ESL-TR-19-07-03

STATEWIDE AIR EMISSIONS CALCULATIONS FROM WIND AND OTHER RENEWABLES

VOLUME II—TECHNICAL APPENDIX

A Report to the
Texas Commission on Environmental Quality
For the Period January 2018 – December 2018

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July 2019

ENERGY SYSTEMS LABORATORY
TEXAS A&M ENGINEERING EXPERIMENT STATION

TEXAS A&M ENGINEERING EXPERIMENT STATION

ENERGY SYSTEMS LABORATORY

July 29, 2019

Mr. Bob Gifford
Stationary Source Programs
Air Quality Division
Texas Commission on Environmental Quality

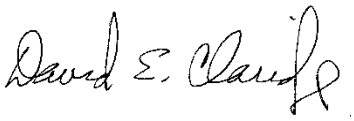
Dear Mr. Gifford,

The Energy Systems Laboratory (ESL) at the Texas Engineering Experiment Station of The Texas A&M University System is pleased to provide its annual report, "Statewide Emissions Calculations From Wind and Other Renewables," as required by the 79th Legislature. This work has been performed through a contract with the Texas Commission on Environmental Quality (TCEQ).

In this work the ESL is required to obtain input from public/private stakeholders, and develop and use a methodology to annually report the energy savings from wind and other renewables. This report summarizes the work performed by the ESL on this project from January 2018 to December 2018.

Please contact me at (979) 845-9213 should you have questions concerning this report or the work presently being done to quantify emissions reductions from renewable energy measures as a result of the TERP implementation.

Sincerely,



David E. Claridge, Ph.D., P.E.
Director

Enclosure

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ACKNOWLEDGMENT

This report cannot be accomplished without the help of many people. Special thanks to Connor Anderson, Planning Engineer, Resource Adequacy department at Electric Reliability Council of Texas (ERCOT), for providing the wind farm power generation data.

TECHNICAL APPENDIX

Statewide Air Emissions Calculations from Wind and Other Renewables

EXECUTIVE SUMMARY

The 79th Legislature, through Senate Bill 20, House Bill 2481 and House Bill 2129, amended Senate Bill 5 to enhance its effectiveness by adding 5,880 MW of generating capacity from renewable energy technologies by 2015 and 500 MW from non-wind renewables.

This legislation also requires the Public Utilities Commission of Texas (PUCT) to establish a target of 10,000 megawatts of installed renewable capacity by 2025, and requires the Texas Commission on Environmental Quality (TCEQ) to develop methodology for computing emissions reductions from renewable energy initiatives and the associated credits.

In this Legislation, the function of the Energy Systems Laboratory (ESL) is to assist the TCEQ in quantifying emissions reductions credits from energy efficiency and renewable energy programs, through a contract with the TCEQ to develop and annually calculate creditable emissions reductions from wind and other renewable energy resources for the State Implementation Plan (SIP).

The ESL, in fulfillment of its responsibilities under this Legislation, submits the annual report, "Statewide Air Emissions Calculations from Wind and Other Renewables," to the TCEQ.

The report is organized in several deliverables:

1. A summary report, which details the key areas of work,
2. Volume I report, which includes main document of renewable energy projects and
3. Volume II technical appendix that includes all information and details about renewables (i.e., wind power, non-utility scale and utility-scale solar PV, solar thermal, biomass, hydroelectric, geothermal, and landfill gas-fired)
4. Supporting data files, including weather data, and wind energy production data.

This volume contains detailed data and analysis for each of wind and other renewables:

- Analysis of wind power generation models,
- Analysis of wind power degradation,
- Electricity generation profiles for solar power projects,
- Electricity generation profiles for biomass projects,
- Electricity generation profiles for hydroelectric projects,
- Lists of non-utility solar PV, solar thermal, geothermal, and landfill gas-fired projects, and
- List of ERCOT REC generators.

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Table G-1: ERCOT REC Generator List up to 2018 (Reference: https://www.texasrenewables.com/publicReports/rpt1.asp) 771

APPENDIX A Wind Power Generation Analysis

In this section, the linear regression models developed based on the 2018 wind power generation data are presented for each wind farm. The estimated 2008 annual and Ozone Season Period (OSP) power productions using the 2018 daily models and the resulting emissions reduction are also shown in details for each wind farm. A list of the wind farms analyzed in this year's report is illustrated in Table A-1.

Table A-1: Listing of Wind Farms Analyzed for Base-year Calculations

No.	Wind Farms
1	Anacacho Wind Farm
2	Baffin Wind Farm (Penascal 3)
3	Barton Chapel Wind 1
4	Bearkat I
5	Big Spring Wind Power
6	Blue Summit Wind Energy Center
7	Bobcat Bluff Wind Project
8	Brazos Wind Ranch
9	Briscoe Wind
10	Bruenning's Breeze
11	Buckthorn
12	Buffalo Gap 1
13	Buffalo Gap 2 (Cirello 1)
14	Buffalo Gap 3
15	Bull Creek Wind Plant
16	Callahan Divide Wind Energy Center
17	Cameron County Wind
18	Camp Springs Wind Energy Center
19	Camp Springs Wind Energy Expansion
20	Capricorn Ridge Wind
21	Capricorn Ridge Wind expansion
22	Cedro Hill Wind
23	Champion Wind Farm
24	Chapman Ranch
25	Colbeck's Corner
26	Cotton Plains Wind
27	Dermott Wind 1
28	Desert Sky (Indian Mesa II)
29	Elbow Creek Wind
30	Electra Wind
31	Falvez Astra Wind
32	Flat Top
33	Fluvanna Renewable 1
34	Forest Creek Wind Farm
35	Goat Wind
36	Goldthwaite Wind Energy
37	Grandview Phase 1 (Conway Windfarm)
38	Green Pastures W
39	Gulf Wind
40	Gunsight Mountain
41	Hackberry Wind Farm
42	Harbor Wind Project

Figure A-1: Listing of Wind Farms Analyzed for Base-year Calculations (Cont.)

No.	Wind Farms
43	Hereford Wind Project (Hereford 1)
44	Hidalgo & Starr Wind
45	Horse Creek Wind
46	Horse Hollow Phase 1
47	Horse Hollow Phase 2
48	Horse Hollow Phase 3
49	Inadale Wind
50	Indian Mesa I
51	Javelina 2 Wind
52	Javelina Wind
53	Jumbo Road Wind (Hereford 2)
54	Keechi Wind
55	King Mountain Wind Ranch
56	Langford Wind Power
57	Logan's Gap Wind I
58	Lone Star - Mesquite Wind
59	Lone Star - Post Oak Wind
60	Longhorn Energy Center North
61	Loraine Windpark
62	Los Vientos I
63	Los Vientos II
64	Los Vientos III
65	Los Vientos IV
66	Los Vientos V
67	Magic Valley Wind Farm
68	Mariah Del Notre
69	McAdoo Wind Energy
70	Mesquite Creek W
71	Miami Wind 1 Project
72	Mozart Wind Farm
73	Notrees Windpower
74	Ocotillo Windpower 1
75	Old Settler Wind
76	Panhandle Wind 1
77	Panhandle Wind 2
78	Panther Creek 1
79	Panther Creek 2
80	Panther Creek 3
81	Papalote Creek Phase II
82	Papalote Creek Wind Farm
83	Penascal Wind Farm
84	Penascal Wind Farm 2
85	Pyron Wind Farm
86	Rattlesnake Wind
87	RattleSnake Wind Ph 1
88	Red Canyon
89	Roscoe Wind Farm
90	Route66 Wind
91	Salt Fork Wind

Figure A-1: Listing of Wind Farms Analyzed for Base-year Calculations (Cont.)

No.	Wind Farms
92	San Roman Wind 1
93	Sand Bluff Wind Farm
94	Santa Rita
95	Senate Wind Farm
96	Sendero Wind Energy Project
97	Shannon Wind
98	Sherbino 1 Wind Farm
99	Sherbino 2 Wind Farm
100	Silver Star Phase I
101	Snyder Wind Project
102	South Plains Wind I
103	South Plains Wind II Phase a
104	South Plains Wind II Phase b
105	South Trent Wind Farm
106	Southwest Mesa Wind Project
107	Spinning Spur Wind II
108	Spinning Spur Wind III
109	Stanton Wind Energy
110	Stephens Ranch Wind Phase 1
111	Stephens Ranch Wind Phase b
112	Sweetwater Wind 1
113	Sweetwater Wind 2
114	Sweetwater Wind 3
115	Sweetwater Wind 4
116	Sweetwater Wind 5
117	Trent Mesa
118	Trinity Hills Wind Farm
119	Turkey Track Energy Center
120	Tyler Bluff Wind (Muenster Wind)
121	Val Verde Wind
122	Wake Wind
123	Whirlwind Energy
124	Whitetail Wind Project
125	Willow Springs Wind
126	Windthorst 2
127	Wolf Ridge Windfarm
128	Woodward Mountain Ranch

A.1 Anacacho Wind Farm

A.1.1 Anacacho Wind Farm - ANACACHO_ANA

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
ANACACHO_ANA	Wind	-	KINNEY	E.On Climate & Renewables	Anacacho Windfarm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
-	ERCOT	S	Dec-12	South	CRP	99.8

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

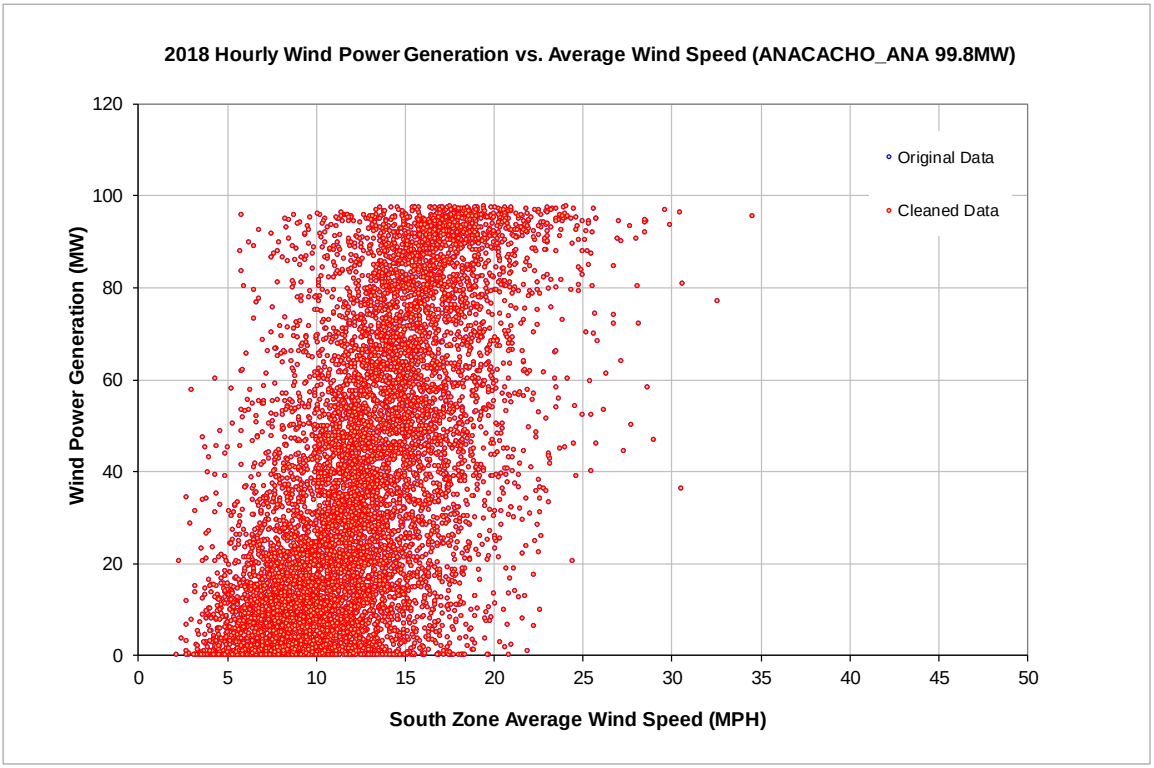


Figure A-1:ANACACHO_ANA - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

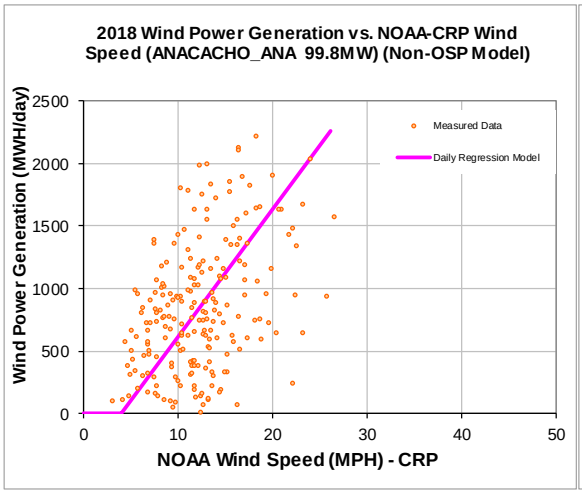
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	270.22
Left Slope (MWh/mph-day)	46.76
RMSE (MWh/day)	465.80
R2	0.17
CV-RMSE	55.3%
Daily Maximum (MWh/day)	2395

OSP Model:

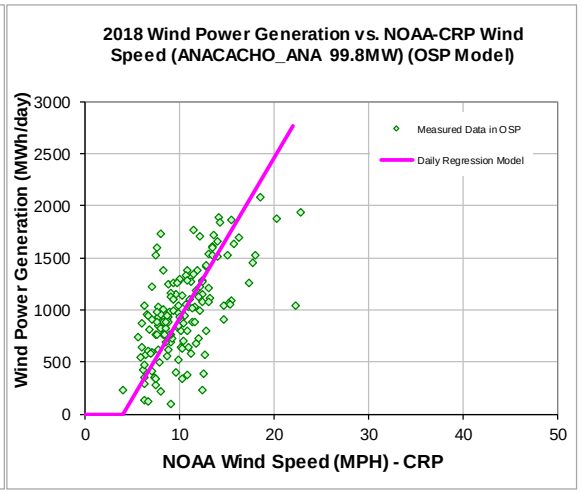
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	173.13
Left Slope (MWh/mph-day)	77.94
RMSE (MWh/day)	335.05
R2	0.37
CV-RMSE	34.0%
Daily Maximum (MWh/day)	2395

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
327,023	329,321

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
966	984

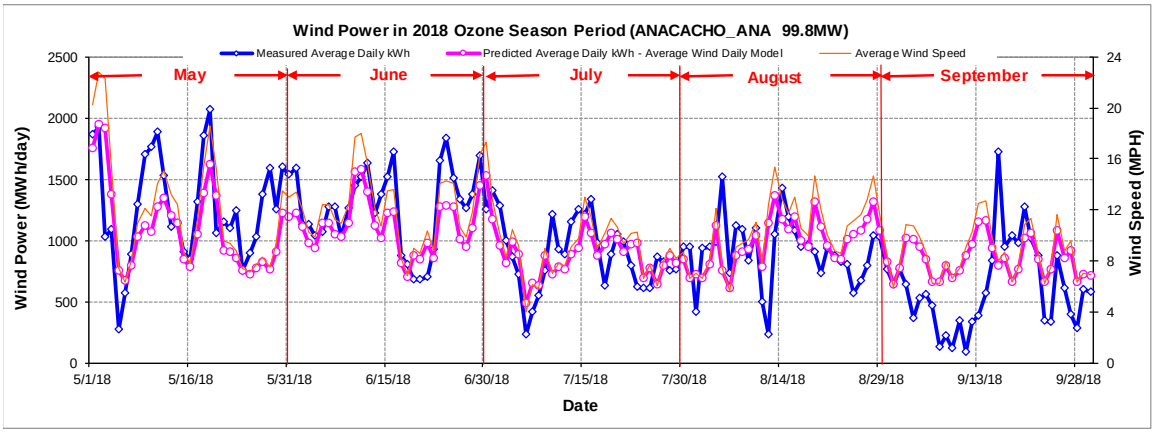
Figure A-2:ANACACHO_ANA - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	23,381	24,469	-4.65%	31%	33%
Feb-18	28	14.08	20,008	26,004	-29.97%	30%	39%
Mar-18	31	13.69	30,963	28,227	8.84%	42%	38%
Apr-18	30	14.08	33,363	27,855	16.51%	46%	39%
May-18	31	11.95	39,625	34,231	13.61%	53%	46%
Jun-18	30	12.21	37,795	33,743	10.72%	53%	47%
Jul-18	31	8.81	27,421	26,654	2.79%	37%	36%
Aug-18	31	10.35	27,581	30,370	-10.11%	37%	41%
Sep-18	30	8.73	18,170	25,595	-40.86%	25%	36%
Oct-18	31	10.87	25,463	24,131	5.23%	34%	32%
Nov-18	30	10.83	18,598	23,306	-25.32%	26%	32%
Dec-18	31	11.29	26,954	24,737	8.22%	36%	33%
Total	365	11.48	329,321	329,321	0.00%	38%	38%
Total in OSP (07/15-09/15)	153	10.41	150,592	150,592	0.00%	41%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

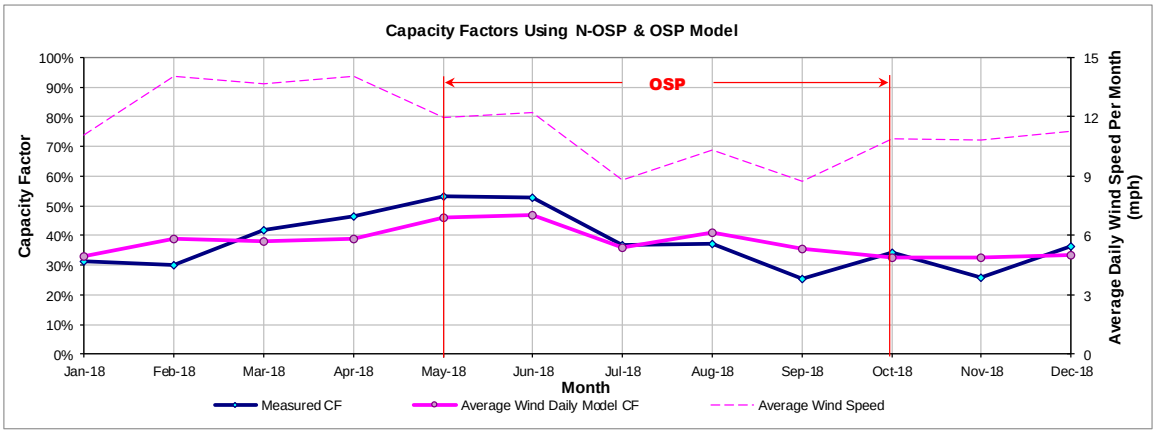


Figure A-3:ANACACHO_ANA - Predicted Wind Power and Capacity Factor Using Daily Models

A.2 Baffin Wind Farm (Penascal 3)

A.2.1 Baffin Wind Farm (Penascal 3) - BAFFIN_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BAFFIN_UNIT1	Wind	Sarita	KENEDY	Iberdrola Renewables	Baffin Wind Farm (Penascal 3)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 Gamesa 2 MW	ERCOT	S	Jun-16	Coastal	CRP	100

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

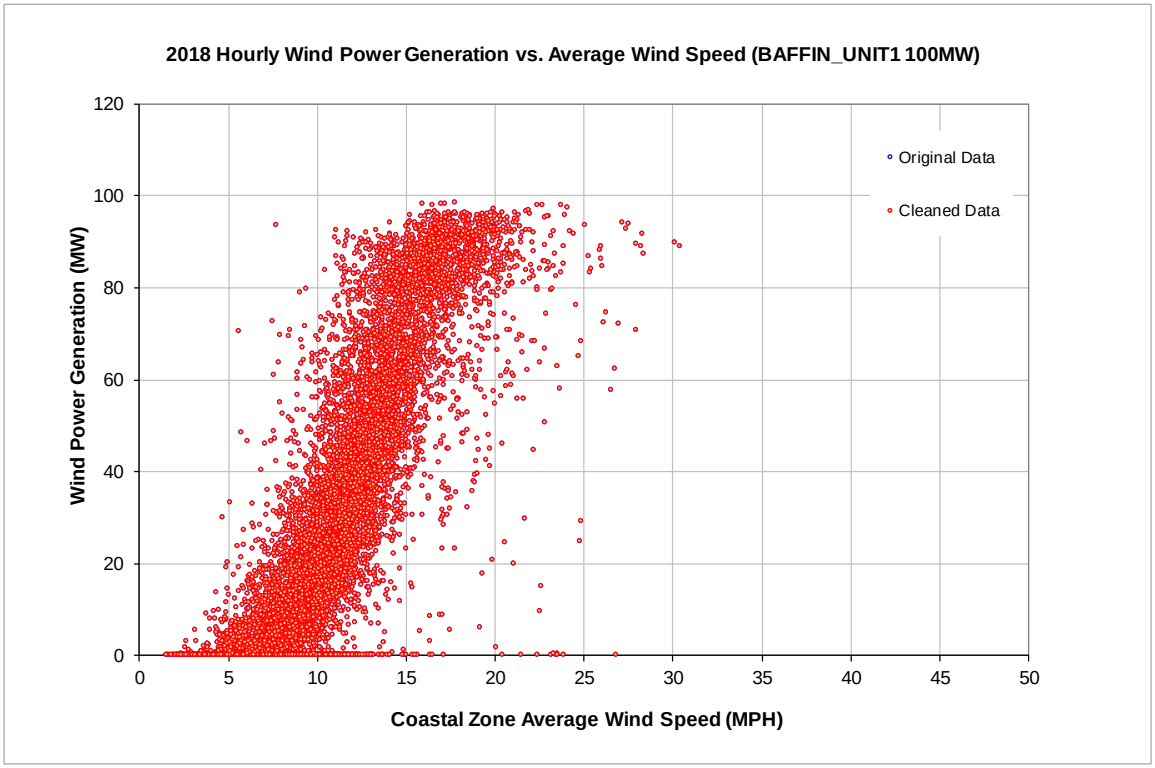


Figure A-4:BAFFIN_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

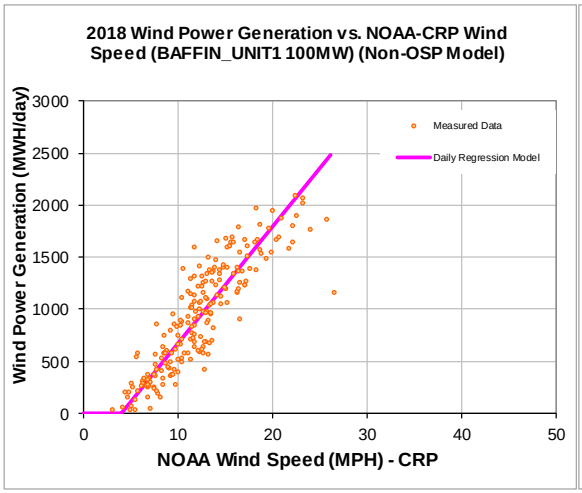
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-299.36
Left Slope (MWh/mph-day)	100.08
RMSE (MWh/day)	246.77
R2	0.77
CV-RMSE	26.6%
Daily Maximum (MWh/day)	2400

OSP Model:

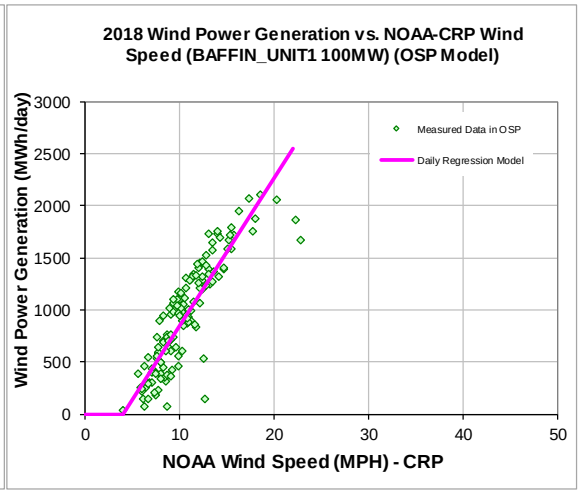
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-501.14
Left Slope (MWh/mph-day)	135.64
RMSE (MWh/day)	249.26
R2	0.77
CV-RMSE	26.6%
Daily Maximum (MWh/day)	2400

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
331,112	327,087

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
878	936

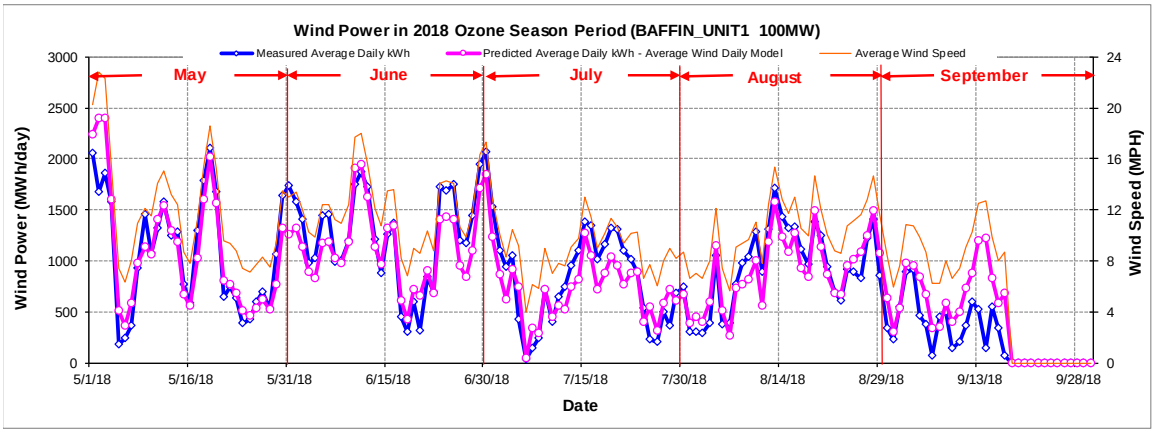
Figure A-5:BAFFIN_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	25,956	25,161	3.06%	35%	34%
Feb-18	28	14.08	27,205	31,080	-14.24%	40%	46%
Mar-18	31	13.69	32,733	33,205	-1.44%	44%	45%
Apr-18	30	14.08	32,816	33,288	-1.44%	46%	46%
May-18	31	11.95	34,104	34,378	-0.80%	46%	46%
Jun-18	30	12.21	37,271	34,650	7.03%	52%	48%
Jul-18	31	8.81	24,088	21,512	10.70%	32%	29%
Aug-18	31	10.35	28,502	27,977	1.84%	38%	38%
Sep-18	30	9.01	7,137	12,268	-71.88%	10%	17%
Oct-18	31	10.97	26,172	23,963	8.44%	35%	32%
Nov-18	30	10.83	23,533	23,550	-0.07%	33%	33%
Dec-18	31	11.29	27,569	25,737	6.65%	37%	35%
Total	365	11.60	327,087	326,769	0.10%	37%	37%
Total in OSP (07/15-09/15)	140	10.60	131,103	130,784	0.24%	39%	39%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

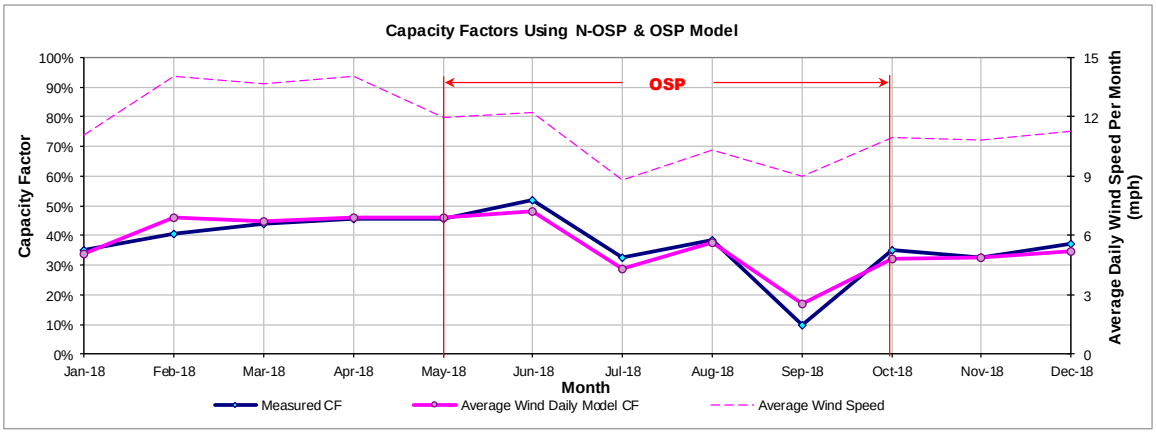


Figure A-6:BAFFIN_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.2.2 Baffin Wind Farm (Penascal 3) - BAFFIN_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BAFFIN_UNIT2	Wind	Sarita	KENEDY	Iberdrola Renewables	Baffin Wind Farm (Penascal 3)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
51 Gamesa 2 MW	ERCOT	S	Jun-16	Coastal	CRP	102

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

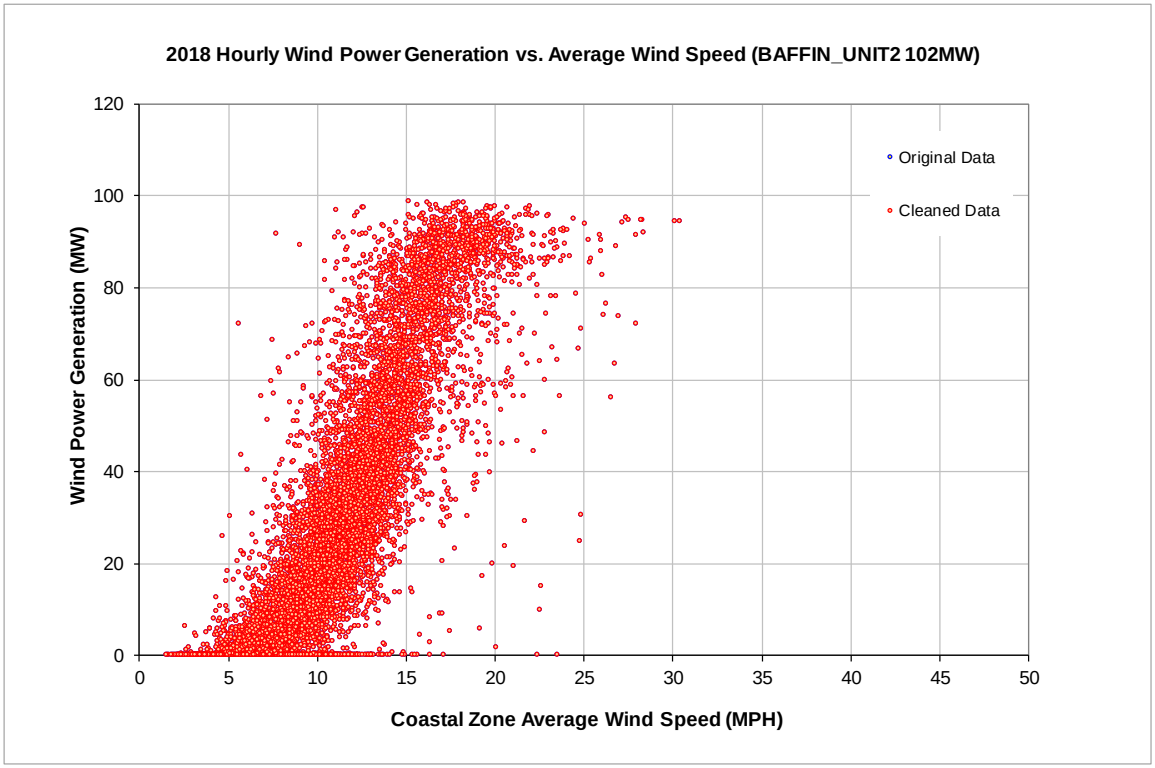


Figure A-7:BAFFIN_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

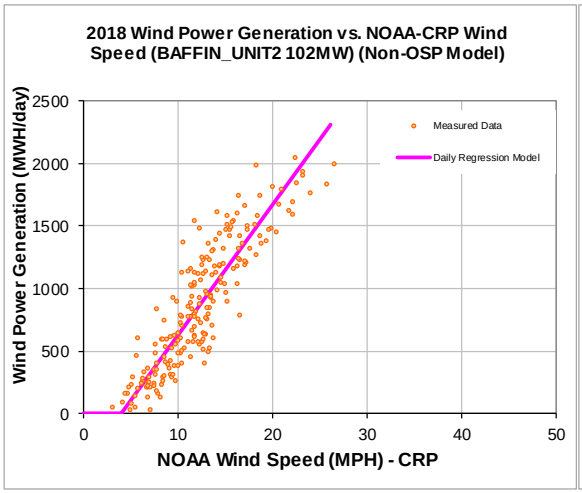
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-352.80
Left Slope (MWh/mph-day)	99.17
RMSE (MWh/day)	231.53
R2	0.79
CV-RMSE	26.8%
Daily Maximum (MWh/day)	2448

OSP Model:

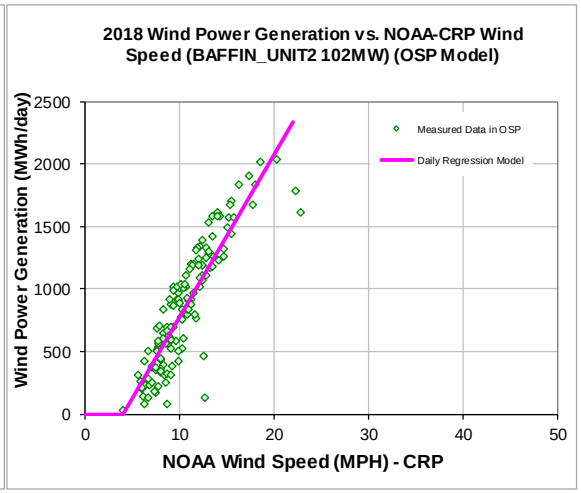
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-512.34
Left Slope (MWh/mph-day)	129.29
RMSE (MWh/day)	221.85
R2	0.79
CV-RMSE	25.9%
Daily Maximum (MWh/day)	2448

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
305,774	302,470

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
802	858

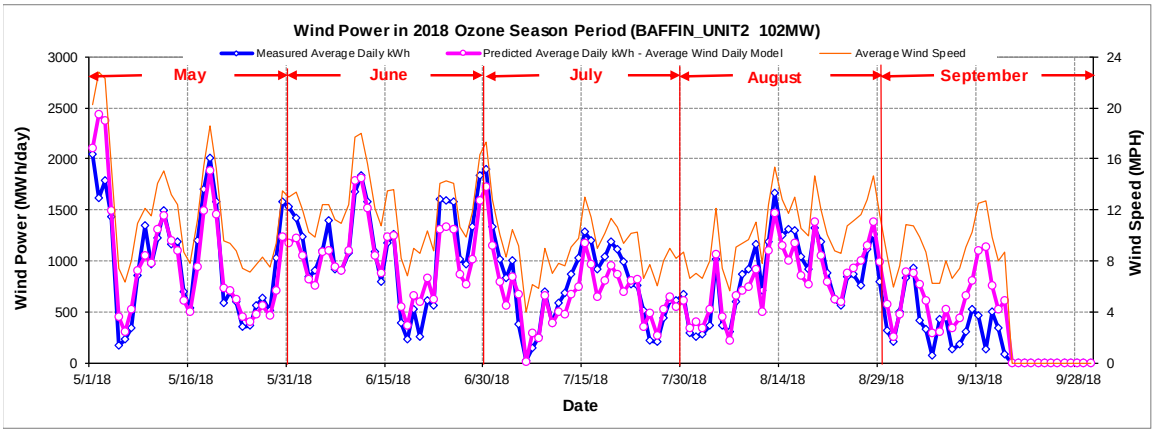
Figure A-8:BAFFIN_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	24,680	23,191	6.03%	33%	31%
Feb-18	28	14.08	26,216	29,225	-11.48%	38%	43%
Mar-18	31	13.69	29,442	31,162	-5.84%	39%	41%
Apr-18	30	14.08	30,326	31,300	-3.21%	41%	43%
May-18	31	11.95	31,922	31,999	-0.24%	42%	42%
Jun-18	30	12.21	33,505	31,989	4.53%	46%	44%
Jul-18	31	8.81	21,952	19,431	11.48%	29%	26%
Aug-18	31	10.35	26,185	25,594	2.26%	35%	34%
Sep-18	30	9.01	6,554	11,105	-69.42%	9%	15%
Oct-18	31	10.97	23,842	22,112	7.26%	31%	29%
Nov-18	30	10.83	22,270	21,652	2.78%	30%	29%
Dec-18	31	11.29	25,576	23,762	7.09%	34%	31%
Total	365	11.60	302,470	302,521	-0.02%	34%	34%
Total in OSP (07/15-09/15)	140	10.60	120,118	120,118	0.00%	35%	35%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

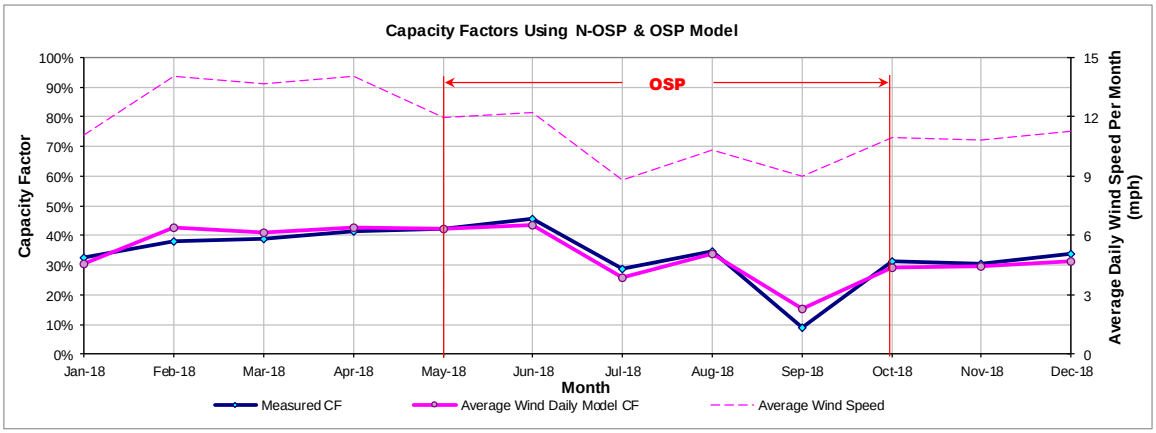


Figure A-9:BAFFIN_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.3 Barton Chapel Wind 1

A.3.1 Barton Chapel Wind 1 - BRTSW_BCW1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BRTSW_BCW1	Wind	Jacksboro	JACK	Iberdrola Renewables	Barton Chapel Wind 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
60 Gamesa G87 2 MW	ERCOT	N	Dec-07	North	ABI	120

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

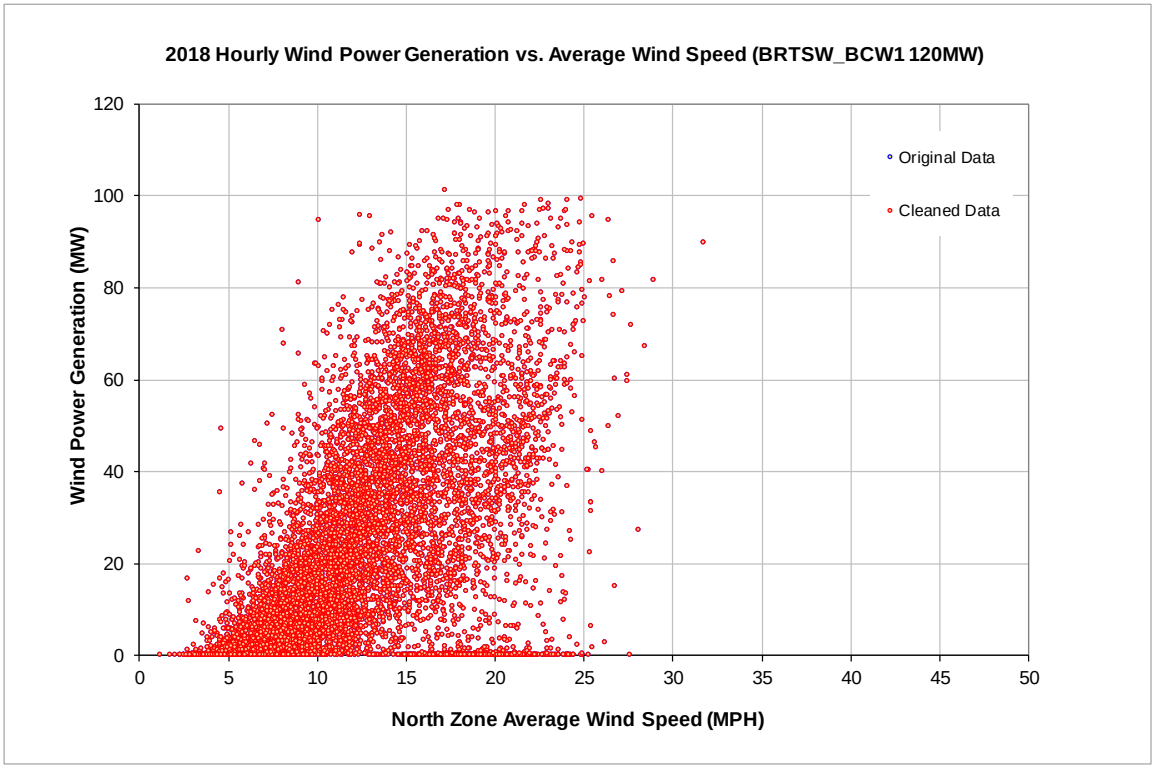


Figure A-10:BRTSW_BCW1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

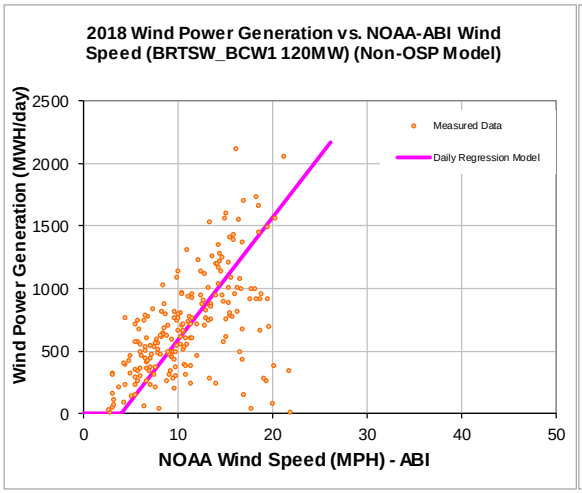
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	148.75
Left Slope (MWh/mph-day)	48.96
RMSE (MWh/day)	335.44
R2	0.31
CV-RMSE	48.9%
Daily Maximum (MWh/day)	2880

OSP Model:

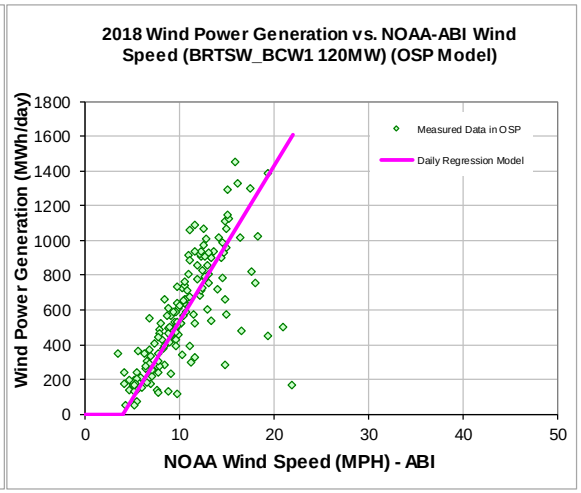
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-69.86
Left Slope (MWh/mph-day)	61.73
RMSE (MWh/day)	219.78
R2	0.52
CV-RMSE	38.4%
Daily Maximum (MWh/day)	2880

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
246,217	232,333

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
579	572

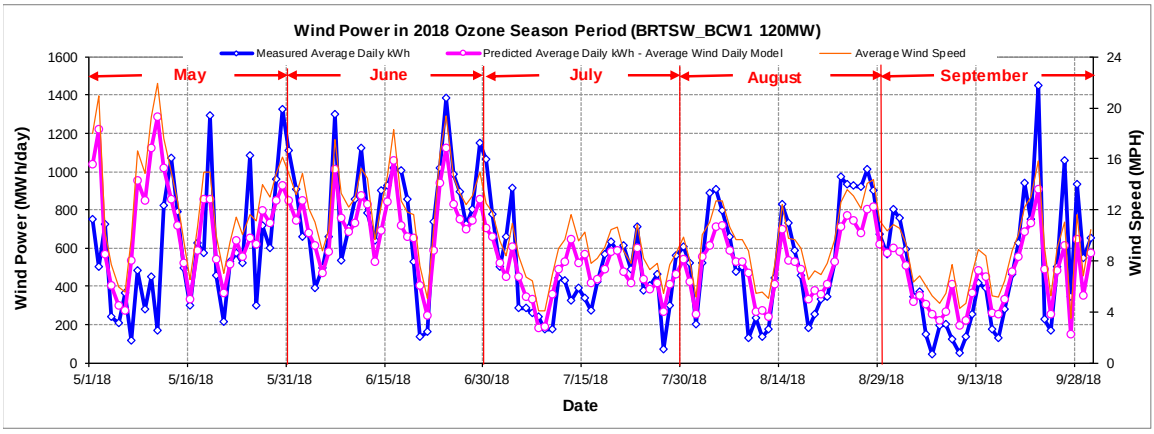
Figure A-11:BRTSW_BCW1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	25,970	21,259	18.14%	29%	24%
Feb-18	28	11.19	18,983	18,814	0.89%	24%	23%
Mar-18	31	11.92	20,580	22,709	-10.35%	23%	25%
Apr-18	30	13.18	12,619	23,815	-88.73%	15%	28%
May-18	31	12.78	18,597	22,293	-19.87%	21%	25%
Jun-18	30	12.90	23,987	21,802	9.11%	28%	25%
Jul-18	31	8.52	13,760	14,139	-2.76%	15%	16%
Aug-18	31	9.85	17,992	16,681	7.29%	20%	19%
Sep-18	30	7.97	13,236	12,656	4.38%	15%	15%
Oct-18	31	9.35	20,545	18,807	8.46%	23%	21%
Nov-18	30	10.05	21,578	19,221	10.92%	25%	22%
Dec-18	31	10.23	24,487	20,137	17.77%	27%	23%
Total	365	10.73	232,333	232,333	0.00%	22%	22%
Total in OSP (07/15-09/15)	153	10.40	87,572	87,572	0.00%	20%	20%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

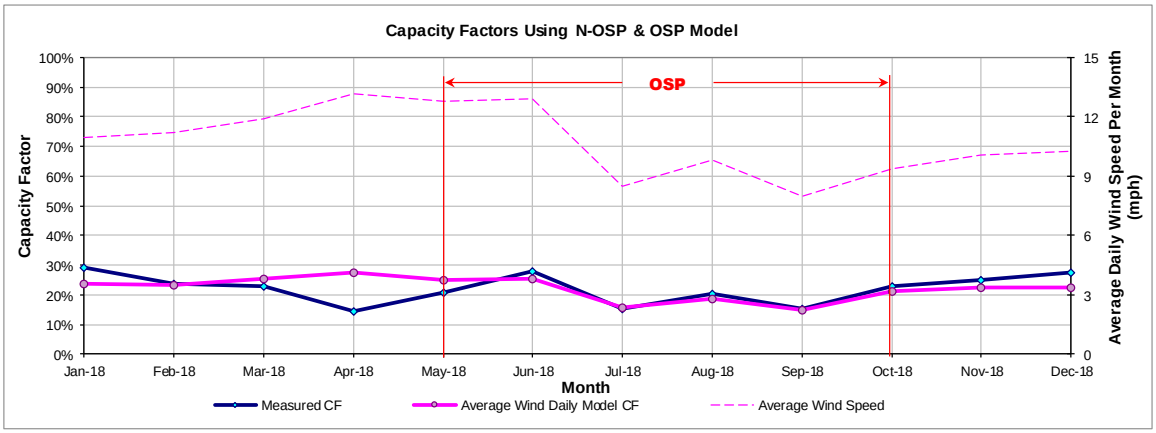


Figure A-12:BRTSW_BCW1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.4 Bearkat I

A.4.1 Bearkat I - NBOHR_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
NBOHR_UNIT1	Wind	-	GLASSCOCK	Tri Global Energy	Niels Bohr (BearKat Wind A)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
57 Vestas 3.45 MW	ERCOT	W	Feb-18	West	ABI	196.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

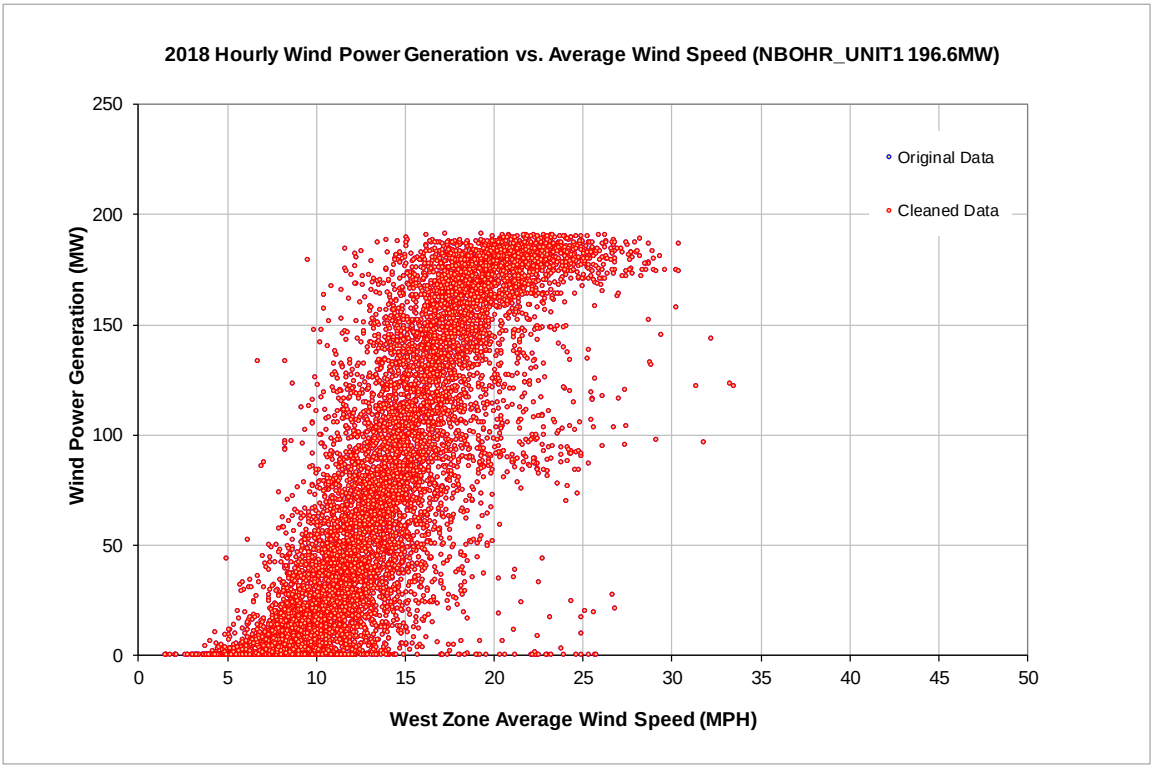


Figure A-13:NBOHR_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

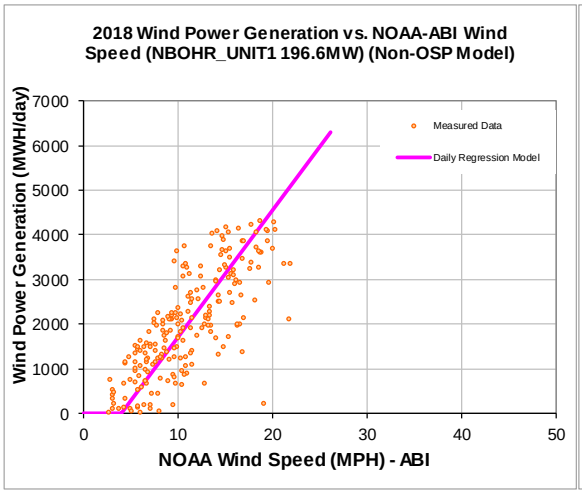
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-154.89
Left Slope (MWh/mph-day)	195.12
RMSE (MWh/day)	744.12
R2	0.59
CV-RMSE	37.5%
Daily Maximum (MWh/day)	4718

OSP Model:

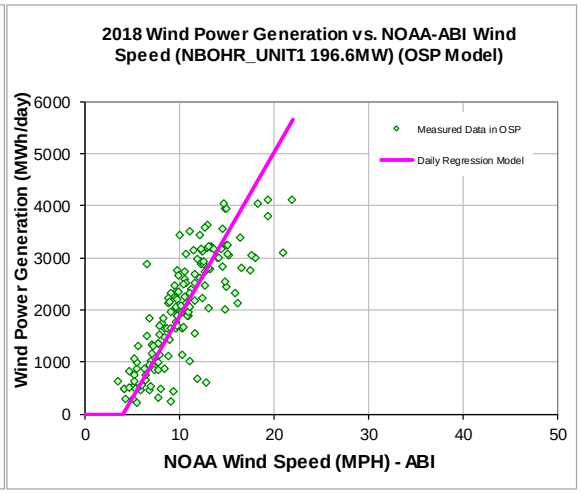
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-361.78
Left Slope (MWh/mph-day)	227.83
RMSE (MWh/day)	602.22
R2	0.66
CV-RMSE	30.0%
Daily Maximum (MWh/day)	4718

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
780,028	727,419

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
2,031	2,008

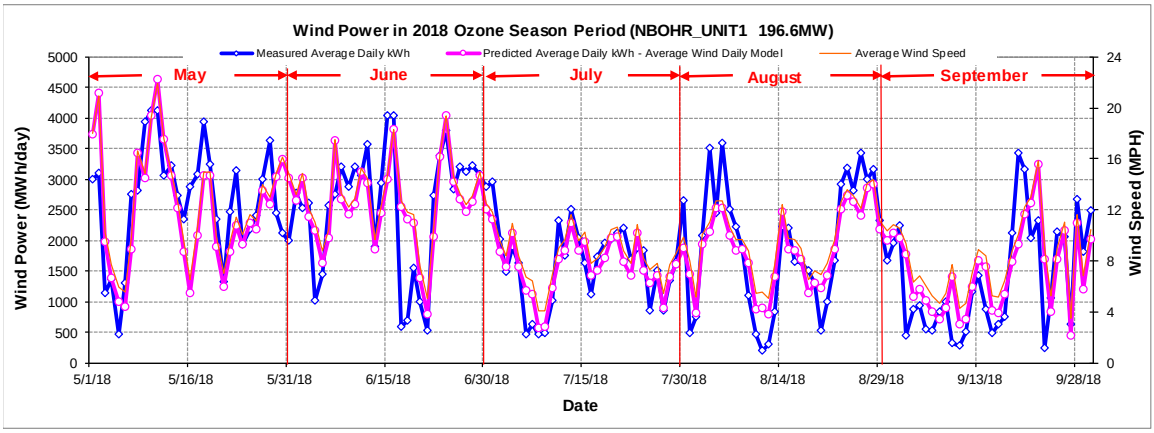
Figure A-14:NBOHR_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	64,264	61,549	4.23%	44%	42%
Feb-18	28	11.00	58,438	55,745	4.61%	44%	42%
Mar-18	31	11.92	74,915	67,329	10.13%	51%	46%
Apr-18	30	13.18	68,482	72,484	-5.84%	48%	51%
May-18	31	12.78	81,410	79,052	2.90%	56%	54%
Jun-18	30	12.90	76,967	77,344	-0.49%	54%	55%
Jul-18	31	8.52	49,130	48,960	0.35%	34%	33%
Aug-18	31	9.85	59,903	58,339	2.61%	41%	40%
Sep-18	30	7.97	39,873	43,588	-9.32%	28%	31%
Oct-18	31	9.35	51,723	51,776	-0.10%	35%	35%
Nov-18	30	10.05	50,130	54,175	-8.07%	35%	38%
Dec-18	31	10.23	52,183	57,077	-9.38%	36%	39%
Total	365	10.72	727,419	727,419	0.00%	42%	42%
Total in OSP (07/15-09/15)	153	10.40	307,283	307,283	0.00%	43%	43%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

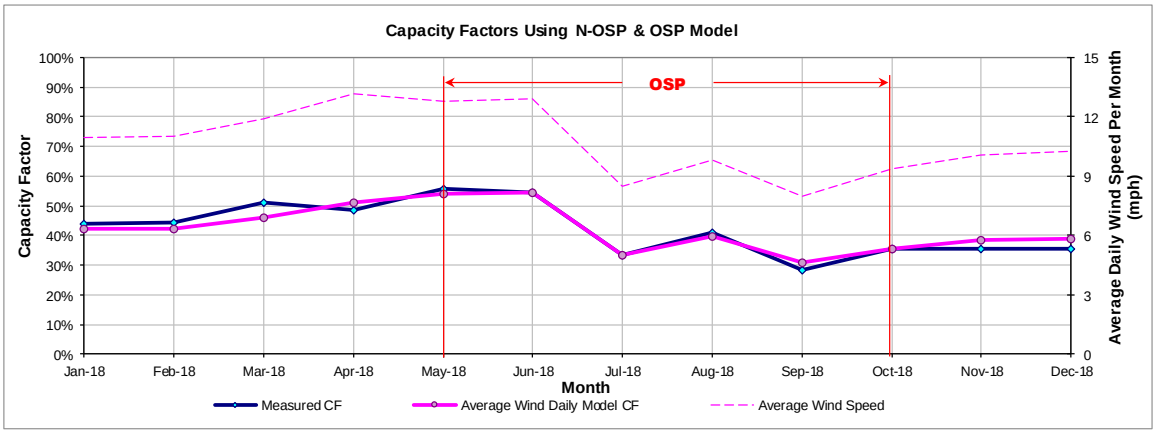


Figure A-15:NBOHR_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.5 Big Spring Wind Power

A.5.1 Big Spring Wind Power - SGMTN_SIGNALMT

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SGMTN_SIGNALMT	Wind	Big Spring	HOWARD	York Research	Big Spring Wind Power

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
42 Vestas 0.66 MW 4 Vestas 1.65 MW	ERCOT	W	Feb-99	West	ABI	34.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

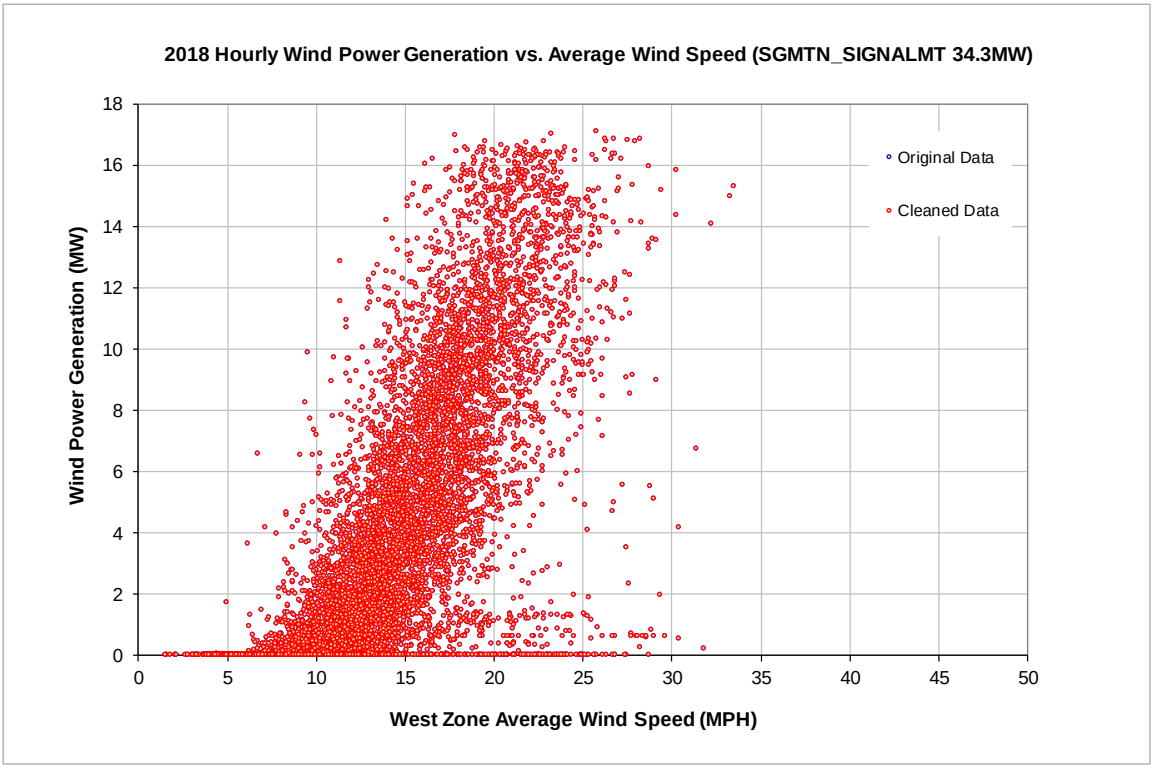


Figure A-16:SGMTN_SIGNALMT - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

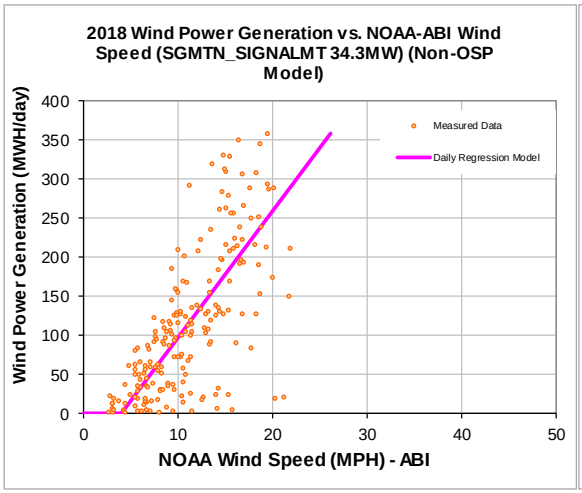
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-42.03
Left Slope (MWh/mph-day)	14.12
RMSE (MWh/day)	65.65
R2	0.50
CV-RMSE	58.1%
Daily Maximum (MWh/day)	823

OSP Model:

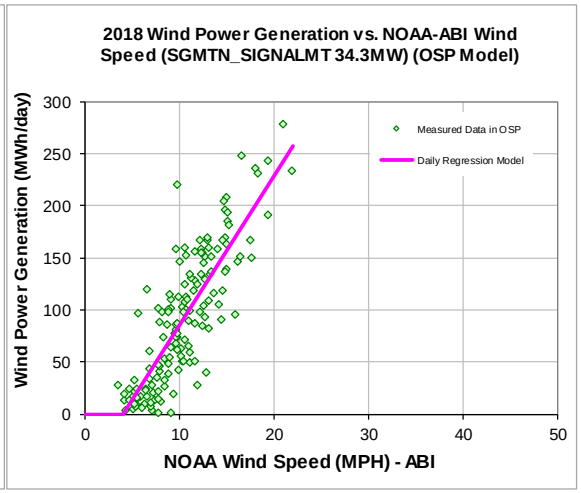
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-60.04
Left Slope (MWh/mph-day)	14.58
RMSE (MWh/day)	35.04
R2	0.70
CV-RMSE	38.2%
Daily Maximum (MWh/day)	823

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
41,658	36,746

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
93	92

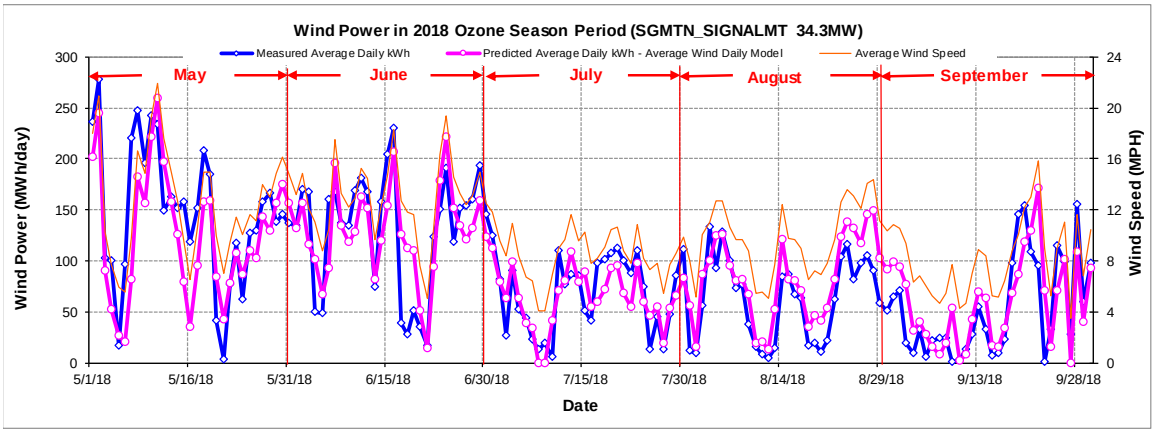
Figure A-17:SGMTN_SIGNALMT - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	5,131	3,500	31.79%	20%	14%
Feb-18	28	11.00	3,968	3,175	19.99%	17%	14%
Mar-18	31	11.92	4,497	3,918	12.88%	18%	15%
Apr-18	30	13.18	4,071	4,322	-6.16%	16%	18%
May-18	31	12.78	4,556	3,915	14.08%	18%	15%
Jun-18	30	12.90	3,904	3,842	1.58%	16%	16%
Jul-18	31	8.52	2,044	1,990	2.64%	8%	8%
Aug-18	31	9.85	1,950	2,589	-32.79%	8%	10%
Sep-18	30	7.97	1,564	1,691	-8.11%	6%	7%
Oct-18	31	9.35	2,482	2,798	-12.74%	10%	11%
Nov-18	30	9.80	993	2,699	-171.95%	4%	11%
Dec-18	31	10.46	1,586	2,325	-46.58%	6%	9%
Total	365	10.73	36,746	36,764	-0.05%	12%	12%
Total in OSP (07/15-09/15)	153	10.40	14,018	14,027	-0.07%	11%	11%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

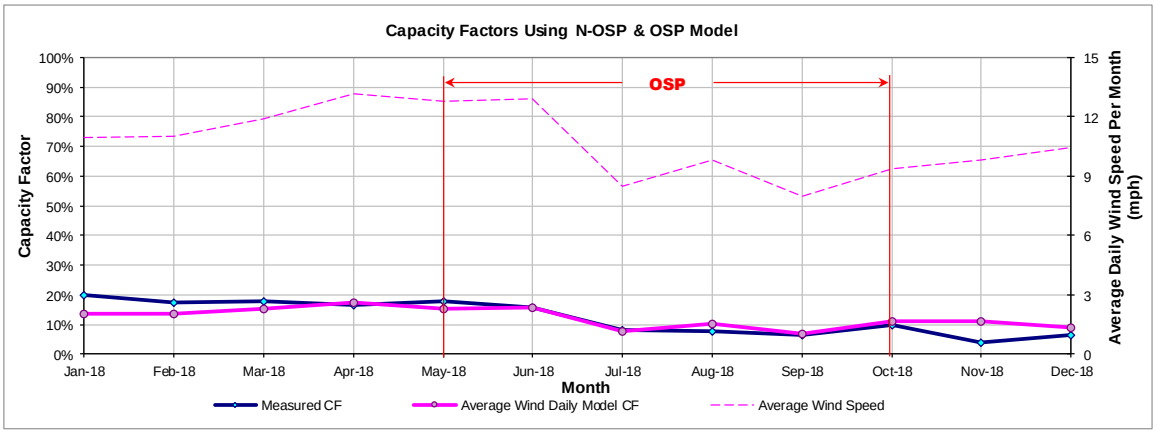


Figure A-18:SGMTN_SIGNALMT - Predicted Wind Power and Capacity Factor Using Daily Models

A.6 Blue Summit Wind Energy Center

A.6.1 Blue Summit Wind Energy Center - BLSUMMIT_BLSMT1_5

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BLSUMMIT_BLSMT1_5	Wind	Vernon	WILBARGER	NextEra	Blue Summit Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
6 GE 1.5 MW 79 GE 1.6 MW	ERCOT	W	Dec-12	West	ABI	135.4

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

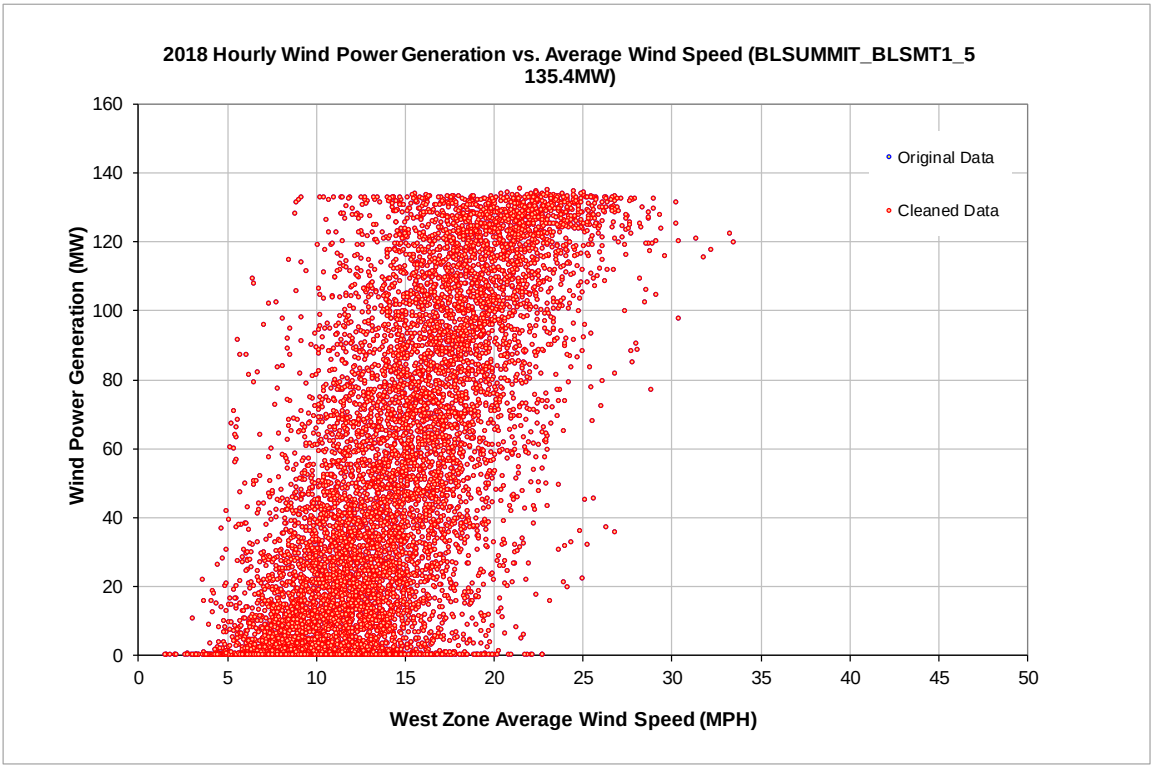


Figure A-19:BLSUMMIT_BLSMT1_5 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

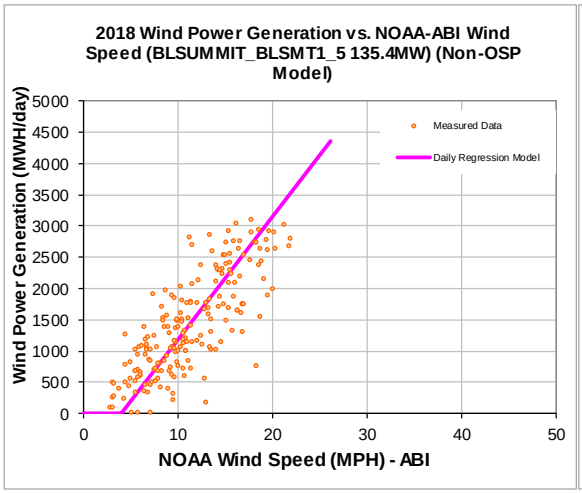
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-124.27
Left Slope (MWh/mph-day)	137.82
RMSE (MWh/day)	488.93
R2	0.62
CV-RMSE	34.4%
Daily Maximum (MWh/day)	3250

OSP Model:

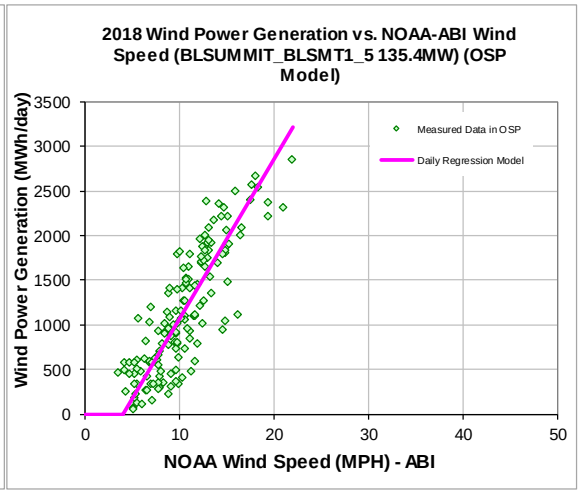
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-488.50
Left Slope (MWh/mph-day)	157.06
RMSE (MWh/day)	363.15
R2	0.72
CV-RMSE	31.7%
Daily Maximum (MWh/day)	3250

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
505,965	456,509

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,161	1,145

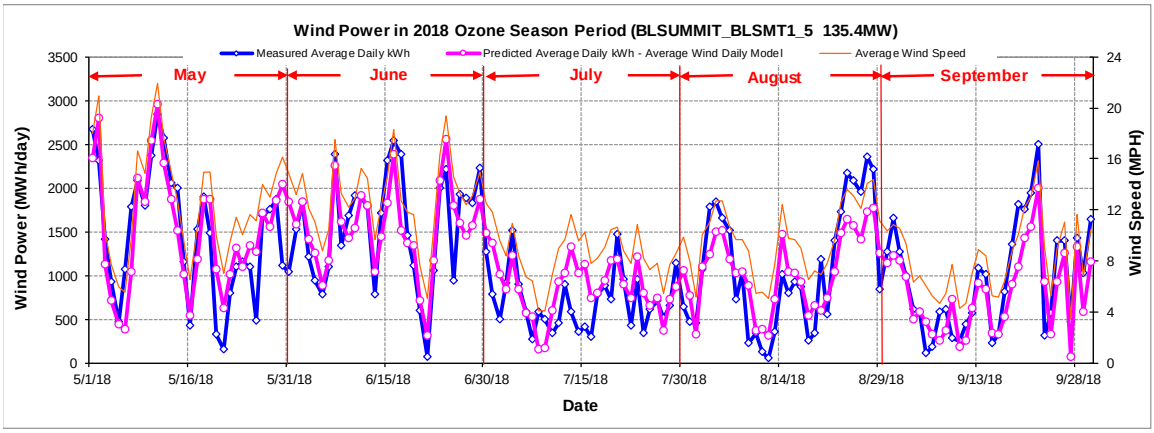
Figure A-20:BLSUMMIT_BLSMT1_5 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	49,715	43,014	13.48%	49%	43%
Feb-18	28	11.00	40,134	38,959	2.93%	44%	43%
Mar-18	31	11.92	48,038	47,097	1.96%	48%	47%
Apr-18	30	13.18	49,270	50,753	-3.01%	51%	52%
May-18	31	12.78	45,374	47,085	-3.77%	45%	47%
Jun-18	30	12.90	46,625	46,147	1.02%	48%	47%
Jul-18	31	8.52	21,057	26,340	-25.09%	21%	26%
Aug-18	31	9.85	34,676	32,806	5.39%	34%	33%
Sep-18	30	7.97	27,524	22,876	16.89%	28%	23%
Oct-18	31	10.73	24,881	31,144	-25.17%	25%	31%
Nov-18	30	10.10	29,340	30,434	-3.73%	30%	31%
Dec-18	31	10.23	39,876	39,855	0.05%	40%	40%
Total	365	10.86	456,509	456,509	0.00%	38%	38%
Total in OSP (07/15-09/15)	153	10.40	175,255	175,255	0.00%	35%	35%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

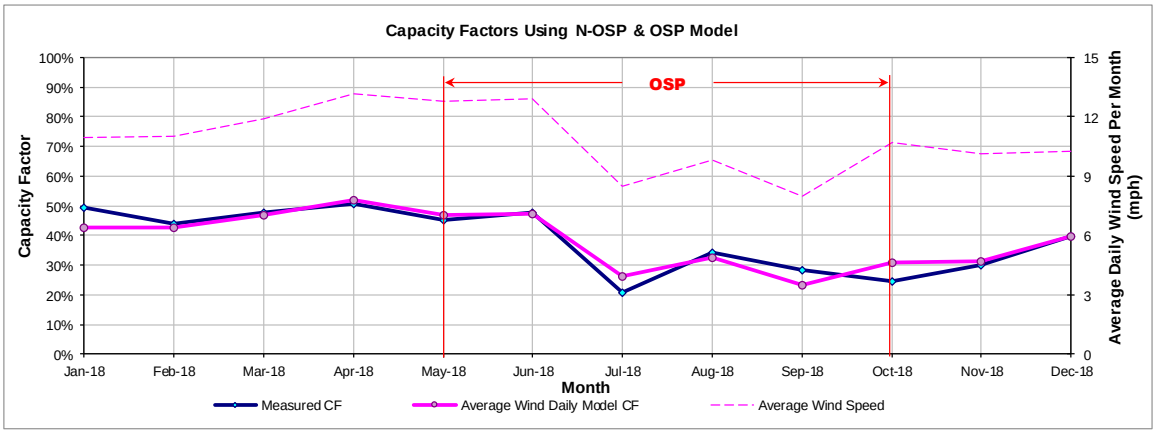


Figure A-21:BLSUMMIT_BLSMT1_5 - Predicted Wind Power and Capacity Factor Using Daily Models

A.7 Bobcat Bluff Wind Project

A.7.1 Bobcat Bluff Wind Project - BCATWIND_WIND_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BCATWIND_WIND_1	Wind	-	CLAY	EDF Renewable	Bobcat Bluff

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
100 GE 1.5 MW	ERCOT	W	Mar-13	West	ABI	150

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

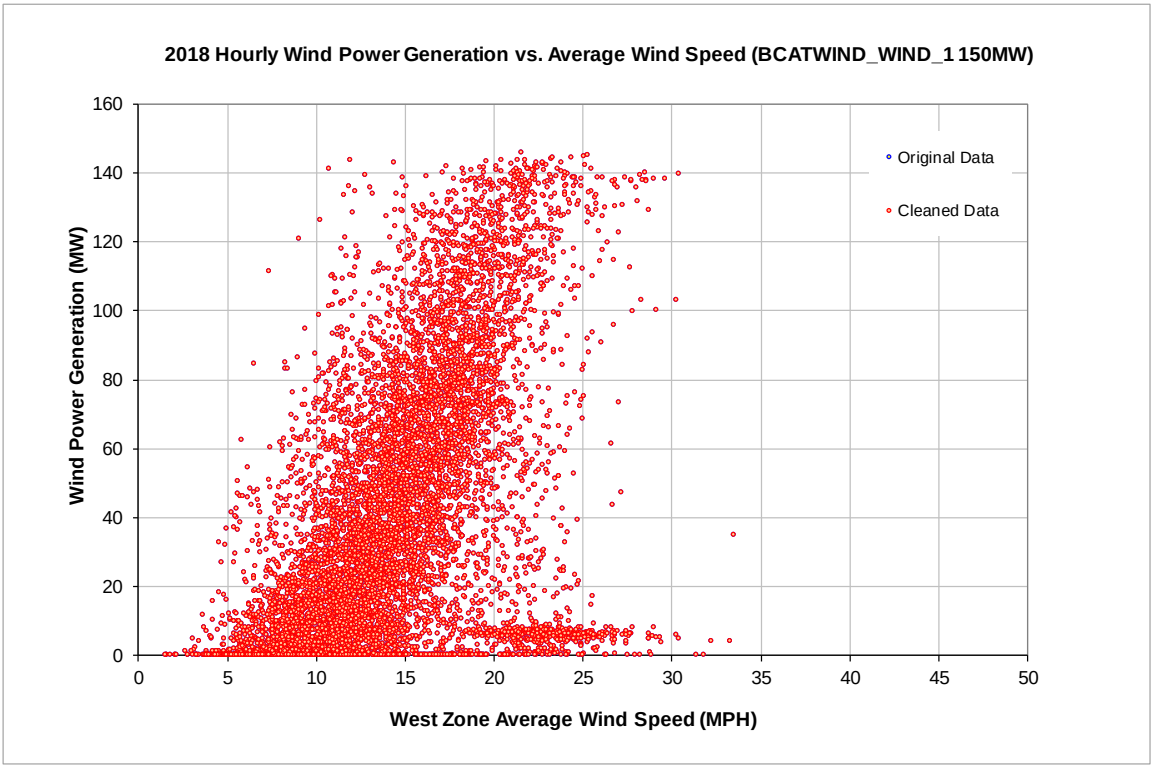


Figure A-22:BCATWIND_WIND_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

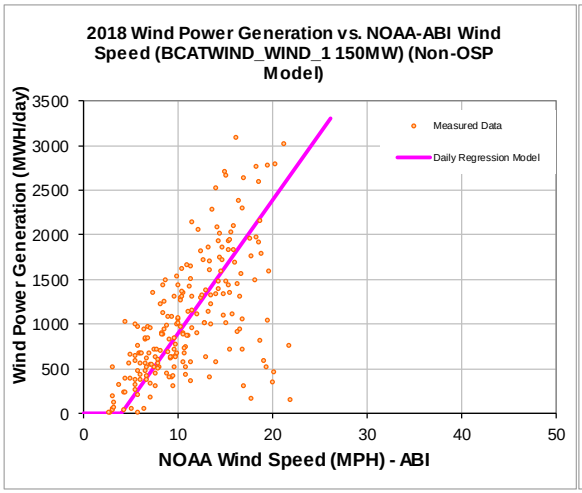
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	34.68
Left Slope (MWh/mph-day)	91.58
RMSE (MWh/day)	523.67
R2	0.39
CV-RMSE	50.5%
Daily Maximum (MWh/day)	3600

OSP Model:

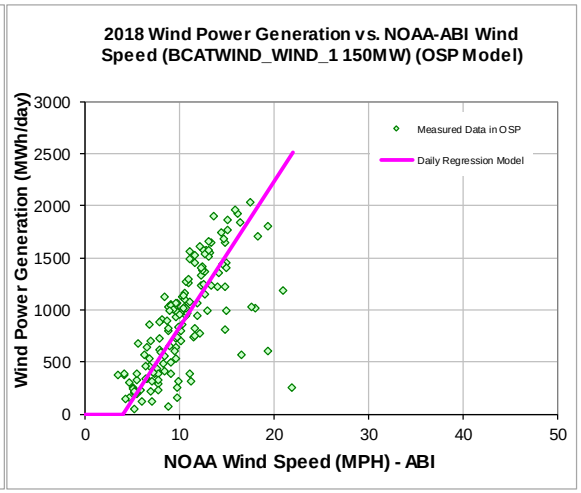
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-126.96
Left Slope (MWh/mph-day)	97.80
RMSE (MWh/day)	360.08
R2	0.50
CV-RMSE	40.8%
Daily Maximum (MWh/day)	3600

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
380,862	352,411

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
900	883

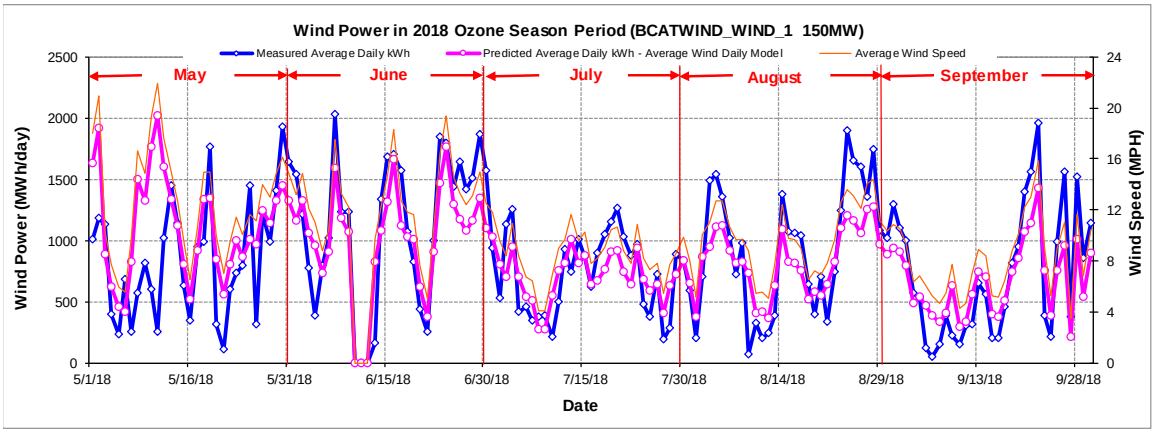
Figure A-23:BCATWIND_WIND_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	38,435	32,217	16.18%	34%	29%
Feb-18	28	11.00	29,072	29,170	-0.34%	29%	29%
Mar-18	31	11.92	35,060	34,930	0.37%	31%	31%
Apr-18	30	13.18	22,216	37,242	-67.63%	21%	34%
May-18	31	12.78	26,863	34,814	-29.60%	24%	31%
Jun-18	30	12.76	33,285	30,261	9.09%	31%	28%
Jul-18	31	8.52	22,239	21,896	1.54%	20%	20%
Aug-18	31	9.85	29,408	25,923	11.85%	26%	23%
Sep-18	30	7.97	20,661	19,562	5.32%	19%	18%
Oct-18	31	9.35	26,912	27,630	-2.67%	24%	25%
Nov-18	30	10.05	32,458	28,648	11.74%	30%	27%
Dec-18	31	10.23	35,800	30,118	15.87%	32%	27%
Total	365	10.69	352,411	352,411	0.00%	27%	27%
Total in OSP (07/15-09/15)	150	10.33	132,457	132,457	0.00%	25%	25%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

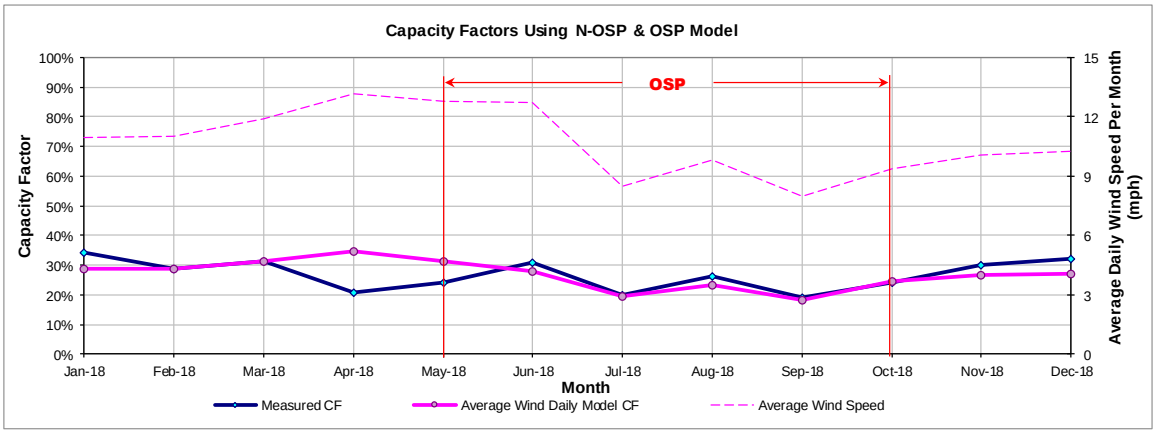


Figure A-24:BCATWIND_WIND_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.8 Brazos Wind Ranch

A.8.1 Brazos Wind Ranch - BRAZ_WND_WND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BRAZ_WND_WND1	Wind	Fluvanna	SCURRY	Cielo/Orion/Green Mountain	Brazos Wind Ranch

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
99 Mitsubishi 1 MW 61 Mitsubishi 1 MW	ERCOT	W	Dec-03	West	LBB	160

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

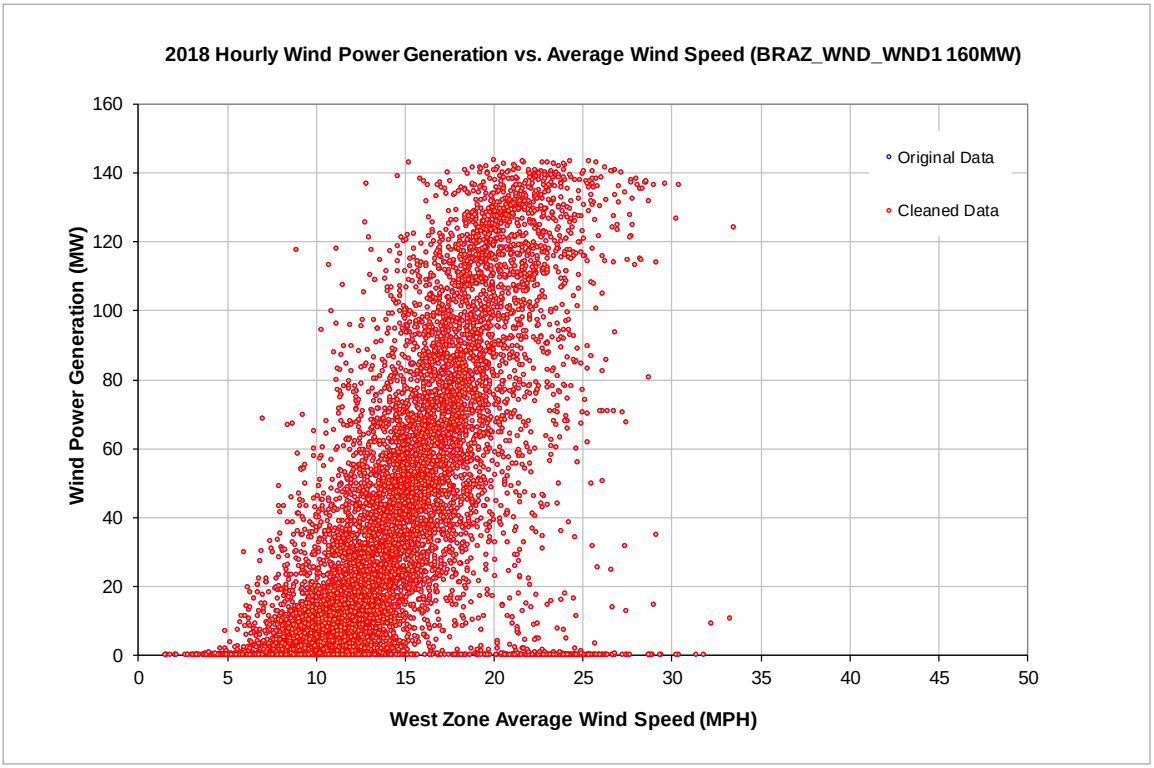


Figure A-25:BRAZ_WND_WND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

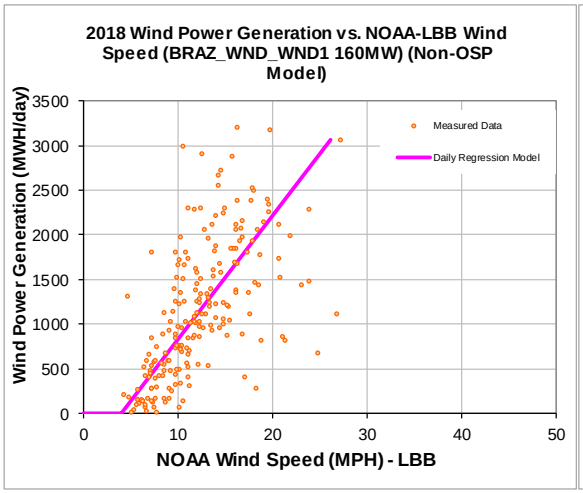
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-144.44
Left Slope (MWh/mph-day)	105.17
RMSE (MWh/day)	590.66
R2	0.39
CV-RMSE	51.9%
Daily Maximum (MWh/day)	3840

OSP Model:

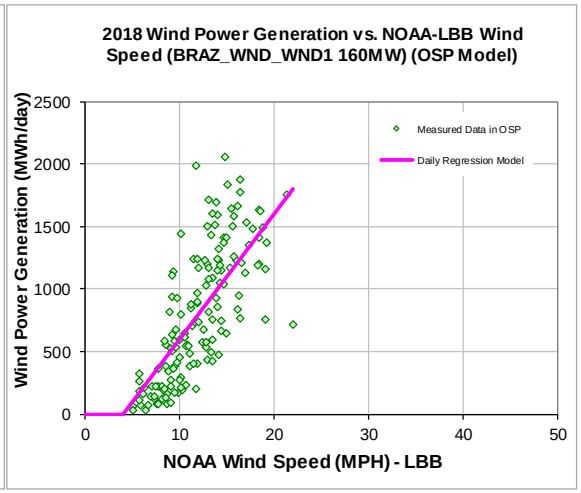
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-499.70
Left Slope (MWh/mph-day)	108.34
RMSE (MWh/day)	351.03
R2	0.56
CV-RMSE	43.9%
Daily Maximum (MWh/day)	3840

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
355,323	360,614

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
681	800

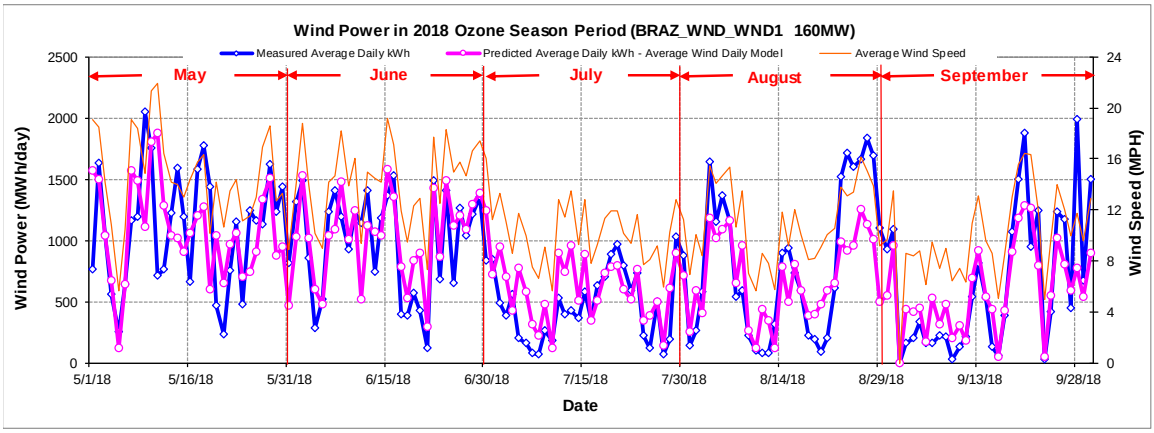
Figure A-26:BRAZ_WND_WND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.47	38,179	30,788	19.36%	32%	26%
Feb-18	28	12.08	35,315	31,520	10.75%	33%	29%
Mar-18	31	13.58	39,195	39,807	-1.56%	33%	33%
Apr-18	30	15.19	30,154	43,602	-44.60%	26%	38%
May-18	31	14.42	33,656	32,954	2.09%	28%	28%
Jun-18	30	14.33	29,596	31,599	-6.77%	26%	27%
Jul-18	31	10.01	14,259	18,112	-27.02%	12%	15%
Aug-18	31	11.09	25,665	21,741	15.29%	22%	18%
Sep-18	30	10.06	18,360	17,130	6.70%	16%	15%
Oct-18	31	10.80	29,407	30,723	-4.48%	25%	26%
Nov-18	30	11.15	31,406	30,832	1.83%	27%	27%
Dec-18	31	11.13	35,422	31,805	10.21%	30%	27%
Total	365	12.11	360,614	360,614	0.00%	26%	26%
Total in OSP (07/15-09/15)	152	11.99	121,536	121,536	0.00%	21%	21%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

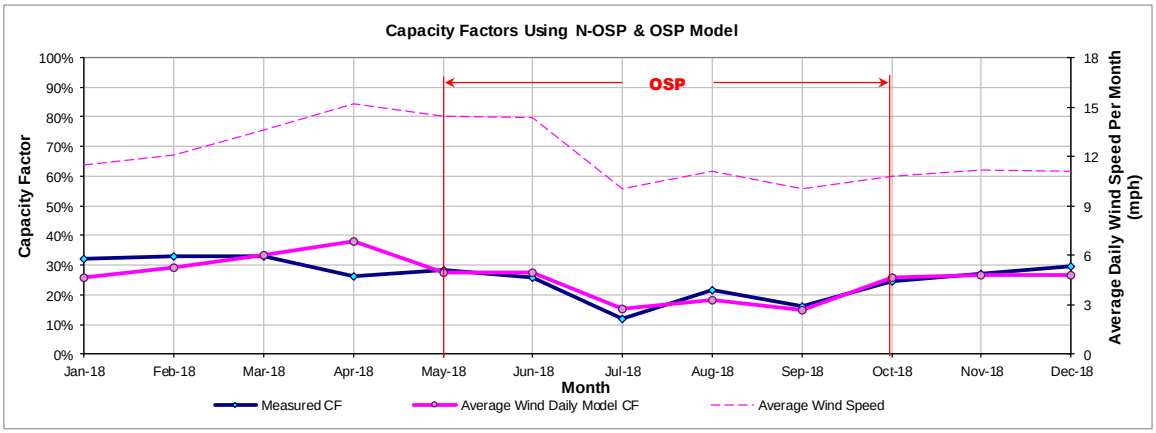


Figure A-27:BRAZ_WND_WND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.9 Briscoe Wind

A.9.1 Briscoe Wind - BRISCOE_WIND

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BRISCOE_WIND	Wind	Silverton	BRISCOE	juwi Wind	Briscoe Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
81 GE 1.85 MW	ERCOT	W	Nov-15	Panhandle	LBB	149.8

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

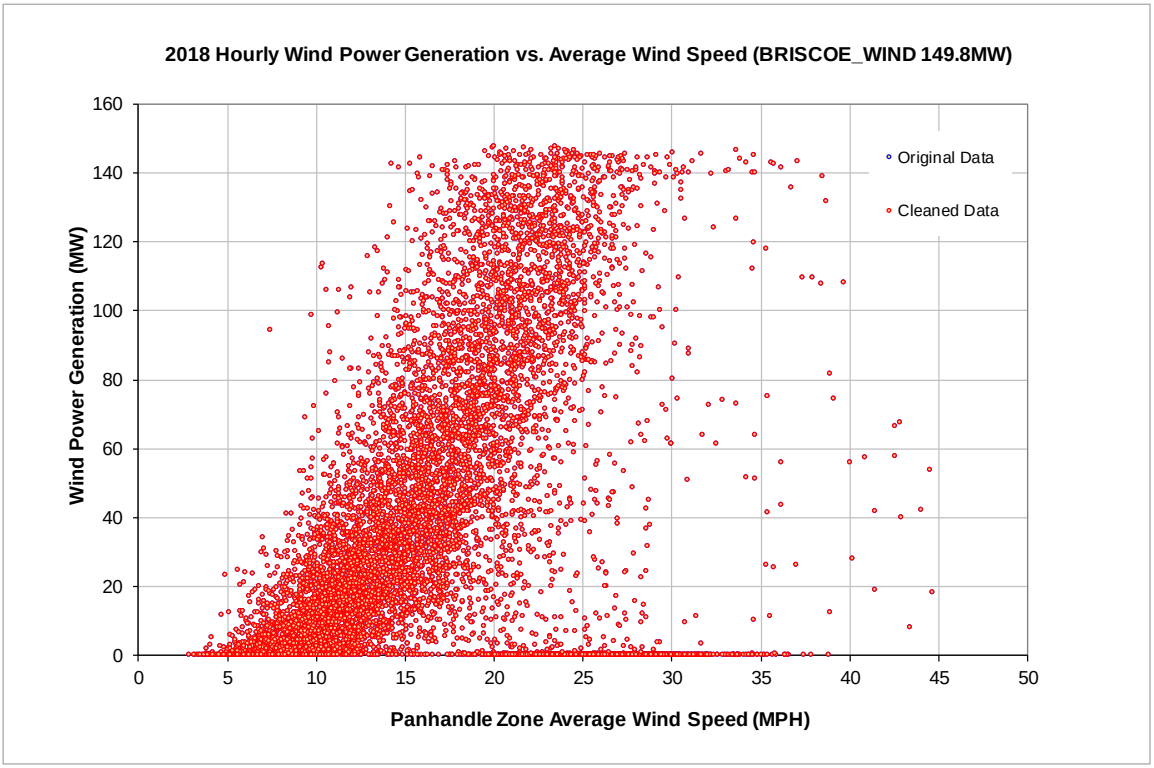


Figure A-28:BRISCOE_WIND - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

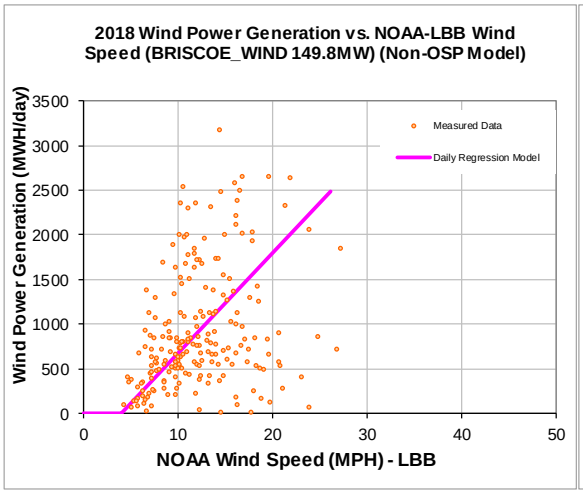
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	372.17
Left Slope (MWh/mph-day)	44.60
RMSE (MWh/day)	638.73
R2	0.09
CV-RMSE	69.9%
Daily Maximum (MWh/day)	3595

OSP Model:

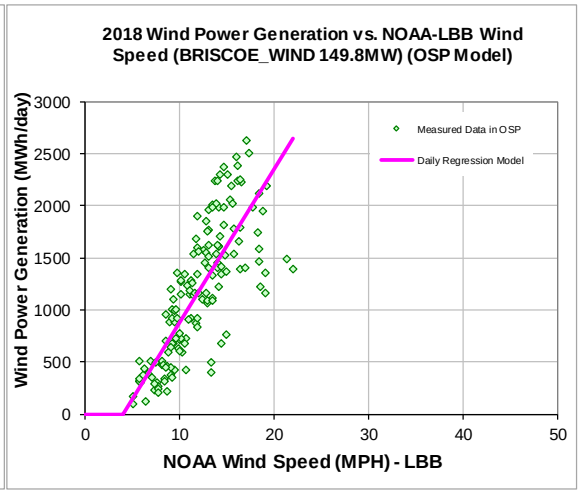
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-468.60
Left Slope (MWh/mph-day)	137.20
RMSE (MWh/day)	404.06
R2	0.60
CV-RMSE	34.3%
Daily Maximum (MWh/day)	3595

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
355,523	373,871

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,025	1,178

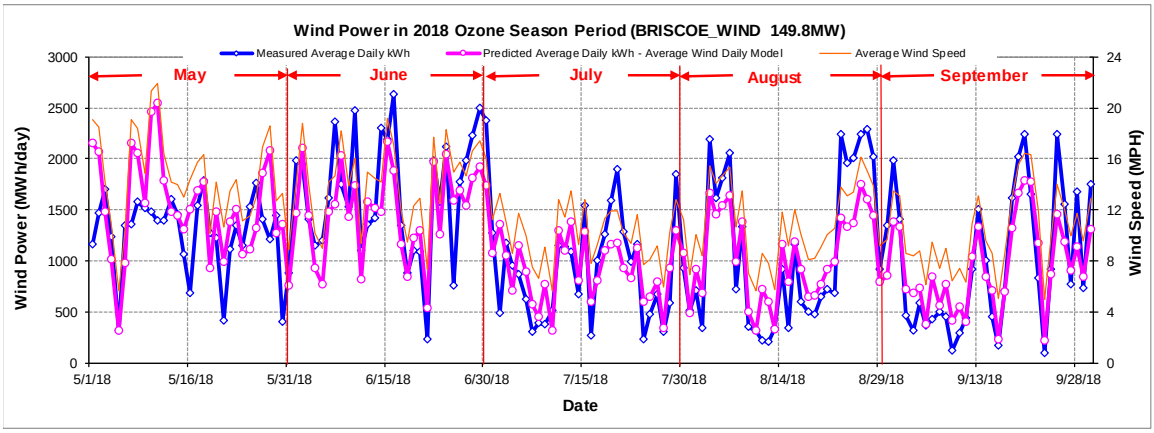
Figure A-29:BRISCOE_WIND - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	19,119	26,872	-40.55%	17%	24%
Feb-18	28	12.08	16,875	25,504	-51.13%	17%	25%
Mar-18	31	13.58	18,505	30,319	-63.85%	17%	27%
Apr-18	30	15.19	23,710	31,495	-32.84%	22%	29%
May-18	31	14.42	39,143	46,824	-19.62%	35%	42%
Jun-18	30	14.33	50,270	44,943	10.60%	47%	42%
Jul-18	31	10.01	27,518	28,028	-1.85%	25%	25%
Aug-18	31	11.09	35,166	32,624	7.23%	32%	29%
Sep-18	30	10.17	28,111	27,788	1.15%	26%	26%
Oct-18	31	10.80	33,351	26,467	20.64%	30%	24%
Nov-18	30	11.15	43,578	26,080	40.15%	40%	24%
Dec-18	31	11.13	38,525	26,926	30.11%	35%	24%
Total	365	12.08	373,871	373,871	0.00%	28%	28%
Total in OSP (07/15-09/15)	153	12.00	180,208	180,208	0.00%	33%	33%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

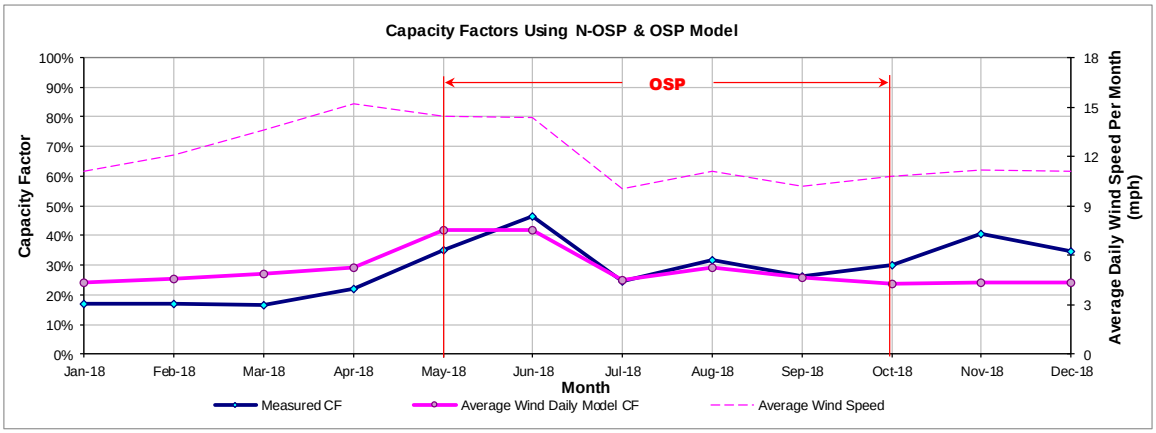


Figure A-30:BRISCOE_WIND - Predicted Wind Power and Capacity Factor Using Daily Models

A.10 Bruenning's Breeze

A.10.1 Bruenning's Breeze - BBREEZE_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BBREEZE_UNIT1	Wind	Willacy	WILLACY	E.On Climate & Renewables	BBREEZE (BruenniGas's Breeze)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
40 Acciona 3 MW	ERCOT	S	Dec-17	Coastal	CRP	120

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

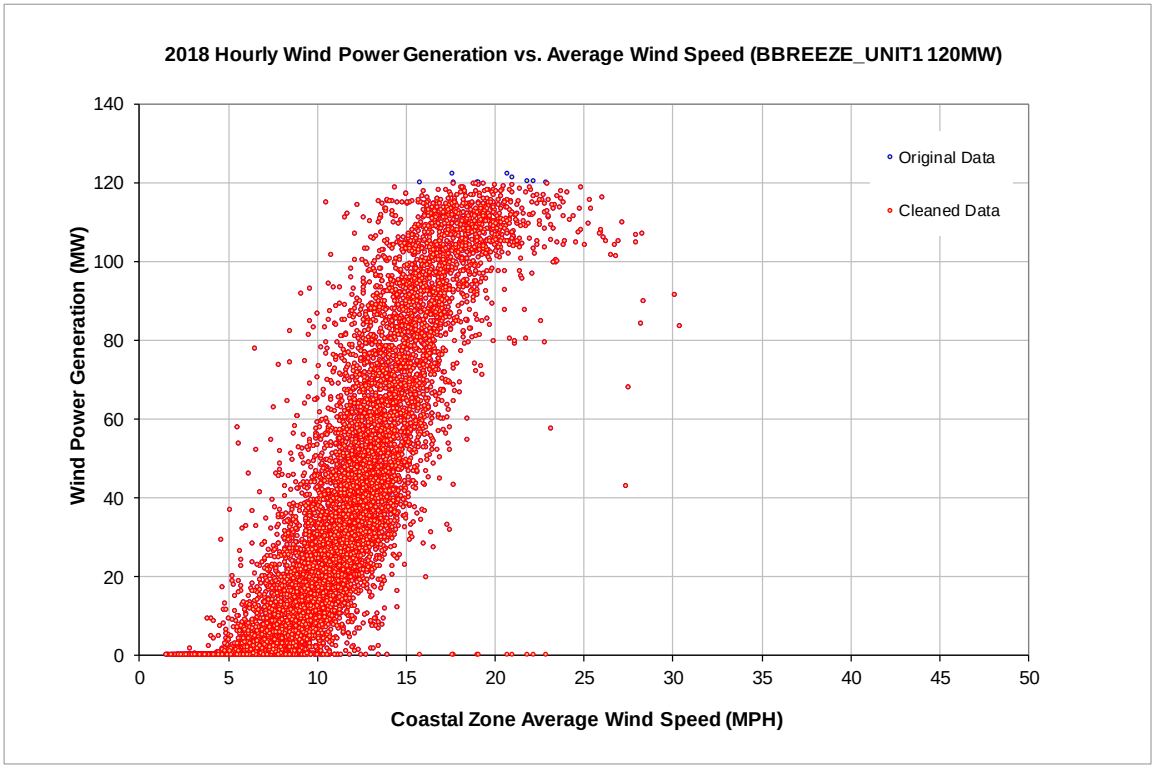


Figure A-31:BBREEZE_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

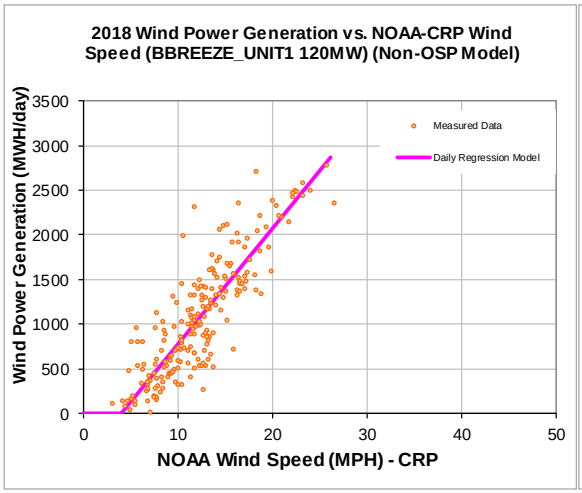
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-452.82
Left Slope (MWh/mph-day)	124.15
RMSE (MWh/day)	334.95
R2	0.74
CV-RMSE	31.4%
Daily Maximum (MWh/day)	2880

OSP Model:

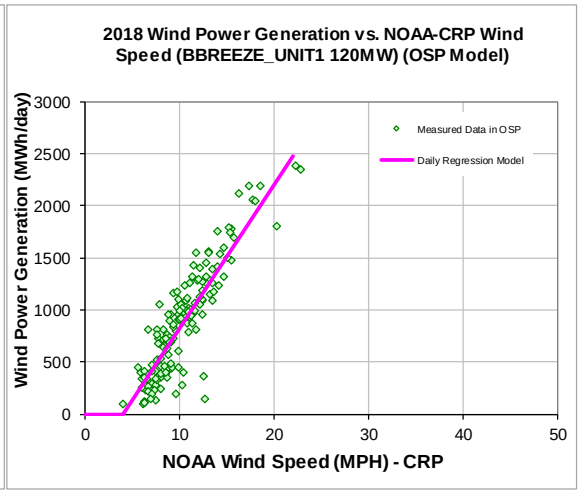
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-592.91
Left Slope (MWh/mph-day)	141.72
RMSE (MWh/day)	234.25
R2	0.80
CV-RMSE	26.6%
Daily Maximum (MWh/day)	2880

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
356,496	361,377

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
848	882

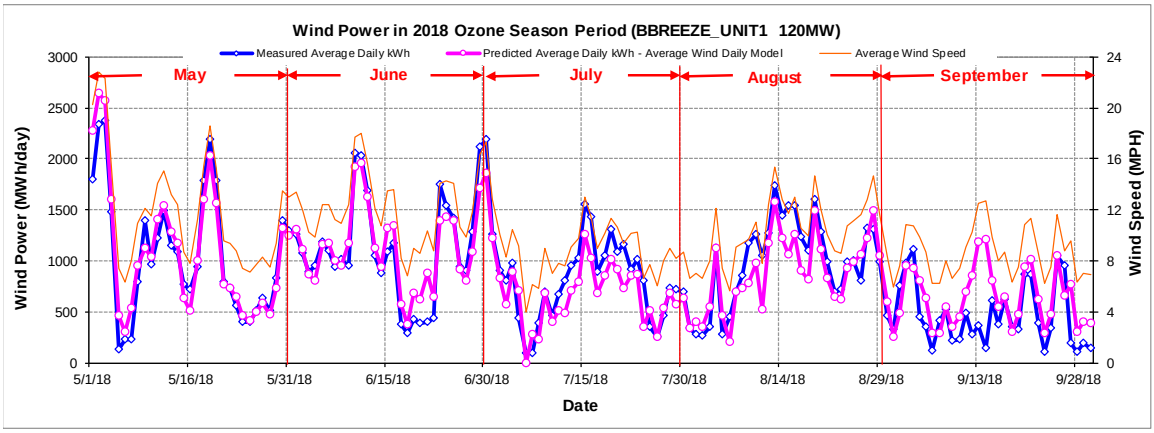
Figure A-32:BBREEZE_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	30,049	28,685	4.54%	34%	32%
Feb-18	28	14.08	32,956	36,272	-10.06%	41%	45%
Mar-18	31	13.69	36,484	38,664	-5.97%	41%	43%
Apr-18	30	14.08	37,075	38,847	-4.78%	43%	45%
May-18	31	11.95	32,906	34,105	-3.64%	37%	38%
Jun-18	30	12.21	33,750	34,125	-1.11%	39%	39%
Jul-18	31	8.81	24,313	20,354	16.28%	27%	23%
Aug-18	31	10.35	30,116	27,084	10.07%	34%	30%
Sep-18	30	8.73	13,866	19,309	-39.25%	16%	22%
Oct-18	31	10.87	28,731	27,865	3.01%	32%	31%
Nov-18	30	10.83	27,083	26,769	1.16%	31%	31%
Dec-18	31	11.29	34,048	29,399	13.65%	38%	33%
Total	365	11.48	361,377	361,478	-0.03%	34%	34%
Total in OSP (07/15-09/15)	153	10.41	134,951	134,977	-0.02%	31%	31%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

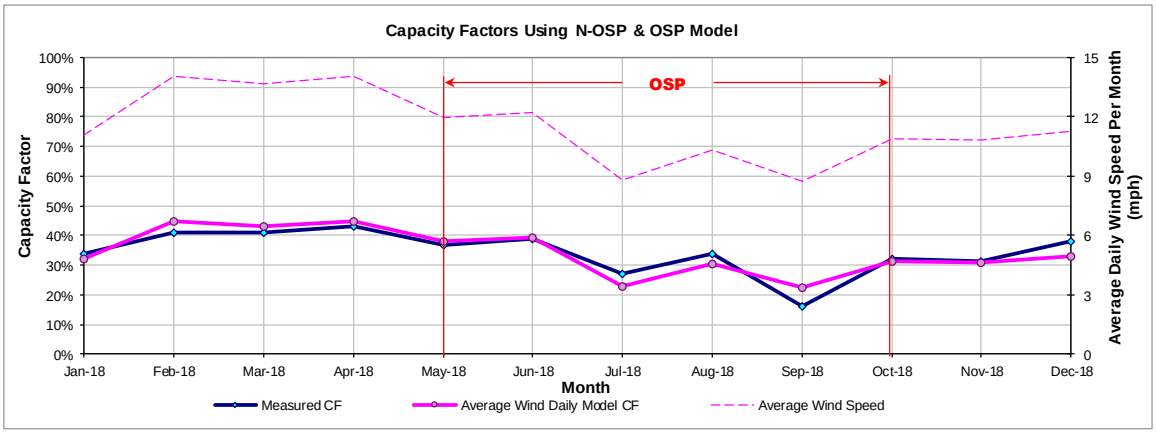


Figure A-33:BBREEZE_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.10.2 Bruenning's Breeze - BBREEZE_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BBREEZE_UNIT2	Wind	Willacy	WILLACY	E.On Climate & Renewables	BBREEZE (BruenniGas's Breeze)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
36 Acciona 3 MW	ERCOT	S	Dec-17	Coastal	CRP	108

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

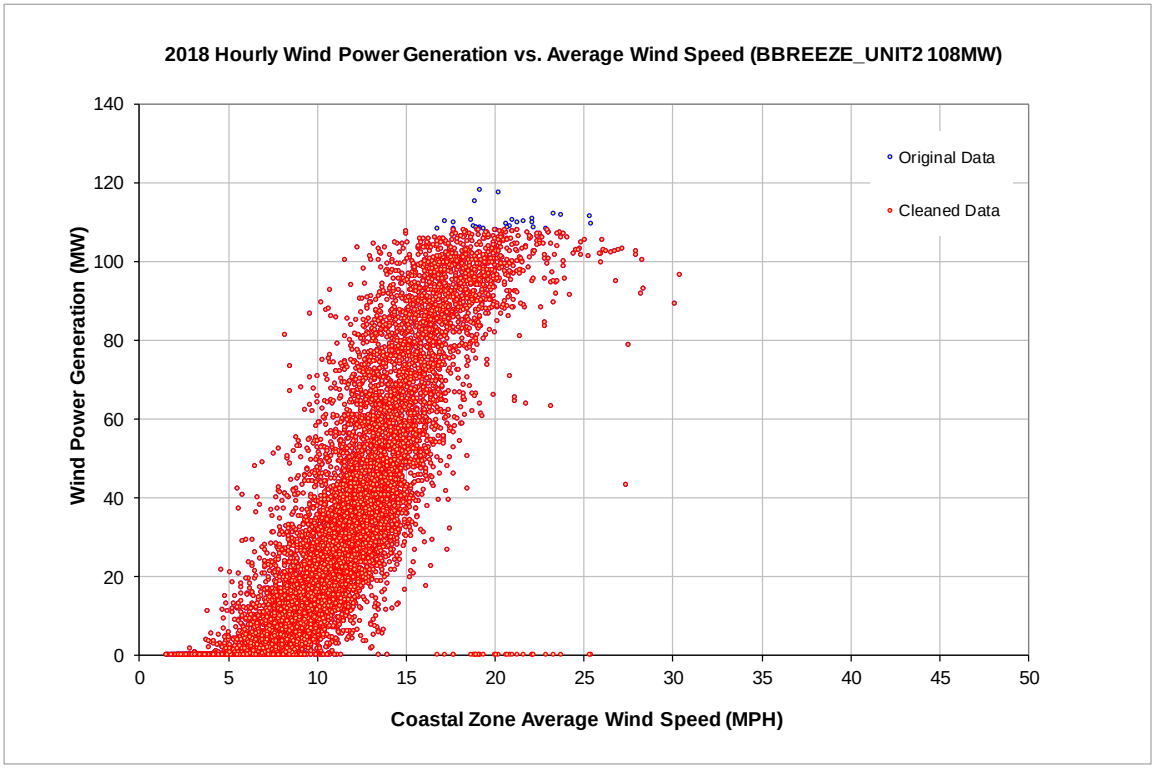


Figure A-34:BBREEZE_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

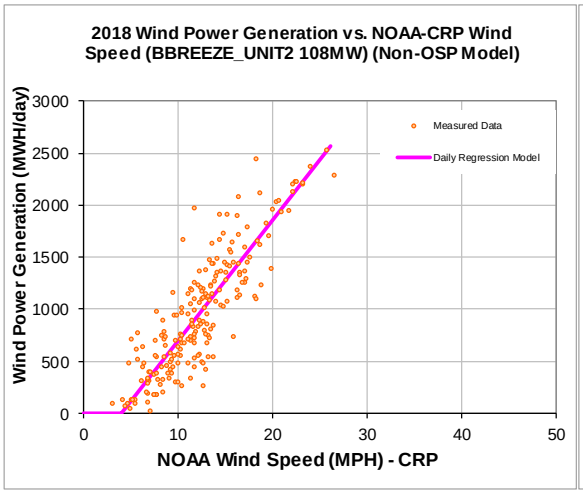
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-407.38
Left Slope (MWh/mph-day)	111.42
RMSE (MWh/day)	288.93
R2	0.75
CV-RMSE	30.2%
Daily Maximum (MWh/day)	2592

OSP Model:

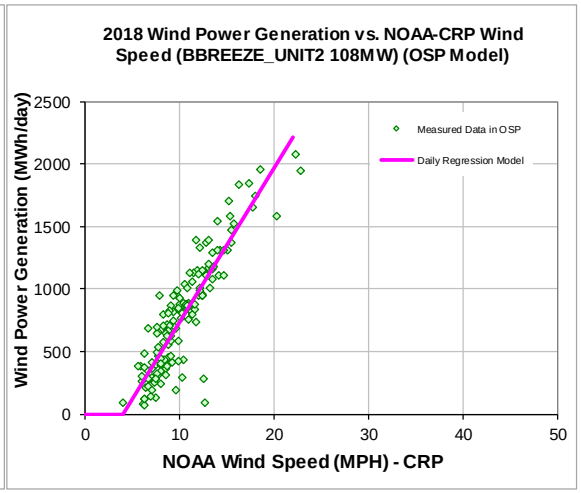
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-470.08
Left Slope (MWh/mph-day)	120.86
RMSE (MWh/day)	201.01
R2	0.80
CV-RMSE	25.5%
Daily Maximum (MWh/day)	2592

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
319,390	323,540

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
759	788

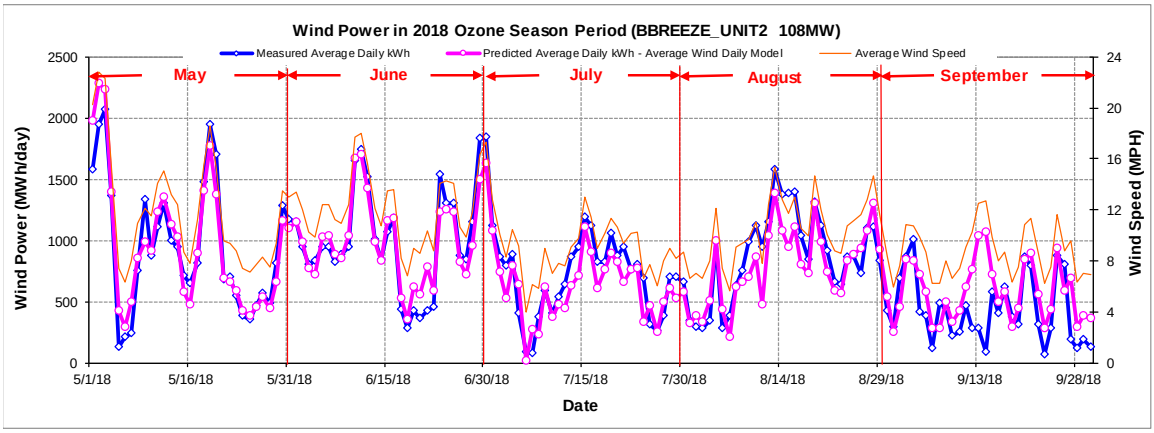
Figure A-35:BBREEZE_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	26,271	25,715	2.12%	33%	32%
Feb-18	28	14.08	29,067	32,527	-11.90%	40%	45%
Mar-18	31	13.69	33,208	34,671	-4.40%	41%	43%
Apr-18	30	14.08	34,180	34,836	-1.92%	44%	45%
May-18	31	11.95	29,628	30,187	-1.89%	37%	38%
Jun-18	30	12.21	30,356	30,169	0.62%	39%	39%
Jul-18	31	8.81	21,022	18,438	12.29%	26%	23%
Aug-18	31	10.35	26,627	24,200	9.12%	33%	30%
Sep-18	30	8.73	12,894	17,534	-35.98%	17%	23%
Oct-18	31	10.87	26,356	24,980	5.22%	33%	31%
Nov-18	30	10.83	23,001	23,996	-4.32%	30%	31%
Dec-18	31	11.29	30,928	26,356	14.78%	38%	33%
Total	365	11.48	323,540	323,608	-0.02%	34%	34%
Total in OSP (07/15-09/15)	153	10.41	120,528	120,528	0.00%	30%	30%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

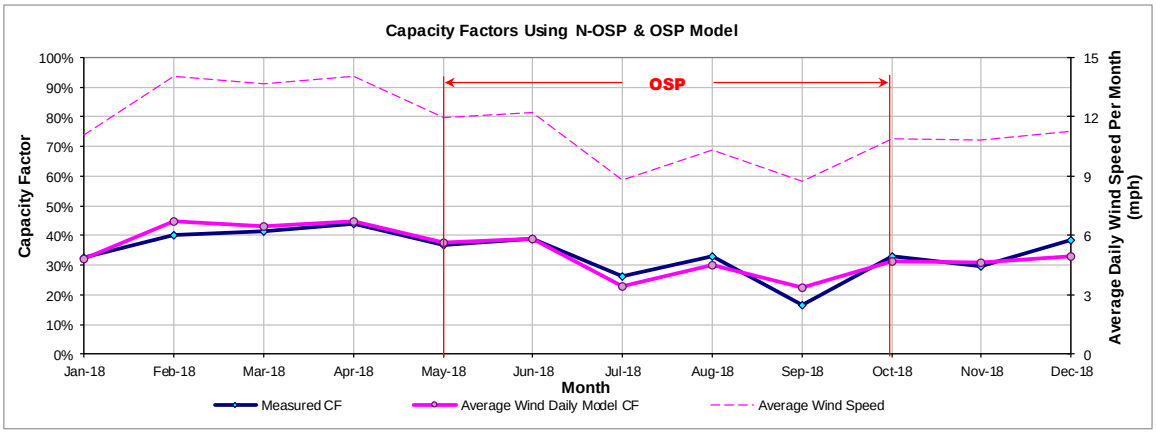


Figure A-36:BBREEZE_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.11 Buckthorn

A.11.1 Buckthorn - BUCKTHRN_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BUCKTHRN_UNIT1	Wind	-	ERATH	Infinity Windpower	Buckthorn Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
13 Vestas 3.45 MW	ERCOT	N	Dec-17	North	ABI	44.9

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

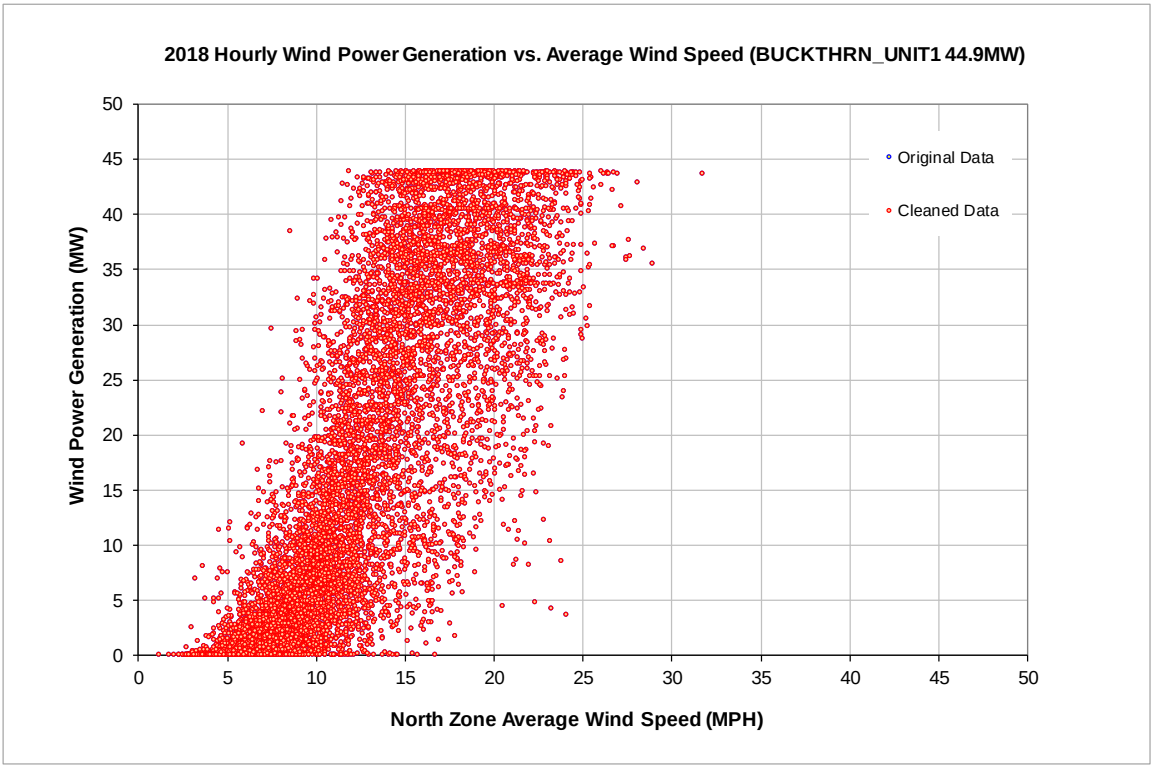


Figure A-37:BUCKTHRN_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

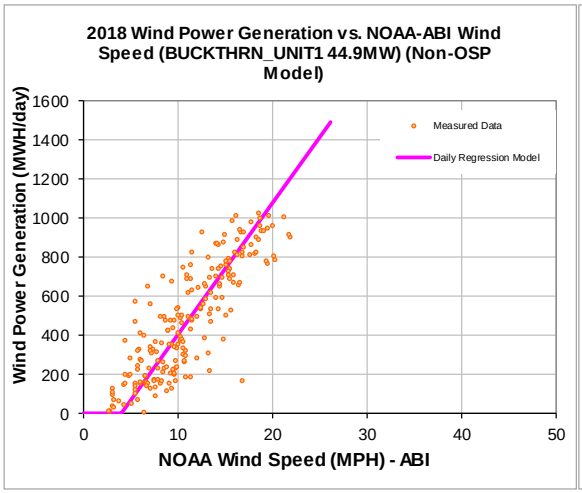
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-107.38
Left Slope (MWh/mph-day)	52.71
RMSE (MWh/day)	149.58
R2	0.72
CV-RMSE	31.7%
Daily Maximum (MWh/day)	1078

OSP Model:

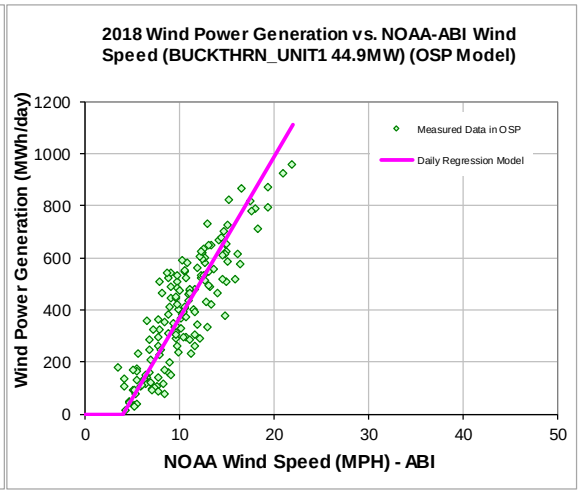
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-143.46
Left Slope (MWh/mph-day)	51.72
RMSE (MWh/day)	105.95
R2	0.77
CV-RMSE	26.8%
Daily Maximum (MWh/day)	1078

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
173,967	159,469

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
400	395

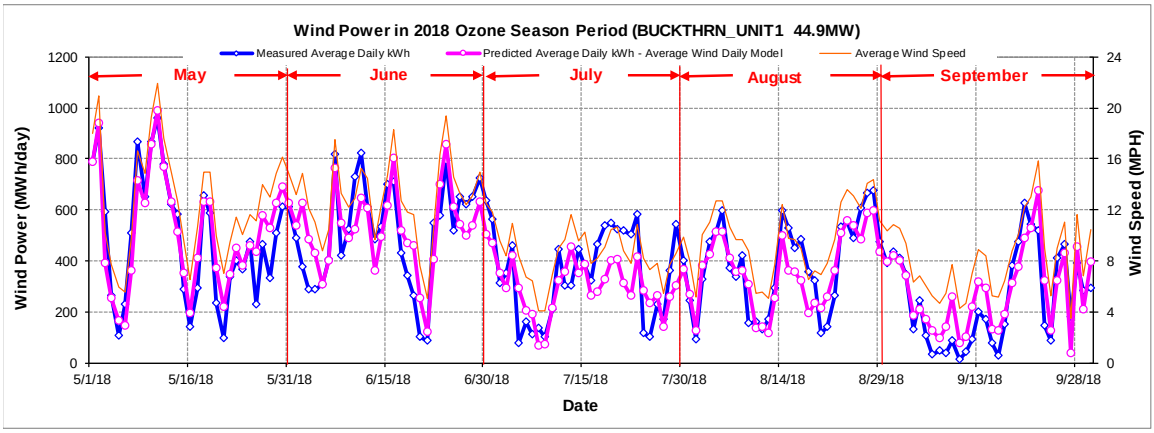
Figure A-38:BUCKTHRN_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.07	15,480	14,283	7.74%	46%	43%
Feb-18	28	11.19	10,165	13,032	-28.21%	34%	43%
Mar-18	31	11.92	15,638	16,156	-3.32%	47%	48%
Apr-18	30	13.18	16,048	17,614	-9.76%	50%	54%
May-18	31	12.78	15,336	16,045	-4.62%	46%	48%
Jun-18	30	12.90	15,420	15,718	-1.93%	48%	49%
Jul-18	31	8.52	10,508	9,213	12.32%	31%	28%
Aug-18	31	9.85	12,106	11,342	6.31%	36%	34%
Sep-18	30	7.97	7,003	8,055	-15.02%	22%	25%
Oct-18	31	9.35	12,180	11,955	1.85%	36%	36%
Nov-18	30	10.05	14,746	12,668	14.09%	46%	39%
Dec-18	31	10.23	14,839	13,387	9.79%	44%	40%
Total	365	10.74	159,469	159,469	0.00%	41%	41%
Total in OSP (07/15-09/15)	153	10.40	60,374	60,374	0.00%	37%	37%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

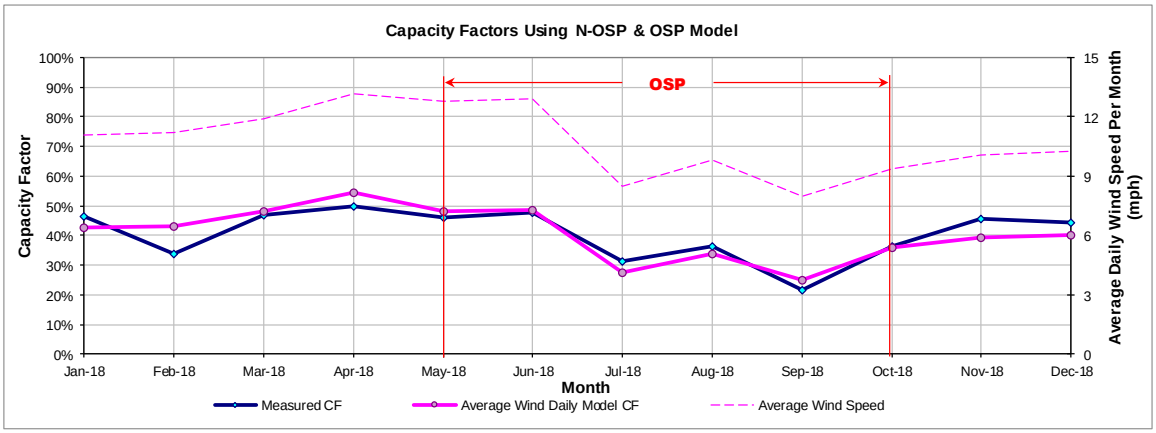


Figure A-39:BUCKTHRN_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.11.2 Buckthorn - BUCKTHRN_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BUCKTHRN_UNIT2	Wind	-	ERATH	Infinity Windpower	Buckthorn Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
16 Vestas 3.45 MW	ERCOT	N	Dec-17	North	ABI	55.7

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

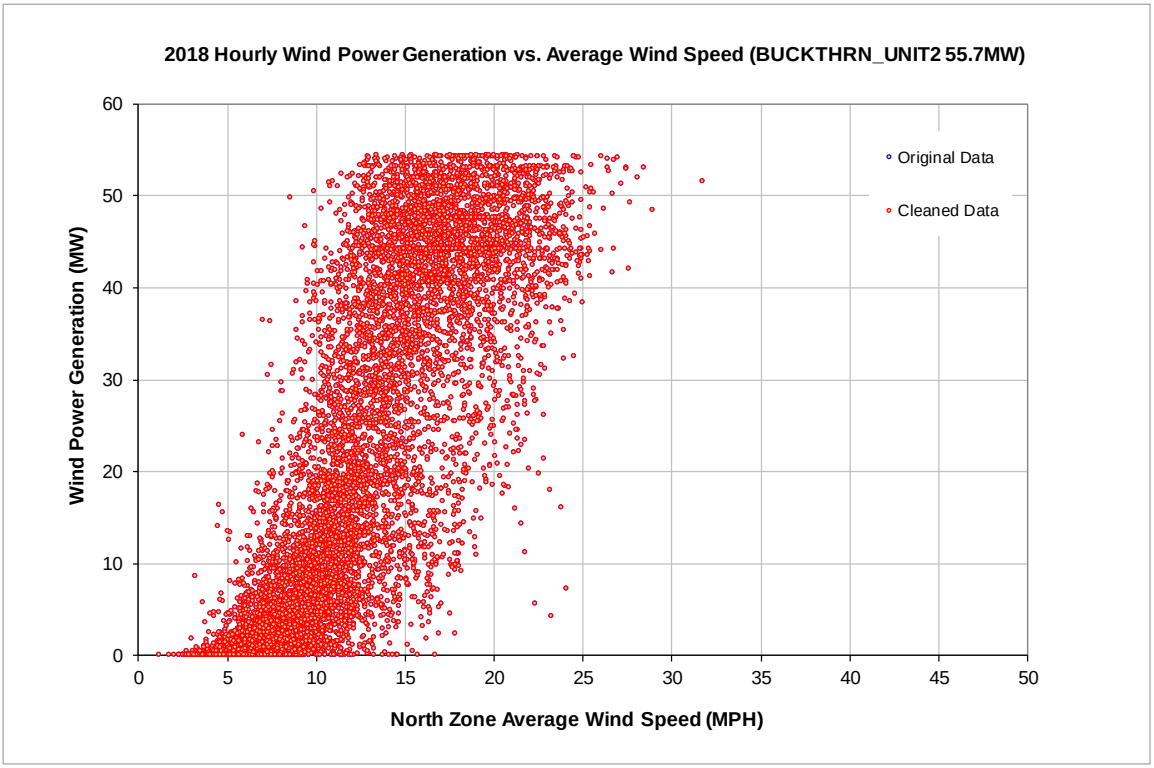


Figure A-40:BUCKTHRN_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

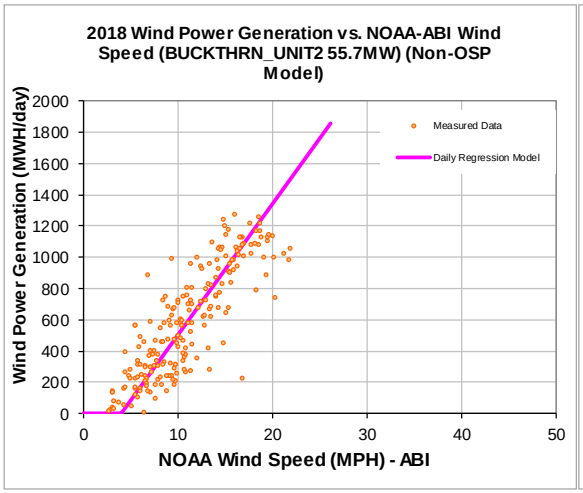
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-121.82
Left Slope (MWh/mph-day)	64.47
RMSE (MWh/day)	186.27
R2	0.72
CV-RMSE	31.7%
Daily Maximum (MWh/day)	1337

OSP Model:

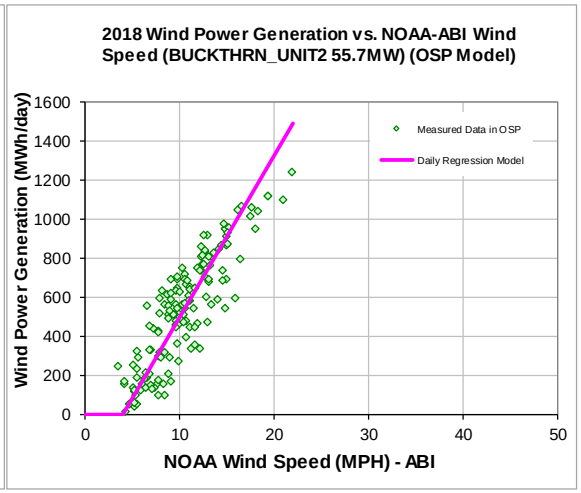
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-178.78
Left Slope (MWh/mph-day)	68.18
RMSE (MWh/day)	136.23
R2	0.77
CV-RMSE	25.7%
Daily Maximum (MWh/day)	1337

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
222,224	204,386

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
537	531

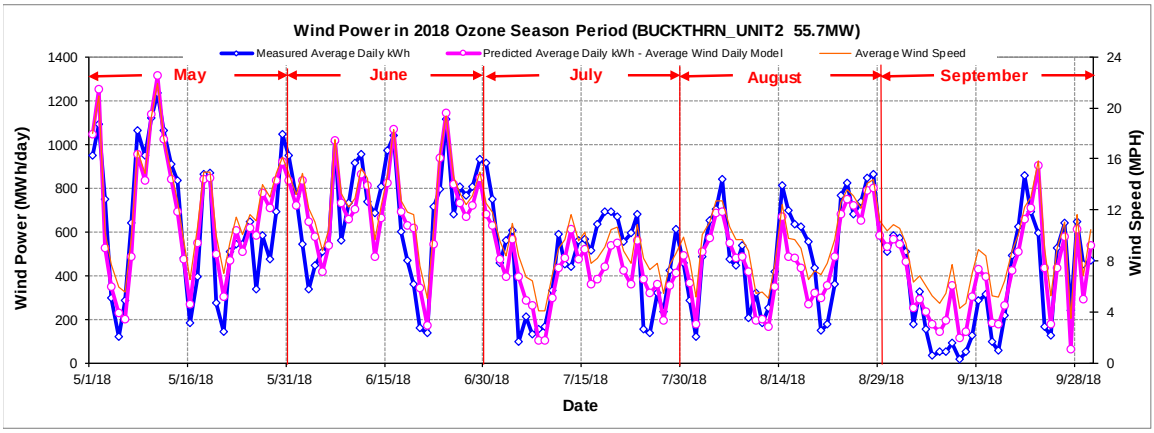
Figure A-41:BUCKTHRN_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.07	21,467	17,756	17.29%	52%	43%
Feb-18	28	11.19	15,959	16,198	-1.49%	43%	43%
Mar-18	31	11.92	19,783	20,057	-1.38%	48%	48%
Apr-18	30	13.18	19,430	21,831	-12.35%	48%	54%
May-18	31	12.78	20,769	21,473	-3.39%	50%	52%
Jun-18	30	12.90	20,747	21,033	-1.38%	52%	52%
Jul-18	31	8.52	13,647	12,467	8.64%	33%	30%
Aug-18	31	9.85	16,410	15,274	6.92%	40%	37%
Sep-18	30	7.97	9,605	10,930	-13.80%	24%	27%
Oct-18	31	9.35	15,346	14,918	2.79%	37%	36%
Nov-18	30	10.05	15,125	15,781	-4.34%	38%	39%
Dec-18	31	10.23	16,099	16,669	-3.55%	39%	40%
Total	365	10.74	204,386	204,386	0.00%	42%	42%
Total in OSP (07/15-09/15)	153	10.40	81,176	81,176	0.00%	40%	40%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

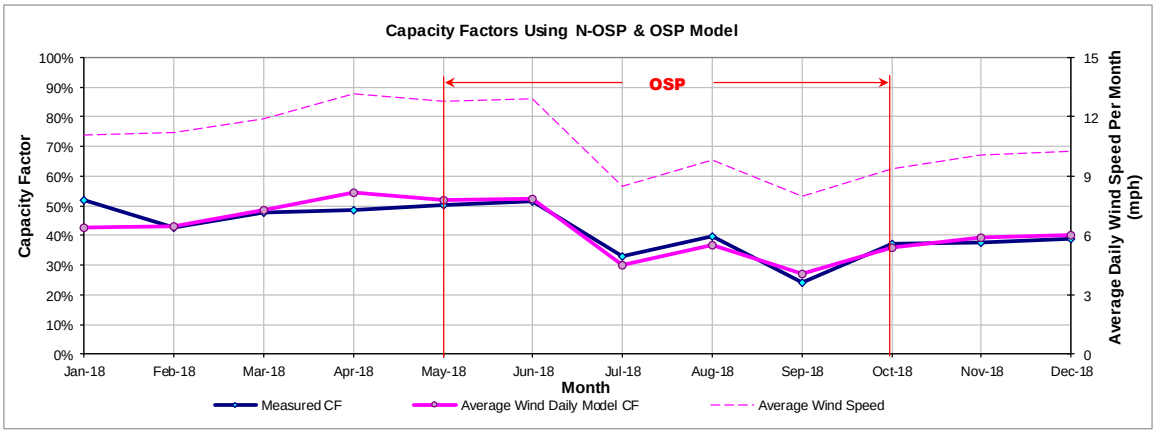


Figure A-42:BUCKTHRN_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.12 Buffalo Gap 1

A.12.1 Buffalo Gap 1 - BUFF_GAP_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BUFF_GAP_UNIT1	Wind	Abilene	TAYLOR	AES	Buffalo Gap 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
67 Vestas 1.8 MW	ERCOT	W	Sep-05	West	ABI	120.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

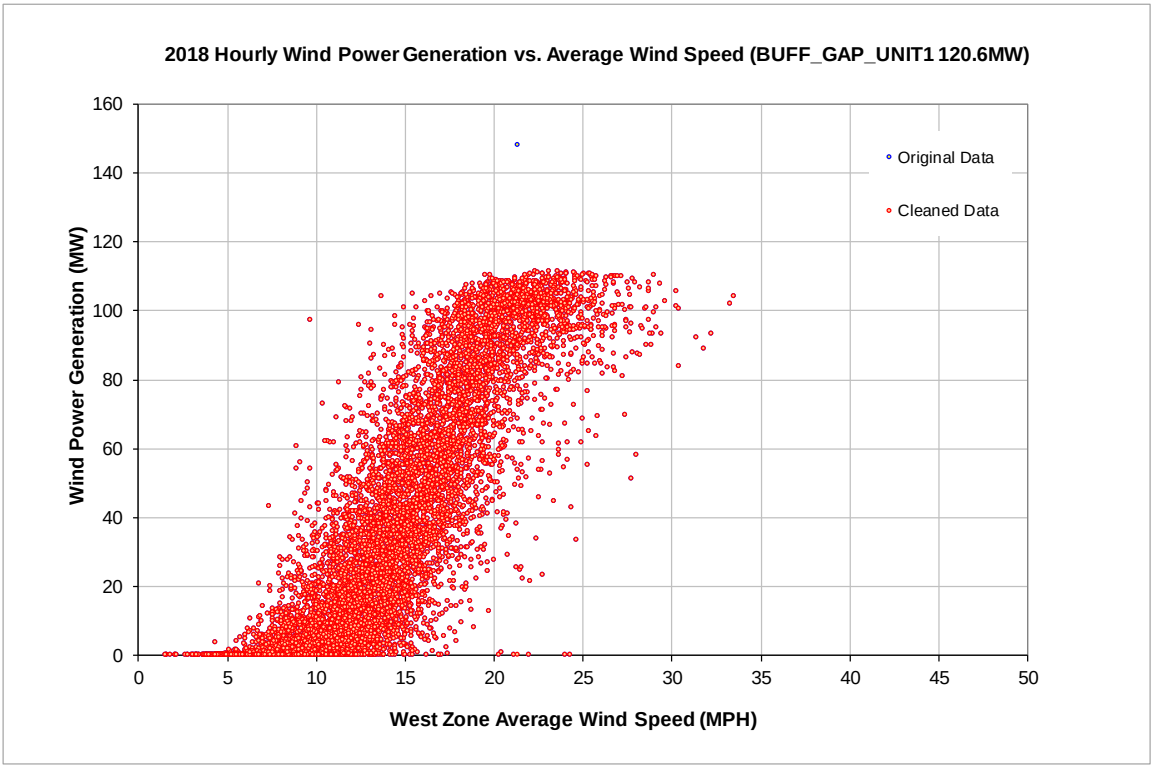


Figure A-43:BUFF_GAP_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

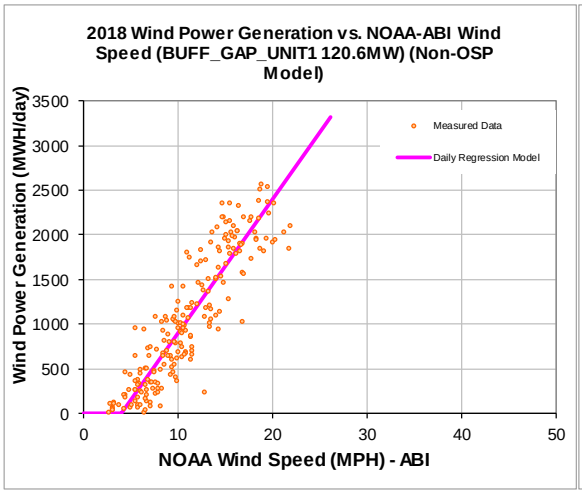
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-500.73
Left Slope (MWh/mph-day)	141.22
RMSE (MWh/day)	313.84
R2	0.81
CV-RMSE	30.0%
Daily Maximum (MWh/day)	2894

OSP Model:

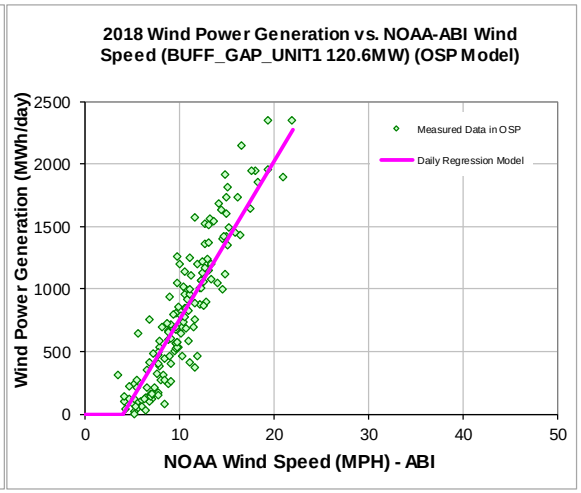
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-646.09
Left Slope (MWh/mph-day)	139.92
RMSE (MWh/day)	224.09
R2	0.84
CV-RMSE	27.7%
Daily Maximum (MWh/day)	2894

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
383,248	344,914

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
826	810

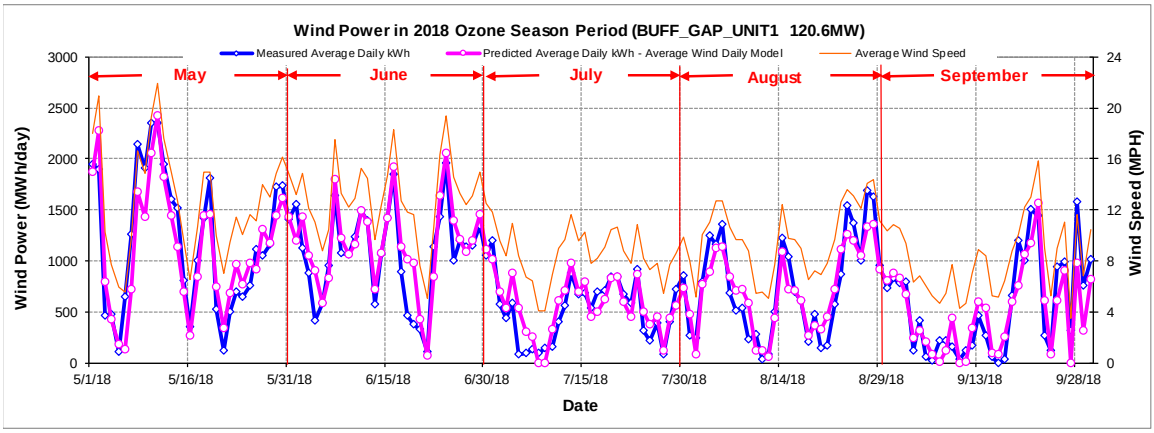
Figure A-44:BUFF_GAP_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.07	35,007	32,022	8.53%	39%	36%
Feb-18	28	11.00	29,348	29,575	-0.77%	36%	36%
Mar-18	31	11.92	35,622	36,680	-2.97%	40%	41%
Apr-18	30	13.18	36,046	40,800	-13.19%	42%	47%
May-18	31	12.78	37,343	35,410	5.18%	42%	39%
Jun-18	30	12.90	31,832	34,785	-9.28%	37%	40%
Jul-18	31	8.52	15,698	17,072	-8.75%	17%	19%
Aug-18	31	9.85	23,349	22,688	2.83%	26%	25%
Sep-18	30	7.97	15,642	14,255	8.87%	18%	16%
Oct-18	31	9.35	27,662	25,637	7.32%	31%	29%
Nov-18	30	10.05	28,075	27,614	1.64%	32%	32%
Dec-18	31	10.23	29,289	29,368	-0.27%	33%	33%
Total	365	10.73	344,914	345,906	-0.29%	33%	33%
Total in OSP (07/15-09/15)	153	10.40	123,864	124,209	-0.28%	28%	28%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

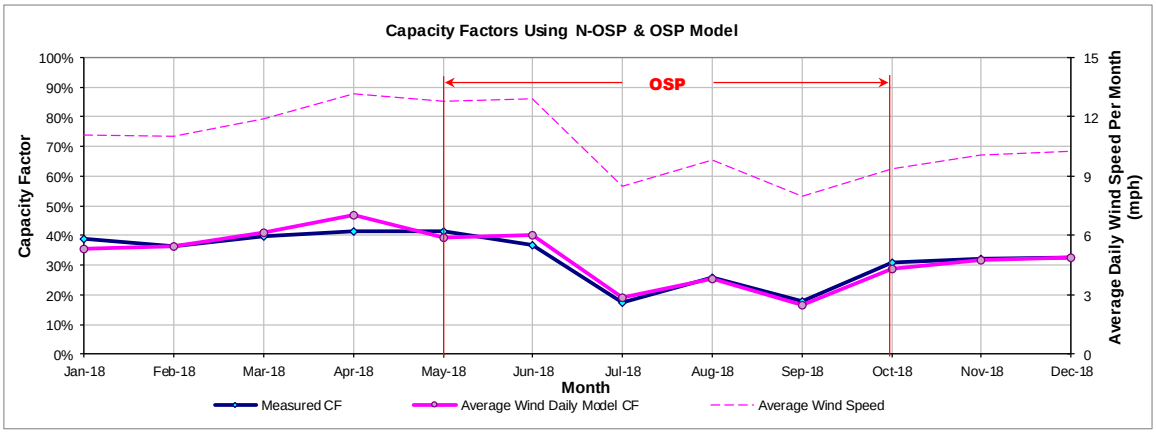


Figure A-45:BUFF_GAP_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.13 Buffalo Gap 2 (Cirello 1)

A.13.1 Buffalo Gap 2 (Cirello 1) - BUFF_GAP_UNIT2_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BUFF_GAP_UNIT2_1	Wind	Abilene	TAYLOR	AES	Buffalo Gap 2 (Cirello 1)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
77 GE 1.5 MW 78 GE 1.5 MW	ERCOT	W	Aug-07	West	ABI	232.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

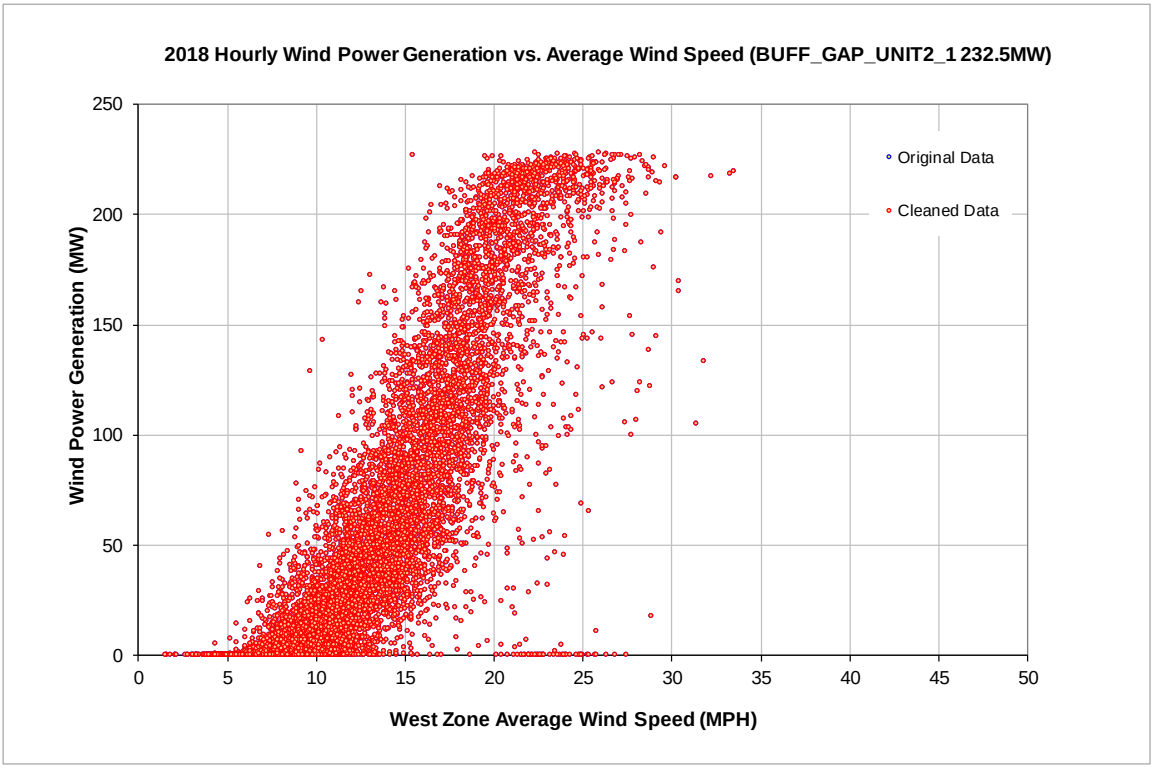


Figure A-46:BUFF_GAP_UNIT2_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

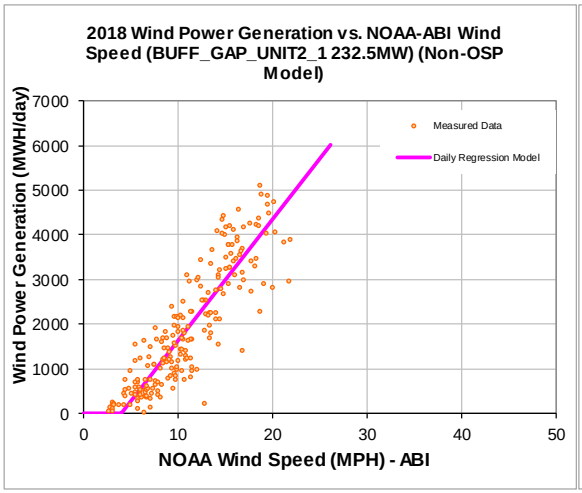
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-924.59
Left Slope (MWh/mph-day)	257.37
RMSE (MWh/day)	638.85
R2	0.77
CV-RMSE	33.7%
Daily Maximum (MWh/day)	5580

OSP Model:

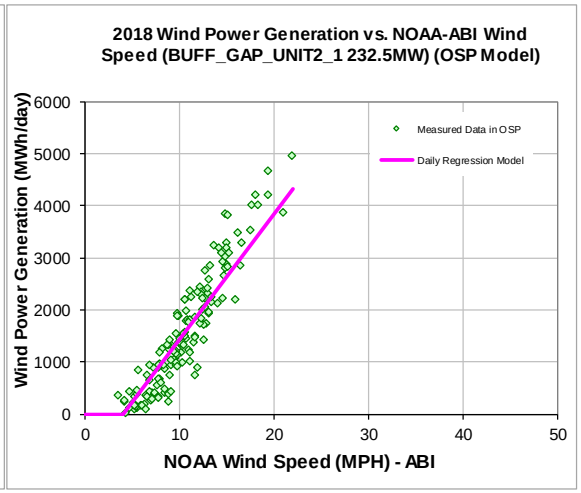
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1418.55
Left Slope (MWh/mph-day)	284.54
RMSE (MWh/day)	393.91
R2	0.88
CV-RMSE	25.6%
Daily Maximum (MWh/day)	5580

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
707,122	636,193

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,579	1,542

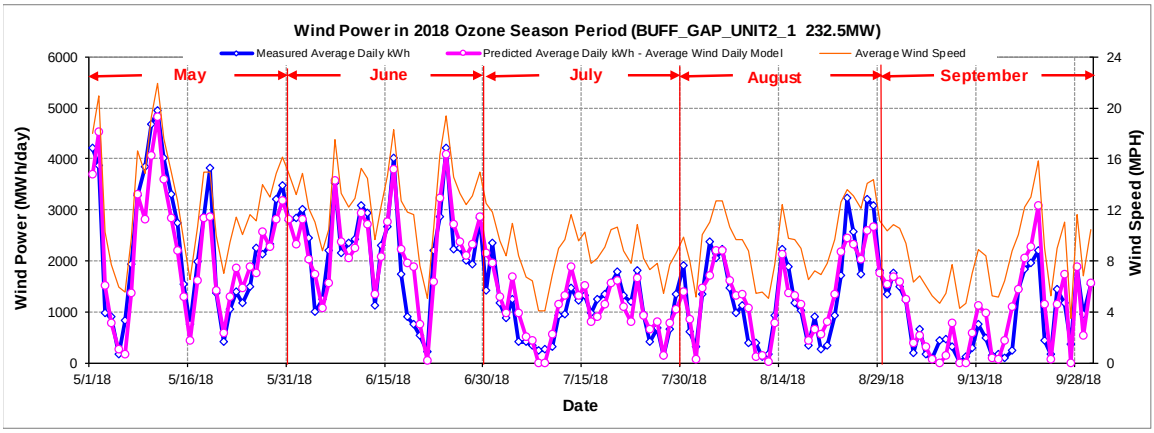
Figure A-47:BUFF_GAP_UNIT2_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.07	66,746	58,024	13.07%	39%	34%
Feb-18	28	11.00	52,751	53,576	-1.56%	34%	34%
Mar-18	31	11.92	66,052	66,478	-0.65%	38%	38%
Apr-18	30	13.18	65,213	73,998	-13.47%	39%	44%
May-18	31	12.78	73,563	68,760	6.53%	43%	40%
Jun-18	30	12.90	65,326	67,594	-3.47%	39%	40%
Jul-18	31	8.52	31,228	31,679	-1.45%	18%	18%
Aug-18	31	9.85	43,229	42,891	0.78%	25%	25%
Sep-18	30	7.97	22,514	26,225	-16.49%	13%	16%
Oct-18	31	9.35	48,287	46,376	3.96%	28%	27%
Nov-18	30	10.05	49,480	49,979	-1.01%	30%	30%
Dec-18	31	10.23	51,805	53,175	-2.64%	30%	31%
Total	365	10.73	636,193	638,758	-0.40%	31%	31%
Total in OSP (07/15-09/15)	153	10.40	235,860	237,151	-0.55%	28%	28%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

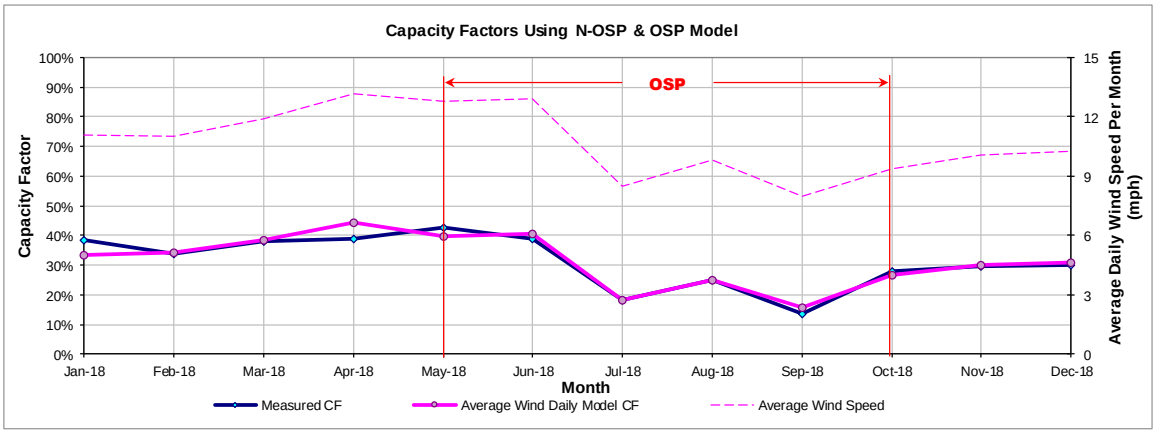


Figure A-48:BUFF_GAP_UNIT2_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.14 Buffalo Gap 3

A.14.1 Buffalo Gap 3 - BUFF_GAP_UNIT3

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BUFF_GAP_UNIT3	Wind	Abilene	TAYLOR	AES	Buffalo Gap 3

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
74 Siemens SWT 2.3 MW	ERCOT	W	Apr-08	West	ABI	170.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

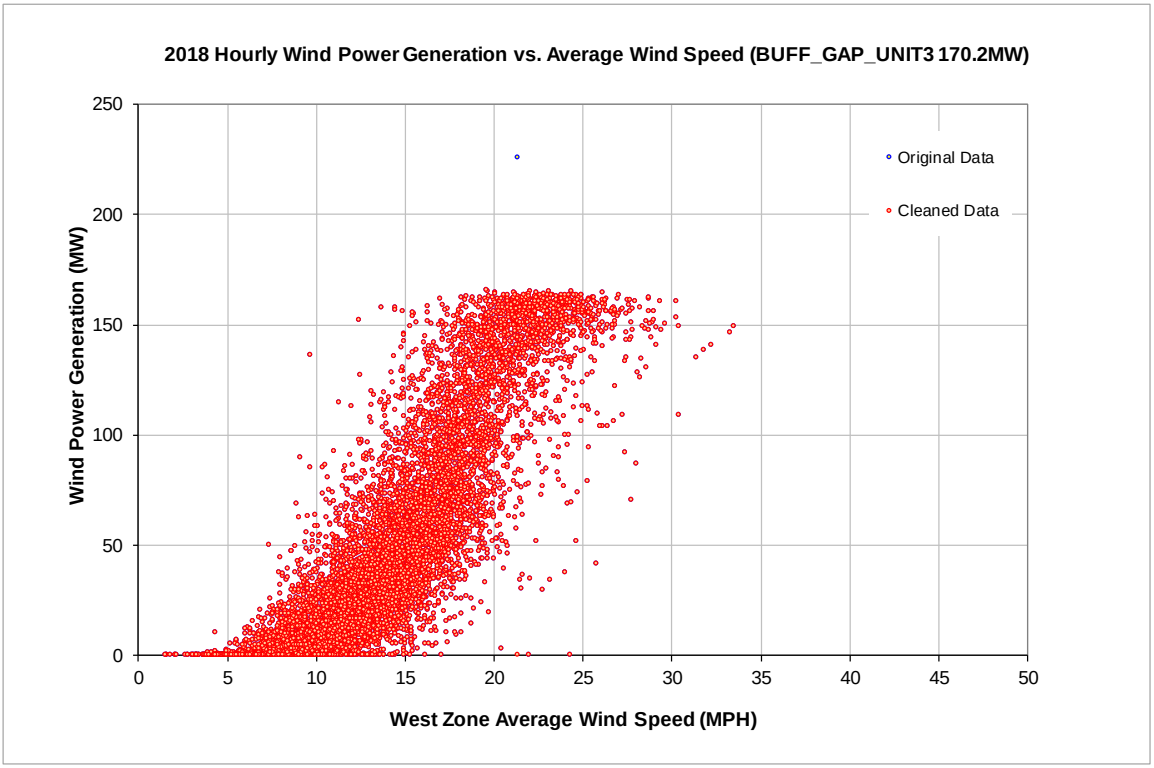


Figure A-49:BUFF_GAP_UNIT3 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

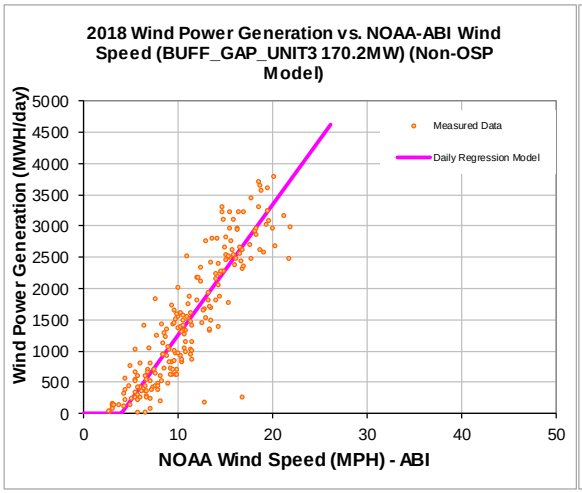
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-721.05
Left Slope (MWh/mph-day)	198.53
RMSE (MWh/day)	449.51
R2	0.80
CV-RMSE	30.8%
Daily Maximum (MWh/day)	4085

OSP Model:

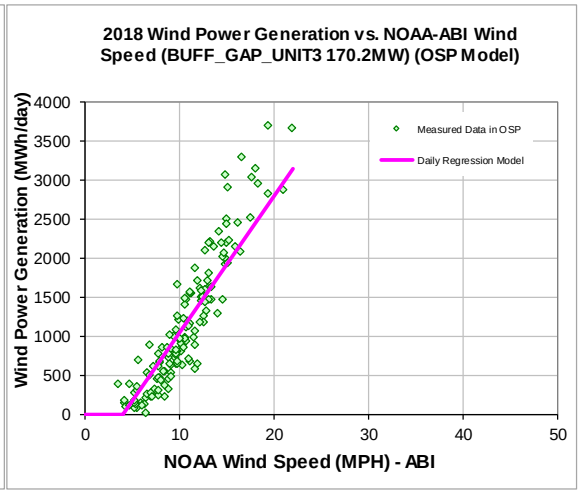
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1082.63
Left Slope (MWh/mph-day)	211.68
RMSE (MWh/day)	314.47
R2	0.86
CV-RMSE	28.1%
Daily Maximum (MWh/day)	4085

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
533,254	477,933

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,149	1,120

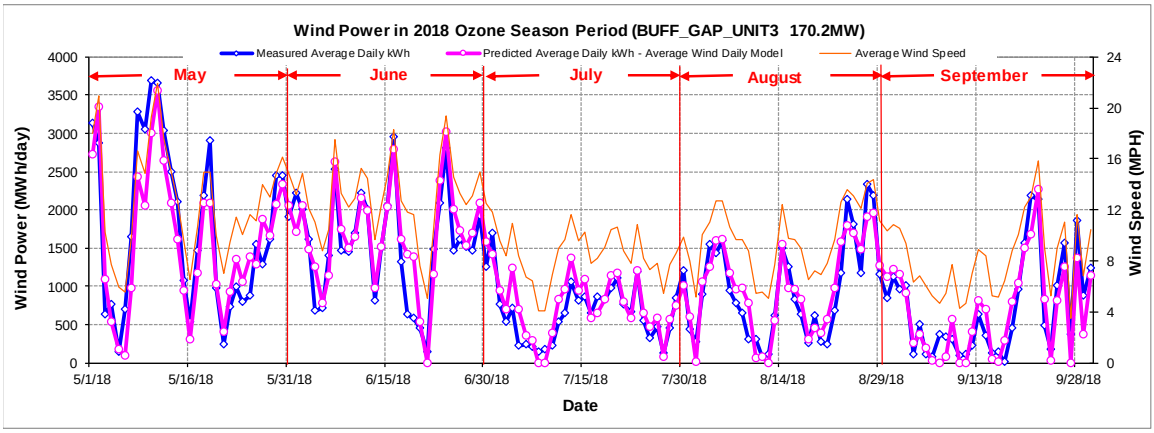
Figure A-50:BUFF_GAP_UNIT3 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.23	47,560	44,013	7.46%	38%	35%
Feb-18	28	11.00	38,434	41,117	-6.98%	34%	36%
Mar-18	31	11.92	48,376	51,039	-5.50%	38%	40%
Apr-18	30	13.18	53,522	56,847	-6.21%	44%	46%
May-18	31	12.78	55,159	50,309	8.79%	44%	40%
Jun-18	30	12.90	45,981	49,476	-7.60%	38%	40%
Jul-18	31	8.52	20,217	22,777	-12.66%	16%	18%
Aug-18	31	9.85	29,621	31,079	-4.92%	23%	25%
Sep-18	30	7.97	20,318	18,801	7.47%	17%	15%
Oct-18	31	9.35	39,269	35,547	9.48%	31%	28%
Nov-18	30	10.05	38,090	38,327	-0.62%	31%	31%
Dec-18	31	10.23	41,385	40,792	1.43%	33%	32%
Total	365	10.74	477,933	480,125	-0.46%	32%	32%
Total in OSP (07/15-09/15)	153	10.40	171,297	172,443	-0.67%	27%	28%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

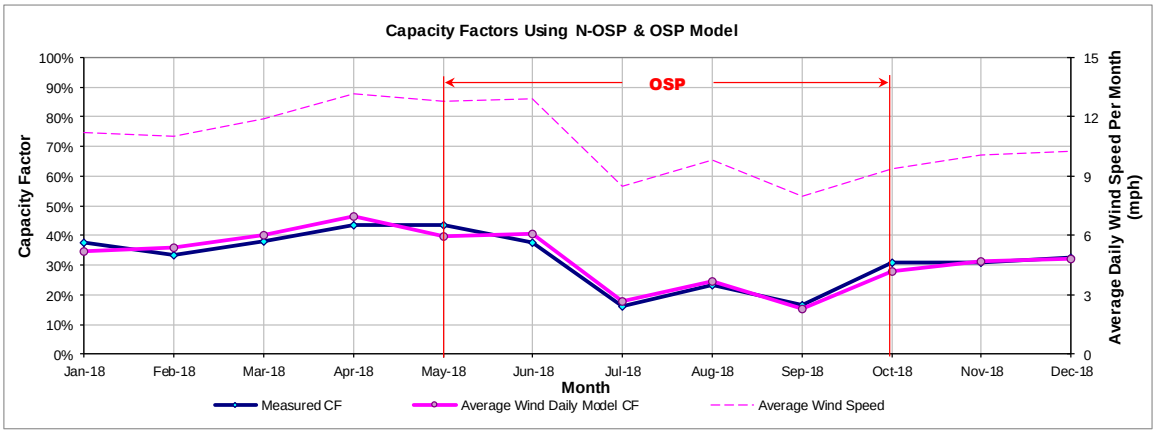


Figure A-51:BUFF_GAP_UNIT3 - Predicted Wind Power and Capacity Factor Using Daily Models

A.15 Bull Creek Wind Plant

A.15.1 Bull Creek Wind Plant - BULLCRK_WND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BULLCRK_WND1	Wind	-	BORDEN	Eurus Energy Holdings	Bull Creek Wind Plant

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
89 Mitsubishi 1 MW 91 Mitsubishi 1 MW	ERCOT	W	Nov-08	West	LBB	178

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

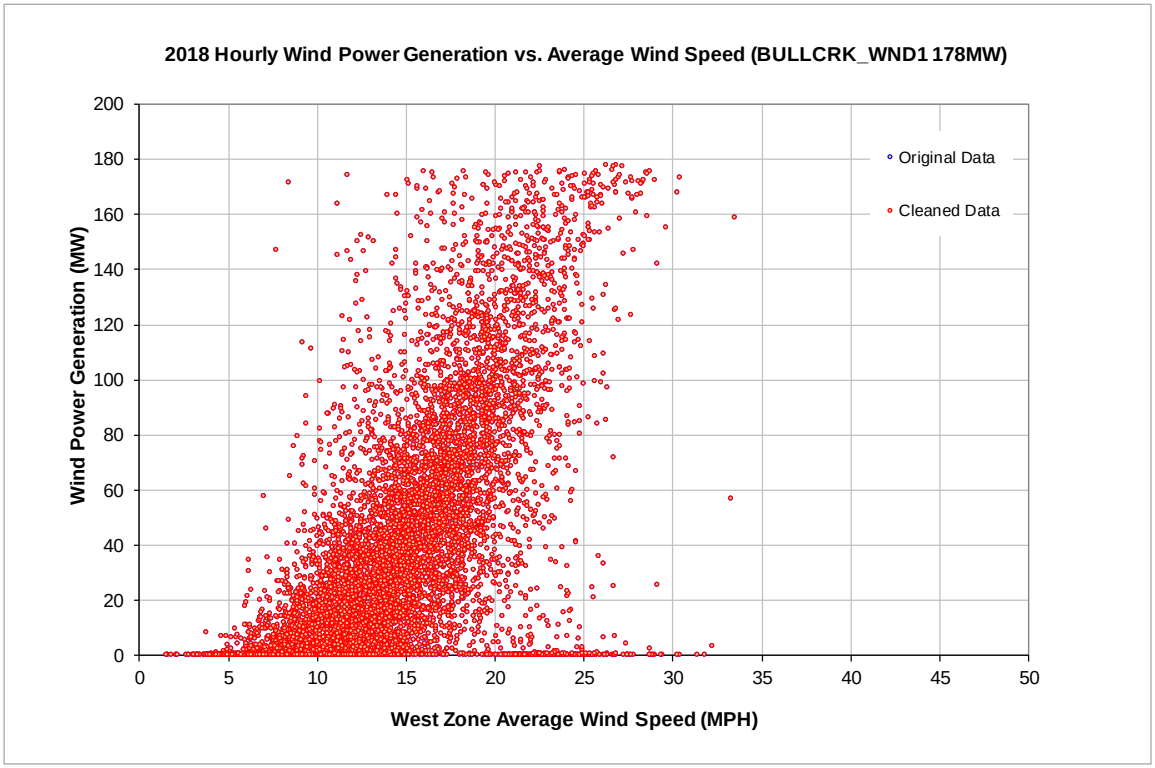


Figure A-52:BULLCRK_WND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

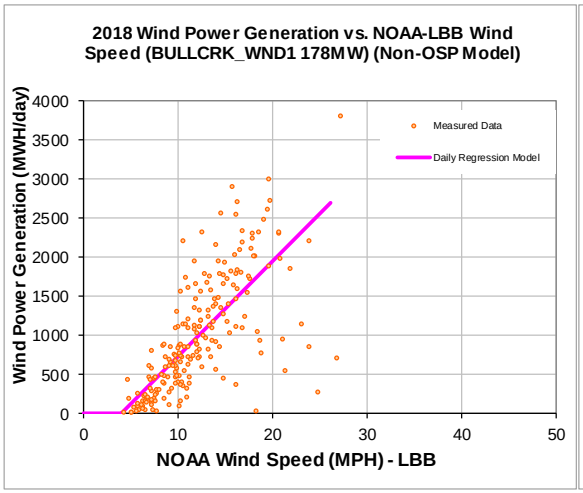
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-390.86
Left Slope (MWh/mph-day)	114.12
RMSE (MWh/day)	530.16
R2	0.49
CV-RMSE	53.3%
Daily Maximum (MWh/day)	4272

OSP Model:

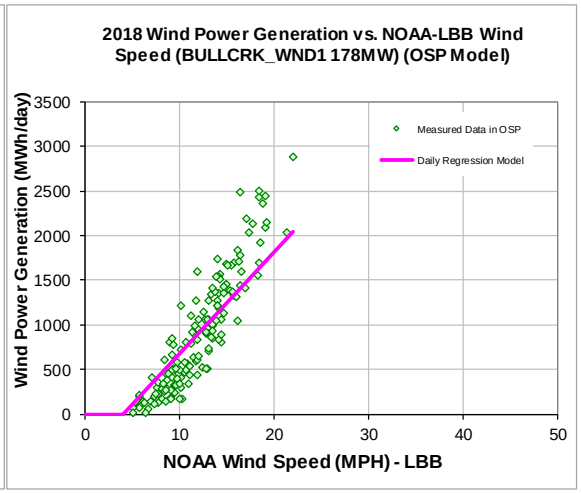
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1041.83
Left Slope (MWh/mph-day)	162.36
RMSE (MWh/day)	262.66
R2	0.83
CV-RMSE	29.0%
Daily Maximum (MWh/day)	4272

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
335,853	349,440

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
741	906

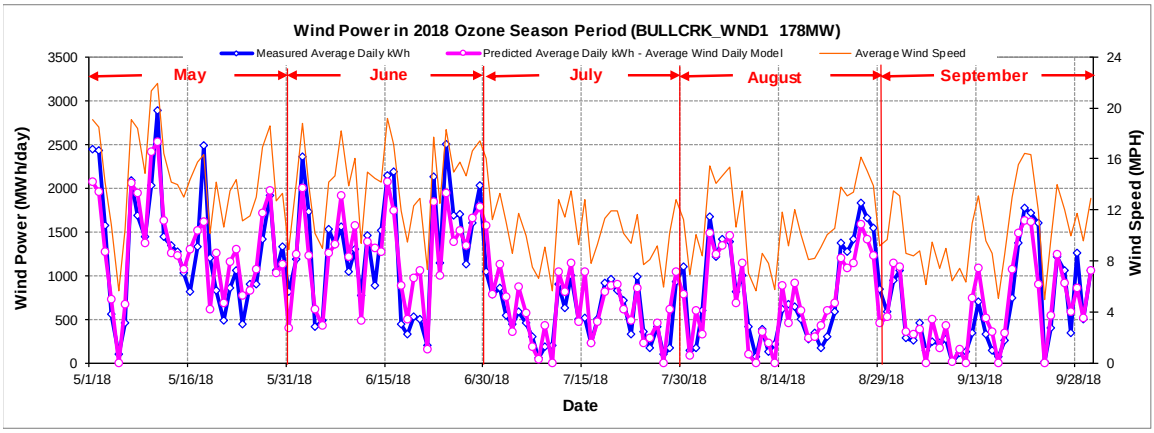
Figure A-53:BULLCRK_WND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	33,859	27,115	19.92%	26%	20%
Feb-18	28	12.08	30,258	27,646	8.63%	25%	23%
Mar-18	31	13.58	33,654	35,935	-6.78%	25%	27%
Apr-18	30	15.19	27,841	40,287	-44.70%	22%	31%
May-18	31	14.42	40,480	40,425	0.13%	31%	31%
Jun-18	30	14.33	38,738	38,565	0.45%	30%	30%
Jul-18	31	10.01	16,623	18,264	-9.87%	13%	14%
Aug-18	31	11.09	24,890	23,730	4.66%	19%	18%
Sep-18	30	10.17	17,963	18,771	-4.50%	14%	15%
Oct-18	31	10.80	25,983	26,079	-0.37%	20%	20%
Nov-18	30	11.15	28,384	26,432	6.88%	22%	21%
Dec-18	31	11.13	30,767	27,253	11.42%	23%	21%
Total	365	12.08	349,440	350,503	-0.30%	22%	22%
Total in OSP (07/15-09/15)	153	12.00	138,693	139,756	-0.77%	21%	21%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

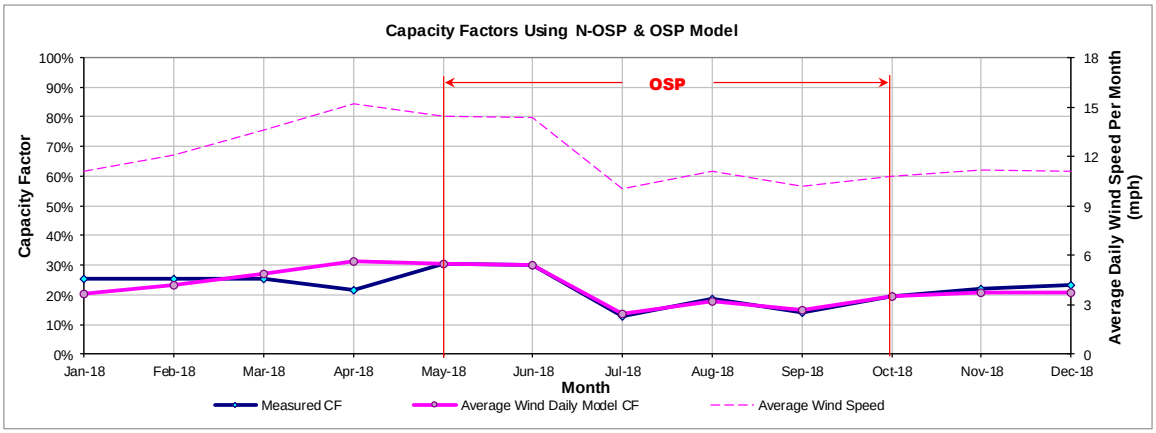


Figure A-54:BULLCRK_WND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.16 Callahan Divide Wind Energy Center

A.16.1 Callahan Divide Wind Energy Center - CALLAHAN_WND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
CALLAHAN_WND1	Wind	Abilene	TAYLOR	FPL Energy	Callahan Divide Wind Energy Center

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
76 GE 1.5 MW	ERCOT	W	Feb-05	West	ABI	114

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

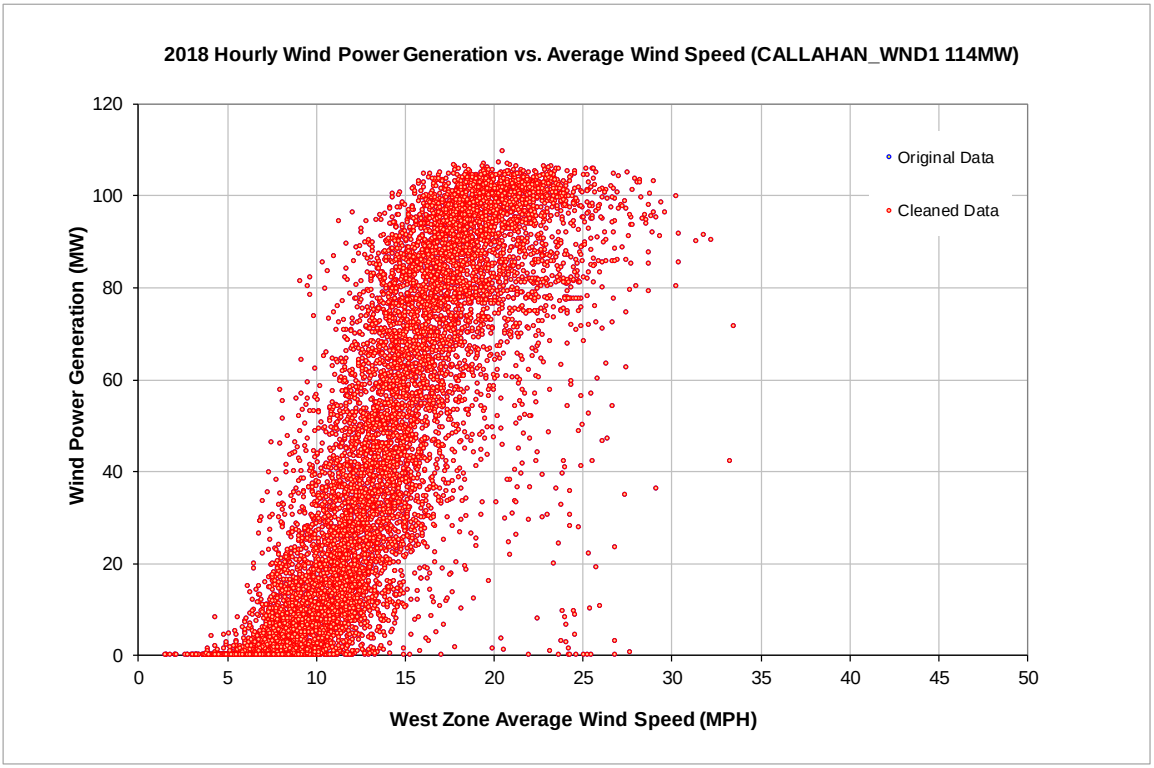


Figure A-55:CALLAHAN_WND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

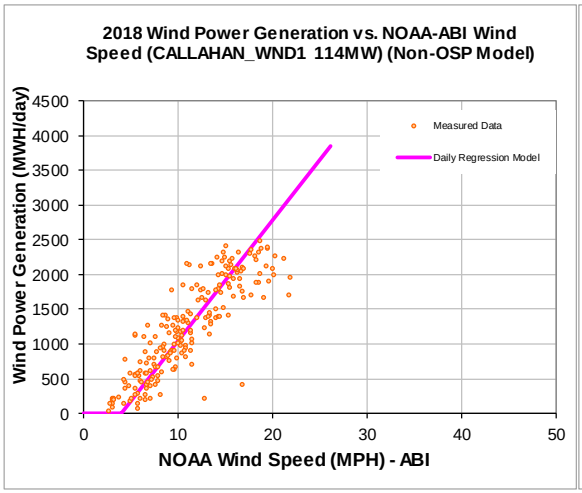
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-178.00
Left Slope (MWh/mph-day)	126.91
RMSE (MWh/day)	337.61
R2	0.75
CV-RMSE	27.8%
Daily Maximum (MWh/day)	2736

OSP Model:

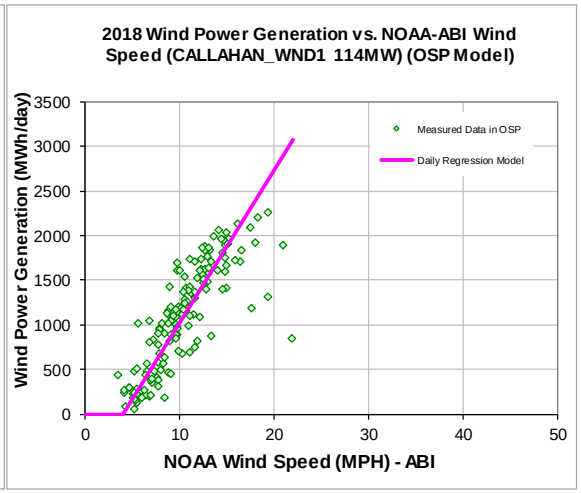
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-261.55
Left Slope (MWh/mph-day)	130.23
RMSE (MWh/day)	330.22
R2	0.68
CV-RMSE	30.2%
Daily Maximum (MWh/day)	2736

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
458,023	422,706

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,106	1,093

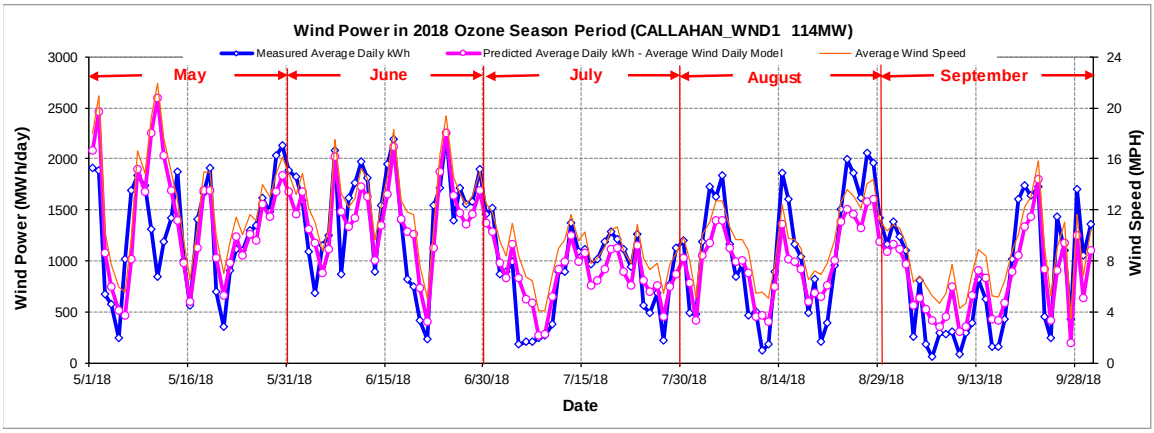
Figure A-56:CALLAHAN_WND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.23	41,404	36,185	12.60%	49%	43%
Feb-18	28	11.00	32,359	34,095	-5.36%	42%	45%
Mar-18	31	11.92	40,962	41,398	-1.06%	48%	49%
Apr-18	30	13.18	39,124	44,828	-14.58%	48%	55%
May-18	31	12.78	40,610	43,490	-7.09%	48%	51%
Jun-18	30	12.90	42,878	42,569	0.72%	52%	52%
Jul-18	31	8.52	25,527	26,289	-2.99%	30%	31%
Aug-18	31	9.85	35,401	31,650	10.60%	42%	37%
Sep-18	30	7.97	22,855	23,273	-1.83%	28%	28%
Oct-18	31	9.35	32,240	31,282	2.97%	38%	37%
Nov-18	30	10.05	34,538	32,919	4.69%	42%	40%
Dec-18	31	10.23	34,807	34,729	0.22%	41%	41%
Total	365	10.74	422,706	422,706	0.00%	42%	42%
Total in OSP (07/15-09/15)	153	10.40	167,271	167,271	0.00%	40%	40%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

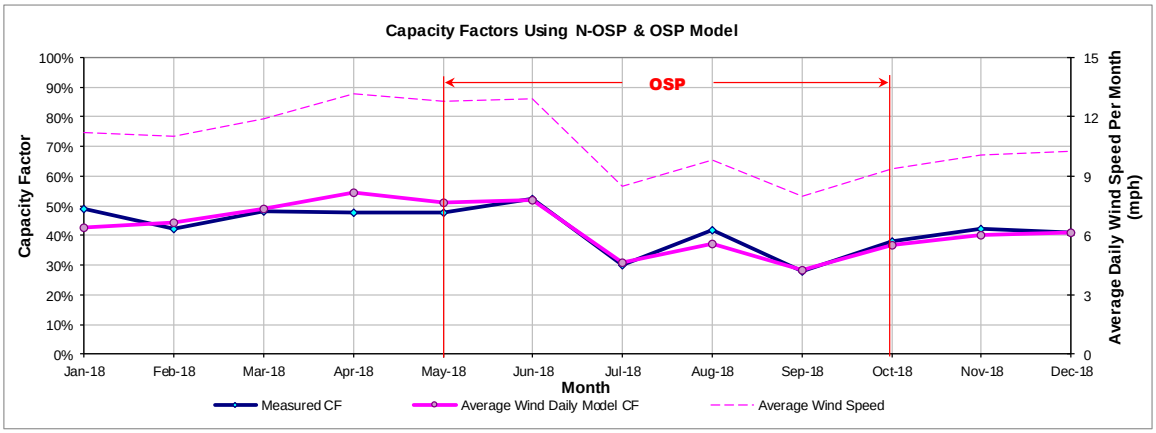


Figure A-57:CALLAHAN_WND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.17 Cameron County Wind

A.17.1 Cameron County Wind - CAMWIND_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
CAMWIND_UNIT1	Wind	Brownsville	CAMERON	Apex Clean Energy	Cameron County Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
55 Acciona 3 MW	ERCOT	S	Jan-16	Coastal	CRP	165

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

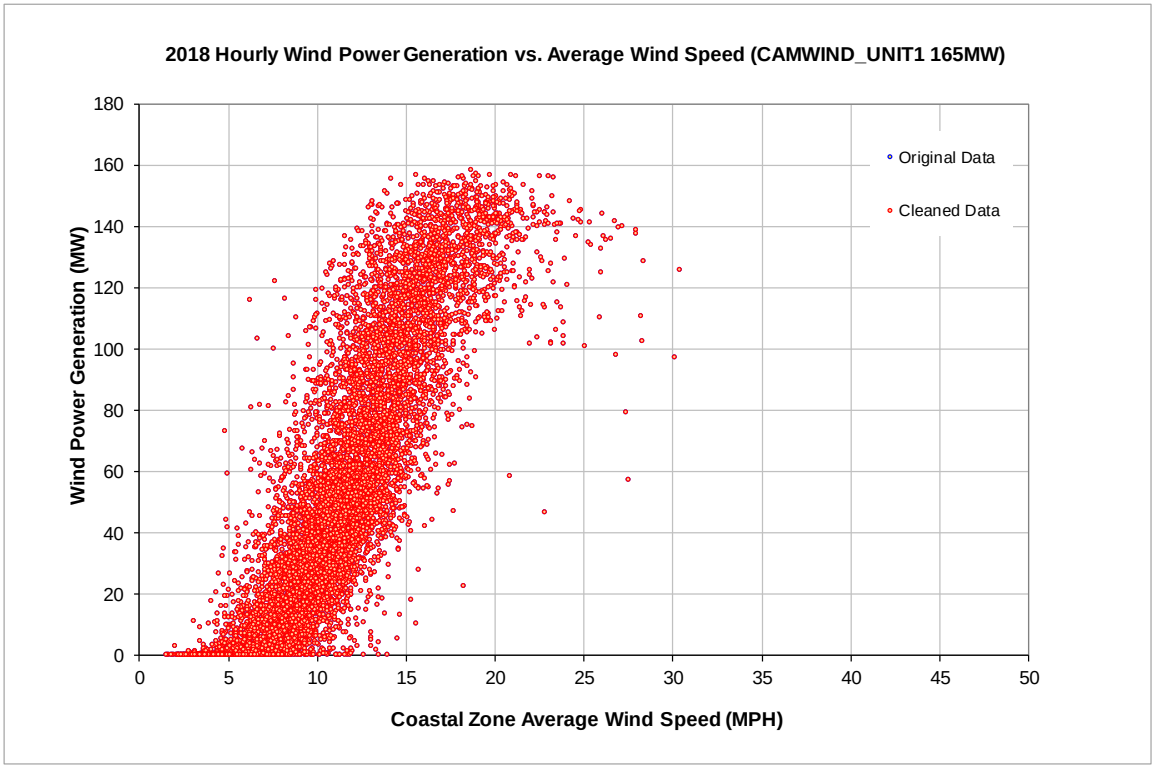


Figure A-58:CAMWIND_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

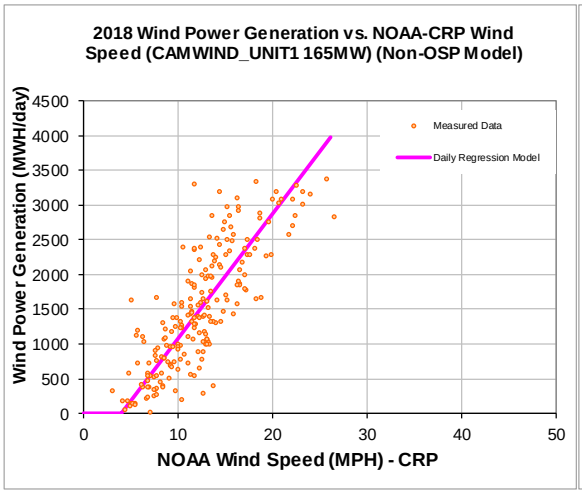
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-453.23
Left Slope (MWh/mph-day)	158.25
RMSE (MWh/day)	499.71
R2	0.67
CV-RMSE	33.6%
Daily Maximum (MWh/day)	3960

OSP Model:

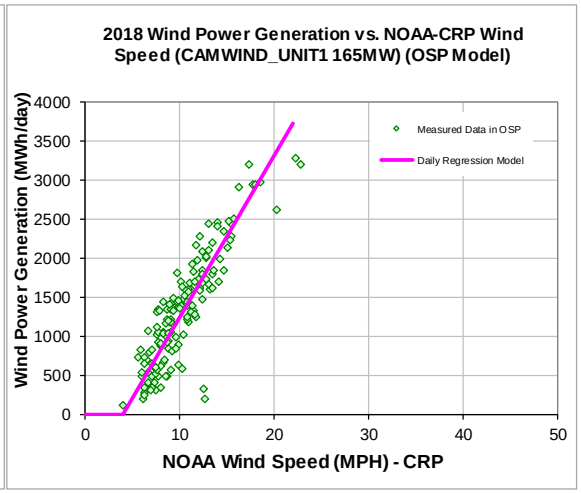
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-634.35
Left Slope (MWh/mph-day)	188.49
RMSE (MWh/day)	330.51
R2	0.78
CV-RMSE	24.9%
Daily Maximum (MWh/day)	3960

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
511,589	517,974

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,282	1,327

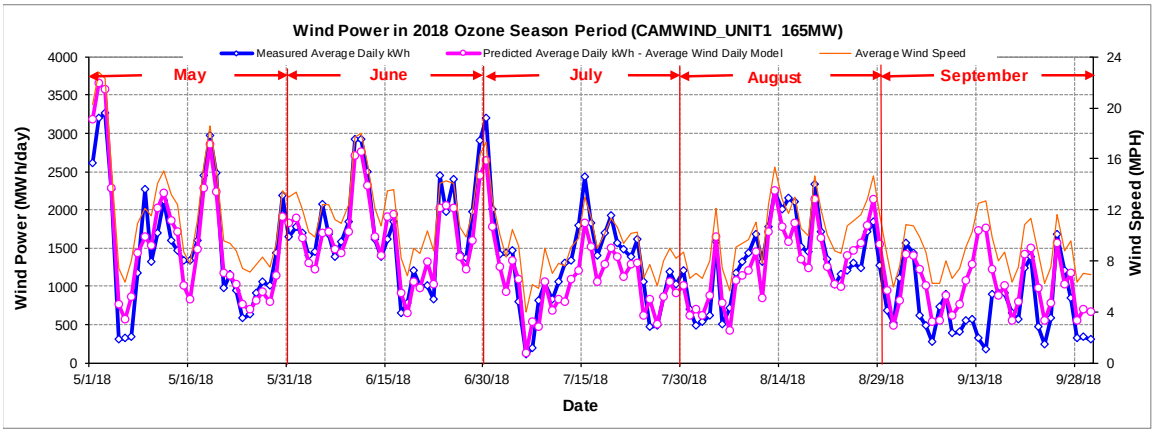
Figure A-59:CAMWIND_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	41,668	40,406	3.03%	34%	33%
Feb-18	28	14.08	43,577	49,705	-14.06%	39%	45%
Mar-18	31	13.69	47,244	53,126	-12.45%	38%	43%
Apr-18	30	14.08	52,579	53,236	-1.25%	44%	45%
May-18	31	11.95	48,545	50,140	-3.29%	40%	41%
Jun-18	30	12.21	52,805	50,013	5.29%	44%	42%
Jul-18	31	8.81	37,829	31,817	15.89%	31%	26%
Aug-18	31	10.35	41,883	40,802	2.58%	34%	33%
Sep-18	30	8.73	22,017	30,307	-37.66%	19%	26%
Oct-18	31	10.87	45,325	39,266	13.37%	37%	32%
Nov-18	30	10.83	37,526	37,840	-0.84%	32%	32%
Dec-18	31	11.29	46,975	41,316	12.05%	38%	34%
Total	365	11.48	517,974	517,974	0.00%	36%	36%
Total in OSP (07/15-09/15)	153	10.41	203,080	203,080	0.00%	34%	34%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

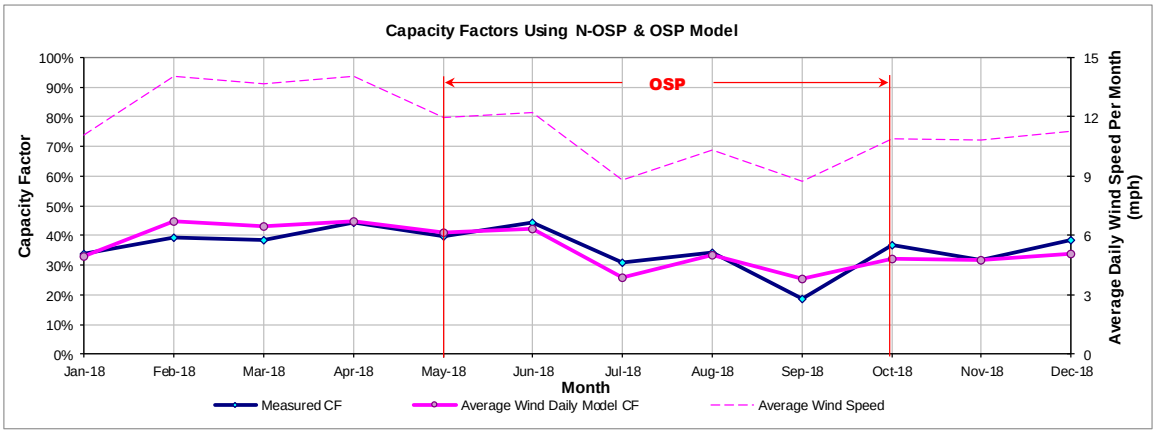


Figure A-60:CAMWIND_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.18 Camp Springs Wind Energy Center

A.18.1 Camp Springs Wind Energy Center - CSEC_CSECG1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
CSEC_CSECG1	Wind	Lubbock	SCURRY	Invenergy	Camp Springs I

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
87 GE 1.5 MW	ERCOT	W	Jul-07	West	ABI	130.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

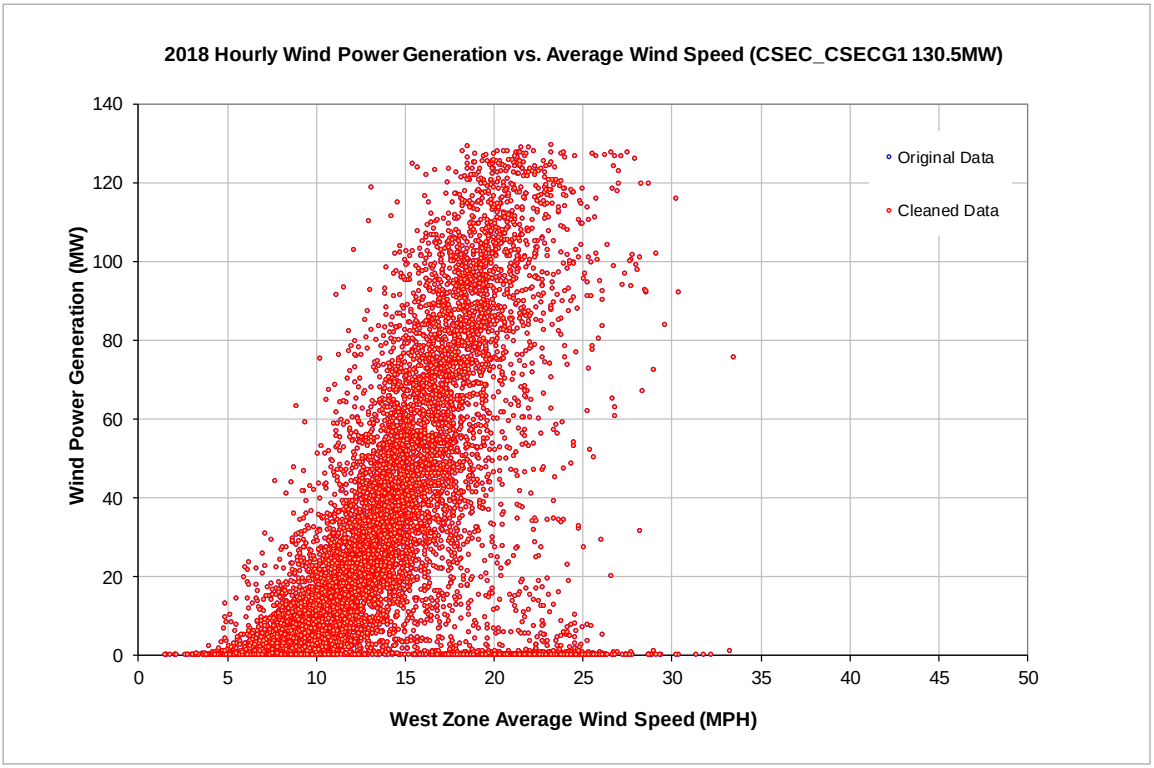


Figure A-61:CSEC_CSECG1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

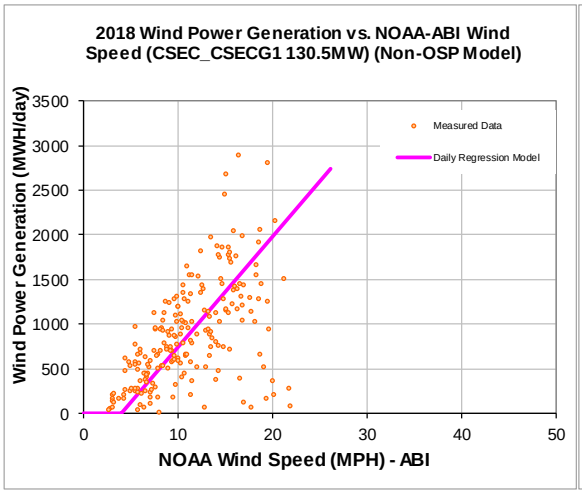
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	93.90
Left Slope (MWh/mph-day)	70.19
RMSE (MWh/day)	472.98
R2	0.32
CV-RMSE	54.8%
Daily Maximum (MWh/day)	3132

OSP Model:

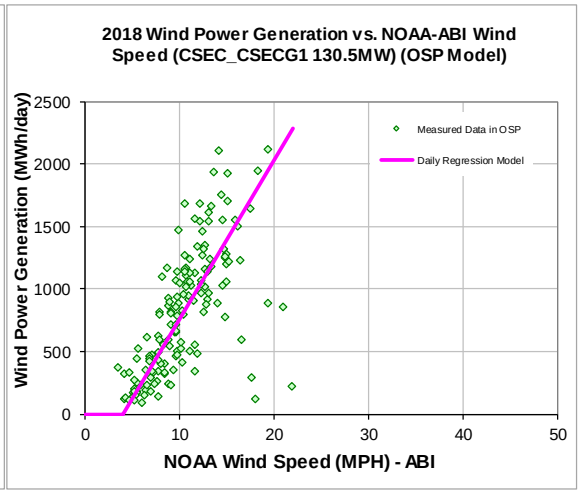
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-102.85
Left Slope (MWh/mph-day)	88.20
RMSE (MWh/day)	377.59
R2	0.43
CV-RMSE	46.3%
Daily Maximum (MWh/day)	3132

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
326,681	307,509

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
824	815

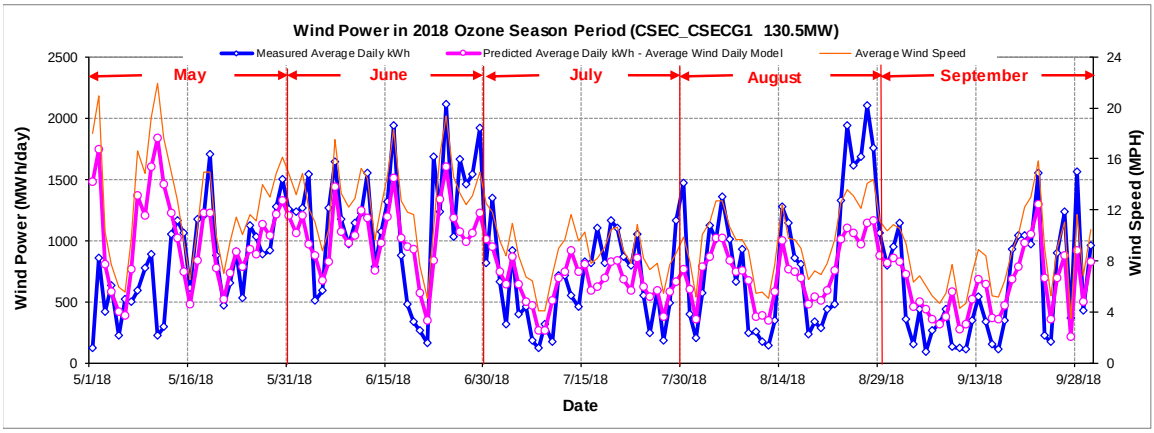
Figure A-62:CSEC_CSECG1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	31,886	26,780	16.01%	33%	28%
Feb-18	28	11.00	29,370	24,243	17.46%	33%	28%
Mar-18	31	11.92	28,863	28,859	0.01%	30%	30%
Apr-18	30	13.18	19,265	30,564	-58.65%	21%	33%
May-18	31	12.78	25,348	31,756	-25.28%	26%	33%
Jun-18	30	12.90	34,716	31,058	10.54%	37%	33%
Jul-18	31	8.52	20,876	20,107	3.68%	22%	21%
Aug-18	31	9.85	26,998	23,738	12.07%	28%	24%
Sep-18	30	7.97	16,712	17,990	-7.65%	18%	19%
Oct-18	31	9.35	25,277	23,264	7.96%	26%	24%
Nov-18	30	10.05	22,313	23,978	-7.46%	24%	26%
Dec-18	31	10.23	25,885	25,171	2.76%	27%	26%
Total	365	10.72	307,509	307,509	0.00%	27%	27%
Total in OSP (07/15-09/15)	153	10.40	124,650	124,650	0.00%	26%	26%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

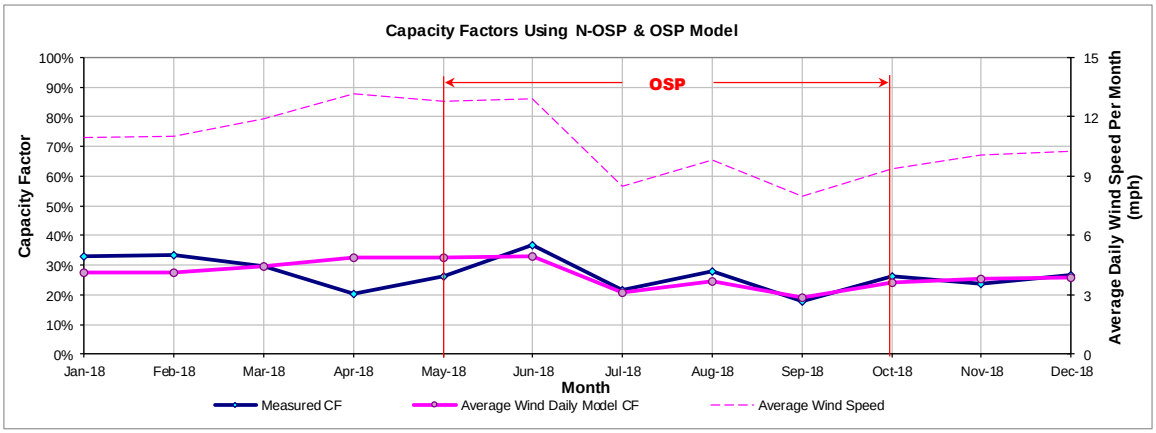


Figure A-63:CSEC_CSECG1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.19 Camp Springs Wind Energy Expansion

A.19.1 Camp Springs Wind Energy Expansion - CSEC_CSECG2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
CSEC_CSECG2	Wind	Lubbock	SCURRY	Invenergy	Camp Springs II

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
80 GE 1.5 MW	ERCOT	W	Jun-08	West	ABI	120

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

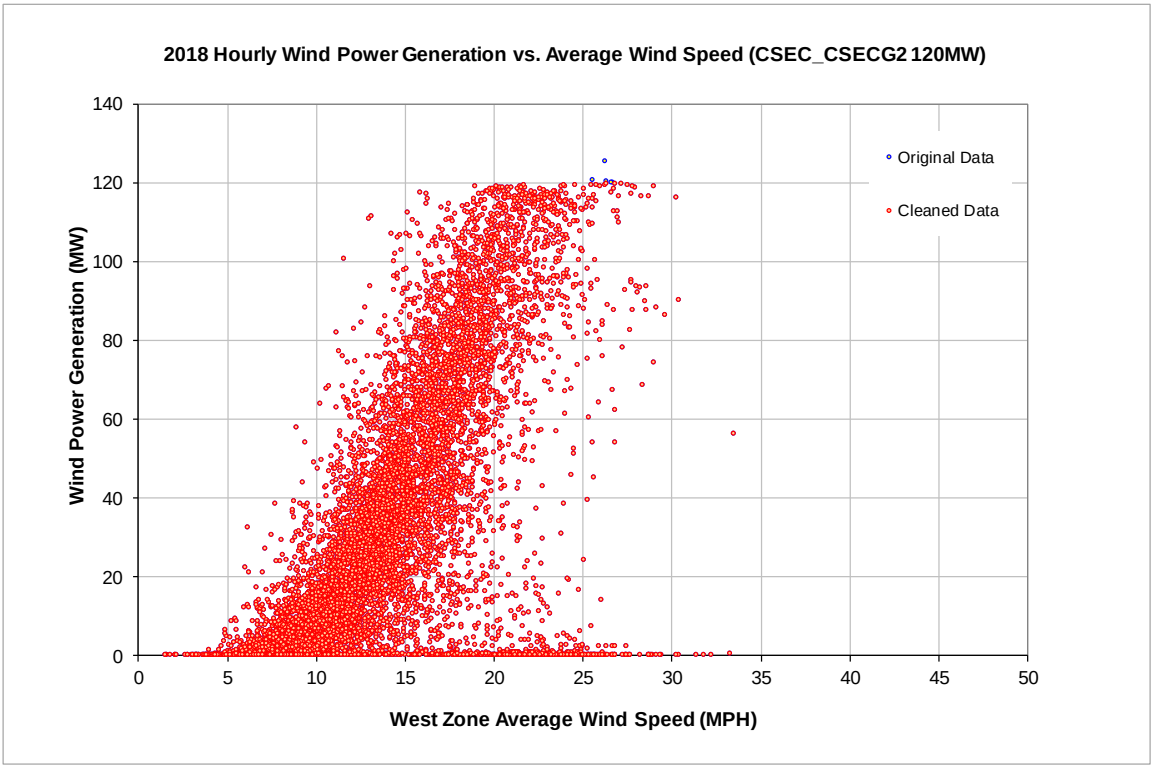


Figure A-64:CSEC_CSECG2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

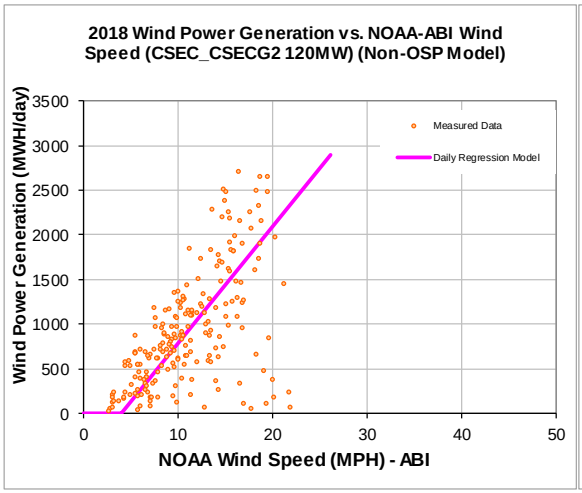
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-7.78
Left Slope (MWh/mph-day)	84.03
RMSE (MWh/day)	520.30
R2	0.36
CV-RMSE	56.7%
Daily Maximum (MWh/day)	2880

OSP Model:

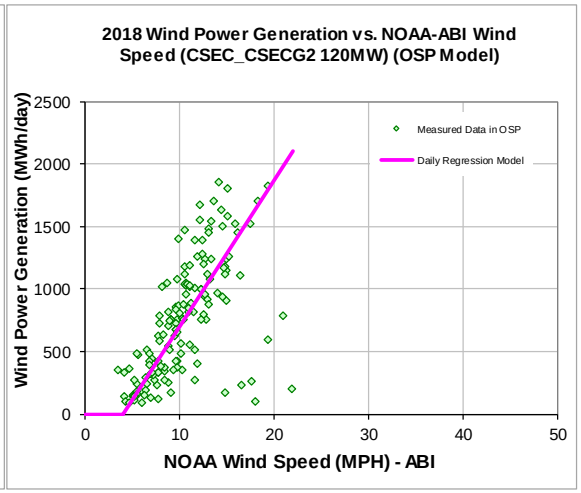
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-60.15
Left Slope (MWh/mph-day)	77.71
RMSE (MWh/day)	365.67
R2	0.38
CV-RMSE	48.9%
Daily Maximum (MWh/day)	2880

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
330,312	306,187

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
756	748

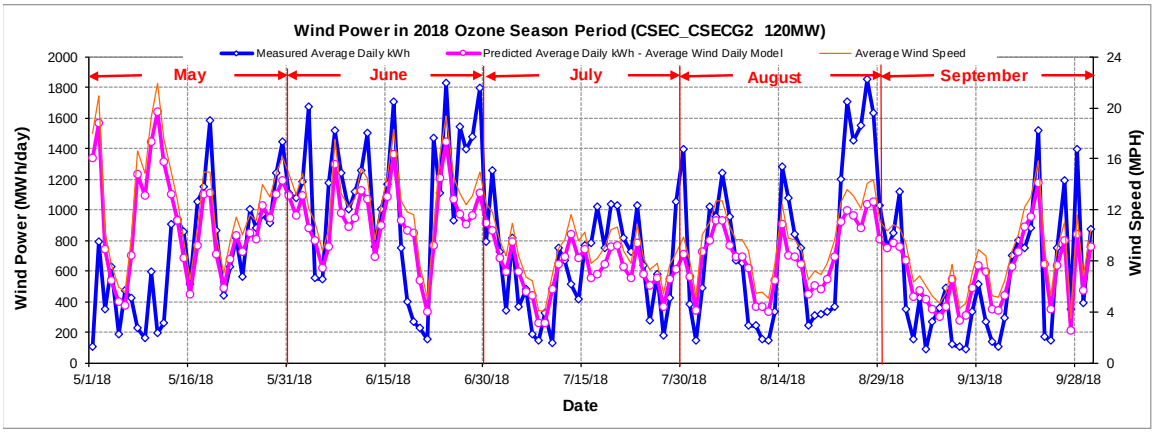
Figure A-65:CSEC_CSECG2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.40	37,700	26,609	29.42%	42%	30%
Feb-18	28	11.00	32,336	25,657	20.66%	40%	32%
Mar-18	31	11.92	37,103	30,822	16.93%	42%	35%
Apr-18	30	13.18	18,551	32,983	-77.80%	21%	38%
May-18	31	12.78	22,215	28,924	-30.20%	25%	32%
Jun-18	30	12.90	32,568	28,278	13.17%	38%	33%
Jul-18	31	8.52	19,958	18,660	6.50%	22%	21%
Aug-18	31	9.85	24,699	21,859	11.50%	28%	24%
Sep-18	30	7.97	15,044	16,764	-11.43%	17%	19%
Oct-18	31	9.35	22,722	24,124	-6.17%	25%	27%
Nov-18	30	10.05	19,617	25,099	-27.94%	23%	29%
Dec-18	31	10.23	23,673	26,407	-11.55%	27%	30%
Total	365	10.75	306,187	306,187	0.00%	29%	29%
Total in OSP (07/15-09/15)	153	10.40	114,485	114,485	0.00%	26%	26%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

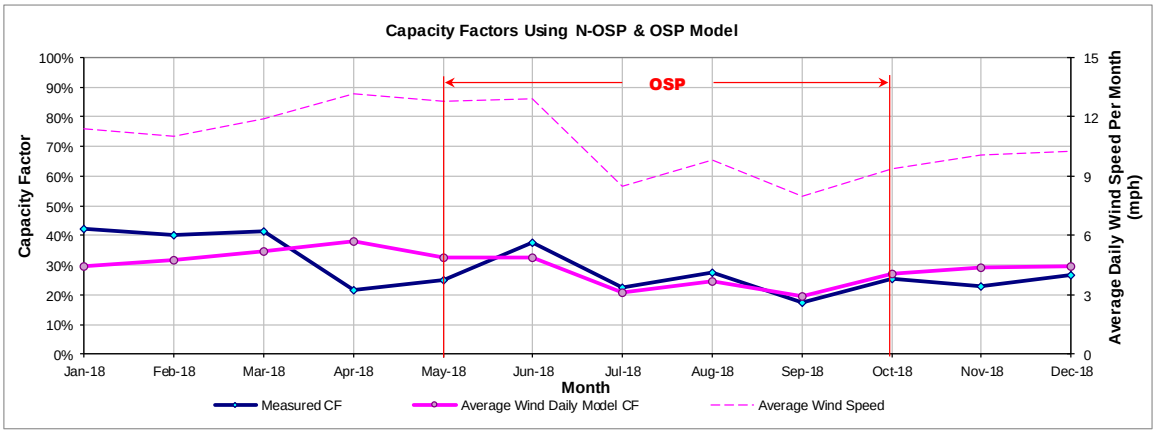


Figure A-66:CSEC_CSECG2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.20 Capricorn Ridge Wind

A.20.1 Capricorn Ridge Wind - CAPRIDGE_CR1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
CAPRIDGE_CR1	Wind	Sterling	STERLING	NextEra	Capricorn Ridge Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
143 GE 1.5 MW 65 Siemens 2.3 MW	ERCOT	W	Sep-07	West	ABI	364

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

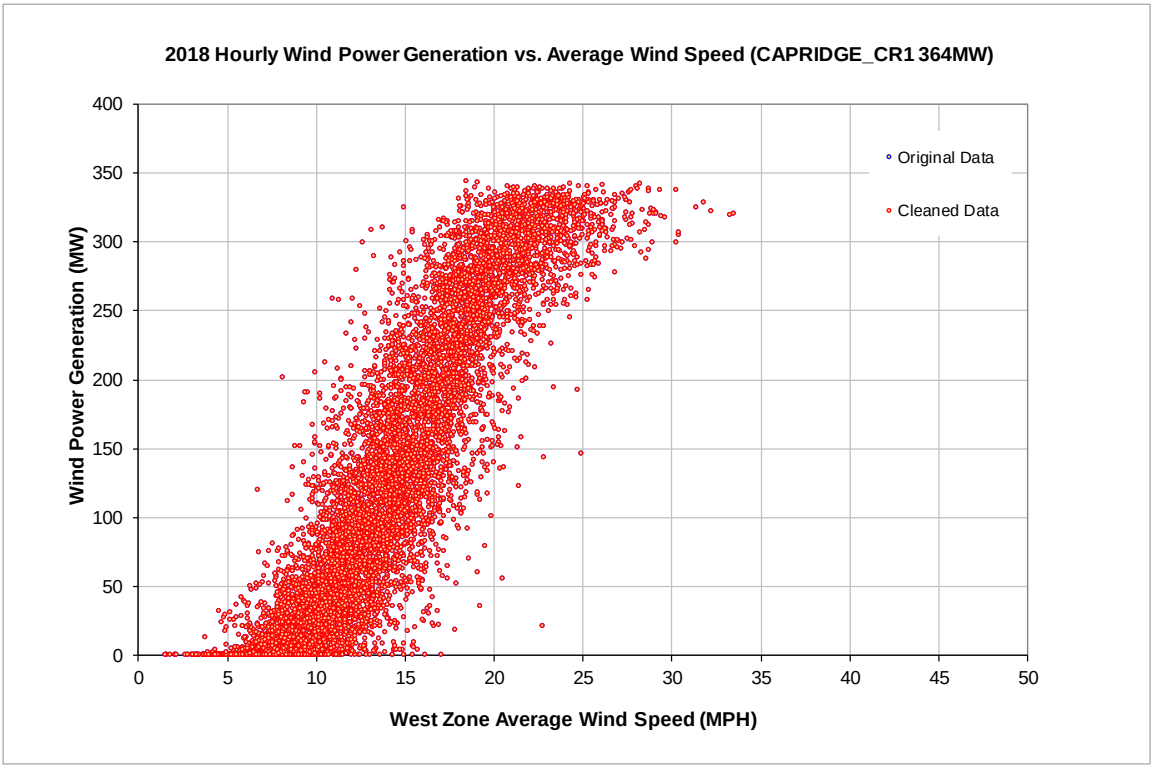


Figure A-67:CAPRIDGE_CR1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

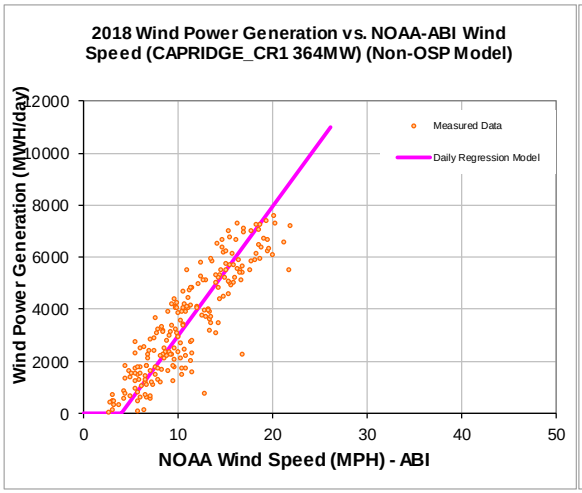
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-879.28
Left Slope (MWh/mph-day)	396.46
RMSE (MWh/day)	916.14
R2	0.80
CV-RMSE	26.4%
Daily Maximum (MWh/day)	8736

OSP Model:

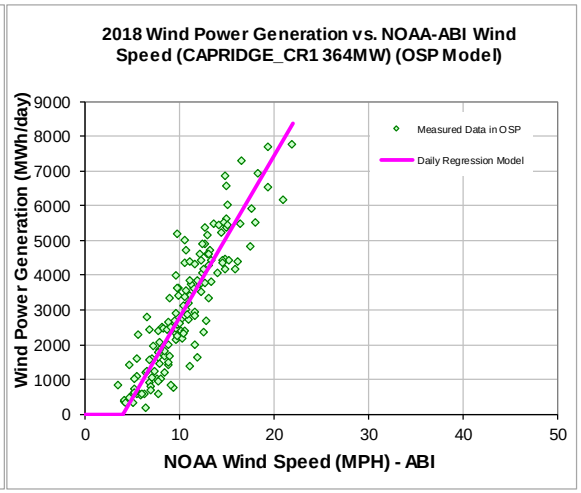
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1571.80
Left Slope (MWh/mph-day)	437.96
RMSE (MWh/day)	801.05
R2	0.80
CV-RMSE	26.8%
Daily Maximum (MWh/day)	8736

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
1,296,785	1,188,306

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
3,030	2,984

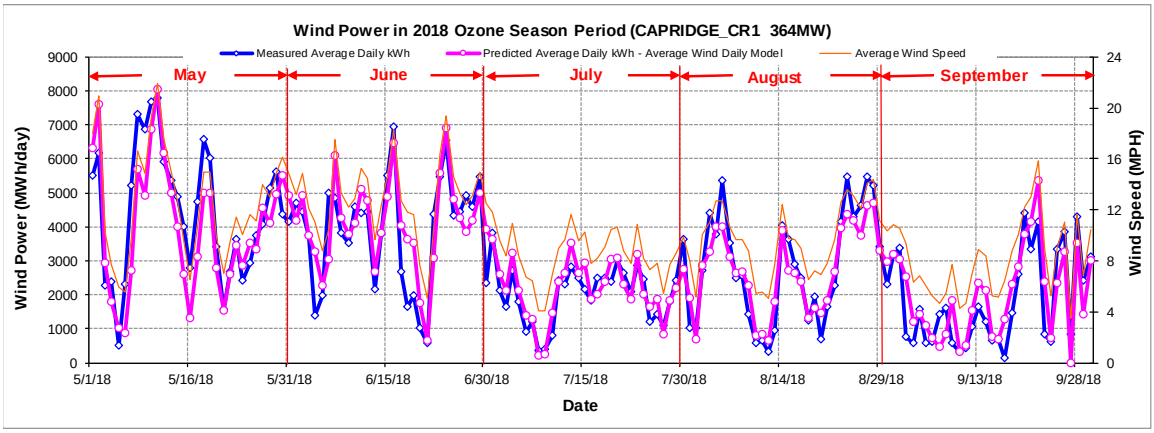
Figure A-68:CAPRIDGE_CR1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.07	102,374	105,280	-2.84%	38%	39%
Feb-18	28	11.00	90,516	97,458	-7.67%	37%	40%
Mar-18	31	11.92	116,294	119,302	-2.59%	43%	44%
Apr-18	30	13.18	123,733	130,340	-5.34%	47%	50%
May-18	31	12.78	137,750	124,797	9.40%	51%	46%
Jun-18	30	12.90	115,352	122,390	-6.10%	44%	47%
Jul-18	31	8.52	62,670	66,950	-6.83%	23%	25%
Aug-18	31	9.85	88,452	84,979	3.93%	33%	31%
Sep-18	30	7.97	52,391	57,539	-9.83%	20%	22%
Oct-18	31	9.35	93,473	87,700	6.18%	35%	32%
Nov-18	30	10.05	99,031	93,139	5.95%	38%	36%
Dec-18	31	10.23	106,269	98,471	7.34%	39%	36%
Total	365	10.73	1,188,306	1,188,344	0.00%	37%	37%
Total in OSP (07/15-09/15)	153	10.40	456,616	456,655	-0.01%	34%	34%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

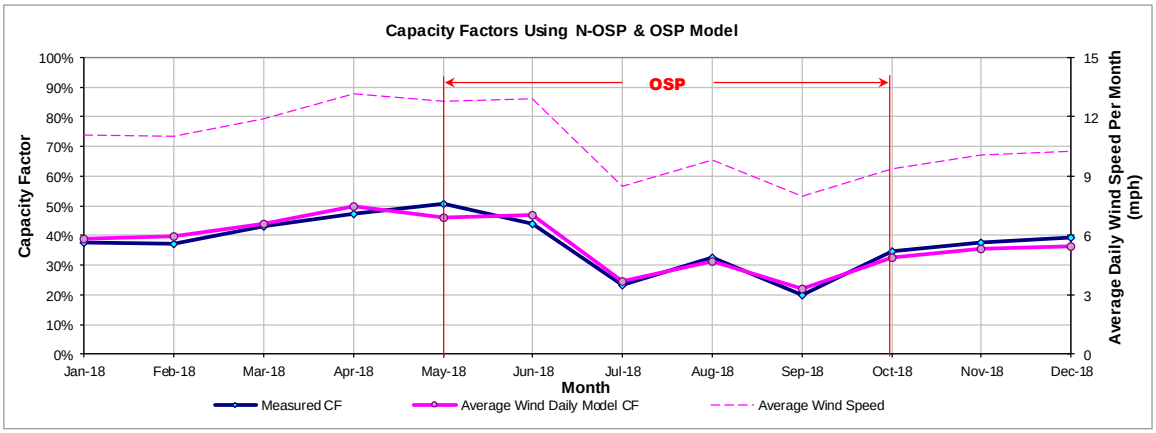


Figure A-69:CAPRIDGE_CR1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.21 Capricorn Ridge Wind expansion

A.21.1 Capricorn Ridge Wind expansion - CAPRIDG4_CR4

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
CAPRIDG4_CR4	Wind	Sterling	STERLING	NextEra	Capricorn Ridge Wind (exp)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
75 GE 1.5 MW	ERCOT	W	May-08	West	ABI	112.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

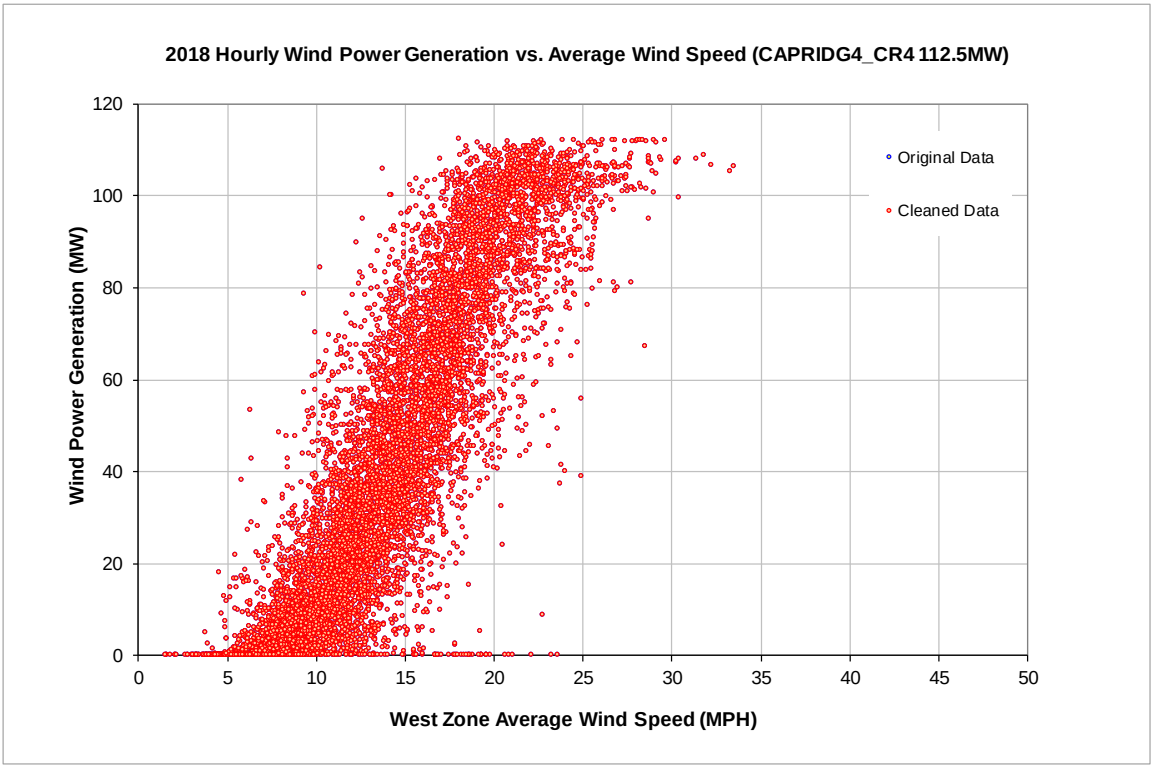


Figure A-70:CAPRIDG4_CR4 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

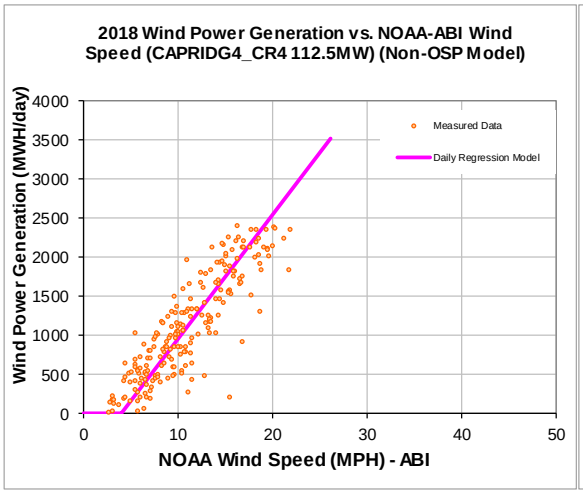
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-269.06
Left Slope (MWh/mph-day)	125.55
RMSE (MWh/day)	320.19
R2	0.76
CV-RMSE	28.9%
Daily Maximum (MWh/day)	2700

OSP Model:

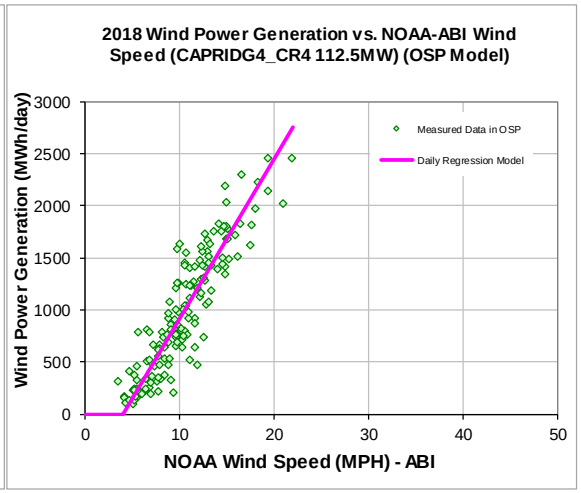
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-497.82
Left Slope (MWh/mph-day)	142.09
RMSE (MWh/day)	253.39
R2	0.81
CV-RMSE	25.8%
Daily Maximum (MWh/day)	2700

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
418,089	383,676

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
995	980

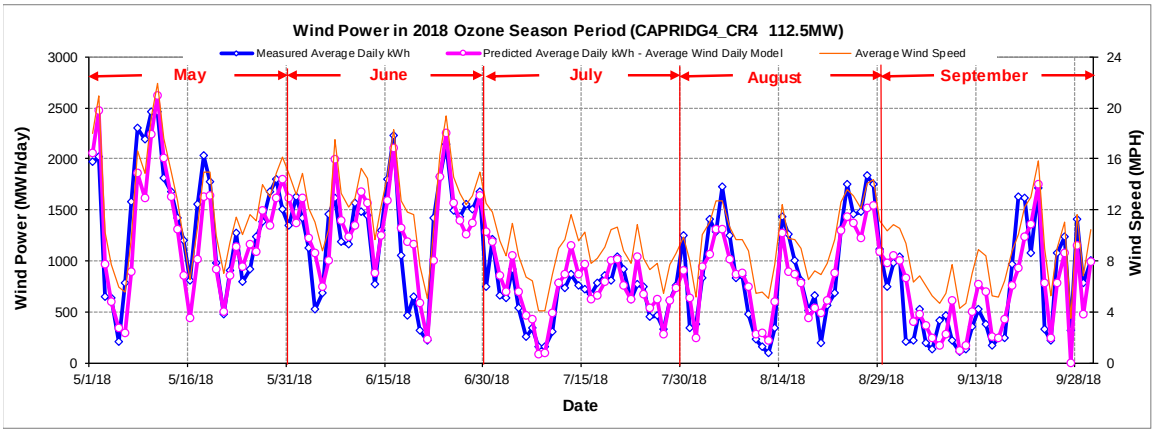
Figure A-71:CAPRIDG4_CR4 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.07	36,047	33,620	6.73%	43%	40%
Feb-18	28	11.00	30,868	31,124	-0.83%	41%	41%
Mar-18	31	11.92	34,876	38,069	-9.16%	42%	45%
Apr-18	30	13.18	39,533	41,555	-5.12%	49%	51%
May-18	31	12.78	43,724	40,864	6.54%	52%	49%
Jun-18	30	12.90	37,786	40,072	-6.05%	47%	49%
Jul-18	31	8.52	20,352	22,097	-8.57%	24%	26%
Aug-18	31	9.85	29,311	27,946	4.66%	35%	33%
Sep-18	30	7.97	18,825	19,019	-1.03%	23%	23%
Oct-18	31	9.35	25,807	28,062	-8.74%	31%	34%
Nov-18	30	10.05	32,185	29,775	7.49%	40%	37%
Dec-18	31	10.23	34,363	31,473	8.41%	41%	38%
Total	365	10.73	383,676	383,677	0.00%	39%	39%
Total in OSP (07/15-09/15)	153	10.40	149,998	149,998	0.00%	36%	36%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

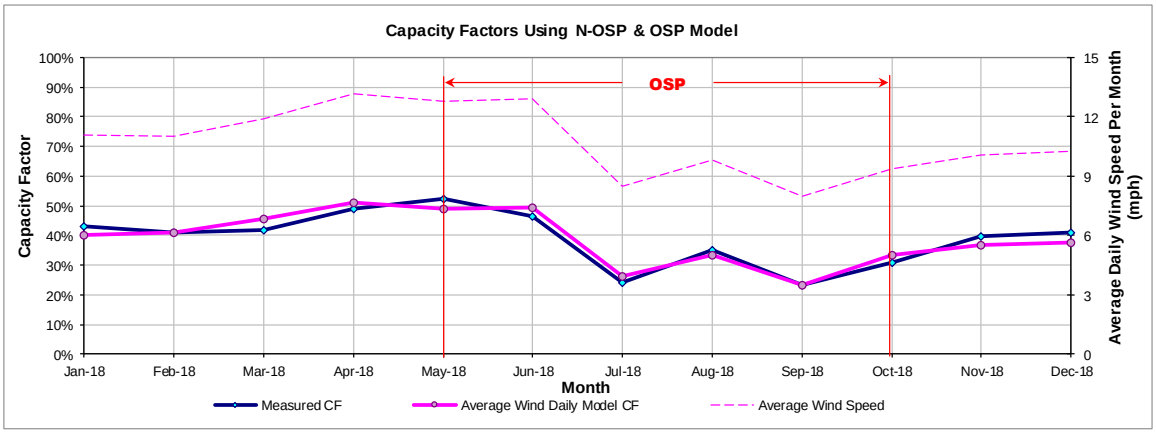


Figure A-72:CAPRIDG4_CR4 - Predicted Wind Power and Capacity Factor Using Daily Models

A.21.2 Capricorn Ridge Wind expansion - CAPRIDGE_CR3

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
CAPRIDGE_CR3	Wind	Sterling	STERLING	NextEra	Capricorn Ridge Wind (exp)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
124 GE 1.5 MW	ERCOT	W	May-08	West	ABI	186

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

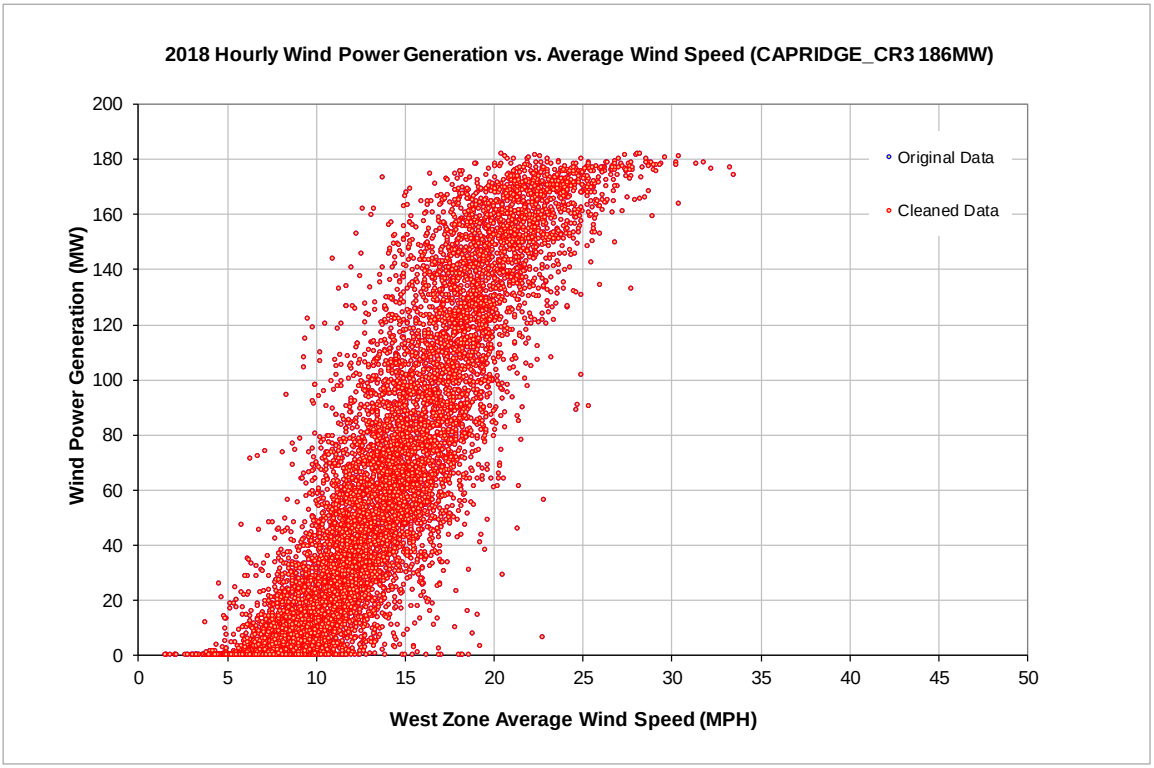


Figure A-73:CAPRIDGE_CR3 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

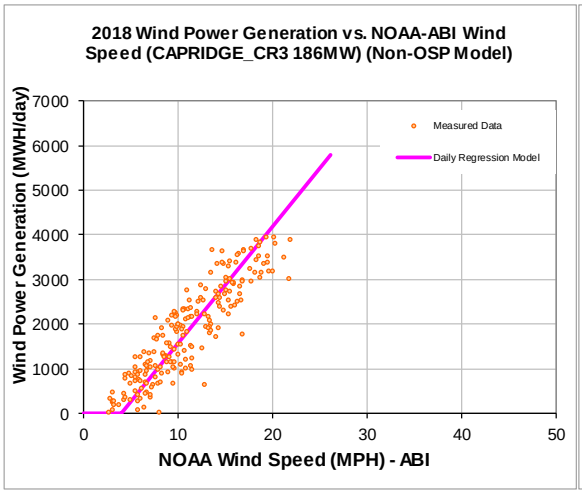
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-432.09
Left Slope (MWh/mph-day)	205.93
RMSE (MWh/day)	461.74
R2	0.81
CV-RMSE	25.3%
Daily Maximum (MWh/day)	4464

OSP Model:

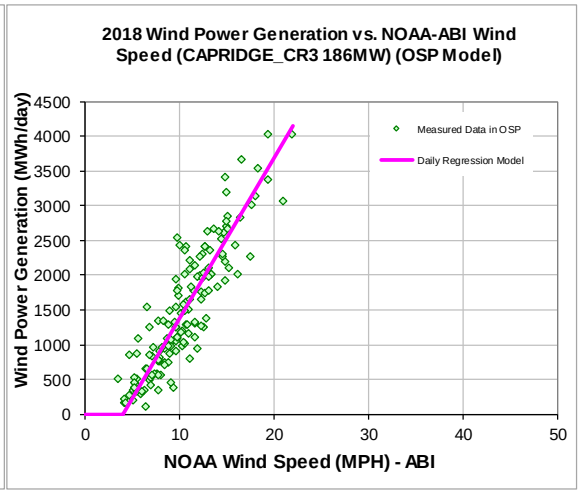
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-763.65
Left Slope (MWh/mph-day)	215.42
RMSE (MWh/day)	401.25
R2	0.80
CV-RMSE	27.2%
Daily Maximum (MWh/day)	4464

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
667,486	612,500

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,500	1,477

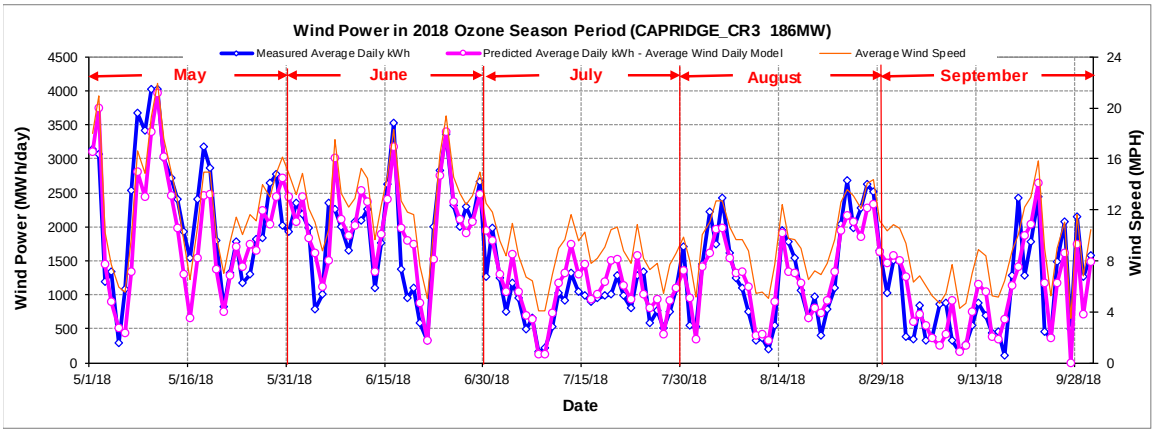
Figure A-74:CAPRIDGE_CR3 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	57,575	56,631	1.64%	42%	41%
Feb-18	28	11.00	49,156	51,311	-4.39%	39%	41%
Mar-18	31	11.92	61,944	62,732	-1.27%	45%	45%
Apr-18	30	13.18	64,309	68,441	-6.42%	48%	51%
May-18	31	12.78	68,888	61,676	10.47%	50%	45%
Jun-18	30	12.90	57,068	60,483	-5.98%	43%	45%
Jul-18	31	8.52	28,790	33,223	-15.40%	21%	24%
Aug-18	31	9.85	42,912	42,091	1.91%	31%	30%
Sep-18	30	7.97	28,382	28,575	-0.68%	21%	21%
Oct-18	31	9.35	48,569	46,317	4.64%	35%	33%
Nov-18	30	10.05	50,288	49,117	2.33%	38%	37%
Dec-18	31	10.23	54,620	51,912	4.96%	39%	38%
Total	365	10.72	612,500	612,509	0.00%	38%	38%
Total in OSP (07/15-09/15)	153	10.40	226,039	226,049	0.00%	33%	33%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

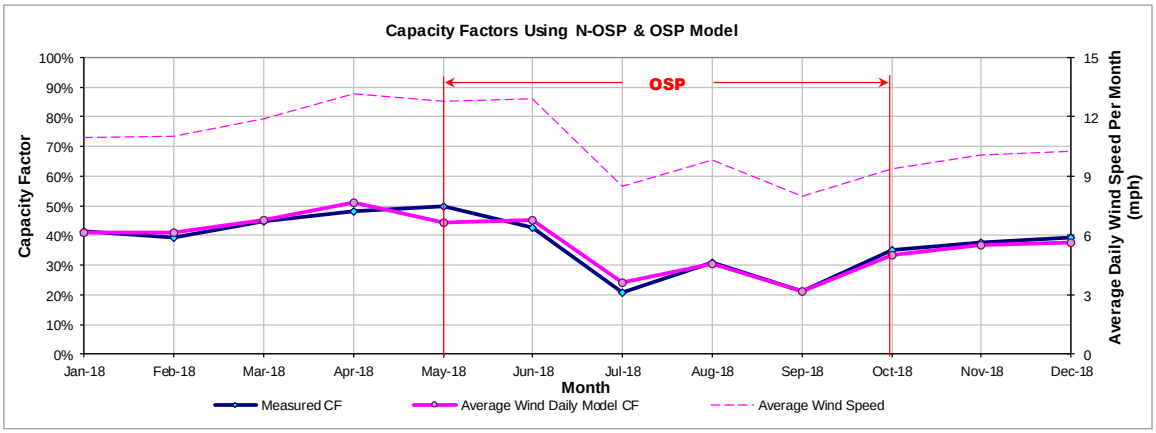


Figure A-75:CAPRIDGE_CR3 - Predicted Wind Power and Capacity Factor Using Daily Models

A.22 Cedro Hill Wind

A.22.1 Cedro Hill Wind - CEDROHIL_CHW1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
CEDROHIL_CHW1	Wind	Bruni	WEBB	Edison Mission group	Cedro Hill Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 GE 1.5 MW 50 GE 1.5 MW	ERCOT	S	Oct-10	South	CRP	150

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

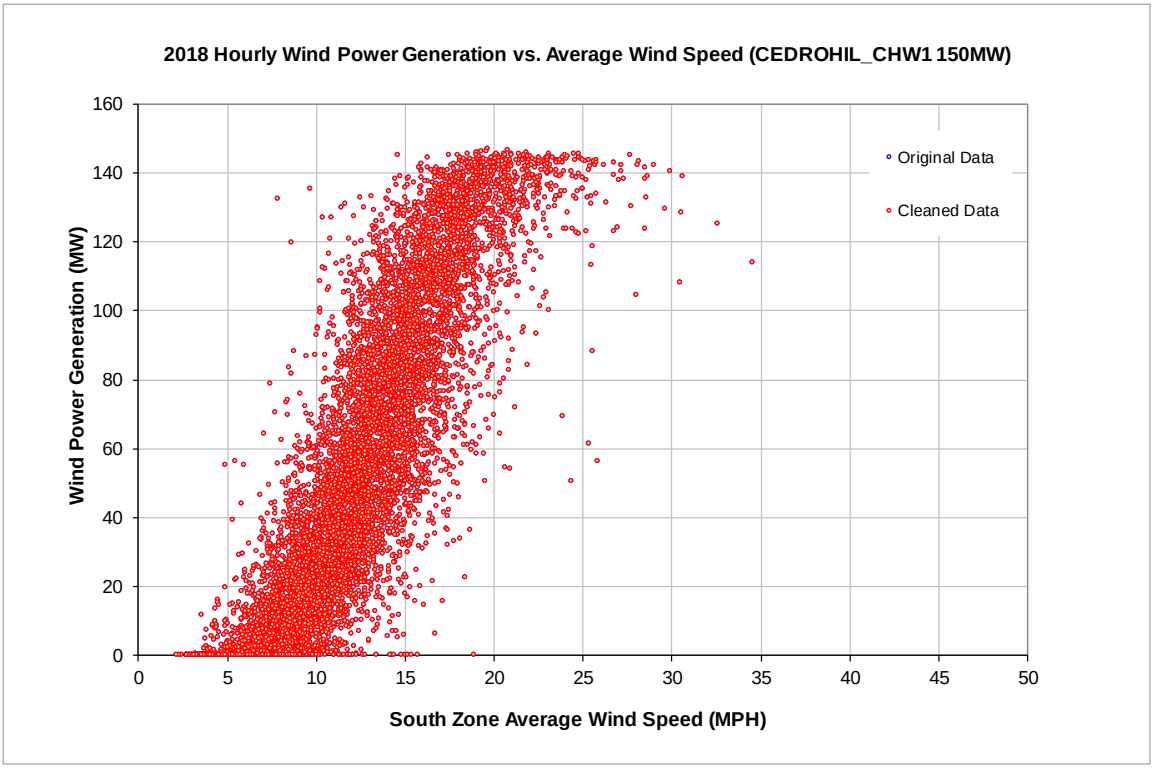


Figure A-76:CEDROHIL_CHW1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

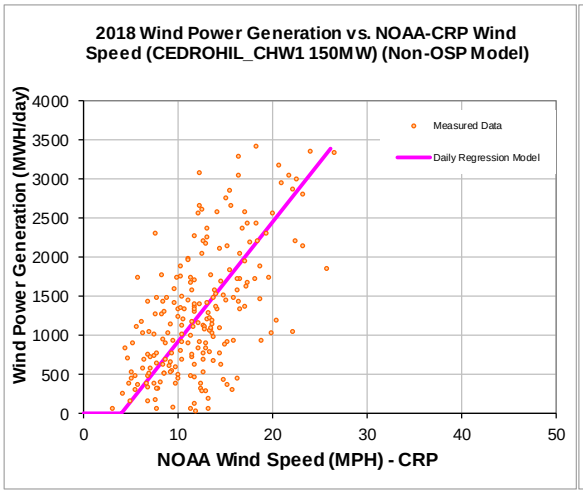
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-48.19
Left Slope (MWh/mph-day)	107.30
RMSE (MWh/day)	632.22
R2	0.37
CV-RMSE	49.9%
Daily Maximum (MWh/day)	3600

OSP Model:

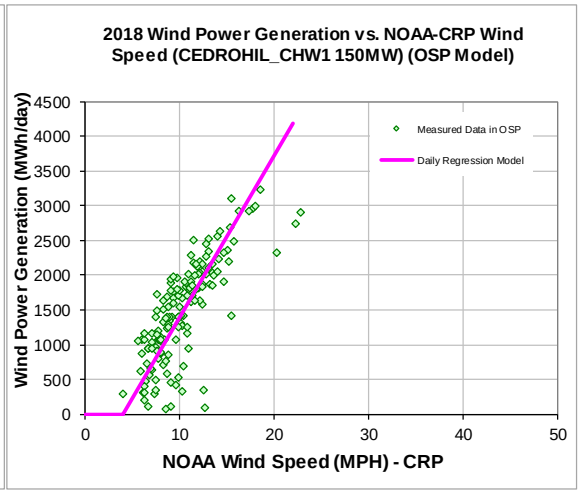
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-295.14
Left Slope (MWh/mph-day)	171.48
RMSE (MWh/day)	452.50
R2	0.61
CV-RMSE	30.4%
Daily Maximum (MWh/day)	3600

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
490,661	496,334

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,448	1,489

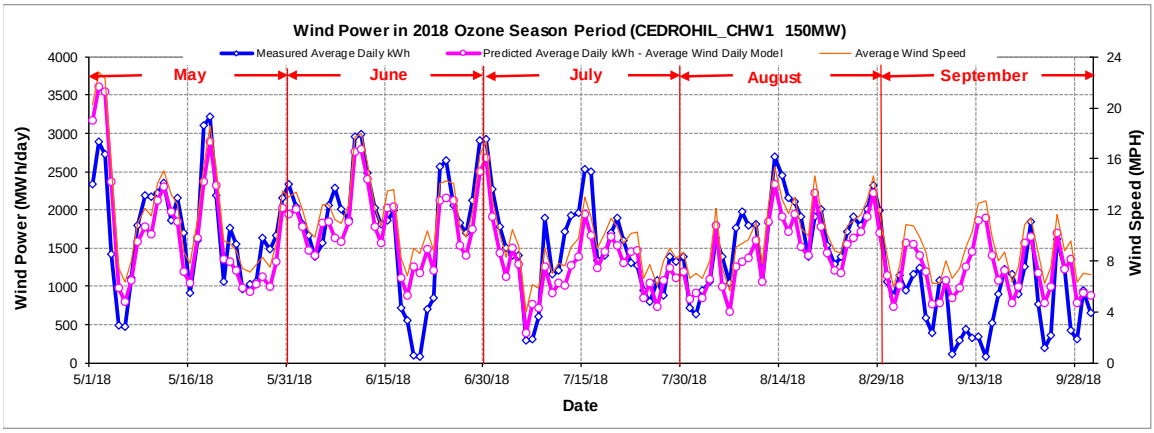
Figure A-77:CEDROHIL_CHW1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	33,841	35,430	-4.70%	30%	32%
Feb-18	28	14.08	33,160	40,958	-23.52%	33%	41%
Mar-18	31	13.69	44,483	44,054	0.96%	40%	39%
Apr-18	30	14.08	47,154	43,870	6.97%	44%	41%
May-18	31	11.95	55,473	54,342	2.04%	50%	49%
Jun-18	30	12.21	54,416	53,957	0.84%	50%	50%
Jul-18	31	8.81	43,353	37,686	13.07%	39%	34%
Aug-18	31	10.35	51,306	45,860	10.62%	46%	41%
Sep-18	30	8.73	23,339	36,030	-54.38%	22%	33%
Oct-18	31	10.87	37,109	34,657	6.61%	33%	31%
Nov-18	30	10.83	32,002	33,431	-4.47%	30%	31%
Dec-18	31	11.29	40,698	36,047	11.43%	36%	32%
Total	365	11.48	496,334	496,321	0.00%	38%	38%
Total in OSP (07/15-09/15)	153	10.41	227,887	227,874	0.01%	41%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

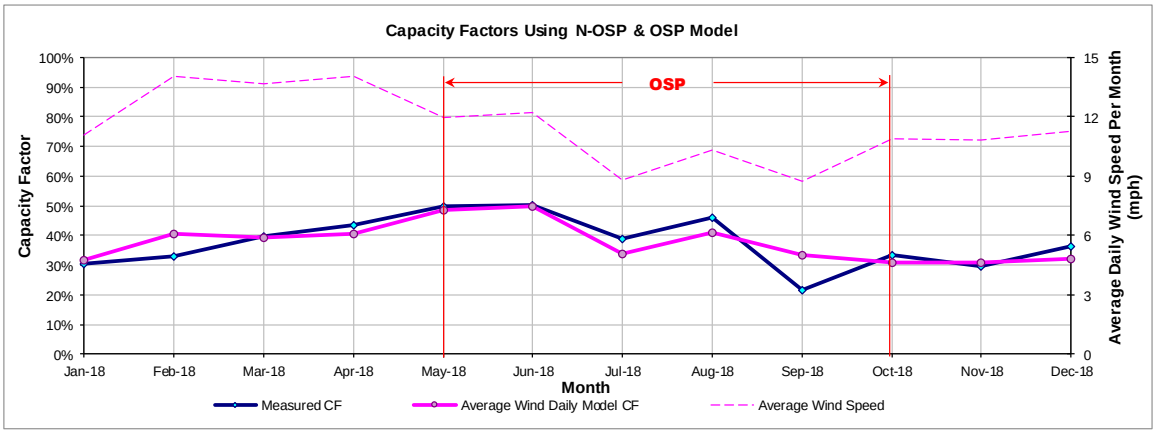


Figure A-78:CEDROHIL_CHW1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.23 Champion Wind Farm

A.23.1 Champion Wind Farm - CHAMPION_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
CHAMPION_UNIT1	Wind	-	SCURRY	E.On Climate & Renewables	Champion Wind Farm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
55 Siemens 2.3 MW	ERCOT	W	Jan-08	West	ABI	126.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

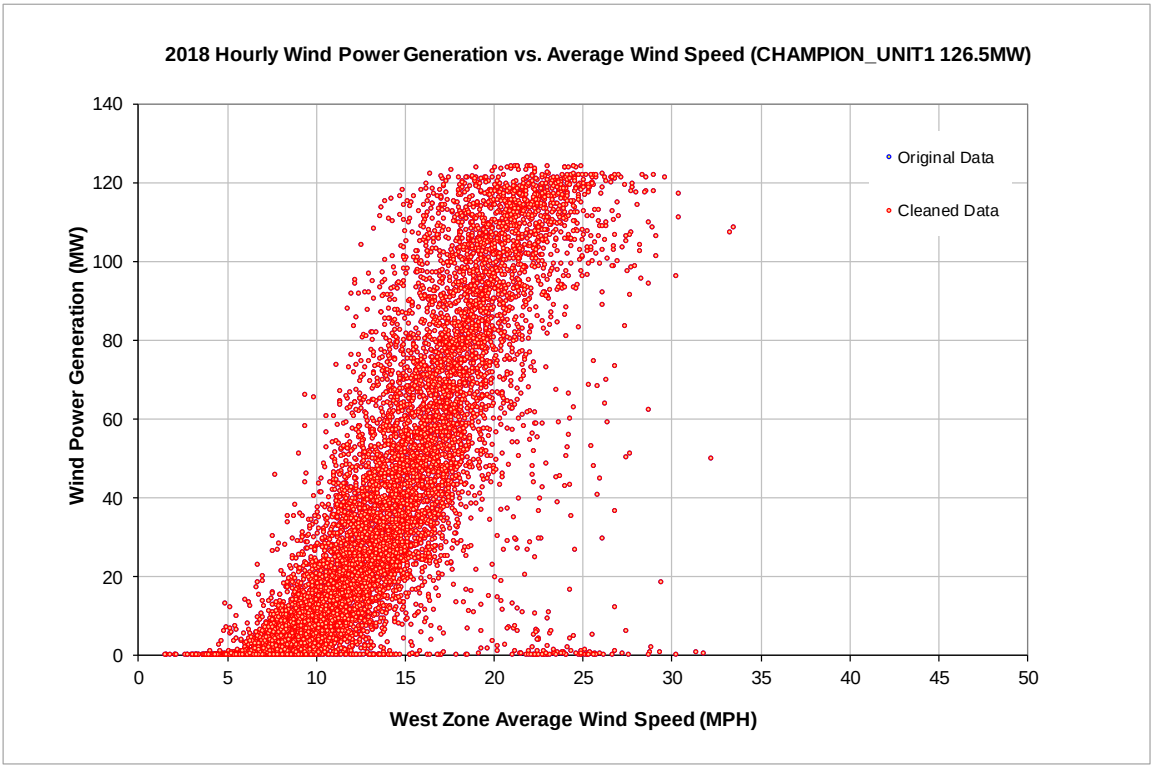


Figure A-79:CHAMPION_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

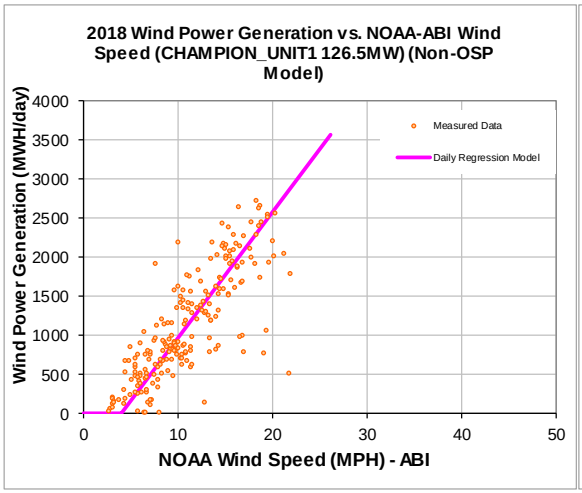
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-225.93
Left Slope (MWh/mph-day)	123.07
RMSE (MWh/day)	412.78
R2	0.65
CV-RMSE	36.8%
Daily Maximum (MWh/day)	3036

OSP Model:

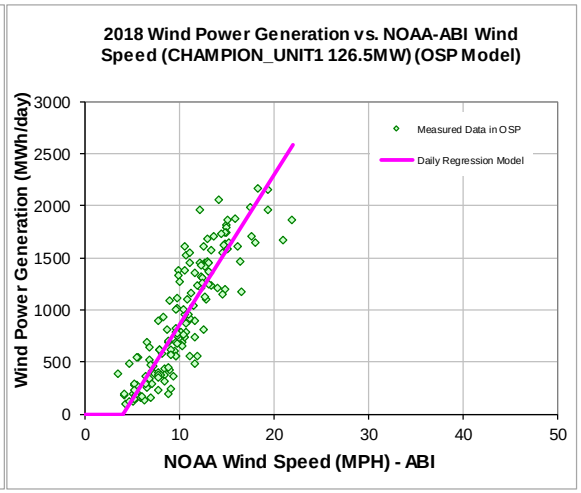
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-457.74
Left Slope (MWh/mph-day)	132.40
RMSE (MWh/day)	269.53
R2	0.77
CV-RMSE	29.3%
Daily Maximum (MWh/day)	3036

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
411,444	377,520

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
933	920

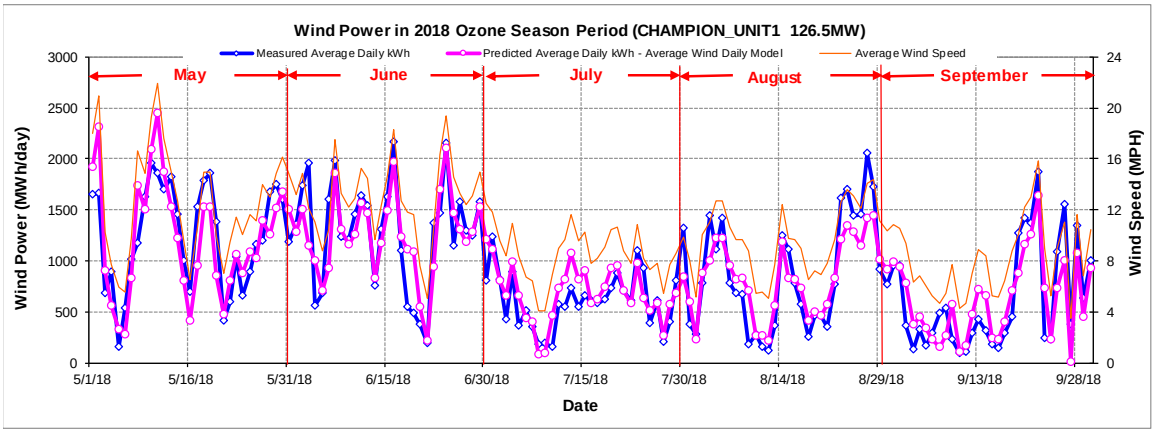
Figure A-80:CHAMPION_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.01	36,358	33,861	6.87%	39%	36%
Feb-18	28	11.00	32,377	31,569	2.50%	38%	37%
Mar-18	31	11.92	38,907	38,491	1.07%	41%	41%
Apr-18	30	13.18	34,664	41,870	-20.79%	38%	46%
May-18	31	12.78	38,559	38,266	0.76%	41%	41%
Jun-18	30	12.90	38,104	37,521	1.53%	42%	41%
Jul-18	31	8.52	19,051	20,779	-9.07%	20%	22%
Aug-18	31	9.85	26,875	26,229	2.40%	29%	28%
Sep-18	30	7.97	18,112	17,905	1.15%	20%	20%
Oct-18	31	9.35	31,123	28,681	7.85%	33%	30%
Nov-18	30	10.05	30,136	30,322	-0.62%	33%	33%
Dec-18	31	10.23	33,253	32,025	3.70%	35%	34%
Total	365	10.72	377,520	377,520	0.00%	34%	34%
Total in OSP (07/15-09/15)	153	10.40	140,701	140,701	0.00%	30%	30%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

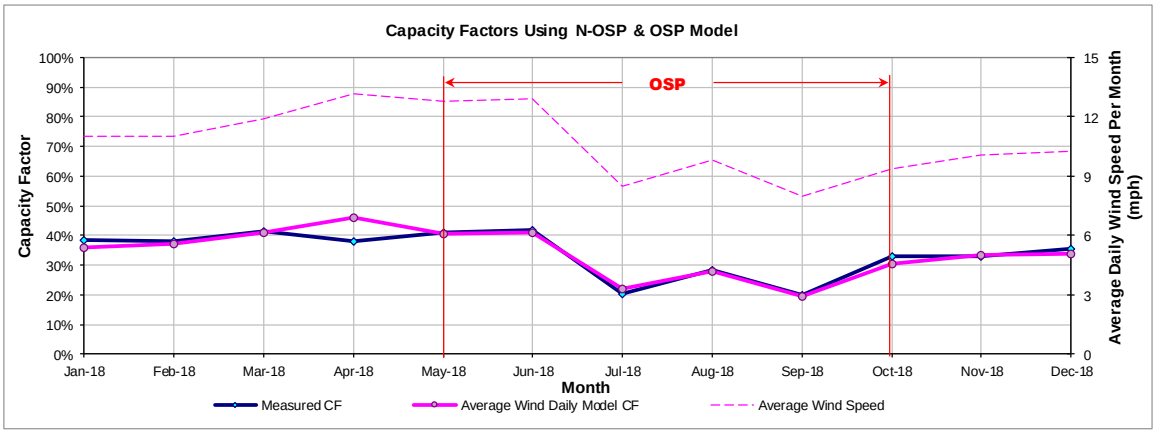


Figure A-81:CHAMPION_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.24 Chapman Ranch

A.24.1 Chapman Ranch - SANTACRU_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SANTACRU_UNIT1	Wind	-	NUECES	Invenergy	Chapman Ranch Wind 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
49 Acciona 3 MW	ERCOT	S	Oct-17	Coastal	CRP	150.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

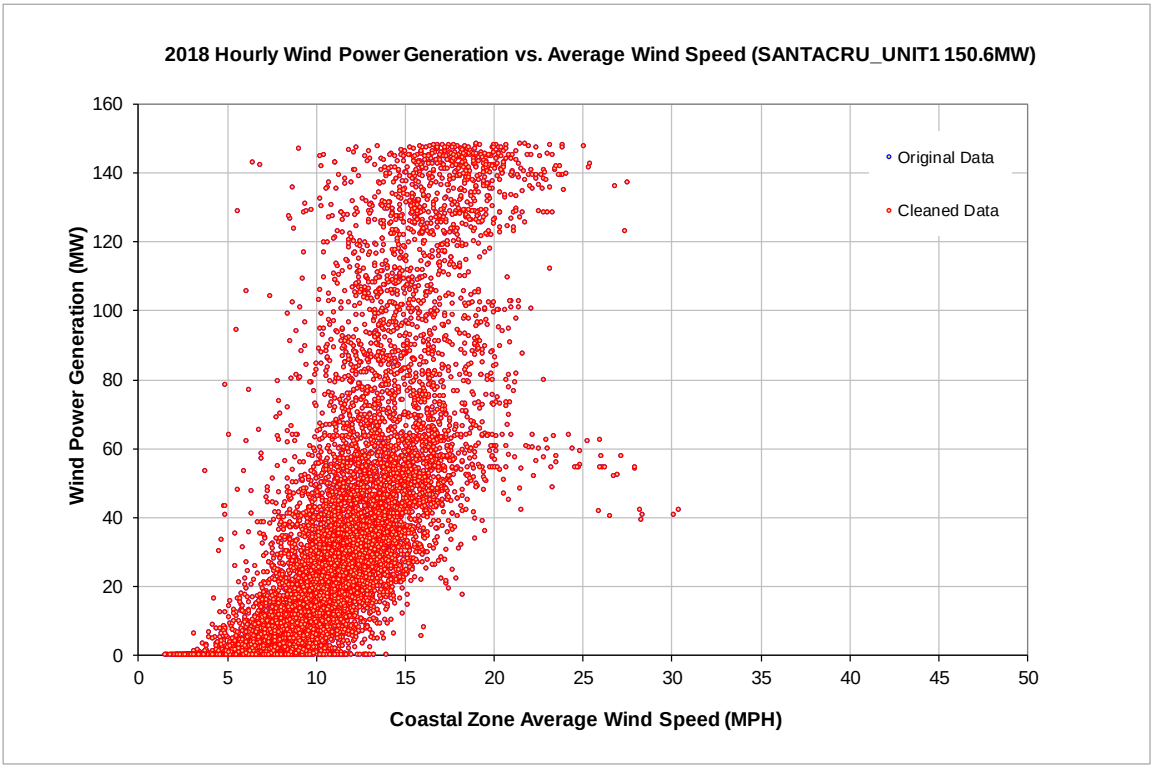


Figure A-82:SANTACRU_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

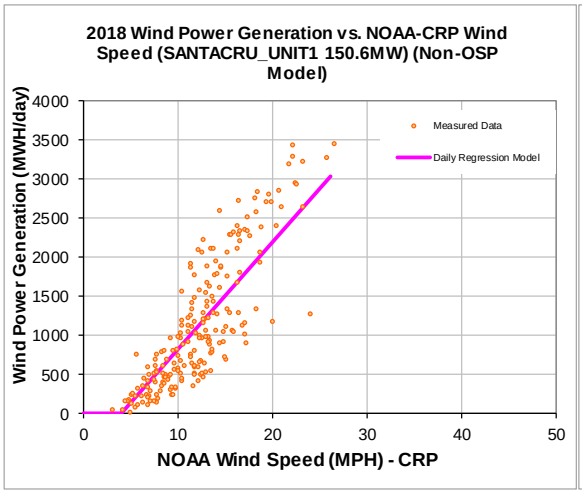
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-787.00
Left Slope (MWh/mph-day)	156.91
RMSE (MWh/day)	448.29
R2	0.72
CV-RMSE	39.5%
Daily Maximum (MWh/day)	3614

OSP Model:

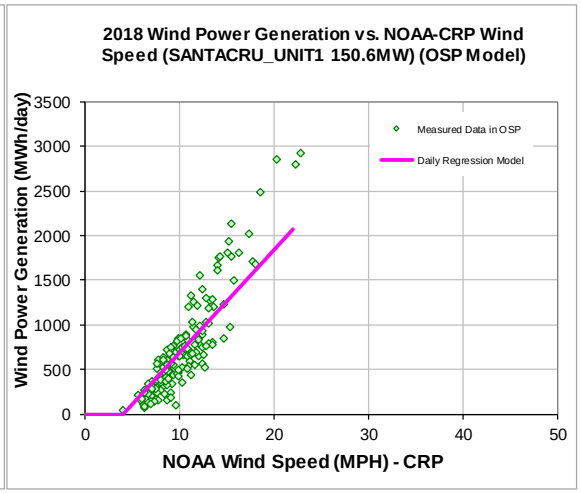
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-898.29
Left Slope (MWh/mph-day)	157.30
RMSE (MWh/day)	236.27
R2	0.83
CV-RMSE	32.0%
Daily Maximum (MWh/day)	3614

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
349,612	353,686

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
707	739

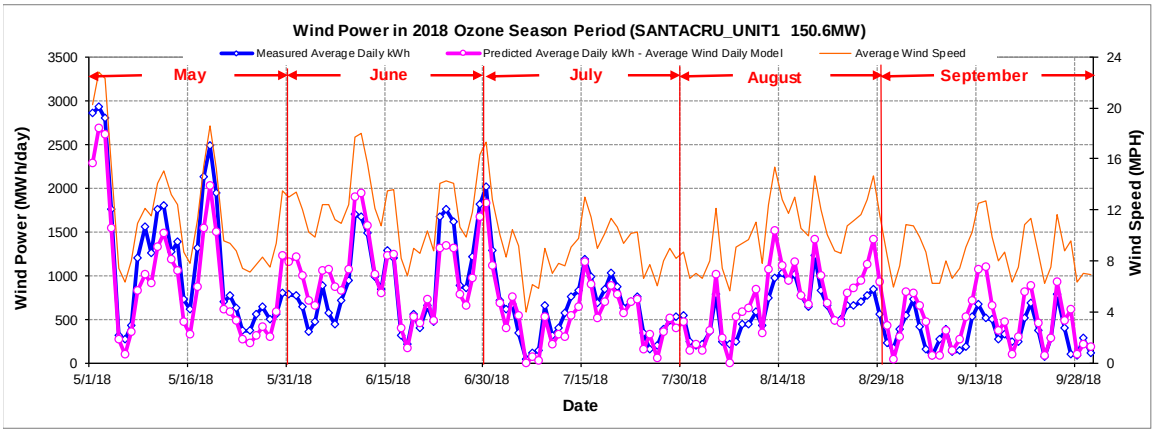
Figure A-83:SANTACRU_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	41,912	29,600	29.38%	37%	26%
Feb-18	28	14.08	46,024	39,857	13.40%	45%	39%
Mar-18	31	13.69	46,447	42,211	9.12%	41%	38%
Apr-18	30	14.08	49,311	42,658	13.49%	45%	39%
May-18	31	11.95	37,309	30,405	18.50%	33%	27%
Jun-18	30	12.21	29,259	30,667	-4.81%	27%	28%
Jul-18	31	8.81	17,807	15,383	13.61%	16%	14%
Aug-18	31	10.35	18,400	22,626	-22.97%	16%	20%
Sep-18	30	8.73	10,248	14,223	-38.79%	9%	13%
Oct-18	31	10.87	20,309	28,778	-41.70%	18%	26%
Nov-18	30	10.83	17,136	27,489	-60.42%	16%	25%
Dec-18	31	11.29	19,525	30,749	-57.48%	17%	27%
Total	365	11.48	353,686	354,646	-0.27%	27%	27%
Total in OSP (07/15-09/15)	153	10.41	113,022	113,304	-0.25%	20%	20%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

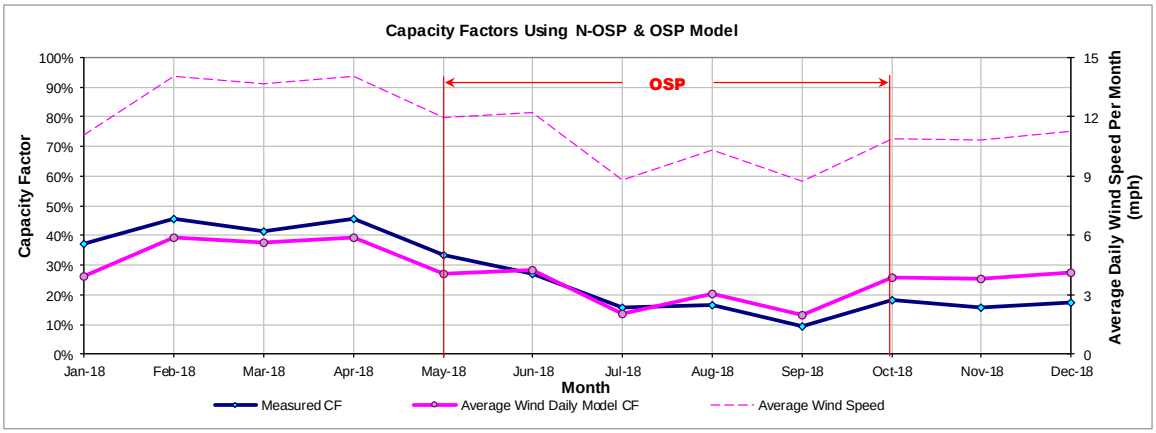


Figure A-84:SANTACRU_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.24.2 Chapman Ranch - SANTACRU_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SANTACRU_UNIT2	Wind	-	NUECES	Invenergy	Chapman Ranch Wind 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
32 Acciona 3 MW	ERCOT	S	Oct-17	Coastal	CRP	98.4

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

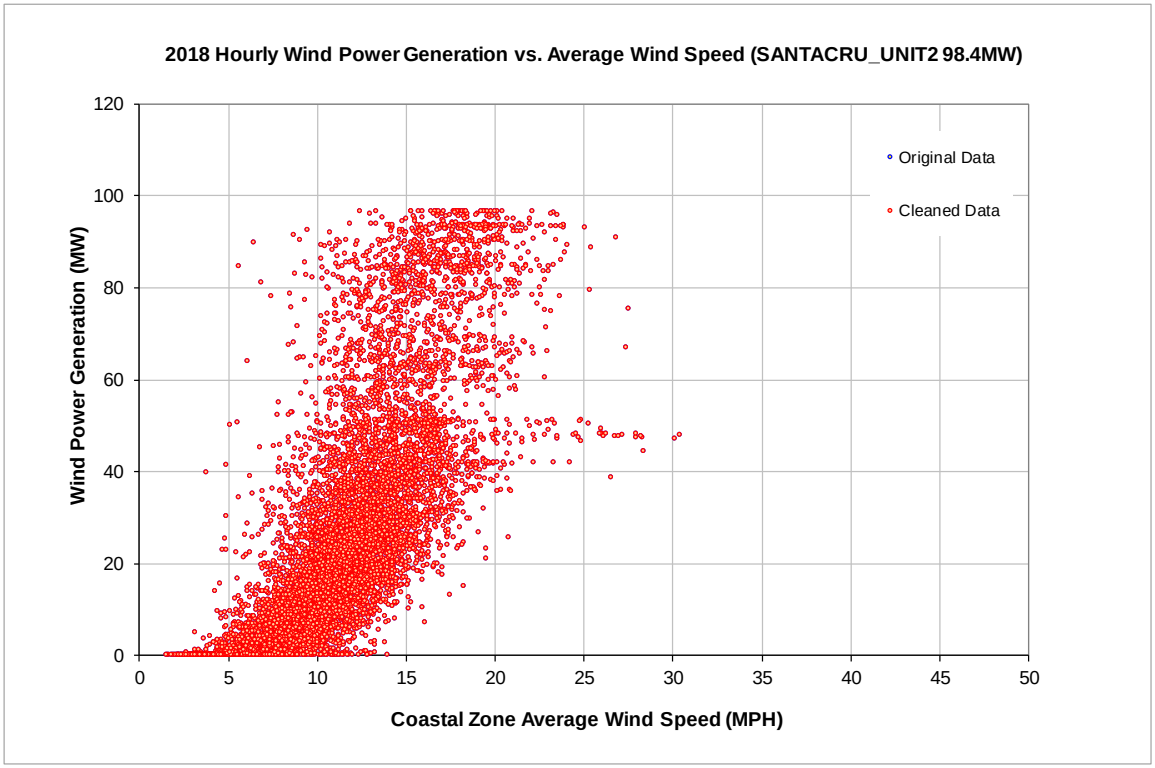


Figure A-85:SANTACRU_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

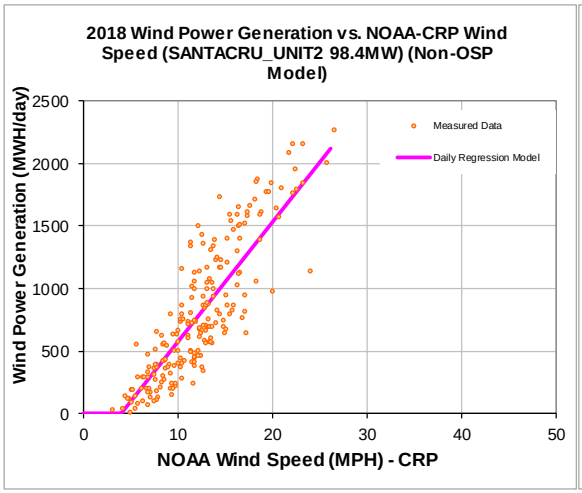
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-454.99
Left Slope (MWh/mph-day)	101.78
RMSE (MWh/day)	268.37
R2	0.75
CV-RMSE	33.9%
Daily Maximum (MWh/day)	2362

OSP Model:

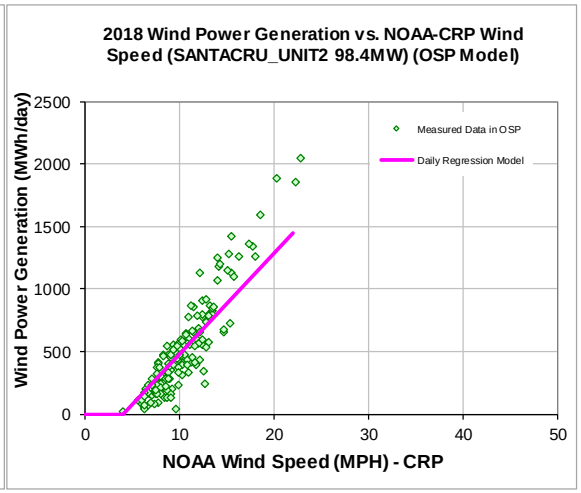
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-621.70
Left Slope (MWh/mph-day)	109.37
RMSE (MWh/day)	153.71
R2	0.85
CV-RMSE	29.8%
Daily Maximum (MWh/day)	2362

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
243,797	246,908

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
494	516

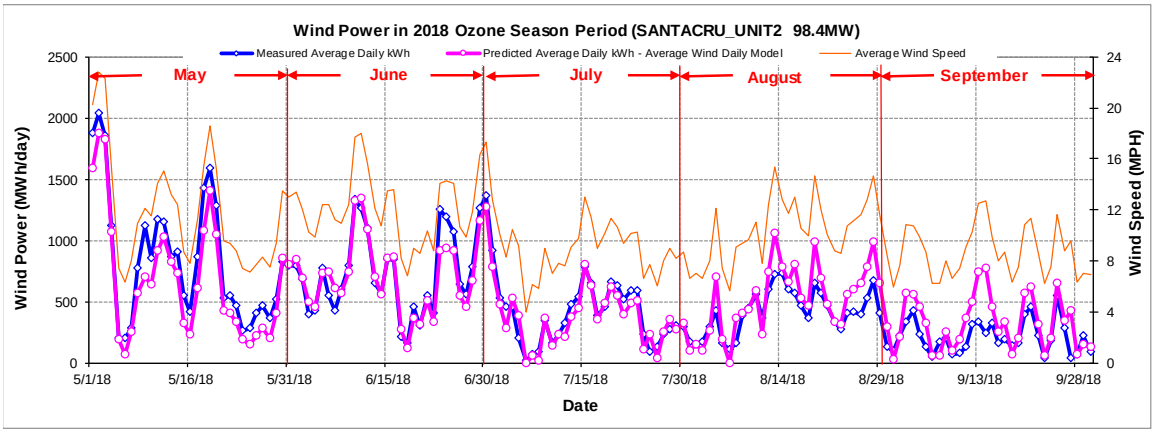
Figure A-86:SANTACRU_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	28,908	20,922	27.63%	39%	29%
Feb-18	28	14.08	31,318	27,393	12.53%	47%	41%
Mar-18	31	13.69	31,765	29,103	8.38%	43%	40%
Apr-18	30	14.08	31,373	29,337	6.49%	44%	41%
May-18	31	11.95	25,984	21,229	18.30%	35%	29%
Jun-18	30	12.21	22,215	21,409	3.63%	31%	30%
Jul-18	31	8.81	11,767	10,782	8.37%	16%	15%
Aug-18	31	10.35	12,622	15,818	-25.32%	17%	22%
Sep-18	30	8.73	6,436	9,976	-54.99%	9%	14%
Oct-18	31	10.87	14,132	20,334	-43.89%	19%	28%
Nov-18	30	10.83	13,357	19,434	-45.50%	19%	27%
Dec-18	31	11.29	17,032	21,556	-26.57%	23%	29%
Total	365	11.48	246,908	247,293	-0.16%	29%	29%
Total in OSP (07/15-09/15)	153	10.41	79,023	79,214	-0.24%	22%	22%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

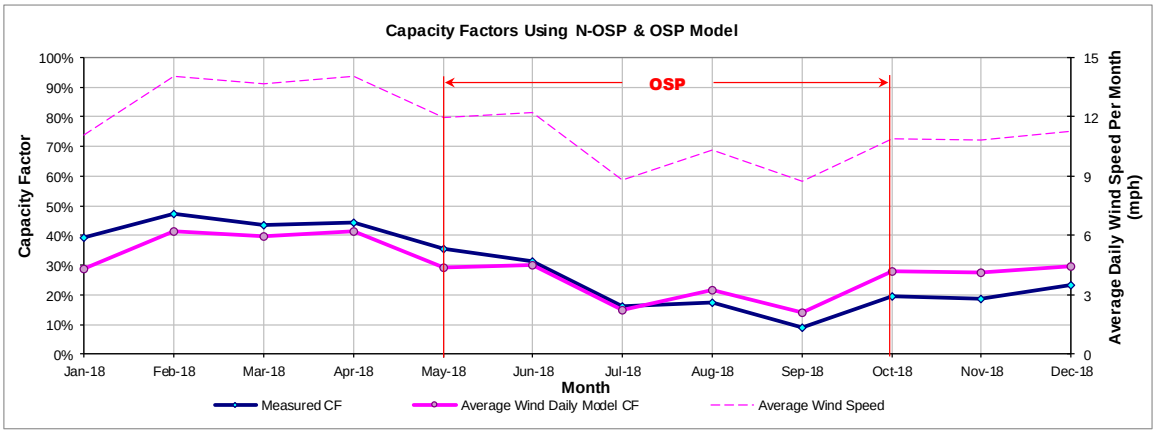


Figure A-87:SANTACRU_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.25

A.25.1 Colbeck's Corner - GRANDVW1_COLA

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
GRANDVW1_COLA	Wind	Amarillo	CARSON	E.ON Climate & Renewables	Colbeck's Corner

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
56 GE 1.7 MW	ERCOT	W	May-16	Panhandle	AMA	100.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

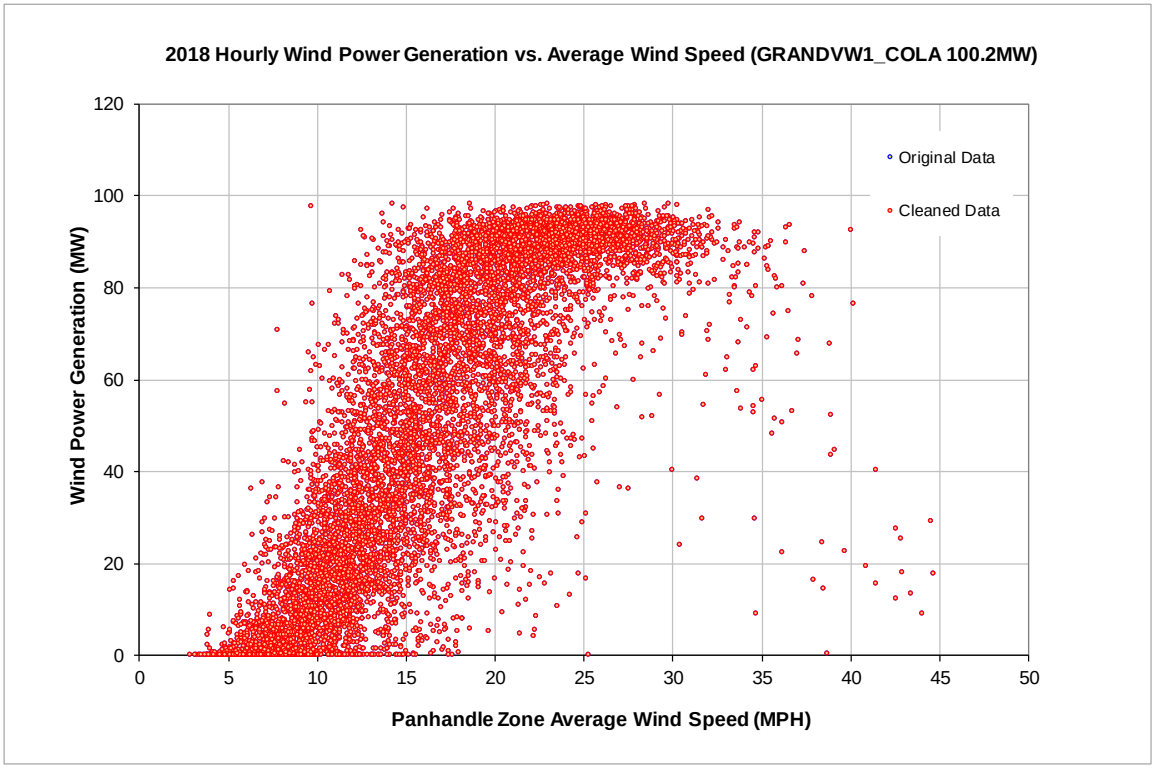


Figure A-88:GRANDVW1_COLA - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

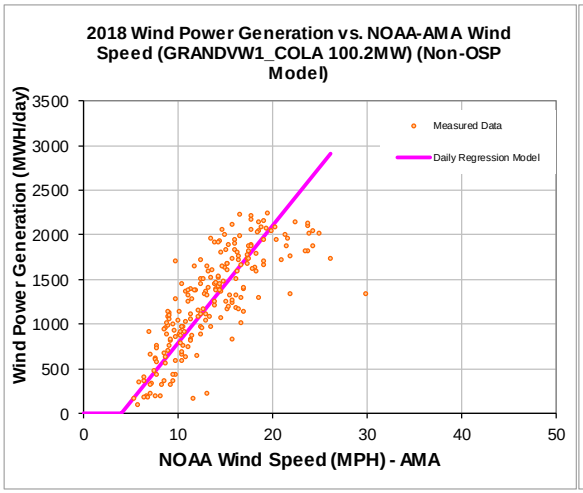
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-20.71
Left Slope (MWh/mph-day)	94.72
RMSE (MWh/day)	336.50
R2	0.63
CV-RMSE	26.5%
Daily Maximum (MWh/day)	2405

OSP Model:

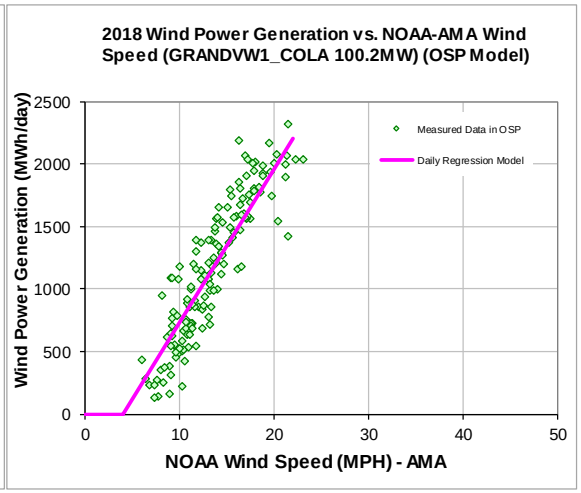
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-602.43
Left Slope (MWh/mph-day)	130.87
RMSE (MWh/day)	237.89
R2	0.82
CV-RMSE	20.5%
Daily Maximum (MWh/day)	2405

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
450,327	446,837

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,129	1,159

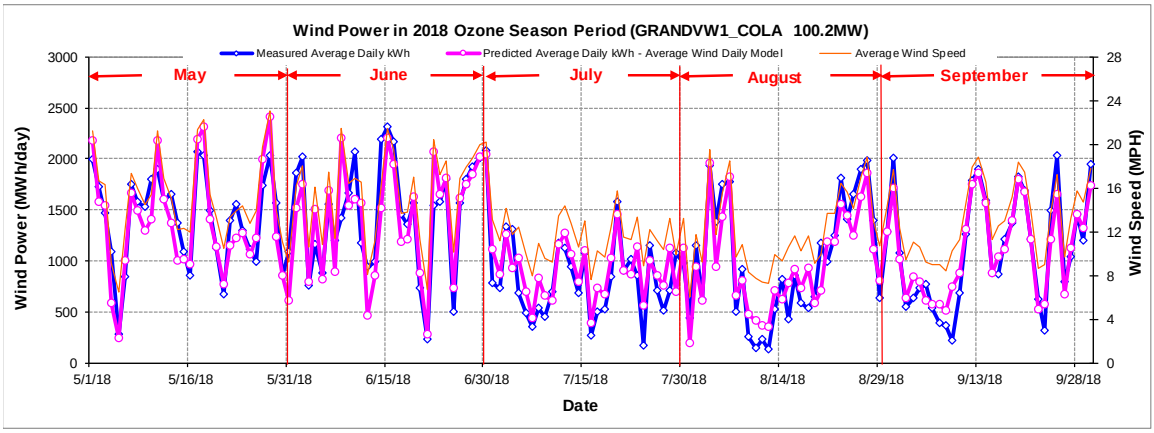
Figure A-89:GRANDVW1_COLA - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	40,554	36,707	9.49%	54%	49%
Feb-18	28	13.78	39,467	35,956	8.90%	59%	53%
Mar-18	31	14.64	43,869	42,355	3.45%	59%	57%
Apr-18	30	17.03	43,174	47,733	-10.56%	60%	66%
May-18	31	14.93	43,462	41,892	3.61%	58%	56%
Jun-18	30	15.70	44,414	43,555	1.93%	62%	60%
Jul-18	31	11.32	24,518	27,259	-11.18%	33%	37%
Aug-18	31	12.42	32,609	31,692	2.81%	44%	43%
Sep-18	30	13.00	32,358	32,955	-1.84%	45%	46%
Oct-18	31	12.69	31,820	36,628	-15.11%	43%	49%
Nov-18	30	12.53	35,000	34,983	0.05%	49%	48%
Dec-18	31	12.16	35,591	34,661	2.62%	48%	46%
Total	365	13.56	446,837	446,375	0.10%	51%	51%
Total in OSP (07/15-09/15)	153	13.46	177,361	177,353	0.00%	48%	48%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

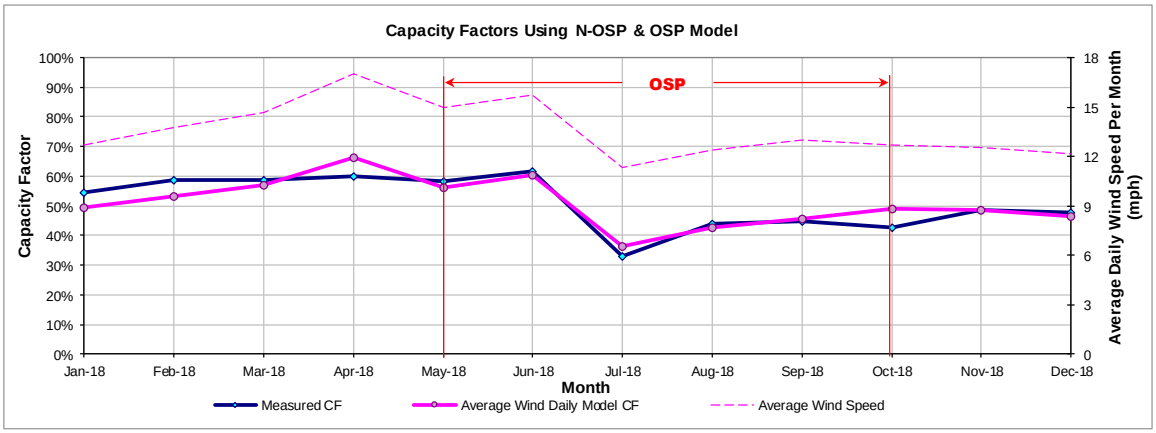


Figure A-90:GRANDVW1_COLA - Predicted Wind Power and Capacity Factor Using Daily Models

A.25.2 Colbeck's Corner - GRANDVW1_COLB

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
GRANDVW1_COLB	Wind	Amarillo	CARSON	E.ON Climate & Renewables	Colbeck's Corner

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
56 GE 1.7 MW	ERCOT	W	May-16	Panhandle	AMA	100.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

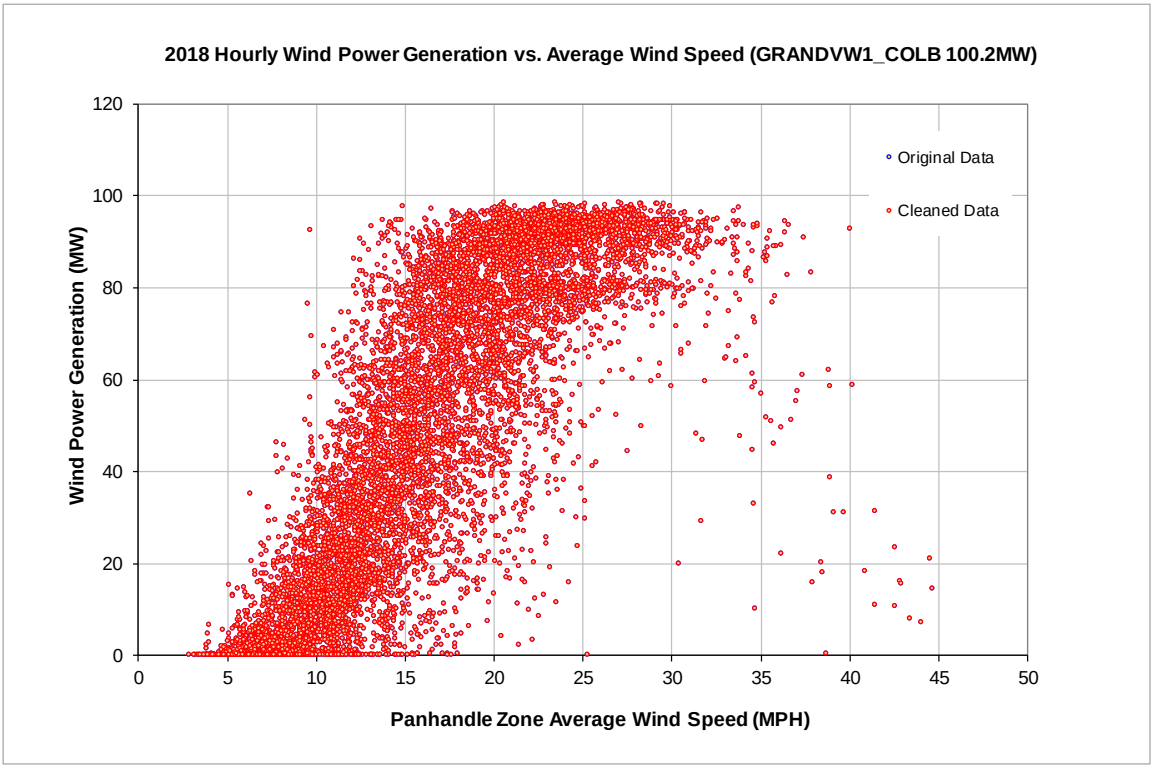


Figure A-91:GRANDVW1_COLB - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

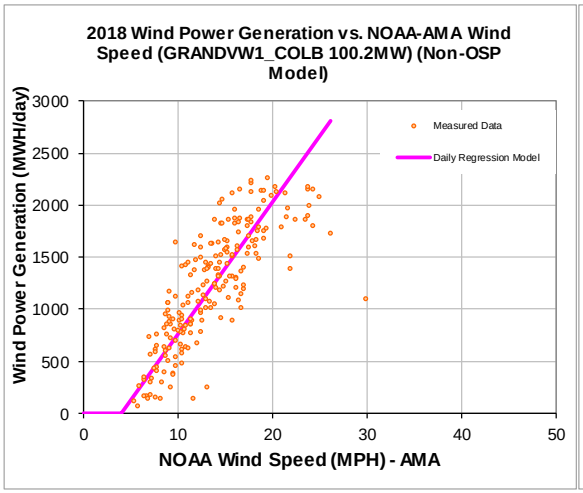
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-108.81
Left Slope (MWh/mph-day)	97.63
RMSE (MWh/day)	333.34
R2	0.65
CV-RMSE	27.3%
Daily Maximum (MWh/day)	2405

OSP Model:

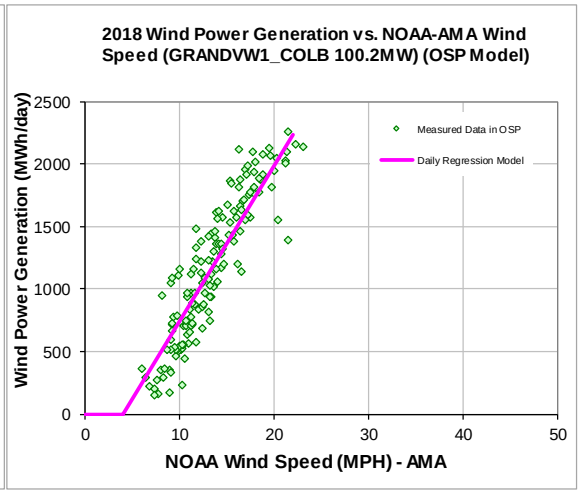
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-622.42
Left Slope (MWh/mph-day)	133.32
RMSE (MWh/day)	234.45
R2	0.83
CV-RMSE	20.0%
Daily Maximum (MWh/day)	2405

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
442,113	438,531

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,142	1,172

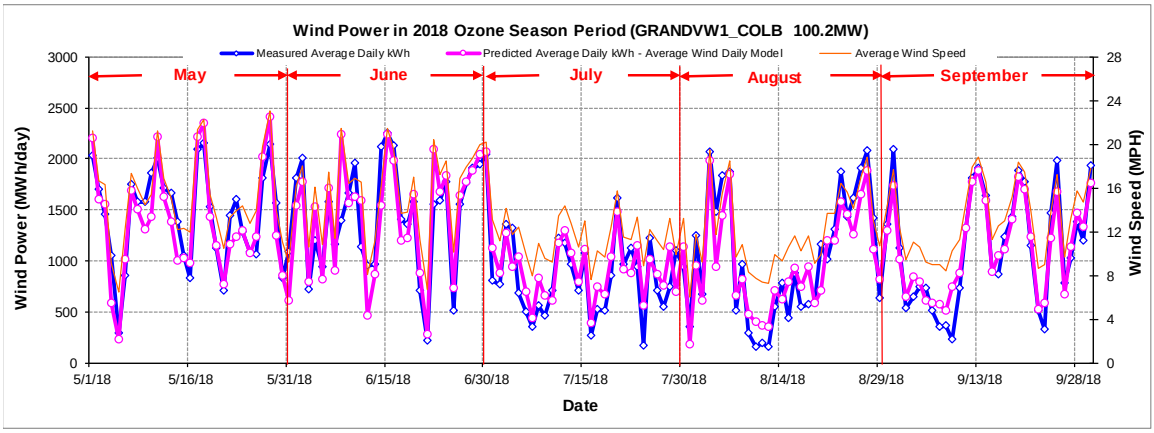
Figure A-92:GRANDVW1_COLB - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	40,647	35,120	13.60%	55%	47%
Feb-18	28	13.78	39,830	34,608	13.11%	59%	51%
Mar-18	31	14.64	45,394	40,941	9.81%	61%	55%
Apr-18	30	17.03	43,613	46,585	-6.82%	60%	65%
May-18	31	14.93	44,236	42,369	4.22%	59%	57%
Jun-18	30	15.70	43,819	44,108	-0.66%	61%	61%
Jul-18	31	11.32	25,196	27,499	-9.14%	34%	37%
Aug-18	31	12.42	33,633	32,015	4.81%	45%	43%
Sep-18	30	13.00	32,460	33,309	-2.62%	45%	46%
Oct-18	31	12.69	29,674	35,038	-18.08%	40%	47%
Nov-18	30	12.53	30,017	33,431	-11.37%	42%	46%
Dec-18	31	12.16	30,013	33,025	-10.03%	40%	44%
Total	365	13.56	438,531	438,047	0.11%	50%	50%
Total in OSP (07/15-09/15)	153	13.46	179,344	179,299	0.02%	49%	49%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

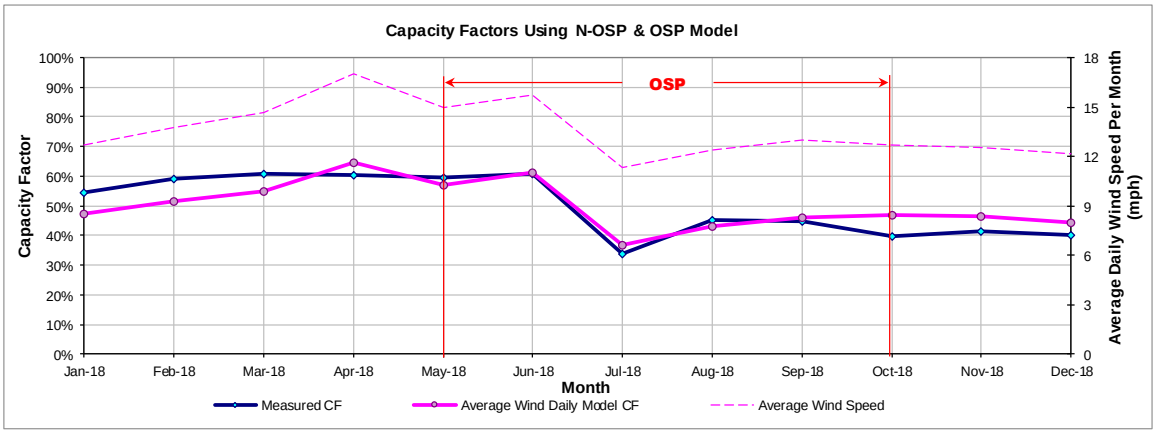


Figure A-93:GRANDVW1_COLB - Predicted Wind Power and Capacity Factor Using Daily Models

A.26 Cotton Plains Wind

A.26.1 Cotton Plains Wind - COTPLNS_COTTONPL

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
COTPLNS_COTTONPL	Wind	Floydada	FLOYD	Apex Clean Energy	Cotton Plains Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
21 GE 2.4 MW	ERCOT	W	Mar-17	Panhandle	LBB	50.4

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

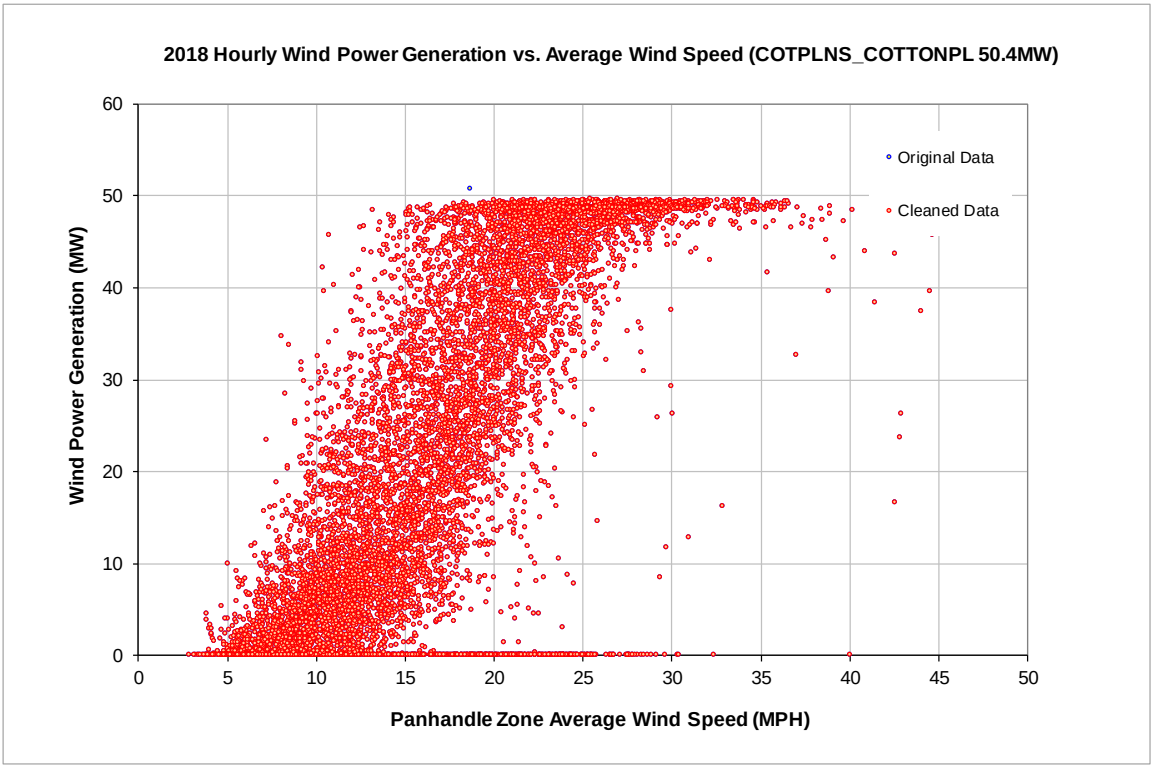


Figure A-94:COTPLNS_COTTONPL - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

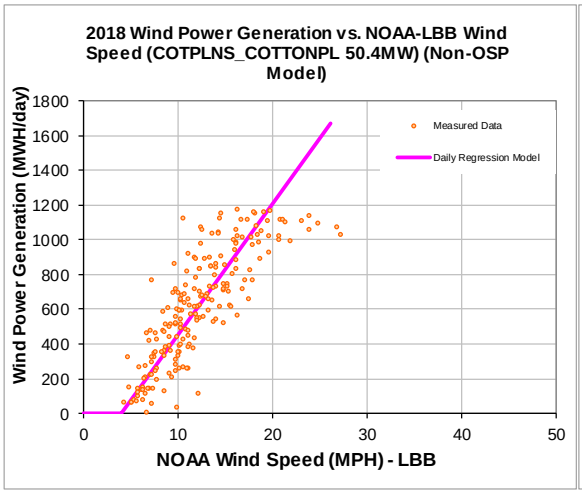
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-82.72
Left Slope (MWh/mph-day)	57.41
RMSE (MWh/day)	181.13
R2	0.68
CV-RMSE	29.5%
Daily Maximum (MWh/day)	1210

OSP Model:

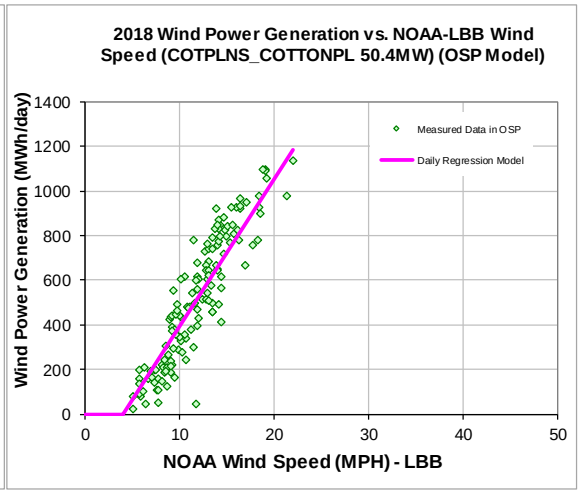
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-335.38
Left Slope (MWh/mph-day)	71.92
RMSE (MWh/day)	117.37
R2	0.83
CV-RMSE	22.8%
Daily Maximum (MWh/day)	1210

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
204,833	199,046

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
448	514

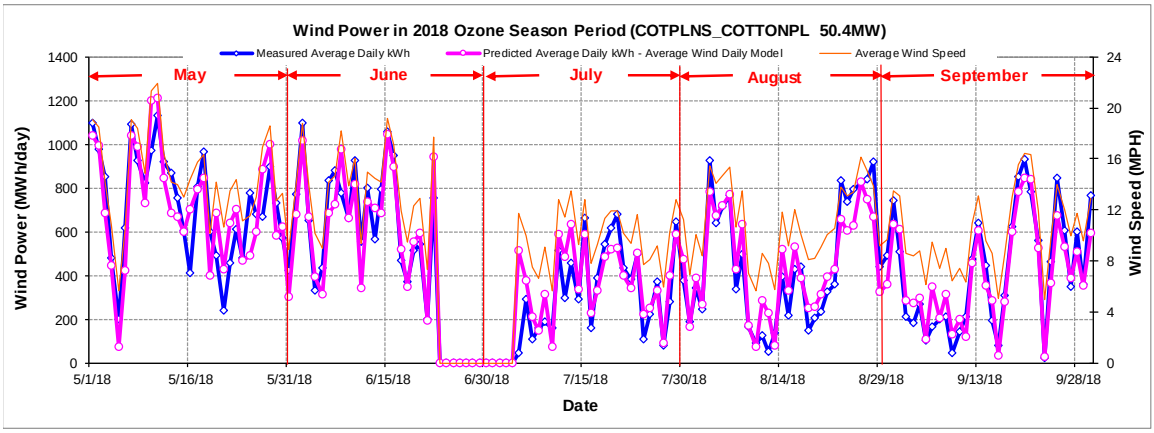
Figure A-95:COTPLNS_COTTONPL - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	19,971	17,172	14.01%	53%	46%
Feb-18	28	12.08	18,242	17,097	6.27%	54%	50%
Mar-18	31	13.58	21,457	21,531	-0.34%	57%	57%
Apr-18	30	15.19	21,218	23,287	-9.75%	58%	64%
May-18	31	14.42	22,082	21,730	1.59%	59%	58%
Jun-18	30	13.81	14,901	14,474	2.86%	41%	40%
Jul-18	31	9.85	9,090	10,073	-10.82%	24%	27%
Aug-18	31	11.09	14,363	14,321	0.30%	38%	38%
Sep-18	30	10.17	12,072	11,875	1.63%	33%	33%
Oct-18	31	10.51	10,829	13,018	-20.22%	29%	35%
Nov-18	30	11.15	17,912	16,714	6.69%	49%	46%
Dec-18	31	11.13	16,910	16,898	0.07%	45%	45%
Total	365	12.01	199,046	198,192	0.43%	45%	45%
Total in OSP (07/15-09/15)	141	11.81	72,507	72,473	0.05%	43%	42%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

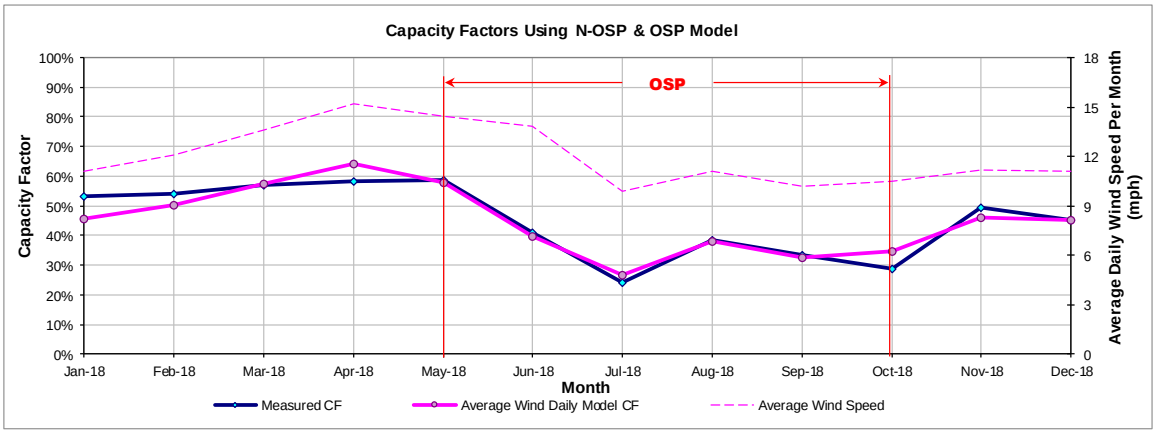


Figure A-96:COTPLNS_COTTONPL - Predicted Wind Power and Capacity Factor Using Daily Models

A.27 Dermott Wind 1

A.27.1 Dermott Wind 1 - DERMOTT_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
DERMOTT_UNIT1	Wind	-	SCURRY	Lincoln Clean Energy	Dermott Wind 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
-	ERCOT	W	Aug-17	West	LBB	126.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

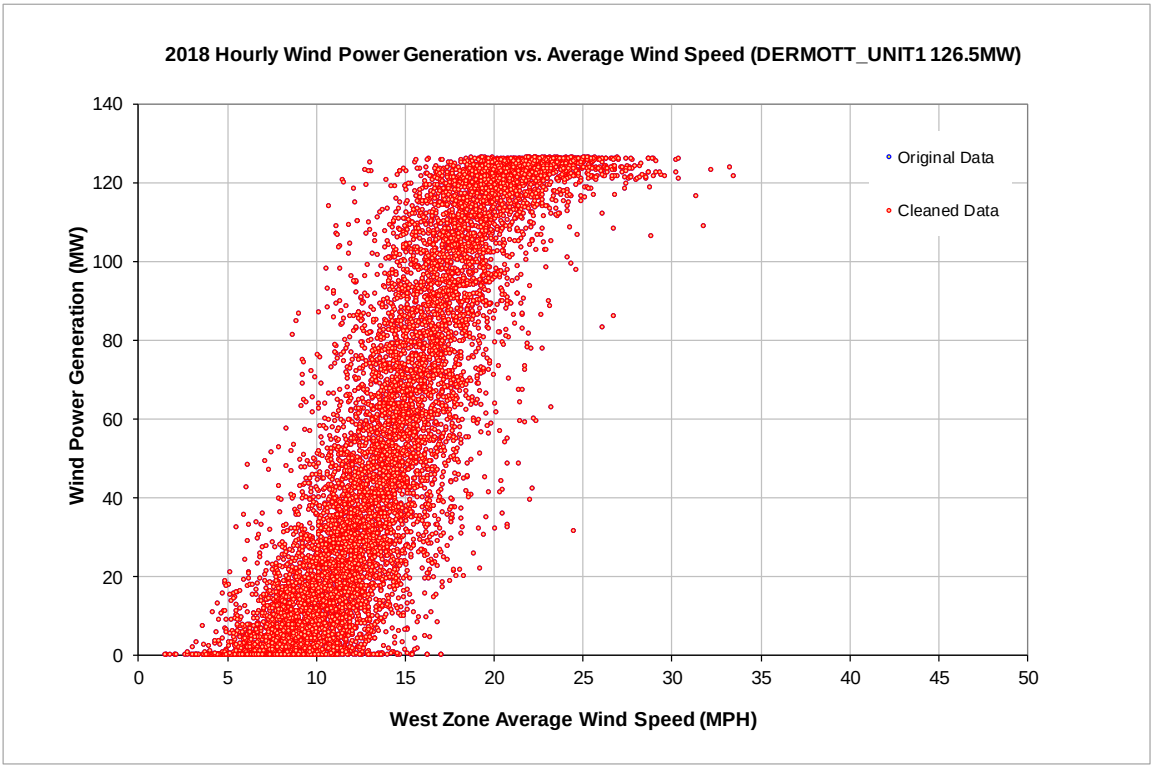


Figure A-97:DERMOTT_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

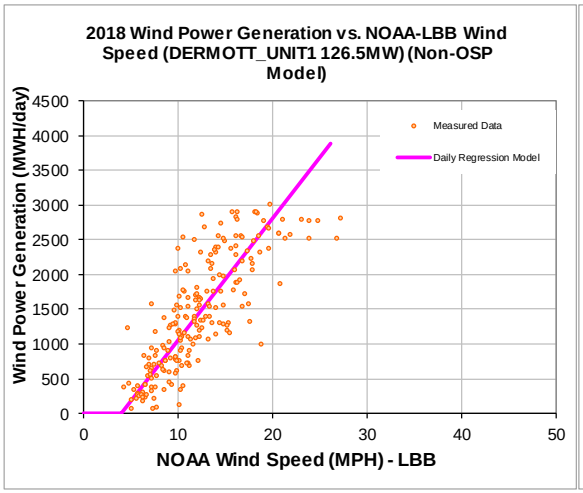
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-312.60
Left Slope (MWh/mph-day)	143.45
RMSE (MWh/day)	481.50
R2	0.65
CV-RMSE	33.7%
Daily Maximum (MWh/day)	3036

OSP Model:

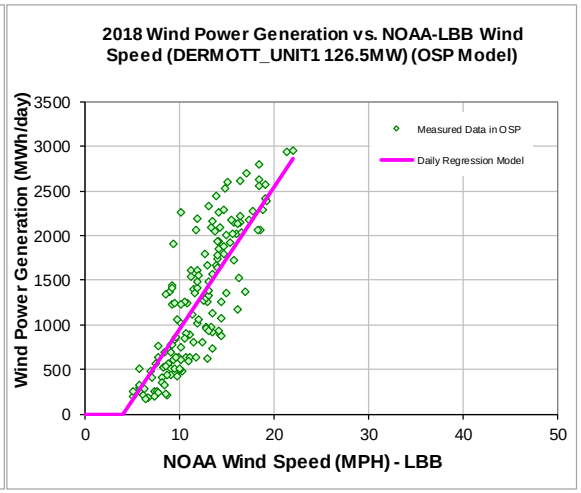
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-811.63
Left Slope (MWh/mph-day)	173.65
RMSE (MWh/day)	407.89
R2	0.70
CV-RMSE	32.1%
Daily Maximum (MWh/day)	3036

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
483,149	497,454

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,081	1,272

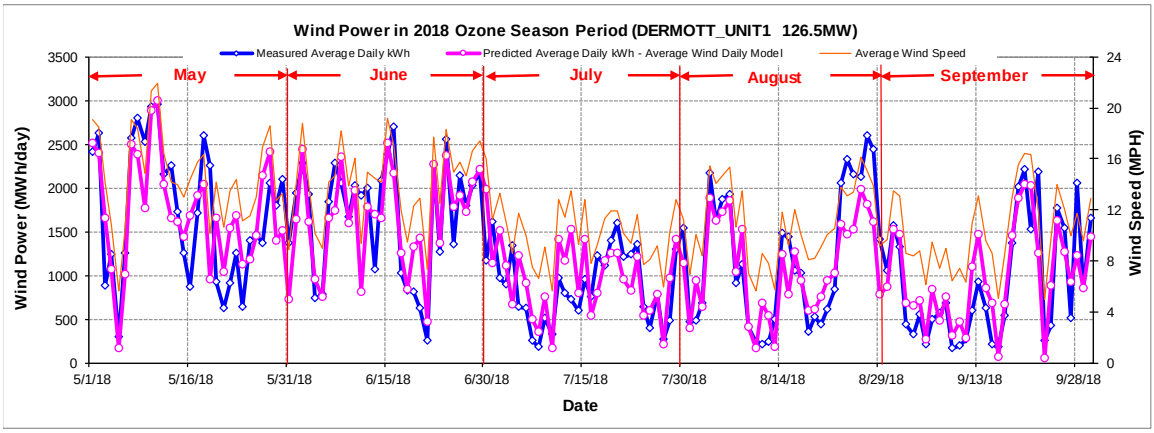
Figure A-98:DERMOTT_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	46,247	39,625	14.32%	49%	42%
Feb-18	28	12.08	40,165	39,755	1.02%	47%	47%
Mar-18	31	13.58	47,685	50,635	-6.19%	51%	54%
Apr-18	30	15.19	51,688	55,313	-7.01%	57%	61%
May-18	31	14.42	53,176	52,491	1.29%	57%	56%
Jun-18	30	14.33	49,916	50,329	-0.83%	55%	55%
Jul-18	31	10.01	27,078	28,701	-5.99%	29%	30%
Aug-18	31	11.09	37,845	34,518	8.79%	40%	37%
Sep-18	30	10.17	26,639	28,615	-7.42%	29%	31%
Oct-18	31	10.80	36,953	38,322	-3.70%	39%	41%
Nov-18	30	11.15	40,021	38,586	3.58%	44%	42%
Dec-18	31	11.13	40,042	39,179	2.16%	43%	42%
Total	365	12.08	497,454	496,069	0.28%	45%	45%
Total in OSP (07/15-09/15)	153	12.00	194,654	194,654	0.00%	42%	42%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

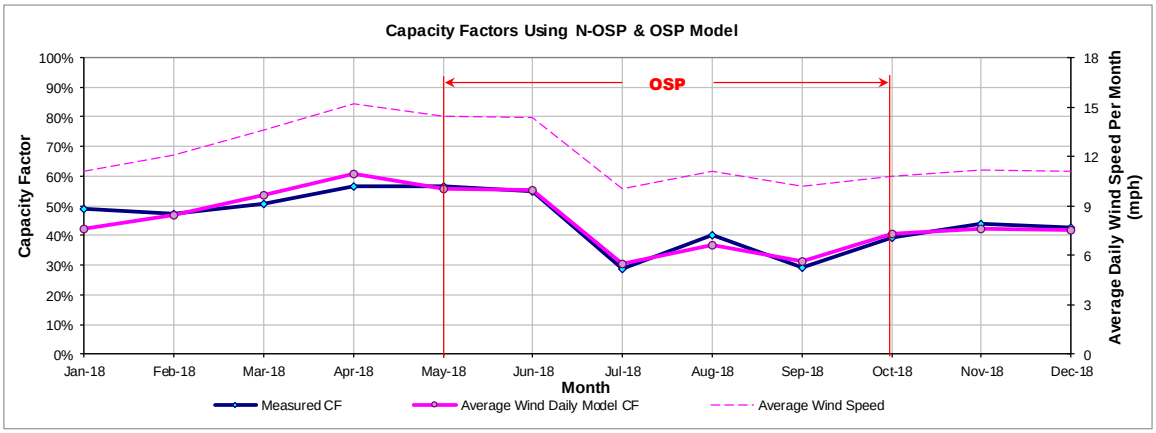


Figure A-99:DERMOTT_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.27.2 Dermott Wind 1 - DERMOTT_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
DERMOTT_UNIT2	Wind	-	SCURRY	Lincoln Clean Energy	Dermott Wind 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
-	ERCOT	W	Aug-17	West	LBB	126.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

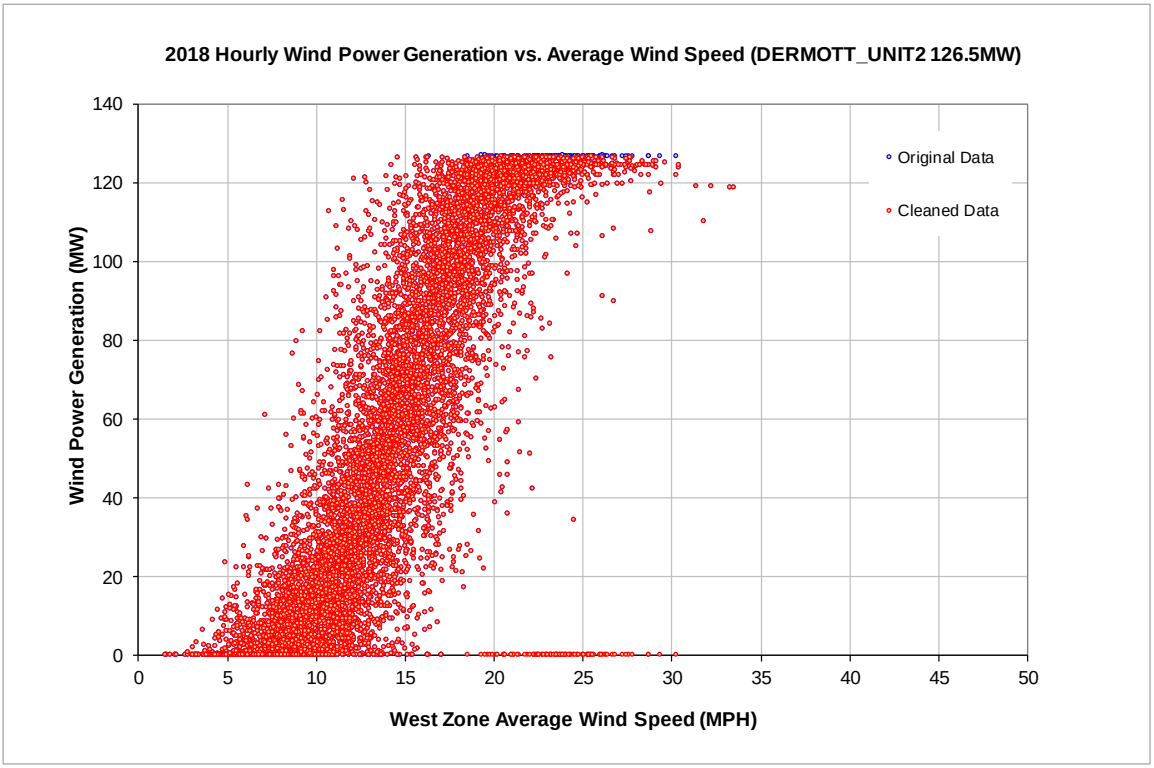


Figure A-100:DERMOTT_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

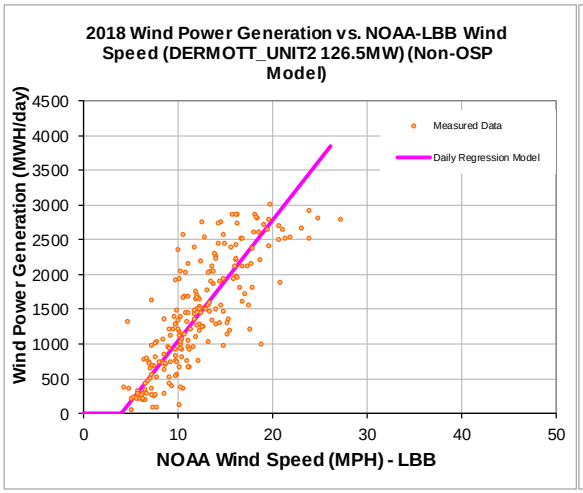
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-363.46
Left Slope (MWh/mph-day)	146.77
RMSE (MWh/day)	470.14
R2	0.66
CV-RMSE	33.4%
Daily Maximum (MWh/day)	3036

OSP Model:

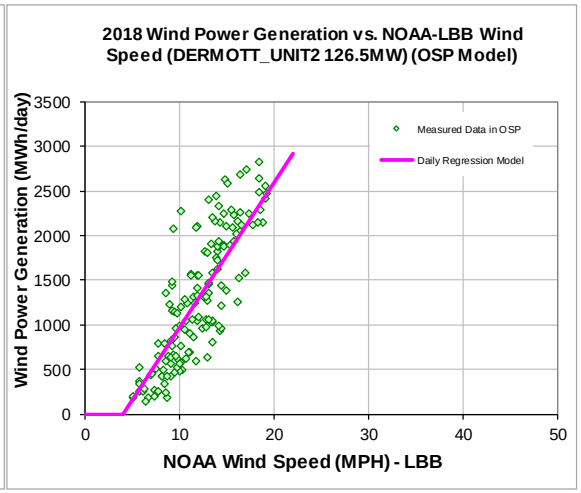
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-828.16
Left Slope (MWh/mph-day)	177.01
RMSE (MWh/day)	400.16
R2	0.70
CV-RMSE	31.4%
Daily Maximum (MWh/day)	3036

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
484,271	489,304

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,101	1,273

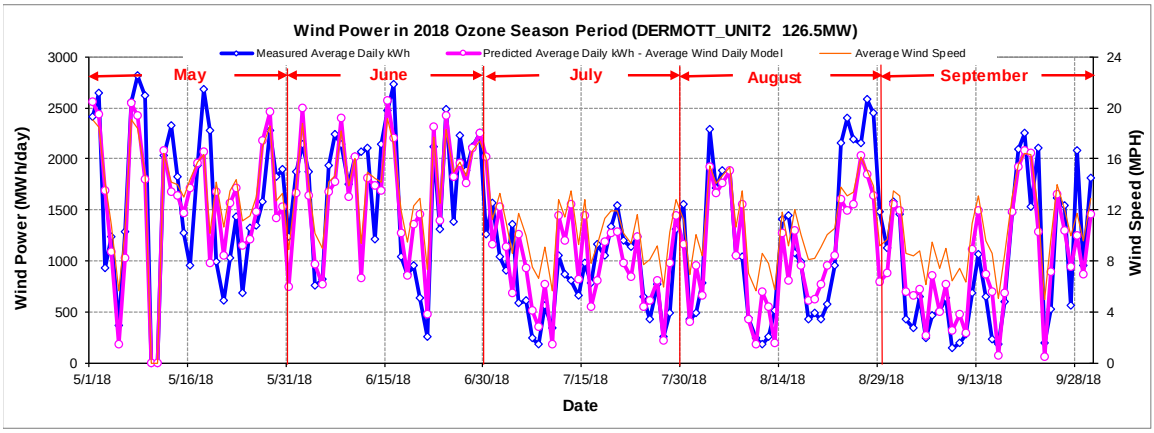
Figure A-101:DERMOTT_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	45,160	39,191	13.22%	48%	42%
Feb-18	28	12.08	39,610	39,456	0.39%	47%	46%
Mar-18	31	13.58	47,475	50,430	-6.22%	50%	54%
Apr-18	30	14.80	49,279	52,197	-5.92%	54%	57%
May-18	31	13.93	48,321	47,480	1.74%	51%	50%
Jun-18	30	14.33	50,989	51,276	-0.56%	56%	56%
Jul-18	31	10.01	26,977	29,229	-8.35%	29%	31%
Aug-18	31	11.09	38,586	35,159	8.88%	41%	37%
Sep-18	30	10.17	27,415	29,143	-6.30%	30%	32%
Oct-18	31	10.80	36,303	37,858	-4.28%	39%	40%
Nov-18	30	11.15	39,281	38,172	2.82%	43%	42%
Dec-18	31	11.13	39,910	38,682	3.08%	42%	41%
Total	365	11.99	489,304	488,274	0.21%	44%	44%
Total in OSP (07/15-09/15)	151	11.87	192,287	192,287	0.00%	42%	42%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

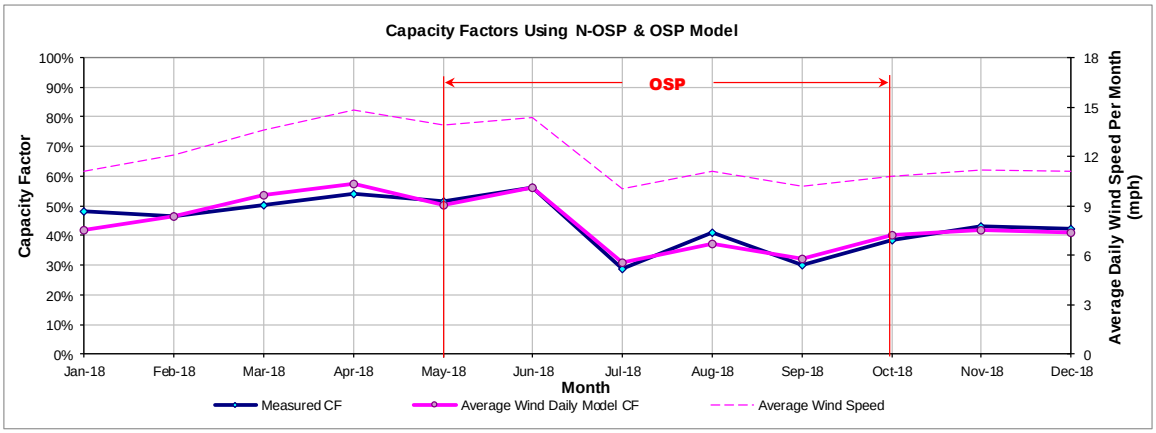


Figure A-102:DERMOTT_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.28 Desert Sky (Indian Mesa II)

A.28.1 Desert Sky (Indian Mesa II) - INDNENR_INDNENR

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
INDNENR_INDNENR	Wind	Iraan	PECOS	AEP	Desert Sky (Indian Mesa II)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
56 Enron 1.5 MW 51 Enron 1.5 MW	ERCOT	W	Dec-01	West	FST	170.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

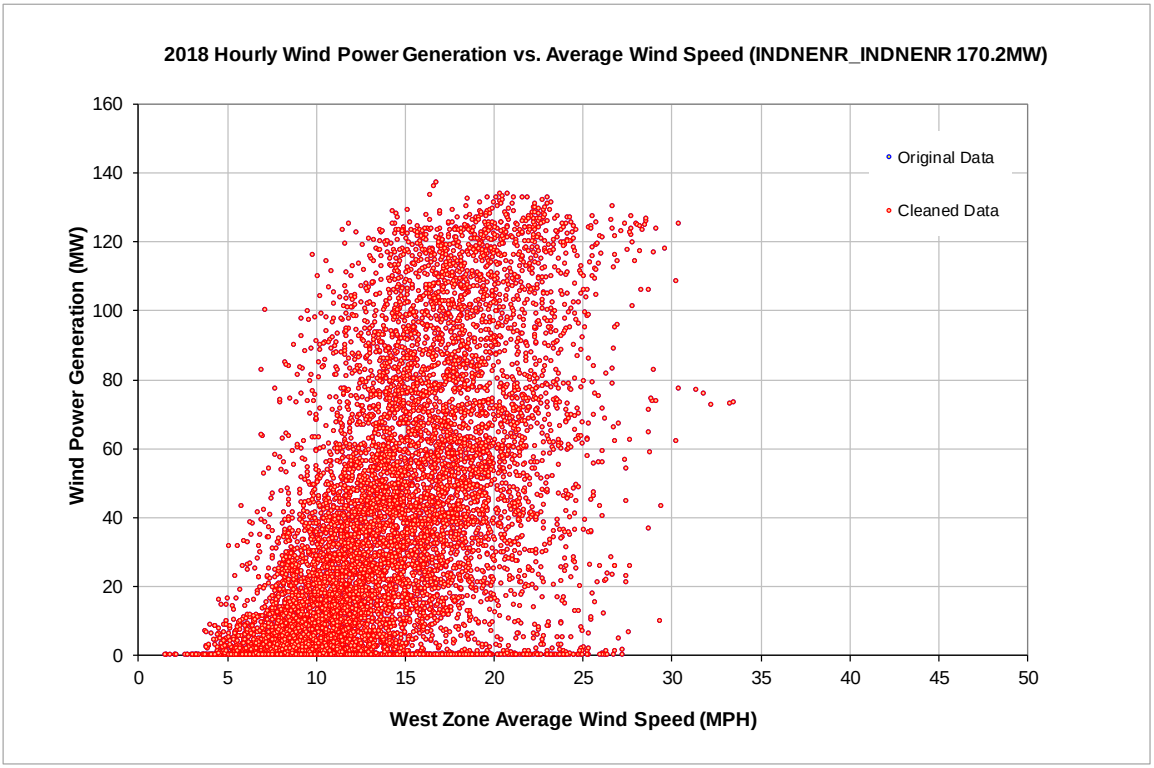


Figure A-103:INDNENR_INDNENR - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

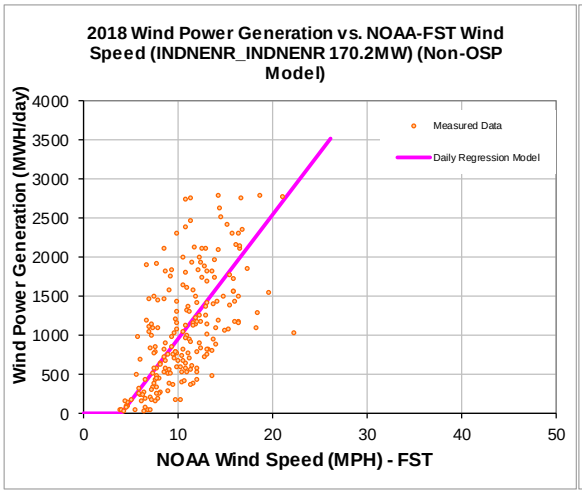
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-255.49
Left Slope (MWh/mph-day)	123.27
RMSE (MWh/day)	547.94
R2	0.38
CV-RMSE	52.1%
Daily Maximum (MWh/day)	4085

OSP Model:

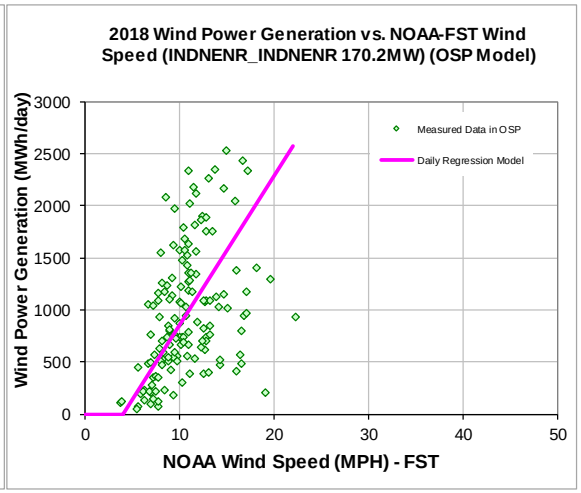
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	141.72
Left Slope (MWh/mph-day)	76.09
RMSE (MWh/day)	548.36
R2	0.17
CV-RMSE	57.3%
Daily Maximum (MWh/day)	4085

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
376,892	362,451

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
970	956

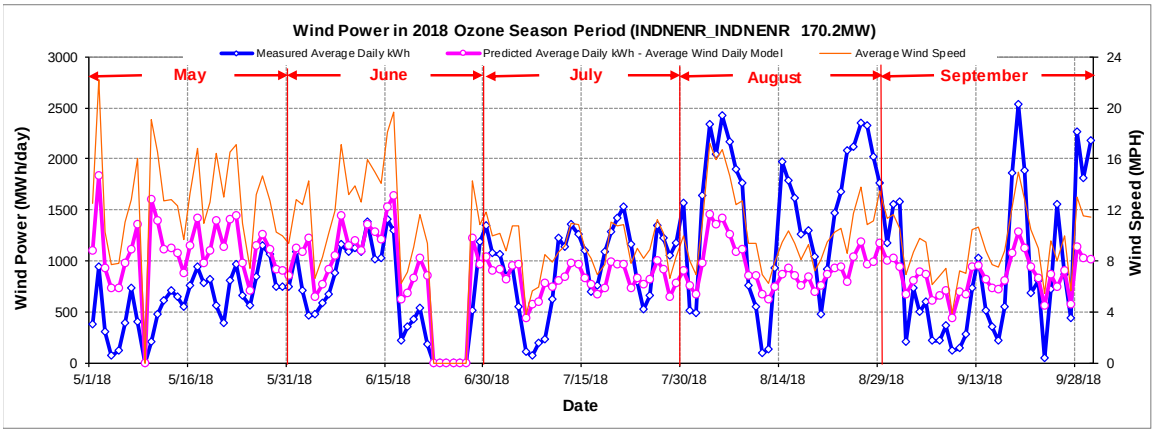
Figure A-104:INDNENR_INDNENR - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.25	36,436	31,250	14.23%	29%	25%
Feb-18	28	10.46	26,665	28,940	-8.53%	23%	25%
Mar-18	31	11.79	35,922	37,147	-3.41%	28%	29%
Apr-18	30	12.36	24,775	38,039	-53.54%	20%	31%
May-18	31	12.95	19,014	33,807	-77.81%	15%	27%
Jun-18	30	12.35	20,164	25,956	-28.72%	16%	21%
Jul-18	31	8.85	28,496	25,274	11.31%	23%	20%
Aug-18	31	10.71	46,030	29,662	35.56%	36%	23%
Sep-18	30	9.06	25,925	24,930	3.84%	21%	20%
Oct-18	31	9.52	35,912	28,461	20.75%	28%	22%
Nov-18	30	9.85	29,749	28,778	3.27%	24%	23%
Dec-18	31	9.98	33,362	30,207	9.46%	26%	24%
Total	365	10.64	362,451	362,451	0.00%	24%	24%
Total in OSP (07/15-09/15)	146	10.71	139,630	139,630	0.00%	23%	23%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

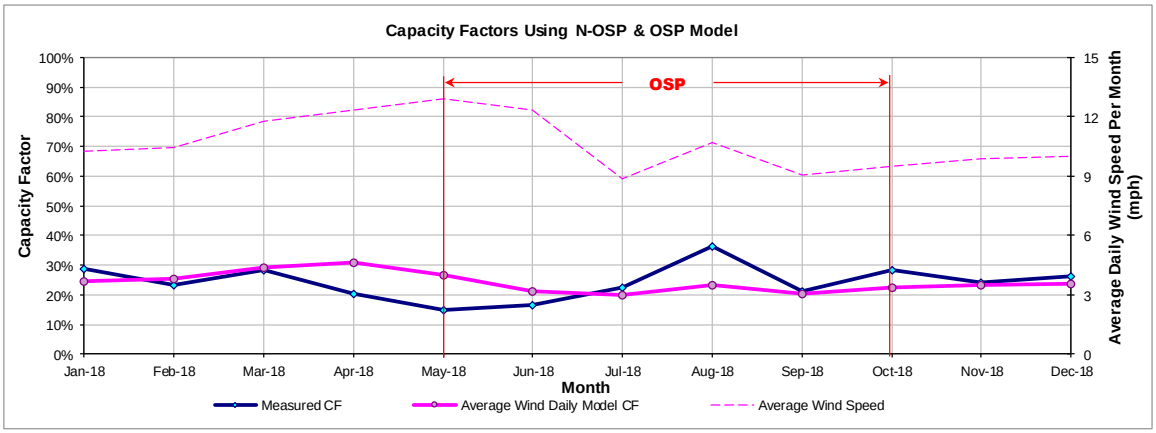


Figure A-105:INDNENR_INDNENR - Predicted Wind Power and Capacity Factor Using Daily Models

A.29 Elbow Creek Wind

A.29.1 Elbow Creek Wind - ELB_ELBCREEK

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
ELB_ELBCREEK	Wind	-	HOWARD	NRG Padoma Wind	Elbow Creek Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
53 Siemens 2.3 MW	ERCOT	W	Nov-08	West	ABI	118.7

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

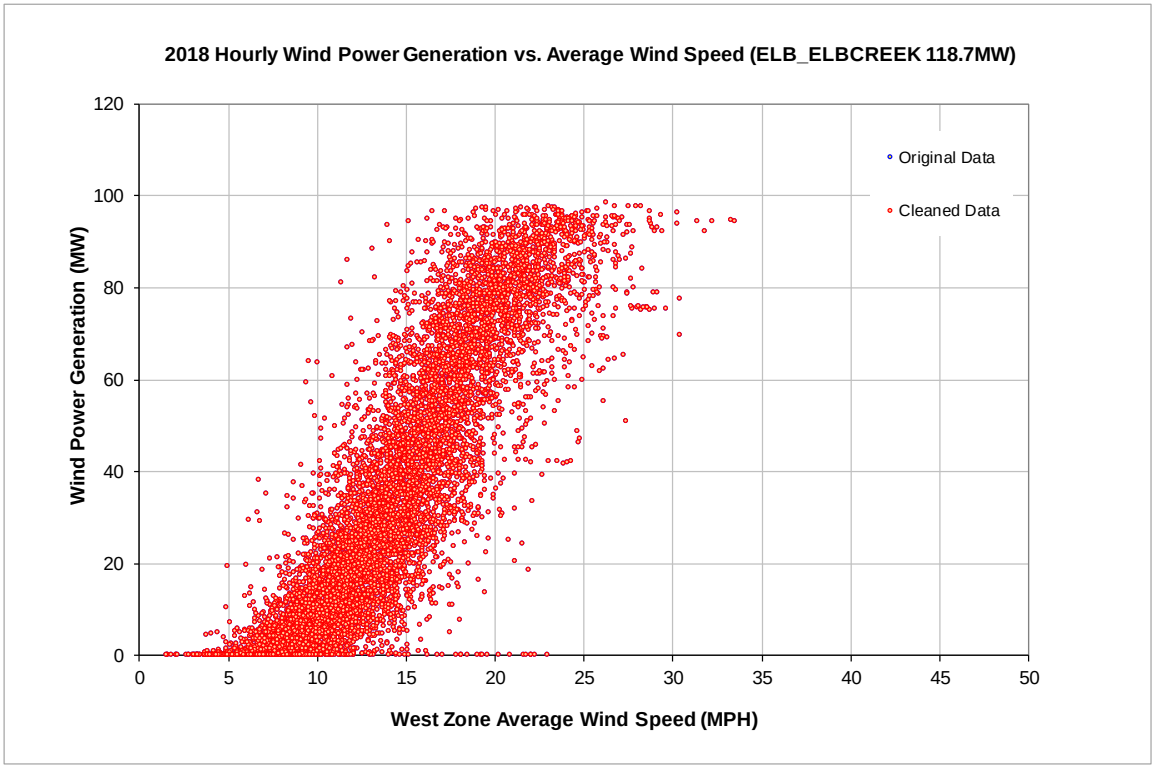


Figure A-106:ELB_ELBCREEK - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

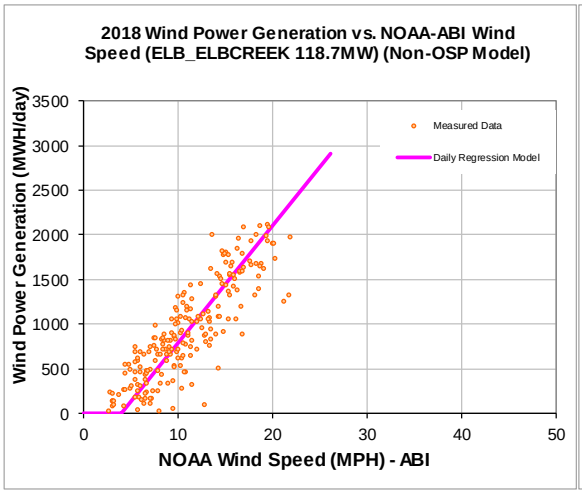
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-211.49
Left Slope (MWh/mph-day)	103.04
RMSE (MWh/day)	281.09
R2	0.74
CV-RMSE	30.7%
Daily Maximum (MWh/day)	2849

OSP Model:

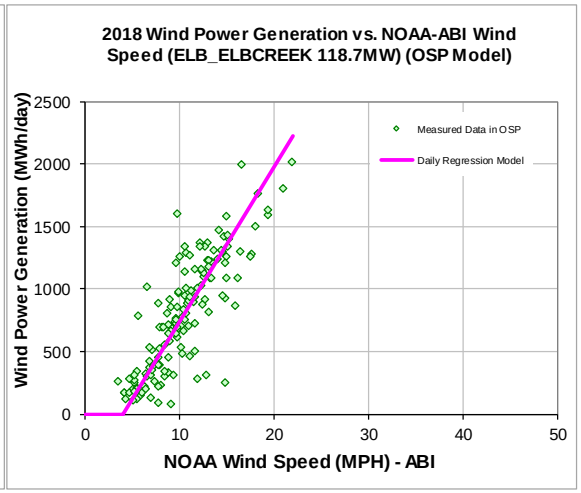
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-274.83
Left Slope (MWh/mph-day)	102.65
RMSE (MWh/day)	252.28
R2	0.69
CV-RMSE	31.8%
Daily Maximum (MWh/day)	2849

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
343,087	315,707

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
803	793

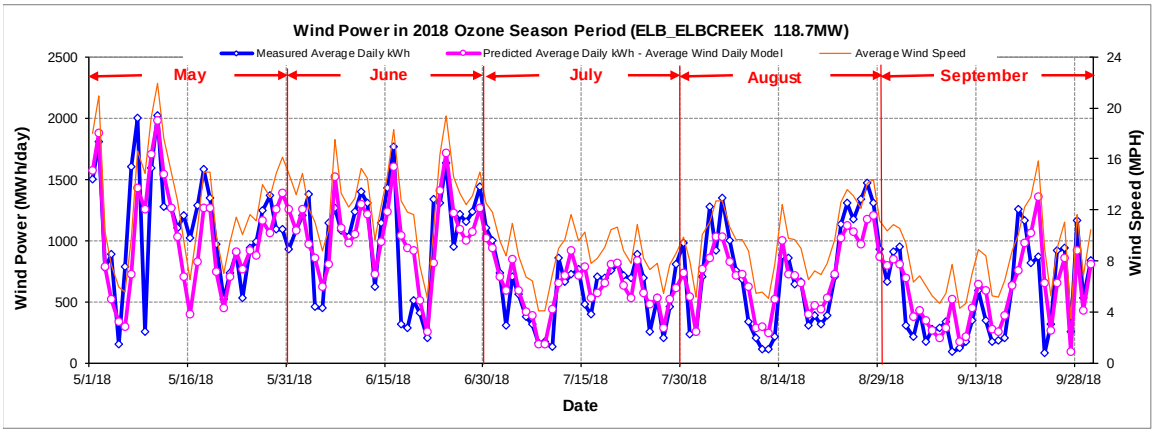
Figure A-107:ELB_ELBCREEK - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	29,875	28,481	4.67%	34%	32%
Feb-18	28	11.00	26,564	25,805	2.85%	33%	32%
Mar-18	31	11.92	32,590	31,533	3.24%	37%	36%
Apr-18	30	13.18	34,355	34,385	-0.09%	40%	40%
May-18	31	12.78	34,653	32,152	7.22%	39%	36%
Jun-18	30	12.90	30,959	31,495	-1.73%	36%	37%
Jul-18	31	8.52	17,662	18,594	-5.28%	20%	21%
Aug-18	31	9.85	23,181	22,819	1.56%	26%	26%
Sep-18	30	7.97	14,890	16,285	-9.37%	17%	19%
Oct-18	31	9.35	22,027	23,320	-5.87%	25%	26%
Nov-18	30	10.05	24,422	24,717	-1.21%	29%	29%
Dec-18	31	10.23	24,529	26,120	-6.49%	28%	30%
Total	365	10.72	315,707	315,707	0.00%	30%	30%
Total in OSP (07/15-09/15)	153	10.40	121,345	121,345	0.00%	28%	28%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

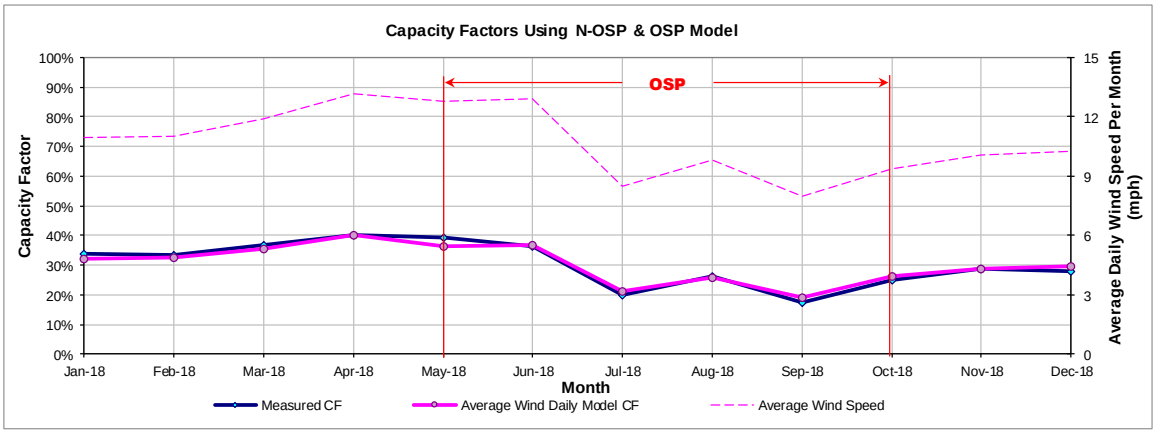


Figure A-108:ELB_ELBCREEK - Predicted Wind Power and Capacity Factor Using Daily Models

A.30 Electra Wind

A.30.1 Electra Wind - DIGBY_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
DIGBY_UNIT1	Wind	-	WILBARGER	Lincoln Clean Energy	Electra Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
43 GE 2.3 MW	ERCOT	W	Jan-17	West	ABI	98.9

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

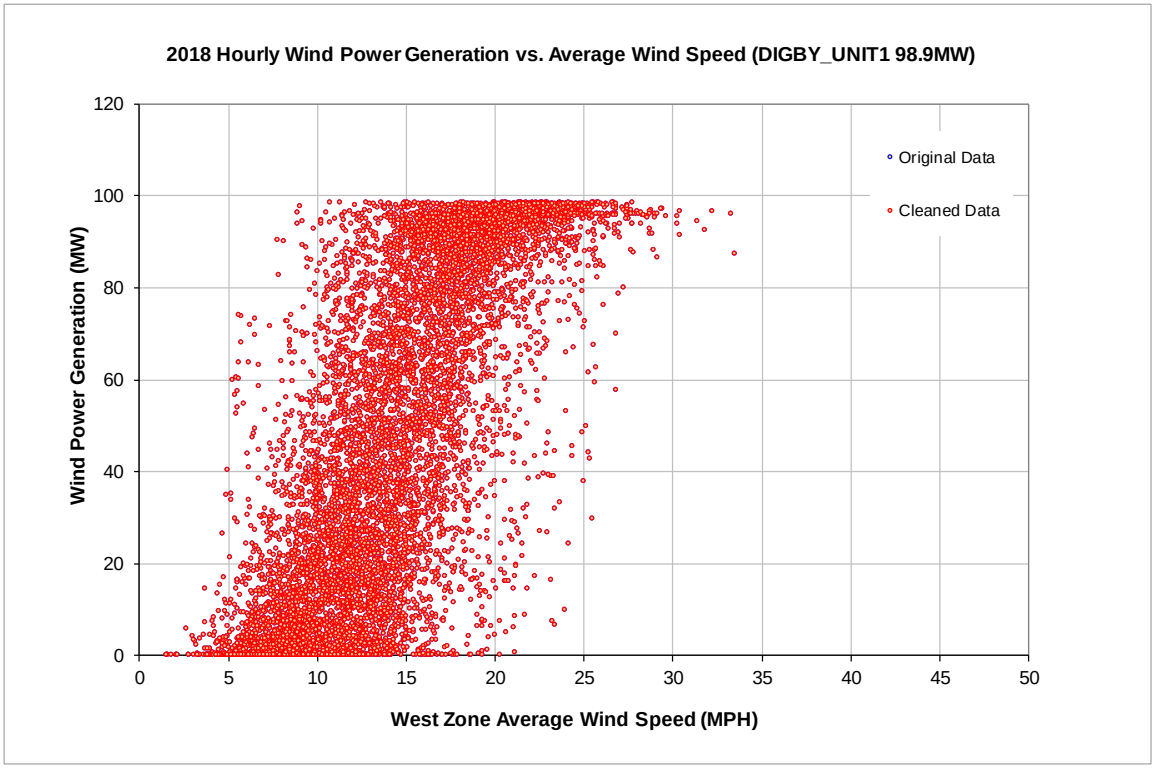


Figure A-109:DIGBY_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

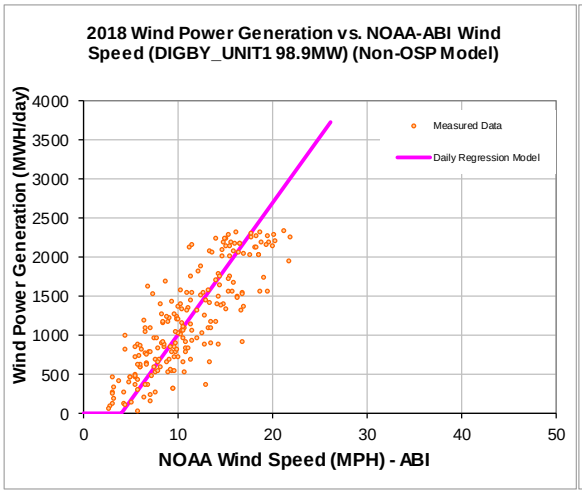
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-96.68
Left Slope (MWh/mph-day)	115.75
RMSE (MWh/day)	354.35
R2	0.69
CV-RMSE	30.3%
Daily Maximum (MWh/day)	2374

OSP Model:

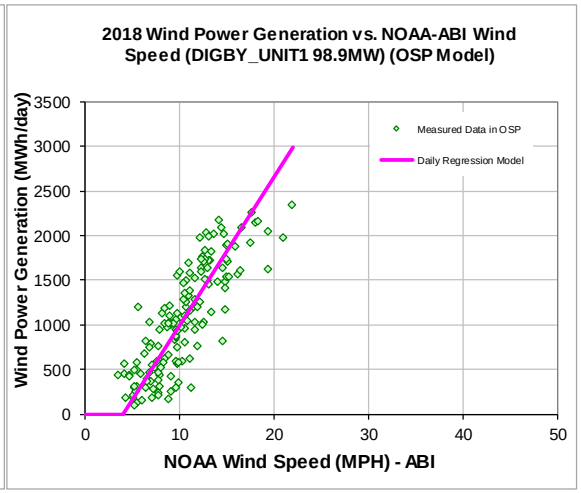
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-331.99
Left Slope (MWh/mph-day)	133.85
RMSE (MWh/day)	326.20
R2	0.70
CV-RMSE	30.8%
Daily Maximum (MWh/day)	2374

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
441,643	410,460

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,074	1,060

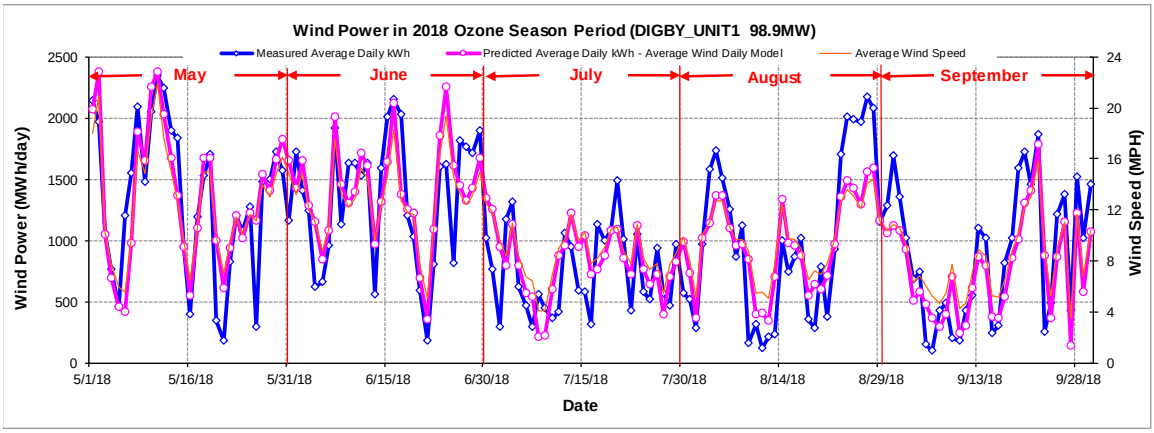
Figure A-110:DIGBY_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	40,390	36,362	9.97%	55%	49%
Feb-18	28	11.00	32,868	32,934	-0.20%	49%	50%
Mar-18	31	11.92	40,566	39,791	1.91%	55%	54%
Apr-18	30	13.18	40,640	42,764	-5.23%	57%	60%
May-18	31	12.78	41,445	42,418	-2.35%	56%	58%
Jun-18	30	12.90	40,448	41,856	-3.48%	57%	59%
Jul-18	31	8.52	22,468	25,061	-11.54%	31%	34%
Aug-18	31	9.85	32,725	30,571	6.58%	44%	42%
Sep-18	30	7.97	25,166	22,024	12.48%	35%	31%
Oct-18	31	9.35	27,472	30,565	-11.26%	37%	42%
Nov-18	30	10.05	33,692	31,993	5.04%	47%	45%
Dec-18	31	10.23	32,579	33,710	-3.47%	44%	46%
Total	365	10.72	410,460	410,048	0.10%	47%	47%
Total in OSP (07/15-09/15)	153	10.40	162,252	161,930	0.20%	45%	45%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

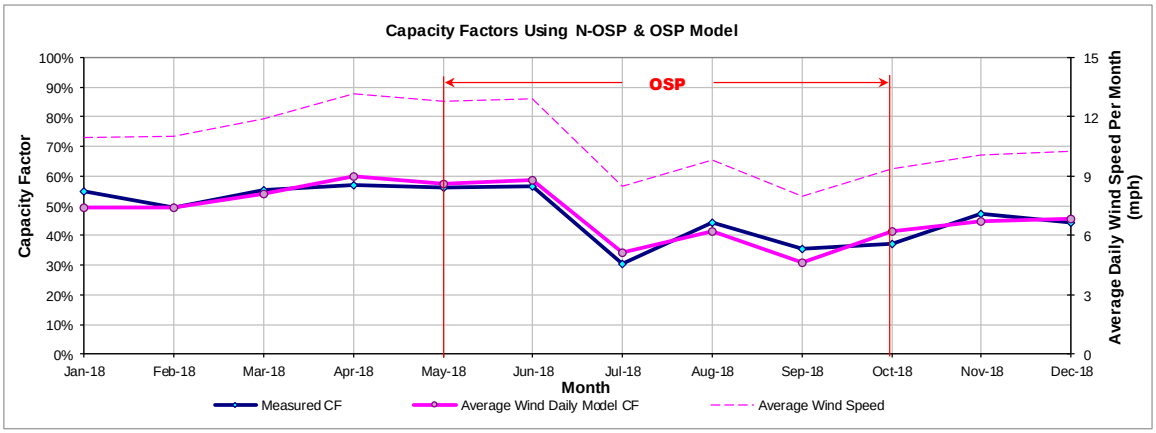


Figure A-111:DIGBY_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.30.2 Electra Wind - DIGBY_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
DIGBY_UNIT2	Wind	-	WILBARGER	Lincoln Clean Energy	Electra Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
57 GE 2.3 MW	ERCOT	W	Jan-17	West	ABI	131.1

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

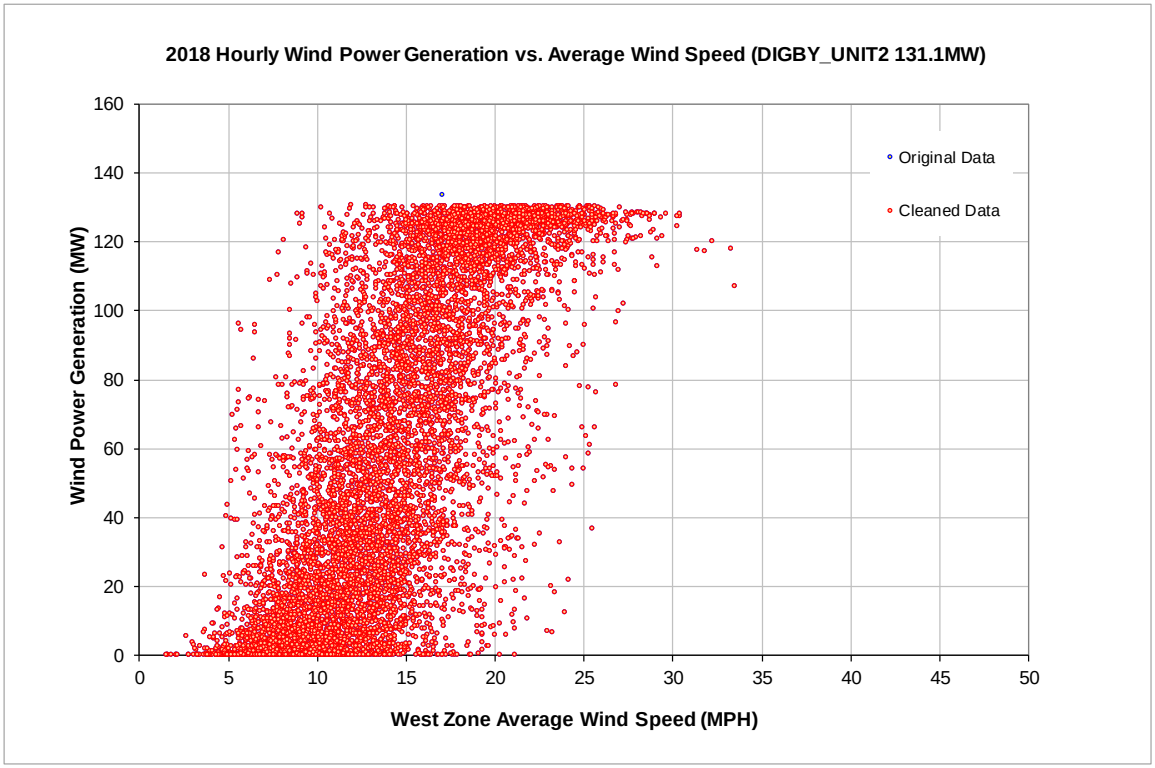


Figure A-112:DIGBY_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

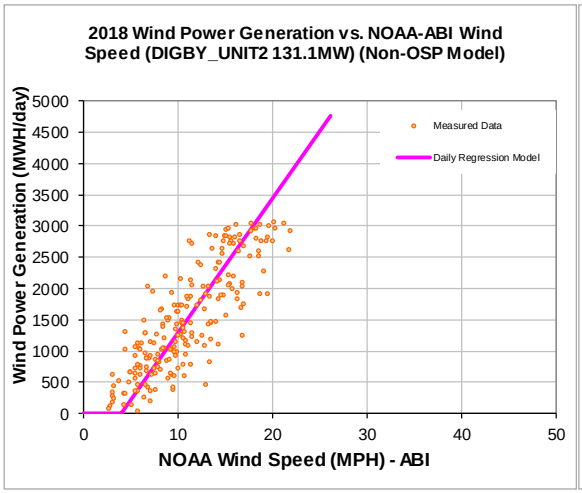
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-178.22
Left Slope (MWh/mph-day)	152.92
RMSE (MWh/day)	466.91
R2	0.69
CV-RMSE	31.2%
Daily Maximum (MWh/day)	3146

OSP Model:

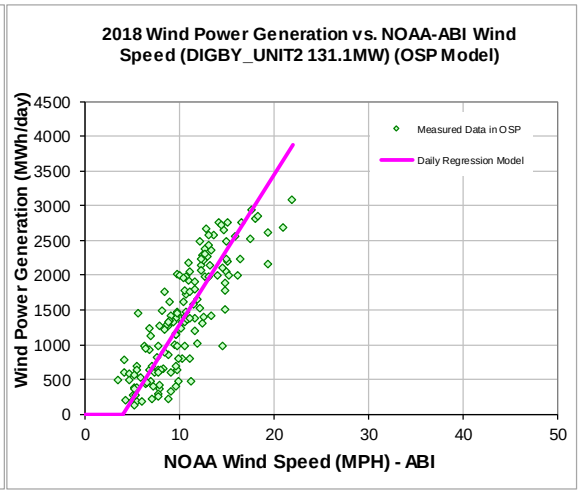
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-473.05
Left Slope (MWh/mph-day)	178.22
RMSE (MWh/day)	428.60
R2	0.70
CV-RMSE	31.0%
Daily Maximum (MWh/day)	3146

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
569,675	528,507

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,399	1,381

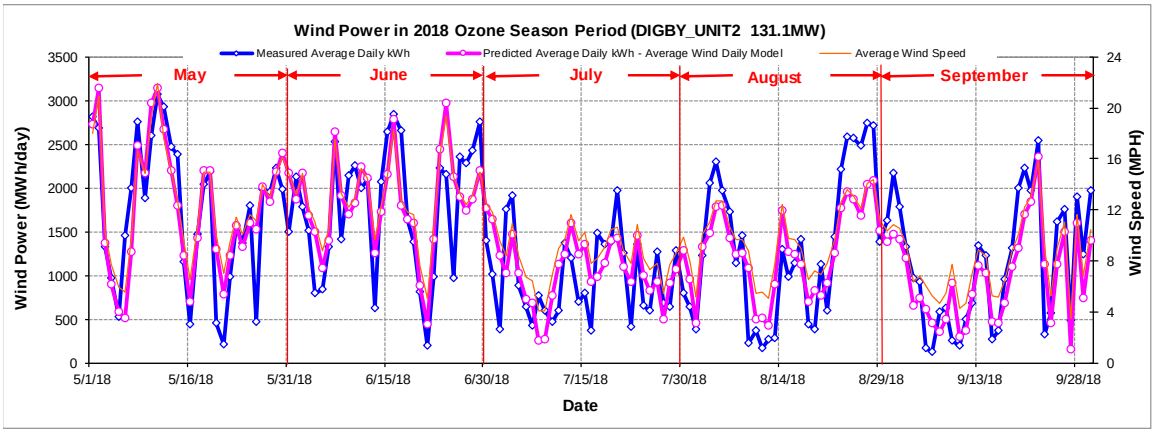
Figure A-113:DIGBY_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	51,102	46,474	9.06%	52%	48%
Feb-18	28	11.00	42,284	42,096	0.44%	48%	48%
Mar-18	31	11.92	50,768	51,005	-0.47%	52%	52%
Apr-18	30	13.18	53,011	55,094	-3.93%	56%	58%
May-18	31	12.78	53,622	55,552	-3.60%	55%	57%
Jun-18	30	12.90	53,177	54,801	-3.05%	56%	58%
Jul-18	31	8.52	29,586	32,407	-9.54%	30%	33%
Aug-18	31	9.85	42,816	39,744	7.18%	44%	41%
Sep-18	30	7.97	32,092	28,395	11.52%	34%	30%
Oct-18	31	9.35	34,489	38,816	-12.55%	35%	40%
Nov-18	30	10.05	42,980	40,752	5.18%	46%	43%
Dec-18	31	10.23	42,581	42,970	-0.91%	44%	44%
Total	365	10.72	528,507	528,105	0.08%	46%	46%
Total in OSP (07/15-09/15)	153	10.40	211,293	210,898	0.19%	44%	44%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

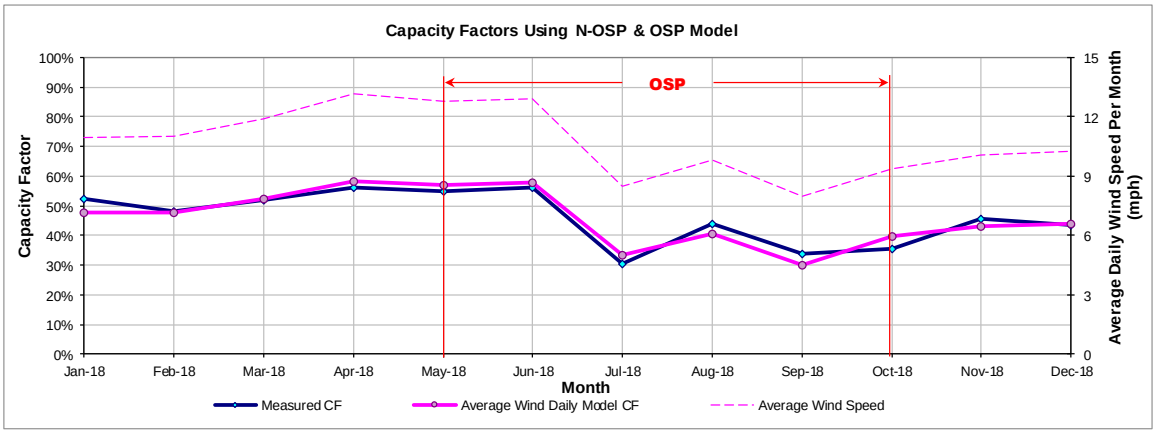


Figure A-114:DIGBY_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.31 Falvez Astra Wind

A.31.1 Falvez Astra Wind - ASTRA_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
ASTRA_UNIT1	Wind	Amarillo	DEAF SMITH	Falvez Energy	Falvez Astra Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
68 GE 2.4 MW	ERCOT	W	May-17	Panhandle	AMA	163.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

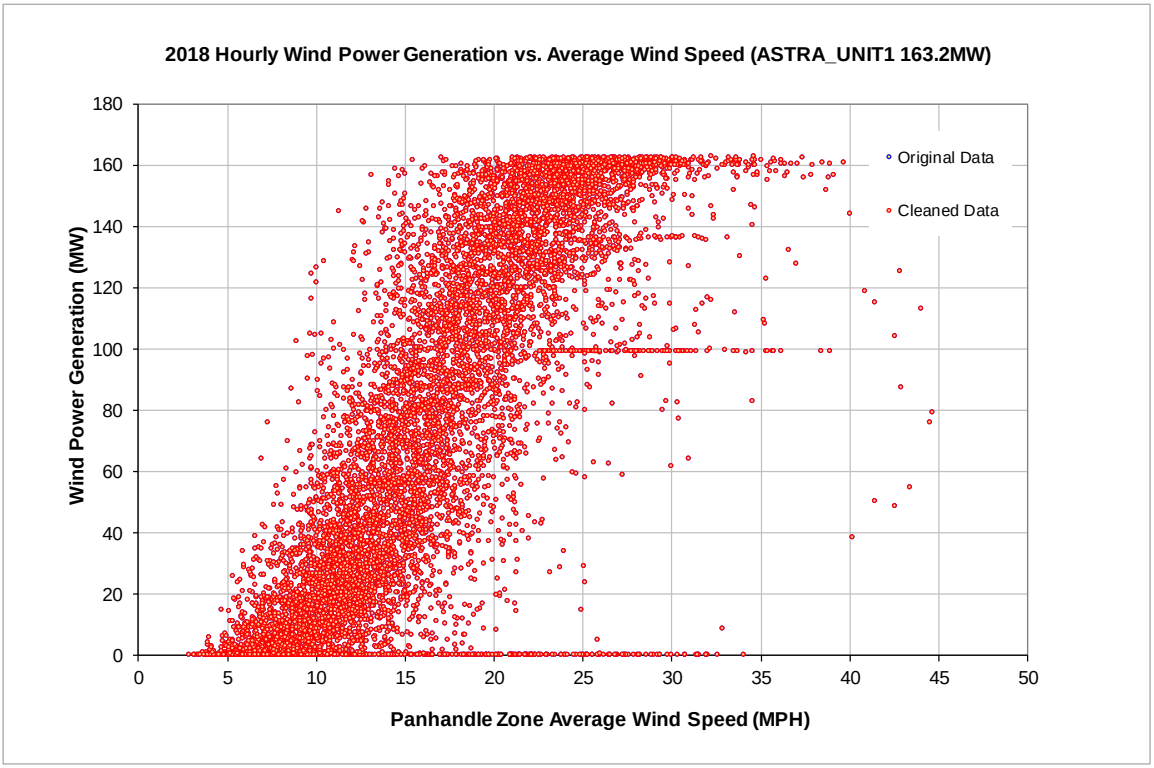


Figure A-115:ASTRA_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

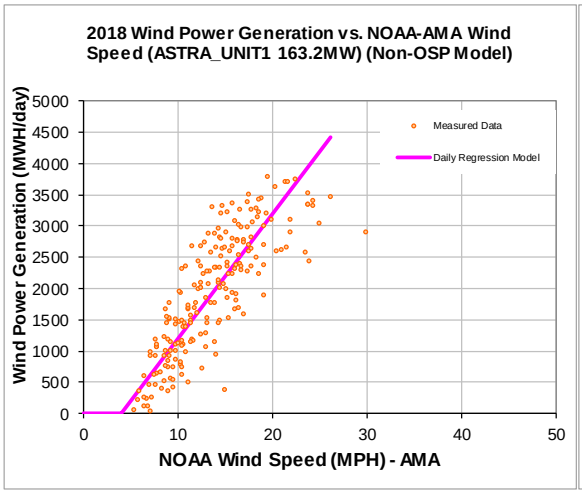
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-378.09
Left Slope (MWh/mph-day)	169.08
RMSE (MWh/day)	554.46
R2	0.67
CV-RMSE	28.8%
Daily Maximum (MWh/day)	3917

OSP Model:

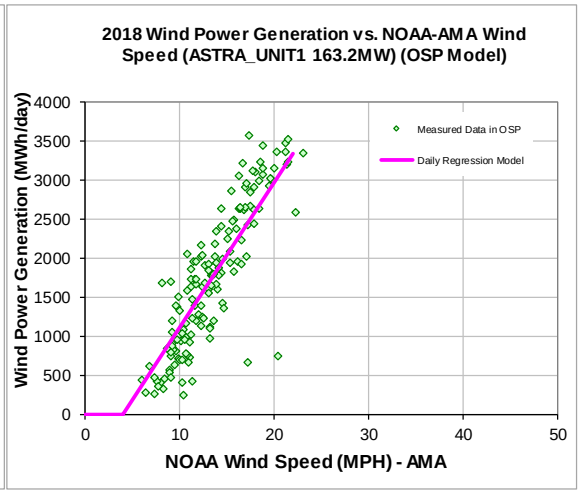
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-980.18
Left Slope (MWh/mph-day)	202.73
RMSE (MWh/day)	455.42
R2	0.74
CV-RMSE	26.0%
Daily Maximum (MWh/day)	3917

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
683,318	664,531

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,703	1,749

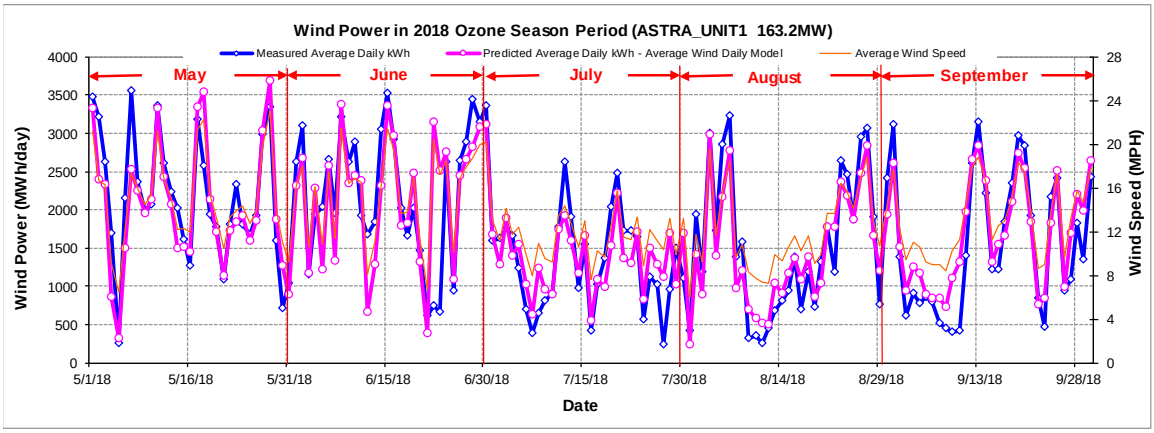
Figure A-116:ASTRA_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.52	58,248	50,434	13.42%	48%	42%
Feb-18	28	13.92	48,944	47,414	3.13%	45%	43%
Mar-18	31	14.64	65,712	65,029	1.04%	54%	54%
Apr-18	30	17.03	65,582	74,936	-14.26%	56%	64%
May-18	31	14.93	66,227	63,451	4.19%	55%	52%
Jun-18	30	15.70	67,300	66,061	1.84%	57%	56%
Jul-18	31	11.32	39,466	40,771	-3.31%	33%	34%
Aug-18	31	12.42	50,180	47,638	5.07%	41%	39%
Sep-18	30	13.00	44,389	49,641	-11.83%	38%	42%
Oct-18	31	12.69	48,731	54,806	-12.47%	40%	45%
Nov-18	30	12.53	56,064	52,211	6.87%	48%	44%
Dec-18	31	12.16	53,689	51,260	4.52%	44%	42%
Total	365	13.56	664,531	663,652	0.13%	46%	46%
Total in OSP (07/15-09/15)	153	13.46	267,562	267,562	0.00%	45%	45%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

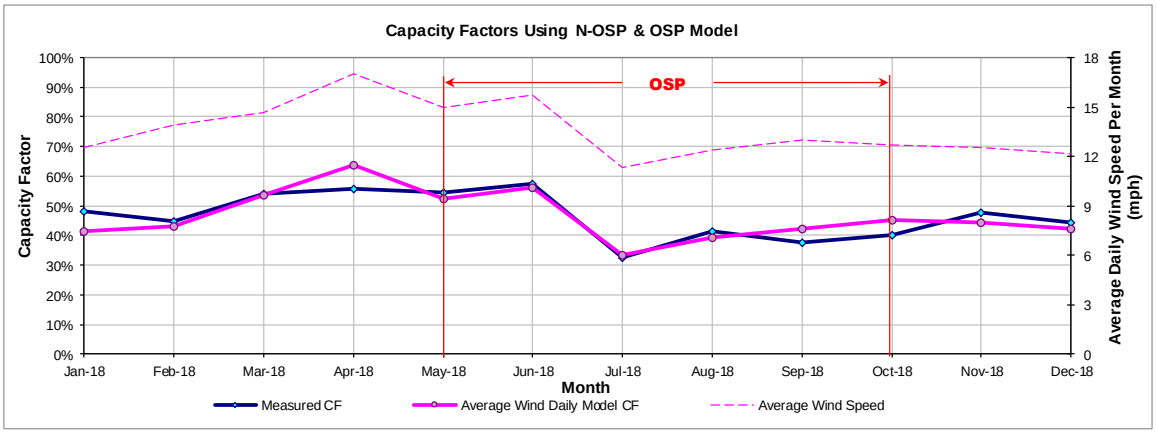


Figure A-117:ASTRA_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.32 Flat Top

A.32.1 Flat Top - FTWIND_UNIT_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
FTWIND_UNIT_1	Wind	Priddy	MILLS	Pioneer Green/Innergex	Flat Top Wind I

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
100 Vestas 2 MW	ERCOT	N	Sep-18	North	DFW	200

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

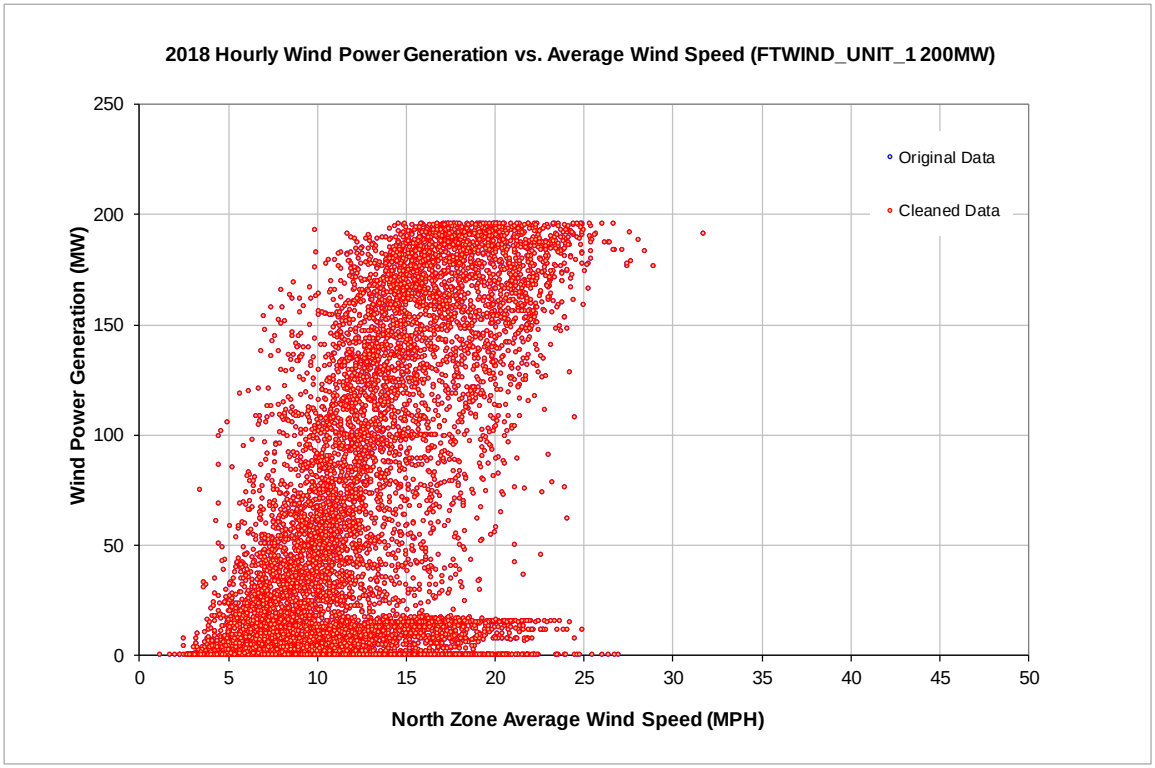


Figure A-118:FTWIND_UNIT_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

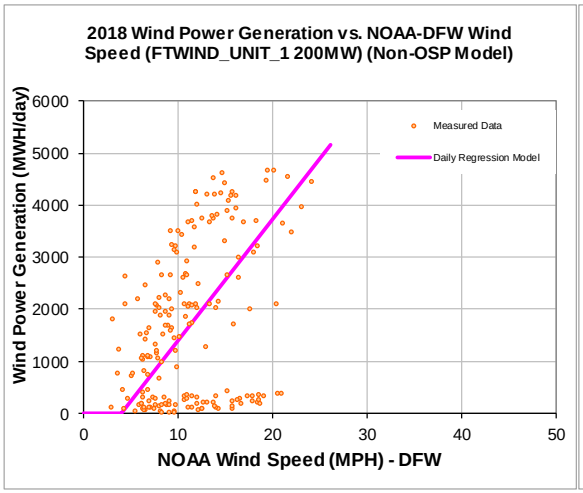
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	307.36
Left Slope (MWh/mph-day)	122.18
RMSE (MWh/day)	1361.06
R2	0.14
CV-RMSE	81.3%
Daily Maximum (MWh/day)	4800

OSP Model:

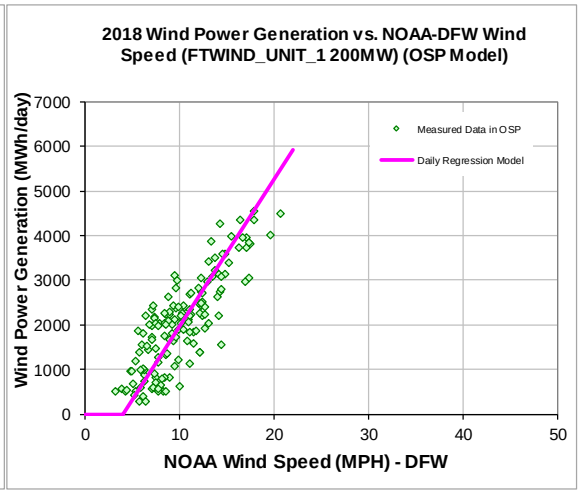
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-393.64
Left Slope (MWh/mph-day)	238.71
RMSE (MWh/day)	581.85
R2	0.69
CV-RMSE	28.5%
Daily Maximum (MWh/day)	4800

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
694,613	624,122

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
2,049	2,043

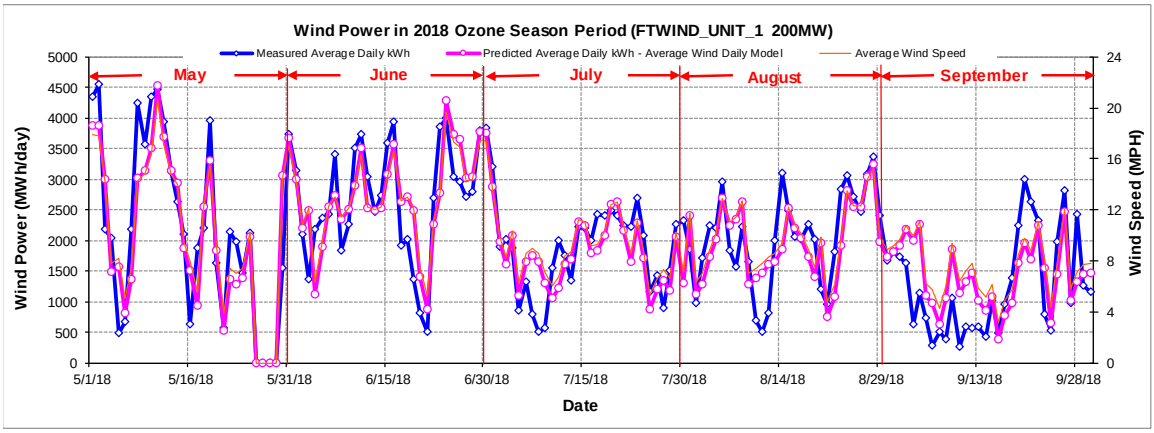
Figure A-119:FTWIND_UNIT_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (DFW) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.42	1,997	25,552	-1179.83%	1%	17%
Feb-18	28	10.98	4,973	46,166	-828.41%	4%	34%
Mar-18	31	11.72	24,280	53,925	-122.10%	16%	36%
Apr-18	30	13.21	79,142	57,639	27.17%	55%	40%
May-18	31	11.77	68,651	65,222	5.00%	46%	44%
Jun-18	30	13.06	80,289	81,735	-1.80%	56%	57%
Jul-18	31	9.10	56,451	55,133	2.33%	38%	37%
Aug-18	31	9.83	62,589	60,524	3.30%	42%	41%
Sep-18	30	7.48	36,376	41,741	-14.75%	25%	29%
Oct-18	31	9.13	53,662	38,421	28.40%	36%	26%
Nov-18	30	10.85	72,868	48,990	32.77%	51%	34%
Dec-18	31	10.44	82,846	49,073	40.77%	56%	33%
Total	365	10.76	624,122	624,122	0.00%	36%	36%
Total in OSP (07/15-09/15)	149	10.21	304,356	304,356	0.00%	43%	43%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

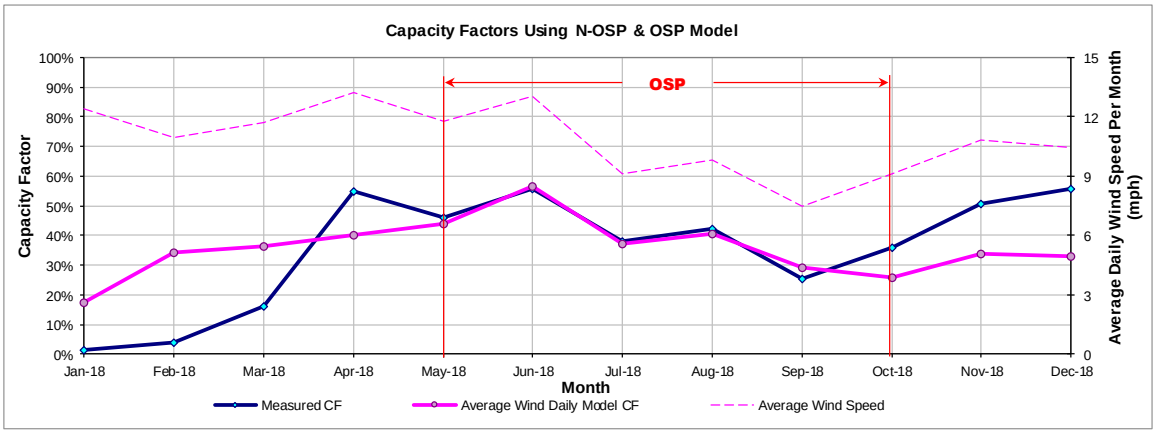


Figure A-120:FTWIND_UNIT_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.33 Fluvanna Renewable 1

A.33.1 Fluvanna Renewable 1 - FLUVANNA_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
FLUVANNA_UNIT1	Wind	-	SCURRY	Tri Global Energy	Fluvanna Renewable 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
38 Siemens or Gamesa 2.1 MW	ERCOT	W	Nov-17	West	LBB	79.8

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

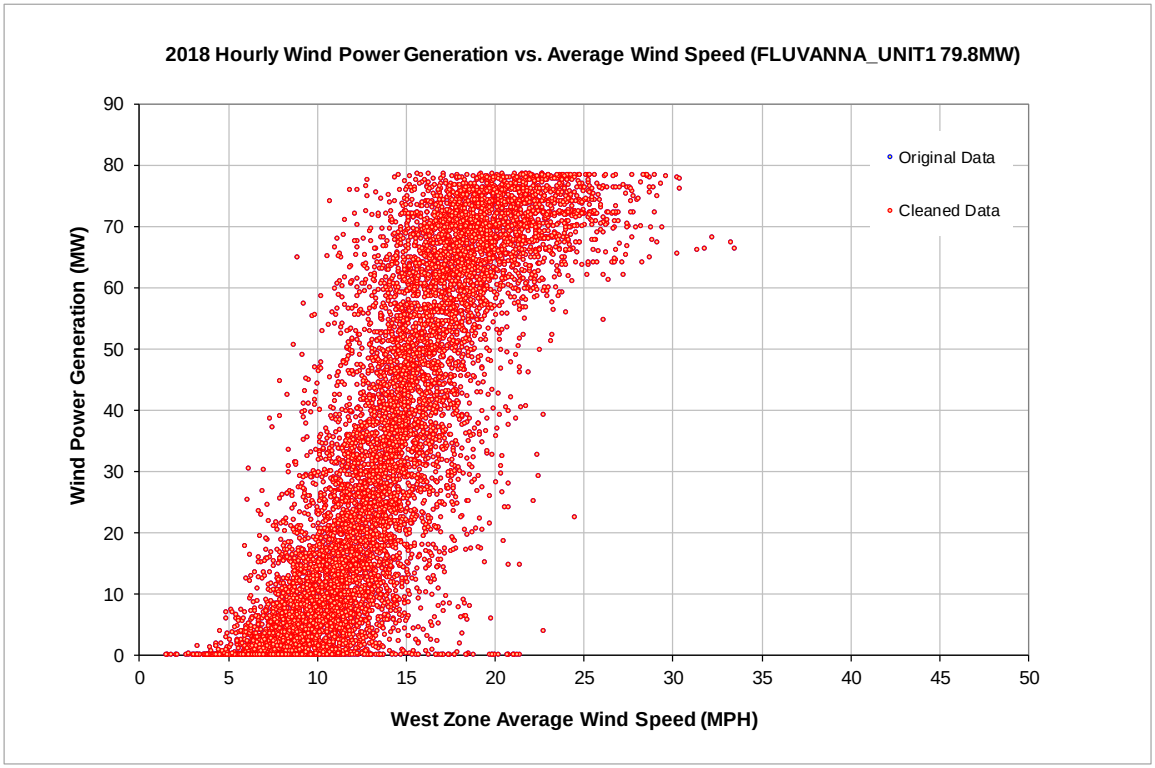


Figure A-121:FLUVANNA_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

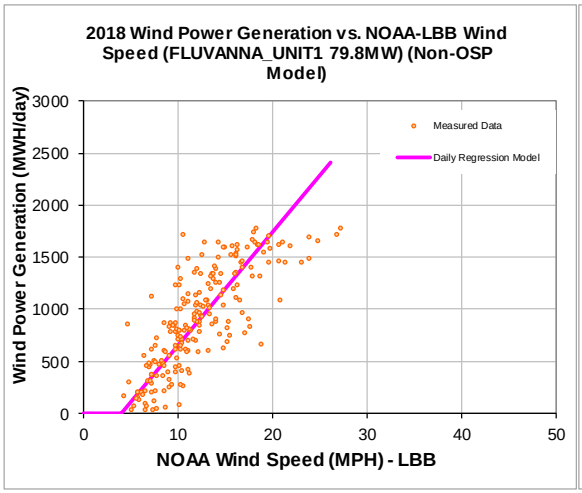
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-138.33
Left Slope (MWh/mph-day)	84.76
RMSE (MWh/day)	293.64
R2	0.63
CV-RMSE	32.8%
Daily Maximum (MWh/day)	1915

OSP Model:

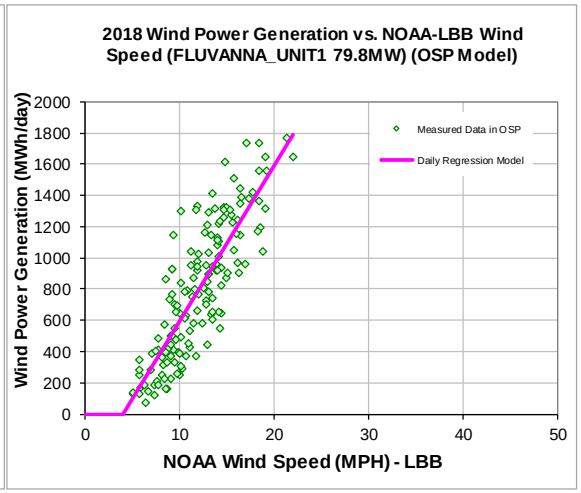
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-406.76
Left Slope (MWh/mph-day)	100.24
RMSE (MWh/day)	231.67
R2	0.71
CV-RMSE	29.1%
Daily Maximum (MWh/day)	1915

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
302,417	309,870

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
685	796

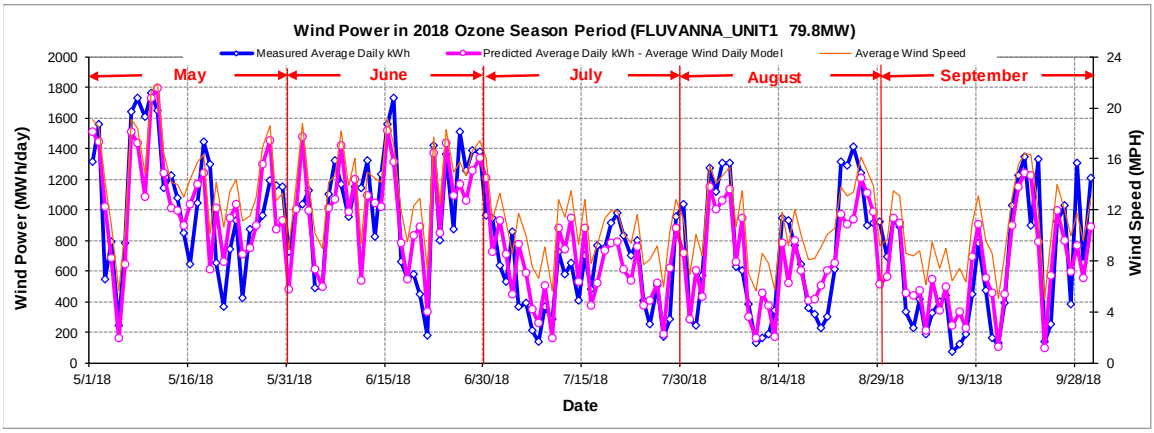
Figure A-122:FLUVANNA_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.47	25,407	24,177	4.84%	43%	41%
Feb-18	28	12.08	26,046	24,788	4.83%	49%	46%
Mar-18	31	13.58	28,937	31,401	-8.51%	49%	53%
Apr-18	30	15.19	31,800	34,223	-7.62%	55%	60%
May-18	31	14.42	32,364	32,212	0.47%	55%	54%
Jun-18	30	14.33	30,995	30,903	0.30%	54%	54%
Jul-18	31	10.01	17,859	18,480	-3.48%	30%	31%
Aug-18	31	11.09	22,922	21,838	4.73%	39%	37%
Sep-18	30	10.17	17,663	18,369	-4.00%	31%	32%
Oct-18	31	10.80	24,149	24,080	0.29%	41%	41%
Nov-18	30	11.15	24,986	24,190	3.18%	43%	42%
Dec-18	31	11.13	26,744	24,700	7.64%	45%	42%
Total	365	12.12	309,870	309,360	0.16%	44%	44%
Total in OSP (07/15-09/15)	153	12.00	121,802	121,802	0.00%	42%	42%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

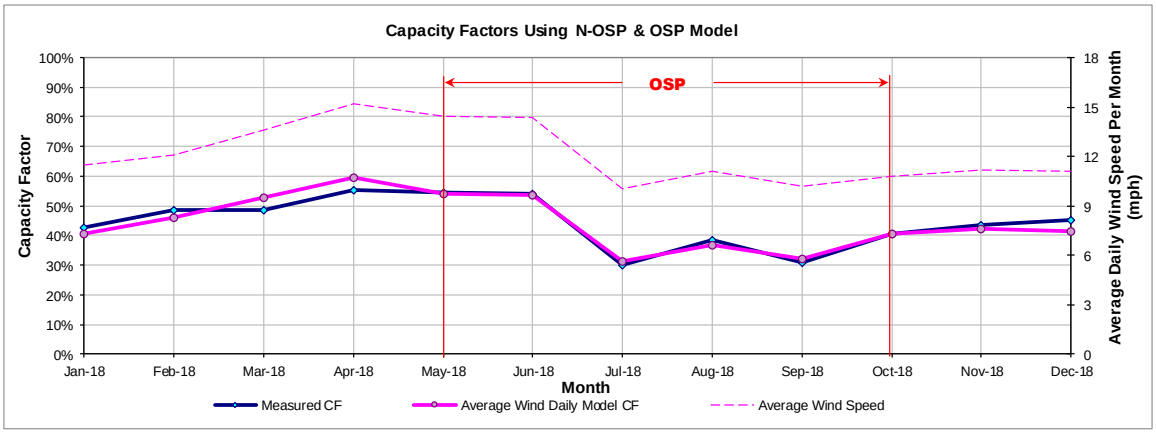


Figure A-123:FLUVANNA_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.33.2 Fluvanna Renewable 1 - FLUVANNA_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
FLUVANNA_UNIT2	Wind	-	SCURRY	Tri Global Energy	Fluvanna Renewable 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
36 Siemens or Gamesa 2.1 MW	ERCOT	W	Nov-17	West	LBB	75.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

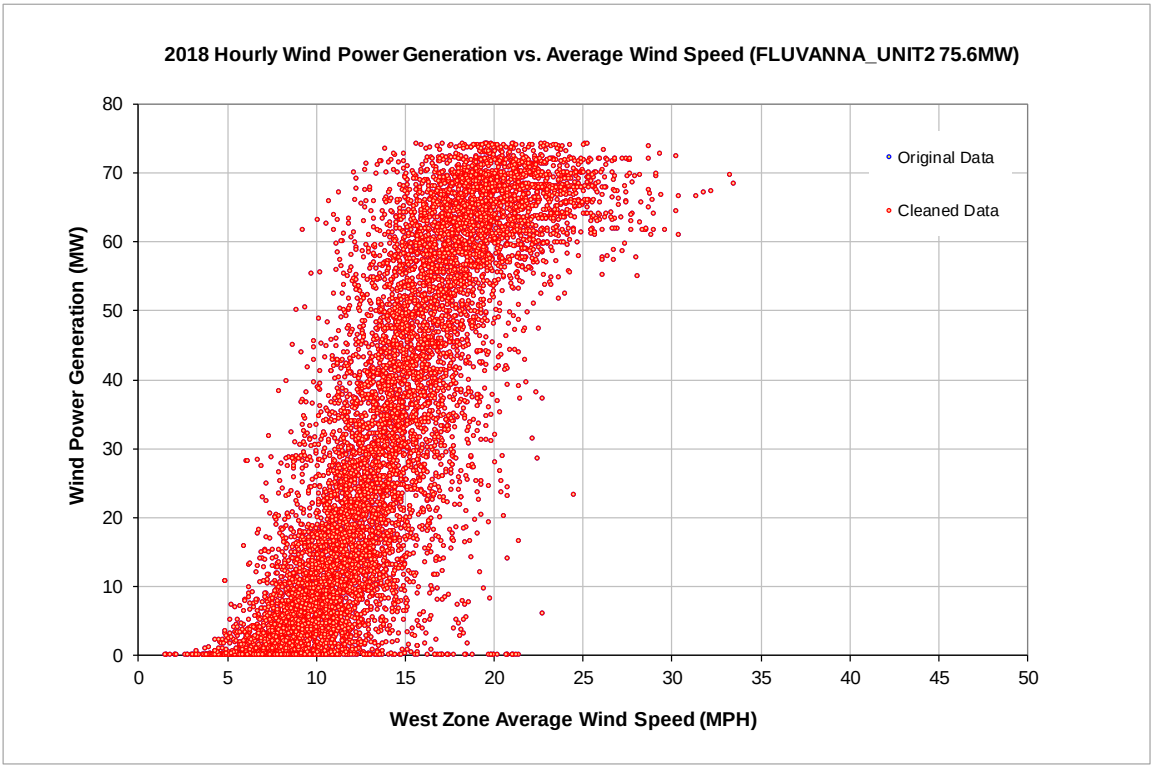


Figure A-124:FLUVANNA_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

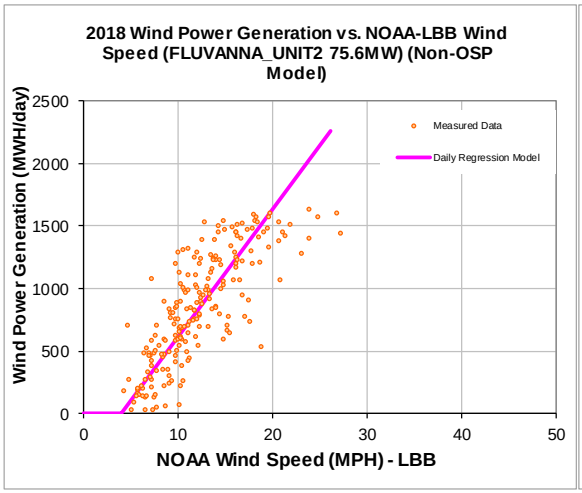
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-101.92
Left Slope (MWh/mph-day)	77.21
RMSE (MWh/day)	267.49
R2	0.63
CV-RMSE	31.8%
Daily Maximum (MWh/day)	1814

OSP Model:

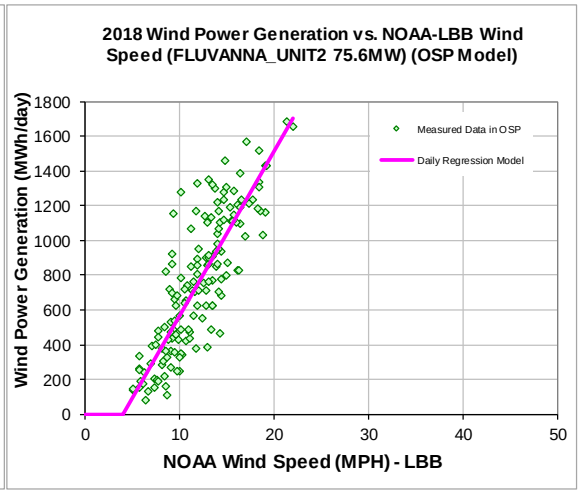
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-336.86
Left Slope (MWh/mph-day)	91.25
RMSE (MWh/day)	215.31
R2	0.70
CV-RMSE	28.4%
Daily Maximum (MWh/day)	1814

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
285,644	292,389

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
657	758

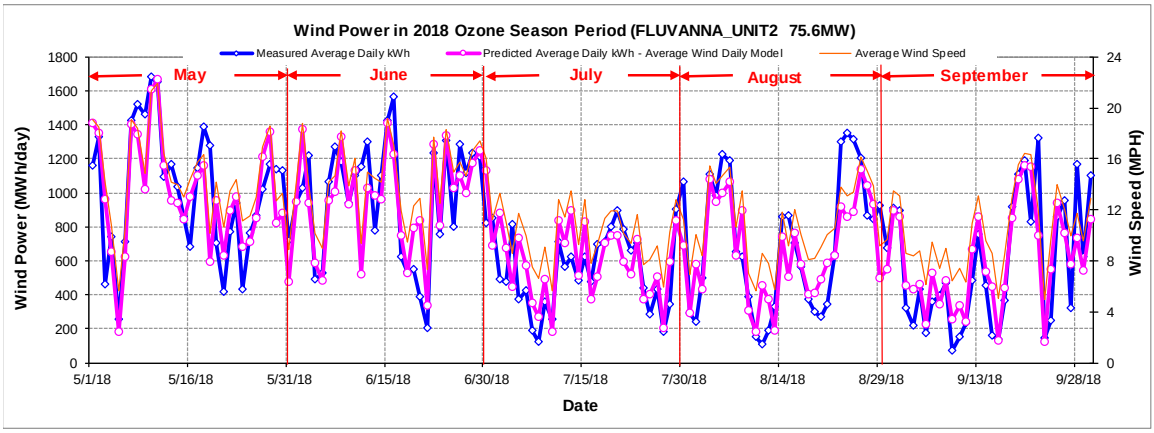
Figure A-125:FLUVANNA_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.47	23,970	22,723	5.20%	43%	40%
Feb-18	28	12.08	23,777	23,256	2.19%	47%	46%
Mar-18	31	13.58	27,850	29,353	-5.39%	50%	52%
Apr-18	30	15.19	29,642	31,989	-7.92%	54%	59%
May-18	31	14.42	31,086	30,362	2.33%	55%	54%
Jun-18	30	14.33	29,108	29,136	-0.10%	53%	54%
Jul-18	31	10.01	16,997	17,860	-5.08%	30%	32%
Aug-18	31	11.09	21,972	20,917	4.80%	39%	37%
Sep-18	30	10.17	16,837	17,726	-5.28%	31%	33%
Oct-18	31	10.80	23,695	22,684	4.27%	42%	40%
Nov-18	30	11.15	23,523	22,760	3.24%	43%	42%
Dec-18	31	11.13	23,932	23,294	2.67%	43%	41%
Total	365	12.12	292,389	292,059	0.11%	44%	44%
Total in OSP (07/15-09/15)	153	12.00	116,001	116,001	0.00%	42%	42%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

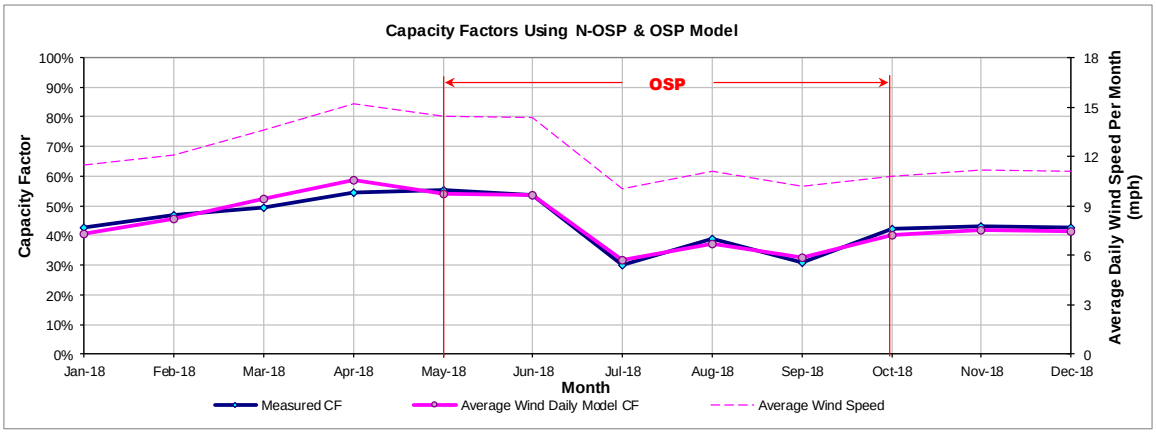


Figure A-126:FLUVANNA_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.34 Forest Creek Wind Farm

A.34.1 Forest Creek Wind Farm - MCDLD_FCW1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MCDLD_FCW1	Wind	Abilene	STERLING	E.On Climate & Renewables	Forest Creek Wind Farm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
54 Siemens 2.3 MW	ERCOT	W	Dec-06	West	ABI	124.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

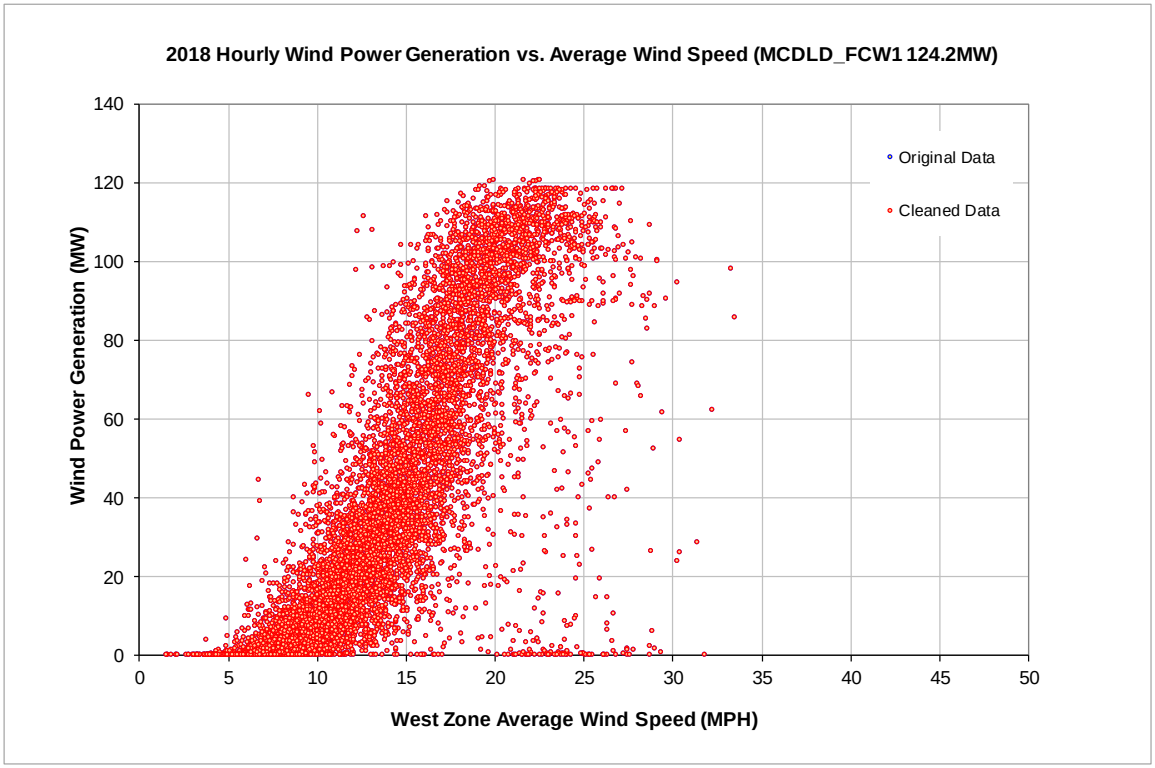


Figure A-127:MCDLD_FCW1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

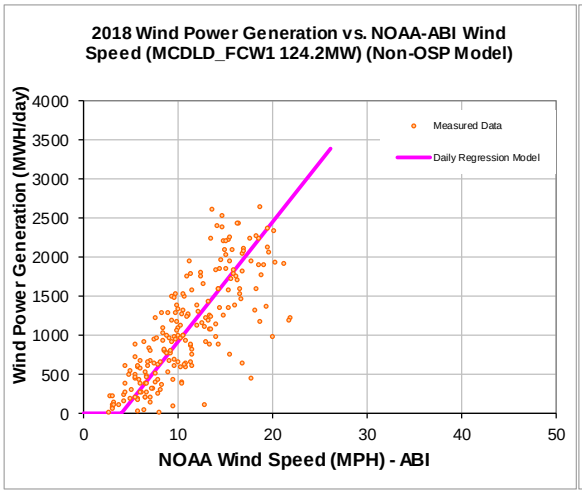
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-192.08
Left Slope (MWh/mph-day)	114.77
RMSE (MWh/day)	419.55
R2	0.61
CV-RMSE	39.4%
Daily Maximum (MWh/day)	2981

OSP Model:

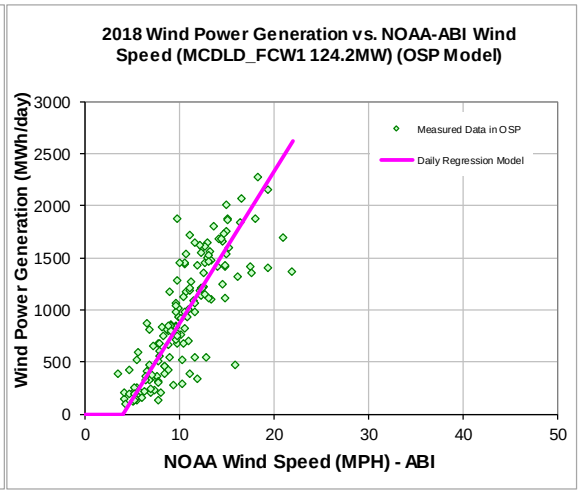
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-339.52
Left Slope (MWh/mph-day)	122.12
RMSE (MWh/day)	318.15
R2	0.67
CV-RMSE	34.1%
Daily Maximum (MWh/day)	2981

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
398,800	367,381

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
943	932

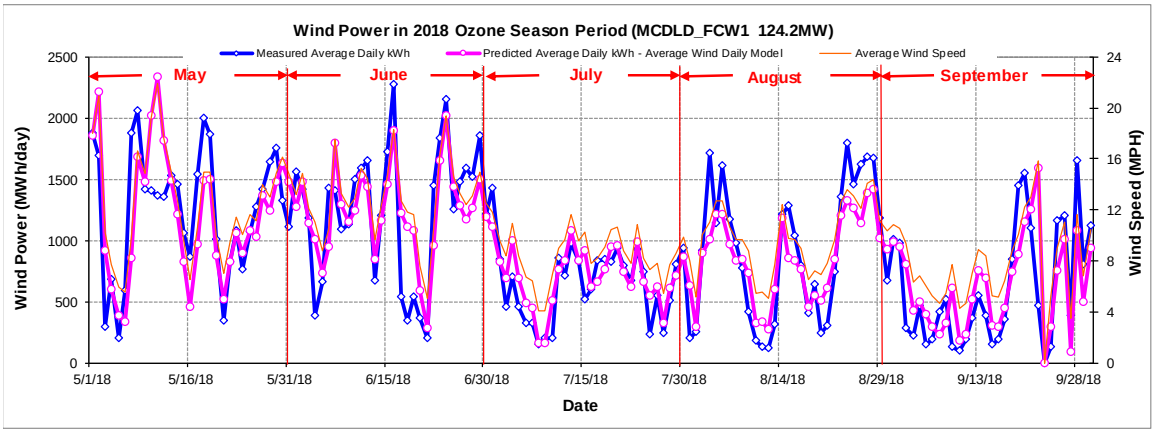
Figure A-128:MCDLD_FCW1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	35,406	33,071	6.60%	38%	36%
Feb-18	28	11.00	30,157	29,960	0.65%	36%	36%
Mar-18	31	11.92	35,318	36,470	-3.26%	38%	39%
Apr-18	30	13.18	32,004	39,603	-23.75%	36%	44%
May-18	31	12.78	38,697	37,861	2.16%	42%	41%
Jun-18	30	12.90	37,155	37,091	0.17%	42%	41%
Jul-18	31	8.52	19,575	21,731	-11.01%	21%	24%
Aug-18	31	9.85	28,804	26,758	7.10%	31%	29%
Sep-18	30	7.93	17,448	18,237	-4.52%	20%	20%
Oct-18	31	9.35	28,597	27,323	4.46%	31%	30%
Nov-18	30	10.05	31,860	28,835	9.50%	36%	32%
Dec-18	31	10.23	32,360	30,441	5.93%	35%	33%
Total	365	10.73	367,381	367,381	0.00%	34%	34%
Total in OSP (07/15-09/15)	152	10.41	141,679	141,679	0.00%	31%	31%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

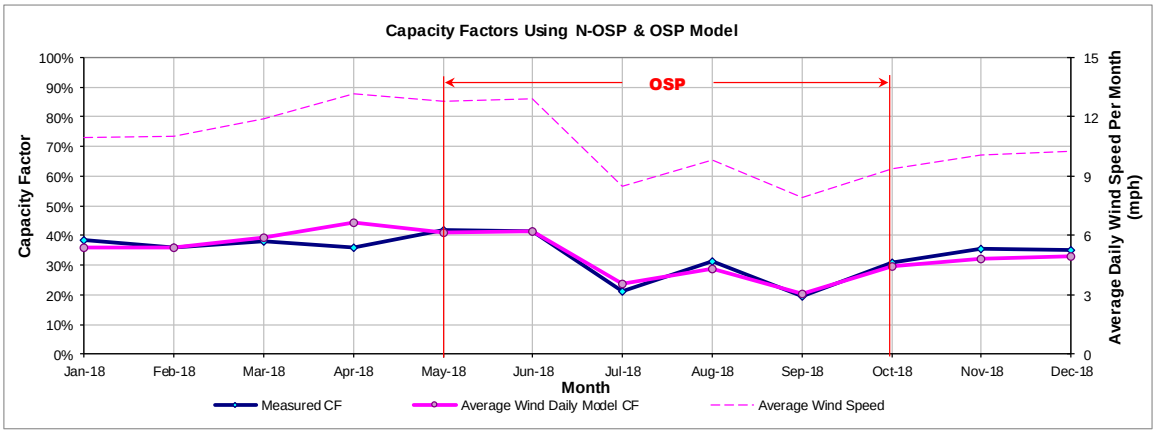


Figure A-129:MCDLD_FCW1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.35 Goat Wind

A.35.1 Goat Wind - GOAT_GOATWIND

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
GOAT_GOATWIND	Wind	-	STERLING	Edison Mission Group	Goat Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
80 Mitsubishi 1 MW 29 Mitsubishi MWT-92 2.4 MW	ERCOT	W	Apr-08	West	SJT	149.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

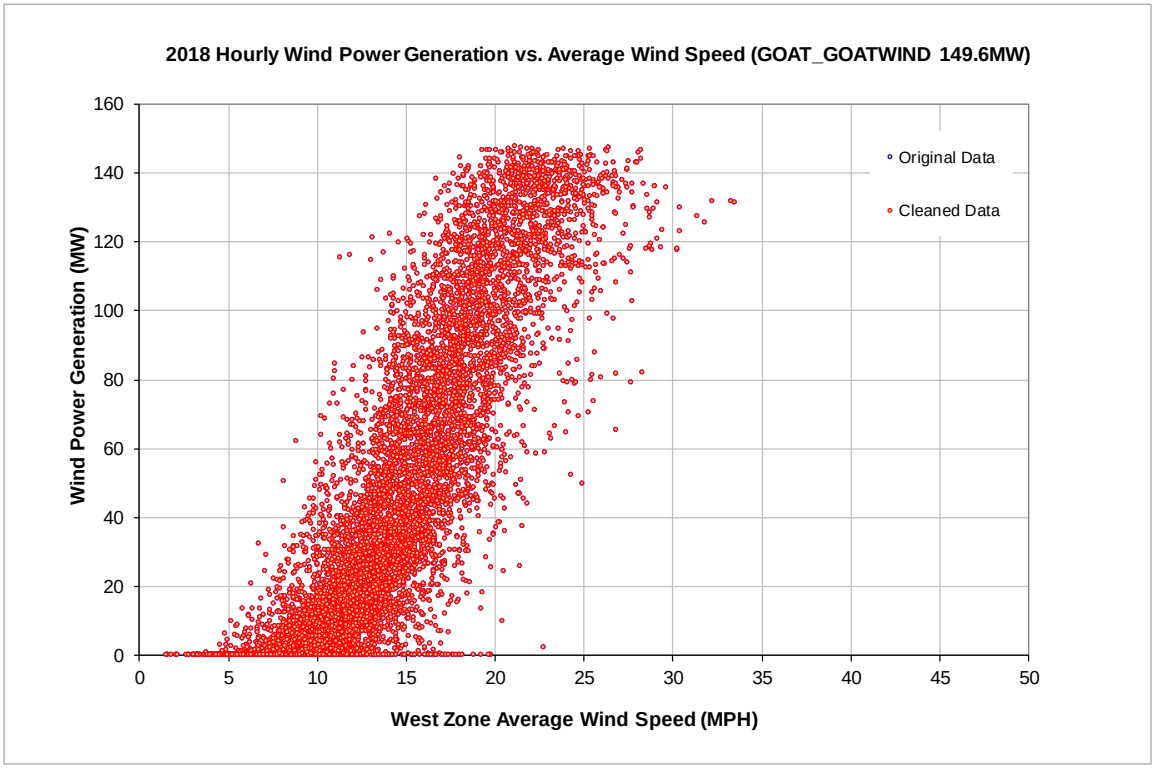


Figure A-130:GOAT_GOATWIND - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

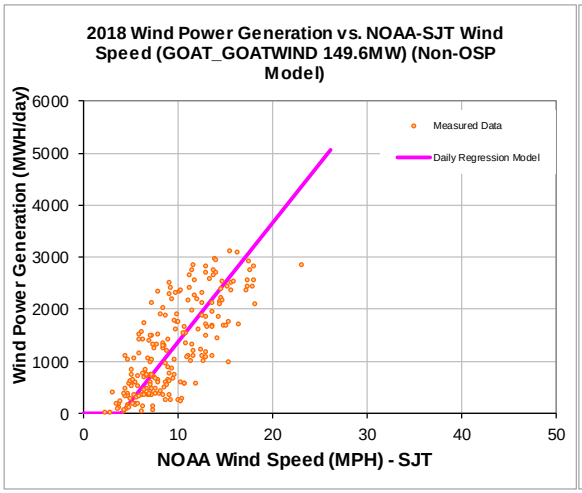
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-362.19
Left Slope (MWh/mph-day)	169.80
RMSE (MWh/day)	560.92
R2	0.58
CV-RMSE	45.5%
Daily Maximum (MWh/day)	3590

OSP Model:

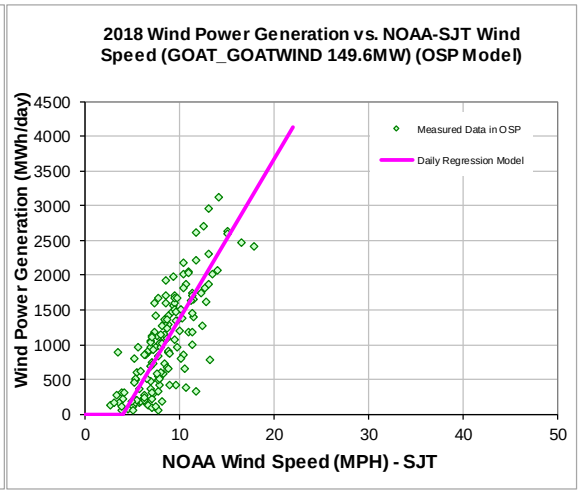
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-653.26
Left Slope (MWh/mph-day)	198.22
RMSE (MWh/day)	439.08
R2	0.61
CV-RMSE	42.9%
Daily Maximum (MWh/day)	3590

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
434,770	416,501

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,032	1,024

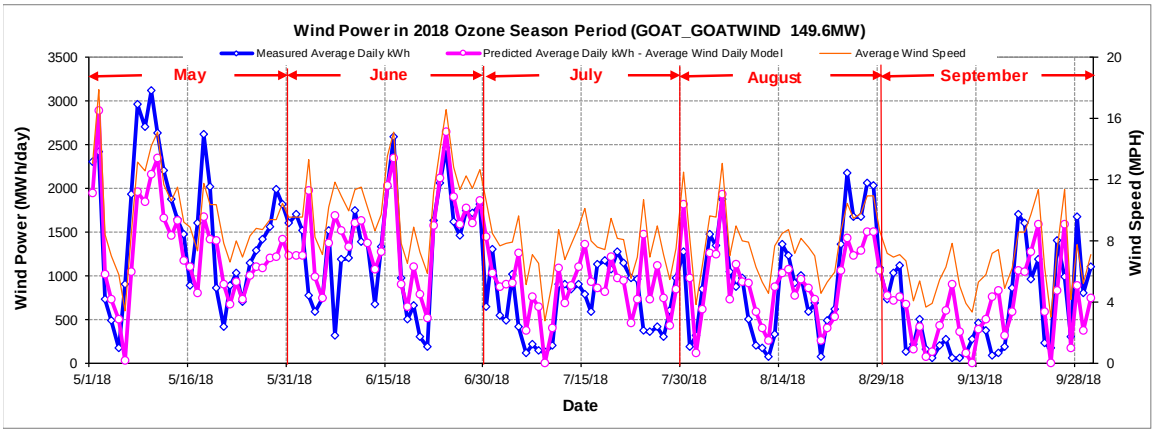
Figure A-131:GOAT_GOATWIND - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (SJT) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	9.18	40,917	35,878	12.31%	37%	32%
Feb-18	28	9.93	31,060	37,091	-19.42%	31%	37%
Mar-18	31	10.21	42,989	42,534	1.06%	39%	38%
Apr-18	30	11.30	42,670	46,703	-9.45%	40%	43%
May-18	31	9.81	49,176	40,057	18.54%	44%	36%
Jun-18	30	10.64	38,226	43,683	-14.28%	35%	41%
Jul-18	31	7.69	21,495	27,132	-26.22%	19%	24%
Aug-18	31	7.85	30,576	27,982	8.48%	27%	25%
Sep-18	30	6.31	17,171	17,966	-4.63%	16%	17%
Oct-18	31	7.54	30,840	28,470	7.68%	28%	26%
Nov-18	30	8.54	35,464	32,638	7.97%	33%	30%
Dec-18	31	9.08	35,916	36,542	-1.74%	32%	33%
Total	365	9.00	416,501	416,677	-0.04%	32%	32%
Total in OSP (07/15-09/15)	153	8.46	156,645	156,821	-0.11%	29%	29%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

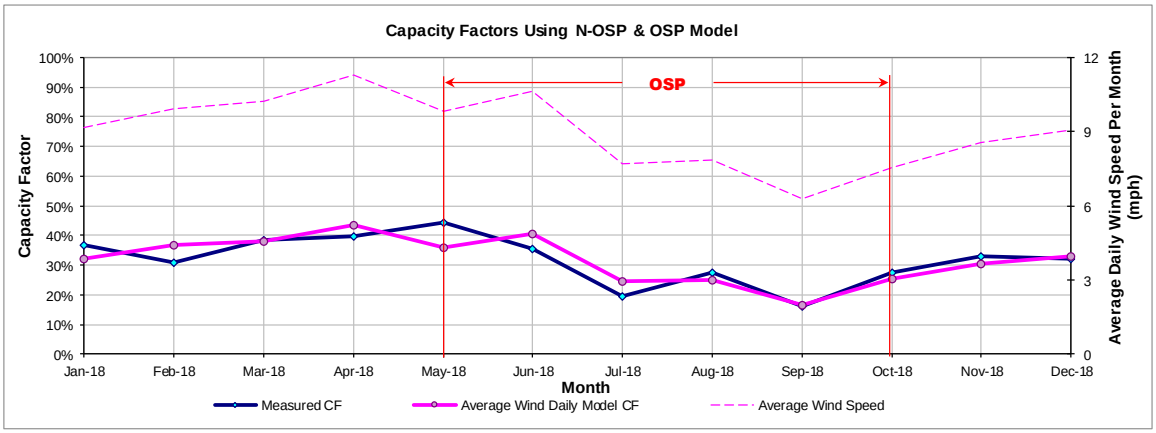


Figure A-132:GOAT_GOATWIND - Predicted Wind Power and Capacity Factor Using Daily Models

A.36 Goldthwaite Wind Energy

A.36.1 Goldthwaite Wind Energy - GWEC_GWEC_G1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
GWEC_GWEC_G1	Wind	-	MILLS	Invenergy	Goldthwaite Wind Energy

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
3 GE 2.5 MW 83 GE 1.7 MW	ERCOT	N	Jun-14	North	DFW	148.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

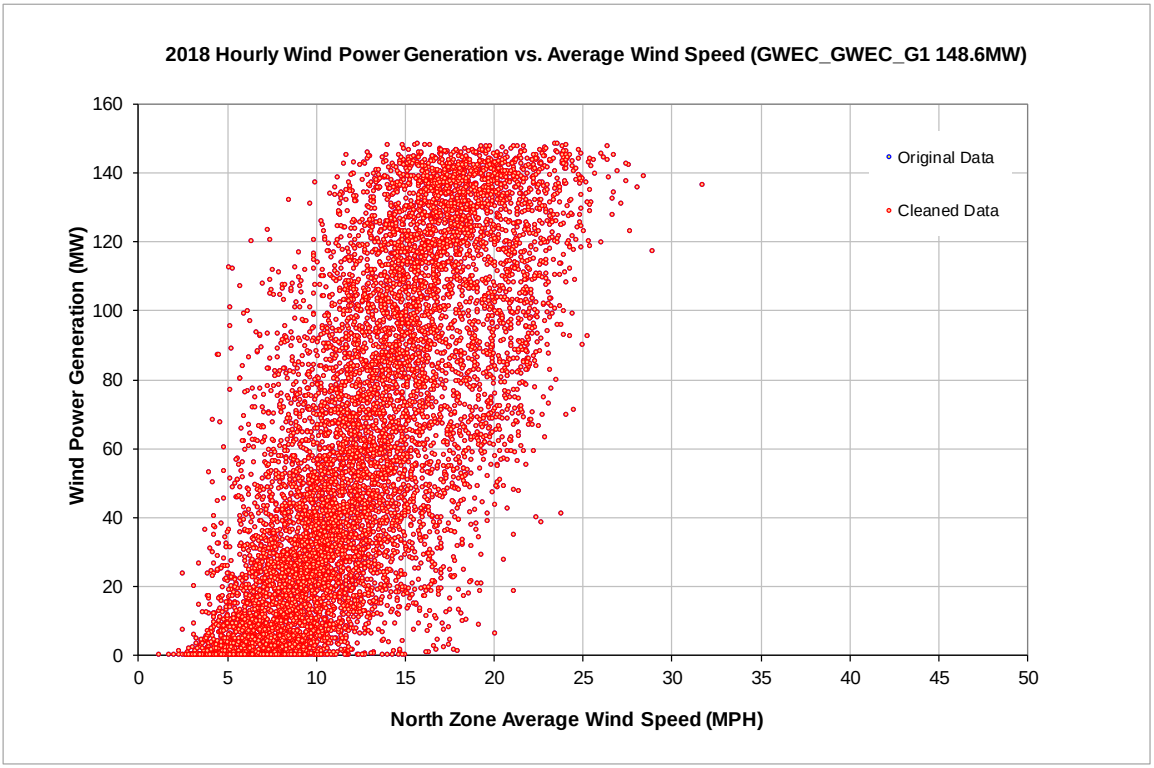


Figure A-133:GWEC_GWEC_G1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

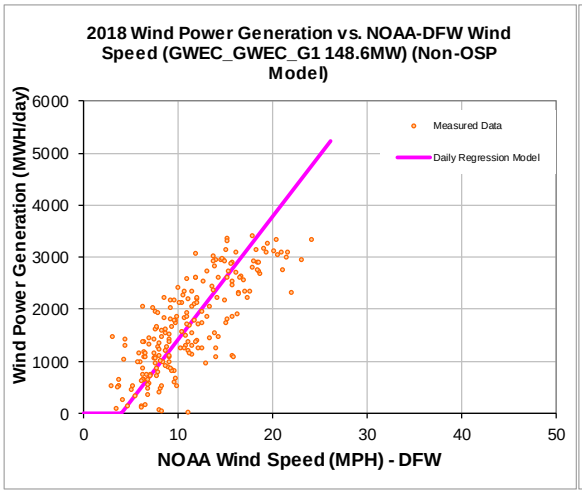
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-23.40
Left Slope (MWh/mph-day)	153.14
RMSE (MWh/day)	535.03
R2	0.63
CV-RMSE	32.0%
Daily Maximum (MWh/day)	3566

OSP Model:

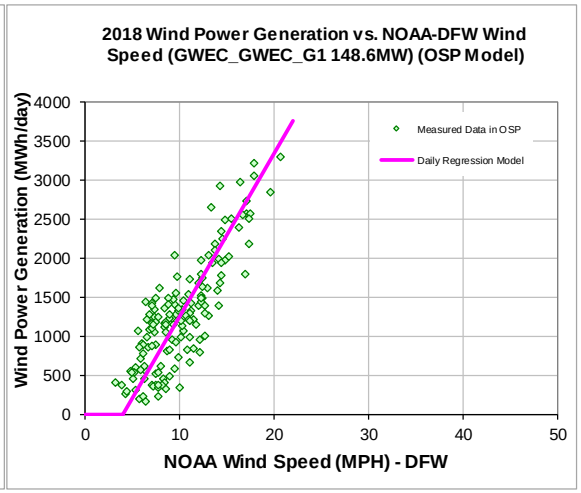
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-369.84
Left Slope (MWh/mph-day)	162.48
RMSE (MWh/day)	384.08
R2	0.70
CV-RMSE	30.1%
Daily Maximum (MWh/day)	3566

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
588,408	550,002

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,293	1,275

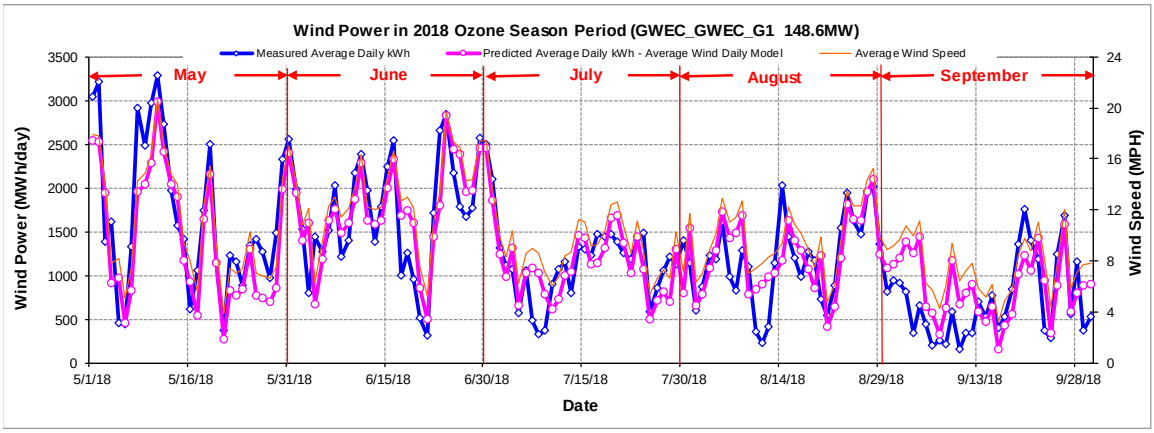
Figure A-134:GWEC_GWEC_G1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (DFW) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.50	52,582	53,871	-2.45%	48%	49%
Feb-18	28	10.98	44,373	46,424	-4.62%	44%	46%
Mar-18	31	11.72	59,251	54,923	7.30%	54%	50%
Apr-18	30	13.21	56,569	59,889	-5.87%	53%	56%
May-18	31	11.15	52,791	44,691	15.34%	48%	40%
Jun-18	30	13.06	51,261	52,575	-2.56%	48%	49%
Jul-18	31	9.10	34,527	34,367	0.46%	31%	31%
Aug-18	31	9.83	35,666	38,036	-6.64%	32%	34%
Sep-18	30	7.48	20,777	25,354	-22.03%	19%	24%
Oct-18	31	8.95	43,466	41,785	3.87%	39%	38%
Nov-18	30	10.85	46,674	49,146	-5.30%	44%	46%
Dec-18	31	10.44	52,063	48,842	6.19%	47%	44%
Total	365	10.68	550,002	549,903	0.02%	42%	42%
Total in OSP (07/15-09/15)	153	10.12	195,022	195,022	0.00%	36%	36%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

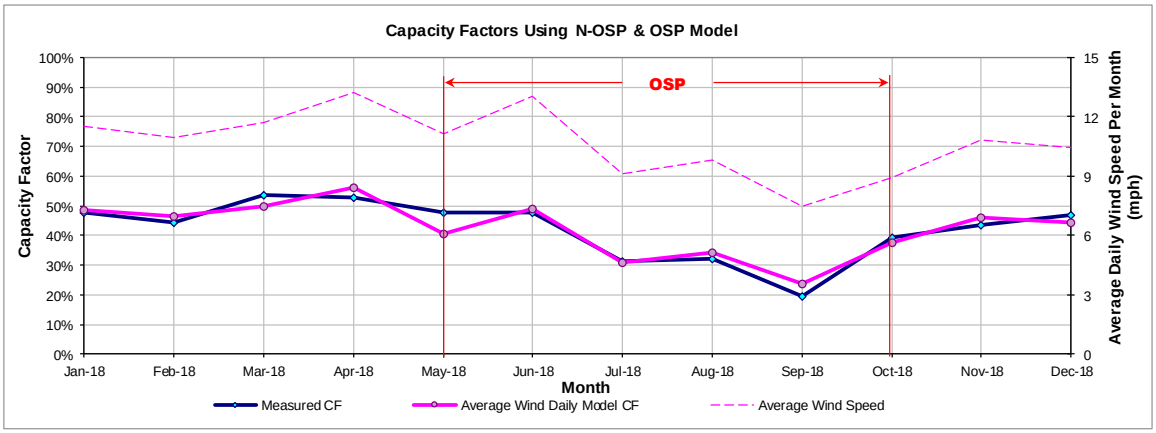


Figure A-135:GWEC_GWEC_G1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.37 Grandview Phase 1 (Conway Windfarm)

A.37.1 Grandview Phase 1 (Conway Windfarm) - GRANDVW1_GV1A

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
GRANDVW1_GV1A	Wind	Amarillo	CARSON	E.ON Climate & Renewables	Grandview Phase 1 (Conway Windfarm)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
59 GE 1.7-100 wind turbine	ERCOT	W	Dec-14	Panhandle	AMA	107.4

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

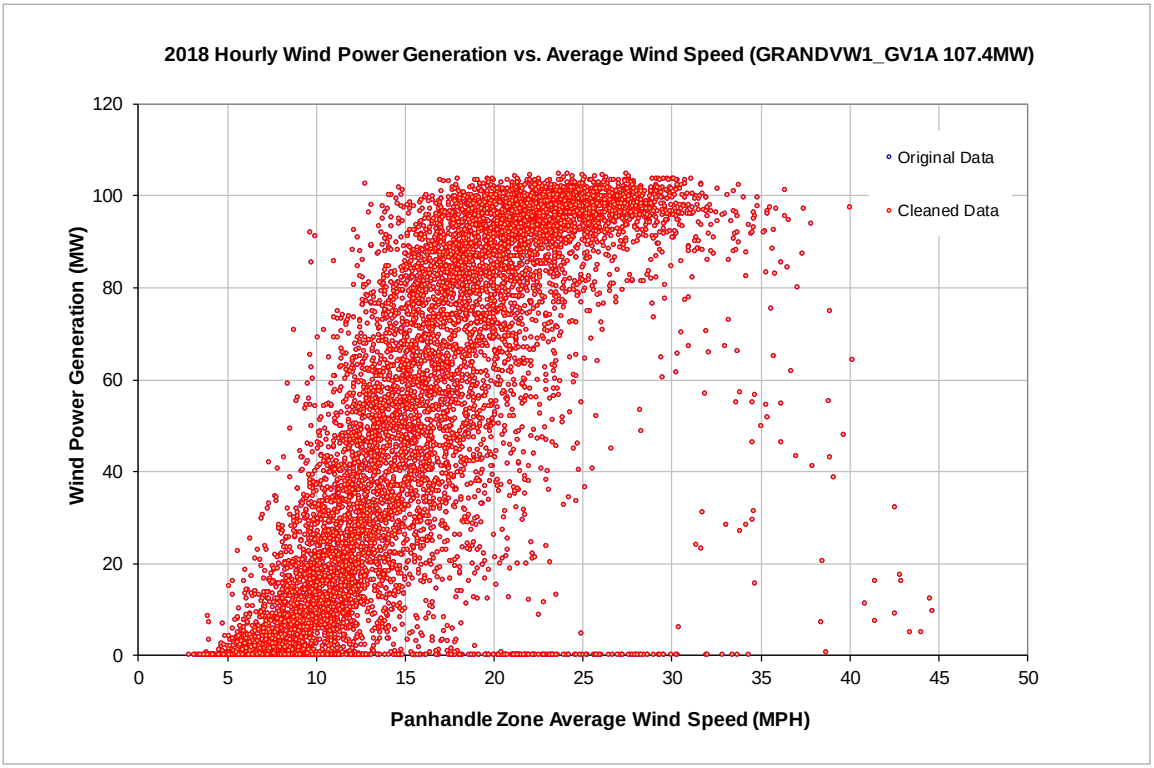


Figure A-136:GRANDVW1_GV1A - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

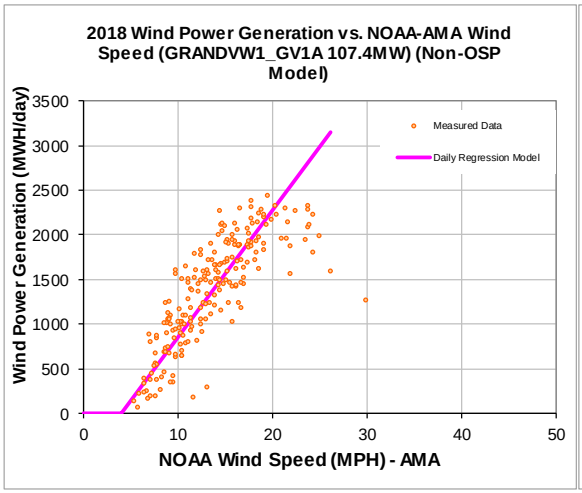
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-14.54
Left Slope (MWh/mph-day)	101.75
RMSE (MWh/day)	357.05
R2	0.63
CV-RMSE	26.0%
Daily Maximum (MWh/day)	2578

OSP Model:

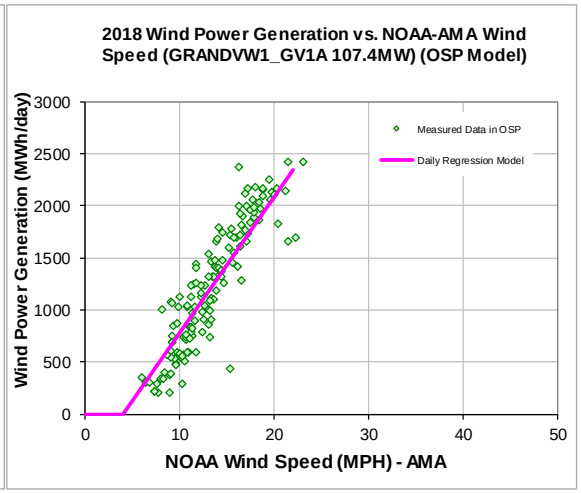
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-692.52
Left Slope (MWh/mph-day)	143.23
RMSE (MWh/day)	256.01
R2	0.82
CV-RMSE	21.0%
Daily Maximum (MWh/day)	2578

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
483,856	469,086

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,203	1,219

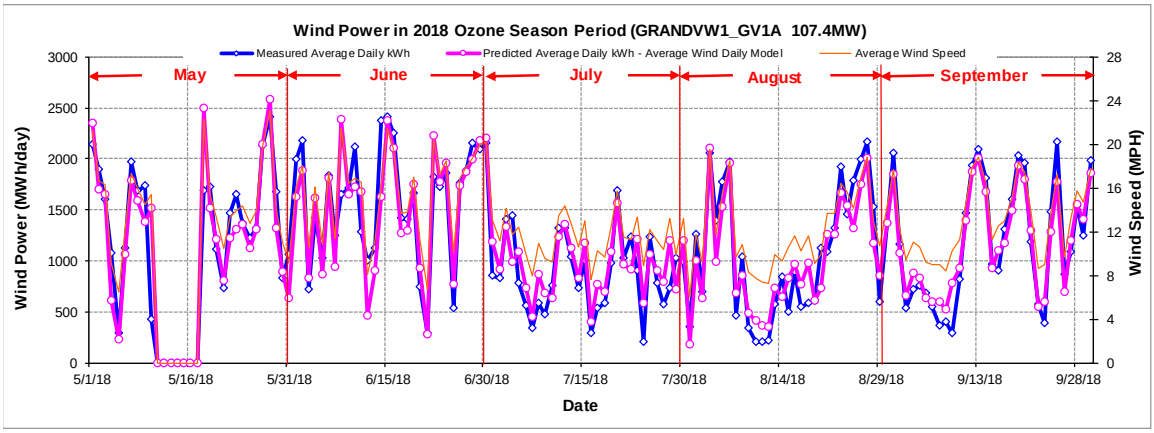
Figure A-137:GRANDVW1_GV1A - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	44,407	39,667	10.67%	56%	50%
Feb-18	28	13.78	43,472	38,837	10.66%	60%	54%
Mar-18	31	14.64	47,978	45,733	4.68%	60%	57%
Apr-18	30	17.03	46,739	51,490	-10.16%	60%	67%
May-18	31	14.66	34,321	33,761	1.63%	43%	42%
Jun-18	30	15.70	47,833	46,674	2.42%	62%	60%
Jul-18	31	11.32	26,514	28,806	-8.65%	33%	36%
Aug-18	31	12.42	34,512	33,658	2.47%	43%	42%
Sep-18	30	13.00	34,822	35,073	-0.72%	45%	45%
Oct-18	31	12.69	33,350	39,582	-18.69%	42%	50%
Nov-18	30	12.53	37,649	37,807	-0.42%	49%	49%
Dec-18	31	12.16	37,490	37,456	0.09%	47%	47%
Total	365	13.52	469,086	468,543	0.12%	50%	50%
Total in OSP (07/15-09/15)	146	13.35	178,001	177,971	0.02%	47%	47%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

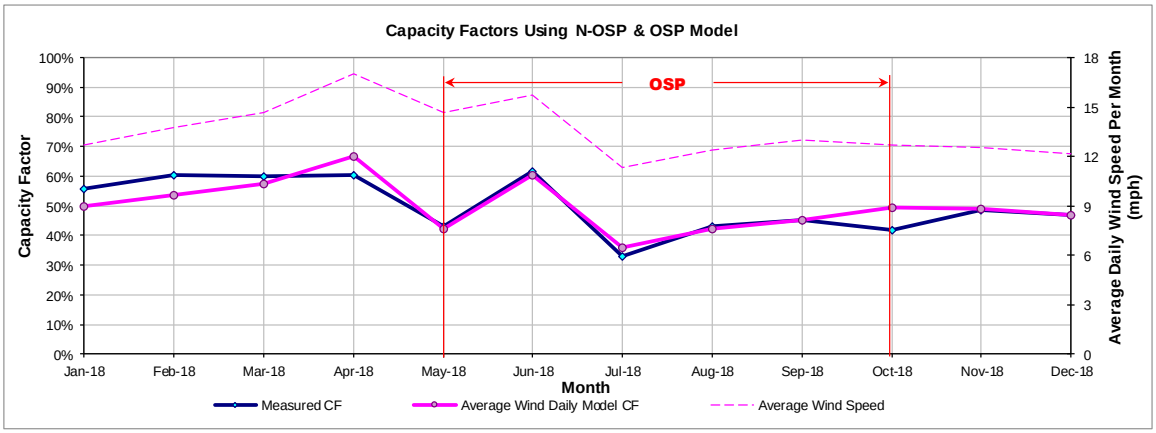


Figure A-138:GRANDVW1_GV1A - Predicted Wind Power and Capacity Factor Using Daily Models

A.37.2 Grandview Phase 1 (Conway Windfarm) - GRANDVW1_GV1B

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
GRANDVW1_GV1B	Wind	Amarillo	CARSON	E.ON Climate & Renewables	Grandview Phase 1 (Conway Windfarm)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
59 GE 1.7-100 wind turbine	ERCOT	W	Dec-14	Panhandle	AMA	103.8

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

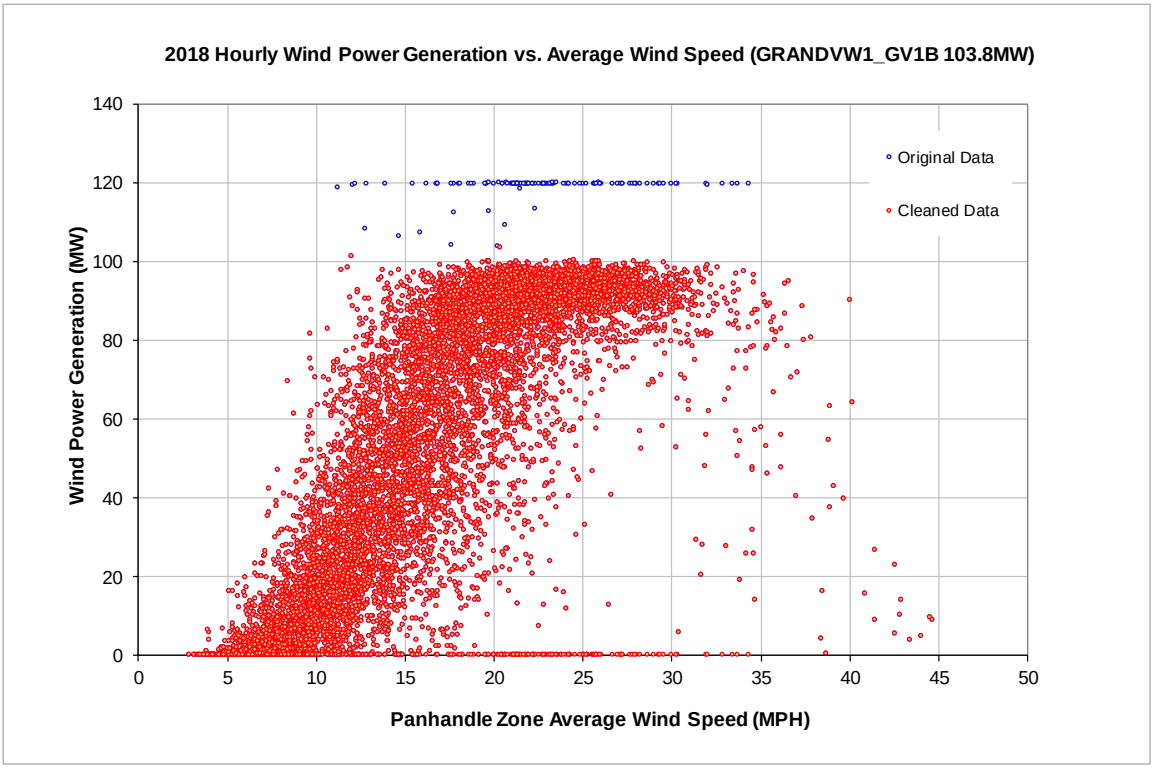


Figure A-139:GRANDVW1_GV1B - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

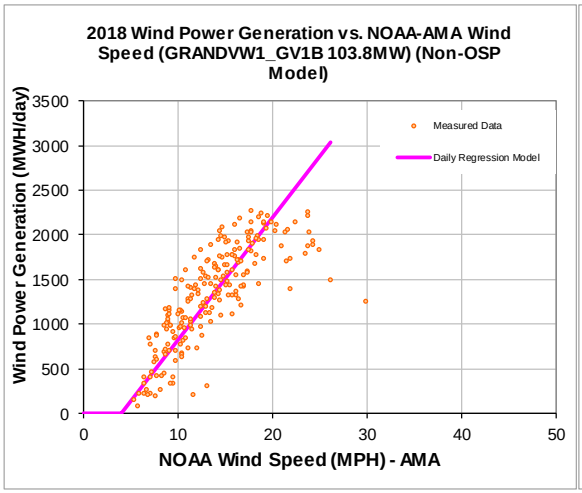
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	52.05
Left Slope (MWh/mph-day)	93.35
RMSE (MWh/day)	336.86
R2	0.62
CV-RMSE	25.4%
Daily Maximum (MWh/day)	2491

OSP Model:

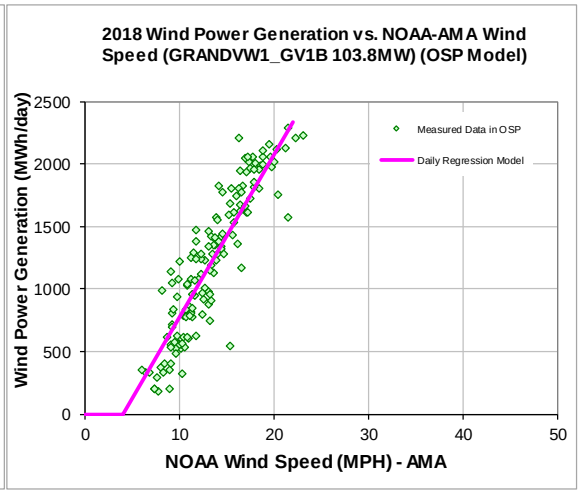
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-612.13
Left Slope (MWh/mph-day)	136.62
RMSE (MWh/day)	239.78
R2	0.82
CV-RMSE	19.8%
Daily Maximum (MWh/day)	2491

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
471,870	458,810

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,196	1,210

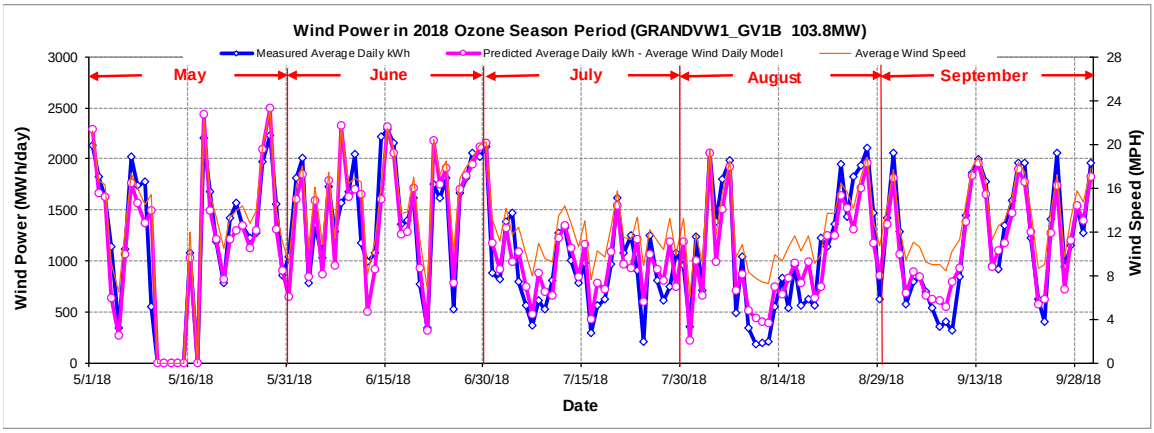
Figure A-140:GRANDVW1_GV1B - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	41,920	38,420	8.35%	54%	50%
Feb-18	28	13.78	41,525	37,463	9.78%	60%	54%
Mar-18	31	14.64	43,655	43,986	-0.76%	57%	57%
Apr-18	30	17.03	45,027	49,262	-9.41%	60%	66%
May-18	31	14.56	35,619	34,372	3.50%	46%	45%
Jun-18	30	15.70	45,942	45,975	-0.07%	61%	62%
Jul-18	31	11.32	26,773	28,979	-8.24%	35%	38%
Aug-18	31	12.42	34,640	33,607	2.98%	45%	44%
Sep-18	30	13.00	34,913	34,908	0.01%	47%	47%
Oct-18	31	12.69	34,980	38,342	-9.61%	45%	50%
Nov-18	30	12.53	36,725	36,649	0.21%	49%	49%
Dec-18	31	12.16	37,091	36,452	1.72%	48%	47%
Total	365	13.51	458,810	458,416	0.09%	50%	50%
Total in OSP (07/15-09/15)	147	13.34	177,886	177,841	0.03%	49%	49%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

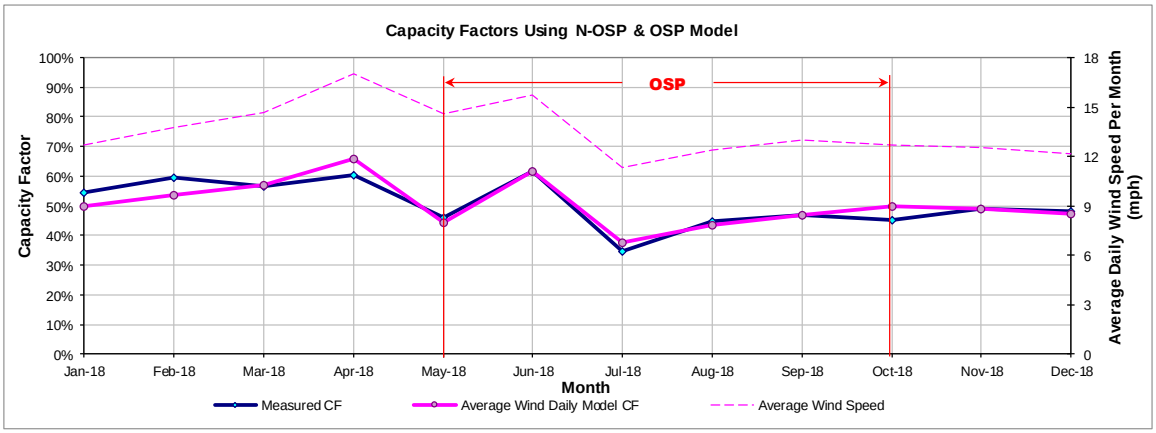


Figure A-141:GRANDVW1_GV1B - Predicted Wind Power and Capacity Factor Using Daily Models

A.38 Green Pastures W

A.38.1 Green Pastures W - GPASTURE_WIND_I

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
GPASTURE_WIND_I	Wind	-	KNOX	Capital Dynamics	Green Pastures W

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 Acciona 3 MW	ERCOT	W	Nov-15	West	ABI	150

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

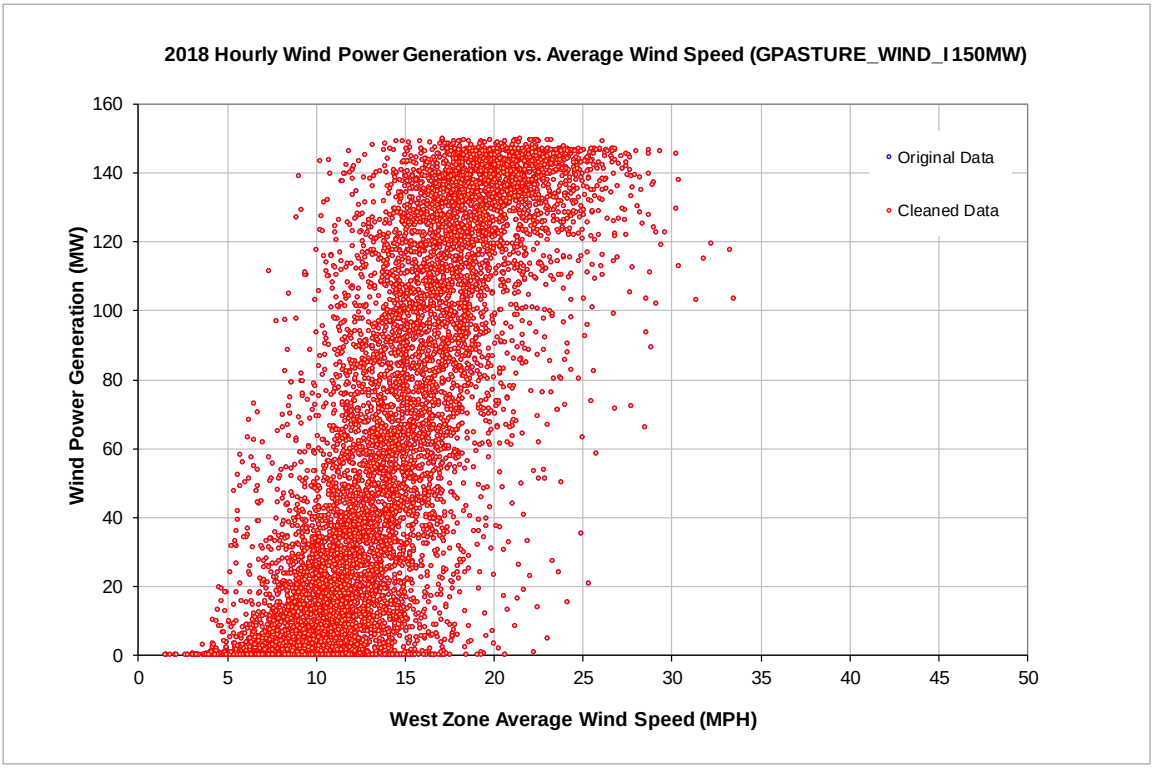


Figure A-142:GPASTURE_WIND_I - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

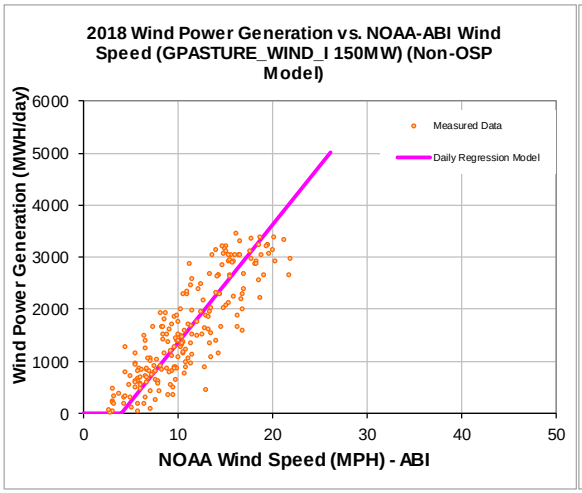
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-407.76
Left Slope (MWh/mph-day)	181.06
RMSE (MWh/day)	488.20
R2	0.74
CV-RMSE	31.0%
Daily Maximum (MWh/day)	3600

OSP Model:

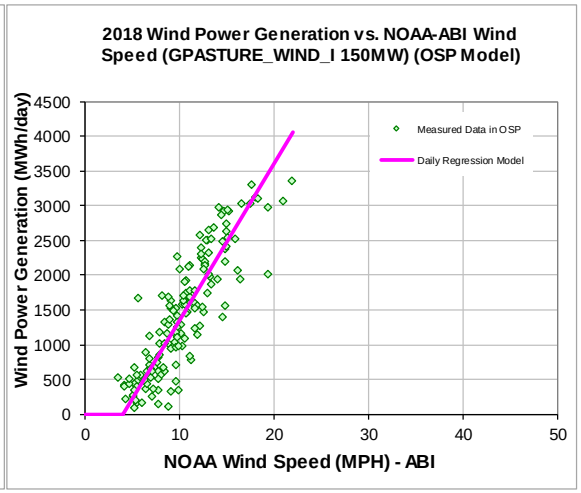
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-659.04
Left Slope (MWh/mph-day)	202.04
RMSE (MWh/day)	420.82
R2	0.76
CV-RMSE	29.2%
Daily Maximum (MWh/day)	3600

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
603,096	554,634

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,464	1,443

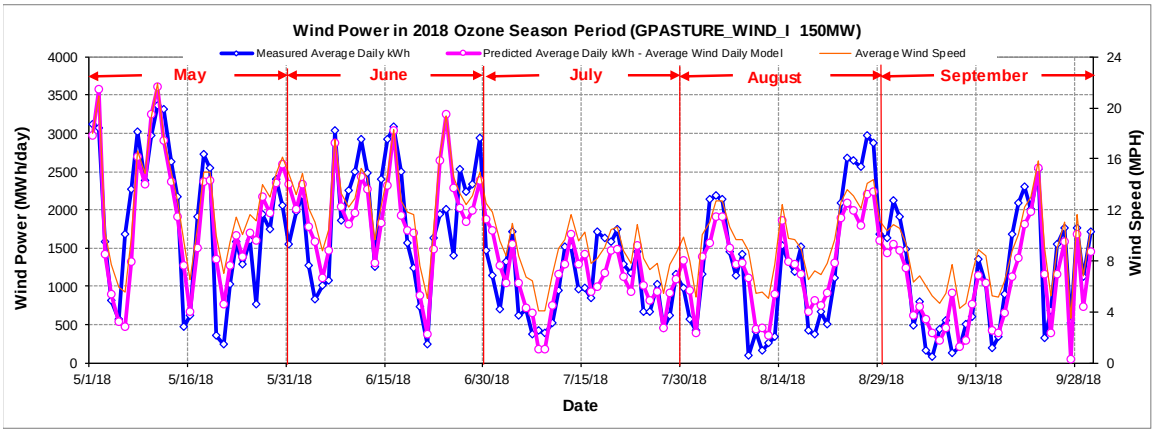
Figure A-143:GPASTURE_WIND_I - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	55,396	48,926	11.68%	50%	44%
Feb-18	28	11.00	43,577	44,333	-1.74%	43%	44%
Mar-18	31	11.92	53,486	54,290	-1.50%	48%	49%
Apr-18	30	13.18	56,307	59,338	-5.38%	52%	55%
May-18	31	12.78	57,630	59,452	-3.16%	52%	53%
Jun-18	30	12.90	57,706	58,445	-1.28%	53%	54%
Jul-18	31	8.52	31,288	32,935	-5.26%	28%	30%
Aug-18	31	9.85	43,073	41,252	4.23%	39%	37%
Sep-18	30	7.97	31,065	28,509	8.23%	29%	26%
Oct-18	31	9.35	34,703	39,859	-14.86%	31%	36%
Nov-18	30	10.05	46,481	42,348	8.89%	43%	39%
Dec-18	31	10.23	43,922	44,777	-1.95%	39%	40%
Total	365	10.72	554,634	554,465	0.03%	42%	42%
Total in OSP (07/15-09/15)	153	10.40	220,762	220,593	0.08%	40%	40%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

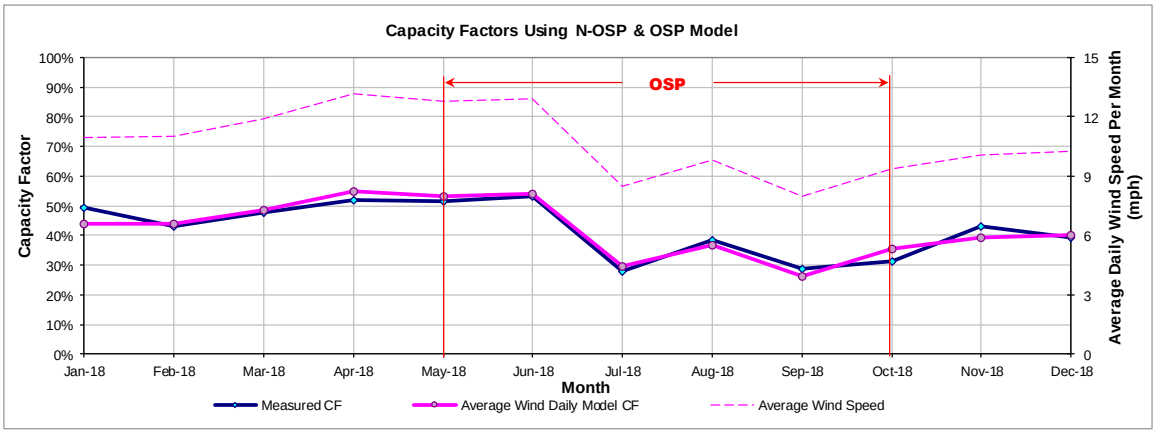


Figure A-144:GPASTURE_WIND_I - Predicted Wind Power and Capacity Factor Using Daily Models

A.38.2 Green Pastures W - VERTIGO_WIND_I

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
VERTIGO_WIND_I	Wind	-	KNOX	Capital Dynamics	Green Pastures W

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 Acciona 3 MW	ERCOT	W	Nov-15	West	ABI	150

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

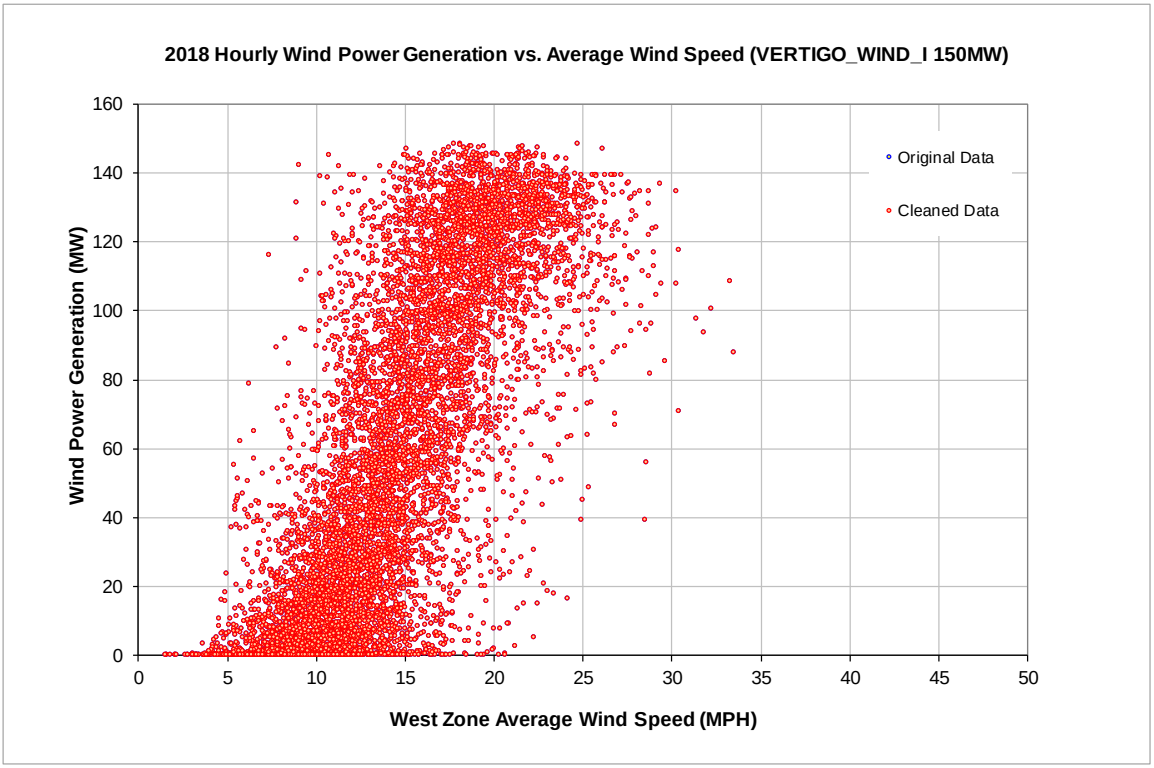


Figure A-145:VERTIGO_WIND_I - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

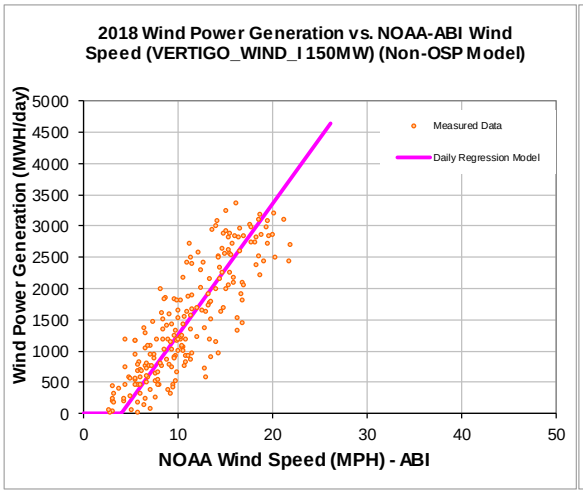
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-352.26
Left Slope (MWh/mph-day)	165.67
RMSE (MWh/day)	482.59
R2	0.71
CV-RMSE	33.0%
Daily Maximum (MWh/day)	3600

OSP Model:

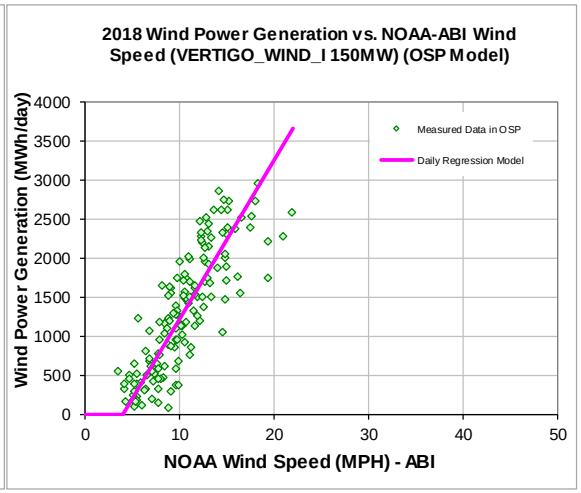
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-489.46
Left Slope (MWh/mph-day)	172.04
RMSE (MWh/day)	420.96
R2	0.70
CV-RMSE	32.4%
Daily Maximum (MWh/day)	3600

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
552,980	508,862

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,318	1,300

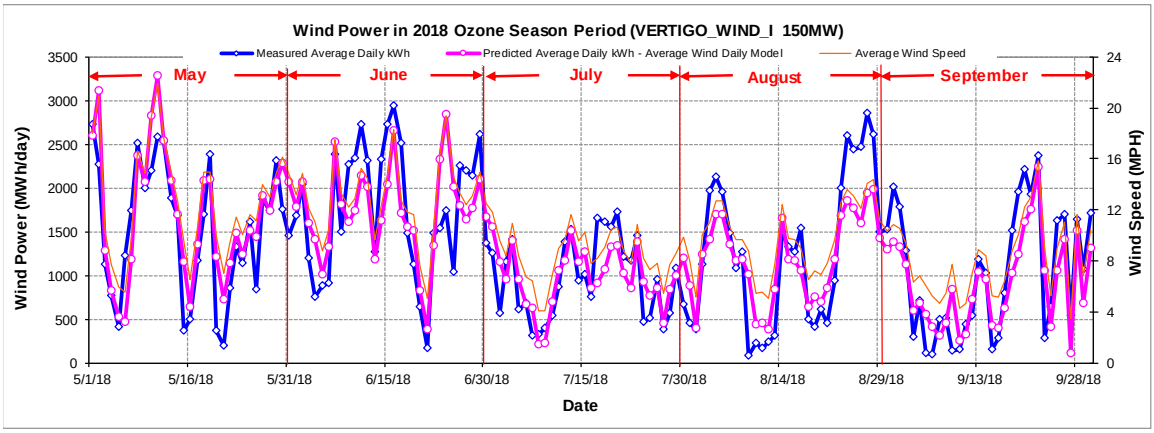
Figure A-146:VERTIGO_WIND_I - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	50,952	45,415	10.87%	46%	41%
Feb-18	28	11.00	39,434	41,149	-4.35%	39%	41%
Mar-18	31	11.92	47,838	50,323	-5.19%	43%	45%
Apr-18	30	13.18	50,548	54,920	-8.65%	47%	51%
May-18	31	12.78	47,164	52,989	-12.35%	42%	47%
Jun-18	30	12.90	52,543	51,916	1.19%	49%	48%
Jul-18	31	8.52	29,162	30,266	-3.79%	26%	27%
Aug-18	31	9.85	40,937	37,348	8.77%	37%	33%
Sep-18	30	7.97	29,139	26,426	9.31%	27%	24%
Oct-18	31	9.35	34,155	37,117	-8.67%	31%	33%
Nov-18	30	10.05	43,613	39,375	9.72%	40%	36%
Dec-18	31	10.23	43,376	41,618	4.05%	39%	37%
Total	365	10.72	508,862	508,862	0.00%	39%	39%
Total in OSP (07/15-09/15)	153	10.40	198,946	198,946	0.00%	36%	36%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

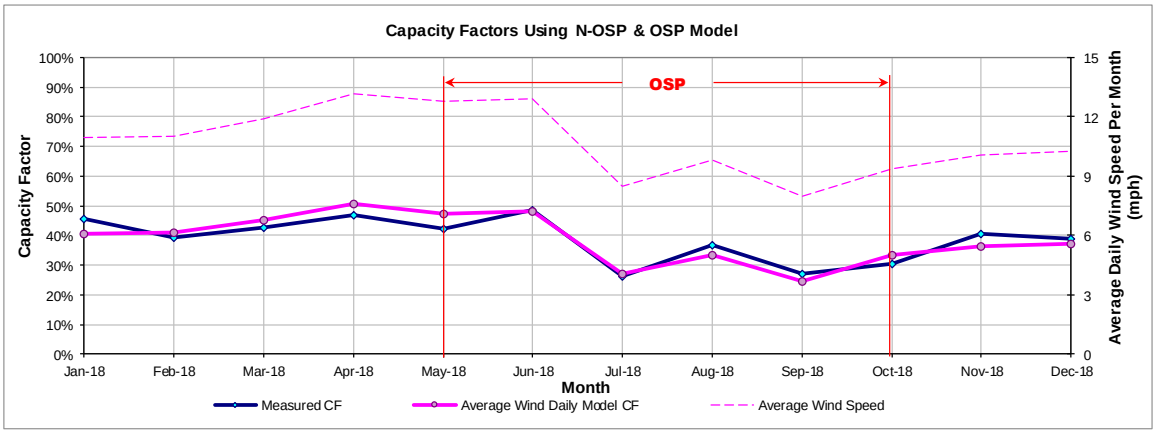


Figure A-147:VERTIGO_WIND_I - Predicted Wind Power and Capacity Factor Using Daily Models

A.39 Gulf Wind

A.39.1 Gulf Wind - TGW_T1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
TGW_T1	Wind	-	KENEDY	Babcock & Brown	Gulf Wind 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
59 Mitsubishi 2.4 MW	ERCOT	S	Nov-08	Coastal	CRP	141.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

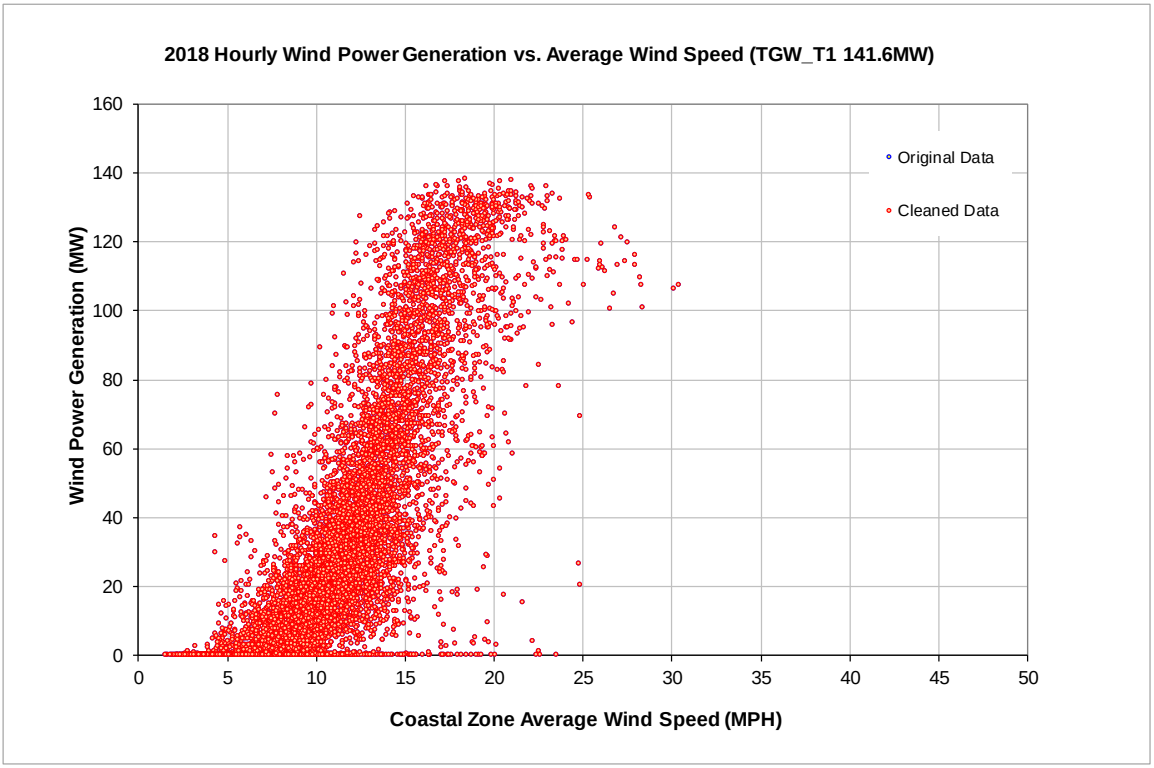


Figure A-148:TGW_T1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

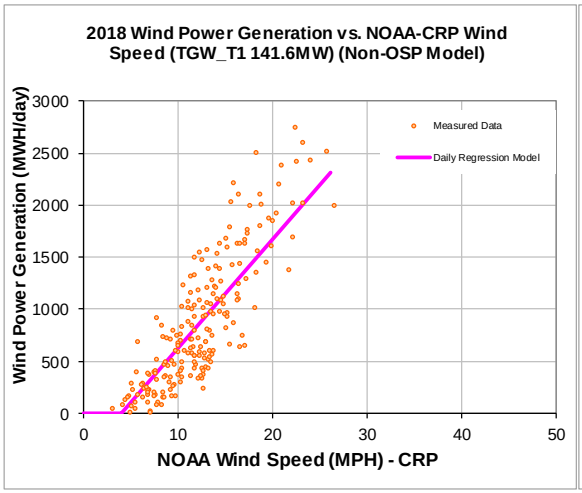
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-581.29
Left Slope (MWh/mph-day)	117.74
RMSE (MWh/day)	332.08
R2	0.72
CV-RMSE	38.3%
Daily Maximum (MWh/day)	3398

OSP Model:

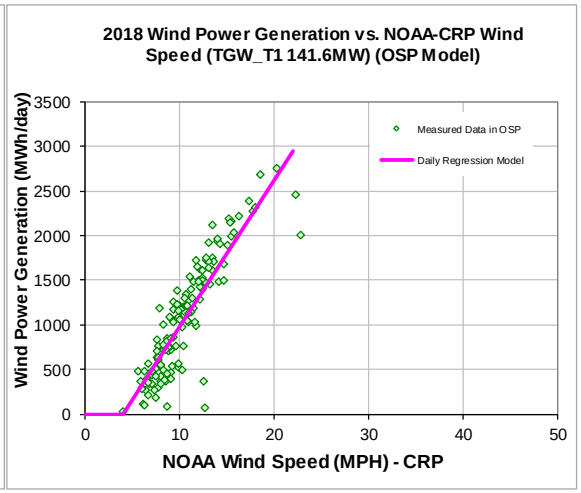
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-704.19
Left Slope (MWh/mph-day)	168.31
RMSE (MWh/day)	288.50
R2	0.79
CV-RMSE	26.7%
Daily Maximum (MWh/day)	3398

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
337,185	333,014

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,007	1,080

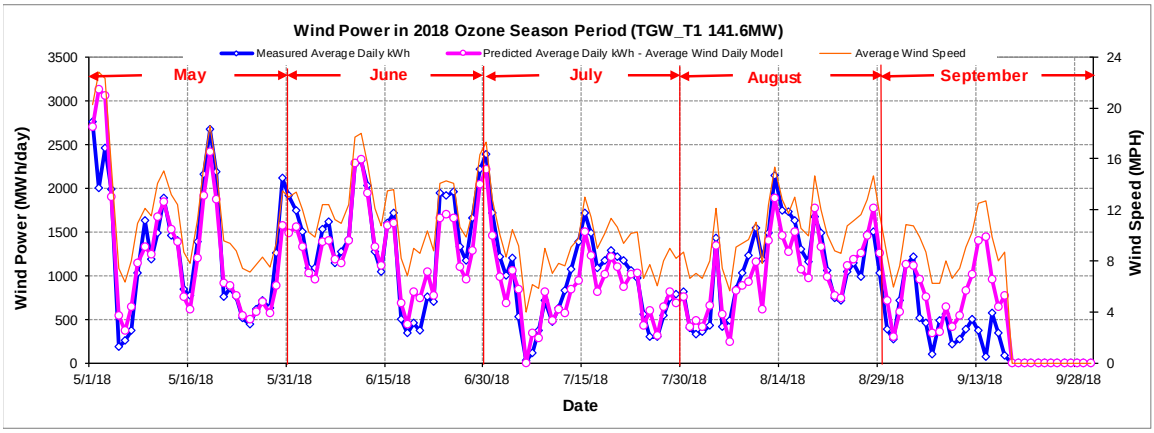
Figure A-149:TGW_T1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	24,176	22,499	6.94%	23%	21%
Feb-18	28	14.08	25,102	30,157	-20.14%	26%	32%
Mar-18	31	13.69	34,502	31,962	7.36%	33%	30%
Apr-18	30	14.08	37,652	32,289	14.25%	37%	32%
May-18	31	11.95	40,534	40,502	0.08%	38%	38%
Jun-18	30	12.21	42,199	40,526	3.97%	41%	40%
Jul-18	31	8.81	26,736	24,171	9.59%	25%	23%
Aug-18	31	10.35	33,808	32,163	4.86%	32%	31%
Sep-18	30	9.01	7,876	13,823	-75.49%	8%	14%
Oct-18	31	11.07	13,913	21,176	-52.20%	13%	20%
Nov-18	30	10.83	20,258	20,887	-3.10%	20%	20%
Dec-18	31	11.29	26,257	23,342	11.10%	25%	22%
Total	365	11.61	333,014	333,496	-0.14%	27%	27%
Total in OSP (07/15-09/15)	140	10.60	151,154	151,185	-0.02%	32%	32%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

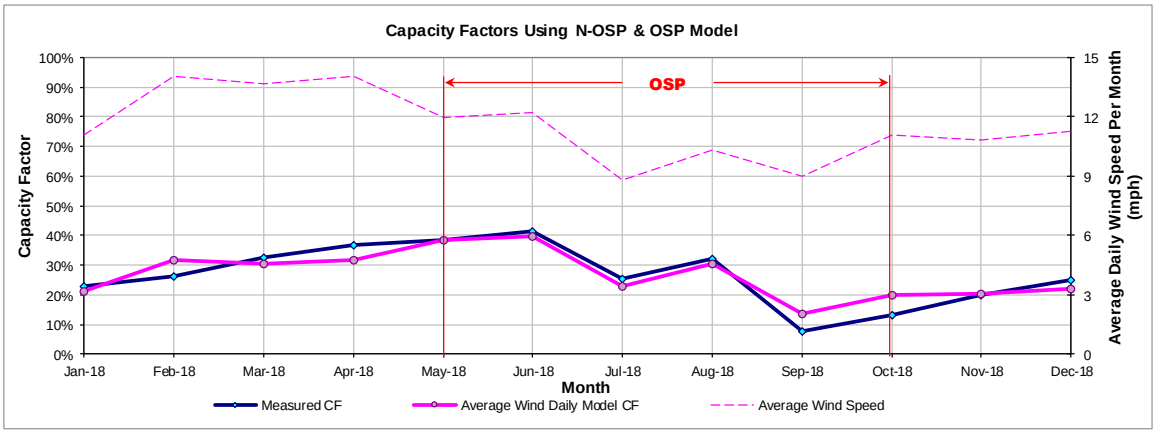


Figure A-150:TGW_T1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.39.2 Gulf Wind - TGW_T2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
TGW_T2	Wind	-	KENEDY	Babcock & Brown	Gulf Wind 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
59 Mitsubishi 2.4 MW	ERCOT	S	Nov-08	Coastal	CRP	141.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

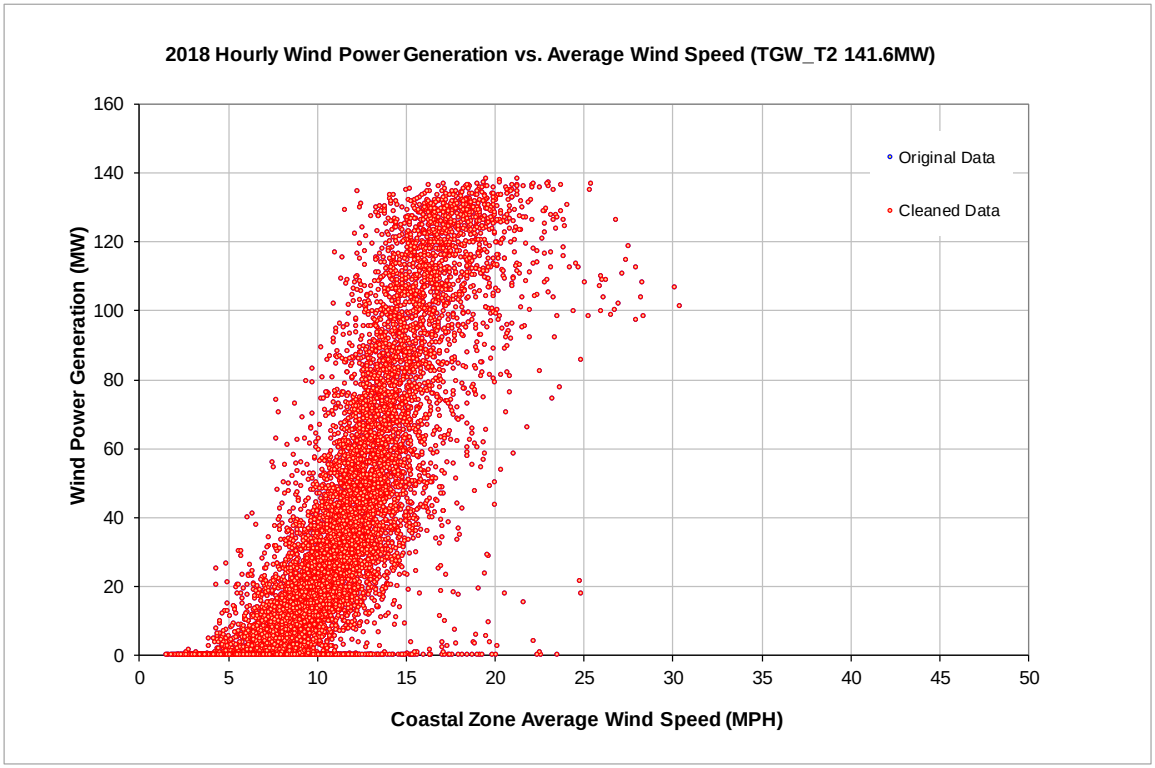


Figure A-151:TGW_T2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

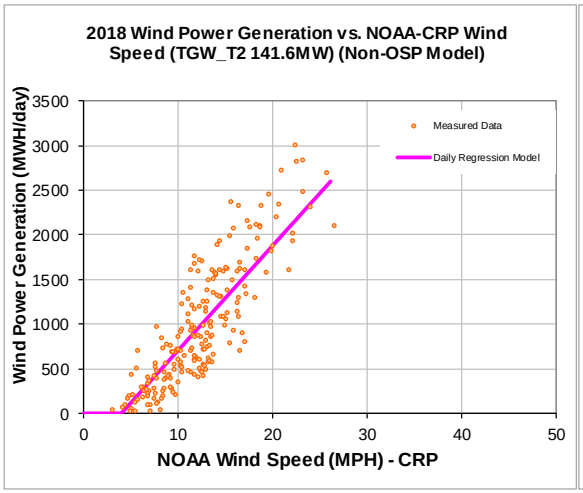
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-608.10
Left Slope (MWh/mph-day)	128.91
RMSE (MWh/day)	353.46
R2	0.73
CV-RMSE	36.3%
Daily Maximum (MWh/day)	3398

OSP Model:

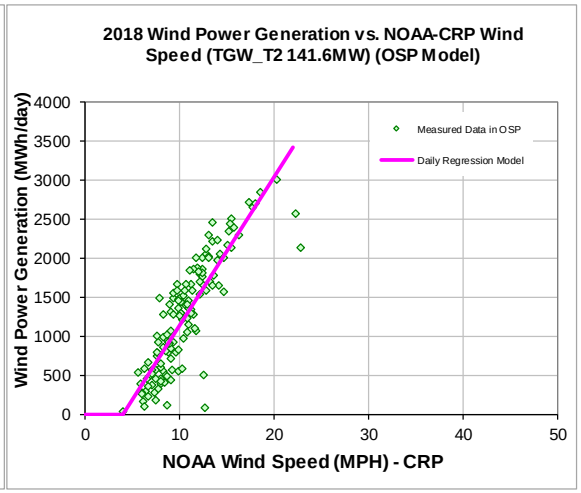
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-700.76
Left Slope (MWh/mph-day)	184.43
RMSE (MWh/day)	361.84
R2	0.74
CV-RMSE	28.9%
Daily Maximum (MWh/day)	3398

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
386,023	381,036

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,174	1,254

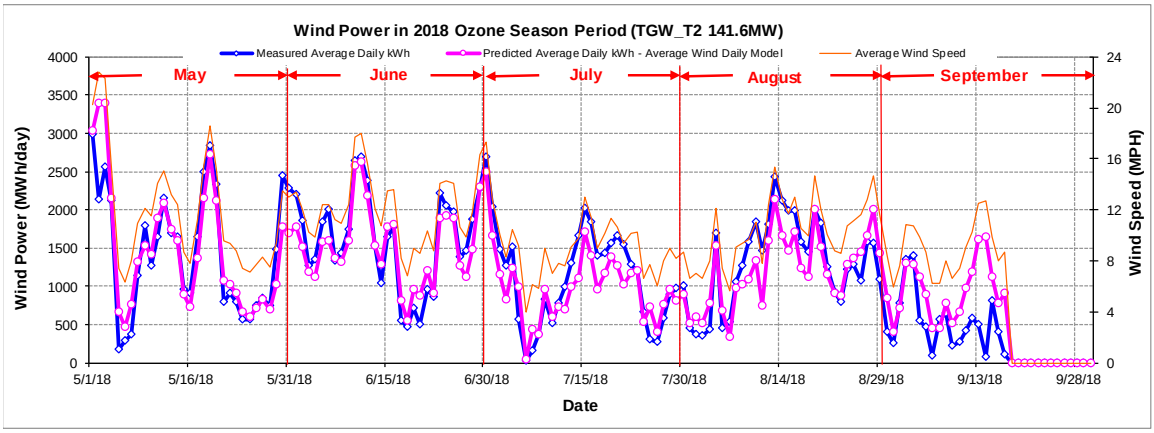
Figure A-152:TGW_T2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	27,383	25,512	6.83%	26%	24%
Feb-18	28	14.08	29,680	33,803	-13.89%	31%	36%
Mar-18	31	13.69	39,528	35,873	9.25%	38%	34%
Apr-18	30	14.08	40,359	36,202	10.30%	40%	36%
May-18	31	11.95	45,341	46,452	-2.45%	43%	44%
Jun-18	30	12.21	48,697	46,531	4.45%	48%	46%
Jul-18	31	8.81	32,594	28,648	12.11%	31%	27%
Aug-18	31	10.35	39,652	37,439	5.58%	38%	36%
Sep-18	30	9.01	9,260	16,350	-76.58%	9%	16%
Oct-18	31	10.97	19,947	24,407	-22.36%	19%	23%
Nov-18	30	10.83	22,006	23,671	-7.57%	22%	23%
Dec-18	31	11.29	26,591	26,379	0.80%	25%	25%
Total	365	11.60	381,036	381,266	-0.06%	31%	31%
Total in OSP (07/15-09/15)	140	10.60	175,543	175,419	0.07%	37%	37%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

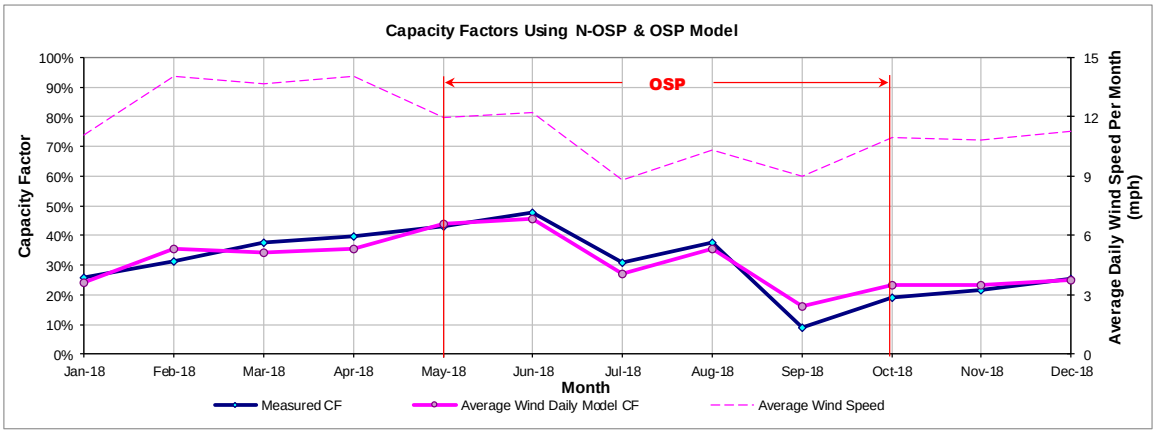


Figure A-153:TGW_T2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.40 Gunsight Mountain

A.40.1 Gunsight Mountain - GUNMTN_G1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
GUNMTN_G1	Wind	Big Spring	HOWARD	Invenergy	Gunsight Mountain

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
67 GE 1.7 MW	ERCOT	W	Sep-16	West	MAF	119.9

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

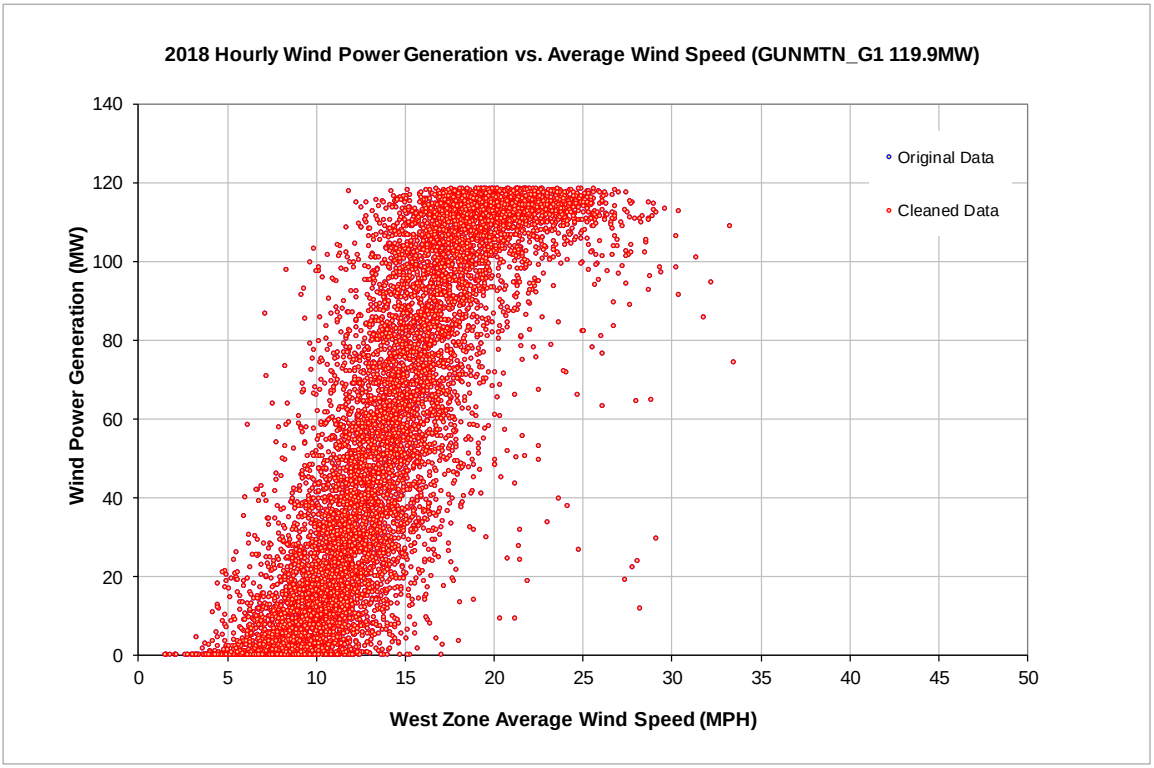


Figure A-154:GUNMTN_G1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

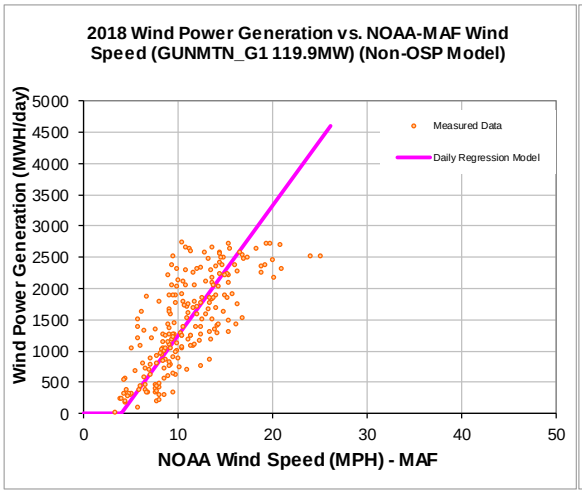
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-65.33
Left Slope (MWh/mph-day)	137.79
RMSE (MWh/day)	495.56
R2	0.55
CV-RMSE	34.6%
Daily Maximum (MWh/day)	2878

OSP Model:

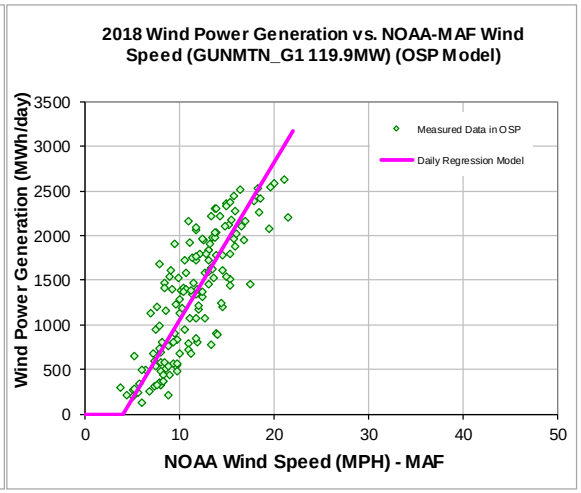
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-452.19
Left Slope (MWh/mph-day)	154.49
RMSE (MWh/day)	392.05
R2	0.68
CV-RMSE	29.6%
Daily Maximum (MWh/day)	2878

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
467,780	506,546

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,180	1,327

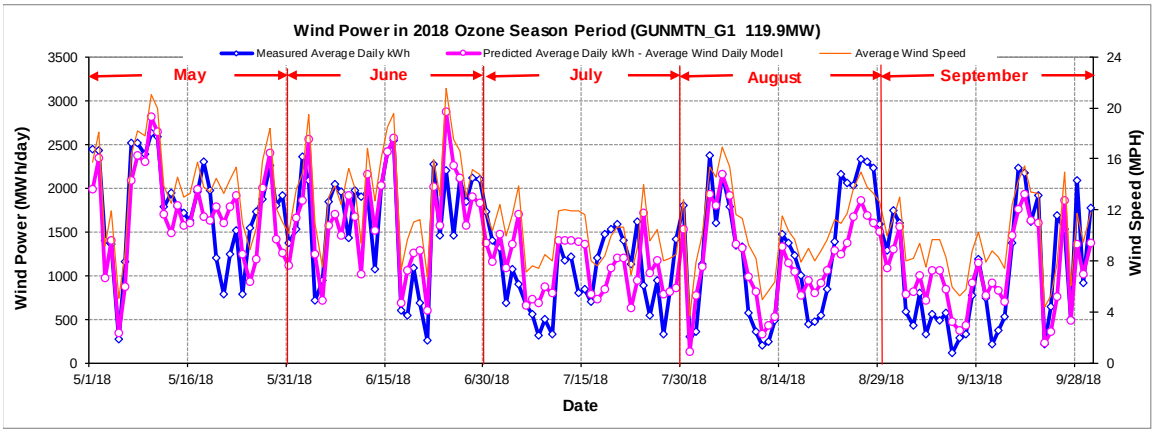
Figure A-155:GUNMTN_G1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (MAF) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	9.47	43,997	38,438	12.63%	49%	43%
Feb-18	28	10.85	39,485	40,035	-1.39%	49%	50%
Mar-18	31	11.79	47,970	48,342	-0.78%	54%	54%
Apr-18	30	13.87	50,045	54,517	-8.94%	58%	63%
May-18	31	13.80	54,639	52,060	4.72%	61%	58%
Jun-18	30	13.77	49,036	50,252	-2.48%	57%	58%
Jul-18	31	9.76	30,673	32,729	-6.70%	34%	37%
Aug-18	31	10.84	40,238	37,885	5.85%	45%	42%
Sep-18	30	9.41	28,393	30,053	-5.84%	33%	35%
Oct-18	31	10.68	40,165	43,588	-8.52%	45%	49%
Nov-18	30	9.55	41,109	37,516	8.74%	48%	43%
Dec-18	31	9.90	40,796	40,270	1.29%	46%	45%
Total	365	11.14	506,546	505,686	0.17%	48%	48%
Total in OSP (07/15-09/15)	153	11.51	202,979	202,979	0.00%	46%	46%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

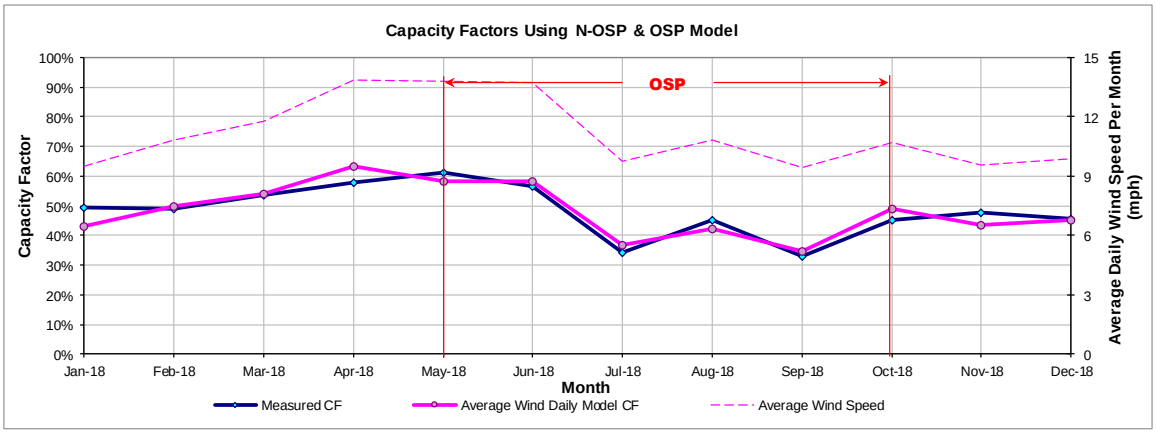


Figure A-156:GUNMTN_G1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.41 Hackberry Wind Farm

A.41.1 Hackberry Wind Farm - HWF_HWFG1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HWF_HWFG1	Wind	-	SHACKELFORD	Renewable Energy Systems	Hackberry Wind Farm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
72 Siemens 2.3 MW	ERCOT	W	Nov-08	West	ABI	163.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

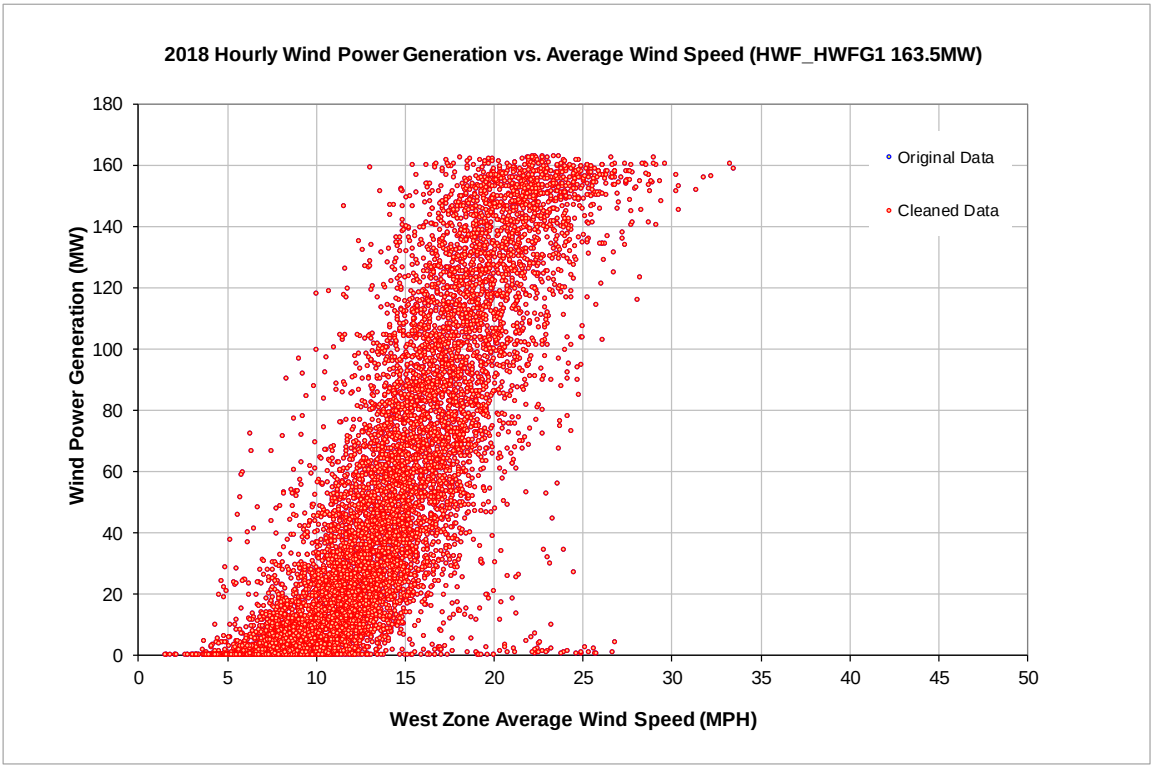


Figure A-157:HWF_HWFG1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

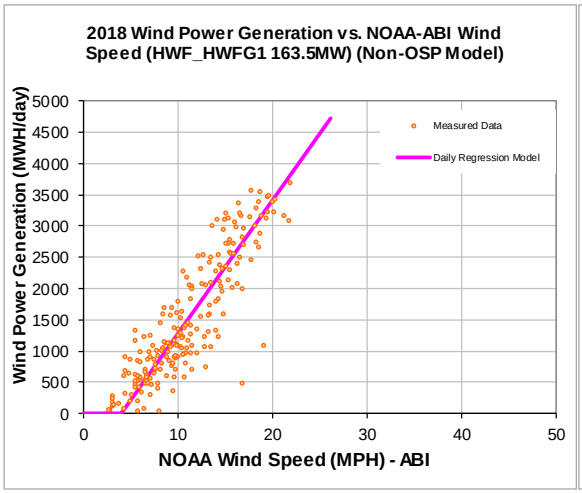
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-588.93
Left Slope (MWh/mph-day)	189.13
RMSE (MWh/day)	463.21
R2	0.78
CV-RMSE	31.3%
Daily Maximum (MWh/day)	3924

OSP Model:

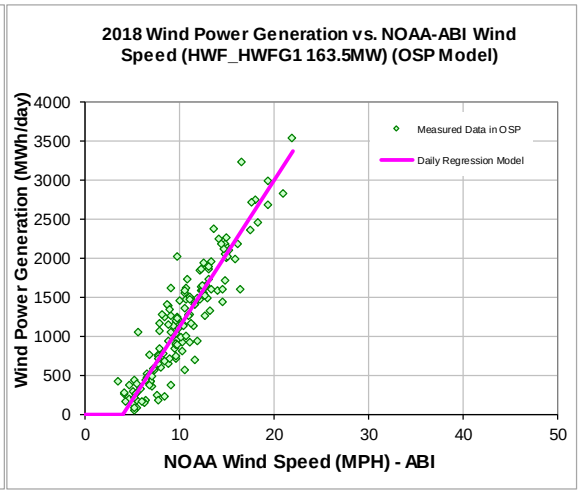
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-680.14
Left Slope (MWh/mph-day)	180.75
RMSE (MWh/day)	287.92
R2	0.84
CV-RMSE	24.0%
Daily Maximum (MWh/day)	3924

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
547,911	497,836

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,219	1,200

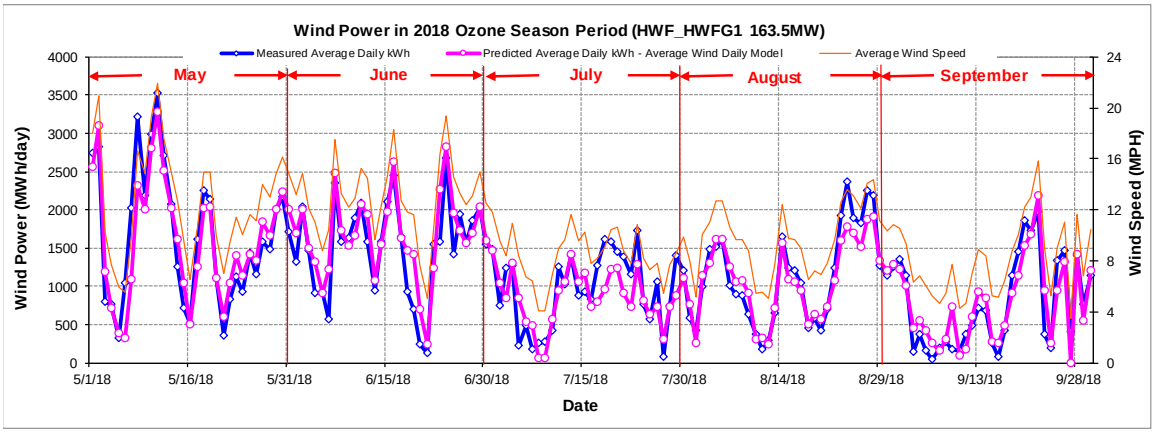
Figure A-158:HWF_HWFG1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	52,335	46,089	11.93%	43%	38%
Feb-18	28	11.00	37,766	41,814	-10.72%	34%	38%
Mar-18	31	11.92	52,791	51,657	2.15%	43%	42%
Apr-18	30	13.18	57,183	57,092	0.16%	49%	48%
May-18	31	12.78	51,435	50,530	1.76%	42%	42%
Jun-18	30	12.90	45,190	49,569	-9.69%	38%	42%
Jul-18	31	8.52	29,408	26,656	9.36%	24%	22%
Aug-18	31	9.85	35,467	34,097	3.86%	29%	28%
Sep-18	30	7.97	22,139	22,835	-3.14%	19%	19%
Oct-18	31	9.35	33,433	36,704	-9.78%	27%	30%
Nov-18	30	10.05	38,766	39,352	-1.51%	33%	33%
Dec-18	31	10.23	41,923	41,720	0.48%	34%	34%
Total	365	10.72	497,836	498,116	-0.06%	35%	35%
Total in OSP (07/15-09/15)	153	10.40	183,640	183,687	-0.03%	31%	31%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

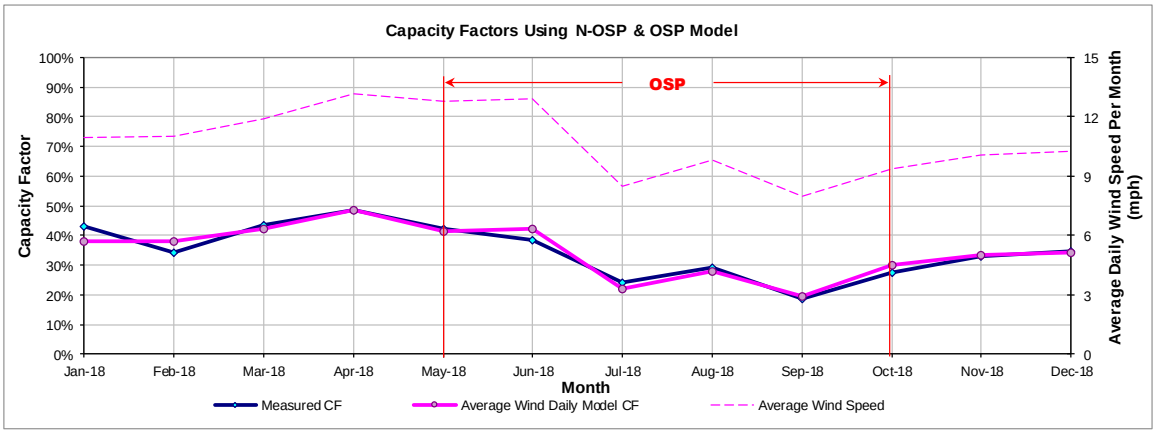


Figure A-159:HWF_HWFG1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.42 Harbor Wind Project

A.42.1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
DG_NUECE_6UNITS	Wind	-	NUECES	Revolution Energy	Harbor Wind Project

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
6 Guodian United Power 1.5 MW	ERCOT	S	Mar-12	Coastal	CRP	9

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

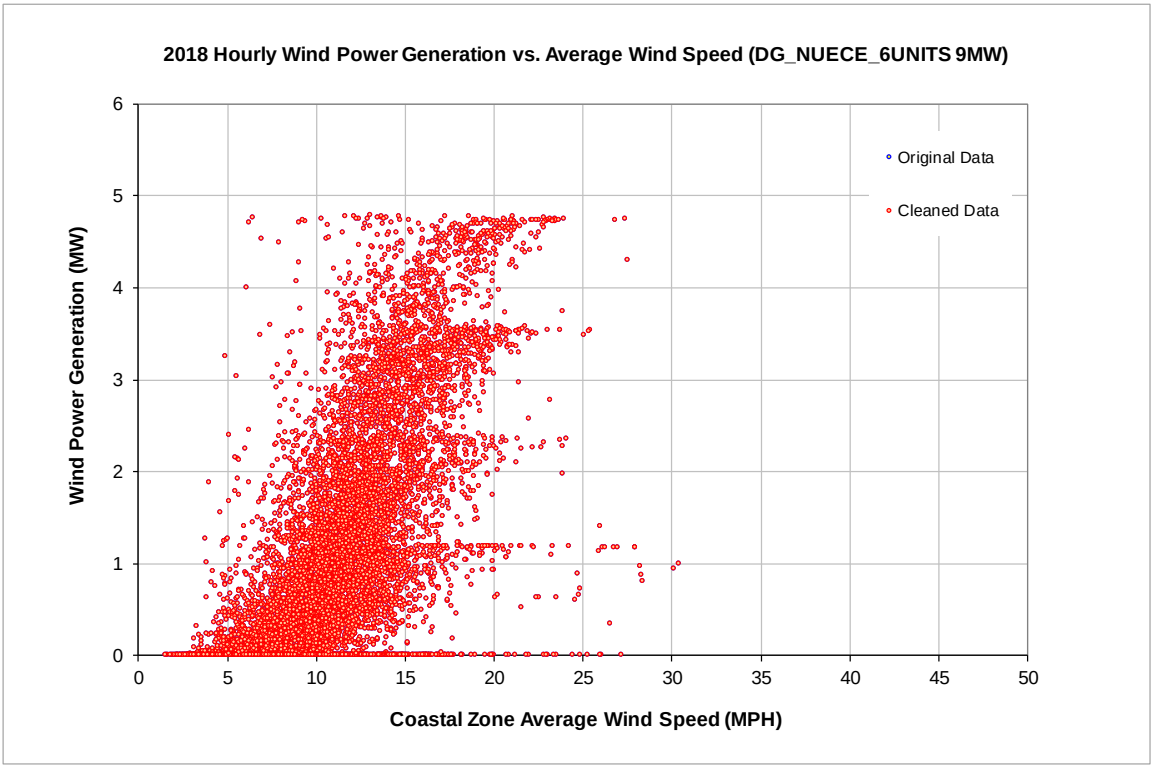


Figure A-160:DG_NUECE_6UNITS - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

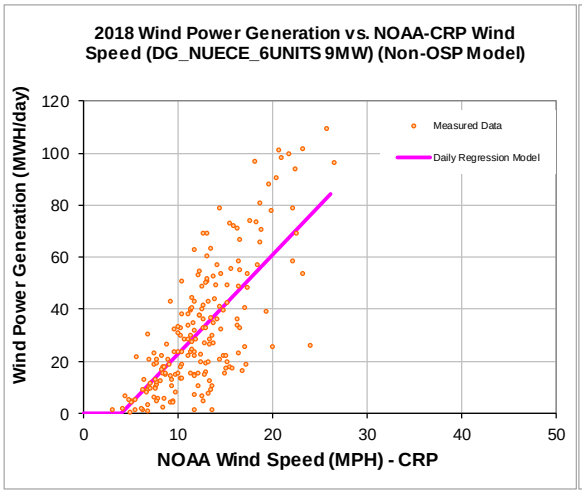
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-19.65
Left Slope (MWh/mph-day)	4.18
RMSE (MWh/day)	16.32
R2	0.57
CV-RMSE	51.1%
Daily Maximum (MWh/day)	216

OSP Model:

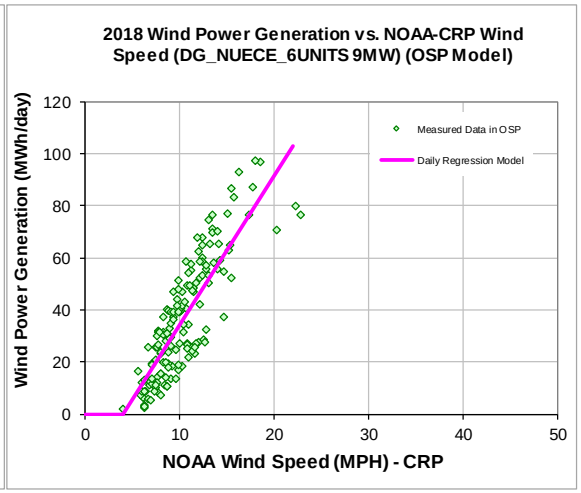
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-24.82
Left Slope (MWh/mph-day)	5.91
RMSE (MWh/day)	11.85
R2	0.73
CV-RMSE	32.3%
Daily Maximum (MWh/day)	216

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
12,087	12,001

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
35	37

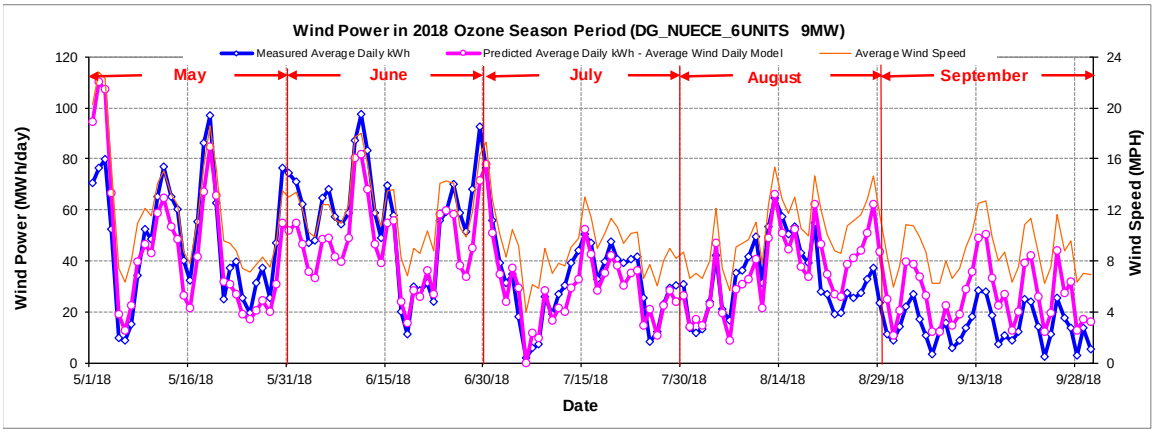
Figure A-161:DG_NUECE_6UNITS - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	1,234	828	32.92%	18%	12%
Feb-18	28	14.08	1,015	1,096	-7.93%	17%	18%
Mar-18	31	13.69	1,413	1,163	17.67%	21%	17%
Apr-18	30	14.08	1,521	1,174	22.82%	23%	18%
May-18	31	11.95	1,523	1,419	6.84%	23%	21%
Jun-18	30	12.21	1,706	1,420	16.79%	26%	22%
Jul-18	31	8.81	929	846	8.94%	14%	13%
Aug-18	31	10.35	1,020	1,126	-10.43%	15%	17%
Sep-18	30	8.73	434	802	-84.99%	7%	12%
Oct-18	31	10.87	547	804	-47.12%	8%	12%
Nov-18	30	11.31	356	745	-109.33%	5%	11%
Dec-18	31	11.08	303	590	-94.68%	5%	9%
Total	365	11.51	12,001	12,013	-0.10%	15%	15%
Total in OSP (07/15-09/15)	153	10.41	5,612	5,613	-0.02%	17%	17%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

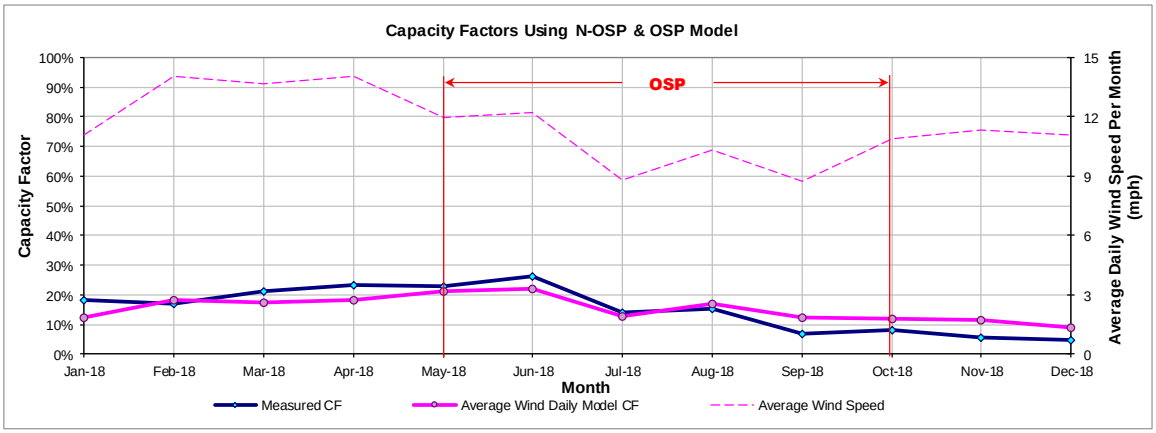


Figure A-162:DG_NUECE_6UNITS - Predicted Wind Power and Capacity Factor Using Daily Models

A.43 Hereford Wind Project (Hereford 1)

A.43.1 Hereford Wind Project (Hereford 1) - HRFDWIND_WIND_G

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HRFDWIND_WIND_G	Wind	Hereford	DEAF SMITH	EDF Renewable	Hereford Wind Project (Hereford 1)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
54 GE 1.85 MW	ERCOT	W	May-15	Panhandle	AMA	99.9

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

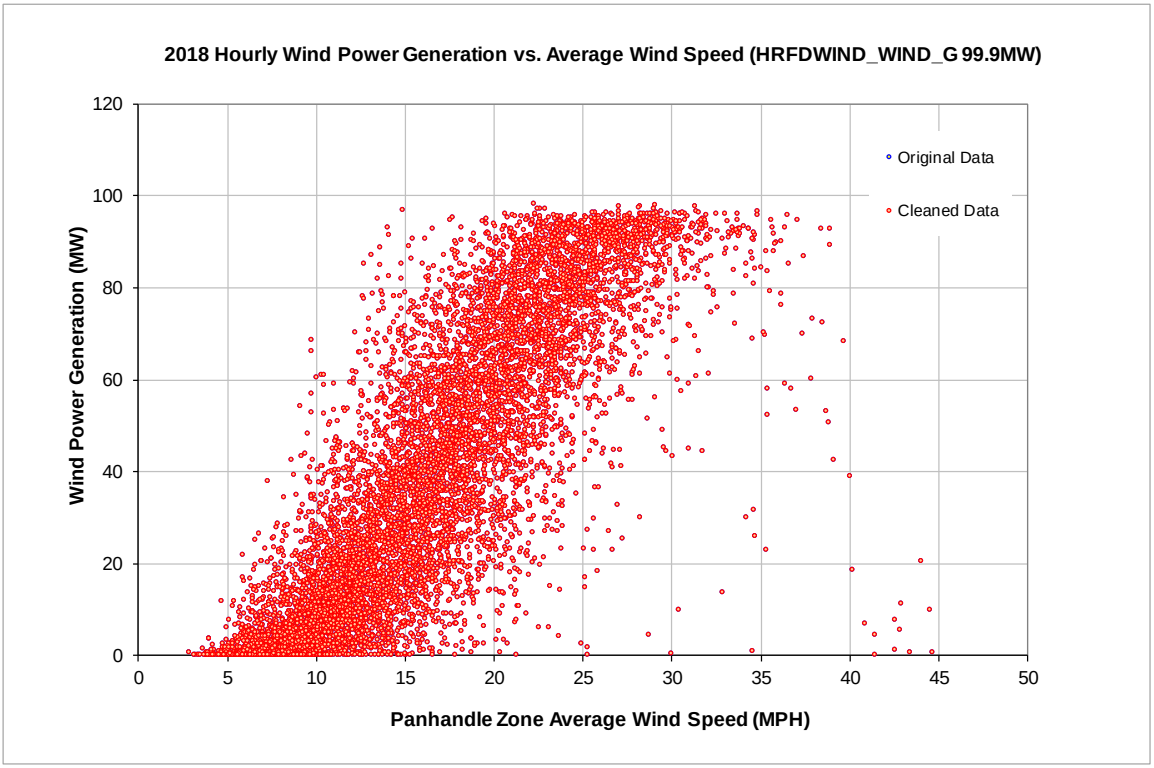


Figure A-163:HRFDWIND_WIND_G - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

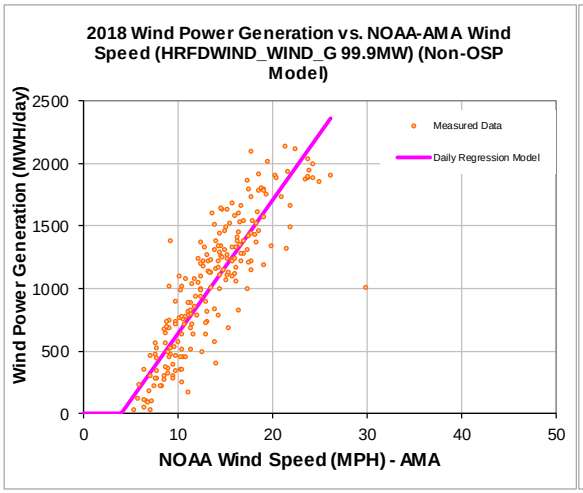
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-304.27
Left Slope (MWh/mph-day)	97.86
RMSE (MWh/day)	273.34
R2	0.73
CV-RMSE	26.5%
Daily Maximum (MWh/day)	2398

OSP Model:

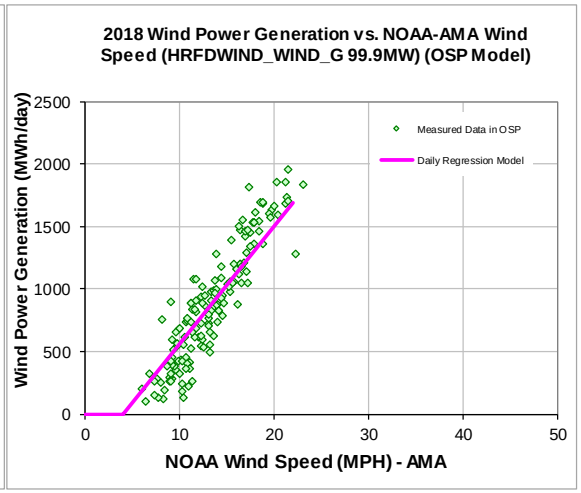
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-634.85
Left Slope (MWh/mph-day)	113.18
RMSE (MWh/day)	185.74
R2	0.84
CV-RMSE	20.9%
Daily Maximum (MWh/day)	2398

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
358,812	354,412

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
865	889

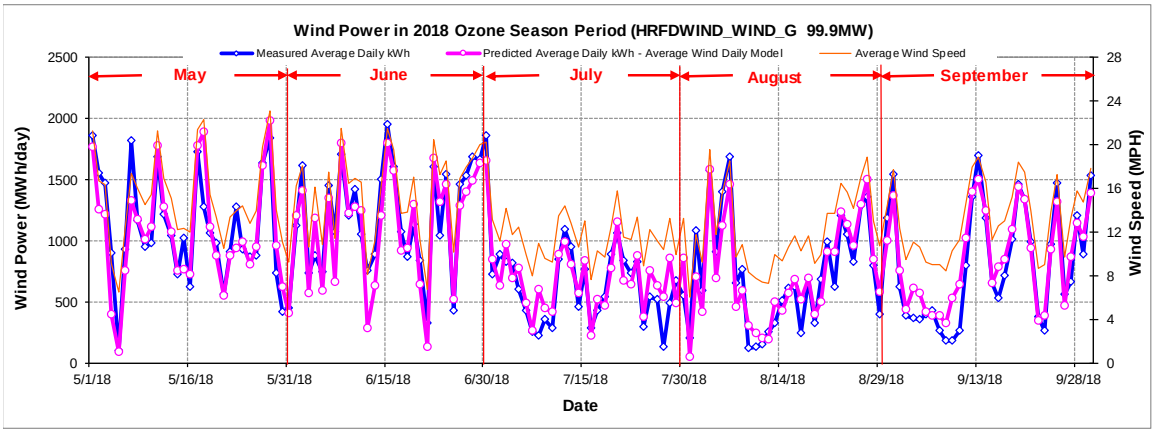
Figure A-164:HRFDWIND_WIND_G - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	32,457	29,154	10.17%	44%	39%
Feb-18	28	13.78	31,548	29,227	7.36%	47%	44%
Mar-18	31	14.64	35,221	34,989	0.66%	47%	47%
Apr-18	30	17.03	38,526	40,880	-6.11%	54%	57%
May-18	31	14.93	33,447	32,708	2.21%	45%	44%
Jun-18	30	15.70	36,645	34,253	6.53%	51%	48%
Jul-18	31	11.32	18,401	20,046	-8.94%	25%	27%
Aug-18	31	12.42	24,463	23,880	2.38%	33%	32%
Sep-18	30	13.00	23,018	25,086	-8.98%	32%	35%
Oct-18	31	12.69	24,010	29,073	-21.08%	32%	39%
Nov-18	30	12.53	29,787	27,656	7.15%	41%	38%
Dec-18	31	12.16	26,889	27,236	-1.29%	36%	37%
Total	365	13.56	354,412	354,190	0.06%	40%	40%
Total in OSP (07/15-09/15)	153	13.46	135,974	135,974	0.00%	37%	37%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

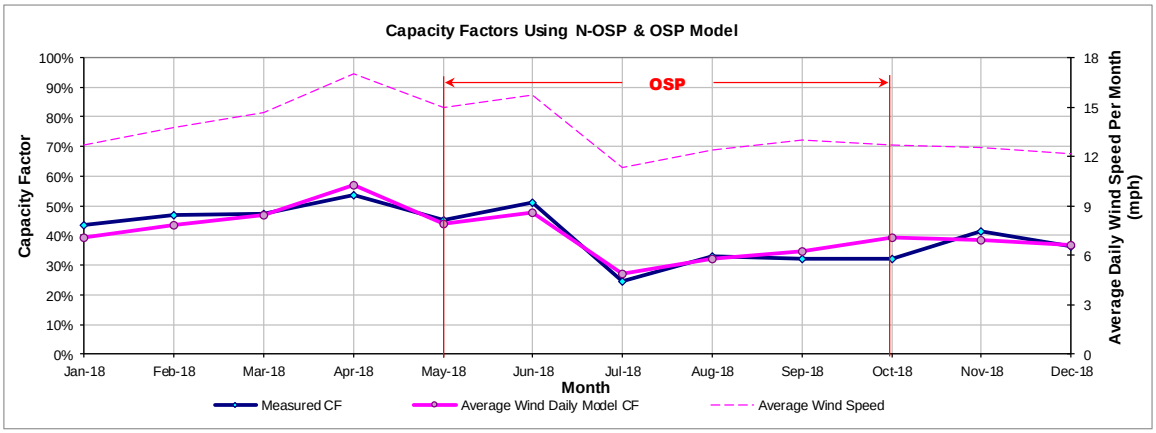


Figure A-165:HRFDWIND_WIND_G - Predicted Wind Power and Capacity Factor Using Daily Models

A.43.2 Hereford Wind Project (Hereford 1) - HRFDWIND_WIND_V

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HRFDWIND_WIND_V	Wind	Hereford	DEAF SMITH	EDF Renewable	Hereford Wind Project (Hereford 1)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 Vestas 2 MW	ERCOT	W	May-15	Panhandle	AMA	100

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

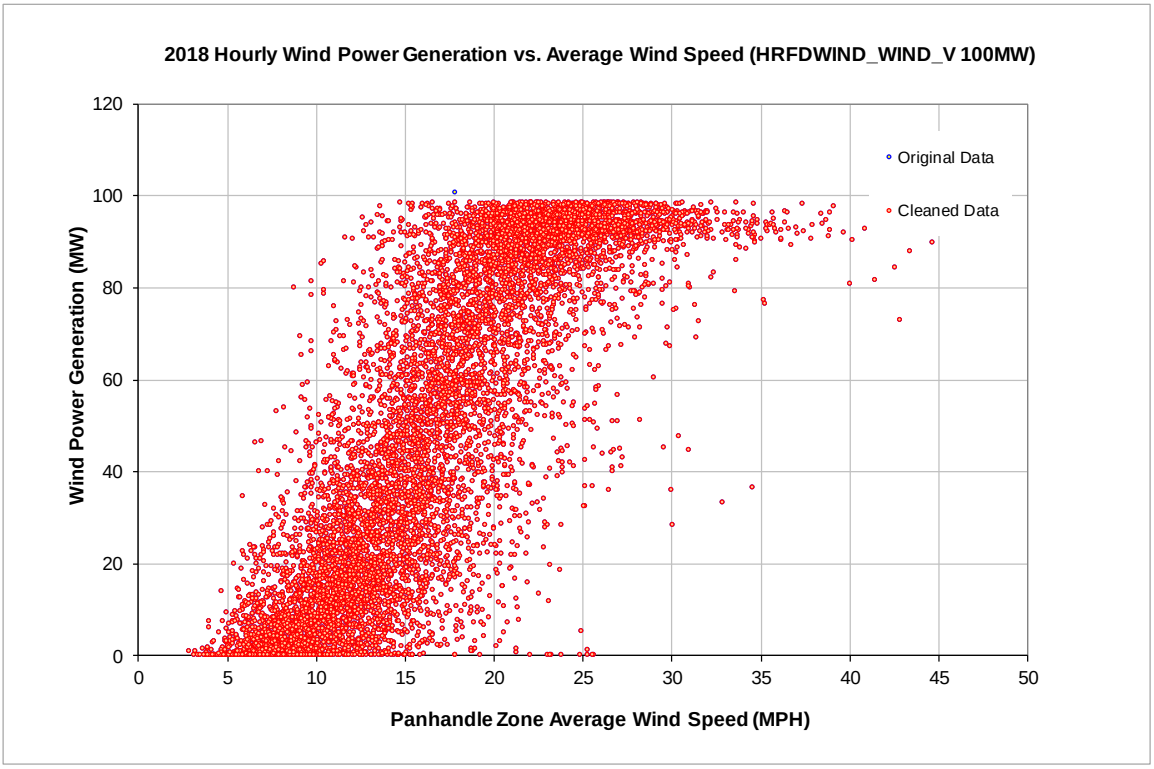


Figure A-166:HRFDWIND_WIND_V - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

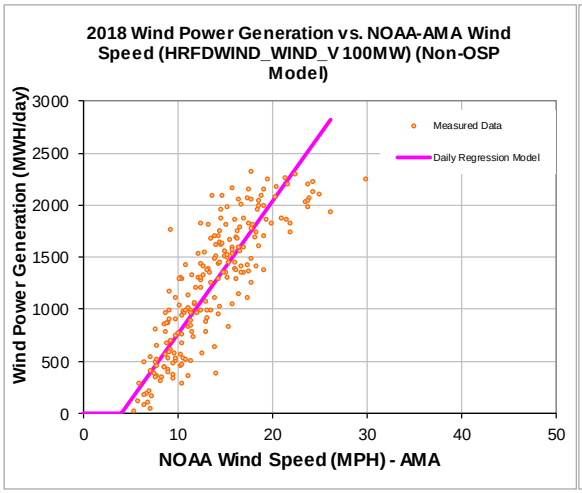
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-264.87
Left Slope (MWh/mph-day)	109.63
RMSE (MWh/day)	320.94
R2	0.71
CV-RMSE	26.1%
Daily Maximum (MWh/day)	2400

OSP Model:

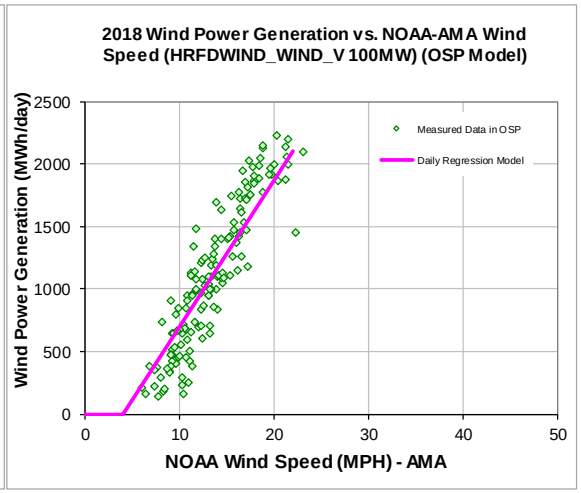
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-731.22
Left Slope (MWh/mph-day)	136.64
RMSE (MWh/day)	230.39
R2	0.84
CV-RMSE	20.8%
Daily Maximum (MWh/day)	2400

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
434,928	430,345

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,079	1,108

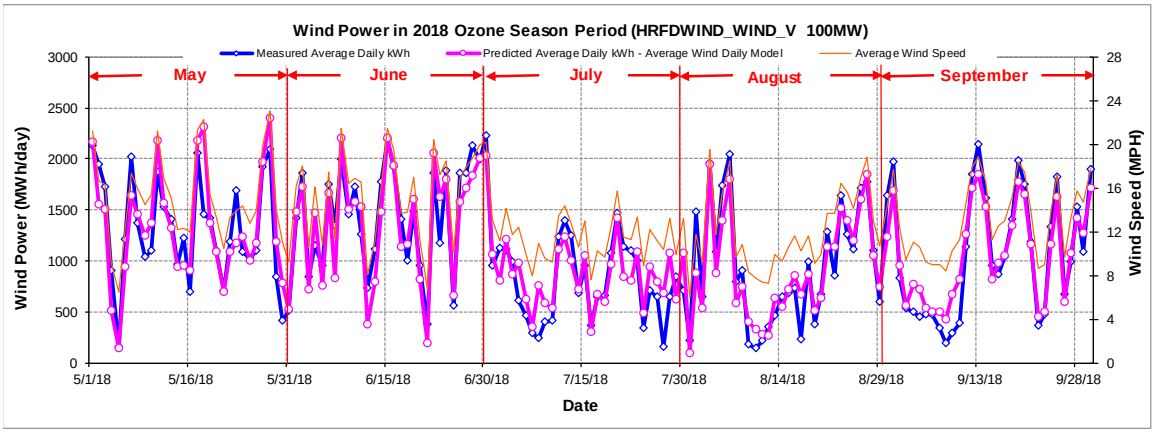
Figure A-167:HRFDWIND_WIND_V - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	39,887	35,014	12.22%	54%	47%
Feb-18	28	13.78	37,657	34,868	7.41%	56%	52%
Mar-18	31	14.64	40,833	41,551	-1.76%	55%	56%
Apr-18	30	17.03	43,657	47,817	-9.53%	61%	66%
May-18	31	14.93	39,854	40,561	-1.78%	54%	55%
Jun-18	30	15.70	44,162	42,409	3.97%	61%	59%
Jul-18	31	11.32	23,773	25,292	-6.39%	32%	34%
Aug-18	31	12.42	31,225	29,921	4.18%	42%	40%
Sep-18	30	13.00	30,526	31,341	-2.67%	42%	44%
Oct-18	31	12.69	29,951	34,923	-16.60%	40%	47%
Nov-18	30	12.53	35,571	33,260	6.50%	49%	46%
Dec-18	31	12.16	33,248	32,504	2.24%	45%	44%
Total	365	13.56	430,345	429,461	0.21%	49%	49%
Total in OSP (07/15-09/15)	153	13.46	169,541	169,524	0.01%	46%	46%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

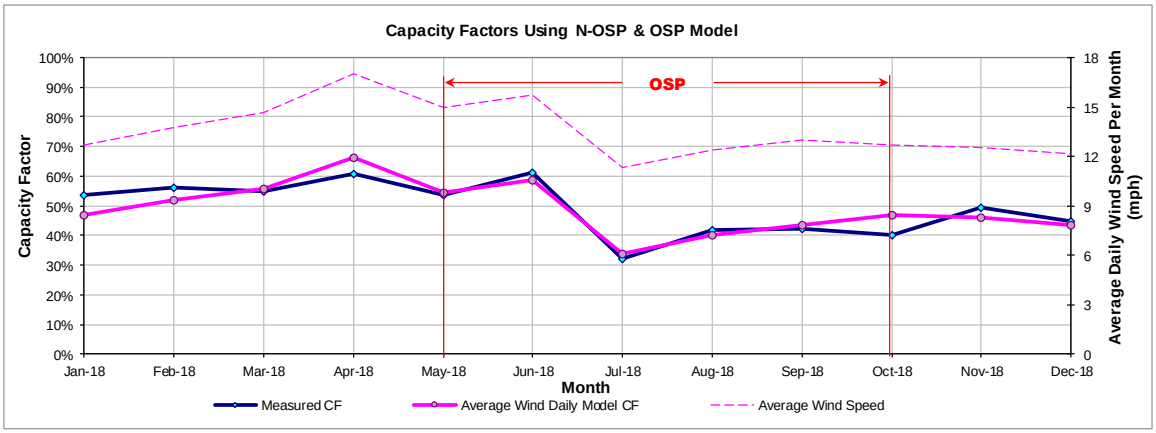


Figure A-168:HRFDWIND_WIND_V - Predicted Wind Power and Capacity Factor Using Daily Models

A.44 Hidalgo & Starr Wind

A.44.1 Hidalgo & Starr Wind - MIRASOLE_MIR11

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MIRASOLE_MIR11	Wind	McCook	HIDALGO	EDP Renovaveis	Hidalgo & Starr Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
26 Vestas 2 MW	ERCOT	S	Dec-16	South	CRP	52

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

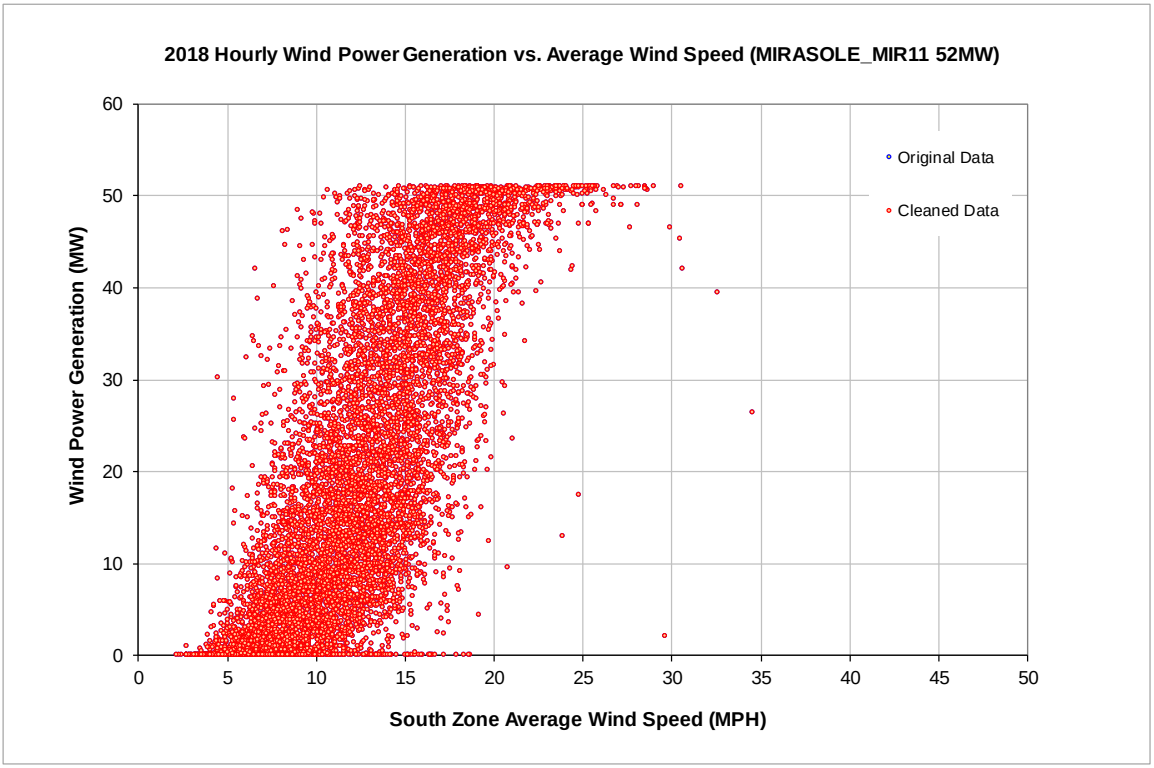


Figure A-169:MIRASOLE_MIR11 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

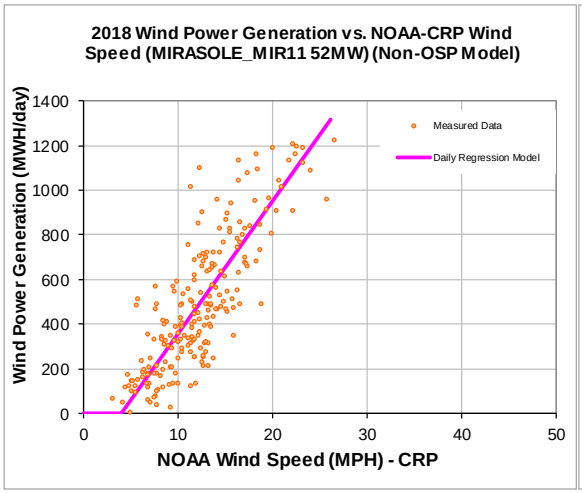
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-184.17
Left Slope (MWh/mph-day)	55.08
RMSE (MWh/day)	171.75
R2	0.68
CV-RMSE	35.0%
Daily Maximum (MWh/day)	1248

OSP Model:

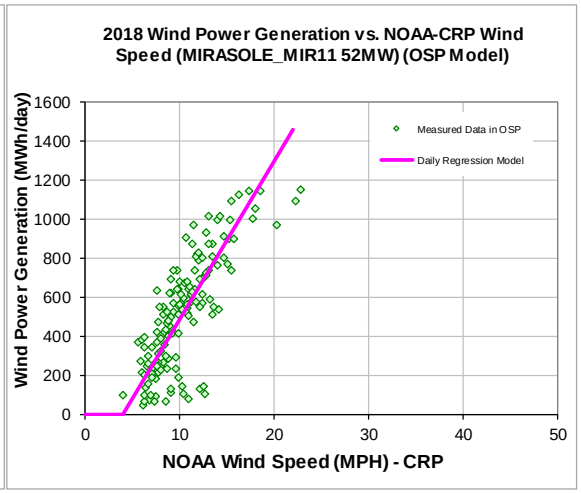
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-193.84
Left Slope (MWh/mph-day)	68.41
RMSE (MWh/day)	173.72
R2	0.63
CV-RMSE	33.5%
Daily Maximum (MWh/day)	1248

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
180,924	183,276

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
502	518

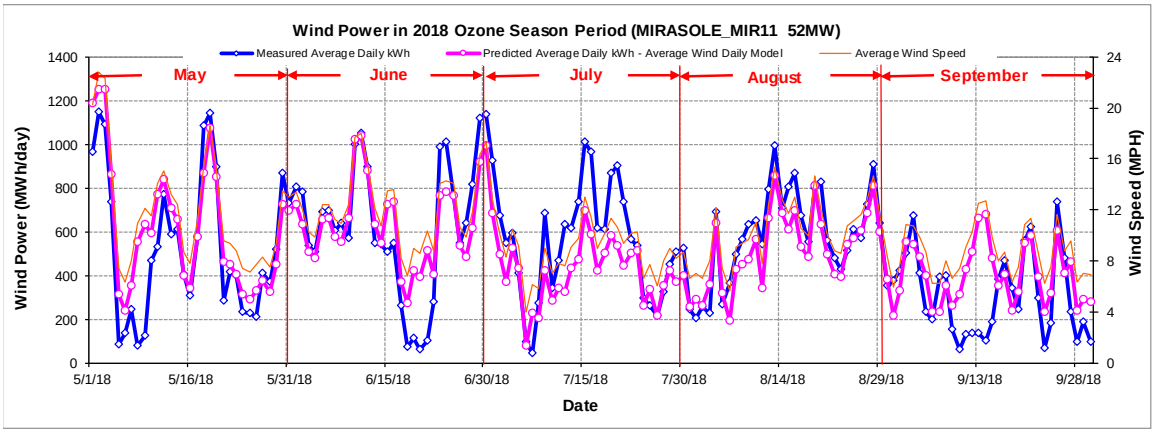
Figure A-170:MIRASOLE_MIR11 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	13,529	13,246	2.09%	35%	34%
Feb-18	28	14.08	14,884	16,537	-11.10%	43%	47%
Mar-18	31	13.69	17,325	17,674	-2.01%	45%	46%
Apr-18	30	14.08	17,403	17,738	-1.93%	46%	47%
May-18	31	11.95	16,635	19,121	-14.94%	43%	49%
Jun-18	30	12.21	18,819	19,241	-2.24%	50%	51%
Jul-18	31	8.81	16,656	12,674	23.90%	43%	33%
Aug-18	31	10.35	18,064	15,935	11.79%	47%	41%
Sep-18	30	8.73	9,090	12,090	-33.00%	24%	32%
Oct-18	31	10.87	14,311	12,866	10.10%	37%	33%
Nov-18	30	10.83	12,751	12,379	2.92%	34%	33%
Dec-18	31	11.29	13,808	13,563	1.78%	36%	35%
Total	365	11.48	183,276	183,064	0.12%	40%	40%
Total in OSP (07/15-09/15)	153	10.41	79,264	79,061	0.26%	42%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

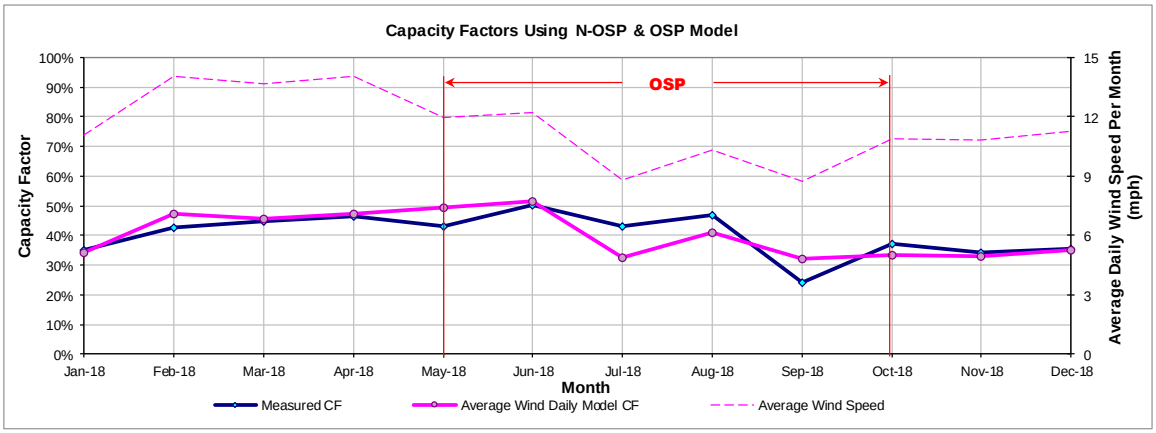


Figure A-171:MIRASOLE_MIR11 - Predicted Wind Power and Capacity Factor Using Daily Models

A.44.2 Hidalgo & Starr Wind - MIRASOLE_MIR12

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MIRASOLE_MIR12	Wind	McCook	HIDALGO	EDP Renovaveis	Hidalgo & Starr Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
49 Vestas 2 MW	ERCOT	S	Dec-16	South	CRP	98

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

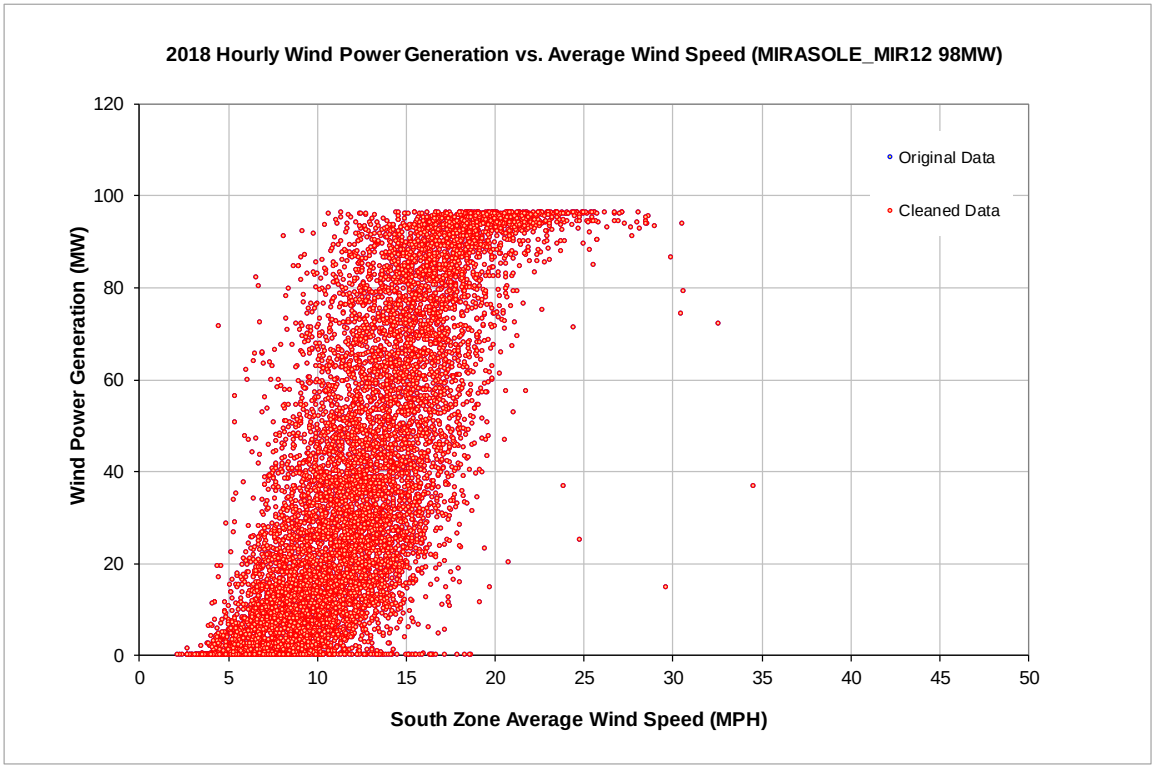


Figure A-172:MIRASOLE_MIR12 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

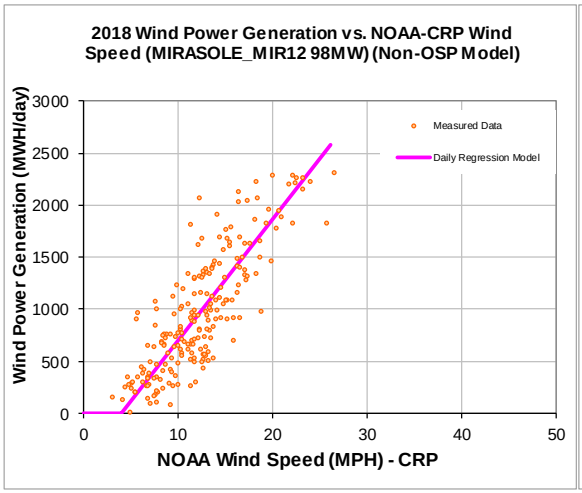
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-334.79
Left Slope (MWh/mph-day)	105.98
RMSE (MWh/day)	321.03
R2	0.69
CV-RMSE	33.3%
Daily Maximum (MWh/day)	2352

OSP Model:

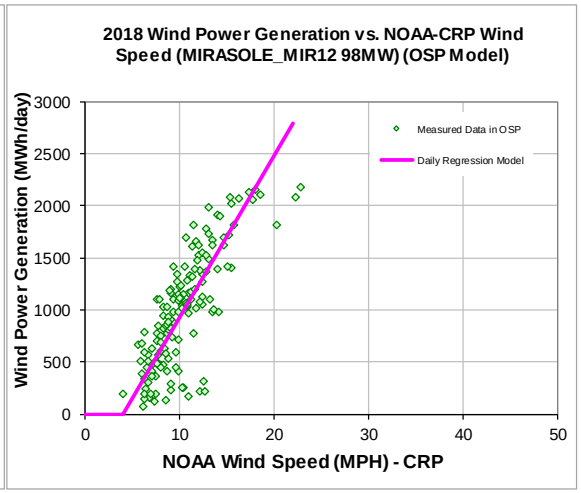
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-386.93
Left Slope (MWh/mph-day)	132.47
RMSE (MWh/day)	331.07
R2	0.63
CV-RMSE	33.4%
Daily Maximum (MWh/day)	2352

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
351,438	355,975

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
960	992

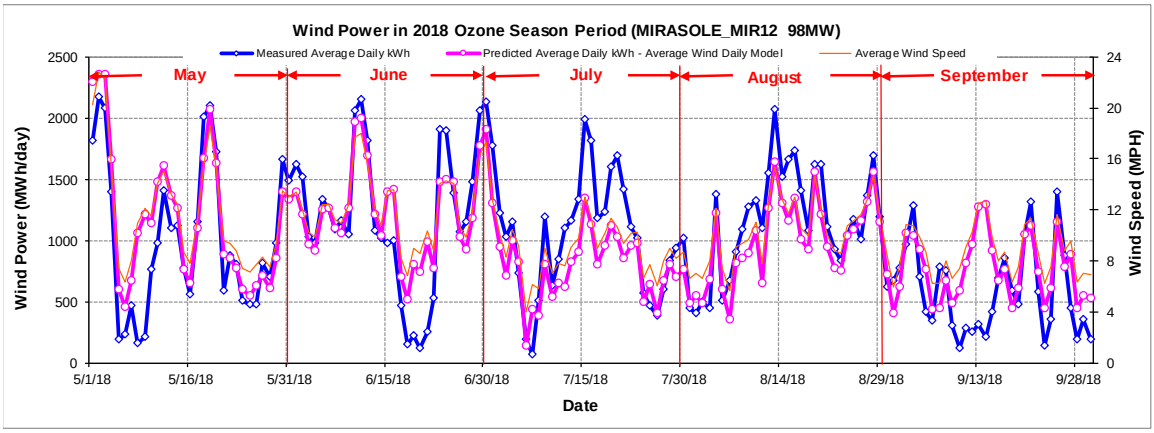
Figure A-173:MIRASOLE_MIR12 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	26,411	26,090	1.22%	36%	36%
Feb-18	28	14.08	29,463	32,294	-9.61%	45%	49%
Mar-18	31	13.69	33,506	34,608	-3.29%	46%	47%
Apr-18	30	14.08	33,578	34,680	-3.28%	48%	49%
May-18	31	11.95	31,771	36,562	-15.08%	44%	50%
Jun-18	30	12.21	35,933	36,913	-2.73%	51%	52%
Jul-18	31	8.81	31,207	24,185	22.50%	43%	33%
Aug-18	31	10.35	35,448	30,499	13.96%	49%	42%
Sep-18	30	8.73	17,365	23,065	-32.82%	25%	33%
Oct-18	31	10.87	28,069	25,339	9.73%	38%	35%
Nov-18	30	10.83	25,161	24,403	3.01%	36%	35%
Dec-18	31	11.29	28,062	26,700	4.85%	38%	37%
Total	365	11.48	355,975	355,337	0.18%	41%	41%
Total in OSP (07/15-09/15)	153	10.41	151,724	151,224	0.33%	42%	42%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

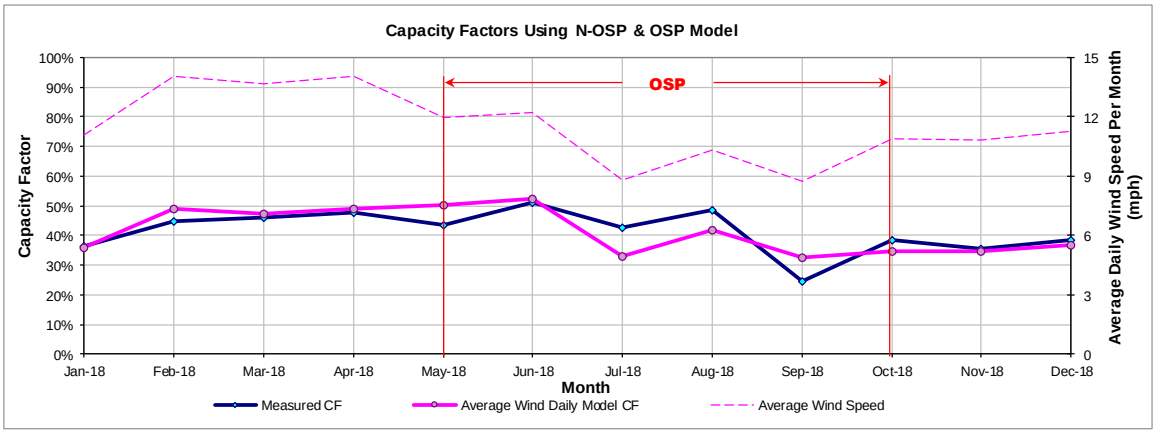


Figure A-174:MIRASOLE_MIR12 - Predicted Wind Power and Capacity Factor Using Daily Models

A.44.3 Hidalgo & Starr Wind - MIRASOLE_MIR21

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MIRASOLE_MIR21	Wind	McCook	HIDALGO	EDP Renovaveis	Hidalgo & Starr Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 Vestas 2 MW	ERCOT	S	Dec-16	South	CRP	100

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

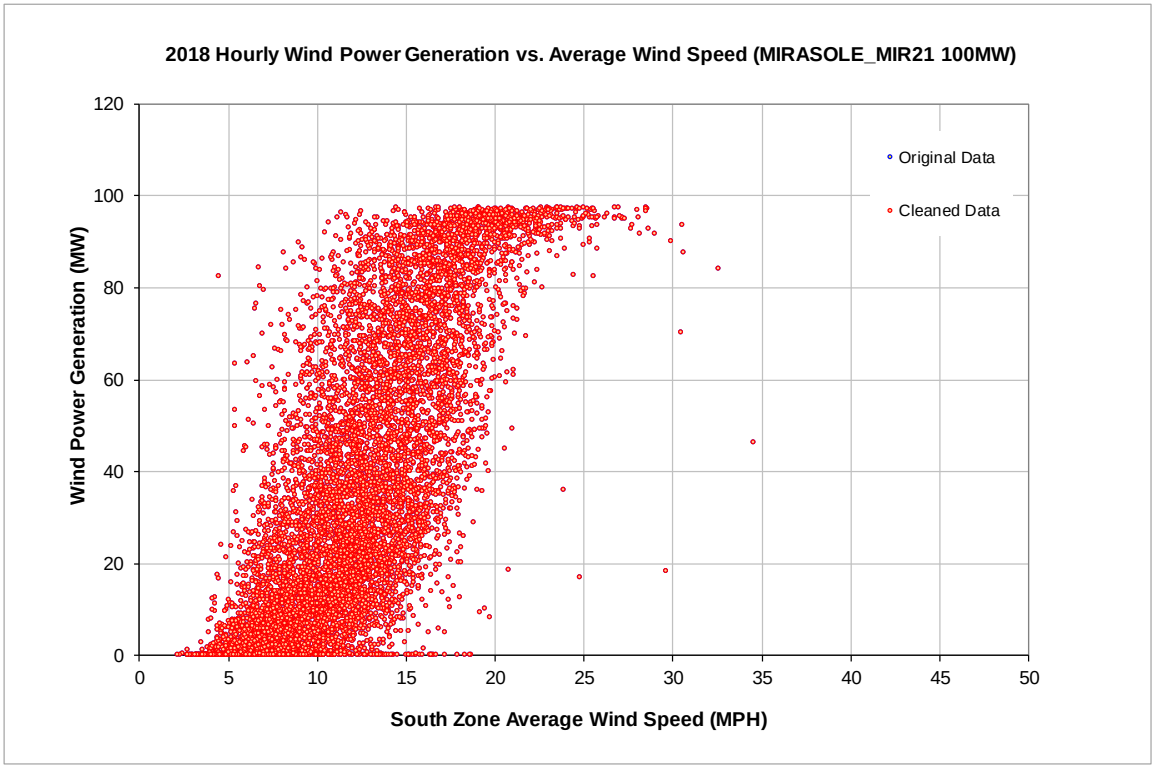


Figure A-175:MIRASOLE_MIR21 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

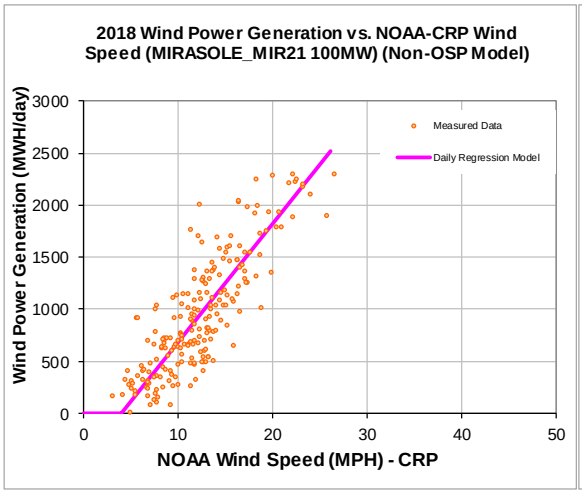
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-335.24
Left Slope (MWh/mph-day)	104.23
RMSE (MWh/day)	309.79
R2	0.70
CV-RMSE	32.9%
Daily Maximum (MWh/day)	2400

OSP Model:

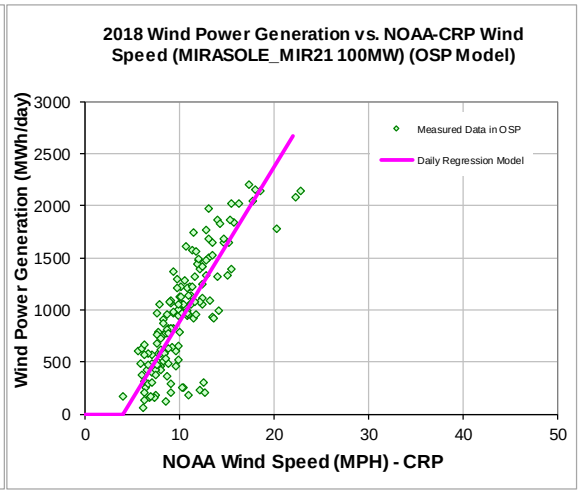
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-434.77
Left Slope (MWh/mph-day)	133.24
RMSE (MWh/day)	310.68
R2	0.66
CV-RMSE	32.6%
Daily Maximum (MWh/day)	2400

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
340,684	345,260

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
920	952

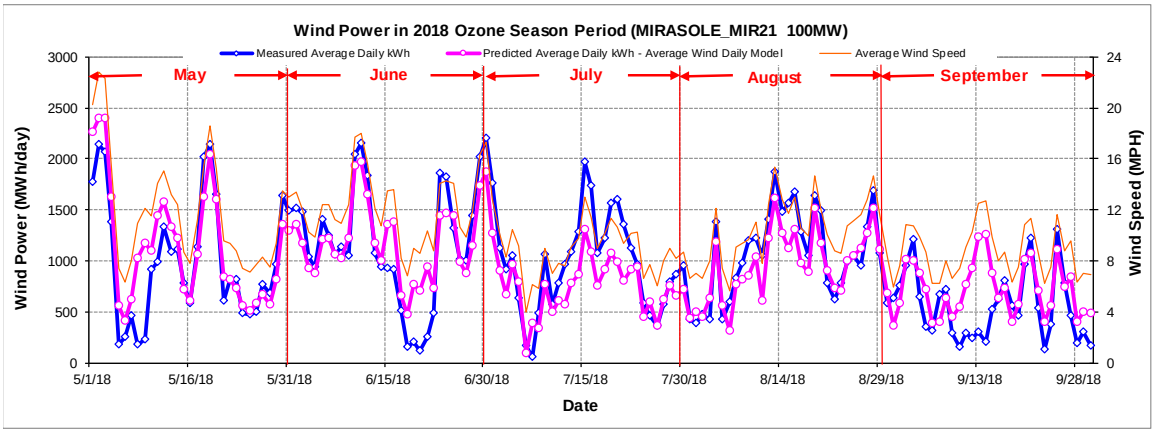
Figure A-176:MIRASOLE_MIR21 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	26,307	25,476	3.16%	35%	34%
Feb-18	28	14.08	28,813	31,689	-9.98%	43%	47%
Mar-18	31	13.69	32,417	33,854	-4.43%	44%	46%
Apr-18	30	14.08	33,265	33,963	-2.10%	46%	47%
May-18	31	11.95	31,618	35,521	-12.35%	42%	48%
Jun-18	30	12.21	35,132	35,760	-1.79%	49%	50%
Jul-18	31	8.81	29,553	22,912	22.47%	40%	31%
Aug-18	31	10.35	32,851	29,263	10.92%	44%	39%
Sep-18	30	8.73	16,478	21,832	-32.49%	23%	30%
Oct-18	31	10.87	26,721	24,743	7.40%	36%	33%
Nov-18	30	10.83	24,911	23,823	4.37%	35%	33%
Dec-18	31	11.29	27,194	26,076	4.11%	37%	35%
Total	365	11.48	345,260	344,913	0.10%	39%	39%
Total in OSP (07/15-09/15)	153	10.41	145,632	145,289	0.24%	40%	40%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

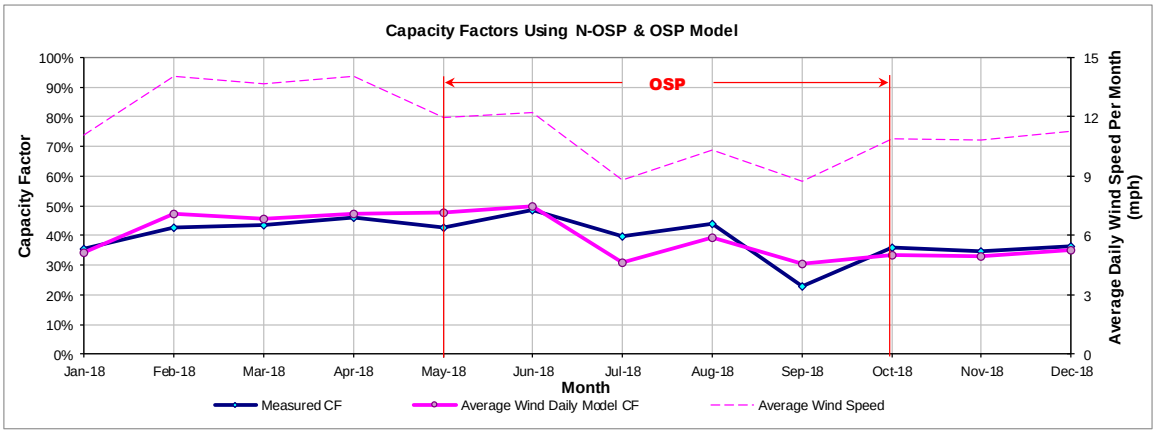


Figure A-177:MIRASOLE_MIR21 - Predicted Wind Power and Capacity Factor Using Daily Models

A.45 Horse Creek Wind

A.45.1 Horse Creek Wind - HORSECRK_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HORSECRK_UNIT1	Wind	-	HASKELL	Lincoln Clean Energy	Horse Creek Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
57 GE 2.3 MW	ERCOT	W	Jan-17	West	ABI	131.1

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

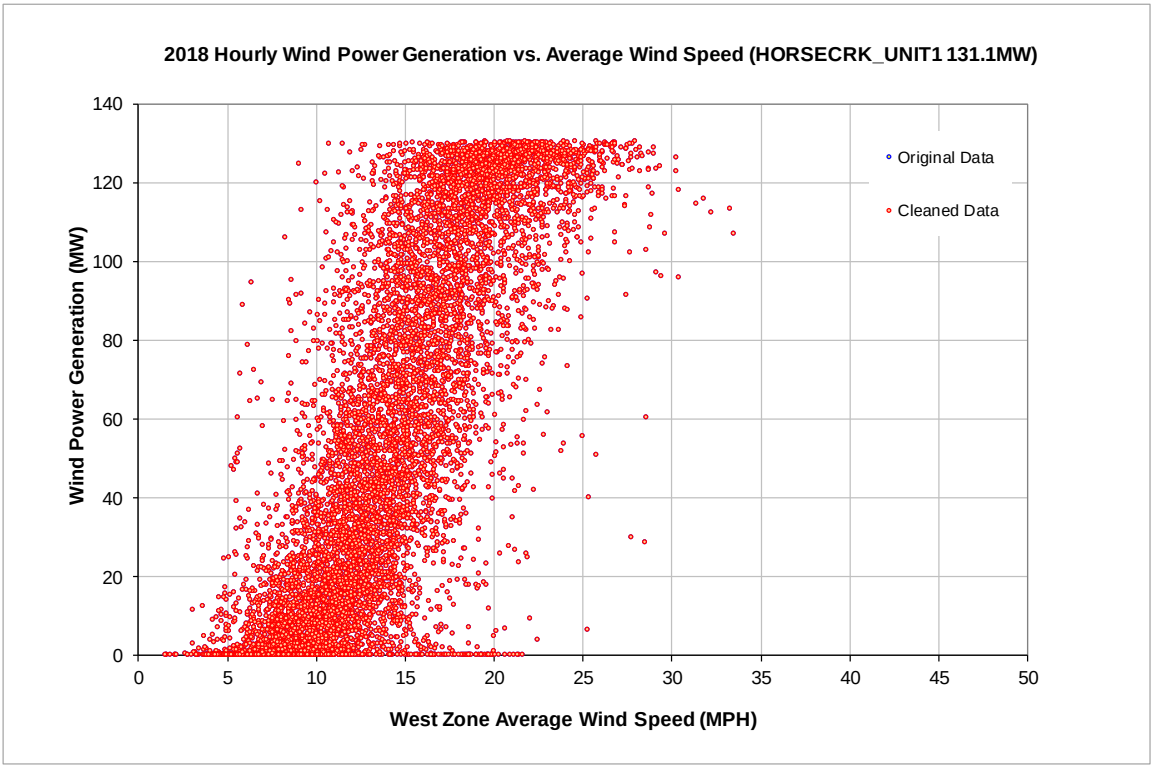


Figure A-178:HORSECRK_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

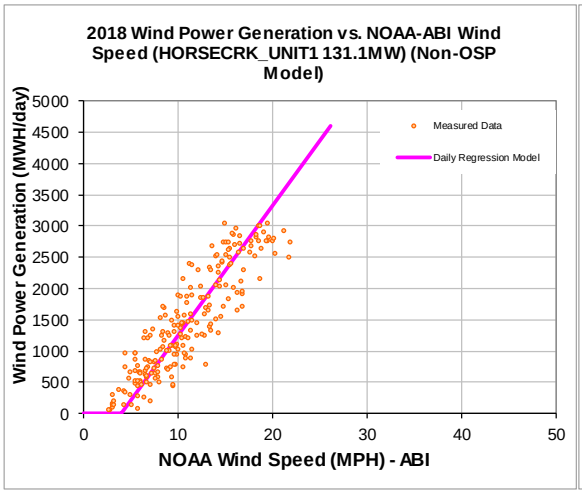
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-354.62
Left Slope (MWh/mph-day)	164.46
RMSE (MWh/day)	372.51
R2	0.80
CV-RMSE	25.8%
Daily Maximum (MWh/day)	3146

OSP Model:

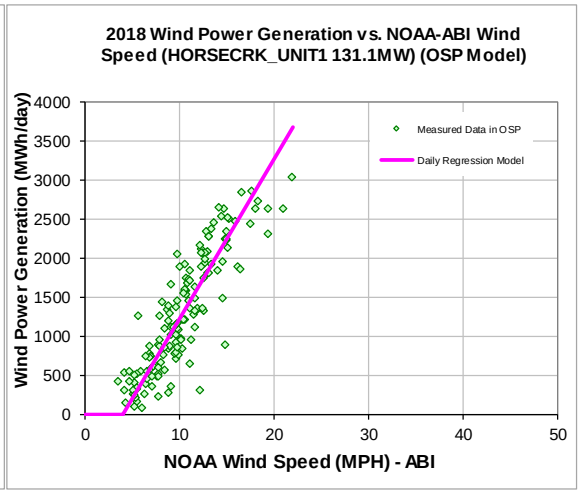
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-557.07
Left Slope (MWh/mph-day)	178.91
RMSE (MWh/day)	362.37
R2	0.77
CV-RMSE	28.0%
Daily Maximum (MWh/day)	3146

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
550,080	502,249

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,322	1,296

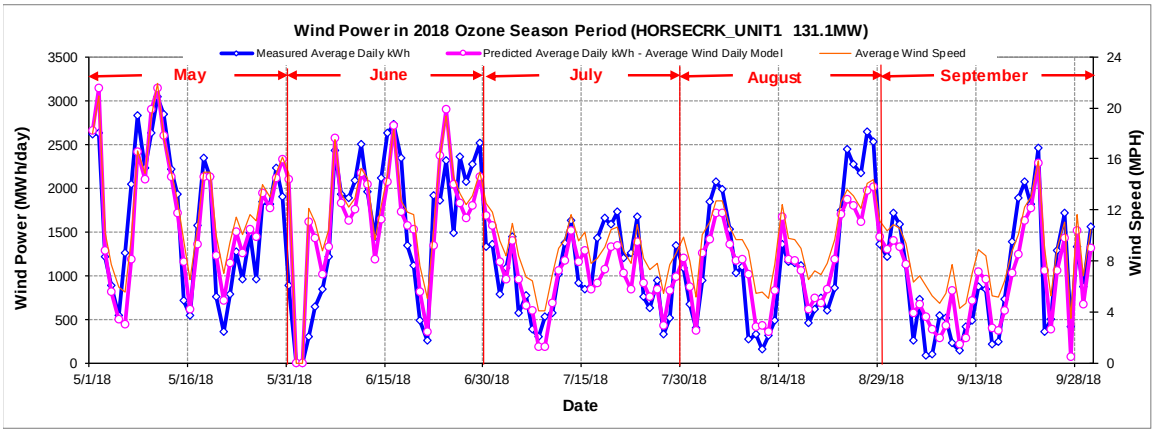
Figure A-179:HORSECRK_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	50,332	44,929	10.74%	52%	46%
Feb-18	28	11.00	39,705	40,709	-2.53%	45%	46%
Mar-18	31	11.92	50,236	49,801	0.87%	52%	51%
Apr-18	30	13.18	50,644	54,225	-7.07%	54%	57%
May-18	31	12.78	51,301	53,361	-4.02%	53%	55%
Jun-18	30	12.83	48,224	48,654	-0.89%	51%	52%
Jul-18	31	8.52	31,113	29,986	3.62%	32%	31%
Aug-18	31	9.85	38,435	37,352	2.82%	39%	38%
Sep-18	30	7.97	26,578	26,041	2.02%	28%	28%
Oct-18	31	9.35	33,714	36,692	-8.83%	35%	38%
Nov-18	30	10.05	41,168	38,938	5.42%	44%	41%
Dec-18	31	10.23	40,799	41,160	-0.88%	42%	42%
Total	365	10.70	502,249	501,848	0.08%	44%	44%
Total in OSP (07/15-09/15)	151	10.36	195,651	195,395	0.13%	41%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

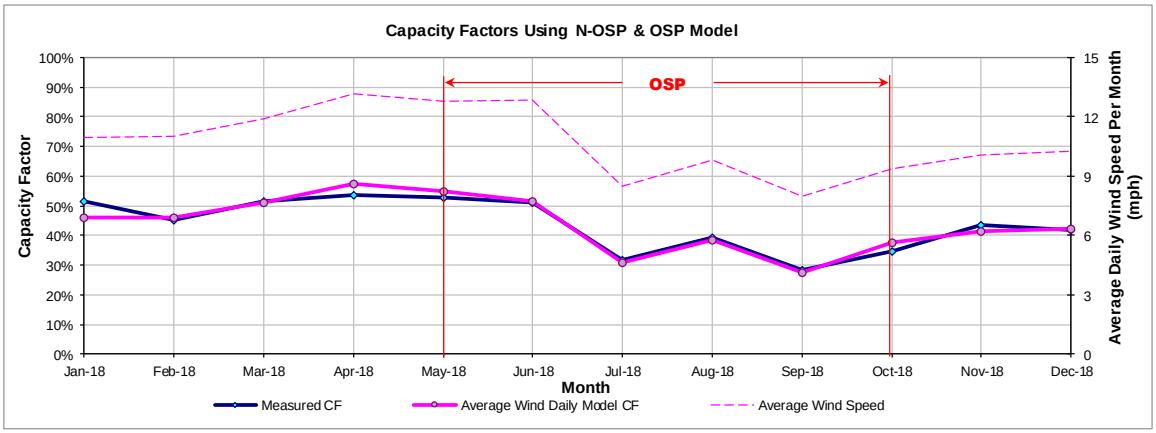


Figure A-180:HORSECRK_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.45.2 Horse Creek Wind - HORSECRK_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HORSECRK_UNIT2	Wind	-	HASKELL	Lincoln Clean Energy	Horse Creek Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
43 GE 2.3 MW	ERCOT	W	Jan-17	West	ABI	98.9

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

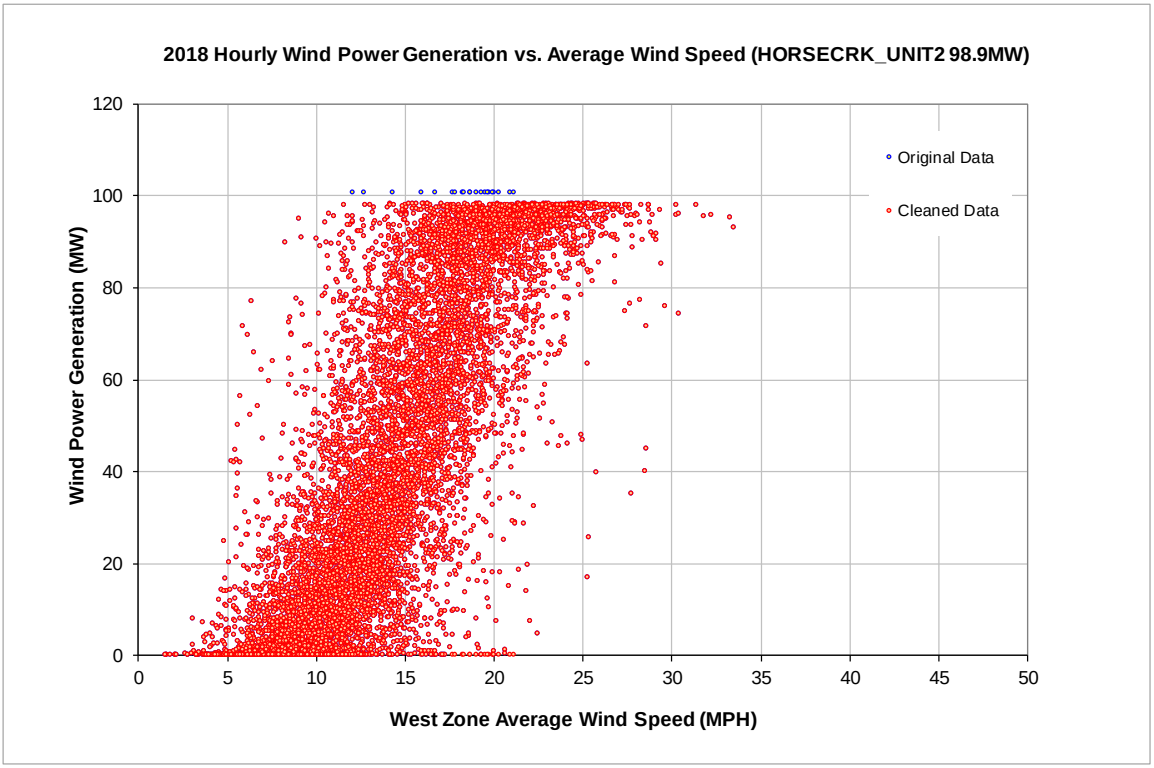


Figure A-181:HORSECRK_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

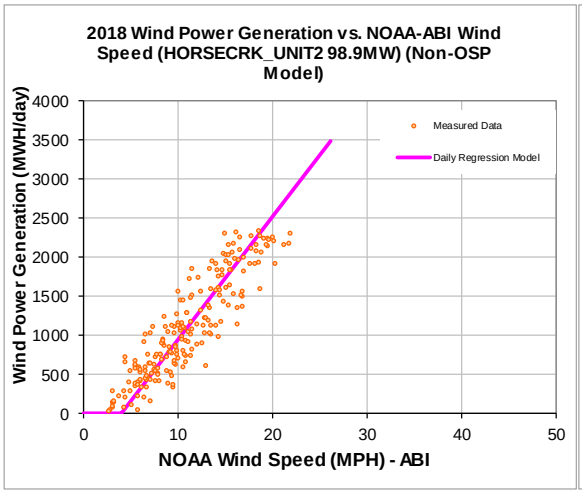
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-286.93
Left Slope (MWh/mph-day)	126.14
RMSE (MWh/day)	273.58
R2	0.82
CV-RMSE	25.0%
Daily Maximum (MWh/day)	2374

OSP Model:

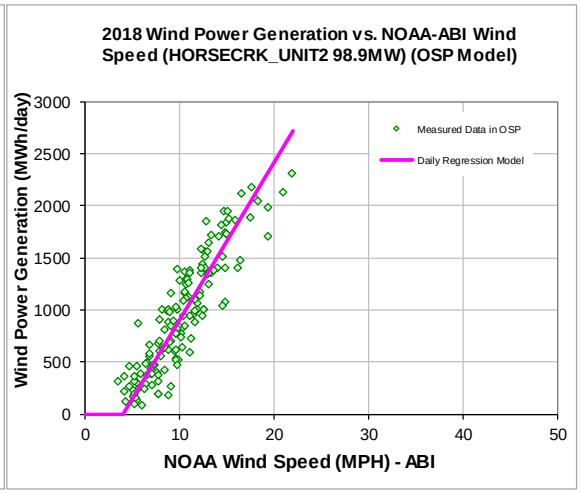
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-444.70
Left Slope (MWh/mph-day)	135.58
RMSE (MWh/day)	236.77
R2	0.82
CV-RMSE	24.6%
Daily Maximum (MWh/day)	2374

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
413,442	378,421

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
980	963

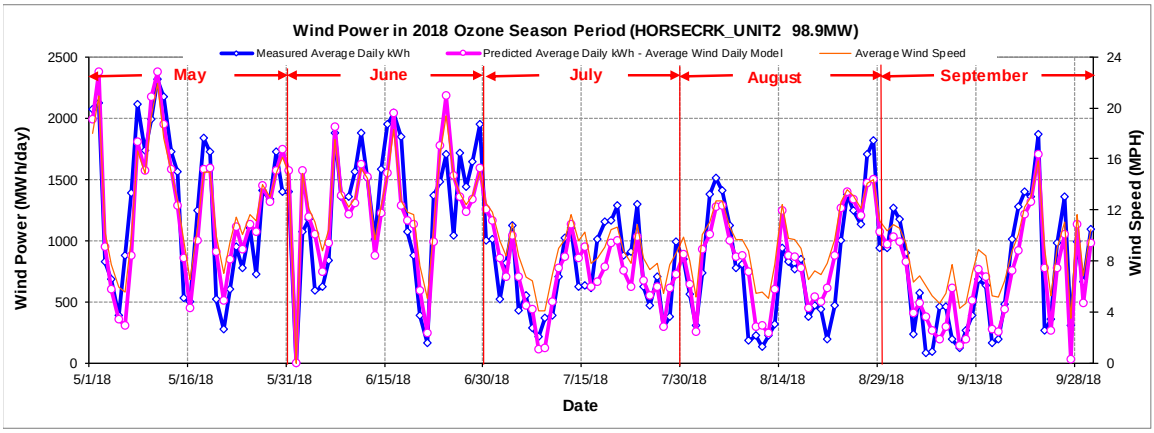
Figure A-182:HORSECRK_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	37,814	33,999	10.09%	51%	46%
Feb-18	28	11.00	30,070	30,807	-2.45%	45%	46%
Mar-18	31	11.92	38,260	37,736	1.37%	52%	51%
Apr-18	30	13.18	40,627	41,094	-1.15%	57%	58%
May-18	31	12.78	39,909	39,760	0.37%	54%	54%
Jun-18	30	12.90	38,020	37,803	0.57%	53%	53%
Jul-18	31	8.52	22,836	22,023	3.56%	31%	30%
Aug-18	31	9.85	25,764	27,604	-7.14%	35%	38%
Sep-18	30	7.97	19,888	19,056	4.19%	28%	27%
Oct-18	31	9.35	24,778	27,681	-11.71%	34%	38%
Nov-18	30	10.05	29,369	29,419	-0.17%	41%	41%
Dec-18	31	10.23	31,085	31,098	-0.04%	42%	42%
Total	365	10.71	378,421	378,080	0.09%	44%	44%
Total in OSP (07/15-09/15)	152	10.39	146,418	146,247	0.12%	41%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

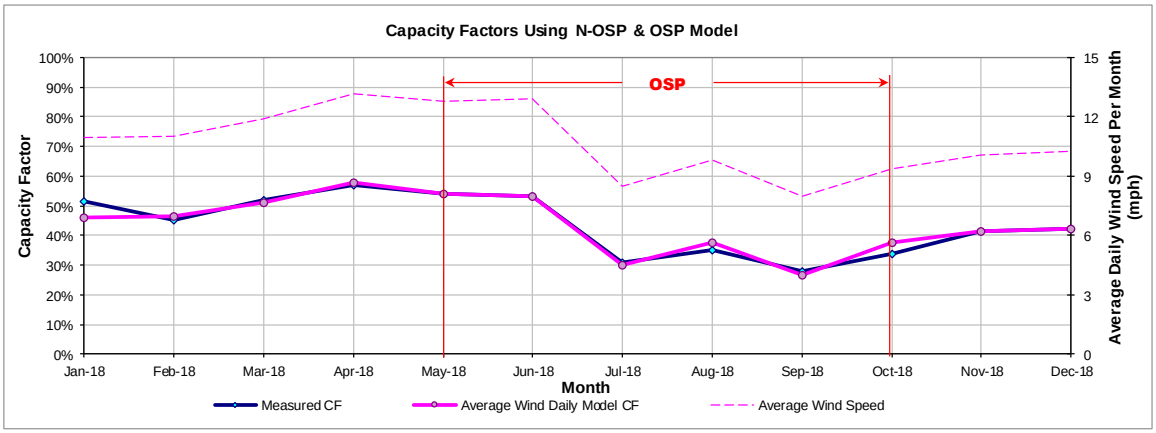


Figure A-183:HORSECRK_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.46 Horse Hollow Phase 1

A.46.1 Horse Hollow Phase 1 - H_HOLLOW_WND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
H_HOLLOW_WND1	Wind	Abilene	TAYLOR	NextEra	Horse Hollow Phase 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
142 GE Energy 1.5 MW	ERCOT	W	Oct-05	West	ABI	206.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

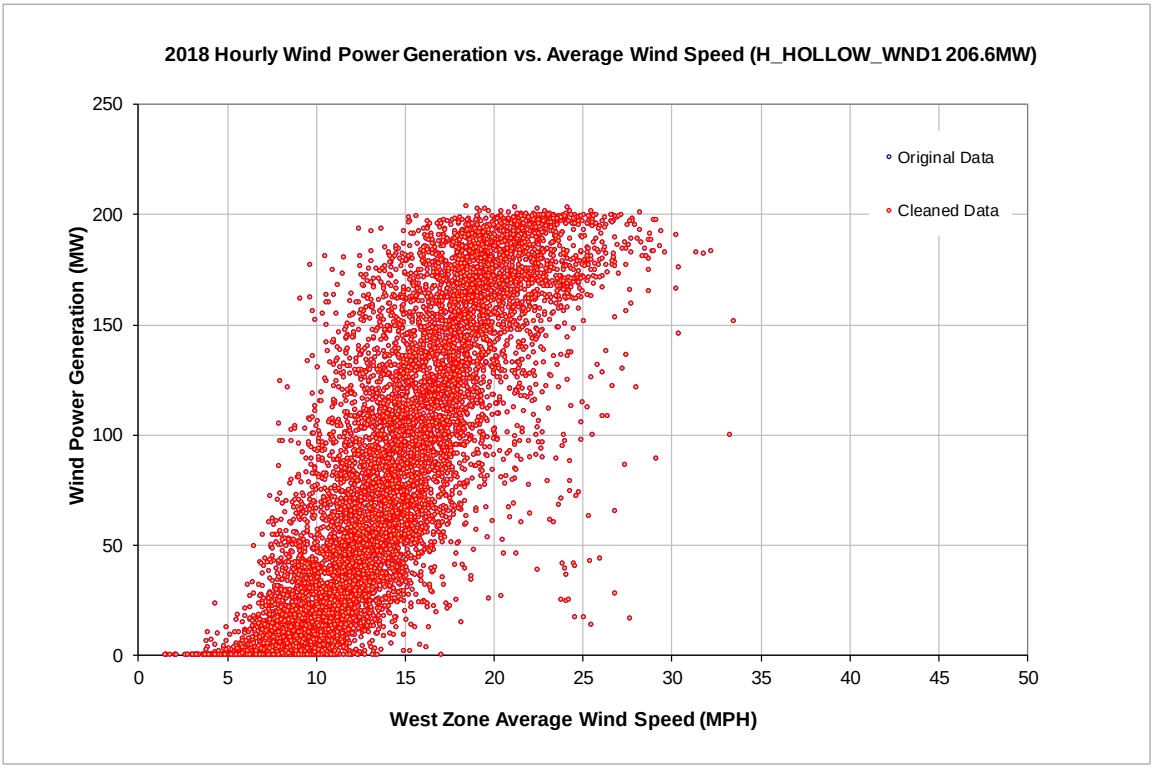


Figure A-184:H_HOLLOW_WND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

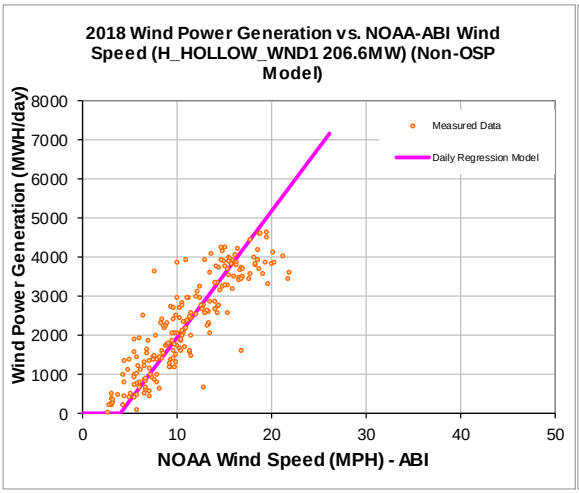
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-304.86
Left Slope (MWh/mph-day)	233.72
RMSE (MWh/day)	582.55
R2	0.77
CV-RMSE	25.7%
Daily Maximum (MWh/day)	4958

OSP Model:

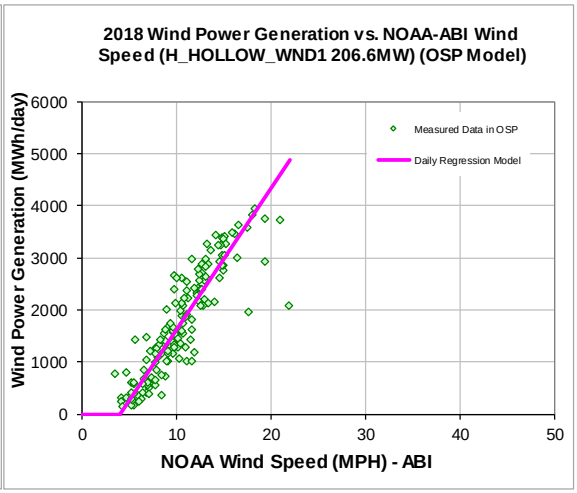
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-777.67
Left Slope (MWh/mph-day)	241.38
RMSE (MWh/day)	479.11
R2	0.78
CV-RMSE	27.6%
Daily Maximum (MWh/day)	4958

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
805,632	740,446

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,758	1,733

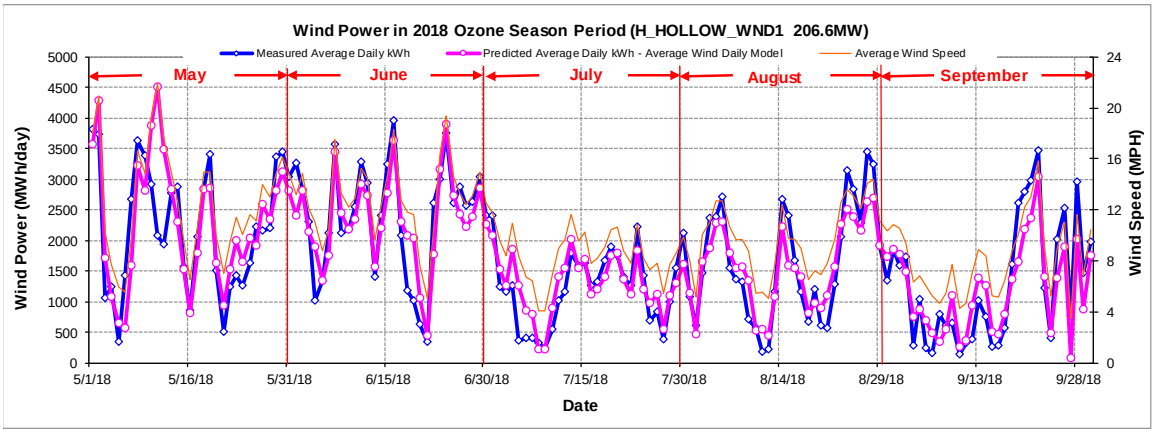
Figure A-185:H_HOLLOW_WND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.23	73,232	67,304	8.09%	48%	44%
Feb-18	28	11.00	62,959	63,431	-0.75%	45%	46%
Mar-18	31	11.92	75,089	76,949	-2.48%	49%	50%
Apr-18	30	13.18	74,017	83,243	-12.46%	50%	56%
May-18	31	12.78	68,517	71,528	-4.40%	45%	47%
Jun-18	30	12.90	71,109	70,113	1.40%	48%	47%
Jul-18	31	8.52	37,280	39,646	-6.35%	24%	26%
Aug-18	31	9.85	50,830	49,583	2.45%	33%	32%
Sep-18	30	7.97	37,484	34,349	8.36%	25%	23%
Oct-18	31	9.35	59,903	58,319	2.64%	39%	38%
Nov-18	30	10.05	62,607	61,312	2.07%	42%	41%
Dec-18	31	10.23	67,419	64,669	4.08%	44%	42%
Total	365	10.74	740,446	740,446	0.00%	41%	41%
Total in OSP (07/15-09/15)	153	10.40	265,220	265,220	0.00%	35%	35%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

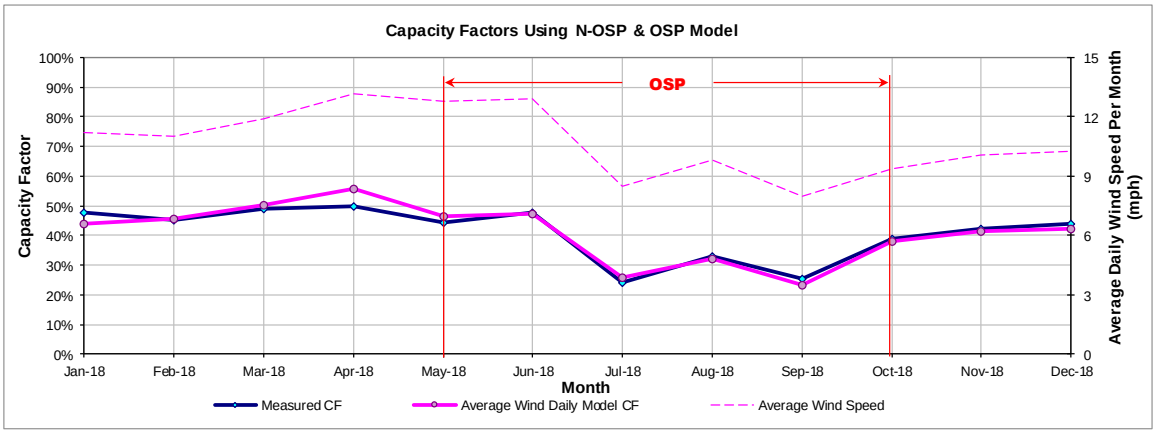


Figure A-186:H_HOLLOW_WND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.47 Horse Hollow Phase 2

A.47.1 Horse Hollow Phase 2 - HHOLLOW2_WIND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HHOLLOW2_WIND1	Wind	Abilene	TAYLOR	NextEra	Horse Hollow Phase 2

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
80 Siemens 2.3 MW	ERCOT	W	May-06	West	ABI	158

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

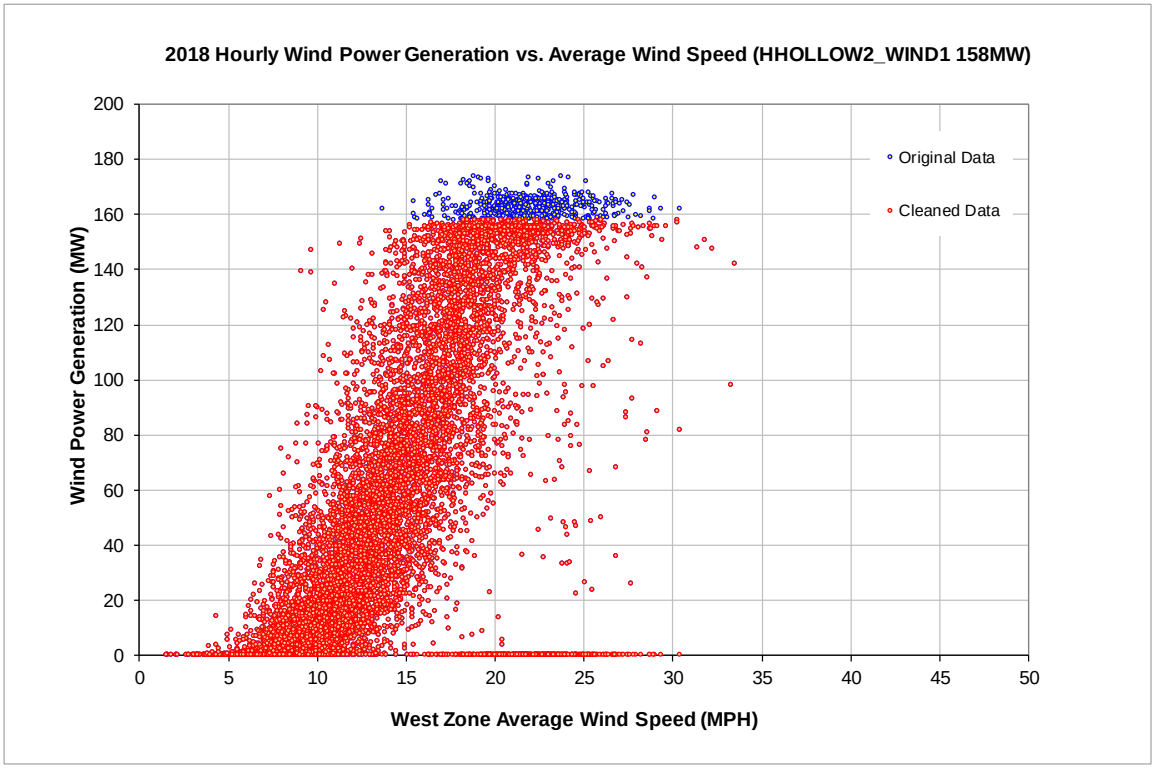


Figure A-187:HHOLLOW2_WIND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

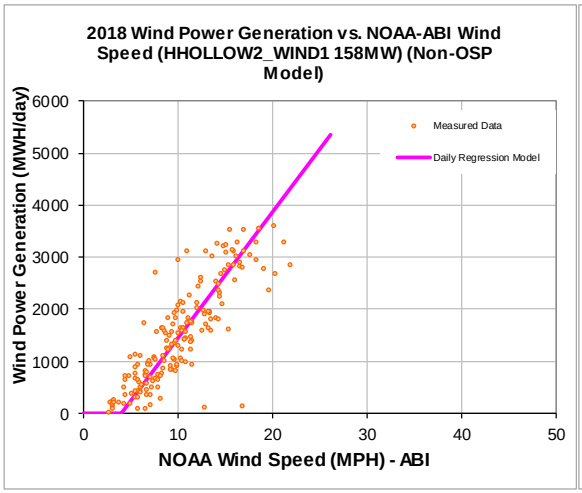
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-447.48
Left Slope (MWh/mph-day)	190.99
RMSE (MWh/day)	509.84
R2	0.71
CV-RMSE	34.2%
Daily Maximum (MWh/day)	3792

OSP Model:

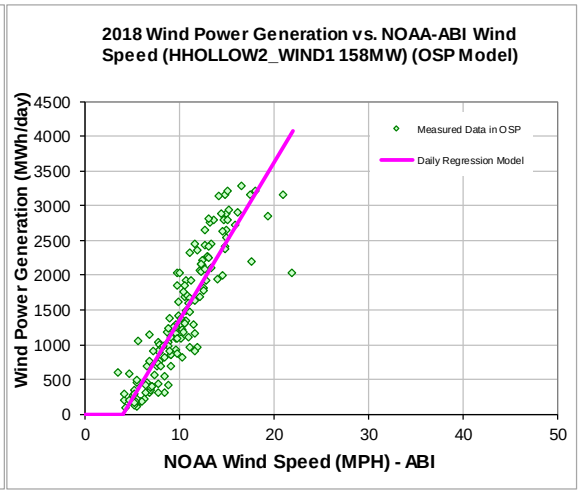
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-881.96
Left Slope (MWh/mph-day)	224.38
RMSE (MWh/day)	399.62
R2	0.80
CV-RMSE	28.2%
Daily Maximum (MWh/day)	3792

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
622,143	486,906

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,476	1,418

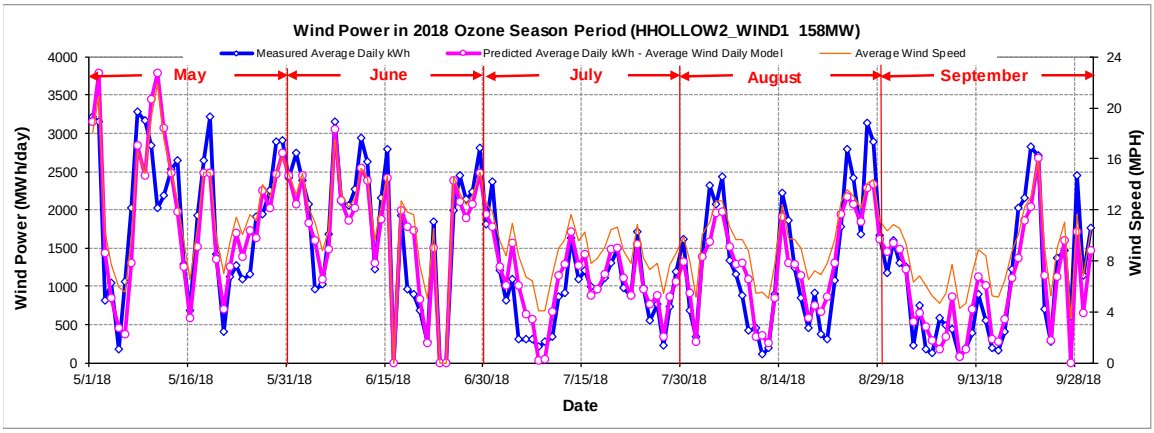
Figure A-188:HHOLLOW2_WIND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	9.91	37,071	34,700	6.39%	32%	30%
Feb-18	28	10.69	38,926	41,437	-6.45%	37%	39%
Mar-18	31	9.56	24,557	28,960	-17.93%	21%	25%
Apr-18	30	11.61	35,610	38,922	-9.30%	31%	34%
May-18	31	12.78	60,566	61,296	-1.21%	52%	52%
Jun-18	30	12.34	52,080	50,942	2.18%	46%	45%
Jul-18	31	8.52	28,987	31,923	-10.13%	25%	27%
Aug-18	31	9.85	42,297	41,160	2.69%	36%	35%
Sep-18	30	7.97	28,812	27,255	5.40%	25%	24%
Oct-18	31	9.35	44,746	41,508	7.24%	38%	35%
Nov-18	30	9.92	42,513	41,941	1.35%	37%	37%
Dec-18	31	10.23	50,741	46,696	7.97%	43%	40%
Total	365	10.19	486,906	486,739	0.03%	35%	35%
Total in OSP (07/15-09/15)	150	10.25	212,741	212,575	0.08%	37%	37%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

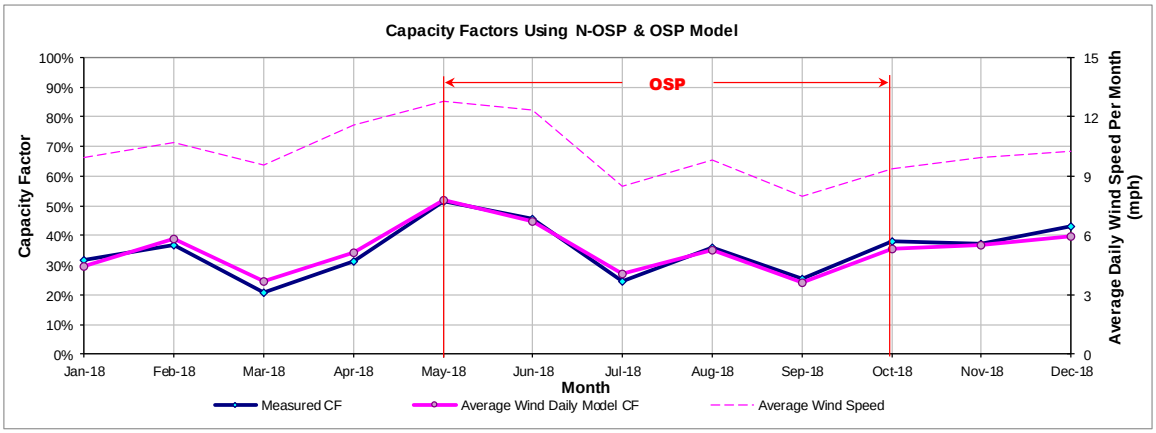


Figure A-189:HHOLLOW2_WIND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.47.2 Horse Hollow Phase 2 - HHOLLOW4_WND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HHOLLOW4_WND1	Wind	Abilene	TAYLOR	NextEra	Horse Hollow Phase 2

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 Siemens 2.3 MW	ERCOT	W	May-06	West	ABI	115

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

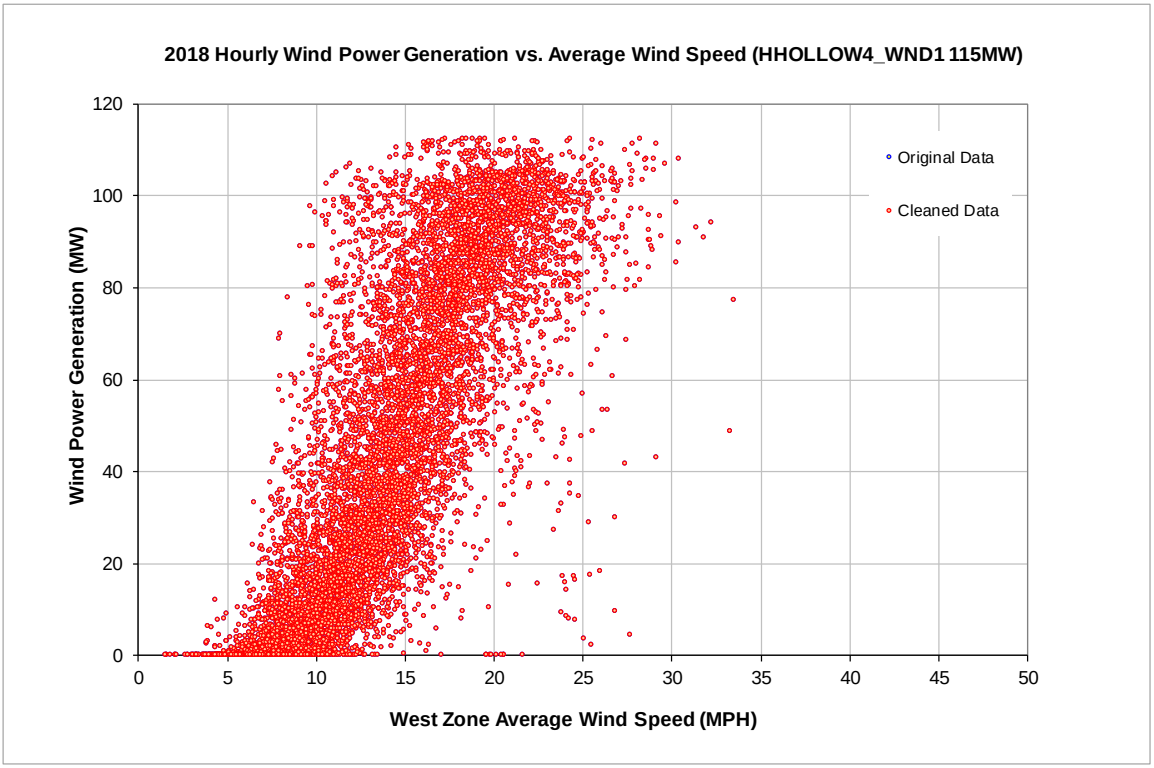


Figure A-190:HHOLLOW4_WND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

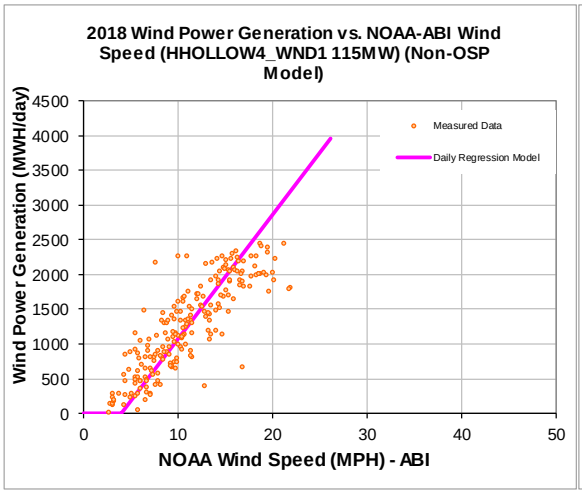
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-76.20
Left Slope (MWh/mph-day)	120.81
RMSE (MWh/day)	344.61
R2	0.72
CV-RMSE	27.5%
Daily Maximum (MWh/day)	2760

OSP Model:

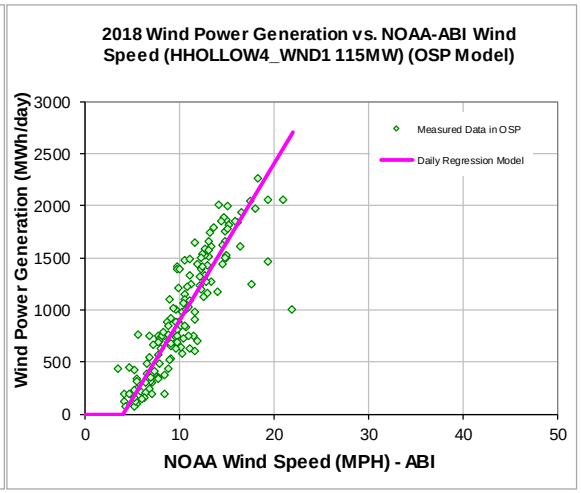
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-409.15
Left Slope (MWh/mph-day)	131.95
RMSE (MWh/day)	272.40
R2	0.76
CV-RMSE	28.3%
Daily Maximum (MWh/day)	2760

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
444,185	410,151

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
977	964

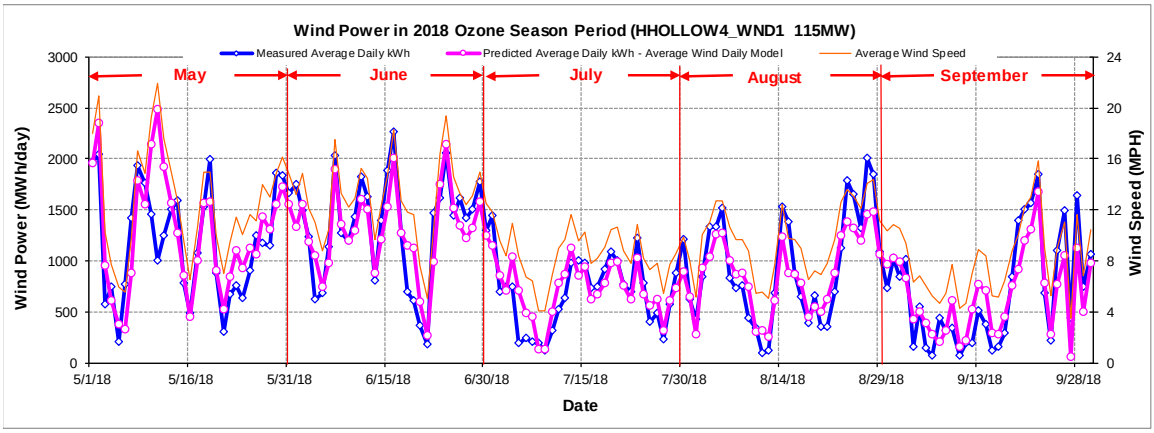
Figure A-191:HHOLLOW4_WND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.23	38,188	37,148	2.72%	45%	43%
Feb-18	28	11.00	34,525	35,065	-1.57%	45%	45%
Mar-18	31	11.92	41,144	42,296	-2.80%	48%	49%
Apr-18	30	13.18	39,338	45,468	-15.58%	48%	55%
May-18	31	12.78	37,099	39,596	-6.73%	43%	46%
Jun-18	30	12.90	39,886	38,806	2.71%	48%	47%
Jul-18	31	8.52	21,311	22,167	-4.02%	25%	26%
Aug-18	31	9.85	28,860	27,599	4.37%	34%	32%
Sep-18	30	7.97	20,269	19,256	5.00%	24%	23%
Oct-18	31	9.35	32,234	32,667	-1.34%	38%	38%
Nov-18	30	10.05	37,309	34,132	8.51%	45%	41%
Dec-18	31	10.23	39,989	35,949	10.10%	47%	42%
Total	365	10.74	410,151	410,151	0.00%	41%	41%
Total in OSP (07/15-09/15)	153	10.40	147,424	147,424	0.00%	35%	35%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

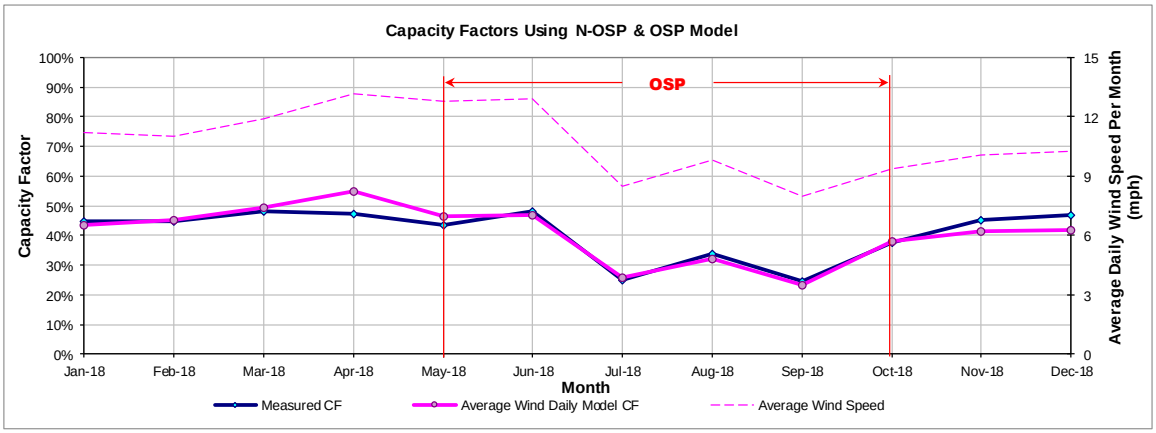


Figure A-192:HHOLLOW4_WND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.48 Horse Hollow Phase 3

A.48.1 Horse Hollow Phase 3 - HHOLLOW3_WND_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HHOLLOW3_WND_1	Wind	Abilene	TAYLOR	NextEra	Horse Hollow Phase 3

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
149 GE 1.5 MW	ERCOT	W	Sep-06	West	ABI	223.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

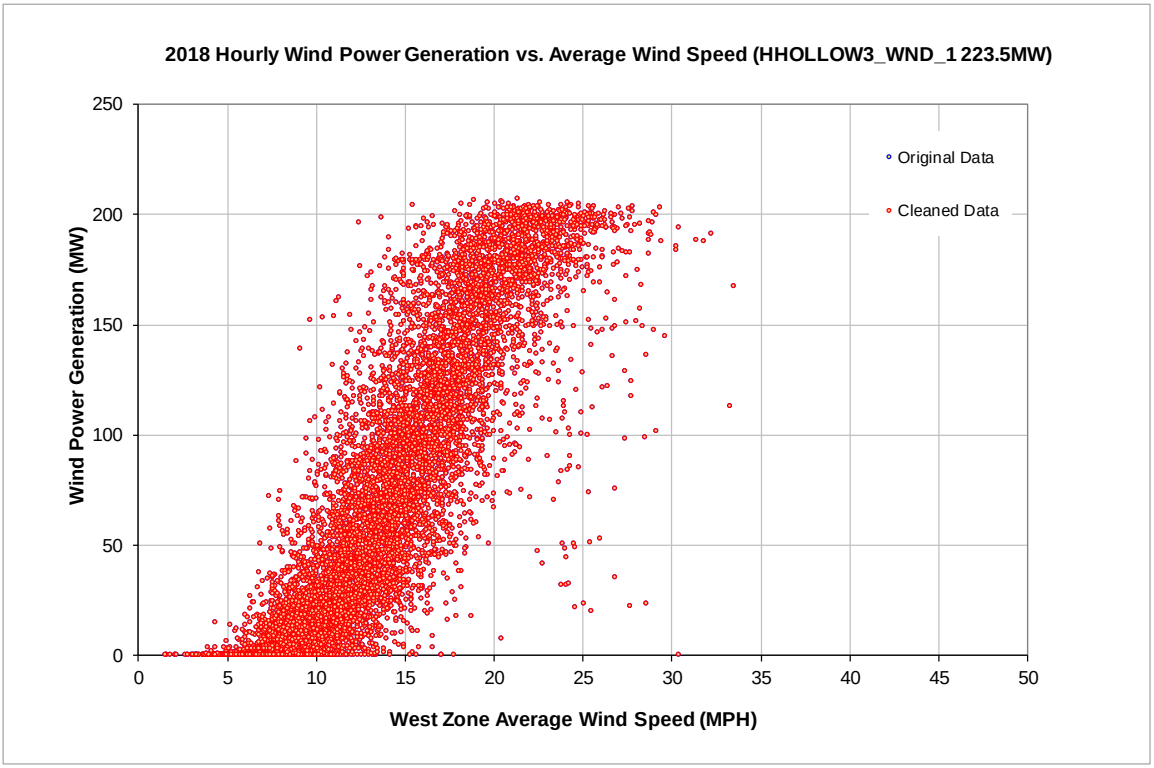


Figure A-193:HHOLLOW3_WND_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

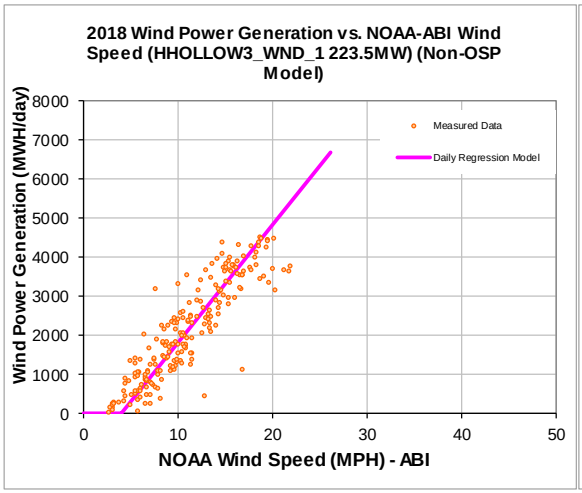
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-575.88
Left Slope (MWh/mph-day)	244.63
RMSE (MWh/day)	563.53
R2	0.80
CV-RMSE	26.7%
Daily Maximum (MWh/day)	5364

OSP Model:

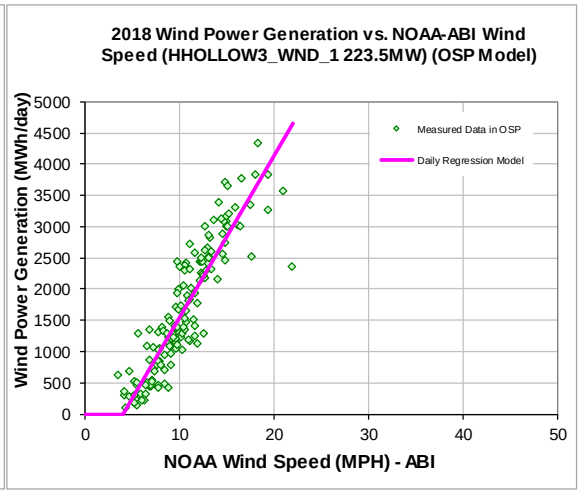
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-938.12
Left Slope (MWh/mph-day)	249.47
RMSE (MWh/day)	443.09
R2	0.81
CV-RMSE	26.7%
Daily Maximum (MWh/day)	5364

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
764,568	697,026

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,684	1,657

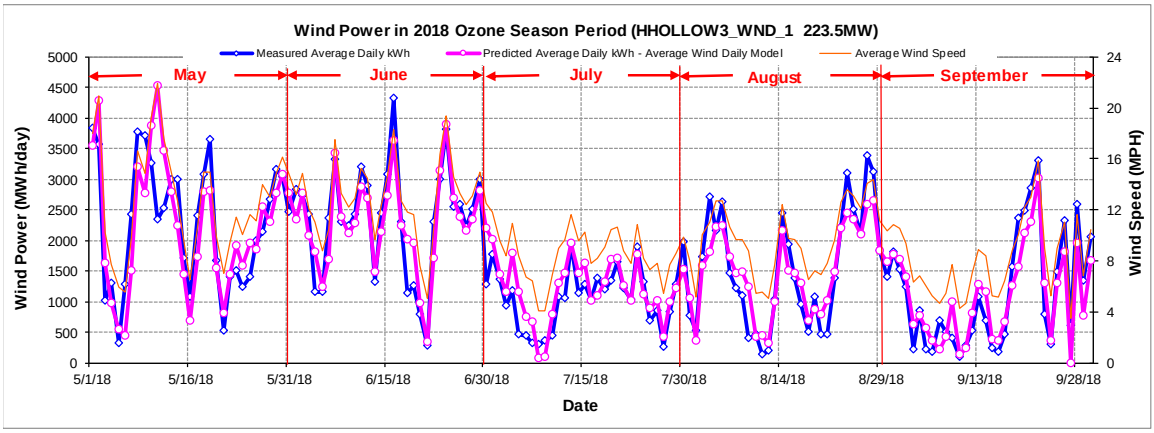
Figure A-194:HHOLLOW3_WND_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.23	66,600	62,997	5.41%	40%	38%
Feb-18	28	11.00	58,026	59,201	-2.02%	39%	39%
Mar-18	31	11.92	70,237	72,579	-3.33%	42%	44%
Apr-18	30	13.18	73,066	79,423	-8.70%	45%	49%
May-18	31	12.78	70,418	69,760	0.93%	42%	42%
Jun-18	30	12.90	69,202	68,433	1.11%	43%	43%
Jul-18	31	8.52	32,767	36,810	-12.34%	20%	22%
Aug-18	31	9.85	47,785	47,079	1.48%	29%	28%
Sep-18	30	7.97	33,379	31,534	5.53%	21%	20%
Oct-18	31	9.35	56,484	53,080	6.03%	34%	32%
Nov-18	30	10.05	57,332	56,469	1.51%	36%	35%
Dec-18	31	10.23	61,729	59,726	3.25%	37%	36%
Total	365	10.74	697,026	697,091	-0.01%	36%	36%
Total in OSP (07/15-09/15)	153	10.40	253,552	253,617	-0.03%	31%	31%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

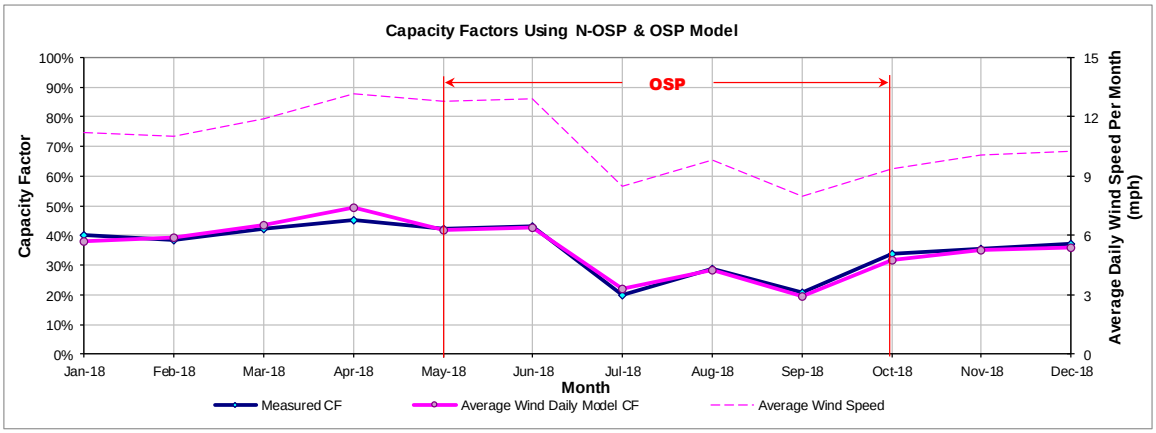


Figure A-195:HHOLLOW3_WND_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.49 Inadale Wind

A.49.1 Inadale Wind - INDL_INADALE1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
INDL_INADALE1	Wind	-	NOLAN	E.On Climate & Renewables	Inadale

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
95 Mitsubishi 1 MW 102 Mitsubishi 1 MW	ERCOT	W	Nov-08	West	ABI	197

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

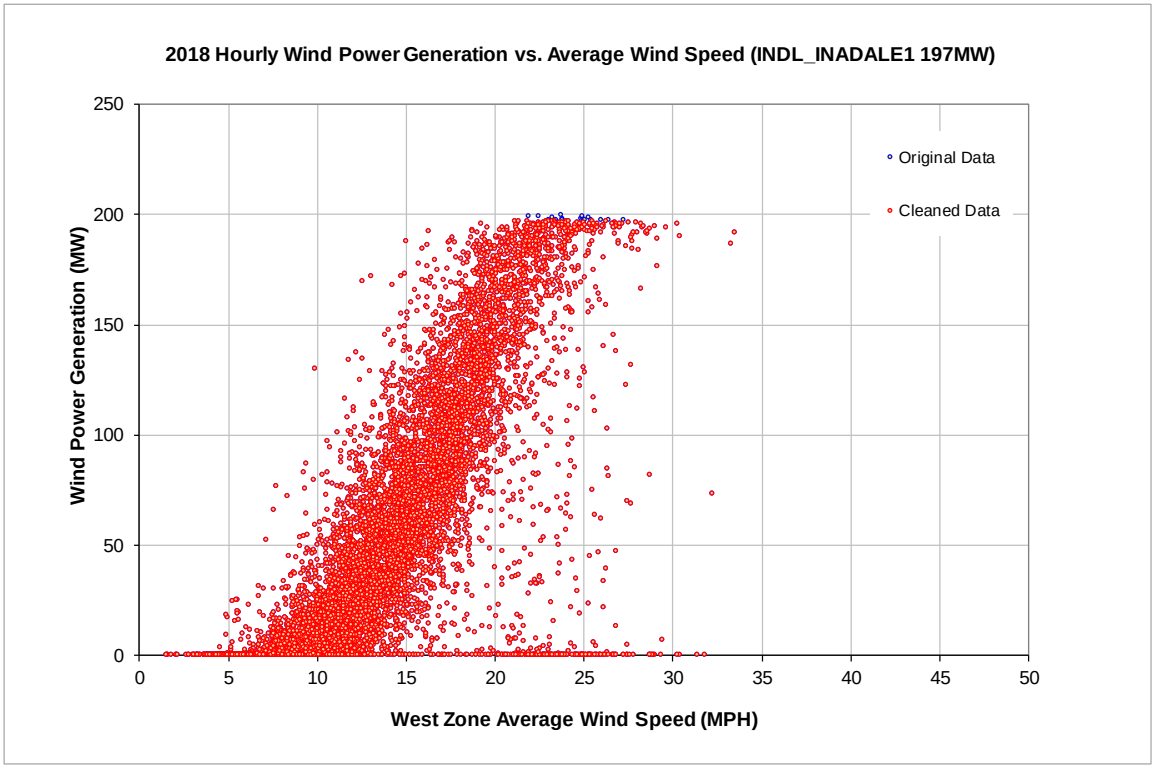


Figure A-196:INDL_INADALE1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

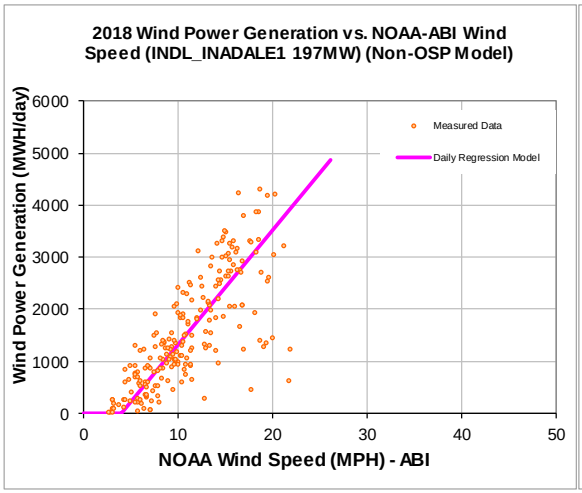
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-405.92
Left Slope (MWh/mph-day)	176.58
RMSE (MWh/day)	670.06
R2	0.59
CV-RMSE	43.9%
Daily Maximum (MWh/day)	4728

OSP Model:

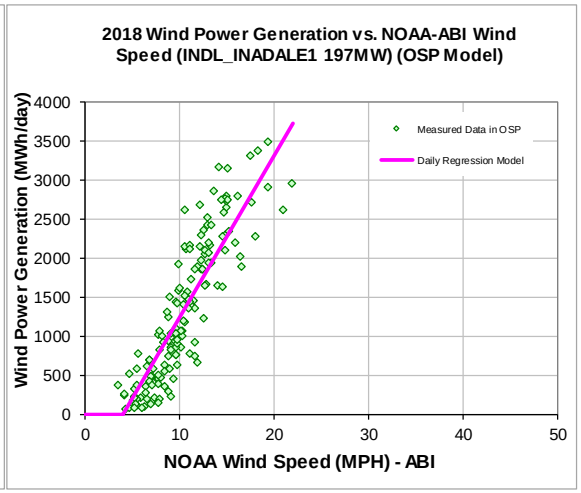
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-950.16
Left Slope (MWh/mph-day)	218.64
RMSE (MWh/day)	419.75
R2	0.79
CV-RMSE	31.7%
Daily Maximum (MWh/day)	4728

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
574,406	526,512

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,349	1,324

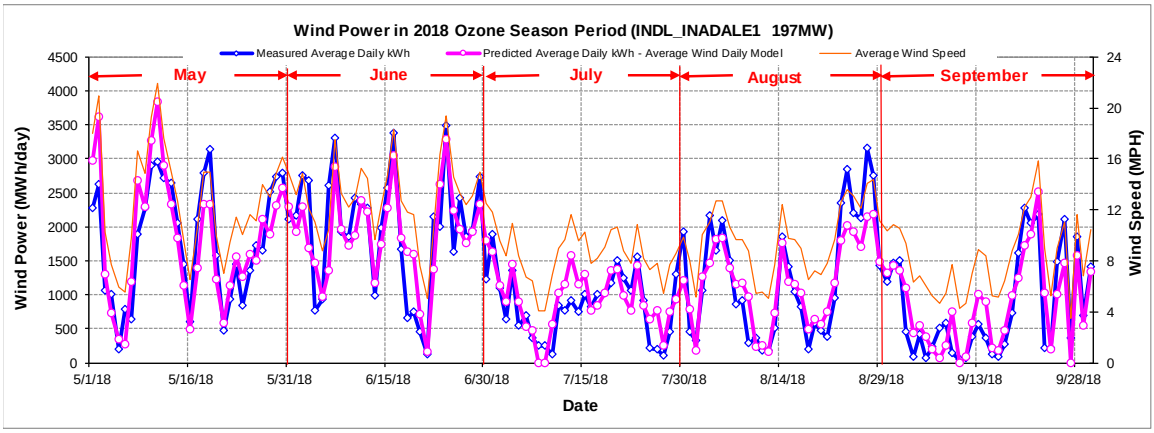
Figure A-197:INDL_INADALE1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	54,145	47,462	12.34%	37%	32%
Feb-18	28	11.00	45,140	43,007	4.72%	34%	32%
Mar-18	31	11.92	49,613	52,693	-6.21%	34%	36%
Apr-18	30	13.18	42,324	57,624	-36.15%	30%	41%
May-18	31	12.78	56,120	57,172	-1.87%	38%	39%
Jun-18	30	12.90	57,963	56,136	3.15%	41%	40%
Jul-18	31	8.52	26,342	28,399	-7.81%	18%	19%
Aug-18	31	9.85	39,178	37,294	4.81%	27%	25%
Sep-18	30	7.97	23,034	23,938	-3.92%	16%	17%
Oct-18	31	9.35	41,471	38,618	6.88%	28%	26%
Nov-18	30	10.05	43,257	41,055	5.09%	30%	29%
Dec-18	31	10.23	47,925	43,415	9.41%	33%	30%
Total	365	10.72	526,512	526,814	-0.06%	31%	31%
Total in OSP (07/15-09/15)	153	10.40	202,637	202,939	-0.15%	28%	28%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

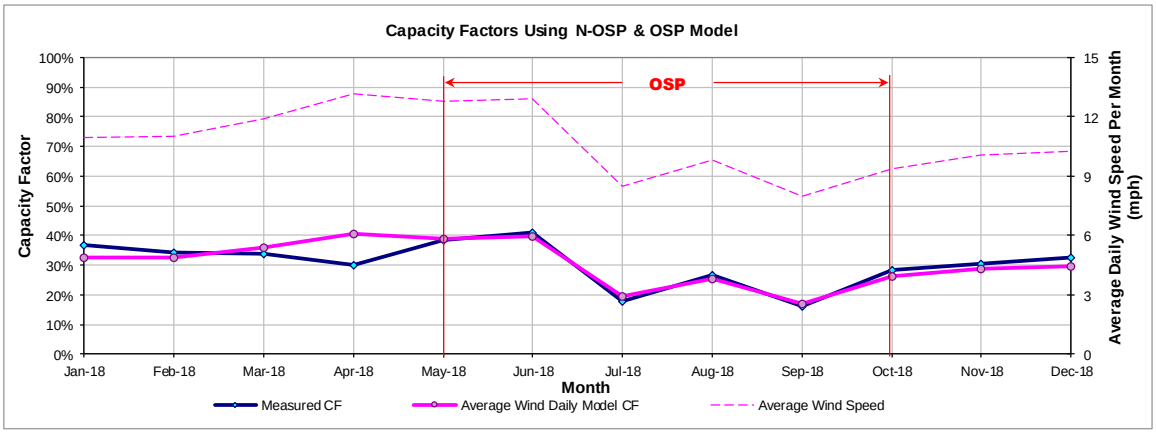


Figure A-198:INDL_INADALE1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.50 Indian Mesa I

A.50.1 Indian Mesa I - INDNNWP_INDNNWP_J01

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
INDNNWP_INDNNWP_J01	Wind	Iraan	PECOS	Orion Energy/American National Wind Power	Indian Mesa

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
125 Vestas 0.66 MW	ERCOT	W	Jun-01	West	FST	82.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

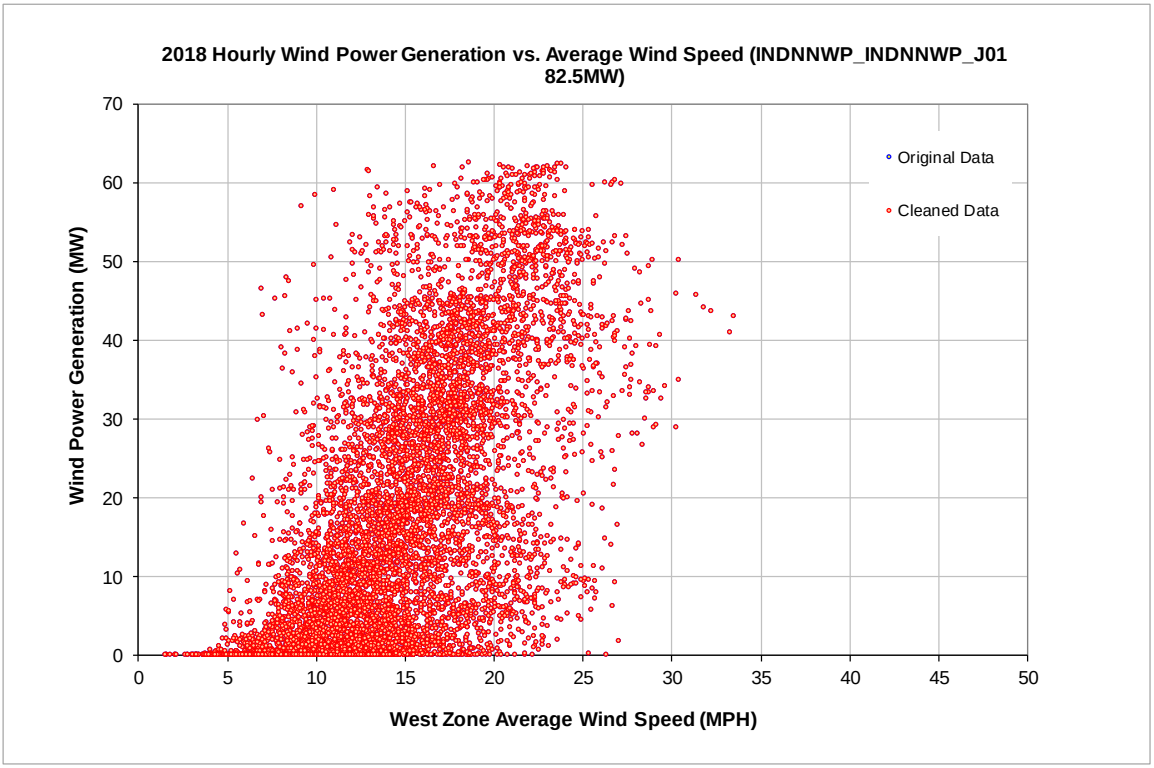


Figure A-199:INDNNWP_INDNNWP_J01 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

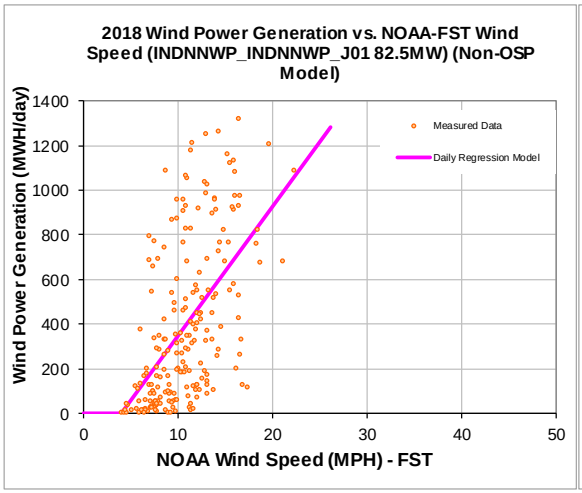
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-230.51
Left Slope (MWh/mph-day)	57.96
RMSE (MWh/day)	297.47
R2	0.31
CV-RMSE	76.8%
Daily Maximum (MWh/day)	1980

OSP Model:

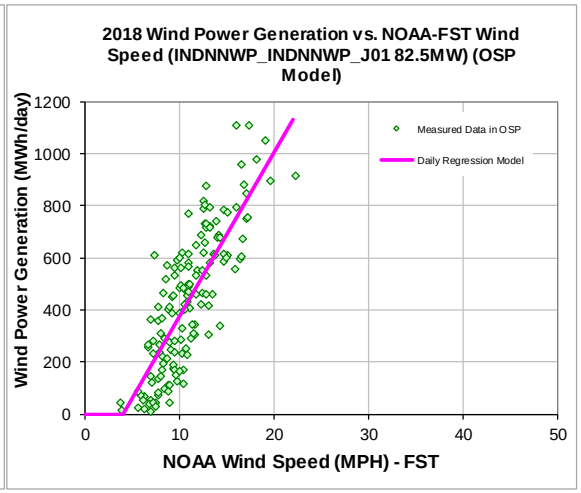
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-279.30
Left Slope (MWh/mph-day)	65.47
RMSE (MWh/day)	150.90
R2	0.67
CV-RMSE	34.7%
Daily Maximum (MWh/day)	1980

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
150,323	147,115

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
434	435

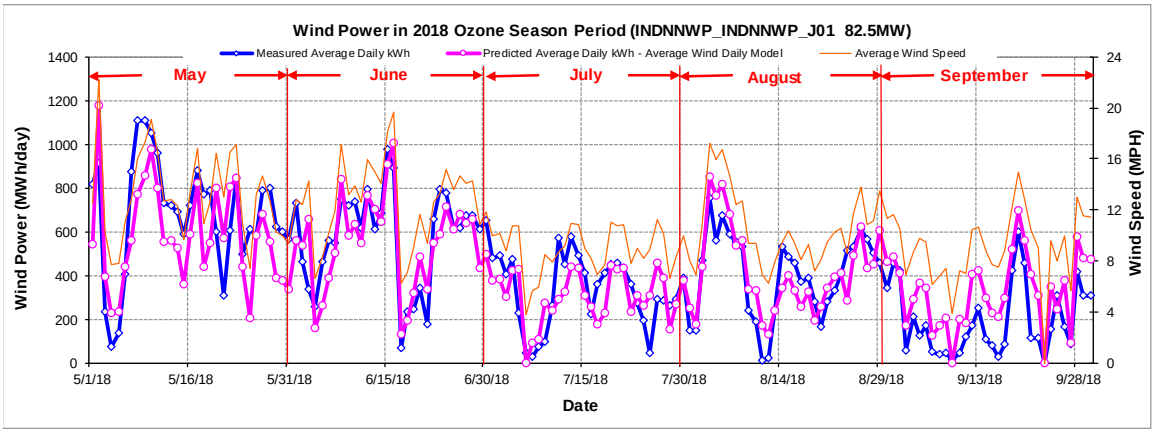
Figure A-200:INDNNWP_INDNNWP_J01 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.25	18,951	11,271	40.52%	31%	18%
Feb-18	28	10.46	13,659	10,516	23.01%	25%	19%
Mar-18	31	11.79	17,516	14,044	19.83%	29%	23%
Apr-18	30	12.36	17,931	14,573	18.72%	30%	25%
May-18	31	13.09	20,942	17,905	14.50%	34%	29%
Jun-18	30	12.66	17,236	16,479	4.39%	29%	28%
Jul-18	31	8.85	9,914	9,340	5.79%	16%	15%
Aug-18	31	10.71	12,591	13,084	-3.92%	21%	21%
Sep-18	30	9.18	5,430	9,361	-72.38%	9%	16%
Oct-18	31	9.89	4,170	9,931	-138.14%	7%	16%
Nov-18	30	9.86	2,134	9,887	-363.41%	4%	17%
Dec-18	31	9.98	6,642	10,781	-62.33%	11%	18%
Total	365	10.77	147,115	147,172	-0.04%	20%	20%
Total in OSP (07/15-09/15)	152	10.91	66,113	66,169	-0.09%	22%	22%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

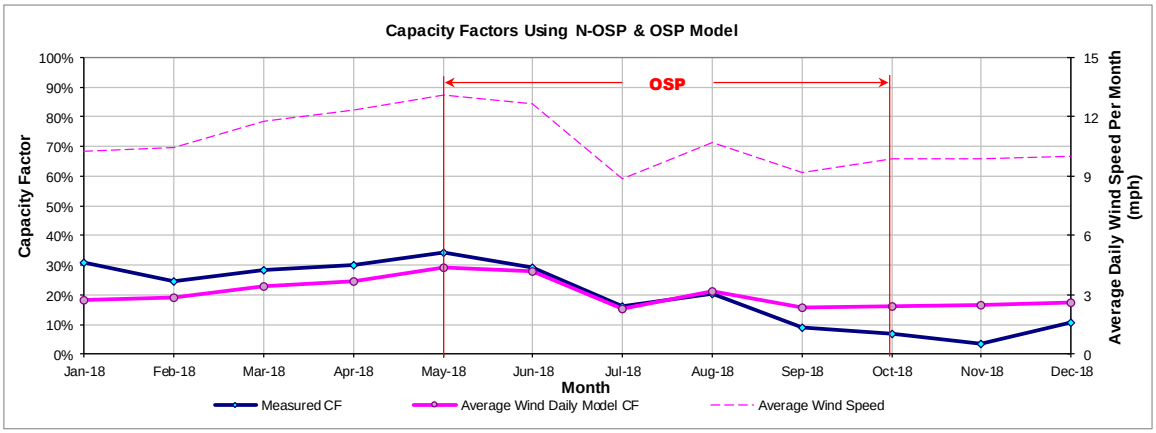


Figure A-201:INDNNWP_INDNNWP_J01 - Predicted Wind Power and Capacity Factor Using Daily Models

A.51 Javelina 2 Wind

A.51.1 Javelina 2 Wind - BORDAS2_JAVEL2_A

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BORDAS2_JAVEL2_A	Wind	Mirando	ZAPATA	NextEra	Javelina 2 Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
48 GE 2 MW	ERCOT	S	Feb-17	South	CRP	96

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

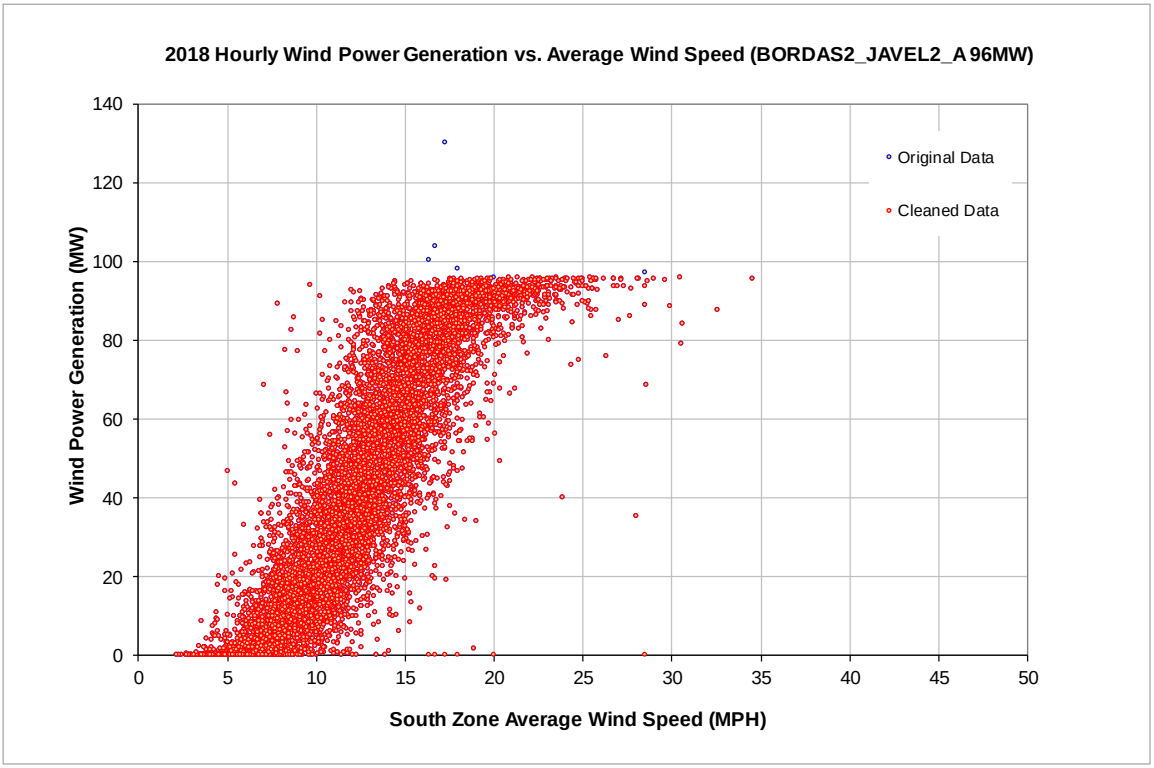


Figure A-202:BORDAS2_JAVEL2_A - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

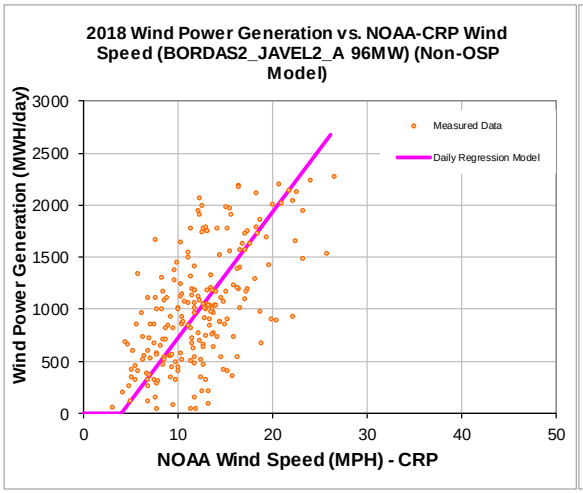
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	88.97
Left Slope (MWh/mph-day)	74.12
RMSE (MWh/day)	436.31
R2	0.37
CV-RMSE	43.8%
Daily Maximum (MWh/day)	2304

OSP Model:

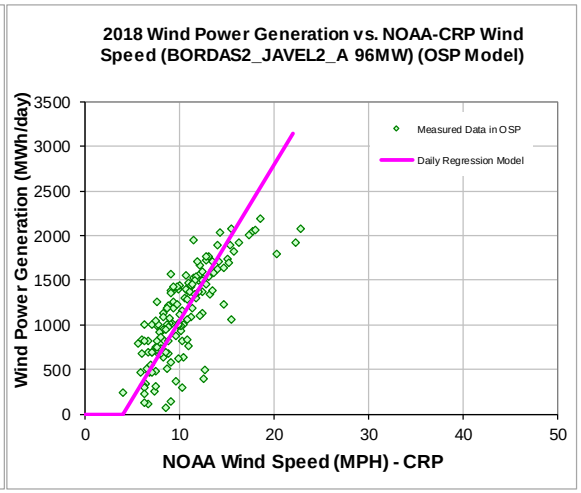
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-115.40
Left Slope (MWh/mph-day)	118.56
RMSE (MWh/day)	311.30
R2	0.61
CV-RMSE	27.8%
Daily Maximum (MWh/day)	2304

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
378,673	382,474

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,090	1,118

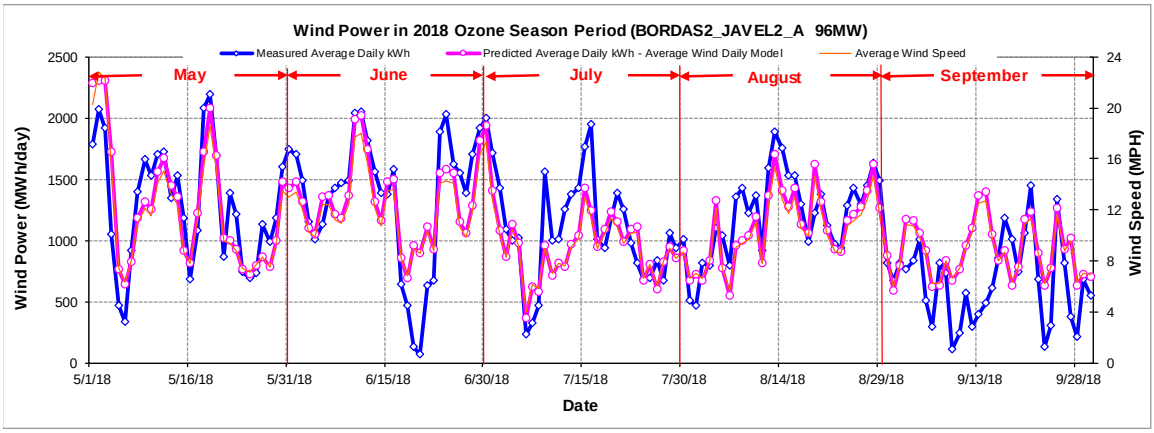
Figure A-203:BORDAS2_JAVEL2_A - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	28,361	28,264	0.34%	40%	40%
Feb-18	28	14.08	25,464	31,715	-24.55%	39%	49%
Mar-18	31	13.69	33,488	34,221	-2.19%	47%	48%
Apr-18	30	14.08	36,627	33,971	7.25%	53%	49%
May-18	31	11.95	40,546	39,818	1.80%	57%	56%
Jun-18	30	12.21	40,720	39,965	1.86%	59%	58%
Jul-18	31	8.81	32,519	28,804	11.43%	46%	40%
Aug-18	31	10.35	37,510	34,455	8.14%	53%	48%
Sep-18	30	8.73	19,827	27,571	-39.05%	29%	40%
Oct-18	31	10.87	30,954	27,729	10.42%	43%	39%
Nov-18	30	10.83	25,081	26,760	-6.69%	36%	39%
Dec-18	31	11.29	31,375	28,690	8.56%	44%	40%
Total	365	11.48	382,474	381,962	0.13%	45%	45%
Total in OSP (07/15-09/15)	153	10.41	171,123	170,612	0.30%	49%	48%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

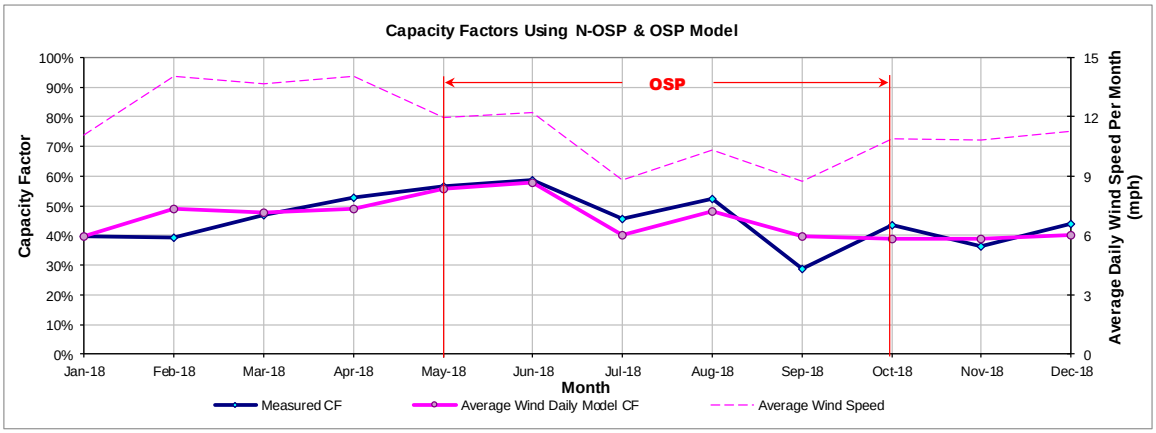


Figure A-204:BORDAS2_JAVEL2_A - Predicted Wind Power and Capacity Factor Using Daily Models

A.51.2 Javelina 2 Wind - BORDAS2_JAVEL2_B

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BORDAS2_JAVEL2_B	Wind	Mirando	ZAPATA	NextEra	Javelina 2 Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
37 GE 2 MW	ERCOT	S	Feb-17	South	CRP	74

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

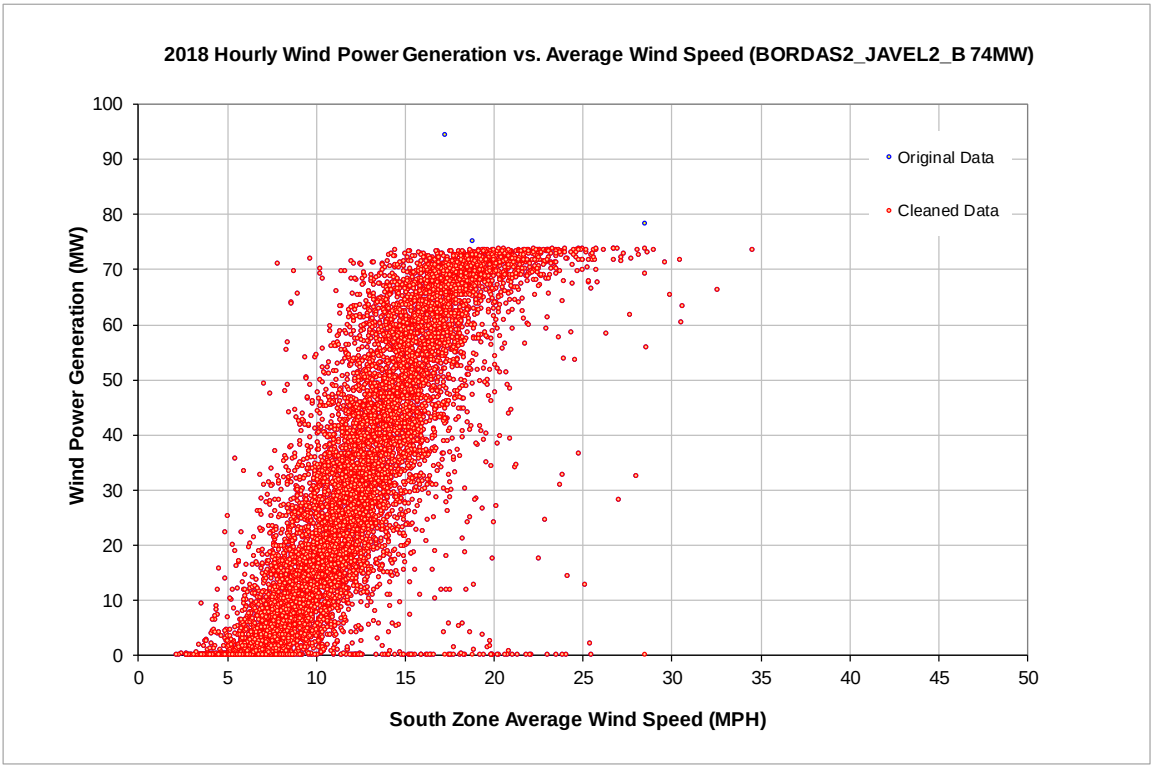


Figure A-205:BORDAS2_JAVEL2_B - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

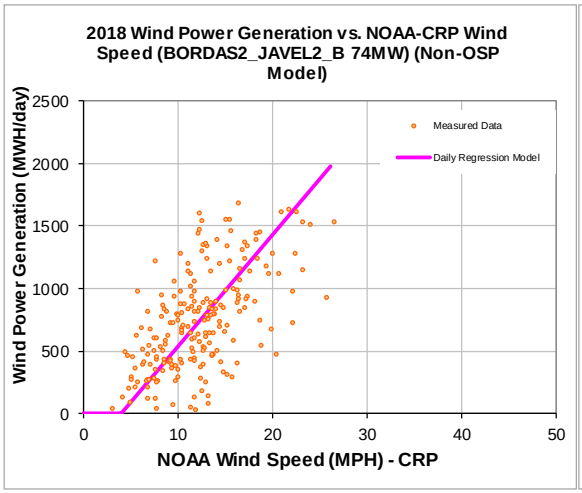
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	100.25
Left Slope (MWh/mph-day)	52.12
RMSE (MWh/day)	323.61
R2	0.35
CV-RMSE	43.8%
Daily Maximum (MWh/day)	1776

OSP Model:

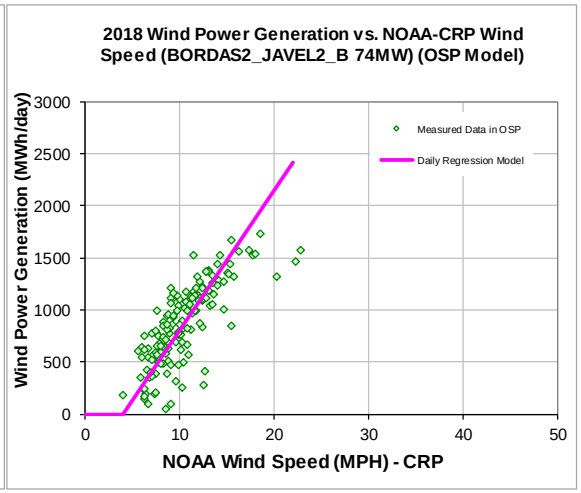
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-83.99
Left Slope (MWh/mph-day)	90.86
RMSE (MWh/day)	242.93
R2	0.60
CV-RMSE	28.2%
Daily Maximum (MWh/day)	1776

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
285,539	288,448

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
840	862

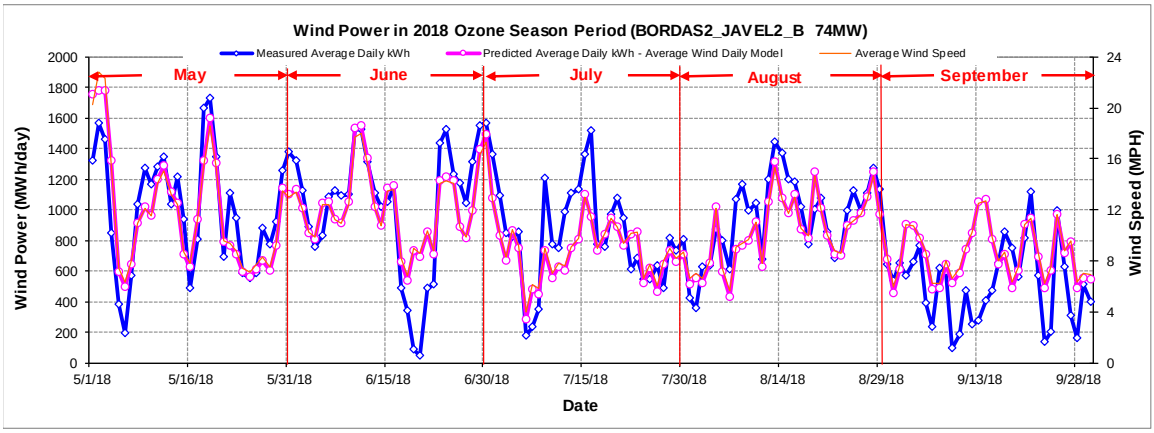
Figure A-206:BORDAS2_JAVEL2_B - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	21,295	21,044	1.18%	39%	38%
Feb-18	28	14.08	19,173	23,358	-21.83%	39%	47%
Mar-18	31	13.69	24,951	25,233	-1.13%	45%	46%
Apr-18	30	14.08	26,318	25,020	4.93%	49%	47%
May-18	31	11.95	31,305	30,666	2.04%	57%	56%
Jun-18	30	12.21	30,782	30,763	0.06%	58%	58%
Jul-18	31	8.81	25,340	22,214	12.34%	46%	40%
Aug-18	31	10.35	29,132	26,545	8.88%	53%	48%
Sep-18	30	8.73	15,273	21,264	-39.23%	29%	40%
Oct-18	31	10.87	23,851	20,668	13.35%	43%	38%
Nov-18	30	10.83	18,261	19,949	-9.25%	34%	37%
Dec-18	31	11.29	22,768	21,344	6.26%	41%	39%
Total	365	11.48	288,448	288,068	0.13%	44%	44%
Total in OSP (07/15-09/15)	153	10.41	131,832	131,451	0.29%	49%	48%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

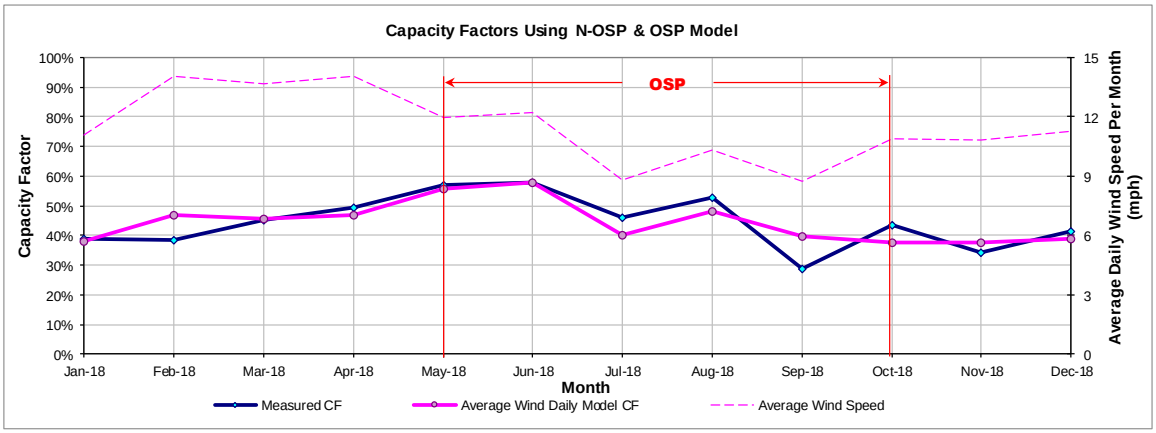


Figure A-207:BORDAS2_JAVEL2_B - Predicted Wind Power and Capacity Factor Using Daily Models

A.51.3 Javelina 2 Wind - BORDAS2_JAVEL2_C

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BORDAS2_JAVEL2_C	Wind	Mirando	ZAPATA	NextEra	Javelina 2 Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
15 GE 2 MW	ERCOT	S	Feb-17	South	CRP	30

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

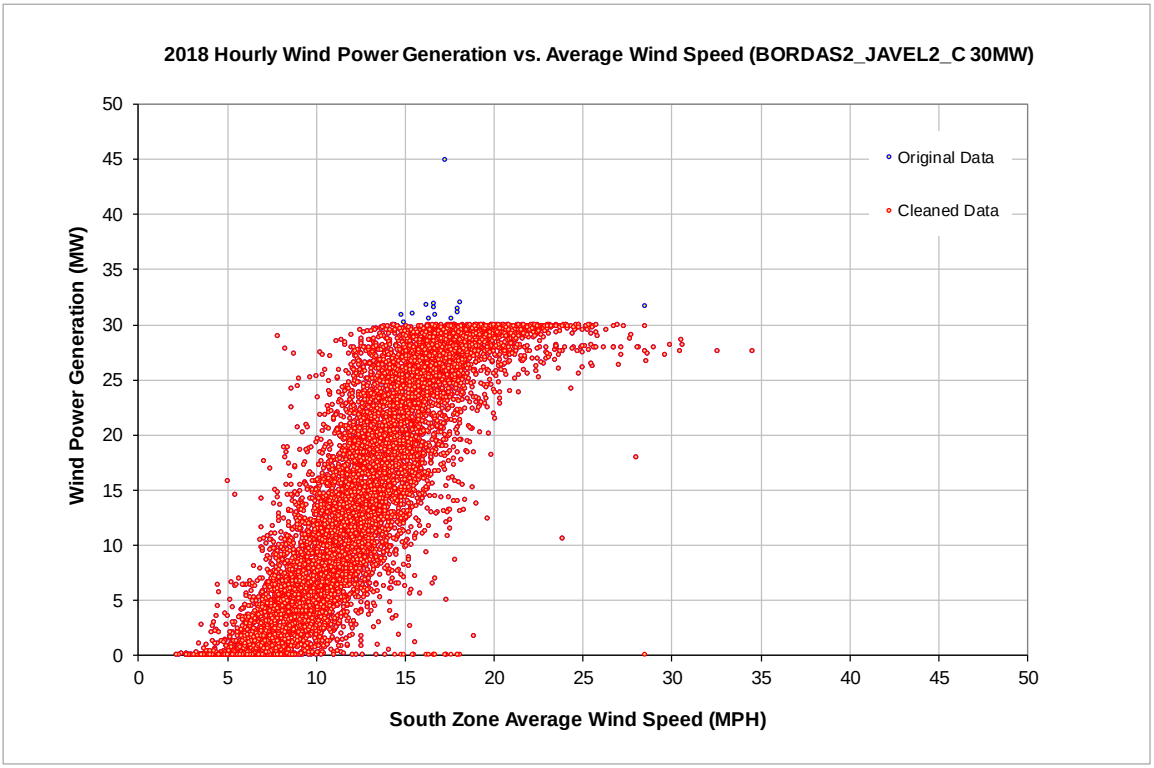


Figure A-208:BORDAS2_JAVEL2_C - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

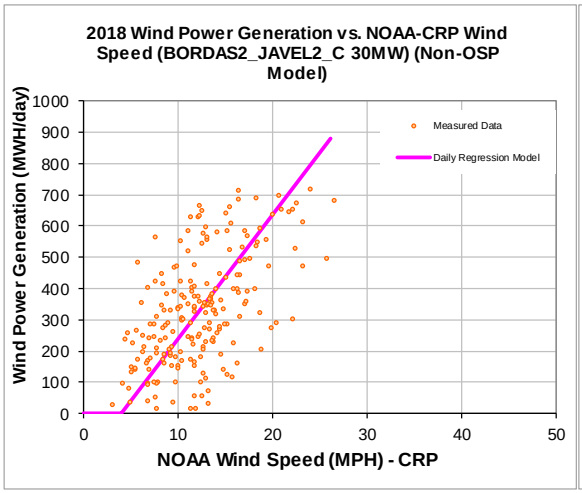
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	59.92
Left Slope (MWh/mph-day)	21.91
RMSE (MWh/day)	144.42
R2	0.32
CV-RMSE	44.0%
Daily Maximum (MWh/day)	720

OSP Model:

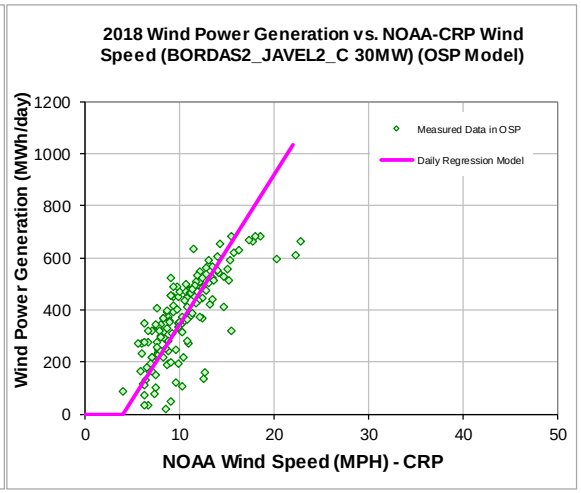
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-19.21
Left Slope (MWh/mph-day)	37.23
RMSE (MWh/day)	102.02
R2	0.59
CV-RMSE	27.7%
Daily Maximum (MWh/day)	720

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
124,775	125,945

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
359	368

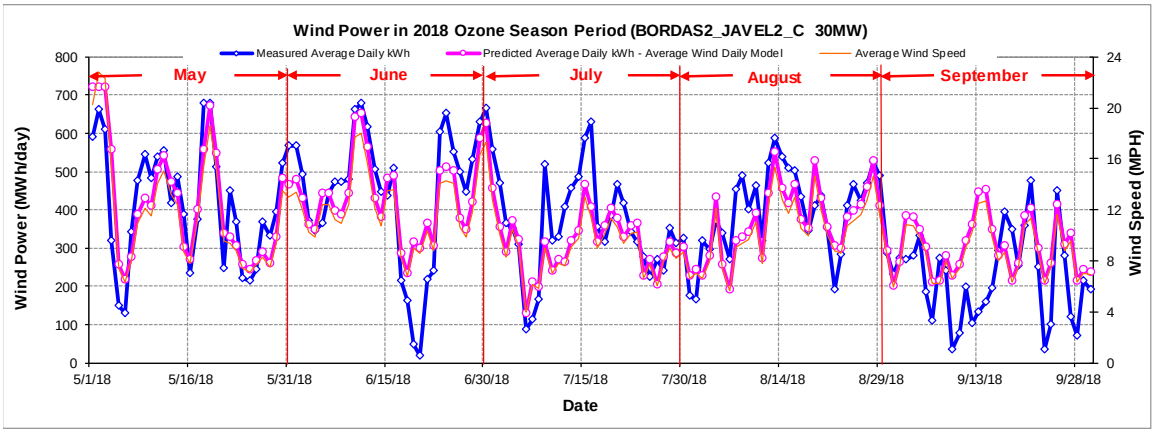
Figure A-209:BORDAS2_JAVEL2_C - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	9,308	9,396	-0.95%	42%	42%
Feb-18	28	14.08	8,150	10,315	-26.57%	40%	51%
Mar-18	31	13.69	11,000	11,157	-1.43%	49%	50%
Apr-18	30	14.08	11,928	11,050	7.36%	55%	51%
May-18	31	11.95	13,100	12,978	0.93%	59%	58%
Jun-18	30	12.21	13,338	13,062	2.07%	62%	60%
Jul-18	31	8.81	10,921	9,574	12.33%	49%	43%
Aug-18	31	10.35	12,294	11,349	7.69%	55%	51%
Sep-18	30	8.73	6,695	9,170	-36.96%	31%	42%
Oct-18	31	10.87	10,329	9,238	10.56%	46%	41%
Nov-18	30	10.83	8,320	8,918	-7.20%	39%	41%
Dec-18	31	11.29	10,563	9,522	9.85%	47%	43%
Total	365	11.48	125,945	125,730	0.17%	48%	48%
Total in OSP (07/15-09/15)	153	10.41	56,348	56,133	0.38%	51%	51%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

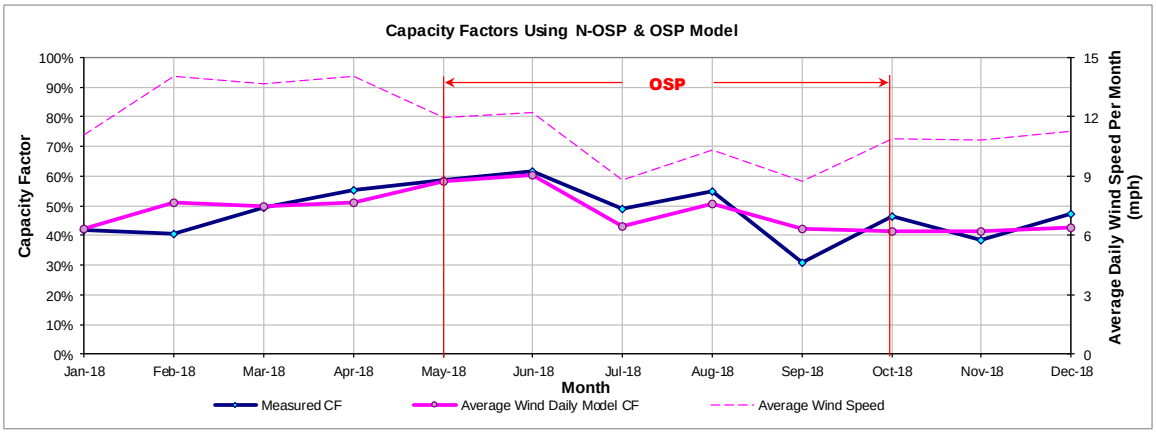


Figure A-210:BORDAS2_JAVEL2_C - Predicted Wind Power and Capacity Factor Using Daily Models

A.52 Javelina Wind

A.52.1 Javelina Wind - BORDAS_JAVEL18

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
BORDAS_JAVEL18	Wind	Mirando	ZAPATA	Map Royalty	Javelina Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
11 GE 1.7 MW 115 GE 2 MW	ERCOT	S	Dec-15	South	CRP	249.7

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

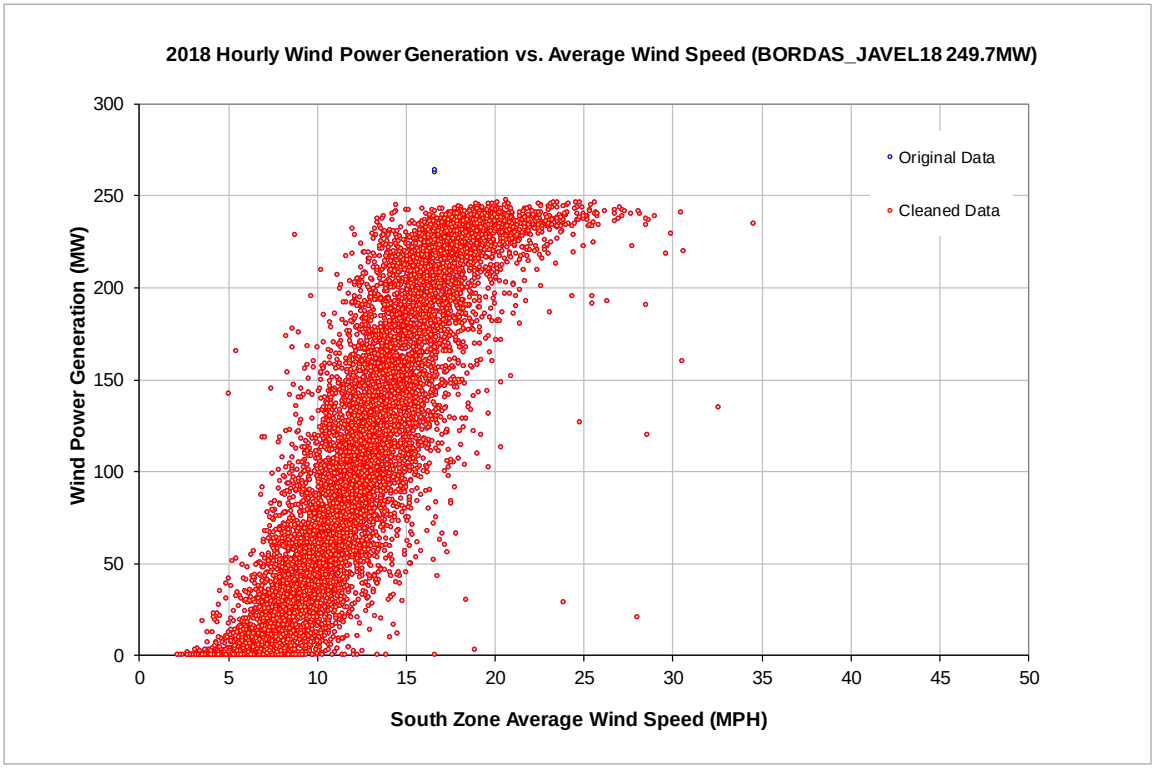


Figure A-211:BORDAS_JAVEL18 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

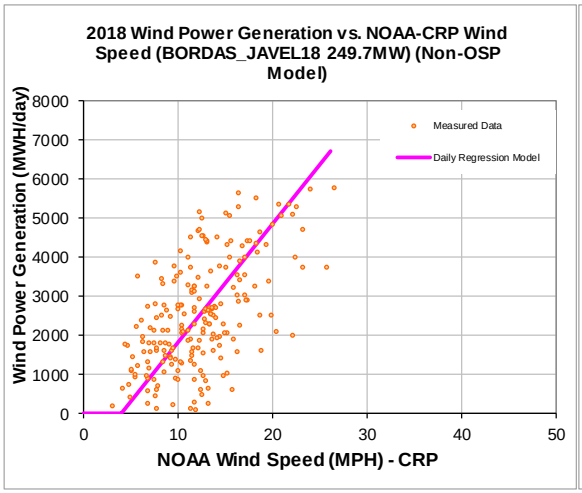
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	327.56
Left Slope (MWh/mph-day)	177.84
RMSE (MWh/day)	1119.73
R2	0.34
CV-RMSE	44.7%
Daily Maximum (MWh/day)	5993

OSP Model:

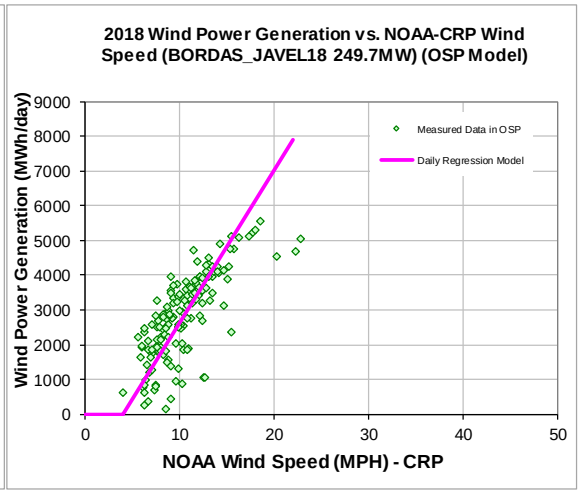
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-136.97
Left Slope (MWh/mph-day)	283.94
RMSE (MWh/day)	784.90
R2	0.59
CV-RMSE	27.9%
Daily Maximum (MWh/day)	5993

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
953,477	962,462

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
2,750	2,818

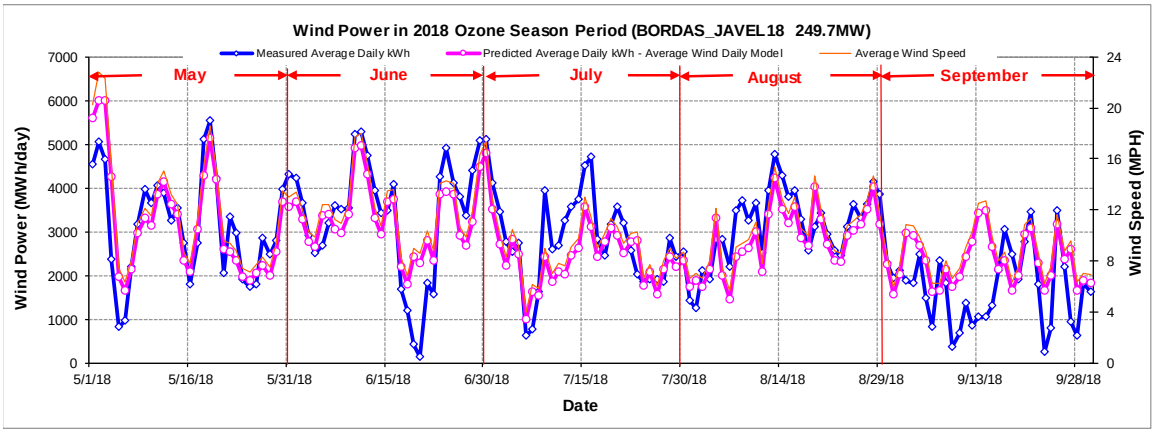
Figure A-212:BORDAS_JAVEL18 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	72,233	71,353	1.22%	39%	38%
Feb-18	28	14.08	64,568	79,292	-22.80%	38%	47%
Mar-18	31	13.69	83,892	85,647	-2.09%	45%	46%
Apr-18	30	14.08	90,063	84,934	5.69%	50%	47%
May-18	31	11.95	98,267	100,353	-2.12%	53%	54%
Jun-18	30	12.21	101,694	99,896	1.77%	57%	56%
Jul-18	31	8.81	84,015	73,305	12.75%	45%	39%
Aug-18	31	10.35	96,462	86,839	9.98%	52%	47%
Sep-18	30	8.73	50,719	70,212	-38.43%	28%	39%
Oct-18	31	10.87	79,115	70,071	11.43%	43%	38%
Nov-18	30	10.83	60,328	67,632	-12.11%	34%	38%
Dec-18	31	11.29	81,105	72,376	10.76%	44%	39%
Total	365	11.48	962,462	961,909	0.06%	44%	44%
Total in OSP (07/15-09/15)	153	10.41	431,159	430,605	0.13%	47%	47%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

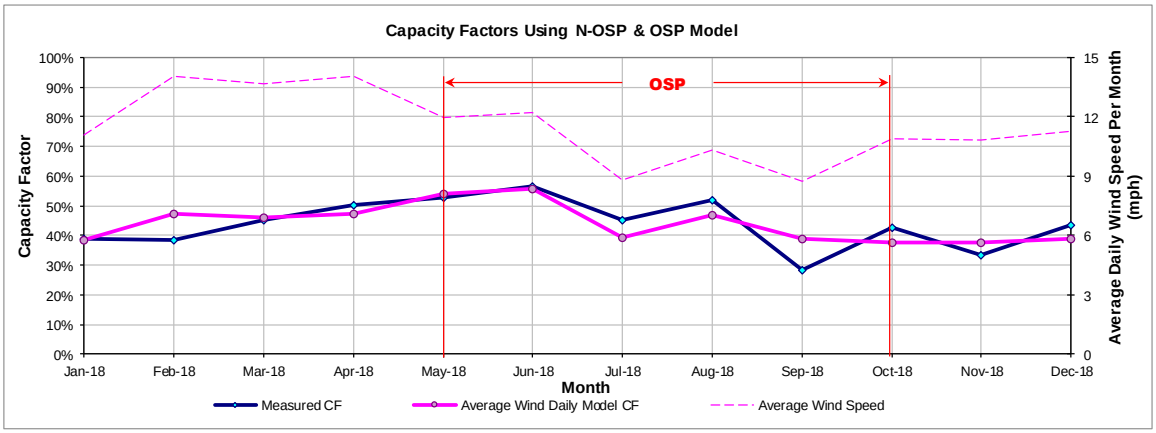


Figure A-213:BORDAS_JAVEL18 - Predicted Wind Power and Capacity Factor Using Daily Models

A.53 Jumbo Road Wind (Hereford 2)

A.53.1 Jumbo Road Wind (Hereford 2) - HRFDWIND_JRDWIND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HRFDWIND_JRDWIND1	Wind	Hereford	CASTRO	BHE Renewables	Jumbo Road Wind (Hereford 2)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
79 GE 1.85 MW	ERCOT	W	Apr-15	Panhandle	AMA	146.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

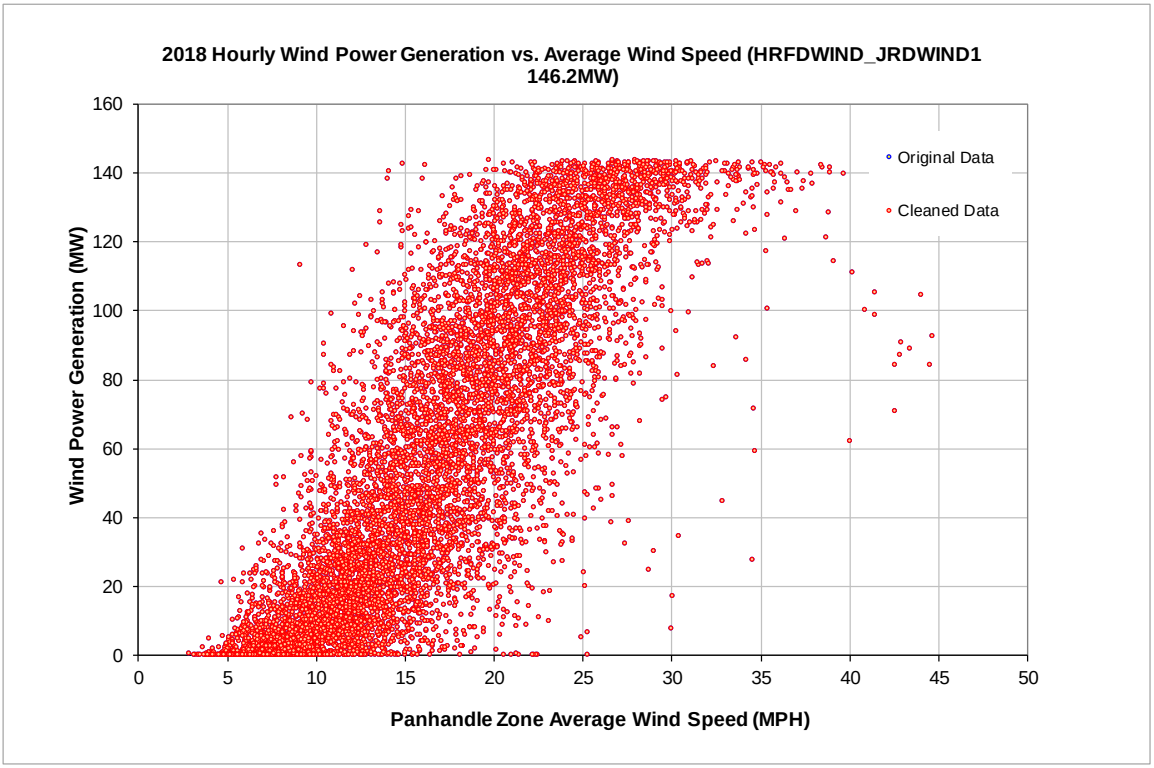


Figure A-214:HRFDWIND_JRDWIND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

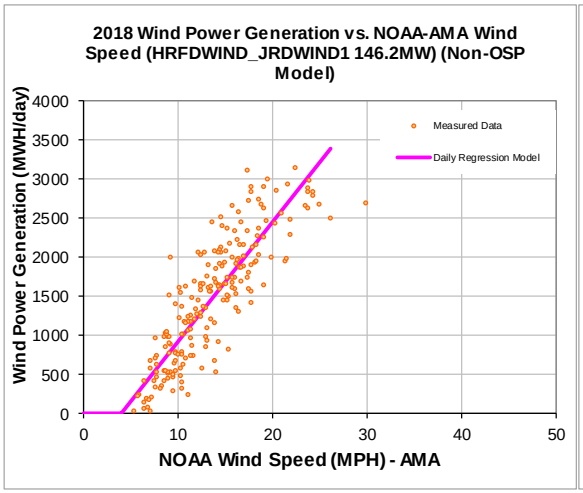
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-498.89
Left Slope (MWh/mph-day)	144.81
RMSE (MWh/day)	408.54
R2	0.73
CV-RMSE	27.7%
Daily Maximum (MWh/day)	3509

OSP Model:

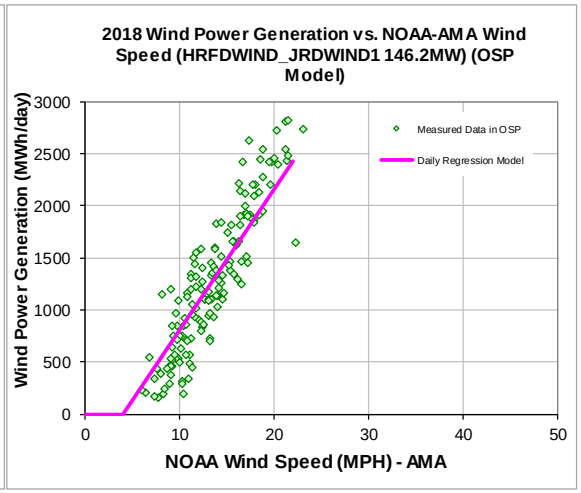
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-894.60
Left Slope (MWh/mph-day)	161.15
RMSE (MWh/day)	285.99
R2	0.82
CV-RMSE	22.4%
Daily Maximum (MWh/day)	3509

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
514,562	507,926

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,241	1,275

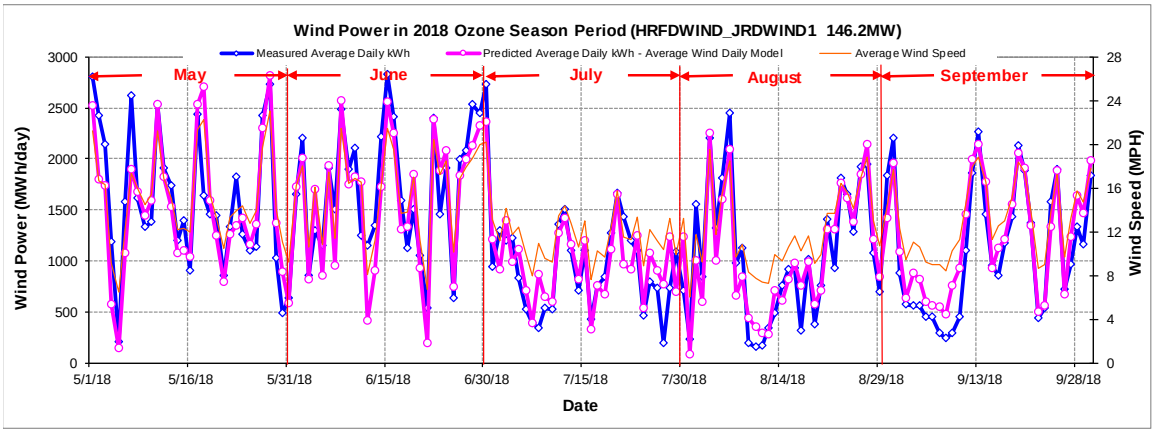
Figure A-215:HRFDWIND_JRDWIND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	47,280	41,631	11.95%	43%	38%
Feb-18	28	13.78	45,089	41,884	7.11%	46%	43%
Mar-18	31	14.64	50,404	50,265	0.28%	46%	46%
Apr-18	30	17.03	55,502	59,030	-6.36%	53%	56%
May-18	31	14.93	48,691	46,859	3.76%	45%	43%
Jun-18	30	15.70	52,204	49,049	6.04%	50%	47%
Jul-18	31	11.32	27,137	28,830	-6.24%	25%	27%
Aug-18	31	12.42	35,365	34,289	3.04%	33%	32%
Sep-18	30	13.00	31,626	35,996	-13.82%	30%	34%
Oct-18	31	12.69	33,004	41,510	-25.77%	30%	38%
Nov-18	30	12.53	42,682	39,463	7.54%	41%	37%
Dec-18	31	12.16	38,942	38,802	0.36%	36%	36%
Total	365	13.56	507,926	507,608	0.06%	40%	40%
Total in OSP (07/15-09/15)	153	13.46	195,023	195,023	0.00%	36%	36%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

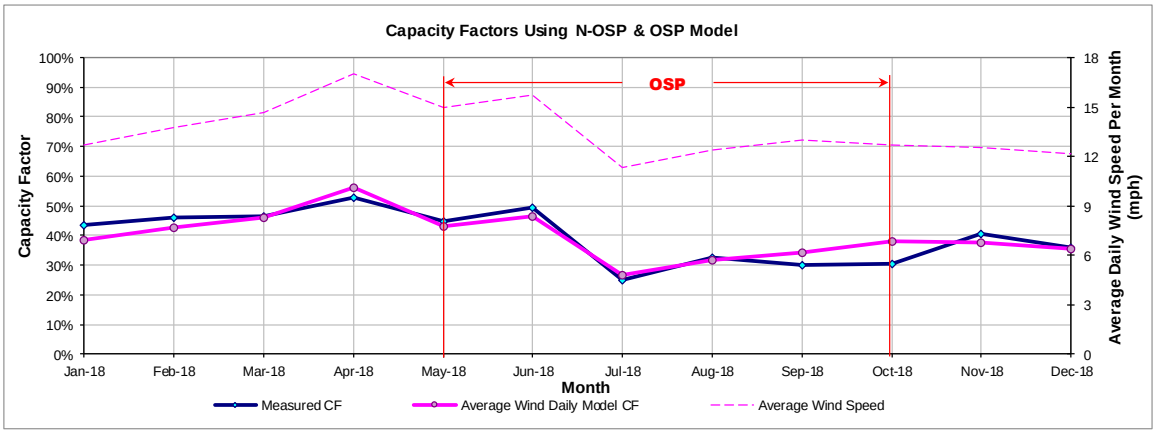


Figure A-216:HRFDWIND_JRDWIND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.53.2 Jumbo Road Wind (Hereford 2) - HRFDWIND_JRDWIND2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HRFDWIND_JRDWIND2	Wind	Hereford	CASTRO	BHE Renewables	Jumbo Road Wind (Hereford 2)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
83 GE 1.85 MW	ERCOT	W	Apr-15	Panhandle	AMA	153.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

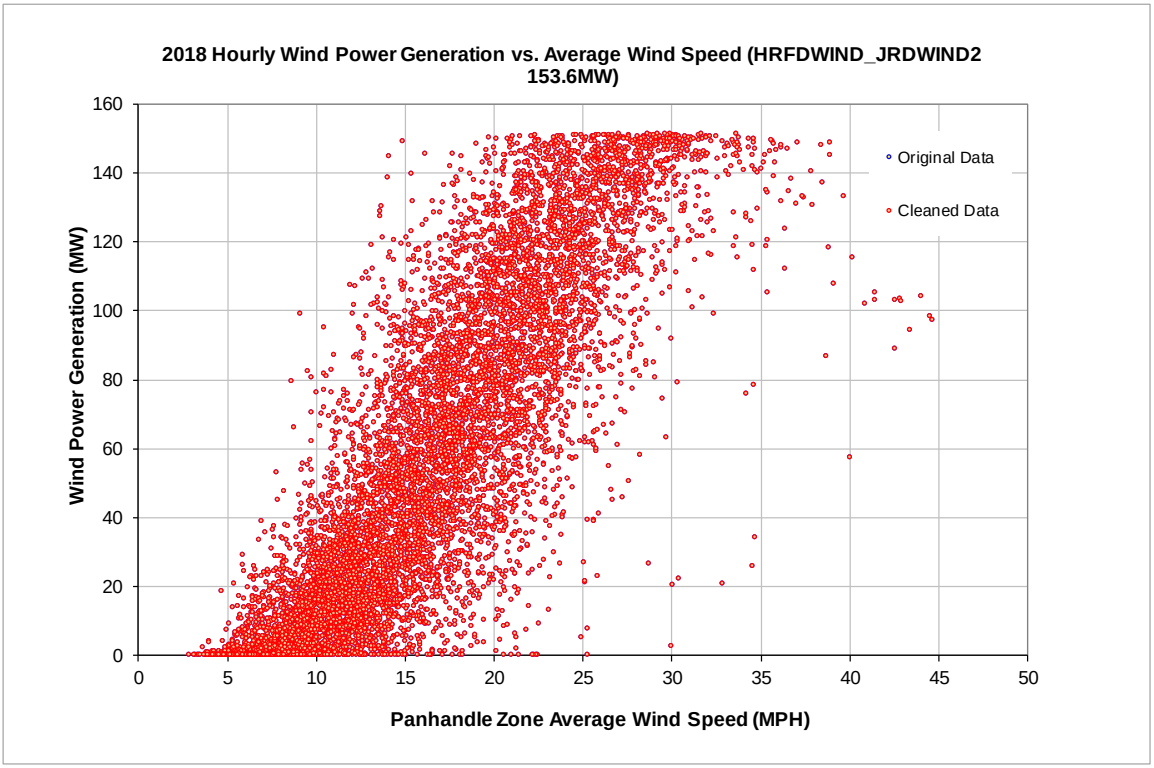


Figure A-217:HRFDWIND_JRDWIND2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

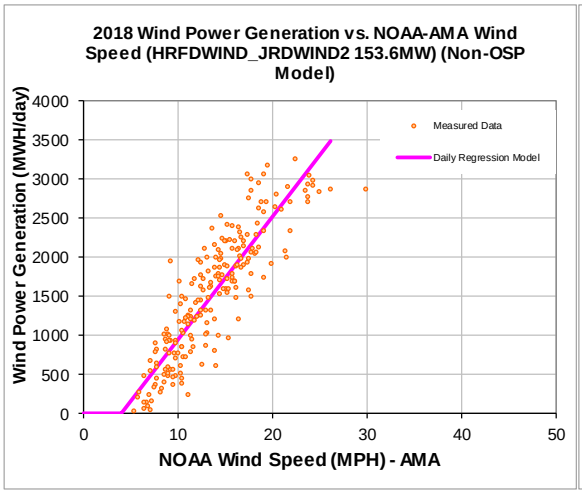
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-544.82
Left Slope (MWh/mph-day)	151.40
RMSE (MWh/day)	387.30
R2	0.77
CV-RMSE	25.5%
Daily Maximum (MWh/day)	3686

OSP Model:

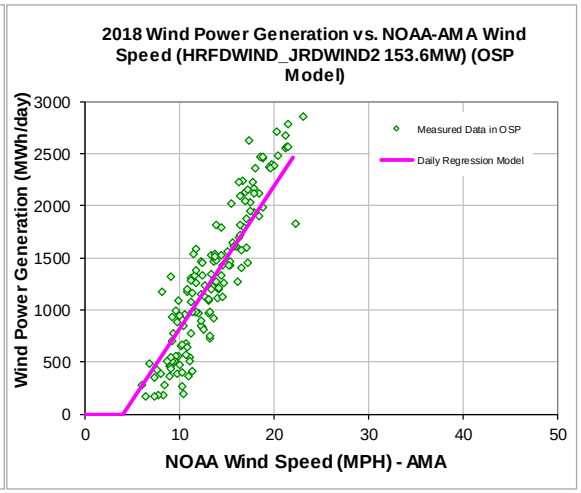
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-916.88
Left Slope (MWh/mph-day)	164.26
RMSE (MWh/day)	277.32
R2	0.84
CV-RMSE	21.4%
Daily Maximum (MWh/day)	3686

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
527,313	520,247

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,260	1,294

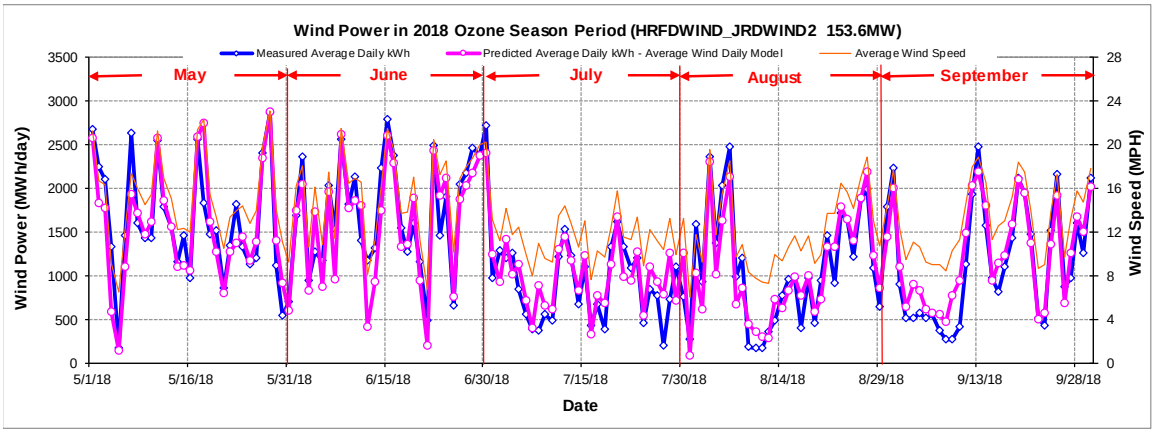
Figure A-218:HRFDWIND_JRDWIND2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	47,845	42,805	10.53%	42%	37%
Feb-18	28	13.78	46,360	43,140	6.95%	45%	42%
Mar-18	31	14.64	51,356	51,833	-0.93%	45%	45%
Apr-18	30	17.03	56,974	61,020	-7.10%	52%	55%
May-18	31	14.93	49,072	47,609	2.98%	43%	42%
Jun-18	30	15.70	52,953	49,847	5.87%	48%	45%
Jul-18	31	11.32	26,670	29,232	-9.61%	23%	26%
Aug-18	31	12.42	36,191	34,797	3.85%	32%	30%
Sep-18	30	13.00	33,140	36,542	-10.26%	30%	33%
Oct-18	31	12.69	34,715	42,679	-22.94%	30%	37%
Nov-18	30	12.53	44,166	40,562	8.16%	40%	37%
Dec-18	31	12.16	40,804	39,889	2.24%	36%	35%
Total	365	13.56	520,247	519,955	0.06%	39%	39%
Total in OSP (07/15-09/15)	153	13.46	198,026	198,026	0.00%	35%	35%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

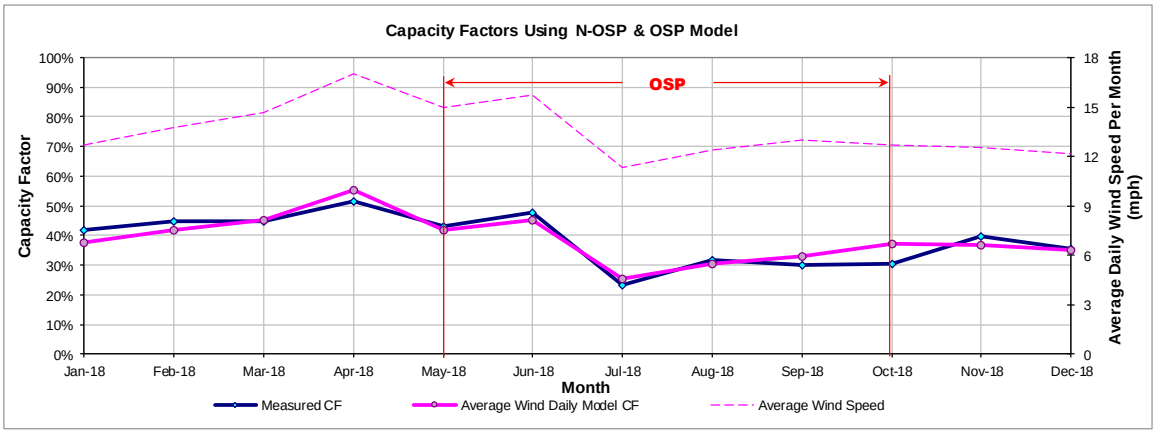


Figure A-219:HRFDWIND_JRDWIND2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.54 Keechi Wind

A.54.1 Keechi Wind - KEECHI_U1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
KEECHI_U1	Wind	-	JACK	RES Americas	Keechi Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
55 Vestas 2 MW	ERCOT	N	Jan-15	North	ABI	110

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

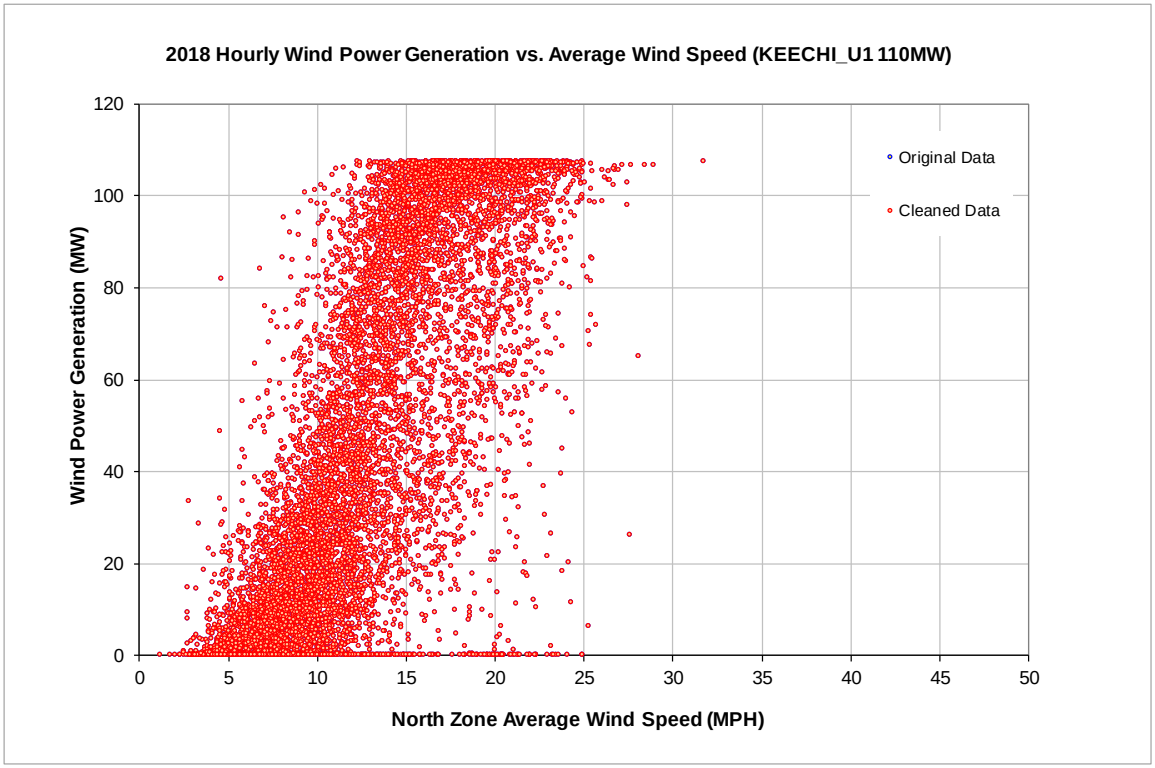


Figure A-220:KEECHI_U1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

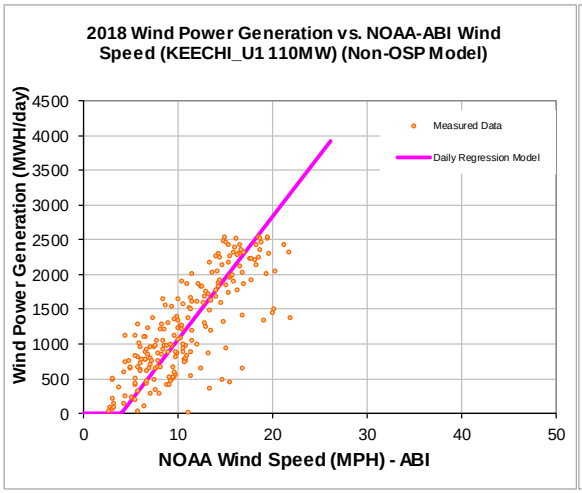
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-83.67
Left Slope (MWh/mph-day)	120.51
RMSE (MWh/day)	422.33
R2	0.63
CV-RMSE	34.2%
Daily Maximum (MWh/day)	2640

OSP Model:

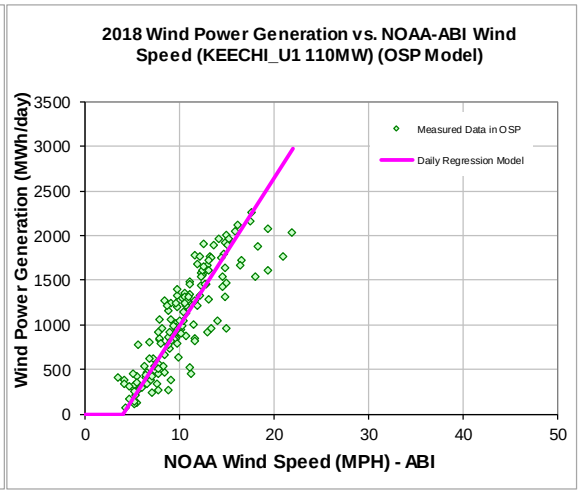
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-311.97
Left Slope (MWh/mph-day)	131.56
RMSE (MWh/day)	277.50
R2	0.75
CV-RMSE	26.3%
Daily Maximum (MWh/day)	2640

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
456,045	423,683

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,070	1,057

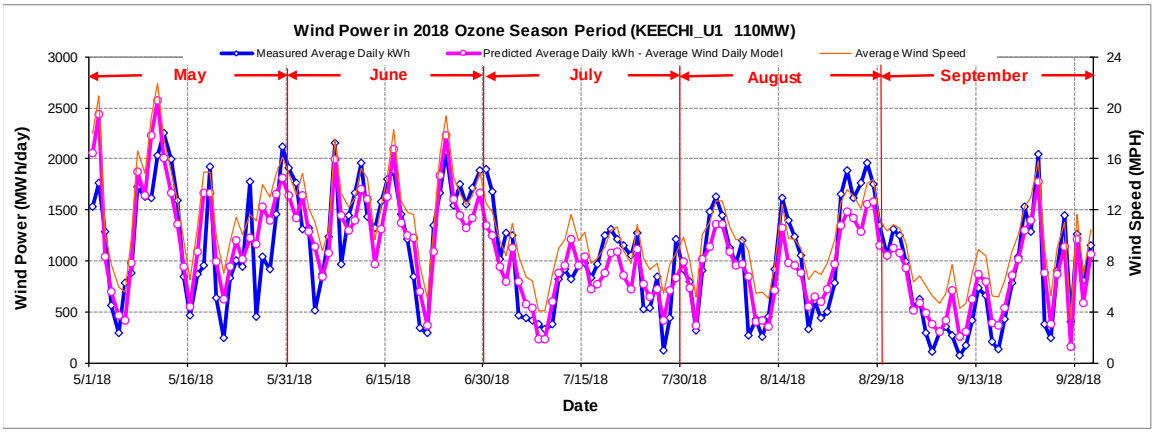
Figure A-221:KEECHI_U1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	46,037	38,384	16.62%	56%	47%
Feb-18	28	11.00	32,968	34,763	-5.45%	45%	47%
Mar-18	31	11.92	44,645	41,954	6.03%	55%	51%
Apr-18	30	13.18	38,738	45,126	-16.49%	49%	57%
May-18	31	12.78	38,220	42,453	-11.07%	47%	52%
Jun-18	30	12.90	42,691	41,570	2.63%	54%	52%
Jul-18	31	8.52	26,455	25,076	5.21%	32%	31%
Aug-18	31	9.85	33,579	30,492	9.19%	41%	37%
Sep-18	30	7.97	20,723	22,077	-6.54%	26%	28%
Oct-18	31	9.35	25,616	32,348	-26.28%	31%	40%
Nov-18	30	10.05	36,550	33,818	7.48%	46%	43%
Dec-18	31	10.23	37,461	35,622	4.91%	46%	44%
Total	365	10.72	423,683	423,683	0.00%	44%	44%
Total in OSP (07/15-09/15)	153	10.40	161,668	161,668	0.00%	40%	40%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

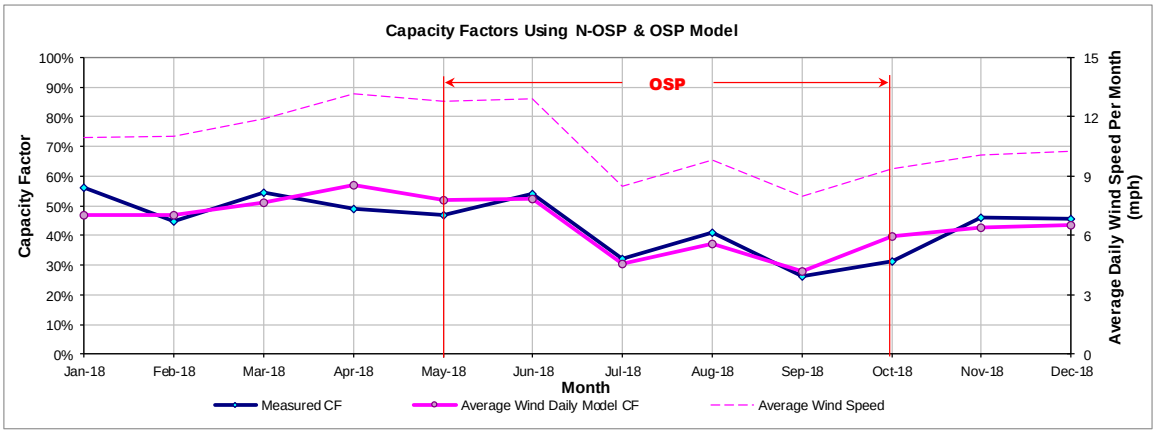


Figure A-222:KEECHI_U1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.55 King Mountain Wind Ranch

A.55.1 King Mountain Wind Ranch - KING_NE_KINGNE

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
KING_NE_KINGNE	Wind	McCamey	UPTON	FPL/Cielo	King Mountain Wind Ranch

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
61 Bonus 1.3 MW	ERCOT	W	Dec-01	West	FST	79.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

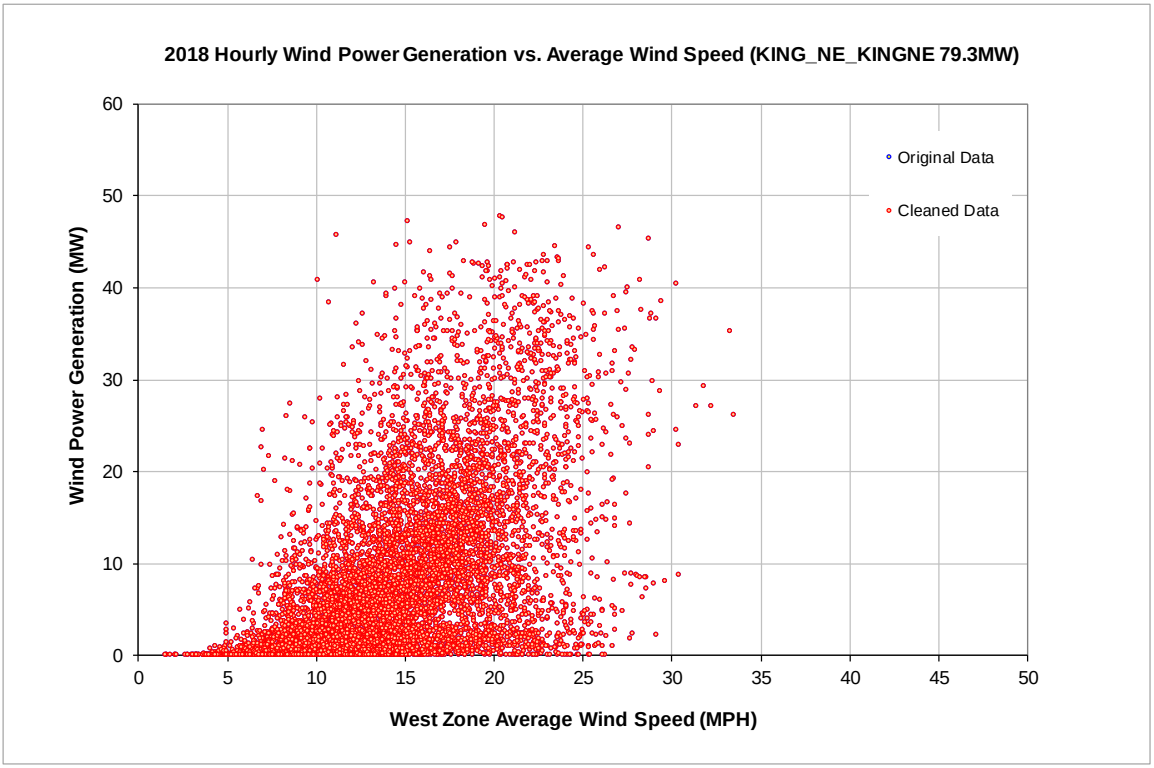


Figure A-223:KING_NE_KINGNE - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

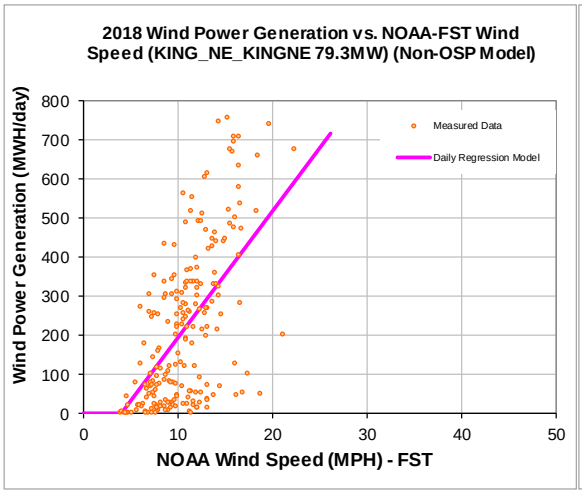
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-163.31
Left Slope (MWh/mph-day)	35.55
RMSE (MWh/day)	156.33
R2	0.39
CV-RMSE	73.0%
Daily Maximum (MWh/day)	1903

OSP Model:

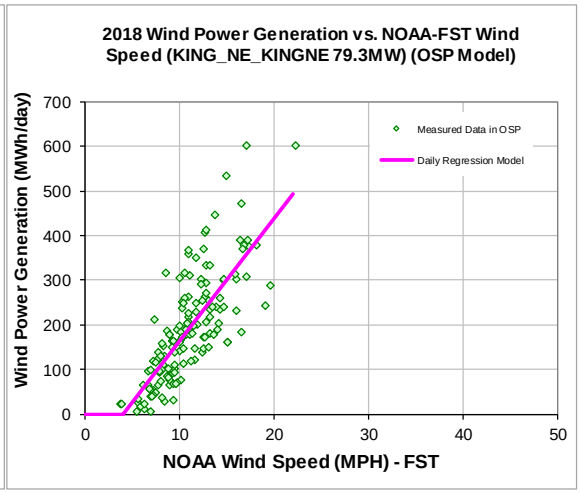
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-115.35
Left Slope (MWh/mph-day)	27.95
RMSE (MWh/day)	74.93
R2	0.61
CV-RMSE	39.7%
Daily Maximum (MWh/day)	1903

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
75,829	74,052

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
189	189

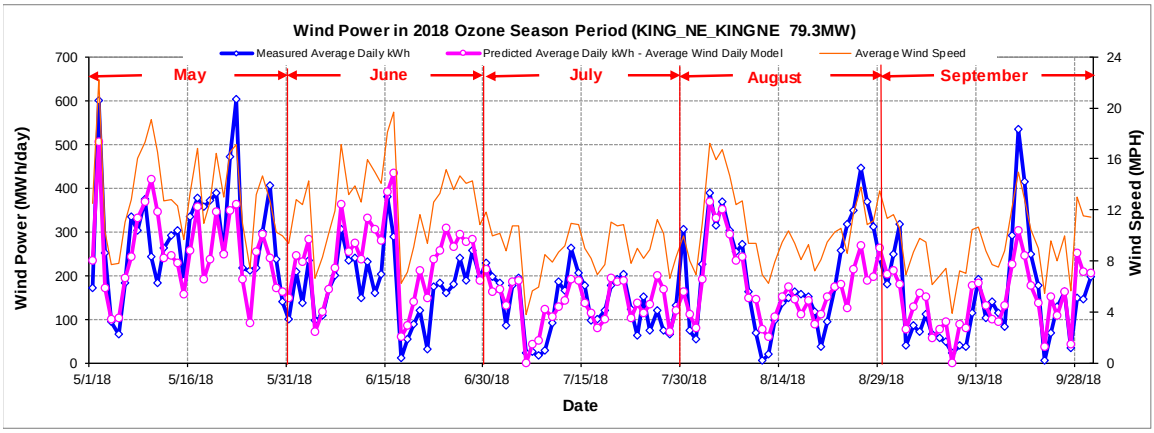
Figure A-224:KING_NE_KINGNE - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.25	9,510	6,234	34.44%	16%	11%
Feb-18	28	10.46	7,769	5,837	24.87%	15%	11%
Mar-18	31	11.79	11,594	7,935	31.56%	20%	13%
Apr-18	30	12.36	10,294	8,287	19.50%	18%	15%
May-18	31	13.09	8,806	7,764	11.83%	15%	13%
Jun-18	30	12.66	5,428	7,152	-31.77%	10%	13%
Jul-18	31	8.85	4,065	4,104	-0.97%	7%	7%
Aug-18	31	10.71	6,395	5,707	10.77%	11%	10%
Sep-18	30	9.06	4,159	4,142	0.39%	7%	7%
Oct-18	31	9.52	3,929	5,478	-39.44%	7%	9%
Nov-18	30	9.85	819	5,625	-586.92%	1%	10%
Dec-18	31	10.10	1,284	5,880	-357.85%	2%	10%
Total	365	10.73	74,052	74,146	-0.13%	11%	11%
Total in OSP (07/15-09/15)	153	10.87	28,853	28,869	-0.06%	10%	10%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

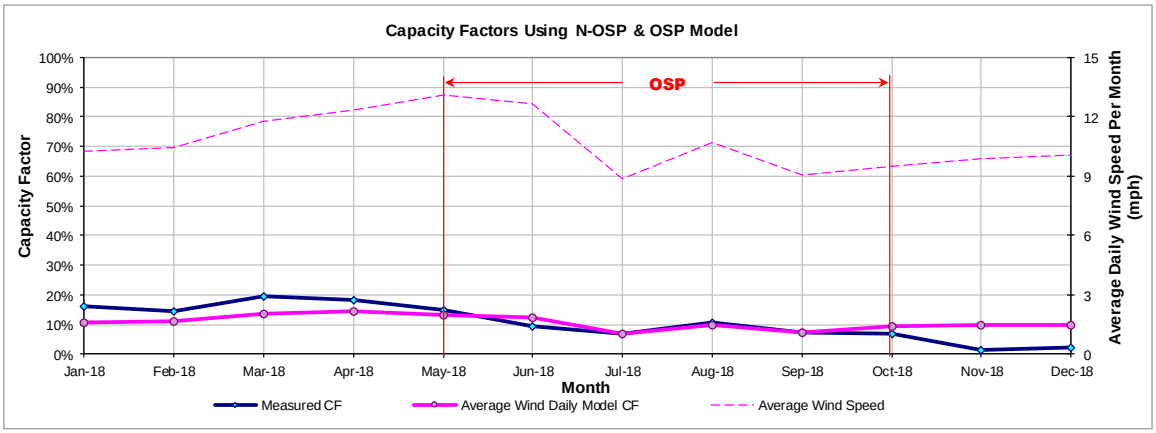


Figure A-225:KING_NE_KINGNE - Predicted Wind Power and Capacity Factor Using Daily Models

A.55.2 King Mountain Wind Ranch - KING_NW_KINGNW

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
KING_NW_KINGNW	Wind	McCamey	UPTON	FPL/Cielo	King Mountain Wind Ranch

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
61 Bonus 1.3 MW	ERCOT	W	Dec-01	West	FST	79.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

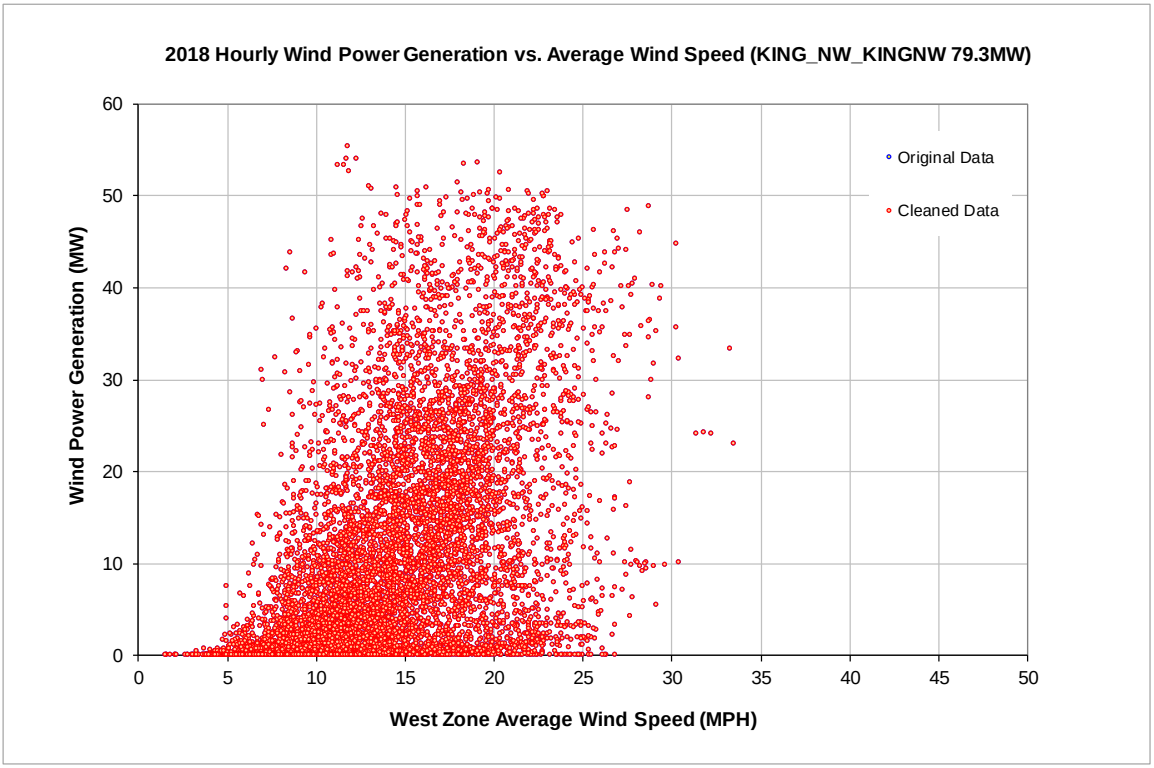


Figure A-226:KING_NW_KINGNW - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

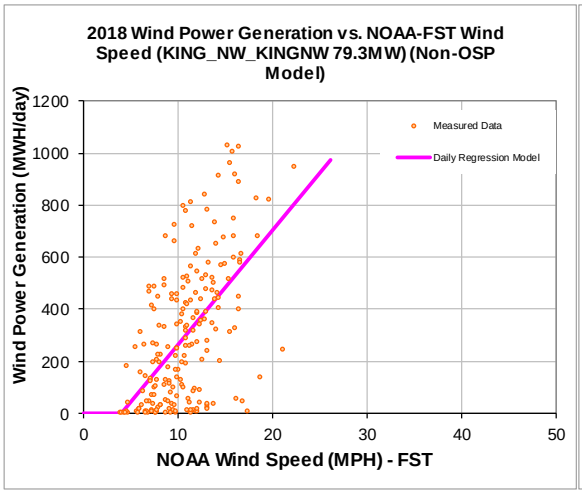
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-163.72
Left Slope (MWh/mph-day)	42.87
RMSE (MWh/day)	221.77
R2	0.31
CV-RMSE	75.7%
Daily Maximum (MWh/day)	1903

OSP Model:

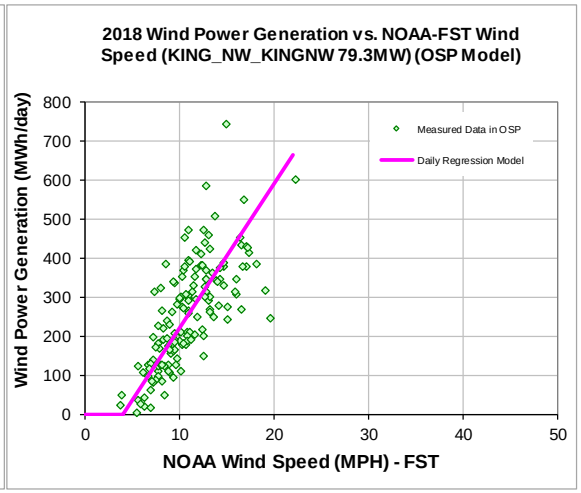
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-62.11
Left Slope (MWh/mph-day)	29.02
RMSE (MWh/day)	90.48
R2	0.53
CV-RMSE	35.7%
Daily Maximum (MWh/day)	1903

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
102,406	99,444

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
254	253

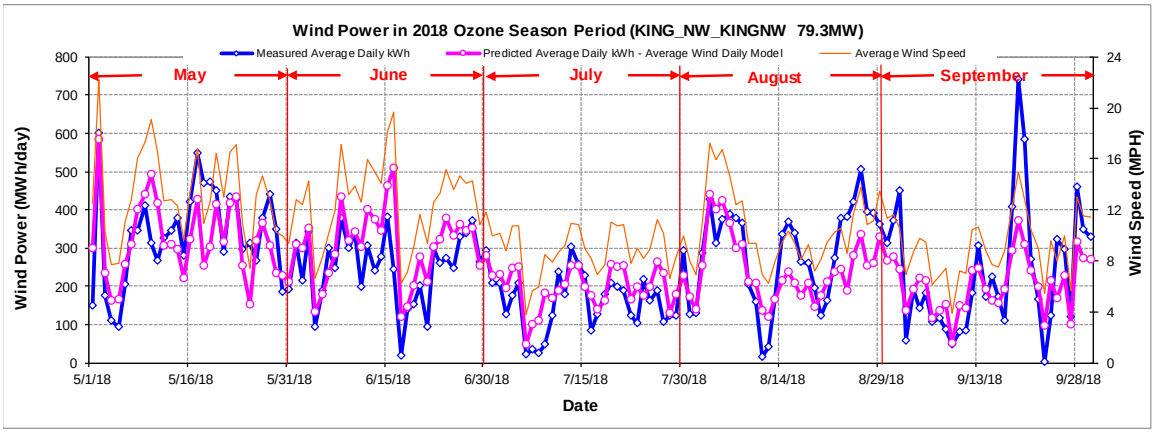
Figure A-227:KING_NW_KINGNW - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.25	13,121	8,547	34.86%	22%	14%
Feb-18	28	10.46	10,748	7,968	25.86%	20%	15%
Mar-18	31	11.79	14,870	10,597	28.74%	25%	18%
Apr-18	30	12.36	13,421	10,983	18.17%	24%	19%
May-18	31	13.09	10,259	9,847	4.02%	17%	17%
Jun-18	30	12.66	7,637	9,154	-19.85%	13%	16%
Jul-18	31	8.85	4,926	6,037	-22.57%	8%	10%
Aug-18	31	10.71	9,075	7,711	15.03%	15%	13%
Sep-18	30	9.06	6,874	6,022	12.39%	12%	11%
Oct-18	31	9.52	6,474	7,577	-17.04%	11%	13%
Nov-18	30	10.04	285	6,929	-2330.77%	0%	12%
Dec-18	31	10.10	1,754	8,073	-360.34%	3%	14%
Total	365	10.75	99,444	99,444	0.00%	14%	14%
Total in OSP (07/15-09/15)	153	10.87	38,771	38,771	0.00%	13%	13%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

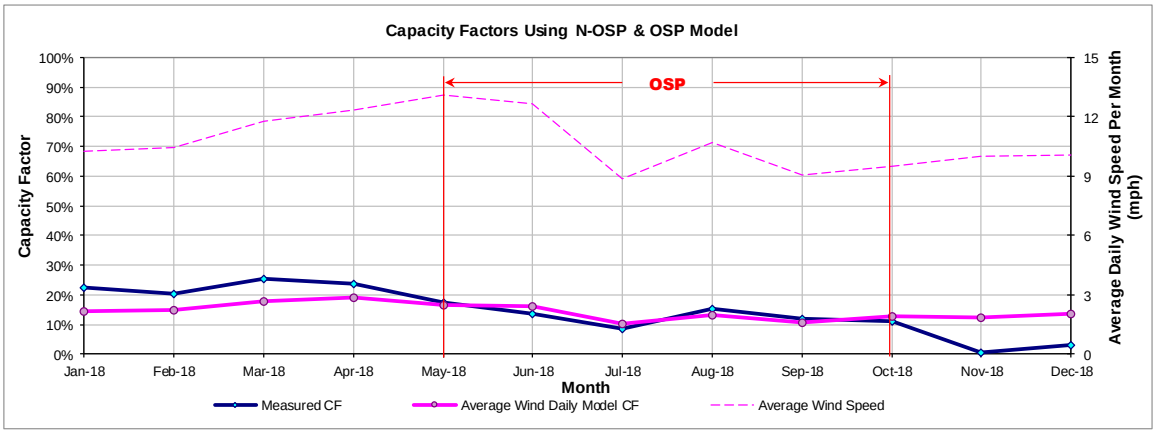


Figure A-228:KING_NW_KINGNW - Predicted Wind Power and Capacity Factor Using Daily Models

A.55.3 King Mountain Wind Ranch - KING_SE_KINGSE

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
KING_SE_KINGSE	Wind	McCamey	UPTON	FPL/Cielo	King Mountain Wind Ranch

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
31 Bonus 1.3 MW	ERCOT	W	Dec-01	West	FST	40.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

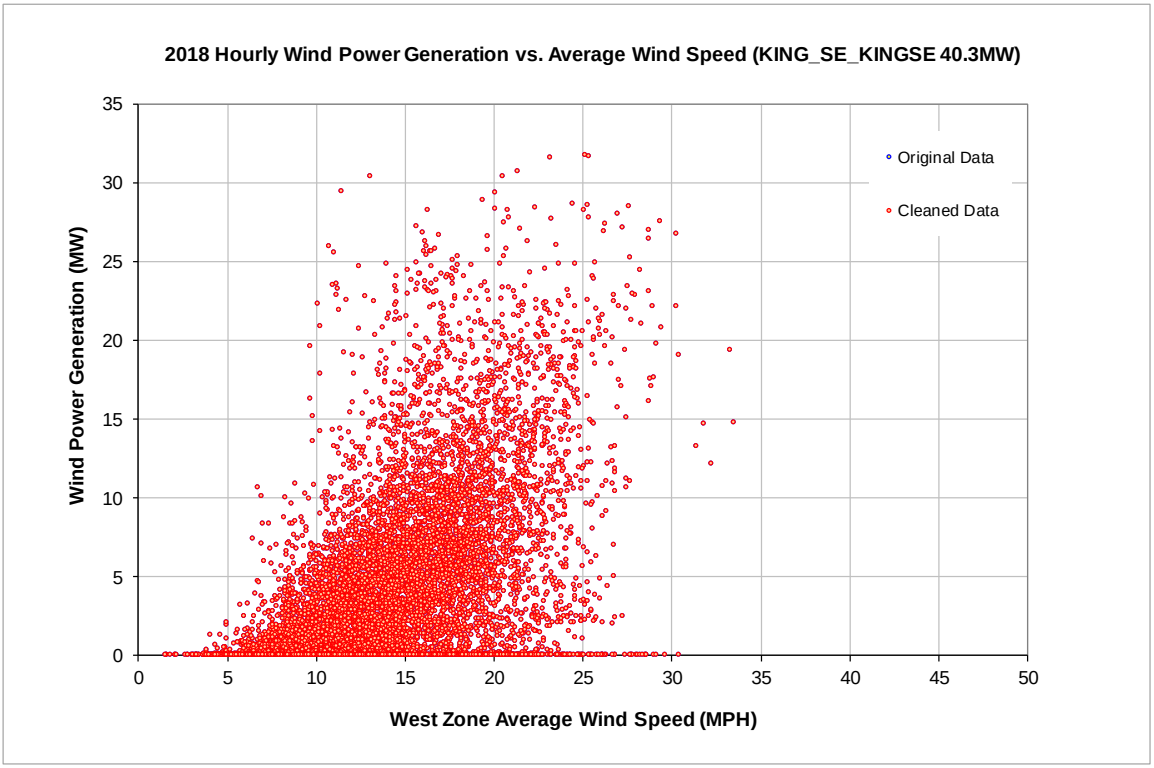


Figure A-229:KING_SE_KINGSE - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

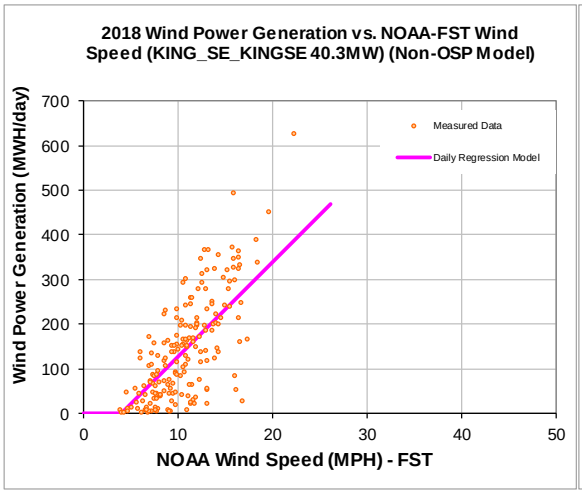
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-120.24
Left Slope (MWh/mph-day)	24.57
RMSE (MWh/day)	79.29
R2	0.53
CV-RMSE	56.2%
Daily Maximum (MWh/day)	967

OSP Model:

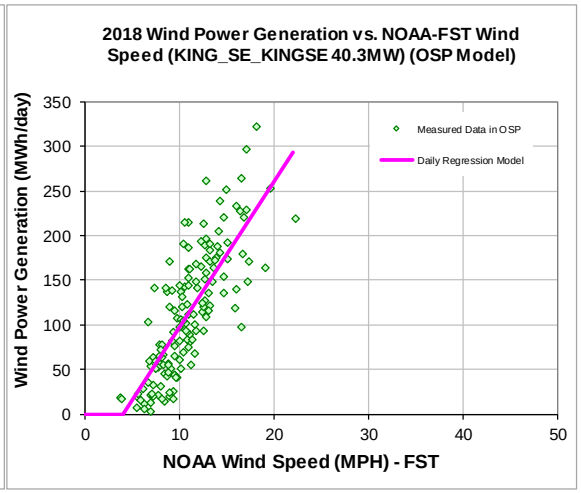
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-70.76
Left Slope (MWh/mph-day)	16.79
RMSE (MWh/day)	42.47
R2	0.63
CV-RMSE	38.0%
Daily Maximum (MWh/day)	967

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
48,022	43,631

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
112	112

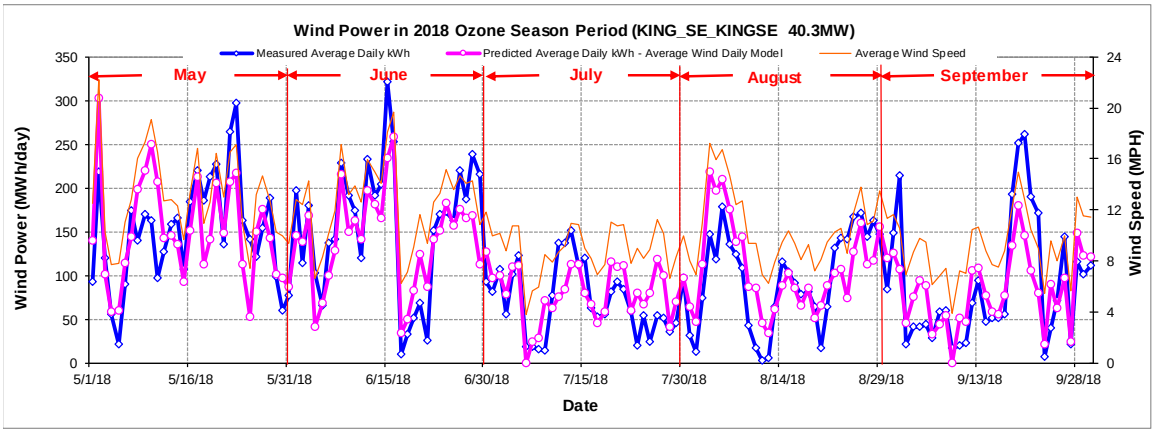
Figure A-230:KING_SE_KINGSE - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.25	4,898	4,081	16.67%	16%	14%
Feb-18	28	10.46	4,571	3,834	16.12%	17%	14%
Mar-18	31	11.79	6,497	5,257	19.09%	22%	18%
Apr-18	30	12.36	6,303	5,514	12.52%	22%	19%
May-18	31	13.09	4,618	4,616	0.04%	15%	15%
Jun-18	30	12.66	4,644	4,250	8.48%	16%	15%
Jul-18	31	8.85	2,157	2,420	-12.17%	7%	8%
Aug-18	31	10.71	3,077	3,380	-9.86%	10%	11%
Sep-18	30	9.06	2,602	2,444	6.05%	9%	8%
Oct-18	31	9.52	3,134	3,580	-14.22%	10%	12%
Nov-18	30	9.85	1,038	3,674	-253.91%	4%	13%
Dec-18	31	8.85	93	681	-633.87%	0%	2%
Total	365	10.74	43,631	43,731	-0.23%	12%	12%
Total in OSP (07/15-09/15)	153	10.87	17,098	17,110	-0.08%	12%	12%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

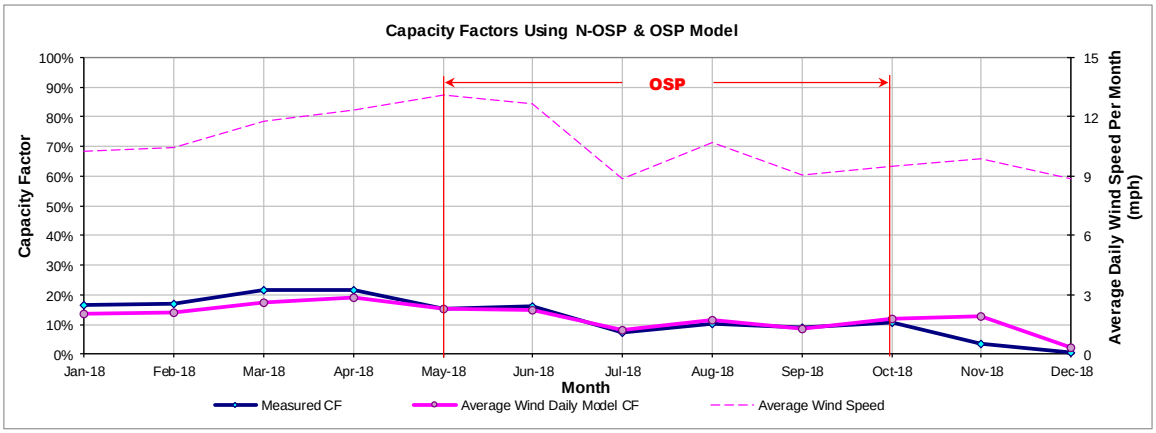


Figure A-231:KING_SE_KINGSE - Predicted Wind Power and Capacity Factor Using Daily Models

A.55.4 King Mountain Wind Ranch - KING_SW_KINGSW

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
KING_SW_KINGSW	Wind	McCamey	UPTON	FPL/Cielo	King Mountain Wind Ranch

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
61 Bonus 1.3 MW	ERCOT	W	Dec-01	West	FST	79.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

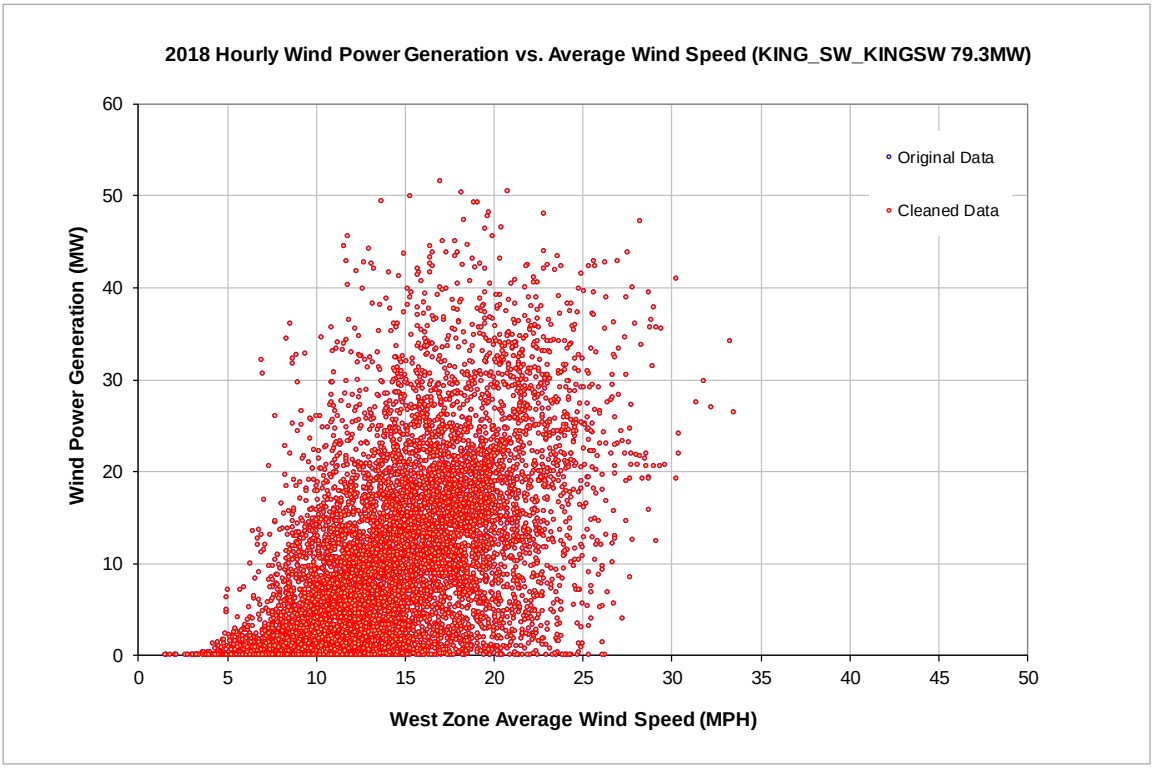


Figure A-232:KING_SW_KINGSW - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

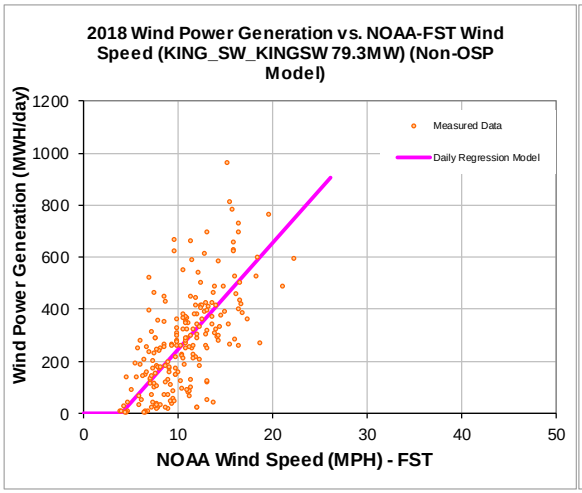
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-97.71
Left Slope (MWh/mph-day)	34.74
RMSE (MWh/day)	144.13
R2	0.41
CV-RMSE	53.3%
Daily Maximum (MWh/day)	1903

OSP Model:

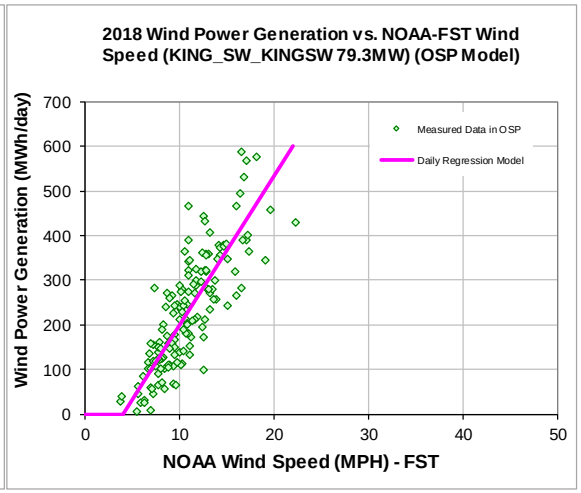
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-113.35
Left Slope (MWh/mph-day)	31.54
RMSE (MWh/day)	72.51
R2	0.68
CV-RMSE	31.6%
Daily Maximum (MWh/day)	1903

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
94,103	92,463

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
230	230

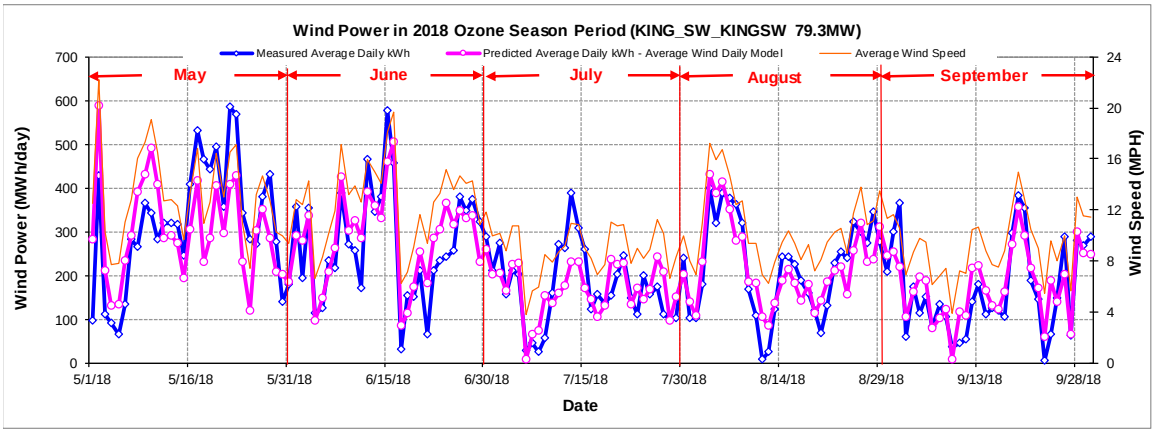
Figure A-233:KING_SW_KINGSW - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.25	10,681	8,009	25.01%	18%	14%
Feb-18	28	10.46	9,548	7,436	22.12%	18%	14%
Mar-18	31	11.79	11,093	9,671	12.82%	19%	16%
Apr-18	30	12.36	10,508	9,948	5.33%	18%	17%
May-18	31	13.09	9,809	9,280	5.39%	17%	16%
Jun-18	30	12.66	8,163	8,573	-5.02%	14%	15%
Jul-18	31	8.85	5,308	5,140	3.16%	9%	9%
Aug-18	31	10.71	6,983	6,959	0.35%	12%	12%
Sep-18	30	9.06	4,858	5,169	-6.41%	9%	9%
Oct-18	31	9.52	5,932	7,224	-21.76%	10%	12%
Nov-18	30	9.85	5,380	7,339	-36.40%	9%	13%
Dec-18	31	9.98	4,200	7,716	-83.72%	7%	13%
Total	365	10.71	92,463	92,463	0.00%	13%	13%
Total in OSP (07/15-09/15)	153	10.87	35,121	35,121	0.00%	12%	12%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

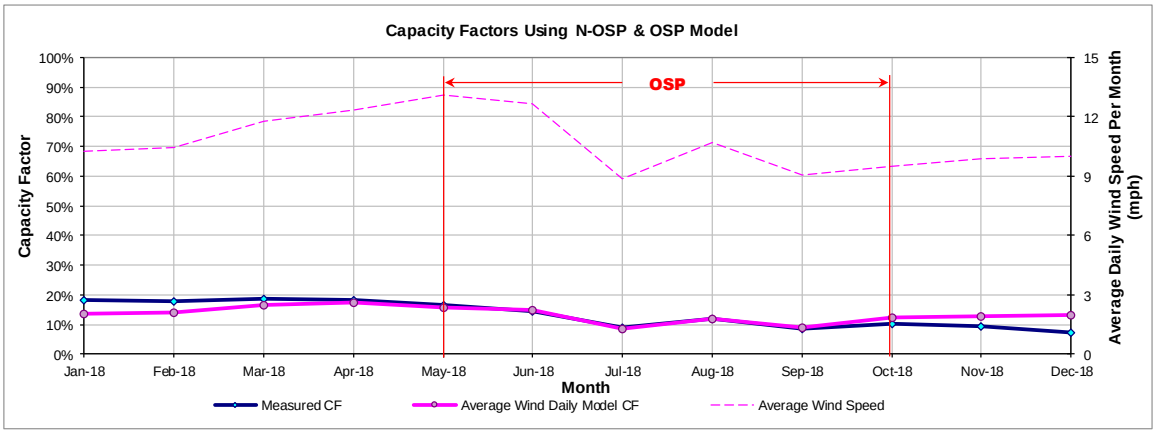


Figure A-234:KING_SW_KINGSW - Predicted Wind Power and Capacity Factor Using Daily Models

A.56 Langford Wind Power

A.56.1 Langford Wind Power - LGD_LANGFORD

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LGD_LANGFORD	Wind	-	TOM GREEN	Padoma	Langford Wind Power

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
100 GE 1.2 MW	ERCOT	W	Oct-09	West	SJT	155

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

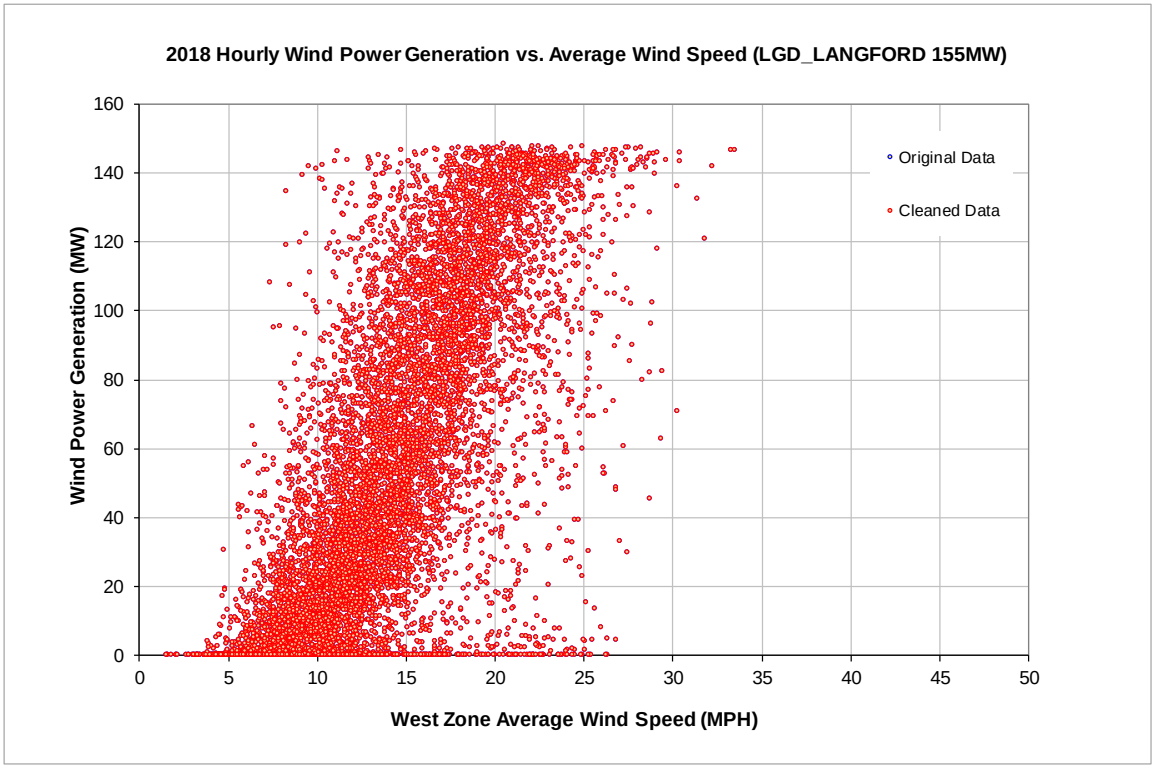


Figure A-235:LGD_LANGFORD - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

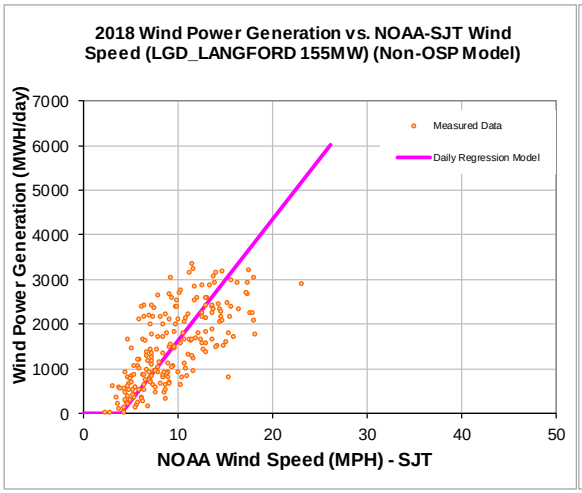
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	21.44
Left Slope (MWh/mph-day)	154.41
RMSE (MWh/day)	616.72
R2	0.49
CV-RMSE	41.9%
Daily Maximum (MWh/day)	3720

OSP Model:

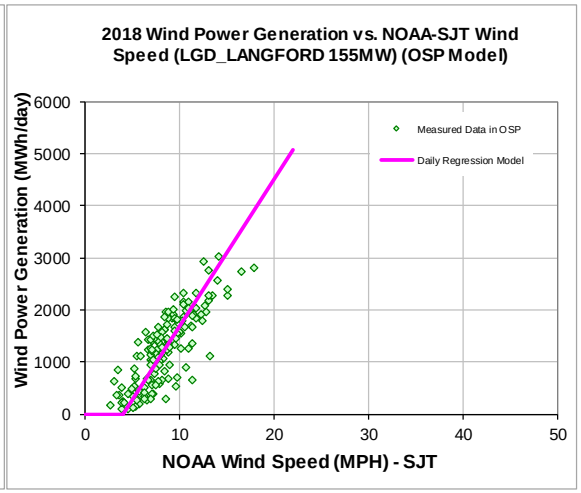
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-433.03
Left Slope (MWh/mph-day)	199.94
RMSE (MWh/day)	402.95
R2	0.66
CV-RMSE	32.0%
Daily Maximum (MWh/day)	3720

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
519,787	500,463

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,263	1,258

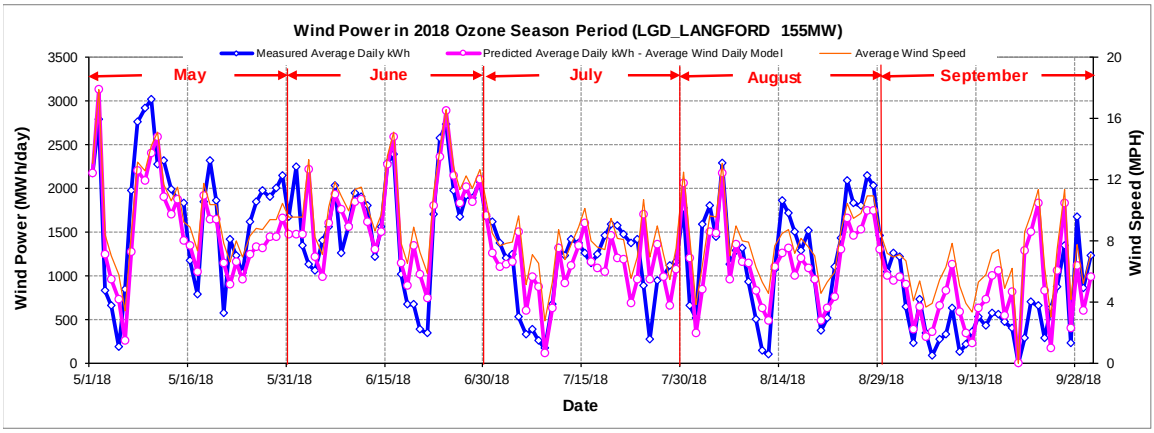
Figure A-236:LGD_LANGFORD - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (SJT) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	9.24	52,295	42,009	19.67%	45%	36%
Feb-18	28	9.93	39,174	43,551	-11.17%	38%	42%
Mar-18	31	10.21	48,129	49,554	-2.96%	42%	43%
Apr-18	30	11.30	46,530	52,994	-13.89%	42%	47%
May-18	31	9.81	53,636	47,407	11.61%	47%	41%
Jun-18	30	10.64	47,767	50,840	-6.43%	43%	46%
Jul-18	31	7.69	33,279	34,253	-2.93%	29%	30%
Aug-18	31	7.85	39,847	35,228	11.59%	35%	31%
Sep-18	30	6.23	16,755	23,556	-40.59%	15%	21%
Oct-18	31	7.54	40,191	36,764	8.53%	35%	32%
Nov-18	30	8.54	38,169	40,204	-5.33%	34%	36%
Dec-18	31	9.08	44,691	44,104	1.31%	39%	38%
Total	365	9.00	500,463	500,463	0.00%	37%	37%
Total in OSP (07/15-09/15)	152	8.46	191,284	191,284	0.00%	34%	34%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

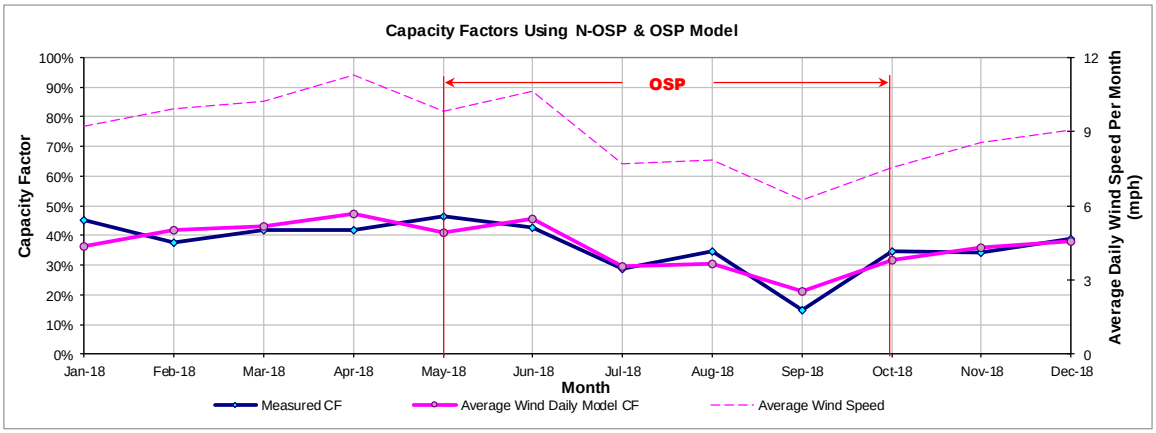


Figure A-237:LGD_LANGFORD - Predicted Wind Power and Capacity Factor Using Daily Models

A.57 Logan's Gap Wind I

A.57.1 Logan's Gap Wind I - LGW_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LGW_UNIT1	Wind	-	COMANCHE	Pattern Energy	Logan's Gap Wind I

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
43 Siemens 2.3 MW	ERCOT	N	Sep-15	North	ABI	103.8

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

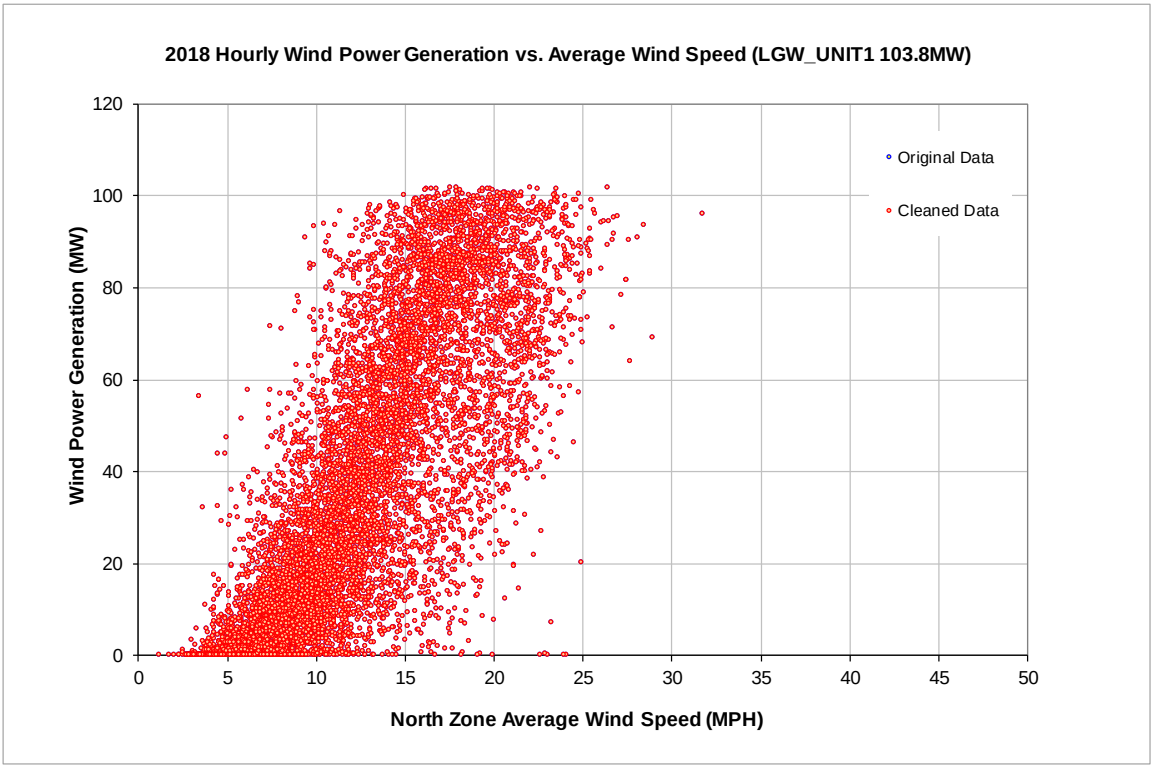


Figure A-238:LGW_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

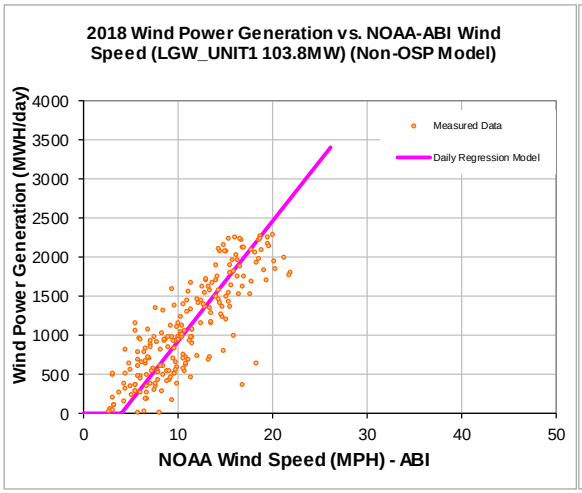
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-171.20
Left Slope (MWh/mph-day)	113.33
RMSE (MWh/day)	344.79
R2	0.69
CV-RMSE	32.2%
Daily Maximum (MWh/day)	2491

OSP Model:

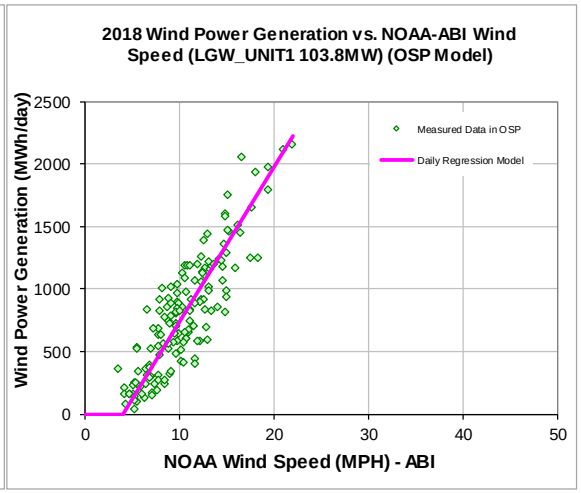
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-346.08
Left Slope (MWh/mph-day)	109.45
RMSE (MWh/day)	226.91
R2	0.76
CV-RMSE	28.6%
Daily Maximum (MWh/day)	2491

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
378,203	348,063

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
804	793

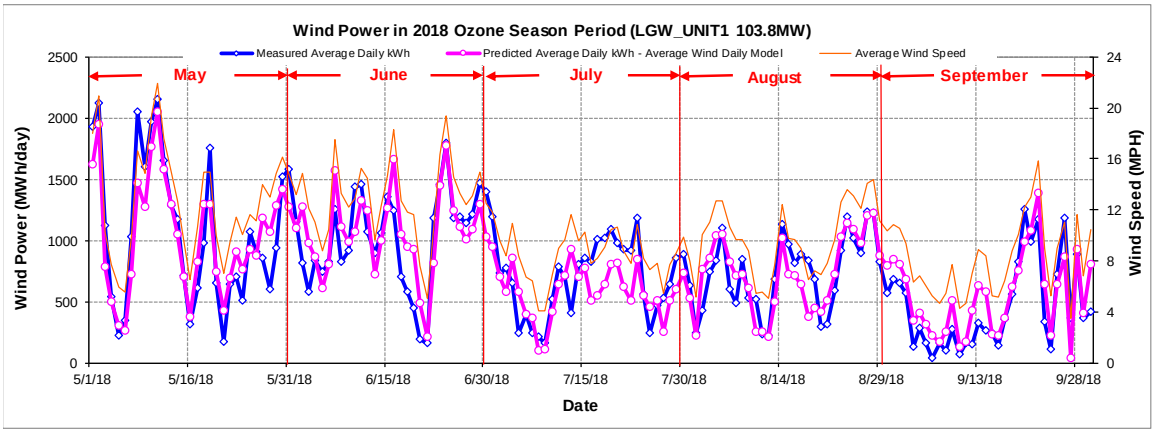
Figure A-239:LGW_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	36,393	33,230	8.69%	47%	43%
Feb-18	28	11.00	29,901	30,103	-0.67%	43%	43%
Mar-18	31	11.92	37,140	36,588	1.49%	48%	47%
Apr-18	30	13.18	36,536	39,663	-8.56%	49%	53%
May-18	31	12.78	33,652	32,637	3.02%	44%	42%
Jun-18	30	12.90	30,515	31,988	-4.83%	41%	43%
Jul-18	31	8.52	21,388	18,180	15.00%	28%	24%
Aug-18	31	9.85	22,492	22,686	-0.86%	29%	29%
Sep-18	30	7.97	13,216	15,772	-19.34%	18%	21%
Oct-18	31	9.35	25,861	27,554	-6.55%	33%	36%
Nov-18	30	10.05	28,570	29,029	-1.61%	38%	39%
Dec-18	31	10.23	32,399	30,633	5.45%	42%	40%
Total	365	10.72	348,063	348,063	0.00%	38%	38%
Total in OSP (07/15-09/15)	153	10.40	121,262	121,262	0.00%	32%	32%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

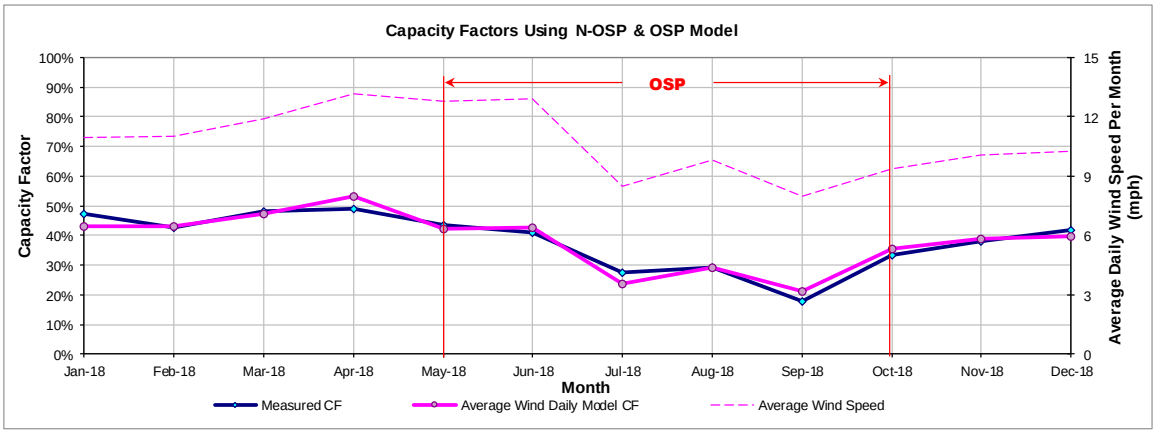


Figure A-240:LGW_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.57.2 Logan's Gap Wind I - LGW_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LGW_UNIT2	Wind	-	COMANCHE	Pattern Energy	Logan's Gap Wind I

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
44 Siemens 2.3 MW	ERCOT	N	Sep-15	North	ABI	106.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

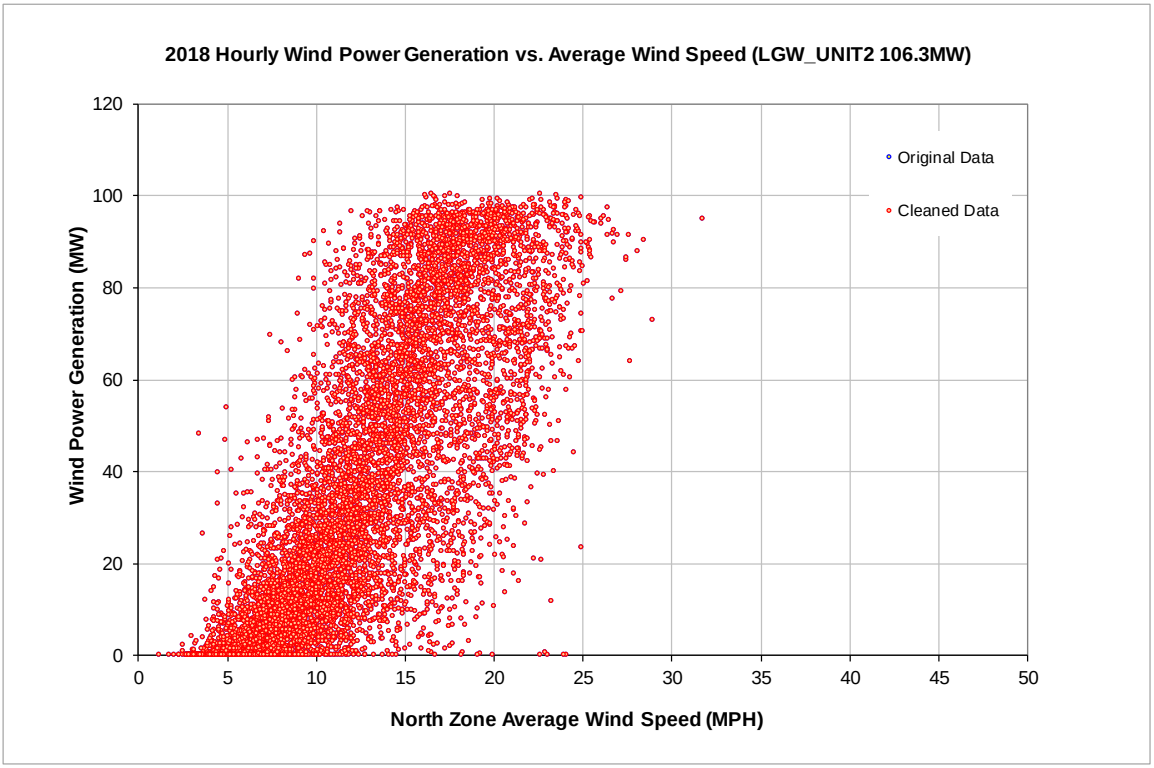


Figure A-241:LGW_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

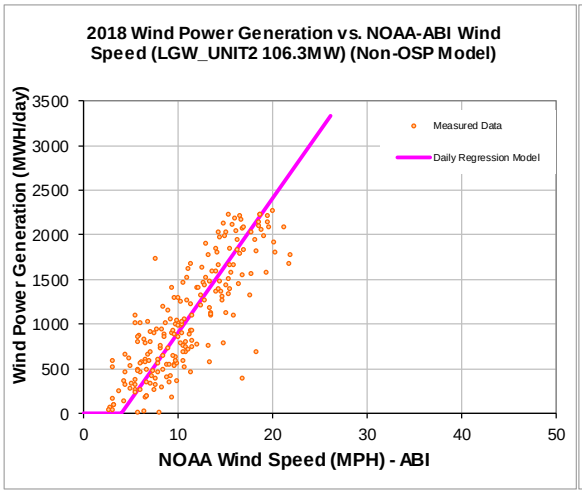
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-176.22
Left Slope (MWh/mph-day)	111.65
RMSE (MWh/day)	344.75
R2	0.69
CV-RMSE	32.9%
Daily Maximum (MWh/day)	2551

OSP Model:

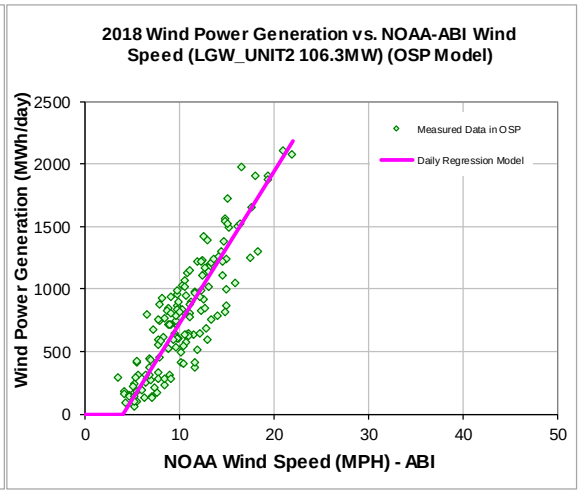
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-375.06
Left Slope (MWh/mph-day)	110.72
RMSE (MWh/day)	219.12
R2	0.78
CV-RMSE	28.2%
Daily Maximum (MWh/day)	2551

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
370,425	340,669

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
788	777

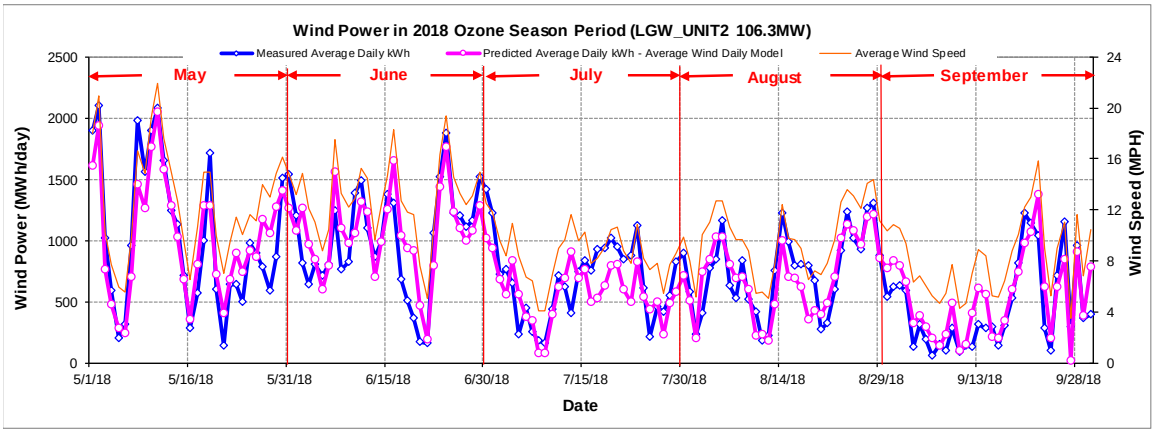
Figure A-242:LGW_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	34,576	32,502	6.00%	44%	41%
Feb-18	28	11.00	28,385	29,444	-3.73%	40%	41%
Mar-18	31	11.92	35,680	35,809	-0.36%	45%	45%
Apr-18	30	13.18	35,153	38,847	-10.51%	46%	51%
May-18	31	12.78	32,541	32,240	0.93%	41%	41%
Jun-18	30	12.90	30,279	31,609	-4.39%	40%	41%
Jul-18	31	8.52	20,277	17,616	13.12%	26%	22%
Aug-18	31	9.85	22,663	22,174	2.16%	29%	28%
Sep-18	30	7.97	13,084	15,205	-16.21%	17%	20%
Oct-18	31	9.35	27,257	26,910	1.27%	34%	34%
Nov-18	30	10.05	28,081	28,370	-1.03%	37%	37%
Dec-18	31	10.23	32,693	29,943	8.41%	41%	38%
Total	365	10.72	340,669	340,669	0.00%	37%	37%
Total in OSP (07/15-09/15)	153	10.40	118,843	118,843	0.00%	30%	30%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

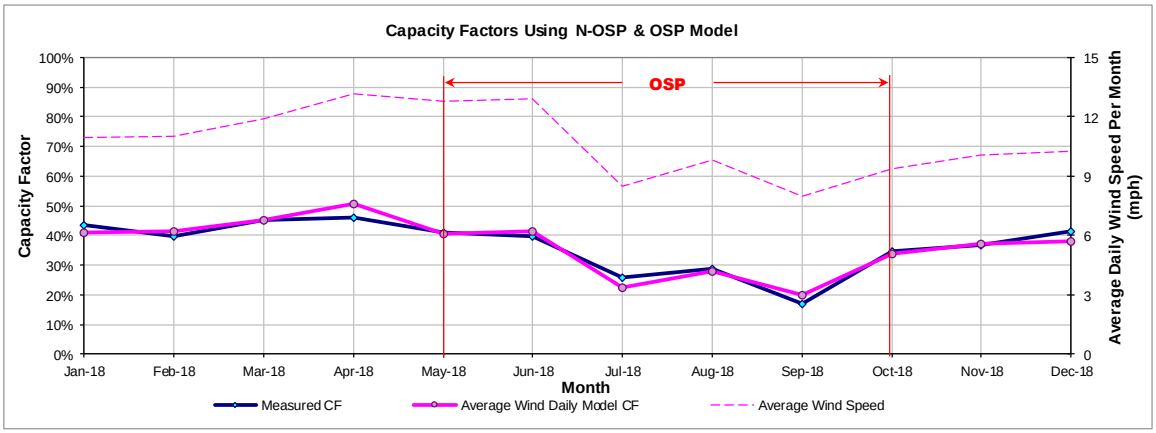


Figure A-243:LGW_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.58 Lone Star - Mesquite Wind

A.58.1 Lone Star - Mesquite Wind - LNCRK_G83

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LNCRK_G83	Wind	Abilene	SHACKELFORD	EDP Renovaveis	Lone Star - Mesquite Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
100 Gamesa 2 MW	ERCOT	W	Dec-07	West	ABI	200

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

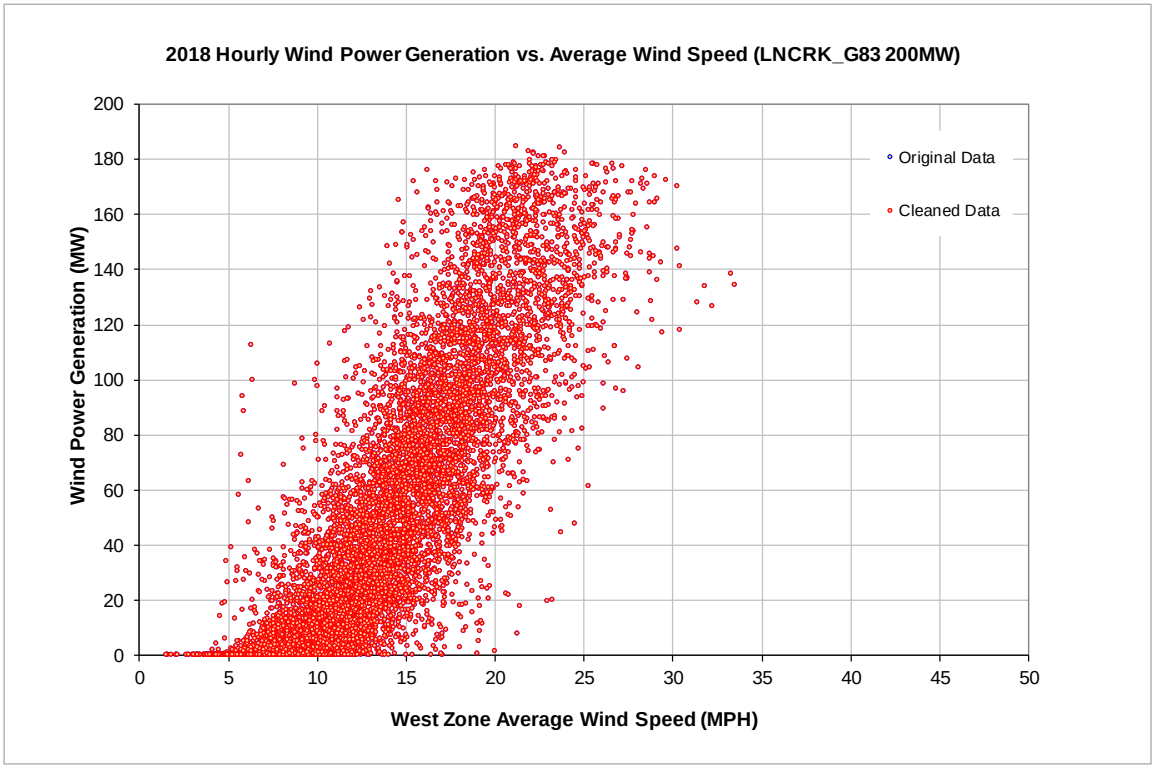


Figure A-244:LNCRK_G83 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

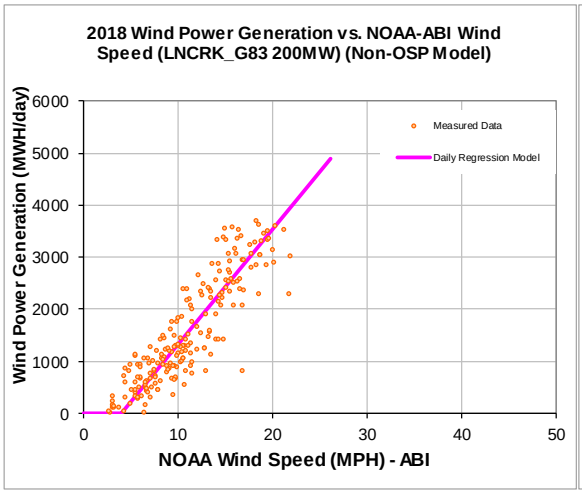
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-600.29
Left Slope (MWh/mph-day)	195.65
RMSE (MWh/day)	471.74
R2	0.78
CV-RMSE	30.4%
Daily Maximum (MWh/day)	4800

OSP Model:

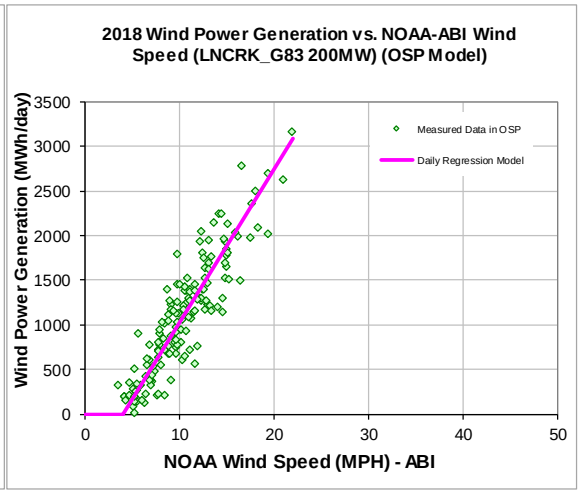
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-537.86
Left Slope (MWh/mph-day)	157.36
RMSE (MWh/day)	284.70
R2	0.81
CV-RMSE	25.9%
Daily Maximum (MWh/day)	4800

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
546,393	493,650

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,115	1,099

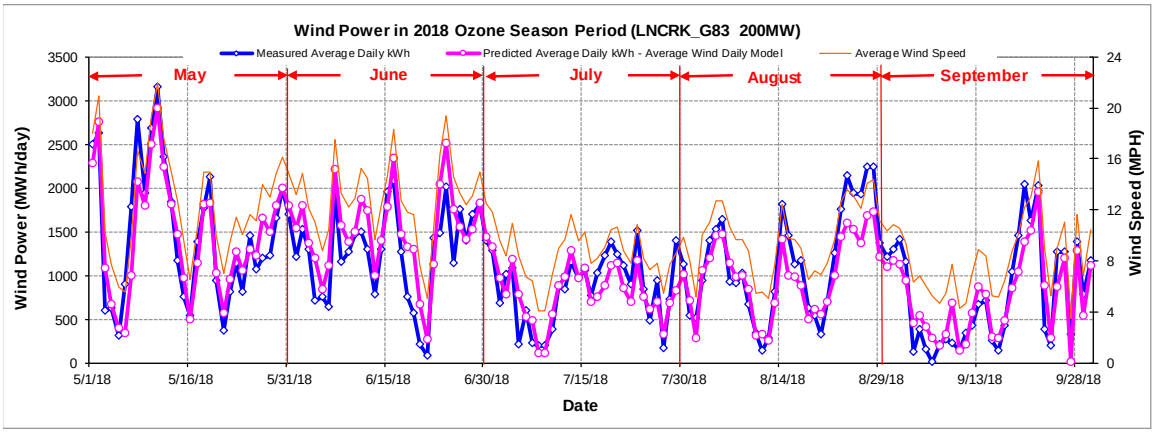
Figure A-245:LNCRK_G83 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.07	55,142	46,983	14.80%	37%	32%
Feb-18	28	11.19	39,002	42,991	-10.23%	29%	32%
Mar-18	31	11.92	52,829	53,718	-1.68%	36%	36%
Apr-18	30	13.18	51,153	59,332	-15.99%	36%	41%
May-18	31	12.78	46,123	45,672	0.98%	31%	31%
Jun-18	30	12.90	37,878	44,781	-18.23%	26%	31%
Jul-18	31	8.52	26,068	24,888	4.52%	18%	17%
Aug-18	31	9.85	36,149	31,366	13.23%	24%	21%
Sep-18	30	7.97	21,957	21,466	2.23%	15%	15%
Oct-18	31	9.35	34,403	38,231	-11.13%	23%	26%
Nov-18	30	10.05	44,736	40,973	8.41%	31%	28%
Dec-18	31	10.23	48,209	43,438	9.90%	32%	29%
Total	365	10.74	493,650	493,838	-0.04%	28%	28%
Total in OSP (07/15-09/15)	153	10.40	168,174	168,174	0.00%	23%	23%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

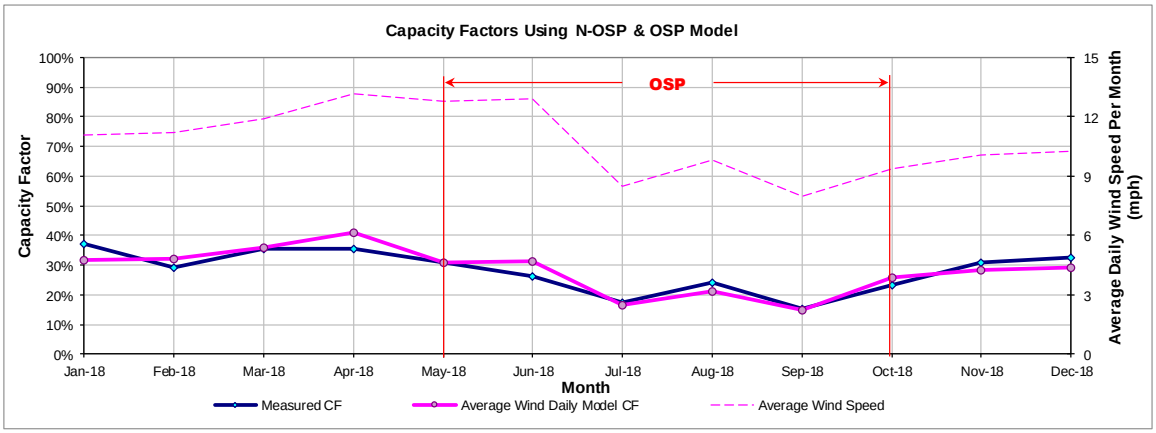


Figure A-246:LNCRK_G83 - Predicted Wind Power and Capacity Factor Using Daily Models

A.59 Lone Star - Post Oak Wind

A.59.1 Lone Star - Post Oak Wind - LNCRK2_G871

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LNCRK2_G871	Wind	-	SHACKELFORD	EDP Renovaveis	Lone Star - Post Oak Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 Gamesa 2 MW 50 Gamesa 2 MW	ERCOT	W	May-08	West	ABI	200

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

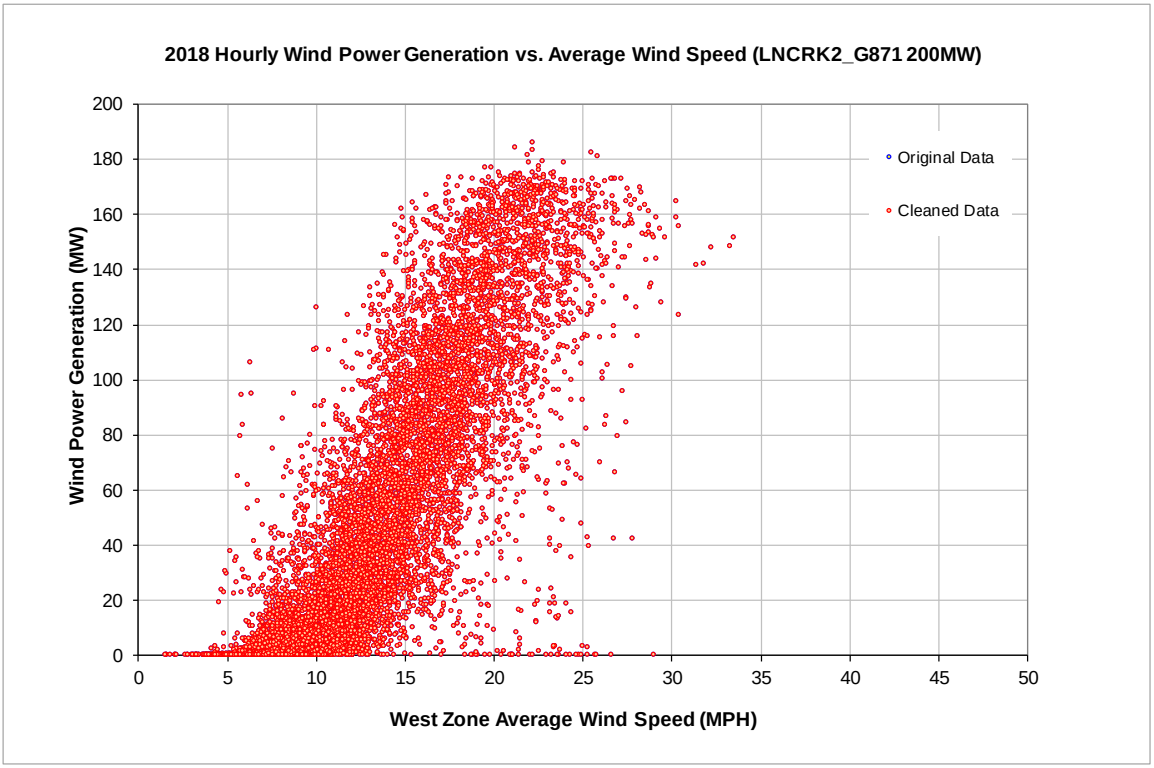


Figure A-247:LNCRK2_G871 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

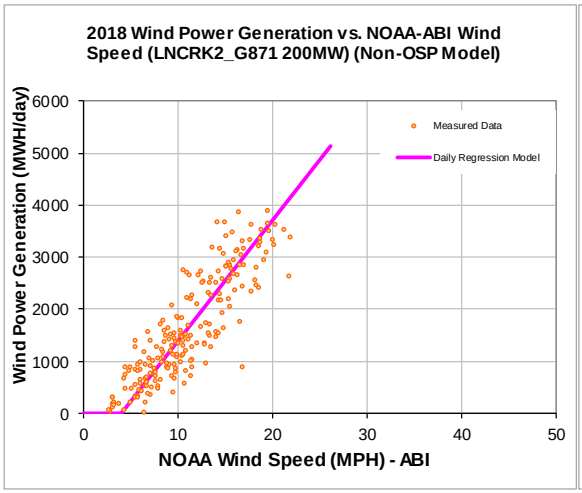
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-506.01
Left Slope (MWh/mph-day)	193.79
RMSE (MWh/day)	498.19
R2	0.76
CV-RMSE	30.7%
Daily Maximum (MWh/day)	4800

OSP Model:

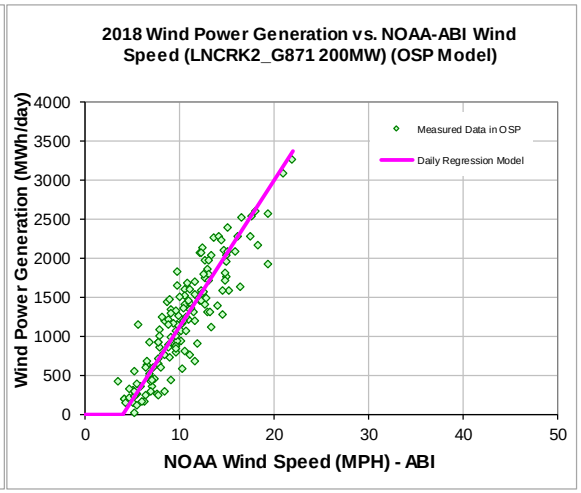
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-529.72
Left Slope (MWh/mph-day)	165.85
RMSE (MWh/day)	298.25
R2	0.81
CV-RMSE	24.9%
Daily Maximum (MWh/day)	4800

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
576,543	523,915

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,213	1,196

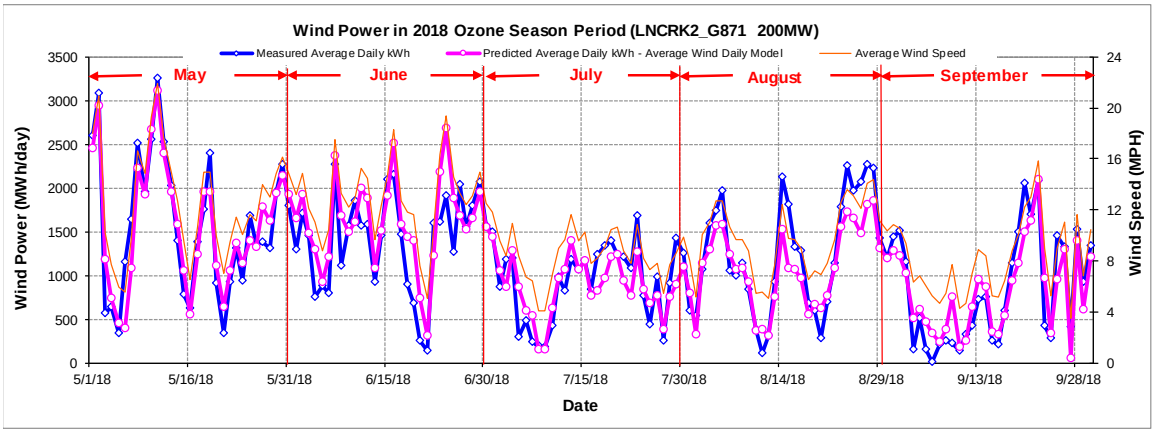
Figure A-248:LNCRK2_G871 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.07	56,204	49,174	12.51%	38%	33%
Feb-18	28	11.19	40,343	44,910	-11.32%	30%	33%
Mar-18	31	11.92	54,024	55,951	-3.57%	36%	38%
Apr-18	30	13.18	55,130	61,423	-11.41%	38%	43%
May-18	31	12.78	49,302	49,292	0.02%	33%	33%
Jun-18	30	12.90	42,297	48,315	-14.23%	29%	34%
Jul-18	31	8.52	28,414	27,385	3.62%	19%	18%
Aug-18	31	9.85	39,155	34,213	12.62%	26%	23%
Sep-18	30	7.97	23,777	23,741	0.15%	17%	16%
Oct-18	31	9.35	37,962	40,510	-6.71%	26%	27%
Nov-18	30	10.05	46,636	43,239	7.28%	32%	30%
Dec-18	31	10.23	50,671	45,769	9.67%	34%	31%
Total	365	10.74	523,915	523,920	0.00%	30%	30%
Total in OSP (07/15-09/15)	153	10.40	182,945	182,945	0.00%	25%	25%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

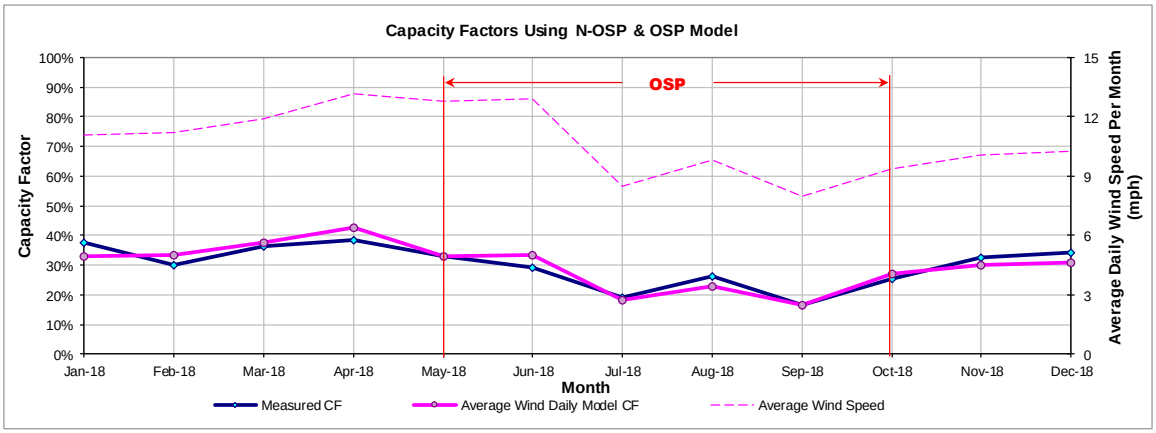


Figure A-249:LNCRK2_G871 - Predicted Wind Power and Capacity Factor Using Daily Models

A.60 Longhorn Energy Center North

A.60.1 Longhorn Energy Center North - LHORN_N_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LHORN_N_UNIT1	Wind	-	BRISCOE	EDF Renewable	Longhorn Energy Center North

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 Vestas 2 MW	ERCOT	W	Sep-15	Panhandle	LBB	100

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

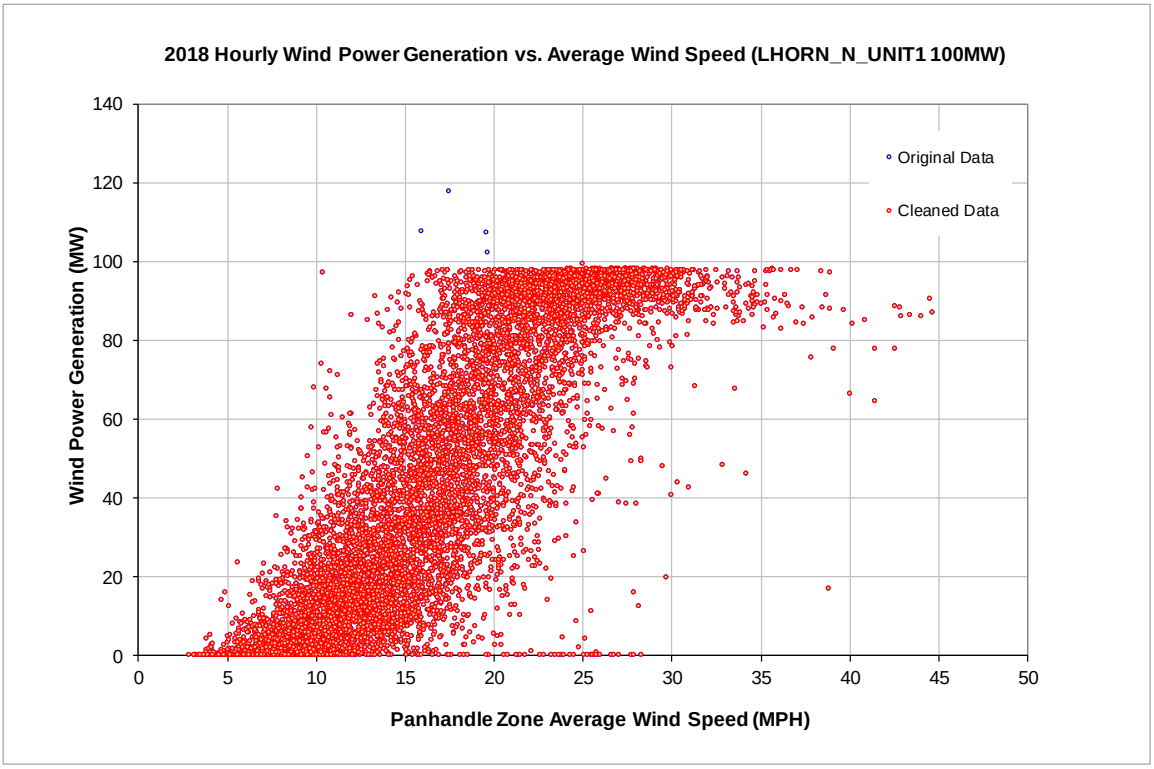


Figure A-250:LHORN_N_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

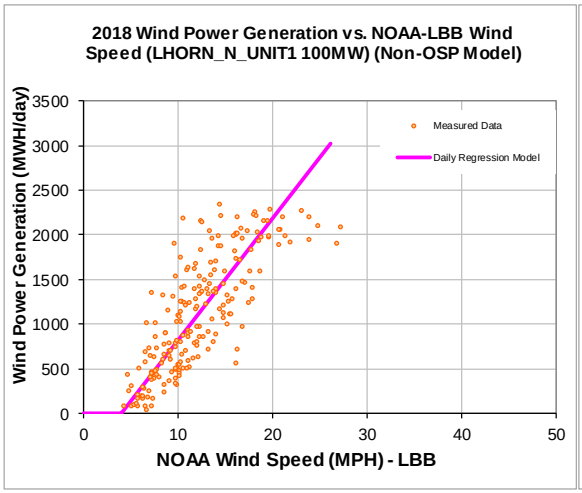
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-232.44
Left Slope (MWh/mph-day)	110.96
RMSE (MWh/day)	391.85
R2	0.63
CV-RMSE	35.1%
Daily Maximum (MWh/day)	2400

OSP Model:

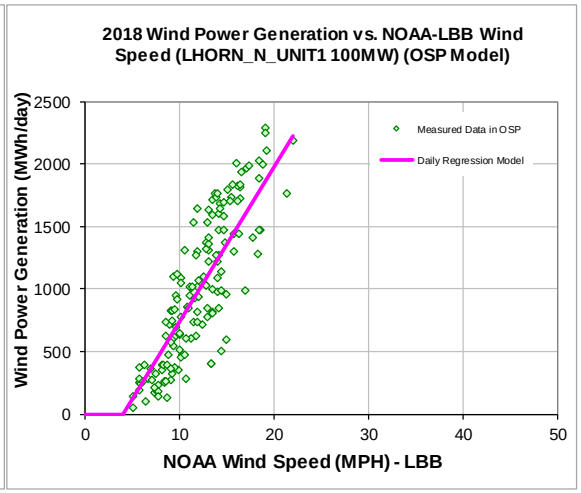
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-652.08
Left Slope (MWh/mph-day)	136.91
RMSE (MWh/day)	301.41
R2	0.73
CV-RMSE	30.4%
Daily Maximum (MWh/day)	2400

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
376,358	385,768

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
840	991

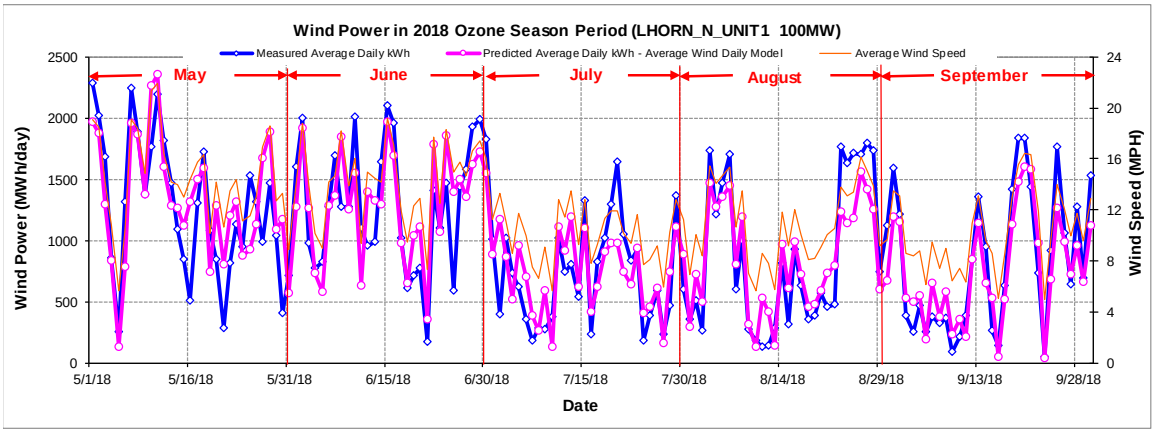
Figure A-251:LHORN_N_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	36,372	30,942	14.93%	49%	42%
Feb-18	28	12.08	32,216	31,015	3.73%	48%	46%
Mar-18	31	13.58	37,604	39,501	-5.05%	51%	53%
Apr-18	30	15.19	39,538	43,152	-9.14%	55%	60%
May-18	31	14.42	39,142	41,008	-4.77%	53%	55%
Jun-18	30	14.33	38,989	39,316	-0.84%	54%	55%
Jul-18	31	10.01	21,644	22,251	-2.80%	29%	30%
Aug-18	31	11.09	28,173	26,838	4.74%	38%	36%
Sep-18	30	10.17	23,660	22,196	6.19%	33%	31%
Oct-18	31	10.80	26,959	29,934	-11.03%	36%	40%
Nov-18	30	11.15	34,398	30,129	12.41%	48%	42%
Dec-18	31	11.11	27,073	28,627	-5.74%	36%	38%
Total	365	12.08	385,768	384,908	0.22%	44%	44%
Total in OSP (07/15-09/15)	153	12.00	151,609	151,609	0.00%	41%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

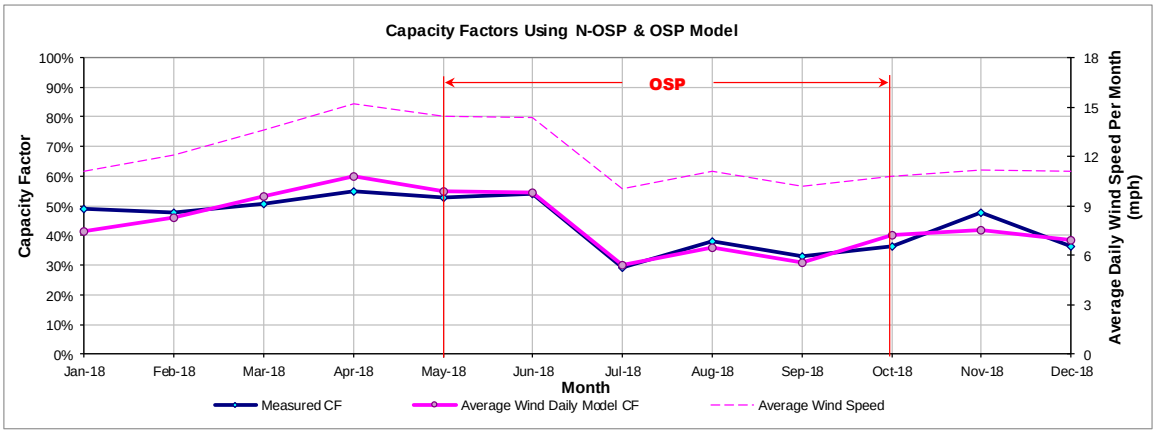


Figure A-252:LHORN_N_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.60.2 Longhorn Energy Center North - LHORN_N_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LHORN_N_UNIT2	Wind	-	BRISCOE	EDF Renewable	Longhorn Energy Center North

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 Vestas 2 MW	ERCOT	W	Sep-15	Panhandle	LBB	100

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

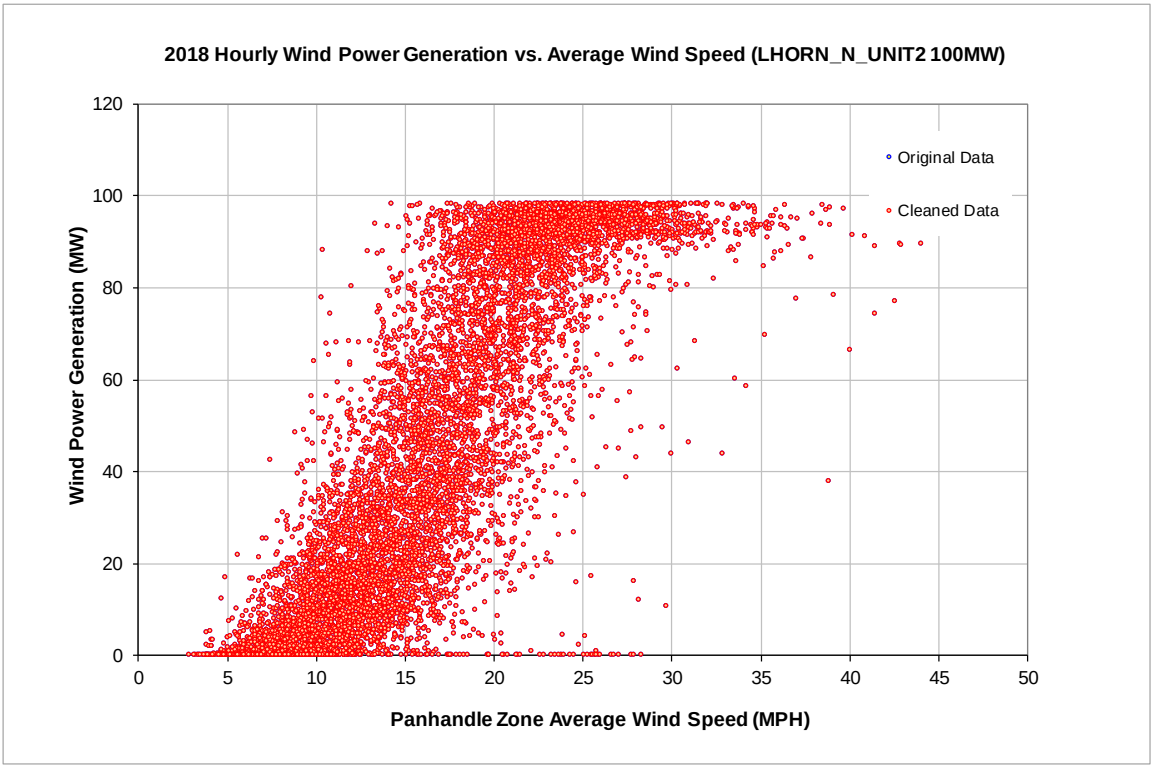


Figure A-253:LHORN_N_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

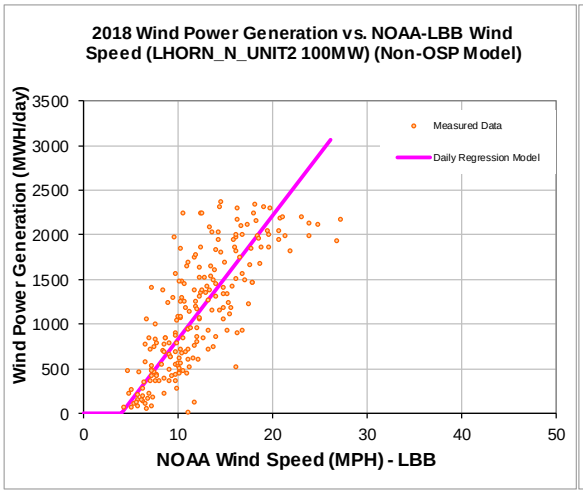
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-234.75
Left Slope (MWh/mph-day)	112.13
RMSE (MWh/day)	416.40
R2	0.60
CV-RMSE	37.0%
Daily Maximum (MWh/day)	2400

OSP Model:

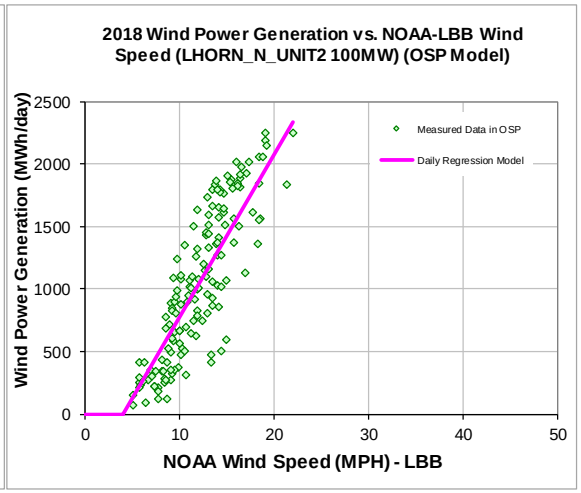
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-670.85
Left Slope (MWh/mph-day)	142.24
RMSE (MWh/day)	306.54
R2	0.74
CV-RMSE	29.6%
Daily Maximum (MWh/day)	2400

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
384,975	397,245

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
879	1,036

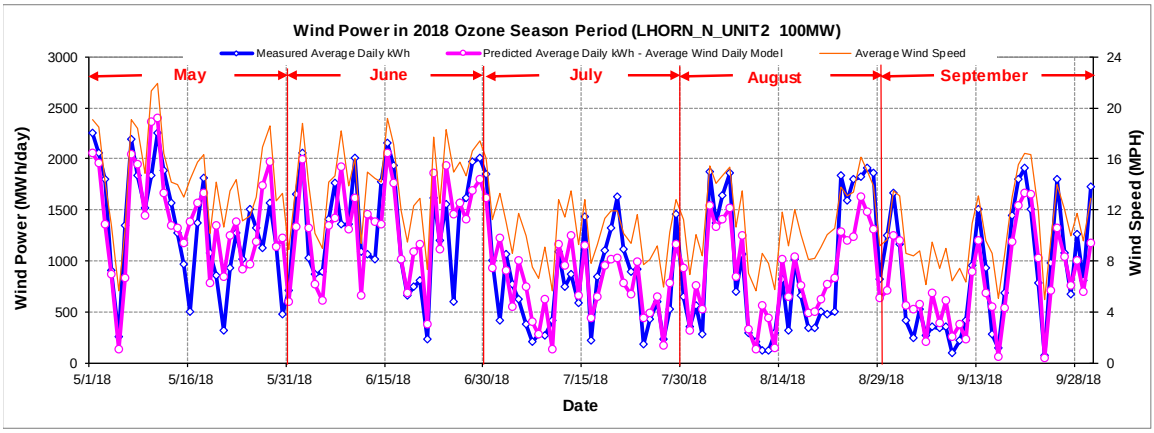
Figure A-254:LHORN_N_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	38,469	31,271	18.71%	52%	42%
Feb-18	28	12.08	33,426	31,345	6.23%	50%	47%
Mar-18	31	13.58	38,110	39,896	-4.68%	51%	54%
Apr-18	30	15.19	38,926	43,559	-11.90%	54%	60%
May-18	31	14.42	40,816	42,756	-4.75%	55%	57%
Jun-18	30	14.33	40,754	41,043	-0.71%	57%	57%
Jul-18	31	10.01	22,486	23,321	-3.71%	30%	31%
Aug-18	31	11.09	29,820	28,086	5.81%	40%	38%
Sep-18	30	10.17	24,640	23,257	5.61%	34%	32%
Oct-18	31	10.80	27,655	30,253	-9.39%	37%	41%
Nov-18	30	11.15	33,868	30,450	10.09%	47%	42%
Dec-18	31	11.13	28,274	30,958	-9.49%	38%	42%
Total	365	12.08	397,245	396,196	0.26%	45%	45%
Total in OSP (07/15-09/15)	153	12.00	158,516	158,464	0.03%	43%	43%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

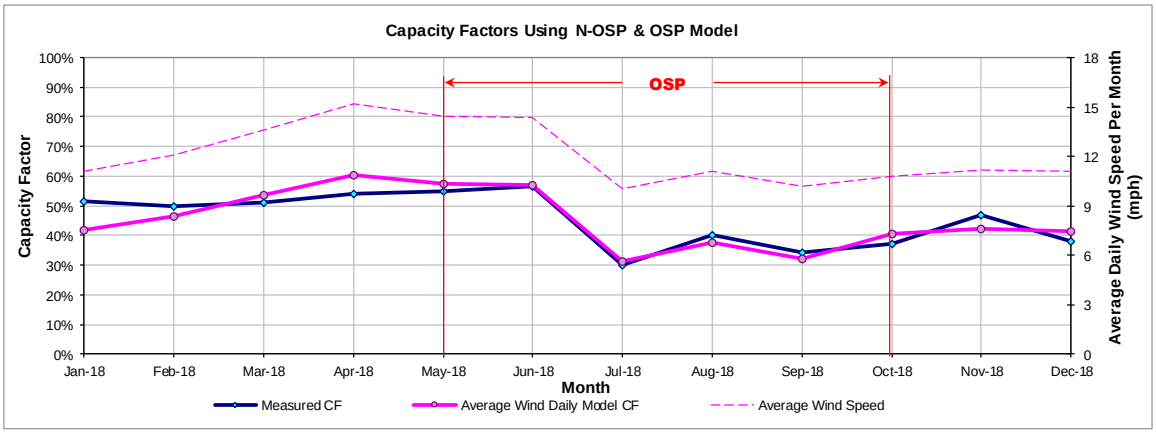


Figure A-255:LHORN_N_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.61

A.61.1 Loraine Windpark - LONEWOLF_G1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LONEWOLF_G1	Wind	-	MITCHELL	Third Planet Windpower	Loraine Windpark

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
33 GE 1.5 MW	ERCOT	W	Oct-09	West	ABI	49.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

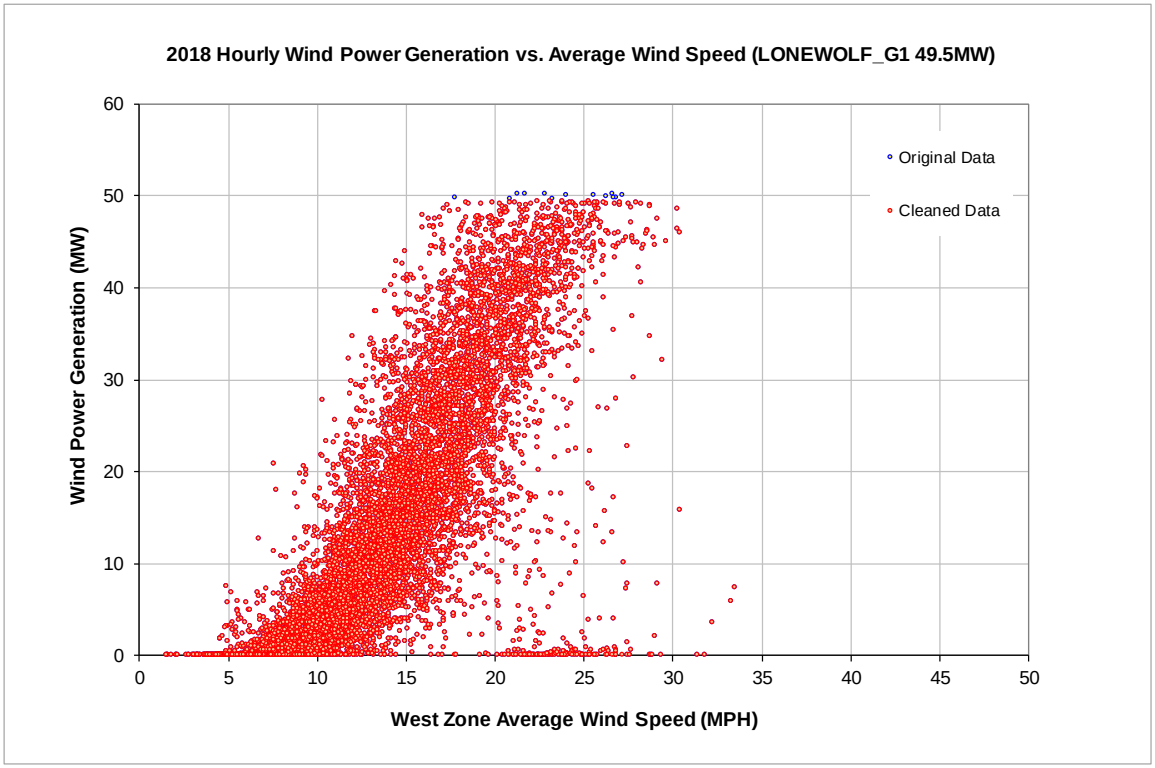


Figure A-256:LONEWOLF_G1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

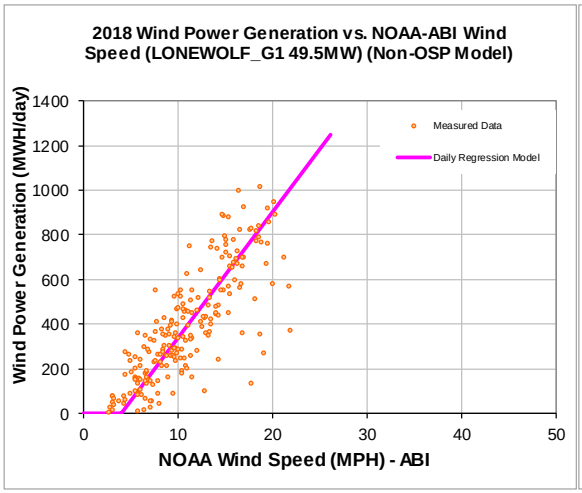
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-82.61
Left Slope (MWh/mph-day)	43.37
RMSE (MWh/day)	144.32
R2	0.66
CV-RMSE	36.8%
Daily Maximum (MWh/day)	1188

OSP Model:

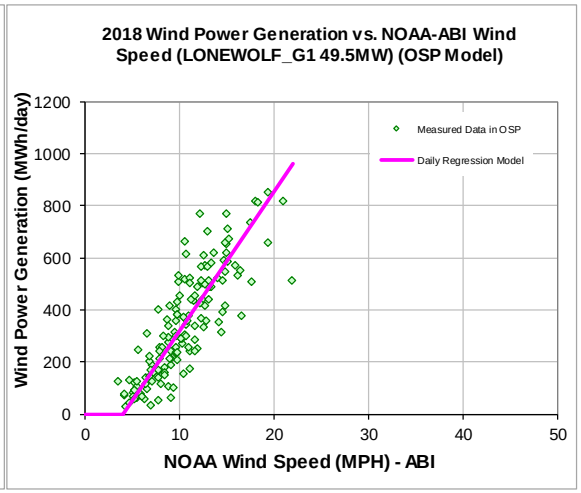
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-144.32
Left Slope (MWh/mph-day)	46.68
RMSE (MWh/day)	110.16
R2	0.71
CV-RMSE	32.3%
Daily Maximum (MWh/day)	1188

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
146,964	135,376

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
346	341

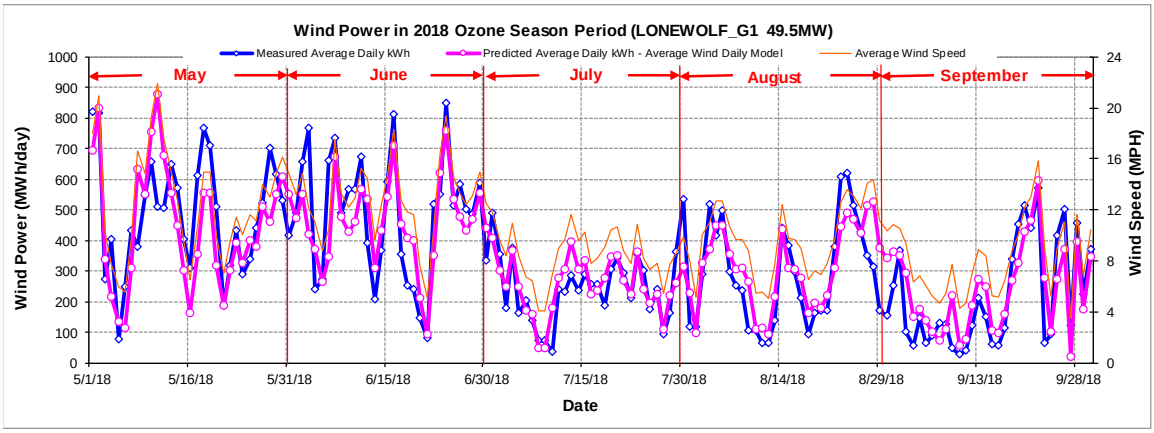
Figure A-257:LONEWOLF_G1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	13,996	12,186	12.94%	38%	33%
Feb-18	28	11.00	11,932	11,041	7.47%	36%	33%
Mar-18	31	11.92	13,713	13,471	1.76%	37%	37%
Apr-18	30	13.18	13,812	14,665	-6.18%	39%	41%
May-18	31	12.78	14,965	14,019	6.32%	41%	38%
Jun-18	30	12.90	14,460	13,740	4.98%	41%	39%
Jul-18	31	8.52	7,529	7,854	-4.32%	20%	21%
Aug-18	31	9.85	8,805	9,776	-11.02%	24%	27%
Sep-18	30	7.97	6,453	6,824	-5.74%	18%	19%
Oct-18	31	9.35	9,648	10,014	-3.80%	26%	27%
Nov-18	30	10.05	9,420	10,595	-12.48%	26%	30%
Dec-18	31	10.23	10,644	11,192	-5.15%	29%	30%
Total	365	10.72	135,376	135,376	0.00%	31%	31%
Total in OSP (07/15-09/15)	153	10.40	52,212	52,212	0.00%	29%	29%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

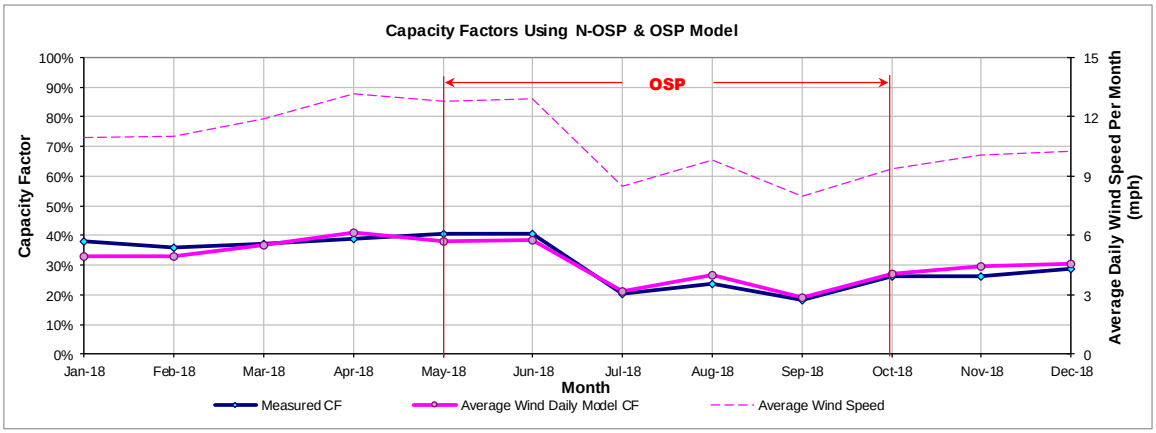


Figure A-258:LONEWOLF_G1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.61.2 Loraine Windpark - LONEWOLF_G2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LONEWOLF_G2	Wind	-	MITCHELL	Third Planet Windpower	Loraine Windpark

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
34 GE 1.5 MW	ERCOT	W	Oct-09	West	ABI	51

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

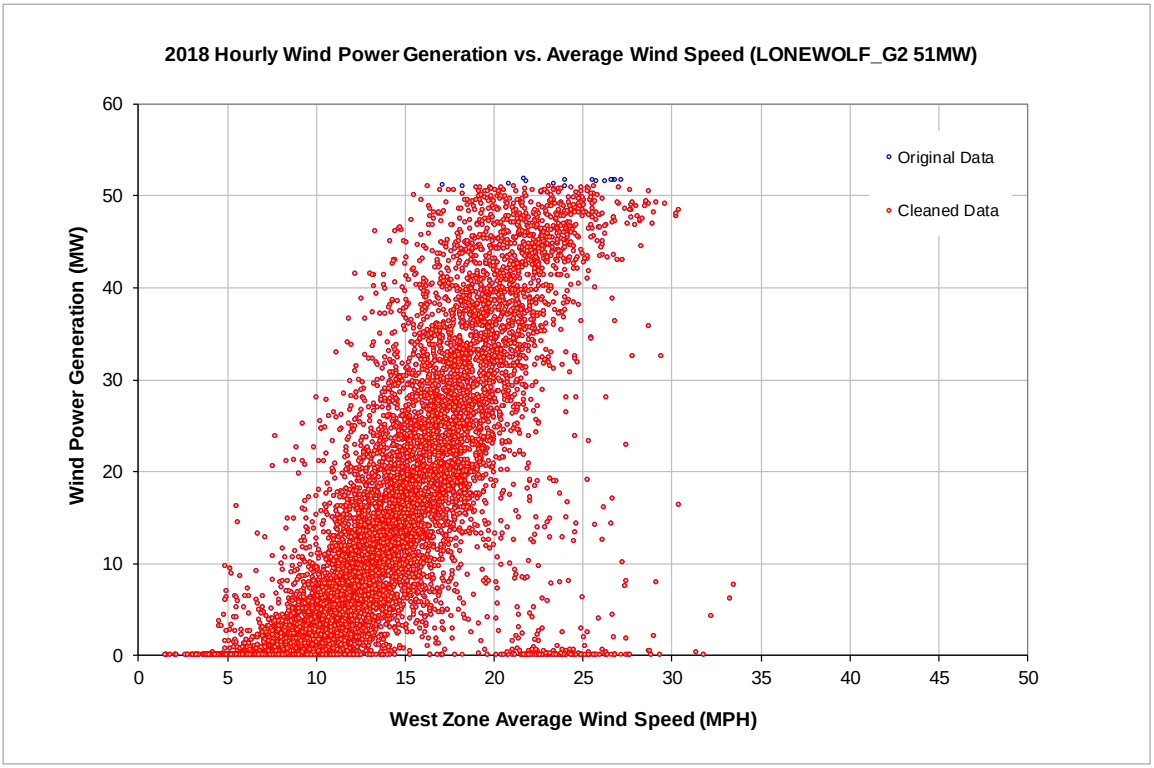


Figure A-259:LONEWOLF_G2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

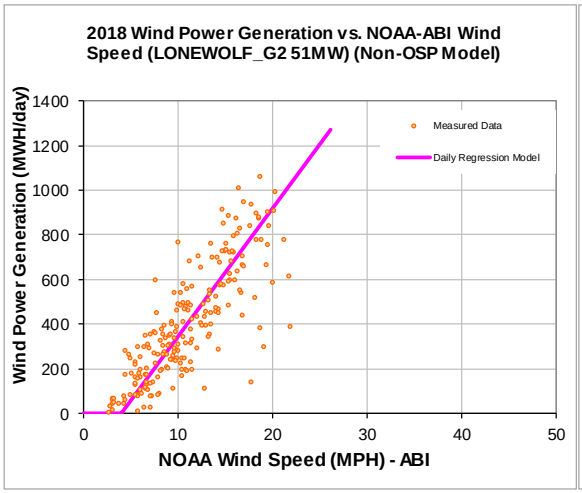
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-95.86
Left Slope (MWh/mph-day)	45.29
RMSE (MWh/day)	146.82
R2	0.67
CV-RMSE	36.7%
Daily Maximum (MWh/day)	1224

OSP Model:

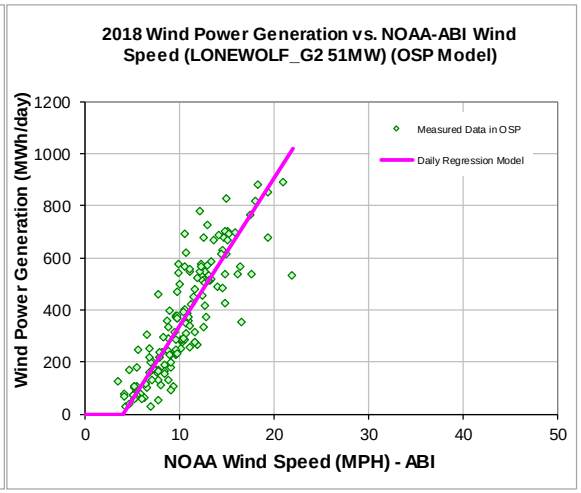
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-164.57
Left Slope (MWh/mph-day)	50.67
RMSE (MWh/day)	113.13
R2	0.73
CV-RMSE	31.2%
Daily Maximum (MWh/day)	1224

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
152,413	140,284

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
368	363

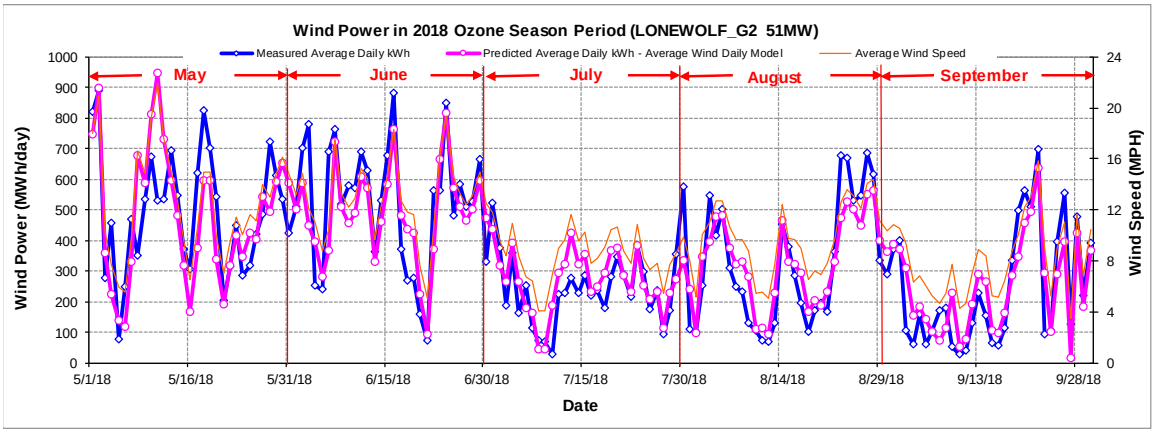
Figure A-260:LONEWOLF_G2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	13,549	12,429	8.27%	36%	33%
Feb-18	28	11.00	11,987	11,261	6.05%	35%	33%
Mar-18	31	11.92	13,941	13,770	1.22%	37%	36%
Apr-18	30	13.18	13,714	15,027	-9.57%	37%	41%
May-18	31	12.78	15,208	14,973	1.55%	40%	39%
Jun-18	30	12.90	15,584	14,677	5.82%	42%	40%
Jul-18	31	8.52	7,522	8,281	-10.08%	20%	22%
Aug-18	31	9.85	10,117	10,366	-2.47%	27%	27%
Sep-18	30	7.97	7,037	7,170	-1.90%	19%	20%
Oct-18	31	9.35	10,118	10,161	-0.42%	27%	27%
Nov-18	30	10.05	9,978	10,777	-8.01%	27%	29%
Dec-18	31	10.23	11,530	11,391	1.21%	30%	30%
Total	365	10.72	140,284	140,284	0.00%	31%	31%
Total in OSP (07/15-09/15)	153	10.40	55,468	55,468	0.00%	30%	30%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

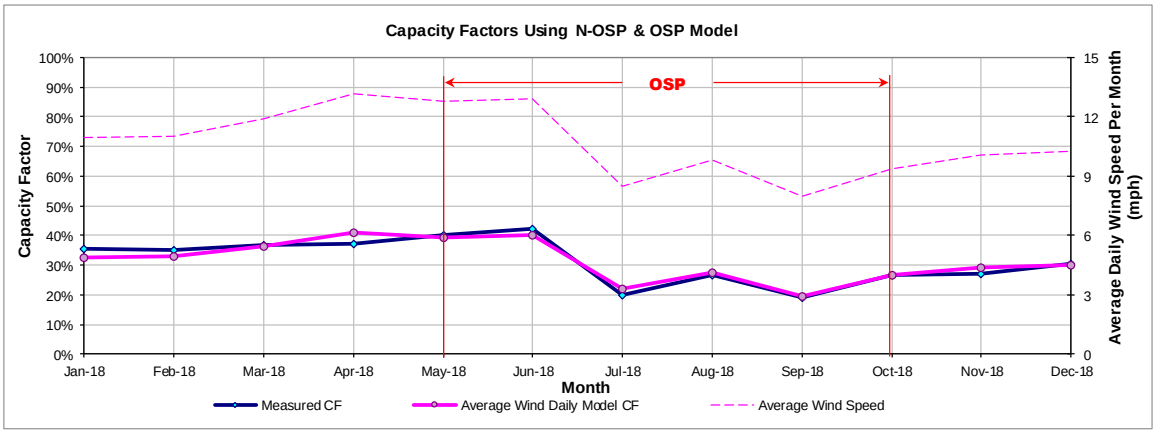


Figure A-261:LONEWOLF_G2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.61.3 Loraine Windpark - LONEWOLF_G3

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LONEWOLF_G3	Wind	-	MITCHELL	Third Planet Windpower	Loraine Windpark

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
17 GE 1.5 MW	ERCOT	W	Jan-11	West	ABI	25.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

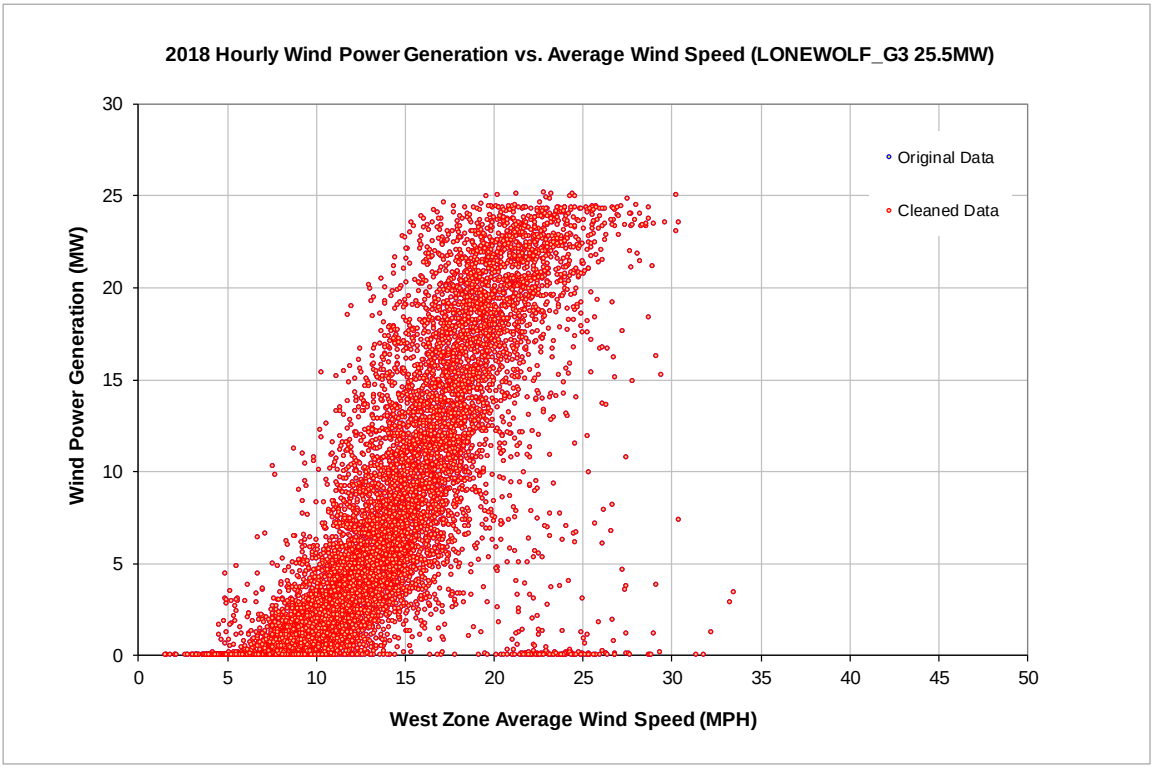


Figure A-262:LONEWOLF_G3 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

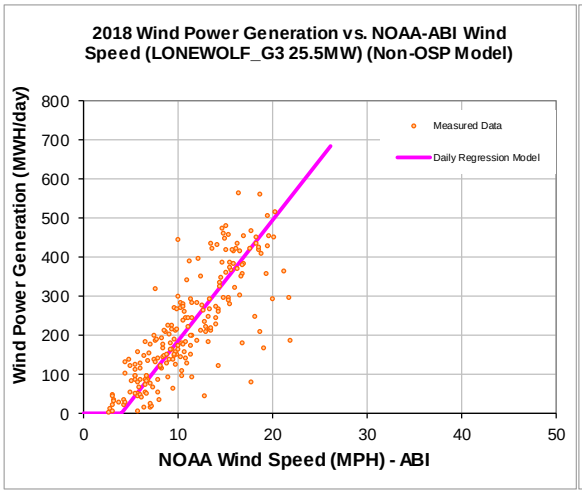
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-45.12
Left Slope (MWh/mph-day)	23.82
RMSE (MWh/day)	80.85
R2	0.65
CV-RMSE	37.5%
Daily Maximum (MWh/day)	612

OSP Model:

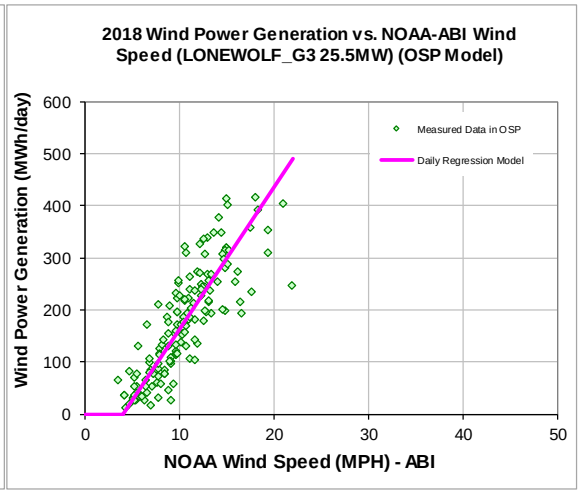
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-69.06
Left Slope (MWh/mph-day)	23.39
RMSE (MWh/day)	56.07
R2	0.70
CV-RMSE	32.2%
Daily Maximum (MWh/day)	612

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
78,732	72,403

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
177	174

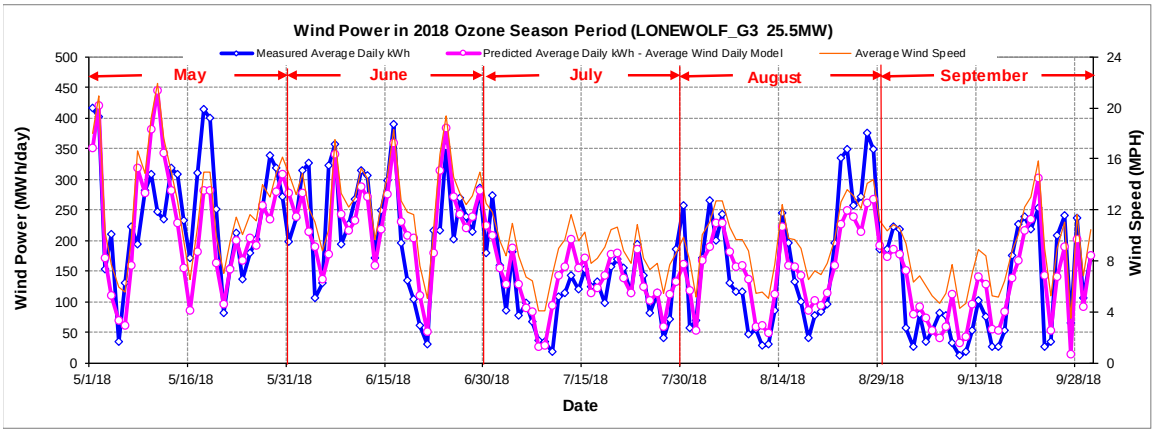
Figure A-263:LONEWOLF_G3 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	7,605	6,702	11.87%	40%	35%
Feb-18	28	11.00	6,437	6,072	5.67%	38%	35%
Mar-18	31	11.92	7,659	7,408	3.28%	40%	39%
Apr-18	30	13.18	7,228	8,064	-11.56%	39%	44%
May-18	31	12.78	7,570	7,126	5.87%	40%	38%
Jun-18	30	12.90	6,891	6,983	-1.33%	38%	38%
Jul-18	31	8.52	3,745	4,037	-7.78%	20%	21%
Aug-18	31	9.85	5,237	5,000	4.52%	28%	26%
Sep-18	30	7.97	3,219	3,517	-9.27%	18%	19%
Oct-18	31	9.35	5,215	5,509	-5.64%	27%	29%
Nov-18	30	10.05	5,324	5,828	-9.47%	29%	32%
Dec-18	31	10.23	6,272	6,156	1.84%	33%	32%
Total	365	10.72	72,403	72,403	0.00%	32%	32%
Total in OSP (07/15-09/15)	153	10.40	26,662	26,662	0.00%	28%	28%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

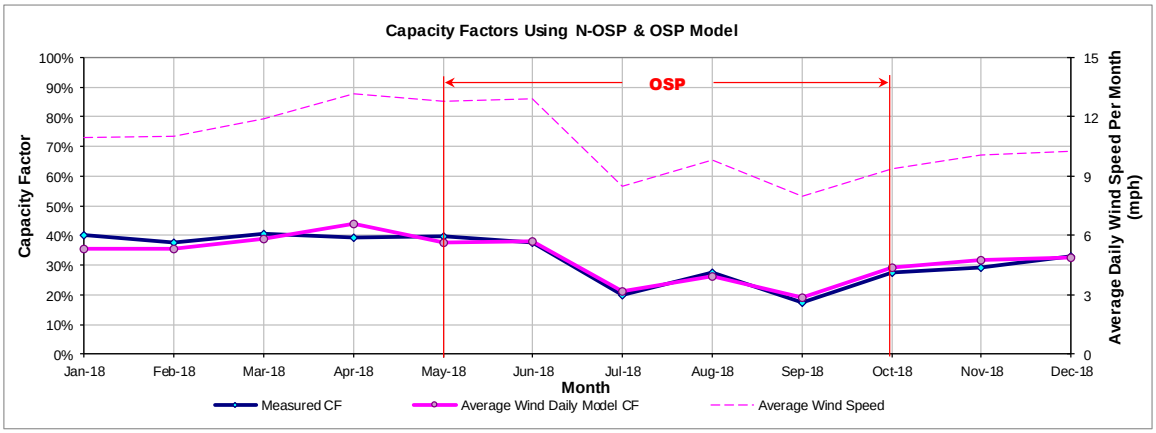


Figure A-264:LONEWOLF_G3 - Predicted Wind Power and Capacity Factor Using Daily Models

A.61.4 Loraine Windpark - LONEWOLF_G4

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LONEWOLF_G4	Wind	-	MITCHELL	Third Planet Windpower	Loraine Windpark

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
16 GE 1.5 MW	ERCOT	W	Jan-12	West	ABI	24

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

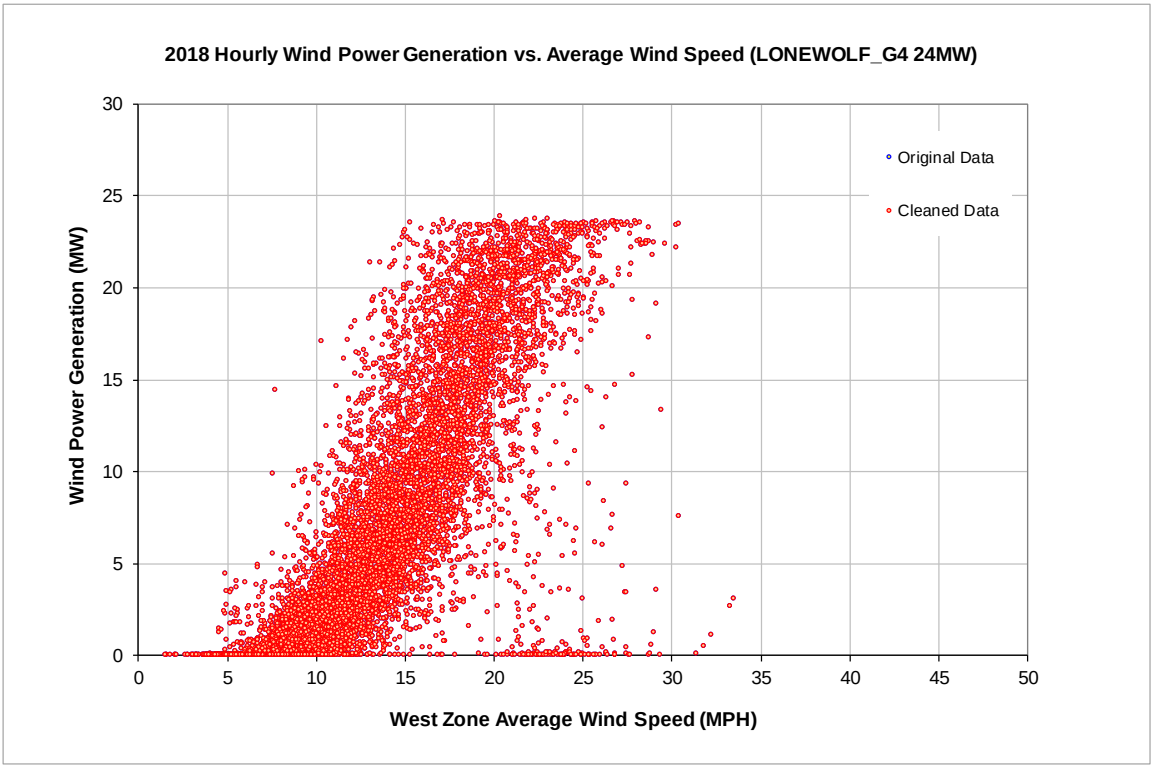


Figure A-265:LONEWOLF_G4 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

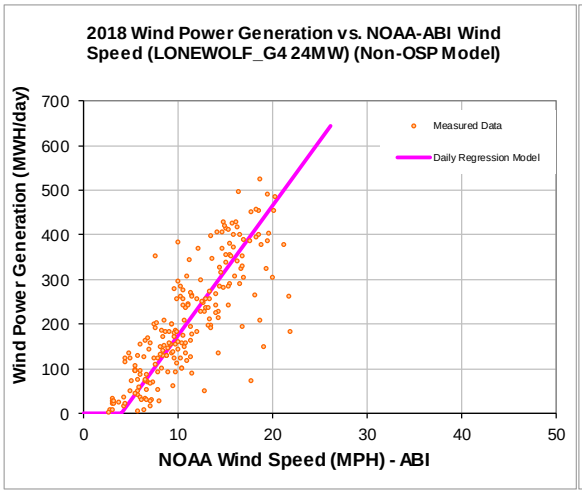
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-45.04
Left Slope (MWh/mph-day)	22.64
RMSE (MWh/day)	74.80
R2	0.66
CV-RMSE	36.9%
Daily Maximum (MWh/day)	576

OSP Model:

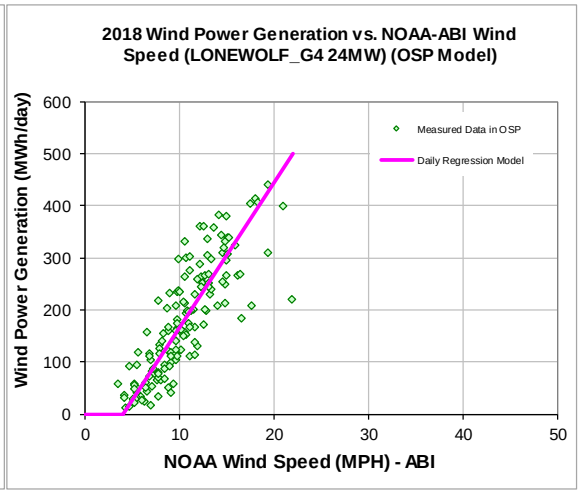
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-73.16
Left Slope (MWh/mph-day)	24.09
RMSE (MWh/day)	58.47
R2	0.70
CV-RMSE	32.9%
Daily Maximum (MWh/day)	576

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
76,208	70,166

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
180	178

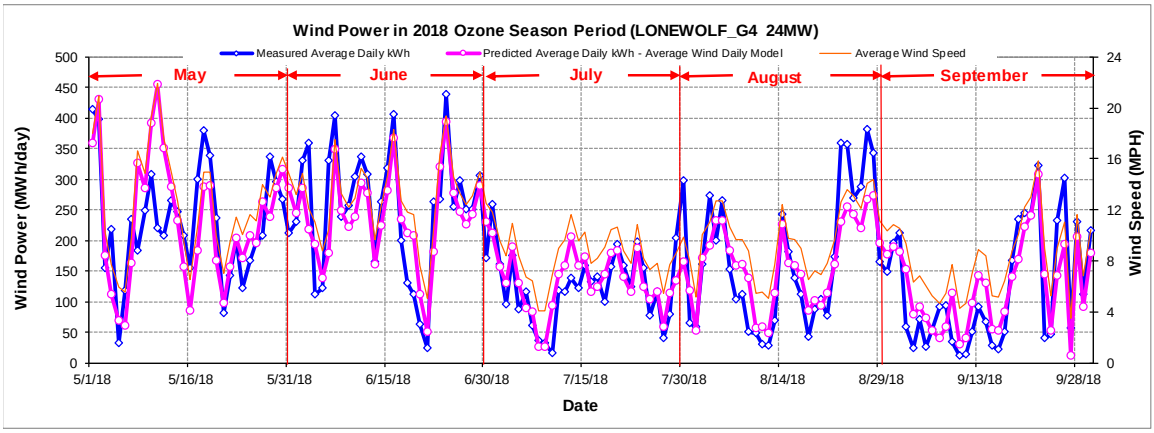
Figure A-266:LONEWOLF_G4 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	6,856	6,302	8.07%	38%	35%
Feb-18	28	11.00	6,057	5,710	5.73%	38%	35%
Mar-18	31	11.92	7,017	6,973	0.63%	39%	39%
Apr-18	30	13.18	6,741	7,598	-12.71%	39%	44%
May-18	31	12.78	7,087	7,278	-2.71%	40%	41%
Jun-18	30	12.90	7,507	7,133	4.98%	43%	41%
Jul-18	31	8.52	3,914	4,096	-4.65%	22%	23%
Aug-18	31	9.85	5,210	5,088	2.35%	29%	28%
Sep-18	30	7.97	3,440	3,563	-3.56%	20%	21%
Oct-18	31	9.35	5,392	5,168	4.15%	30%	29%
Nov-18	30	10.05	5,135	5,474	-6.59%	30%	32%
Dec-18	31	10.23	5,810	5,783	0.46%	33%	32%
Total	365	10.72	70,166	70,166	0.00%	33%	33%
Total in OSP (07/15-09/15)	153	10.40	27,158	27,158	0.00%	31%	31%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

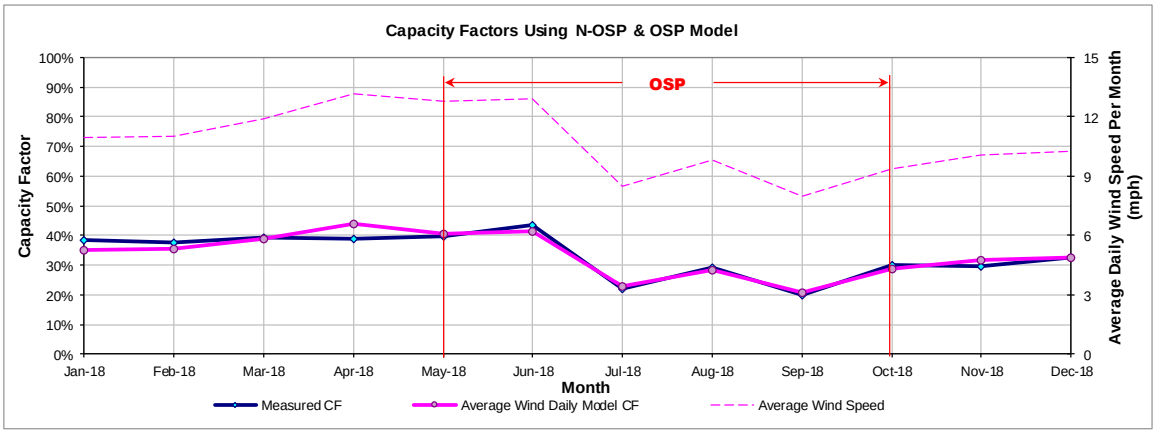


Figure A-267:LONEWOLF_G4 - Predicted Wind Power and Capacity Factor Using Daily Models

A.62 Los Vientos I

A.62.1 Los Vientos I - LV1_LV1A

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LV1_LV1A	Wind	-	WILLACY	Duke Energy	Los Vientos I

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
87 Siemens 2.3 MW	ERCOT	S	Jan-13	Coastal	CRP	200.1

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

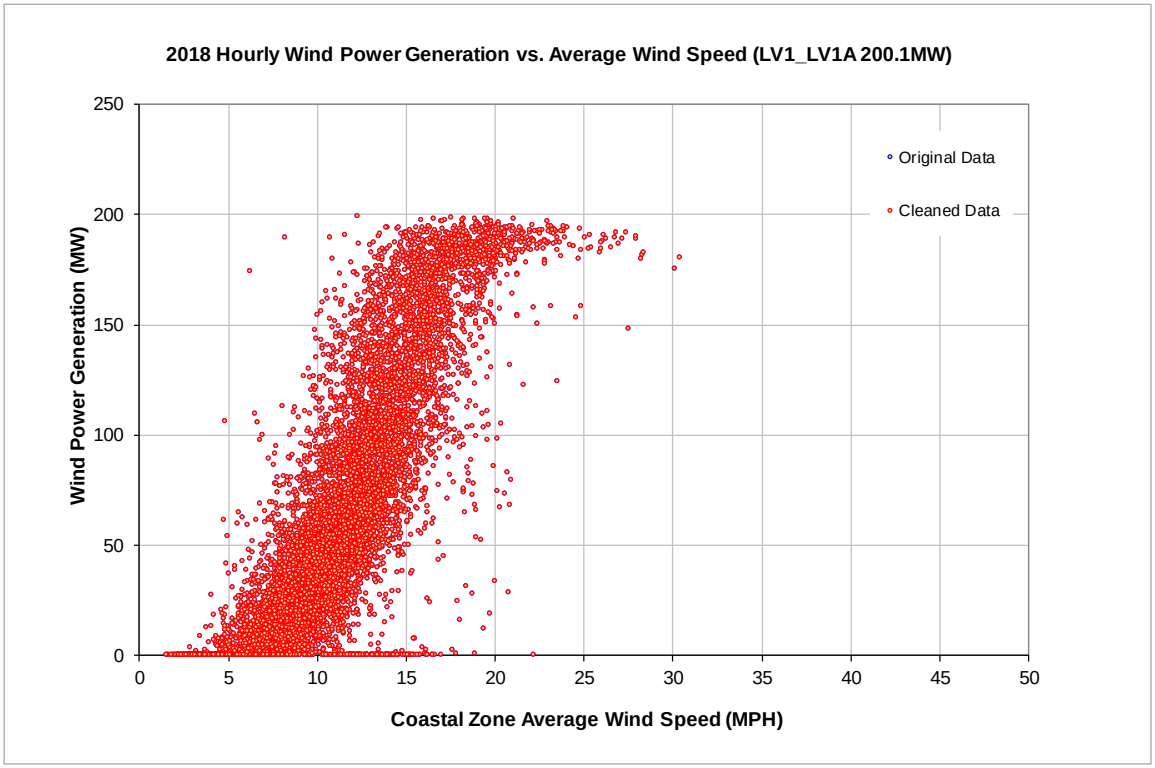


Figure A-268:LV1_LV1A - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

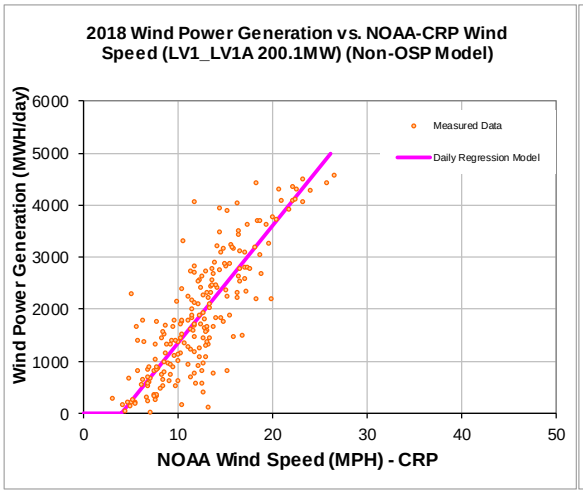
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-710.14
Left Slope (MWh/mph-day)	209.92
RMSE (MWh/day)	651.87
R2	0.68
CV-RMSE	34.9%
Daily Maximum (MWh/day)	4802

OSP Model:

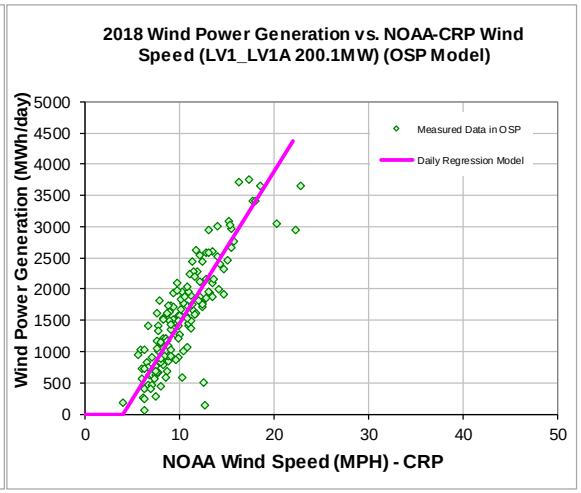
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-657.68
Left Slope (MWh/mph-day)	212.93
RMSE (MWh/day)	428.29
R2	0.73
CV-RMSE	27.5%
Daily Maximum (MWh/day)	4802

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
625,851	626,629

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,507	1,558

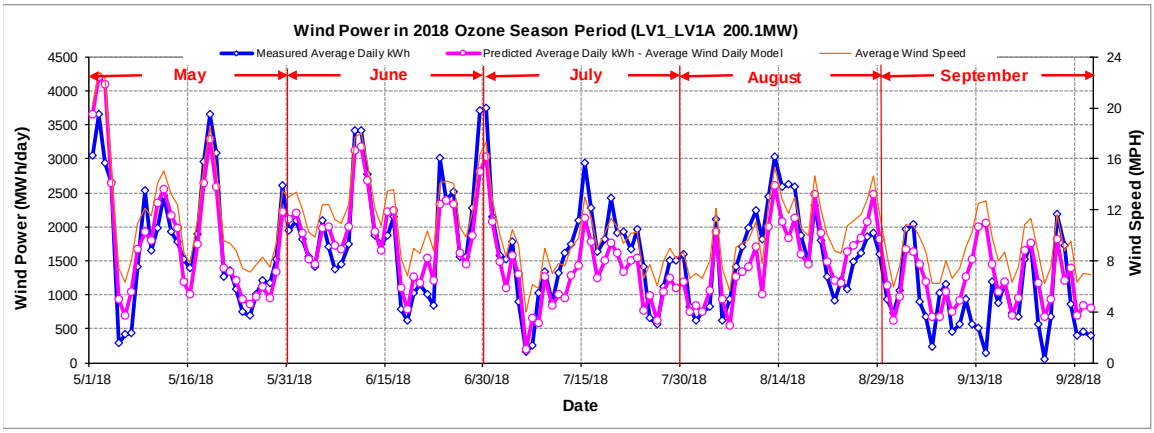
Figure A-269:LV1_LV1A - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	53,737	50,226	6.53%	36%	34%
Feb-18	28	14.08	61,764	62,846	-1.75%	46%	47%
Mar-18	31	13.69	64,302	67,099	-4.35%	43%	45%
Apr-18	30	14.08	67,204	67,354	-0.22%	47%	47%
May-18	31	11.95	56,204	58,468	-4.03%	38%	39%
Jun-18	30	12.21	58,555	58,265	0.49%	41%	40%
Jul-18	31	8.81	46,029	37,769	17.94%	31%	25%
Aug-18	31	10.35	50,255	47,919	4.65%	34%	32%
Sep-18	30	8.73	27,385	36,005	-31.48%	19%	25%
Oct-18	31	10.84	37,545	42,344	-12.78%	25%	28%
Nov-18	30	10.83	45,596	46,930	-2.92%	32%	33%
Dec-18	31	11.29	58,053	51,433	11.40%	39%	35%
Total	365	11.48	626,629	626,659	0.00%	36%	36%
Total in OSP (07/15-09/15)	153	10.41	238,428	238,428	0.00%	32%	32%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

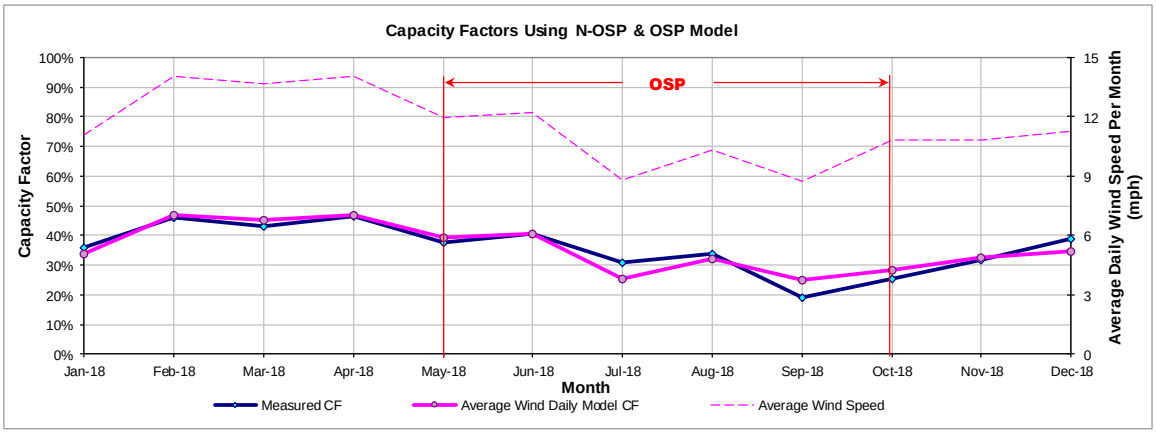


Figure A-270:LV1_LV1A - Predicted Wind Power and Capacity Factor Using Daily Models

A.63 Los Vientos II

A.63.1 Los Vientos II - LV1_LV1B

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LV1_LV1B	Wind	-	WILLACY	Duke Energy	Los Vientos II

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
87 Mitsubishi 2.4 MW	ERCOT	S	Jan-13	Coastal	CRP	201.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

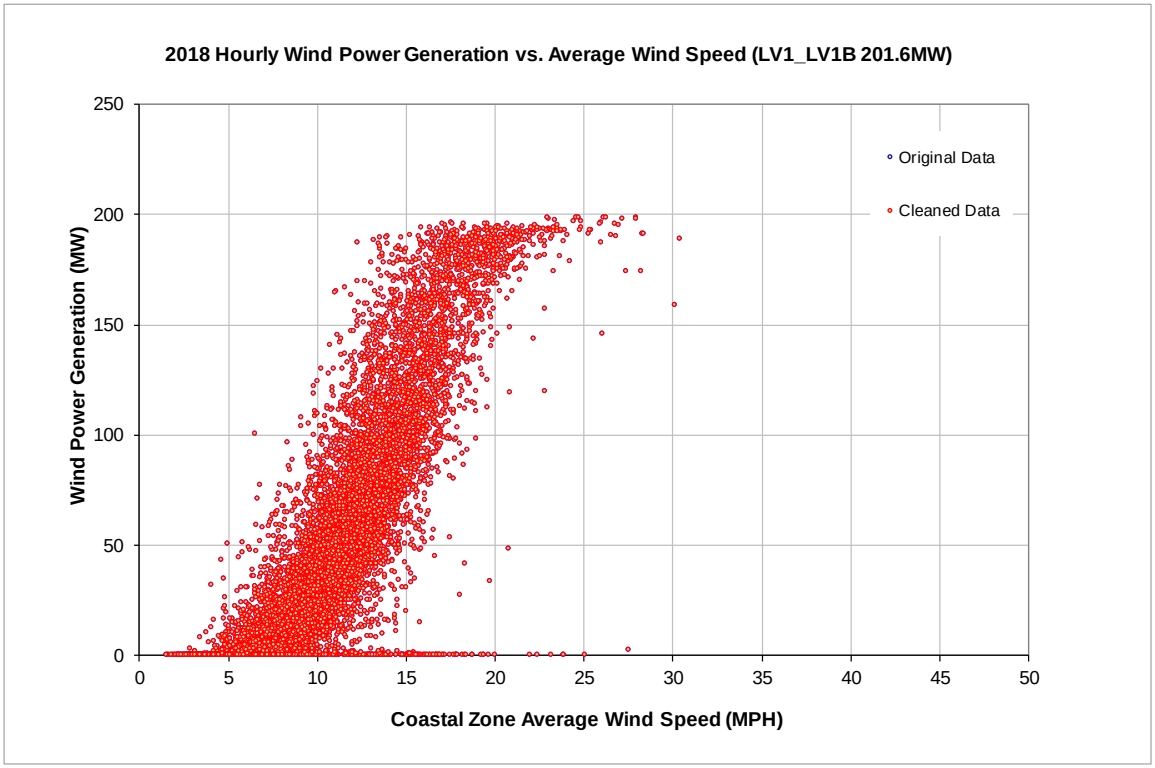


Figure A-271:LV1_LV1B - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

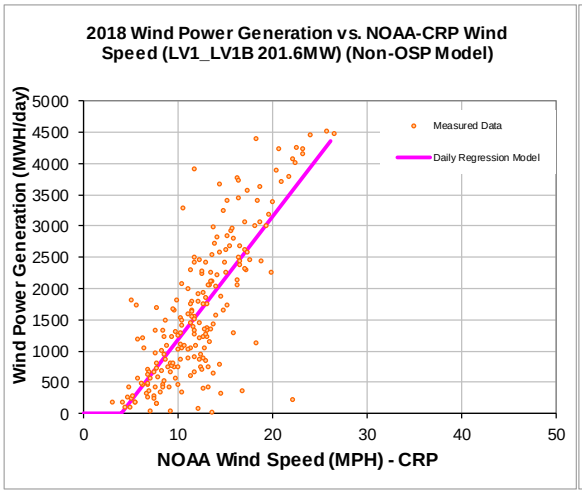
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-802.62
Left Slope (MWh/mph-day)	198.08
RMSE (MWh/day)	706.47
R2	0.62
CV-RMSE	43.6%
Daily Maximum (MWh/day)	4838

OSP Model:

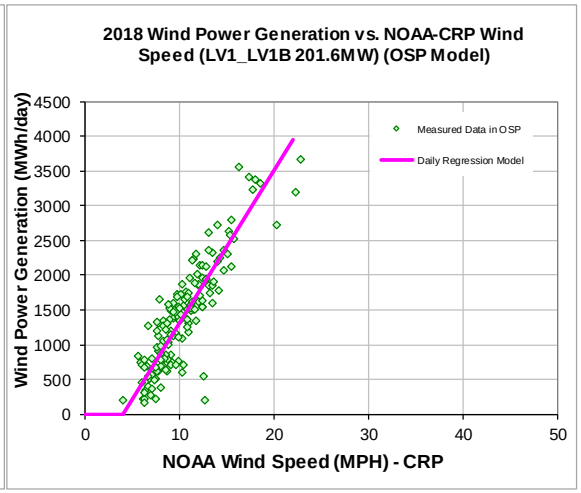
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-730.59
Left Slope (MWh/mph-day)	205.16
RMSE (MWh/day)	366.77
R2	0.77
CV-RMSE	26.1%
Daily Maximum (MWh/day)	4838

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
552,112	555,117

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,355	1,405

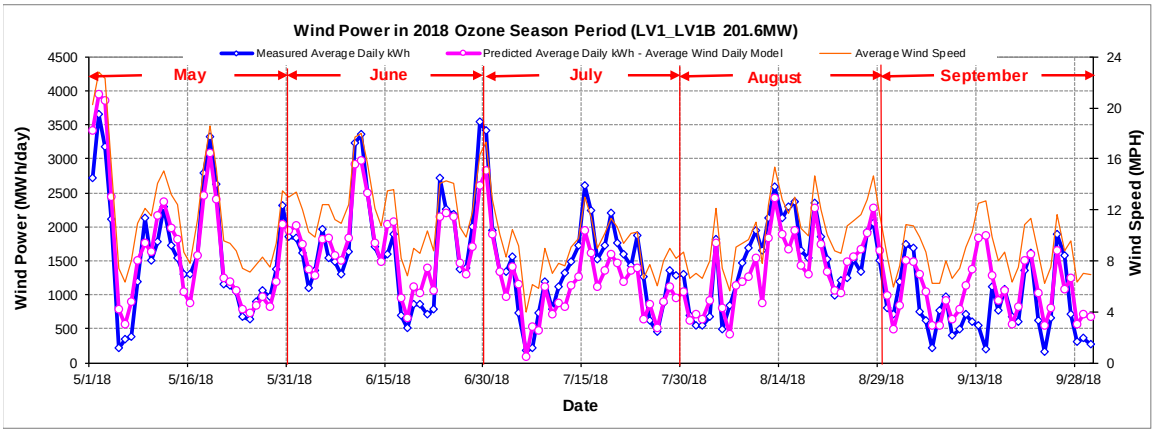
Figure A-272:LV1_LV1B - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	47,186	43,284	8.27%	31%	29%
Feb-18	28	14.08	49,155	55,629	-13.17%	36%	41%
Mar-18	31	13.69	57,775	59,205	-2.48%	39%	39%
Apr-18	30	14.08	61,574	59,578	3.24%	42%	41%
May-18	31	11.95	50,707	53,331	-5.17%	34%	36%
Jun-18	30	12.21	52,834	53,232	-0.75%	36%	37%
Jul-18	31	8.81	40,350	33,387	17.26%	27%	22%
Aug-18	31	10.35	46,460	43,166	7.09%	31%	29%
Sep-18	30	8.73	24,549	31,784	-29.47%	17%	22%
Oct-18	31	10.63	30,511	37,991	-24.52%	20%	25%
Nov-18	30	10.83	40,510	40,306	0.50%	28%	28%
Dec-18	31	11.29	53,505	44,425	16.97%	36%	30%
Total	365	11.46	555,117	555,319	-0.04%	31%	31%
Total in OSP (07/15-09/15)	153	10.41	214,900	214,900	0.00%	29%	29%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

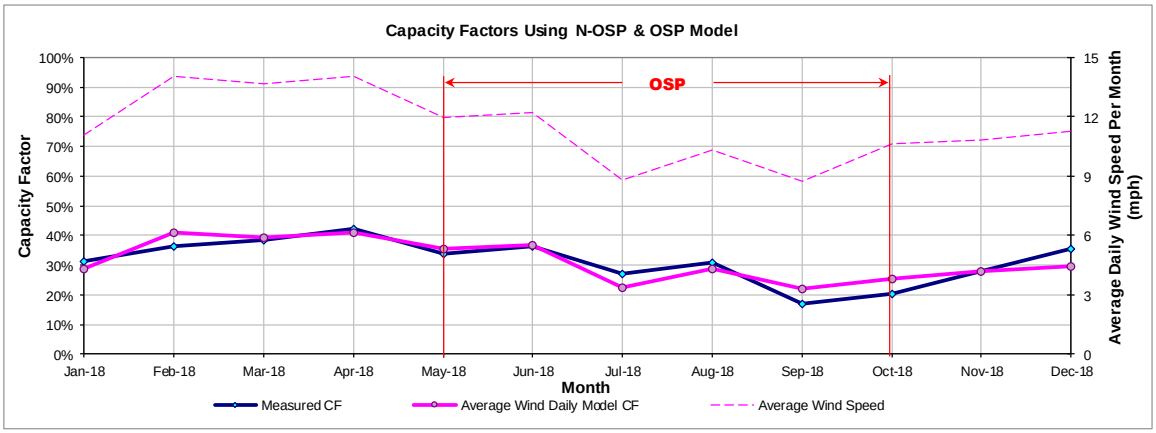


Figure A-273:LV1_LV1B - Predicted Wind Power and Capacity Factor Using Daily Models

A.64 Los Vientos III

A.64.1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LV3_UNIT_1	Wind	-	STARR	Duke Energy	Los Vientos III

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
100 Vestas 2 MW	ERCOT	S	Dec-15	South	CRP	200

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

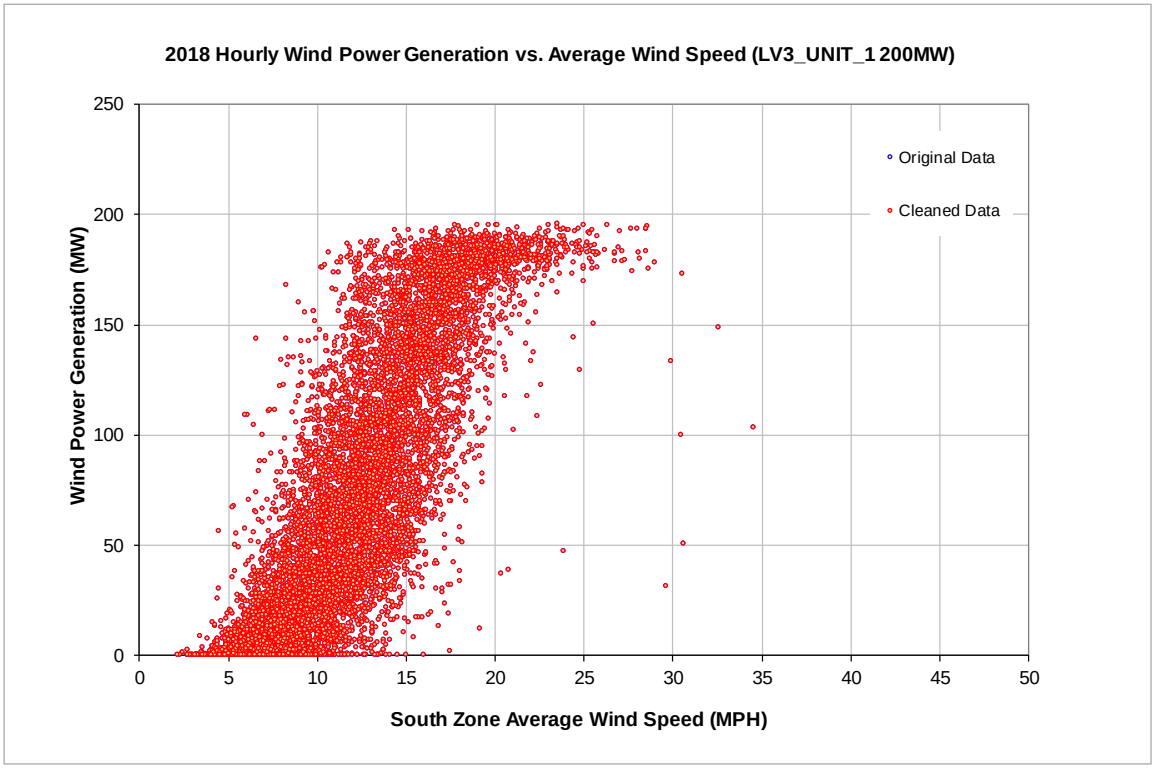


Figure A-274:LV3_UNIT_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

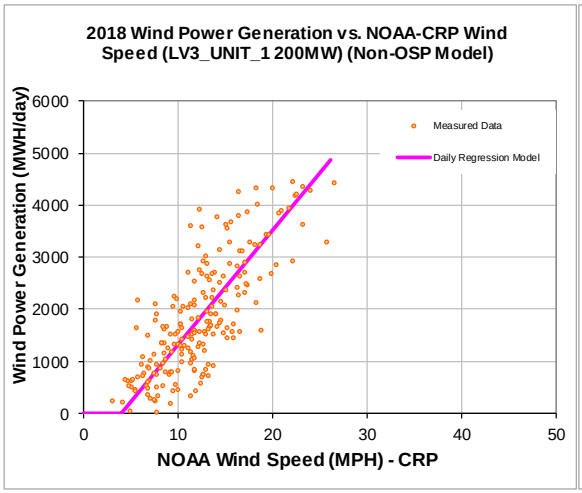
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-508.21
Left Slope (MWh/mph-day)	189.95
RMSE (MWh/day)	683.05
R2	0.61
CV-RMSE	37.6%
Daily Maximum (MWh/day)	4800

OSP Model:

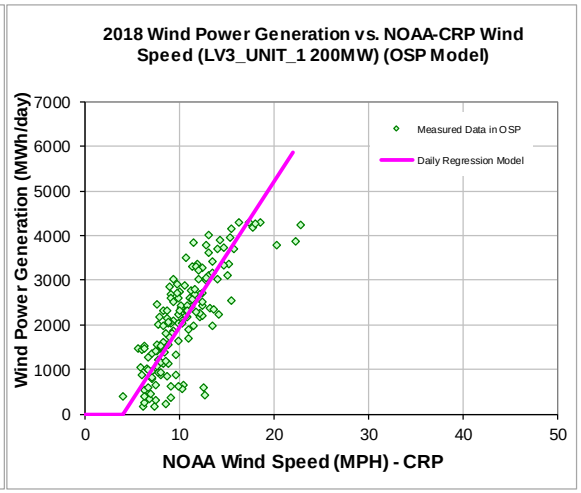
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-659.60
Left Slope (MWh/mph-day)	264.05
RMSE (MWh/day)	671.39
R2	0.63
CV-RMSE	32.1%
Daily Maximum (MWh/day)	4800

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
696,086	703,252

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
2,025	2,088

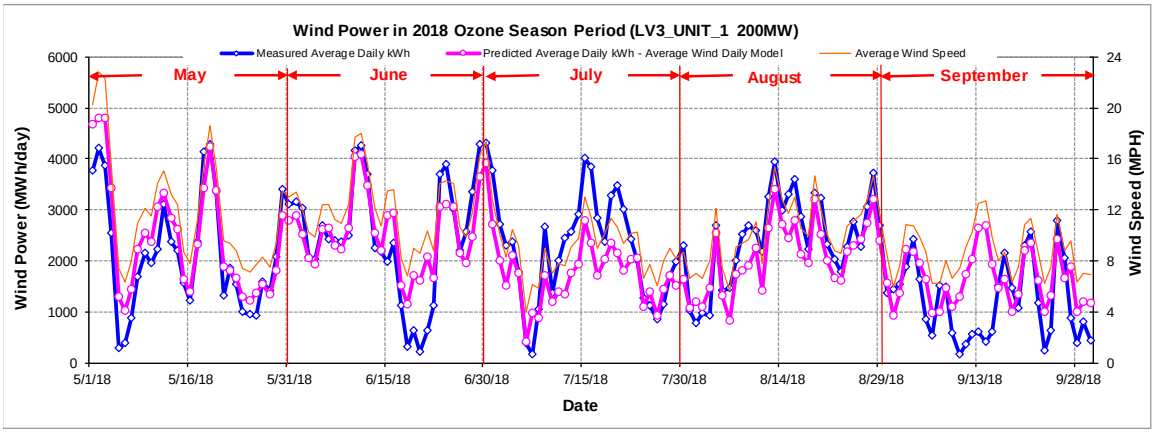
Figure A-275:LV3_UNIT_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	49,786	49,612	0.35%	33%	33%
Feb-18	28	14.08	52,702	60,666	-15.11%	39%	45%
Mar-18	31	13.69	62,248	64,880	-4.23%	42%	44%
Apr-18	30	14.08	65,841	64,976	1.31%	46%	45%
May-18	31	11.95	67,619	76,342	-12.90%	45%	51%
Jun-18	30	12.21	74,793	76,931	-2.86%	52%	53%
Jul-18	31	8.81	67,106	51,671	23.00%	45%	35%
Aug-18	31	10.35	74,542	64,257	13.80%	50%	43%
Sep-18	30	8.73	35,464	49,327	-39.09%	25%	34%
Oct-18	31	10.82	53,768	46,393	13.72%	36%	31%
Nov-18	30	10.83	45,730	46,496	-1.68%	32%	32%
Dec-18	31	11.29	53,655	50,705	5.50%	36%	34%
Total	365	11.48	703,252	702,256	0.14%	40%	40%
Total in OSP (07/15-09/15)	153	10.41	319,524	318,528	0.31%	44%	43%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

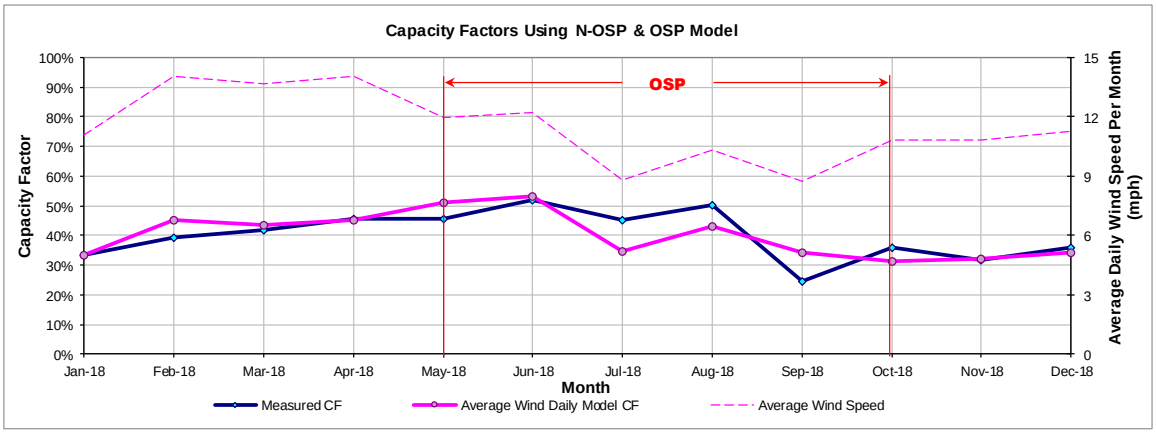


Figure A-276:LV3_UNIT_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.65 Los Vientos IV

A.65.1 Los Vientos IV - LV4_UNIT_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LV4_UNIT_1	Wind	-	STARR	Duke Energy	Los Vientos IV

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
100 Vestas 2 MW	ERCOT	S	Jun-16	South	CRP	200

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

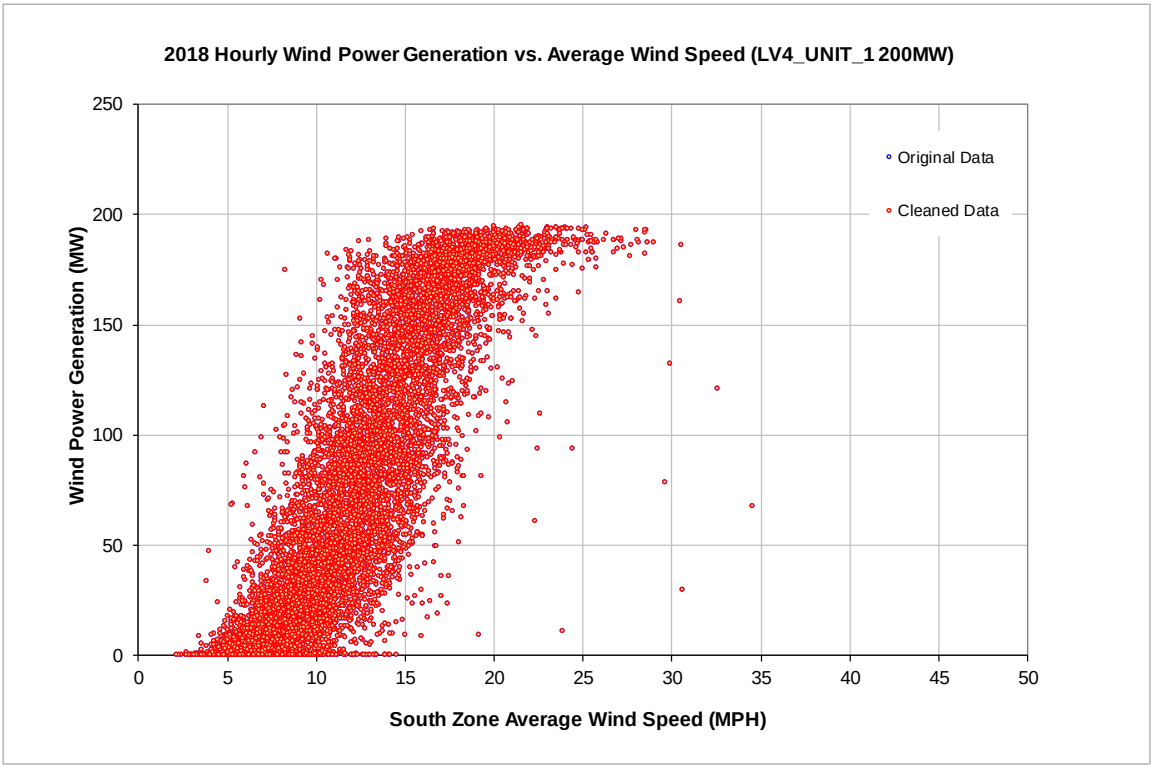


Figure A-277:LV4_UNIT_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

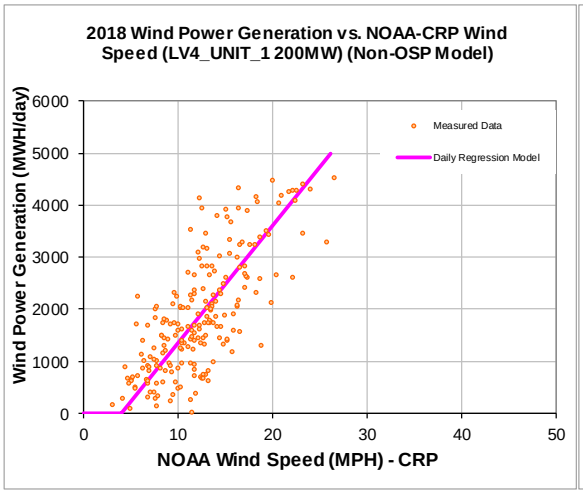
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-380.44
Left Slope (MWh/mph-day)	183.49
RMSE (MWh/day)	744.57
R2	0.56
CV-RMSE	39.8%
Daily Maximum (MWh/day)	4800

OSP Model:

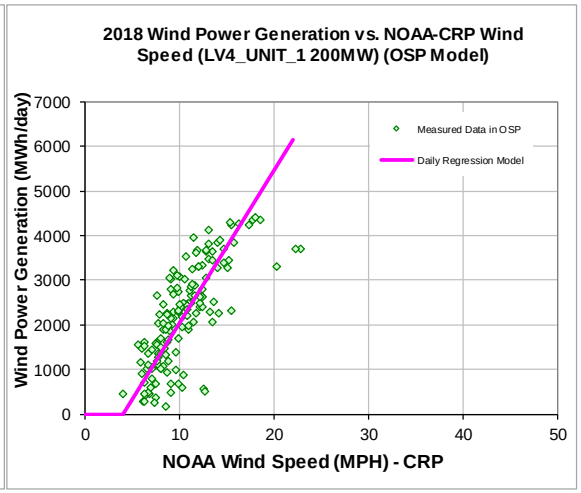
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-472.18
Left Slope (MWh/mph-day)	255.59
RMSE (MWh/day)	718.38
R2	0.58
CV-RMSE	32.8%
Daily Maximum (MWh/day)	4800

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
721,979	729,272

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
2,126	2,188

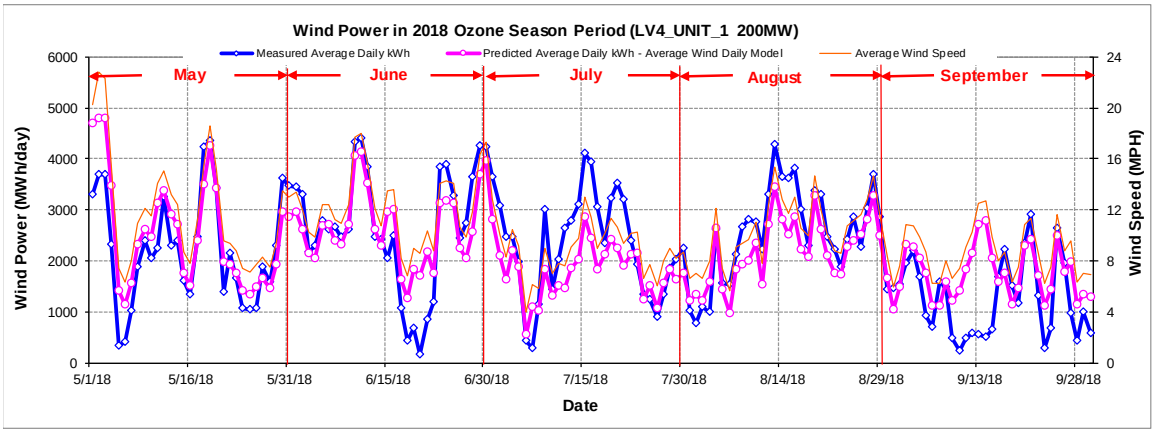
Figure A-278:LV4_UNIT_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	50,925	51,348	-0.83%	34%	35%
Feb-18	28	14.08	53,238	61,695	-15.88%	40%	46%
Mar-18	31	13.69	64,510	66,096	-2.46%	43%	44%
Apr-18	30	14.08	68,037	66,079	2.88%	47%	46%
May-18	31	11.95	69,860	79,025	-13.12%	47%	53%
Jun-18	30	12.21	79,014	79,453	-0.56%	55%	55%
Jul-18	31	8.81	70,155	55,169	21.36%	47%	37%
Aug-18	31	10.35	78,416	67,352	14.11%	53%	45%
Sep-18	30	8.73	37,277	52,734	-41.46%	26%	37%
Oct-18	31	10.87	58,209	50,026	14.06%	39%	34%
Nov-18	30	10.89	42,487	46,903	-10.39%	30%	33%
Dec-18	31	11.29	57,145	52,403	8.30%	38%	35%
Total	365	11.48	729,272	728,283	0.14%	42%	42%
Total in OSP (07/15-09/15)	153	10.41	334,722	333,733	0.30%	46%	45%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

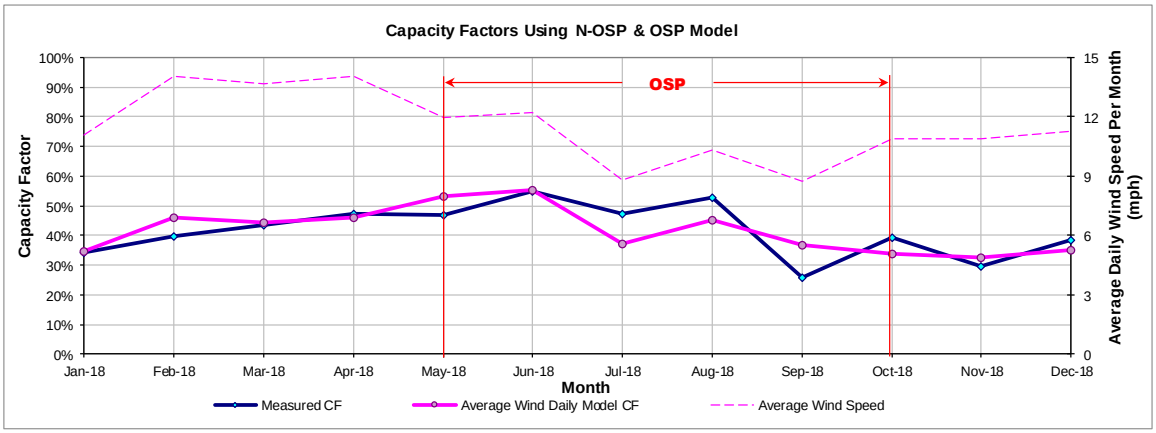


Figure A-279:LV4_UNIT_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.66 Los Vientos V

A.66.1 Los Vientos V - LV5_UNIT_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
LV5_UNIT_1	Wind	-	STARR	Duke Energy	Los Vientos V

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
55 Vestas 2 MW	ERCOT	S	Sep-16	South	CRP	110

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

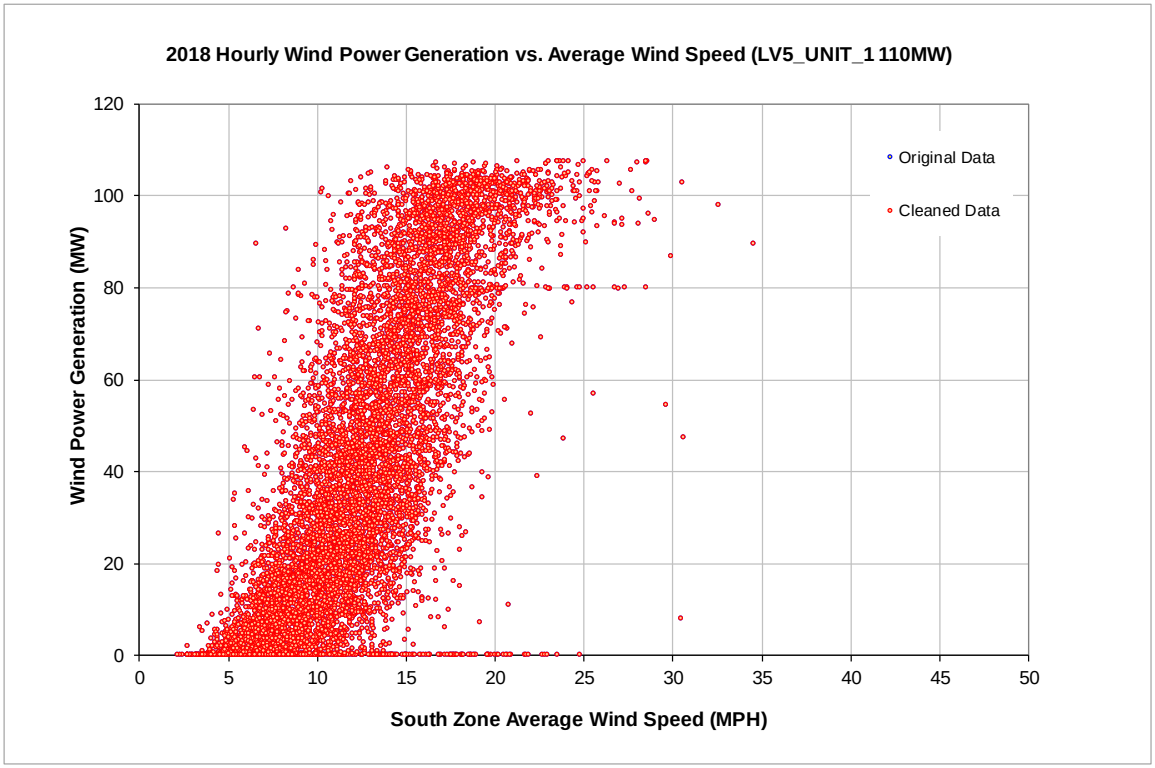


Figure A-280:LV5_UNIT_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

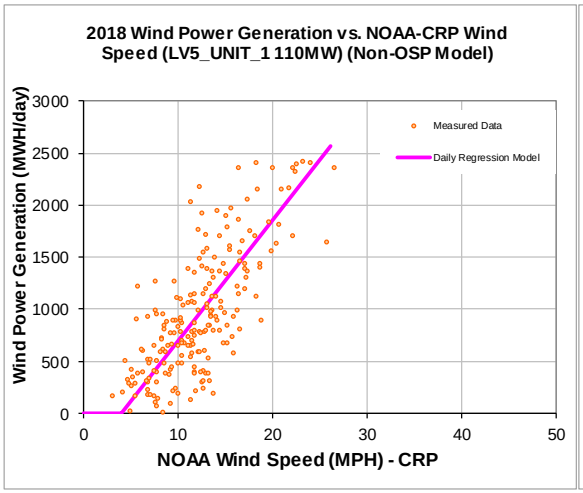
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-263.16
Left Slope (MWh/mph-day)	99.58
RMSE (MWh/day)	395.91
R2	0.56
CV-RMSE	41.7%
Daily Maximum (MWh/day)	2640

OSP Model:

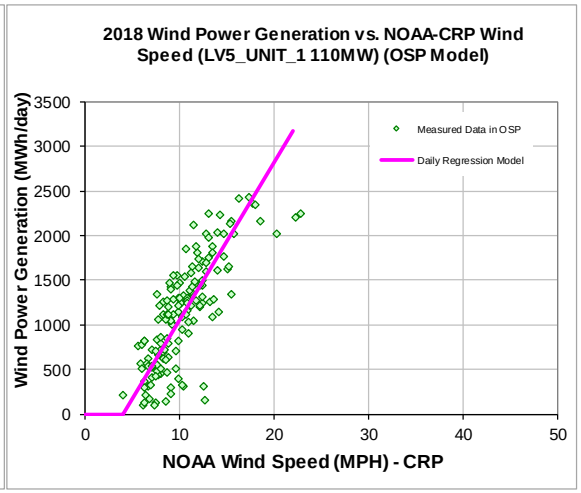
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-365.49
Left Slope (MWh/mph-day)	143.52
RMSE (MWh/day)	365.33
R2	0.62
CV-RMSE	32.4%
Daily Maximum (MWh/day)	2640

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
370,525	370,011

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,094	1,128

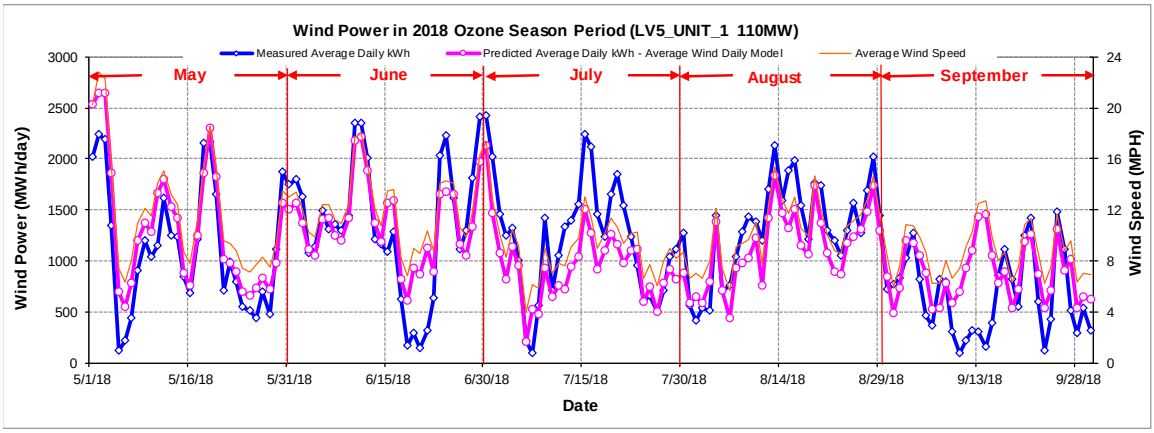
Figure A-281:LV5_UNIT_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	27,093	26,110	3.63%	33%	32%
Feb-18	28	13.82	23,006	27,826	-20.95%	31%	38%
Mar-18	31	13.61	31,304	32,759	-4.65%	38%	40%
Apr-18	30	14.08	34,646	34,162	1.40%	44%	43%
May-18	31	11.95	35,505	41,354	-16.48%	43%	51%
Jun-18	30	12.21	41,031	41,605	-1.40%	52%	53%
Jul-18	31	8.81	36,066	27,868	22.73%	44%	34%
Aug-18	31	10.35	40,533	34,710	14.37%	50%	42%
Sep-18	30	8.73	19,470	26,601	-36.63%	25%	34%
Oct-18	31	10.87	29,381	25,393	13.57%	36%	31%
Nov-18	30	10.83	23,891	24,473	-2.44%	30%	31%
Dec-18	31	11.29	28,086	26,683	5.00%	34%	33%
Total	365	11.42	370,011	369,545	0.13%	38%	38%
Total in OSP (07/15-09/15)	153	10.41	172,604	172,139	0.27%	43%	43%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

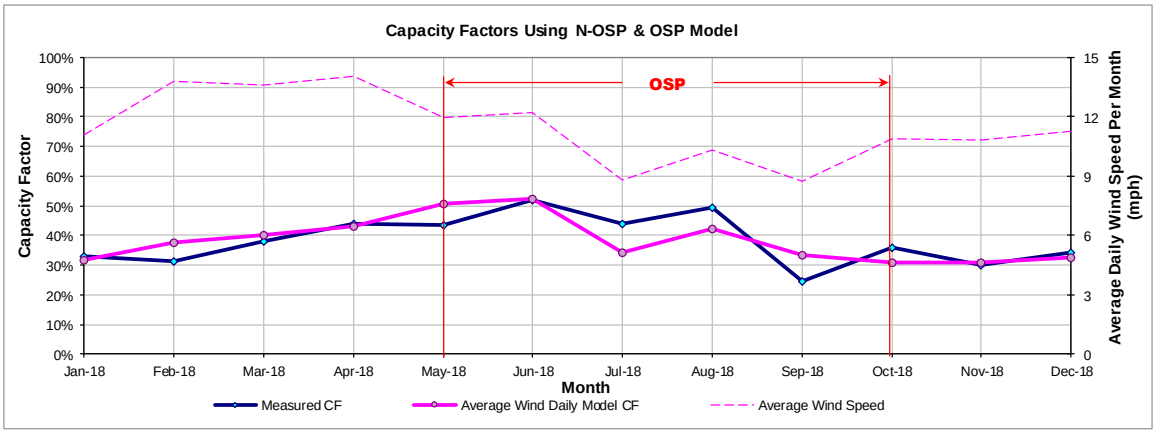


Figure A-282:LV5_UNIT_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.67 Magic Valley Wind Farm

A.67.1 Magic Valley Wind Farm - REDFISH_MV1A

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
REDFISH_MV1A	Wind	-	WILLACY	E.ON Climate & Renewables	Magic Valley Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
56 Vestas 1.8 MW	ERCOT	S	Apr-12	Coastal	CRP	99.8

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

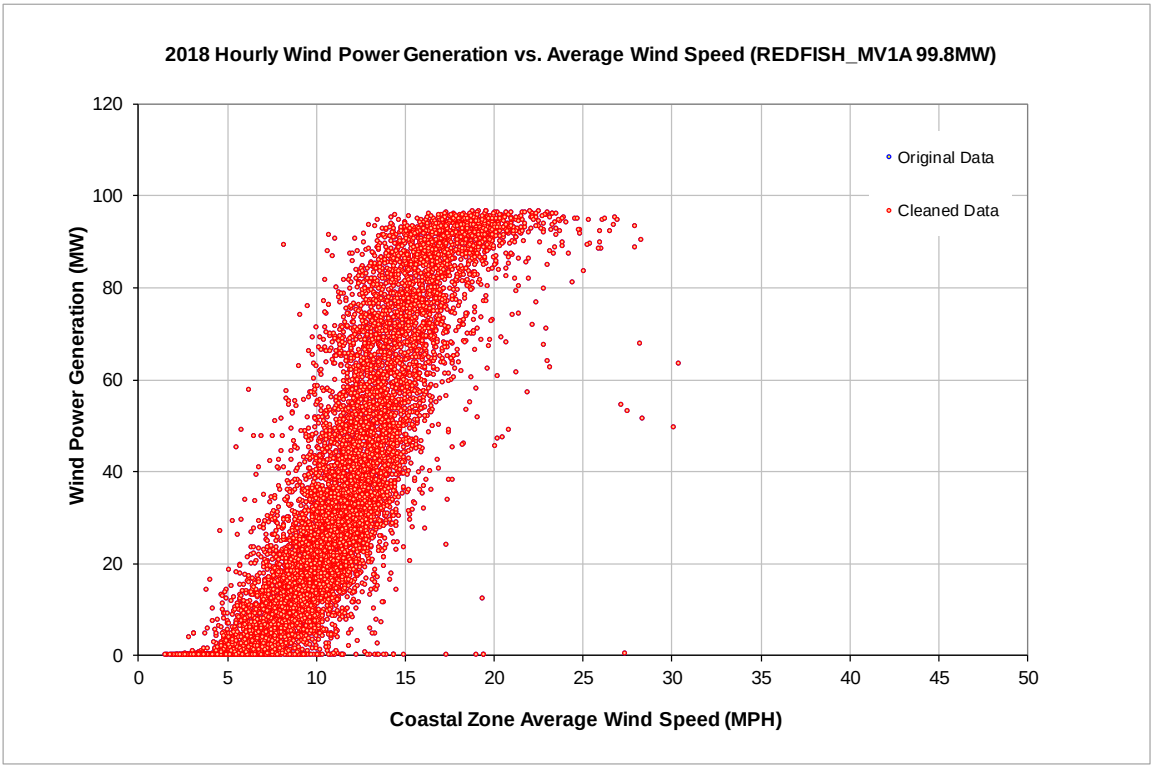


Figure A-283:REDFISH_MV1A - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

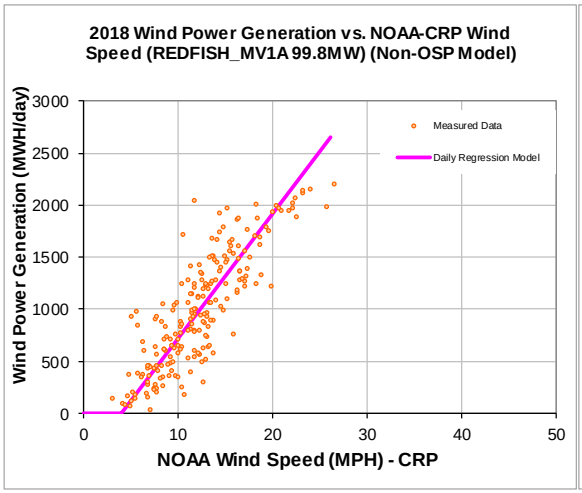
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-263.90
Left Slope (MWh/mph-day)	102.36
RMSE (MWh/day)	294.03
R2	0.71
CV-RMSE	29.7%
Daily Maximum (MWh/day)	2395

OSP Model:

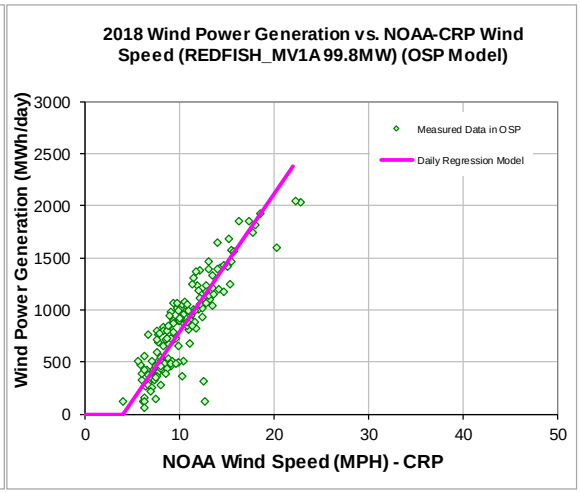
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-368.79
Left Slope (MWh/mph-day)	116.92
RMSE (MWh/day)	204.43
R2	0.78
CV-RMSE	24.1%
Daily Maximum (MWh/day)	2395

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
335,716	338,844

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
820	848

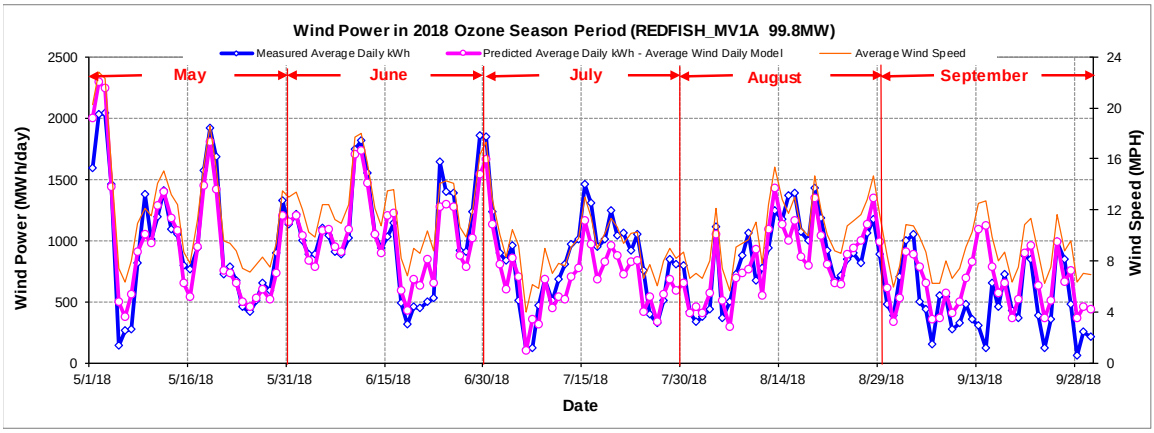
Figure A-284:REDFISH_MV1A - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	29,193	27,043	7.37%	39%	36%
Feb-18	28	14.08	30,850	32,921	-6.71%	46%	49%
Mar-18	31	13.81	31,969	34,481	-7.86%	43%	46%
Apr-18	30	14.08	33,567	35,313	-5.20%	47%	49%
May-18	31	11.95	31,491	31,867	-1.19%	42%	43%
Jun-18	30	12.21	32,077	31,763	0.98%	45%	44%
Jul-18	31	8.81	24,607	20,501	16.68%	33%	28%
Aug-18	31	10.35	26,802	26,074	2.71%	36%	35%
Sep-18	30	8.73	14,769	19,540	-32.30%	21%	27%
Oct-18	31	10.87	28,748	26,305	8.50%	39%	35%
Nov-18	30	10.83	24,882	25,354	-1.90%	35%	35%
Dec-18	31	11.29	29,889	27,632	7.55%	40%	37%
Total	365	11.48	338,844	338,795	0.01%	39%	39%
Total in OSP (07/15-09/15)	153	10.41	129,746	129,746	0.00%	35%	35%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

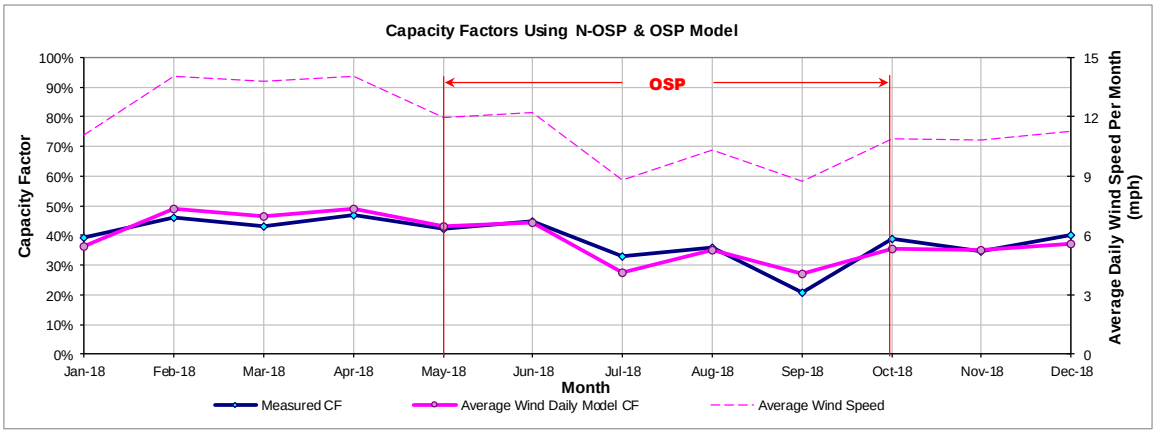


Figure A-285:REDFISH_MV1A - Predicted Wind Power and Capacity Factor Using Daily Models

A.67.2 Magic Valley Wind Farm - REDFISH_MV1B

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
REDFISH_MV1B	Wind	-	WILLACY	E.ON Climate & Renewables	Magic Valley Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
56 Vestas 1.8 MW	ERCOT	S	Apr-12	Coastal	CRP	103.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

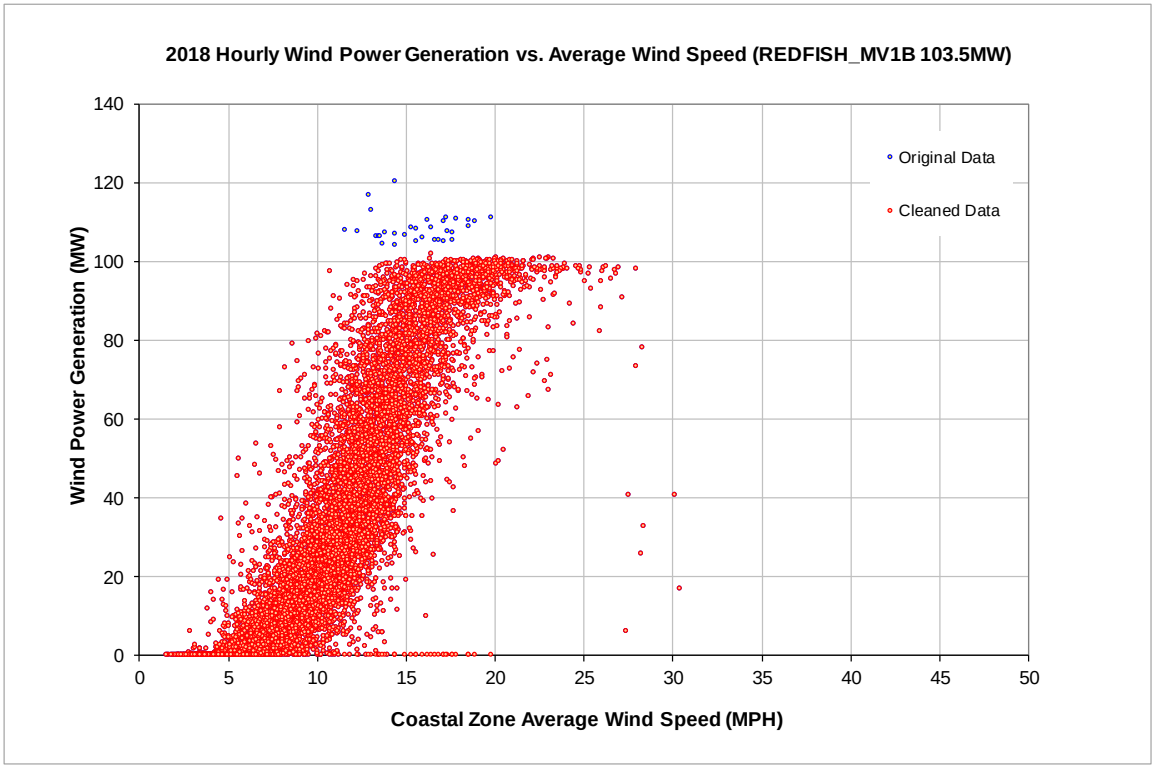


Figure A-286:REDFISH_MV1B - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

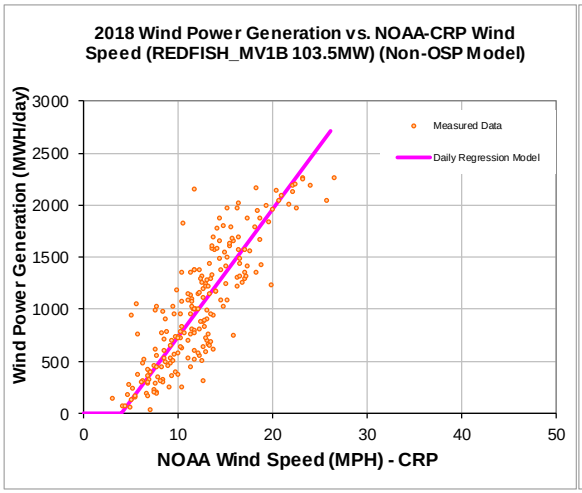
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-329.84
Left Slope (MWh/mph-day)	109.68
RMSE (MWh/day)	303.46
R2	0.73
CV-RMSE	29.9%
Daily Maximum (MWh/day)	2484

OSP Model:

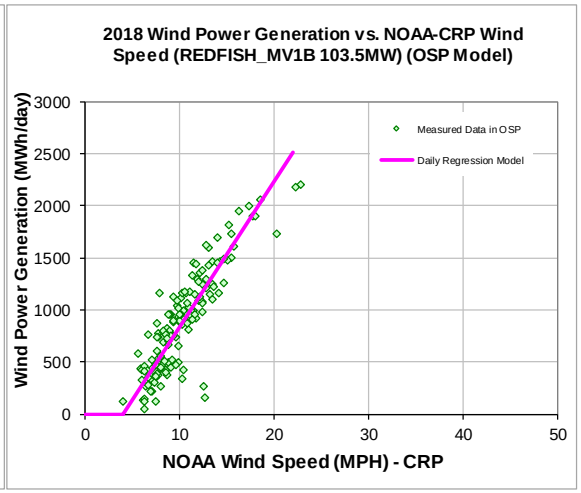
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-447.08
Left Slope (MWh/mph-day)	128.81
RMSE (MWh/day)	227.39
R2	0.77
CV-RMSE	25.6%
Daily Maximum (MWh/day)	2484

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
347,245	350,091

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
863	889

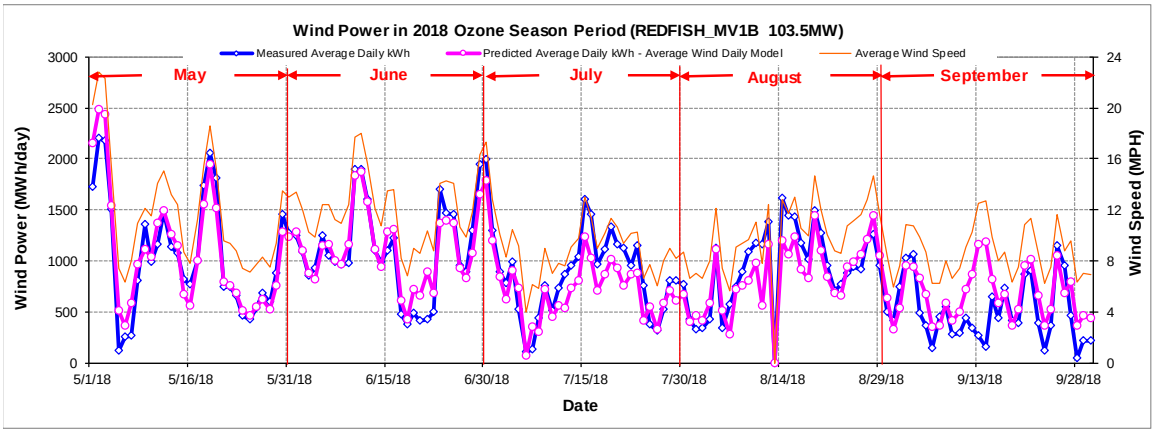
Figure A-287:REDFISH_MV1B - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	28,666	27,518	4.00%	37%	36%
Feb-18	28	14.08	32,539	33,922	-4.25%	47%	49%
Mar-18	31	13.69	36,056	36,333	-0.77%	47%	47%
Apr-18	30	14.08	34,616	36,424	-5.23%	46%	49%
May-18	31	11.95	32,850	33,839	-3.01%	43%	44%
Jun-18	30	12.21	33,450	33,770	-0.96%	45%	45%
Jul-18	31	8.81	25,568	21,322	16.61%	33%	28%
Aug-18	31	10.18	28,445	25,934	8.83%	37%	34%
Sep-18	30	8.73	14,861	20,304	-36.63%	20%	27%
Oct-18	31	10.87	27,540	26,727	2.95%	36%	35%
Nov-18	30	10.83	25,245	25,755	-2.02%	34%	35%
Dec-18	31	11.29	30,256	28,149	6.96%	39%	37%
Total	365	11.47	350,091	349,997	0.03%	39%	39%
Total in OSP (07/15-09/15)	152	10.37	135,174	135,169	0.00%	36%	36%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

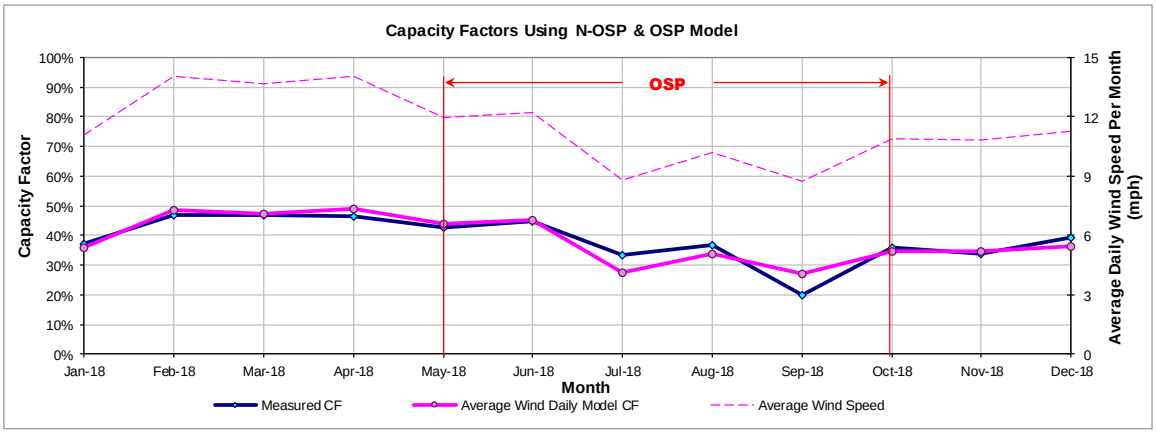


Figure A-288:REDFISH_MV1B - Predicted Wind Power and Capacity Factor Using Daily Models

A.68 Mariah Del Notre

A.68.1 Mariah Del Notre - MARIAH_NORTE1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MARIAH_NORTE1	Wind	-	PARMER	First Reserve	Mariah Del Notre

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
48 GE 2.4 MW	ERCOT	W	Mar-17	Panhandle	AMA	115.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

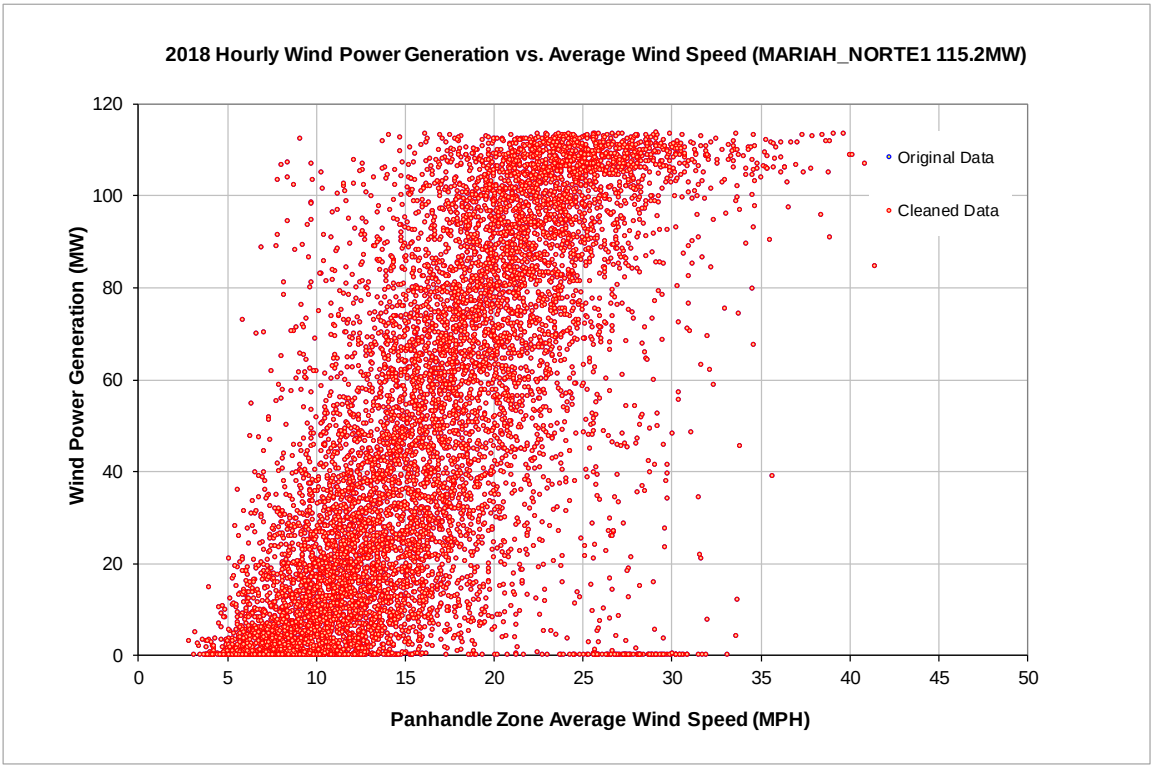


Figure A-289:MARIAH_NORTE1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

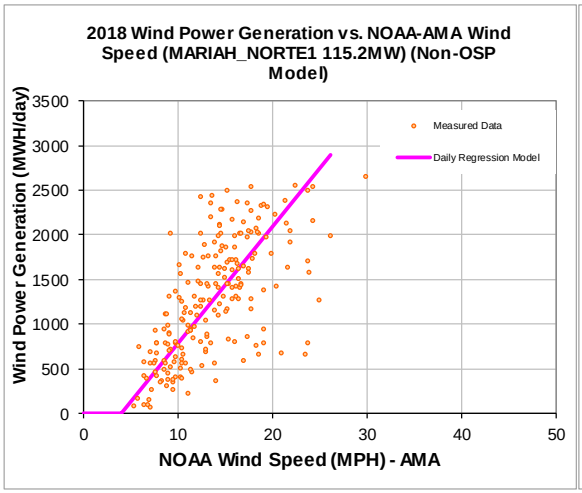
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	4.38
Left Slope (MWh/mph-day)	92.46
RMSE (MWh/day)	494.72
R2	0.43
CV-RMSE	39.1%
Daily Maximum (MWh/day)	2765

OSP Model:

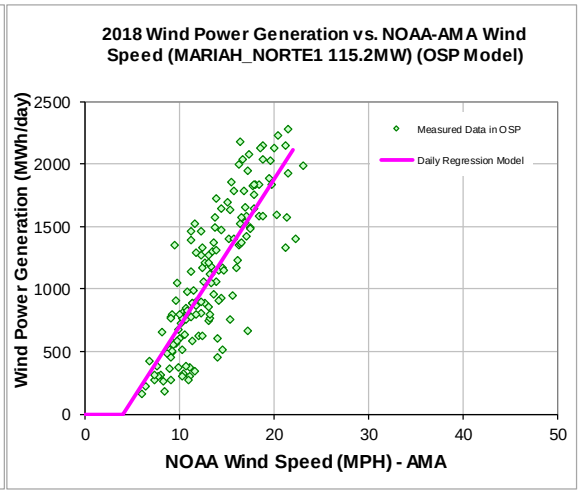
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-526.98
Left Slope (MWh/mph-day)	121.51
RMSE (MWh/day)	309.51
R2	0.69
CV-RMSE	27.9%
Daily Maximum (MWh/day)	2765

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
441,475	437,891

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,081	1,109

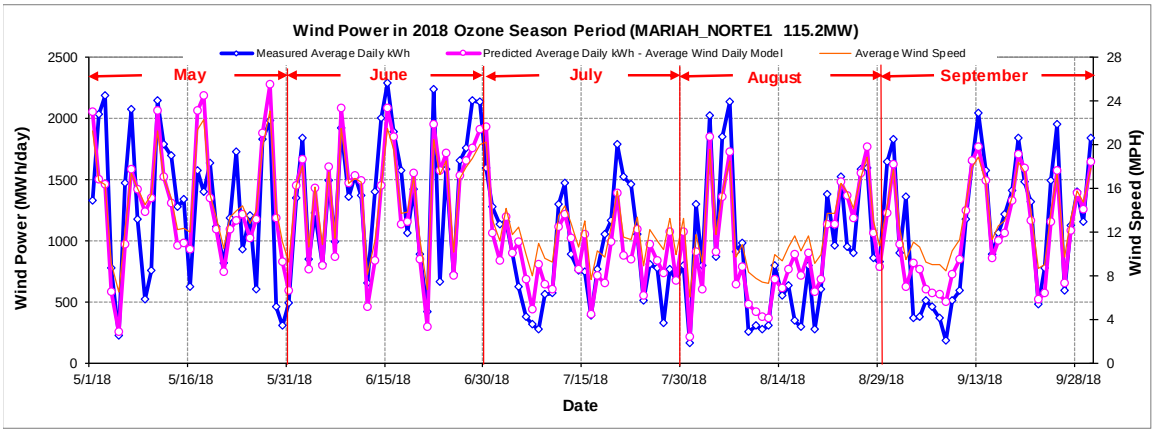
Figure A-290:MARIAH_NORTE1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	45,354	36,592	19.32%	53%	43%
Feb-18	28	13.78	40,250	35,786	11.09%	52%	46%
Mar-18	31	14.64	40,926	42,105	-2.88%	48%	49%
Apr-18	30	17.03	32,191	47,379	-47.18%	39%	57%
May-18	31	14.93	38,523	39,909	-3.60%	45%	47%
Jun-18	30	15.70	42,697	41,413	3.01%	51%	50%
Jul-18	31	11.32	26,261	26,315	-0.21%	31%	31%
Aug-18	31	12.42	30,227	30,431	-0.67%	35%	36%
Sep-18	30	13.00	31,931	31,571	1.13%	38%	38%
Oct-18	31	12.69	30,814	36,515	-18.50%	36%	43%
Nov-18	30	12.53	39,433	34,885	11.53%	48%	42%
Dec-18	31	12.16	39,285	34,988	10.94%	46%	41%
Total	365	13.56	437,891	437,889	0.00%	43%	43%
Total in OSP (07/15-09/15)	153	13.46	169,639	169,639	0.00%	40%	40%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

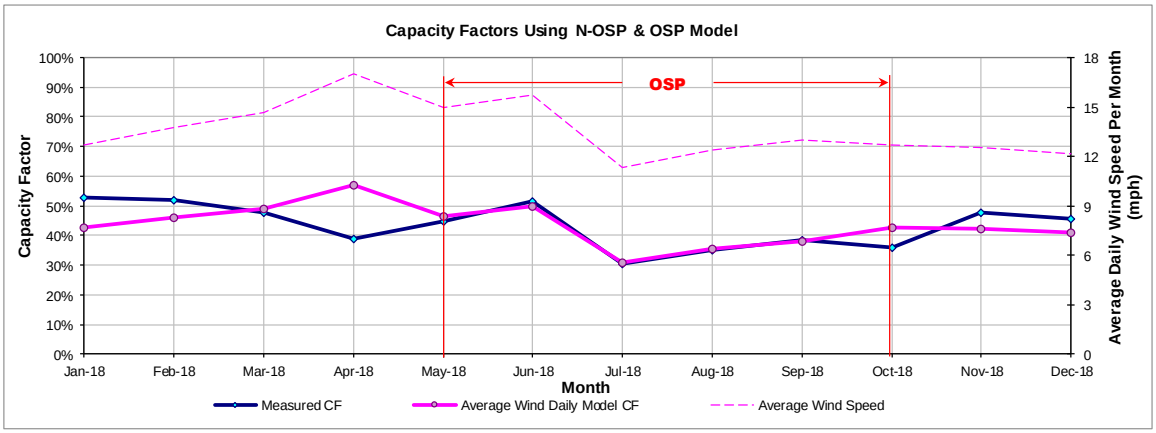


Figure A-291:MARIAH_NORTE1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.68.2 Mariah Del Notre - MARIAH_NORTE2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MARIAH_NORTE2	Wind	-	PARMER	First Reserve	Mariah Del Notre

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
48 GE 2.4 MW	ERCOT	W	Mar-17	Panhandle	AMA	115.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

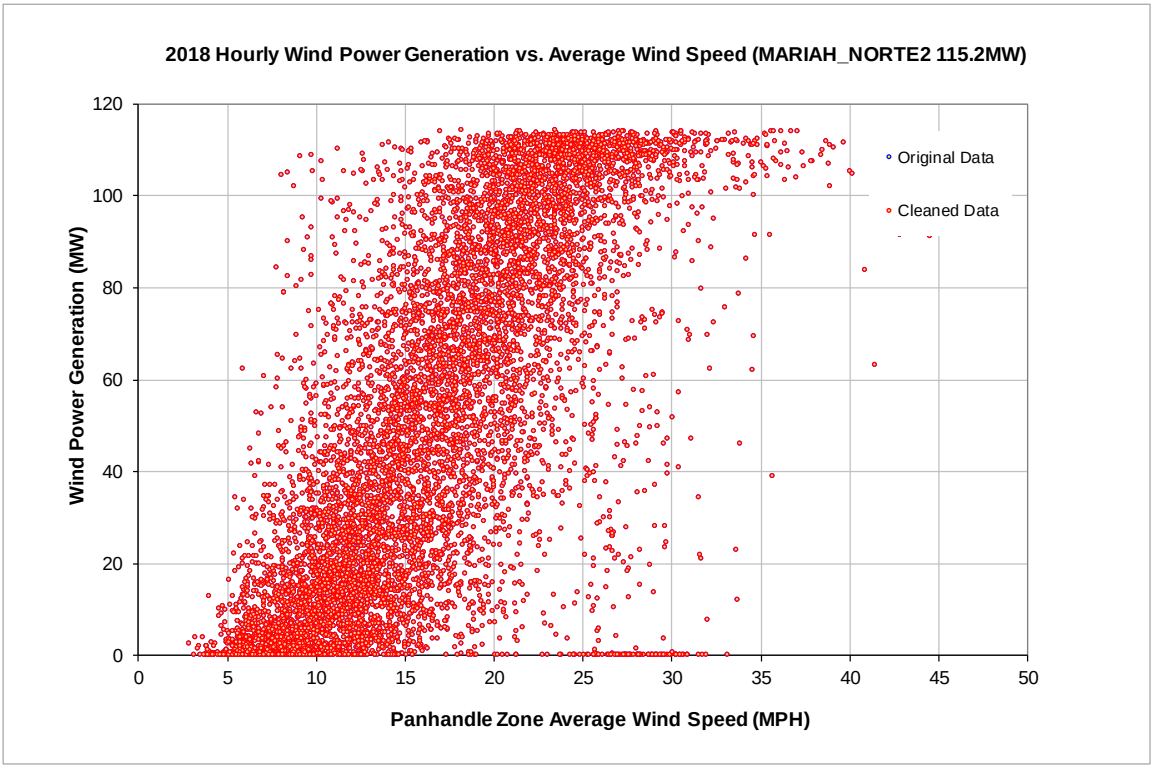


Figure A-292:MARIAH_NORTE2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

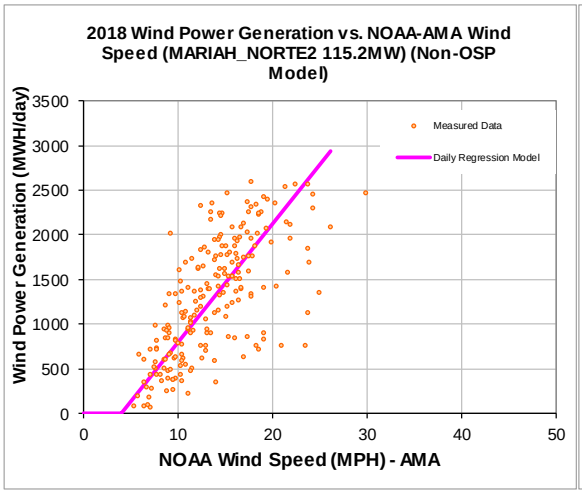
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-33.50
Left Slope (MWh/mph-day)	96.63
RMSE (MWh/day)	478.30
R2	0.47
CV-RMSE	37.2%
Daily Maximum (MWh/day)	2765

OSP Model:

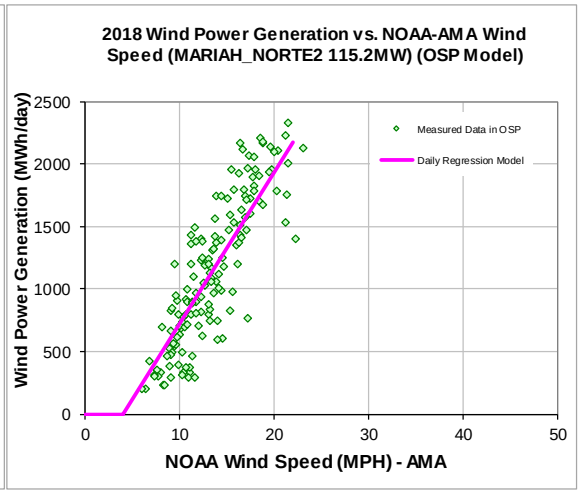
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-605.06
Left Slope (MWh/mph-day)	129.69
RMSE (MWh/day)	294.77
R2	0.74
CV-RMSE	25.8%
Daily Maximum (MWh/day)	2765

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
450,494	446,797

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,111	1,141

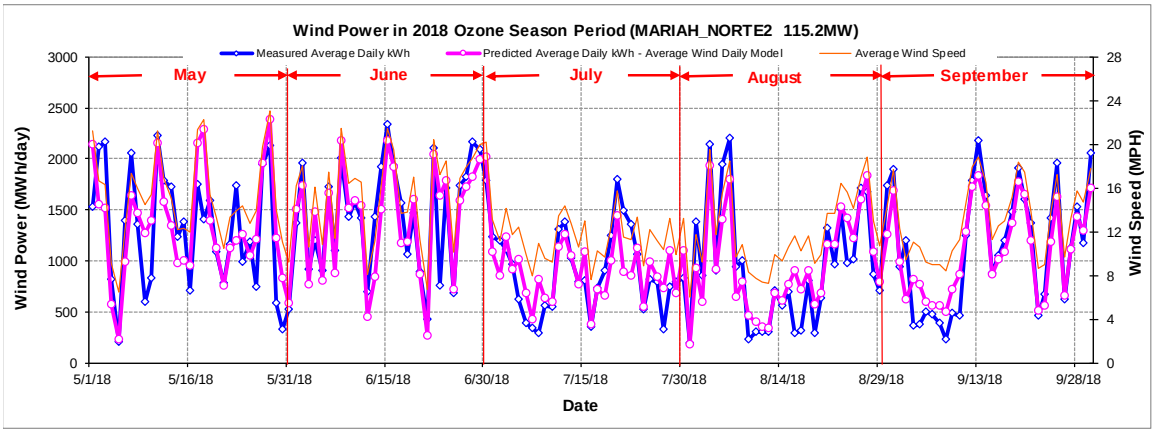
Figure A-293:MARIAH_NORTE2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	45,474	37,061	18.50%	53%	43%
Feb-18	28	13.78	41,384	36,333	12.21%	53%	47%
Mar-18	31	14.64	42,558	42,823	-0.62%	50%	50%
Apr-18	30	17.03	33,981	48,372	-42.35%	41%	58%
May-18	31	14.93	40,042	41,272	-3.07%	47%	48%
Jun-18	30	15.70	44,145	42,920	2.78%	53%	52%
Jul-18	31	11.32	26,488	26,763	-1.04%	31%	31%
Aug-18	31	12.42	31,140	31,156	-0.05%	36%	36%
Sep-18	30	13.00	32,711	32,415	0.90%	39%	39%
Oct-18	31	12.69	31,490	36,981	-17.44%	37%	43%
Nov-18	30	12.53	38,830	35,315	9.05%	47%	43%
Dec-18	31	12.16	38,556	35,298	8.45%	45%	41%
Total	365	13.56	446,797	446,709	0.02%	44%	44%
Total in OSP (07/15-09/15)	153	13.46	174,525	174,525	0.00%	41%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

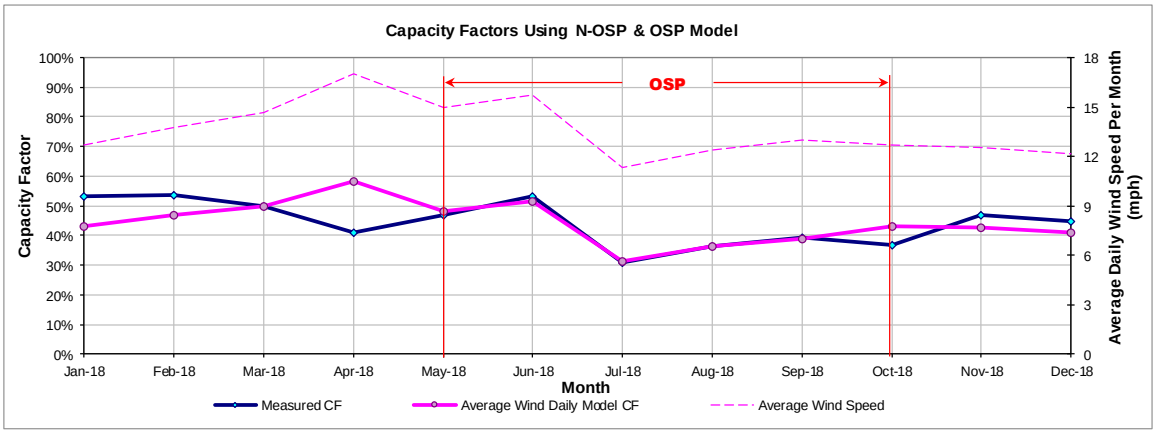


Figure A-294:MARIAH_NORTE2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.69 McAdoo Wind Energy

A.69.1 McAdoo Wind Energy - MWEC_G1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MWEC_G1	Wind	-	DICKENS	Invenergy	McAdoo Wind Energy

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
100 GE 1.5 MW	ERCOT	W	May-08	Panhandle	LBB	150

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

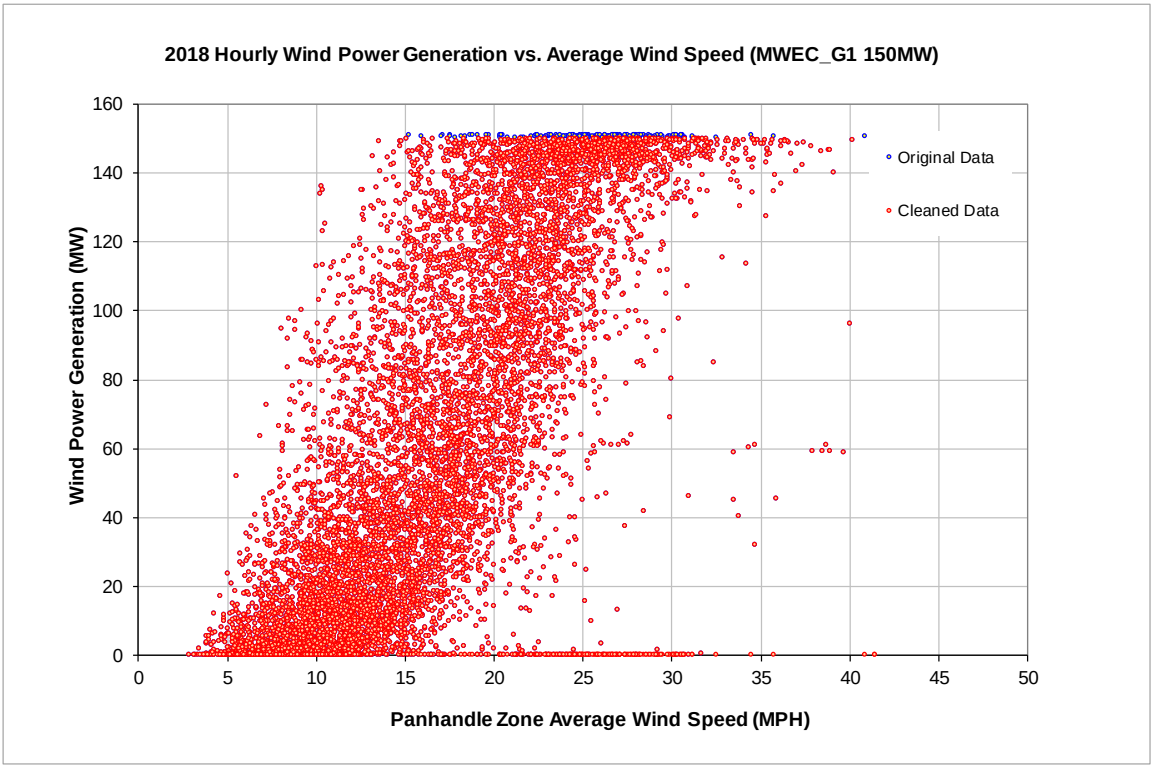


Figure A-295:MWEC_G1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

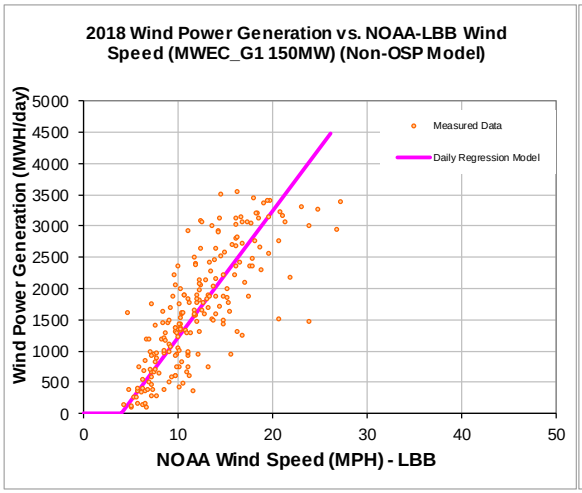
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-283.93
Left Slope (MWh/mph-day)	159.14
RMSE (MWh/day)	566.74
R2	0.62
CV-RMSE	34.4%
Daily Maximum (MWh/day)	3600

OSP Model:

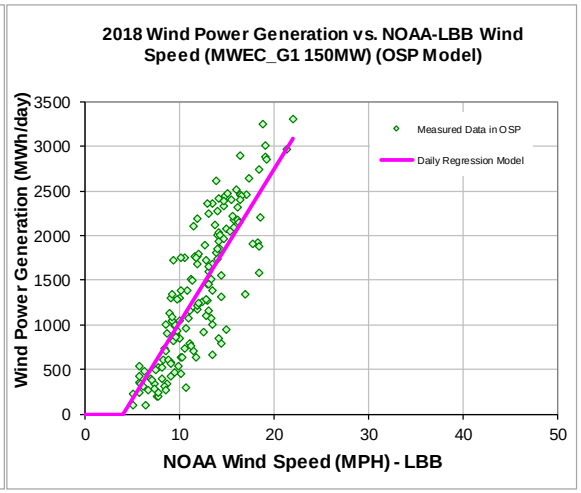
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-884.49
Left Slope (MWh/mph-day)	188.03
RMSE (MWh/day)	411.39
R2	0.73
CV-RMSE	30.0%
Daily Maximum (MWh/day)	3600

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
544,215	552,275

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,165	1,372

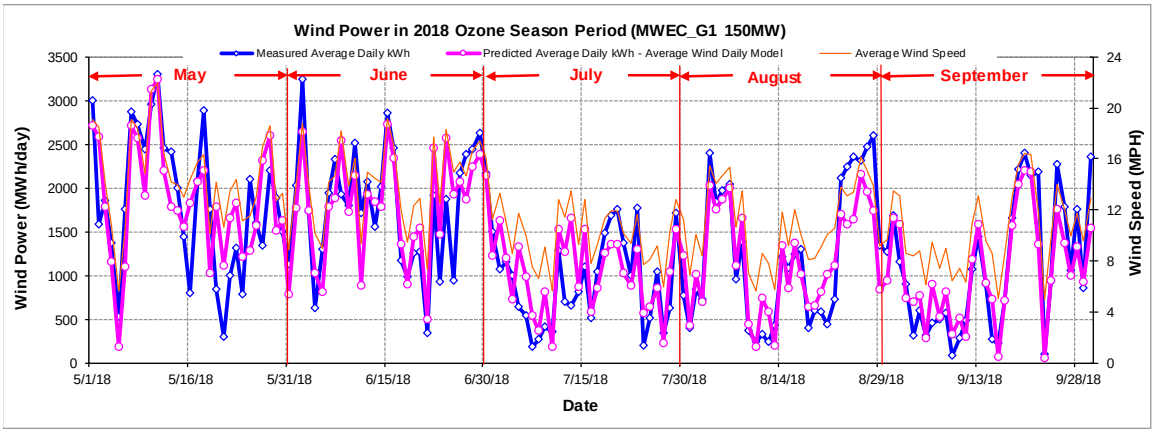
Figure A-296:MWEC_G1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	53,284	45,910	13.84%	48%	41%
Feb-18	28	12.08	51,507	45,867	10.95%	51%	46%
Mar-18	31	13.59	56,451	56,359	0.16%	51%	51%
Apr-18	30	15.19	58,804	63,590	-8.14%	54%	59%
May-18	31	14.42	56,122	56,662	-0.96%	50%	51%
Jun-18	30	14.33	54,455	54,327	0.24%	50%	50%
Jul-18	31	10.01	27,821	30,902	-11.07%	25%	28%
Aug-18	31	11.09	39,656	37,201	6.19%	36%	33%
Sep-18	30	10.17	31,853	30,815	3.26%	29%	29%
Oct-18	31	10.80	37,910	44,465	-17.29%	34%	40%
Nov-18	30	10.99	41,189	41,033	0.38%	38%	38%
Dec-18	31	11.15	43,222	44,269	-2.42%	39%	40%
Total	365	12.07	552,275	551,401	0.16%	42%	42%
Total in OSP (07/15-09/15)	153	12.00	209,908	209,908	0.00%	38%	38%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

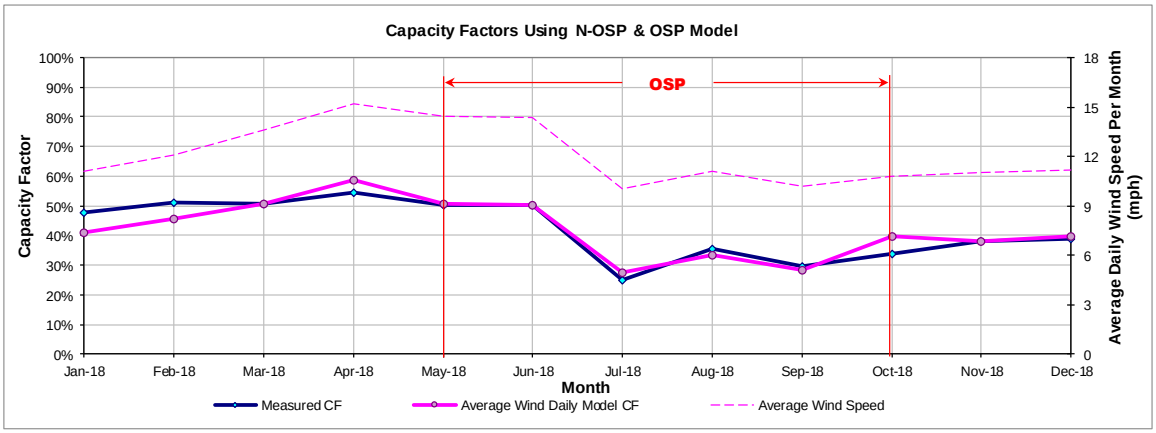


Figure A-297:MWEC_G1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.70 Mesquite Creek W

A.70.1 Mesquite Creek W - MESQCRK_WND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MESQCRK_WND1	Wind	-	BORDEN	Sumitomo/Duke Energy	Mesquite Creek W

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
59 GE 1.7 MW	ERCOT	W	Apr-15	West	LBB	105.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

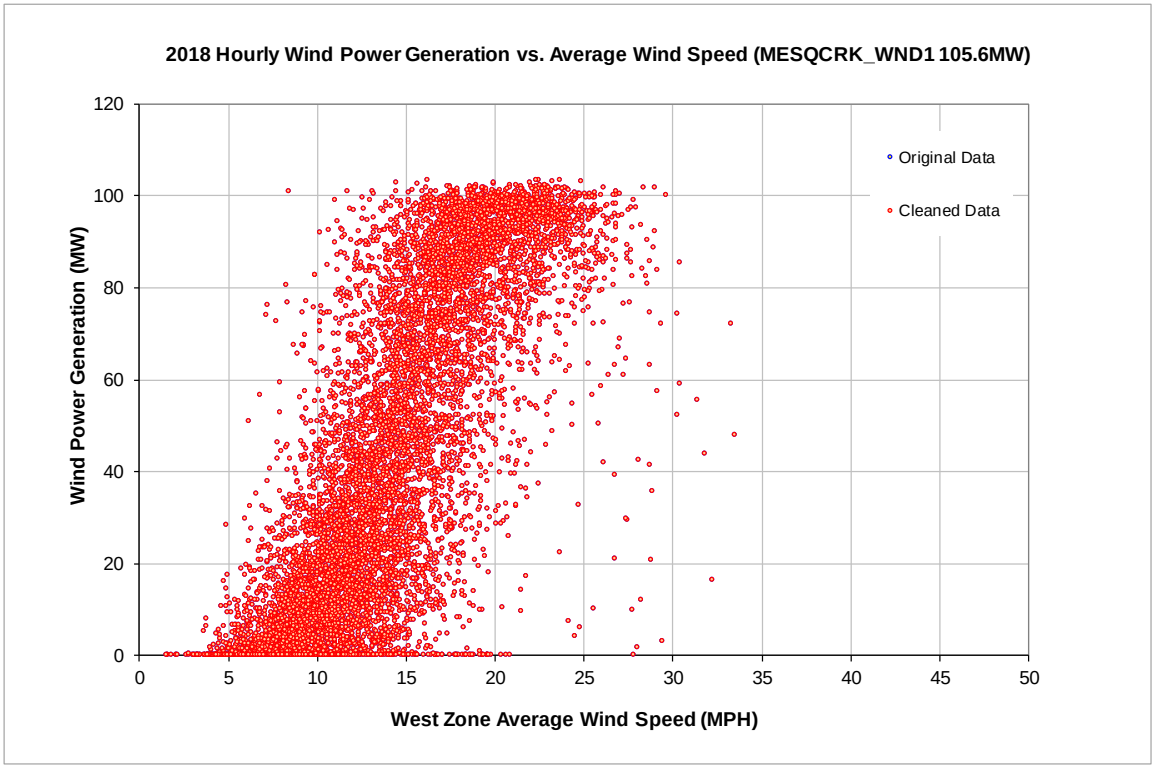


Figure A-298:MESQCRK_WND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

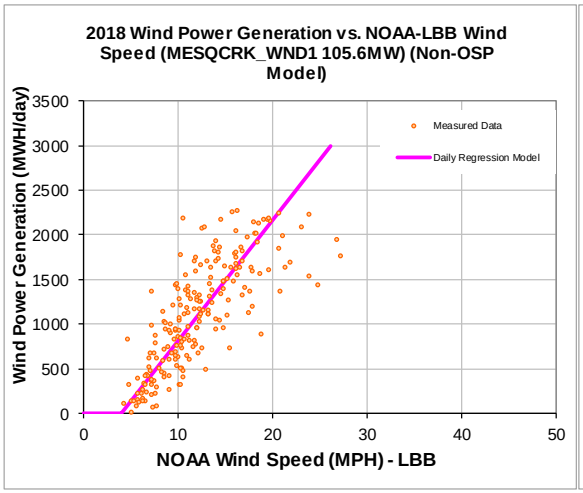
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-136.22
Left Slope (MWh/mph-day)	102.12
RMSE (MWh/day)	374.01
R2	0.61
CV-RMSE	34.0%
Daily Maximum (MWh/day)	2534

OSP Model:

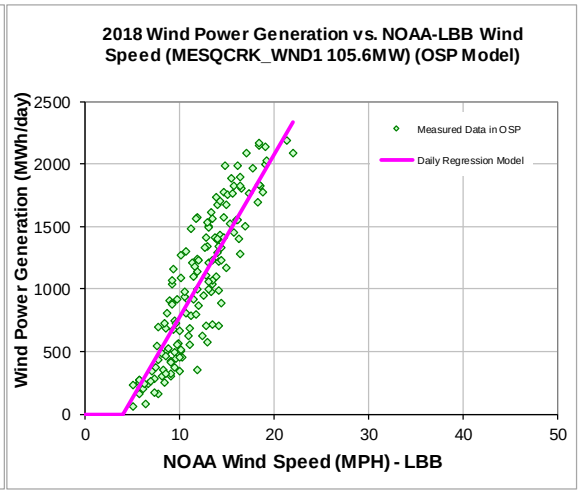
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-652.96
Left Slope (MWh/mph-day)	141.00
RMSE (MWh/day)	260.63
R2	0.79
CV-RMSE	25.1%
Daily Maximum (MWh/day)	2534

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
379,799	390,081

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
884	1,039

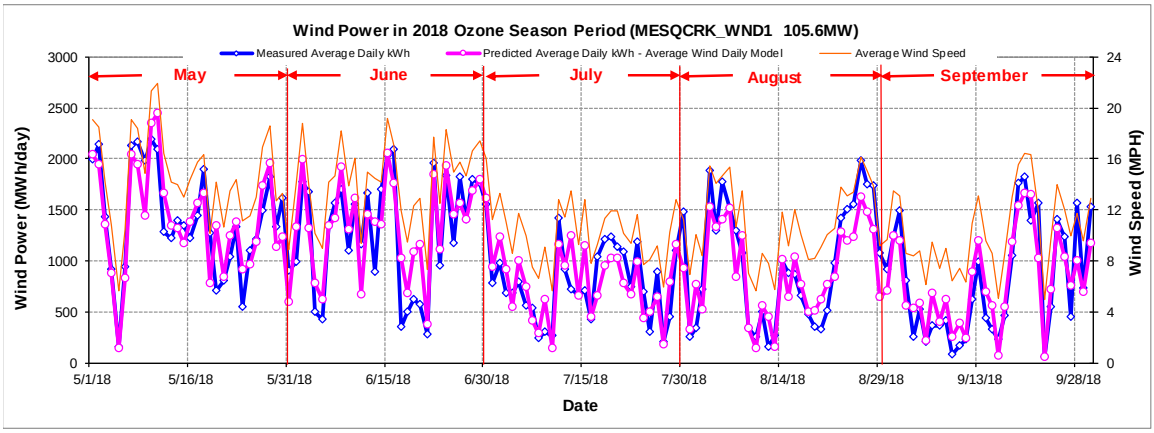
Figure A-299:MESQCRK_WND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	34,710	30,885	11.02%	44%	39%
Feb-18	28	12.08	32,473	30,720	5.40%	46%	43%
Mar-18	31	13.58	36,833	38,778	-5.28%	47%	49%
Apr-18	30	15.19	40,108	42,402	-5.72%	53%	56%
May-18	31	14.42	43,046	42,811	0.55%	55%	54%
Jun-18	30	14.33	38,672	41,049	-6.15%	51%	54%
Jul-18	31	10.01	23,666	23,493	0.73%	30%	30%
Aug-18	31	11.09	30,574	28,217	7.71%	39%	36%
Sep-18	30	10.17	23,029	23,417	-1.69%	30%	31%
Oct-18	31	10.51	24,344	27,184	-11.66%	31%	35%
Nov-18	30	11.15	31,366	30,060	4.16%	41%	40%
Dec-18	31	11.13	31,261	30,901	1.15%	40%	39%
Total	365	12.06	390,081	389,916	0.04%	42%	42%
Total in OSP (07/15-09/15)	153	12.00	158,987	158,987	0.00%	41%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

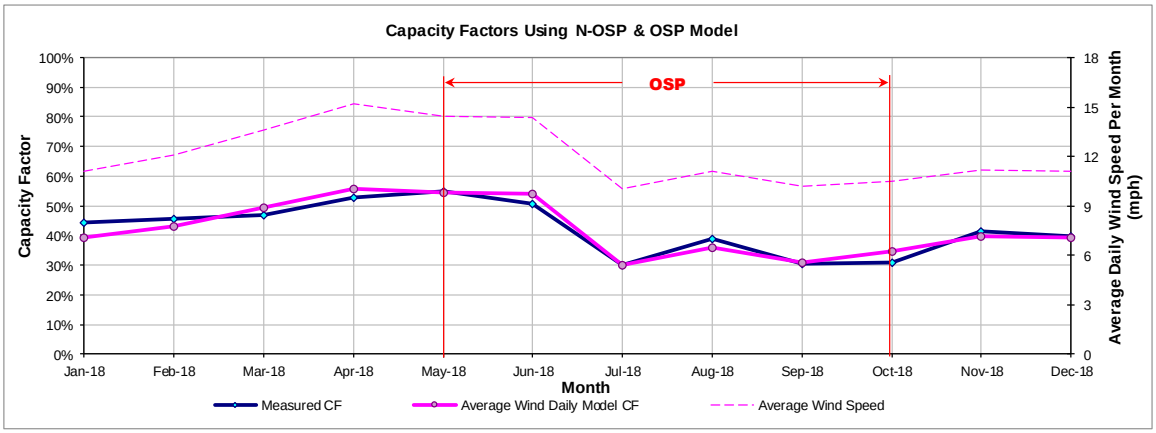


Figure A-300:MESQCRK_WND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.70.2 Mesquite Creek W - MESQCRK_WND2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MESQCRK_WND2	Wind	-	BORDEN	Sumitomo/Duke Energy	Mesquite Creek W

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
59 GE 1.7 MW	ERCOT	W	Apr-15	West	LBB	105.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

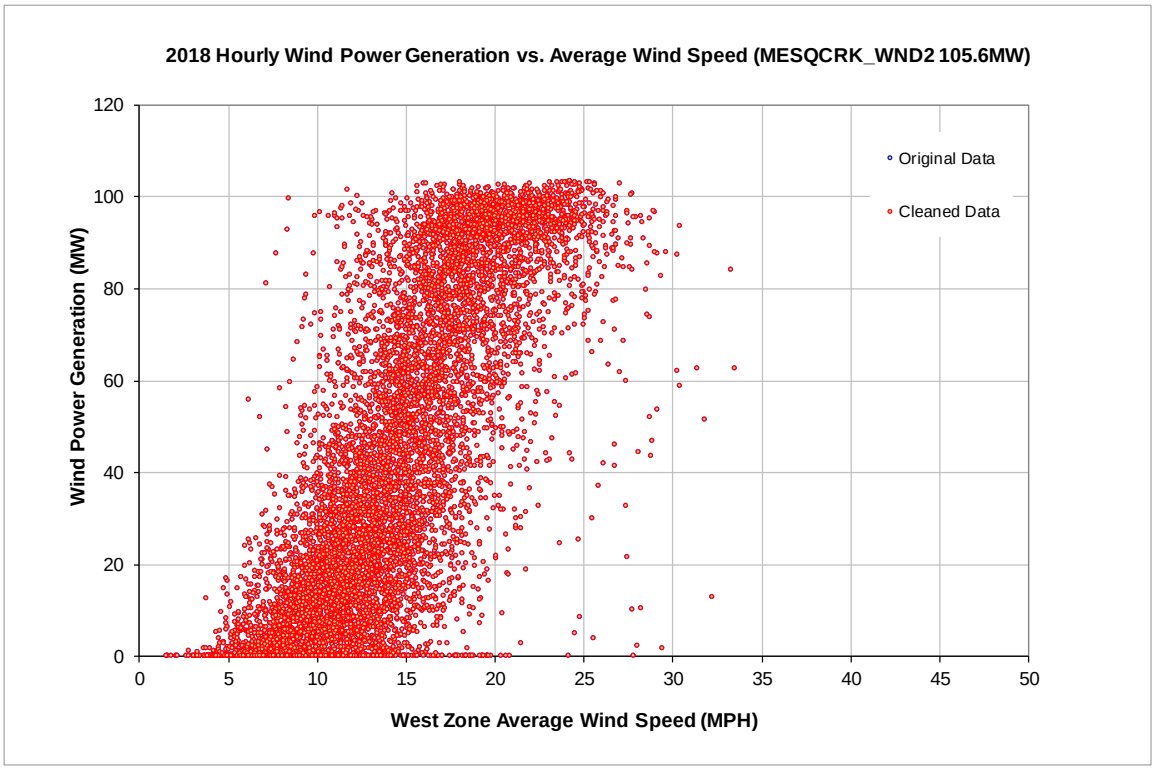


Figure A-301:MESQCRK_WND2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

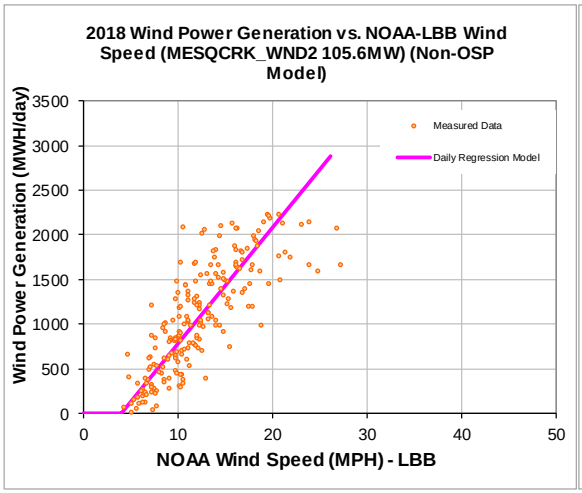
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-227.64
Left Slope (MWh/mph-day)	106.19
RMSE (MWh/day)	354.04
R2	0.65
CV-RMSE	33.5%
Daily Maximum (MWh/day)	2534

OSP Model:

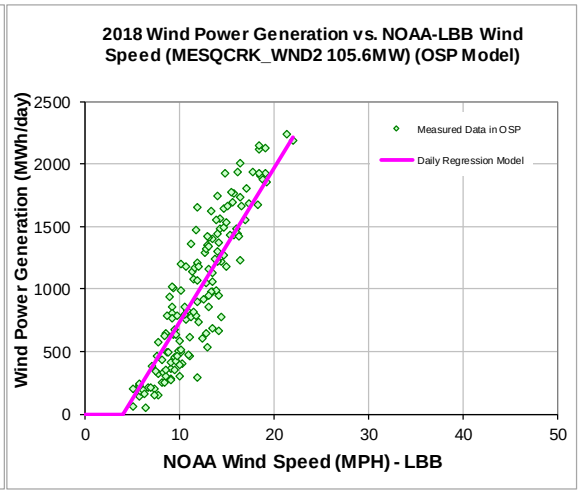
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-721.91
Left Slope (MWh/mph-day)	142.17
RMSE (MWh/day)	250.39
R2	0.81
CV-RMSE	25.4%
Daily Maximum (MWh/day)	2534

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
362,781	372,826

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
828	984

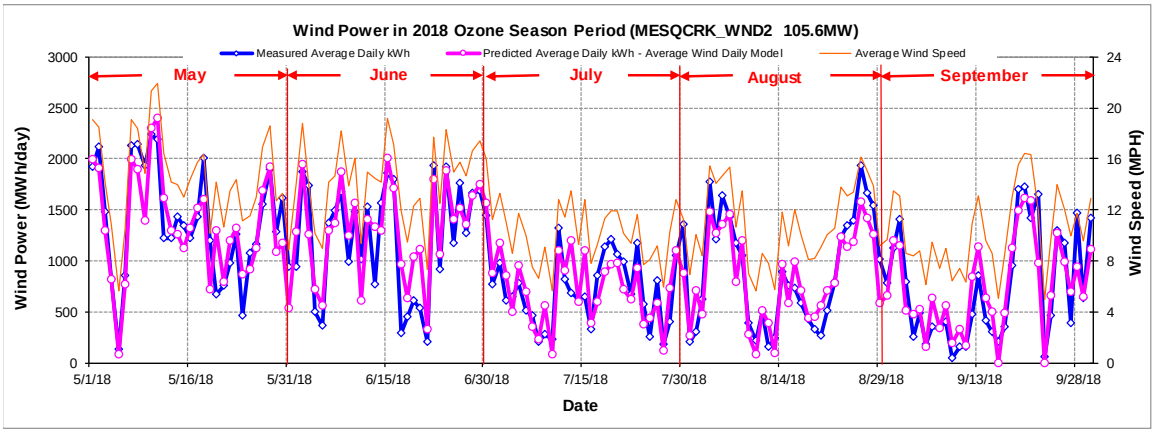
Figure A-302:MESQCRK_WND2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	32,687	29,452	9.90%	42%	37%
Feb-18	28	12.08	30,129	29,537	1.96%	42%	42%
Mar-18	31	13.58	36,208	37,659	-4.01%	46%	48%
Apr-18	30	15.19	39,562	41,499	-4.90%	52%	55%
May-18	31	14.42	42,649	41,193	3.41%	54%	52%
Jun-18	30	14.33	36,726	39,480	-7.50%	48%	52%
Jul-18	31	10.01	21,736	21,716	0.09%	28%	28%
Aug-18	31	11.09	27,980	26,479	5.37%	36%	34%
Sep-18	30	10.17	21,480	21,715	-1.09%	28%	29%
Oct-18	31	10.51	23,215	25,774	-11.02%	30%	33%
Nov-18	30	11.15	30,257	28,679	5.21%	40%	38%
Dec-18	31	11.13	30,196	29,453	2.46%	38%	37%
Total	365	12.06	372,826	372,635	0.05%	40%	40%
Total in OSP (07/15-09/15)	153	12.00	150,571	150,582	-0.01%	39%	39%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

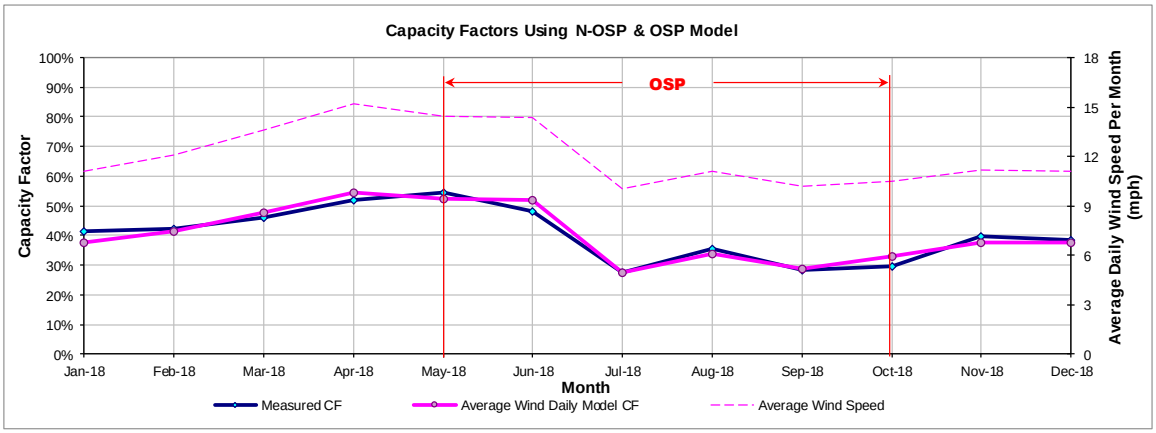


Figure A-303:MESQCRK_WND2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.71 Miami Wind 1 Project

A.71.1 Miami Wind 1 Project - MIAM1_G1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MIAM1_G1	Wind	-	GRAY	Invenergy	Miami Wind 1 Project

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
78 GE 1.85 MW	ERCOT	W	Dec-14	Panhandle	AMA	144.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

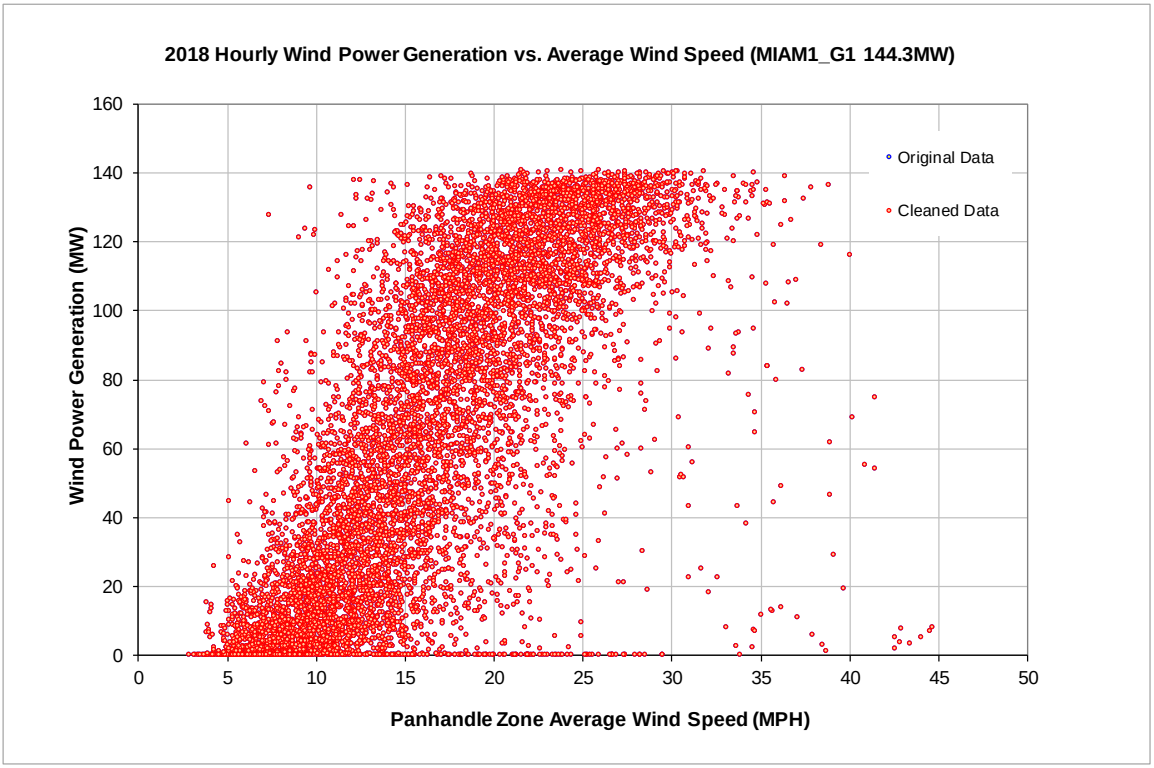


Figure A-304:MIAM1_G1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

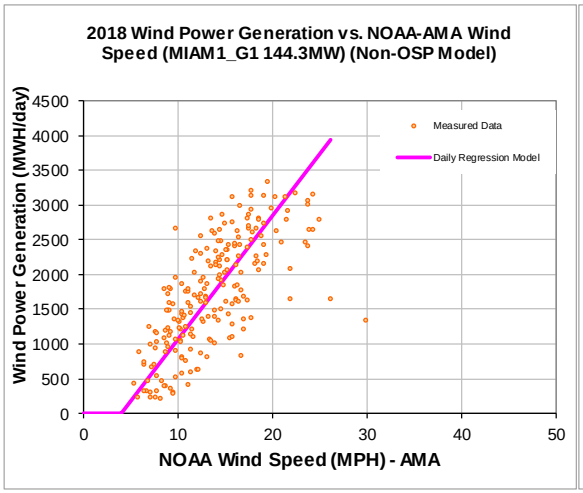
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	35.45
Left Slope (MWh/mph-day)	123.23
RMSE (MWh/day)	556.02
R2	0.51
CV-RMSE	32.4%
Daily Maximum (MWh/day)	3463

OSP Model:

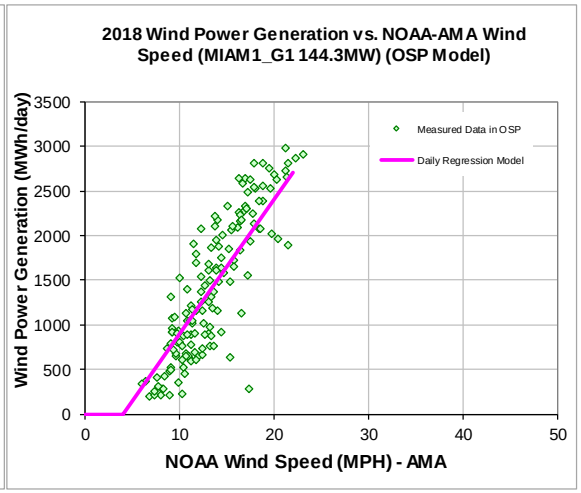
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-934.46
Left Slope (MWh/mph-day)	174.89
RMSE (MWh/day)	399.33
R2	0.74
CV-RMSE	28.2%
Daily Maximum (MWh/day)	3463

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
585,808	577,567

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,382	1,416

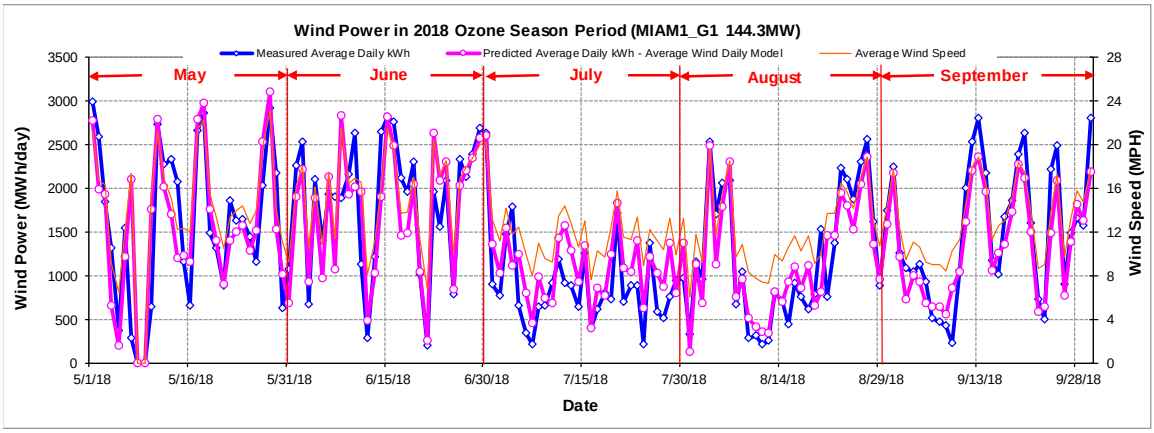
Figure A-305:MIAM1_G1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	55,638	49,686	10.70%	52%	46%
Feb-18	28	13.78	50,443	48,522	3.81%	52%	50%
Mar-18	31	14.64	60,251	57,034	5.34%	56%	53%
Apr-18	30	17.03	57,652	64,032	-11.07%	55%	62%
May-18	31	14.91	48,359	48,528	-0.35%	45%	45%
Jun-18	30	15.70	56,277	54,327	3.46%	54%	52%
Jul-18	31	11.32	25,540	32,420	-26.94%	24%	30%
Aug-18	31	12.42	39,391	38,344	2.66%	37%	36%
Sep-18	30	13.00	44,213	40,160	9.17%	43%	39%
Oct-18	31	12.69	44,458	49,583	-11.53%	41%	46%
Nov-18	30	12.53	45,925	47,381	-3.17%	44%	46%
Dec-18	31	12.16	49,421	47,297	4.30%	46%	44%
Total	365	13.55	577,567	577,314	0.04%	46%	46%
Total in OSP (07/15-09/15)	151	13.44	213,778	213,778	0.00%	41%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

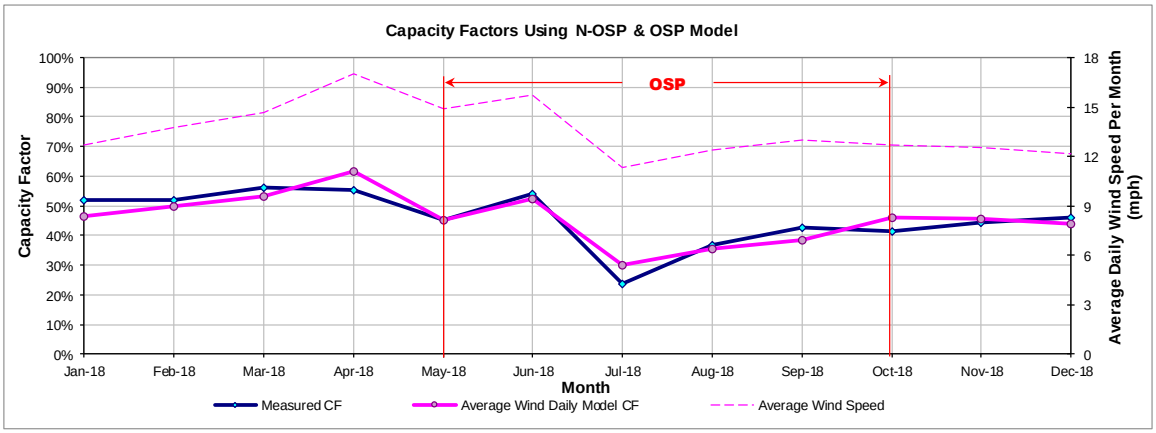


Figure A-306:MIAM1_G1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.71.2 Miami Wind 1 Project - MIAM1_G2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MIAM1_G2	Wind	-	GRAY	Invenergy	Miami Wind 1 Project

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
78 GE 1.85 MW	ERCOT	W	Dec-14	Panhandle	AMA	144.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

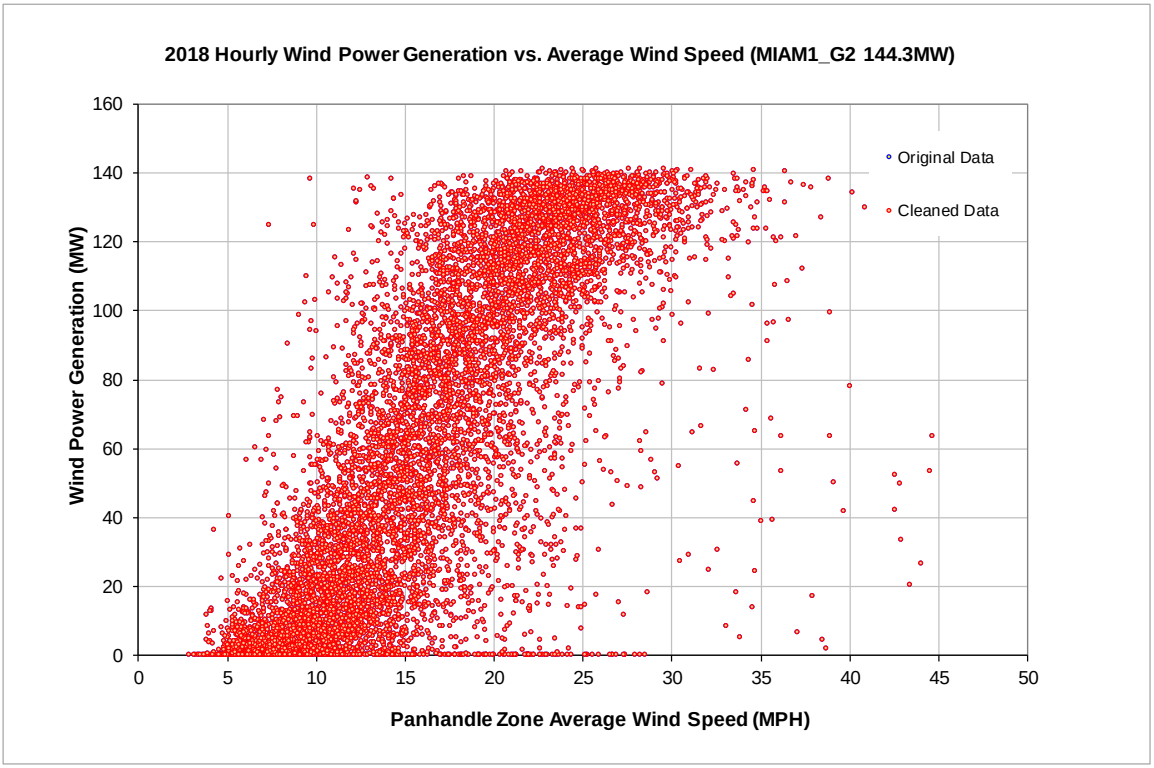


Figure A-307:MIAM1_G2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

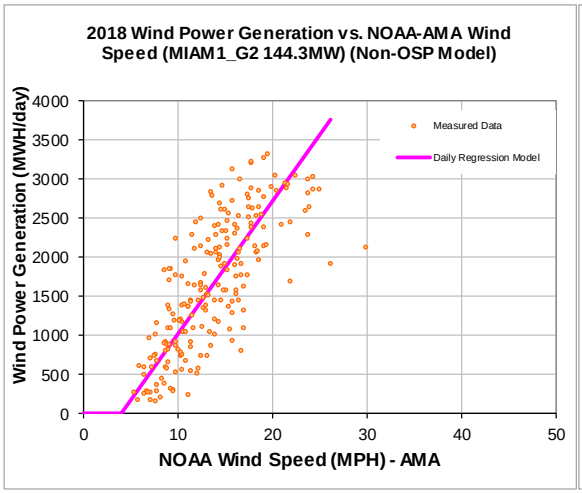
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-233.87
Left Slope (MWh/mph-day)	137.31
RMSE (MWh/day)	539.37
R2	0.58
CV-RMSE	32.9%
Daily Maximum (MWh/day)	3463

OSP Model:

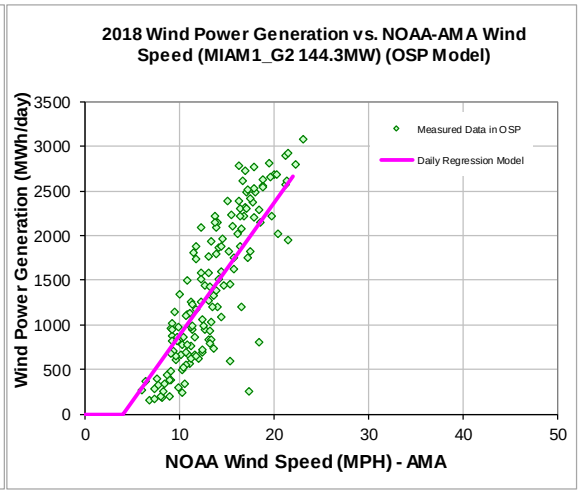
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-996.92
Left Slope (MWh/mph-day)	178.33
RMSE (MWh/day)	423.66
R2	0.72
CV-RMSE	30.3%
Daily Maximum (MWh/day)	3463

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
567,911	558,742

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,366	1,399

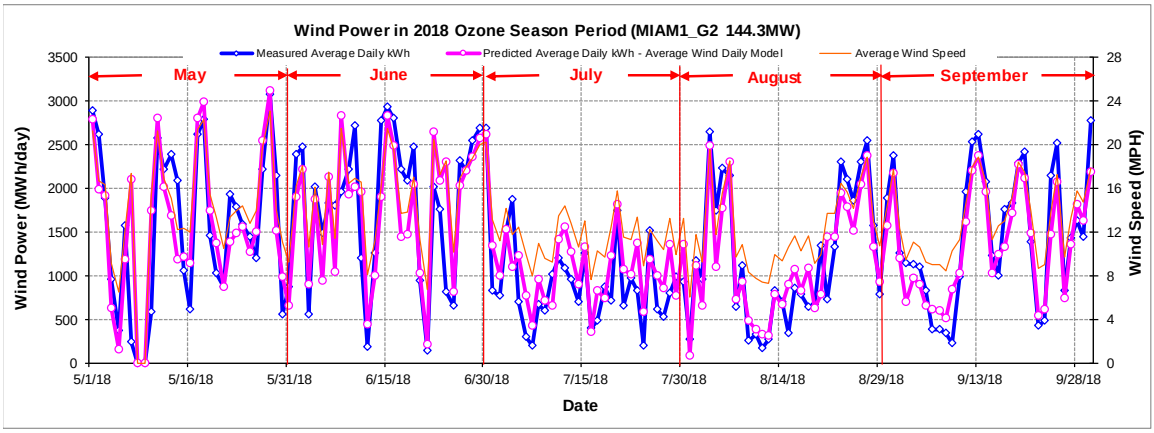
Figure A-308:MIAM1_G2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	54,792	46,891	14.42%	51%	44%
Feb-18	28	13.78	49,196	46,414	5.65%	51%	48%
Mar-18	31	14.64	57,164	55,079	3.65%	53%	51%
Apr-18	30	17.03	56,055	63,151	-12.66%	54%	61%
May-18	31	14.91	47,510	48,203	-1.46%	44%	45%
Jun-18	30	15.70	55,975	54,072	3.40%	54%	52%
Jul-18	31	11.32	26,004	31,690	-21.86%	24%	30%
Aug-18	31	12.42	39,491	37,731	4.46%	37%	35%
Sep-18	30	13.00	42,342	39,627	6.41%	41%	38%
Oct-18	31	12.69	42,202	46,777	-10.84%	39%	44%
Nov-18	30	12.53	42,220	44,596	-5.63%	41%	43%
Dec-18	31	12.16	45,790	44,106	3.68%	43%	41%
Total	365	13.55	558,742	558,337	0.07%	44%	44%
Total in OSP (07/15-09/15)	151	13.44	211,323	211,323	0.00%	40%	40%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

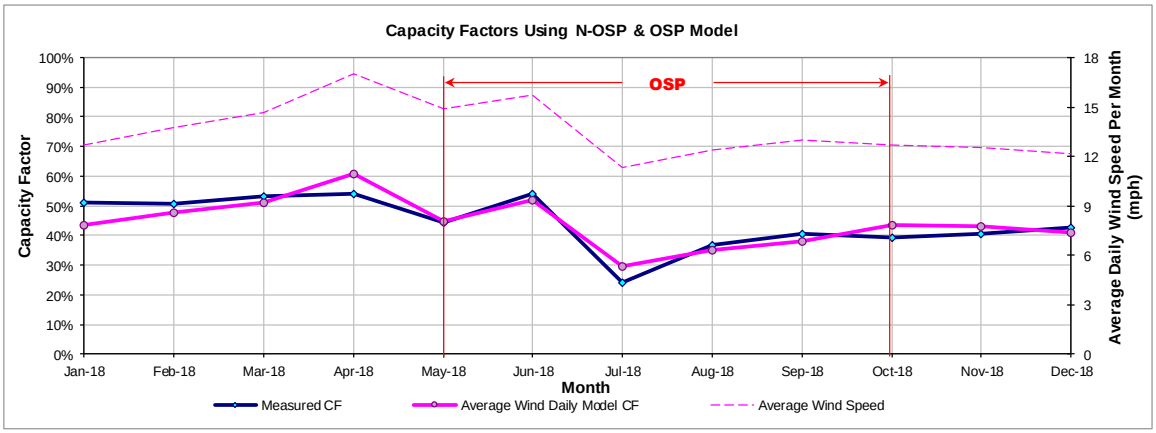


Figure A-309:MIAM1_G2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.72 Mozart Wind Farm

A.72.1 Mozart Wind Farm - MOZART_WIND_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MOZART_WIND_1	Wind	-	KENT	WKN AG	Mozart

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
12 Nordex 2.5 MW	ERCOT	W	Dec-12	West	LBB	30

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

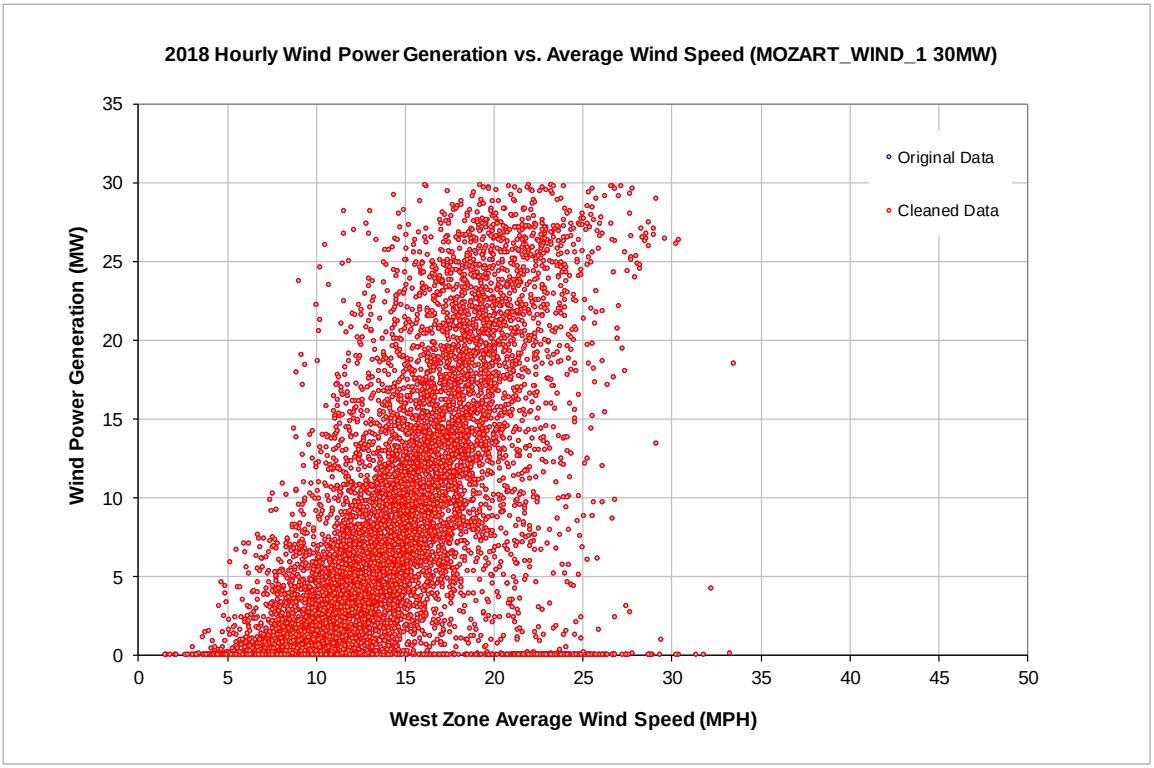


Figure A-310:MOZART_WIND_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

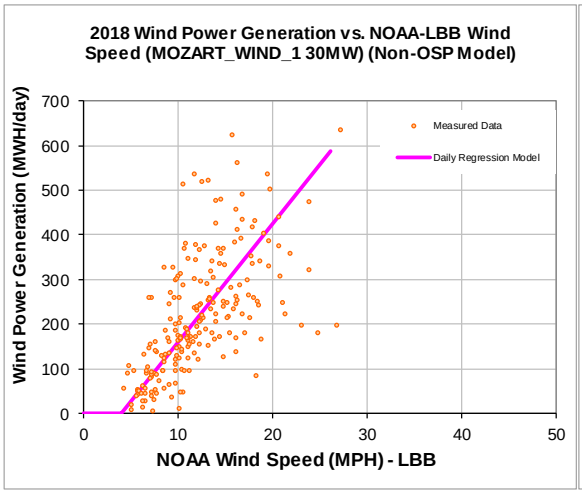
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-5.04
Left Slope (MWh/mph-day)	18.26
RMSE (MWh/day)	103.81
R2	0.39
CV-RMSE	47.9%
Daily Maximum (MWh/day)	720

OSP Model:

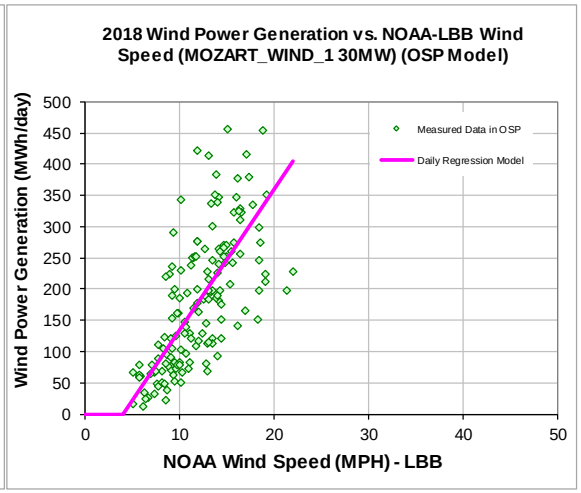
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-59.37
Left Slope (MWh/mph-day)	19.91
RMSE (MWh/day)	77.09
R2	0.47
CV-RMSE	42.9%
Daily Maximum (MWh/day)	720

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
71,955	73,392

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
157	180

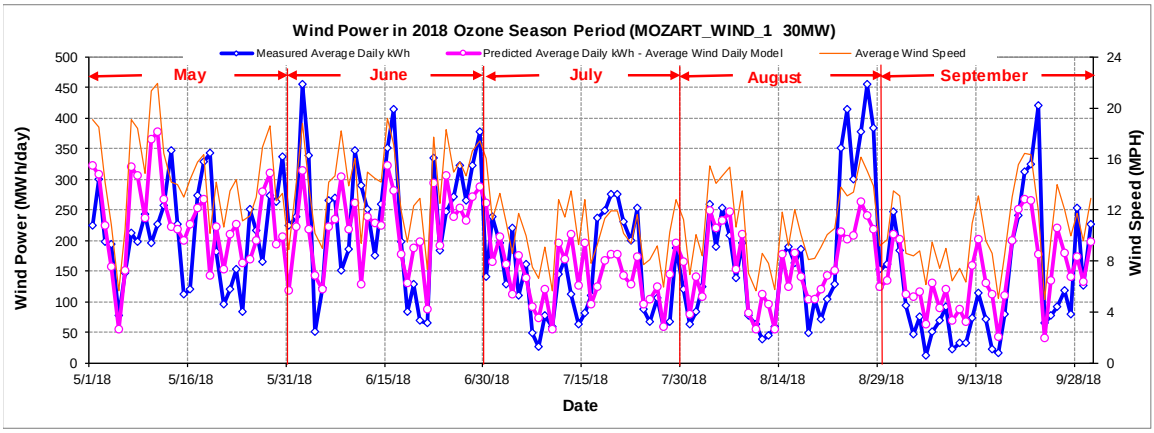
Figure A-311:MOZART_WIND_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	7,681	6,123	20.29%	34%	27%
Feb-18	28	12.08	5,766	6,035	-4.67%	29%	30%
Mar-18	31	13.58	7,180	7,534	-4.93%	32%	34%
Apr-18	30	15.19	6,378	8,173	-28.14%	30%	38%
May-18	31	14.42	6,568	7,062	-7.52%	29%	32%
Jun-18	30	14.33	7,157	6,780	5.27%	33%	31%
Jul-18	31	10.01	4,409	4,334	1.70%	20%	19%
Aug-18	31	11.09	5,730	5,001	12.72%	26%	22%
Sep-18	30	10.17	3,605	4,291	-19.04%	17%	20%
Oct-18	31	10.80	5,453	5,957	-9.24%	24%	27%
Nov-18	30	11.15	6,442	5,956	7.55%	30%	28%
Dec-18	31	11.13	7,022	6,145	12.49%	31%	28%
Total	365	12.08	73,392	73,392	0.00%	28%	28%
Total in OSP (07/15-09/15)	153	12.00	27,469	27,469	0.00%	25%	25%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

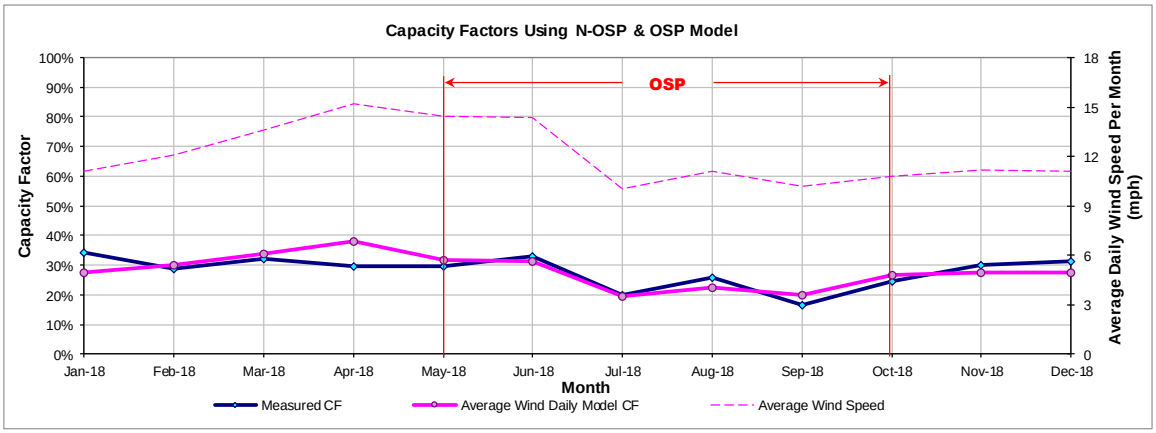


Figure A-312:MOZART_WIND_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.73 Notrees Windpower

A.73.1 Notrees Windpower - NWF_NWF1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
NWF_NWF1	Wind	-	ECTOR	Duke Energy	Notrees Windpower

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
55 Vestas 1.65 MW 1 Vestas 1.8 MW 40 GE 1.5 MW	ERCOT	W	Jan-09	West	MAF	152.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

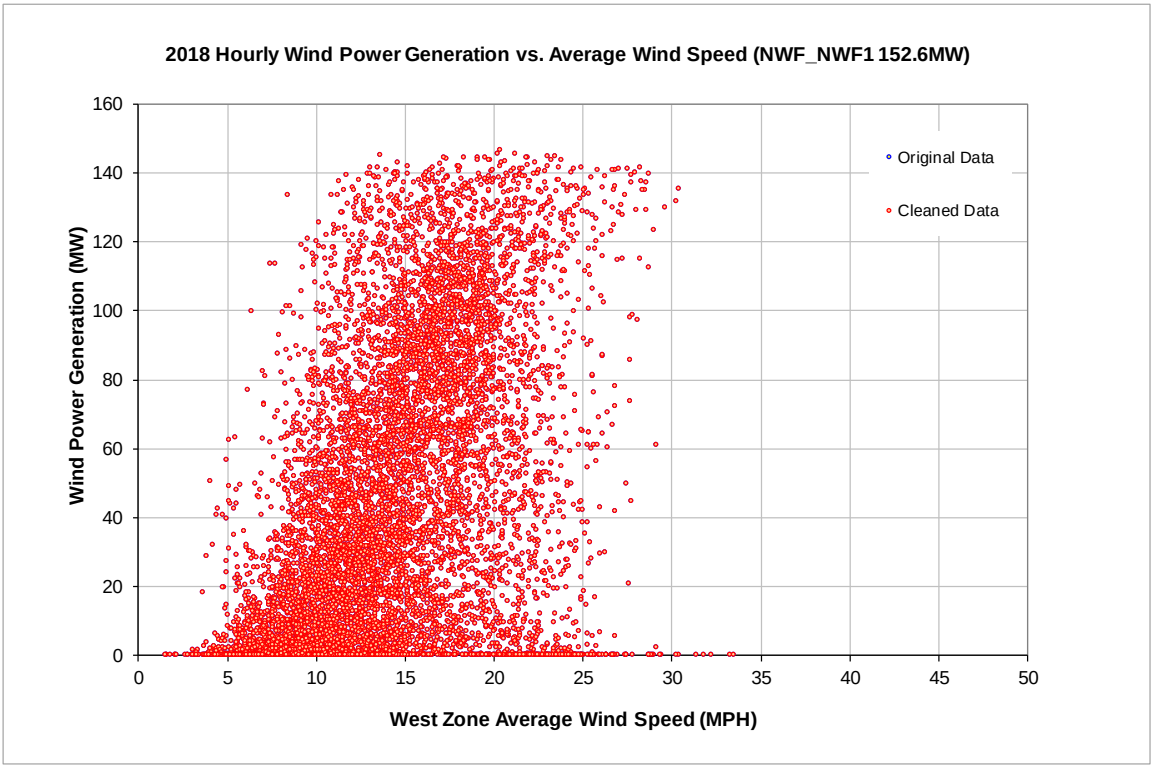


Figure A-313:NWF_NWF1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

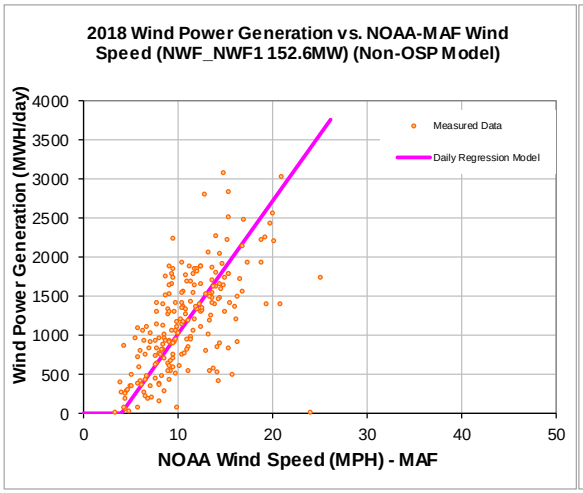
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	74.35
Left Slope (MWh/mph-day)	100.31
RMSE (MWh/day)	490.85
R2	0.40
CV-RMSE	42.3%
Daily Maximum (MWh/day)	3662

OSP Model:

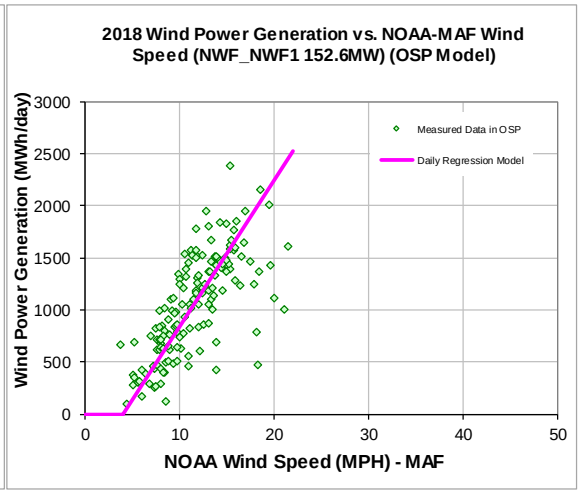
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-11.06
Left Slope (MWh/mph-day)	92.40
RMSE (MWh/day)	337.86
R2	0.50
CV-RMSE	32.1%
Daily Maximum (MWh/day)	3662

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
382,718	403,368

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
965	1,053

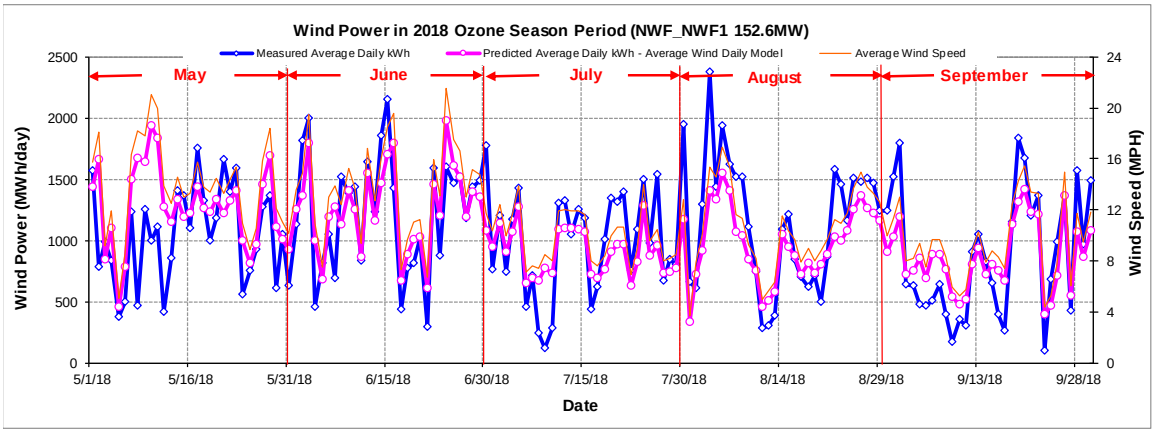
Figure A-314:NWF_NWF1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (MAF) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	9.47	36,472	31,762	12.92%	32%	28%
Feb-18	28	10.85	35,989	32,559	9.53%	35%	32%
Mar-18	31	11.79	39,099	38,972	0.33%	34%	34%
Apr-18	30	13.81	32,269	39,418	-22.15%	29%	36%
May-18	31	13.80	32,286	39,177	-21.34%	28%	35%
Jun-18	30	13.77	37,666	37,837	-0.45%	34%	34%
Jul-18	31	9.76	30,104	27,615	8.27%	27%	24%
Aug-18	31	10.84	35,767	30,699	14.17%	32%	27%
Sep-18	30	9.41	25,260	25,755	-1.96%	23%	23%
Oct-18	31	10.68	31,435	35,511	-12.96%	28%	31%
Nov-18	30	9.55	30,320	30,969	-2.14%	28%	28%
Dec-18	31	9.90	36,700	33,095	9.82%	32%	29%
Total	365	11.11	403,368	403,368	0.00%	30%	30%
Total in OSP (07/15-09/15)	153	11.51	161,084	161,084	0.00%	29%	29%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

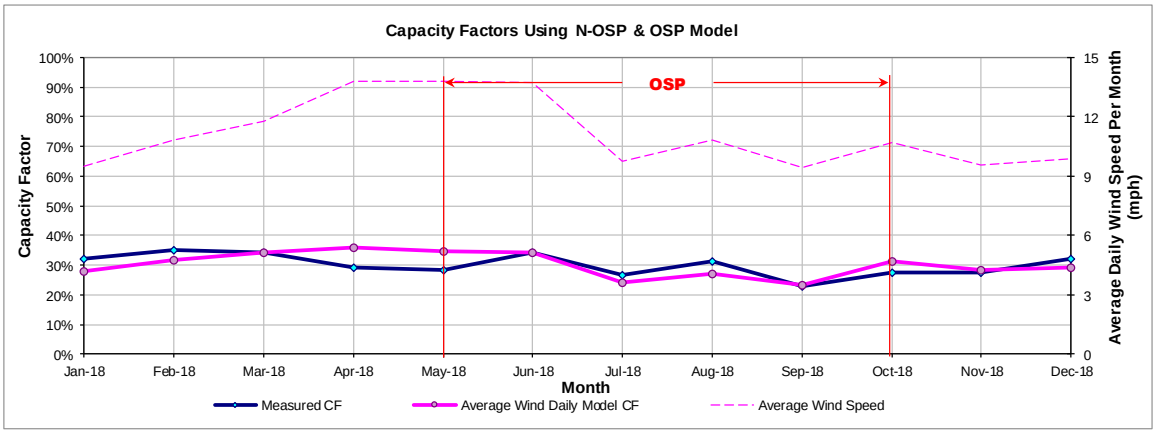


Figure A-315:NWF_NWF1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.74 Ocotillo Windpower 1

A.74.1 Ocotillo Windpower 1 - OWF_OWF

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
OWF_OWF	Wind	-	HOWARD	Duke Energy	Ocotillo Windpower 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
28 Suzion 2.1 MW	ERCOT	W	Aug-08	West	ABI	58.8

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

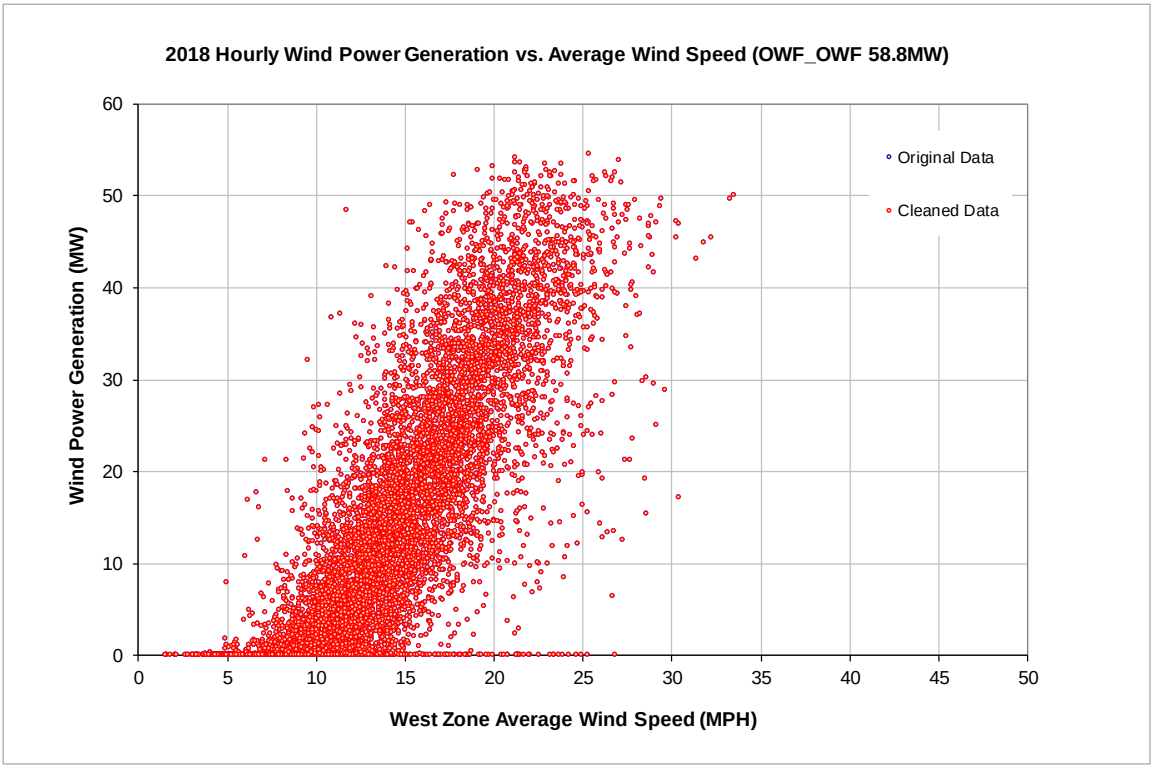


Figure A-316:OWF_OWF - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

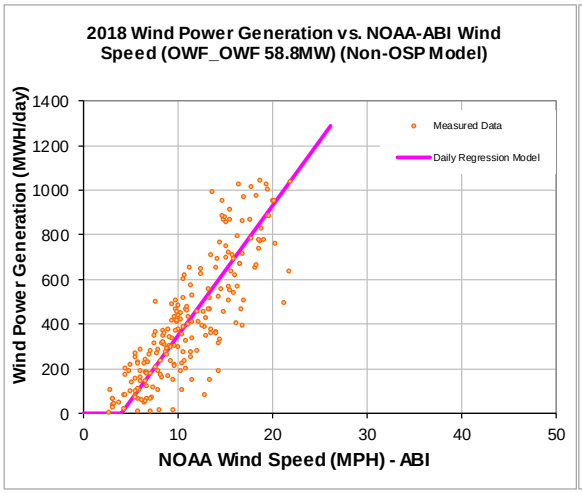
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-145.72
Left Slope (MWh/mph-day)	50.24
RMSE (MWh/day)	145.37
R2	0.72
CV-RMSE	36.0%
Daily Maximum (MWh/day)	1411

OSP Model:

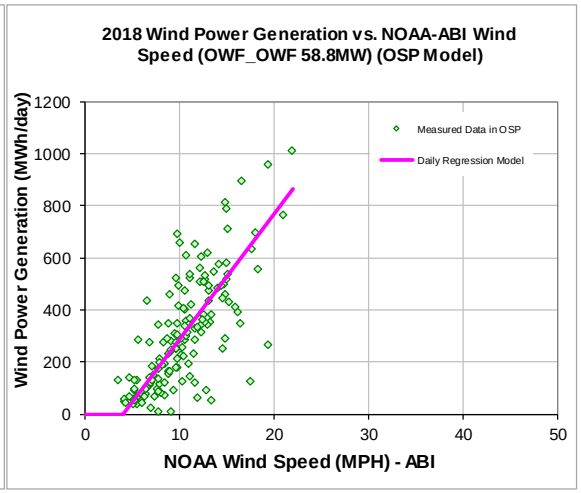
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-135.61
Left Slope (MWh/mph-day)	42.59
RMSE (MWh/day)	143.79
R2	0.55
CV-RMSE	46.8%
Daily Maximum (MWh/day)	1411

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
145,992	132,367

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
312	307

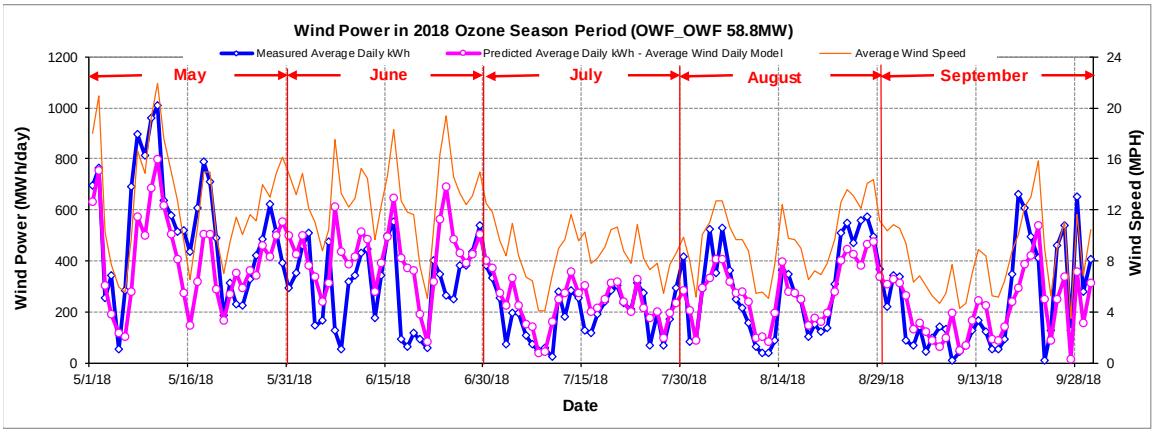
Figure A-317:OWF_OWF - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	14,695	12,567	14.48%	34%	29%
Feb-18	28	11.00	11,837	11,398	3.71%	30%	29%
Mar-18	31	11.92	14,345	14,056	2.01%	33%	32%
Apr-18	30	13.24	14,768	15,065	-2.01%	35%	36%
May-18	31	12.78	16,014	12,672	20.87%	37%	29%
Jun-18	30	12.90	9,174	12,421	-35.39%	22%	29%
Jul-18	31	8.52	5,908	7,046	-19.27%	14%	16%
Aug-18	31	9.85	9,089	8,799	3.18%	21%	20%
Sep-18	30	7.97	6,863	6,110	10.98%	16%	14%
Oct-18	31	9.35	10,396	10,067	3.17%	24%	23%
Nov-18	30	10.05	9,420	10,774	-14.38%	22%	25%
Dec-18	31	10.23	9,859	11,416	-15.79%	23%	26%
Total	365	10.72	132,367	132,391	-0.02%	26%	26%
Total in OSP (07/15-09/15)	153	10.40	47,047	47,047	0.00%	22%	22%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

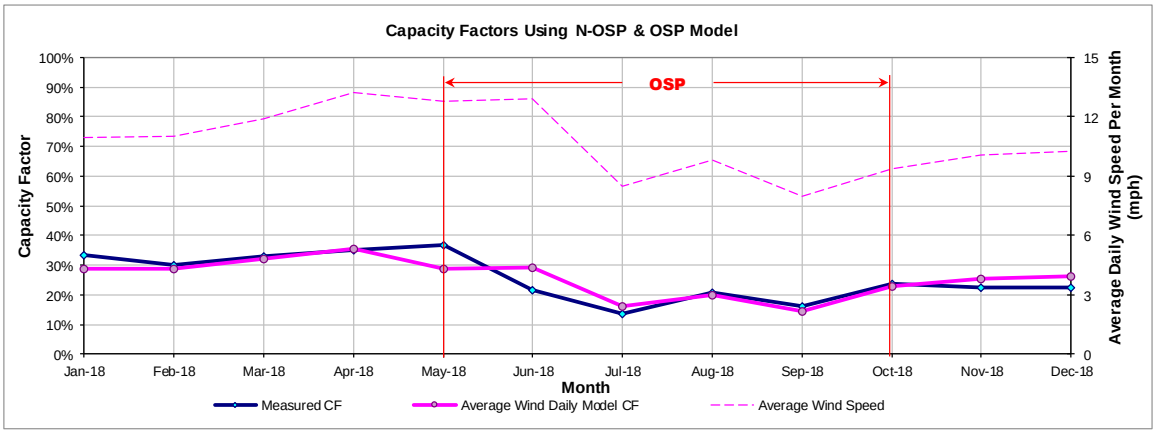


Figure A-318:OWF_OWF - Predicted Wind Power and Capacity Factor Using Daily Models

A.75 Old Settler Wind

A.75.1 Old Settler Wind - COTPLNS_OLDSETLR

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
COTPLNS_OLDSETLR	Wind	-	FLOYD	Apex Clean Energy	Old Settler Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
63 GE 2.4 MW	ERCOT	W	Apr-17	Panhandle	LBB	151.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

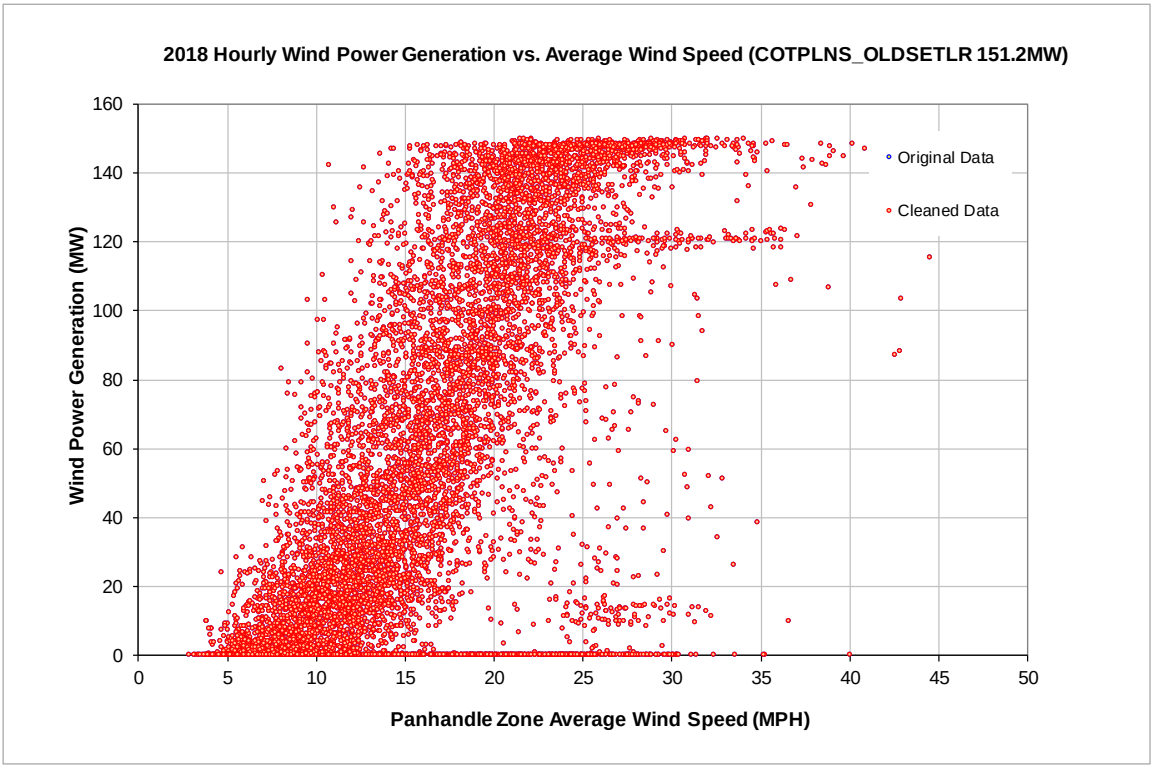


Figure A-319:COTPLNS_OLDSETLR - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

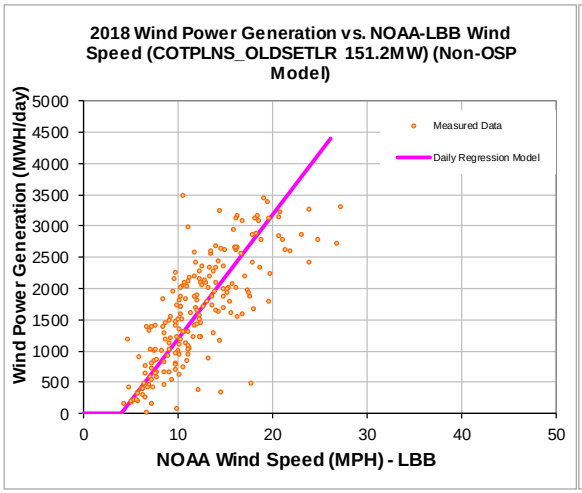
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-153.66
Left Slope (MWh/mph-day)	146.21
RMSE (MWh/day)	546.65
R2	0.60
CV-RMSE	33.7%
Daily Maximum (MWh/day)	3629

OSP Model:

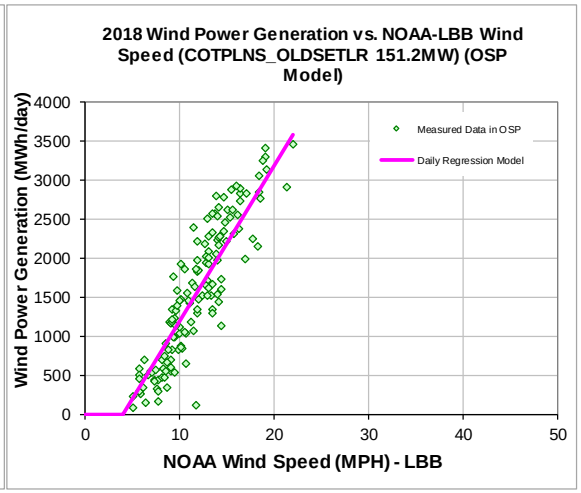
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-994.31
Left Slope (MWh/mph-day)	215.65
RMSE (MWh/day)	379.29
R2	0.81
CV-RMSE	24.4%
Daily Maximum (MWh/day)	3629

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
566,393	552,994

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,356	1,553

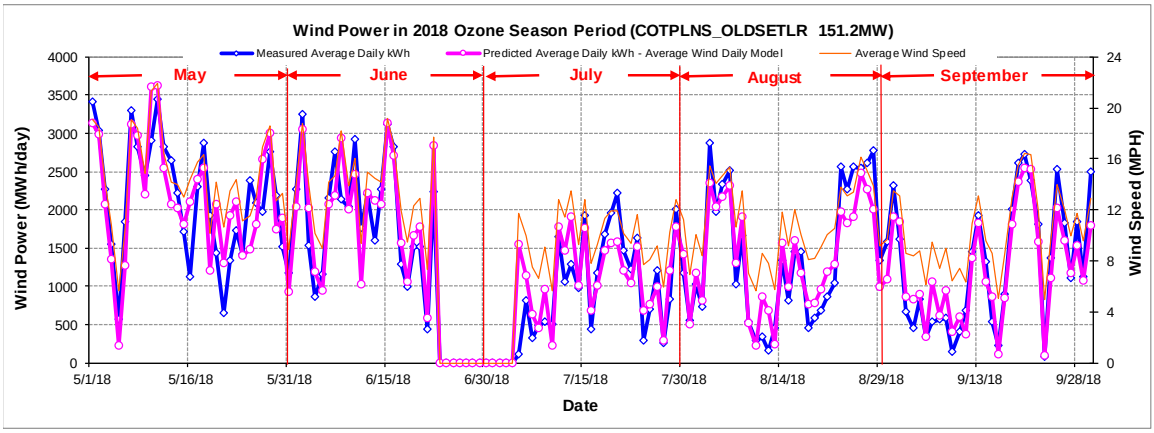
Figure A-320:COTPLNS_OLDSETLR - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	48,559	45,501	6.30%	43%	40%
Feb-18	28	12.08	39,021	45,139	-15.68%	38%	44%
Mar-18	31	13.58	51,726	56,801	-9.81%	46%	50%
Apr-18	30	15.19	58,788	61,907	-5.30%	54%	57%
May-18	31	14.42	65,765	65,494	0.41%	58%	58%
Jun-18	30	13.81	42,788	43,646	-2.00%	39%	40%
Jul-18	31	9.85	28,387	30,507	-7.47%	25%	27%
Aug-18	31	11.09	45,065	43,287	3.95%	40%	38%
Sep-18	30	10.17	36,983	35,943	2.81%	34%	33%
Oct-18	31	10.51	33,081	34,580	-4.53%	29%	31%
Nov-18	30	11.15	51,244	44,278	13.60%	47%	41%
Dec-18	31	11.13	51,586	45,482	11.83%	46%	40%
Total	365	12.01	552,994	552,564	0.08%	42%	42%
Total in OSP (07/15-09/15)	141	11.81	218,988	218,876	0.05%	43%	43%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

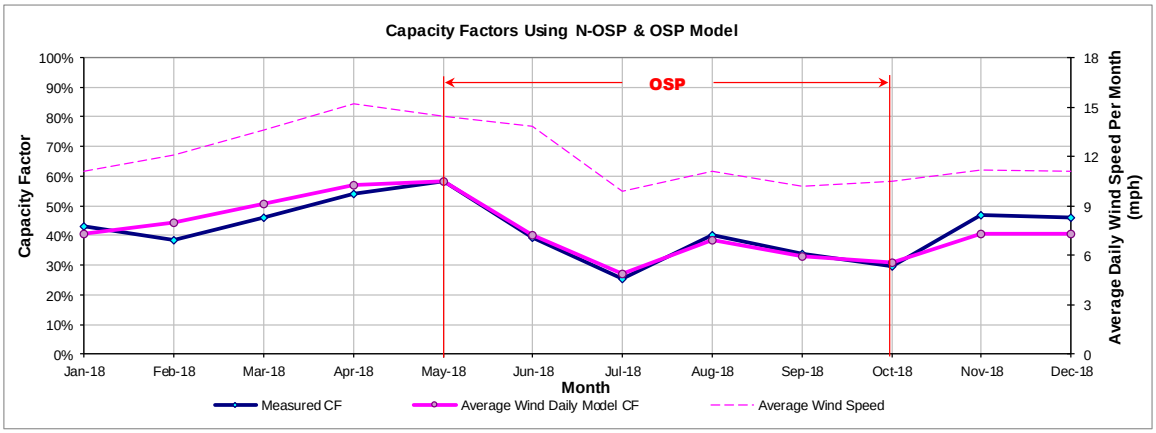


Figure A-321:COTPLNS_OLDSETLR - Predicted Wind Power and Capacity Factor Using Daily Models

A.76 Panhandle Wind 1

A.76.1 Panhandle Wind 1 - PH1_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PH1_UNIT1	Wind	Amarilo	CARSON	Pattern Energy	Panhandle Wind 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
59 GE 1.85 MW	ERCOT	W	Jul-14	Panhandle	AMA	109.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

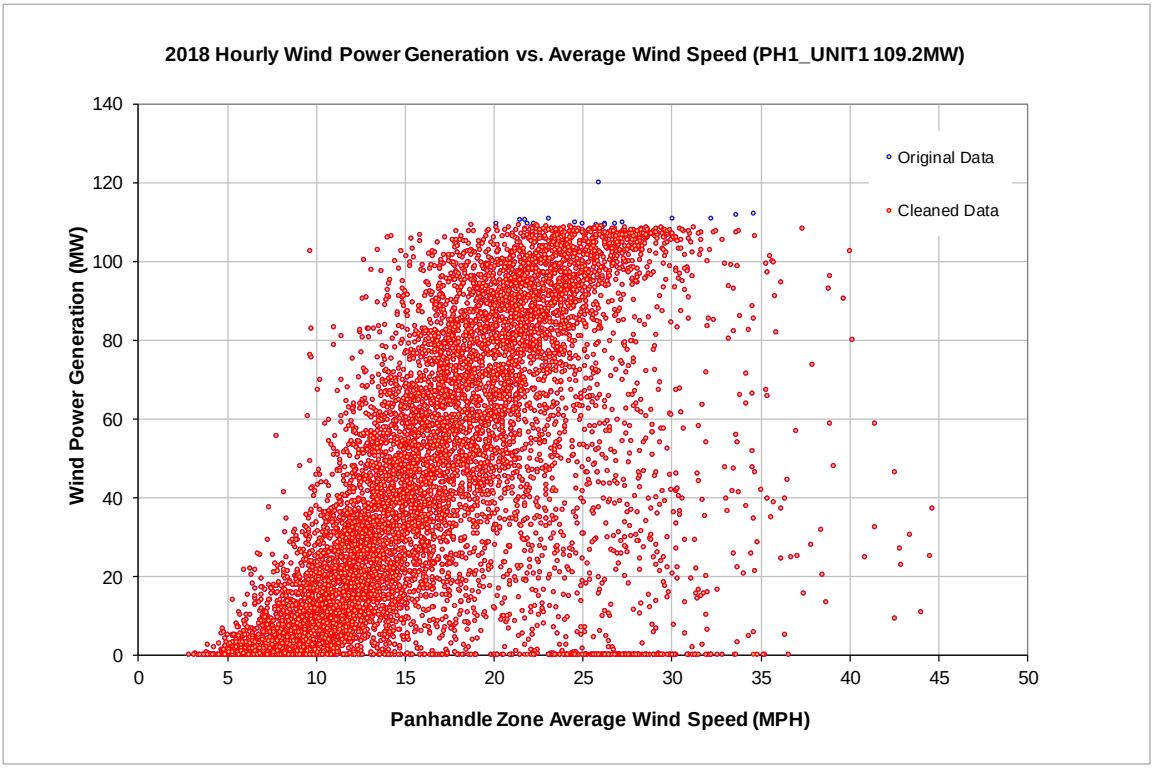


Figure A-322:PH1_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

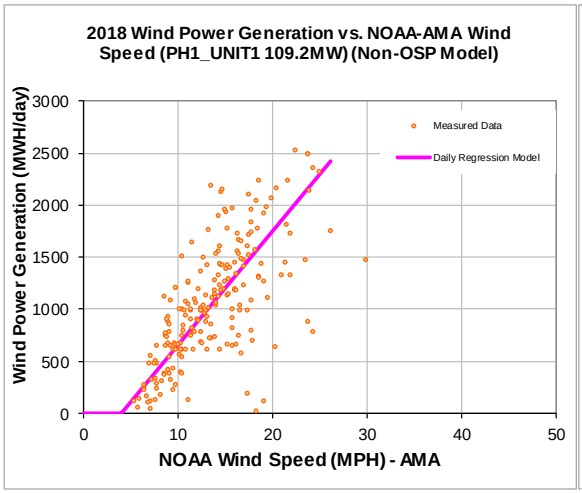
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-106.30
Left Slope (MWh/mph-day)	85.19
RMSE (MWh/day)	415.05
R2	0.47
CV-RMSE	39.4%
Daily Maximum (MWh/day)	2621

OSP Model:

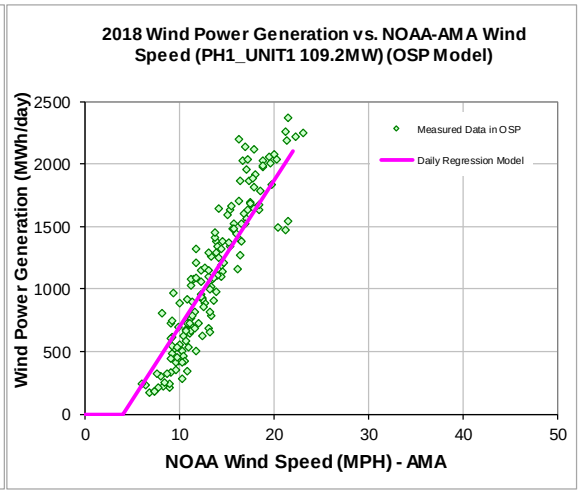
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-788.42
Left Slope (MWh/mph-day)	140.92
RMSE (MWh/day)	223.77
R2	0.85
CV-RMSE	20.2%
Daily Maximum (MWh/day)	2621

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
396,003	391,858

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,079	1,108

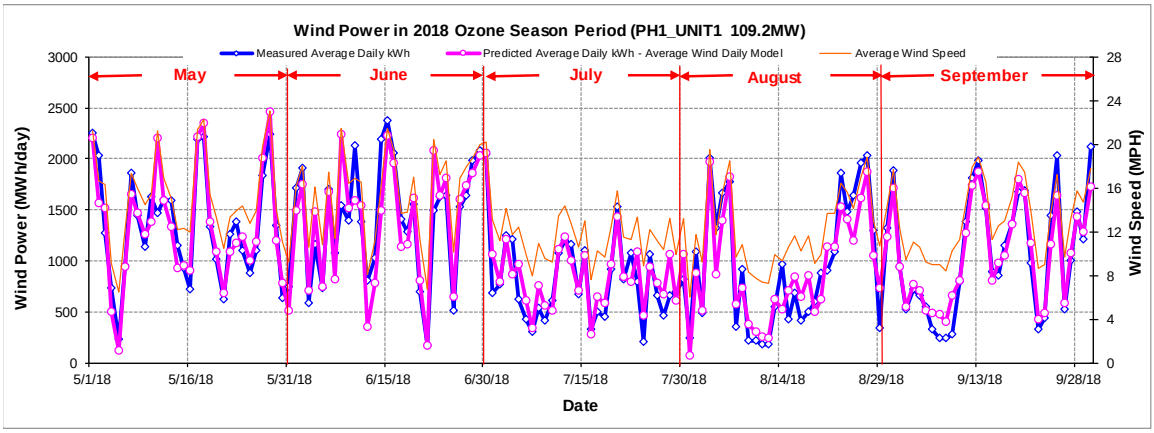
Figure A-323:PH1_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	32,407	30,296	6.51%	40%	37%
Feb-18	28	13.78	25,163	29,884	-18.76%	34%	41%
Mar-18	31	14.64	28,065	35,376	-26.05%	35%	44%
Apr-18	30	16.96	39,405	38,826	1.47%	50%	49%
May-18	31	14.93	40,843	40,785	0.14%	50%	50%
Jun-18	30	15.70	43,343	42,707	1.47%	55%	54%
Jul-18	31	11.32	23,177	25,020	-7.95%	29%	31%
Aug-18	31	12.42	31,153	29,794	4.36%	38%	37%
Sep-18	30	13.00	31,084	31,293	-0.67%	40%	40%
Oct-18	31	12.69	31,250	30,225	3.28%	38%	37%
Nov-18	30	12.53	32,634	28,833	11.65%	42%	37%
Dec-18	31	12.16	33,336	28,819	13.55%	41%	35%
Total	365	13.55	391,858	391,858	0.00%	41%	41%
Total in OSP (07/15-09/15)	153	13.46	169,598	169,598	0.00%	42%	42%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

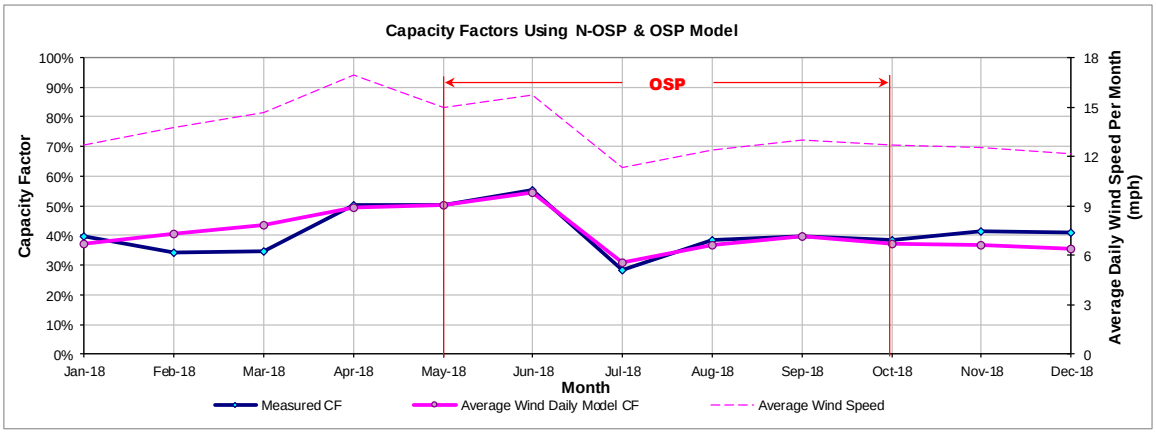


Figure A-324:PH1_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.76.2 Panhandle Wind 1 - PH1_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PH1_UNIT2	Wind	Amarilo	CARSON	Pattern Energy	Panhandle Wind 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
59 GE 1.85 MW	ERCOT	W	Jul-14	Panhandle	AMA	109.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

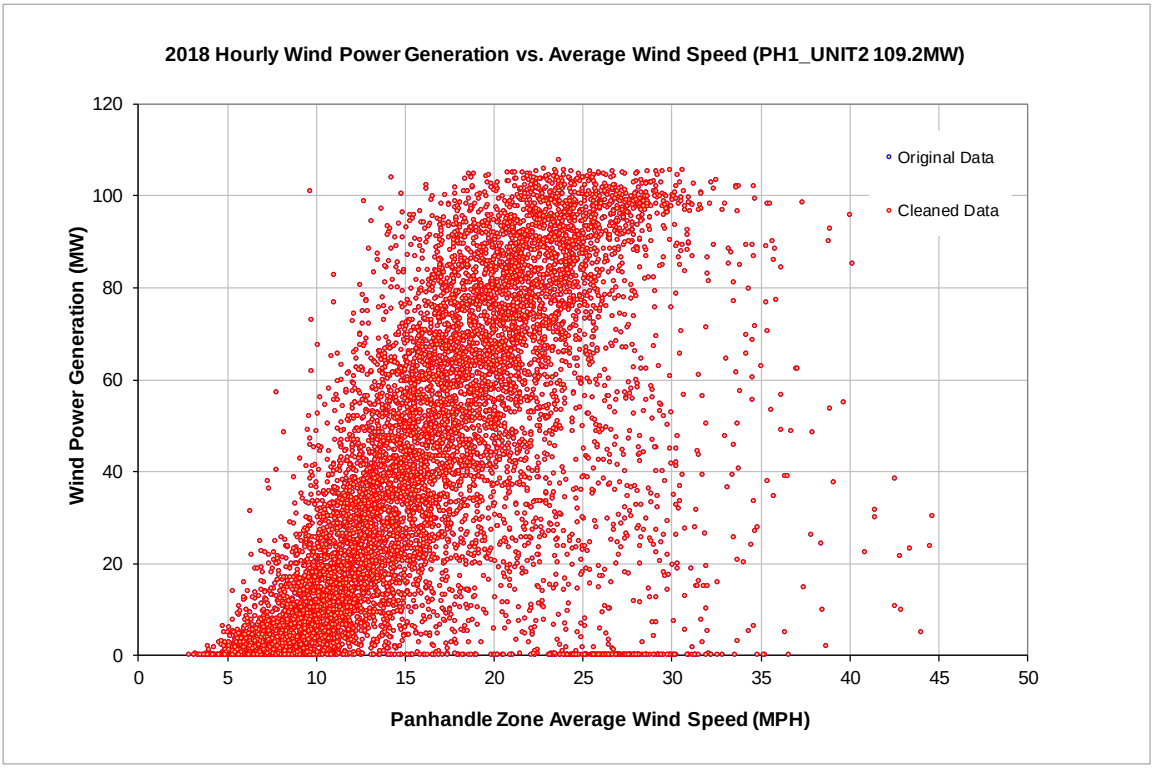


Figure A-325:PH1_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

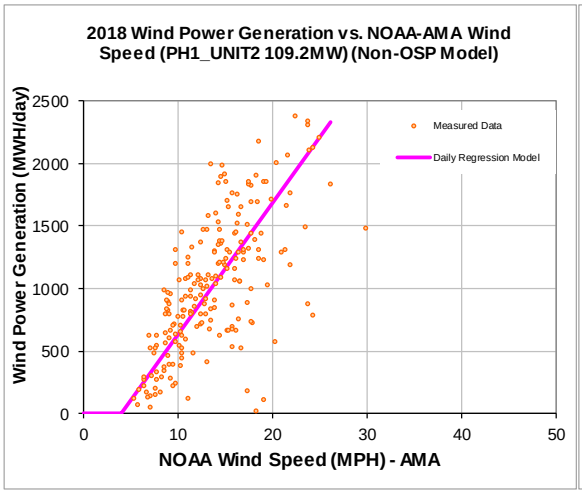
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-54.20
Left Slope (MWh/mph-day)	78.55
RMSE (MWh/day)	394.91
R2	0.46
CV-RMSE	38.9%
Daily Maximum (MWh/day)	2621

OSP Model:

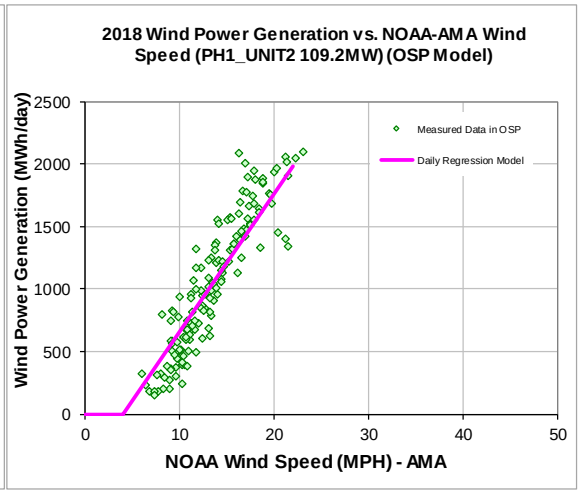
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-663.53
Left Slope (MWh/mph-day)	126.83
RMSE (MWh/day)	213.76
R2	0.84
CV-RMSE	20.5%
Daily Maximum (MWh/day)	2621

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
377,727	373,857

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,016	1,044

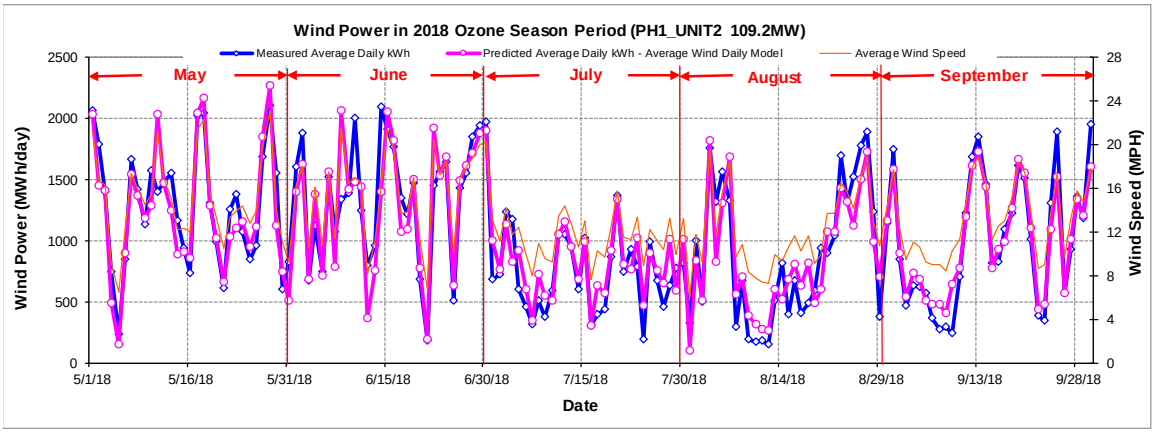
Figure A-326:PH1_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	30,942	29,290	5.34%	38%	36%
Feb-18	28	13.78	24,633	28,778	-16.83%	34%	39%
Mar-18	31	14.64	27,563	33,973	-23.26%	34%	42%
Apr-18	30	16.96	37,961	37,066	2.36%	48%	47%
May-18	31	14.93	39,260	38,138	2.86%	48%	47%
Jun-18	30	15.70	40,820	39,821	2.45%	52%	51%
Jul-18	31	11.32	21,963	23,949	-9.04%	27%	29%
Aug-18	31	12.42	28,511	28,245	0.93%	35%	35%
Sep-18	30	13.00	29,146	29,548	-1.38%	37%	38%
Oct-18	31	12.69	27,310	29,224	-7.01%	34%	36%
Nov-18	30	12.53	31,637	27,897	11.82%	40%	35%
Dec-18	31	12.16	34,111	27,928	18.12%	42%	34%
Total	365	13.55	373,857	373,857	0.00%	39%	39%
Total in OSP (07/15-09/15)	153	13.46	159,701	159,701	0.00%	40%	40%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

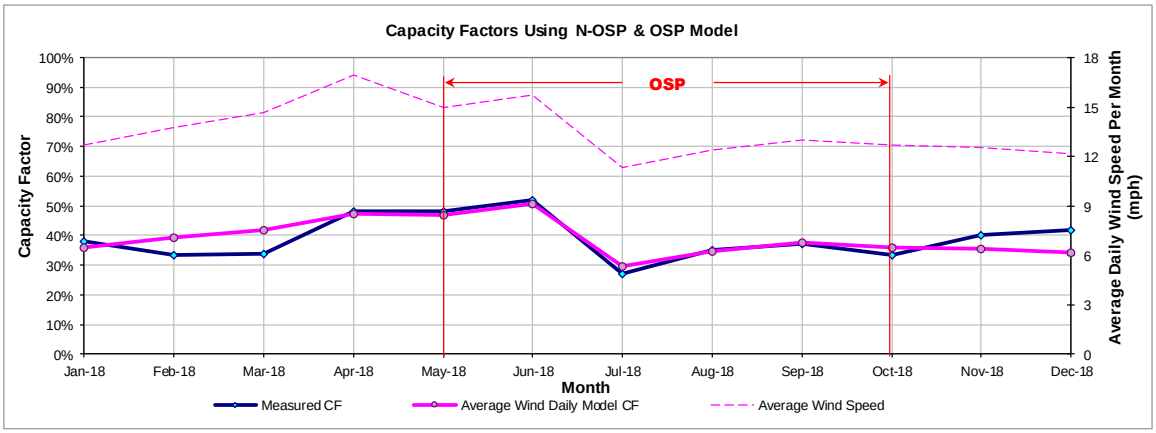


Figure A-327:PH1_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.77 Panhandle Wind 2

A.77.1 Panhandle Wind 2 - PH2_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PH2_UNIT1	Wind	Amarilo	CARSON	Pattern Energy	Panhandle Wind 2

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
39 Siemens 2.3 MW	ERCOT	W	Nov-14	Panhandle	AMA	94.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

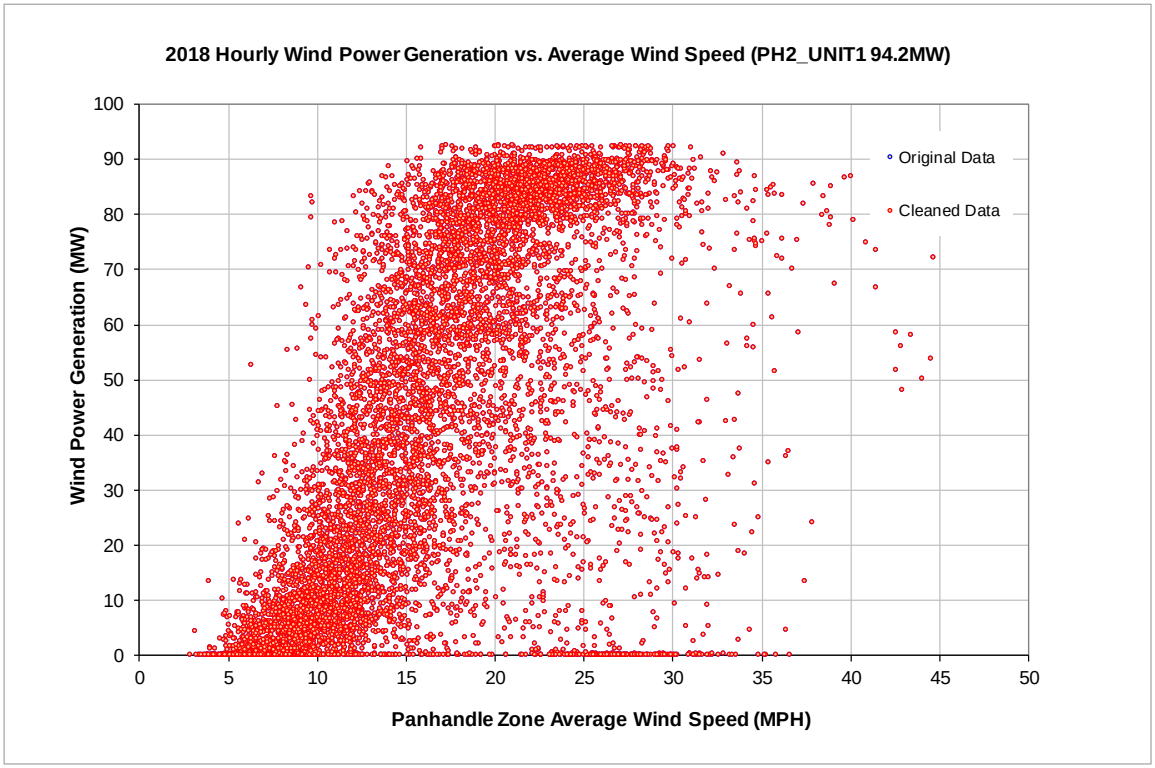


Figure A-328:PH2_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

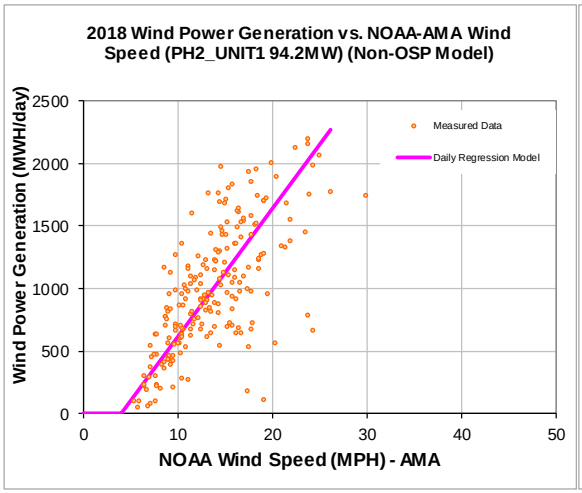
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-38.56
Left Slope (MWh/mph-day)	75.25
RMSE (MWh/day)	357.96
R2	0.48
CV-RMSE	36.4%
Daily Maximum (MWh/day)	2261

OSP Model:

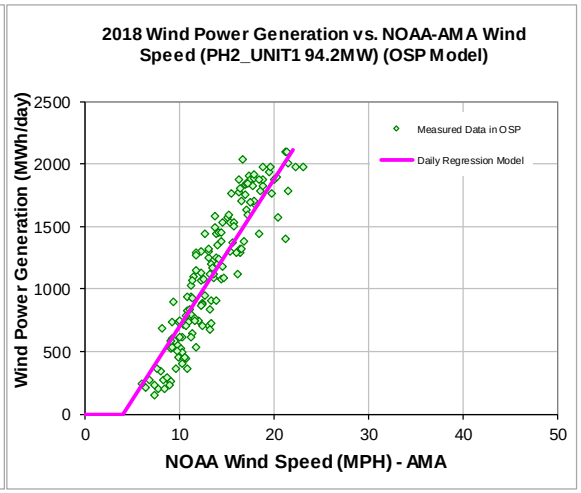
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-653.47
Left Slope (MWh/mph-day)	131.15
RMSE (MWh/day)	217.75
R2	0.84
CV-RMSE	19.6%
Daily Maximum (MWh/day)	2261

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
381,445	376,681

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,083	1,112

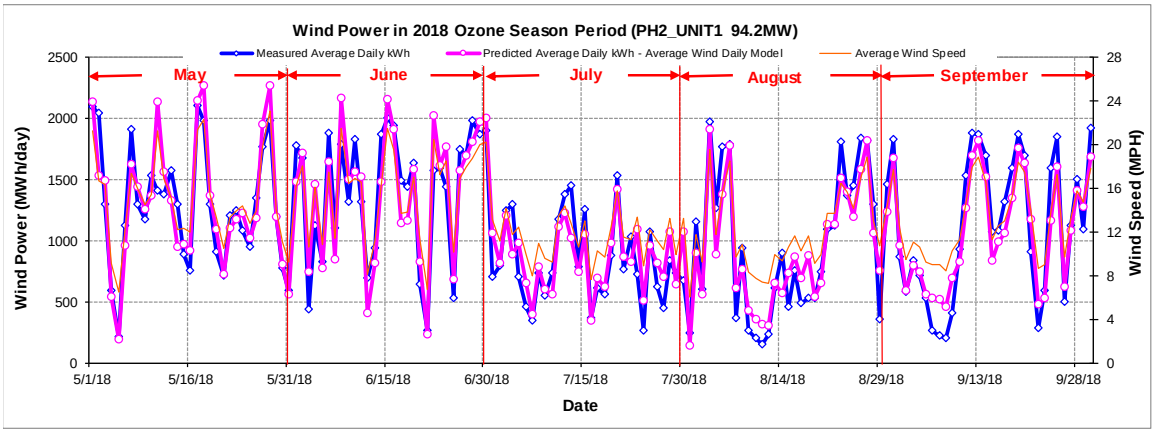
Figure A-329:PH2_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	30,567	28,476	6.84%	44%	41%
Feb-18	28	13.78	24,117	27,946	-15.87%	38%	44%
Mar-18	31	14.64	27,250	32,963	-20.96%	39%	47%
Apr-18	30	16.86	34,538	34,452	0.25%	51%	51%
May-18	31	14.93	39,596	40,331	-1.86%	56%	58%
Jun-18	30	15.70	42,233	42,156	0.18%	62%	62%
Jul-18	31	11.32	24,835	25,775	-3.79%	35%	37%
Aug-18	31	12.42	31,056	30,218	2.70%	44%	43%
Sep-18	30	13.00	32,409	31,533	2.70%	48%	46%
Oct-18	31	12.69	30,357	28,413	6.40%	43%	41%
Nov-18	30	12.53	30,908	27,129	12.23%	46%	40%
Dec-18	31	12.16	28,813	27,172	5.70%	41%	39%
Total	365	13.53	376,681	376,564	0.03%	46%	46%
Total in OSP (07/15-09/15)	153	13.46	170,130	170,013	0.07%	49%	49%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

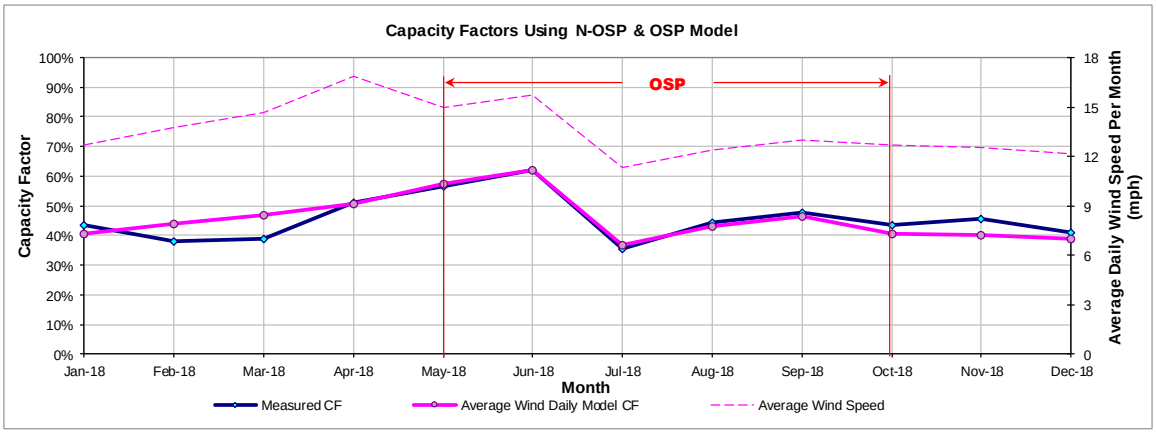


Figure A-330:PH2_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.77.2 Panhandle Wind 2 - PH2_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PH2_UNIT2	Wind	Amarilo	CARSON	Pattern Energy	Panhandle Wind 2

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
40 Siemens 2.3 MW	ERCOT	W	Nov-14	Panhandle	AMA	96.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

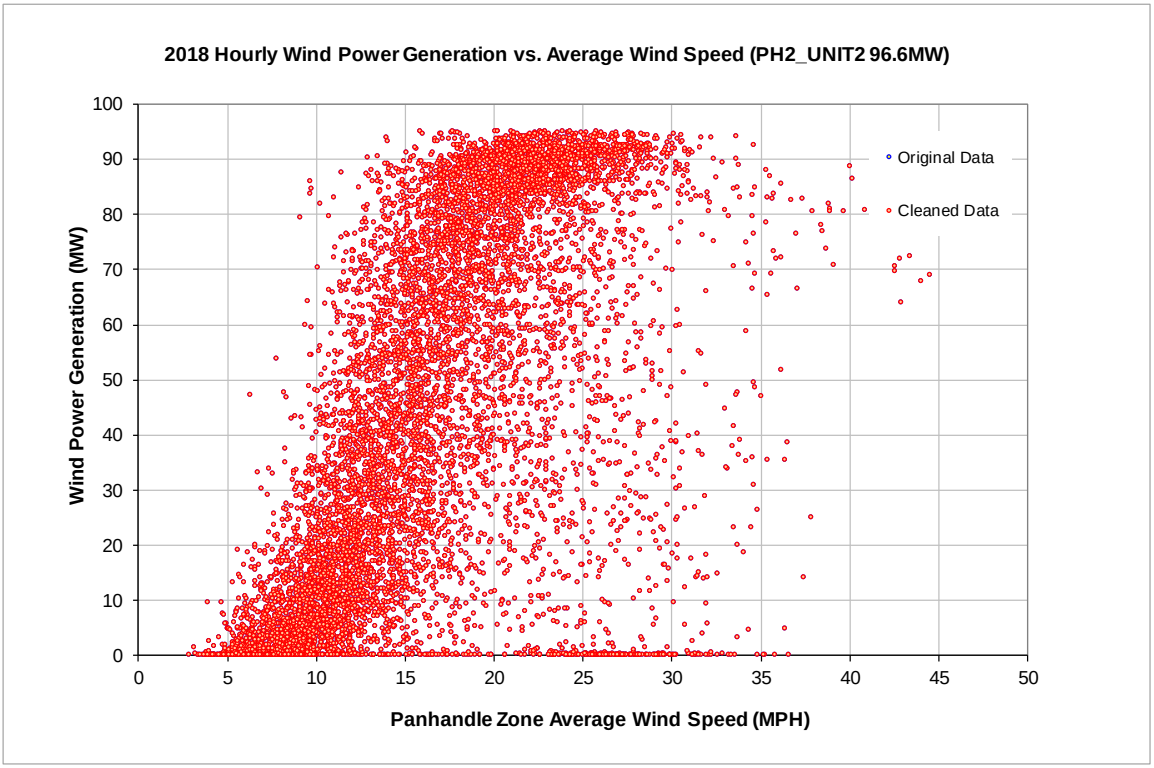


Figure A-331:PH2_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

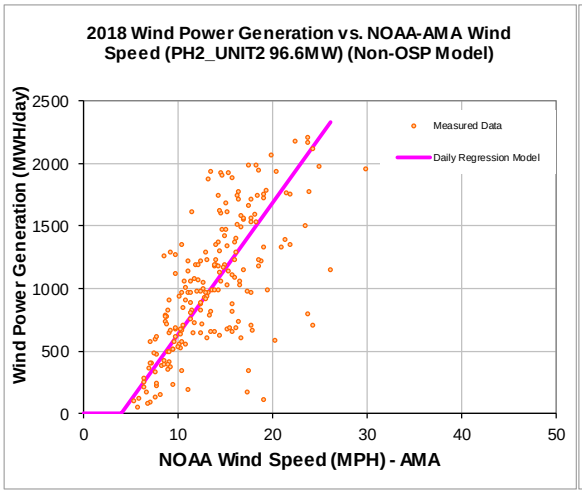
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-41.33
Left Slope (MWh/mph-day)	77.31
RMSE (MWh/day)	380.47
R2	0.47
CV-RMSE	37.7%
Daily Maximum (MWh/day)	2318

OSP Model:

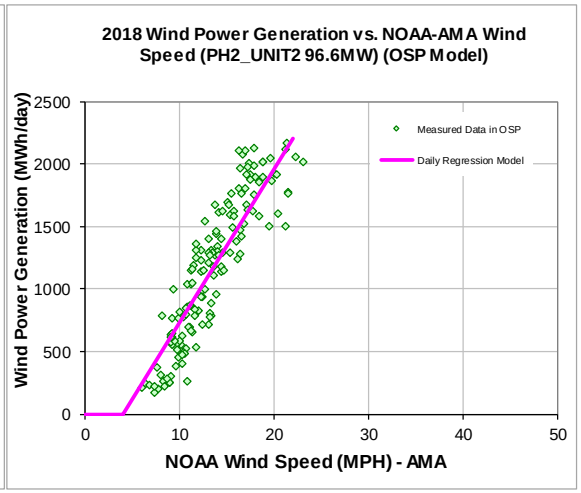
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-644.42
Left Slope (MWh/mph-day)	133.86
RMSE (MWh/day)	243.53
R2	0.82
CV-RMSE	21.0%
Daily Maximum (MWh/day)	2318

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
393,799	388,939

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,127	1,157

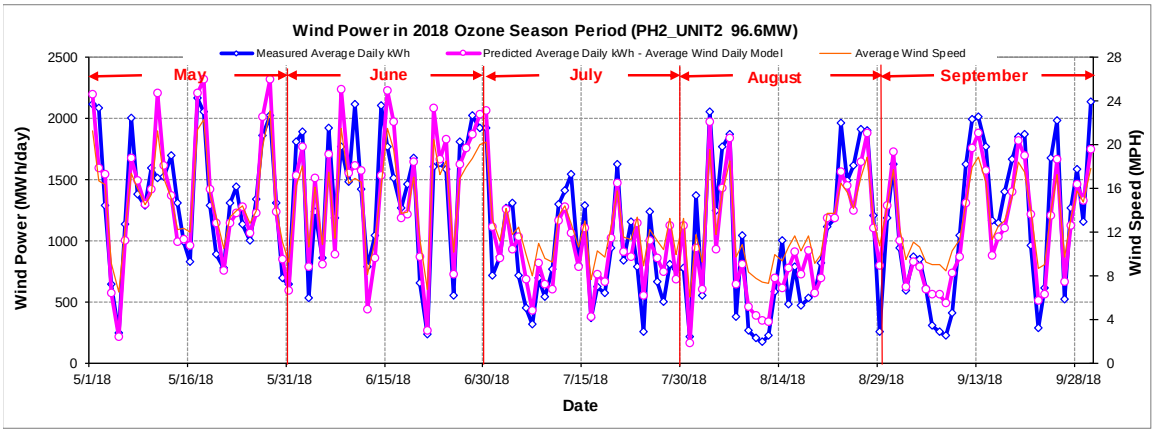
Figure A-332:PH2_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	31,207	29,202	6.42%	43%	41%
Feb-18	28	13.78	24,732	28,663	-15.89%	38%	44%
Mar-18	31	14.64	27,688	33,812	-22.12%	39%	47%
Apr-18	30	16.86	34,213	35,347	-3.32%	49%	51%
May-18	31	14.93	41,429	41,840	-0.99%	58%	58%
Jun-18	30	15.70	43,399	43,704	-0.70%	62%	63%
Jul-18	31	11.32	25,956	27,007	-4.05%	36%	38%
Aug-18	31	12.42	31,708	31,542	0.52%	44%	44%
Sep-18	30	13.00	34,605	32,861	5.04%	50%	47%
Oct-18	31	12.69	31,575	29,138	7.72%	44%	41%
Nov-18	30	12.53	30,859	27,820	9.85%	44%	40%
Dec-18	31	12.16	31,570	27,862	11.75%	44%	39%
Total	365	13.53	388,939	388,797	0.04%	46%	46%
Total in OSP (07/15-09/15)	153	13.46	177,097	176,954	0.08%	50%	50%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

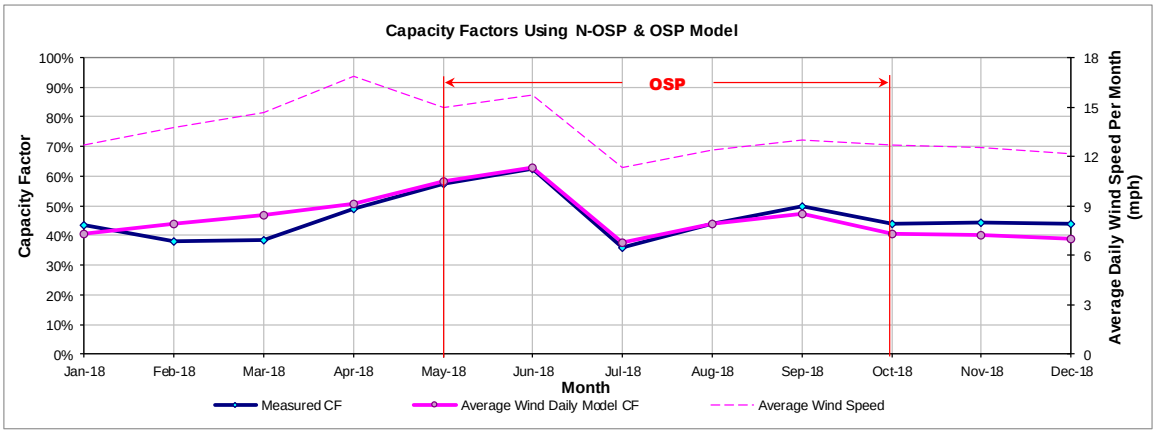


Figure A-333:PH2_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.78 Panther Creek 1

A.78.1 Panther Creek 1 - PC_NORTH_PANTHER1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PC_NORTH_PANTHER1	Wind	-	HOWARD	E.On Climate & Renewables	Panther Creek

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
95 GE 1.5 MW	ERCOT	W	Jun-08	West	ABI	142.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

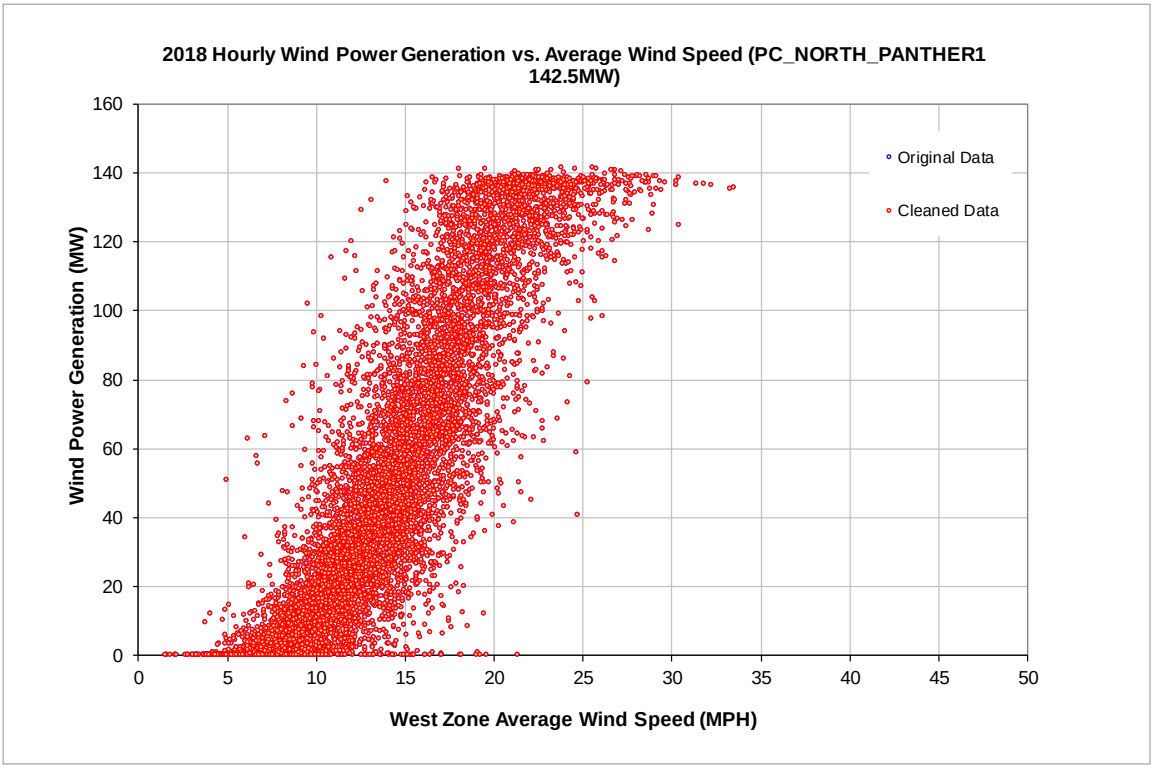


Figure A-334:PC_NORTH_PANTHER1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

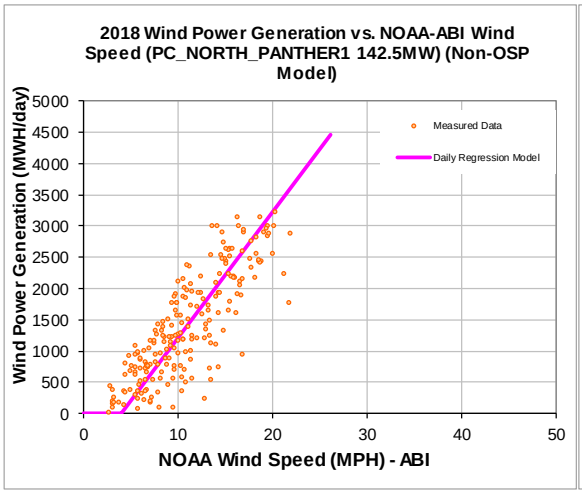
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-275.93
Left Slope (MWh/mph-day)	153.46
RMSE (MWh/day)	473.31
R2	0.69
CV-RMSE	33.7%
Daily Maximum (MWh/day)	3420

OSP Model:

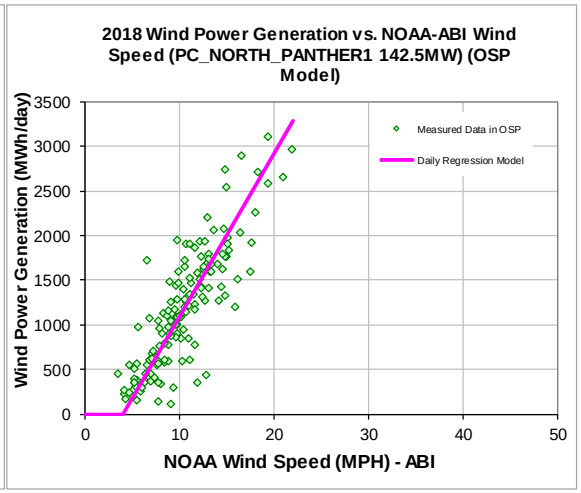
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-434.66
Left Slope (MWh/mph-day)	153.96
RMSE (MWh/day)	351.25
R2	0.72
CV-RMSE	30.1%
Daily Maximum (MWh/day)	3420

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
517,155	476,321

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,183	1,167

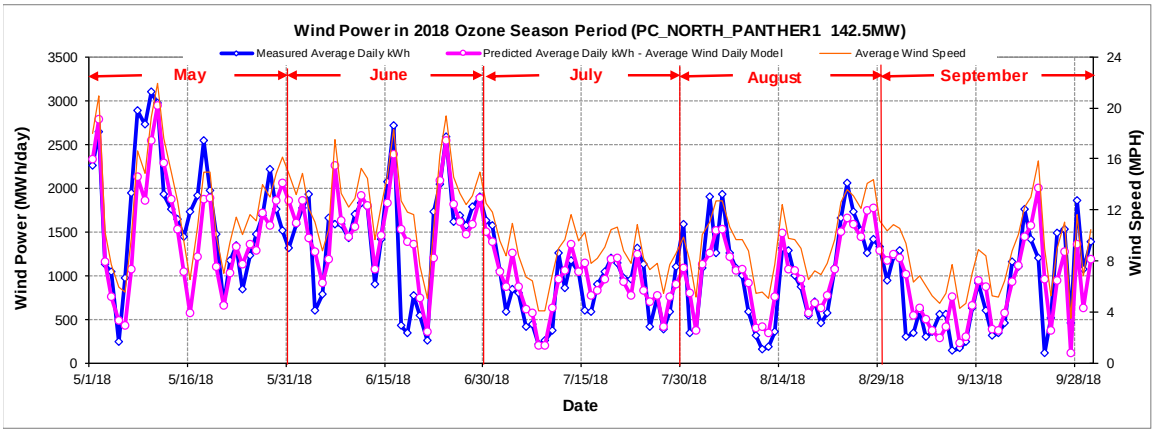
Figure A-335:PC_NORTH_PANTHER1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	45,695	43,630	4.52%	43%	41%
Feb-18	28	11.00	37,854	39,528	-4.42%	40%	41%
Mar-18	31	11.92	48,339	48,176	0.34%	46%	45%
Apr-18	30	13.18	49,174	52,385	-6.53%	48%	51%
May-18	31	12.78	53,382	47,526	10.97%	50%	45%
Jun-18	30	12.90	44,113	46,563	-5.55%	43%	45%
Jul-18	31	8.52	25,726	27,191	-5.69%	24%	26%
Aug-18	31	9.85	32,335	33,529	-3.69%	30%	32%
Sep-18	30	7.97	23,003	23,751	-3.25%	22%	23%
Oct-18	31	9.35	35,756	35,944	-0.53%	34%	34%
Nov-18	30	10.05	37,708	37,985	-0.73%	37%	37%
Dec-18	31	10.23	43,235	40,113	7.22%	41%	38%
Total	365	10.72	476,321	476,321	0.00%	38%	38%
Total in OSP (07/15-09/15)	153	10.40	178,559	178,559	0.00%	34%	34%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

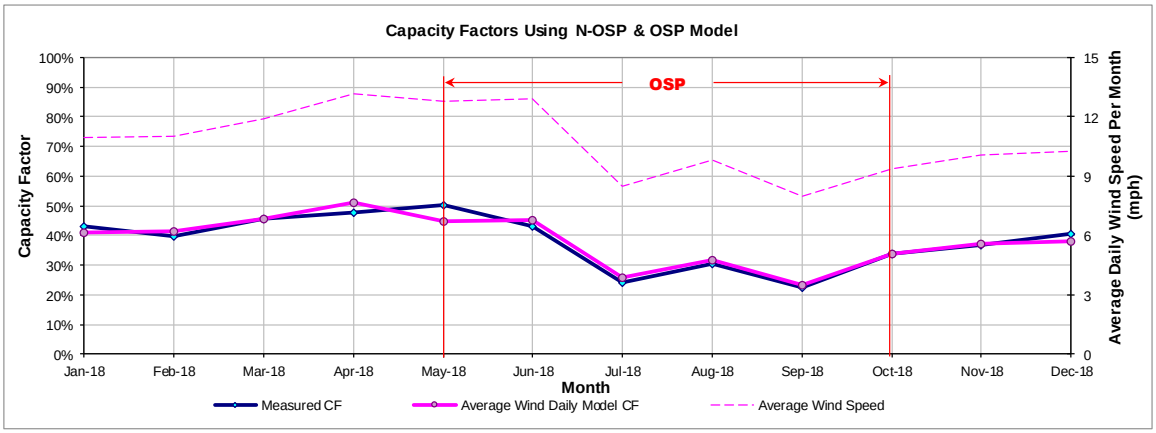


Figure A-336:PC_NORTH_PANTHER1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.79 Panther Creek 2

A.79.1 Panther Creek 2 - PC_SOUTH_PANTHER2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PC_SOUTH_PANTHER2	Wind	-	HOWARD	E.On Climate & Renewables	Panther Creek 2

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
77 GE 1.5 MW	ERCOT	W	Nov-08	West	ABI	115.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

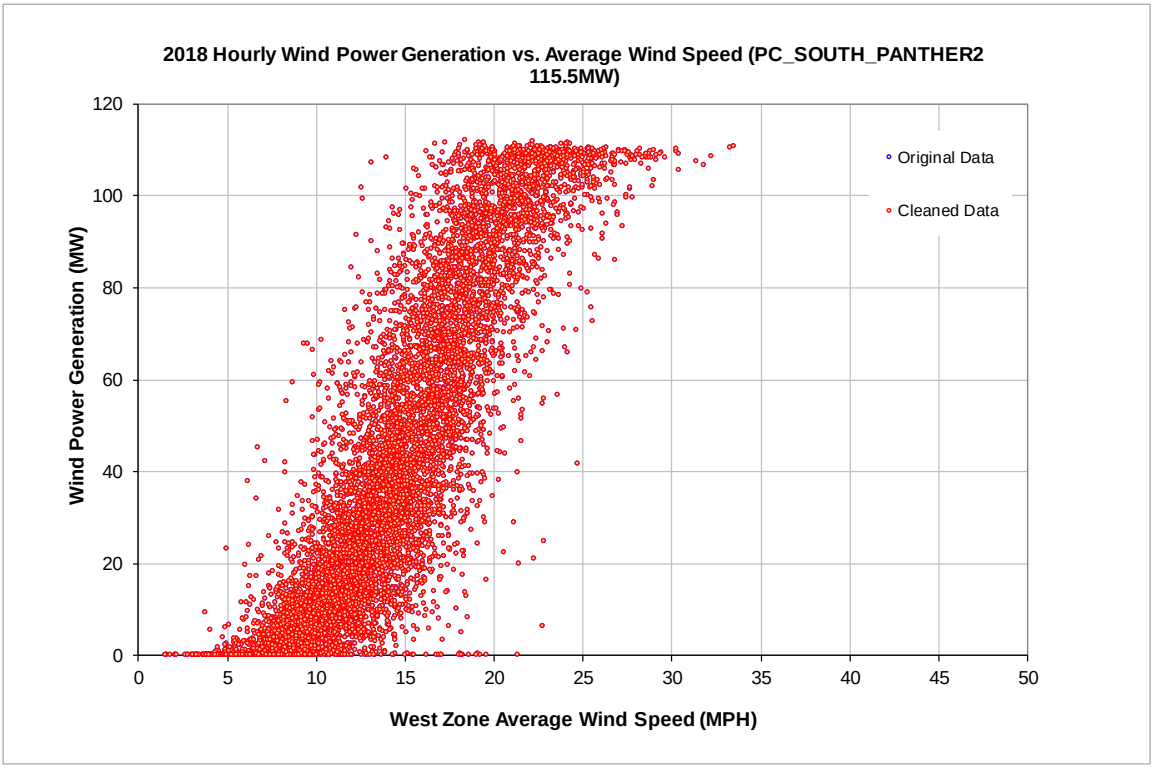


Figure A-337:PC_SOUTH_PANTHER2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

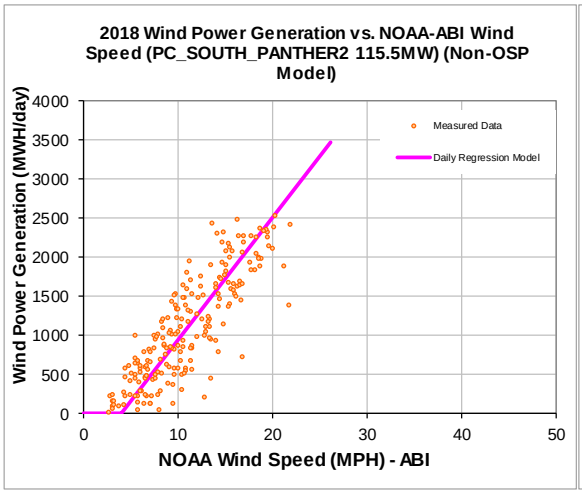
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-277.99
Left Slope (MWh/mph-day)	125.18
RMSE (MWh/day)	361.05
R2	0.72
CV-RMSE	33.0%
Daily Maximum (MWh/day)	2772

OSP Model:

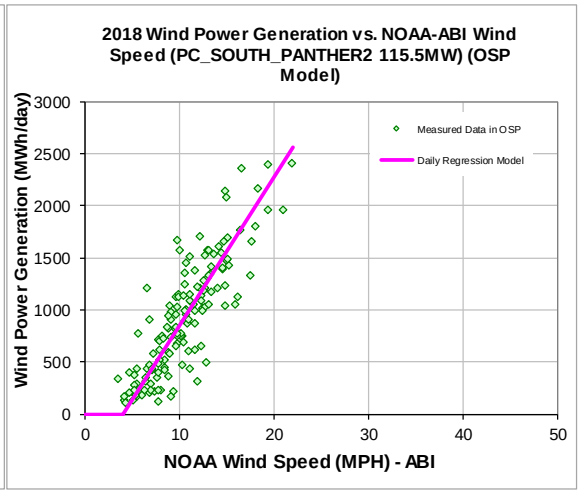
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-408.48
Left Slope (MWh/mph-day)	126.75
RMSE (MWh/day)	282.60
R2	0.73
CV-RMSE	31.1%
Daily Maximum (MWh/day)	2772

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
404,225	370,923

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
923	910

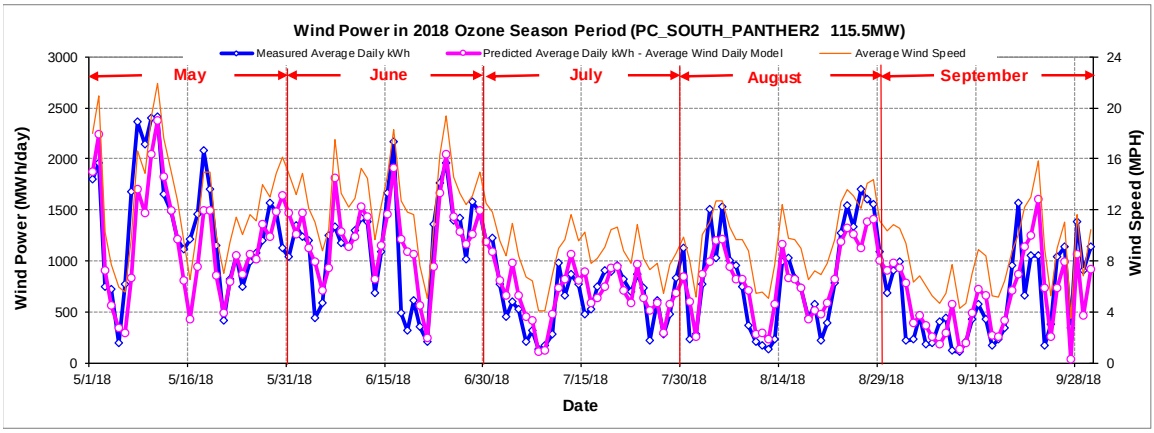
Figure A-338:PC_SOUTH_PANTHER2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	36,660	33,950	7.39%	43%	40%
Feb-18	28	11.00	28,849	30,762	-6.63%	37%	40%
Mar-18	31	11.92	37,472	37,658	-0.50%	44%	44%
Apr-18	30	13.18	38,638	41,144	-6.49%	46%	49%
May-18	31	12.78	41,668	37,556	9.87%	48%	44%
Jun-18	30	12.90	34,450	36,813	-6.86%	41%	44%
Jul-18	31	8.52	19,238	20,815	-8.19%	22%	24%
Aug-18	31	9.85	26,479	26,032	1.69%	31%	30%
Sep-18	30	7.97	17,415	18,033	-3.55%	21%	22%
Oct-18	31	9.35	26,470	27,680	-4.57%	31%	32%
Nov-18	30	10.05	30,179	29,398	2.59%	36%	35%
Dec-18	31	10.23	33,405	31,081	6.96%	39%	36%
Total	365	10.72	370,923	370,923	0.00%	37%	37%
Total in OSP (07/15-09/15)	153	10.40	139,250	139,250	0.00%	33%	33%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

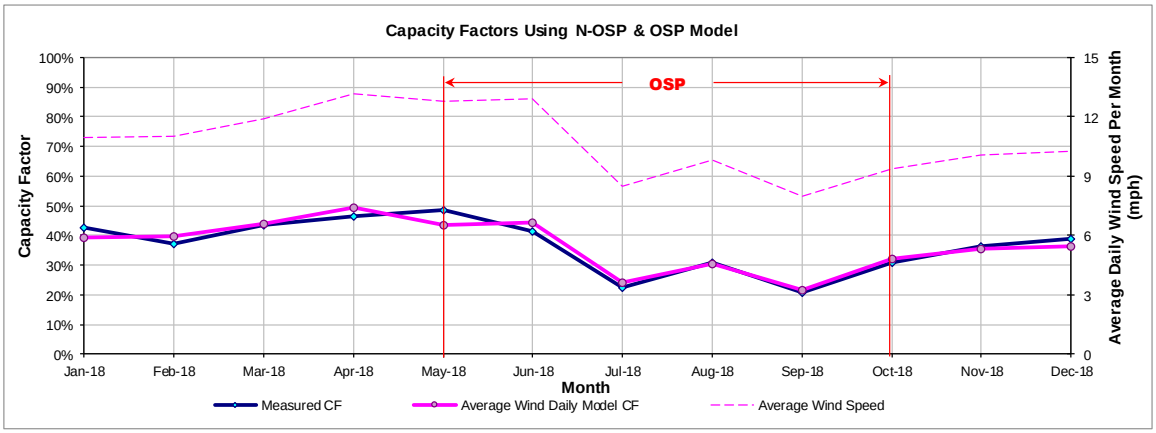


Figure A-339:PC_SOUTH_PANTHER2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.80

A.80.1 Panther Creek 3 - PC_SOUTH_PANTHER3

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PC_SOUTH_PANTHER3	Wind	-	HOWARD	E.On Climate & Renewables	Panther Creek 3

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
133 GE 1.5 MW	ERCOT	W	Aug-09	West	ABI	199.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

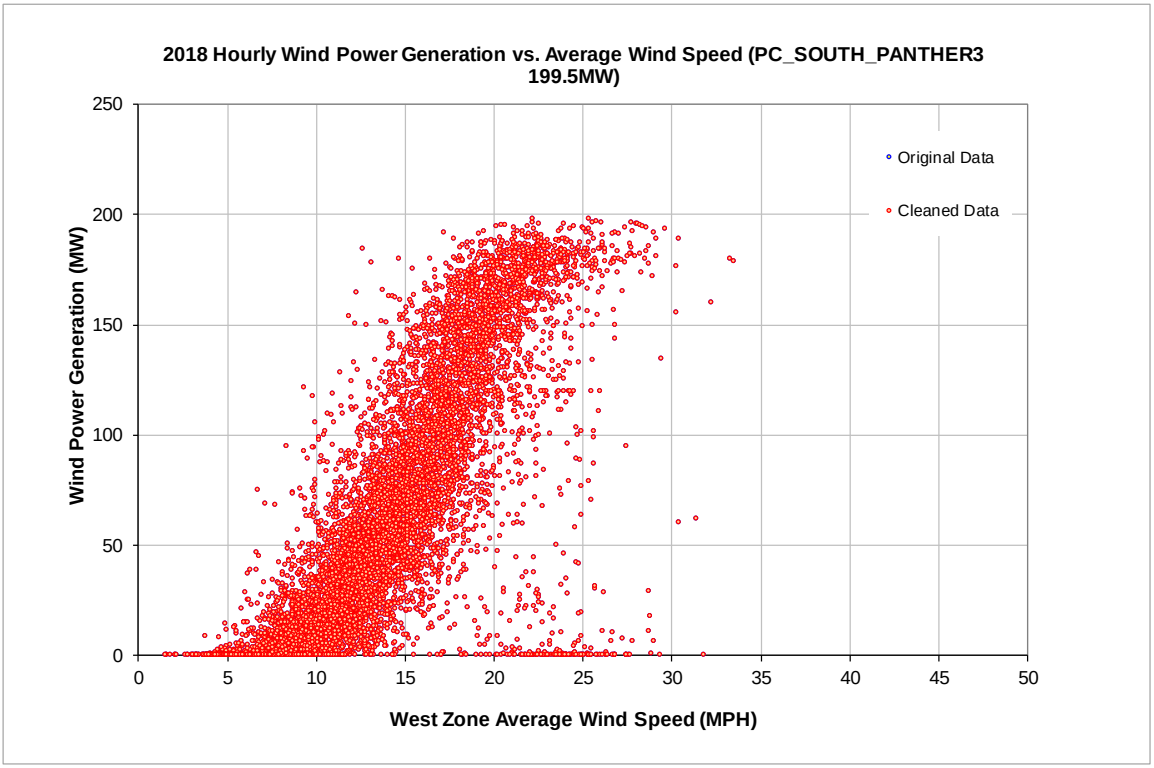


Figure A-340:PC_SOUTH_PANTHER3 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

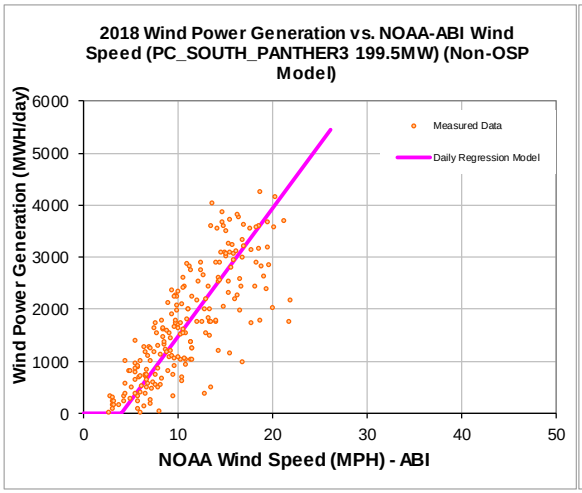
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-349.02
Left Slope (MWh/mph-day)	188.03
RMSE (MWh/day)	642.17
R2	0.64
CV-RMSE	37.6%
Daily Maximum (MWh/day)	4788

OSP Model:

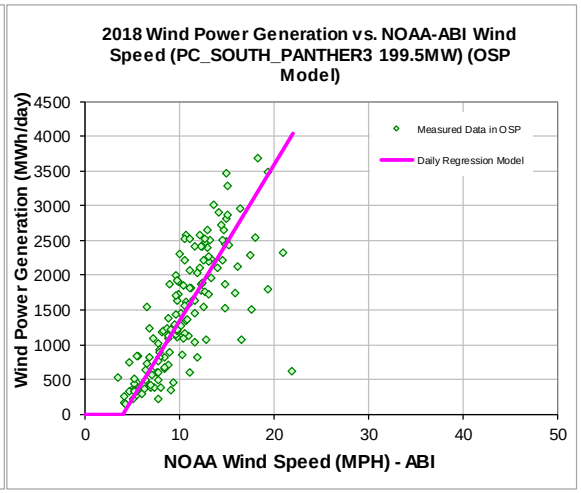
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-373.47
Left Slope (MWh/mph-day)	174.27
RMSE (MWh/day)	546.03
R2	0.58
CV-RMSE	37.9%
Daily Maximum (MWh/day)	4788

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
632,559	582,759

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,457	1,440

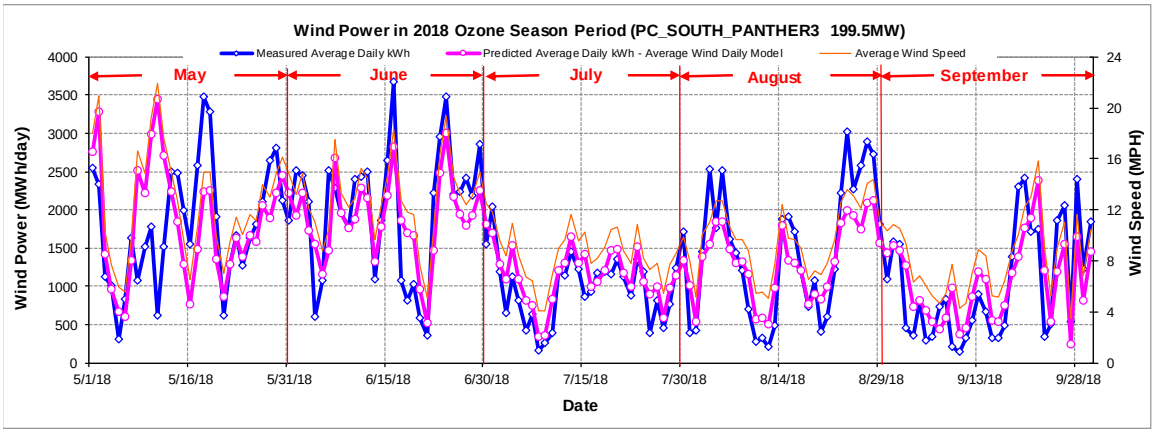
Figure A-341:PC_SOUTH_PANTHER3 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	58,267	53,118	8.84%	39%	36%
Feb-18	28	11.00	47,914	48,125	-0.44%	36%	36%
Mar-18	31	11.92	57,341	58,688	-2.35%	39%	40%
Apr-18	30	13.18	51,457	63,856	-24.10%	36%	44%
May-18	31	12.78	55,724	57,471	-3.13%	38%	39%
Jun-18	30	12.90	59,725	56,261	5.80%	42%	39%
Jul-18	31	8.52	29,537	34,452	-16.64%	20%	23%
Aug-18	31	9.85	45,742	41,626	9.00%	31%	28%
Sep-18	30	7.97	29,522	30,440	-3.11%	21%	21%
Oct-18	31	9.35	46,142	43,701	5.29%	31%	29%
Nov-18	30	10.05	46,861	46,212	1.38%	33%	32%
Dec-18	31	10.23	54,528	48,809	10.49%	37%	33%
Total	365	10.72	582,759	582,759	0.00%	33%	33%
Total in OSP (07/15-09/15)	153	10.40	220,250	220,250	0.00%	30%	30%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

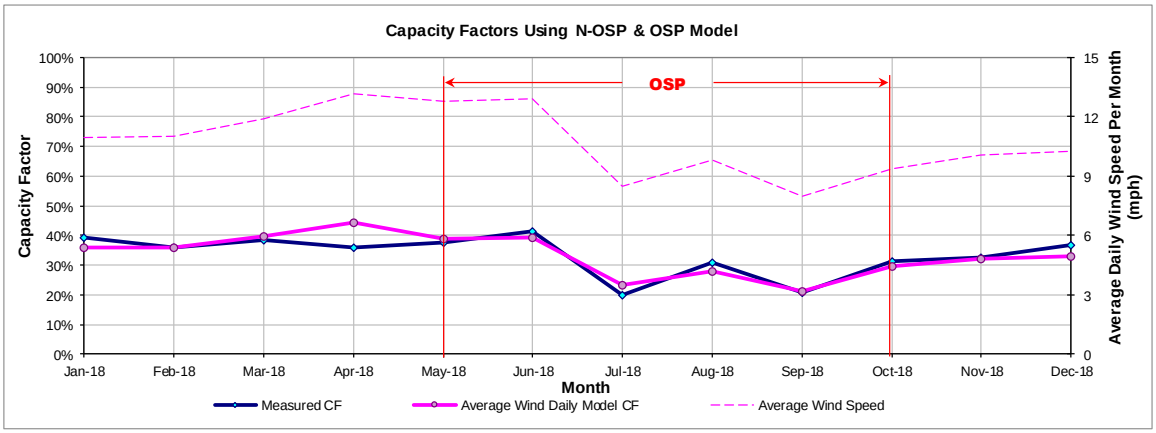


Figure A-342:PC_SOUTH_PANTHER3 - Predicted Wind Power and Capacity Factor Using Daily Models

A.81 Papalote Creek Phase II

A.81.1 Papalote Creek Phase II - COTTON_PAP2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
COTTON_PAP2	Wind	Taft	SAN PATRICIO	E.On Climate & Renewables	Papalote Creek Phase II

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
87 GE 2.3 MW	ERCOT	S	Jun-10	Coastal	CRP	200.1

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

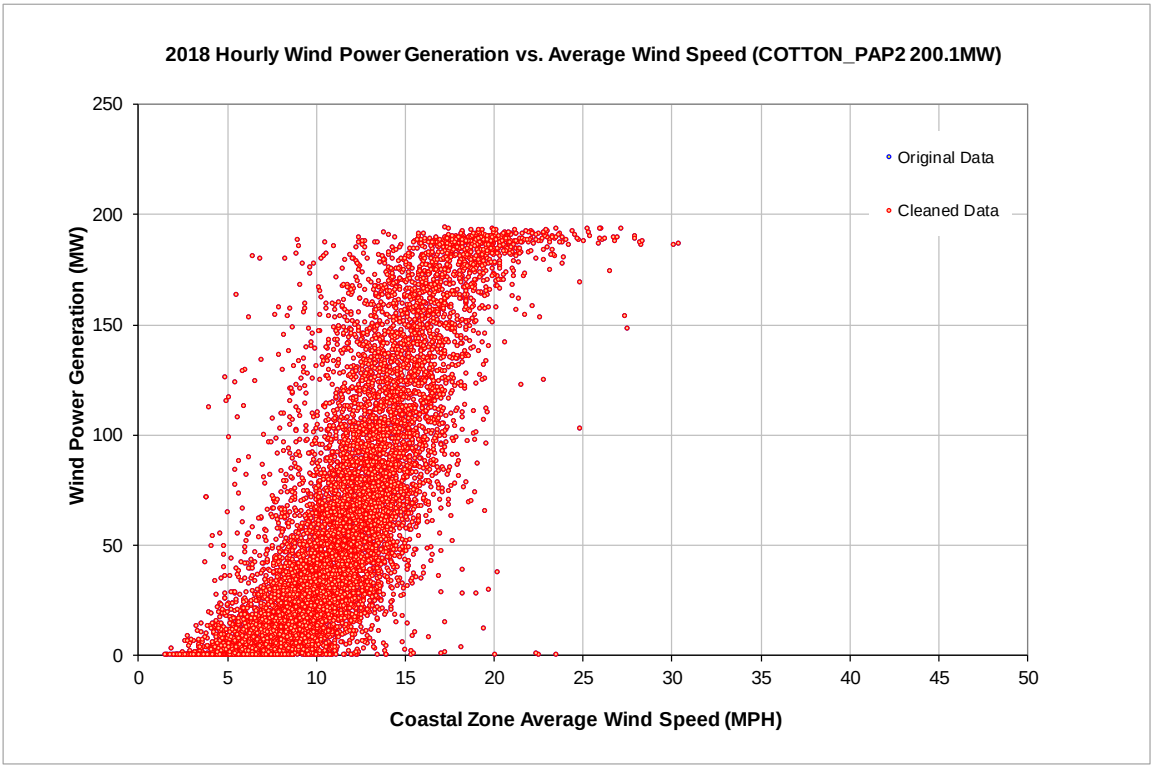


Figure A-343:COTTON_PAP2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

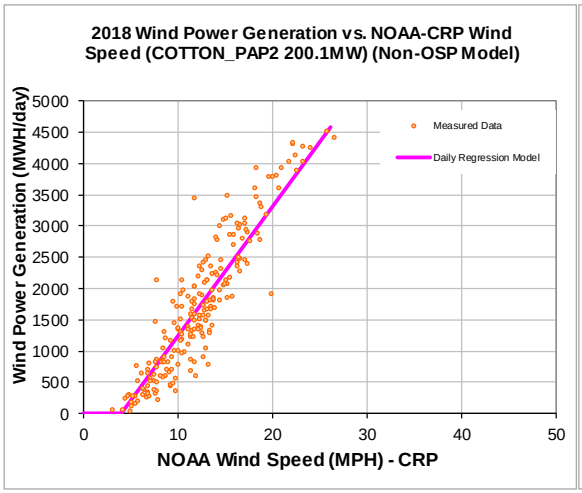
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1017.94
Left Slope (MWh/mph-day)	222.48
RMSE (MWh/day)	430.50
R2	0.85
CV-RMSE	25.2%
Daily Maximum (MWh/day)	4802

OSP Model:

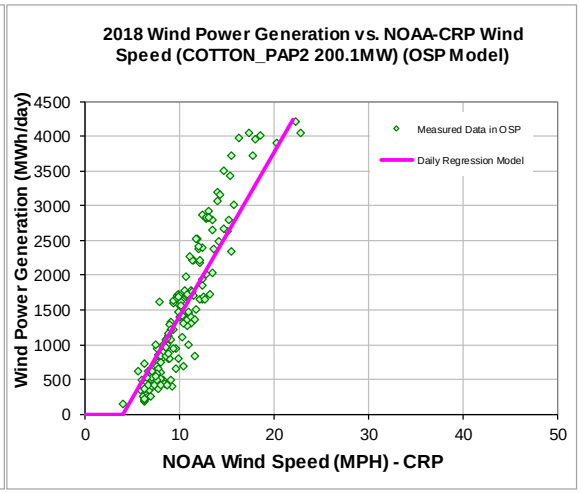
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1501.86
Left Slope (MWh/mph-day)	289.45
RMSE (MWh/day)	380.73
R2	0.86
CV-RMSE	25.2%
Daily Maximum (MWh/day)	4802

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
583,842	593,101

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,446	1,511

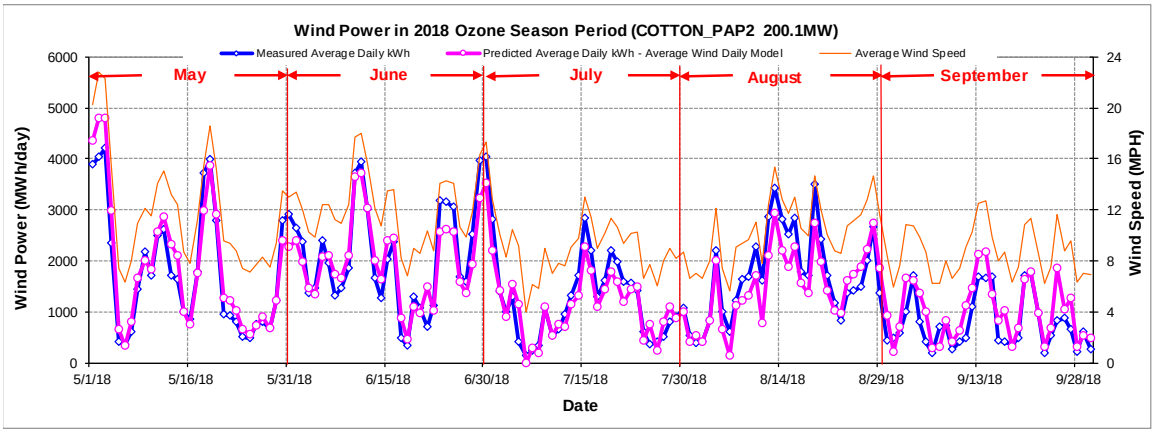
Figure A-344:COTTON_PAP2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	43,903	45,005	-2.51%	29%	30%
Feb-18	28	14.08	52,989	59,153	-11.63%	39%	44%
Mar-18	31	13.69	63,116	62,886	0.36%	42%	42%
Apr-18	30	14.08	61,917	63,422	-2.43%	43%	44%
May-18	31	11.95	56,509	60,183	-6.50%	38%	40%
Jun-18	30	12.21	62,867	60,968	3.02%	44%	42%
Jul-18	31	8.81	35,581	32,843	7.69%	24%	22%
Aug-18	31	10.35	52,567	46,296	11.93%	35%	31%
Sep-18	30	8.73	23,584	30,708	-30.21%	16%	21%
Oct-18	31	10.87	44,070	43,742	0.74%	30%	29%
Nov-18	30	10.83	42,442	41,777	1.57%	29%	29%
Dec-18	31	11.29	53,557	46,438	13.29%	36%	31%
Total	365	11.48	593,101	593,422	-0.05%	34%	34%
Total in OSP (07/15-09/15)	153	10.41	231,107	230,998	0.05%	31%	31%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

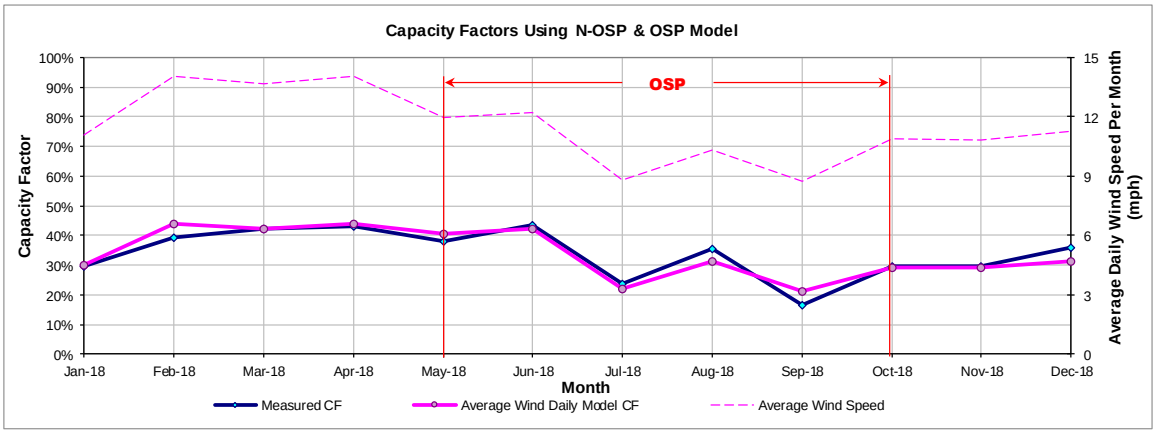


Figure A-345:COTTON_PAP2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.82 Papalote Creek Wind Farm

A.82.1 Papalote Creek Wind Farm - PAP1_PAP1_J01

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PAP1_PAP1_J01	Wind	Taft	SAN PATRICIO	E.On Climate & Renewables	Papalote Creek Wind Farm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
109 Vestas 1.65 MW	ERCOT	S	Sep-09	Coastal	CRP	179.9

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

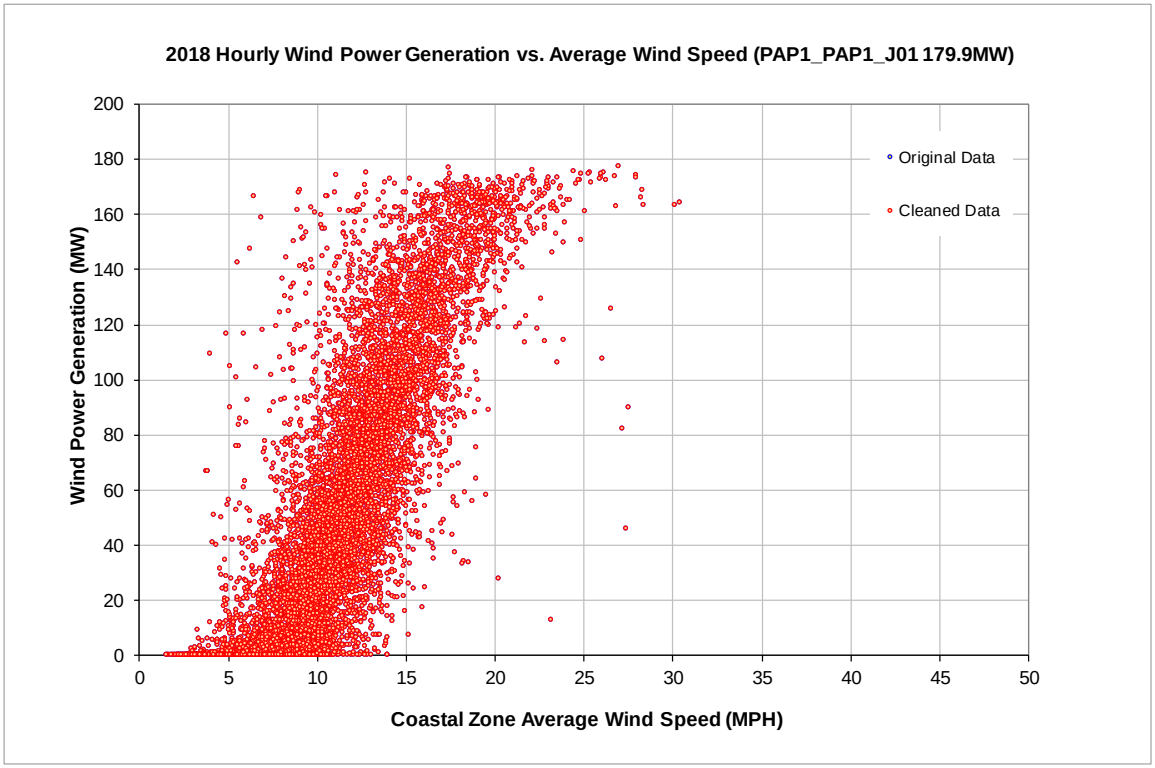


Figure A-346:PAP1_PAP1_J01 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

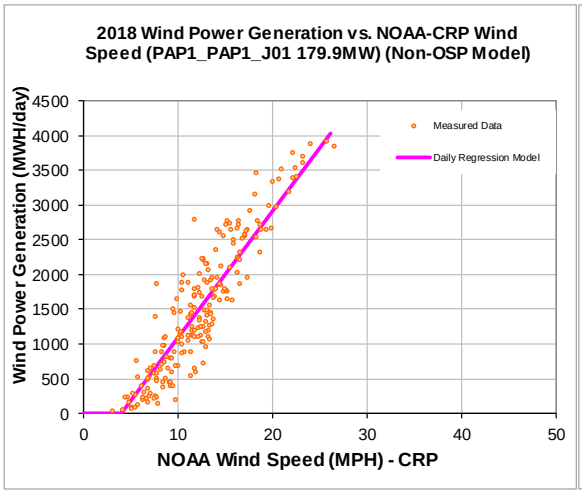
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-881.89
Left Slope (MWh/mph-day)	194.62
RMSE (MWh/day)	376.10
R2	0.85
CV-RMSE	24.9%
Daily Maximum (MWh/day)	4318

OSP Model:

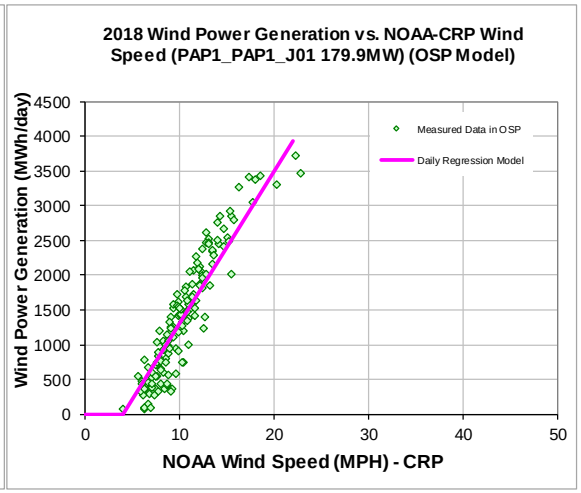
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1178.32
Left Slope (MWh/mph-day)	247.51
RMSE (MWh/day)	311.00
R2	0.87
CV-RMSE	22.3%
Daily Maximum (MWh/day)	4318

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
523,964	532,244

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,339	1,397

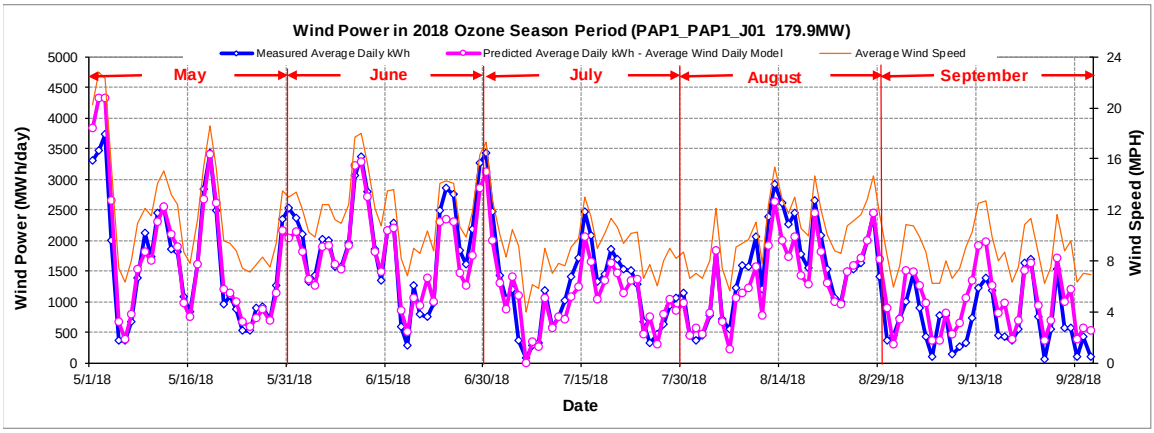
Figure A-347:PAP1_PAP1_J01 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	38,971	39,636	-1.71%	29%	30%
Feb-18	28	14.42	45,175	51,979	-15.06%	37%	43%
Mar-18	31	13.69	54,298	55,279	-1.81%	41%	41%
Apr-18	30	14.08	55,392	55,740	-0.63%	43%	43%
May-18	31	11.95	52,514	54,955	-4.65%	39%	41%
Jun-18	30	12.21	58,074	55,309	4.76%	45%	43%
Jul-18	31	8.81	34,507	31,260	9.41%	26%	23%
Aug-18	31	10.35	47,697	42,870	10.12%	36%	32%
Sep-18	30	8.73	21,025	29,435	-40.00%	16%	23%
Oct-18	31	10.87	40,791	38,523	5.56%	30%	29%
Nov-18	30	10.83	37,131	36,804	0.88%	29%	28%
Dec-18	31	11.29	46,670	40,873	12.42%	35%	31%
Total	365	11.50	532,244	532,663	-0.08%	34%	34%
Total in OSP (07/15-09/15)	153	10.41	213,817	213,829	-0.01%	32%	32%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

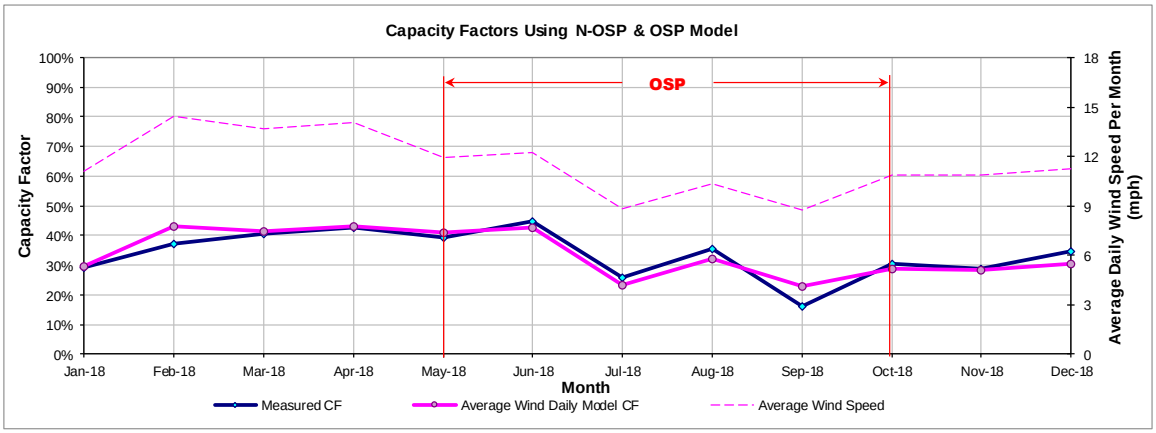


Figure A-348:PAP1_PAP1_J01 - Predicted Wind Power and Capacity Factor Using Daily Models

A.83 Penascal Wind Farm

A.83.1 Penascal Wind Farm - PENA_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PENA_UNIT1	Wind	-	KENEDY	Iberdrola Renewables	Penascal Wind Farm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
67 Mitsubishi 2.4 MW	ERCOT	S	Nov-08	Coastal	CRP	160.8

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

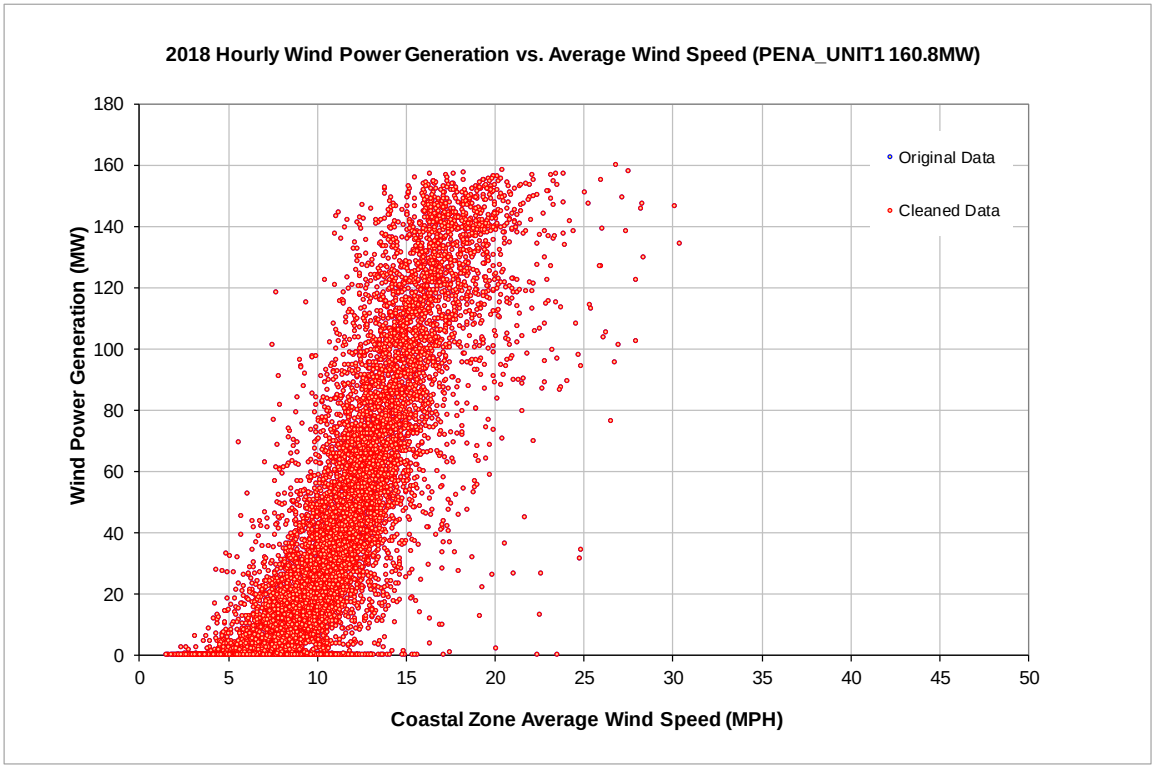


Figure A-349:PENA_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

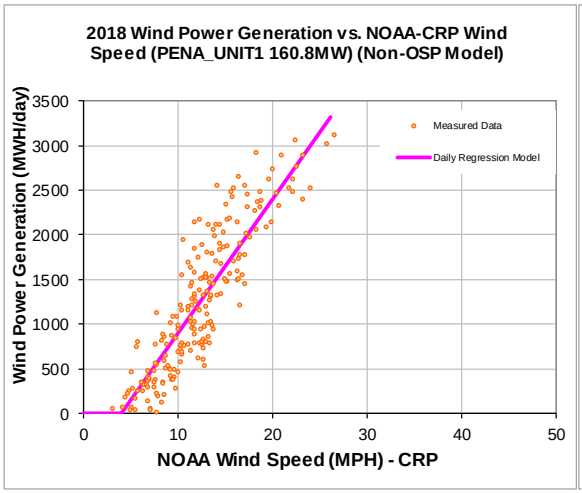
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-657.71
Left Slope (MWh/mph-day)	154.72
RMSE (MWh/day)	362.22
R2	0.79
CV-RMSE	29.2%
Daily Maximum (MWh/day)	3859

OSP Model:

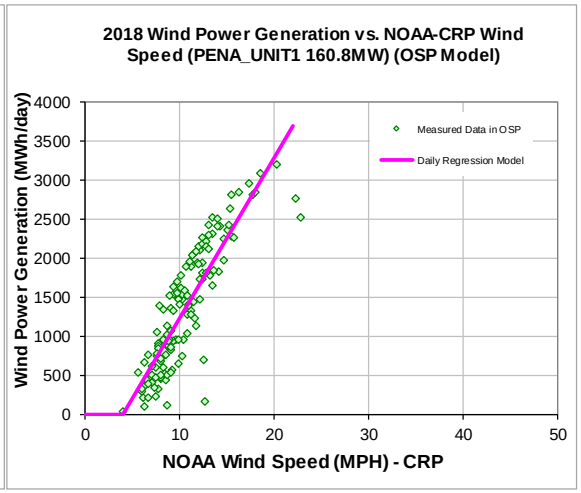
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-807.36
Left Slope (MWh/mph-day)	203.90
RMSE (MWh/day)	378.54
R2	0.76
CV-RMSE	28.0%
Daily Maximum (MWh/day)	3859

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
456,423	451,308

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,266	1,354

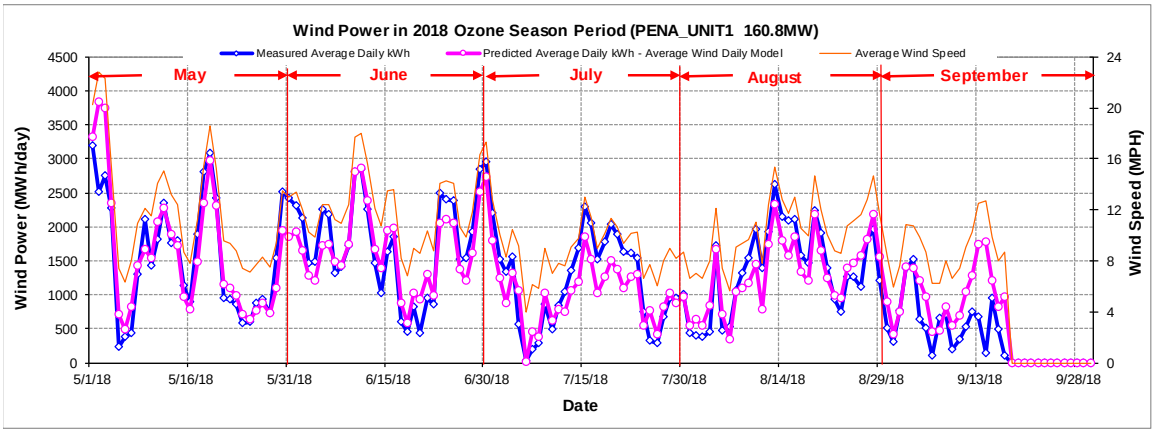
Figure A-350:PENA_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	34,830	32,853	5.68%	29%	27%
Feb-18	28	14.08	39,181	42,588	-8.70%	36%	39%
Mar-18	31	13.69	44,393	45,289	-2.02%	37%	38%
Apr-18	30	14.08	46,546	45,611	2.01%	40%	39%
May-18	31	11.95	49,415	50,483	-2.16%	41%	42%
Jun-18	30	12.21	52,253	50,466	3.42%	45%	44%
Jul-18	31	8.81	35,612	30,662	13.90%	30%	26%
Aug-18	31	10.35	41,768	40,381	3.32%	35%	34%
Sep-18	30	9.01	10,468	17,523	-67.39%	9%	15%
Oct-18	31	10.96	27,855	31,339	-12.51%	23%	26%
Nov-18	30	10.83	32,426	30,558	5.76%	28%	26%
Dec-18	31	11.29	36,562	33,775	7.62%	31%	28%
Total	365	11.60	451,308	451,528	-0.05%	32%	32%
Total in OSP (07/15-09/15)	140	10.60	189,515	189,515	0.00%	35%	35%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

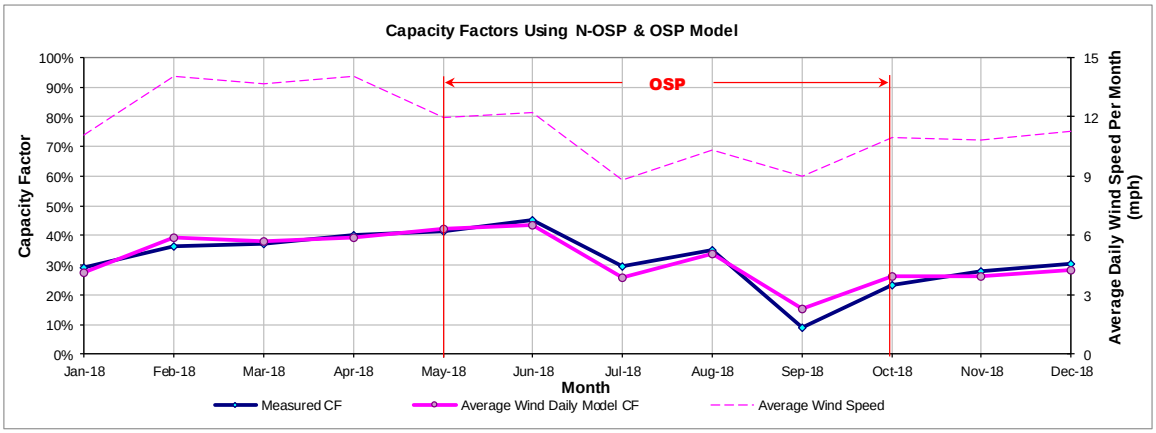


Figure A-351:PENA_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.83.2 Penascal Wind Farm - PENA_UNIT2_J01

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PENA_UNIT2_J01	Wind	-	KENEDY	Iberdrola Renewables	Penascal Wind Farm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
59 Mitsubishi 2.4 MW	ERCOT	S	Nov-08	Coastal	CRP	141.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

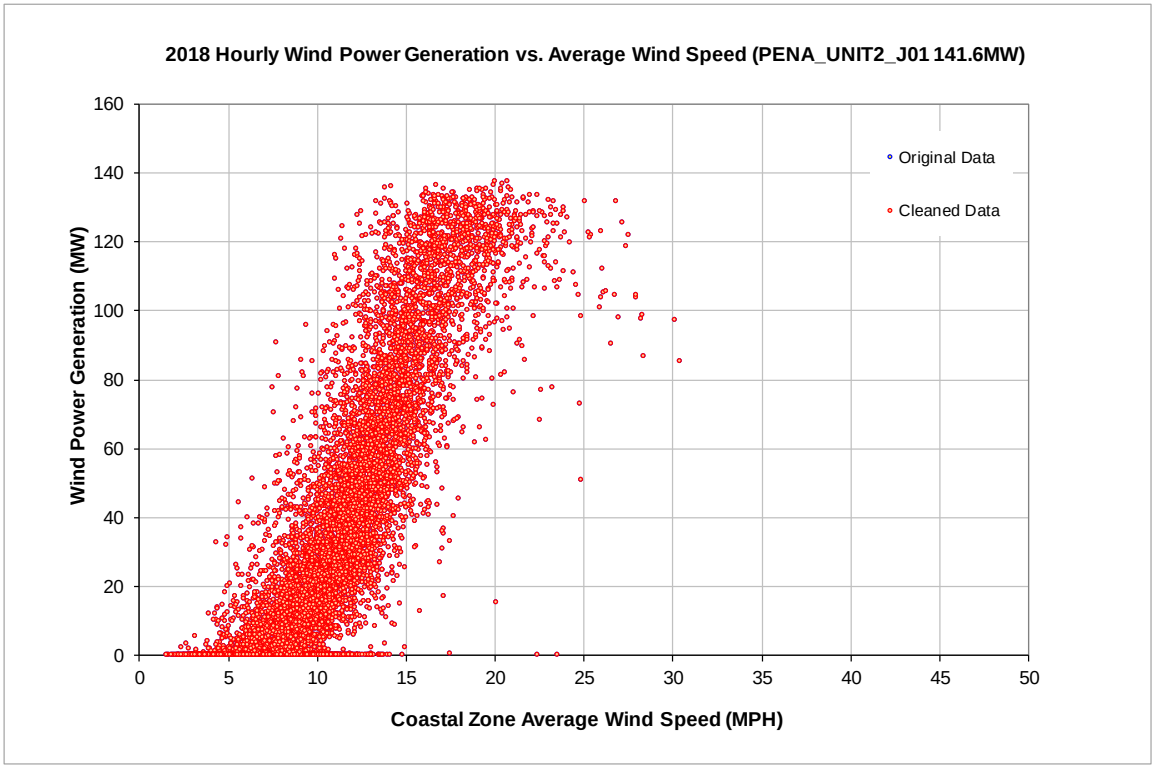


Figure A-352:PENA_UNIT2_J01 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

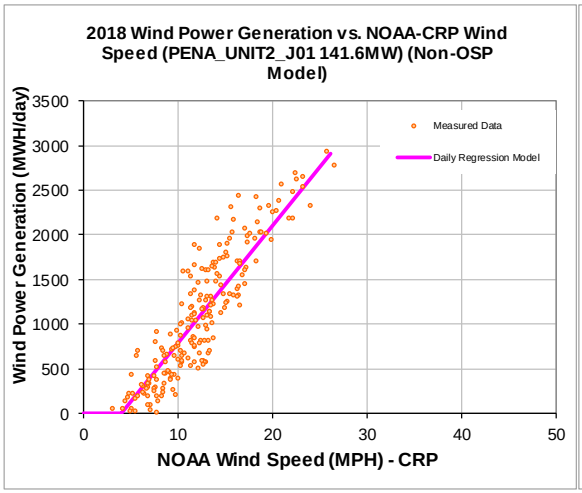
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-633.40
Left Slope (MWh/mph-day)	140.36
RMSE (MWh/day)	302.57
R2	0.82
CV-RMSE	27.8%
Daily Maximum (MWh/day)	3398

OSP Model:

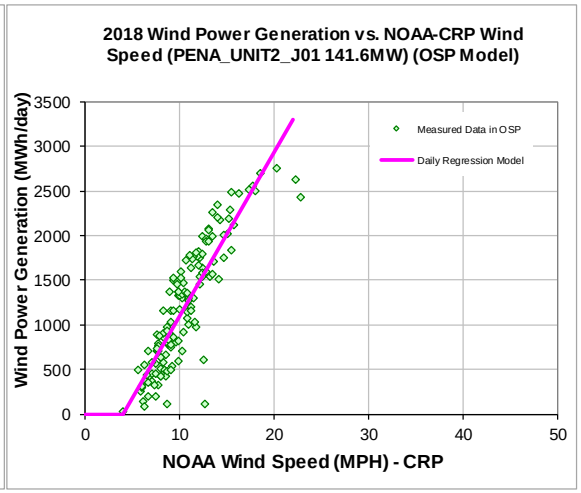
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-714.51
Left Slope (MWh/mph-day)	181.39
RMSE (MWh/day)	323.05
R2	0.78
CV-RMSE	26.7%
Daily Maximum (MWh/day)	3398

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
403,506	398,861

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,130	1,208

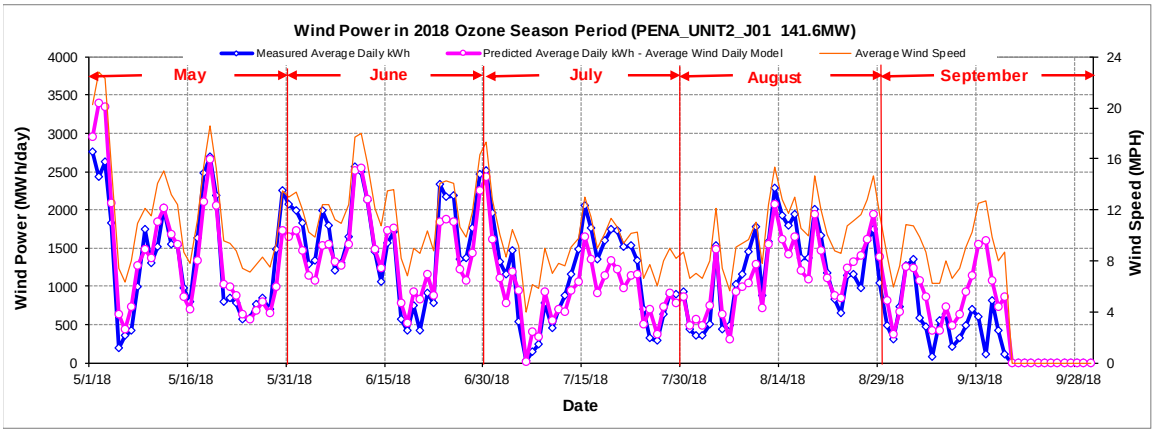
Figure A-353:PENA_UNIT2_J01 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	30,097	28,665	4.76%	29%	27%
Feb-18	28	14.08	33,564	37,606	-12.04%	35%	40%
Mar-18	31	13.69	39,568	39,946	-0.95%	38%	38%
Apr-18	30	14.08	42,185	40,275	4.53%	41%	40%
May-18	31	11.95	43,654	45,005	-3.10%	41%	43%
Jun-18	30	12.21	47,245	45,008	4.73%	46%	44%
Jul-18	31	8.81	31,903	27,394	14.13%	30%	26%
Aug-18	31	10.35	36,895	36,040	2.32%	35%	34%
Sep-18	30	9.01	9,424	15,652	-66.09%	9%	15%
Oct-18	31	10.96	27,527	27,364	0.59%	26%	26%
Nov-18	30	10.83	26,798	26,620	0.67%	26%	26%
Dec-18	31	11.29	30,001	29,551	1.50%	28%	28%
Total	365	11.60	398,861	399,126	-0.07%	32%	32%
Total in OSP (07/15-09/15)	140	10.60	169,120	169,099	0.01%	36%	36%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

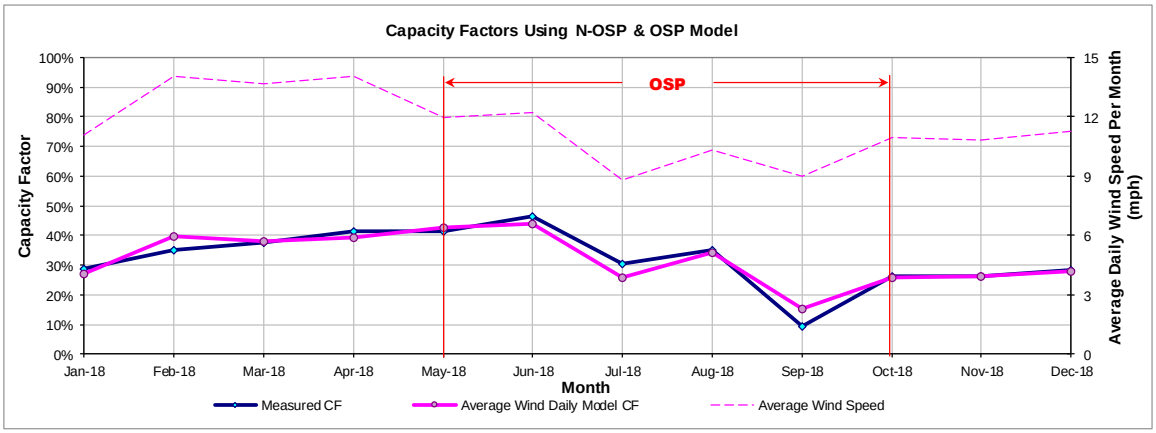


Figure A-354:PENA_UNIT2_J01 - Predicted Wind Power and Capacity Factor Using Daily Models

A.84 Penascal Wind Farm 2

A.84.1 Penascal Wind Farm 2 - PENA3_UNIT3

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PENA3_UNIT3	Wind	-	KENEDY	Iberdrola Renewables	Penascal Wind Farm 2

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
42 Mitsubishi 2.4 MW	ERCOT	S	Oct-10	Coastal	CRP	100.8

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

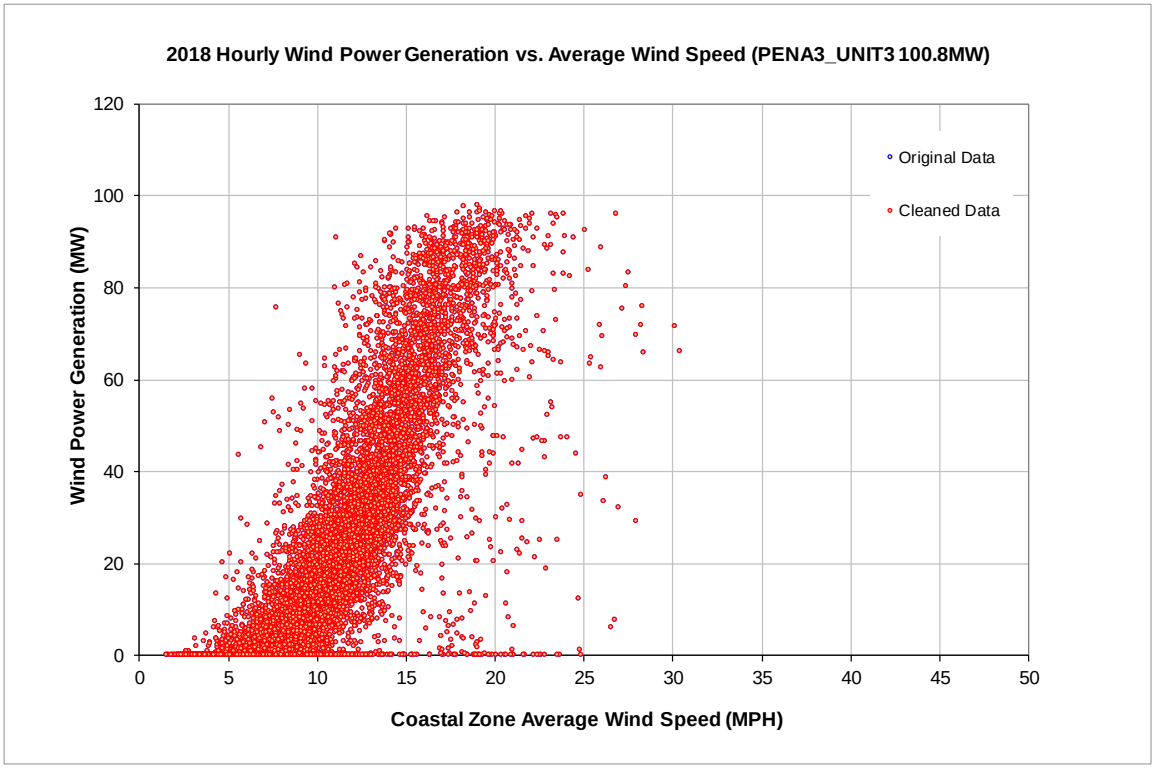


Figure A-355:PENA3_UNIT3 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

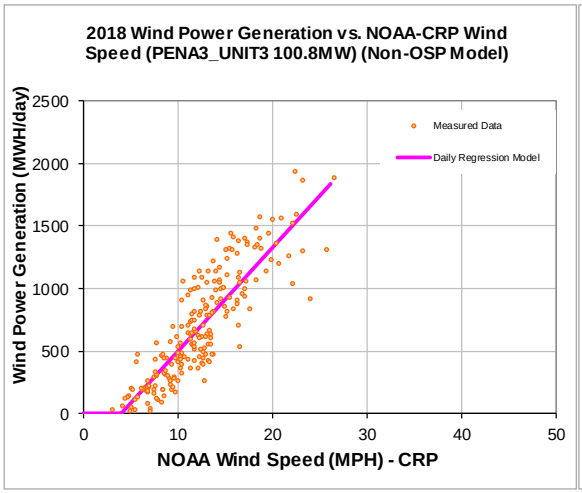
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-341.93
Left Slope (MWh/mph-day)	83.84
RMSE (MWh/day)	216.99
R2	0.75
CV-RMSE	31.5%
Daily Maximum (MWh/day)	2419

OSP Model:

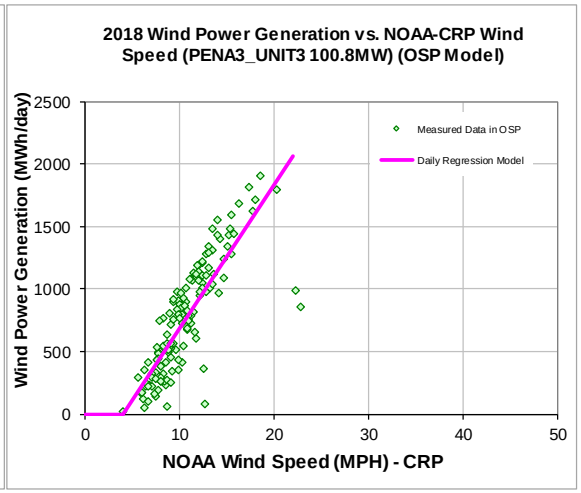
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-419.64
Left Slope (MWh/mph-day)	110.99
RMSE (MWh/day)	249.48
R2	0.69
CV-RMSE	33.0%
Daily Maximum (MWh/day)	2419

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
253,896	250,547

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
709	757

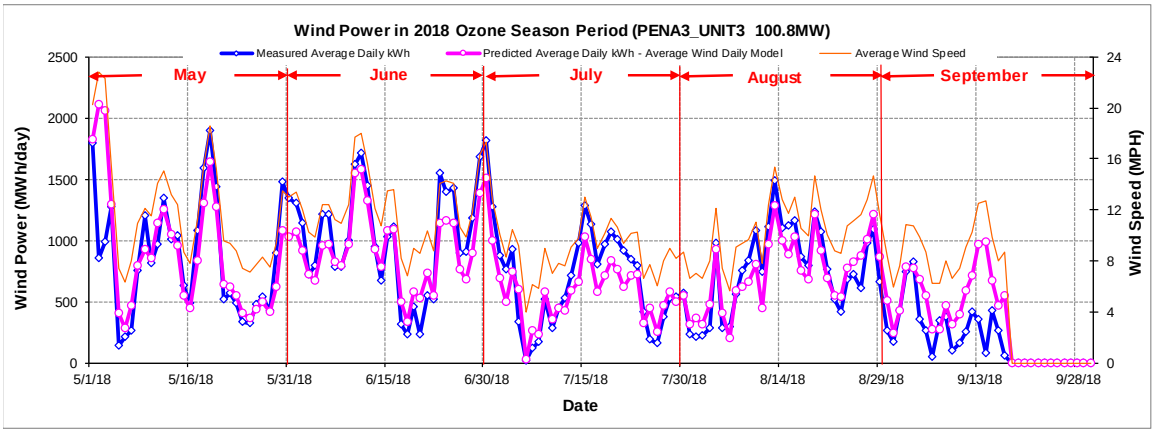
Figure A-356:PENA3_UNIT3 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	19,796	18,251	7.80%	26%	24%
Feb-18	28	14.08	22,091	23,483	-6.30%	33%	35%
Mar-18	31	13.69	25,764	24,990	3.00%	34%	33%
Apr-18	30	14.08	24,922	25,150	-0.92%	34%	35%
May-18	31	11.95	27,107	28,095	-3.64%	36%	37%
Jun-18	30	12.21	30,620	28,066	8.34%	42%	39%
Jul-18	31	8.81	19,732	17,306	12.30%	26%	23%
Aug-18	31	10.35	23,014	22,596	1.82%	31%	30%
Sep-18	30	9.01	5,465	9,876	-80.70%	8%	14%
Oct-18	31	11.07	15,903	17,094	-7.49%	21%	23%
Nov-18	30	10.83	17,190	16,993	1.14%	24%	23%
Dec-18	31	11.29	18,942	18,737	1.09%	25%	25%
Total	365	11.61	250,547	250,637	-0.04%	28%	28%
Total in OSP (07/15-09/15)	140	10.60	105,938	105,938	0.00%	31%	31%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

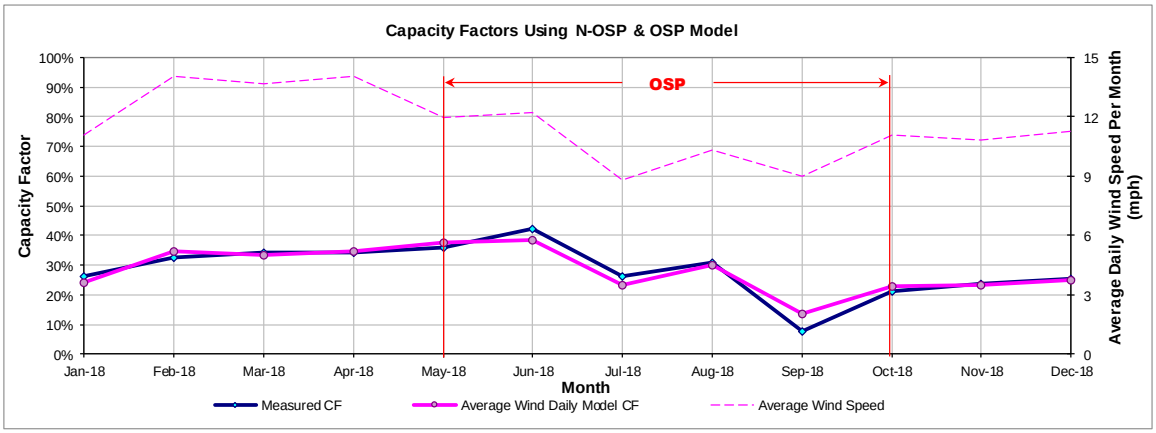


Figure A-357:PENA3_UNIT3 - Predicted Wind Power and Capacity Factor Using Daily Models

A.85 Pyron Wind Farm

A.85.1 Pyron Wind Farm - PYR_PYRON1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
PYR_PYRON1	Wind	-	SCURRY	E.On Climate & Renewables	Pyron

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
81 GE 1.5 MW 85 GE 1.5 MW	ERCOT	W	Nov-08	West	ABI	249

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

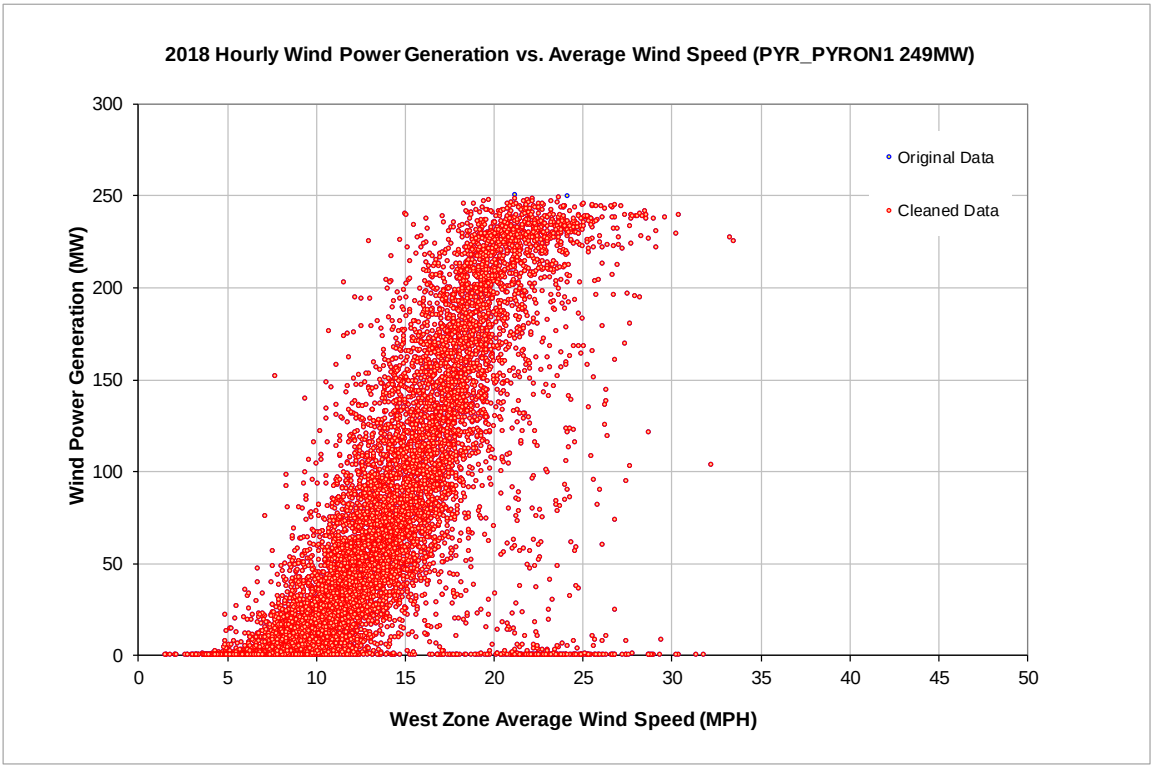


Figure A-358:PYR_PYRON1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

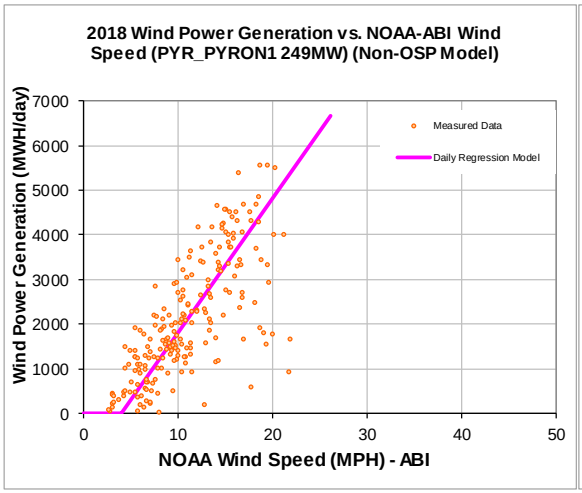
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-263.35
Left Slope (MWh/mph-day)	215.46
RMSE (MWh/day)	913.18
R2	0.54
CV-RMSE	43.6%
Daily Maximum (MWh/day)	5976

OSP Model:

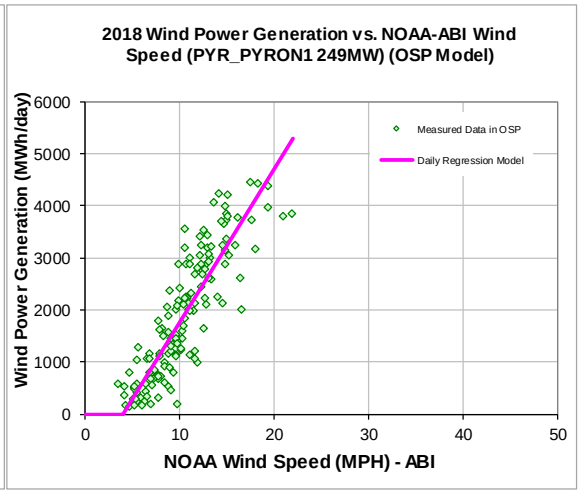
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1052.24
Left Slope (MWh/mph-day)	282.33
RMSE (MWh/day)	596.21
R2	0.75
CV-RMSE	31.6%
Daily Maximum (MWh/day)	5976

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
791,421	732,743

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,915	1,885

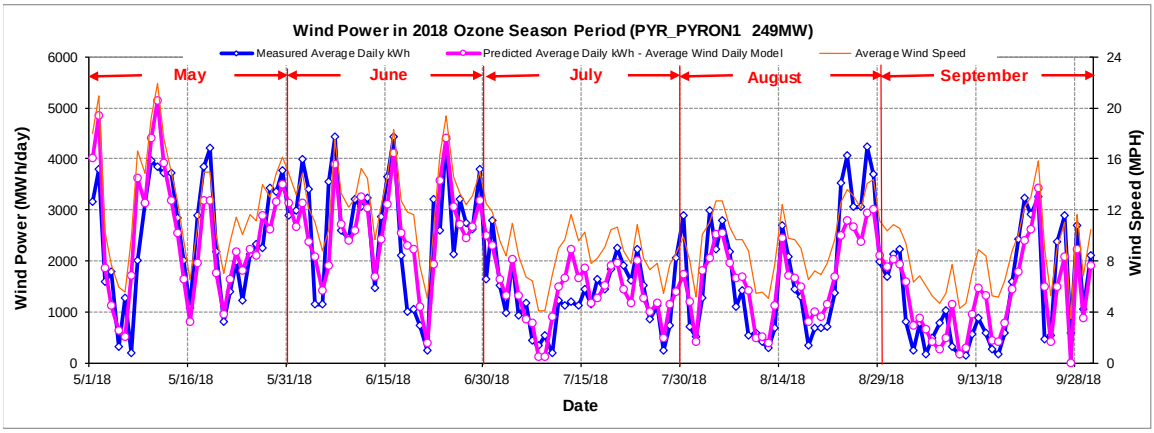
Figure A-359:PYR_PYRON1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	70,250	65,101	7.33%	38%	35%
Feb-18	28	11.00	62,120	58,969	5.07%	37%	35%
Mar-18	31	11.92	67,786	71,484	-5.46%	37%	39%
Apr-18	30	13.18	55,884	77,268	-38.27%	31%	43%
May-18	31	12.78	76,916	79,243	-3.03%	42%	43%
Jun-18	30	12.90	78,899	77,731	1.48%	44%	43%
Jul-18	31	8.52	41,021	41,951	-2.27%	22%	23%
Aug-18	31	9.85	55,494	53,574	3.46%	30%	29%
Sep-18	30	7.97	36,068	35,962	0.29%	20%	20%
Oct-18	31	9.35	59,110	54,310	8.12%	32%	29%
Nov-18	30	10.05	62,109	57,051	8.14%	35%	32%
Dec-18	31	10.23	67,087	60,163	10.32%	36%	32%
Total	365	10.72	732,743	732,807	-0.01%	34%	34%
Total in OSP (07/15-09/15)	153	10.40	288,397	288,461	-0.02%	32%	32%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

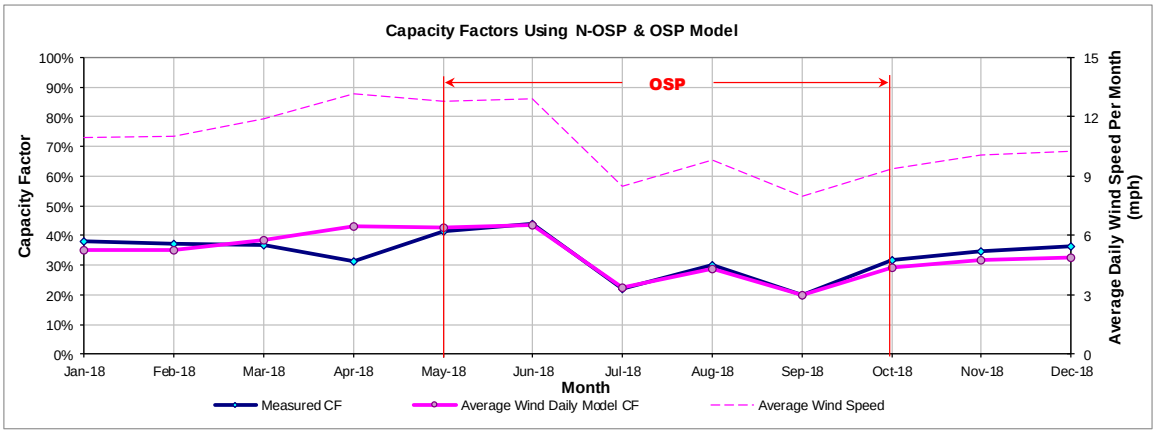


Figure A-360:PYR_PYRON1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.86 Rattlesnake Wind

A.86.1 Rattlesnake Wind - RTS_U1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
RTS_U1	Wind	-	MCCULLOCH	Goldwind/RES	RTS WIND

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
64 Goldwind 2.5 MW	ERCOT	S	Sep-18	South	SJT	160

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

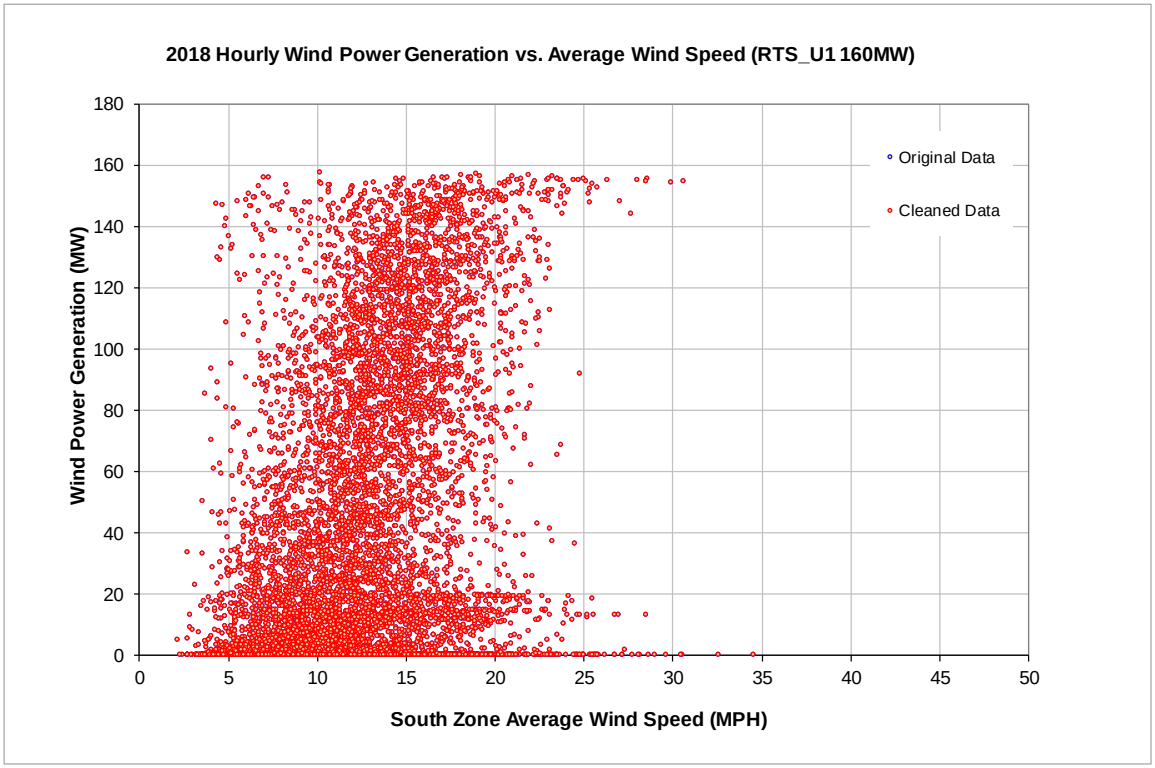


Figure A-361:RTS_U1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

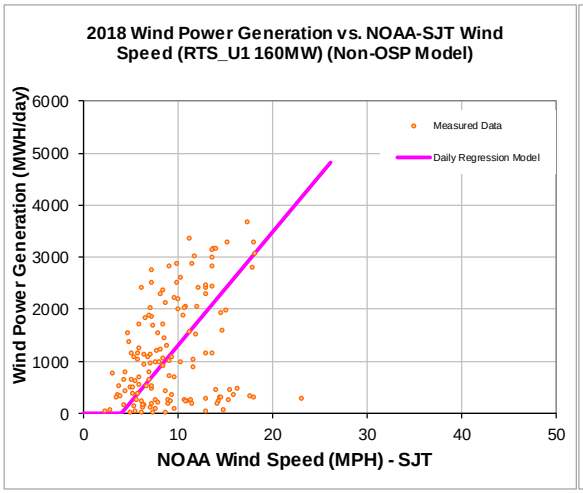
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	368.84
Left Slope (MWh/mph-day)	84.58
RMSE (MWh/day)	934.03
R2	0.11
CV-RMSE	80.8%
Daily Maximum (MWh/day)	3840

OSP Model:

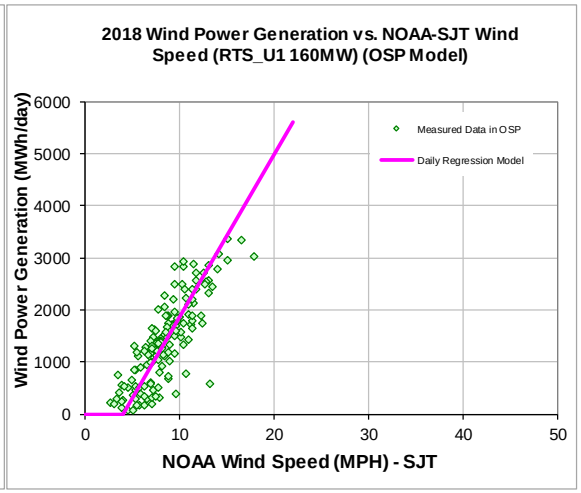
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-587.43
Left Slope (MWh/mph-day)	233.71
RMSE (MWh/day)	457.13
R2	0.67
CV-RMSE	32.9%
Daily Maximum (MWh/day)	3840

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
468,399	379,160

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,395	1,390

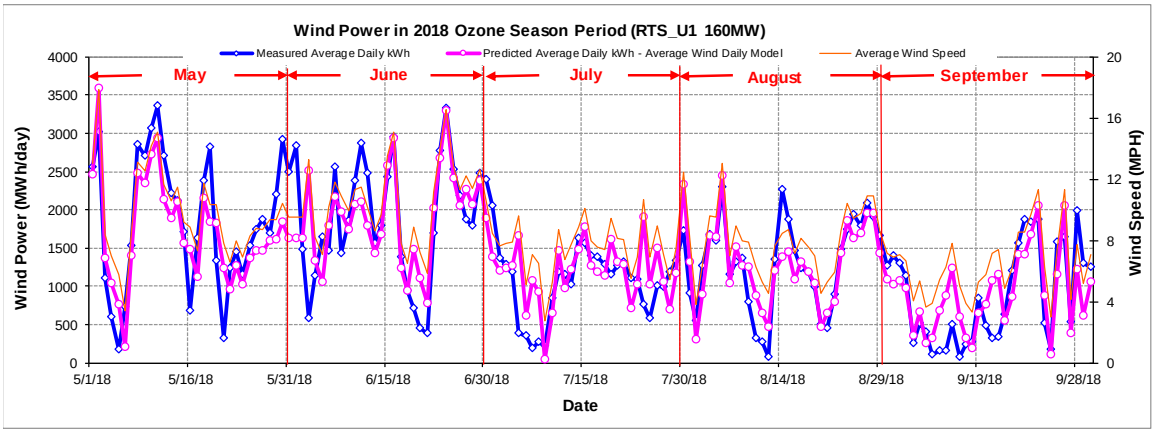
Figure A-362:RTS_U1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (SJT) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	#DIV/0!	0	0	#DIV/0!	0%	0%
Feb-18	28	#DIV/0!	0	0	#DIV/0!	0%	0%
Mar-18	31	10.46	4,827	27,585	-471.51%	4%	23%
Apr-18	30	11.30	17,861	39,741	-122.51%	16%	34%
May-18	31	9.81	57,871	52,896	8.60%	49%	44%
Jun-18	30	10.64	56,358	56,989	-1.12%	49%	49%
Jul-18	31	7.69	33,200	37,520	-13.01%	28%	32%
Aug-18	31	7.85	40,174	38,659	3.77%	34%	32%
Sep-18	30	6.31	25,058	26,597	-6.14%	22%	23%
Oct-18	31	7.54	43,811	31,208	28.77%	37%	26%
Nov-18	30	8.54	48,260	32,735	32.17%	42%	28%
Dec-18	31	9.08	51,741	35,229	31.91%	43%	30%
Total	365	8.87	379,160	379,160	0.00%	27%	27%
Total in OSP (07/15-09/15)	153	8.46	212,661	212,661	0.00%	36%	36%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

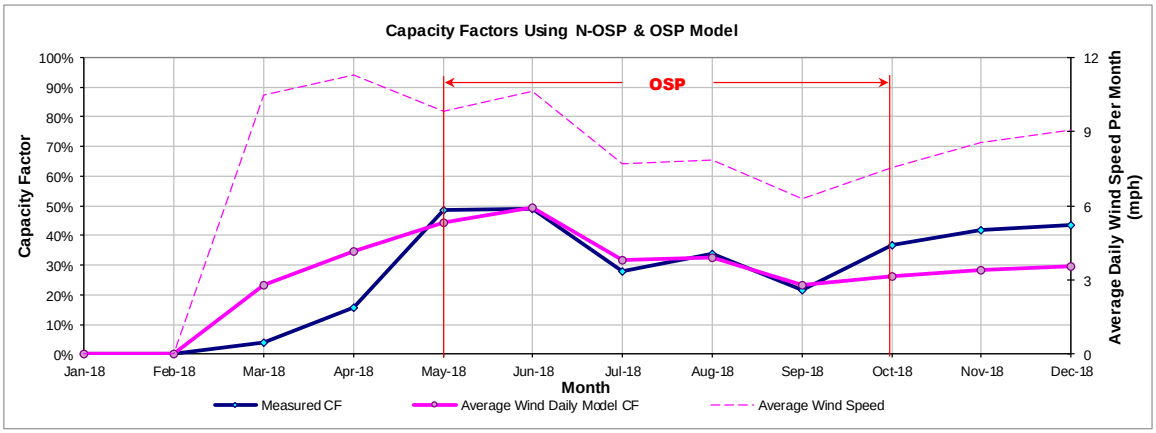


Figure A-363:RTS_U1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.87 RattleSnake Wind Ph 1

A.87.1 RattleSnake Wind Ph 1 - RSNAKE_G1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
RSNAKE_G1	Wind	Garden	GLASSCOCK	Invenergy	RattleSnake Wind Ph 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
61 GE 1.7 MW	ERCOT	W	Sep-15	West	ABI	104.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

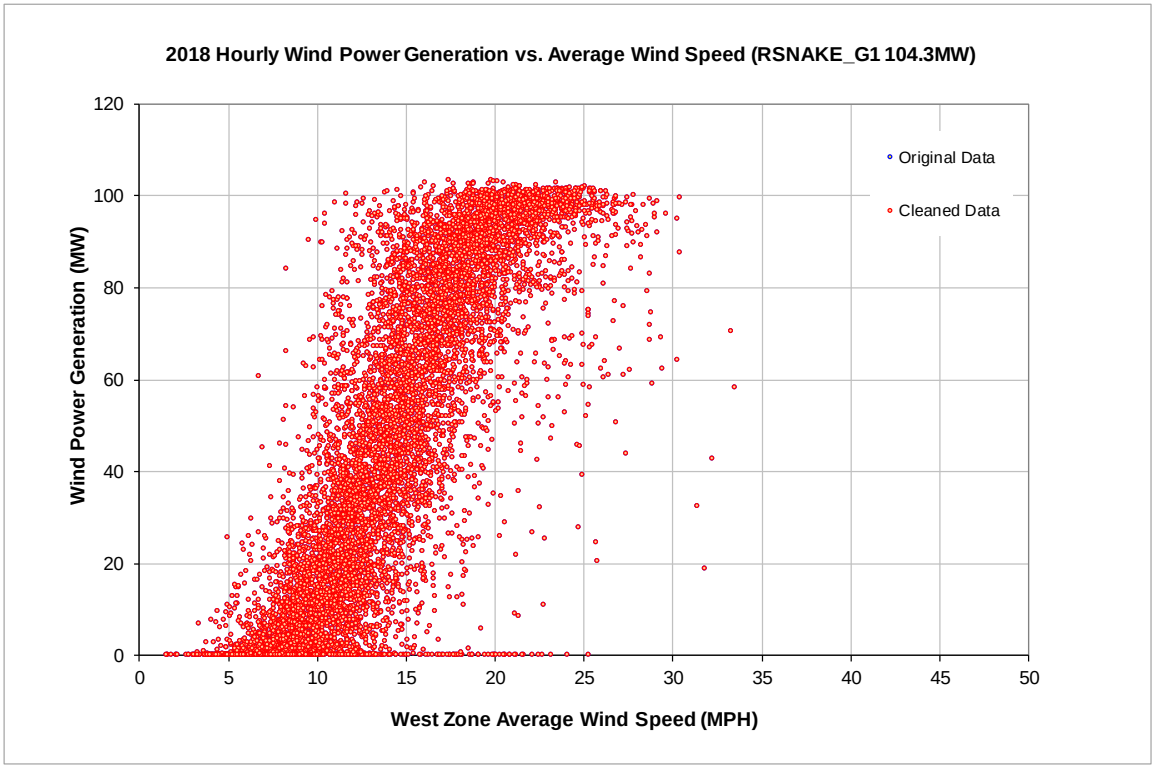


Figure A-364:RSNAKE_G1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

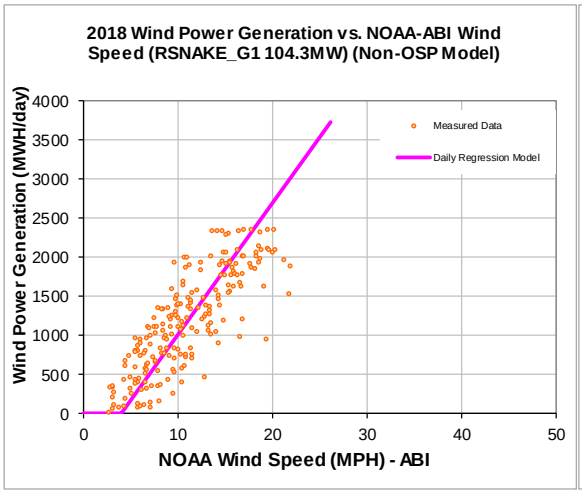
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-56.45
Left Slope (MWh/mph-day)	112.41
RMSE (MWh/day)	368.53
R2	0.66
CV-RMSE	31.4%
Daily Maximum (MWh/day)	2503

OSP Model:

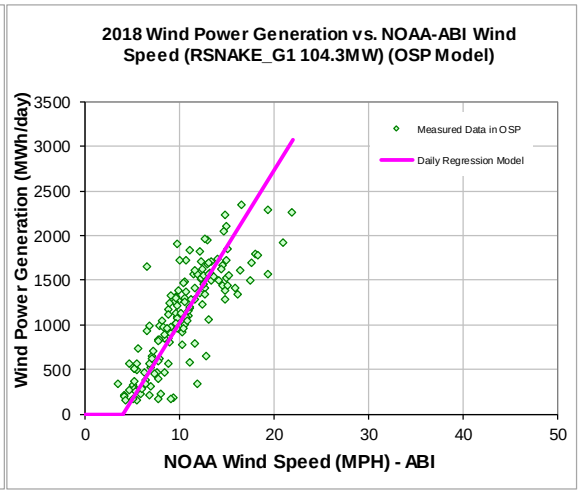
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-174.71
Left Slope (MWh/mph-day)	121.95
RMSE (MWh/day)	320.16
R2	0.67
CV-RMSE	29.3%
Daily Maximum (MWh/day)	2503

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
446,560	413,792

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,106	1,094

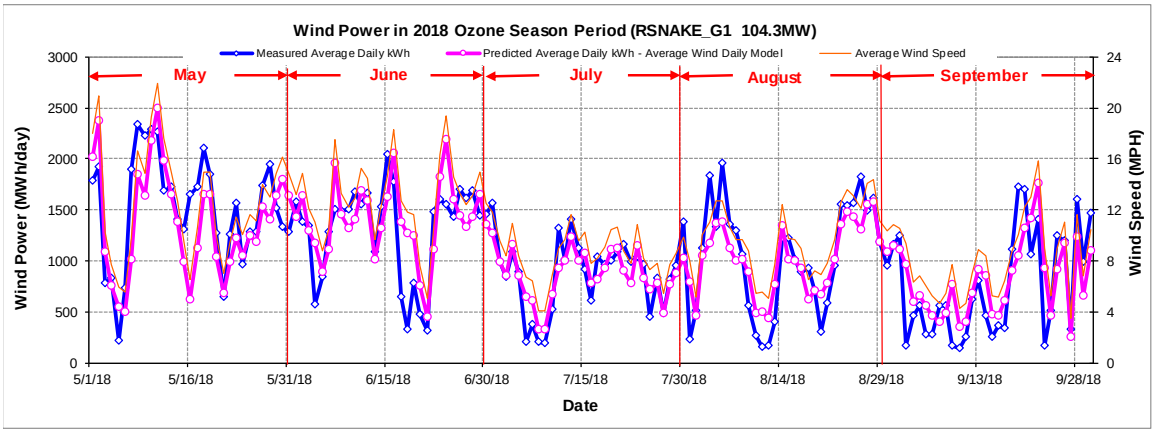
Figure A-365:RSNAKE_G1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	39,043	36,474	6.58%	50%	47%
Feb-18	28	11.00	33,896	33,032	2.55%	48%	47%
Mar-18	31	11.92	42,813	39,804	7.03%	55%	51%
Apr-18	30	13.26	36,966	40,170	-8.67%	49%	53%
May-18	31	12.78	46,760	42,902	8.25%	60%	55%
Jun-18	30	12.90	39,273	41,969	-6.86%	52%	56%
Jul-18	31	8.52	26,641	26,794	-0.57%	34%	35%
Aug-18	31	9.85	32,682	31,814	2.66%	42%	41%
Sep-18	30	7.97	22,022	23,900	-8.53%	29%	32%
Oct-18	31	9.35	29,358	30,844	-5.06%	38%	40%
Nov-18	30	10.05	30,864	32,193	-4.30%	41%	43%
Dec-18	31	10.23	33,473	33,898	-1.27%	43%	44%
Total	365	10.71	413,792	413,792	0.00%	45%	45%
Total in OSP (07/15-09/15)	153	10.40	167,378	167,378	0.00%	44%	44%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

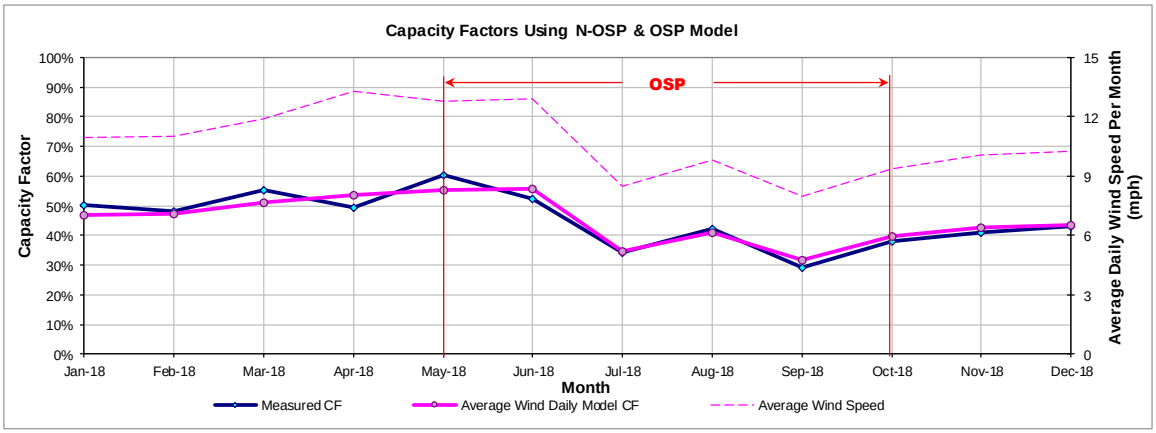


Figure A-366:RSNAKE_G1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.87.2 RattleSnake Wind Ph 1 - RSNAKE_G2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
RSNAKE_G2	Wind	Garden	GLASSCOCK	Invenergy	RattleSnake Wind Ph 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
61 GE 1.7 MW	ERCOT	W	Sep-15	West	ABI	103

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

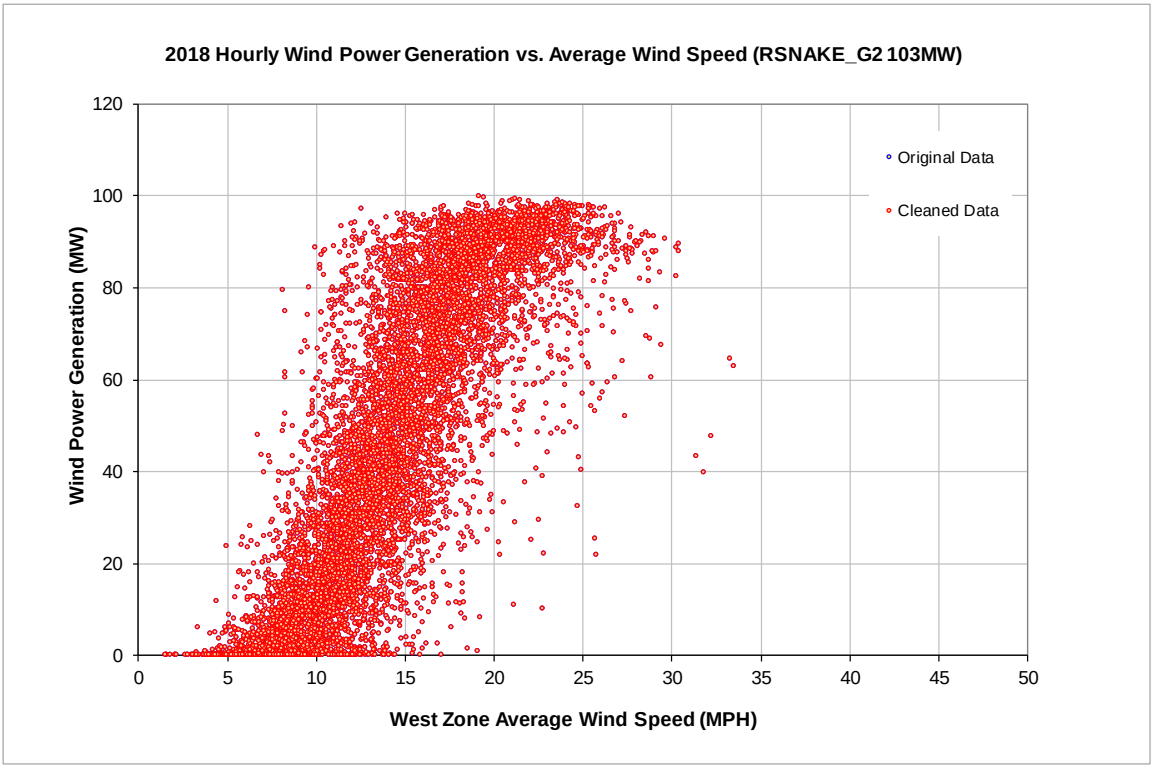


Figure A-367:RSNAKE_G2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

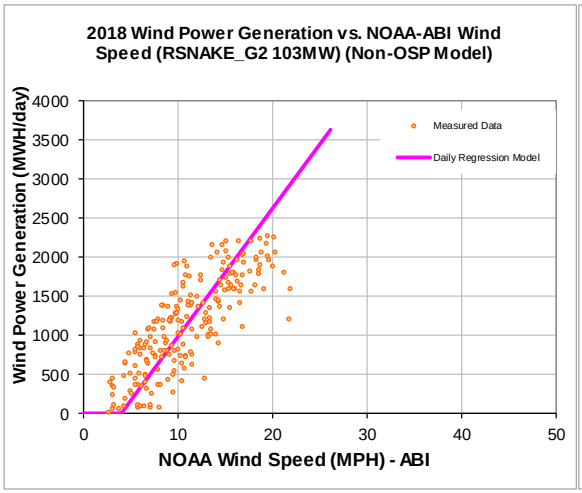
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1.48
Left Slope (MWh/mph-day)	104.42
RMSE (MWh/day)	351.79
R2	0.65
CV-RMSE	30.8%
Daily Maximum (MWh/day)	2472

OSP Model:

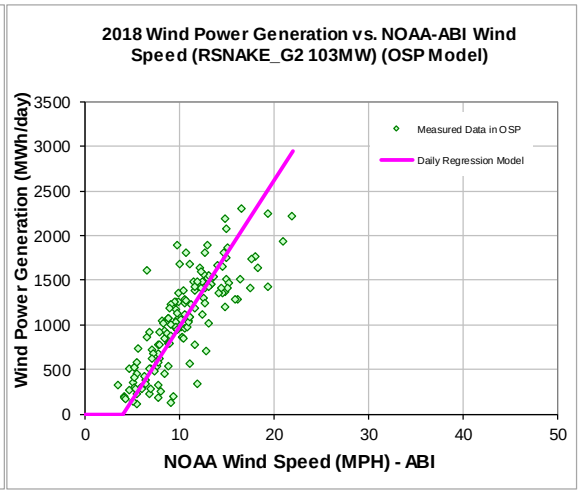
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-159.87
Left Slope (MWh/mph-day)	115.98
RMSE (MWh/day)	303.63
R2	0.67
CV-RMSE	29.0%
Daily Maximum (MWh/day)	2472

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
430,388	402,244

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,058	1,047

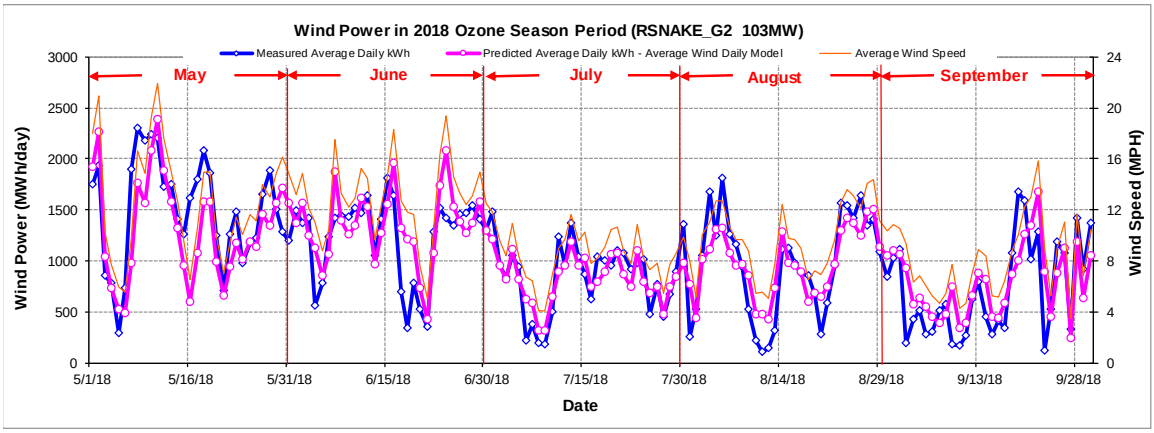
Figure A-368:RSNAKE_G2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	36,726	35,461	3.45%	48%	46%
Feb-18	28	11.00	32,244	32,111	0.41%	47%	46%
Mar-18	31	11.92	41,712	38,554	7.57%	54%	50%
Apr-18	30	13.18	40,477	41,232	-1.87%	55%	56%
May-18	31	12.78	46,200	40,998	11.26%	60%	53%
Jun-18	30	12.90	37,092	40,104	-8.12%	50%	54%
Jul-18	31	8.52	25,705	25,678	0.10%	34%	34%
Aug-18	31	9.85	30,240	30,453	-0.70%	39%	40%
Sep-18	30	7.97	20,915	22,919	-9.58%	28%	31%
Oct-18	31	9.35	27,636	30,231	-9.39%	36%	39%
Nov-18	30	10.05	30,966	31,434	-1.51%	42%	42%
Dec-18	31	10.23	32,329	33,068	-2.28%	42%	43%
Total	365	10.72	402,244	402,244	0.00%	45%	45%
Total in OSP (07/15-09/15)	153	10.40	160,153	160,153	0.00%	42%	42%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

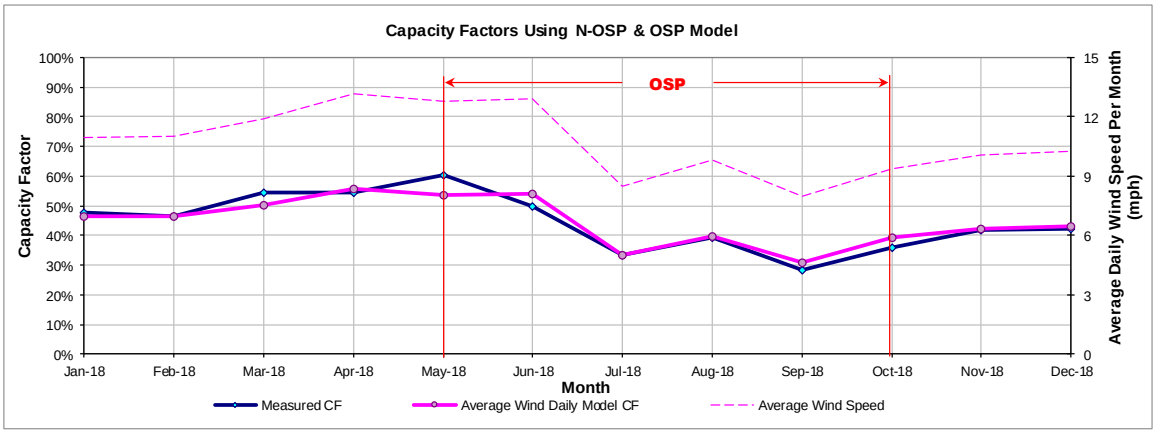


Figure A-369:RSNAKE_G2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.88 Red Canyon

A.88.1 Red Canyon - RDCANYON_RDCNY1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
RDCANYON_RDCNY1	Wind	-	BORDEN	NextEra	Red Canyon 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
56 GE 1.5 MW	ERCOT	W	May-06	West	ABI	84

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

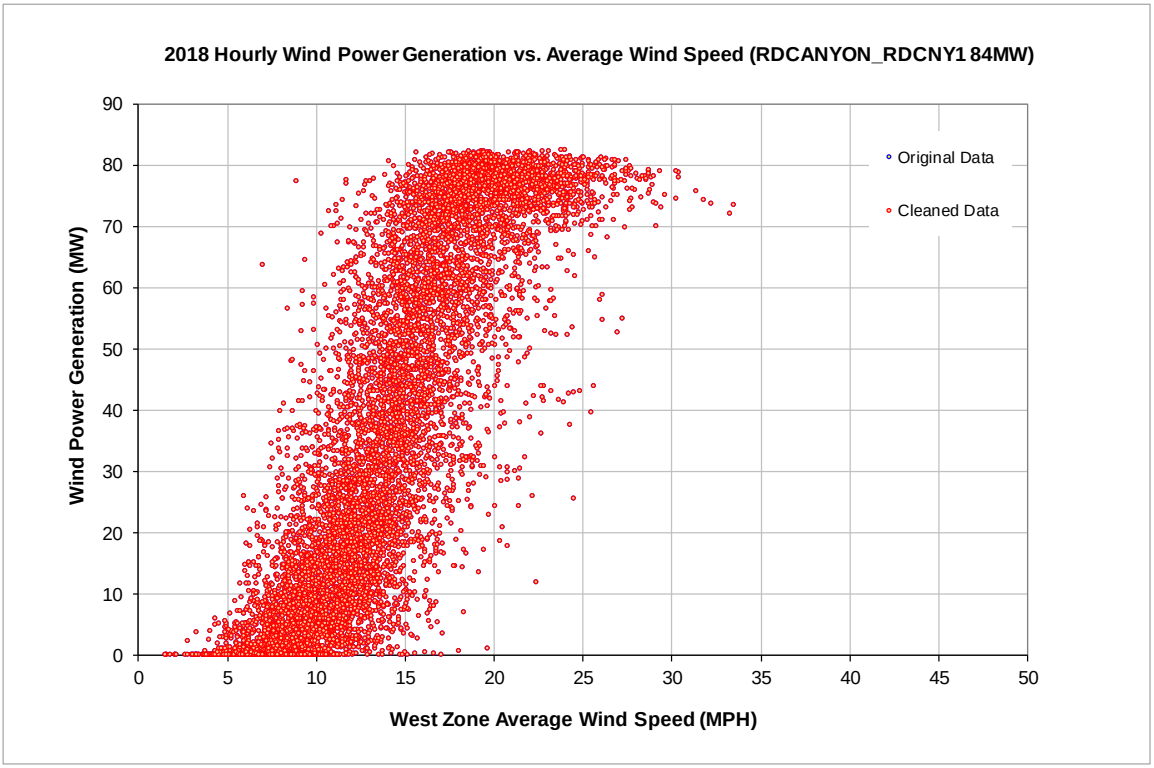


Figure A-370:RDCANYON_RDCNY1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

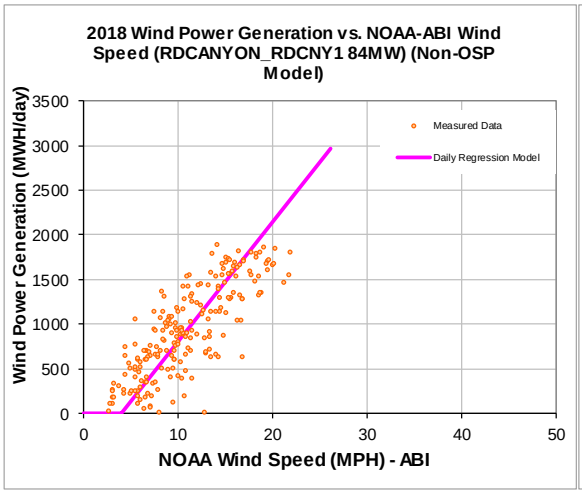
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-49.27
Left Slope (MWh/mph-day)	89.74
RMSE (MWh/day)	300.14
R2	0.65
CV-RMSE	32.2%
Daily Maximum (MWh/day)	2016

OSP Model:

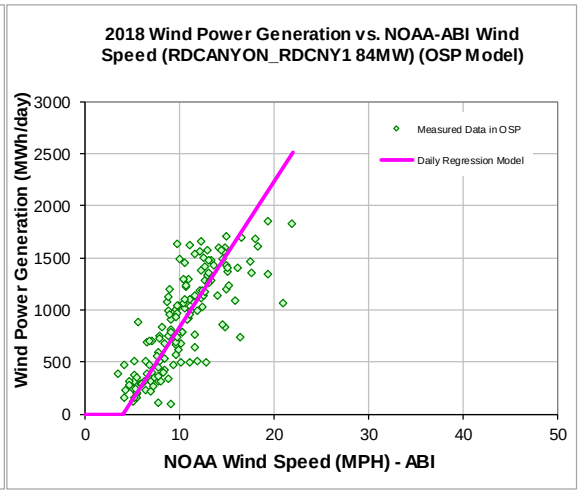
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-153.81
Left Slope (MWh/mph-day)	100.74
RMSE (MWh/day)	283.92
R2	0.63
CV-RMSE	31.8%
Daily Maximum (MWh/day)	2016

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
358,869	334,712

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
904	894

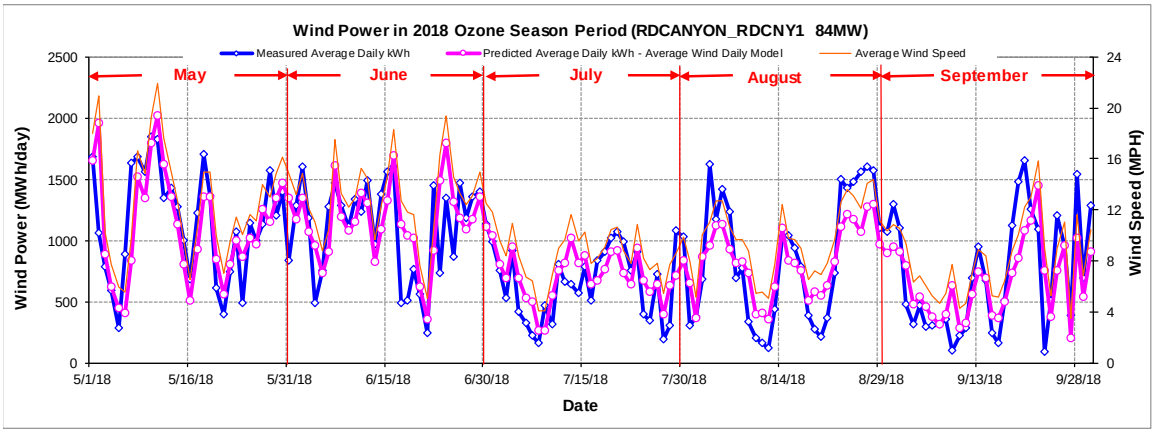
Figure A-371:RDCANYON_RDCNY1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	28,831	28,990	-0.55%	46%	46%
Feb-18	28	11.00	26,158	26,254	-0.37%	46%	47%
Mar-18	31	11.92	29,317	31,648	-7.95%	47%	51%
Apr-18	30	13.18	33,221	33,997	-2.34%	55%	56%
May-18	31	12.78	35,381	35,109	0.77%	57%	56%
Jun-18	30	12.90	33,429	34,385	-2.86%	55%	57%
Jul-18	31	8.52	19,867	21,840	-9.93%	32%	35%
Aug-18	31	9.85	27,493	25,988	5.48%	44%	42%
Sep-18	30	7.97	20,648	19,459	5.76%	34%	32%
Oct-18	31	9.35	25,736	24,495	4.82%	41%	39%
Nov-18	30	10.05	27,405	25,576	6.67%	45%	42%
Dec-18	31	10.23	27,225	26,933	1.07%	44%	43%
Total	365	10.72	334,712	334,674	0.01%	45%	45%
Total in OSP (07/15-09/15)	153	10.40	136,819	136,781	0.03%	44%	44%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

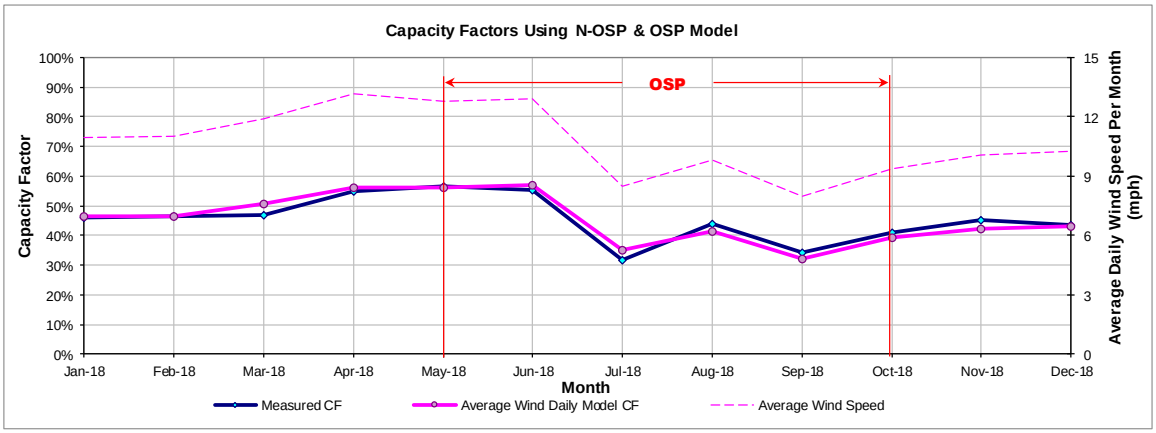


Figure A-372:RDCANYON_RDCNY1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.89 Roscoe Wind Farm

A.89.1 Roscoe Wind Farm - TKWSW1_ROSCOE

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
TKWSW1_ROSCOE	Wind	-	SCURRY	E.On Climate & Renewables	Roscoe Wind Farm 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
114 Mitsubishi 1 MW 95 Mitsubishi 1 MW	ERCOT	W	Jan-08	West	ABI	209

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

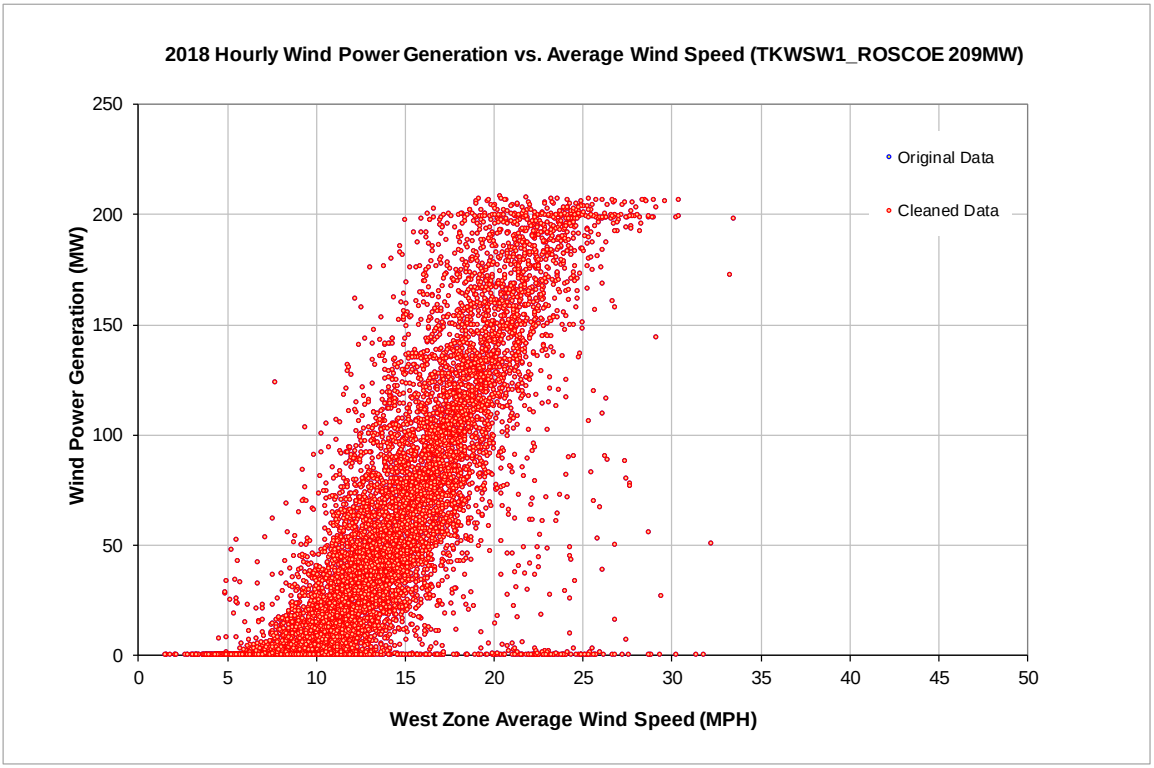


Figure A-373:TKWSW1_ROSCOE - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

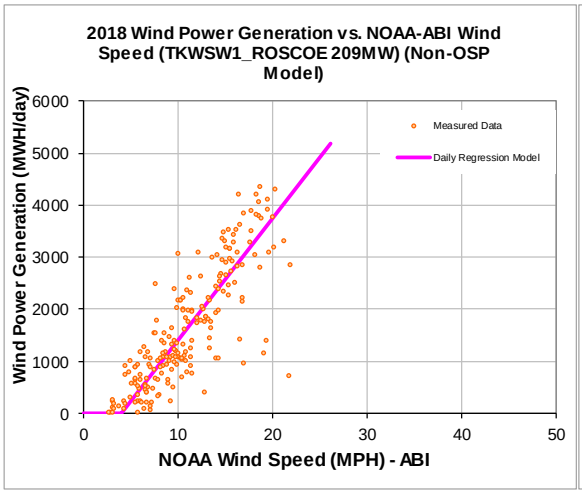
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-606.48
Left Slope (MWh/mph-day)	204.43
RMSE (MWh/day)	638.52
R2	0.68
CV-RMSE	39.3%
Daily Maximum (MWh/day)	5016

OSP Model:

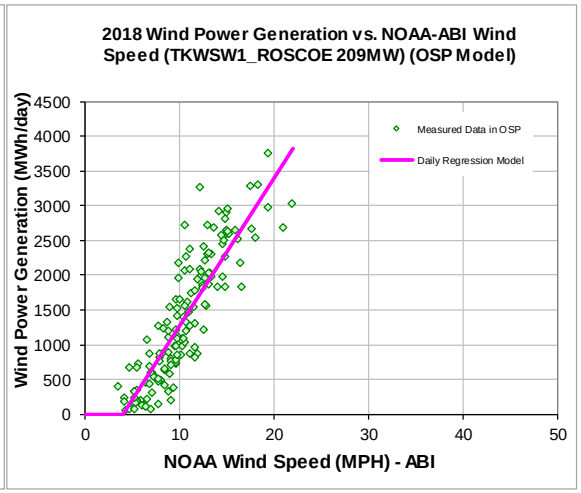
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-903.43
Left Slope (MWh/mph-day)	217.42
RMSE (MWh/day)	427.21
R2	0.78
CV-RMSE	31.4%
Daily Maximum (MWh/day)	5016

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
608,455	548,900

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,382	1,358

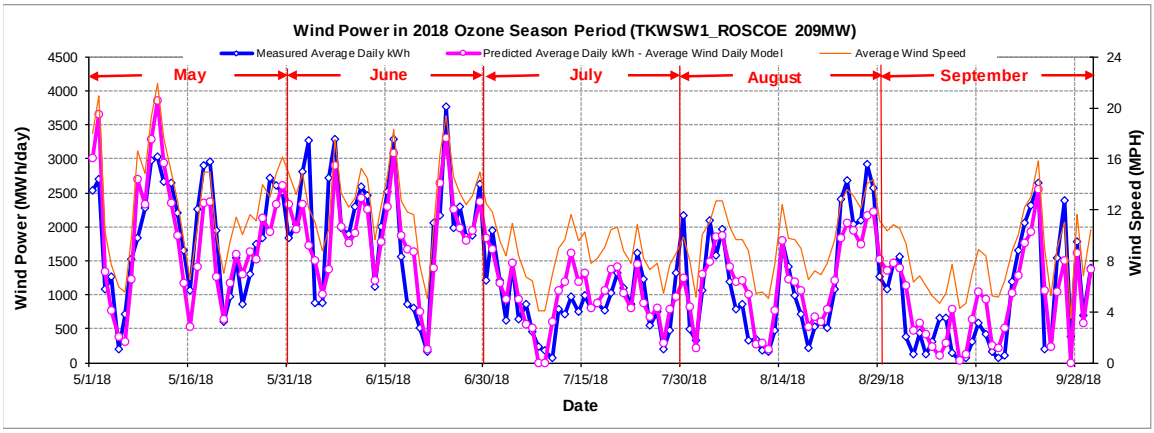
Figure A-374:TKWSW1_ROSCOE - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	57,053	50,714	11.11%	37%	33%
Feb-18	28	11.00	48,668	46,010	5.46%	35%	33%
Mar-18	31	11.71	50,950	51,824	-1.72%	33%	33%
Apr-18	30	13.18	51,509	62,615	-21.56%	34%	42%
May-18	31	12.78	58,813	58,137	1.15%	38%	37%
Jun-18	30	12.90	59,638	57,066	4.31%	40%	38%
Jul-18	31	8.52	27,334	29,442	-7.71%	18%	19%
Aug-18	31	9.85	37,542	38,370	-2.21%	24%	25%
Sep-18	30	7.97	24,518	24,994	-1.94%	16%	17%
Oct-18	31	9.35	42,782	40,553	5.21%	28%	26%
Nov-18	30	10.05	41,771	43,433	-3.98%	28%	29%
Dec-18	31	10.23	48,322	46,029	4.74%	31%	30%
Total	365	10.70	548,900	549,187	-0.05%	30%	30%
Total in OSP (07/15-09/15)	153	10.40	207,845	208,010	-0.08%	27%	27%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

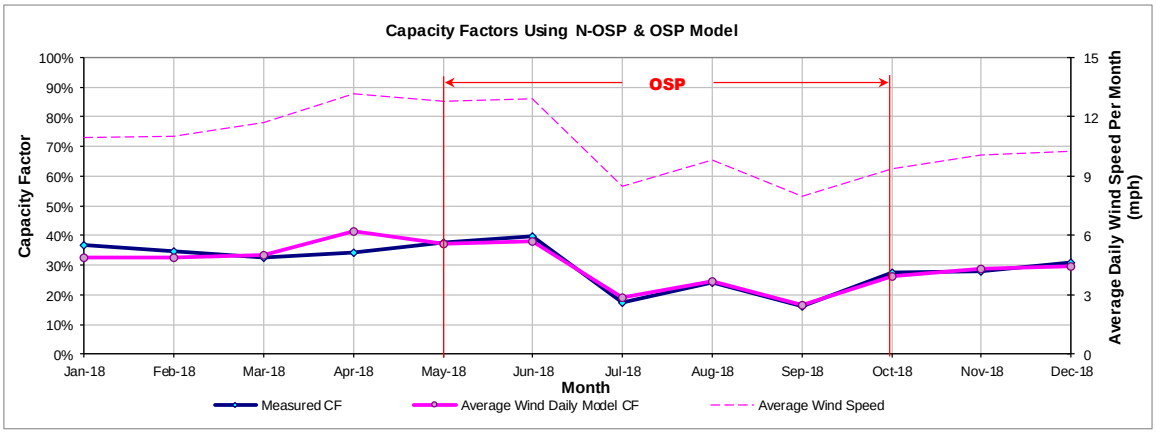


Figure A-375:TKWSW1_ROSCOE - Predicted Wind Power and Capacity Factor Using Daily Models

A.90 Route66 Wind

A.90.1 Route66 Wind - ROUTE_66_WIND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
ROUTE_66_WIND1	Wind	Amarilo	ARMSTRONG	First Wind	Route66 Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
75 Vestas 2 MW	ERCOT	W	Aug-15	Panhandle	AMA	150

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

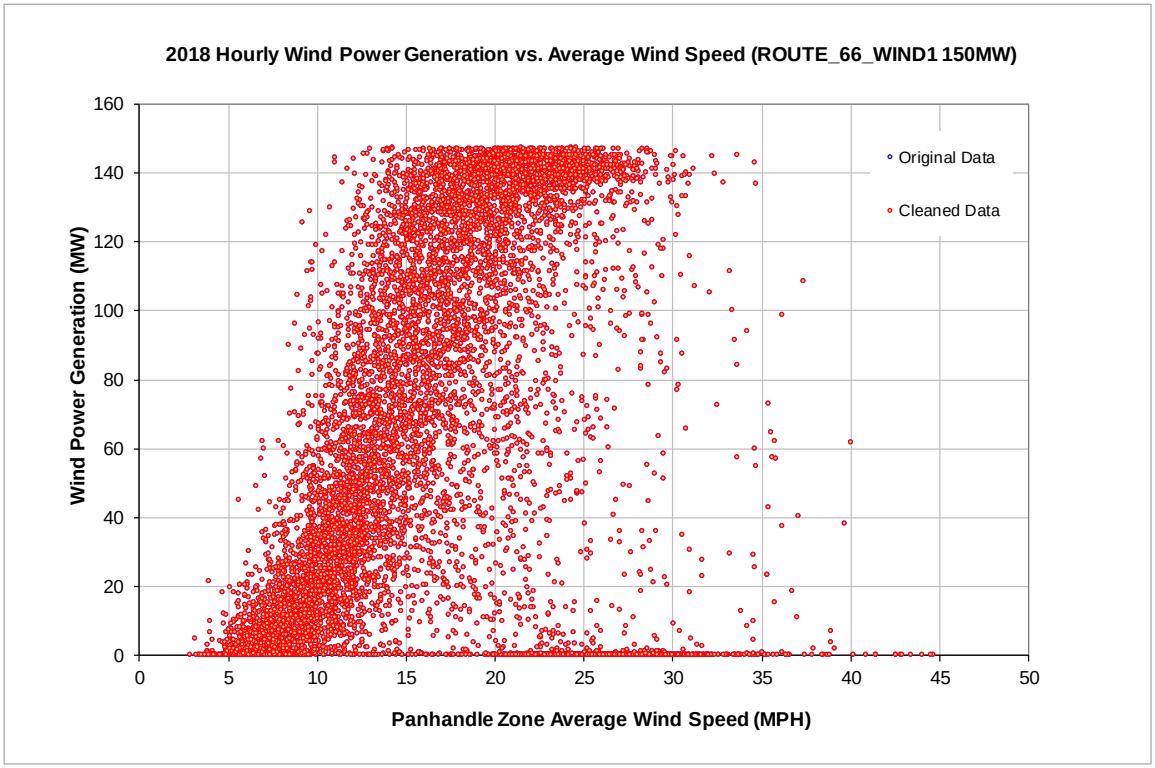


Figure A-376:ROUTE_66_WIND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

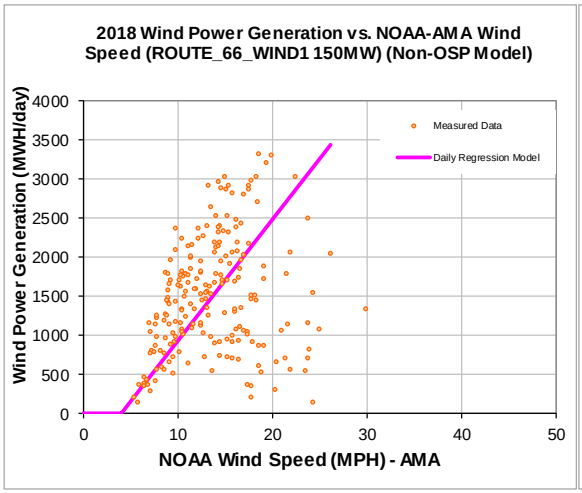
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	998.68
Left Slope (MWh/mph-day)	36.14
RMSE (MWh/day)	713.14
R2	0.05
CV-RMSE	47.9%
Daily Maximum (MWh/day)	3600

OSP Model:

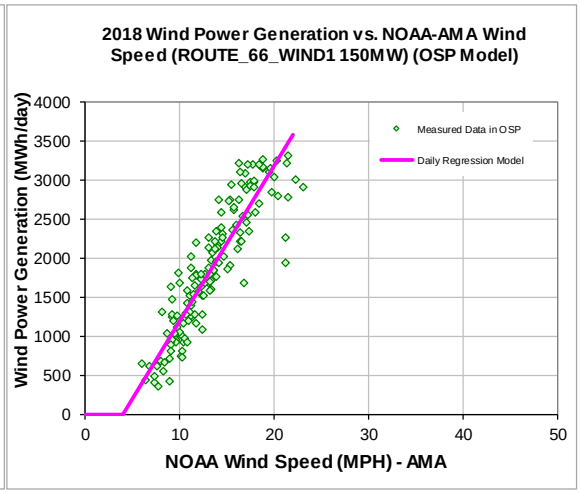
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-676.45
Left Slope (MWh/mph-day)	189.86
RMSE (MWh/day)	353.72
R2	0.81
CV-RMSE	18.8%
Daily Maximum (MWh/day)	3600

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
600,881	600,345

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,834	1,879

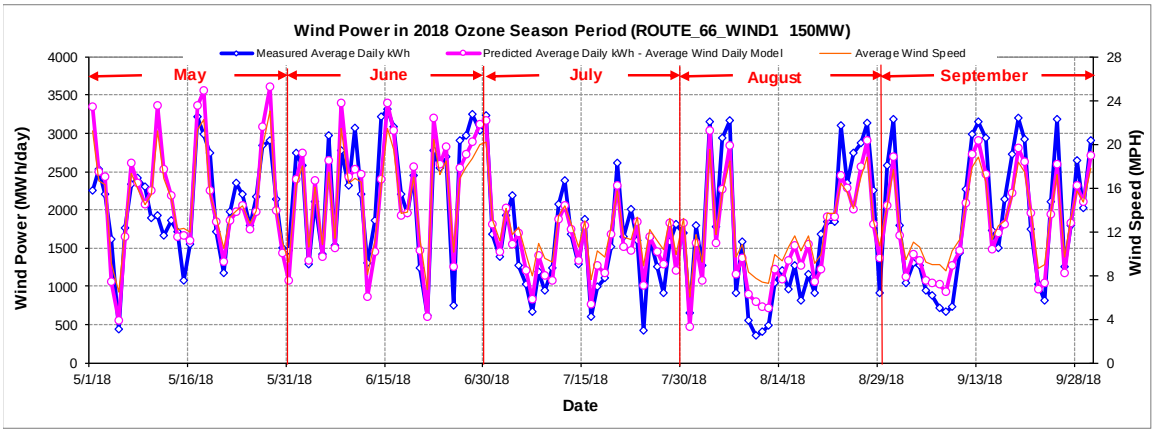
Figure A-377:ROUTE_66_WIND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.49	36,267	43,507	-19.96%	32%	39%
Feb-18	28	13.58	34,995	40,214	-14.91%	35%	40%
Mar-18	31	14.64	36,479	47,364	-29.84%	33%	42%
Apr-18	30	17.03	42,794	48,428	-13.16%	40%	45%
May-18	31	14.93	62,602	66,811	-6.72%	56%	60%
Jun-18	30	15.70	70,305	69,113	1.70%	65%	64%
Jul-18	31	11.32	44,748	45,669	-2.06%	40%	41%
Aug-18	31	12.42	54,153	52,101	3.79%	49%	47%
Sep-18	30	13.00	55,718	53,734	3.56%	52%	50%
Oct-18	31	12.69	52,982	45,179	14.73%	47%	40%
Nov-18	30	12.53	54,464	43,545	20.05%	50%	40%
Dec-18	31	12.16	54,837	44,582	18.70%	49%	40%
Total	365	13.53	600,345	600,247	0.02%	46%	46%
Total in OSP (07/15-09/15)	153	13.46	287,526	287,428	0.03%	52%	52%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

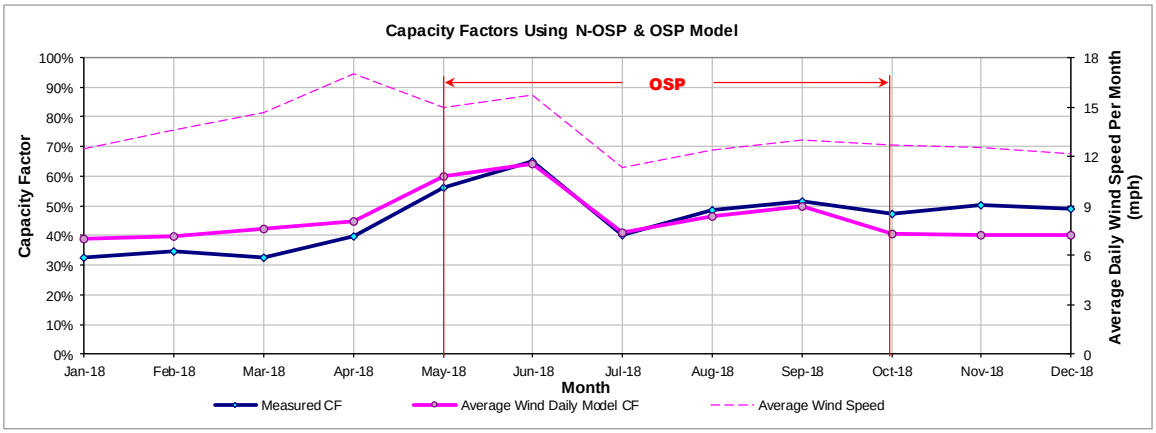


Figure A-378:ROUTE_66_WIND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.91 Salt Fork Wind

A.91.1 Salt Fork Wind - SALTFORK_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SALTFORK_UNIT1	Wind	-	DONLEY	Southern Company	Salt Fork Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
32 Vestas 2 MW	ERCOT	W	Dec-16	Panhandle	AMA	64

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

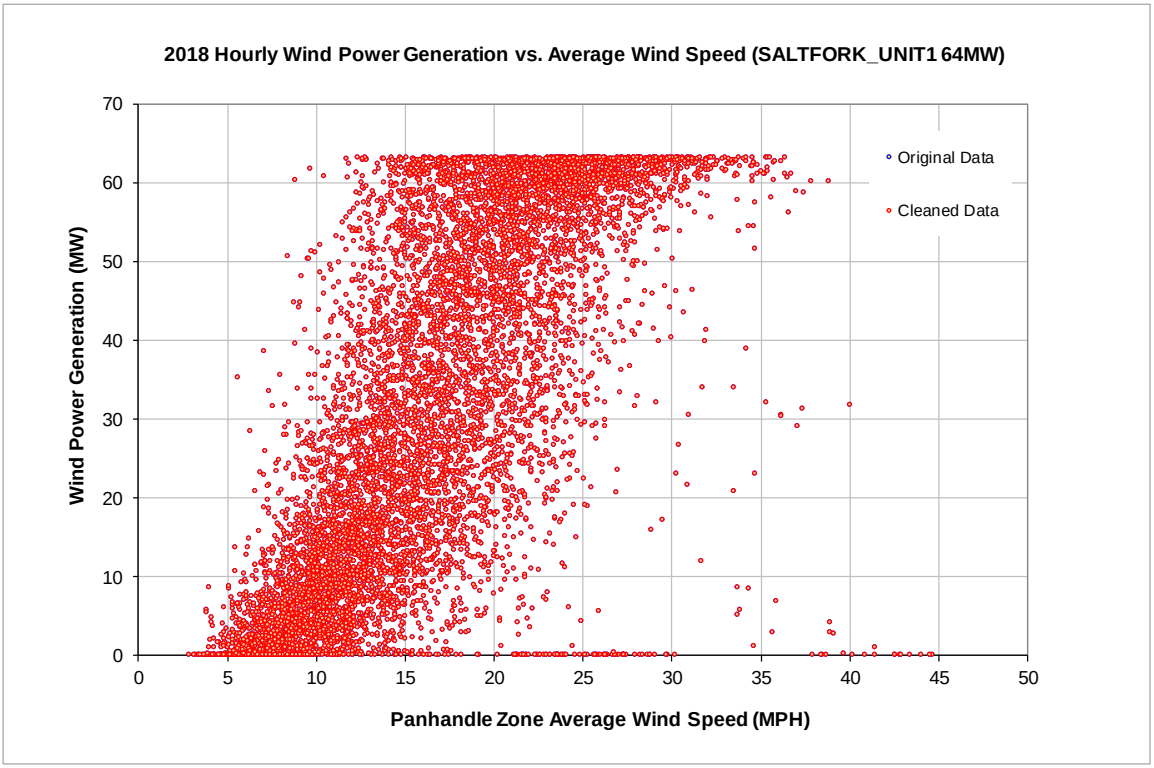


Figure A-379:SALTFORK_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

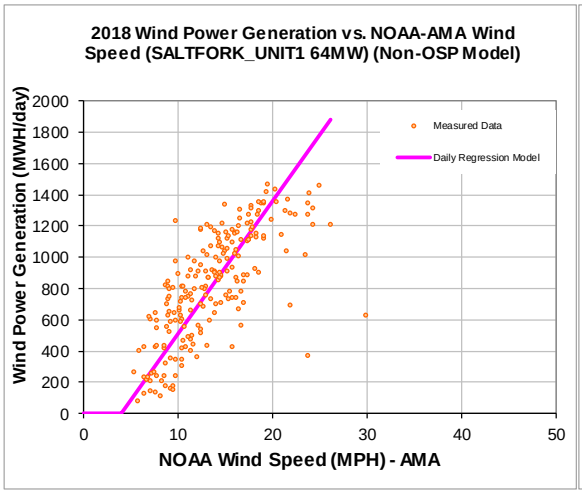
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	75.44
Left Slope (MWh/mph-day)	54.59
RMSE (MWh/day)	239.13
R2	0.53
CV-RMSE	29.2%
Daily Maximum (MWh/day)	1536

OSP Model:

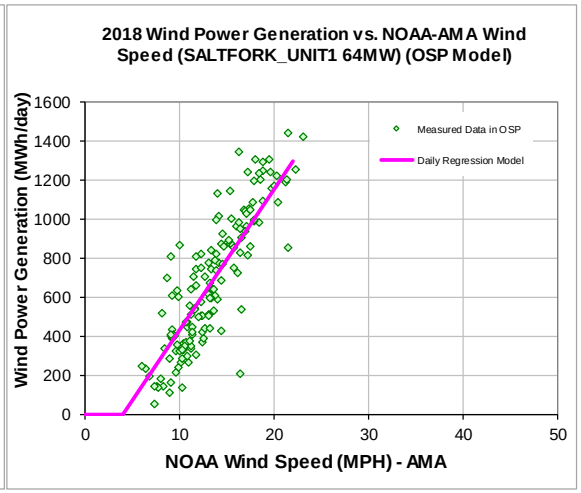
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-366.84
Left Slope (MWh/mph-day)	77.88
RMSE (MWh/day)	170.87
R2	0.75
CV-RMSE	25.3%
Daily Maximum (MWh/day)	1536

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
280,111	275,865

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
664	676

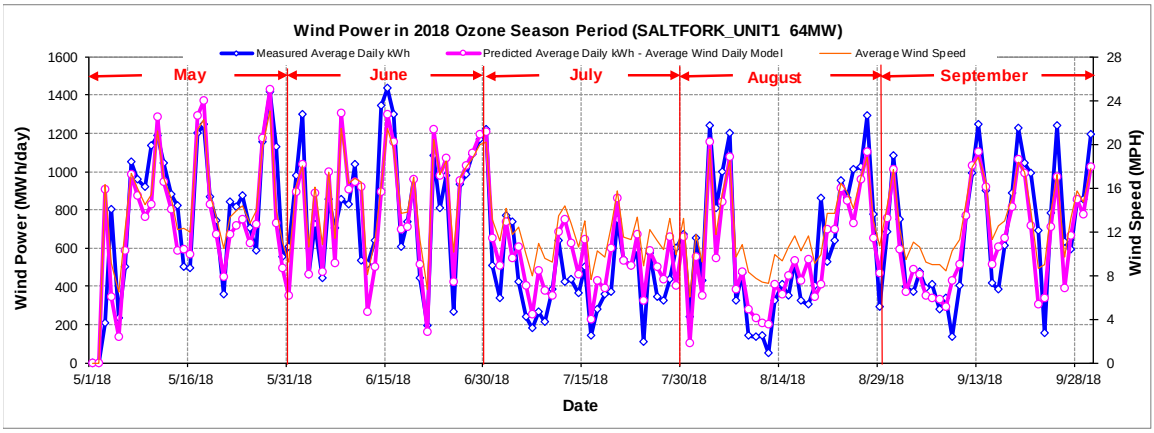
Figure A-380:SALTFORK_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	25,403	23,861	6.07%	53%	50%
Feb-18	28	13.78	25,226	23,166	8.16%	59%	54%
Mar-18	31	14.64	28,108	27,116	3.53%	59%	57%
Apr-18	30	17.03	27,801	30,156	-8.47%	60%	65%
May-18	31	14.66	23,817	22,460	5.70%	50%	47%
Jun-18	30	15.70	25,405	25,669	-1.04%	55%	56%
Jul-18	31	11.32	13,223	15,963	-20.73%	28%	34%
Aug-18	31	12.42	19,208	18,601	3.16%	40%	39%
Sep-18	30	13.00	20,401	19,361	5.10%	44%	42%
Oct-18	31	12.69	20,702	23,816	-15.04%	43%	50%
Nov-18	30	12.53	23,450	22,781	2.85%	51%	49%
Dec-18	31	12.16	23,121	22,745	1.63%	49%	48%
Total	365	13.53	275,865	275,695	0.06%	49%	49%
Total in OSP (07/15-09/15)	151	13.39	102,054	102,054	0.00%	44%	44%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

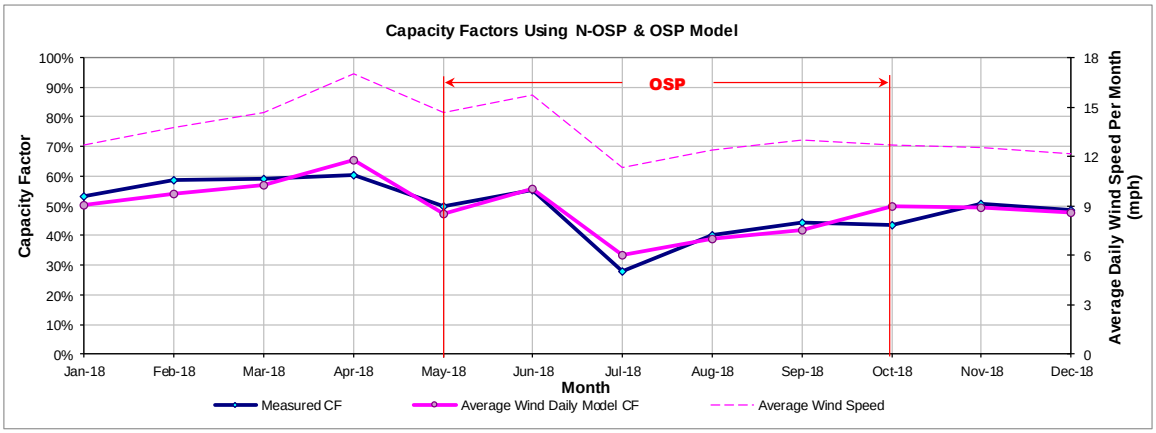


Figure A-381:SALTFORK_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.91.2 Salt Fork Wind - SALTFORK_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SALTFORK_UNIT2	Wind	-	DONLEY	Southern Company	Salt Fork Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
55 Vestas 2 MW	ERCOT	W	Dec-16	Panhandle	AMA	110

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

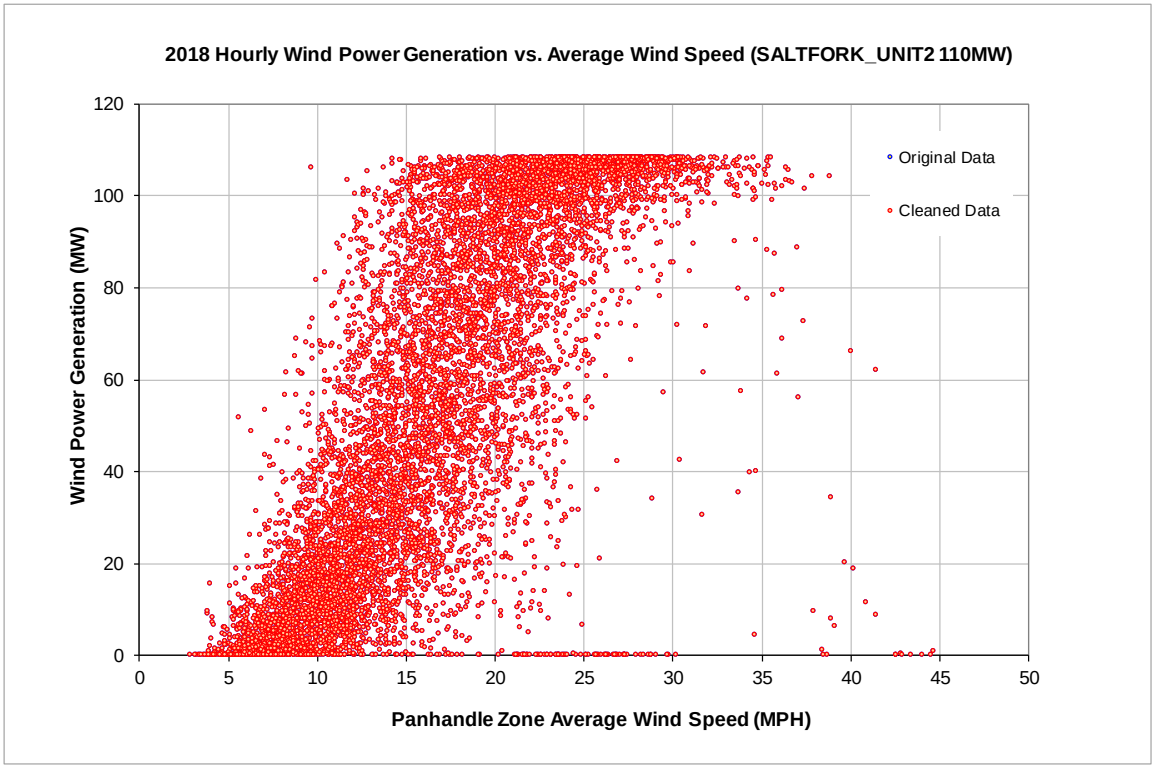


Figure A-382:SALTFORK_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

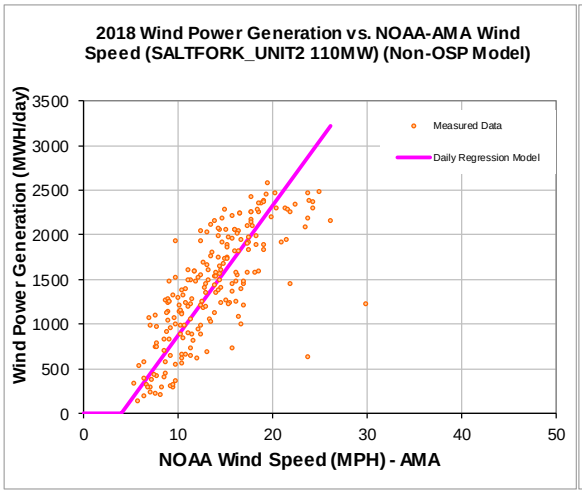
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	19.53
Left Slope (MWh/mph-day)	101.69
RMSE (MWh/day)	404.75
R2	0.57
CV-RMSE	28.8%
Daily Maximum (MWh/day)	2640

OSP Model:

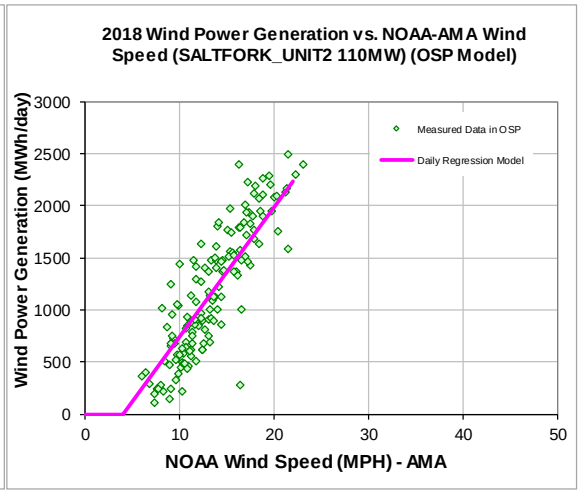
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-698.99
Left Slope (MWh/mph-day)	139.44
RMSE (MWh/day)	302.10
R2	0.75
CV-RMSE	25.9%
Daily Maximum (MWh/day)	2640

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
482,330	474,488

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,147	1,168

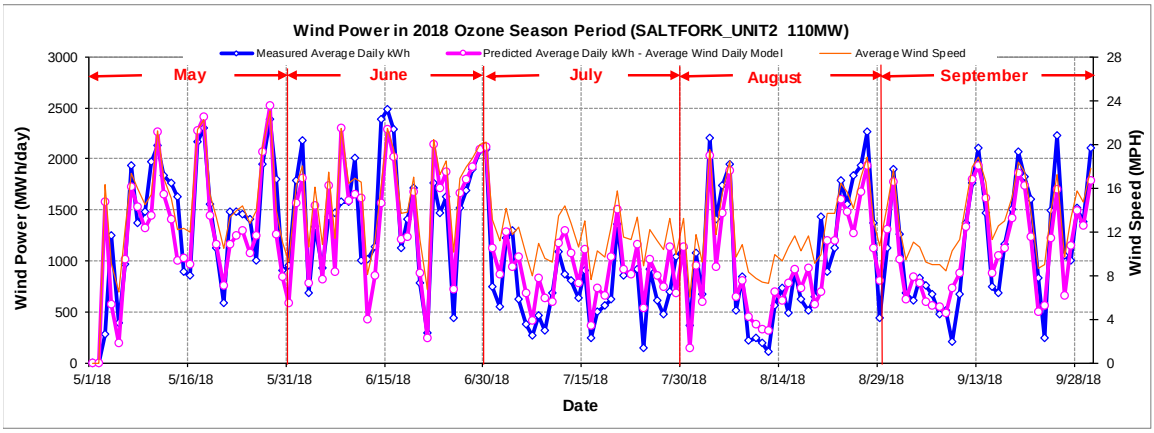
Figure A-383:SALTFORK_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	44,504	40,699	8.55%	54%	50%
Feb-18	28	13.78	43,473	39,768	8.52%	59%	54%
Mar-18	31	14.64	48,285	46,762	3.15%	59%	57%
Apr-18	30	17.03	47,344	52,511	-10.91%	60%	66%
May-18	31	14.66	41,210	38,990	5.39%	50%	48%
Jun-18	30	15.70	45,108	44,694	0.92%	57%	56%
Jul-18	31	11.32	22,092	27,274	-23.46%	27%	33%
Aug-18	31	12.42	33,196	31,997	3.61%	41%	39%
Sep-18	30	13.00	34,748	33,399	3.88%	44%	42%
Oct-18	31	12.69	35,630	40,614	-13.99%	44%	50%
Nov-18	30	12.53	39,899	38,807	2.74%	50%	49%
Dec-18	31	12.16	39,000	38,519	1.23%	48%	47%
Total	365	13.53	474,488	474,035	0.10%	49%	49%
Total in OSP (07/15-09/15)	151	13.39	176,354	176,354	0.00%	44%	44%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

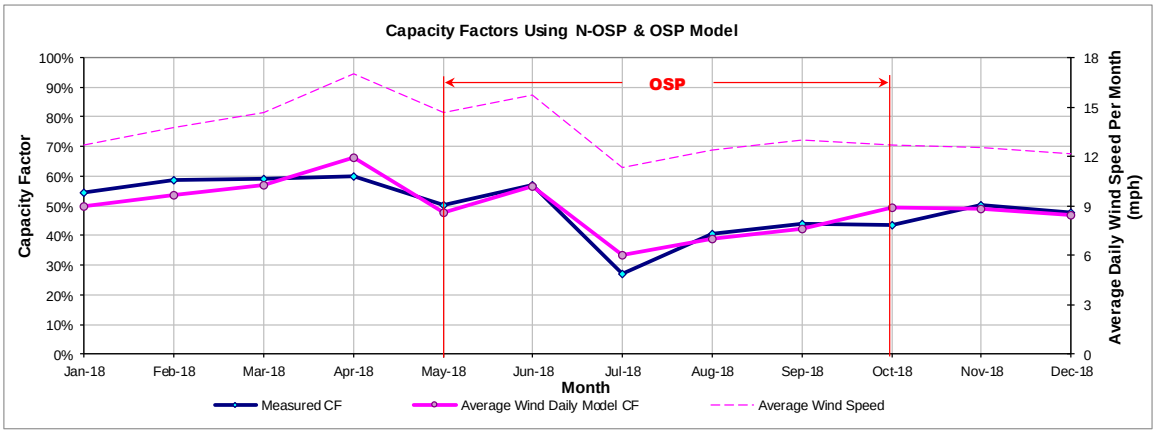


Figure A-384:SALTFORK_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.92 San Roman Wind 1

A.92.1 San Roman Wind 1 - SANROMAN_WIND_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SANROMAN_WIND_1	Wind	-	CAMERON	Pioneer Green	San Roman Wind 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
31 Acciona 3 MW	ERCOT	S	Feb-17	Coastal	CRP	95.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

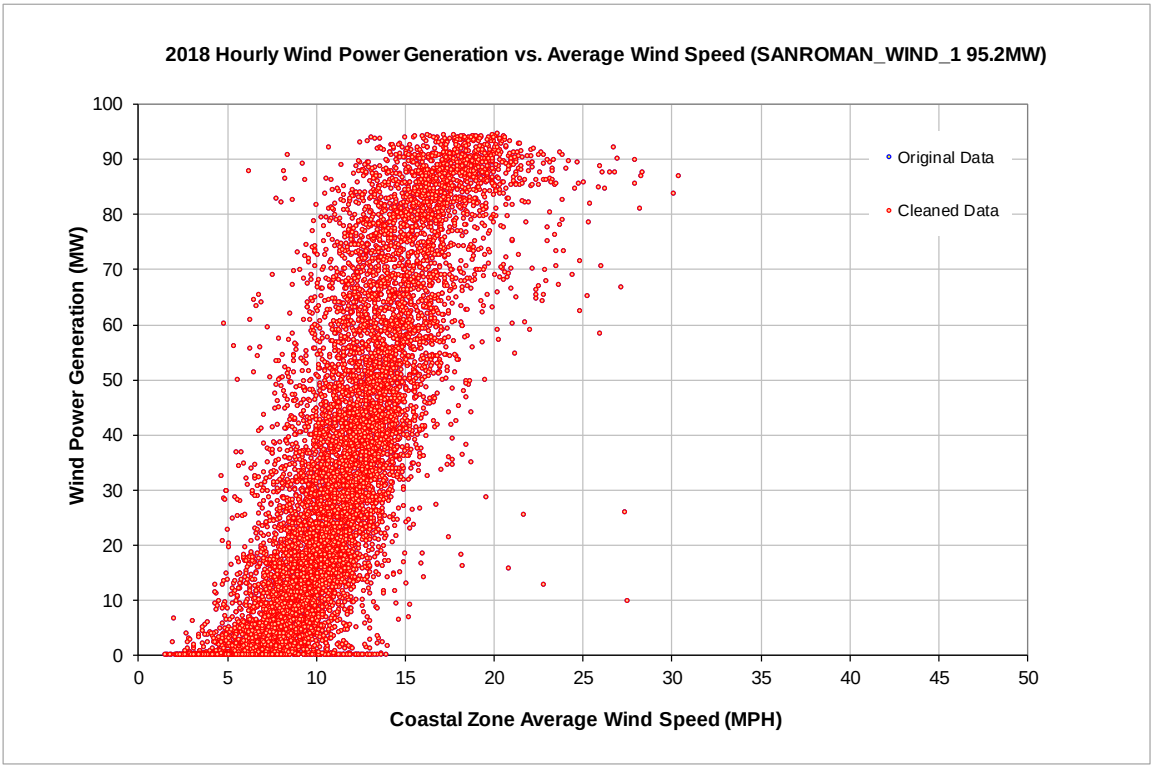


Figure A-385:SANROMAN_WIND_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

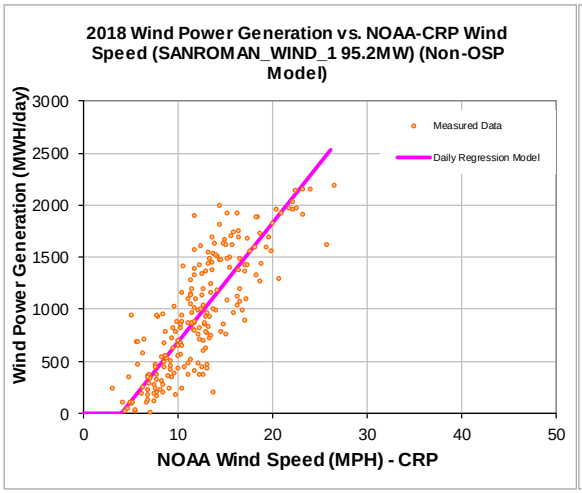
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-316.67
Left Slope (MWh/mph-day)	103.03
RMSE (MWh/day)	320.12
R2	0.68
CV-RMSE	33.9%
Daily Maximum (MWh/day)	2285

OSP Model:

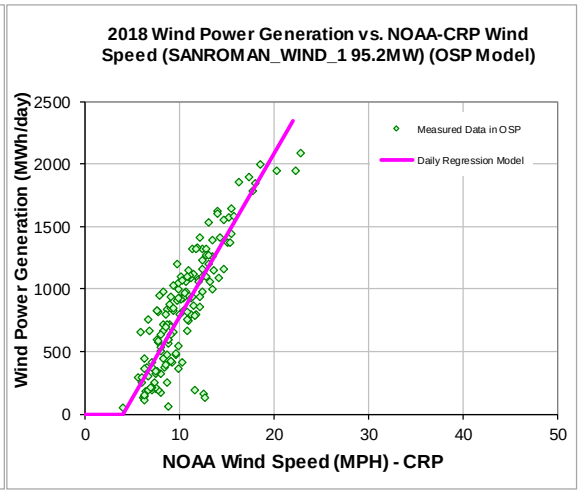
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-455.25
Left Slope (MWh/mph-day)	124.06
RMSE (MWh/day)	242.07
R2	0.74
CV-RMSE	29.0%
Daily Maximum (MWh/day)	2285

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
324,113	328,341

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
806	836

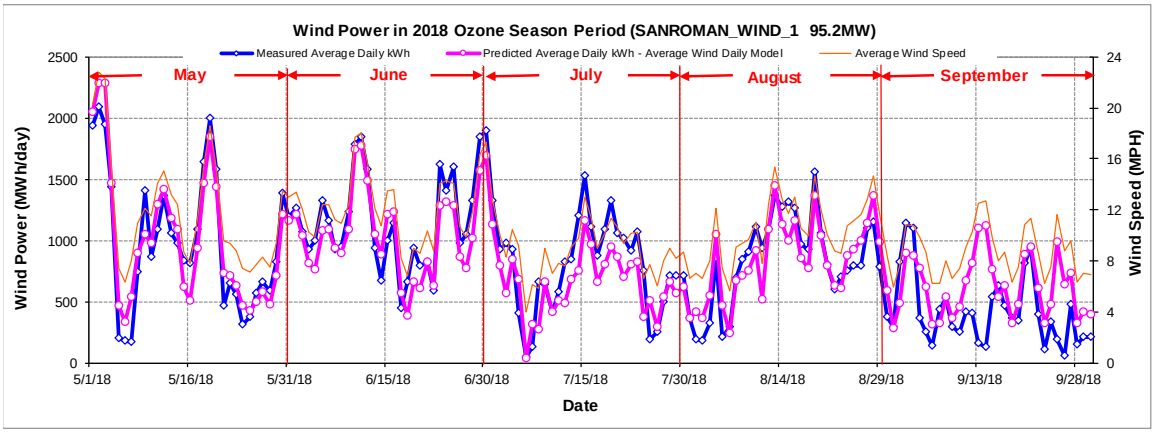
Figure A-386:SANROMAN_WIND_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	28,509	25,640	10.07%	40%	36%
Feb-18	28	14.08	31,976	31,634	1.07%	50%	49%
Mar-18	31	13.69	31,583	33,921	-7.40%	45%	48%
Apr-18	30	14.08	29,717	33,971	-14.32%	43%	50%
May-18	31	11.95	31,001	31,713	-2.30%	44%	45%
Jun-18	30	12.21	34,724	31,785	8.46%	51%	46%
Jul-18	31	8.81	24,056	19,771	17.81%	34%	28%
Aug-18	31	10.35	25,462	25,685	-0.88%	36%	36%
Sep-18	30	8.73	12,645	18,815	-48.79%	18%	27%
Oct-18	31	10.87	27,036	24,900	7.90%	38%	35%
Nov-18	30	10.83	23,466	23,990	-2.23%	34%	35%
Dec-18	31	11.29	28,166	26,232	6.87%	40%	37%
Total	365	11.48	328,341	328,059	0.09%	39%	39%
Total in OSP (07/15-09/15)	153	10.41	127,888	127,770	0.09%	37%	37%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

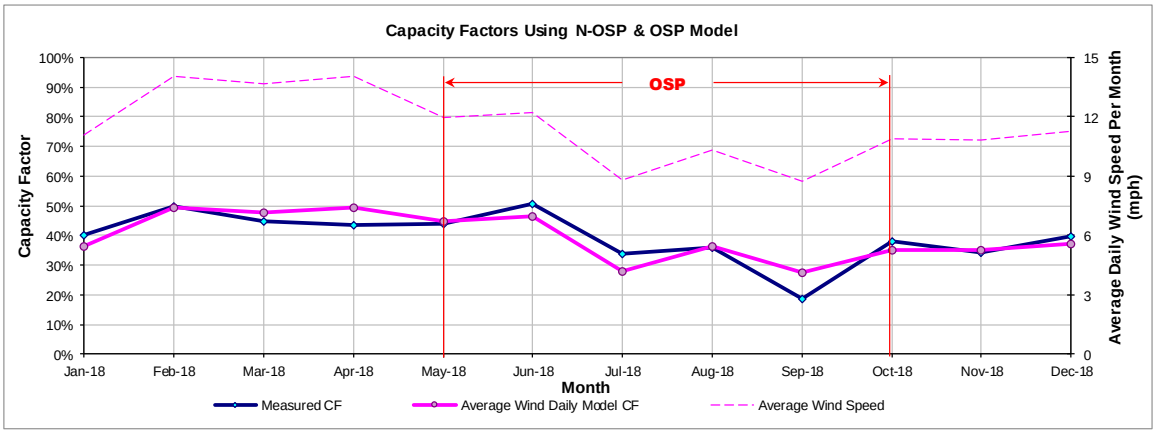


Figure A-387:SANROMAN_WIND_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.93 Sand Bluff Wind Farm

A.93.1 Sand Bluff Wind Farm - MCDLD_SBW1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
MCDLD_SBW1	Wind	Abilene	STERLING	E.On Climate & Renewables	Sand Bluff Wind Farm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
45 Gamesa 2 MW	ERCOT	W	Dec-06	West	ABI	90

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

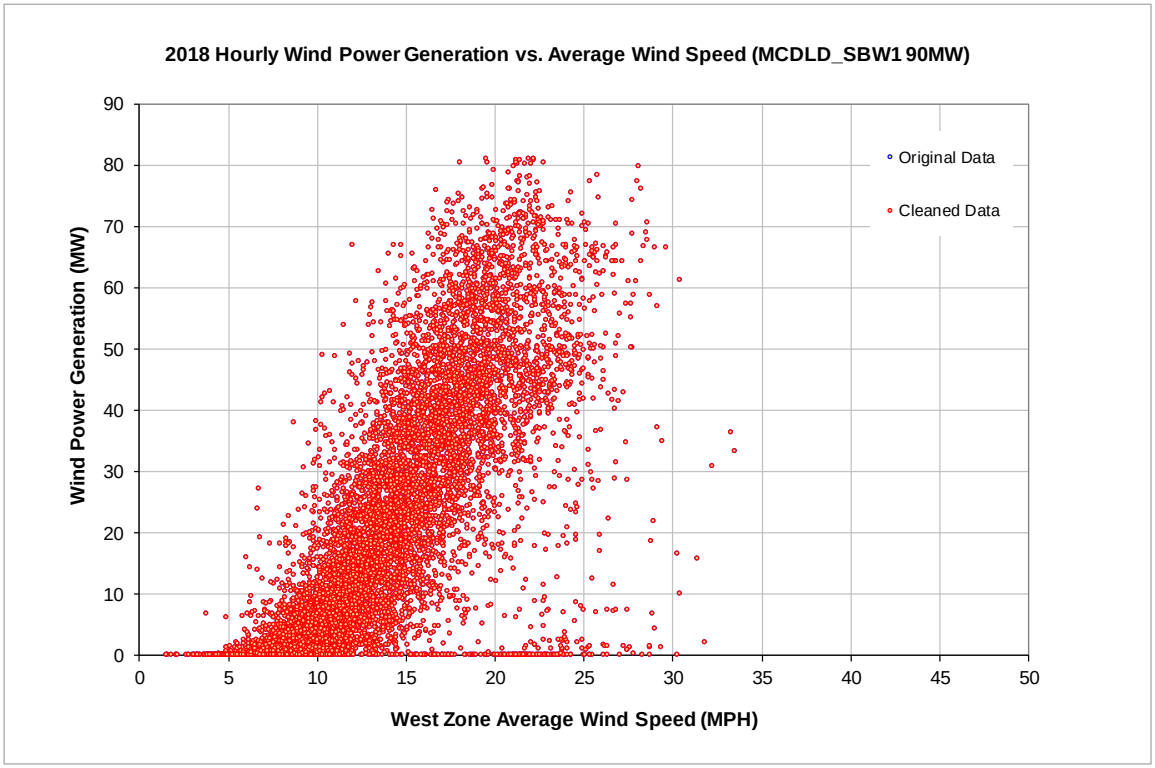


Figure A-388:MCDLD_SBW1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

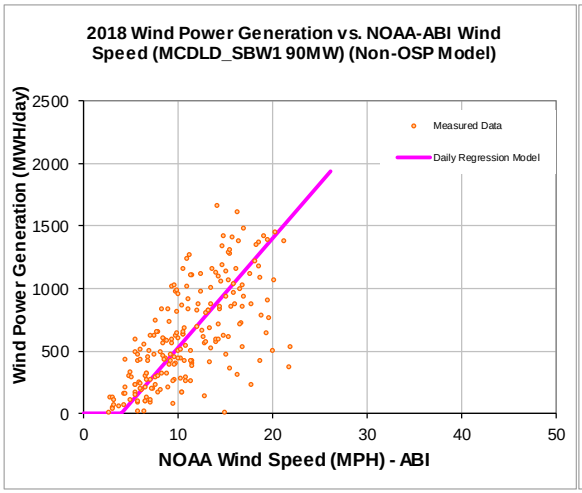
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-26.12
Left Slope (MWh/mph-day)	57.95
RMSE (MWh/day)	291.70
R2	0.45
CV-RMSE	47.9%
Daily Maximum (MWh/day)	2160

OSP Model:

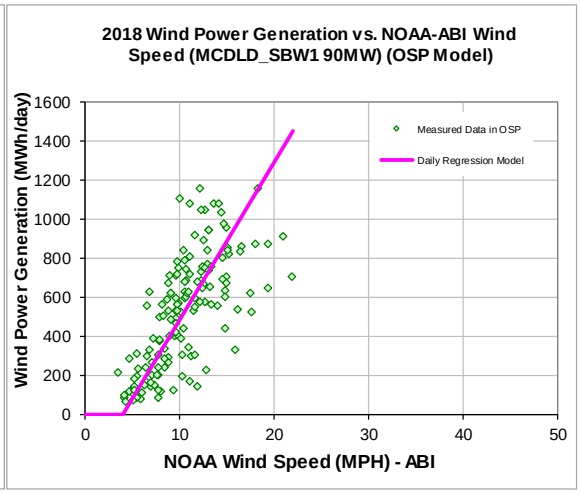
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-54.70
Left Slope (MWh/mph-day)	54.74
RMSE (MWh/day)	206.06
R2	0.49
CV-RMSE	40.0%
Daily Maximum (MWh/day)	2160

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
223,198	204,954

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
520	515

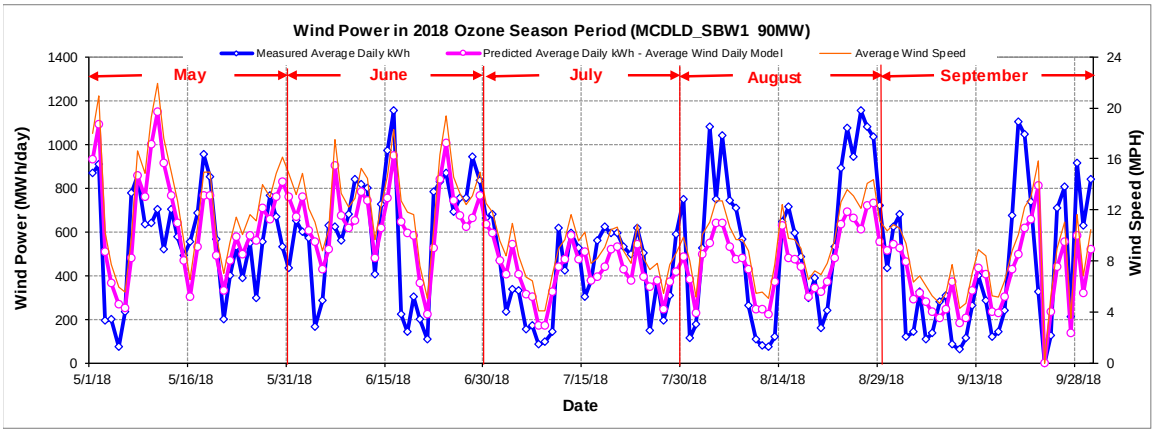
Figure A-389:MCDLD_SBW1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.02	17,752	16,534	6.86%	27%	25%
Feb-18	28	11.00	16,409	17,112	-4.28%	27%	28%
Mar-18	31	11.92	16,661	20,612	-23.71%	25%	31%
Apr-18	30	13.18	14,624	22,123	-51.28%	23%	34%
May-18	31	12.78	17,260	19,994	-15.84%	26%	30%
Jun-18	30	12.90	18,527	19,552	-5.53%	29%	30%
Jul-18	31	8.52	12,473	12,764	-2.33%	19%	19%
Aug-18	31	9.85	18,183	15,017	17.41%	27%	22%
Sep-18	30	7.93	11,886	11,003	7.43%	18%	17%
Oct-18	31	9.35	18,255	15,993	12.40%	27%	24%
Nov-18	30	10.05	20,587	16,685	18.95%	32%	26%
Dec-18	31	10.23	22,337	17,567	21.36%	33%	26%
Total	365	10.73	204,954	204,954	0.00%	26%	26%
Total in OSP (07/15-09/15)	152	10.41	78,330	78,330	0.00%	24%	24%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

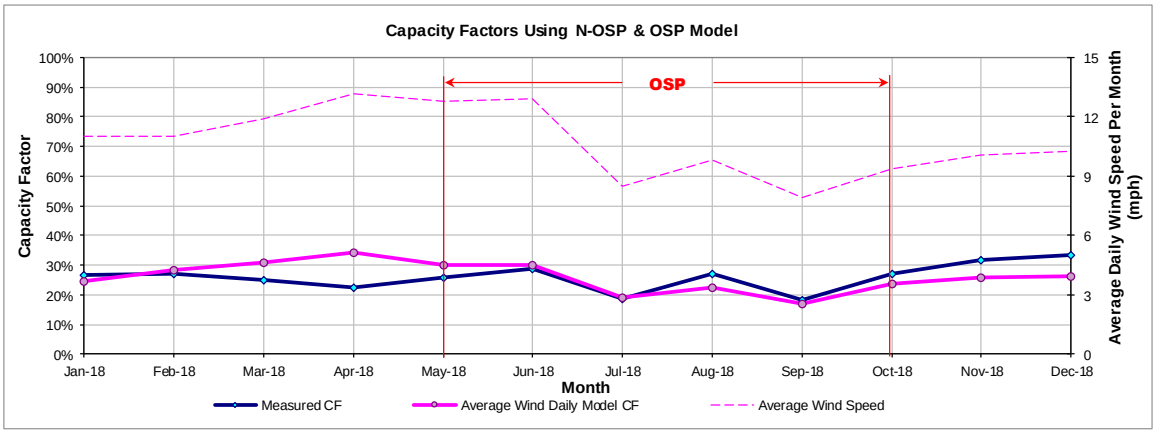


Figure A-390:MCDLD_SBW1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.94 Santa Rita

A.94.1 Santa Rita - HICKMAN_G1_J01

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HICKMAN_G1_J01	Wind	Reagan	REAGAN	Invenergy	HICKMAN

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
61 GE 2.5 MW	ERCOT	W	May-18	West	MAF	152.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

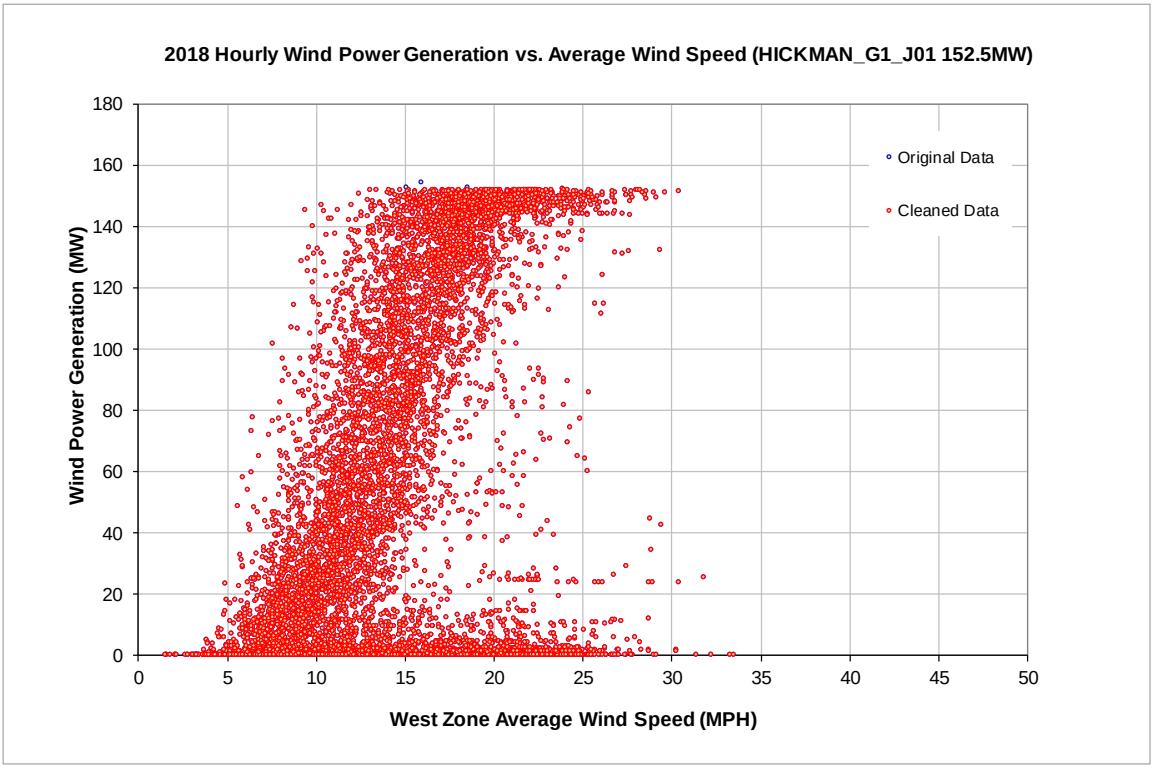


Figure A-391:HICKMAN_G1_J01 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

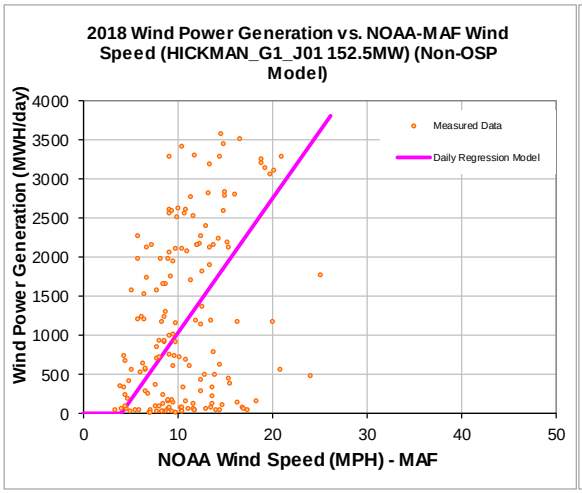
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	238.16
Left Slope (MWh/mph-day)	85.59
RMSE (MWh/day)	1028.85
R2	0.11
CV-RMSE	89.2%
Daily Maximum (MWh/day)	3660

OSP Model:

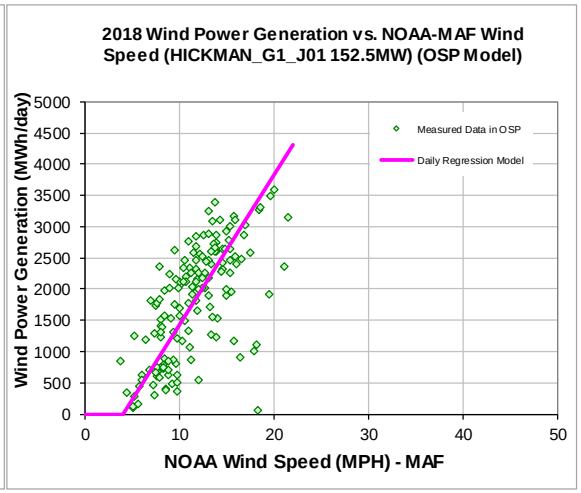
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-13.15
Left Slope (MWh/mph-day)	157.07
RMSE (MWh/day)	673.77
R2	0.42
CV-RMSE	37.5%
Daily Maximum (MWh/day)	3660

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
489,672	463,910

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,647	1,795

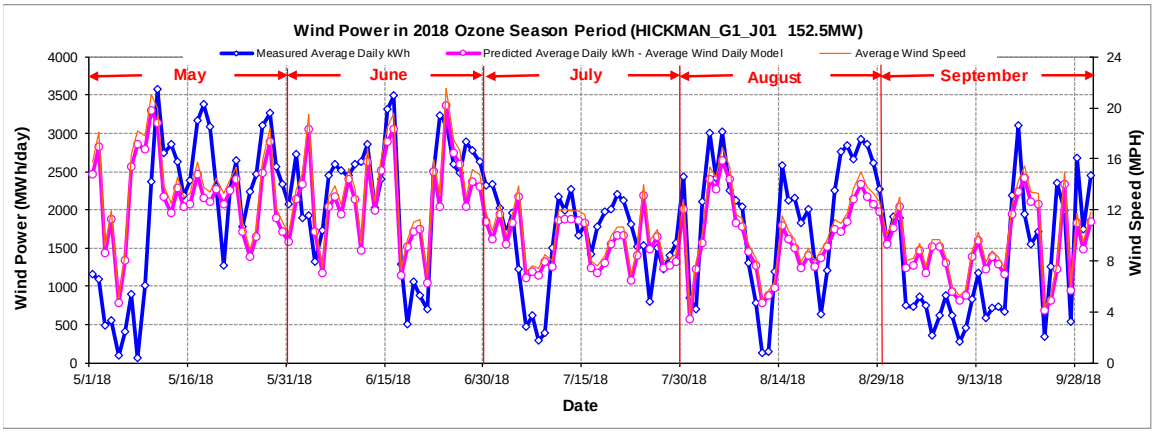
Figure A-392:HICKMAN_G1_J01 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (MAF) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	9.70	5,176	29,905	-477.78%	5%	26%
Feb-18	28	10.86	3,551	22,188	-524.76%	3%	22%
Mar-18	31	11.95	720	10,086	-1301.05%	1%	9%
Apr-18	30	15.09	14,642	26,005	-77.60%	13%	24%
May-18	31	13.80	62,312	66,772	-7.16%	55%	59%
Jun-18	30	13.77	67,790	64,488	4.87%	62%	59%
Jul-18	31	9.76	48,378	47,119	2.60%	43%	42%
Aug-18	31	10.84	59,570	52,361	12.10%	53%	46%
Sep-18	30	9.41	36,640	43,951	-19.95%	33%	40%
Oct-18	31	10.68	54,203	35,716	34.11%	48%	31%
Nov-18	30	9.55	52,781	31,665	40.01%	48%	29%
Dec-18	31	9.90	58,145	33,654	42.12%	51%	30%
Total	365	11.09	463,910	463,910	0.00%	35%	35%
Total in OSP (07/15-09/15)	153	11.51	274,691	274,691	0.00%	49%	49%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

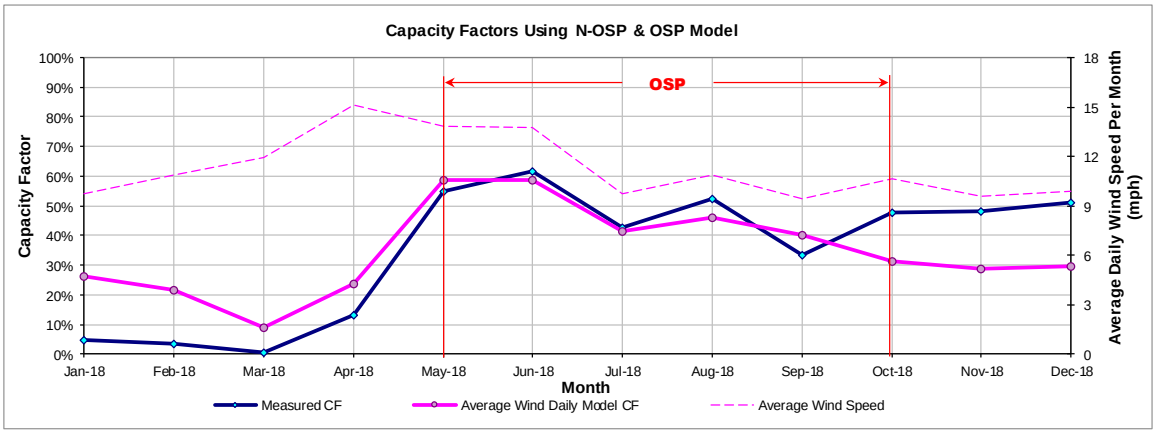


Figure A-393:HICKMAN_G1_J01 - Predicted Wind Power and Capacity Factor Using Daily Models

A.94.2 Santa Rita - HICKMAN_G2_J01

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
HICKMAN_G2_J01	Wind	Reagan	REAGAN	Invenergy	HICKMAN

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
59 GE 2.5 MW	ERCOT	W	May-18	West	MAF	147.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

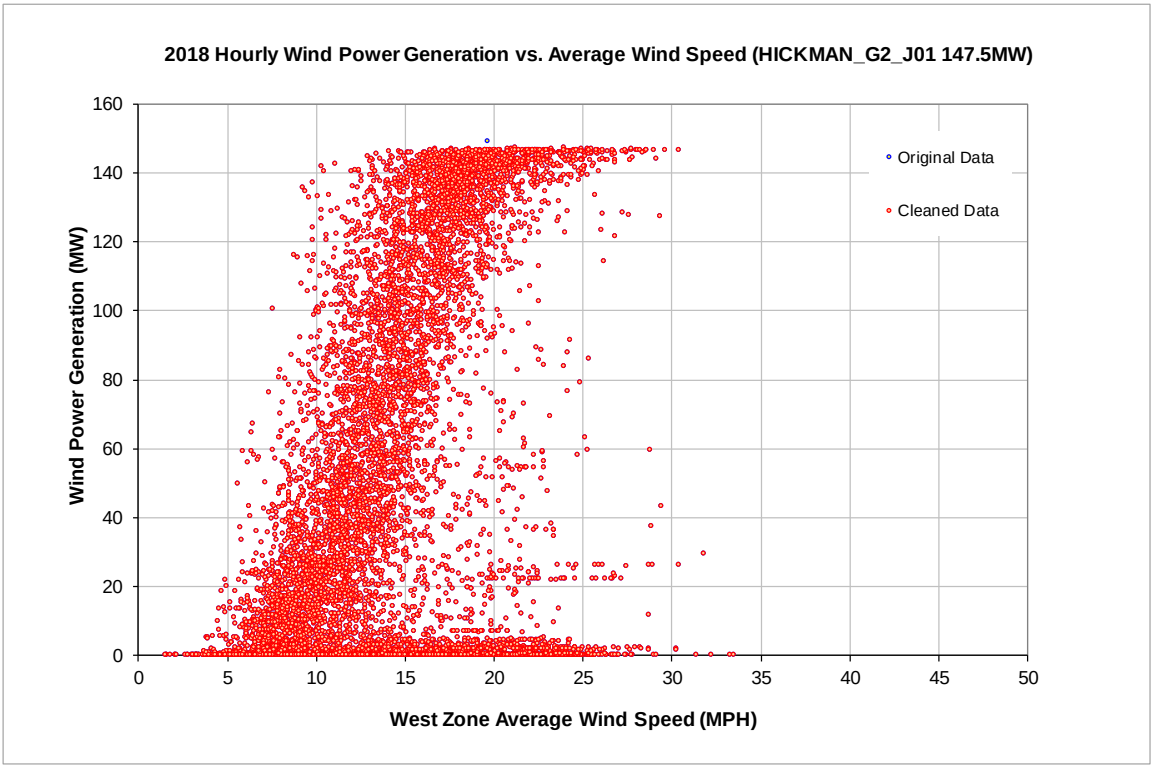


Figure A-394:HICKMAN_G2_J01 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

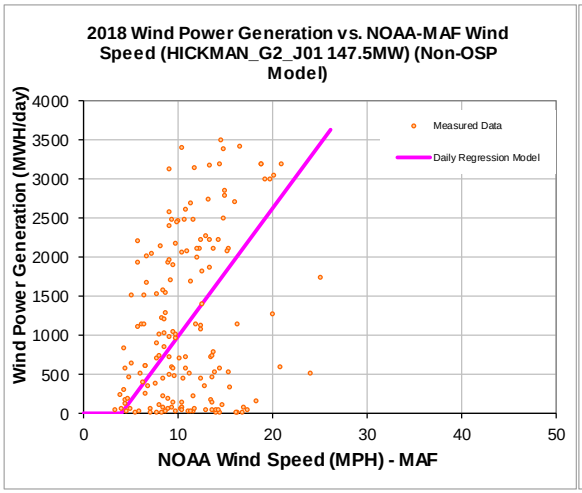
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	333.40
Left Slope (MWh/mph-day)	73.29
RMSE (MWh/day)	1006.86
R2	0.09
CV-RMSE	89.2%
Daily Maximum (MWh/day)	3540

OSP Model:

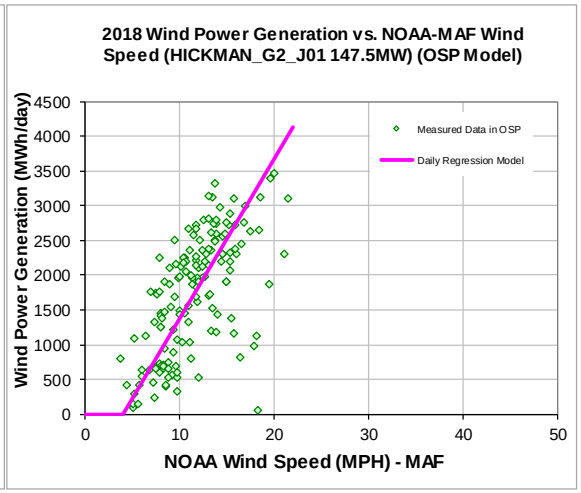
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	0.68
Left Slope (MWh/mph-day)	149.56
RMSE (MWh/day)	657.97
R2	0.41
CV-RMSE	38.2%
Daily Maximum (MWh/day)	3540

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
473,061	451,041

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,581	1,723

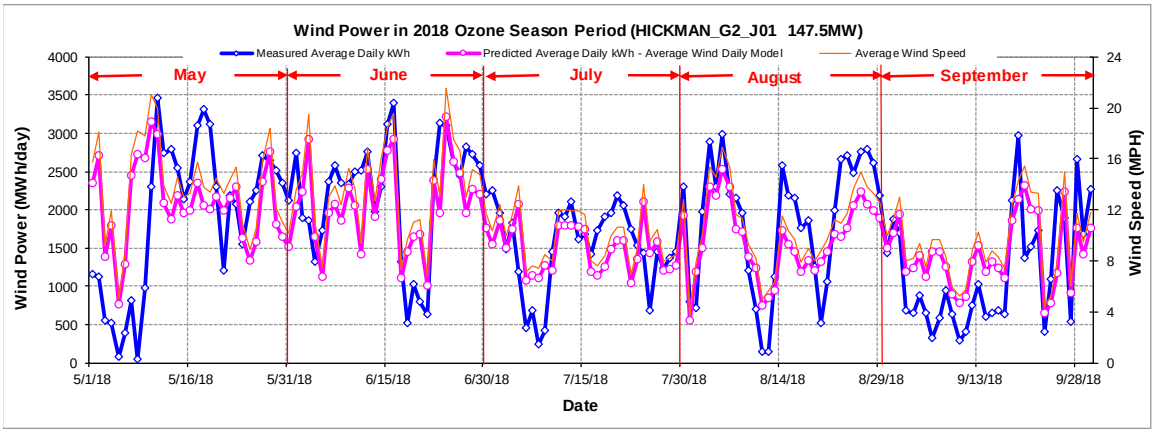
Figure A-395:HICKMAN_G2_J01 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (MAF) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	9.86	3,826	25,343	-562.43%	3%	23%
Feb-18	28	11.24	6,771	24,297	-258.85%	7%	25%
Mar-18	31	12.52	786	13,760	-1649.90%	1%	13%
Apr-18	30	14.88	14,442	25,633	-77.49%	14%	24%
May-18	31	13.80	59,484	63,990	-7.57%	54%	58%
Jun-18	30	13.77	65,968	61,802	6.32%	62%	58%
Jul-18	31	9.76	46,366	45,276	2.35%	42%	41%
Aug-18	31	10.84	57,266	50,268	12.22%	52%	46%
Sep-18	30	9.41	34,498	42,247	-22.46%	32%	40%
Oct-18	31	10.68	53,194	34,596	34.96%	48%	32%
Nov-18	30	9.55	51,823	30,999	40.18%	49%	29%
Dec-18	31	9.90	56,617	32,831	42.01%	52%	30%
Total	365	11.17	451,041	451,041	0.00%	35%	35%
Total in OSP (07/15-09/15)	153	11.51	263,582	263,582	0.00%	49%	49%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

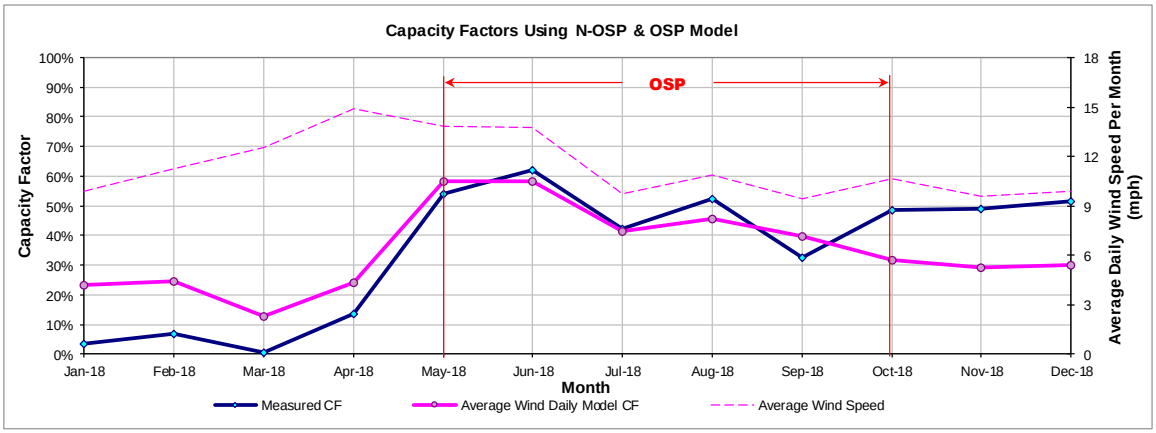


Figure A-396:HICKMAN_G2_J01 - Predicted Wind Power and Capacity Factor Using Daily Models

A.95 Senate Wind Farm

A.95.1 Senate Wind Farm - SENATEWD_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SENATEWD_UNIT1	Wind	-	JACK	Liberty Power	Senate Wind Project

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
75 Gamesa 2 MW	ERCOT	N	Dec-12	North	ABI	150

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

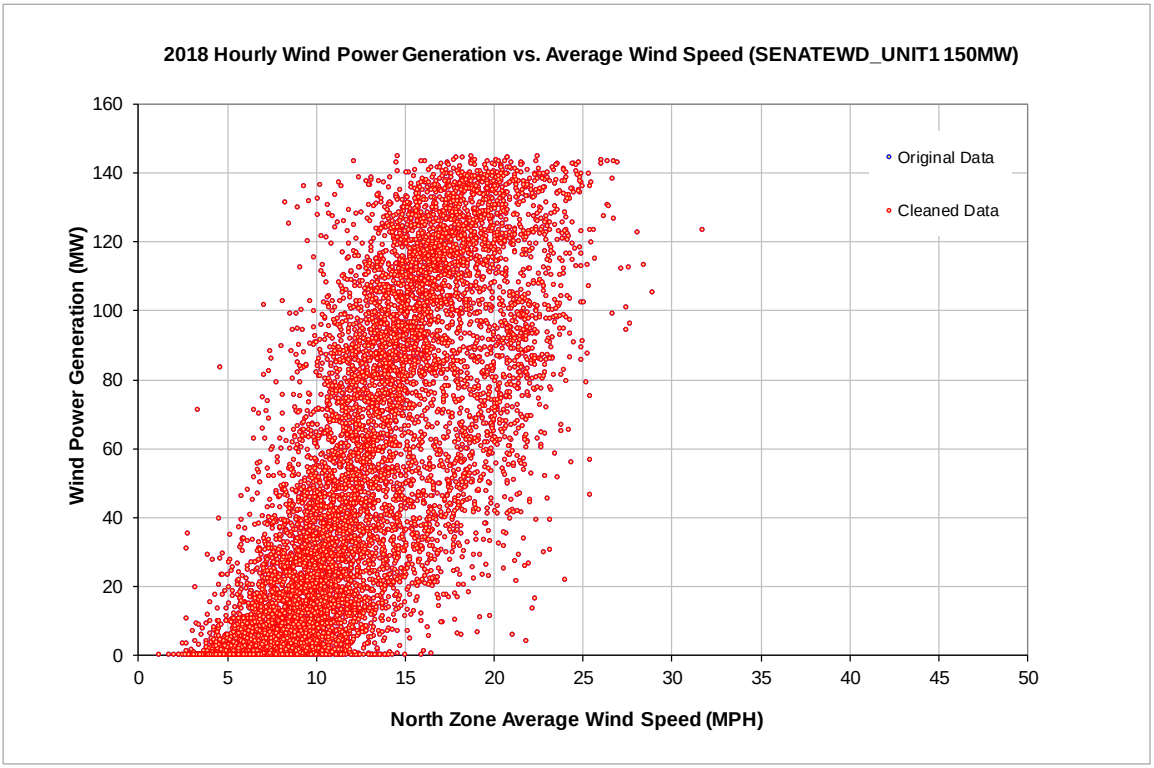


Figure A-397:SENATEWD_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

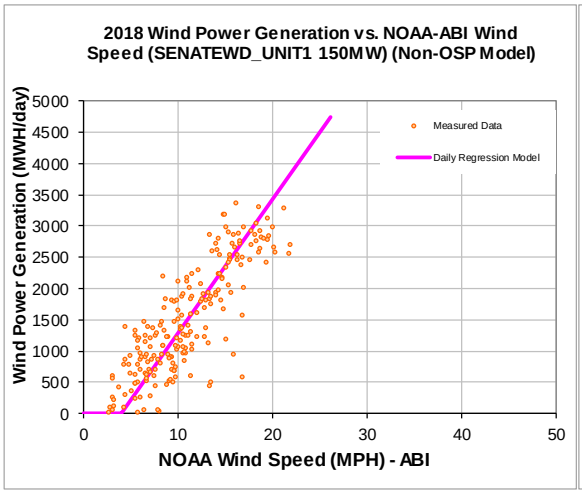
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-240.36
Left Slope (MWh/mph-day)	158.06
RMSE (MWh/day)	480.97
R2	0.70
CV-RMSE	32.2%
Daily Maximum (MWh/day)	3600

OSP Model:

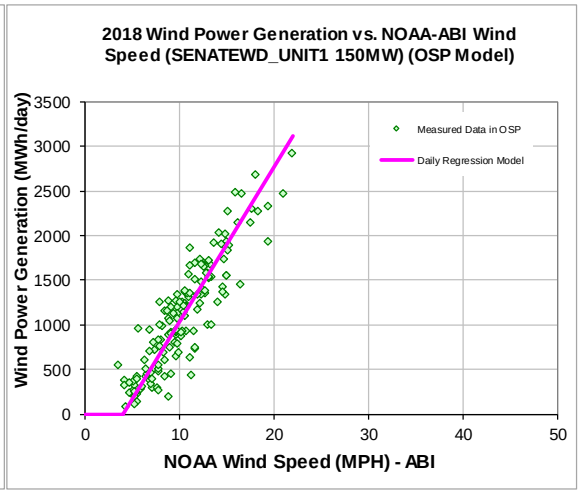
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-454.19
Left Slope (MWh/mph-day)	150.39
RMSE (MWh/day)	271.35
R2	0.81
CV-RMSE	24.4%
Daily Maximum (MWh/day)	3600

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
527,847	484,864

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,126	1,110

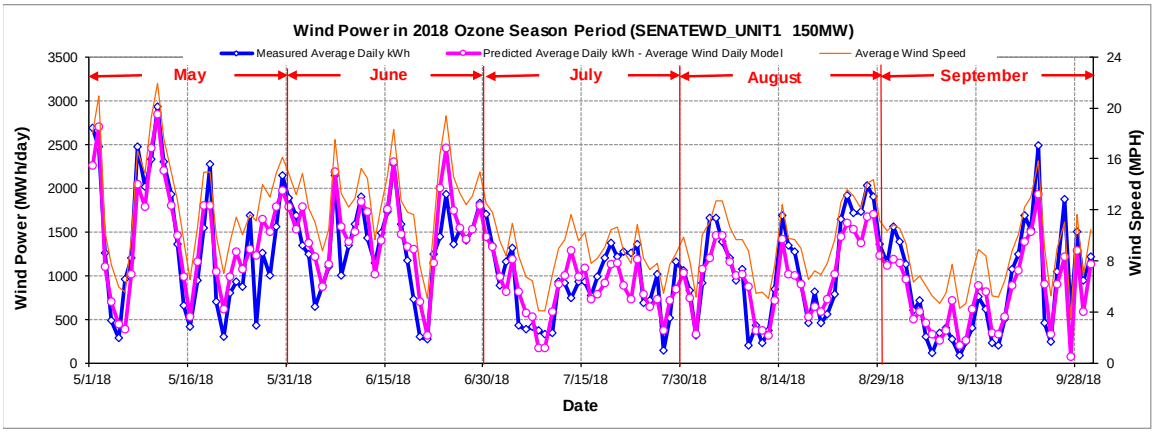
Figure A-398:SENATEWD_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	56,286	46,296	17.75%	50%	41%
Feb-18	28	11.00	37,793	41,939	-10.97%	37%	42%
Mar-18	31	11.92	47,517	50,979	-7.28%	43%	46%
Apr-18	30	13.18	48,299	55,269	-14.43%	45%	51%
May-18	31	12.78	43,894	45,508	-3.68%	39%	41%
Jun-18	30	12.90	40,806	44,596	-9.29%	38%	41%
Jul-18	31	8.52	26,829	25,643	4.42%	24%	23%
Aug-18	31	9.85	34,355	31,834	7.34%	31%	29%
Sep-18	30	7.97	24,010	22,312	7.07%	22%	21%
Oct-18	31	9.40	33,299	37,375	-12.24%	30%	33%
Nov-18	30	10.05	45,053	40,438	10.24%	42%	37%
Dec-18	31	10.23	46,722	42,674	8.67%	42%	38%
Total	365	10.73	484,864	484,864	0.00%	37%	37%
Total in OSP (07/15-09/15)	153	10.40	169,894	169,894	0.00%	31%	31%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

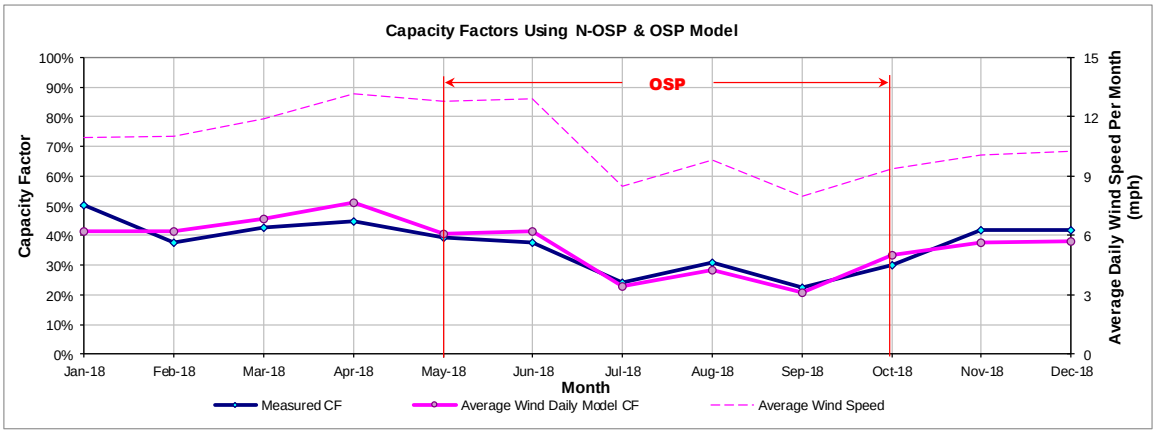


Figure A-399:SENATEWD_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.96 Sendero Wind Energy Project

A.96.1 Sendero Wind Energy Project - EXGNSND_WIND_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
EXGNSND_WIND_1	Wind	-	JIM HOGG	Exelon	Sendero Wind Energy Project

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
39 GE 2 MW	ERCOT	S	Dec-15	South	CRP	76

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

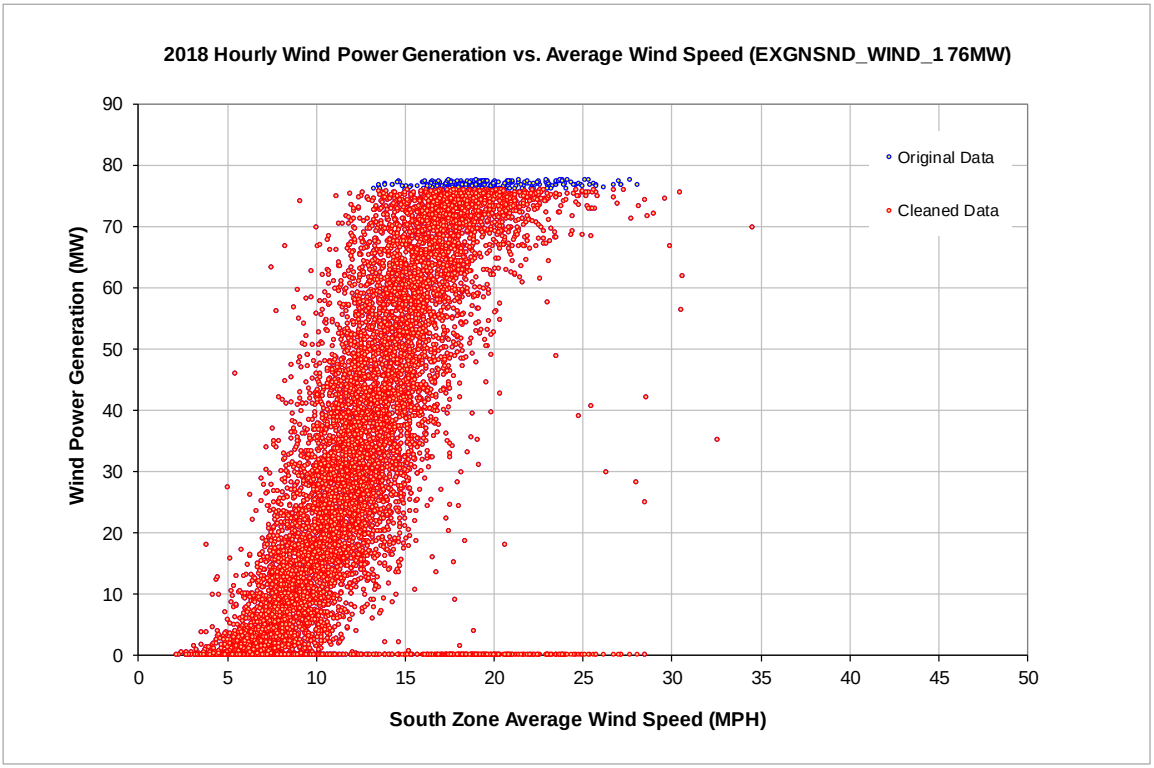


Figure A-400:EXGNSND_WIND_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

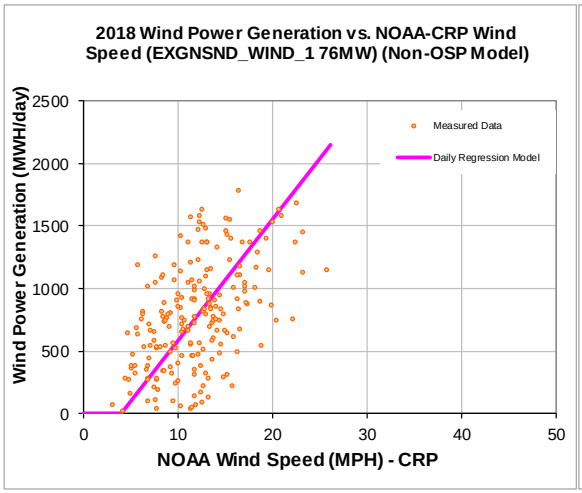
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	194.40
Left Slope (MWh/mph-day)	48.60
RMSE (MWh/day)	361.87
R2	0.25
CV-RMSE	46.6%
Daily Maximum (MWh/day)	1824

OSP Model:

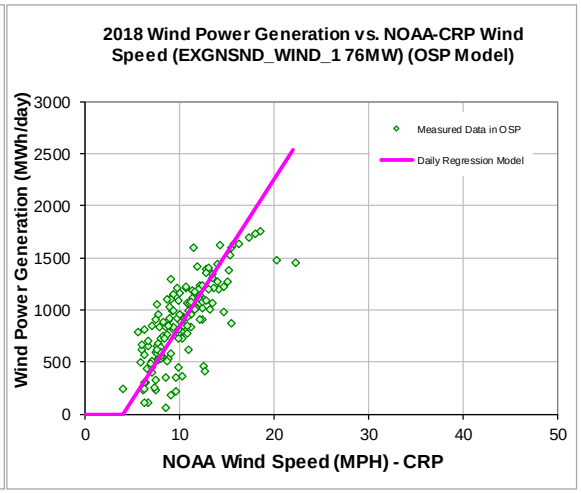
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-85.62
Left Slope (MWh/mph-day)	94.34
RMSE (MWh/day)	244.39
R2	0.59
CV-RMSE	27.7%
Daily Maximum (MWh/day)	1824

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
301,589	291,792

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
874	884

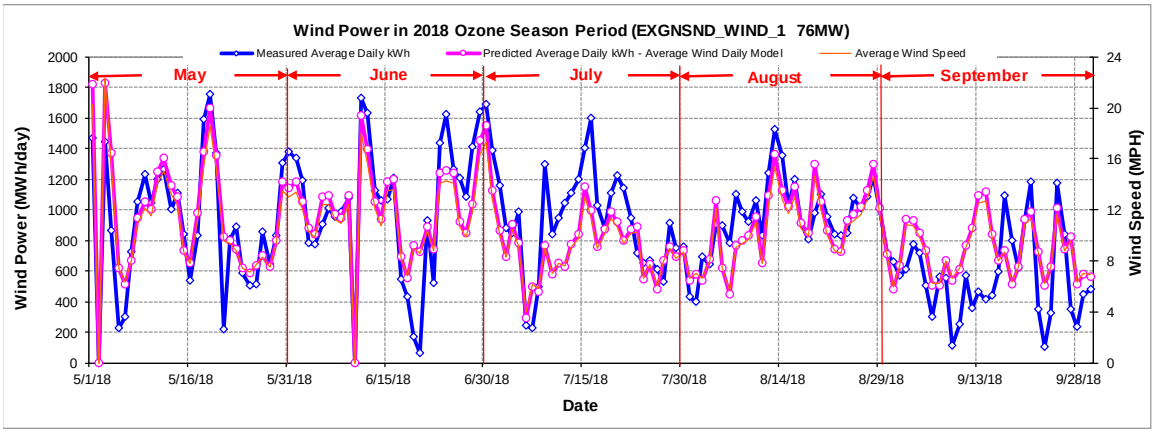
Figure A-401:EXGNSND_WIND_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	23,870	22,752	4.68%	42%	40%
Feb-18	28	13.15	16,162	20,842	-28.96%	32%	41%
Mar-18	31	13.69	27,615	26,658	3.47%	49%	47%
Apr-18	30	13.80	27,409	25,089	8.46%	50%	46%
May-18	31	11.58	28,377	30,021	-5.79%	50%	53%
Jun-18	30	12.02	30,846	30,398	1.45%	56%	56%
Jul-18	31	8.81	28,001	23,112	17.46%	50%	41%
Aug-18	31	10.35	29,550	27,609	6.57%	52%	49%
Sep-18	30	8.73	16,688	22,125	-32.58%	30%	40%
Oct-18	31	10.87	24,899	22,402	10.03%	44%	40%
Nov-18	30	10.89	17,437	20,984	-20.34%	32%	38%
Dec-18	31	10.40	20,939	19,603	6.38%	37%	35%
Total	365	11.25	291,792	291,594	0.07%	44%	44%
Total in OSP (07/15-09/15)	151	10.28	133,461	133,264	0.15%	48%	48%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

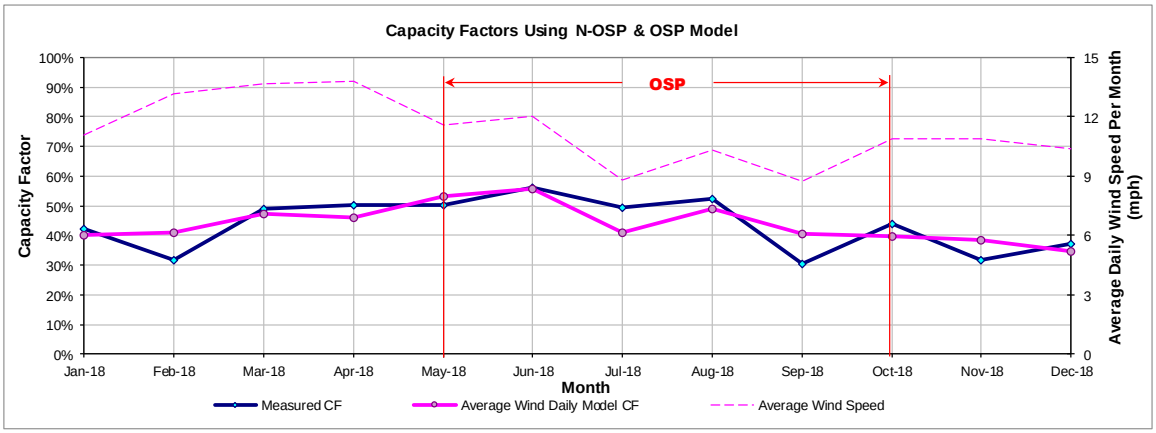


Figure A-402:EXGNSND_WIND_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.97 Shannon Wind

A.97.1 Shannon Wind - SHANNONW_UNIT_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SHANNONW_UNIT_1	Wind	-	CLAY	Alterra Power/Starwood Energy	Shannon Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
119 GE 1.7 MW	ERCOT	W	Dec-15	West	ABI	204.1

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

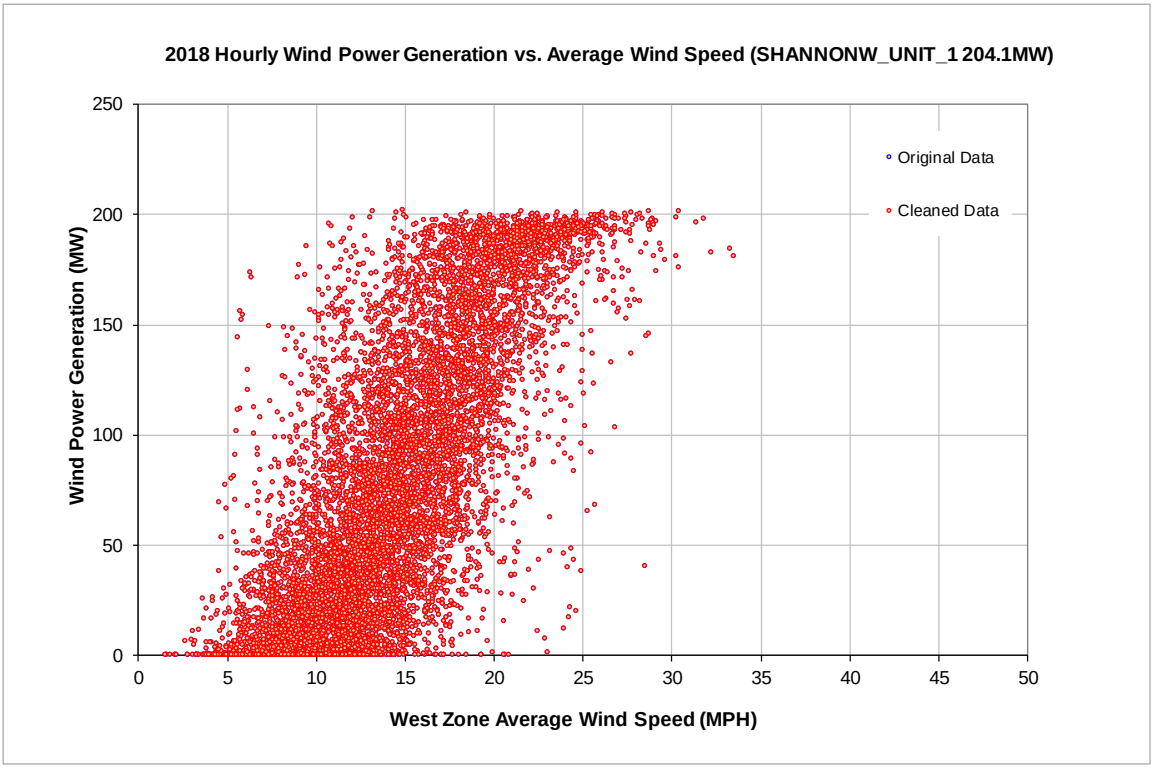


Figure A-403:SHANNONW_UNIT_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

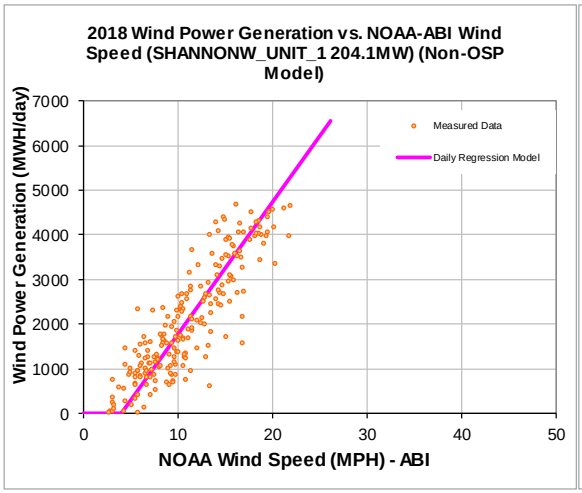
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-584.10
Left Slope (MWh/mph-day)	241.76
RMSE (MWh/day)	603.66
R2	0.77
CV-RMSE	29.3%
Daily Maximum (MWh/day)	4898

OSP Model:

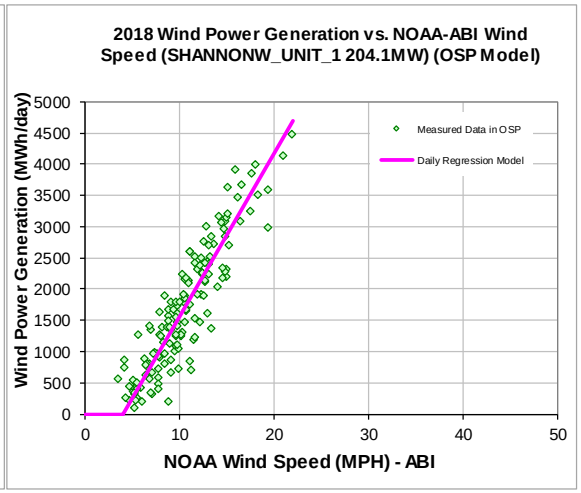
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-867.22
Left Slope (MWh/mph-day)	243.70
RMSE (MWh/day)	417.85
R2	0.82
CV-RMSE	25.0%
Daily Maximum (MWh/day)	4898

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
756,950	692,618

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,693	1,668

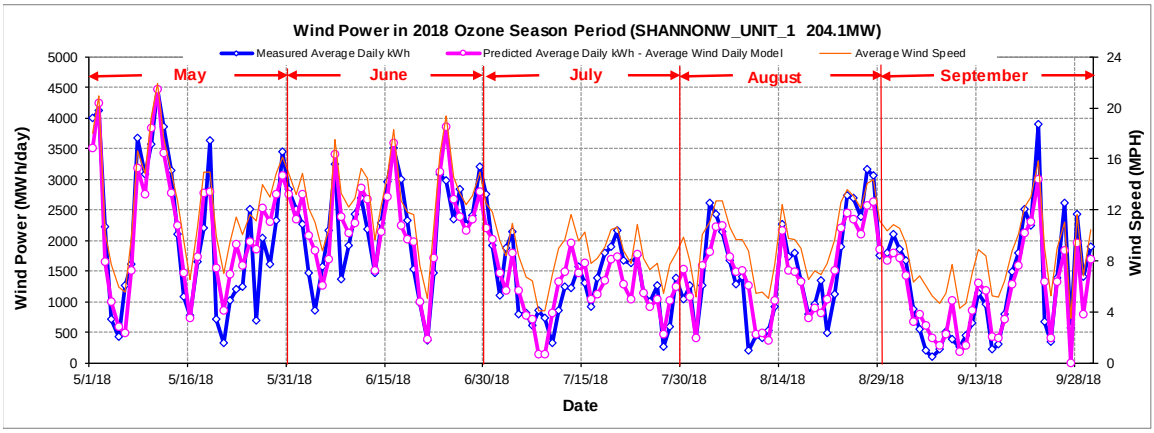
Figure A-404:SHANNONW_UNIT_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	74,169	64,100	13.58%	49%	42%
Feb-18	28	11.00	51,557	58,086	-12.66%	38%	42%
Mar-18	31	11.92	70,995	71,262	-0.38%	47%	47%
Apr-18	30	13.18	75,437	78,042	-3.45%	51%	53%
May-18	31	12.78	67,424	69,673	-3.34%	44%	46%
Jun-18	30	12.90	66,232	68,327	-3.16%	45%	46%
Jul-18	31	8.52	38,348	37,484	2.25%	25%	25%
Aug-18	31	9.85	48,959	47,516	2.95%	32%	31%
Sep-18	30	7.97	34,255	32,232	5.91%	23%	22%
Oct-18	31	9.35	44,204	51,992	-17.62%	29%	34%
Nov-18	30	10.05	60,768	55,357	8.90%	41%	38%
Dec-18	31	10.23	60,271	58,560	2.84%	40%	39%
Total	365	10.72	692,618	692,632	0.00%	39%	39%
Total in OSP (07/15-09/15)	153	10.40	255,218	255,232	-0.01%	34%	34%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

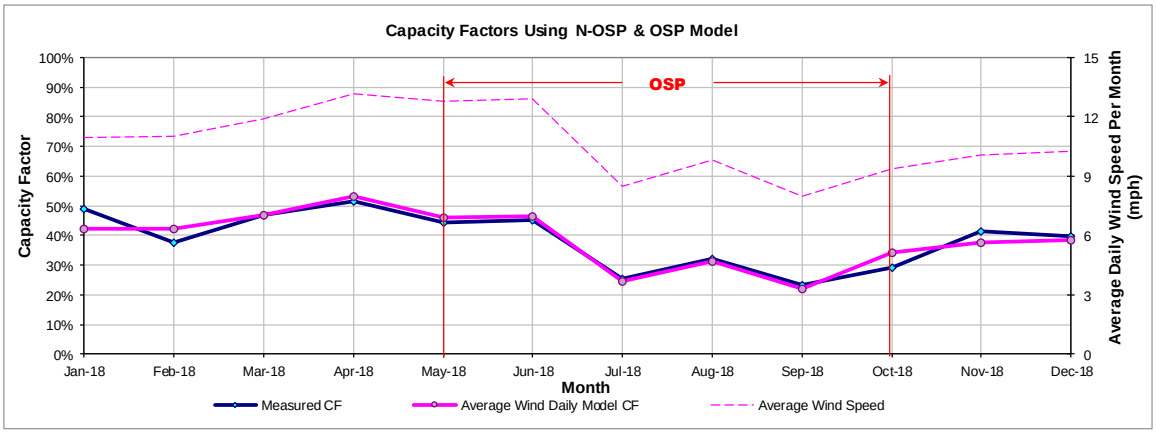


Figure A-405:SHANNONW_UNIT_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.98 Sherbino 1 Wind Farm

A.98.1 Sherbino 1 Wind Farm - KEO_KEO_SM1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
KEO_KEO_SM1	Wind	-	PECOS	BP Alternative Energy	Sherbino Mesa Wind Farm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 Vestas 3 MW	ERCOT	W	Sep-08	West	FST	150

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

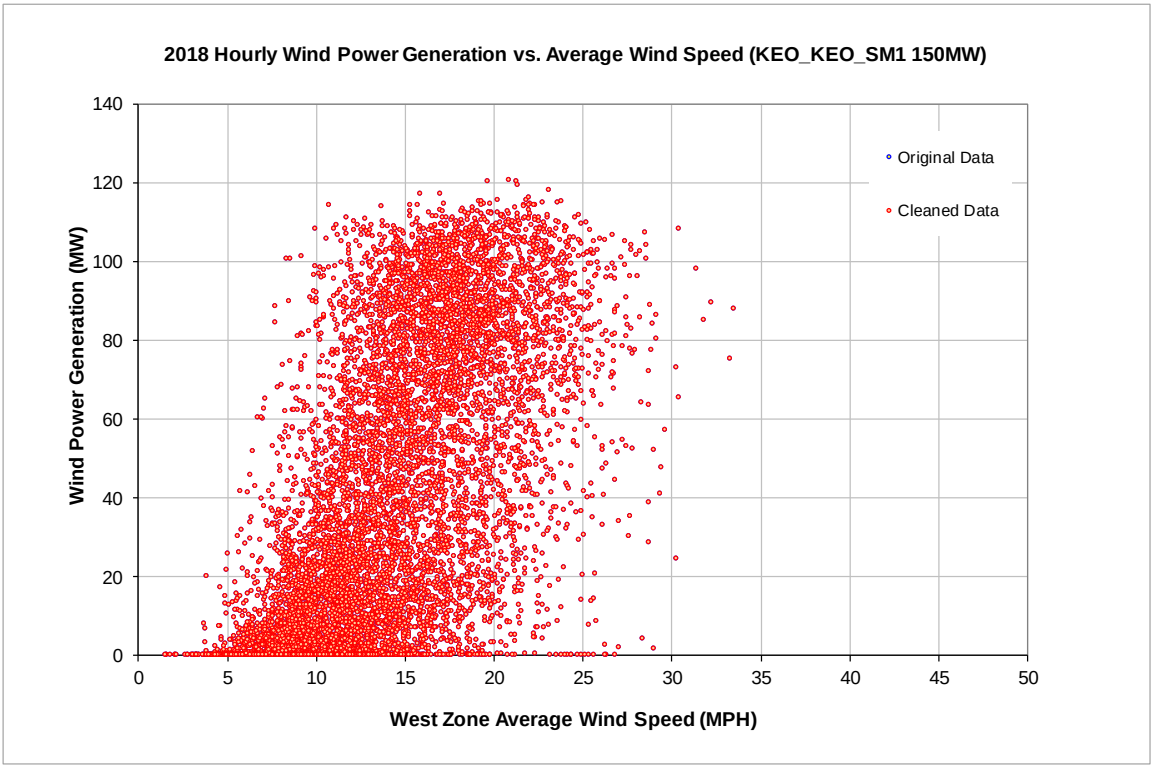


Figure A-406:KEO_KEO_SM1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

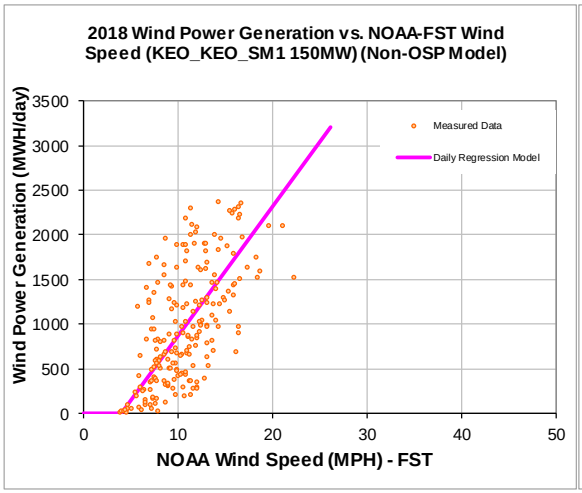
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-276.07
Left Slope (MWh/mph-day)	116.50
RMSE (MWh/day)	499.16
R2	0.40
CV-RMSE	51.8%
Daily Maximum (MWh/day)	3600

OSP Model:

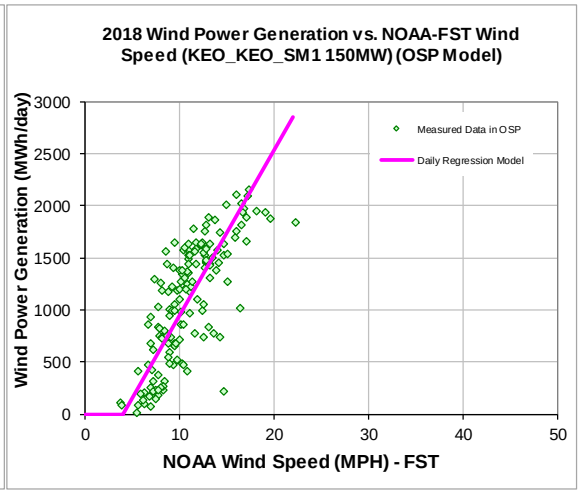
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-329.19
Left Slope (MWh/mph-day)	130.53
RMSE (MWh/day)	363.31
R2	0.59
CV-RMSE	33.3%
Daily Maximum (MWh/day)	3600

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
375,539	369,037

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,092	1,090

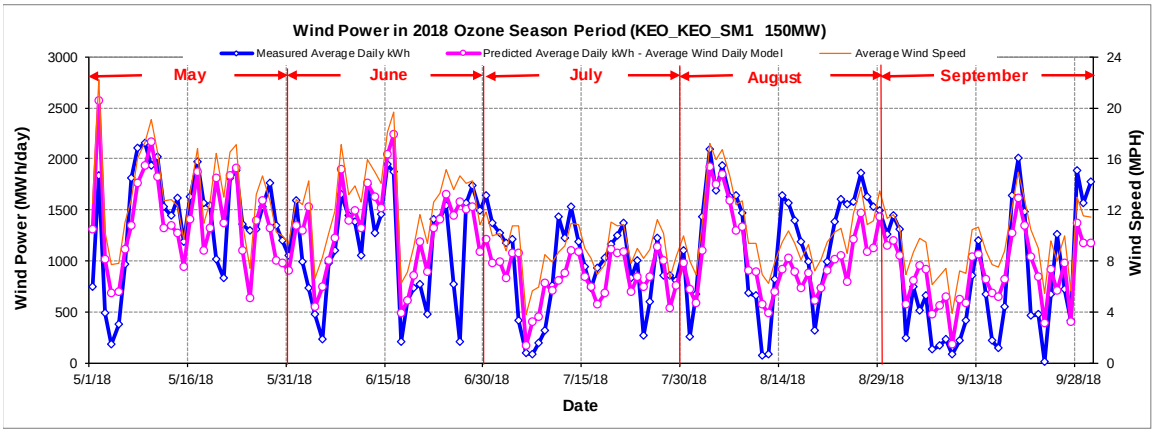
Figure A-407:KEO_KEO_SM1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.37	34,506	27,949	19.00%	31%	25%
Feb-18	28	10.46	24,810	26,379	-6.33%	25%	26%
Mar-18	31	11.79	35,797	34,031	4.93%	32%	30%
Apr-18	30	12.36	32,025	34,909	-9.01%	30%	32%
May-18	31	13.09	43,384	42,752	1.46%	39%	38%
Jun-18	30	12.66	34,402	39,682	-15.35%	32%	37%
Jul-18	31	8.85	27,373	25,615	6.42%	25%	23%
Aug-18	31	10.71	38,952	33,142	14.92%	35%	30%
Sep-18	30	9.06	22,675	25,596	-12.88%	21%	24%
Oct-18	31	9.52	31,178	25,823	17.18%	28%	23%
Nov-18	30	9.85	23,043	26,157	-13.52%	21%	24%
Dec-18	31	10.10	20,892	27,002	-29.24%	19%	24%
Total	365	10.74	369,037	369,037	0.00%	28%	28%
Total in OSP (07/15-09/15)	153	10.87	166,786	166,786	0.00%	30%	30%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

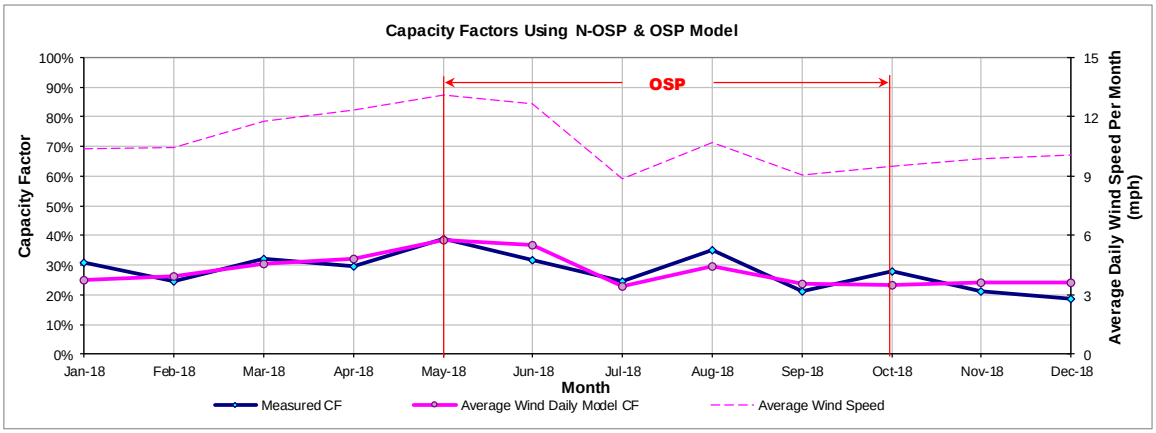


Figure A-408:KEO_KEO_SM1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.99 Sherbino 2 Wind Farm

A.99.1 Sherbino 2 Wind Farm - KEO_SHRBINO2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
KEO_SHRBINO2	Wind	-	PECOS	BP Alternative Energy	Sherbino Mesa Wind Farm 2

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
60 Clipper Liberty 2.5 MW	ERCOT	W	Nov-11	West	FST	145

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

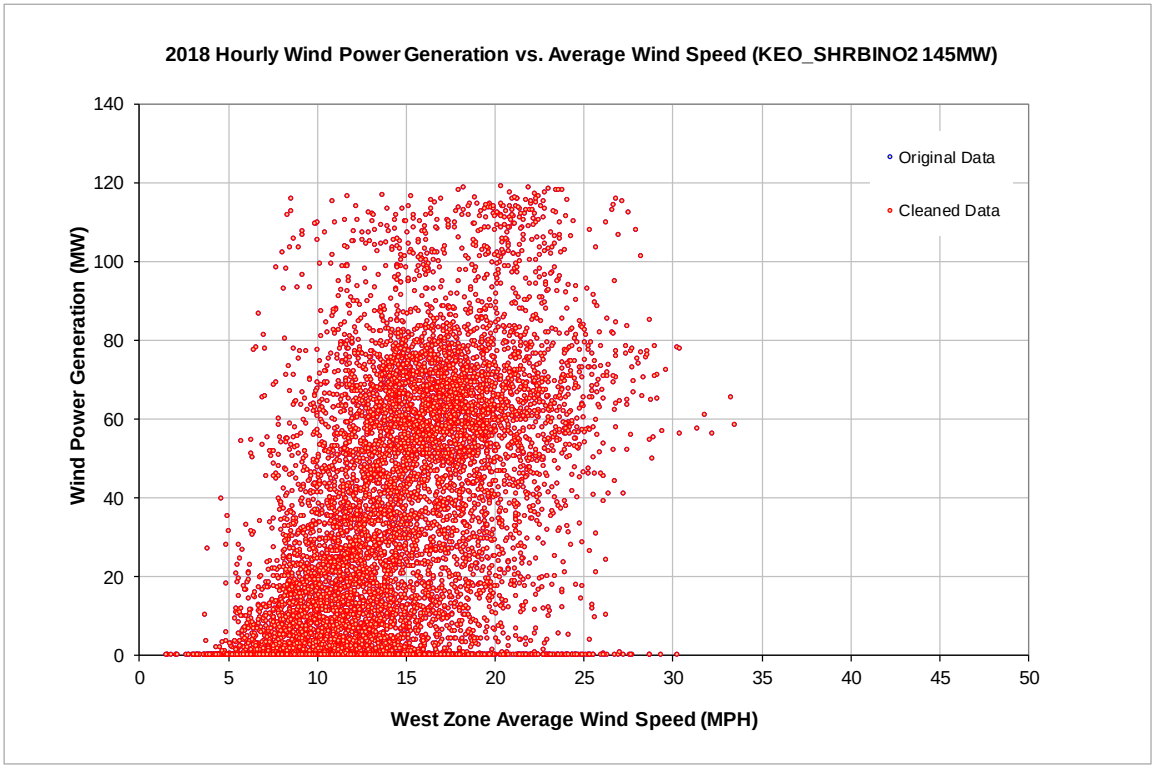


Figure A-409:KEO_SHRBINO2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

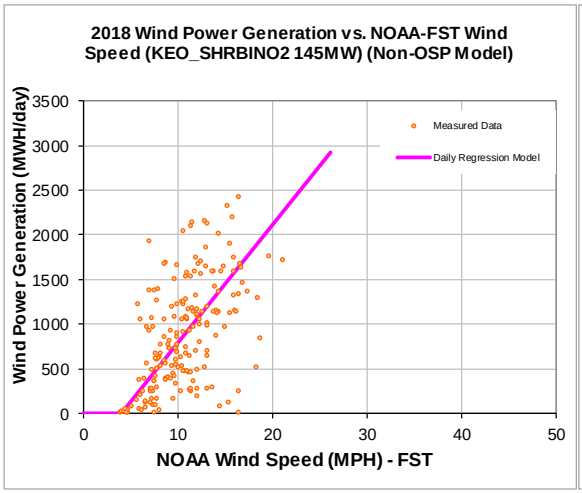
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-112.79
Left Slope (MWh/mph-day)	92.84
RMSE (MWh/day)	498.98
R2	0.29
CV-RMSE	57.4%
Daily Maximum (MWh/day)	3480

OSP Model:

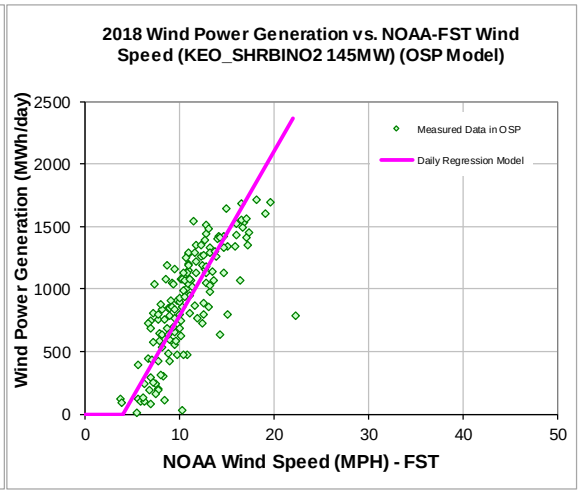
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-178.07
Left Slope (MWh/mph-day)	99.38
RMSE (MWh/day)	267.30
R2	0.60
CV-RMSE	29.6%
Daily Maximum (MWh/day)	3480

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
327,301	305,110

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
904	902

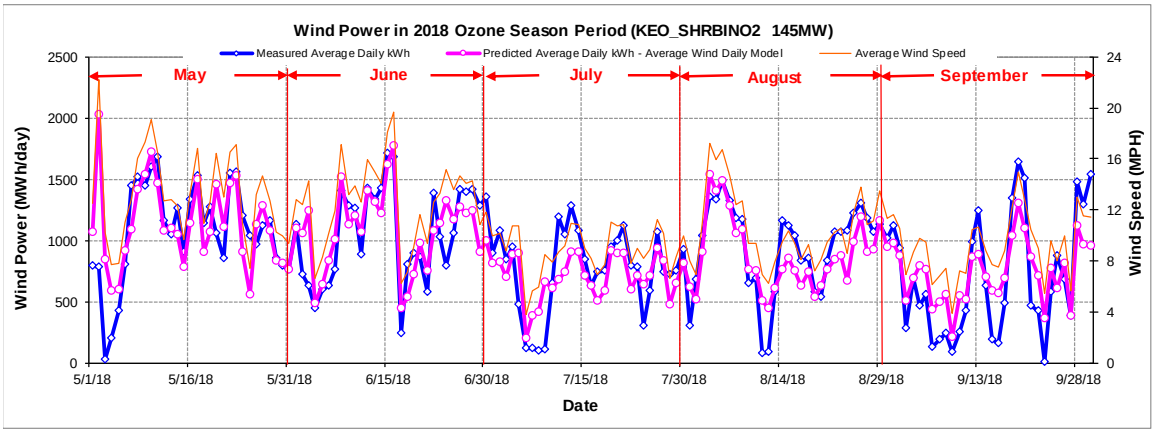
Figure A-410:KEO_SHRBINO2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.46	37,055	24,880	32.86%	34%	23%
Feb-18	28	10.46	28,777	24,026	16.51%	30%	25%
Mar-18	31	12.10	21,299	19,203	9.84%	20%	18%
Apr-18	30	12.37	20,852	26,932	-29.16%	20%	26%
May-18	31	13.09	33,270	34,797	-4.59%	31%	32%
Jun-18	30	12.66	31,827	32,388	-1.76%	30%	31%
Jul-18	31	8.85	22,934	21,750	5.16%	21%	20%
Aug-18	31	10.71	29,868	27,481	7.99%	28%	25%
Sep-18	30	9.06	20,180	21,663	-7.35%	19%	21%
Oct-18	31	9.52	23,585	23,904	-1.35%	22%	22%
Nov-18	30	9.85	18,911	24,063	-27.24%	18%	23%
Dec-18	31	10.14	16,551	24,021	-45.14%	15%	22%
Total	365	10.71	305,110	305,110	0.00%	24%	24%
Total in OSP (07/15-09/15)	153	10.87	138,079	138,079	0.00%	26%	26%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

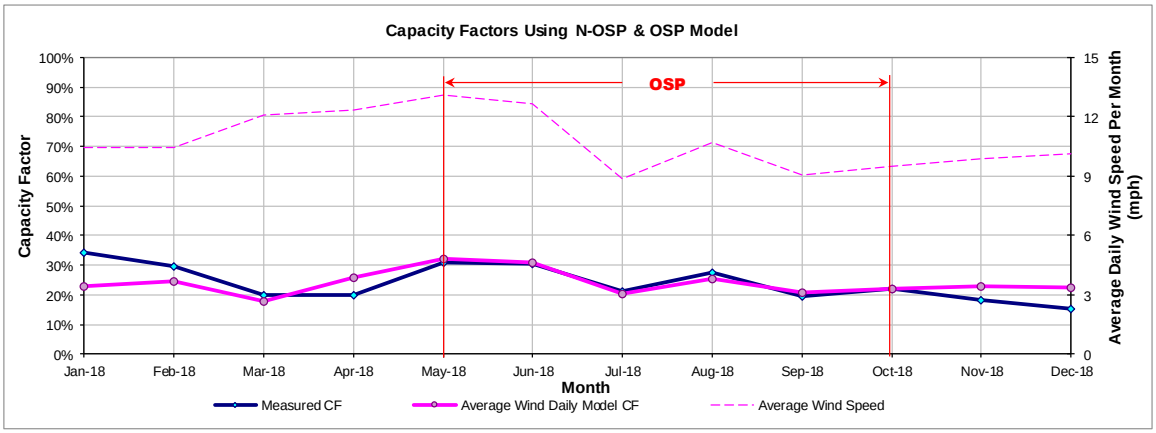


Figure A-411:KEO_SHRBINO2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.100 Silver Star Phase I

A.100.1 Silver Star Phase I - FLTCK_SSI

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
FLTCK_SSI	Wind	-	ERATH	BP Alternative Energy/Clipper Windpower	Silver Star Phase I

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
24 Clipper Liberty 2.5 MW	ERCOT	N	Mar-08	North	ABI	60

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

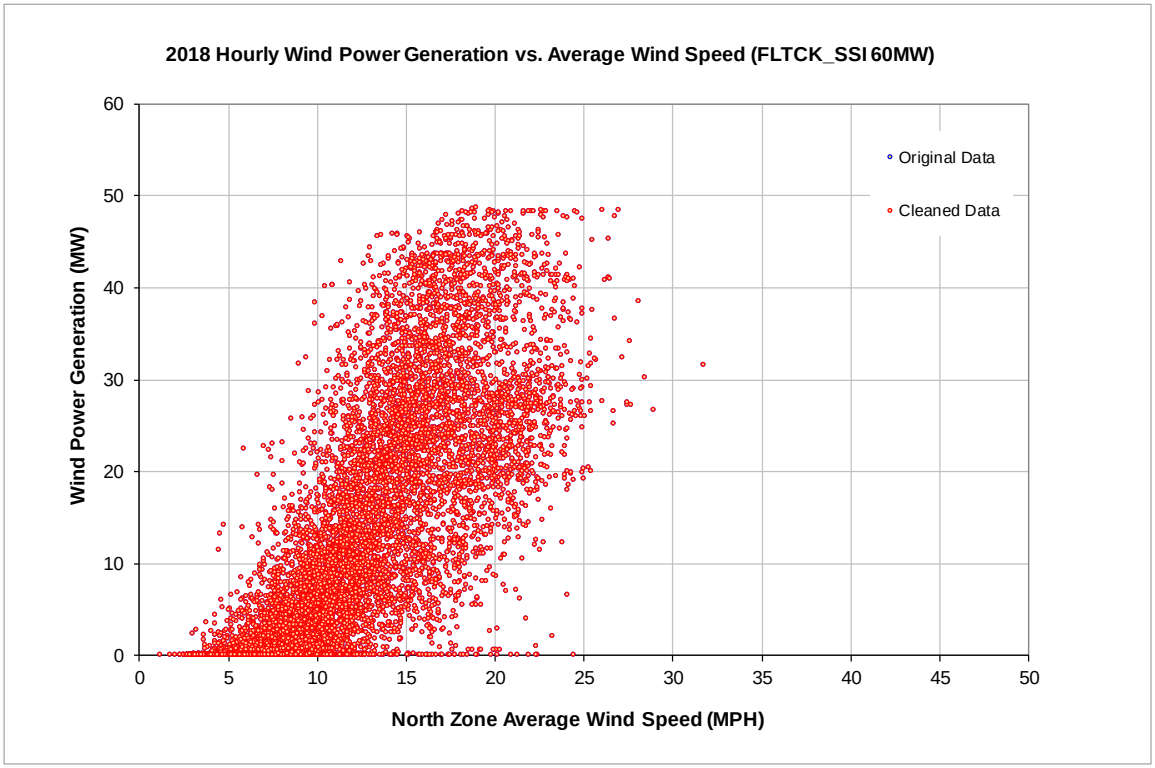


Figure A-412:FLTCK_SSI - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

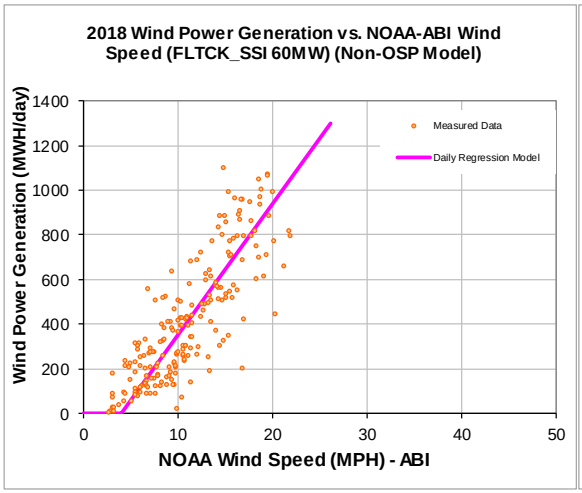
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-134.60
Left Slope (MWh/mph-day)	49.76
RMSE (MWh/day)	155.17
R2	0.68
CV-RMSE	37.5%
Daily Maximum (MWh/day)	1440

OSP Model:

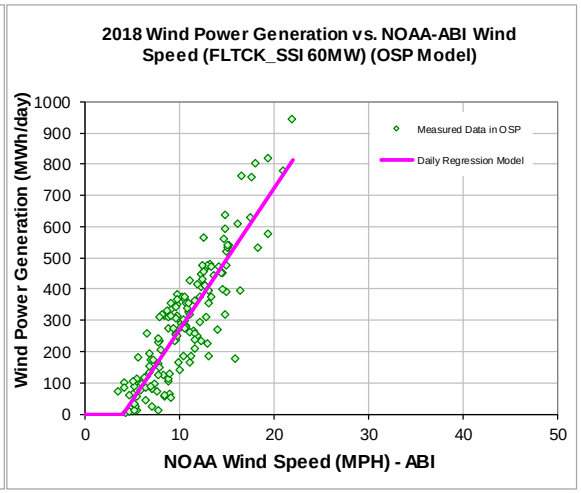
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-173.53
Left Slope (MWh/mph-day)	44.47
RMSE (MWh/day)	91.09
R2	0.77
CV-RMSE	31.5%
Daily Maximum (MWh/day)	1440

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
144,371	129,510

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
294	289

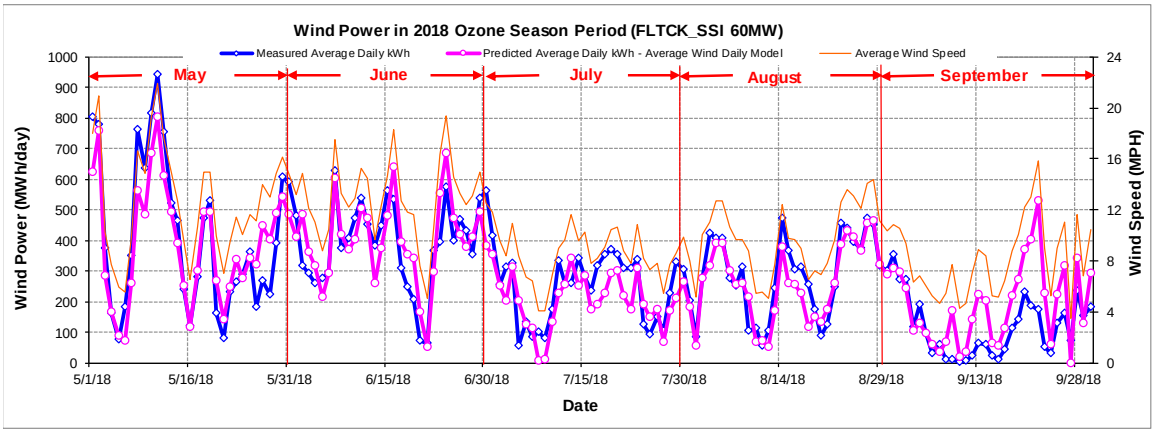
Figure A-413:FLTCK_SSI - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.23	16,529	12,308	25.54%	37%	28%
Feb-18	28	11.19	12,933	11,406	11.81%	32%	28%
Mar-18	31	11.92	15,692	14,222	9.37%	35%	32%
Apr-18	30	13.18	14,594	15,632	-7.11%	34%	36%
May-18	31	12.78	12,913	12,241	5.20%	29%	27%
Jun-18	30	12.90	11,697	12,011	-2.68%	27%	28%
Jul-18	31	8.52	7,521	6,367	15.34%	17%	14%
Aug-18	31	9.85	8,967	8,198	8.58%	20%	18%
Sep-18	30	7.97	3,141	5,439	-73.15%	7%	13%
Oct-18	31	9.35	9,083	10,262	-12.97%	20%	23%
Nov-18	30	10.05	8,975	10,963	-22.15%	21%	25%
Dec-18	31	10.23	7,464	10,485	-40.47%	17%	23%
Total	365	10.76	129,510	129,534	-0.02%	25%	25%
Total in OSP (07/15-09/15)	153	10.40	44,239	44,257	-0.04%	20%	20%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

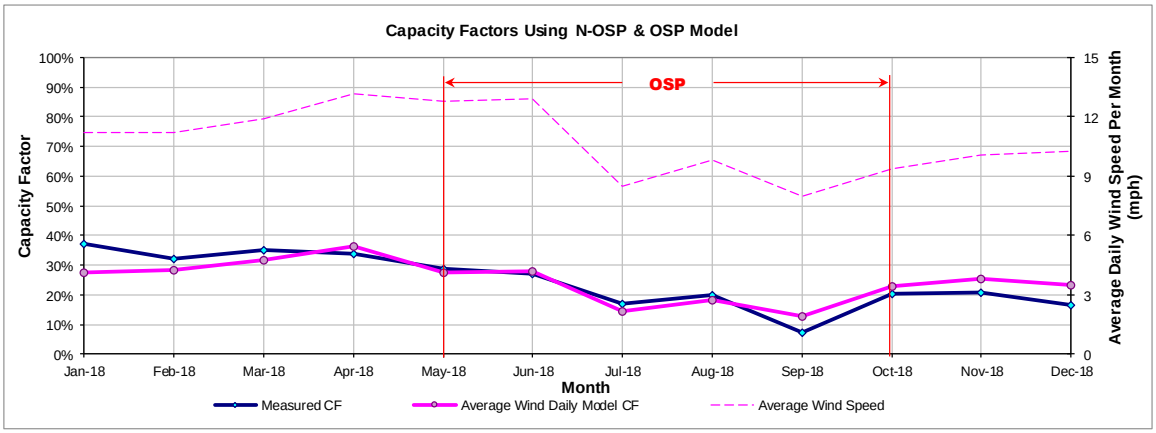


Figure A-414:FLTCK_SSI - Predicted Wind Power and Capacity Factor Using Daily Models

A.101 Snyder Wind Project

A.101.1 Snyder Wind Project - ENAS_ENA1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
ENAS_ENA1	Wind	Snyder	SCURRY	Enel Green Power	Snyder Wind Project

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
21 Vestas 3 MW	ERCOT	W	Dec-07	West	ABI	63

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

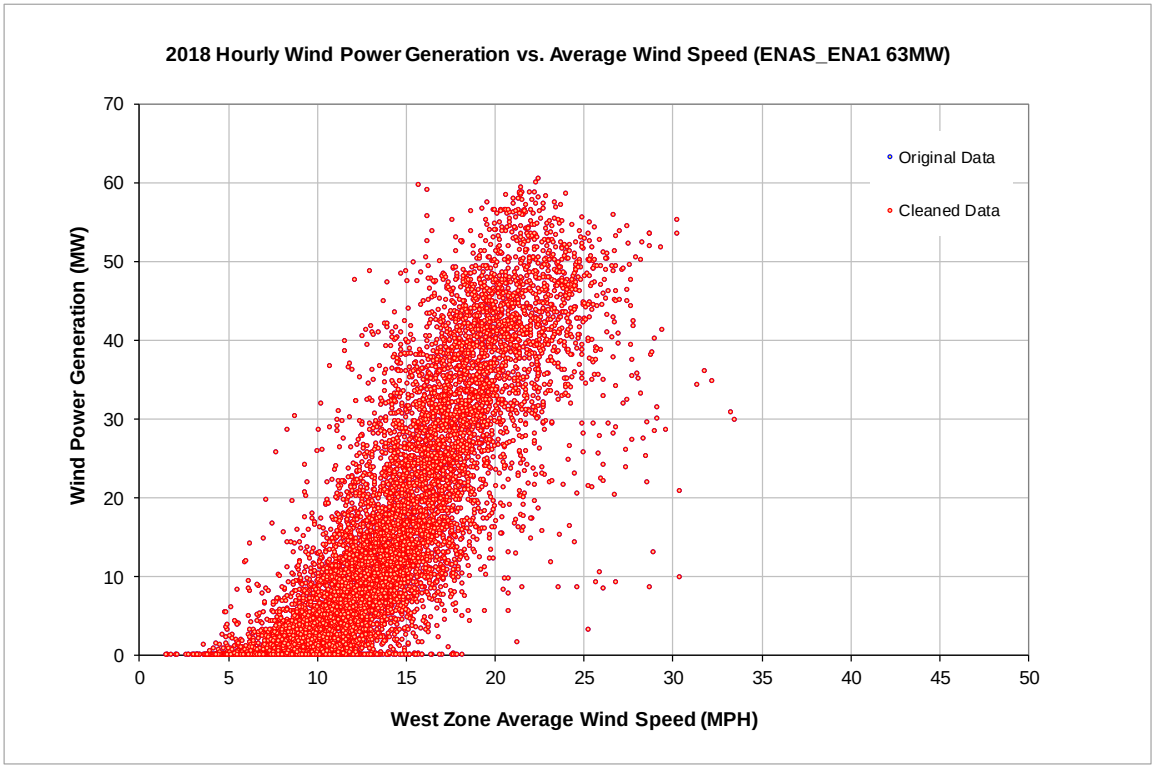


Figure A-415:ENAS_ENA1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

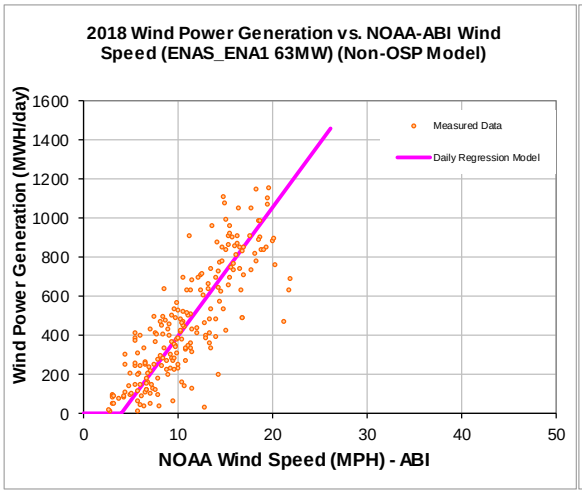
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-121.14
Left Slope (MWh/mph-day)	52.96
RMSE (MWh/day)	162.79
R2	0.69
CV-RMSE	35.5%
Daily Maximum (MWh/day)	1512

OSP Model:

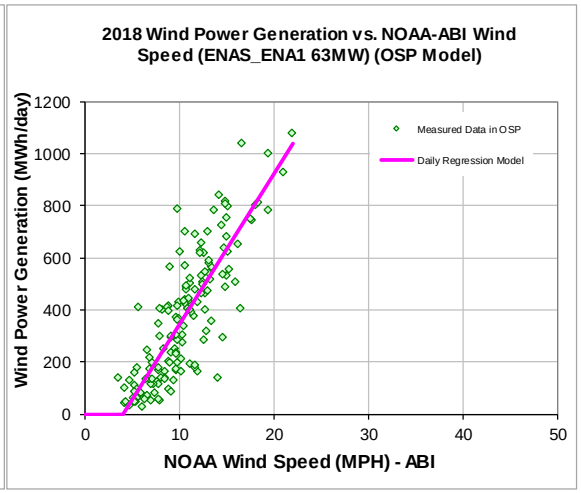
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-217.58
Left Slope (MWh/mph-day)	56.50
RMSE (MWh/day)	136.03
R2	0.70
CV-RMSE	36.7%
Daily Maximum (MWh/day)	1512

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
168,062	153,897

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
376	370

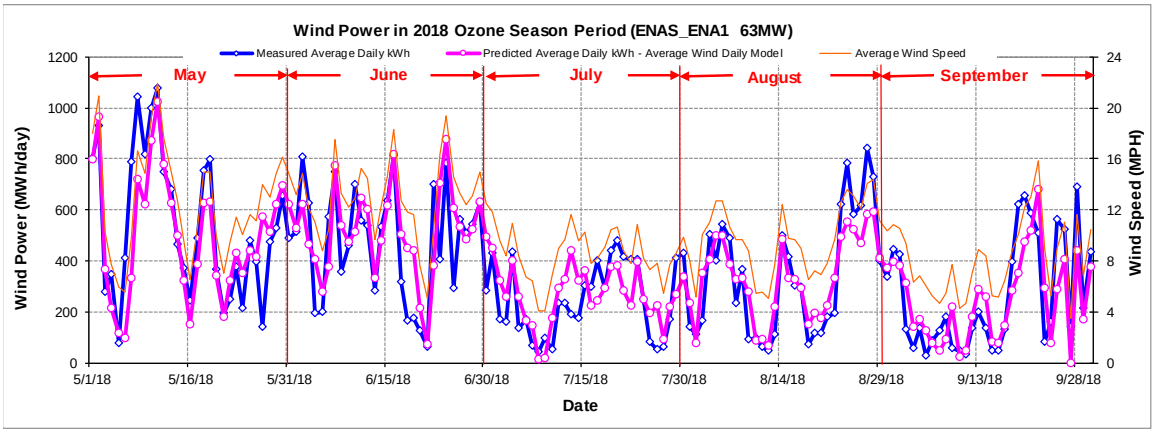
Figure A-416:ENAS_ENA1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	16,664	14,252	14.47%	36%	30%
Feb-18	28	11.00	12,863	12,914	-0.40%	30%	31%
Mar-18	31	11.92	14,789	15,821	-6.98%	32%	34%
Apr-18	30	13.18	16,326	17,299	-5.96%	36%	38%
May-18	31	12.78	16,650	15,642	6.06%	36%	33%
Jun-18	30	12.90	14,078	15,346	-9.00%	31%	34%
Jul-18	31	8.52	7,602	8,179	-7.59%	16%	17%
Aug-18	31	9.85	10,749	10,505	2.27%	23%	22%
Sep-18	30	7.97	7,566	6,994	7.56%	17%	15%
Oct-18	31	9.35	12,060	11,600	3.82%	26%	25%
Nov-18	30	10.05	12,288	12,330	-0.34%	27%	27%
Dec-18	31	10.23	12,263	13,038	-6.32%	26%	28%
Total	365	10.72	153,897	153,917	-0.01%	28%	28%
Total in OSP (07/15-09/15)	153	10.40	56,645	56,665	-0.03%	24%	24%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

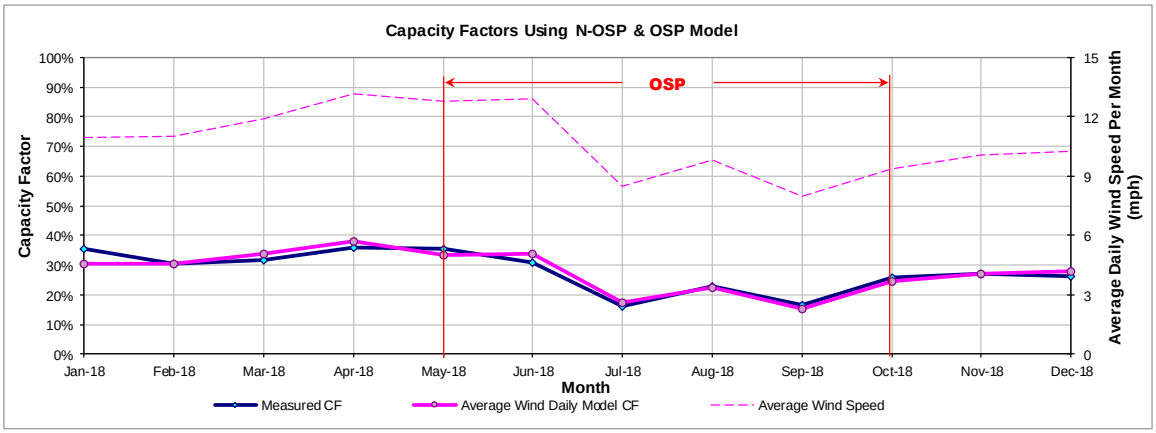


Figure A-417:ENAS_ENA1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.102 South Plains Wind I

A.102.1 South Plains Wind I - SPLAIN1_WIND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SPLAIN1_WIND1	Wind	Floydada	FLOYD	SunEdison	South Plains Wind I

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
51 Vestas 2 MW	ERCOT	W	Nov-15	Panhandle	LBB	102

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

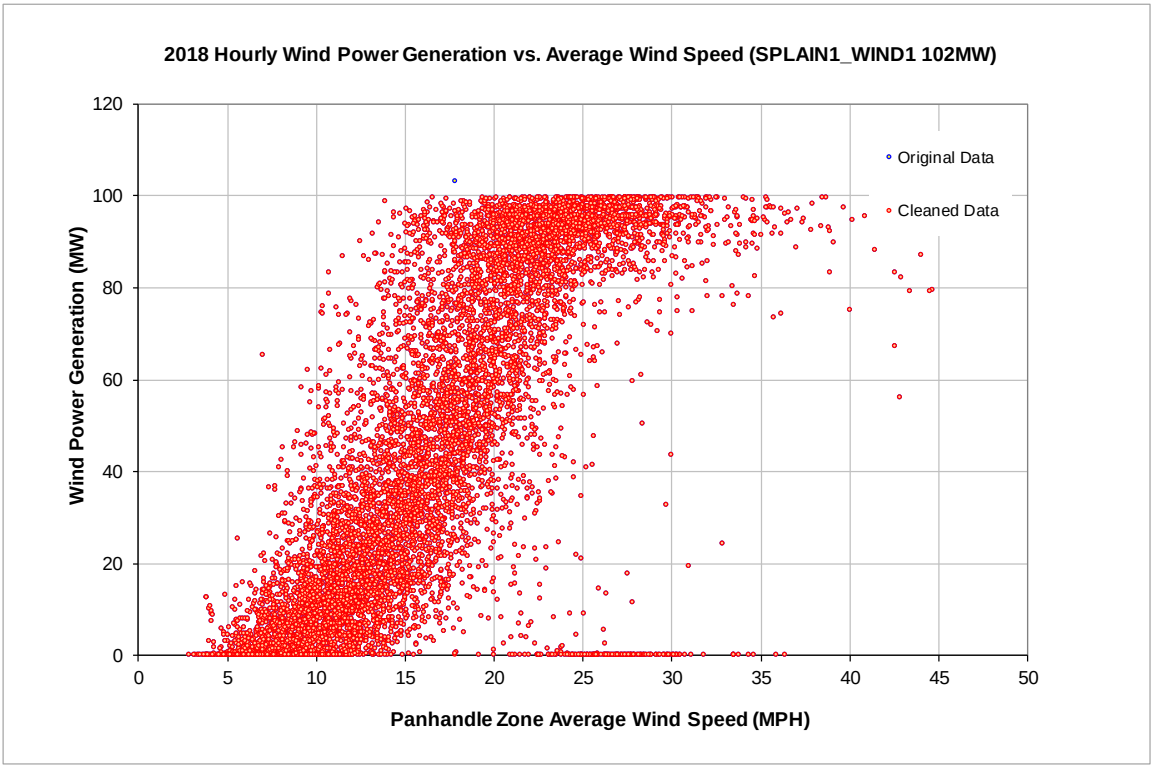


Figure A-418:SPLAIN1_WIND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

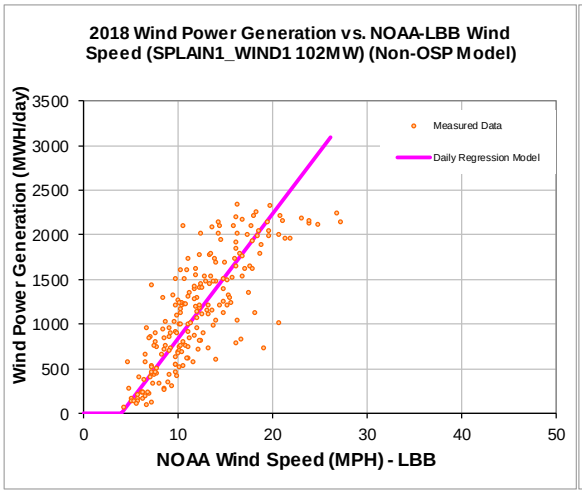
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-170.31
Left Slope (MWh/mph-day)	107.83
RMSE (MWh/day)	364.66
R2	0.64
CV-RMSE	32.1%
Daily Maximum (MWh/day)	2448

OSP Model:

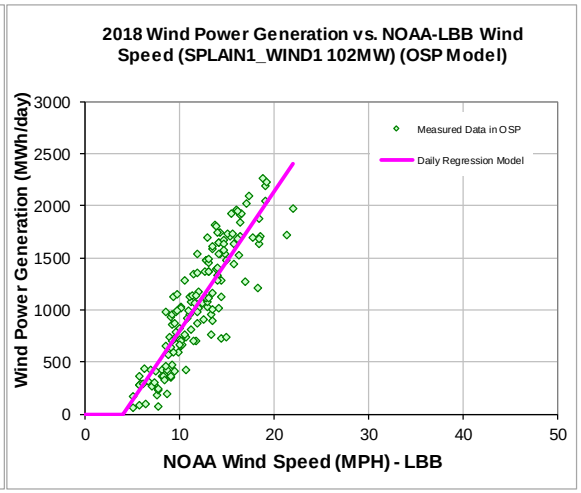
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-590.37
Left Slope (MWh/mph-day)	138.07
RMSE (MWh/day)	256.51
R2	0.79
CV-RMSE	24.1%
Daily Maximum (MWh/day)	2448

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
392,413	403,109

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
914	1,066

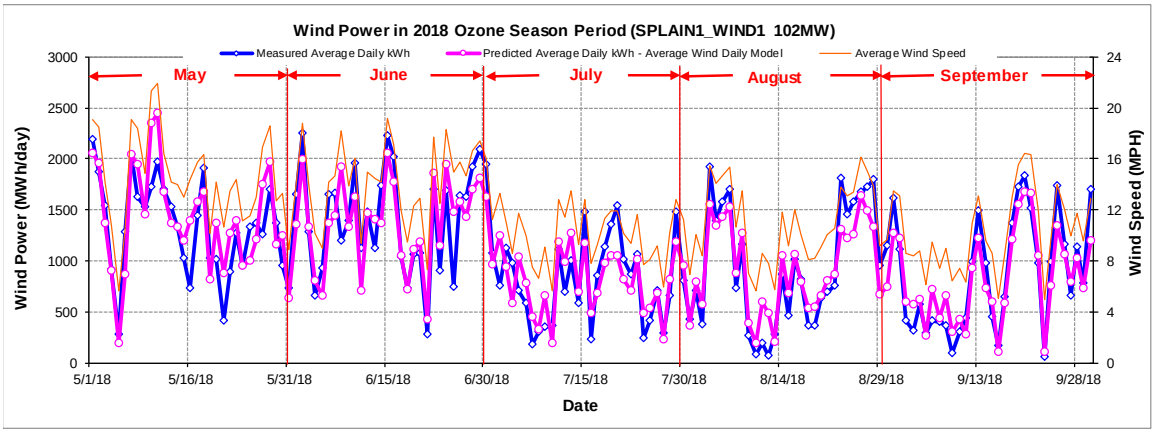
Figure A-419:SPLAIN1_WIND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.98	23,479	30,399	-29.47%	31%	40%
Feb-18	28	12.08	36,048	31,696	12.07%	53%	46%
Mar-18	31	13.58	41,369	40,126	3.00%	55%	53%
Apr-18	30	15.19	41,868	43,723	-4.43%	57%	60%
May-18	31	14.42	40,932	43,437	-6.12%	54%	57%
Jun-18	30	14.33	42,717	41,663	2.47%	58%	57%
Jul-18	31	10.01	24,327	24,522	-0.80%	32%	32%
Aug-18	31	11.09	30,159	29,147	3.35%	40%	38%
Sep-18	30	10.17	25,031	24,399	2.53%	34%	33%
Oct-18	31	10.80	28,324	30,813	-8.78%	37%	41%
Nov-18	30	11.15	35,205	30,947	12.09%	48%	42%
Dec-18	31	11.13	33,649	31,607	6.07%	44%	42%
Total	365	12.07	403,109	402,477	0.16%	45%	45%
Total in OSP (07/15-09/15)	153	12.00	163,167	163,167	0.00%	44%	44%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

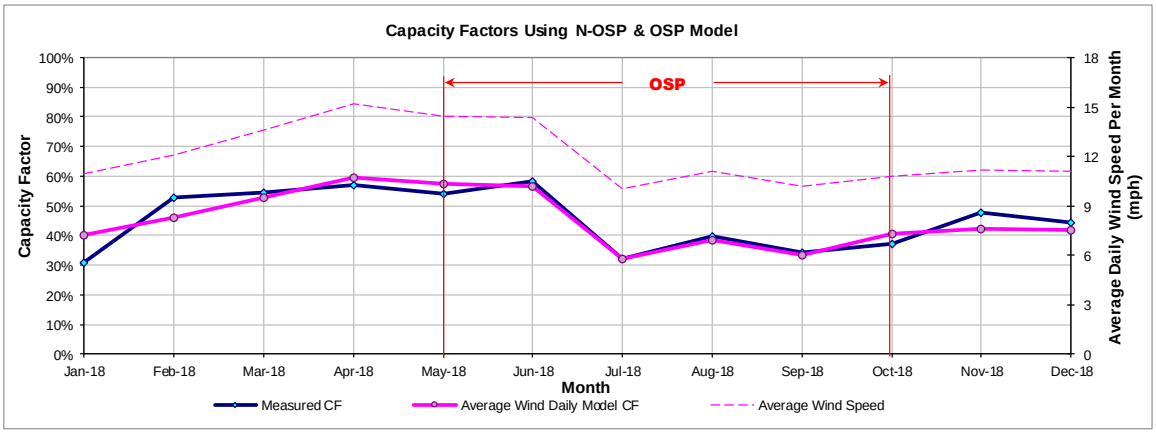


Figure A-420:SPLAIN1_WIND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.102.2 South Plains Wind I - SPLAIN1_WIND2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SPLAIN1_WIND2	Wind	Floydada	FLOYD	SunEdison	South Plains Wind I

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
49 Vestas 2 MW	ERCOT	W	Nov-15	Panhandle	LBB	98

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

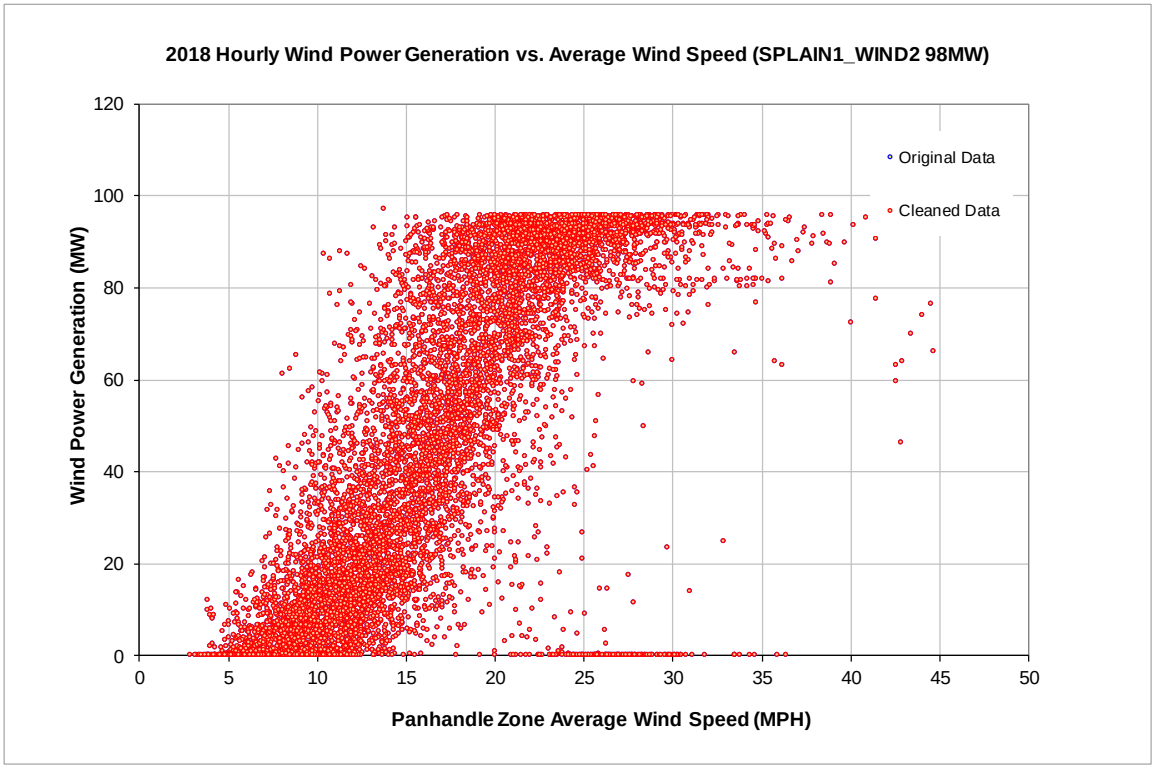


Figure A-421:SPLAIN1_WIND2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

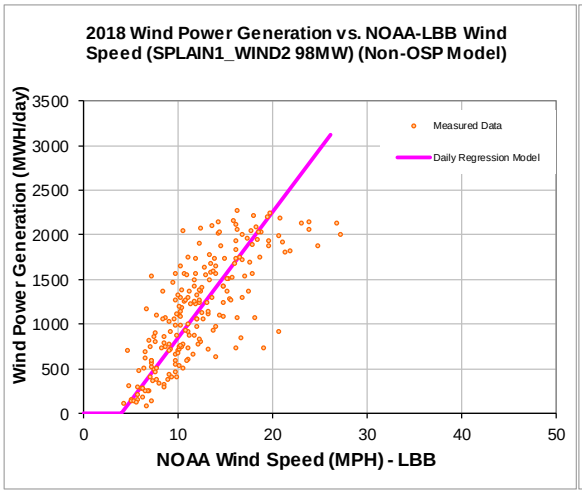
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-67.25
Left Slope (MWh/mph-day)	100.08
RMSE (MWh/day)	374.34
R2	0.60
CV-RMSE	32.7%
Daily Maximum (MWh/day)	2352

OSP Model:

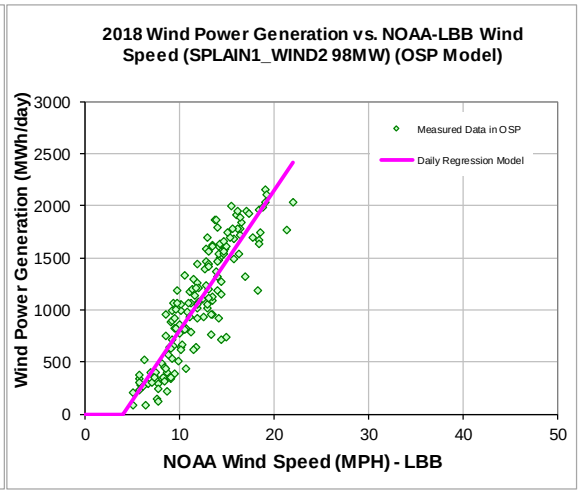
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-542.65
Left Slope (MWh/mph-day)	134.59
RMSE (MWh/day)	255.02
R2	0.79
CV-RMSE	23.8%
Daily Maximum (MWh/day)	2352

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
395,051	405,937

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
923	1,072

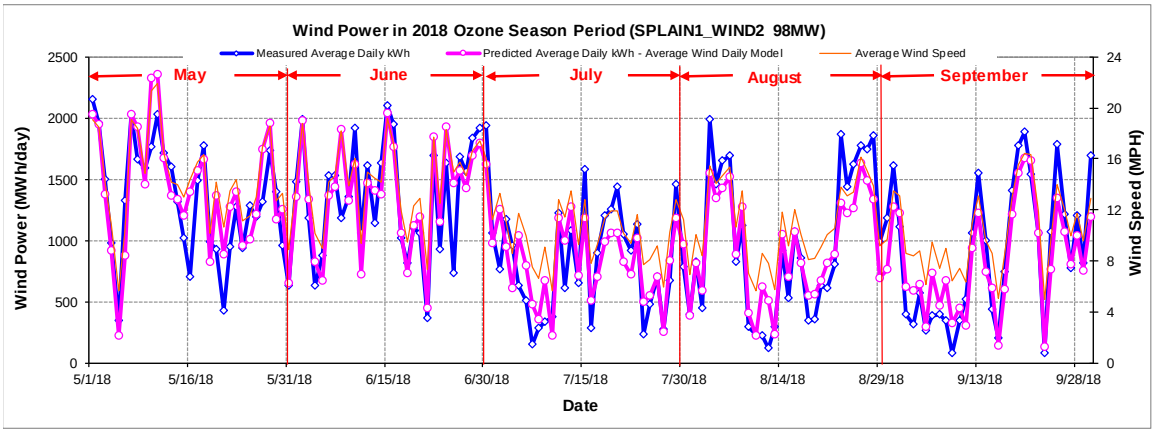
Figure A-422:SPLAIN1_WIND2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.98	23,995	30,938	-28.94%	33%	42%
Feb-18	28	12.08	36,731	31,960	12.99%	56%	49%
Mar-18	31	13.58	42,368	40,057	5.45%	58%	55%
Apr-18	30	15.19	40,769	43,282	-6.17%	58%	61%
May-18	31	14.42	40,932	43,300	-5.79%	56%	59%
Jun-18	30	14.33	41,397	41,599	-0.49%	59%	59%
Jul-18	31	10.01	24,491	24,922	-1.76%	34%	34%
Aug-18	31	11.09	31,307	29,431	5.99%	43%	40%
Sep-18	30	10.17	25,957	24,770	4.57%	37%	35%
Oct-18	31	10.80	28,821	31,413	-8.99%	40%	43%
Nov-18	30	11.15	35,750	31,446	12.04%	51%	45%
Dec-18	31	11.13	33,422	32,139	3.84%	46%	44%
Total	365	12.07	405,937	405,257	0.17%	47%	47%
Total in OSP (07/15-09/15)	153	12.00	164,082	164,022	0.04%	46%	46%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

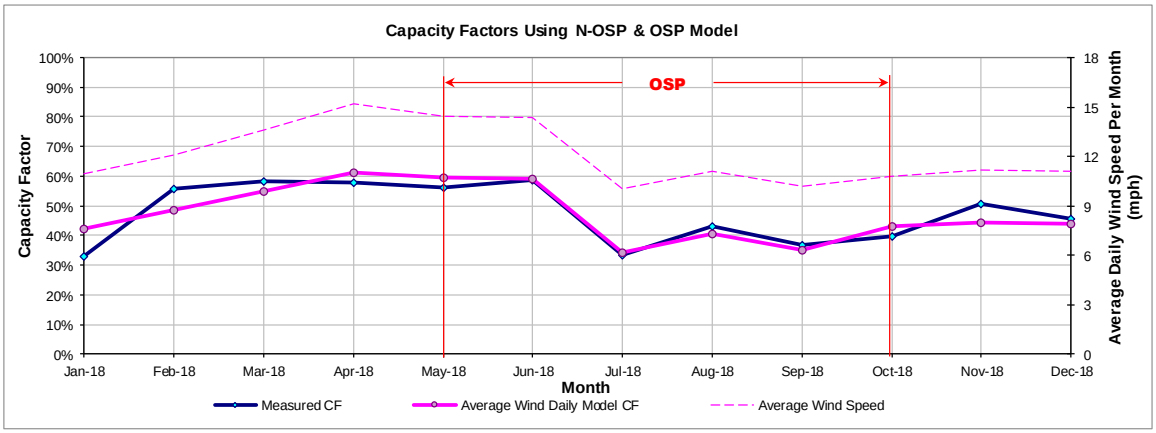


Figure A-423:SPLAIN1_WIND2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.103 South Plains Wind II Phase a

A.103.1 South Plains Wind II Phase a - SPLAIN2_WIND21

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SPLAIN2_WIND21	Wind	Floydada	FLOYD	SunEdison	South Plains Wind II Phase a

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
45 Vestas 3.3 MW	ERCOT	W	Jun-16	Panhandle	LBB	148.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

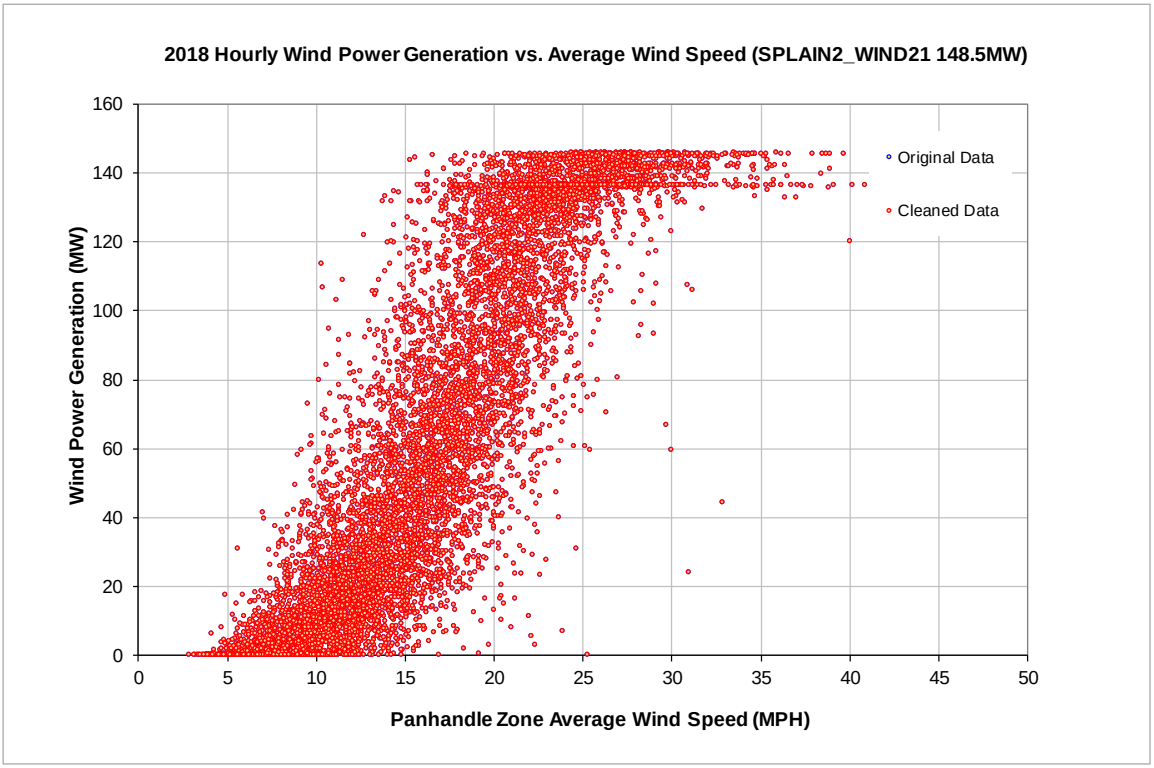


Figure A-424:SPLAIN2_WIND21 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

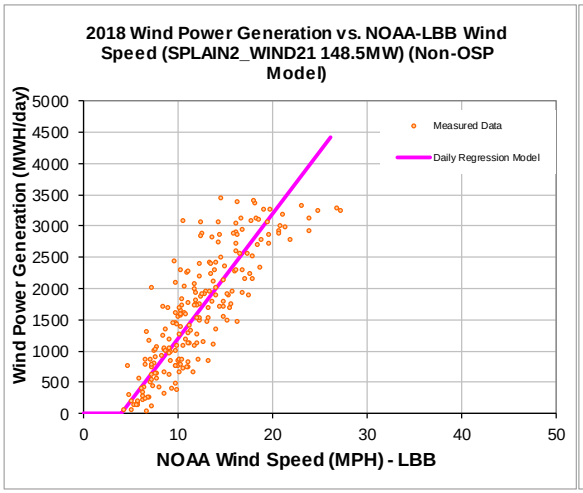
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-446.83
Left Slope (MWh/mph-day)	170.68
RMSE (MWh/day)	507.18
R2	0.70
CV-RMSE	31.2%
Daily Maximum (MWh/day)	3564

OSP Model:

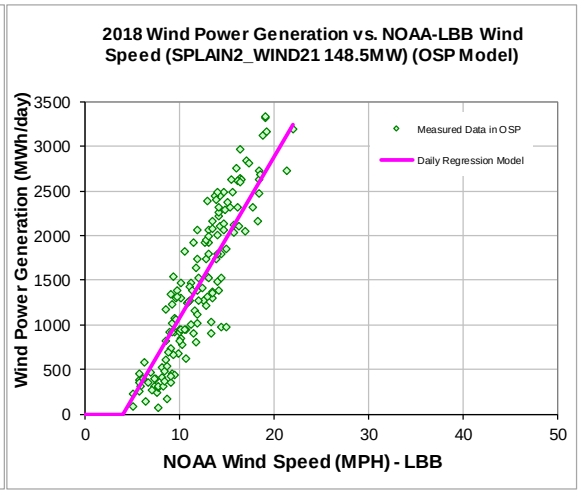
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1073.44
Left Slope (MWh/mph-day)	209.67
RMSE (MWh/day)	356.17
R2	0.82
CV-RMSE	24.7%
Daily Maximum (MWh/day)	3564

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
547,775	565,147

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,213	1,443

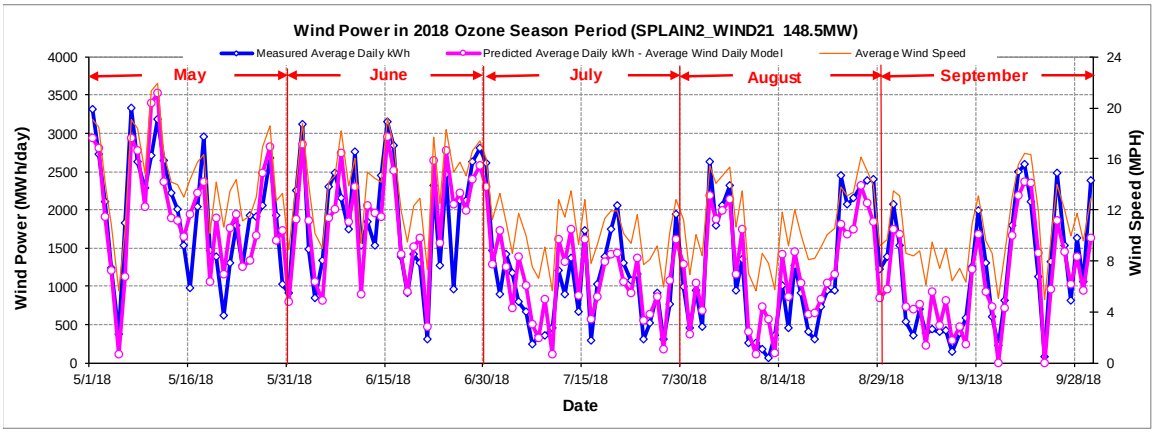
Figure A-425:SPLAIN2_WIND21 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	54,229	44,828	17.34%	49%	41%
Feb-18	28	12.08	47,959	45,208	5.74%	48%	45%
Mar-18	31	13.58	55,640	57,956	-4.16%	50%	52%
Apr-18	30	15.19	58,050	63,622	-9.60%	54%	60%
May-18	31	14.42	60,222	60,480	-0.43%	55%	55%
Jun-18	30	14.33	58,350	57,963	0.66%	55%	54%
Jul-18	31	10.01	29,848	31,755	-6.39%	27%	29%
Aug-18	31	11.09	38,926	38,779	0.38%	35%	35%
Sep-18	30	10.17	33,376	31,778	4.79%	31%	30%
Oct-18	31	10.80	37,204	43,277	-16.32%	34%	39%
Nov-18	30	11.15	45,882	43,667	4.83%	43%	41%
Dec-18	31	11.13	45,460	44,351	2.44%	41%	40%
Total	365	12.08	565,147	563,664	0.26%	43%	43%
Total in OSP (07/15-09/15)	153	12.00	220,723	220,755	-0.01%	40%	40%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

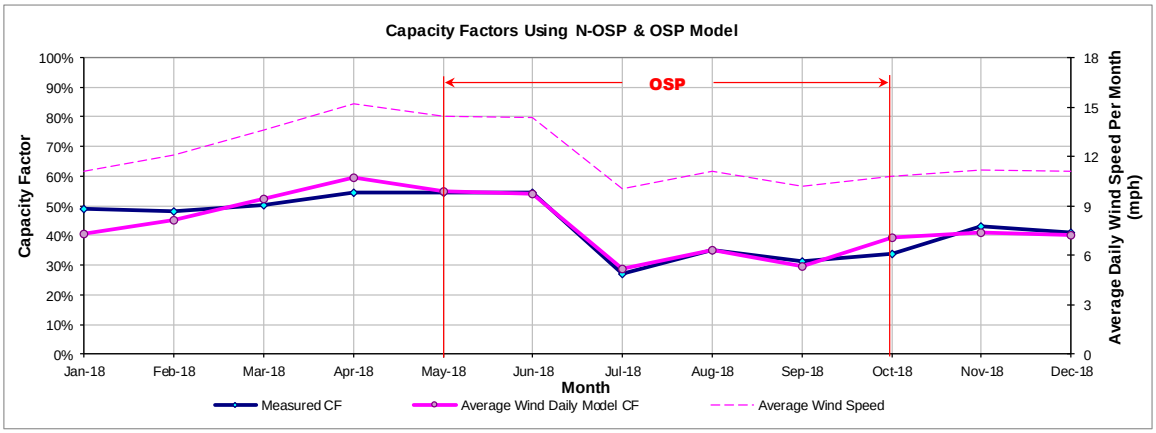


Figure A-426:SPLAIN2_WIND21 - Predicted Wind Power and Capacity Factor Using Daily Models

A.104 South Plains Wind II Phase b

A.104.1 South Plains Wind II Phase b - SPLAIN2_WIND22

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SPLAIN2_WIND22	Wind	Floydada	FLOYD	SunEdison	South Plains Wind II Phase b

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
46 Vestas 3.3 MW	ERCOT	W	Jun-16	Panhandle	LBB	151.8

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

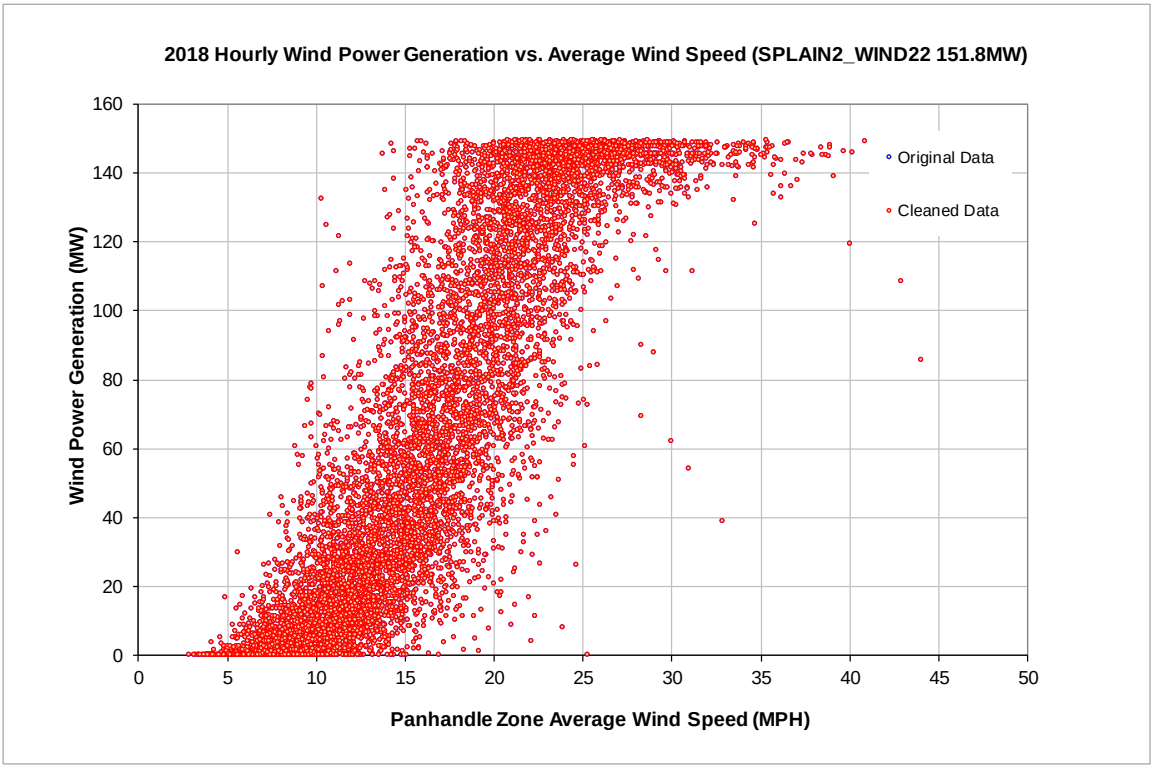


Figure A-427:SPLAIN2_WIND22 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

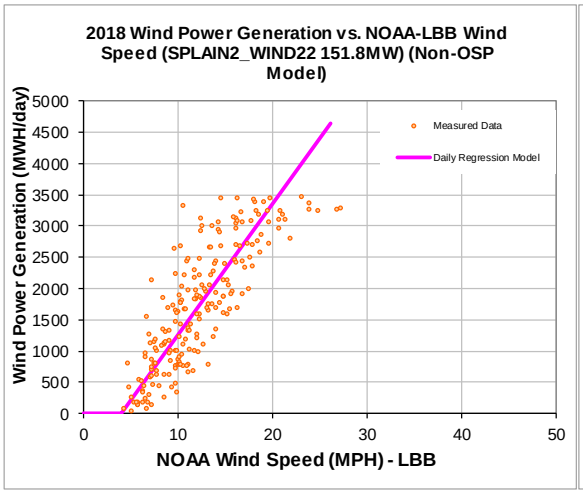
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-421.39
Left Slope (MWh/mph-day)	175.40
RMSE (MWh/day)	544.90
R2	0.68
CV-RMSE	31.9%
Daily Maximum (MWh/day)	3643

OSP Model:

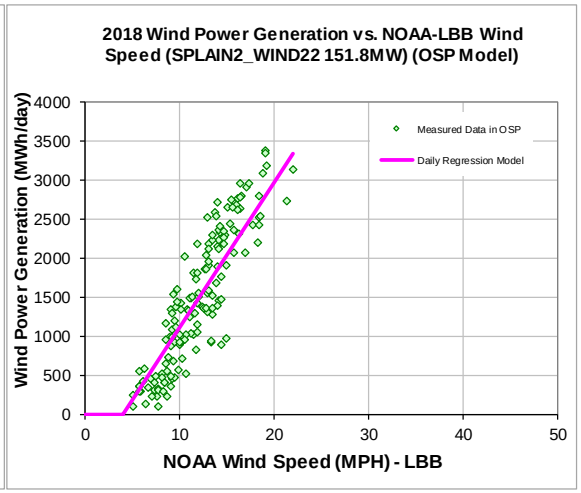
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1056.63
Left Slope (MWh/mph-day)	211.82
RMSE (MWh/day)	386.09
R2	0.80
CV-RMSE	26.0%
Daily Maximum (MWh/day)	3643

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
571,901	589,194

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,253	1,485

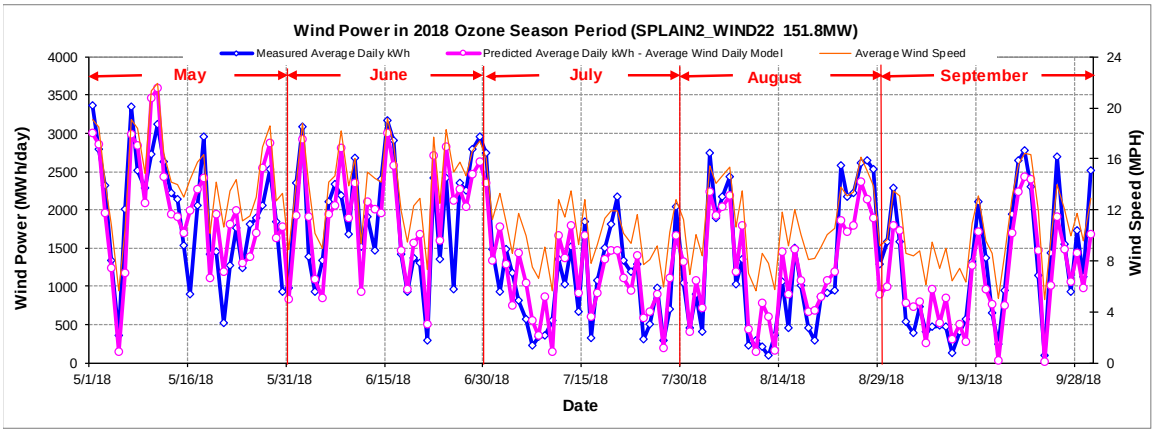
Figure A-428:SPLAIN2_WIND22 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	56,086	47,237	15.78%	50%	42%
Feb-18	28	12.08	49,698	47,515	4.39%	49%	47%
Mar-18	31	13.58	57,880	60,671	-4.82%	51%	54%
Apr-18	30	15.19	59,746	66,400	-11.14%	55%	61%
May-18	31	14.42	60,174	61,963	-2.97%	53%	55%
Jun-18	30	14.33	58,874	59,392	-0.88%	54%	54%
Jul-18	31	10.01	31,210	32,943	-5.55%	28%	29%
Aug-18	31	11.09	41,381	40,039	3.24%	37%	35%
Sep-18	30	10.17	35,603	32,906	7.58%	33%	30%
Oct-18	31	10.80	39,458	45,644	-15.68%	35%	40%
Nov-18	30	11.15	49,611	46,007	7.26%	45%	42%
Dec-18	31	11.13	49,473	46,633	5.74%	44%	41%
Total	365	12.08	589,194	587,351	0.31%	44%	44%
Total in OSP (07/15-09/15)	153	12.00	227,243	227,243	0.00%	41%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

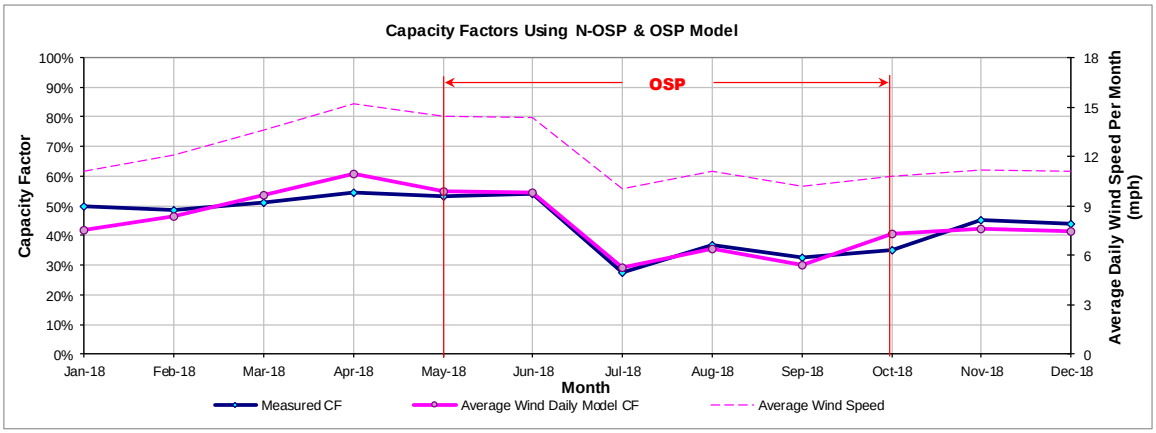


Figure A-429:SPLAIN2_WIND22 - Predicted Wind Power and Capacity Factor Using Daily Models

A.105 South Trent Wind Farm

A.105.1 South Trent Wind Farm - STWF_T1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
STWF_T1	Wind	-	TAYLOR	Babcock & Brown	South Trent Wind Farm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
44 Siemens 2.3 MW	ERCOT	W	Oct-08	West	ABI	98.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

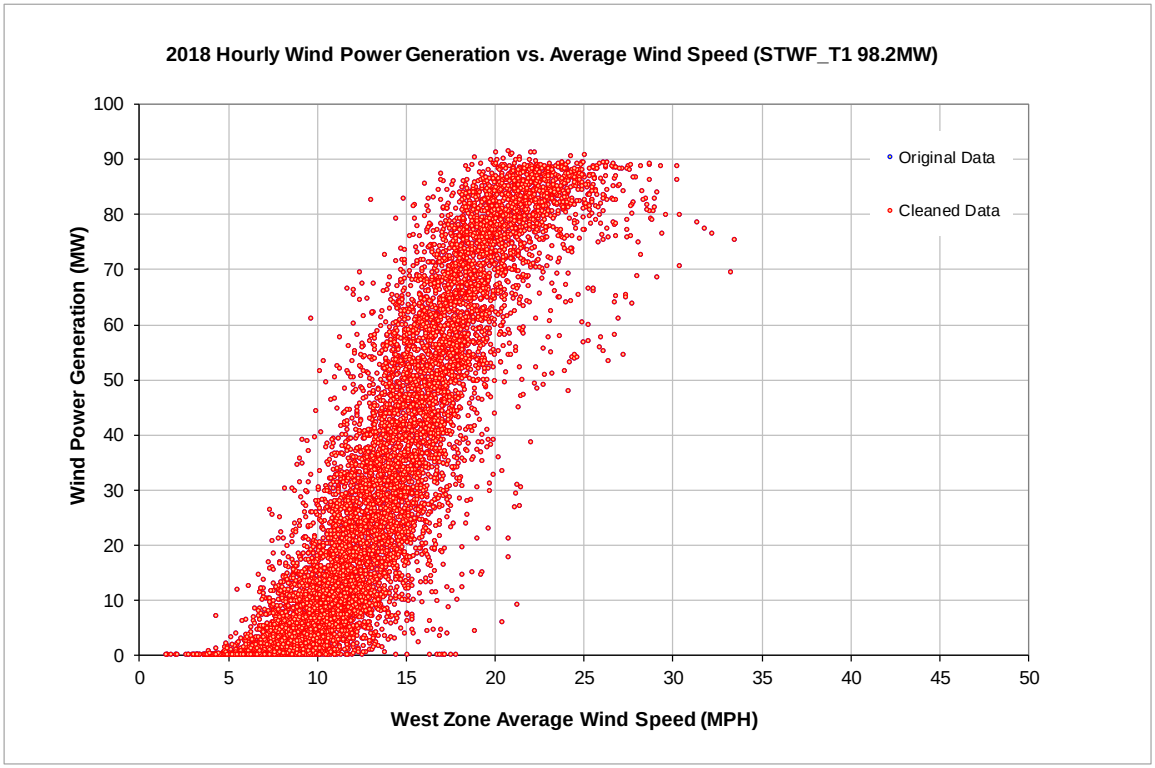


Figure A-430:STWF_T1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

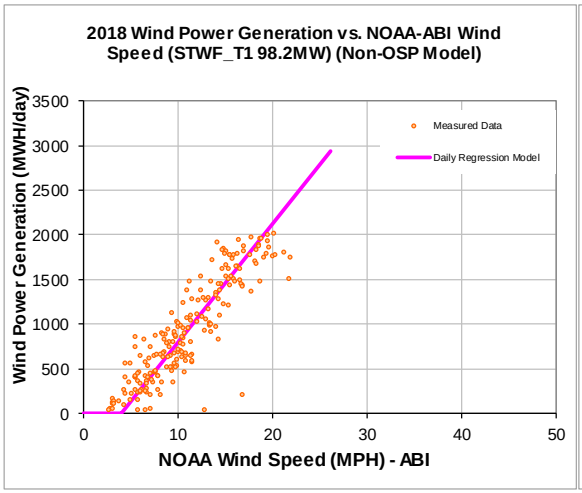
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-279.32
Left Slope (MWh/mph-day)	109.93
RMSE (MWh/day)	256.55
R2	0.80
CV-RMSE	27.6%
Daily Maximum (MWh/day)	2357

OSP Model:

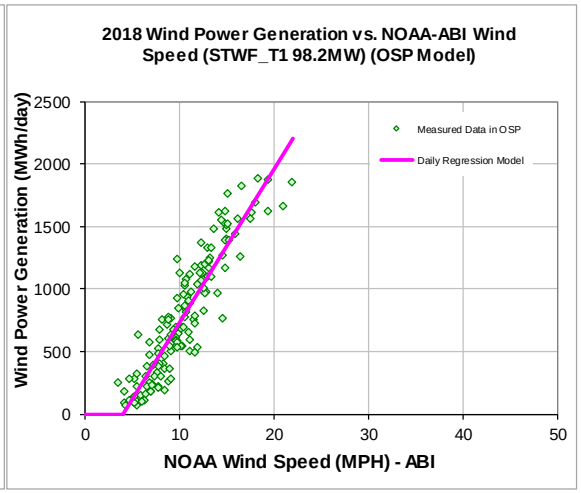
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-481.99
Left Slope (MWh/mph-day)	121.64
RMSE (MWh/day)	190.16
R2	0.85
CV-RMSE	24.3%
Daily Maximum (MWh/day)	2357

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
345,326	314,856

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
796	783

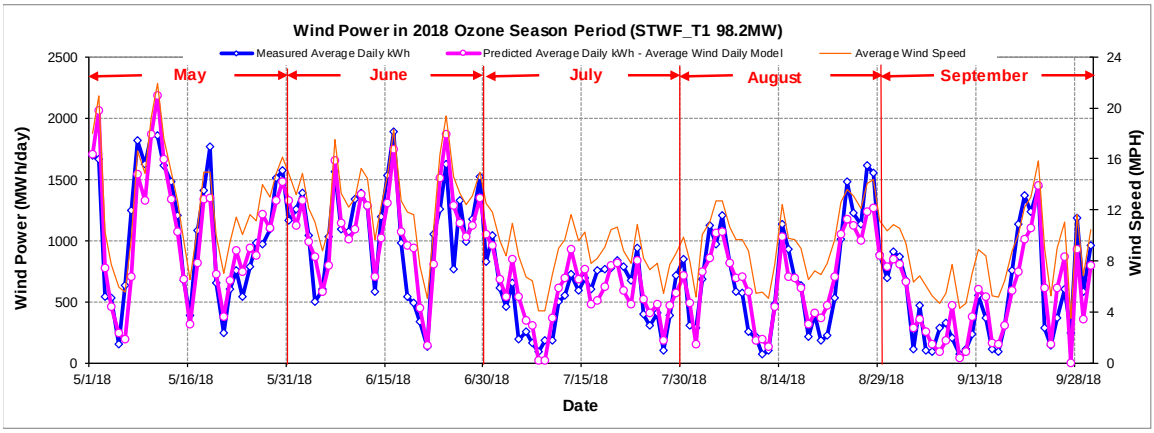
Figure A-431:STWF_T1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.23	30,492	27,715	9.11%	42%	38%
Feb-18	28	11.00	23,363	26,030	-11.42%	35%	39%
Mar-18	31	11.92	30,404	31,980	-5.18%	42%	44%
Apr-18	30	13.18	33,491	35,077	-4.73%	47%	50%
May-18	31	12.78	33,984	33,253	2.15%	47%	46%
Jun-18	30	12.90	31,658	32,630	-3.07%	45%	46%
Jul-18	31	8.52	16,385	17,186	-4.89%	22%	24%
Aug-18	31	9.85	22,689	22,194	2.18%	31%	30%
Sep-18	30	7.97	15,155	14,663	3.24%	21%	21%
Oct-18	31	9.35	25,142	23,218	7.66%	34%	32%
Nov-18	30	10.05	25,256	24,761	1.96%	36%	35%
Dec-18	31	10.23	26,836	26,204	2.36%	37%	36%
Total	365	10.74	314,856	314,912	-0.02%	37%	37%
Total in OSP (07/15-09/15)	153	10.40	119,871	119,927	-0.05%	33%	33%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

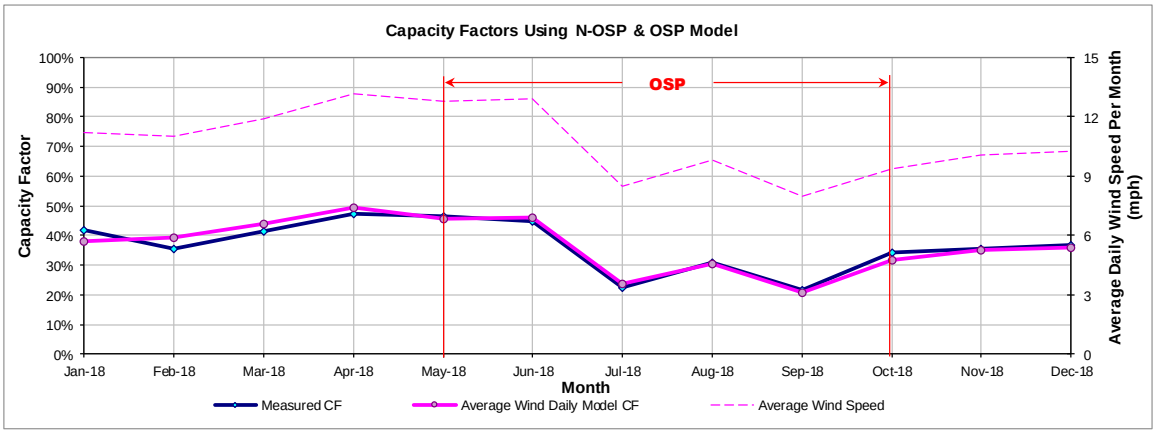


Figure A-432:STWF_T1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.106 Southwest Mesa Wind Project

A.106.1 Southwest Mesa Wind Project - SW_MESA_SW_MESA

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SW_MESA_SW_MESA	Wind	McCamey	UPTON	NextEra	Southwest Mesa Wind Project

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
107 NEG Micon 0.75 MW	ERCOT	W	Jun-99	West	FST	80.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

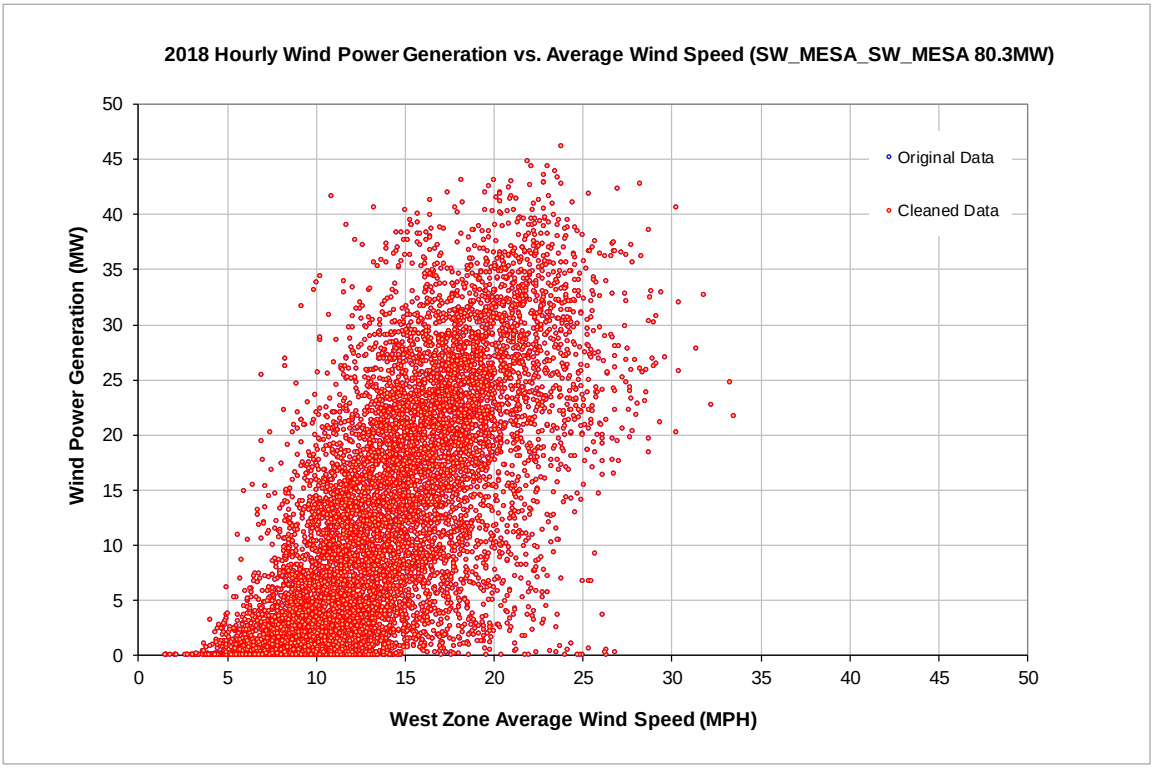


Figure A-433:SW_MESA_SW_MESA - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

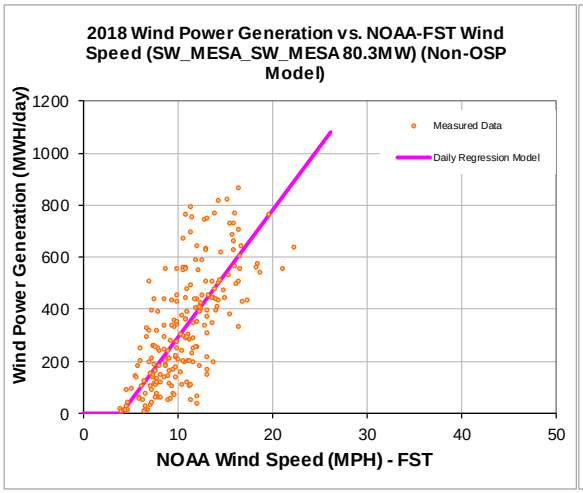
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-138.36
Left Slope (MWh/mph-day)	43.45
RMSE (MWh/day)	151.06
R2	0.50
CV-RMSE	46.9%
Daily Maximum (MWh/day)	1927

OSP Model:

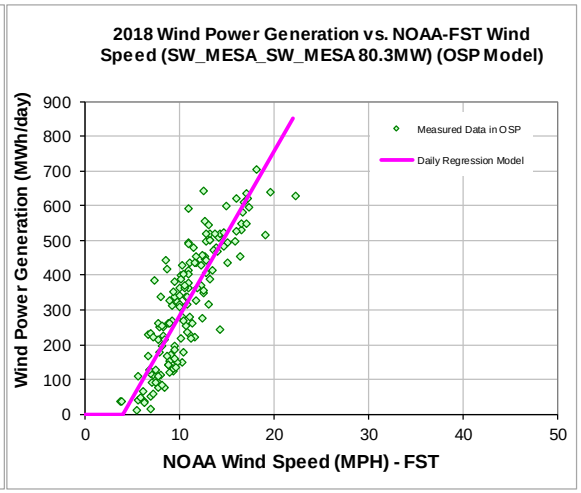
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-153.67
Left Slope (MWh/mph-day)	44.01
RMSE (MWh/day)	90.92
R2	0.72
CV-RMSE	28.0%
Daily Maximum (MWh/day)	1927

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
120,034	117,990

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
326	325

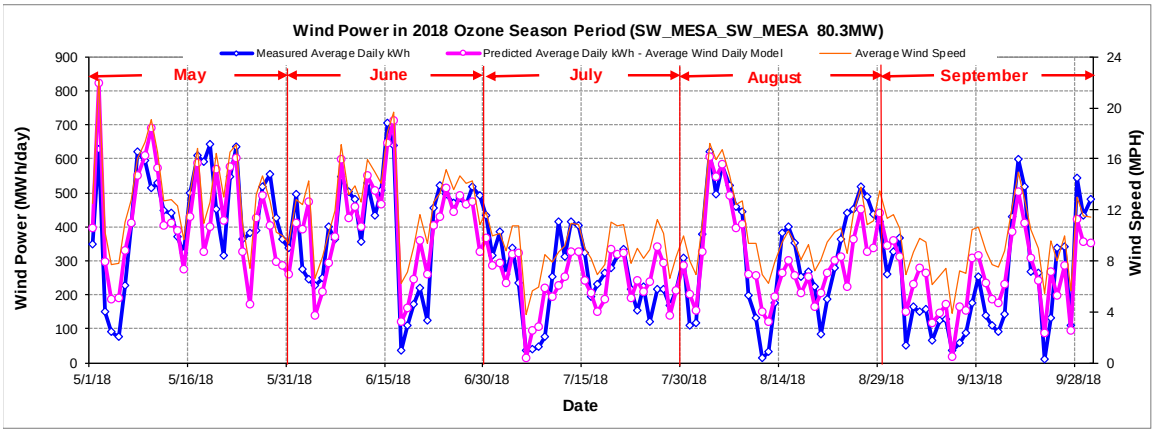
Figure A-434:SW_MESA_SW_MESA - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.25	11,826	9,516	19.53%	20%	16%
Feb-18	28	10.46	10,404	8,847	14.97%	19%	16%
Mar-18	31	11.79	13,429	11,594	13.66%	22%	19%
Apr-18	30	12.36	12,010	11,957	0.44%	21%	21%
May-18	31	13.09	13,370	13,091	2.09%	22%	22%
Jun-18	30	12.66	11,923	12,098	-1.47%	21%	21%
Jul-18	31	8.85	7,396	7,313	1.12%	12%	12%
Aug-18	31	10.71	10,266	9,851	4.05%	17%	16%
Sep-18	30	9.06	6,748	7,349	-8.91%	12%	13%
Oct-18	31	9.52	8,420	8,533	-1.34%	14%	14%
Nov-18	30	9.85	5,399	8,693	-61.01%	9%	15%
Dec-18	31	9.98	6,801	9,148	-34.52%	11%	15%
Total	365	10.71	117,990	117,990	0.00%	17%	17%
Total in OSP (07/15-09/15)	153	10.87	49,702	49,702	0.00%	17%	17%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

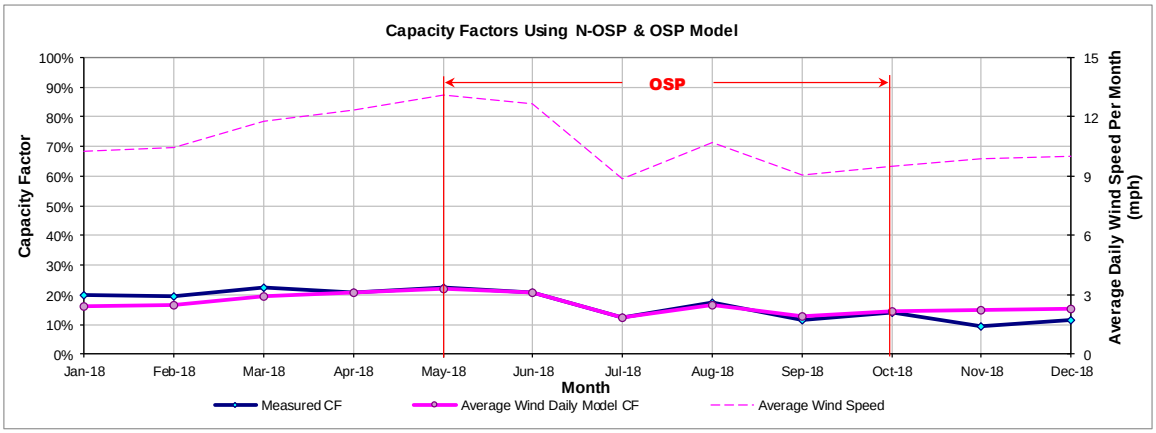


Figure A-435:SW_MESA_SW_MESA - Predicted Wind Power and Capacity Factor Using Daily Models

A.107 Spinning Spur Wind II

A.107.1 Spinning Spur Wind II - SSPURTWO_WIND_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SSPURTWO_WIND_1	Wind	Amarillo	OLDHAM	EDF Renewable	Spinning Spur Wind II

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
87 GE 1.85 MW	ERCOT	W	Jun-14	Panhandle	AMA	161

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

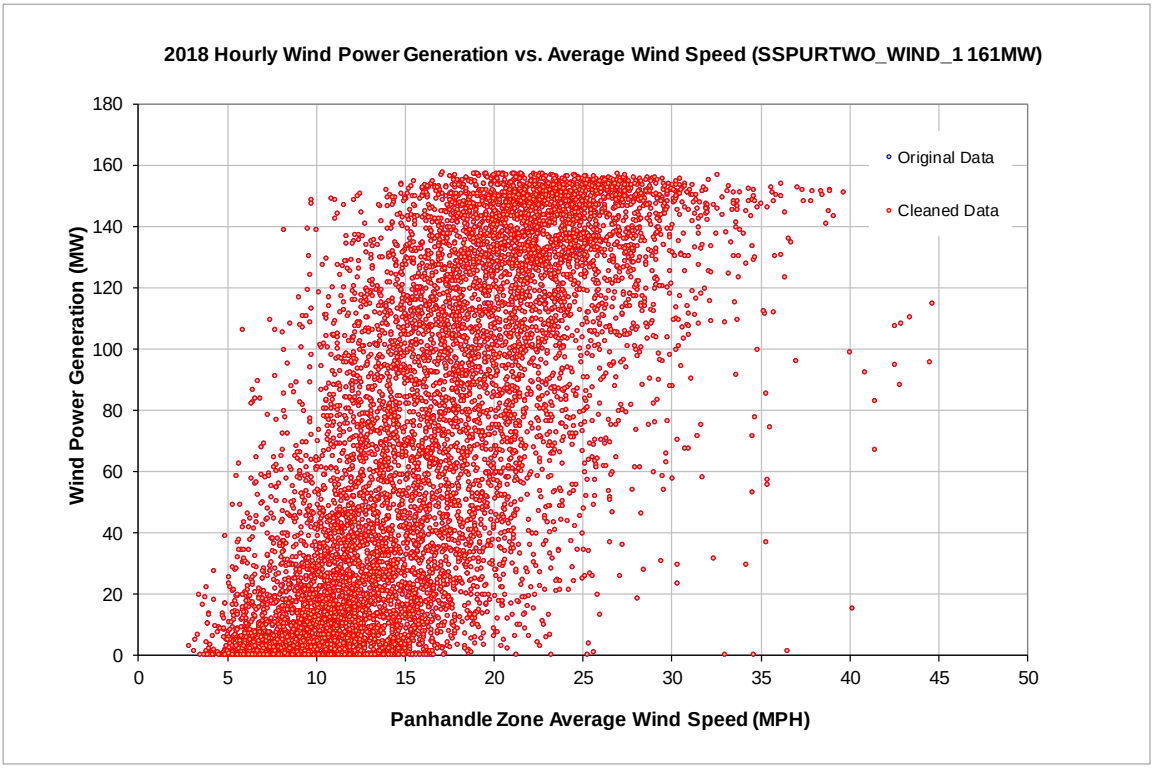


Figure A-436:SSPURTWO_WIND_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

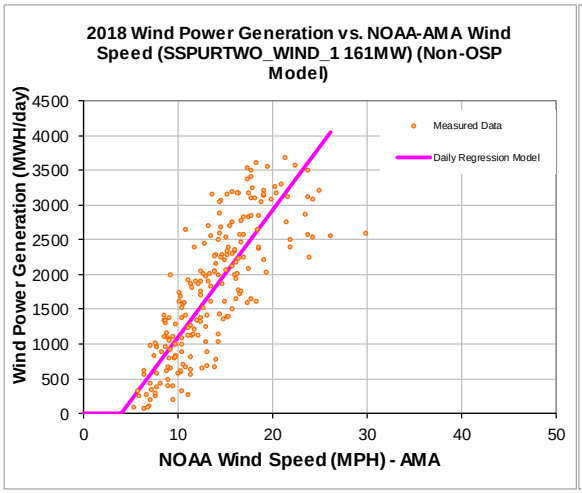
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-481.38
Left Slope (MWh/mph-day)	164.96
RMSE (MWh/day)	572.53
R2	0.64
CV-RMSE	32.4%
Daily Maximum (MWh/day)	3864

OSP Model:

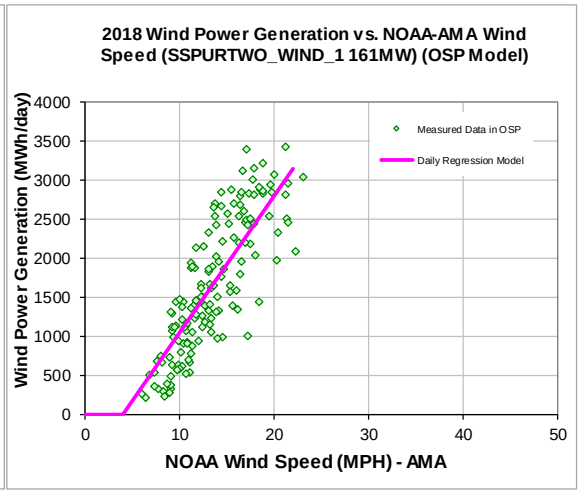
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-822.13
Left Slope (MWh/mph-day)	183.41
RMSE (MWh/day)	470.49
R2	0.69
CV-RMSE	28.6%
Daily Maximum (MWh/day)	3864

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
633,990	626,854

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,605	1,647

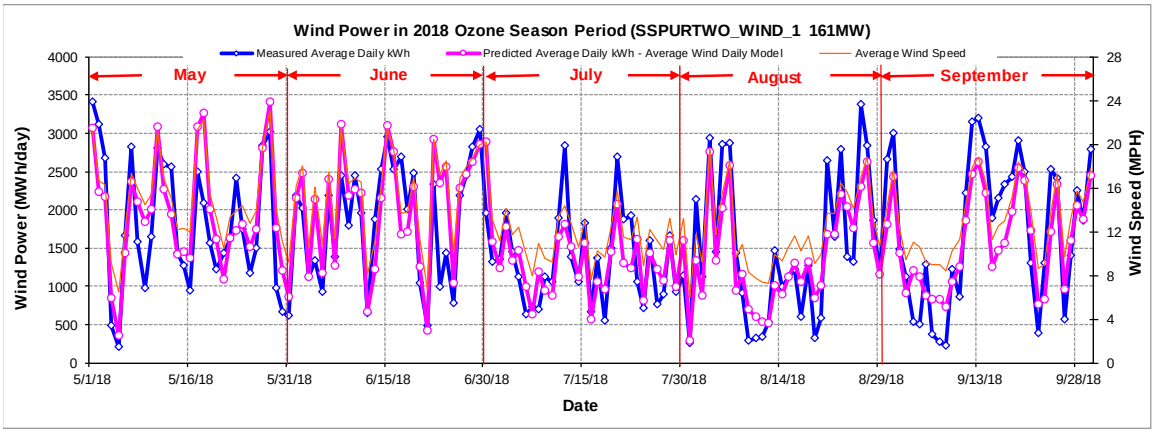
Figure A-437:SSPURTWO_WIND_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	57,160	50,120	12.32%	48%	42%
Feb-18	28	13.78	55,918	50,148	10.32%	52%	46%
Mar-18	31	14.64	61,238	59,956	2.09%	51%	50%
Apr-18	30	17.03	65,357	69,854	-6.88%	56%	60%
May-18	31	14.93	55,491	59,411	-7.06%	46%	50%
Jun-18	30	15.70	56,960	61,708	-8.34%	49%	53%
Jul-18	31	11.32	39,984	38,892	2.73%	33%	32%
Aug-18	31	12.42	49,366	45,105	8.63%	41%	38%
Sep-18	30	13.00	50,167	46,852	6.61%	43%	40%
Oct-18	31	12.69	44,555	49,983	-12.18%	37%	42%
Nov-18	30	12.53	47,066	47,564	-1.06%	41%	41%
Dec-18	31	12.16	43,594	46,678	-7.08%	36%	39%
Total	365	13.56	626,854	626,271	0.09%	44%	44%
Total in OSP (07/15-09/15)	153	13.46	251,968	251,968	0.00%	43%	43%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

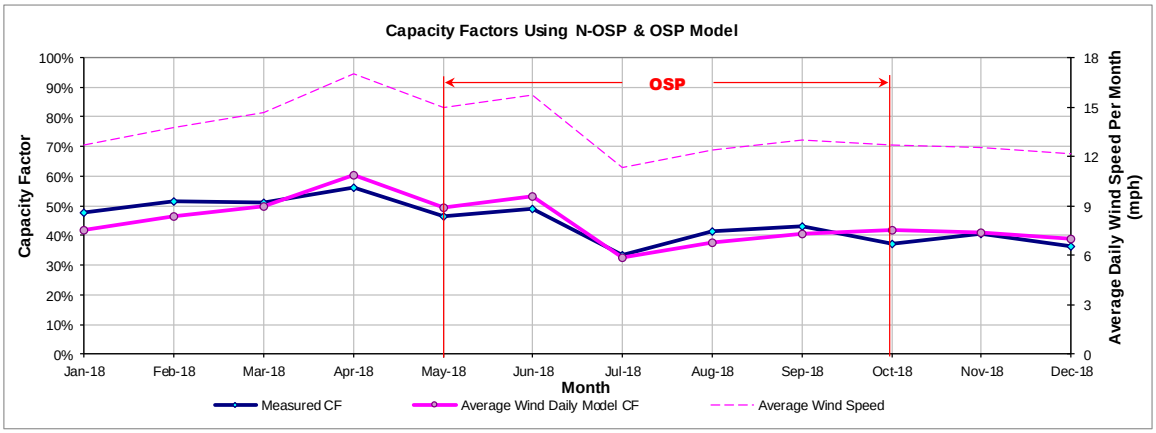


Figure A-438:SSPURTWO_WIND_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.108 Spinning Spur Wind III

A.108.1 Spinning Spur Wind III - SSPURTWO_SS3WIND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SSPURTWO_SS3WIND1	Wind	Amarillo	OLDHAM	EDF Renewable	Spinning Spur Wind III

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
48 Vestas 2 MW	ERCOT	W	Oct-15	Panhandle	AMA	96

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

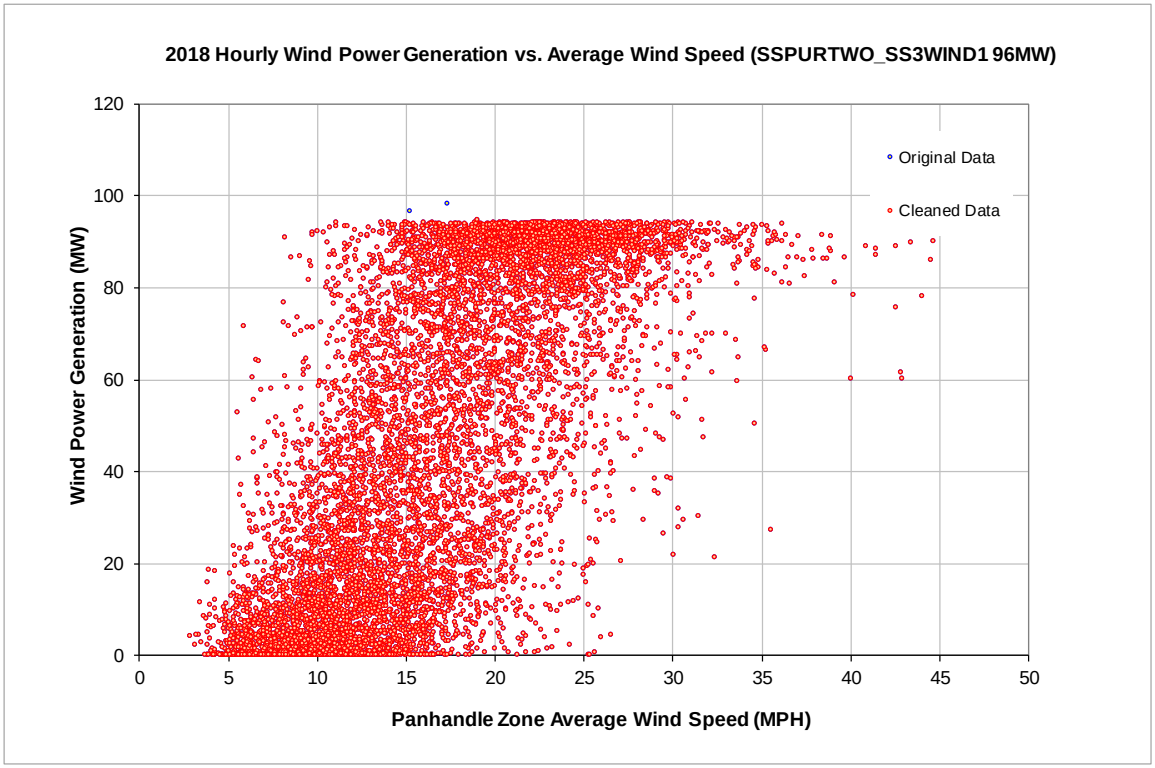


Figure A-439:SSPURTWO_SS3WIND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

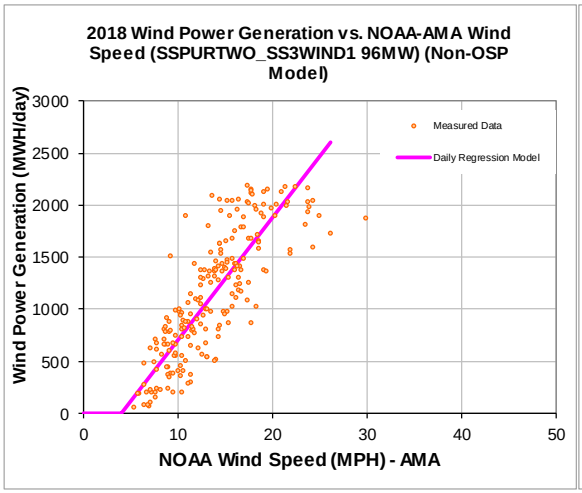
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-309.26
Left Slope (MWh/mph-day)	105.90
RMSE (MWh/day)	345.23
R2	0.67
CV-RMSE	30.4%
Daily Maximum (MWh/day)	2304

OSP Model:

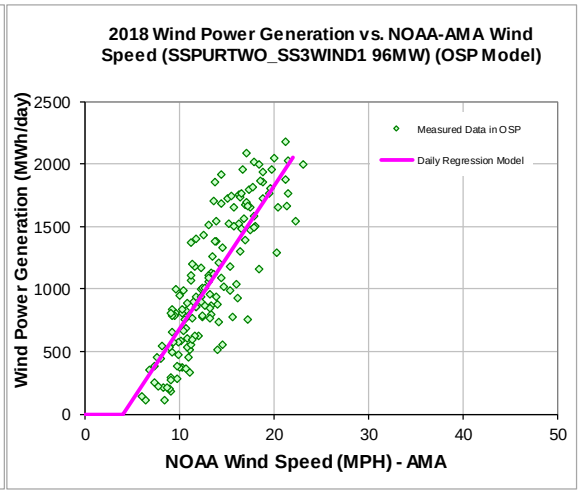
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-544.15
Left Slope (MWh/mph-day)	120.57
RMSE (MWh/day)	290.10
R2	0.72
CV-RMSE	26.9%
Daily Maximum (MWh/day)	2304

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
410,196	405,707

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,051	1,079

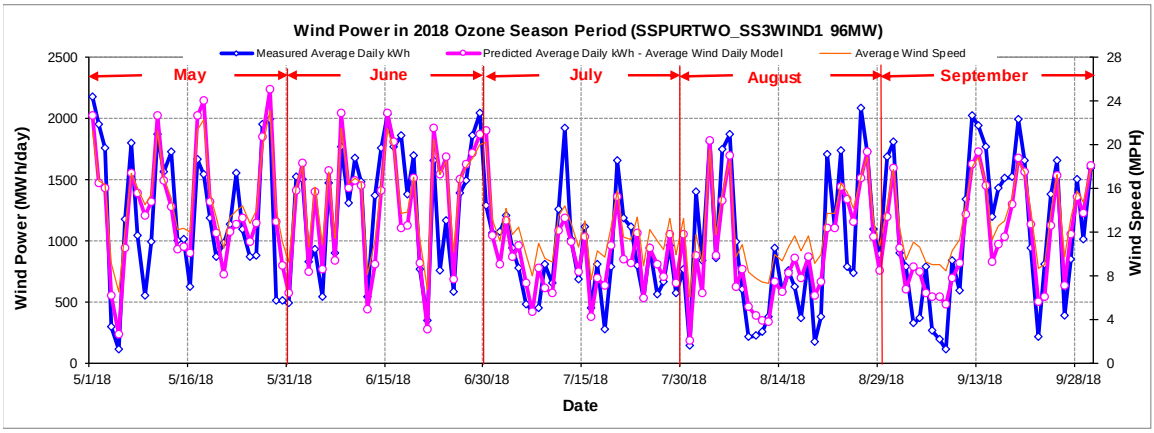
Figure A-440:SSPURTWO_SS3WIND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	36,081	32,170	10.84%	51%	45%
Feb-18	28	13.78	36,031	32,189	10.66%	56%	50%
Mar-18	31	14.64	39,535	38,485	2.65%	55%	54%
Apr-18	30	17.03	42,921	44,669	-4.07%	62%	65%
May-18	31	14.93	36,718	38,942	-6.06%	51%	55%
Jun-18	30	15.70	39,529	40,456	-2.34%	57%	59%
Jul-18	31	11.32	25,938	25,453	1.87%	36%	36%
Aug-18	31	12.42	31,126	29,537	5.10%	44%	41%
Sep-18	30	13.00	31,766	30,689	3.39%	46%	44%
Oct-18	31	12.69	28,806	32,082	-11.37%	40%	45%
Nov-18	30	12.53	29,885	30,529	-2.16%	43%	44%
Dec-18	31	12.16	27,371	29,784	-8.82%	38%	42%
Total	365	13.56	405,707	404,986	0.18%	48%	48%
Total in OSP (07/15-09/15)	153	13.46	165,076	165,076	0.00%	47%	47%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

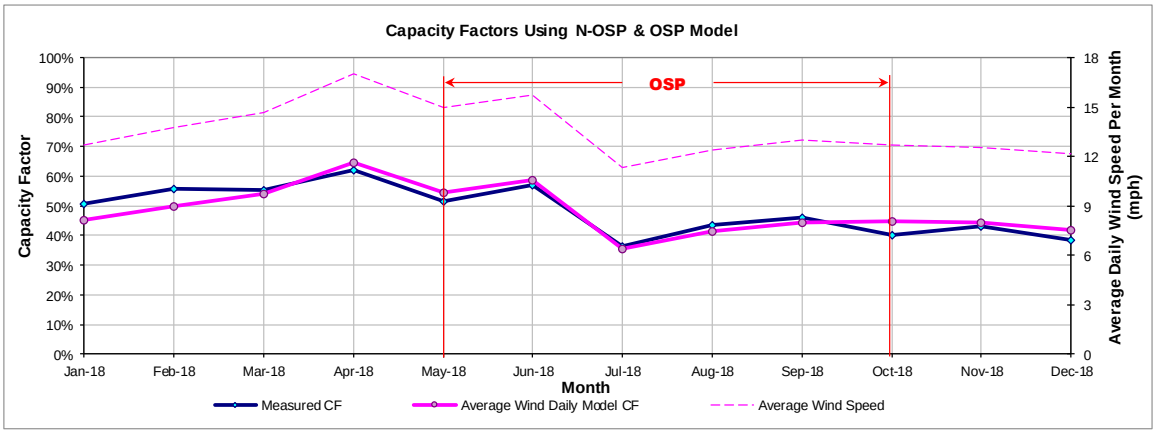


Figure A-441:SSPURTWO_SS3WIND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.108.2 Spinning Spur Wind III - SSPURTWO_SS3WIND2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SSPURTWO_SS3WIND2	Wind	Amarillo	OLDHAM	EDF Renewable	Spinning Spur Wind III

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
49 Vestas 2 MW	ERCOT	W	Oct-15	Panhandle	AMA	98

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

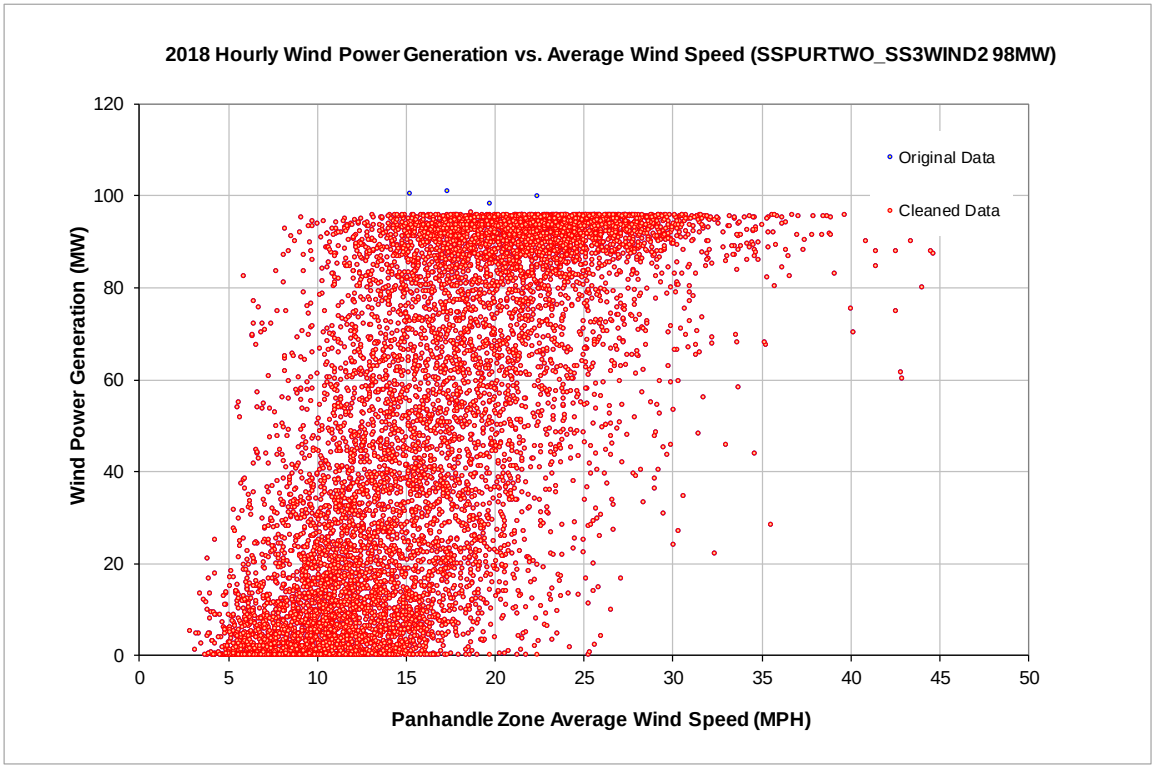


Figure A-442:SSPURTWO_SS3WIND2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

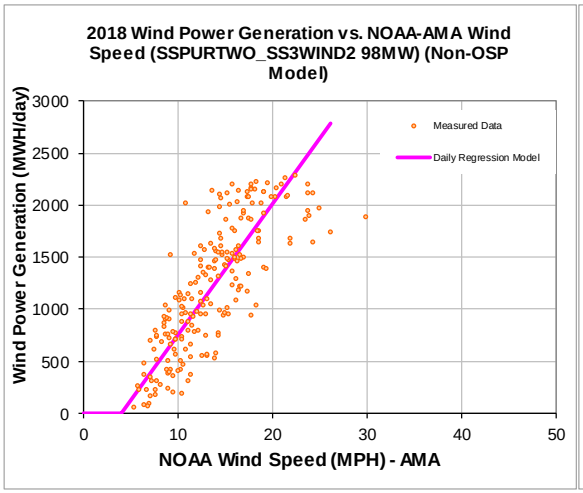
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-223.04
Left Slope (MWh/mph-day)	105.46
RMSE (MWh/day)	368.28
R2	0.64
CV-RMSE	30.3%
Daily Maximum (MWh/day)	2352

OSP Model:

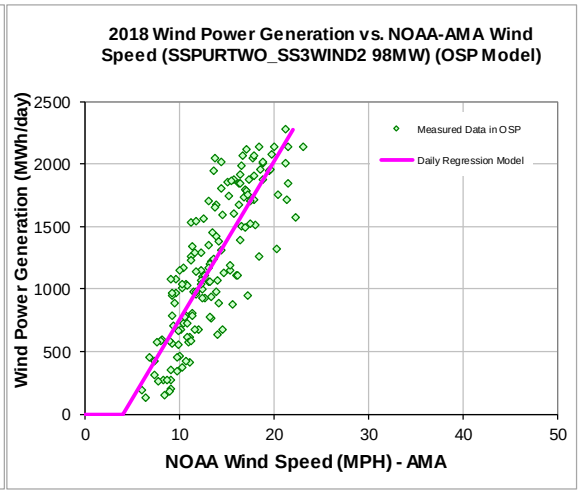
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-458.88
Left Slope (MWh/mph-day)	122.80
RMSE (MWh/day)	317.22
R2	0.69
CV-RMSE	26.6%
Daily Maximum (MWh/day)	2352

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
444,604	440,313

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,165	1,194

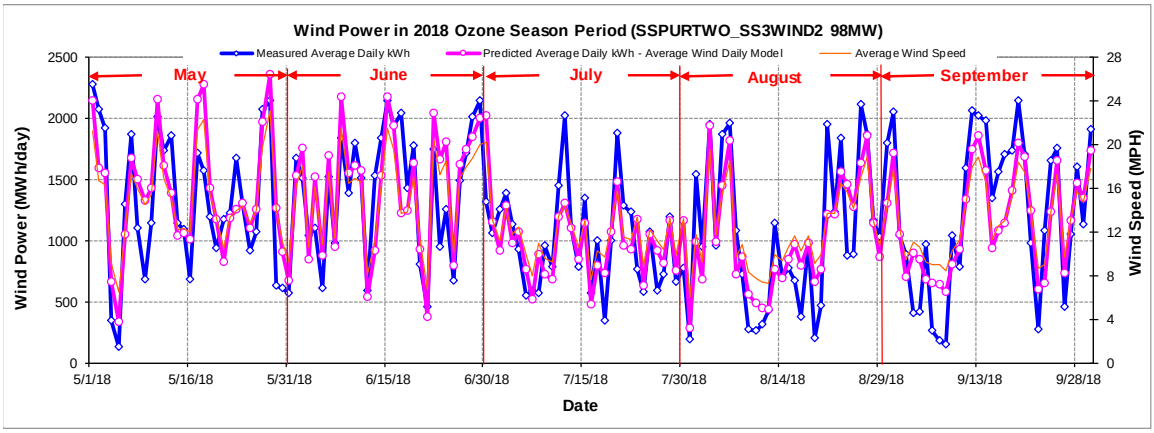
Figure A-443:SSPURTWO_SS3WIND2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (AMA) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	12.72	39,293	34,666	11.77%	54%	48%
Feb-18	28	13.78	37,736	34,430	8.76%	57%	52%
Mar-18	31	14.64	41,574	40,954	1.49%	57%	56%
Apr-18	30	17.03	44,827	46,973	-4.79%	64%	67%
May-18	31	14.93	40,081	42,595	-6.27%	55%	58%
Jun-18	30	15.70	42,755	44,060	-3.05%	61%	62%
Jul-18	31	11.32	29,715	28,876	2.82%	41%	40%
Aug-18	31	12.42	34,332	33,036	3.77%	47%	45%
Sep-18	30	13.00	35,817	34,114	4.76%	51%	48%
Oct-18	31	12.69	31,756	34,578	-8.89%	44%	47%
Nov-18	30	12.53	32,314	32,947	-1.96%	46%	47%
Dec-18	31	12.16	30,113	32,263	-7.14%	41%	44%
Total	365	13.56	440,313	439,495	0.19%	51%	51%
Total in OSP (07/15-09/15)	153	13.46	182,700	182,682	0.01%	51%	51%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

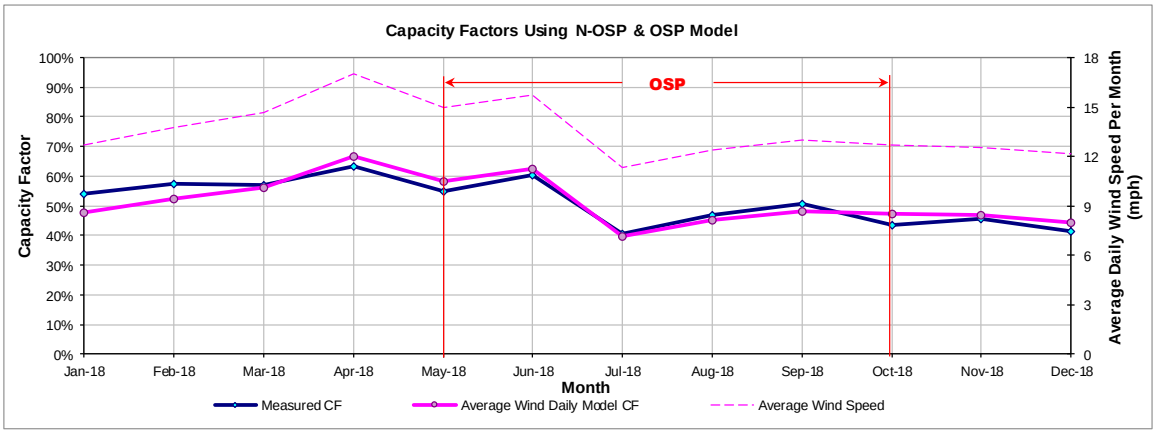


Figure A-444:SSPURTWO_SS3WIND2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.109 Stanton Wind Energy

A.109.1 Stanton Wind Energy - SWEC_G1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SWEC_G1	Wind	Stanton	MARTIN	Invenergy	Stanton Wind Energy

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
80 GE 1.5 MW	ERCOT	W	Jan-08	West	MAF	120

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

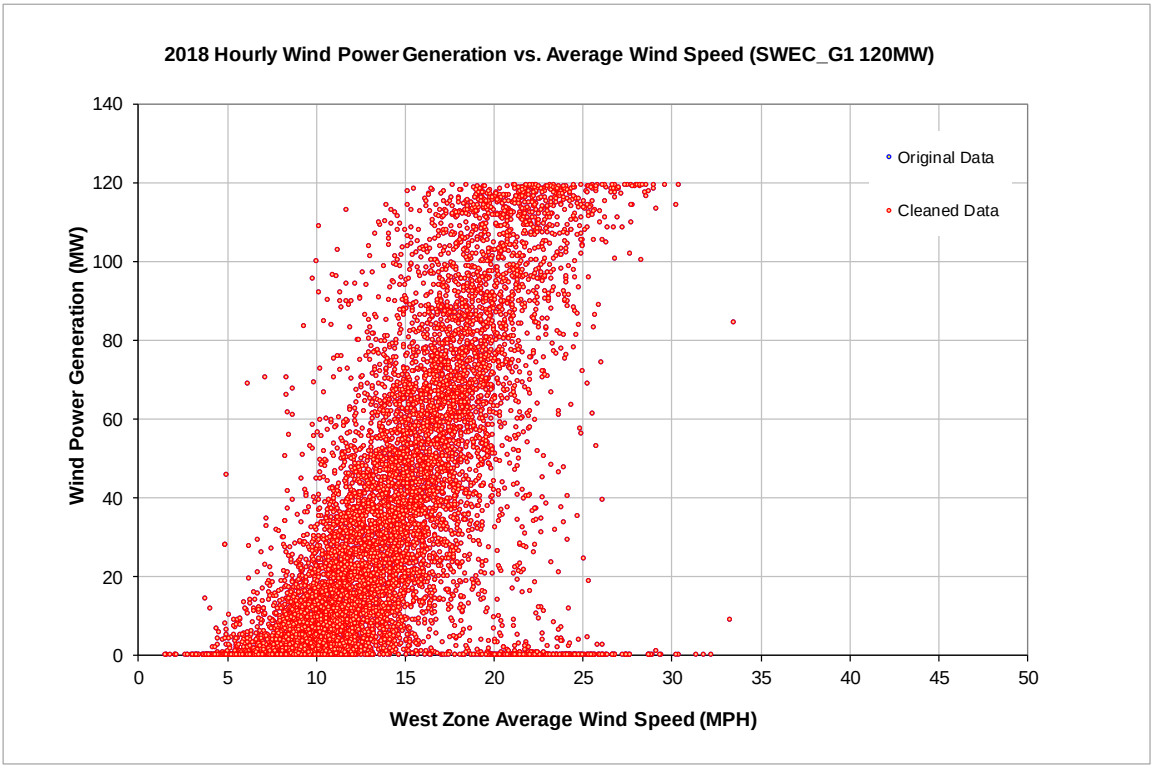


Figure A-445:SWEC_G1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

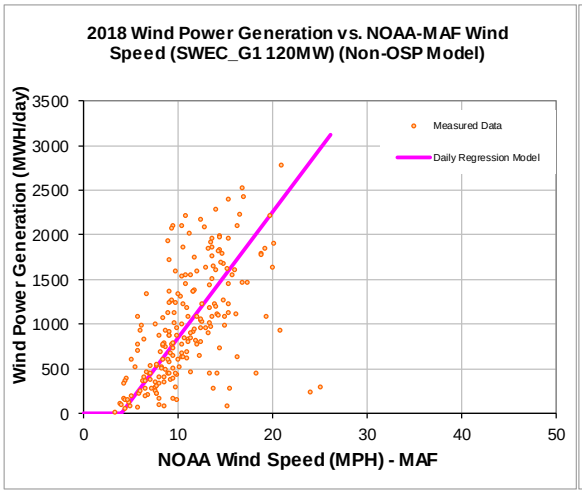
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	2.23
Left Slope (MWh/mph-day)	89.17
RMSE (MWh/day)	515.05
R2	0.32
CV-RMSE	53.0%
Daily Maximum (MWh/day)	2880

OSP Model:

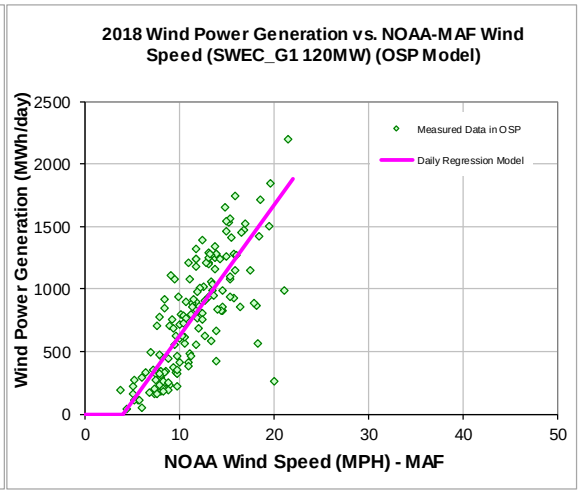
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-311.19
Left Slope (MWh/mph-day)	95.11
RMSE (MWh/day)	290.12
R2	0.59
CV-RMSE	37.0%
Daily Maximum (MWh/day)	2880

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
301,529	325,826

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
694	784

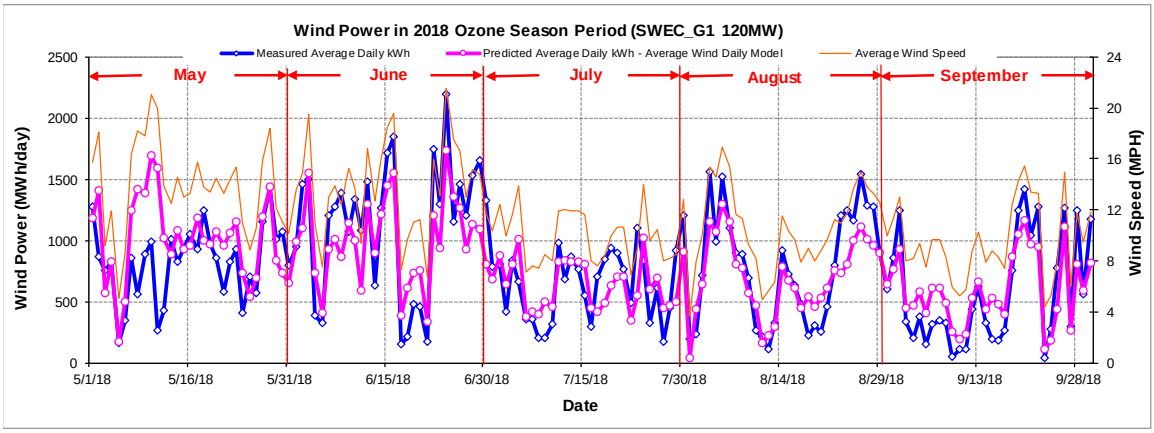
Figure A-446:SWEC_G1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (MAF) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	9.47	36,542	26,255	28.15%	41%	29%
Feb-18	28	10.85	29,975	27,155	9.41%	37%	34%
Mar-18	31	11.79	36,518	32,664	10.55%	41%	37%
Apr-18	30	13.87	19,384	37,172	-91.76%	22%	43%
May-18	31	13.80	25,443	31,032	-21.97%	28%	35%
Jun-18	30	13.77	33,864	29,953	11.55%	39%	35%
Jul-18	31	9.76	19,468	19,132	1.73%	22%	21%
Aug-18	31	10.84	24,298	22,306	8.20%	27%	25%
Sep-18	30	9.41	16,866	17,517	-3.86%	20%	20%
Oct-18	31	10.68	25,483	29,587	-16.11%	29%	33%
Nov-18	30	9.55	26,315	25,614	2.67%	30%	30%
Dec-18	31	9.90	31,670	27,440	13.36%	35%	31%
Total	365	11.14	325,826	325,826	0.00%	31%	31%
Total in OSP (07/15-09/15)	153	11.51	119,940	119,940	0.00%	27%	27%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

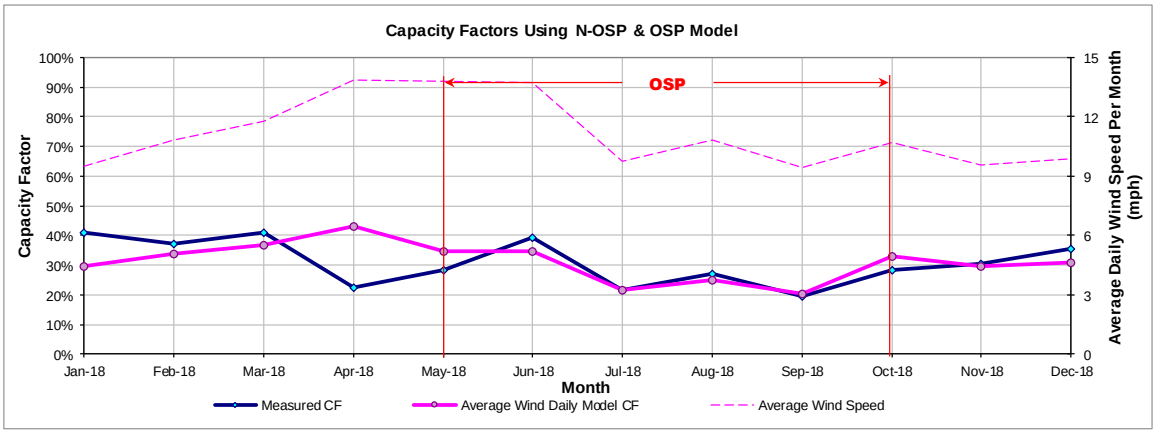


Figure A-447:SWEC_G1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.110 Stephens Ranch Wind Phase 1

A.110.1 Stephens Ranch Wind Phase 1 - SRWE1_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SRWE1_UNIT1	Wind	-	BORDEN	Starwood Energy Group Global	Stephens Ranch Wind Phase 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
118 GE 1.7 MW	ERCOT	W	Dec-14	West	LBB	211.2

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

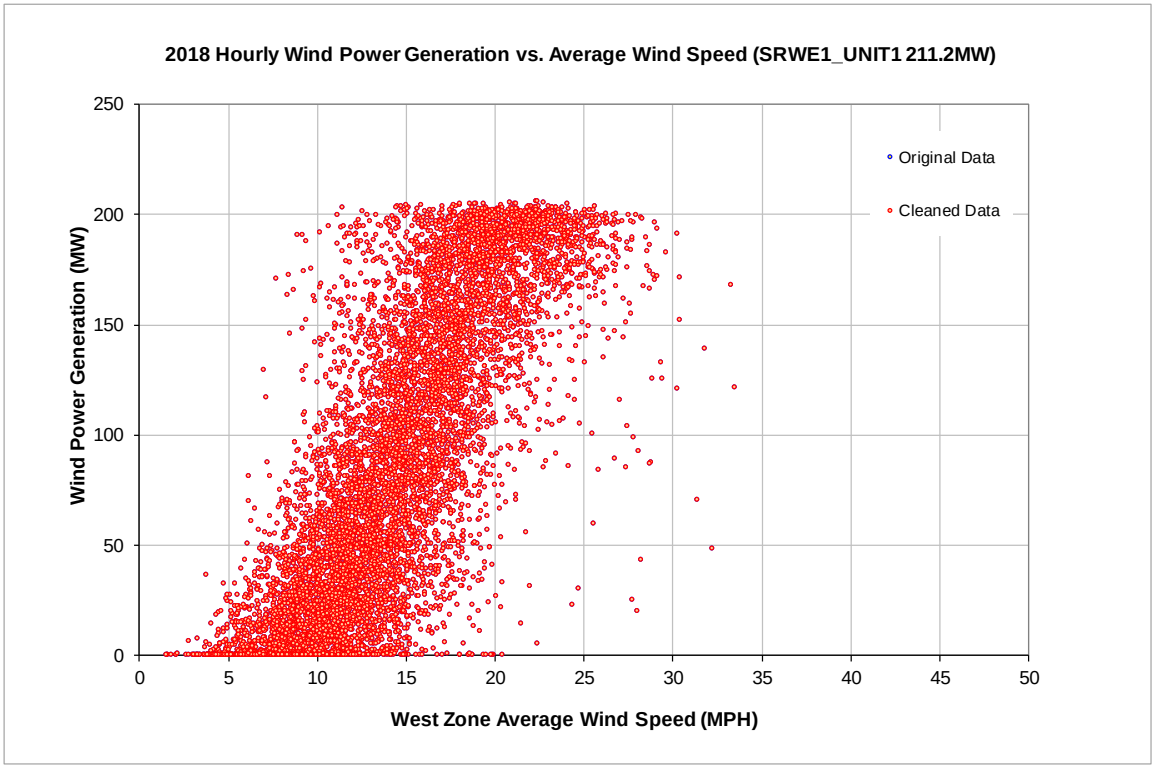


Figure A-448:SRWE1_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

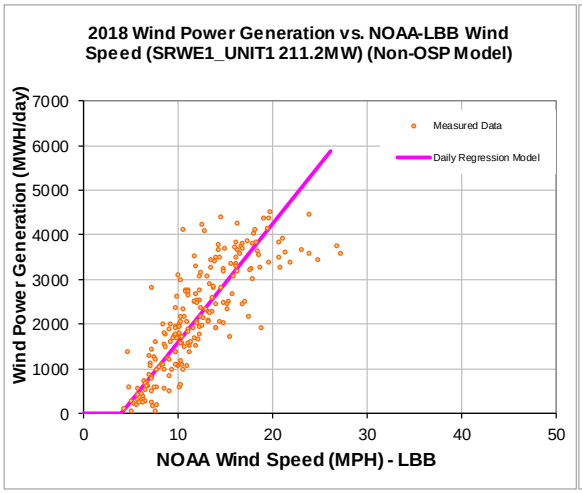
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-419.09
Left Slope (MWh/mph-day)	212.46
RMSE (MWh/day)	674.06
R2	0.67
CV-RMSE	31.2%
Daily Maximum (MWh/day)	5069

OSP Model:

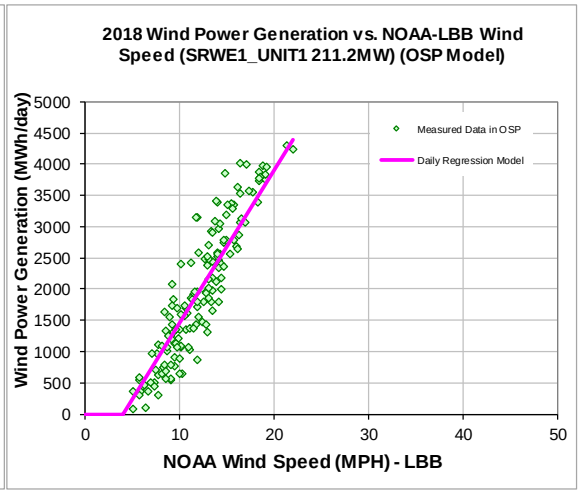
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1356.29
Left Slope (MWh/mph-day)	275.56
RMSE (MWh/day)	430.17
R2	0.84
CV-RMSE	22.1%
Daily Maximum (MWh/day)	5069

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
732,115	756,219

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,648	1,951

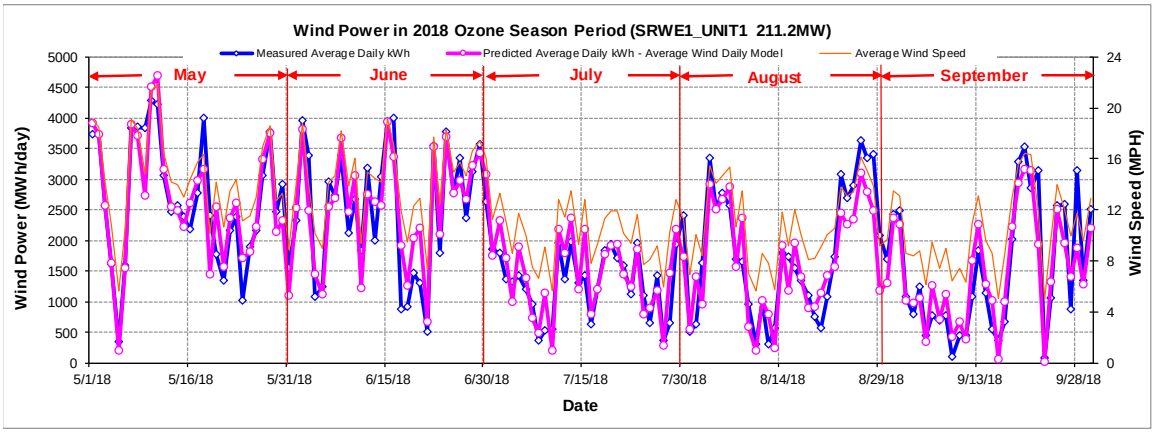
Figure A-449:SRWE1_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	66,449	60,049	9.63%	42%	38%
Feb-18	28	12.08	61,769	60,111	2.68%	44%	42%
Mar-18	31	13.58	75,805	76,470	-0.88%	48%	49%
Apr-18	30	15.19	72,841	84,077	-15.43%	48%	55%
May-18	31	14.42	81,880	81,177	0.86%	52%	52%
Jun-18	30	14.33	75,716	77,814	-2.77%	50%	51%
Jul-18	31	10.01	40,263	43,425	-7.85%	26%	28%
Aug-18	31	11.09	56,761	52,657	7.23%	36%	34%
Sep-18	30	10.17	43,810	43,358	1.03%	29%	29%
Oct-18	31	10.80	58,767	58,119	1.10%	37%	37%
Nov-18	30	11.15	60,548	58,468	3.44%	40%	38%
Dec-18	31	11.13	61,608	60,013	2.59%	39%	38%
Total	365	12.08	756,219	755,740	0.06%	41%	41%
Total in OSP (07/15-09/15)	153	12.00	298,431	298,431	0.00%	38%	38%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

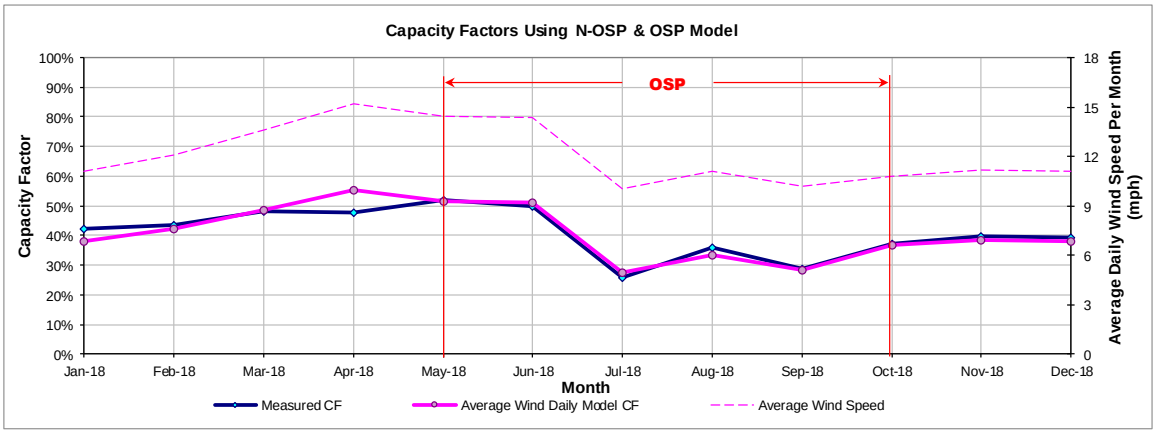


Figure A-450:SRWE1_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.111 Stephens Ranch Wind Phase b

A.111.1 Stephens Ranch Wind Phase b - SRWE1_SRWE2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SRWE1_SRWE2	Wind	-	BORDEN	Wind Tex Energy	Stephens Ranch Wind Phase b

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
97 GE 1.7 MW	ERCOT	W	May-15	West	LBB	164.7

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

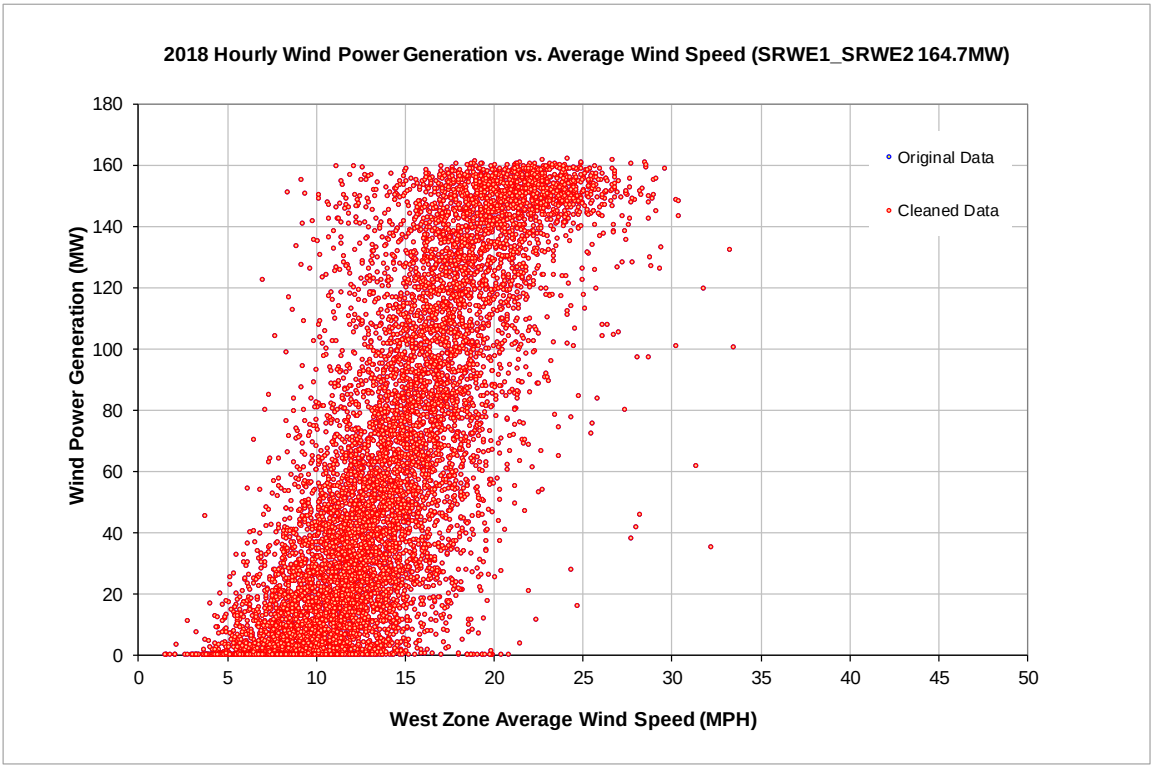


Figure A-451:SRWE1_SRWE2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

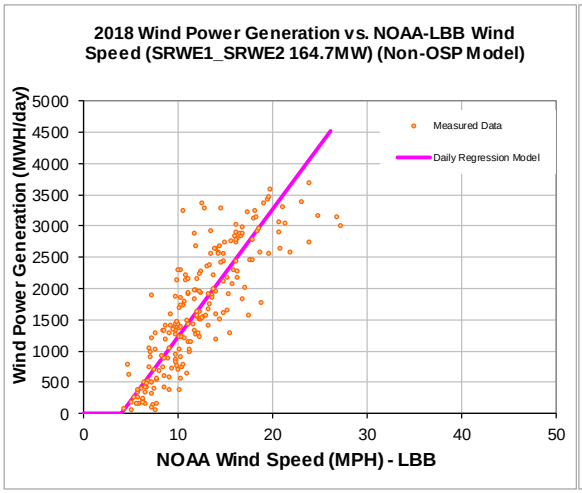
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-457.94
Left Slope (MWh/mph-day)	174.74
RMSE (MWh/day)	516.81
R2	0.70
CV-RMSE	31.1%
Daily Maximum (MWh/day)	3953

OSP Model:

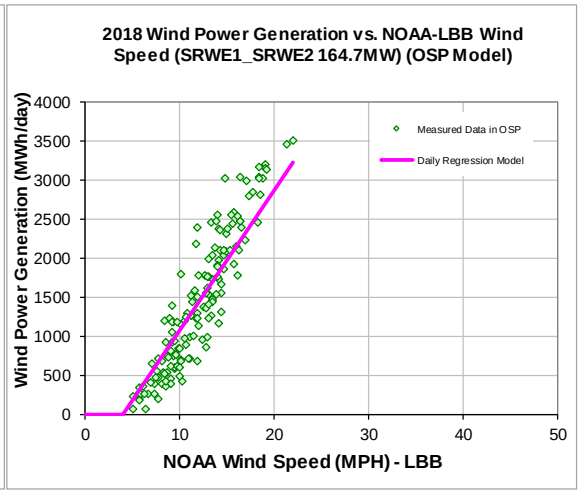
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1221.68
Left Slope (MWh/mph-day)	220.83
RMSE (MWh/day)	332.38
R2	0.85
CV-RMSE	23.3%
Daily Maximum (MWh/day)	3953

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
552,630	571,039

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,189	1,428

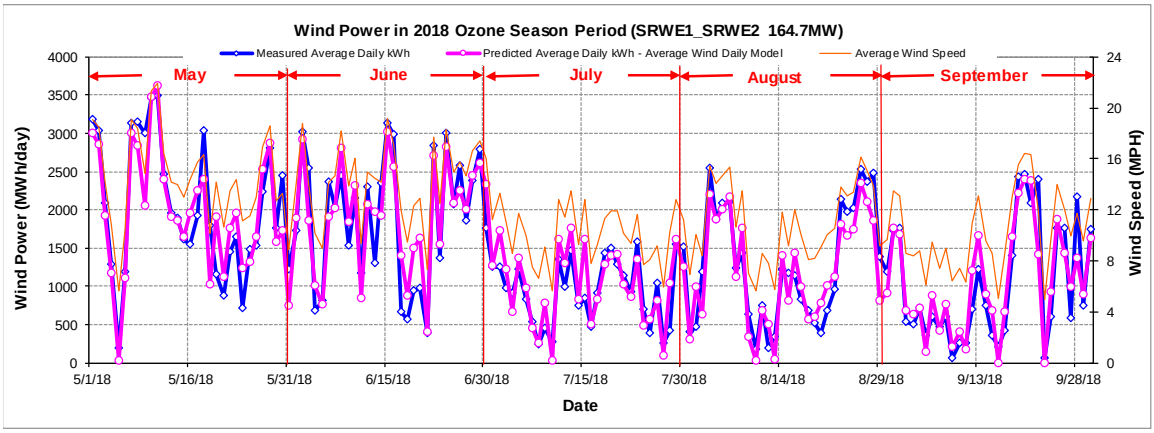
Figure A-452:SRWE1_SRWE2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	49,075	45,877	6.52%	40%	37%
Feb-18	28	12.08	47,228	46,268	2.03%	43%	42%
Mar-18	31	13.58	56,545	59,382	-5.02%	46%	48%
Apr-18	30	15.19	59,565	65,649	-10.21%	50%	55%
May-18	31	14.42	62,735	60,877	2.96%	51%	50%
Jun-18	30	14.33	56,701	58,317	-2.85%	48%	49%
Jul-18	31	10.01	28,806	30,623	-6.31%	24%	25%
Aug-18	31	11.09	40,349	38,021	5.77%	33%	31%
Sep-18	30	10.17	29,948	30,920	-3.24%	25%	26%
Oct-18	31	10.80	44,078	44,290	-0.48%	36%	36%
Nov-18	30	11.15	47,838	44,689	6.58%	40%	38%
Dec-18	31	11.13	48,170	45,744	5.04%	39%	37%
Total	365	12.08	571,039	570,656	0.07%	40%	40%
Total in OSP (07/15-09/15)	153	12.00	218,540	218,757	-0.10%	36%	36%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

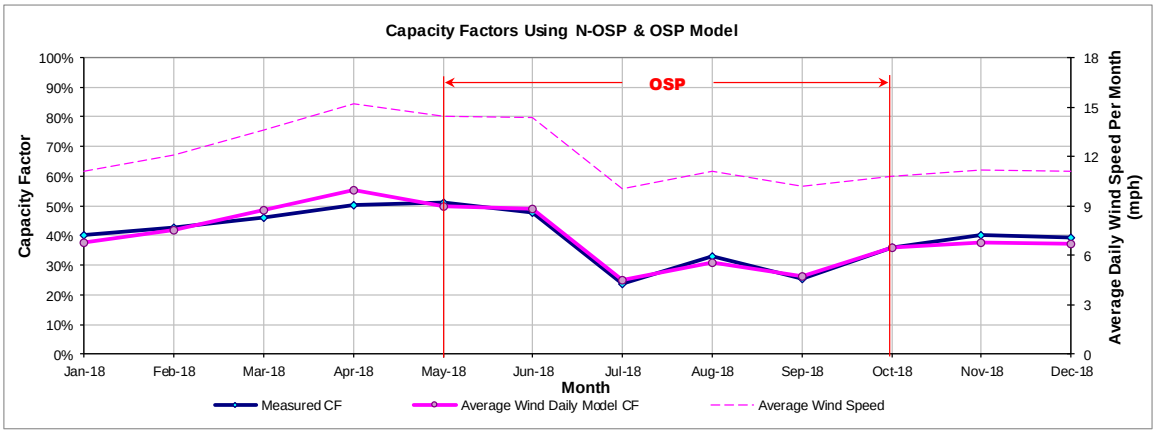


Figure A-453:SRWE1_SRWE2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.112 Sweetwater Wind 1

A.112.1 Sweetwater Wind 1 - SWEETWND_WND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SWEETWND_WND1	Wind	Sweetwater	NOLAN	DKRW/BabcockBrown	Sweetwater Wind 1

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
25 GE 1.5 MW	ERCOT	W	Dec-03	West	ABI	42.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

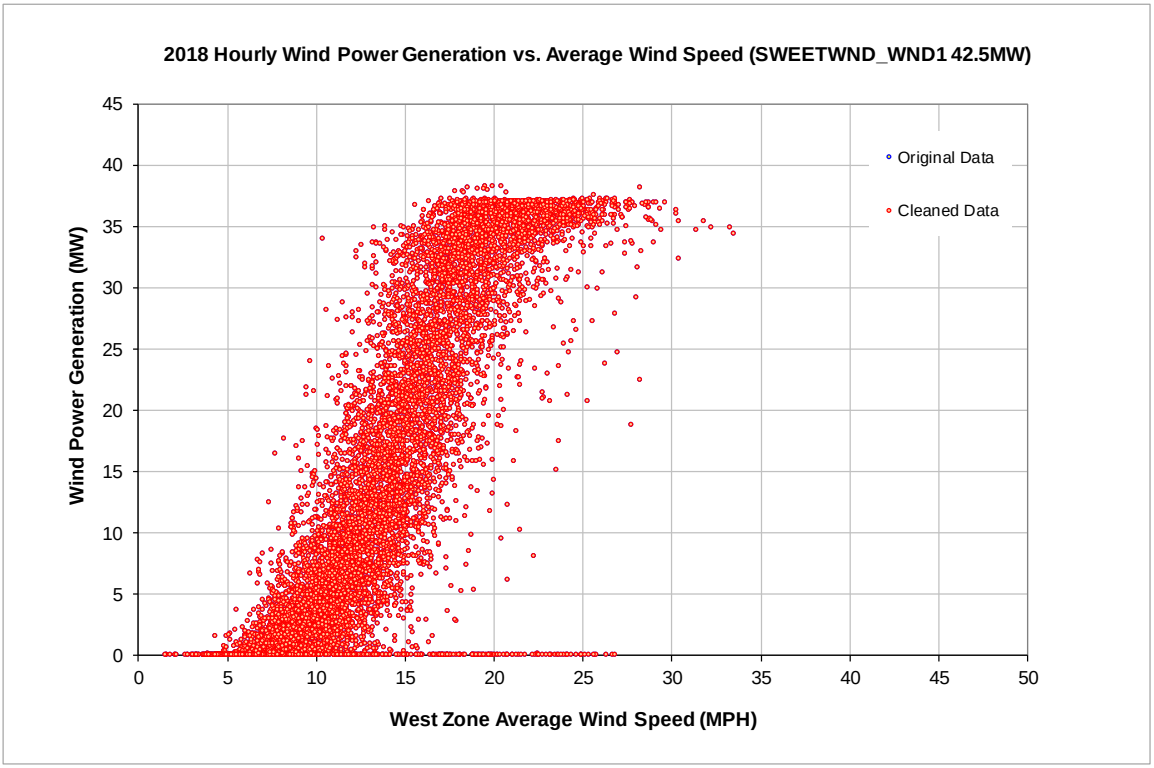


Figure A-454:SWEETWND_WND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

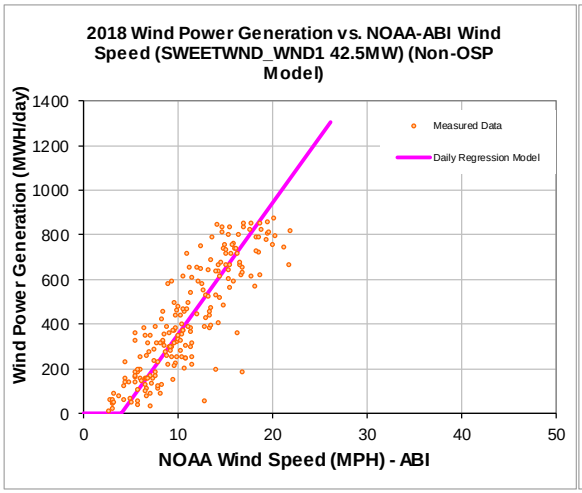
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-97.98
Left Slope (MWh/mph-day)	46.53
RMSE (MWh/day)	124.25
R2	0.74
CV-RMSE	30.0%
Daily Maximum (MWh/day)	1020

OSP Model:

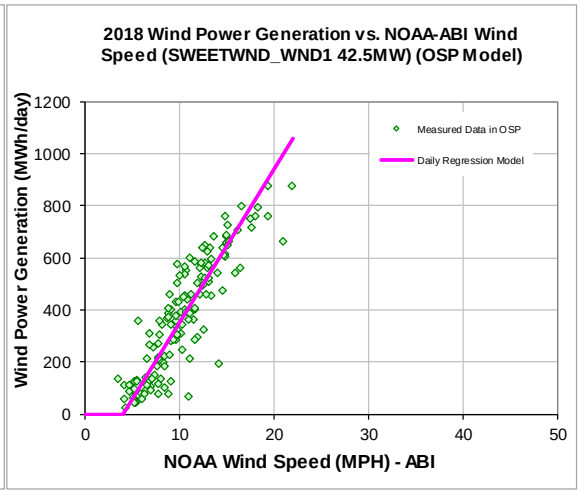
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-165.79
Left Slope (MWh/mph-day)	52.11
RMSE (MWh/day)	101.41
R2	0.79
CV-RMSE	27.1%
Daily Maximum (MWh/day)	1020

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
157,287	141,894

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
382	375

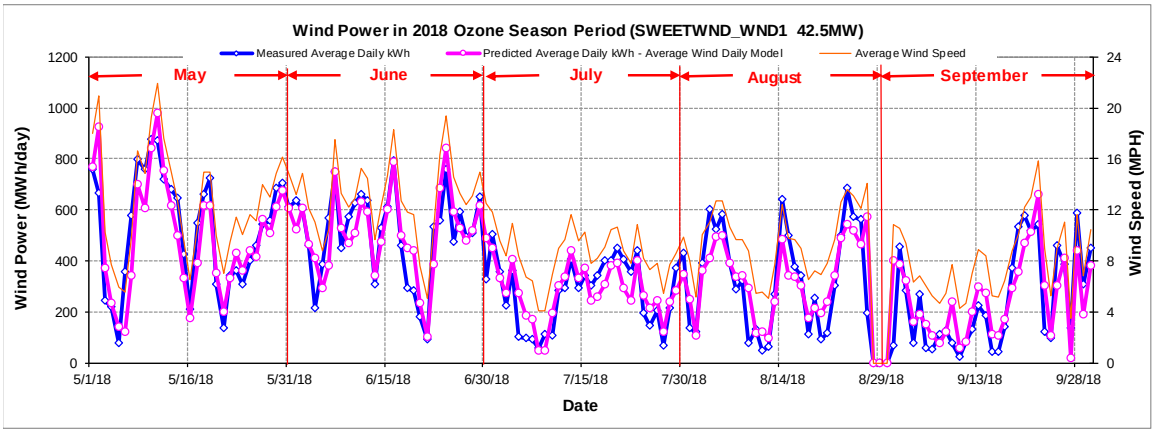
Figure A-455:SWEETWND_WND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.23	12,616	12,318	2.36%	40%	39%
Feb-18	28	11.00	10,925	11,585	-6.04%	38%	41%
Mar-18	31	11.92	13,554	14,164	-4.50%	43%	45%
Apr-18	30	13.18	14,355	15,454	-7.66%	47%	51%
May-18	31	12.78	16,228	15,506	4.44%	51%	49%
Jun-18	30	12.90	14,974	15,199	-1.50%	49%	50%
Jul-18	31	8.52	8,462	8,624	-1.91%	27%	27%
Aug-18	31	9.62	9,100	9,399	-3.29%	29%	30%
Sep-18	30	7.97	7,443	7,478	-0.47%	24%	24%
Oct-18	31	9.35	11,488	10,455	8.99%	36%	33%
Nov-18	30	10.05	11,290	11,088	1.79%	37%	36%
Dec-18	31	10.26	11,459	10,623	7.30%	36%	34%
Total	365	10.74	141,894	141,894	0.00%	38%	38%
Total in OSP (07/15-09/15)	150	10.37	56,206	56,206	0.00%	37%	37%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

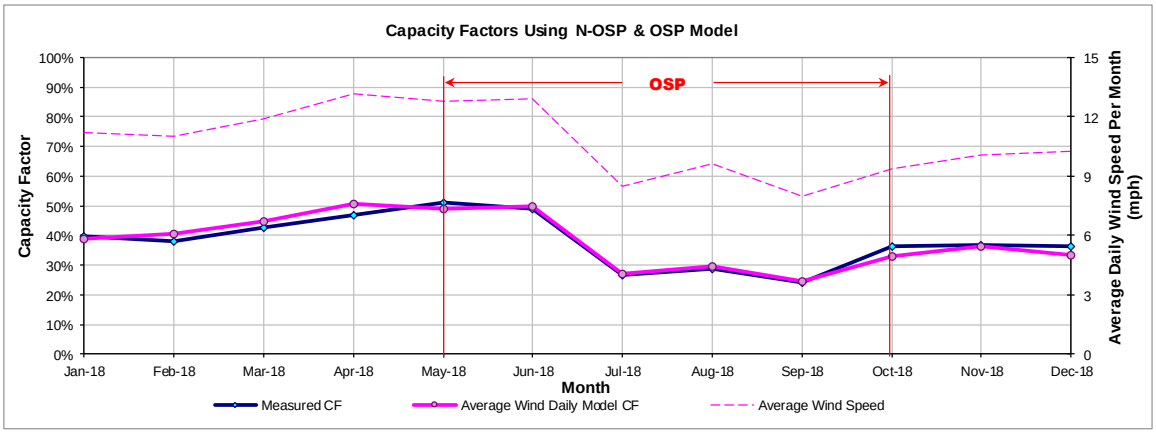


Figure A-456:SWEETWND_WND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.113 Sweetwater Wind 2

A.113.1 Sweetwater Wind 2 - SWEETWN2_WND2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SWEETWN2_WND2	Wind	Sweetwater	NOLAN	DKRW/BabcockBrown	Sweetwater Wind 2

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
61 GE 1.5 MW	ERCOT	W	Feb-05	West	ABI	98.8

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

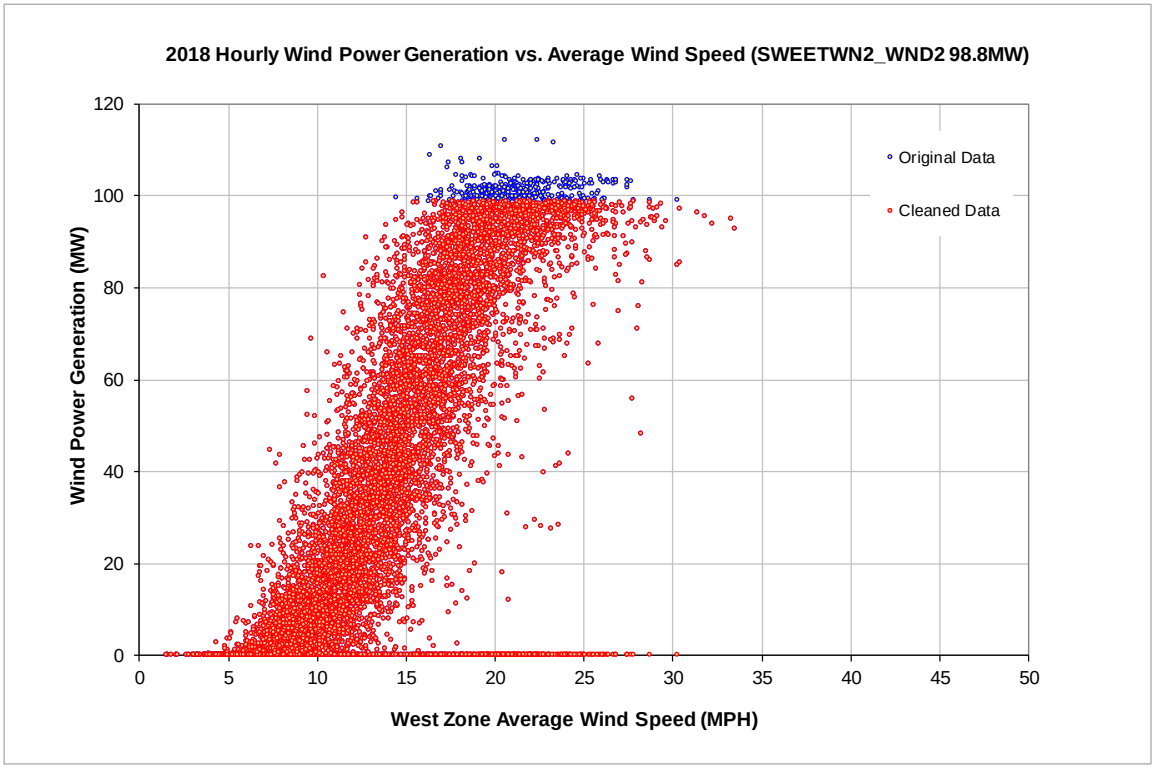


Figure A-457:SWEETWN2_WND2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

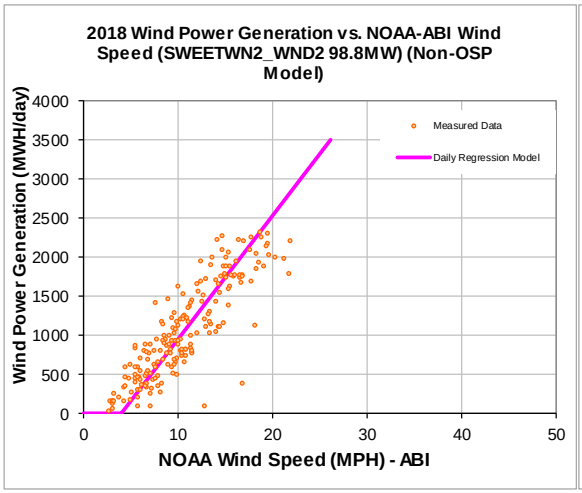
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-211.99
Left Slope (MWh/mph-day)	118.90
RMSE (MWh/day)	309.22
R2	0.75
CV-RMSE	29.3%
Daily Maximum (MWh/day)	2371

OSP Model:

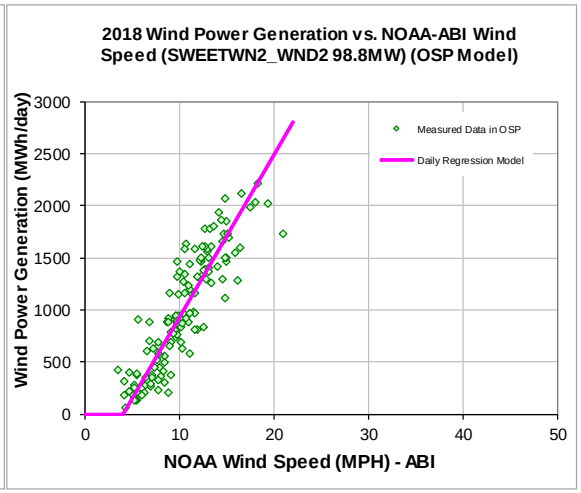
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-470.45
Left Slope (MWh/mph-day)	140.85
RMSE (MWh/day)	252.99
R2	0.80
CV-RMSE	26.1%
Daily Maximum (MWh/day)	2371

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
415,311	342,112

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,009	970

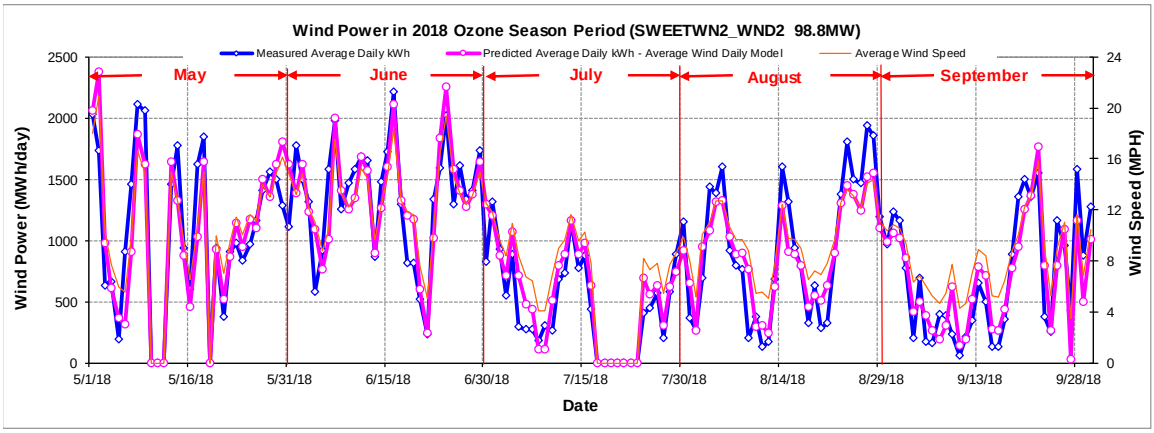
Figure A-458:SWEETWN2_WND2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.40	32,534	32,024	1.57%	44%	44%
Feb-18	28	11.00	29,709	30,676	-3.26%	45%	46%
Mar-18	31	11.70	34,865	35,385	-1.49%	47%	48%
Apr-18	30	12.55	32,104	34,571	-7.69%	45%	49%
May-18	31	11.94	33,002	32,599	1.22%	45%	44%
Jun-18	30	12.90	40,322	40,411	-0.22%	57%	57%
Jul-18	31	8.26	14,504	16,638	-14.71%	20%	23%
Aug-18	31	9.85	29,825	28,415	4.73%	41%	39%
Sep-18	30	7.97	20,056	19,543	2.56%	28%	27%
Oct-18	31	8.41	23,701	21,267	10.27%	32%	29%
Nov-18	30	9.26	23,050	22,216	3.62%	32%	31%
Dec-18	31	9.98	28,440	28,255	0.65%	39%	38%
Total	365	10.47	342,112	342,000	0.03%	40%	40%
Total in OSP (07/15-09/15)	142	10.23	137,710	137,605	0.08%	41%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

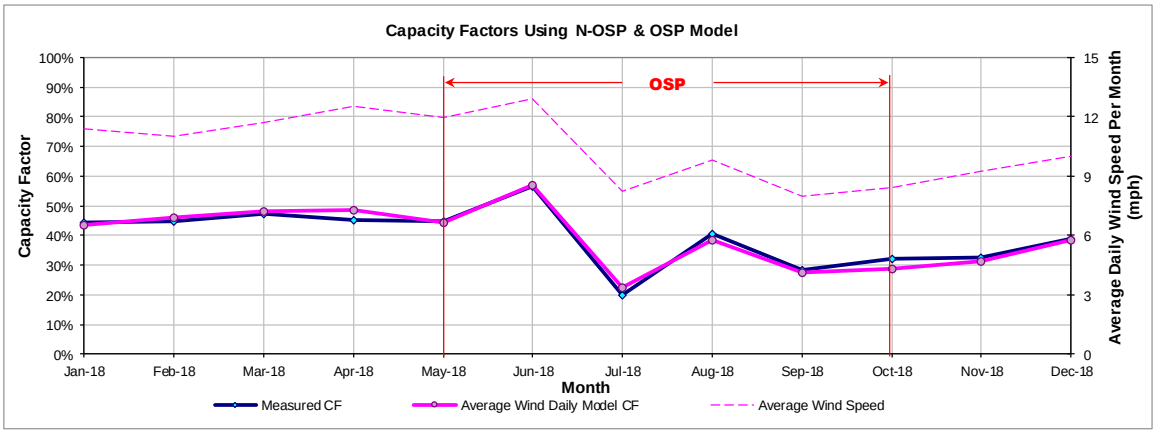


Figure A-459:SWEETWN2_WND2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.113.2 Sweetwater Wind 2 - SWEETWN2_WND24

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SWEETWN2_WND24	Wind	Sweetwater	NOLAN	DKRW/BabcockBrown	Sweetwater Wind 2

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
-	ERCOT	W	Feb-05	West	ABI	17

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

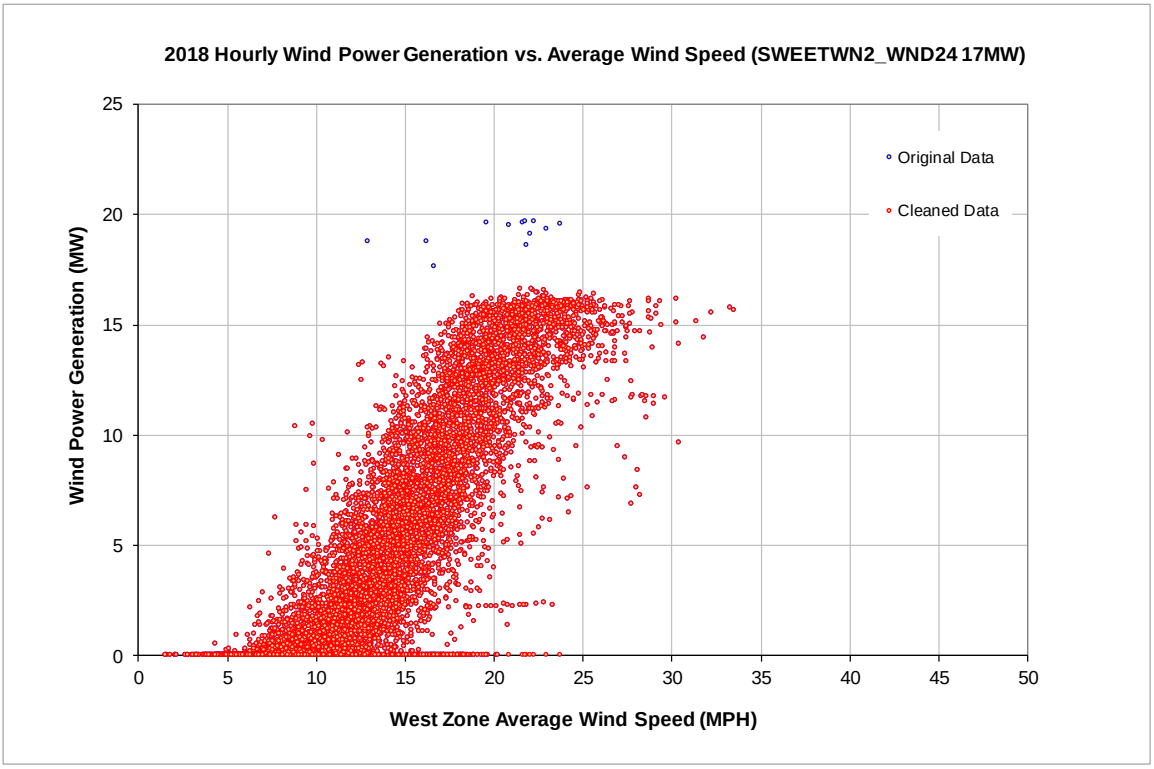


Figure A-460:SWEETWN2_WND24 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

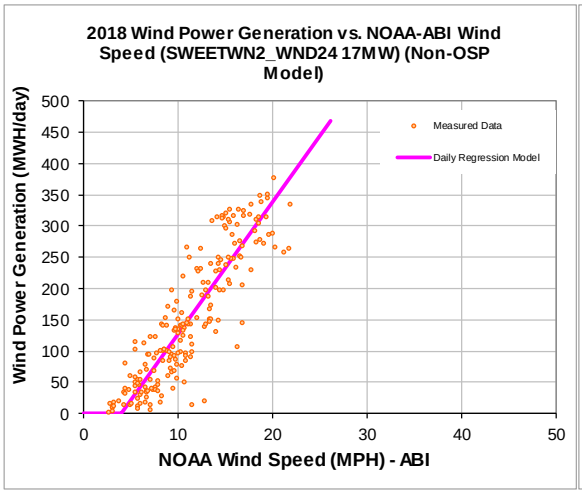
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-70.14
Left Slope (MWh/mph-day)	19.85
RMSE (MWh/day)	47.94
R2	0.78
CV-RMSE	32.3%
Daily Maximum (MWh/day)	408

OSP Model:

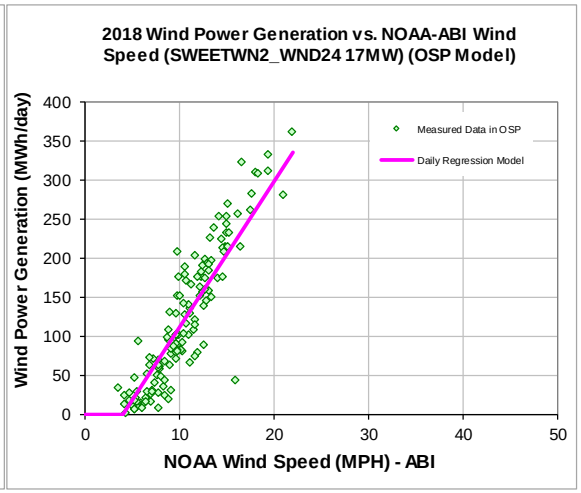
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-98.13
Left Slope (MWh/mph-day)	20.90
RMSE (MWh/day)	35.61
R2	0.83
CV-RMSE	29.8%
Daily Maximum (MWh/day)	408

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
54,788	48,111

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
122	120

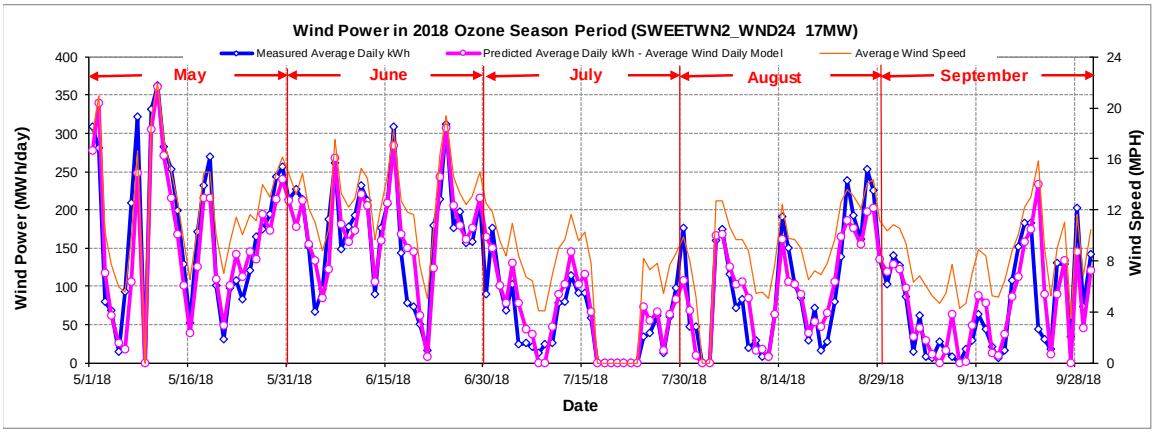
Figure A-461:SWEETWN2_WND24 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.40	4,978	4,392	11.76%	39%	35%
Feb-18	28	11.00	3,997	4,163	-4.14%	35%	36%
Mar-18	31	11.92	4,910	5,162	-5.15%	39%	41%
Apr-18	30	13.18	5,005	5,741	-14.71%	41%	47%
May-18	31	12.71	5,433	5,028	7.46%	43%	40%
Jun-18	30	12.90	4,992	5,148	-3.13%	41%	42%
Jul-18	31	8.26	1,611	1,814	-12.59%	13%	14%
Aug-18	31	9.80	3,105	3,095	0.34%	25%	24%
Sep-18	30	7.97	1,969	2,085	-5.87%	16%	17%
Oct-18	31	9.35	3,833	3,610	5.84%	30%	29%
Nov-18	30	10.05	4,060	3,888	4.25%	33%	32%
Dec-18	31	10.23	4,218	4,134	1.99%	33%	33%
Total	365	10.77	48,111	48,259	-0.31%	32%	32%
Total in OSP (07/15-09/15)	143	10.42	17,111	17,169	-0.34%	29%	29%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

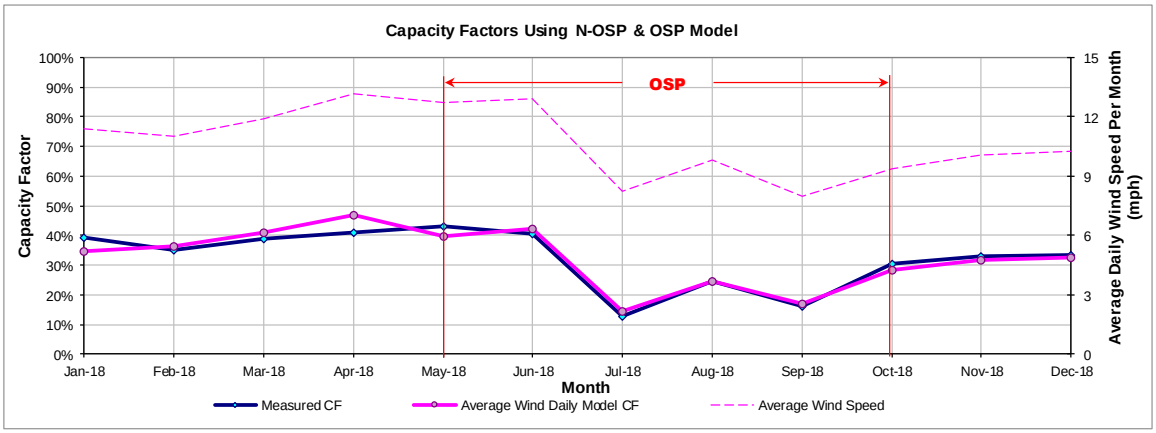


Figure A-462:SWEETWN2_WND24 - Predicted Wind Power and Capacity Factor Using Daily Models

A.114 Sweetwater Wind 3

A.114.1 Sweetwater Wind 3 - SWEETWN3_WND3A

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SWEETWN3_WND3A	Wind	Sweetwater	NOLAN	DKRW/BabcockBrown	Sweetwater Wind 3 (Cottonwood

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
90 GE 1.5 MW	ERCOT	W	Dec-05	West	ABI	151

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

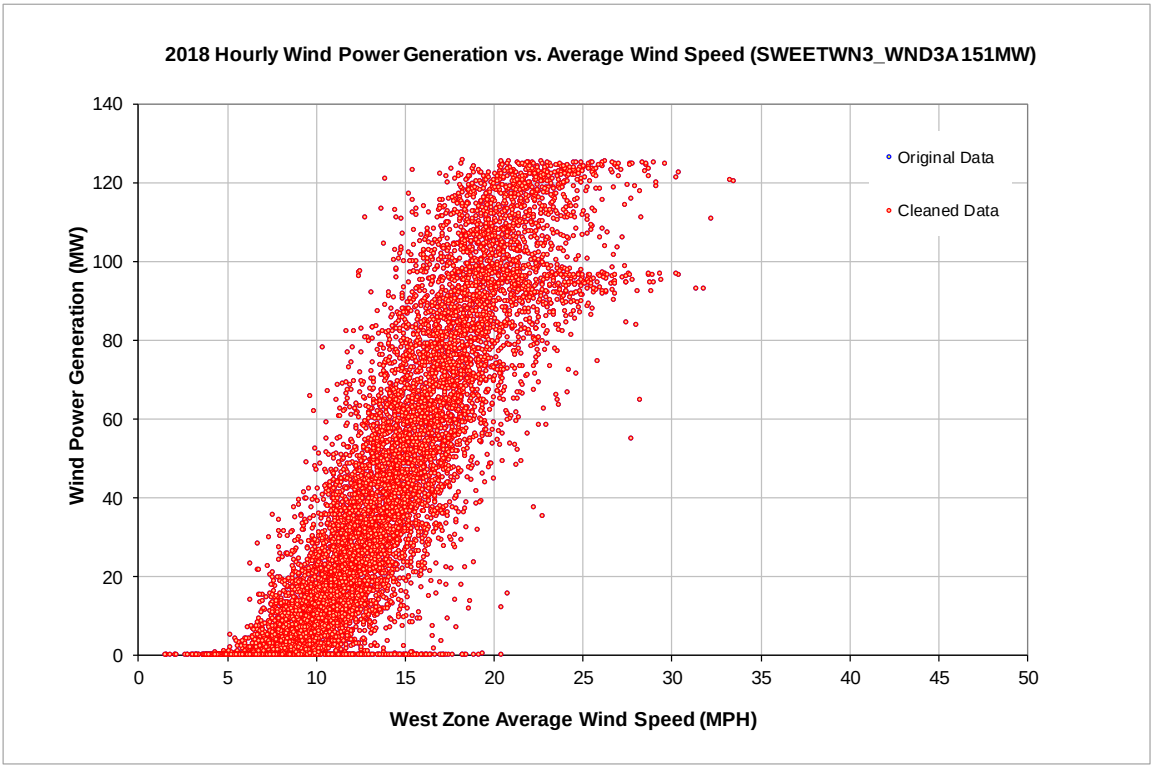


Figure A-463:SWEETWN3_WND3A - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

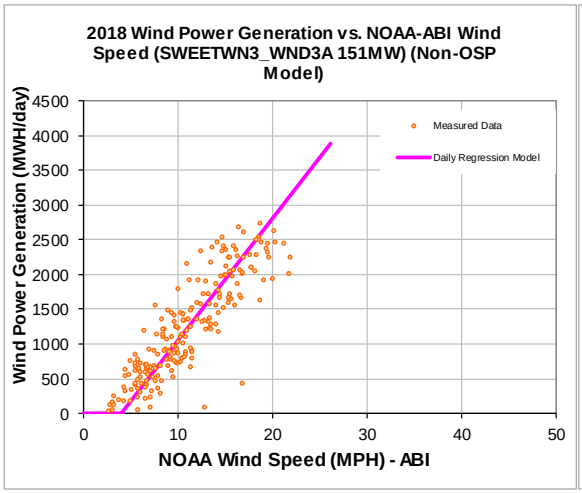
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-277.31
Left Slope (MWh/mph-day)	137.01
RMSE (MWh/day)	353.10
R2	0.76
CV-RMSE	28.8%
Daily Maximum (MWh/day)	3624

OSP Model:

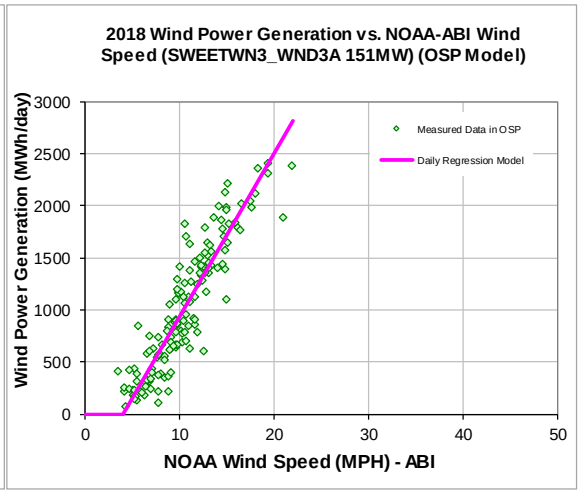
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-541.95
Left Slope (MWh/mph-day)	148.37
RMSE (MWh/day)	256.50
R2	0.82
CV-RMSE	25.2%
Daily Maximum (MWh/day)	3624

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
449,208	407,330

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,017	1,017

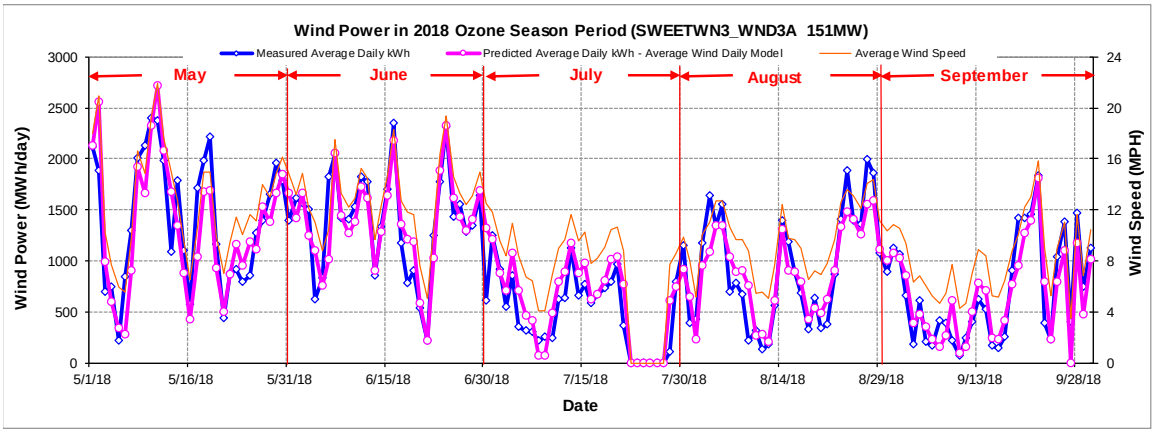
Figure A-464:SWEETWN3_WND3A - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.23	39,346	36,595	6.99%	35%	33%
Feb-18	28	11.00	32,829	34,423	-4.86%	32%	34%
Mar-18	31	11.92	39,982	42,051	-5.17%	36%	37%
Apr-18	30	13.18	41,808	45,839	-9.64%	38%	42%
May-18	31	12.78	43,588	41,986	3.68%	39%	37%
Jun-18	30	12.90	40,975	41,180	-0.50%	38%	38%
Jul-18	31	8.67	15,546	18,598	-19.63%	14%	17%
Aug-18	31	9.85	29,295	28,496	2.73%	26%	25%
Sep-18	30	7.97	20,053	19,219	4.16%	18%	18%
Oct-18	31	9.35	32,982	31,130	5.62%	29%	28%
Nov-18	30	10.05	33,579	32,983	1.78%	31%	30%
Dec-18	31	10.23	37,347	34,852	6.68%	33%	31%
Total	365	10.79	407,330	407,353	-0.01%	31%	31%
Total in OSP (07/15-09/15)	147	10.51	149,456	149,479	-0.02%	28%	28%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

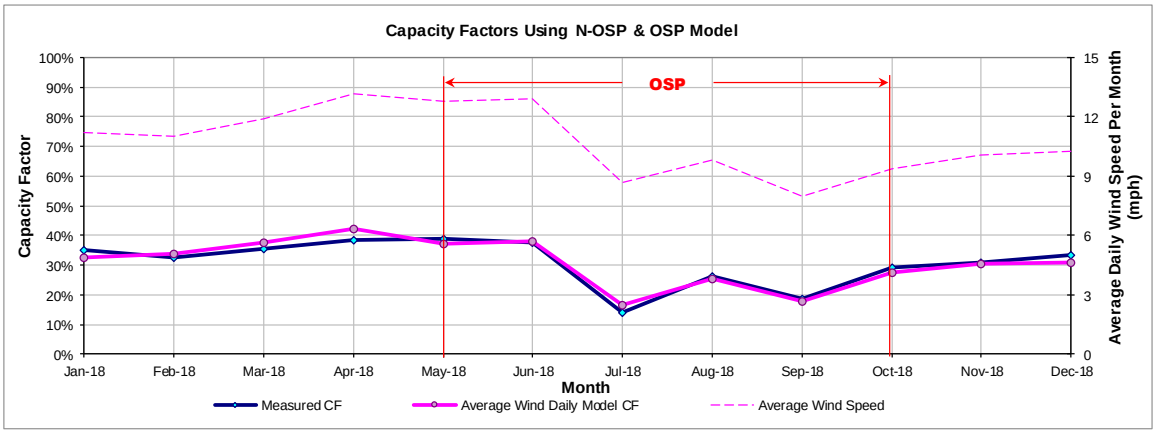


Figure A-465:SWEETWN3_WND3A - Predicted Wind Power and Capacity Factor Using Daily Models

A.115 Sweetwater Wind 4

A.115.1 Sweetwater Wind 4 - SWEETWN4_WND4A

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SWEETWN4_WND4A	Wind	Sweetwater	NOLAN	DKRW/BabcockBrown	Sweetwater Wind 4 (Cottonwood

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
135 Mitsubishi 1 MW 46 Siemens 2.3 MW	ERCOT	W	May-07	West	ABI	237

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

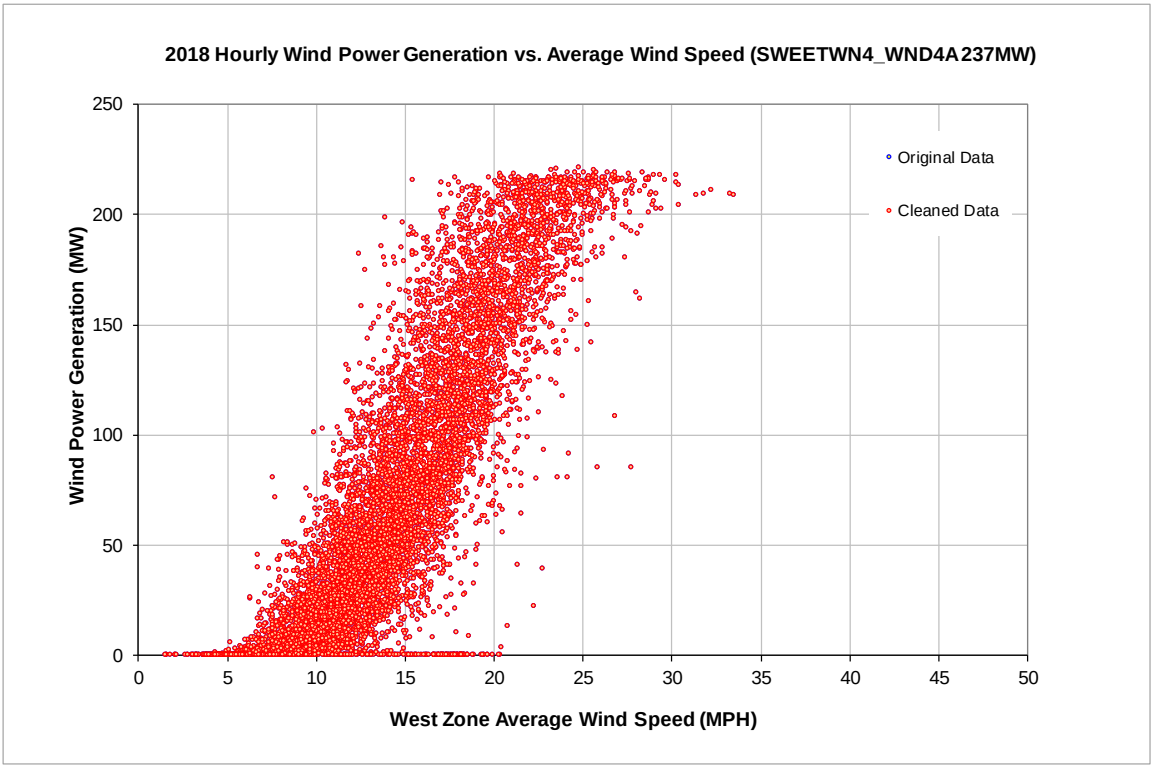


Figure A-466:SWEETWN4_WND4A - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

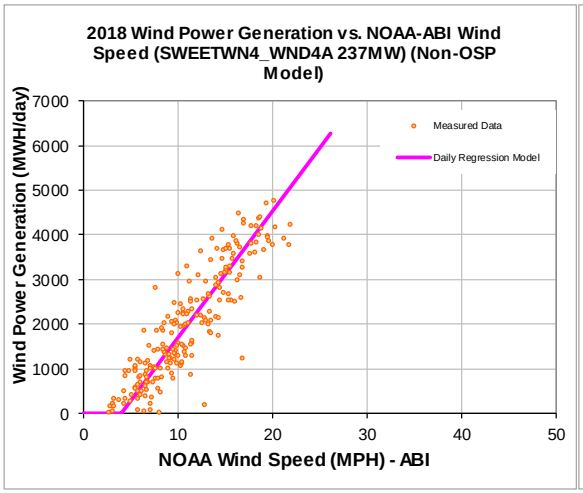
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-716.67
Left Slope (MWh/mph-day)	245.55
RMSE (MWh/day)	568.00
R2	0.80
CV-RMSE	28.8%
Daily Maximum (MWh/day)	5688

OSP Model:

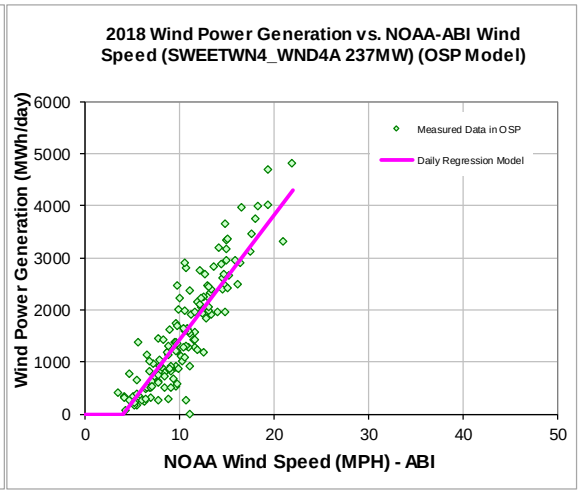
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-1138.71
Left Slope (MWh/mph-day)	256.47
RMSE (MWh/day)	470.02
R2	0.81
CV-RMSE	30.6%
Daily Maximum (MWh/day)	5688

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
717,832	645,343

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,559	1,535

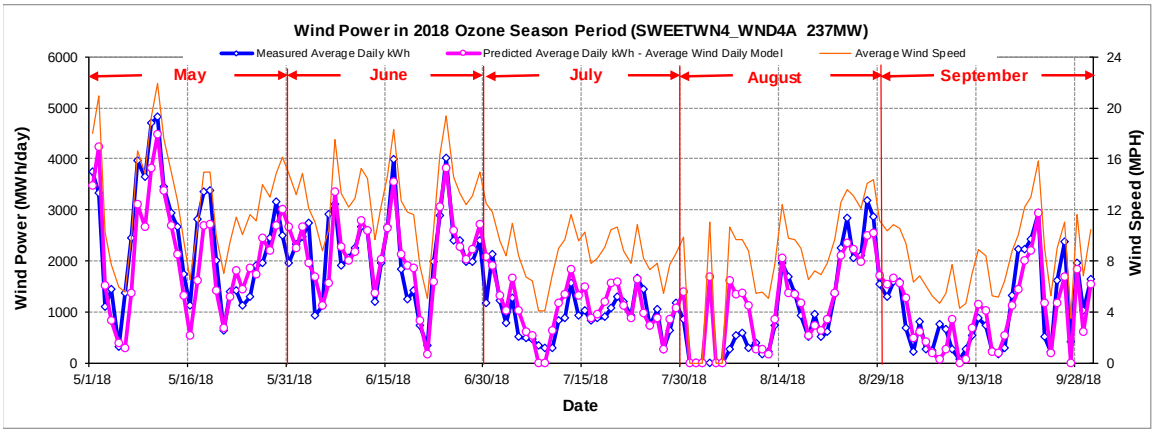
Figure A-467:SWEETWN4_WND4A - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	63,319	61,282	3.22%	36%	35%
Feb-18	28	11.00	53,523	55,585	-3.85%	34%	35%
Mar-18	31	11.92	65,364	68,556	-4.88%	37%	39%
Apr-18	30	13.18	74,181	75,565	-1.87%	43%	44%
May-18	31	12.78	73,928	66,315	10.30%	42%	38%
Jun-18	30	12.90	63,549	65,124	-2.48%	37%	38%
Jul-18	31	8.54	27,781	31,710	-14.14%	16%	18%
Aug-18	31	9.80	32,603	37,134	-13.90%	18%	21%
Sep-18	30	7.97	29,373	27,403	6.71%	17%	16%
Oct-18	31	9.35	50,338	49,066	2.53%	29%	28%
Nov-18	30	10.05	52,311	52,524	-0.41%	31%	31%
Dec-18	31	10.23	59,075	55,655	5.79%	34%	32%
Total	365	10.73	645,343	645,919	-0.09%	31%	31%
Total in OSP (07/15-09/15)	148	10.43	227,234	227,685	-0.20%	27%	27%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

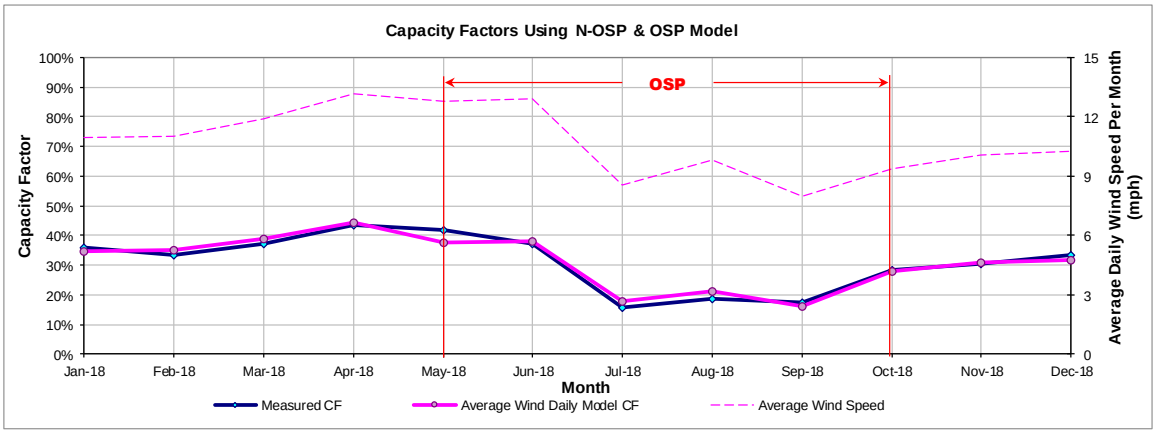


Figure A-468:SWEETWN4_WND4A - Predicted Wind Power and Capacity Factor Using Daily Models

A.116 Sweetwater Wind 5

A.116.1 Sweetwater Wind 5 - SWEETWN4_WND5

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SWEETWN4_WND5	Wind	Sweetwater	NOLAN	DKRW/BabcockBrown	Sweetwater Wind 5

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
35 Siemens 2.3 MW	ERCOT	W	Dec-07	West	ABI	85

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

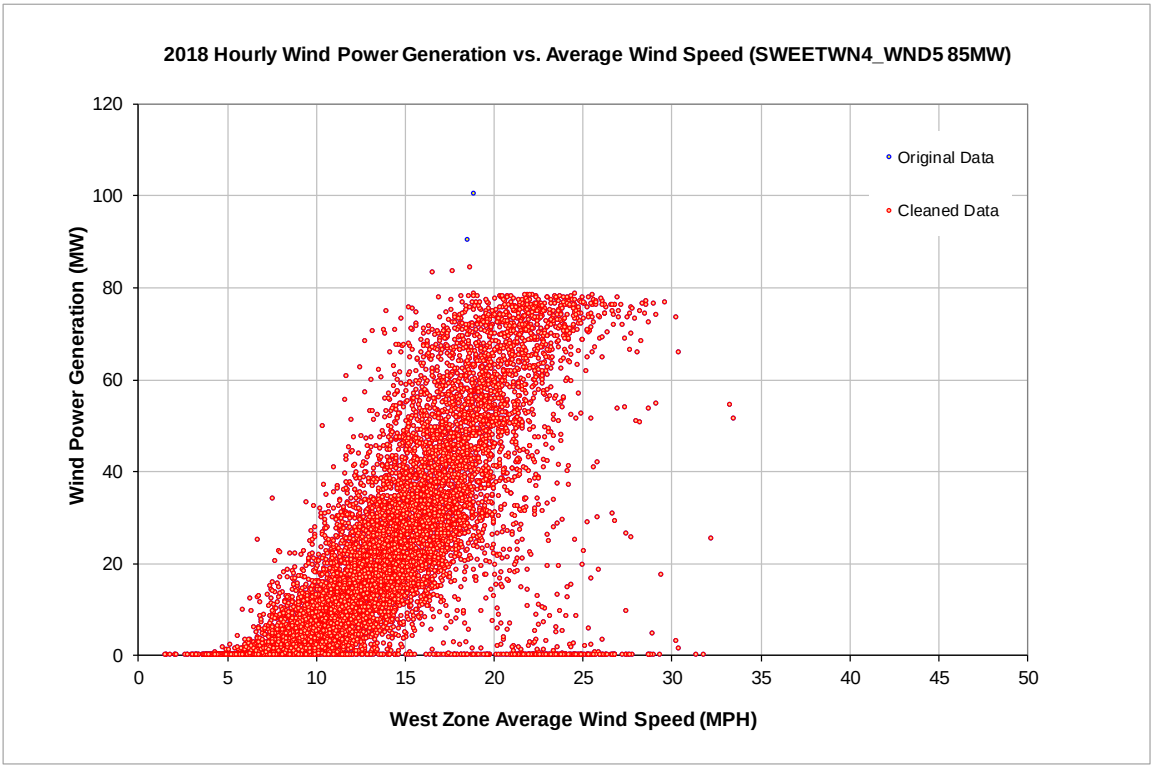


Figure A-469:SWEETWN4_WND5 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

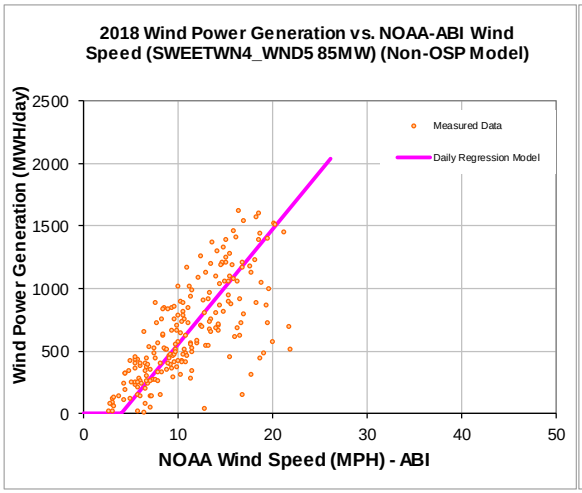
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-47.56
Left Slope (MWh/mph-day)	62.91
RMSE (MWh/day)	264.79
R2	0.54
CV-RMSE	41.2%
Daily Maximum (MWh/day)	2040

OSP Model:

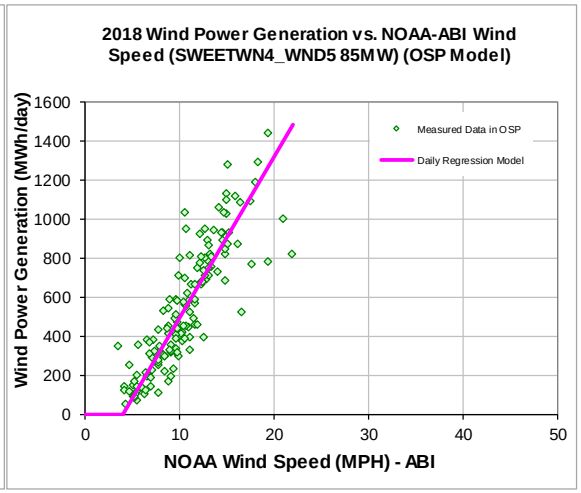
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-230.74
Left Slope (MWh/mph-day)	72.99
RMSE (MWh/day)	156.84
R2	0.75
CV-RMSE	29.5%
Daily Maximum (MWh/day)	2040

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
233,818	215,393

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
536	533

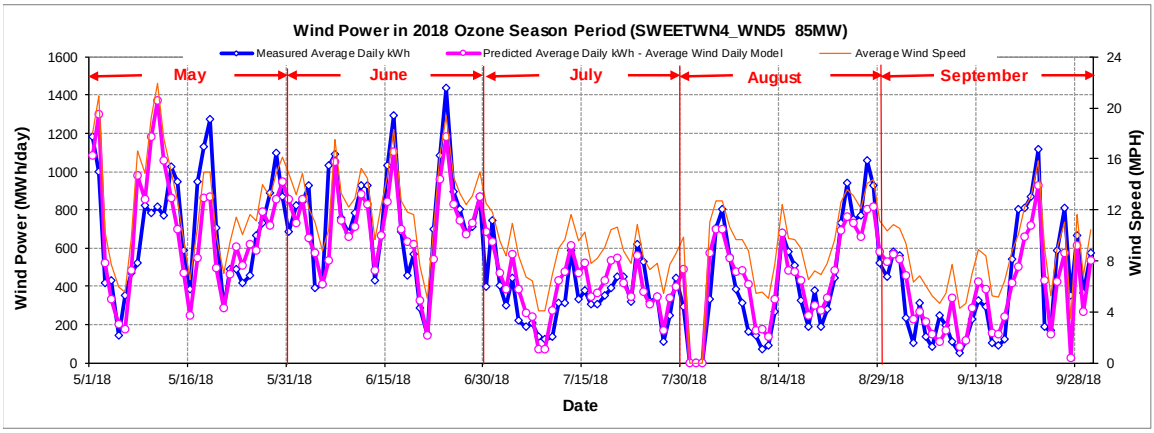
Figure A-470:SWEETWN4_WND5 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.07	22,179	19,466	12.23%	35%	31%
Feb-18	28	11.00	17,328	18,041	-4.11%	30%	32%
Mar-18	31	11.92	19,968	21,783	-9.09%	32%	34%
Apr-18	30	13.18	19,116	23,443	-22.63%	31%	38%
May-18	31	12.78	21,729	21,767	-0.18%	34%	34%
Jun-18	30	12.90	22,685	21,335	5.95%	37%	35%
Jul-18	31	8.54	10,283	11,776	-14.51%	16%	19%
Aug-18	31	10.00	14,076	14,479	-2.86%	22%	23%
Sep-18	30	7.97	11,103	10,520	5.25%	18%	17%
Oct-18	31	9.35	18,219	16,768	7.96%	29%	27%
Nov-18	30	10.05	18,297	17,539	4.14%	30%	29%
Dec-18	31	10.23	20,409	18,477	9.47%	32%	29%
Total	365	10.75	215,393	215,393	0.00%	29%	29%
Total in OSP (07/15-09/15)	150	10.46	79,876	79,876	0.00%	26%	26%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

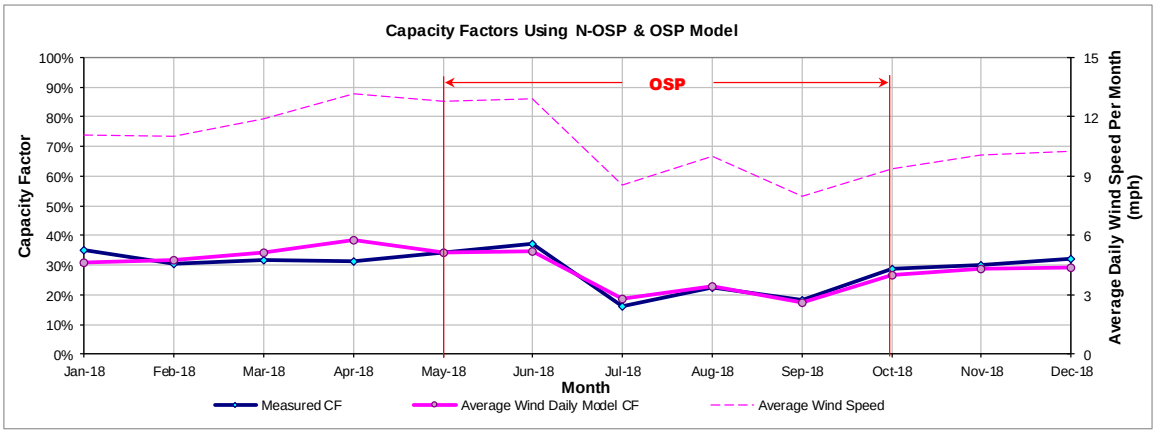


Figure A-471:SWEETWN4_WND5 - Predicted Wind Power and Capacity Factor Using Daily Models

A.117 Trent Mesa

A.117.1 Trent Mesa - TRENT_TRENT

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
TRENT_TRENT	Wind	Trent Mesa	NOLAN	AEP	Trent Mesa

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
100 Enron 1.5 MW	ERCOT	W	Nov-01	West	ABI	150

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

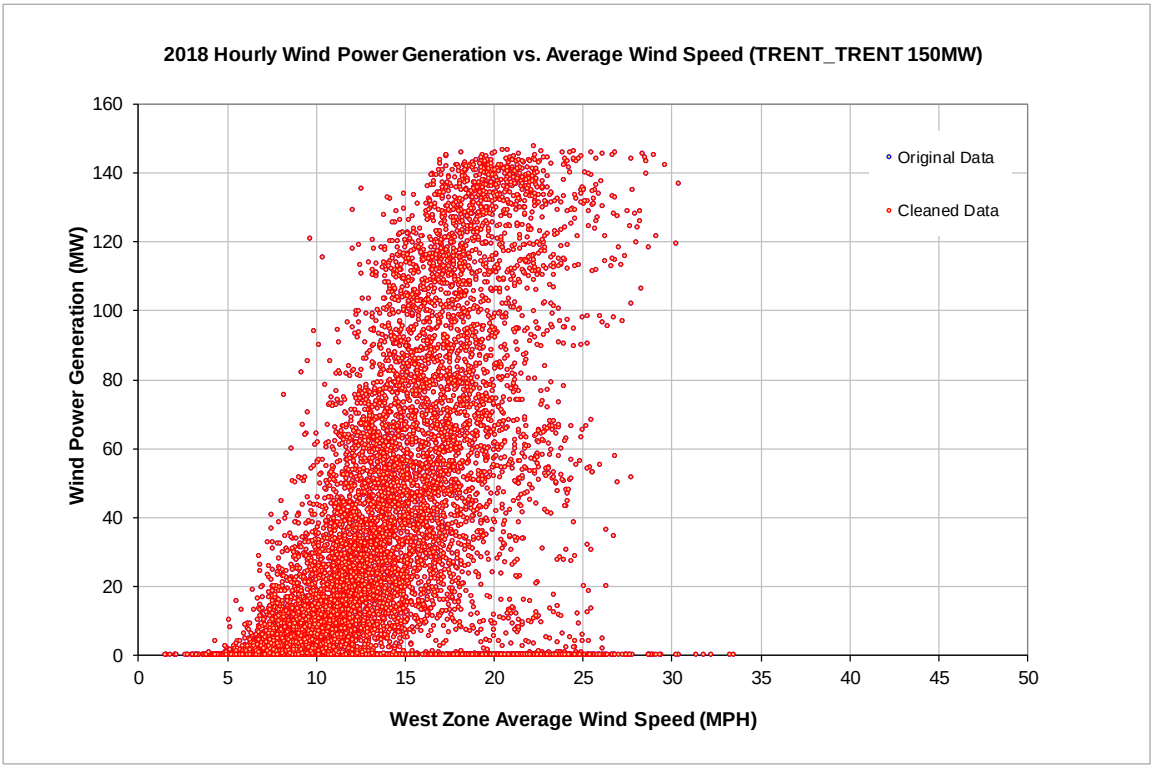


Figure A-472:TRENT_TRENT - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

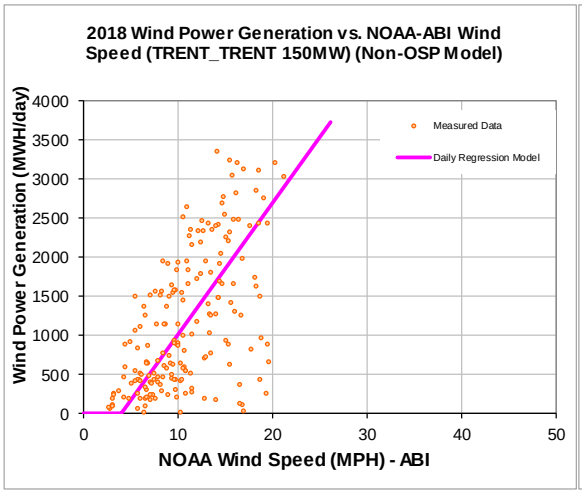
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-105.87
Left Slope (MWh/mph-day)	116.02
RMSE (MWh/day)	719.94
R2	0.34
CV-RMSE	63.0%
Daily Maximum (MWh/day)	3600

OSP Model:

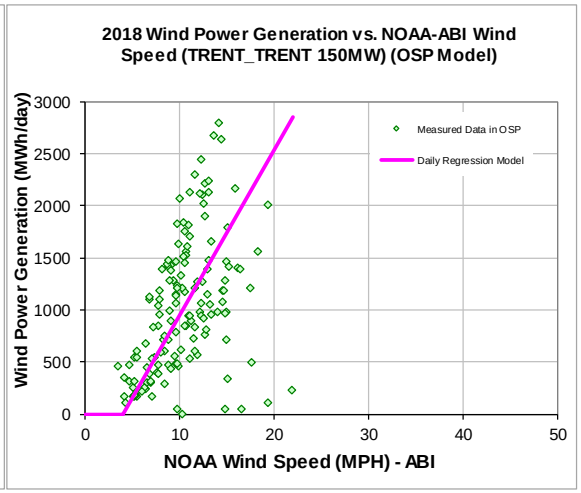
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	190.54
Left Slope (MWh/mph-day)	78.81
RMSE (MWh/day)	575.44
R2	0.19
CV-RMSE	57.1%
Daily Maximum (MWh/day)	3600

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
431,877	366,253

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,018	1,007

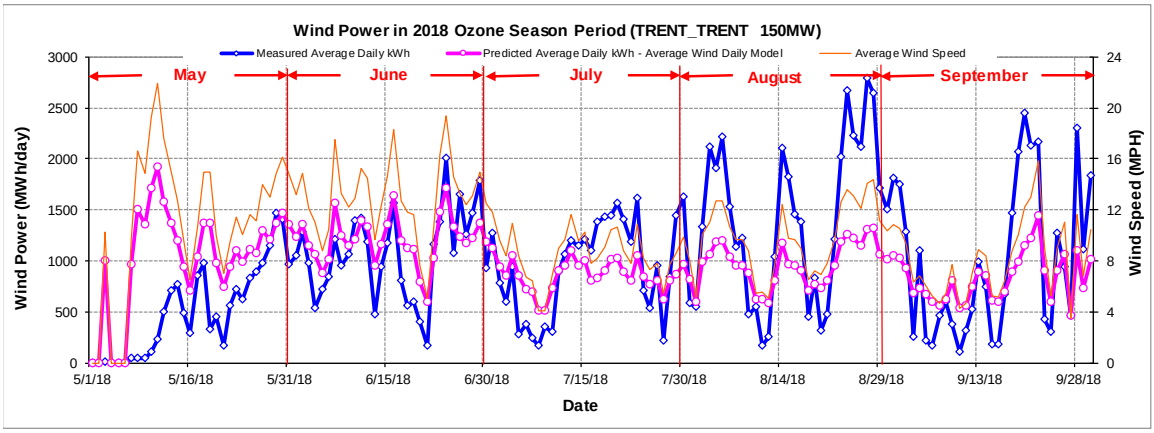
Figure A-473:TRENT_TRENT - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.07	38,799	35,351	8.89%	35%	32%
Feb-18	28	11.00	21,984	32,759	-49.01%	22%	32%
Mar-18	31	11.92	19,141	39,605	-106.91%	17%	35%
Apr-18	30	14.13	2,076	13,796	-564.68%	2%	13%
May-18	31	13.01	15,527	31,610	-103.58%	14%	28%
Jun-18	30	12.90	31,999	36,227	-13.21%	30%	34%
Jul-18	31	8.52	28,808	26,724	7.24%	26%	24%
Aug-18	31	9.85	43,965	29,968	31.84%	39%	27%
Sep-18	30	7.97	28,779	24,550	14.70%	27%	23%
Oct-18	31	9.35	41,598	30,358	27.02%	37%	27%
Nov-18	30	10.05	45,619	31,798	30.30%	42%	29%
Dec-18	31	10.23	47,958	33,509	30.13%	43%	30%
Total	365	10.59	366,253	366,253	0.00%	28%	28%
Total in OSP (07/15-09/15)	148	10.36	149,079	149,079	0.00%	28%	28%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

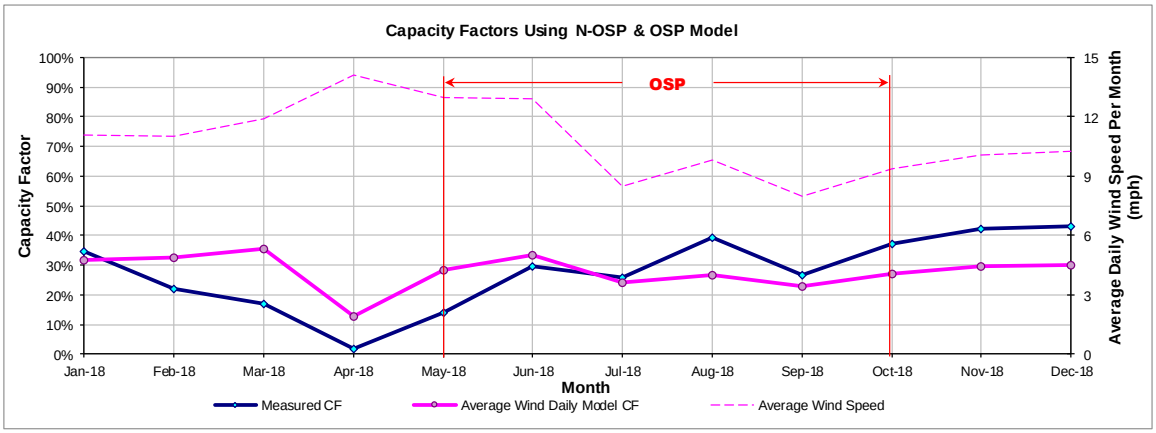


Figure A-474:TRENT_TRENT - Predicted Wind Power and Capacity Factor Using Daily Models

A.118 Trinity Hills Wind Farm

A.118.1 Trinity Hills Wind Farm - TRINITY_TH1_BUS1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
TRINITY_TH1_BUS1	Wind	-	YOUNG	BP Wind Power	Trinity Hills Wind Farm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
47 Clipper Liberty 2.5 MW	ERCOT	W	Jan-12	West	ABI	117.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

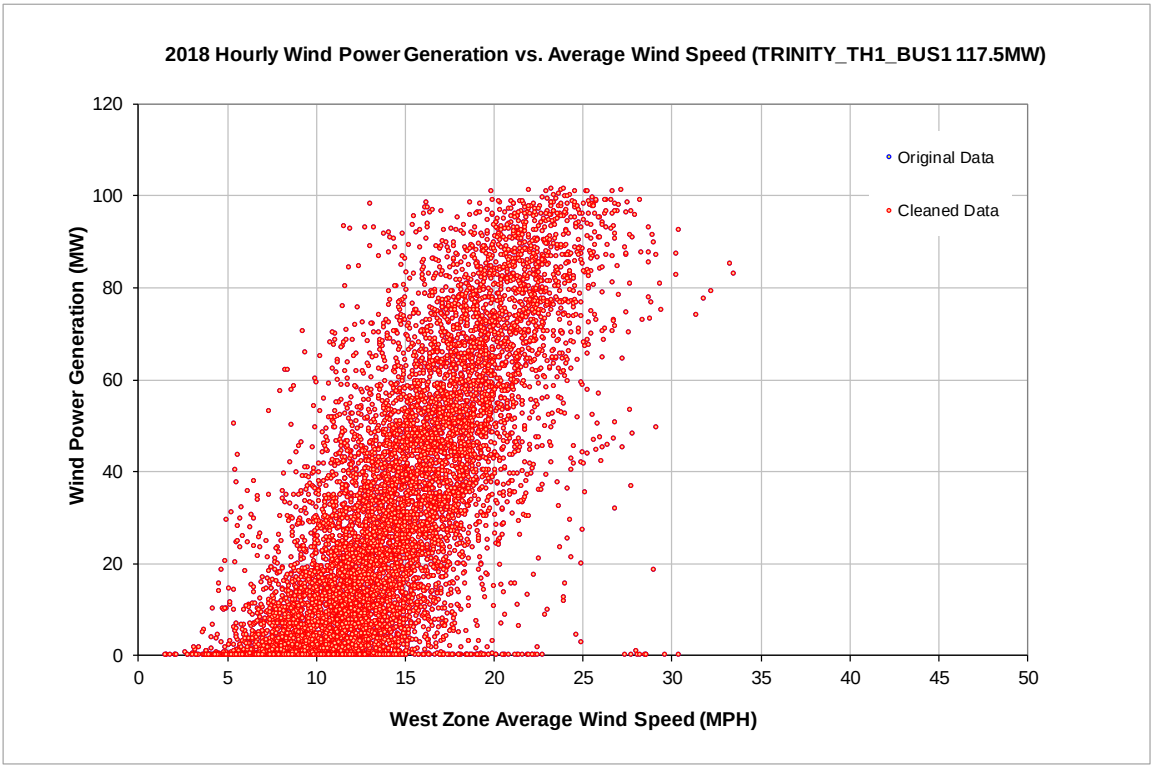


Figure A-475:TRINITY_TH1_BUS1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

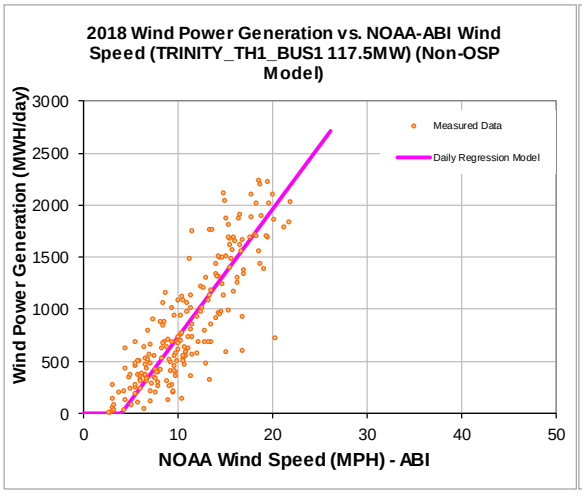
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-331.39
Left Slope (MWh/mph-day)	108.28
RMSE (MWh/day)	304.68
R2	0.73
CV-RMSE	35.5%
Daily Maximum (MWh/day)	2820

OSP Model:

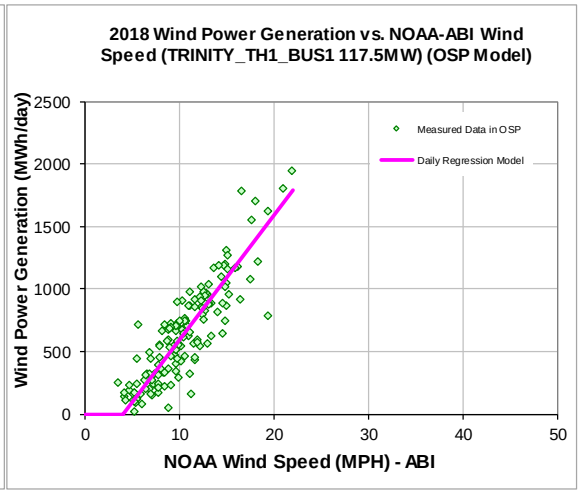
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-323.90
Left Slope (MWh/mph-day)	92.23
RMSE (MWh/day)	186.55
R2	0.77
CV-RMSE	29.3%
Daily Maximum (MWh/day)	2820

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
306,837	275,650

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
645	636

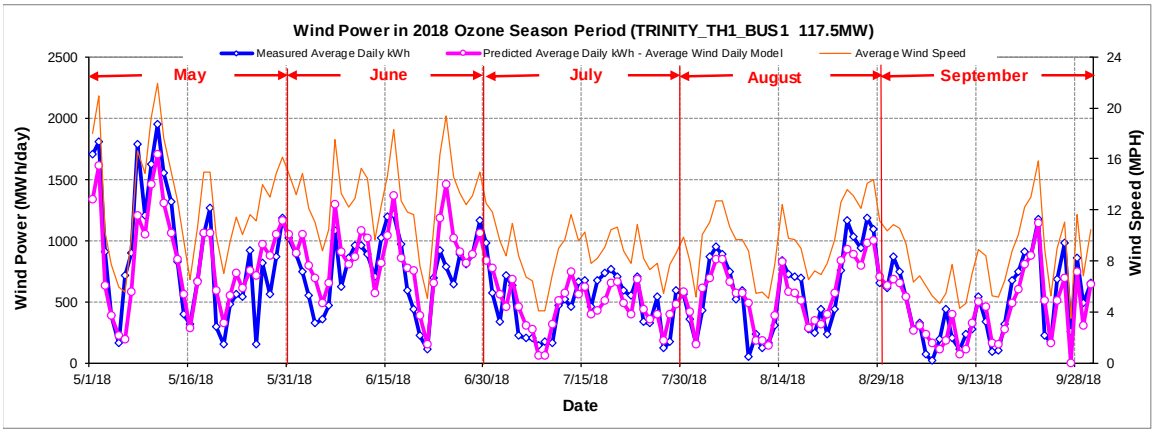
Figure A-476:TRINITY_TH1_BUS1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	34,486	26,556	23.00%	39%	30%
Feb-18	28	11.19	23,557	23,814	-1.09%	30%	30%
Mar-18	31	11.92	30,960	29,755	3.89%	35%	34%
Apr-18	30	13.18	31,792	32,861	-3.36%	38%	39%
May-18	31	12.78	27,992	26,503	5.32%	32%	30%
Jun-18	30	12.90	22,812	25,989	-13.93%	27%	31%
Jul-18	31	8.52	14,196	14,320	-0.87%	16%	16%
Aug-18	31	9.85	18,841	18,117	3.84%	22%	21%
Sep-18	30	7.97	13,410	12,324	8.10%	16%	15%
Oct-18	31	9.35	17,398	21,182	-21.75%	20%	24%
Nov-18	30	10.05	23,341	22,701	2.74%	28%	27%
Dec-18	31	10.19	16,865	21,631	-28.26%	19%	25%
Total	365	10.74	275,650	275,752	-0.04%	27%	27%
Total in OSP (07/15-09/15)	153	10.40	97,251	97,252	0.00%	23%	23%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

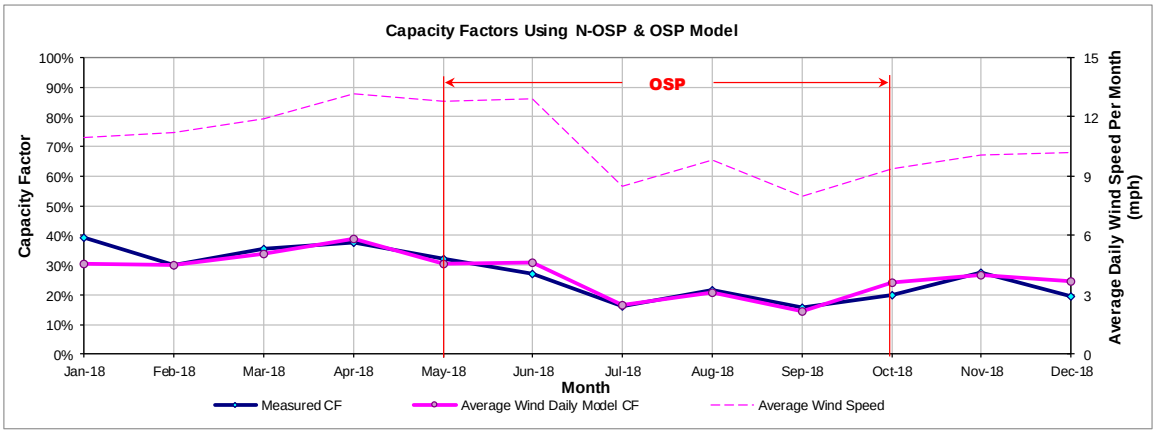


Figure A-477:TRINITY_TH1_BUS1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.118.2 Trinity Hills Wind Farm - TRINITY_TH1_BUS2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
TRINITY_TH1_BUS2	Wind	-	YOUNG	BP Wind Power	Trinity Hills Wind Farm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
43 Clipper Liberty 2.5 MW	ERCOT	W	Jan-12	West	ABI	107.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

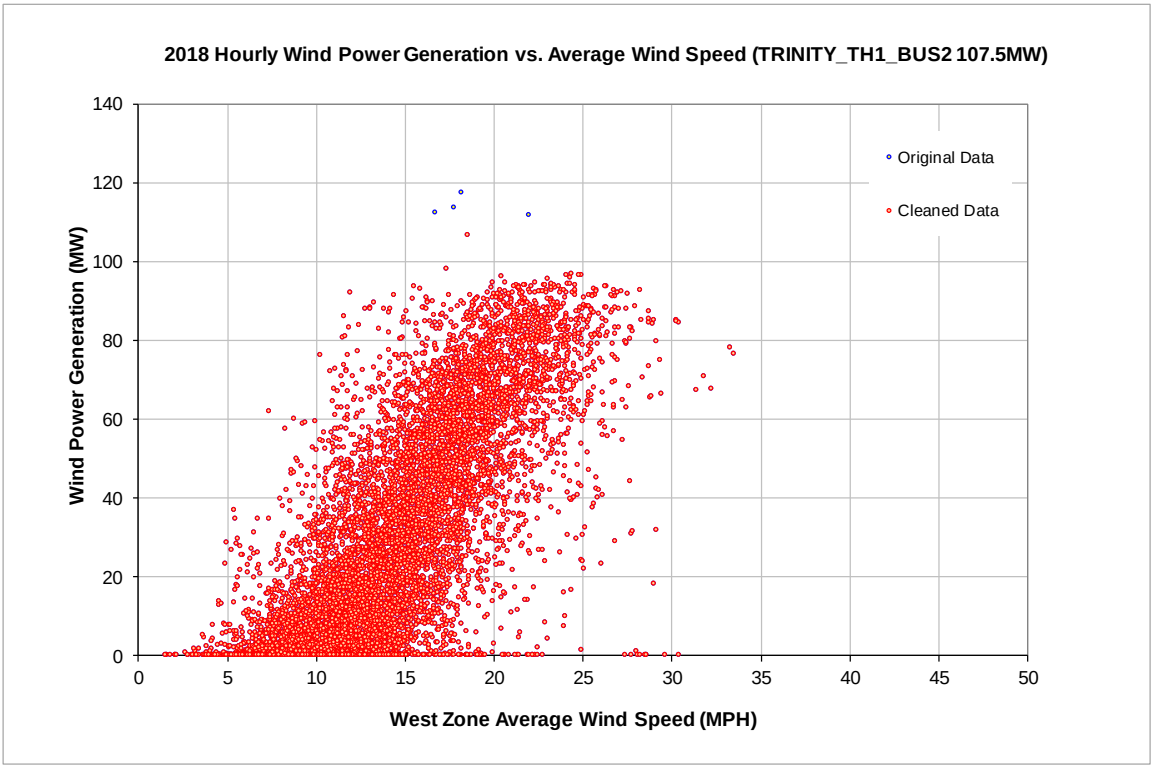


Figure A-478:TRINITY_TH1_BUS2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

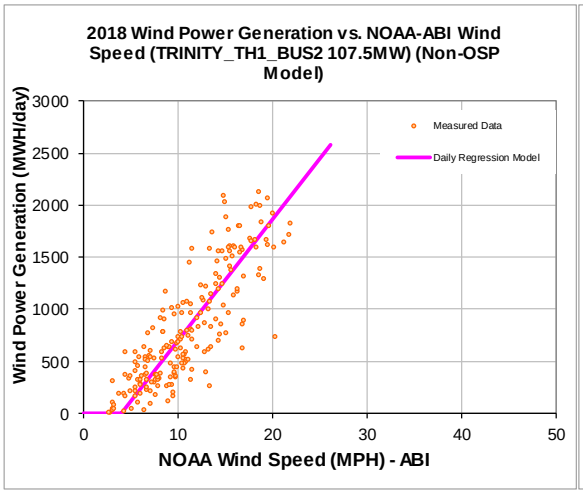
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-300.27
Left Slope (MWh/mph-day)	101.61
RMSE (MWh/day)	297.78
R2	0.71
CV-RMSE	36.5%
Daily Maximum (MWh/day)	2580

OSP Model:

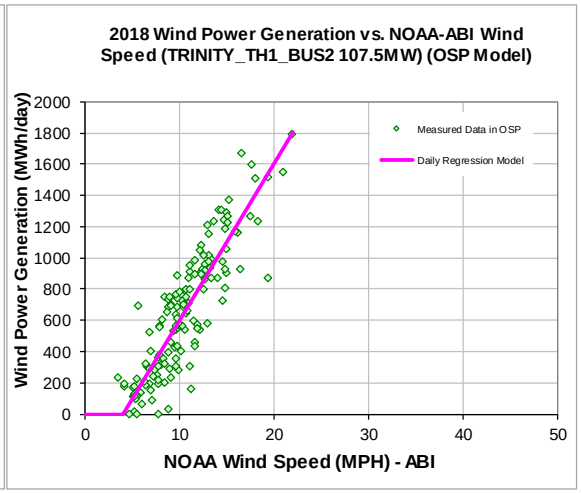
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-365.13
Left Slope (MWh/mph-day)	96.89
RMSE (MWh/day)	191.19
R2	0.78
CV-RMSE	29.3%
Daily Maximum (MWh/day)	2580

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
297,508	267,539

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
653	653

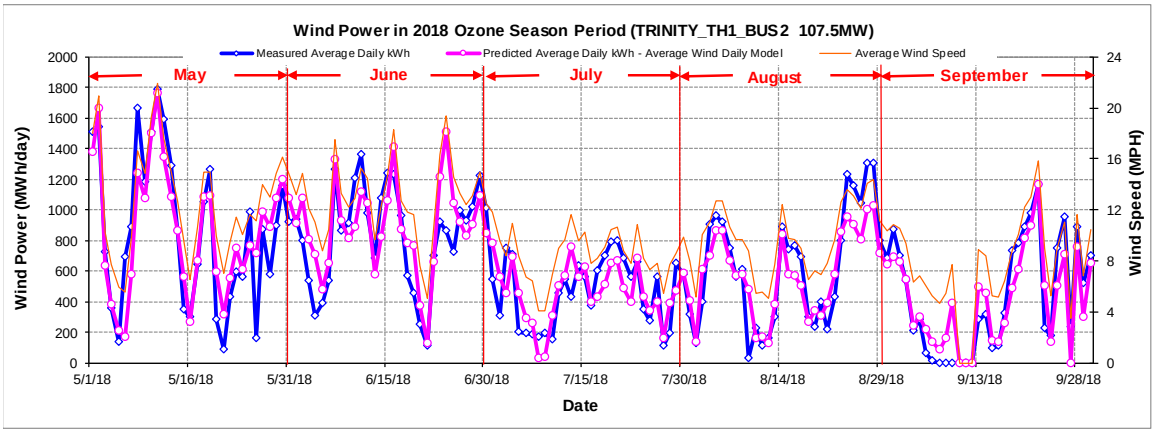
Figure A-479:TRINITY_TH1_BUS2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	33,684	25,245	25.05%	42%	32%
Feb-18	28	11.19	22,233	22,627	-1.77%	31%	31%
Mar-18	31	11.92	29,305	28,255	3.58%	37%	35%
Apr-18	30	13.18	29,459	31,159	-5.77%	38%	40%
May-18	31	12.78	26,850	27,069	-0.82%	34%	34%
Jun-18	30	12.90	25,025	26,554	-6.11%	32%	34%
Jul-18	31	8.52	14,200	14,272	-0.51%	18%	18%
Aug-18	31	9.85	19,907	18,260	8.27%	25%	23%
Sep-18	30	8.26	11,913	11,766	1.23%	15%	15%
Oct-18	31	9.35	16,661	20,193	-21.20%	21%	25%
Nov-18	30	10.05	22,211	21,624	2.64%	29%	28%
Dec-18	31	10.19	16,091	20,599	-28.02%	20%	26%
Total	365	10.78	267,539	267,624	-0.03%	28%	28%
Total in OSP (07/15-09/15)	150	10.50	97,895	97,921	-0.03%	25%	25%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

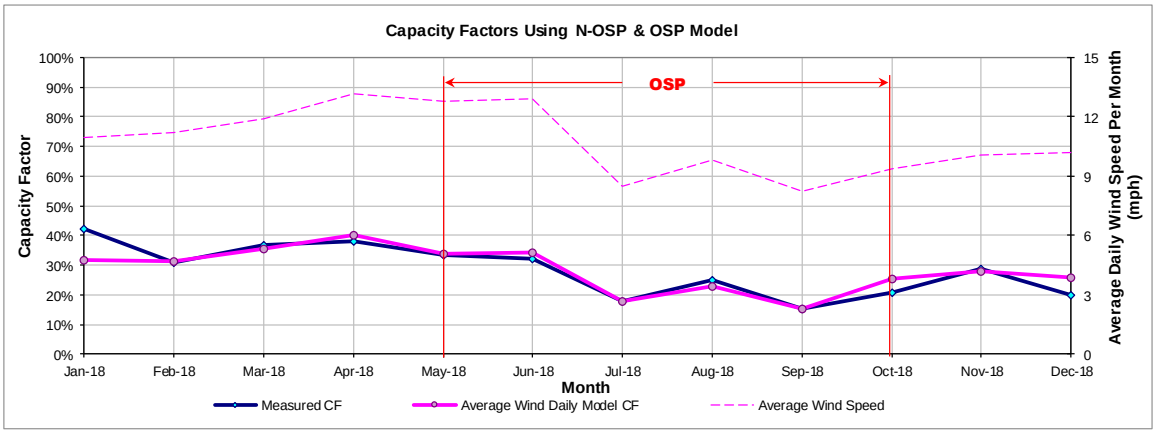


Figure A-480:TRINITY_TH1_BUS2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.119 Turkey Track Energy Center

A.119.1 Turkey Track Energy Center - TTWEC_G1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
TTWEC_G1	Wind	-	NOLAN	Invenergy	Turkey Track Energy Center

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
113 GE 1.5 MW	ERCOT	W	Nov-08	West	ABI	169.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

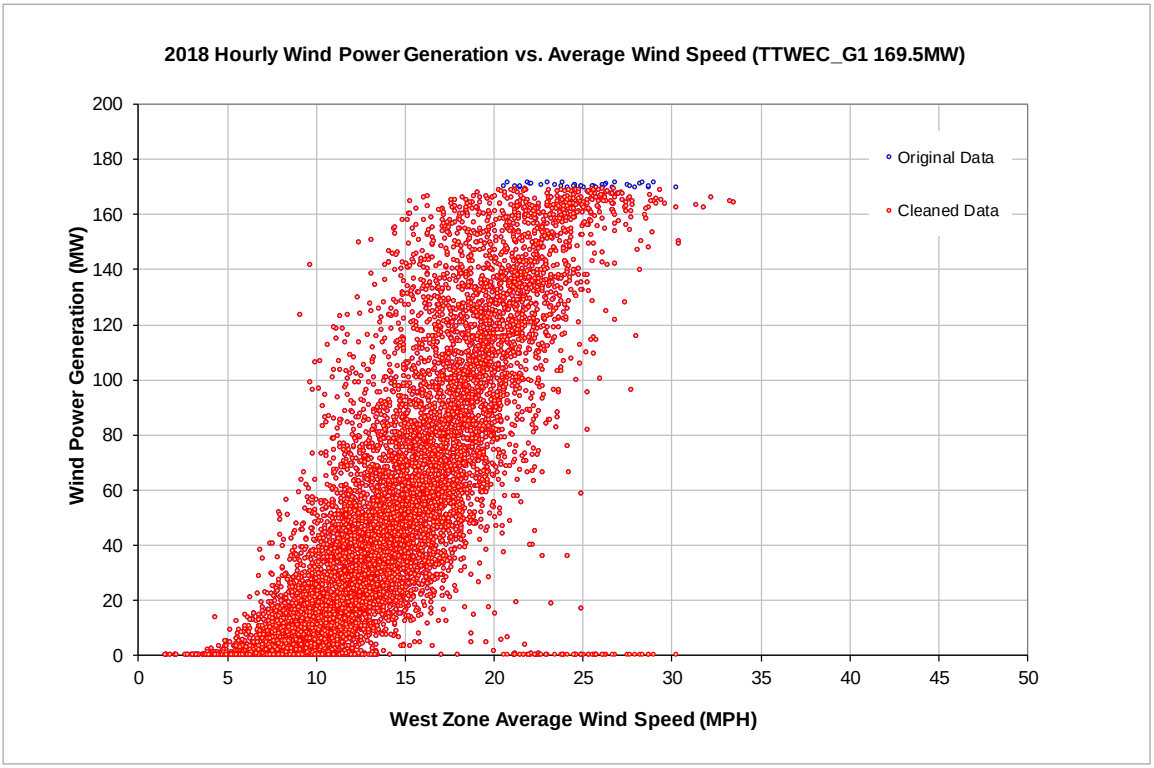


Figure A-481:TTWEC_G1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

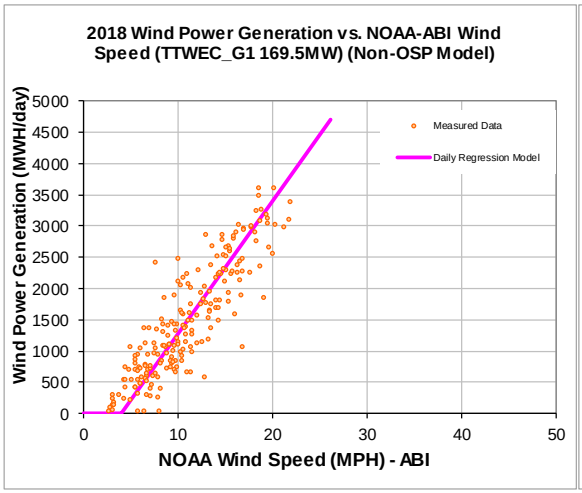
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-415.95
Left Slope (MWh/mph-day)	173.05
RMSE (MWh/day)	425.82
R2	0.78
CV-RMSE	28.9%
Daily Maximum (MWh/day)	4068

OSP Model:

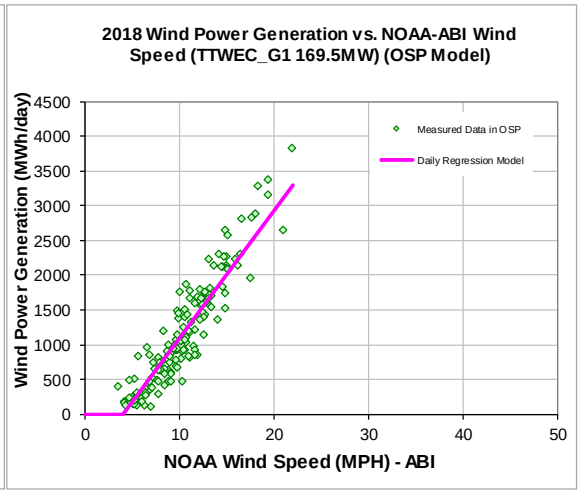
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-866.31
Left Slope (MWh/mph-day)	195.81
RMSE (MWh/day)	285.00
R2	0.87
CV-RMSE	24.3%
Daily Maximum (MWh/day)	4068

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
539,343	490,429

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,193	1,171

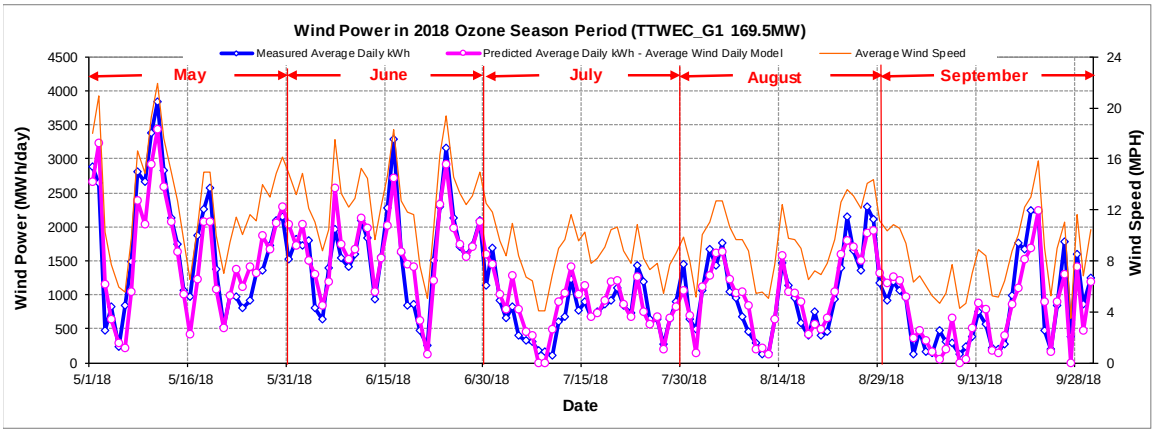
Figure A-482:TTWEC_G1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.82	44,931	43,692	2.76%	36%	35%
Feb-18	28	11.00	39,287	41,639	-5.99%	34%	37%
Mar-18	31	11.92	50,697	51,078	-0.75%	40%	41%
Apr-18	30	13.18	55,576	55,928	-0.63%	46%	46%
May-18	31	12.78	53,109	50,728	4.48%	42%	40%
Jun-18	30	12.90	47,903	49,815	-3.99%	39%	41%
Jul-18	31	8.52	23,338	24,989	-7.07%	19%	20%
Aug-18	31	9.85	31,923	32,925	-3.14%	25%	26%
Sep-18	30	7.97	22,860	21,009	8.10%	19%	17%
Oct-18	31	9.35	39,289	37,284	5.10%	31%	30%
Nov-18	30	10.05	38,373	39,690	-3.43%	31%	33%
Dec-18	31	10.23	43,143	41,985	2.68%	34%	33%
Total	365	10.71	490,429	490,761	-0.07%	33%	33%
Total in OSP (07/15-09/15)	153	10.40	179,133	179,466	-0.19%	29%	29%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

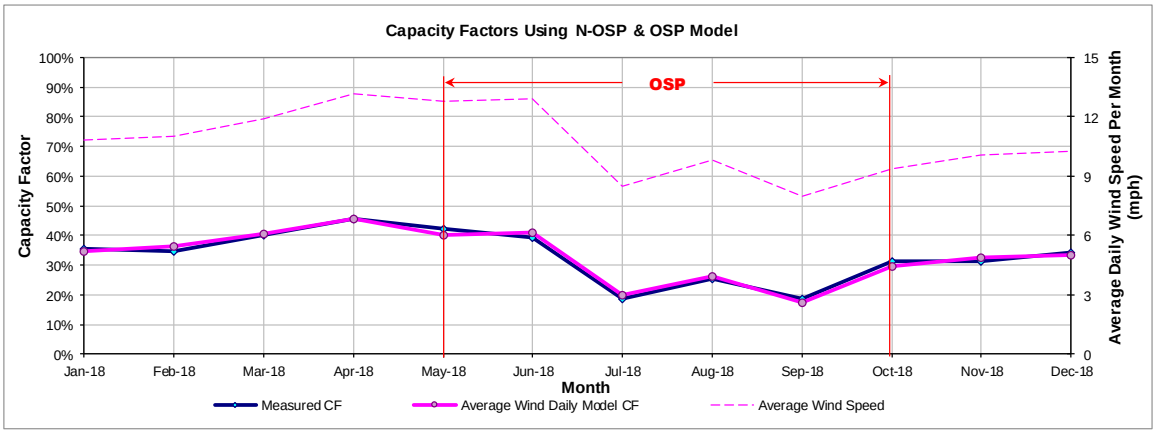


Figure A-483:TTWEC_G1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.120 Tyler Bluff Wind (Muenster Wind)

A.120.1 Tyler Bluff Wind (Muenster Wind) - TYLRWIND_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
TYLRWIND_UNIT1	Wind	-	COOKE	Southern Power	Tyler Bluff Wind (Muenster Wind)

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
52 Siemens 2.3 MW	ERCOT	N	Dec-16	North	DFW	125.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

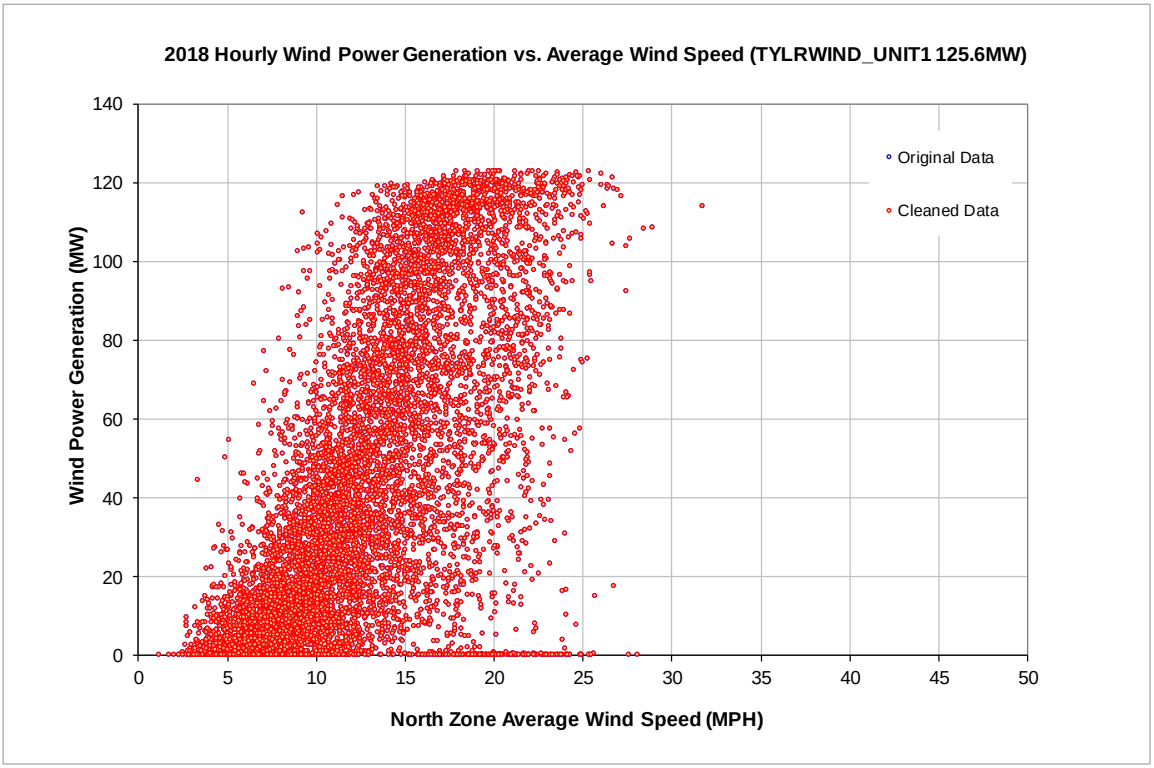


Figure A-484:TYLRWIND_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

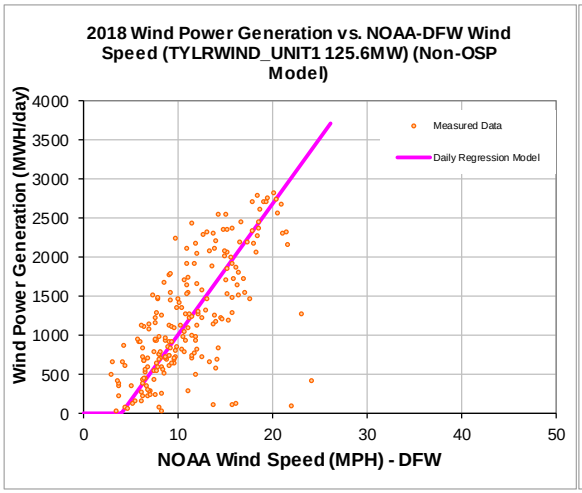
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-32.99
Left Slope (MWh/mph-day)	110.41
RMSE (MWh/day)	534.36
R2	0.47
CV-RMSE	44.9%
Daily Maximum (MWh/day)	3014

OSP Model:

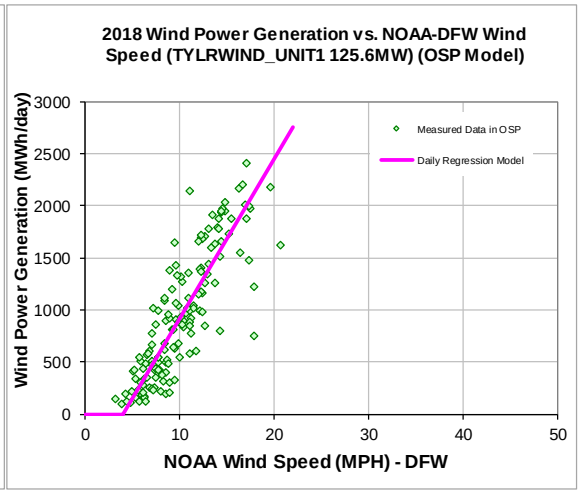
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-489.04
Left Slope (MWh/mph-day)	140.89
RMSE (MWh/day)	321.75
R2	0.71
CV-RMSE	34.3%
Daily Maximum (MWh/day)	3014

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
424,241	395,866

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
955	937

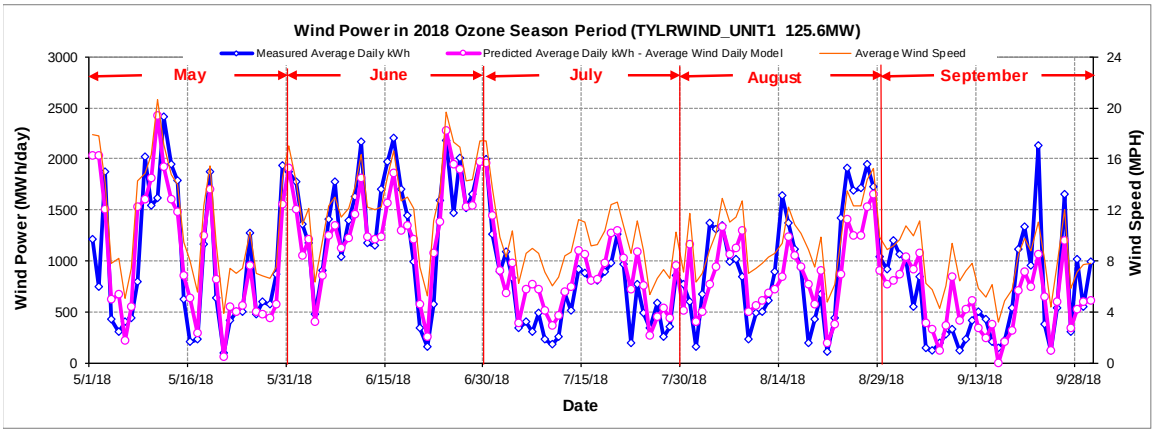
Figure A-485:TYLRWIND_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (DFW) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.50	46,823	38,340	18.12%	50%	41%
Feb-18	28	10.98	31,620	33,019	-4.43%	37%	39%
Mar-18	31	11.72	43,657	39,099	10.44%	47%	42%
Apr-18	30	13.21	29,761	42,767	-43.70%	33%	47%
May-18	31	11.15	31,289	33,533	-7.17%	33%	36%
Jun-18	30	13.06	42,814	40,538	5.32%	47%	45%
Jul-18	31	9.10	20,095	24,581	-22.33%	22%	26%
Aug-18	31	9.83	30,820	27,763	9.92%	33%	30%
Sep-18	30	7.48	18,332	16,971	7.42%	20%	19%
Oct-18	31	8.95	29,676	29,626	0.17%	32%	32%
Nov-18	30	10.85	35,523	34,950	1.61%	39%	39%
Dec-18	31	10.44	35,457	34,715	2.09%	38%	37%
Total	365	10.68	395,866	395,903	-0.01%	36%	36%
Total in OSP (07/15-09/15)	153	10.12	143,350	143,387	-0.03%	31%	31%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

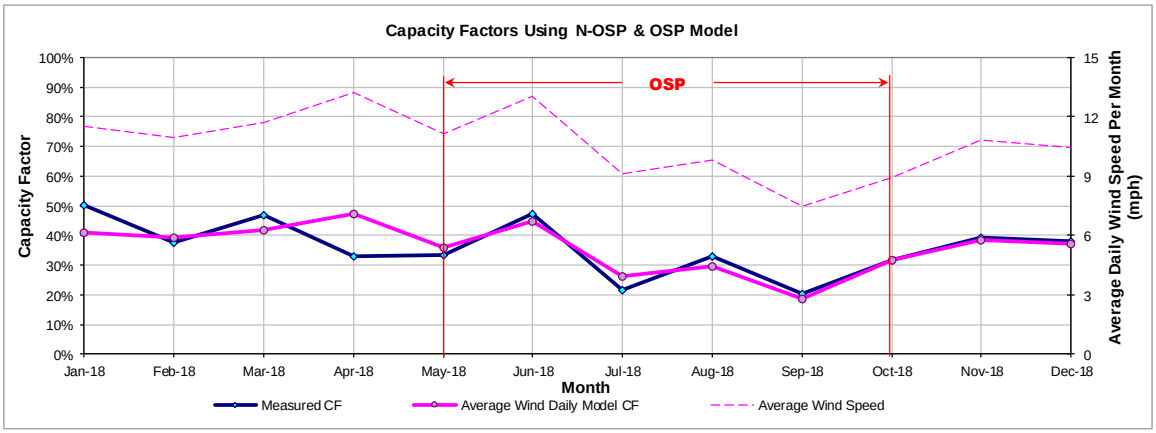


Figure A-486:TYLRWIND_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.121 Val Verde Wind

A.121.1 Val Verde Wind - FERMI_WIND1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
FERMI_WIND1	Wind	-	VAL VERDE	Akuo Energy	Val Verde Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
53 GE 2.3 MW	ERCOT	S	Oct-17	West	FST	121.9

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

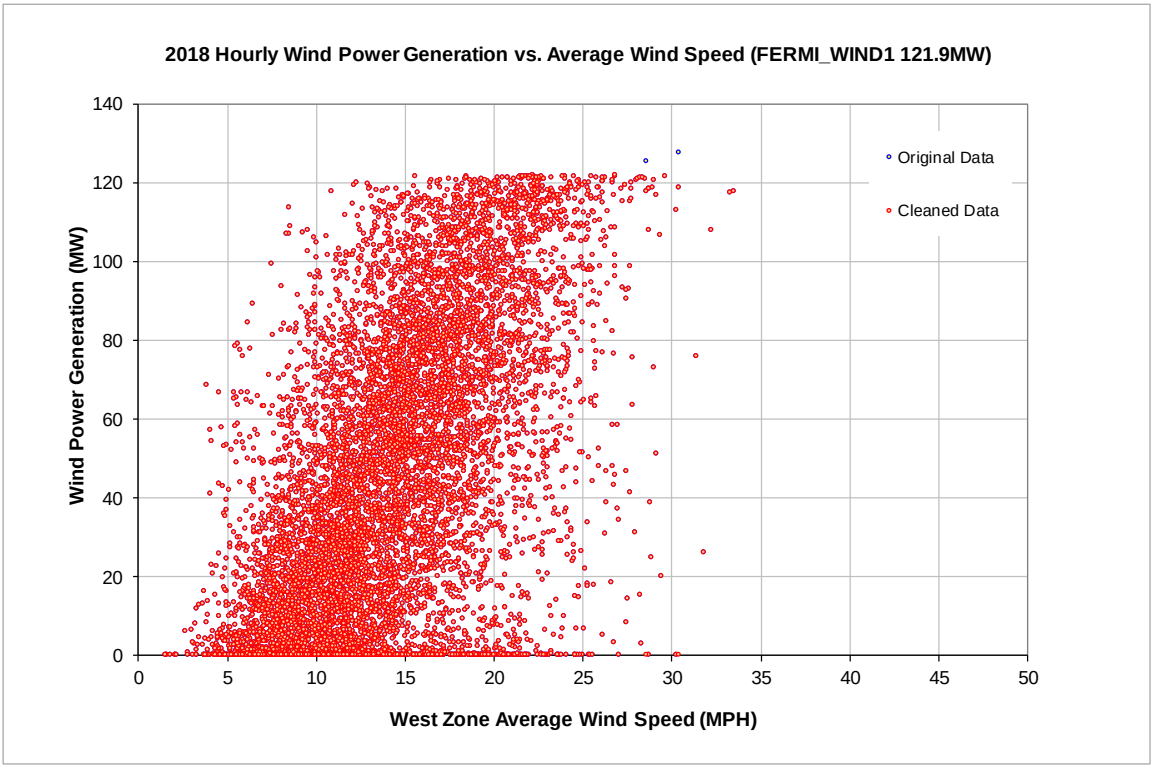


Figure A-487:FERMI_WIND1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

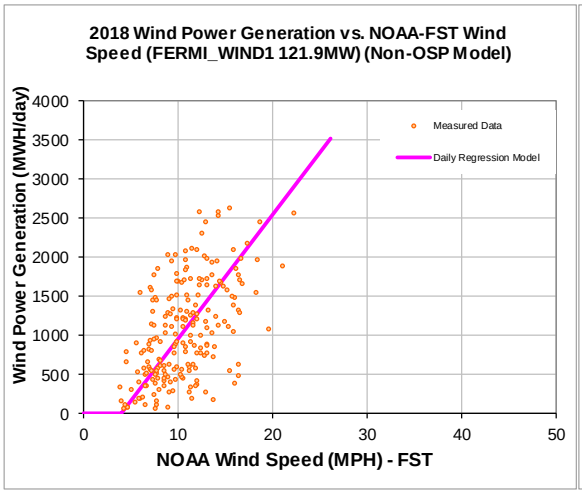
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	33.69
Left Slope (MWh/mph-day)	96.01
RMSE (MWh/day)	534.89
R2	0.28
CV-RMSE	51.0%
Daily Maximum (MWh/day)	2926

OSP Model:

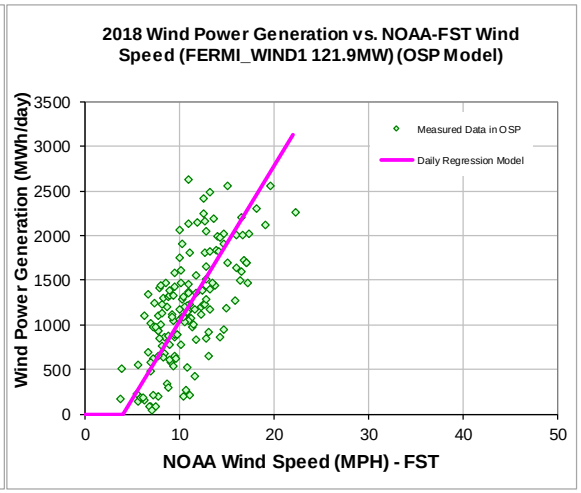
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-160.63
Left Slope (MWh/mph-day)	124.85
RMSE (MWh/day)	445.92
R2	0.46
CV-RMSE	37.3%
Daily Maximum (MWh/day)	2926

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
410,847	403,563

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,199	1,197

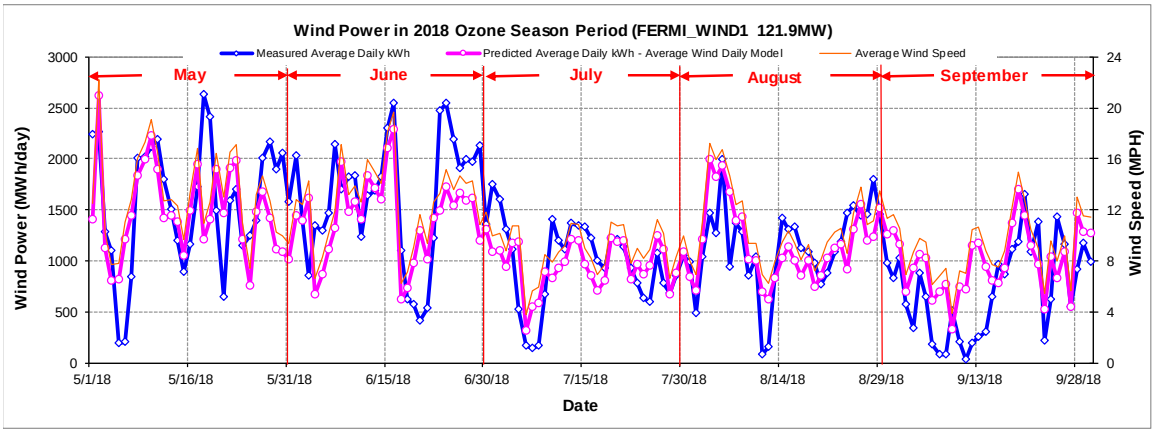
Figure A-488:FERMI_WIND1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.25	33,342	31,552	5.37%	37%	35%
Feb-18	28	10.46	26,149	29,055	-11.11%	32%	35%
Mar-18	31	11.73	34,766	34,783	-0.05%	38%	38%
Apr-18	30	12.41	38,078	35,525	6.70%	43%	40%
May-18	31	13.09	48,624	45,675	6.07%	54%	50%
Jun-18	30	12.66	48,078	42,584	11.43%	55%	49%
Jul-18	31	8.85	30,274	29,283	3.28%	33%	32%
Aug-18	31	10.71	34,906	36,482	-4.52%	38%	40%
Sep-18	30	9.06	21,252	29,110	-36.98%	24%	33%
Oct-18	31	9.52	30,920	29,380	4.98%	34%	32%
Nov-18	30	9.85	25,942	29,394	-13.31%	30%	33%
Dec-18	31	9.98	31,232	30,740	1.57%	34%	34%
Total	365	10.70	403,563	403,563	0.00%	38%	38%
Total in OSP (07/15-09/15)	153	10.87	183,134	183,134	0.00%	41%	41%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

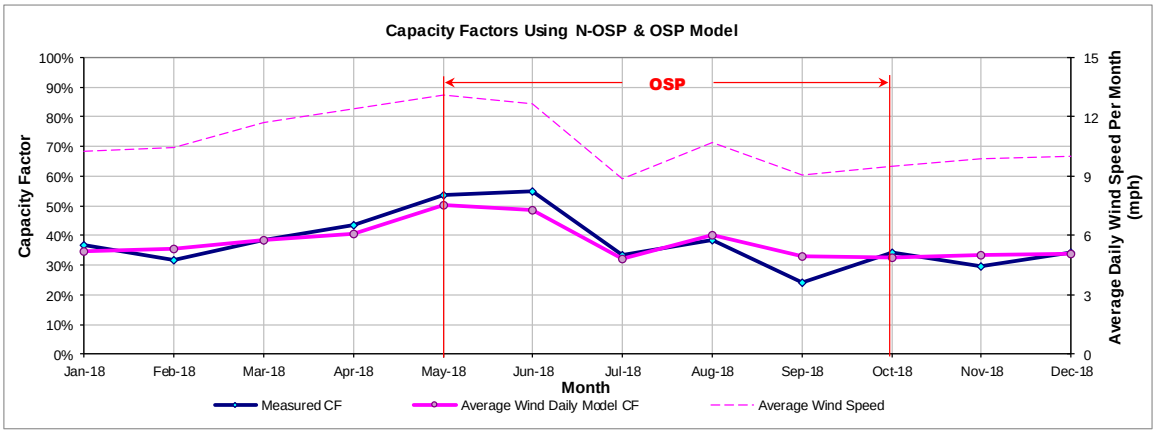


Figure A-489:FERMI_WIND1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.121.2 Val Verde Wind - FERMI_WIND2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
FERMI_WIND2	Wind	-	VAL VERDE	Akuo Energy	Val Verde Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
16 GE 1.7 MW	ERCOT	S	Oct-17	West	FST	27.4

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

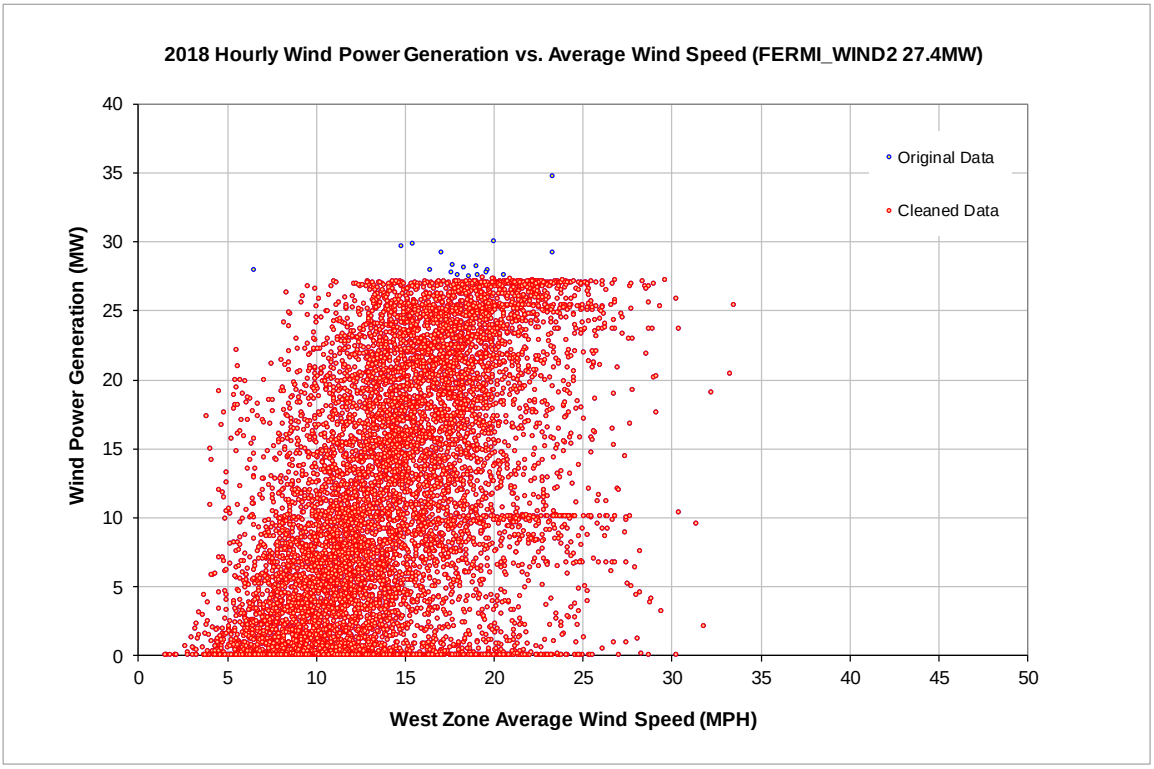


Figure A-490:FERMI_WIND2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

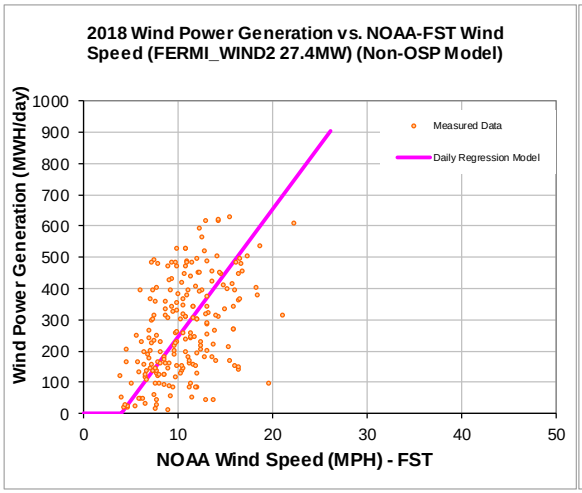
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	52.60
Left Slope (MWh/mph-day)	20.43
RMSE (MWh/day)	136.52
R2	0.21
CV-RMSE	50.8%
Daily Maximum (MWh/day)	658

OSP Model:

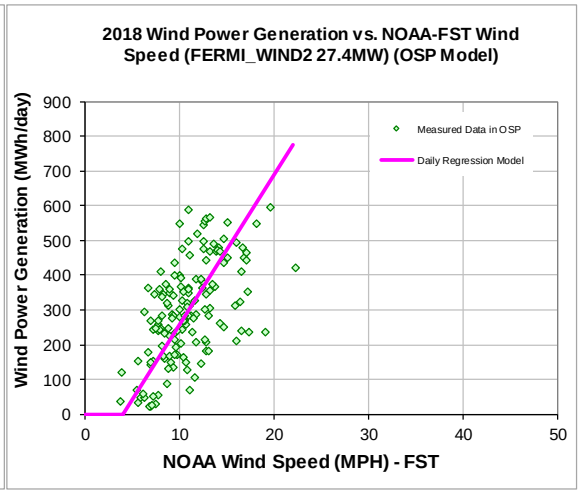
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	31.79
Left Slope (MWh/mph-day)	24.26
RMSE (MWh/day)	115.49
R2	0.33
CV-RMSE	39.1%
Daily Maximum (MWh/day)	658

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
103,343	101,048

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
296	295

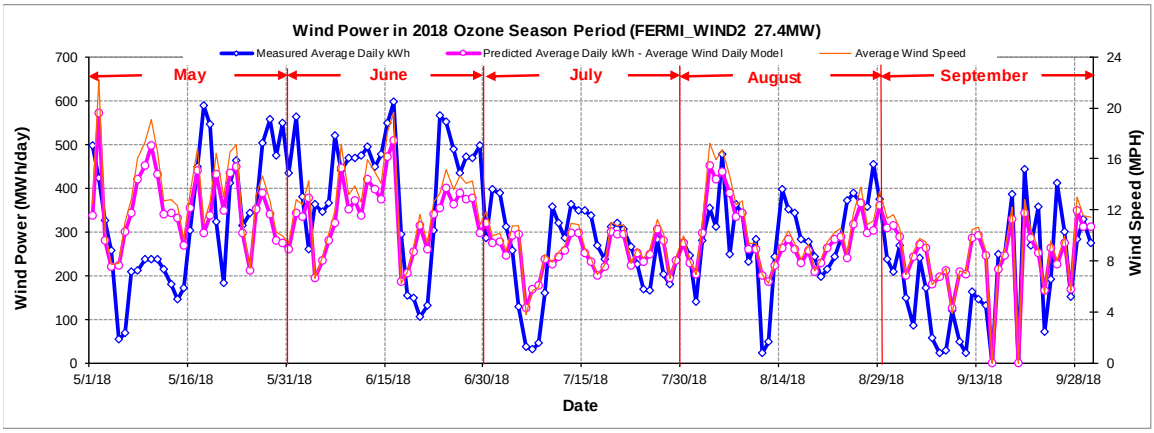
Figure A-491:FERMI_WIND2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.25	8,984	8,122	9.60%	44%	40%
Feb-18	28	10.46	6,832	7,454	-9.10%	37%	40%
Mar-18	31	11.73	8,702	8,764	-0.70%	43%	43%
Apr-18	30	12.41	8,538	8,876	-3.96%	43%	45%
May-18	31	13.09	10,232	10,827	-5.82%	50%	53%
Jun-18	30	12.66	12,088	10,164	15.92%	61%	52%
Jul-18	31	8.85	7,788	7,642	1.87%	38%	37%
Aug-18	31	10.71	8,912	9,041	-1.45%	44%	44%
Sep-18	30	8.90	5,589	6,933	-24.06%	28%	35%
Oct-18	31	9.52	8,309	7,659	7.82%	41%	38%
Nov-18	30	9.85	6,957	7,617	-9.49%	35%	39%
Dec-18	31	9.98	8,118	7,949	2.09%	40%	39%
Total	365	10.70	101,048	101,048	0.00%	42%	42%
Total in OSP (07/15-09/15)	151	10.87	44,608	44,608	0.00%	45%	45%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

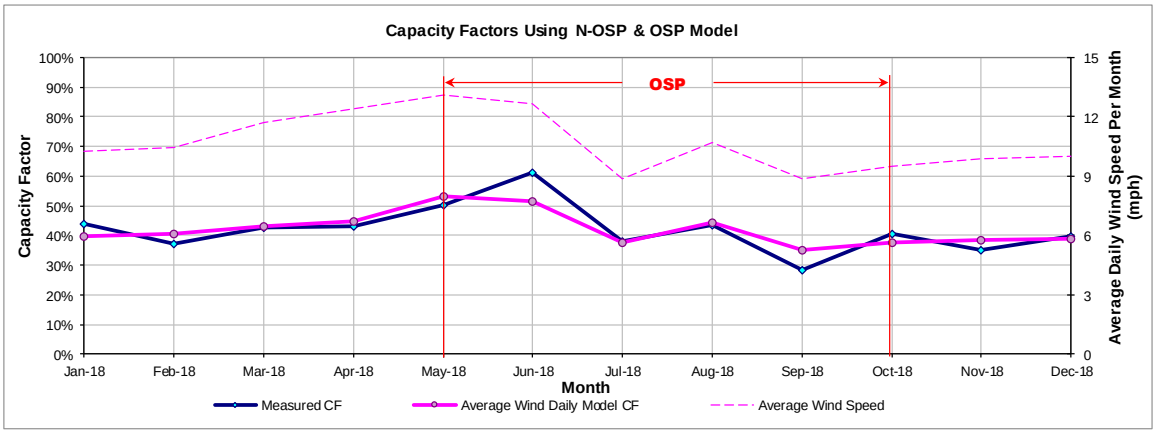


Figure A-492:FERMI_WIND2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.122 Wake Wind

A.122.1 Wake Wind - WAKEWE_G1_J01

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
WAKEWE_G1_J01	Wind	Floydada	DICKENS	Invenergy	Wake Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
67 GE 1.7 MW	ERCOT	W	Oct-16	Panhandle	LBB	114.9

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

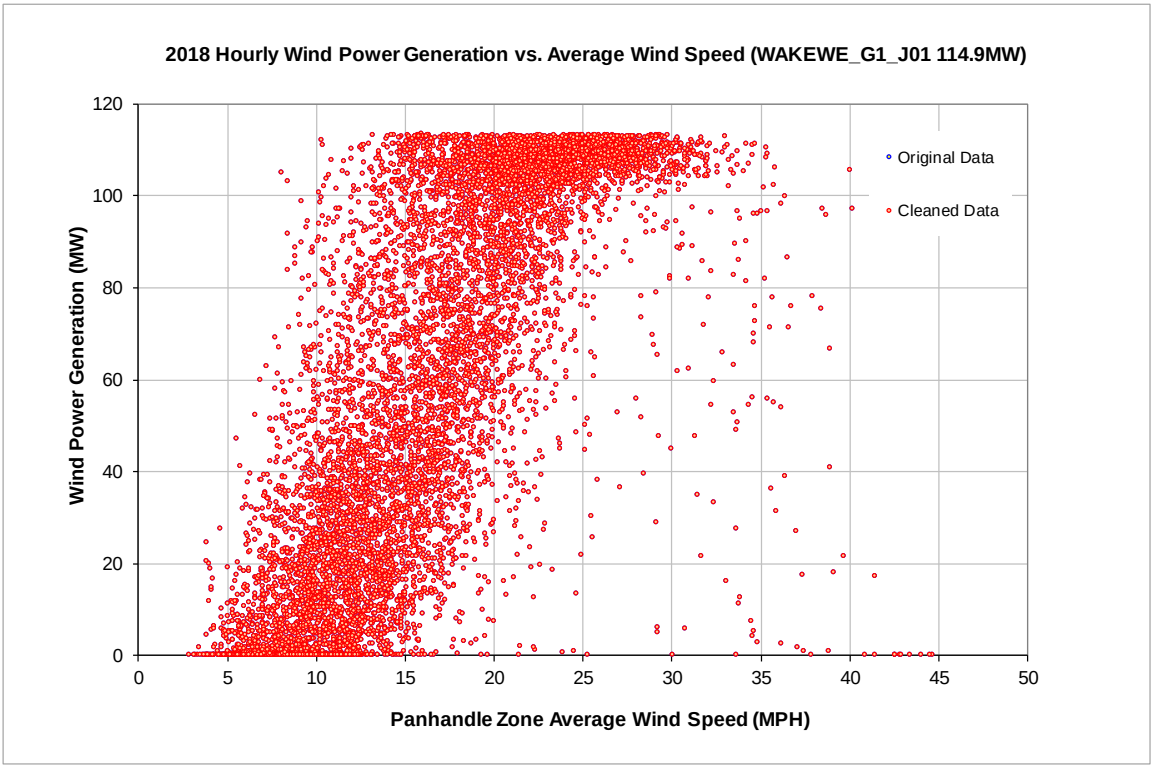


Figure A-493:WAKEWE_G1_J01 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

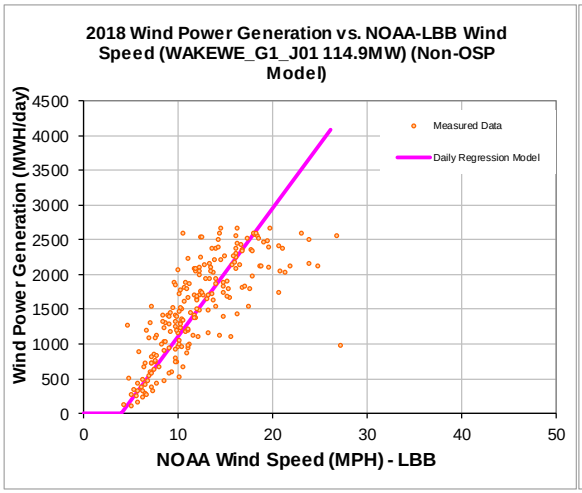
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	104.41
Left Slope (MWh/mph-day)	115.51
RMSE (MWh/day)	443.16
R2	0.58
CV-RMSE	29.4%
Daily Maximum (MWh/day)	2758

OSP Model:

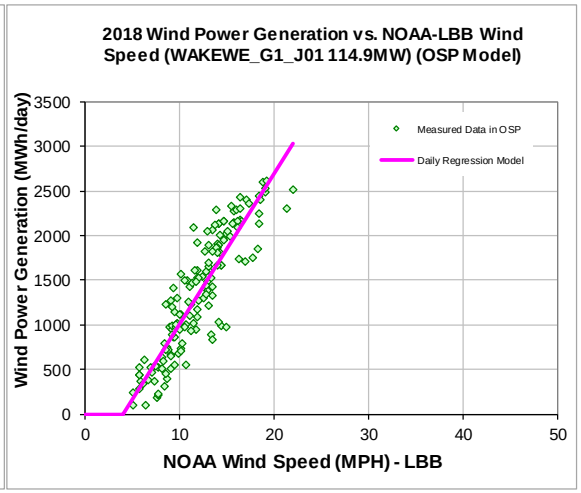
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-651.12
Left Slope (MWh/mph-day)	166.63
RMSE (MWh/day)	300.92
R2	0.80
CV-RMSE	22.3%
Daily Maximum (MWh/day)	2758

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
509,787	525,654

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,163	1,348

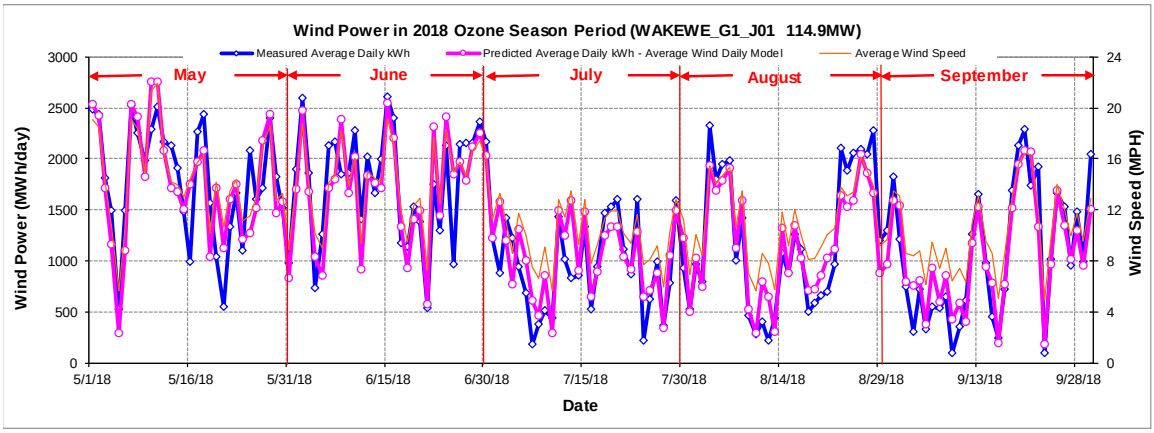
Figure A-494:WAKEWE_G1_J01 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	46,495	42,949	7.63%	54%	50%
Feb-18	28	12.08	45,270	41,986	7.25%	59%	54%
Mar-18	31	13.58	52,372	51,773	1.14%	61%	61%
Apr-18	30	15.19	52,335	55,140	-5.36%	63%	67%
May-18	31	14.42	54,441	53,936	0.93%	64%	63%
Jun-18	30	14.33	53,573	52,123	2.71%	65%	63%
Jul-18	31	10.01	28,937	31,497	-8.85%	34%	37%
Aug-18	31	11.09	38,474	37,079	3.62%	45%	43%
Sep-18	30	10.17	30,887	31,287	-1.30%	37%	38%
Oct-18	31	10.80	38,044	41,900	-10.14%	45%	49%
Nov-18	30	11.15	43,473	41,757	3.95%	53%	50%
Dec-18	31	11.13	41,354	42,504	-2.78%	48%	50%
Total	365	12.08	525,654	523,933	0.33%	52%	52%
Total in OSP (07/15-09/15)	153	12.00	206,312	205,923	0.19%	49%	49%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

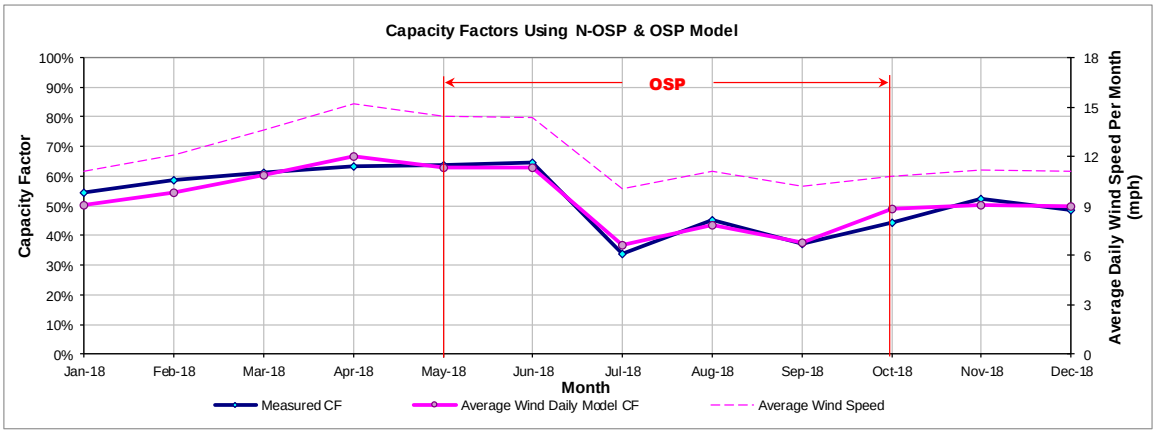


Figure A-495:WAKEWE_G1_J01 - Predicted Wind Power and Capacity Factor Using Daily Models

A.122.2 Wake Wind - WAKEWE_G2_J01

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
WAKEWE_G2_J01	Wind	Floydada	DICKENS	Invenergy	Wake Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
83 GE 1.7 MW	ERCOT	W	Oct-16	Panhandle	LBB	142.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

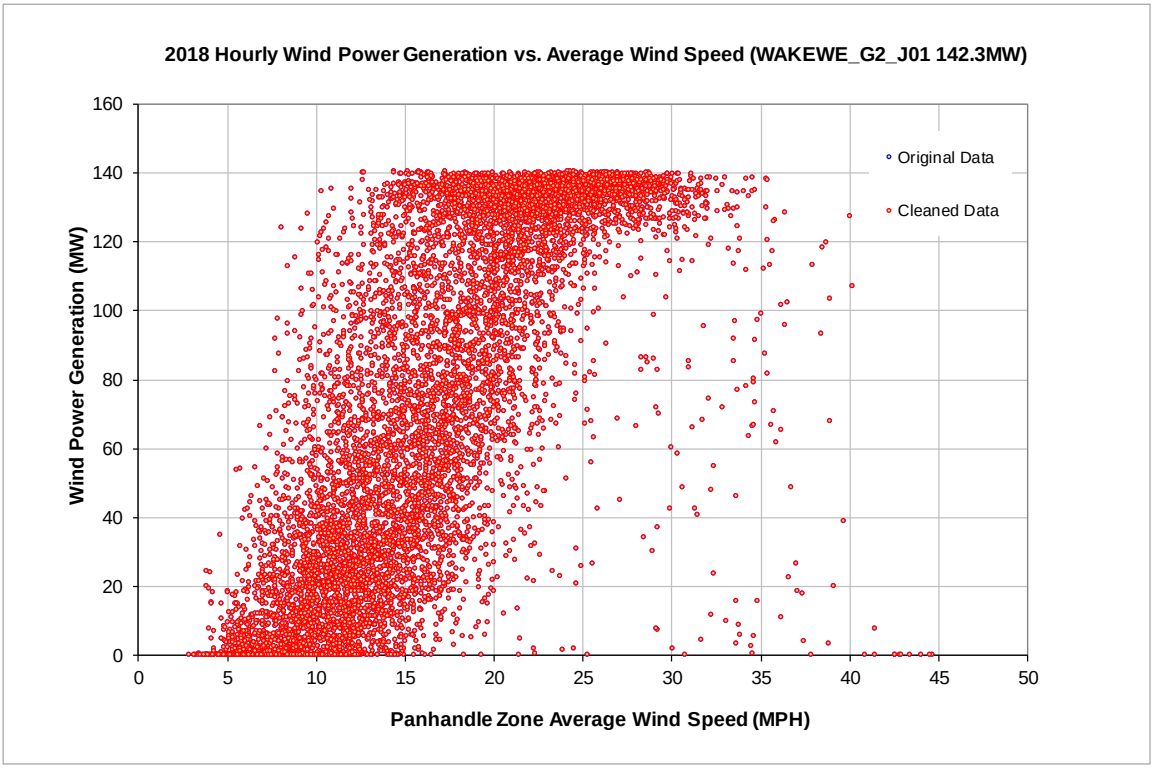


Figure A-496:WAKEWE_G2_J01 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

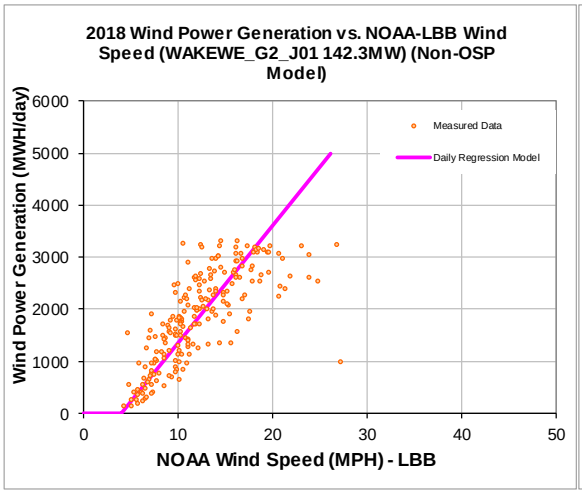
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	87.78
Left Slope (MWh/mph-day)	144.01
RMSE (MWh/day)	569.53
R2	0.57
CV-RMSE	31.0%
Daily Maximum (MWh/day)	3415

OSP Model:

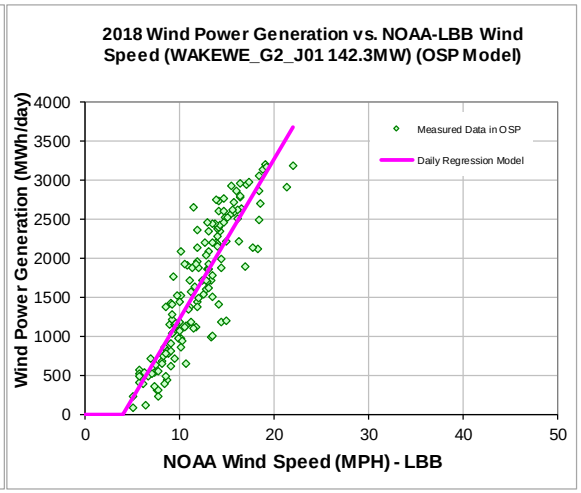
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-849.26
Left Slope (MWh/mph-day)	206.95
RMSE (MWh/day)	378.58
R2	0.80
CV-RMSE	23.2%
Daily Maximum (MWh/day)	3415

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
619,519	639,168

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,405	1,634

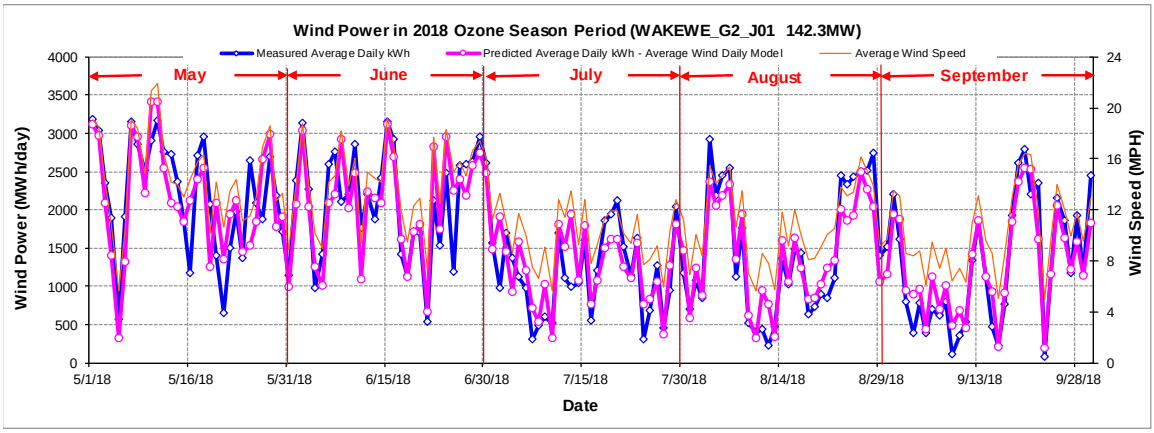
Figure A-497:WAKEWE_G2_J01 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	57,003	52,230	8.37%	54%	49%
Feb-18	28	12.08	54,949	51,156	6.90%	57%	53%
Mar-18	31	13.58	62,639	63,250	-0.97%	59%	60%
Apr-18	30	15.19	63,999	67,509	-5.49%	62%	66%
May-18	31	14.42	67,283	65,794	2.21%	64%	62%
Jun-18	30	14.33	64,160	63,521	1.00%	63%	62%
Jul-18	31	10.01	35,518	37,863	-6.60%	34%	36%
Aug-18	31	11.09	46,479	44,796	3.62%	44%	42%
Sep-18	30	10.17	36,599	37,643	-2.85%	36%	37%
Oct-18	31	10.80	45,901	50,922	-10.94%	43%	48%
Nov-18	30	11.15	53,387	50,786	4.87%	52%	50%
Dec-18	31	11.13	51,249	51,714	-0.91%	48%	49%
Total	365	12.08	639,168	637,184	0.31%	51%	51%
Total in OSP (07/15-09/15)	153	12.00	250,039	249,618	0.17%	48%	48%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

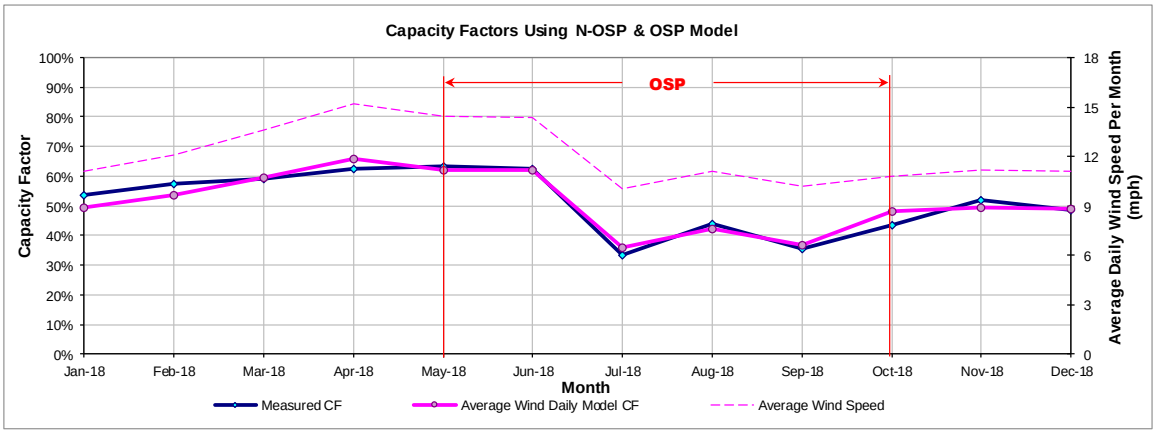


Figure A-498:WAKEWE_G2_J01 - Predicted Wind Power and Capacity Factor Using Daily Models

A.123 Whirlwind Energy

A.123.1 Whirlwind Energy - WEC_WECG1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
WEC_WECG1	Wind	-	FLOYD	Renewable Energy Systems	Whirlwind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
26 Siemens 2.3 MW	ERCOT	W	Dec-07	Panhandle	LBB	57

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

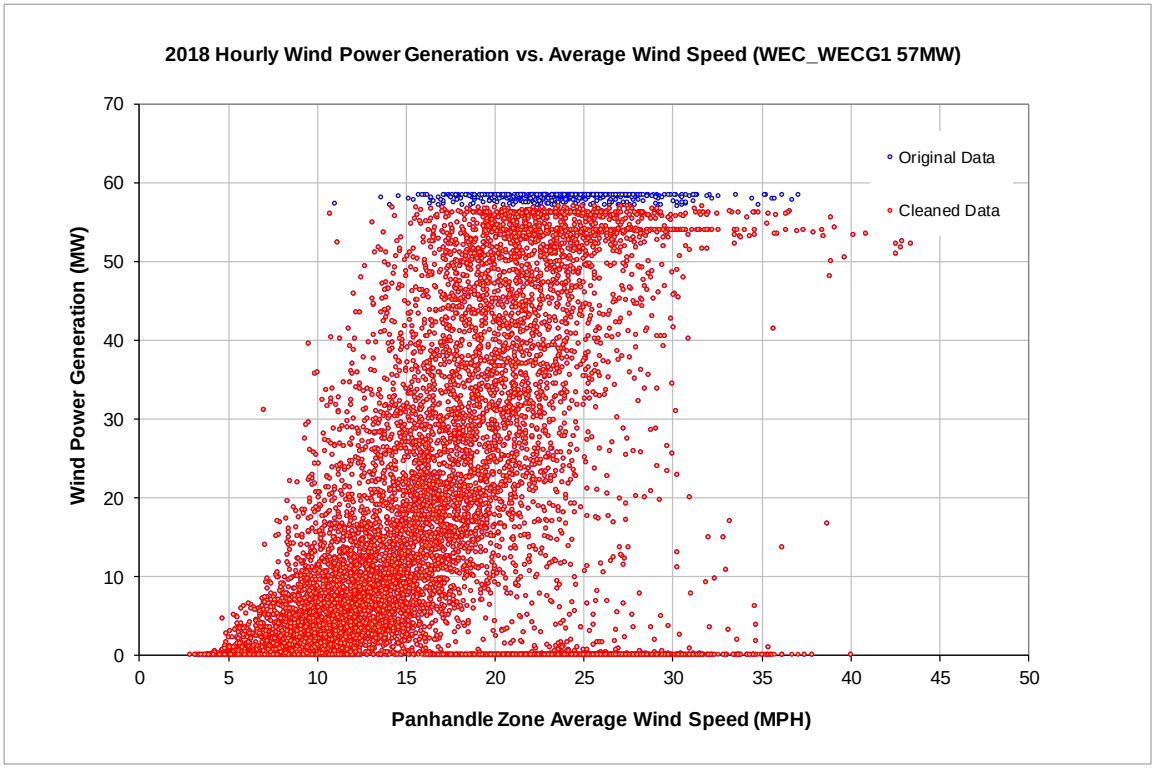


Figure A-499:WEC_WECG1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

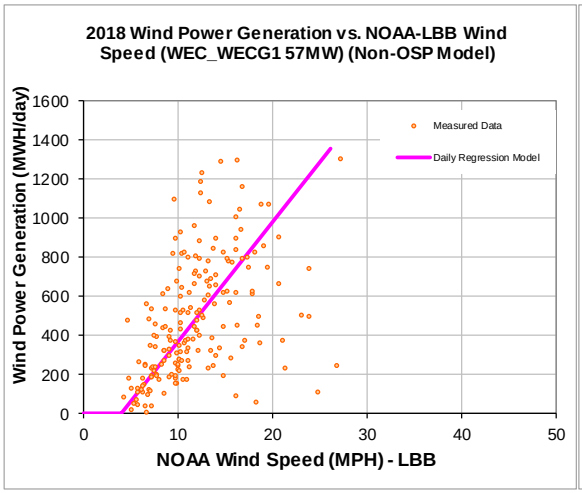
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	98.83
Left Slope (MWh/mph-day)	32.05
RMSE (MWh/day)	264.49
R2	0.23
CV-RMSE	55.6%
Daily Maximum (MWh/day)	1368

OSP Model:

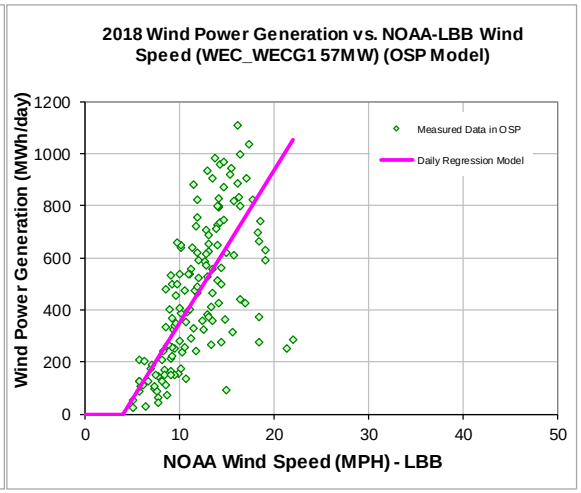
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-115.38
Left Slope (MWh/mph-day)	48.47
RMSE (MWh/day)	208.86
R2	0.41
CV-RMSE	45.7%
Daily Maximum (MWh/day)	1368

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
170,016	156,740

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
412	457

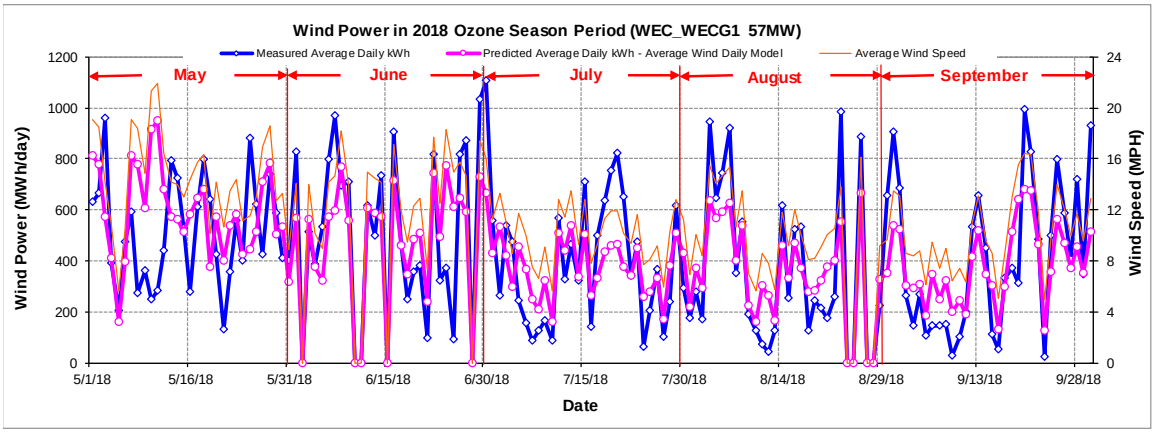
Figure A-500:WEC_WECG1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (LBB) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.09	18,497	14,082	23.87%	44%	33%
Feb-18	28	11.27	12,297	10,582	13.95%	32%	28%
Mar-18	31	12.80	11,867	13,235	-11.54%	28%	31%
Apr-18	30	15.19	11,910	17,573	-47.55%	29%	43%
May-18	31	14.42	15,807	18,097	-14.49%	37%	43%
Jun-18	30	14.01	15,155	14,086	7.05%	37%	34%
Jul-18	31	10.01	11,437	11,457	-0.17%	27%	27%
Aug-18	31	10.67	11,737	10,852	7.54%	28%	26%
Sep-18	30	10.17	11,678	11,322	3.05%	28%	28%
Oct-18	31	10.47	12,122	12,597	-3.92%	29%	30%
Nov-18	30	9.97	9,826	9,626	2.04%	24%	23%
Dec-18	31	11.15	14,408	13,231	8.17%	34%	31%
Total	365	11.79	156,740	156,740	0.00%	31%	31%
Total in OSP (07/15-09/15)	144	11.81	65,814	65,814	0.00%	33%	33%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

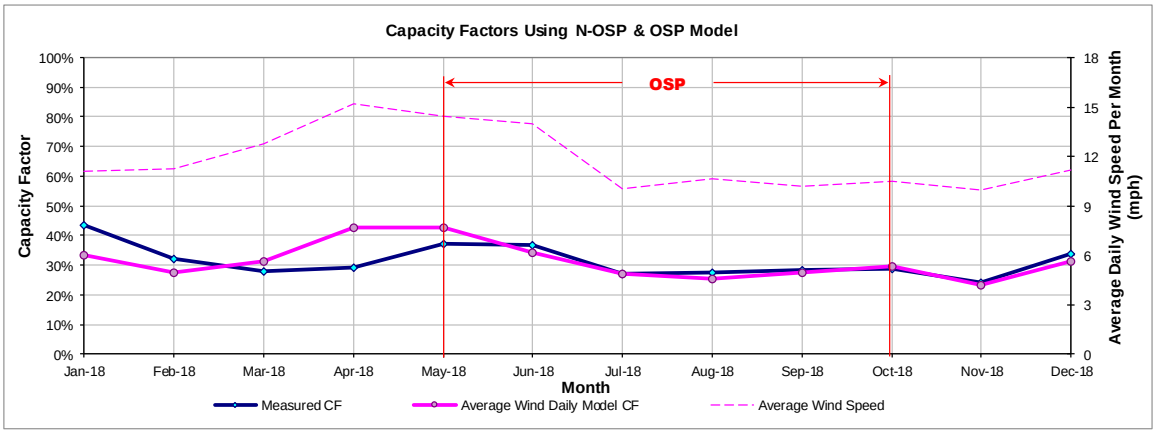


Figure A-501:WEC_WECG1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.124 Whitetail Wind Project

A.124.1 Whitetail Wind Project - EXGNWTL_WIND_1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
EXGNWTL_WIND_1	Wind	-	WEBB	Exelon	Whitetail Wind Project

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
57 GE	ERCOT	S	Dec-12	South	CRP	92.3

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

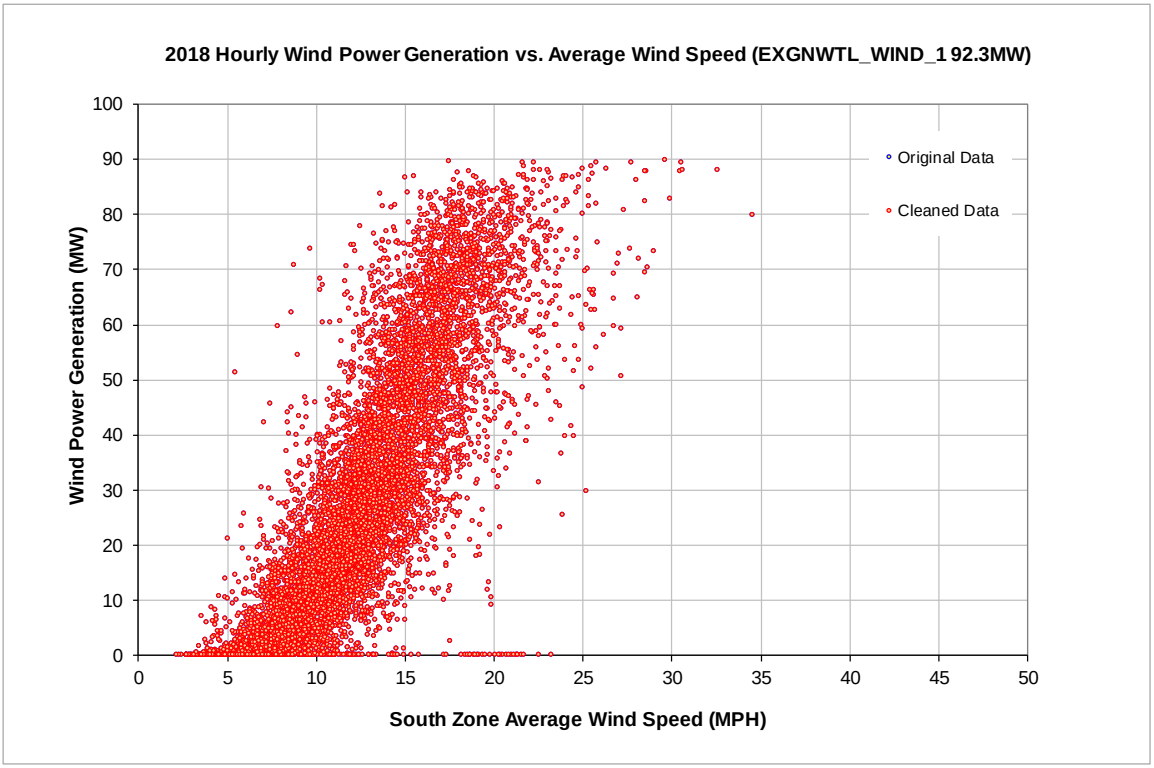


Figure A-502:EXGNWTL_WIND_1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

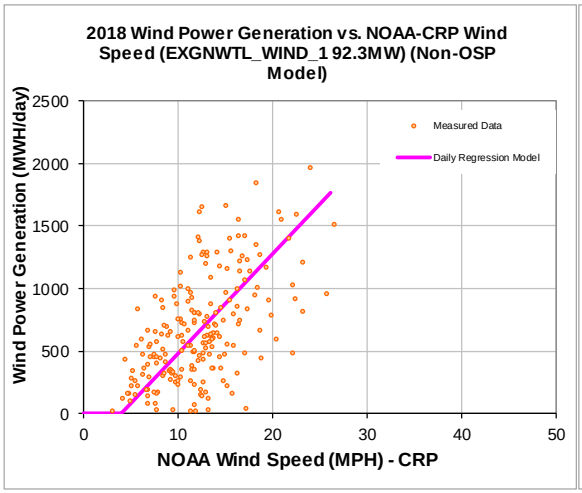
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	17.52
Left Slope (MWh/mph-day)	52.40
RMSE (MWh/day)	344.79
R2	0.32
CV-RMSE	52.4%
Daily Maximum (MWh/day)	2215

OSP Model:

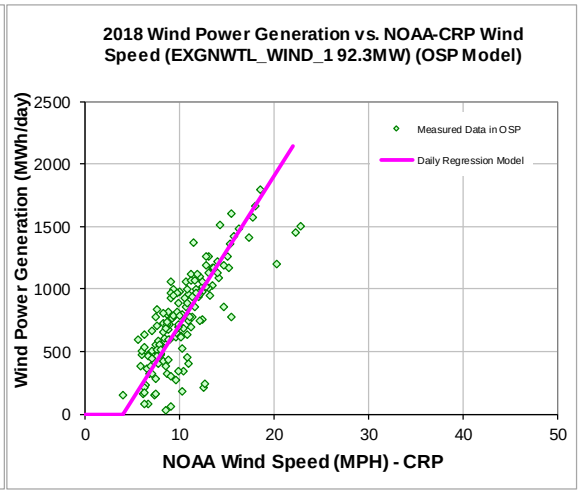
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-175.12
Left Slope (MWh/mph-day)	90.03
RMSE (MWh/day)	228.09
R2	0.63
CV-RMSE	29.9%
Daily Maximum (MWh/day)	2215

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
253,392	254,825

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
740	762

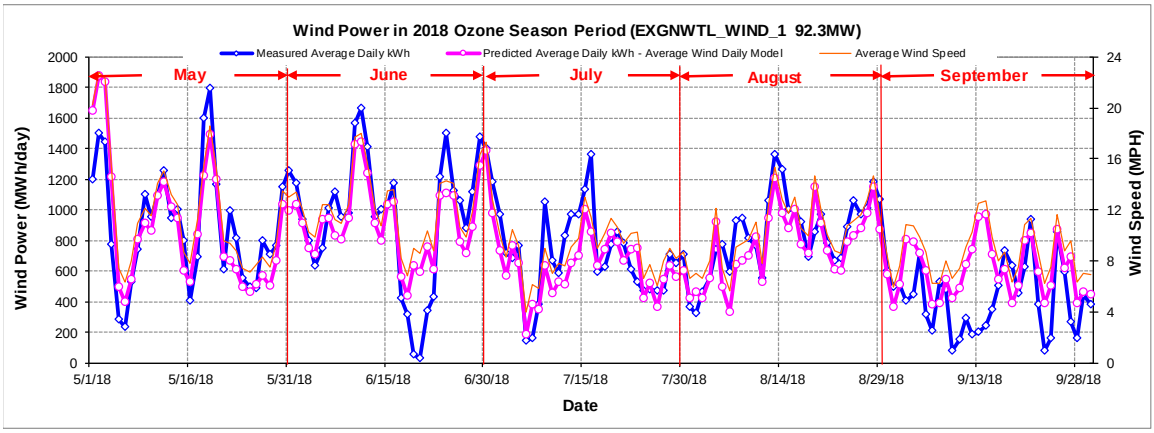
Figure A-503:EXGNWTL_WIND_1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (CRP) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.10	20,111	18,574	7.64%	29%	27%
Feb-18	28	14.08	16,387	21,150	-29.07%	26%	34%
Mar-18	31	13.69	23,010	22,786	0.98%	34%	33%
Apr-18	30	14.08	23,869	22,655	5.09%	36%	34%
May-18	31	11.95	28,121	27,912	0.74%	41%	41%
Jun-18	30	12.21	28,501	27,723	2.73%	43%	42%
Jul-18	31	8.81	21,660	19,160	11.54%	32%	28%
Aug-18	31	10.35	25,968	23,451	9.69%	38%	34%
Sep-18	30	8.73	12,308	18,311	-48.78%	19%	28%
Oct-18	31	10.87	20,396	18,197	10.78%	30%	26%
Nov-18	30	10.59	12,527	16,031	-27.97%	19%	24%
Dec-18	31	11.29	21,969	18,876	14.08%	32%	27%
Total	365	11.46	254,825	254,825	0.00%	32%	32%
Total in OSP (07/15-09/15)	153	10.41	116,557	116,557	0.00%	34%	34%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

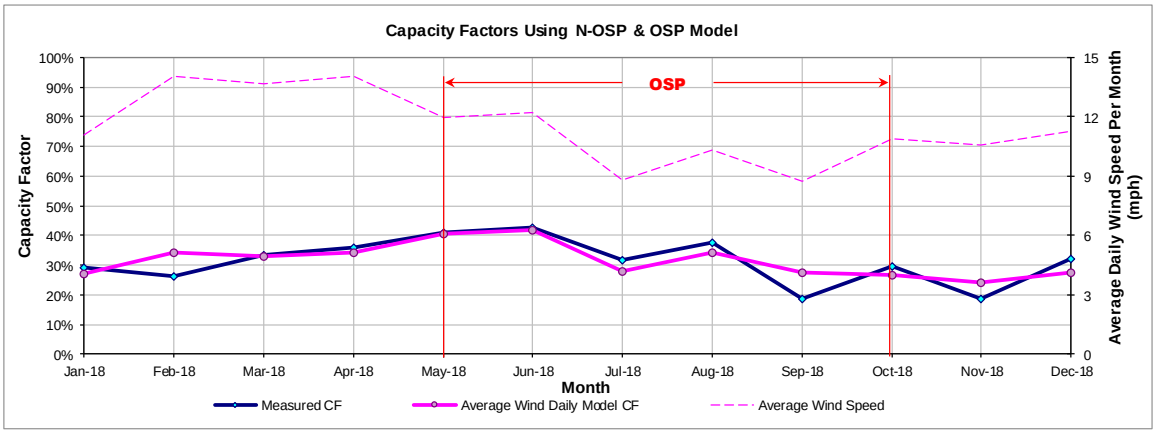


Figure A-504:EXGNWTL_WIND_1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.125 Willow Springs Wind

A.125.1 Willow Springs Wind - SALVTION_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SALVTION_UNIT1	Wind	-	HASKELL	Lincoln Clean Energy	Willow Springs Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 GE 2.5 MW	ERCOT	W	Dec-17	West	ABI	125

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

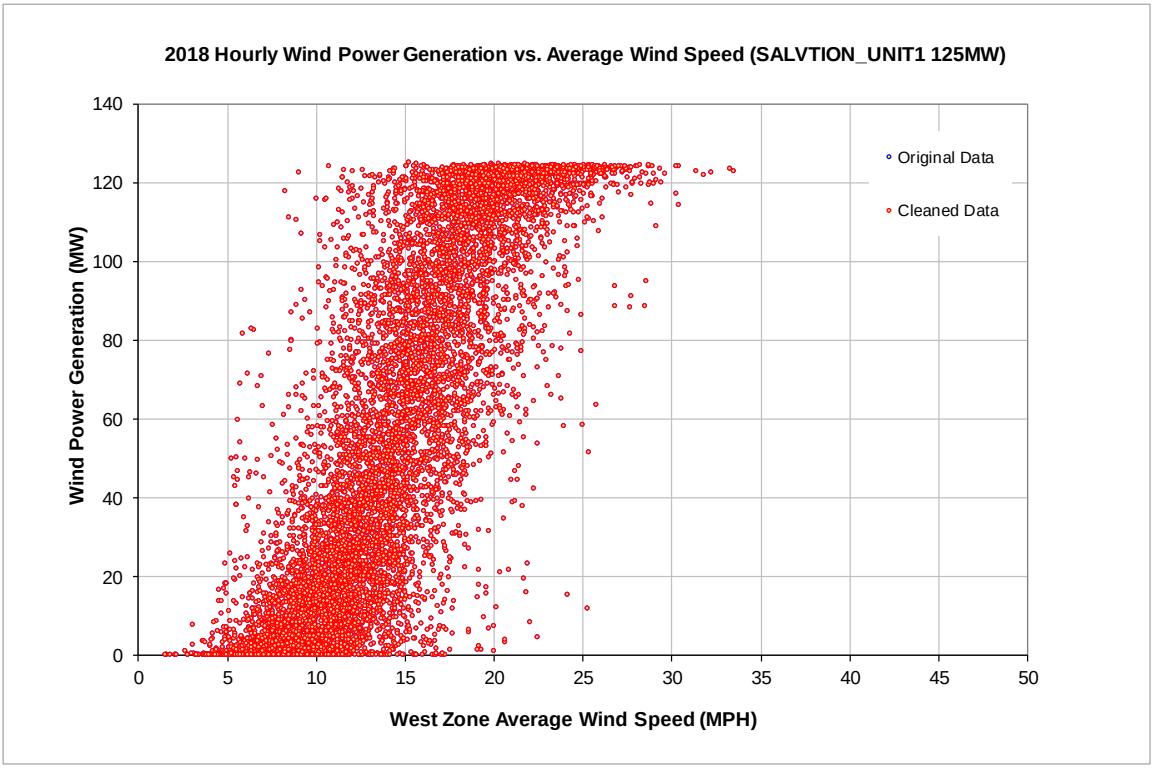


Figure A-505:SALVTION_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

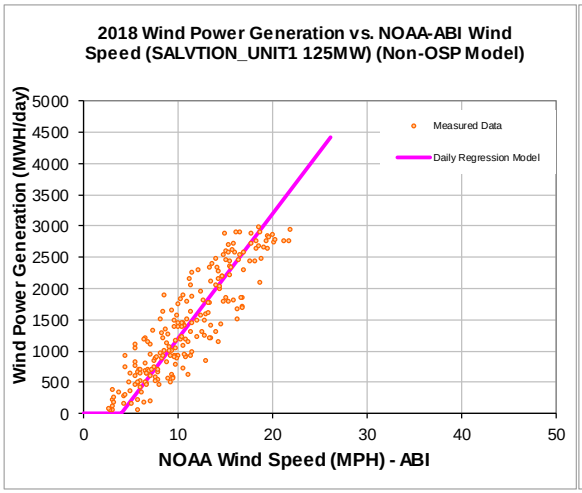
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-347.10
Left Slope (MWh/mph-day)	158.87
RMSE (MWh/day)	361.28
R2	0.80
CV-RMSE	25.9%
Daily Maximum (MWh/day)	3000

OSP Model:

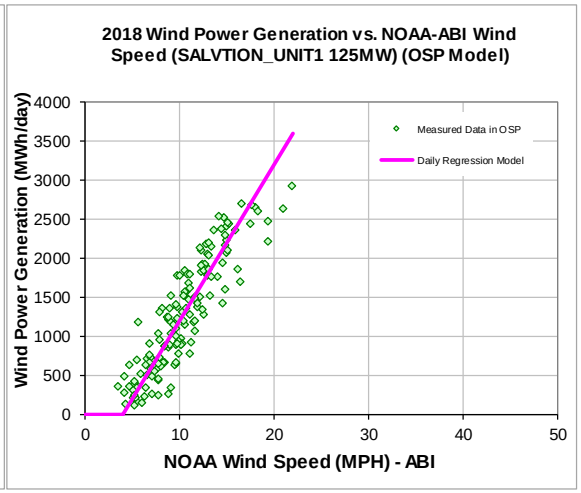
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-538.44
Left Slope (MWh/mph-day)	174.37
RMSE (MWh/day)	313.48
R2	0.81
CV-RMSE	24.6%
Daily Maximum (MWh/day)	3000

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
532,856	490,398

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,293	1,276

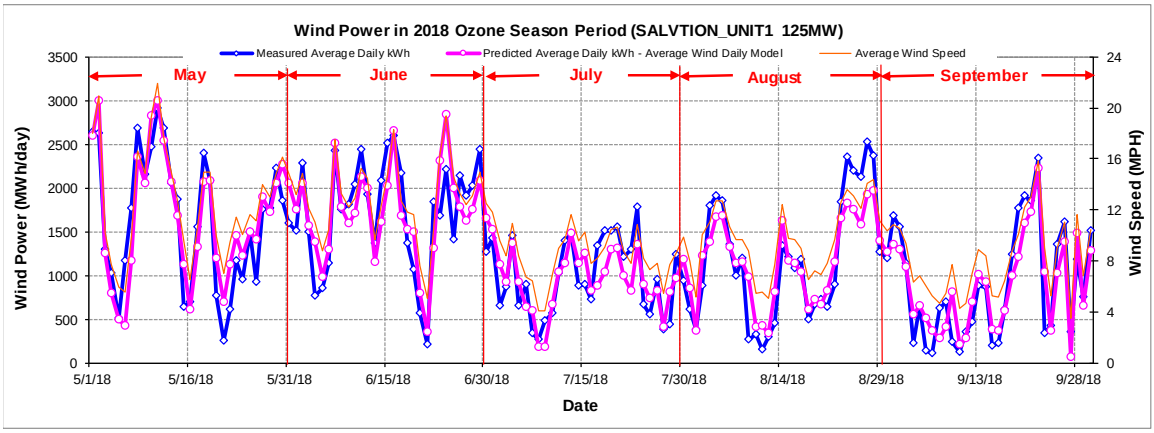
Figure A-506:SALVTION_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	47,196	43,263	8.33%	51%	47%
Feb-18	28	11.00	38,160	39,200	-2.73%	45%	47%
Mar-18	31	11.92	47,198	47,969	-1.63%	51%	52%
Apr-18	30	13.18	51,347	52,177	-1.62%	57%	58%
May-18	31	12.78	50,575	52,004	-2.83%	54%	56%
Jun-18	30	12.90	51,294	51,351	-0.11%	57%	57%
Jul-18	31	8.52	29,956	29,365	1.97%	32%	32%
Aug-18	31	9.85	37,608	36,543	2.83%	40%	39%
Sep-18	30	7.97	25,737	25,515	0.86%	29%	28%
Oct-18	31	9.35	31,136	35,306	-13.39%	33%	38%
Nov-18	30	10.05	40,014	37,480	6.33%	44%	42%
Dec-18	31	10.23	40,177	39,606	1.42%	43%	43%
Total	365	10.72	490,398	489,780	0.13%	45%	45%
Total in OSP (07/15-09/15)	153	10.40	195,170	194,778	0.20%	43%	42%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

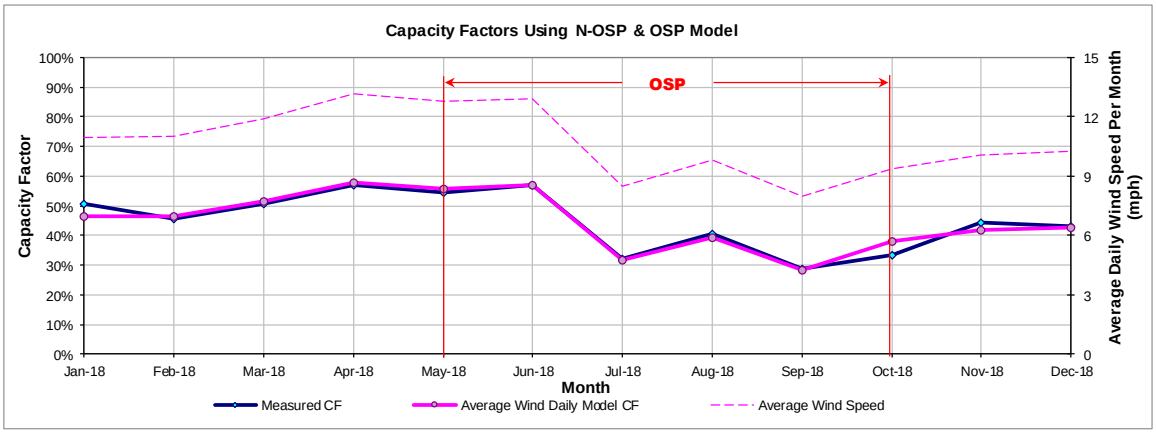


Figure A-507:SALVTION_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.125.2 Willow Springs Wind - SALVTION_UNIT2

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
SALVTION_UNIT2	Wind	-	HASKELL	Lincoln Clean Energy	Willow Springs Wind

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
50 GE 2.5 MW	ERCOT	W	Dec-17	West	ABI	125

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

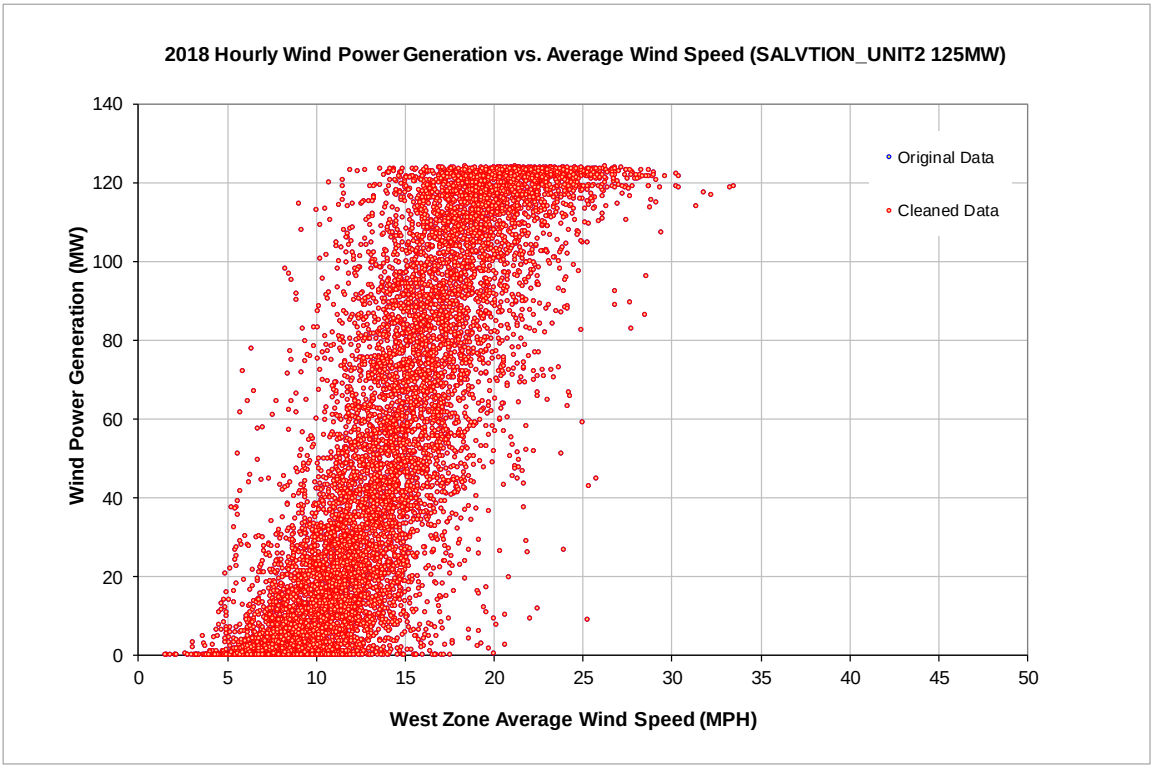


Figure A-508:SALVTION_UNIT2 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

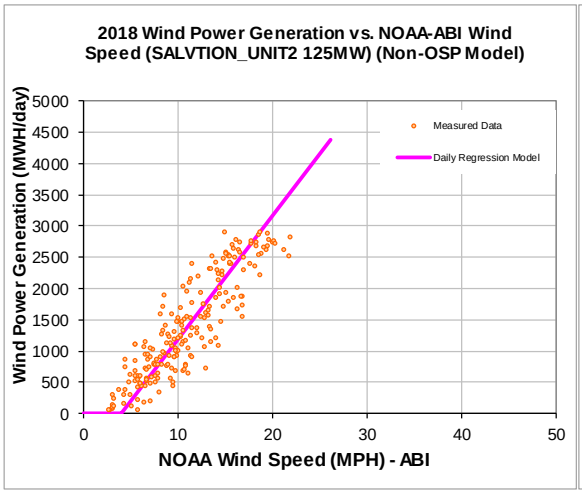
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-357.19
Left Slope (MWh/mph-day)	158.11
RMSE (MWh/day)	365.95
R2	0.80
CV-RMSE	26.6%
Daily Maximum (MWh/day)	3000

OSP Model:

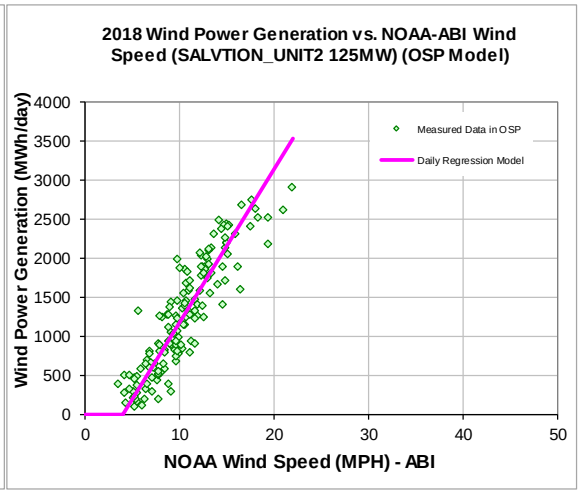
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-556.51
Left Slope (MWh/mph-day)	174.20
RMSE (MWh/day)	311.76
R2	0.81
CV-RMSE	24.8%
Daily Maximum (MWh/day)	3000

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
525,711	483,440

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
1,273	1,256

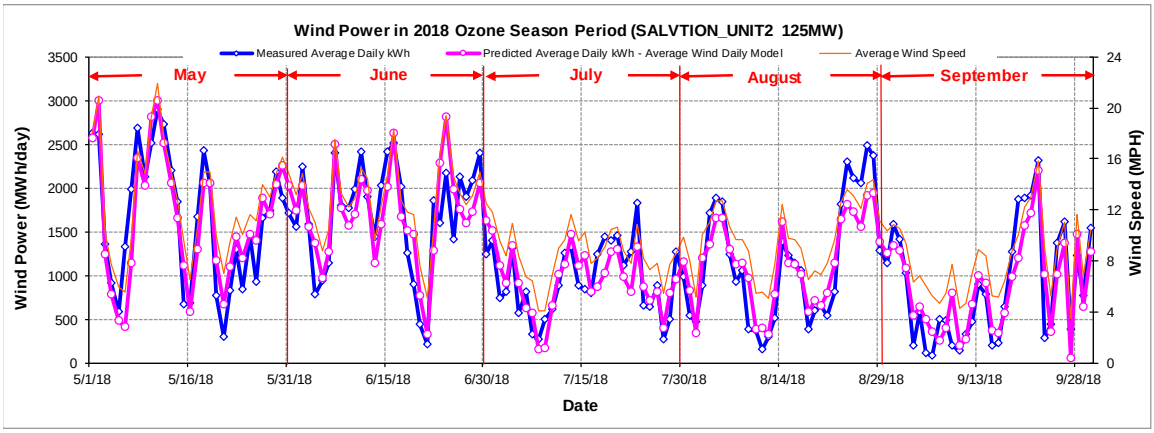
Figure A-509:SALVTION_UNIT2 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	47,043	42,690	9.25%	51%	46%
Feb-18	28	11.00	37,491	38,682	-3.18%	45%	46%
Mar-18	31	11.92	47,791	47,374	0.87%	51%	51%
Apr-18	30	13.18	49,900	51,626	-3.46%	55%	57%
May-18	31	12.78	51,390	51,418	-0.05%	55%	55%
Jun-18	30	12.90	50,409	50,741	-0.66%	56%	56%
Jul-18	31	8.52	28,698	28,758	-0.21%	31%	31%
Aug-18	31	9.85	36,554	35,929	1.71%	39%	39%
Sep-18	30	7.97	25,074	24,931	0.57%	28%	28%
Oct-18	31	9.35	31,179	34,772	-11.52%	34%	37%
Nov-18	30	10.05	39,806	36,947	7.18%	44%	41%
Dec-18	31	10.23	38,103	39,067	-2.53%	41%	42%
Total	365	10.72	483,440	482,935	0.10%	44%	44%
Total in OSP (07/15-09/15)	153	10.40	192,125	191,777	0.18%	42%	42%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

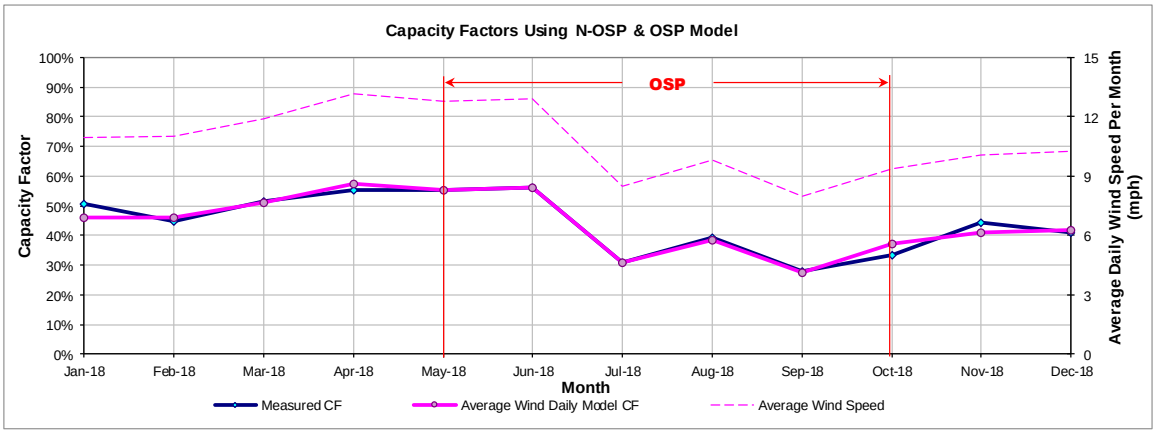


Figure A-510:SALVTION_UNIT2 - Predicted Wind Power and Capacity Factor Using Daily Models

A.126 Windthorst 2

A.126.1 Windthorst 2 - WNDTHST2_UNIT1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
WNDTHST2_UNIT1	Wind	-	ARCHER	OwnEnergy	Windthorst 2

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
30 Siemens 2.3 MW	ERCOT	W	Dec-14	West	ABI	67.6

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

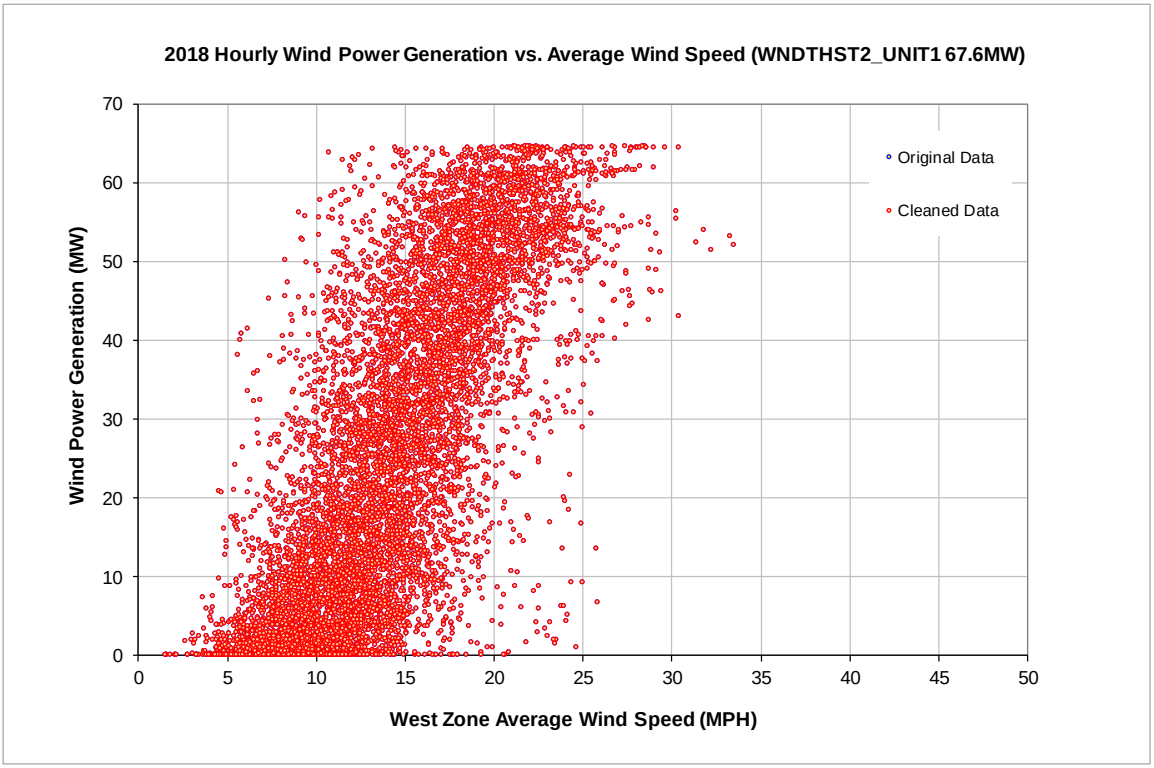


Figure A-511:WNDTHST2_UNIT1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

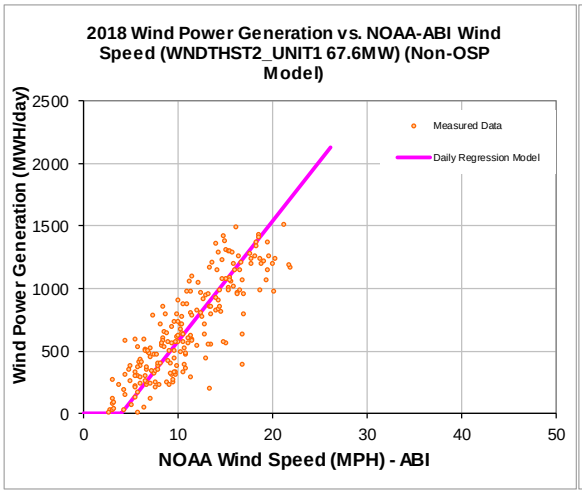
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-109.46
Left Slope (MWh/mph-day)	71.07
RMSE (MWh/day)	201.02
R2	0.72
CV-RMSE	30.1%
Daily Maximum (MWh/day)	1622

OSP Model:

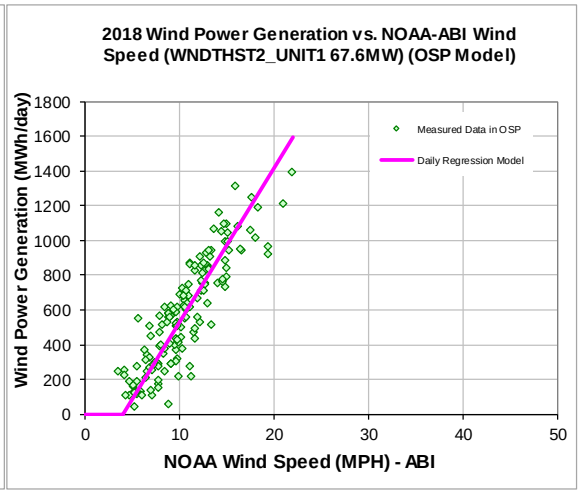
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-210.00
Left Slope (MWh/mph-day)	74.80
RMSE (MWh/day)	144.21
R2	0.79
CV-RMSE	25.4%
Daily Maximum (MWh/day)	1622

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
247,701	228,718

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
576	568

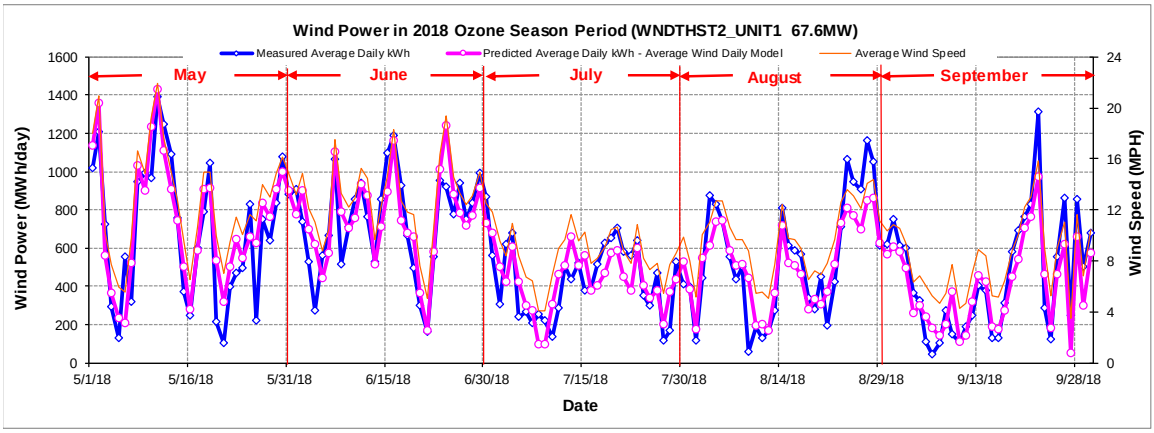
Figure A-512:WNDTHST2_UNIT1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (ABI) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.97	24,543	20,774	15.36%	49%	41%
Feb-18	28	11.00	17,448	18,819	-7.86%	38%	41%
Mar-18	31	11.92	22,374	22,880	-2.26%	44%	45%
Apr-18	30	13.18	20,696	24,810	-19.88%	43%	51%
May-18	31	12.78	21,571	23,127	-7.21%	43%	46%
Jun-18	30	12.90	22,272	22,658	-1.73%	46%	47%
Jul-18	31	8.52	12,998	13,247	-1.92%	26%	26%
Aug-18	31	9.85	17,364	16,326	5.98%	35%	32%
Sep-18	30	7.97	12,728	11,575	9.06%	26%	24%
Oct-18	31	9.35	15,786	17,215	-9.05%	31%	34%
Nov-18	30	10.05	20,766	18,141	12.64%	43%	37%
Dec-18	31	10.23	20,171	19,145	5.09%	40%	38%
Total	365	10.72	228,718	228,718	0.00%	39%	39%
Total in OSP (07/15-09/15)	153	10.40	86,933	86,933	0.00%	35%	35%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

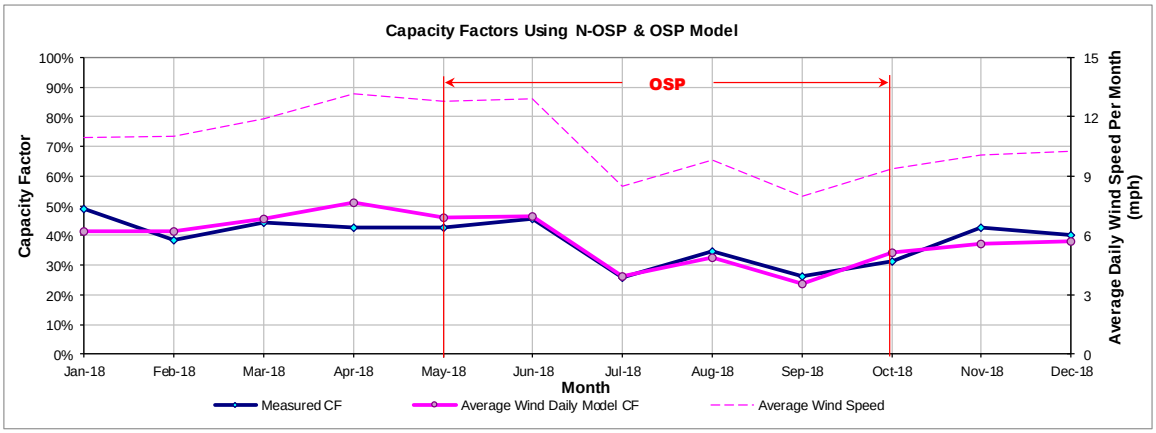


Figure A-513:WNDTHST2_UNIT1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.127 Wolf Ridge Windfarm

A.127.1 Wolf Ridge Windfarm - WHTTAIL_WR1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
WHTTAIL_WR1	Wind	-	COOKE	NextEra	Wolf Ridge Windfarm

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
75 GE 1.5 MW	ERCOT	N	Oct-08	North	DFW	112.5

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

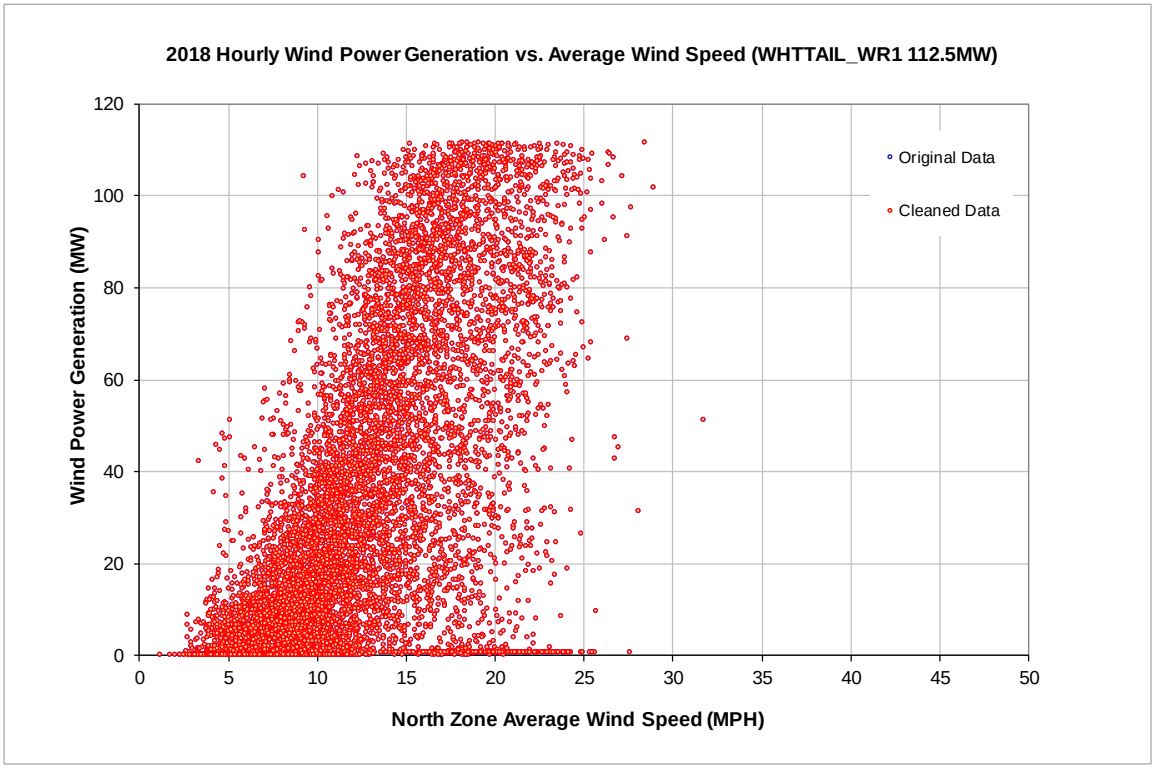


Figure A-514:WHTTAIL_WR1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

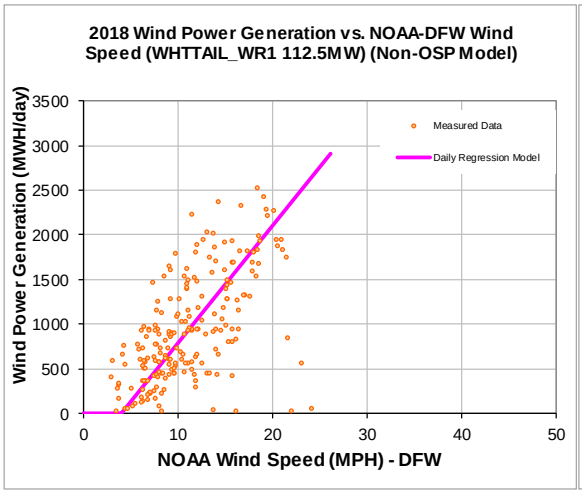
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	61.97
Left Slope (MWh/mph-day)	78.54
RMSE (MWh/day)	481.14
R2	0.36
CV-RMSE	51.6%
Daily Maximum (MWh/day)	2700

OSP Model:

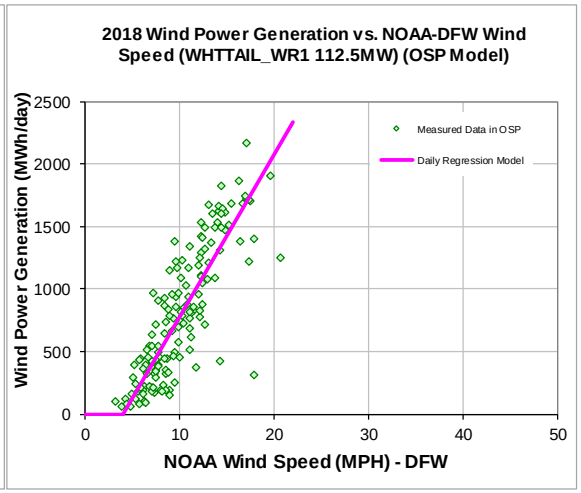
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-441.64
Left Slope (MWh/mph-day)	122.03
RMSE (MWh/day)	292.39
R2	0.69
CV-RMSE	36.8%
Daily Maximum (MWh/day)	2700

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
339,932	319,149

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
810	794

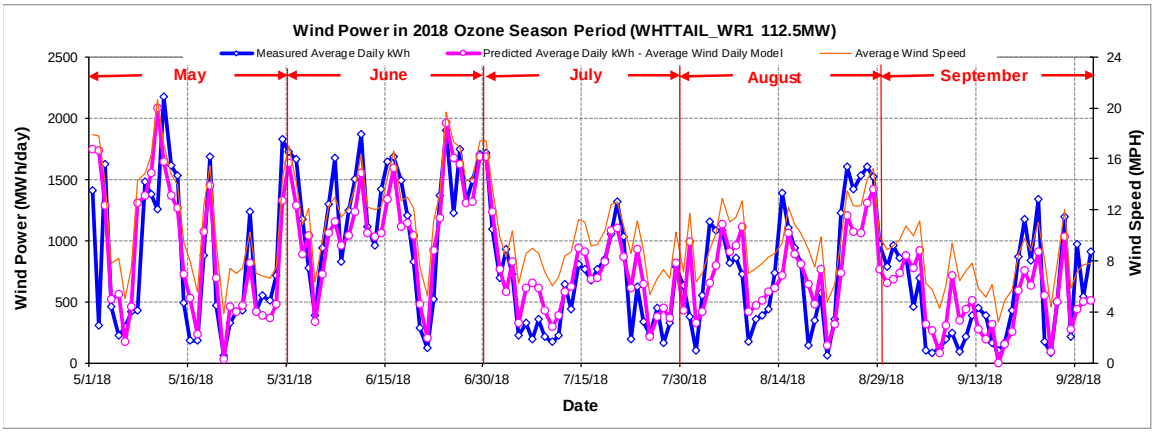
Figure A-515:WHTTAIL_WR1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (DFW) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	11.50	37,732	29,922	20.70%	45%	36%
Feb-18	28	10.98	26,505	25,881	2.36%	35%	34%
Mar-18	31	11.72	33,326	30,462	8.59%	40%	36%
Apr-18	30	13.21	20,322	32,985	-62.31%	25%	41%
May-18	31	11.15	26,571	28,487	-7.21%	32%	34%
Jun-18	30	13.06	36,958	34,573	6.45%	46%	43%
Jul-18	31	9.10	17,492	20,733	-18.53%	21%	25%
Aug-18	31	9.83	25,688	23,489	8.56%	31%	28%
Sep-18	30	7.48	14,700	14,177	3.55%	18%	18%
Oct-18	31	8.95	22,662	23,723	-4.68%	27%	28%
Nov-18	30	10.85	28,530	27,425	3.87%	35%	34%
Dec-18	31	10.44	28,663	27,343	4.61%	34%	33%
Total	365	10.68	319,149	319,199	-0.02%	32%	32%
Total in OSP (07/15-09/15)	153	10.12	121,409	121,459	-0.04%	29%	29%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

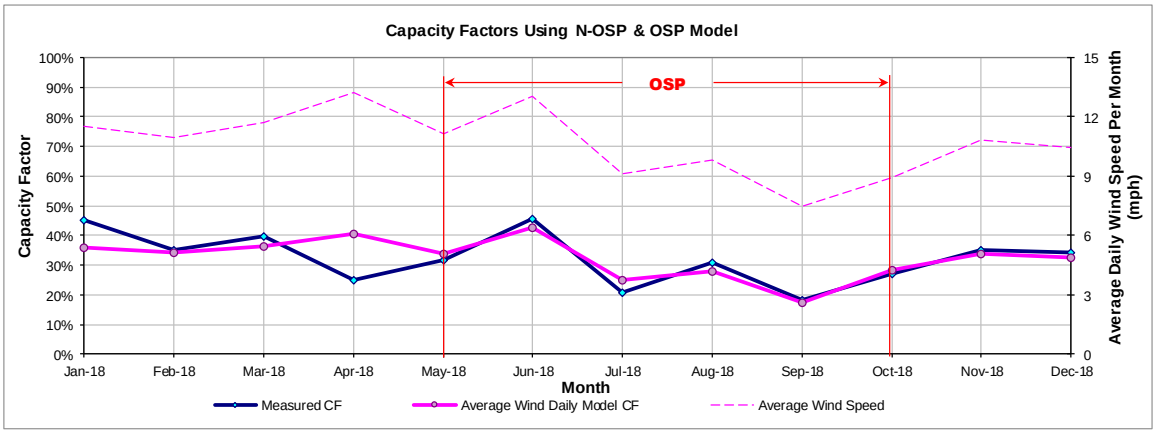


Figure A-516:WHTTAIL_WR1 - Predicted Wind Power and Capacity Factor Using Daily Models

A.128 Woodward Mountain Ranch

A.128.1 Woodward Mountain Ranch - WOODWRD1_WOODWRD1

SITE INFORMATION

GENSITECODE_ERCOT	Renewable Energy	City	County	Company	Facility
WOODWRD1_WOODWRD1	Wind	McCamey	PECOS	NextEra	Woodward Mountain Ranch

Wind Turbine Information	Region	CM Zones	Date in Service	ERCOT Wind Zone	NOAA Wind Zone	Capacity (MW)
125 Vestas 0.66 MW 117 Vestas 0.66 MW	ERCOT	W	Jul-01	West	FST	159.7

HOURLY WIND POWER VS. ERCOT AVERAGE WIND SPEED

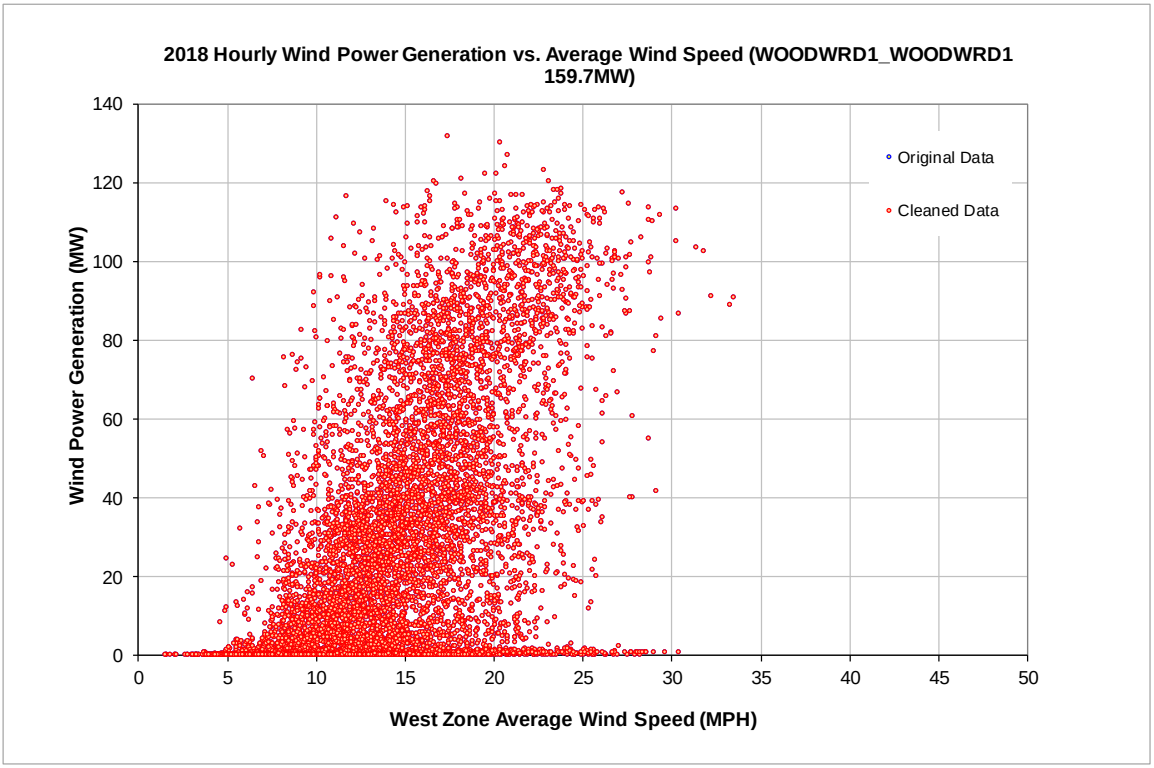


Figure A-517:WOODWRD1_WOODWRD1 - Hourly Wind Power vs. ERCOT Average Wind Speed

MODEL COEFFICIENTS

Non-OSP Model:

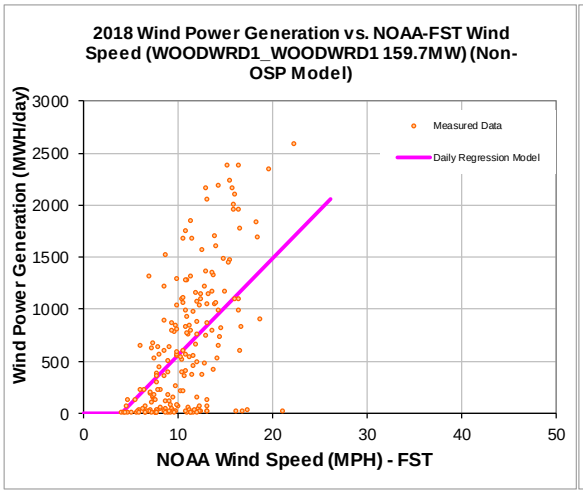
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-600.19
Left Slope (MWh/mph-day)	114.47
RMSE (MWh/day)	522.27
R2	0.36
CV-RMSE	82.8%
Daily Maximum (MWh/day)	3833

OSP Model:

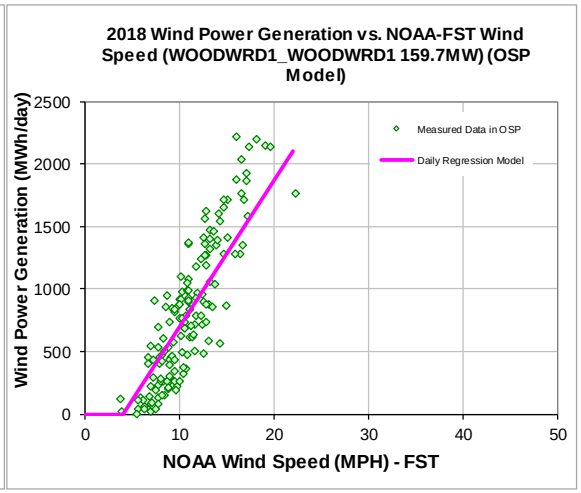
IMT Coefficient	Average Wind Daily Model
YCP (MWh/day)	-798.36
Left Slope (MWh/mph-day)	147.42
RMSE (MWh/day)	274.22
R2	0.76
CV-RMSE	34.1%
Daily Maximum (MWh/day)	3833

DAILY WIND POWER VS. AVERAGE WIND SPEED
(Using OSP and Non OSP Model)

Non-OSP Model:



OSP Model:



POWER PRODUCTION (2008 Estimated Vs. 2018 Measured)

Annual

2008 Estimated MWh/yr	2018 Measured MWh/yr
259,009	250,573

OSD

2008 OSD Estimated MWh/day	2018 OSD Measured MWh/day
808	805

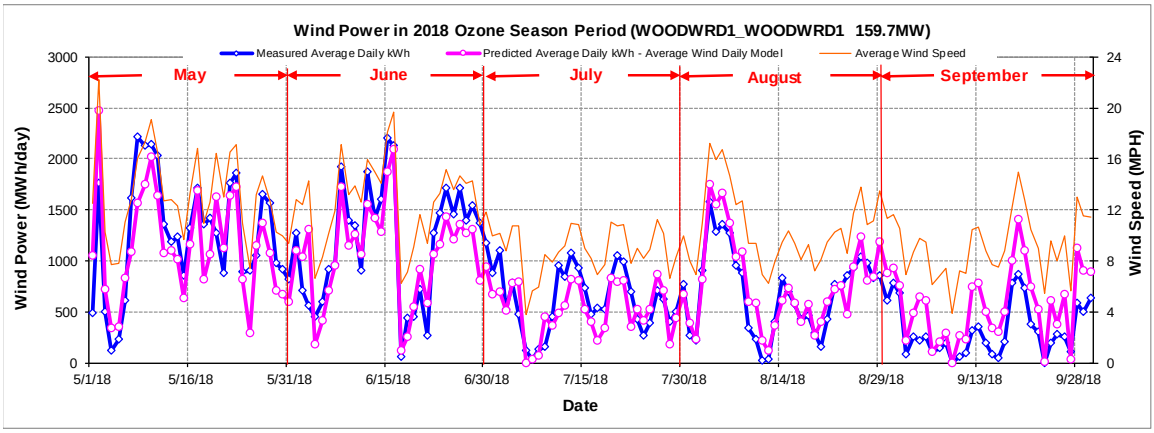
Figure A-518:WOODWRD1_WOODWRD1 - Model Coefficients (Using Non-OSP and OSP Data)

COMPARISON OF PREDICTED POWER VS. MEASURED POWER

Average Wind Speed (FST) Zone

Month	No. Of Days	Average Daily Wind Speed (MPH)	Measured Power Generation (MWh)	Predicted Power Generation Using Daily Model (MWh)	Diff.	Measured Capacity Factor	Capacity Factor Using Daily Model
Jan-18	31	10.44	22,604	15,465	31.58%	19%	13%
Feb-18	28	10.46	23,186	16,778	27.64%	22%	16%
Mar-18	31	11.79	35,404	23,244	34.35%	30%	20%
Apr-18	30	12.36	32,709	24,526	25.02%	28%	21%
May-18	31	13.09	38,767	35,060	9.56%	33%	30%
Jun-18	30	12.66	35,235	32,019	9.13%	31%	28%
Jul-18	31	8.85	18,574	15,945	14.15%	16%	13%
Aug-18	31	10.71	21,651	24,206	-11.80%	18%	20%
Sep-18	30	9.06	8,875	16,338	-84.09%	8%	14%
Oct-18	31	9.71	8,500	15,553	-82.97%	7%	13%
Nov-18	30	9.85	429	15,982	-3628.31%	0%	14%
Dec-18	31	10.56	4,639	16,534	-256.38%	4%	14%
Total	365	10.81	250,573	251,650	-0.43%	18%	18%
Total in OSP (07/15-09/15)	153	10.87	123,102	123,568	-0.38%	21%	21%

PREDICTED WIND POWER IN OSP USING AVERAGE WIND SPEED



PREDICTED CAPACITY FACTORS USING DAILY MODELS

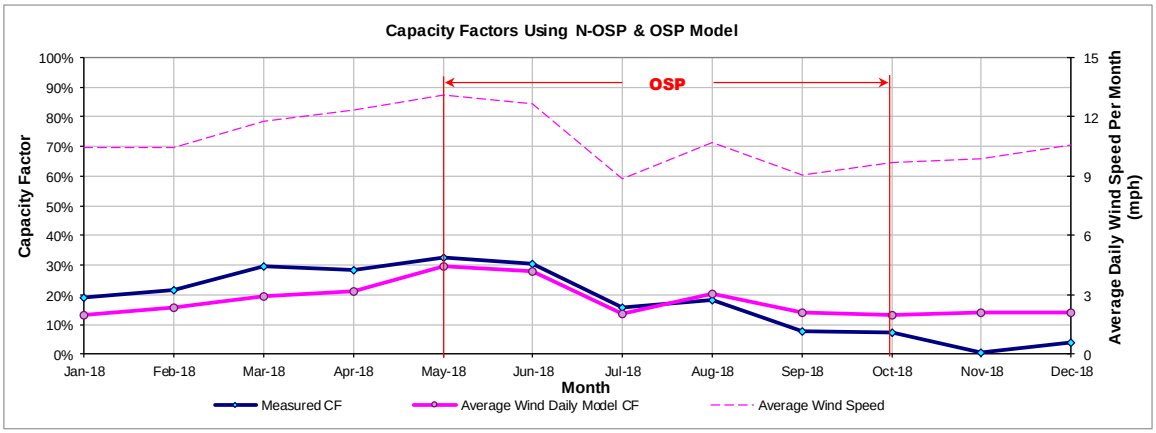


Figure A-519:WOODWRD1_WOODWRD1 - Predicted Wind Power and Capacity Factor Using Daily Models

APPENDIX B Degradation Analysis

Figure B-1 and Figure B-122 show the design capacity, the maximum and minimum of the observed maximum hourly wind power over the sliding 12-month period, and the observed maximum hourly wind power for the last 12-month period for the studied wind farms. It is interesting to note that in most cases the observed maximum hourly wind power generation is equal, or slightly lower, than the design/announced capacity for all the sites.

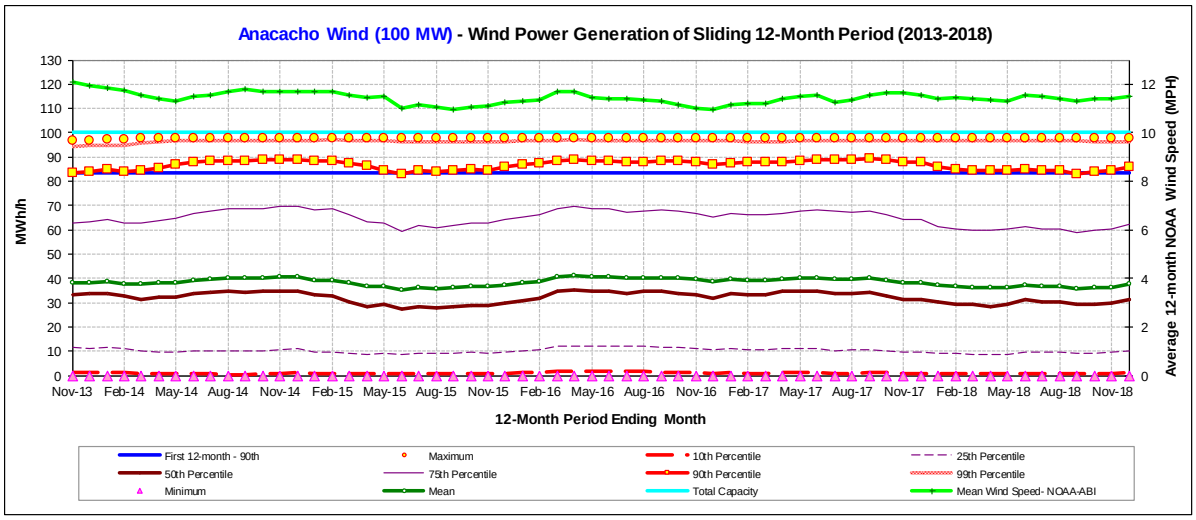


Figure B-1: Sliding 12-month Hourly Wind Power Generation for Anacacho Wind

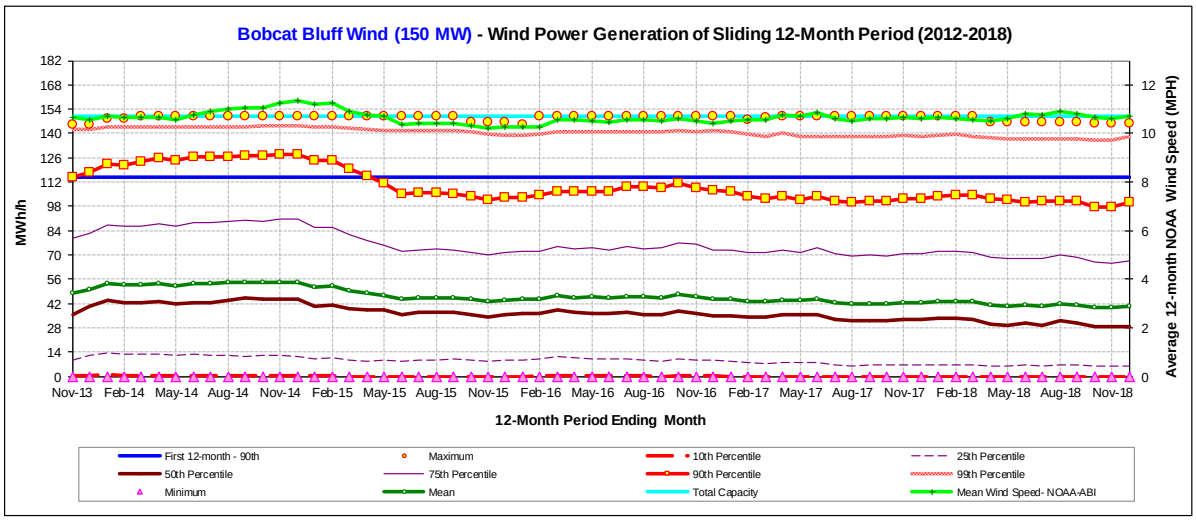


Figure B-2: Sliding 12-month Hourly Wind Power Generation for Bobcat Bluff Wind

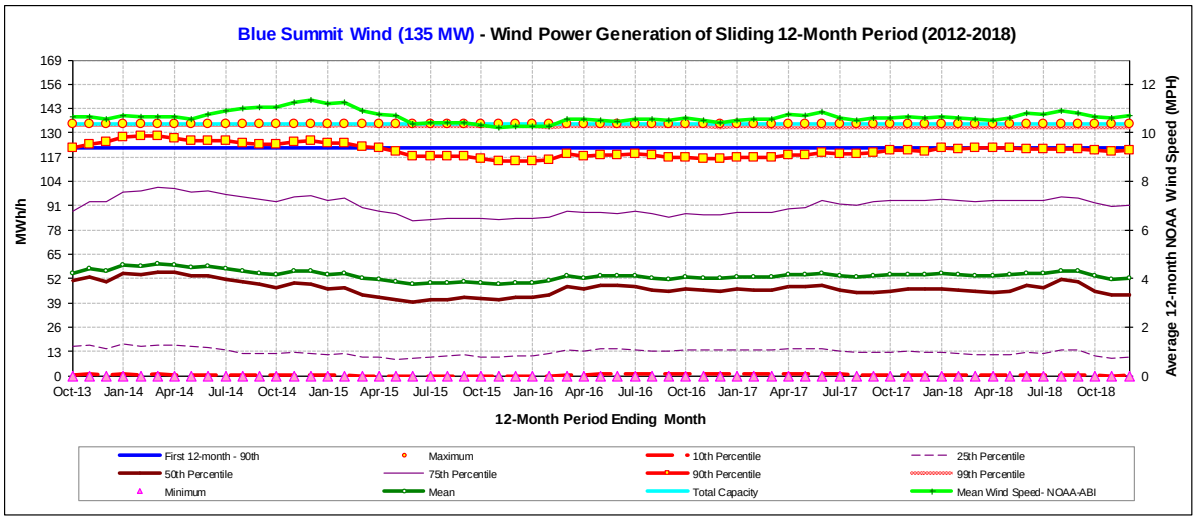


Figure B-3: Sliding 12-month Hourly Wind Power Generation for Blue Summit Wind

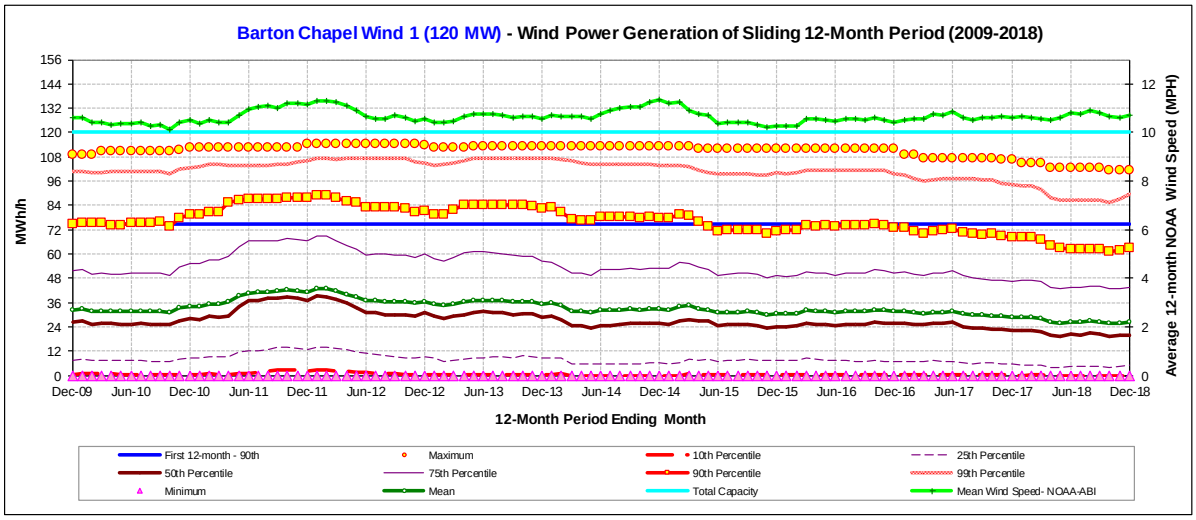


Figure B-4: Sliding 12-month Hourly Wind Power Generation for Barton Chapel Wind 1

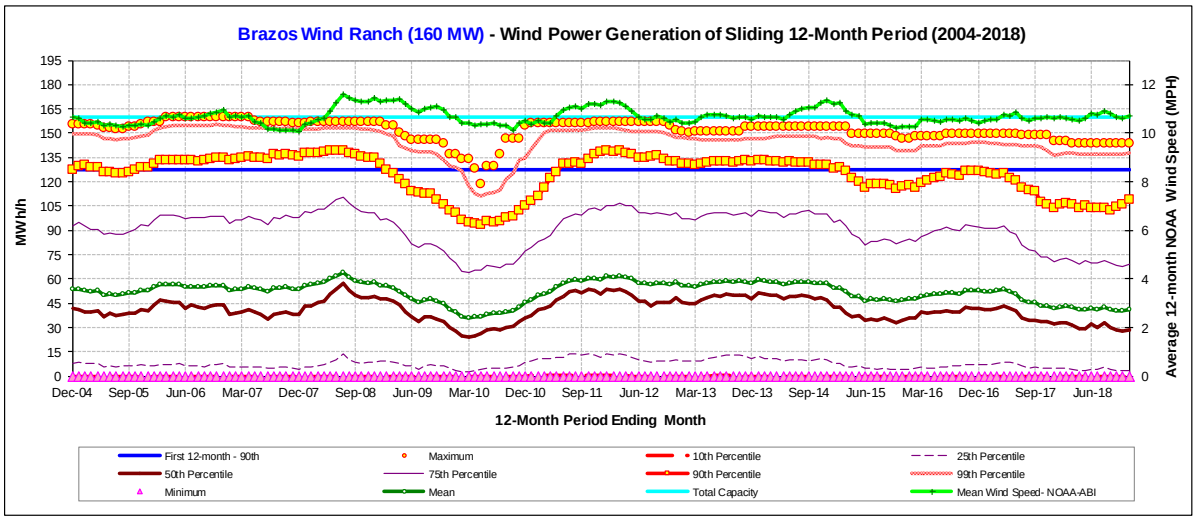


Figure B-5: Sliding 12-month Hourly Wind Power Generation for Brazos Wind Ranch

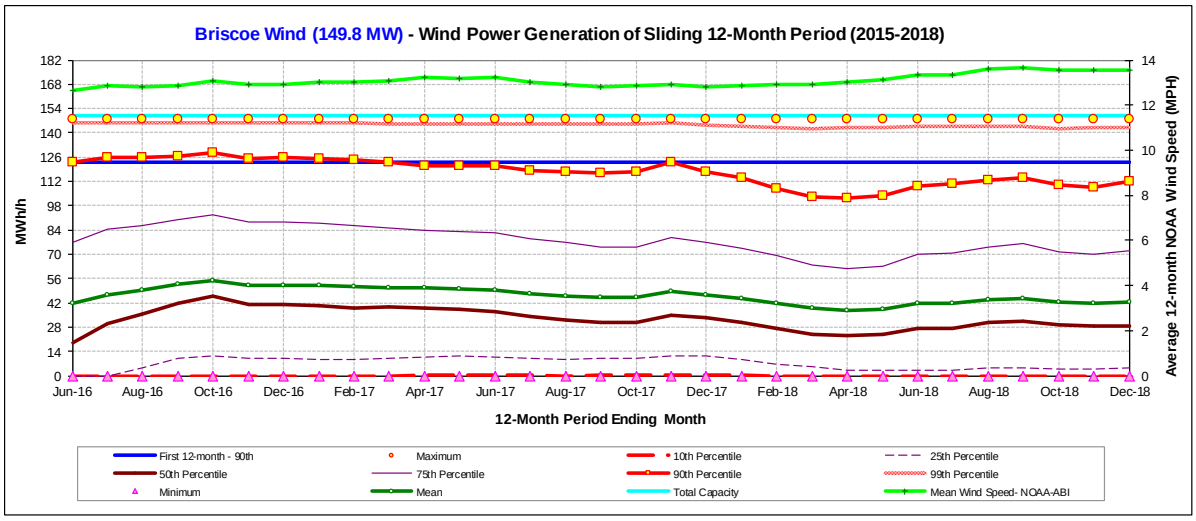


Figure B-6: Sliding 12-month Hourly Wind Power Generation for Briscoe Wind

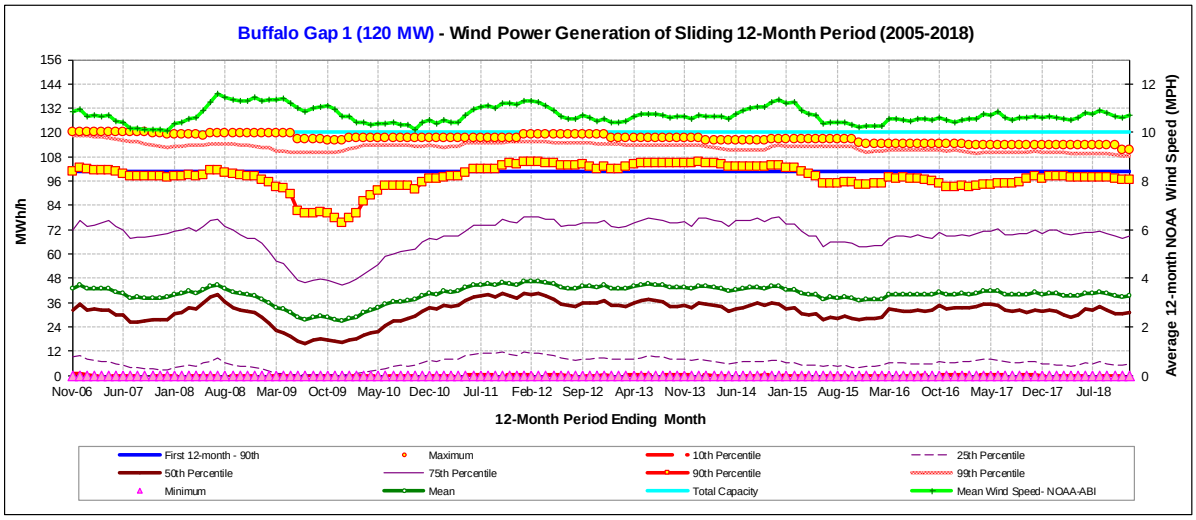


Figure B-7: Sliding 12-month Hourly Wind Power Generation for Buffalo Gap 1

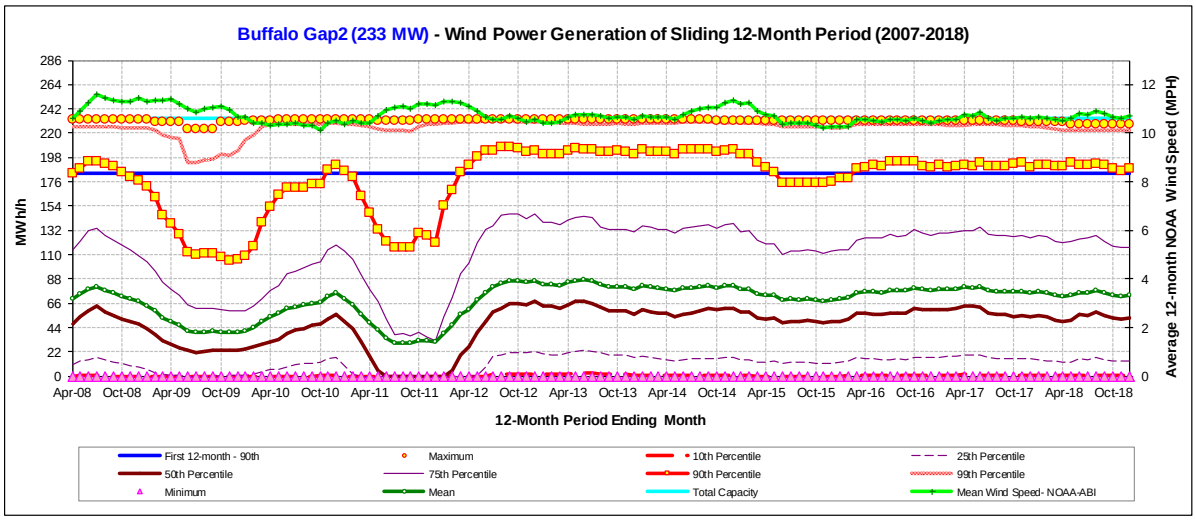


Figure B-8: Sliding 12-month Hourly Wind Power Generation for Buffalo Gap 2

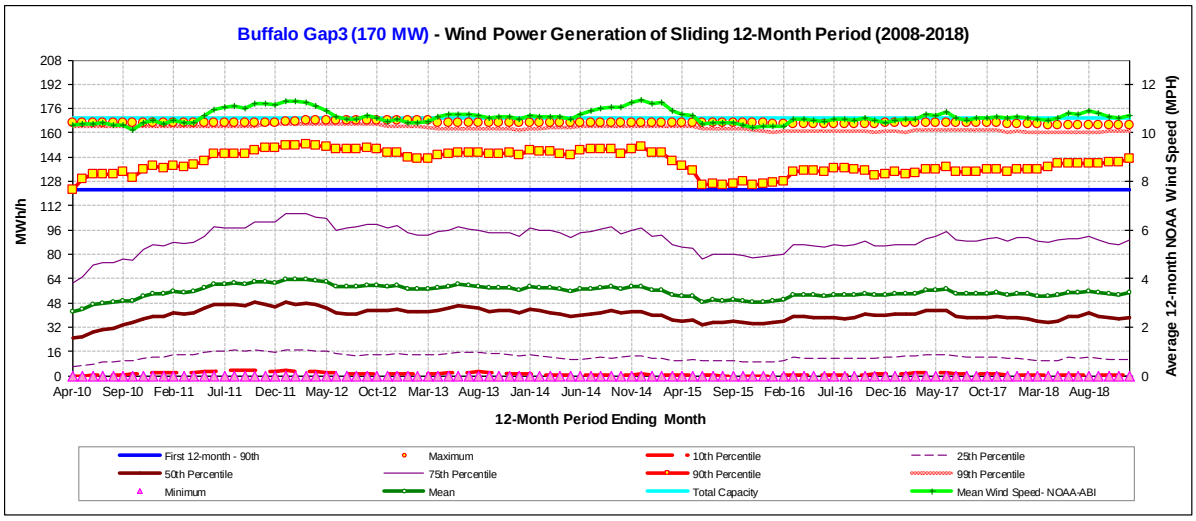


Figure B-9: Sliding 12-month Hourly Wind Power Generation for Buffalo Gap 3

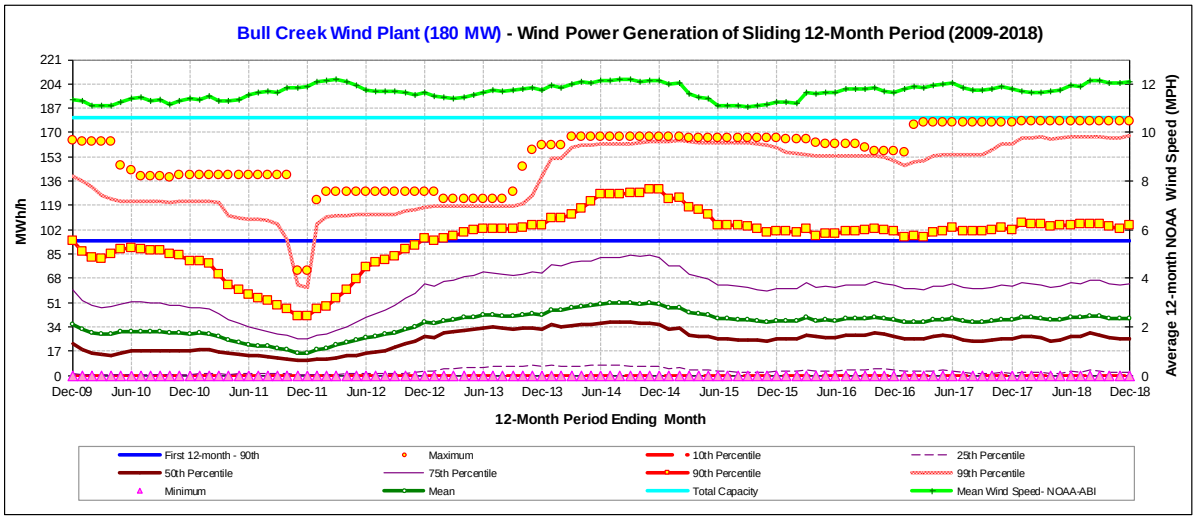


Figure B-10: Sliding 12-month Hourly Wind Power Generation for Bull Creek Wind Plant

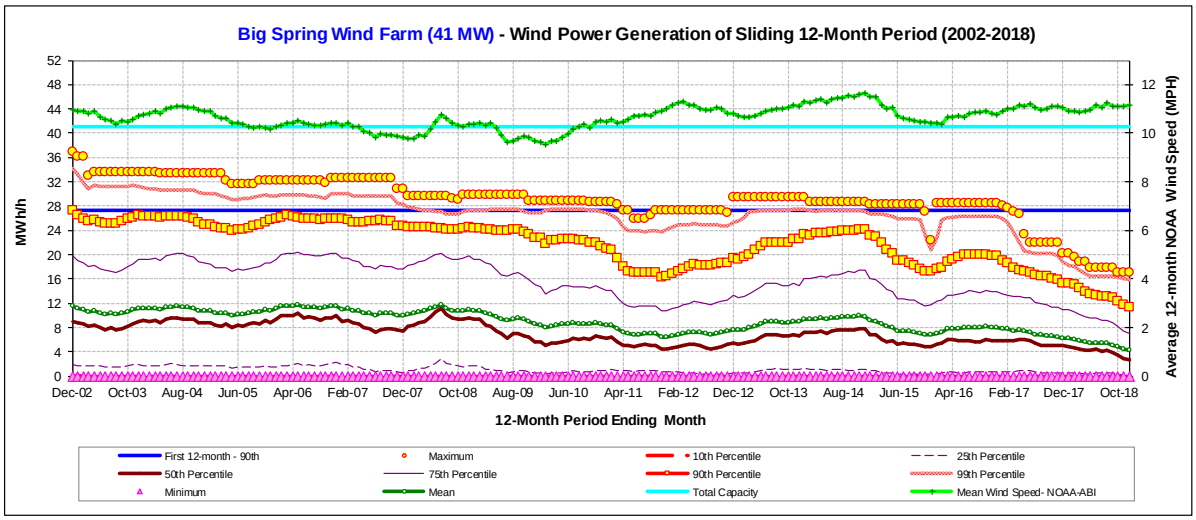


Figure B-11: Sliding 12-month Hourly Wind Power Generation for Big Spring Wind Power

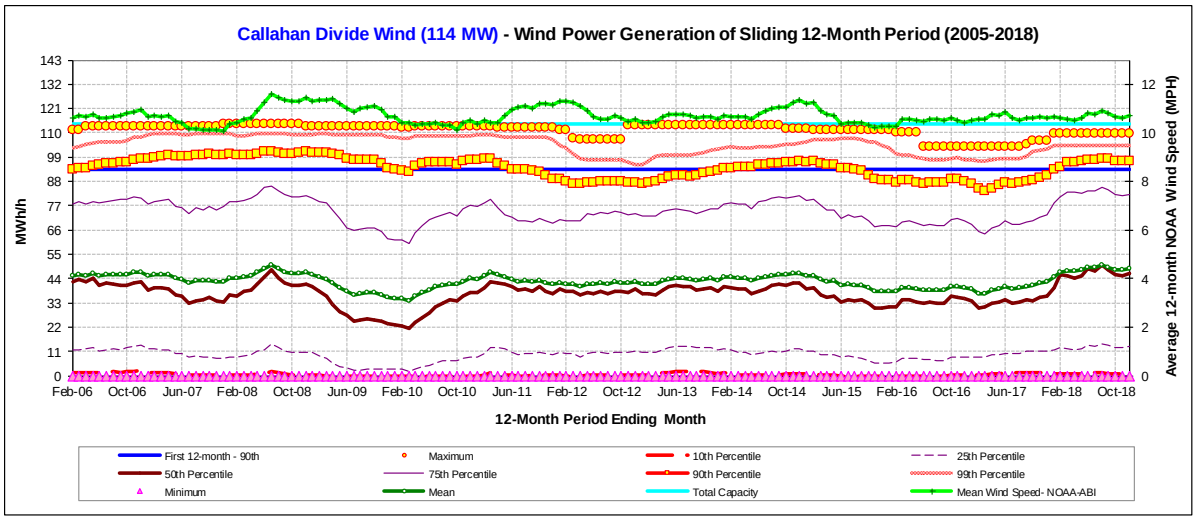


Figure B-12: Sliding 12-month Hourly Wind Power Generation for Callahan Divide Wind

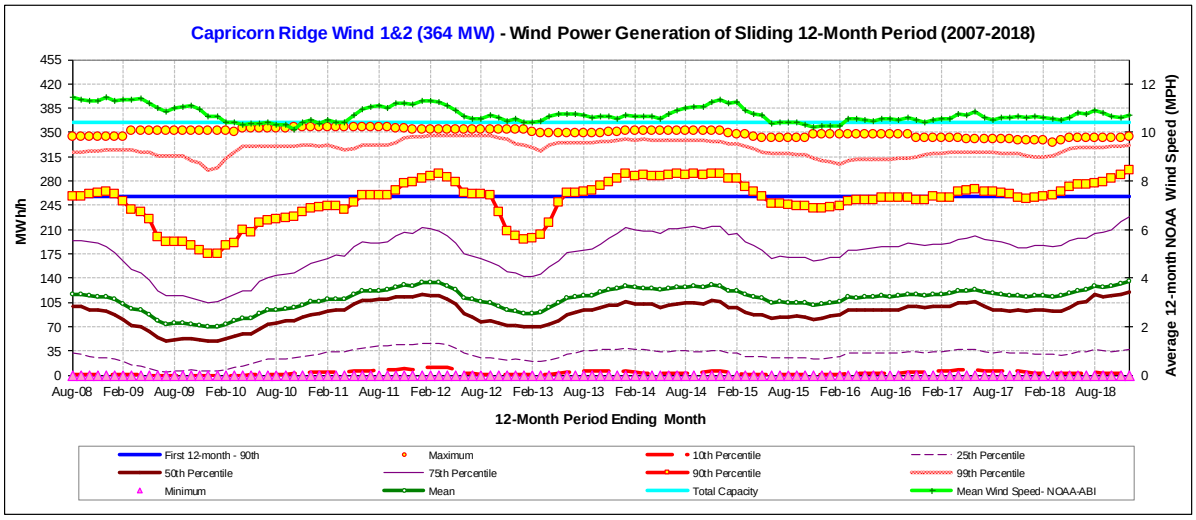


Figure B-13: Sliding 12-month Hourly Wind Power Generation for Capricorn Ridge Wind 1 & 2

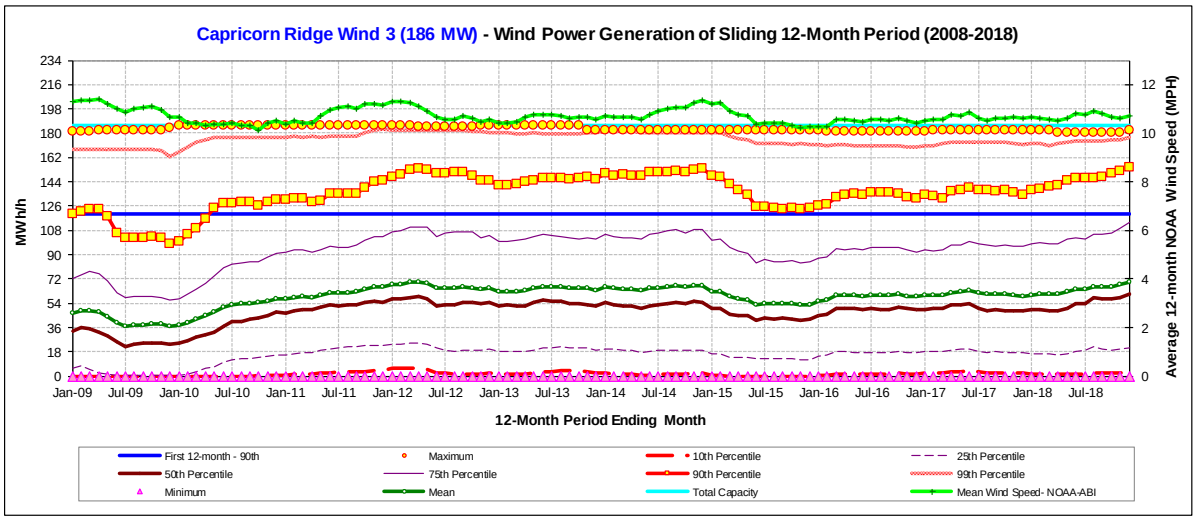


Figure B-14: Sliding 12-month Hourly Wind Power Generation for Capricorn Ridge Wind 3

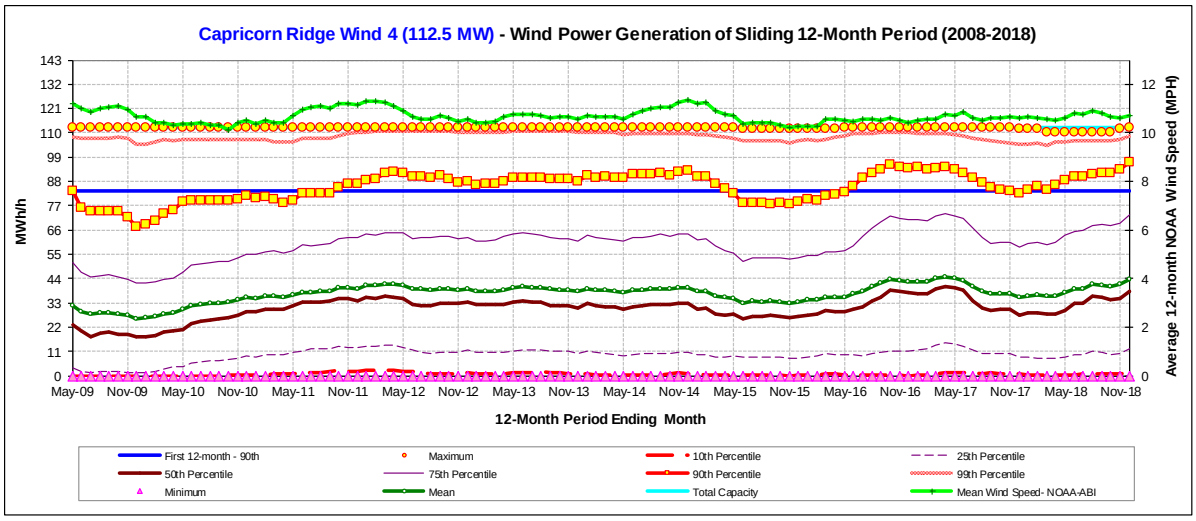


Figure B-15: Sliding 12-month Hourly Wind Power Generation for Capricorn Ridge Wind 4

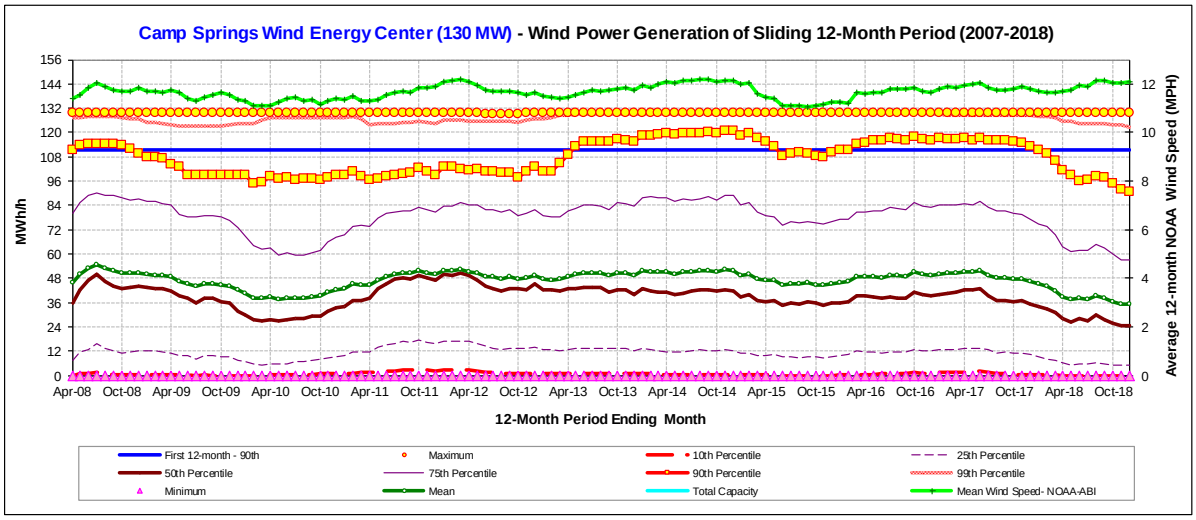


Figure B-16: Sliding 12-month Hourly Wind Power Generation for Camp Springs Wind Energy Center

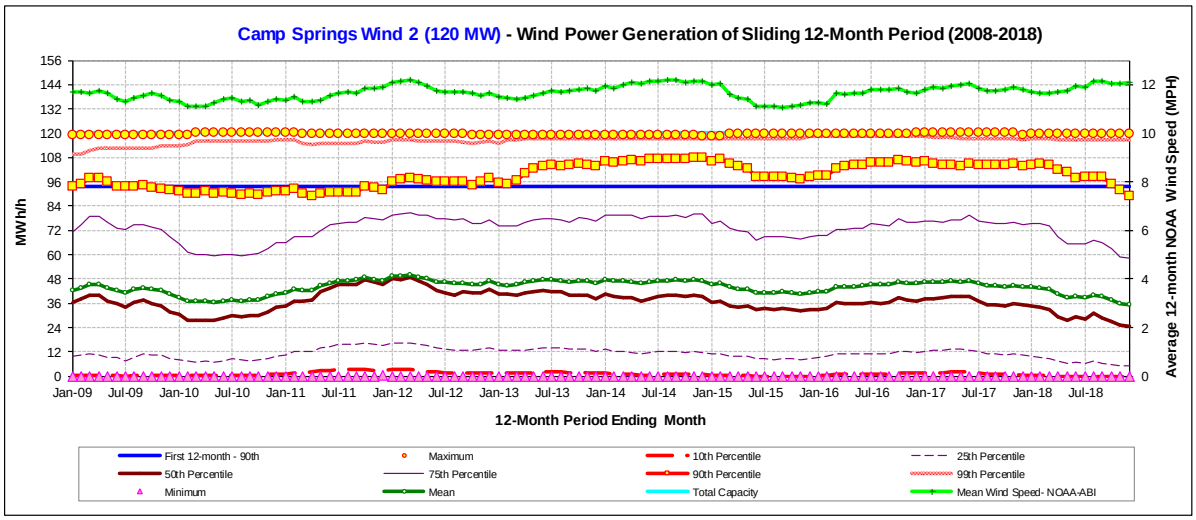


Figure B-17: Sliding 12-month Hourly Wind Power Generation for Camp Springs Wind Energy Expansion

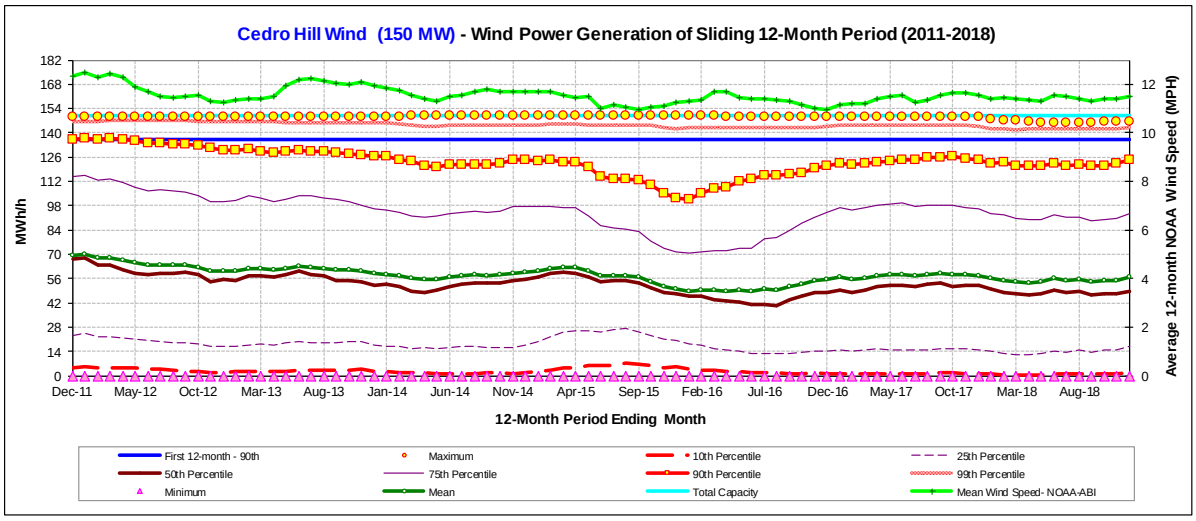


Figure B-18: Sliding 12-month Hourly Wind Power Generation for Cedro Hill Wind

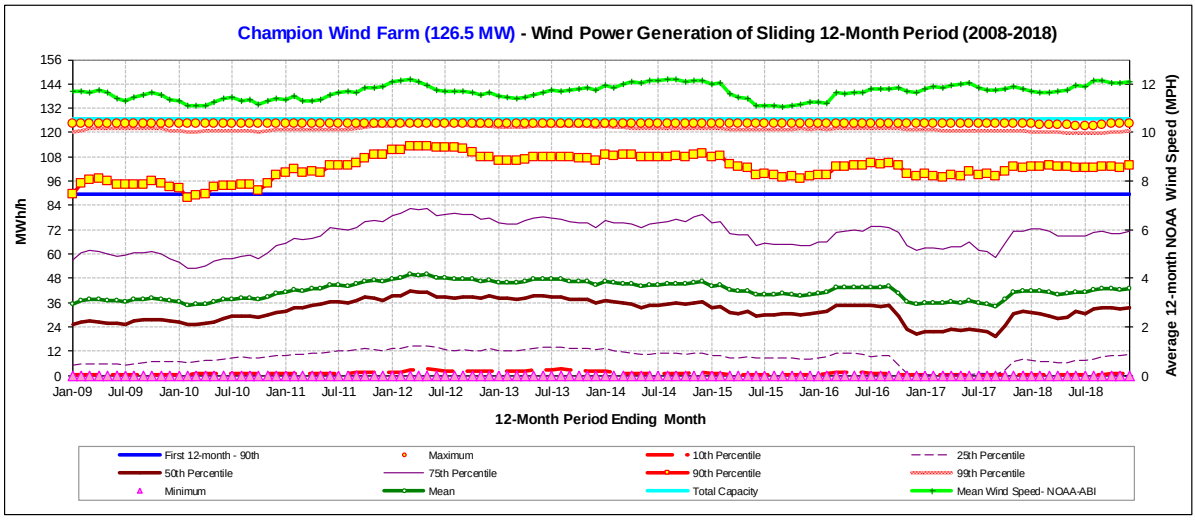


Figure B-19: Sliding 12-month Hourly Wind Power Generation for Champion Wind

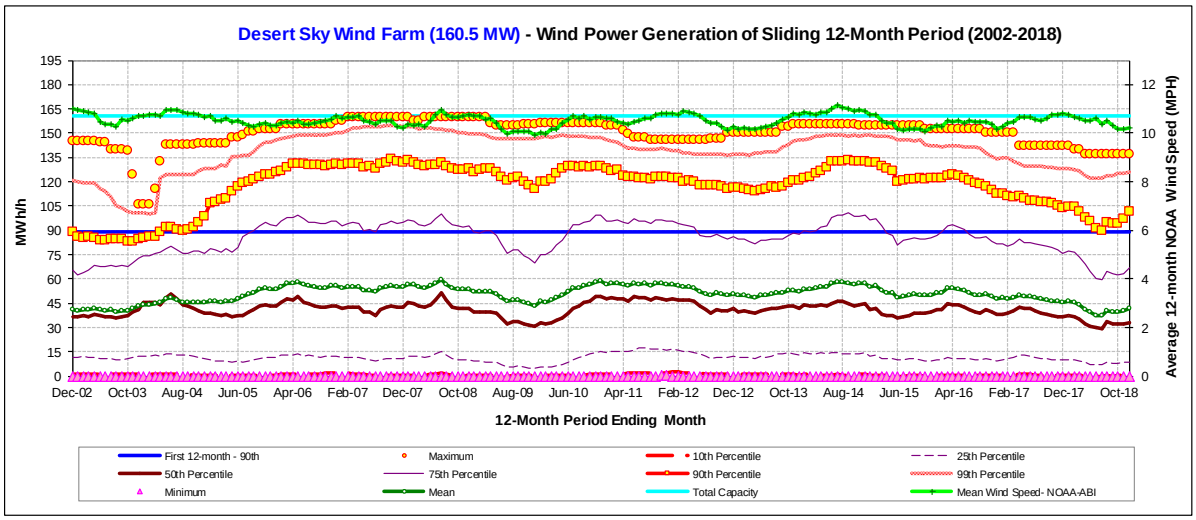


Figure B-20: Sliding 12-month Hourly Wind Power Generation for Desert Sky

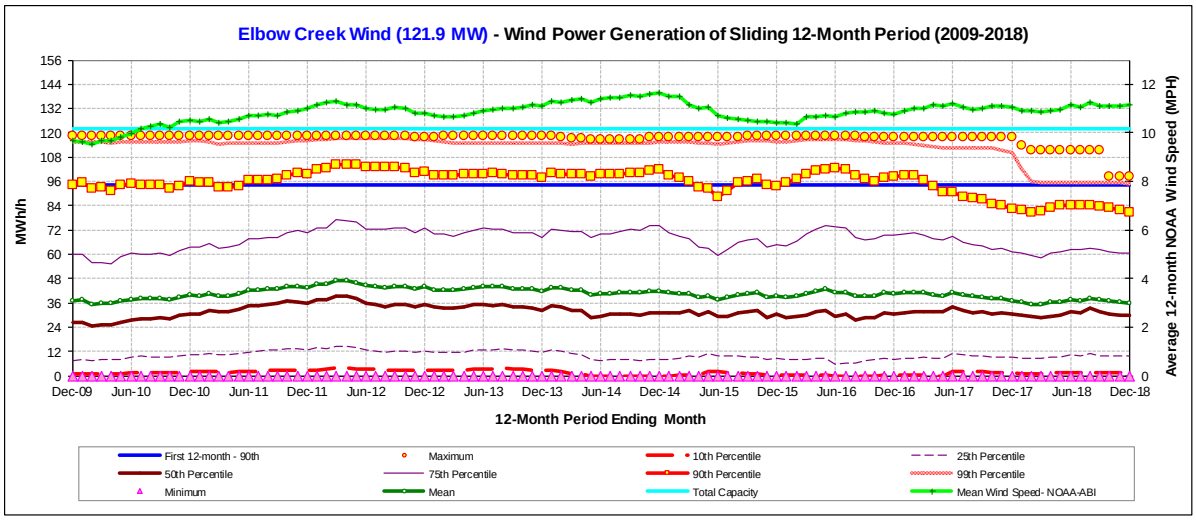


Figure B-21: Sliding 12-month Hourly Wind Power Generation for Elbow Creek Wind

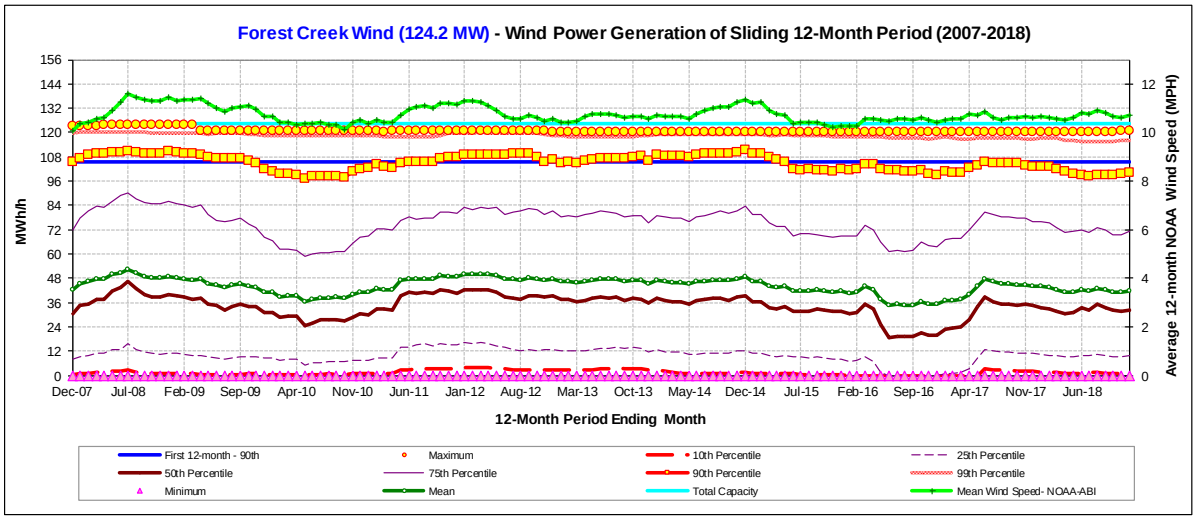


Figure B-22: Sliding 12-month Hourly Wind Power Generation for Forest Creek Wind

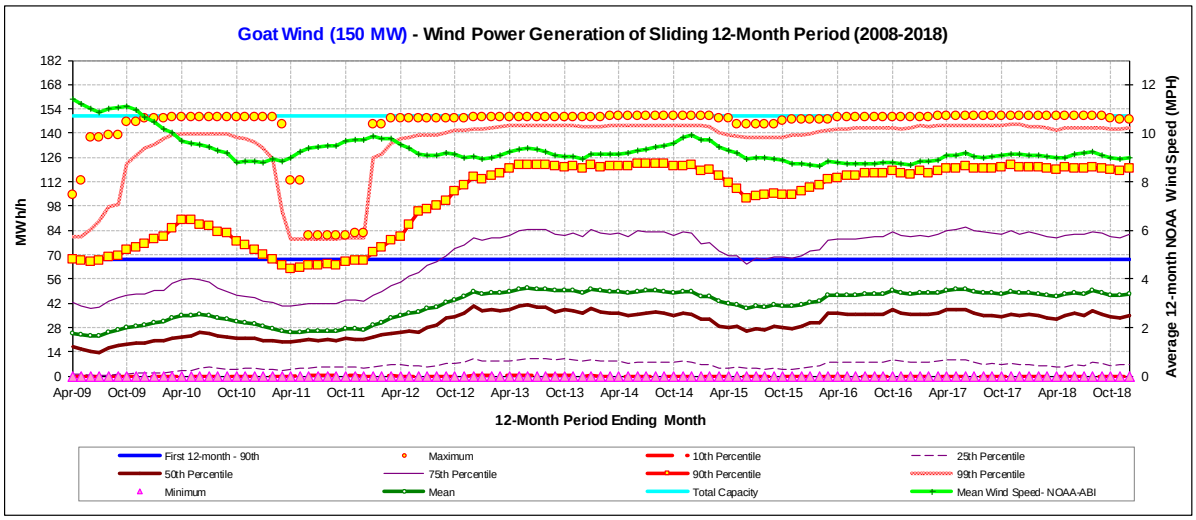


Figure B-23: Sliding 12-month Hourly Wind Power Generation for Goat Wind

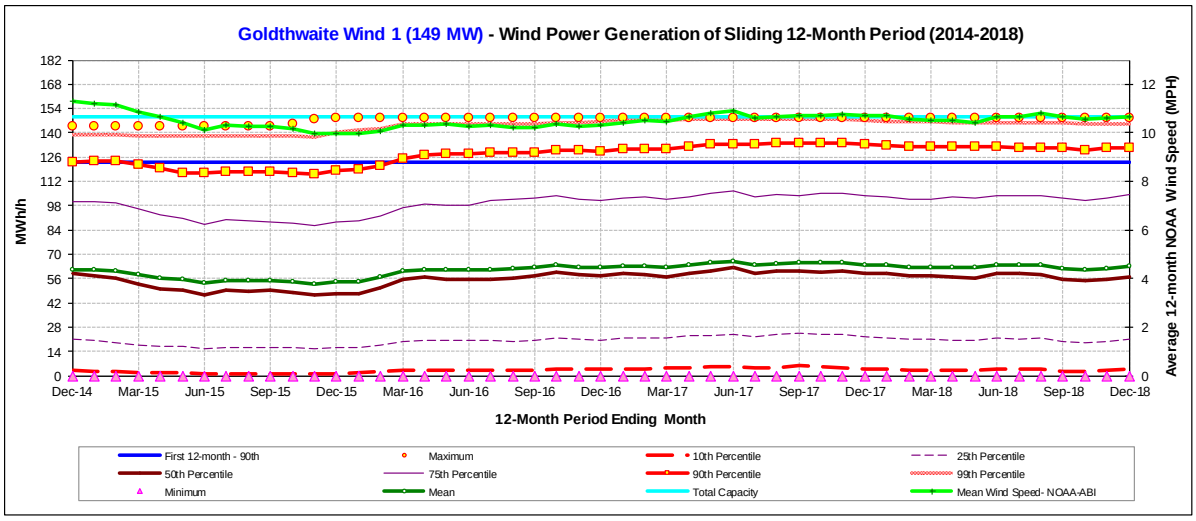


Figure B-24: Sliding 12-month Hourly Wind Power Generation for Goldthwaite Wind 1

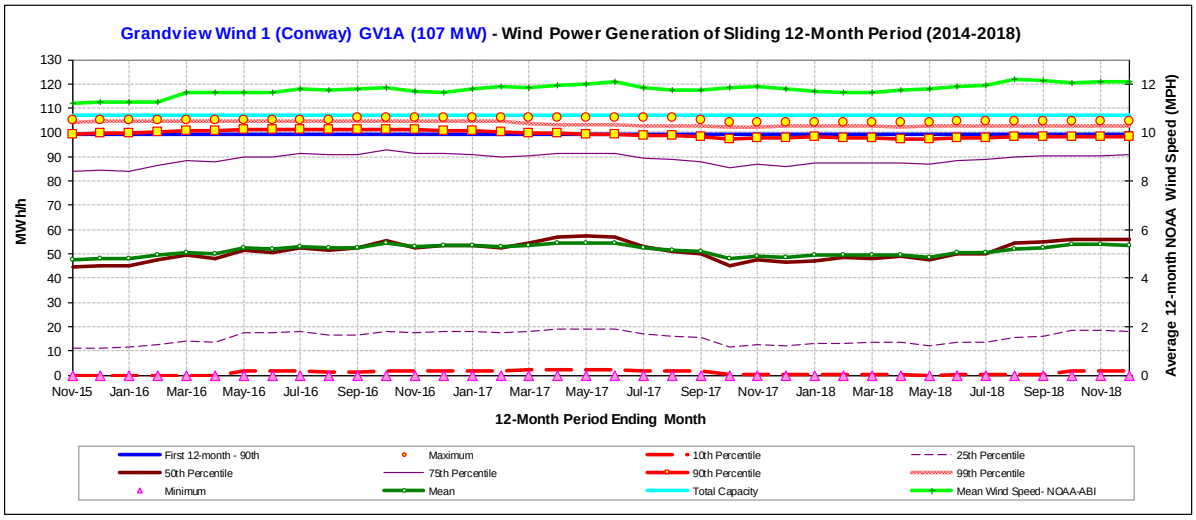


Figure B-25: Sliding 12-month Hourly Wind Power Generation for Grandview Wind 1 (Conway) GV1A

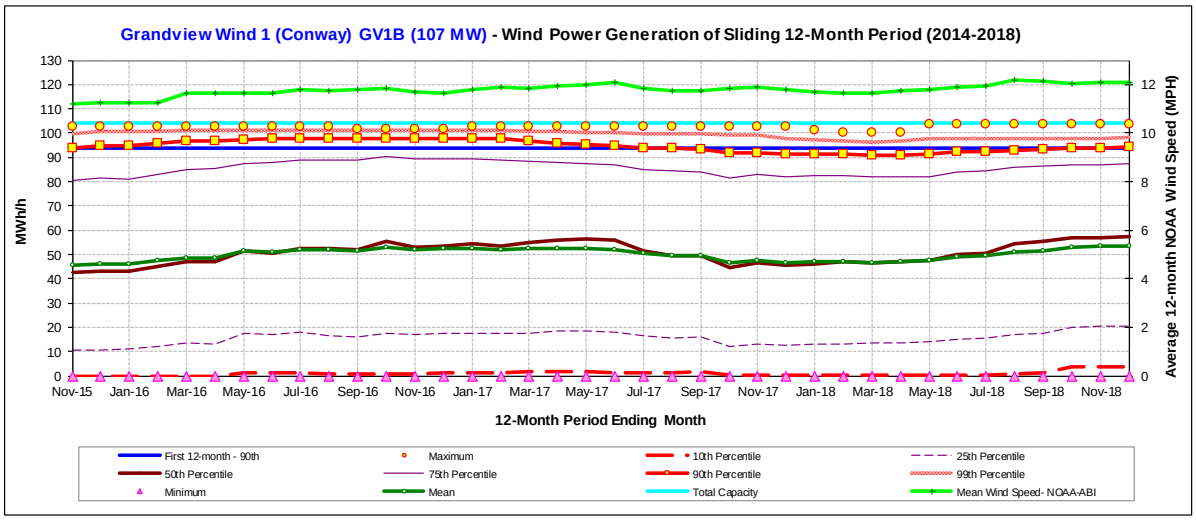


Figure B-26: Sliding 12-month Hourly Wind Power Generation for Grandview Wind 1 (Conway) GV1B

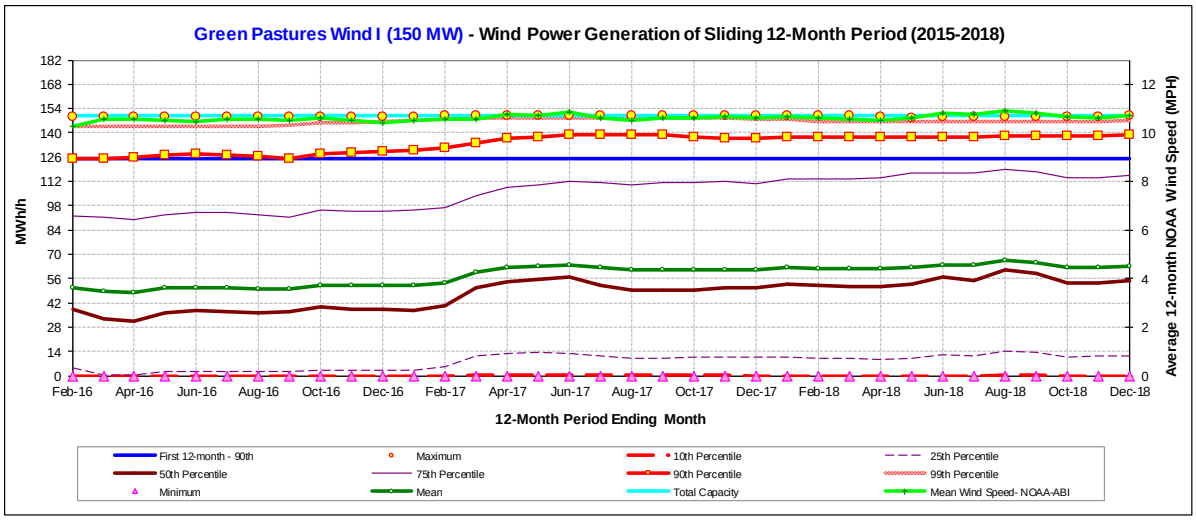


Figure B-27: Sliding 12-month Hourly Wind Power Generation for Green Pastures Wind I

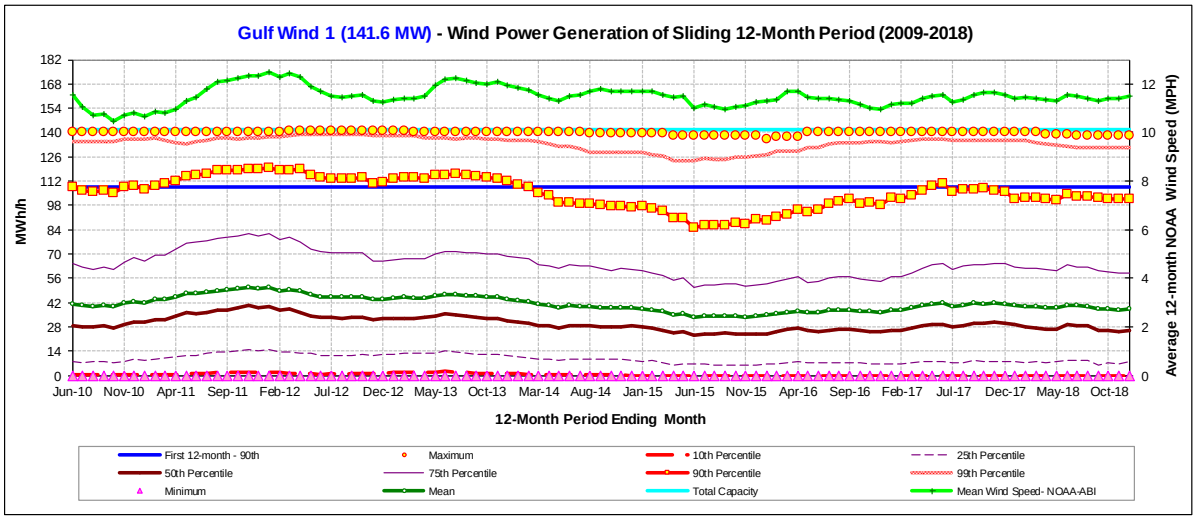


Figure B-28: Sliding 12-month Hourly Wind Power Generation for Gulf Wind 1

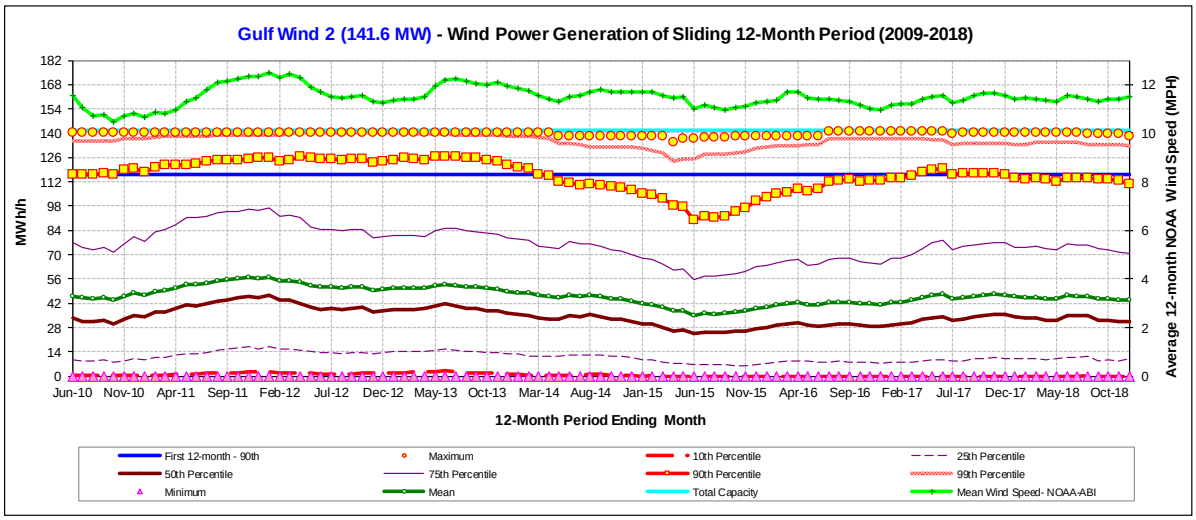


Figure B-29: Sliding 12-month Hourly Wind Power Generation for Gulf Wind 2

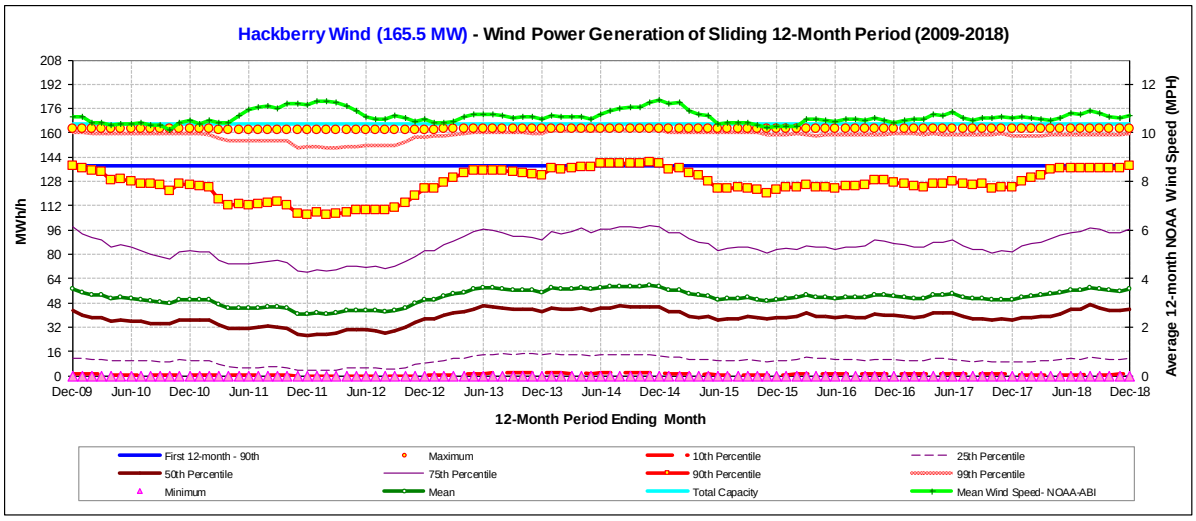


Figure B-30: Sliding 12-month Hourly Wind Power Generation for Hackberry Wind

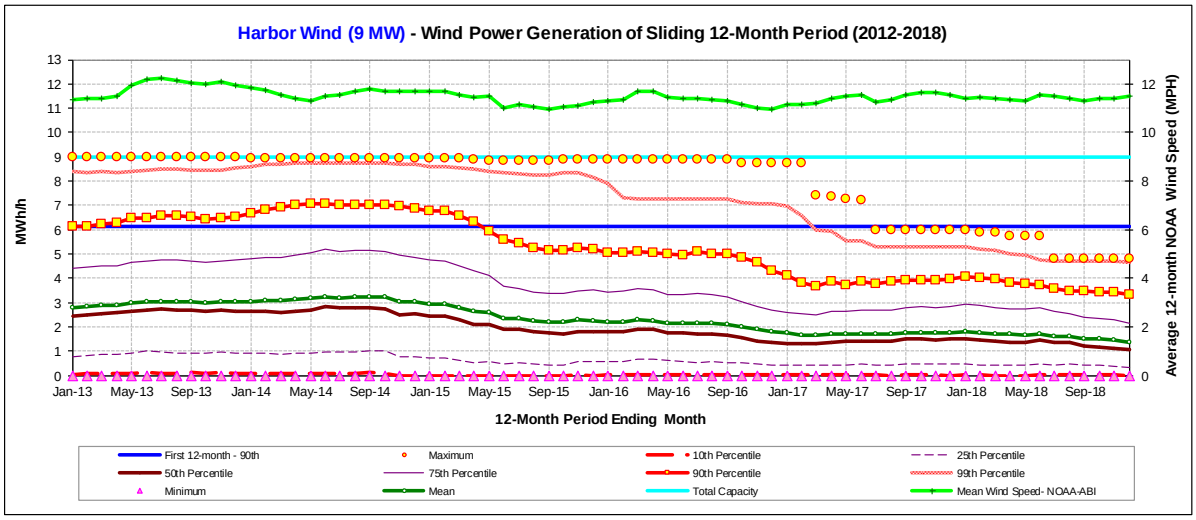


Figure B-31: Sliding 12-month Hourly Wind Power Generation for Harbor Wind

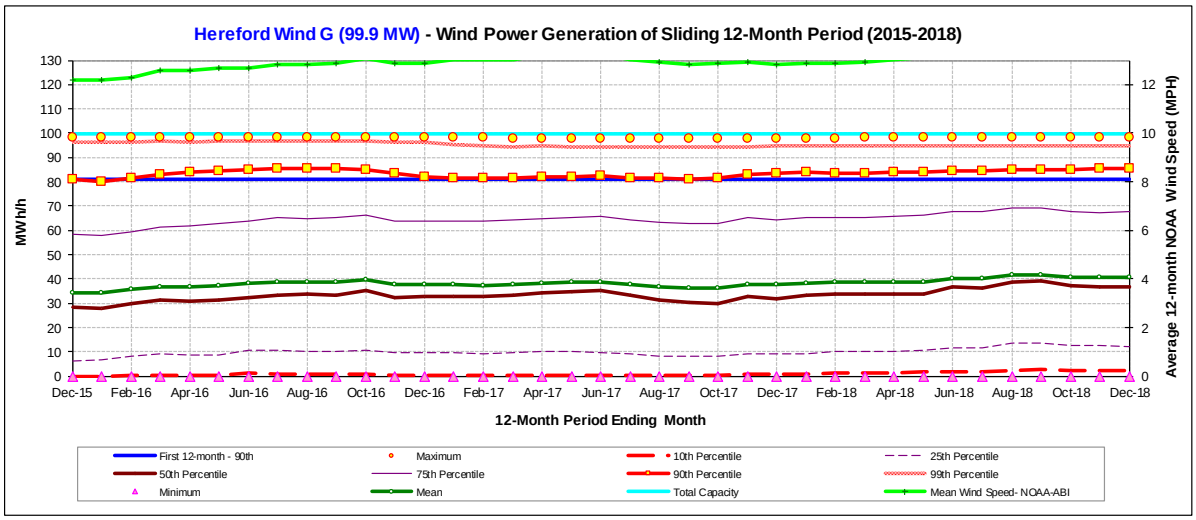


Figure B-32: Sliding 12-month Hourly Wind Power Generation for Hereford Wind G

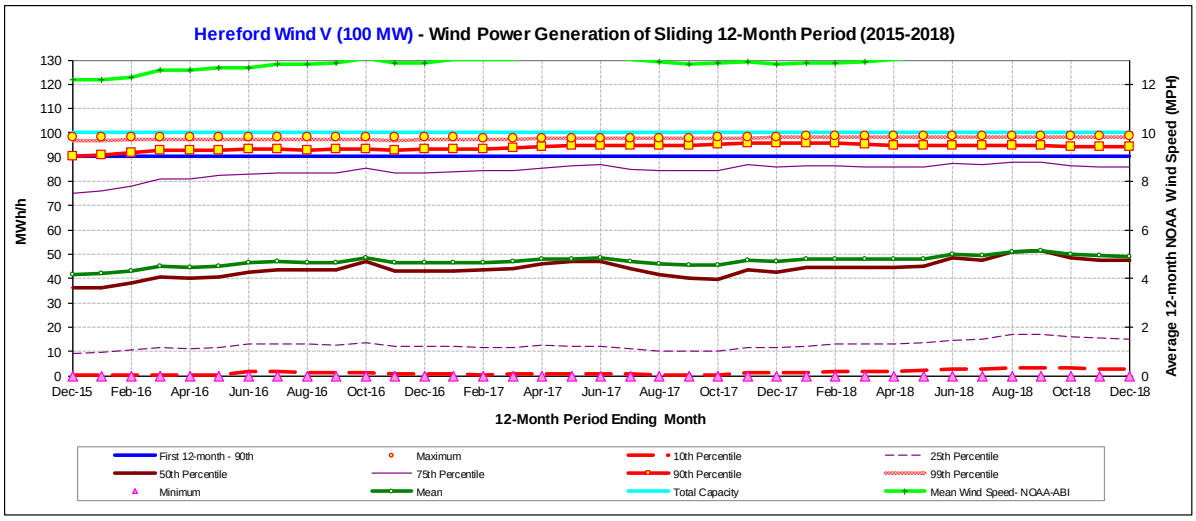


Figure B-33: Sliding 12-month Hourly Wind Power Generation for Hereford Wind V

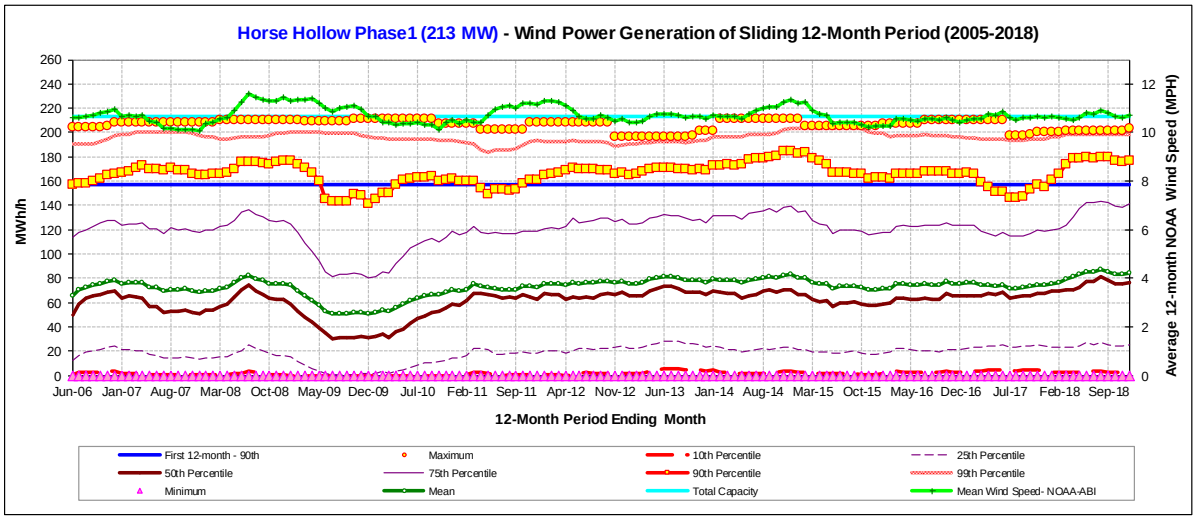


Figure B-34: Sliding 12-month Hourly Wind Power Generation for Horse Hollow Phase 1

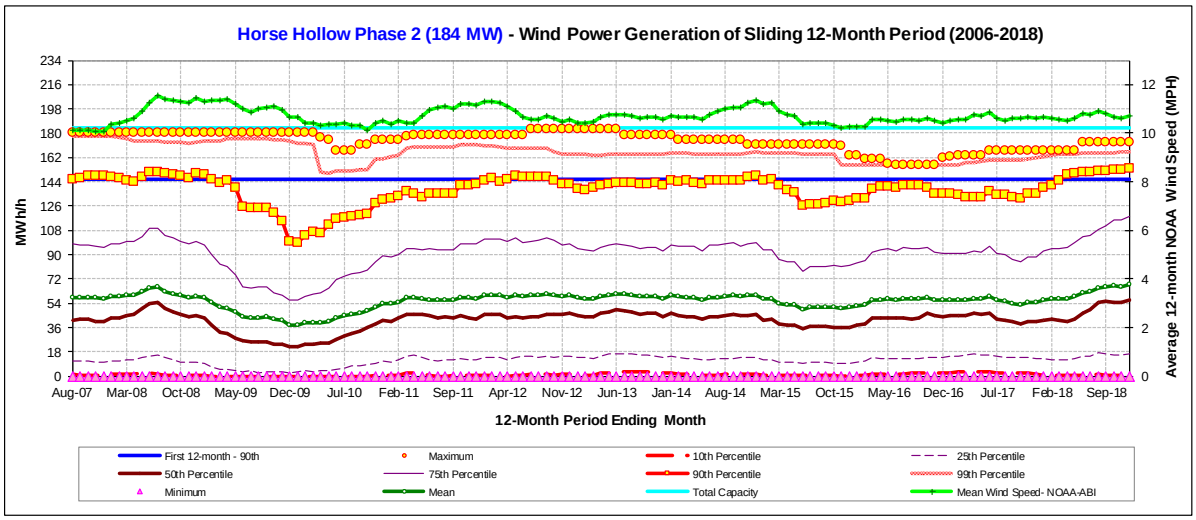


Figure B-35: Sliding 12-month Hourly Wind Power Generation for Horse Hollow Phase 2

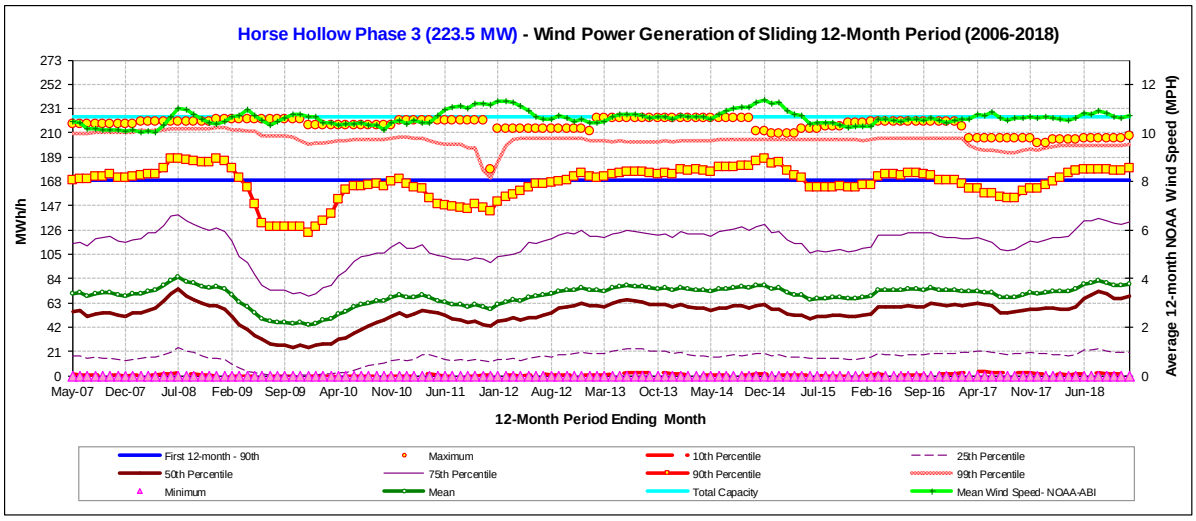


Figure B-36: Sliding 12-month Hourly Wind Power Generation for Horse Hollow Phase 3

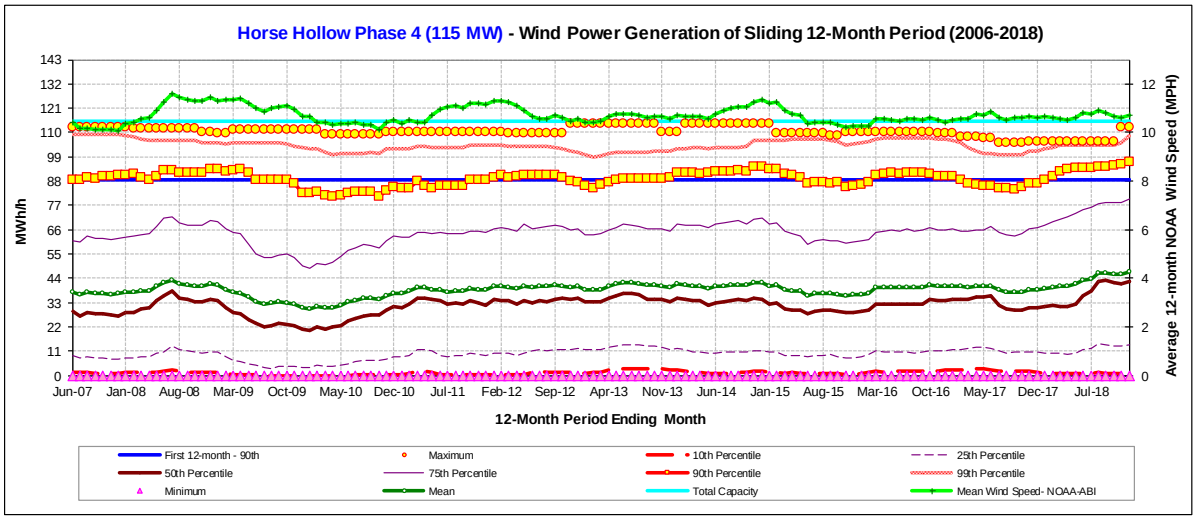


Figure B-37: Sliding 12-month Hourly Wind Power Generation for Horse Hollow Phase 4

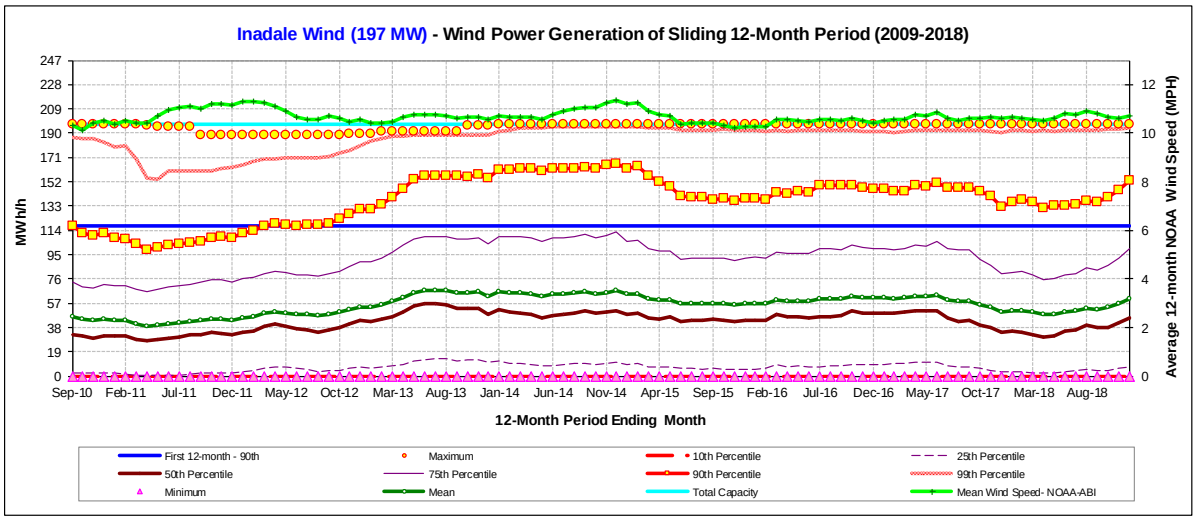


Figure B-38: Sliding 12-month Hourly Wind Power Generation for Inadale Wind

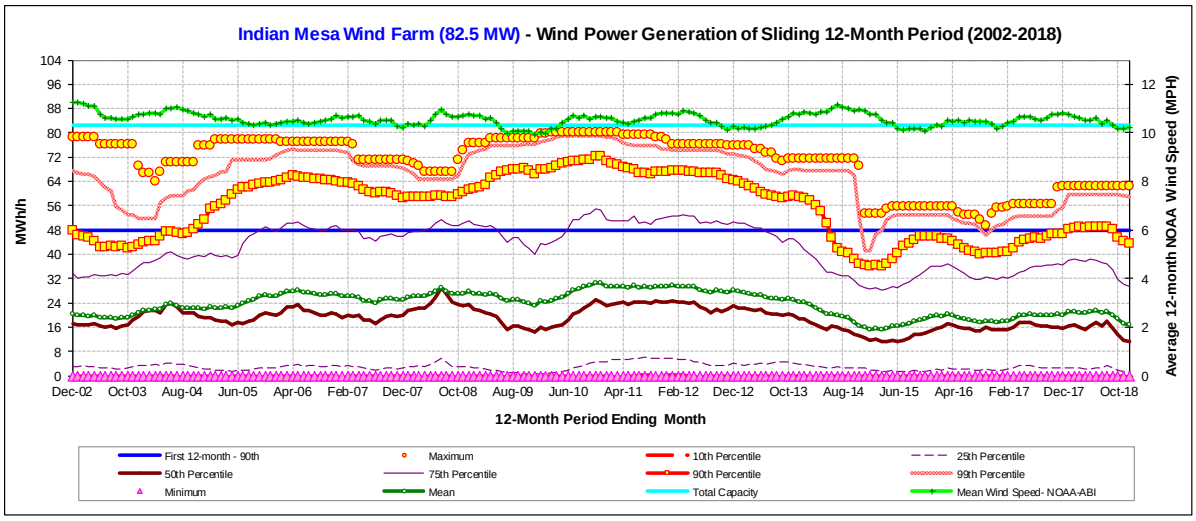


Figure B-39: Sliding 12-month Hourly Wind Power Generation for Indian Mesa

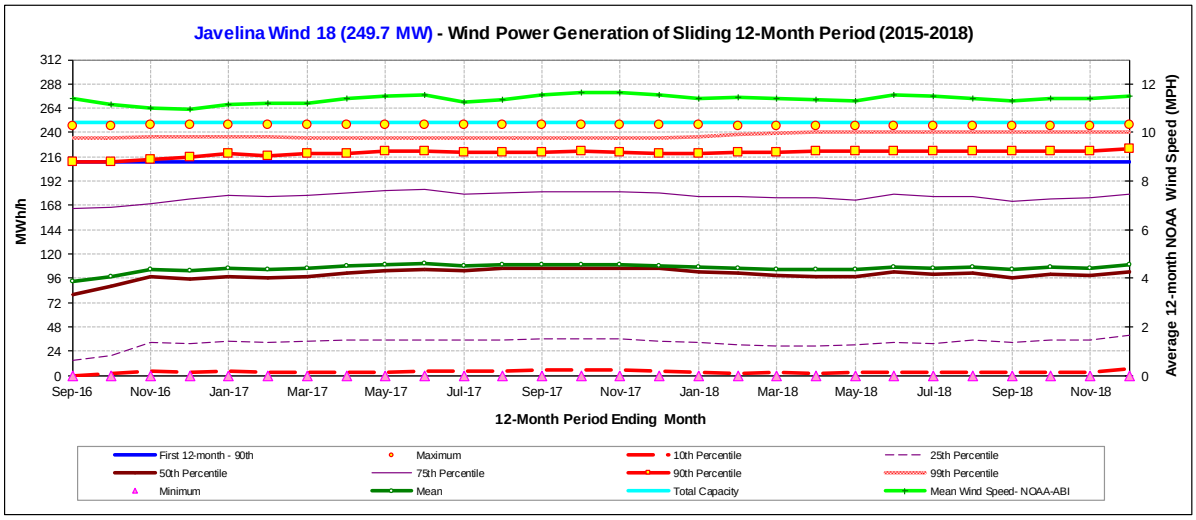


Figure B-40: Sliding 12-month Hourly Wind Power Generation for Javelina Wind 18

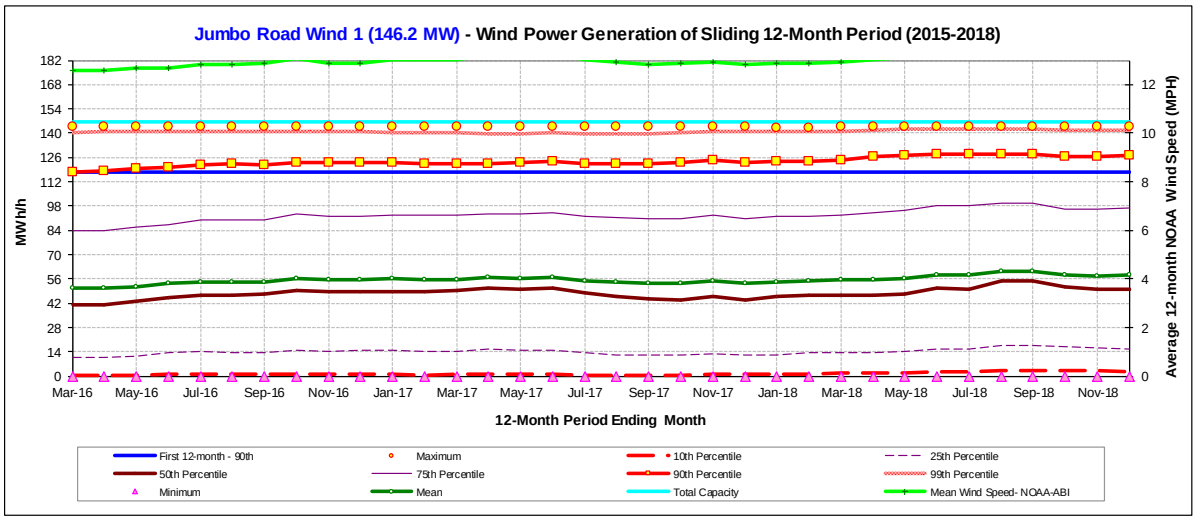


Figure B-41: Sliding 12-month Hourly Wind Power Generation for Jumbo Road Wind 1

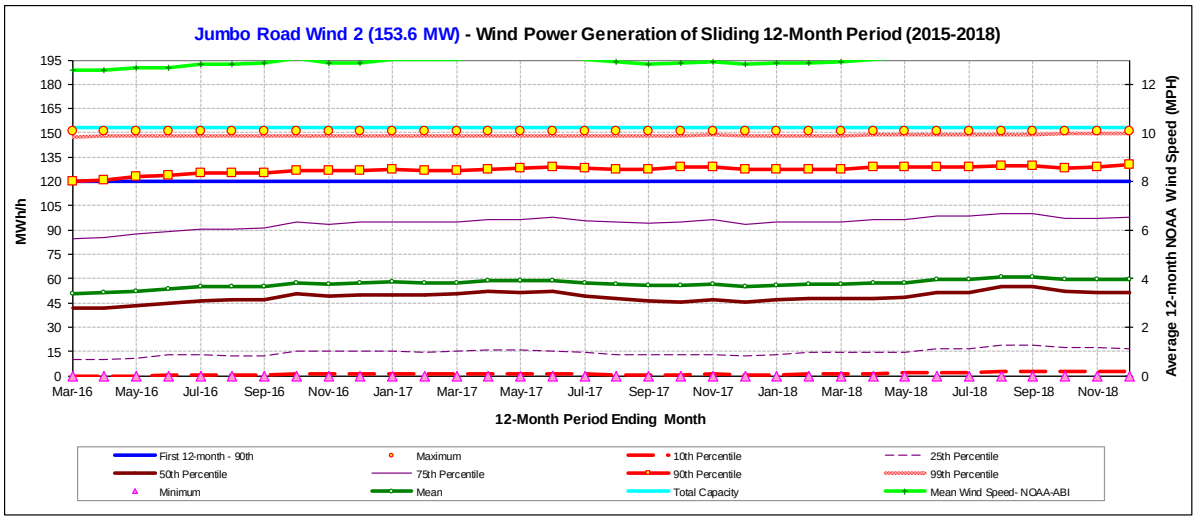


Figure B-42: Sliding 12-month Hourly Wind Power Generation for Jumbo Road Wind 2

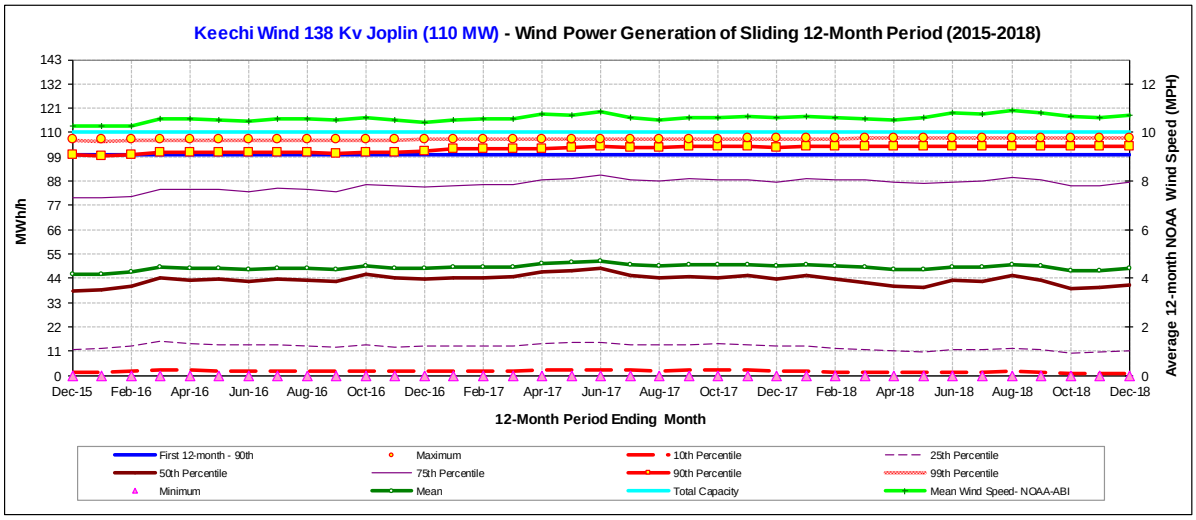


Figure B-43: Sliding 12-month Hourly Wind Power Generation for Keechi Wind 138 Kv Joplin

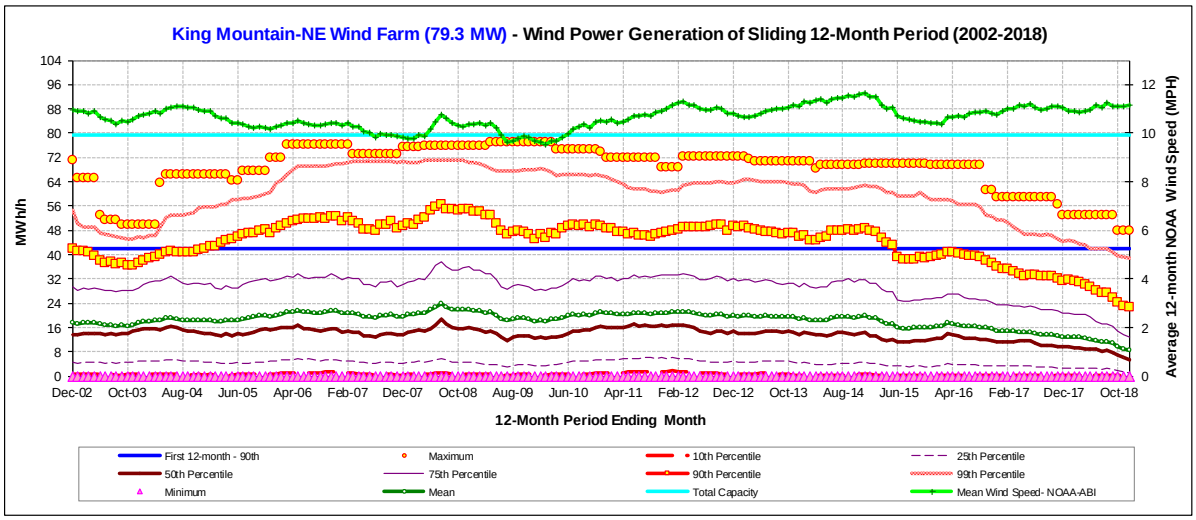


Figure B-44: Sliding 12-month Hourly Wind Power Generation for King Mountain Wind Ranch-NE

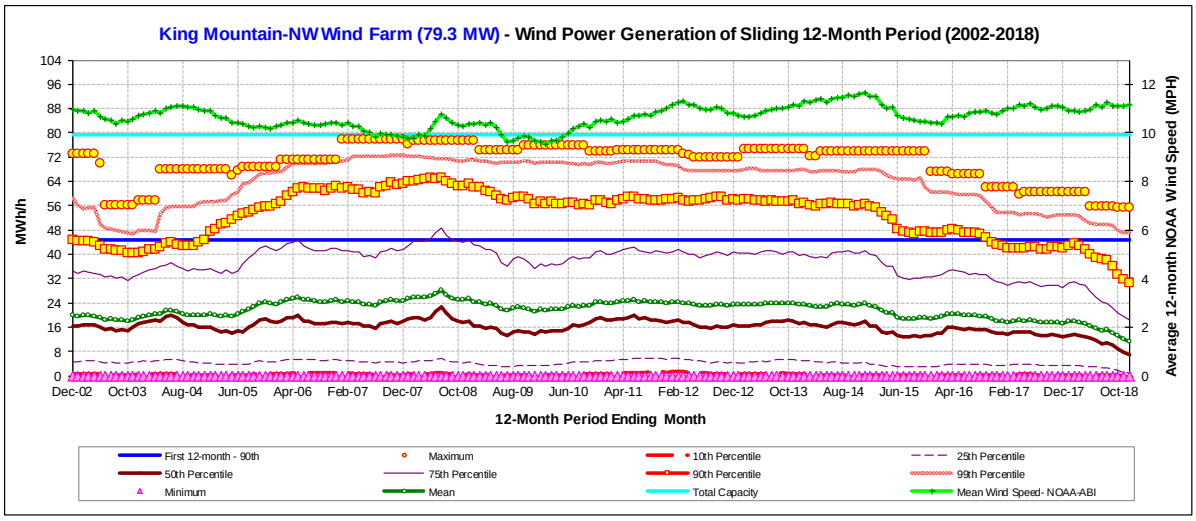


Figure B-45: Sliding 12-month Hourly Wind Power Generation for King Mountain Wind Ranch-NW

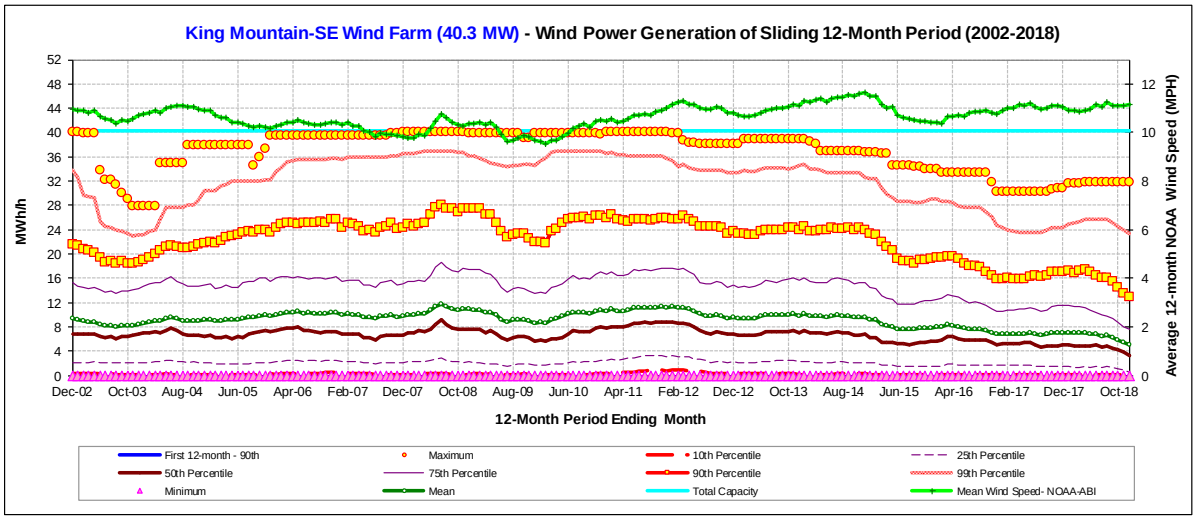


Figure B-46: Sliding 12-month Hourly Wind Power Generation for King Mountain Wind Ranch-SE

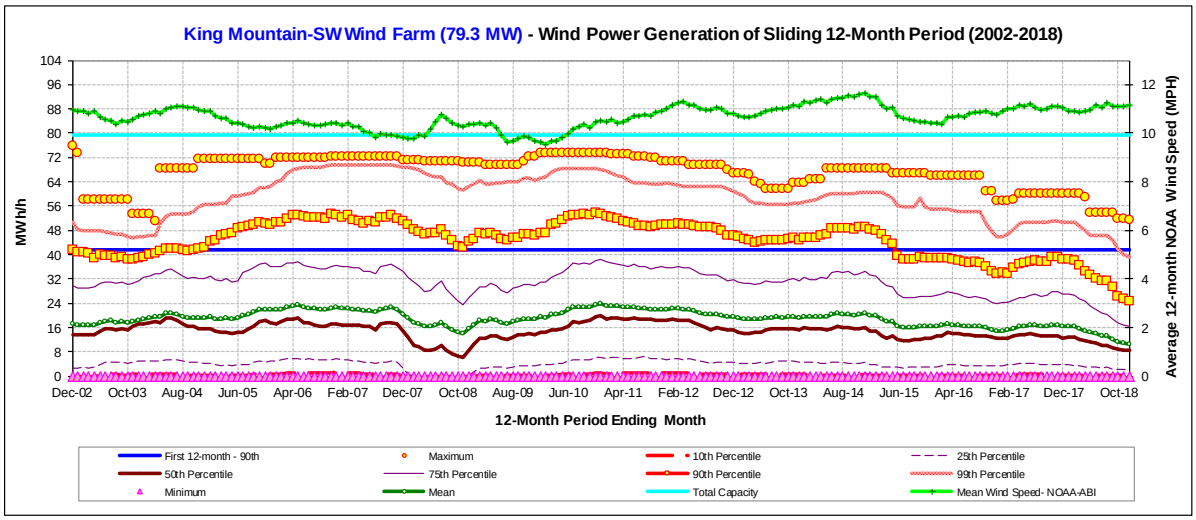


Figure B-47: Sliding 12-month Hourly Wind Power Generation for King Mountain Wind Ranch-SW

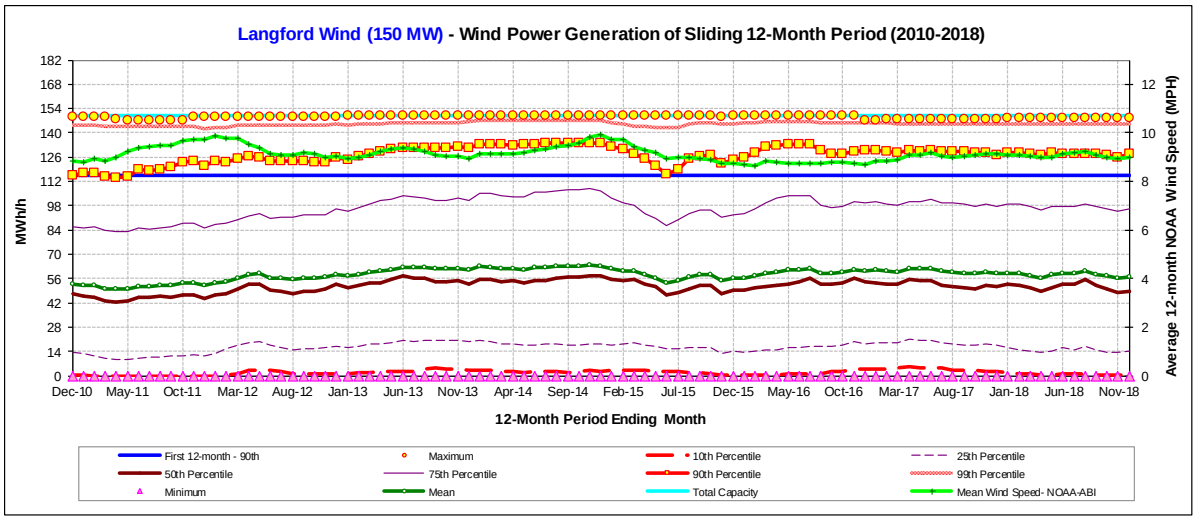


Figure B-48: Sliding 12-month Hourly Wind Power Generation for Langford Wind

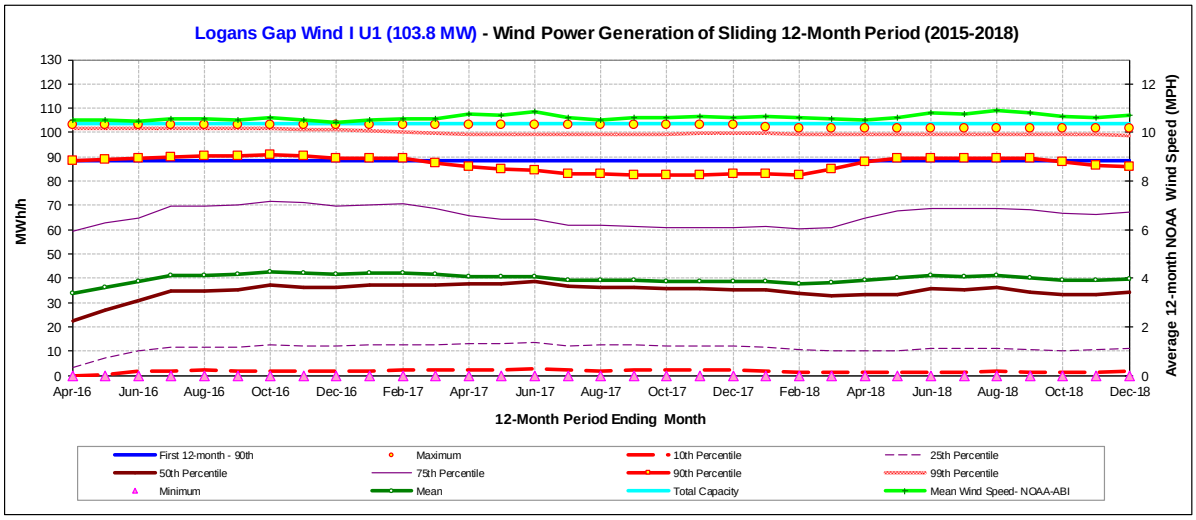


Figure B-49: Sliding 12-month Hourly Wind Power Generation for Logans Gap Wind I U1

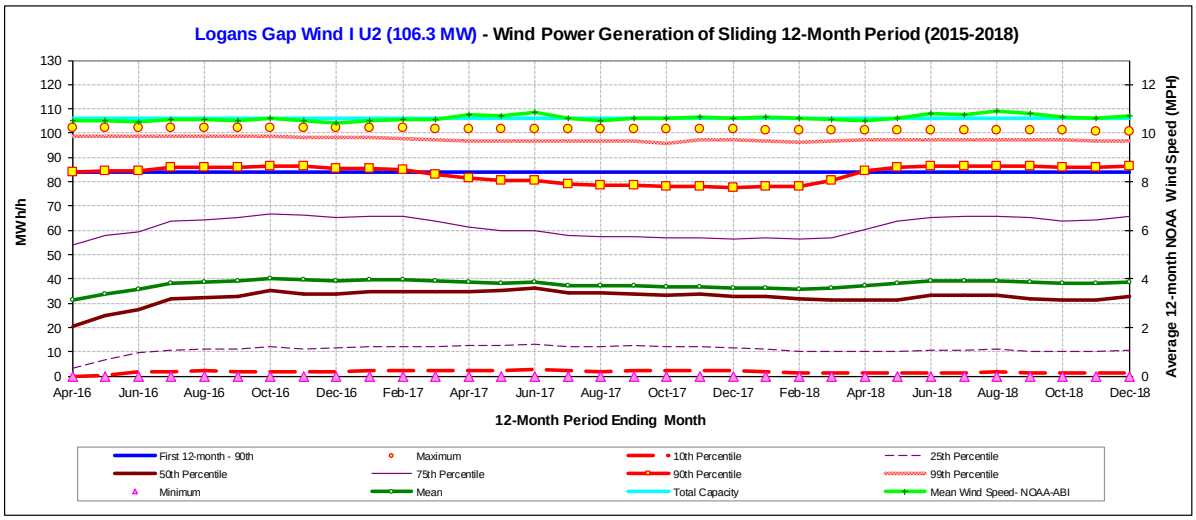


Figure B-50: Sliding 12-month Hourly Wind Power Generation for Logans Gap Wind I U2

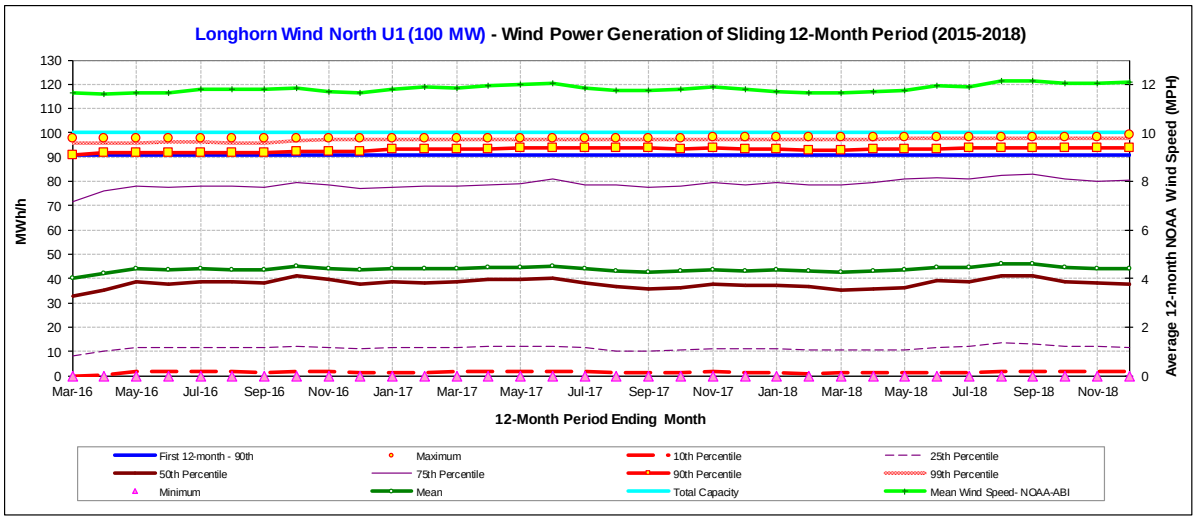


Figure B-51: Sliding 12-month Hourly Wind Power Generation for Longhorn Wind North U1

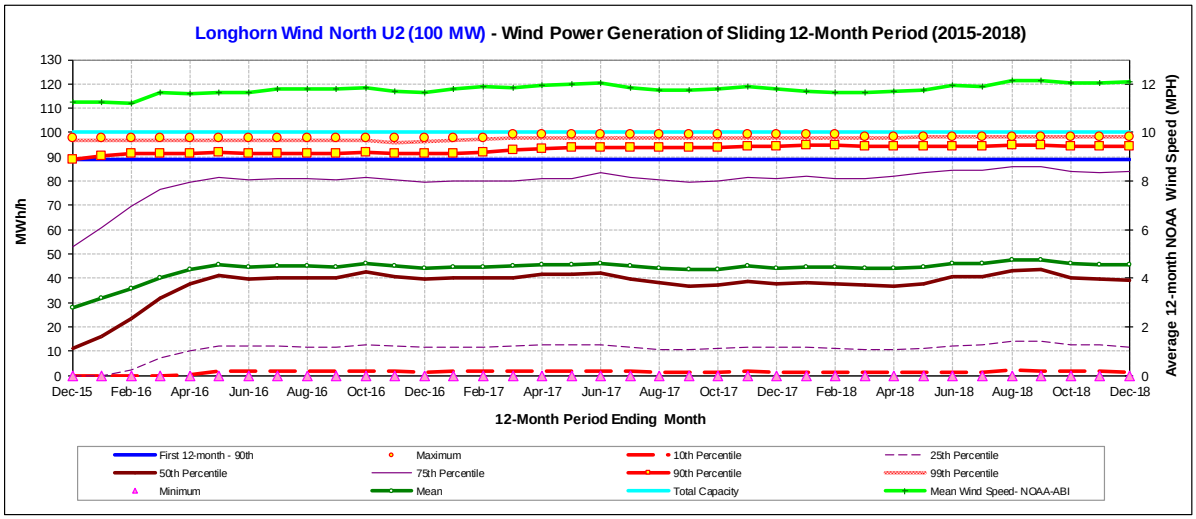


Figure B-52: Sliding 12-month Hourly Wind Power Generation for Longhorn Wind North U2

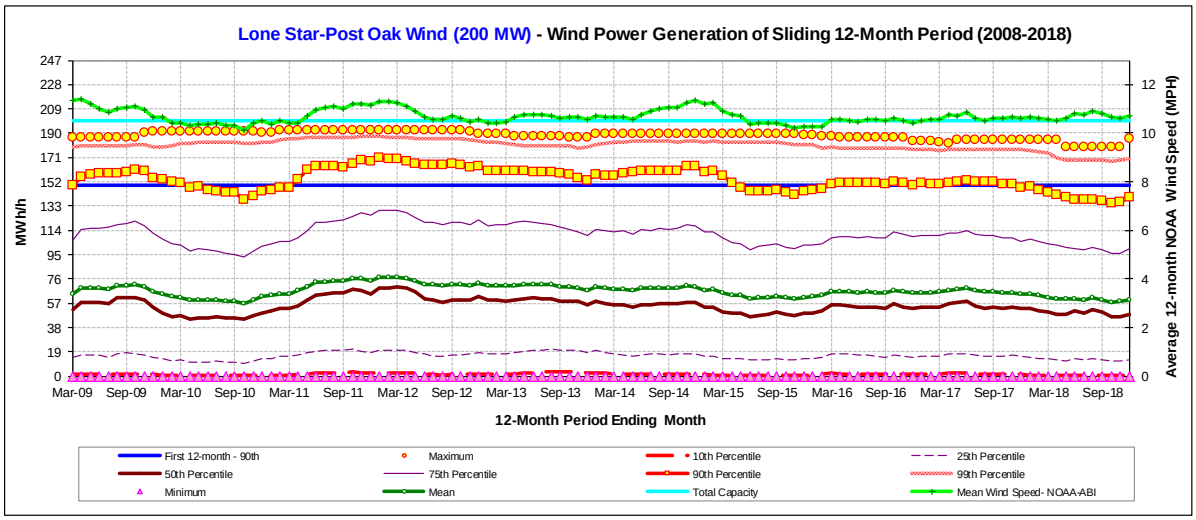


Figure B-53: Sliding 12-month Hourly Wind Power Generation for Lone Star - Post Oak Wind

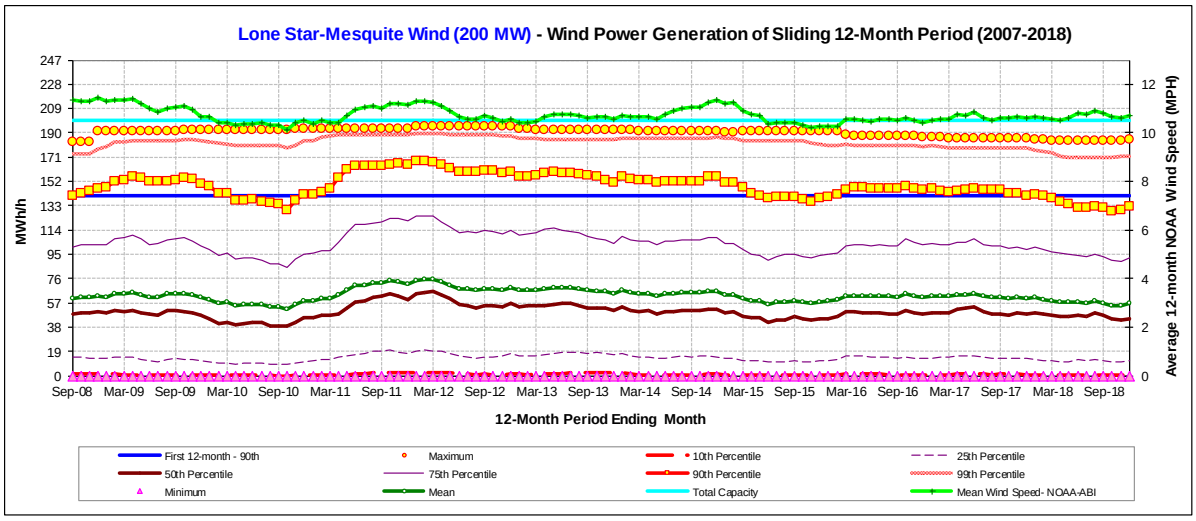


Figure B-54: Sliding 12-month Hourly Wind Power Generation for Lone-Star Mesquite Wind

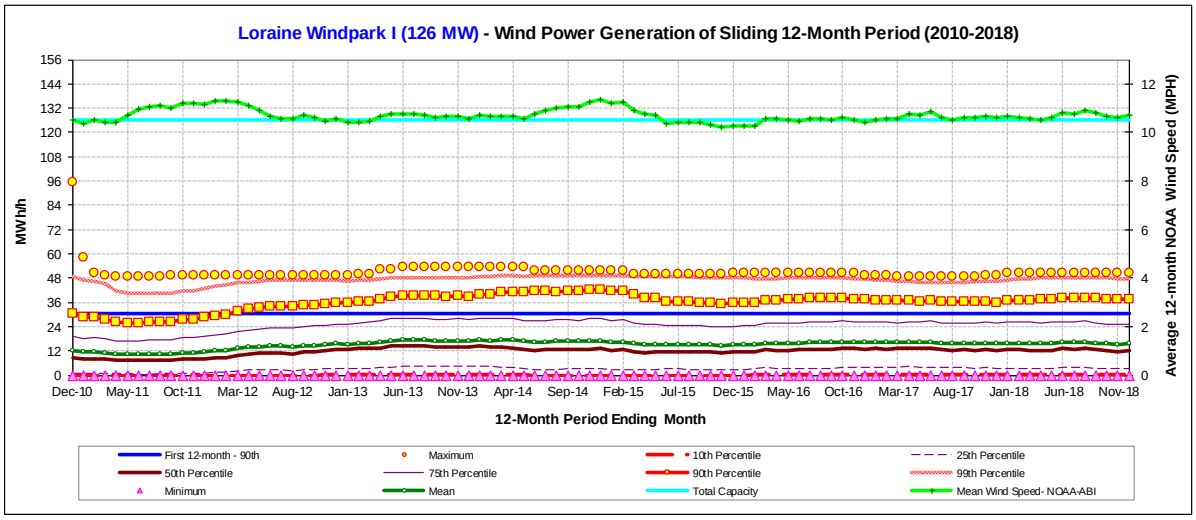


Figure B-55: Sliding 12-month Hourly Wind Power Generation for Loraine Windpark I

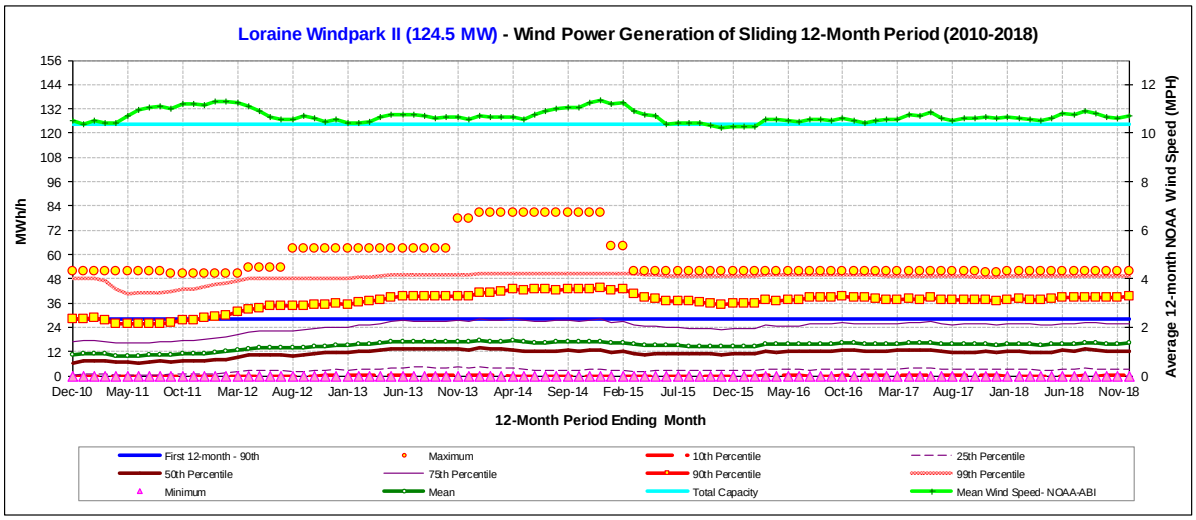


Figure B-56: Sliding 12-month Hourly Wind Power Generation for Loraine Windpark II

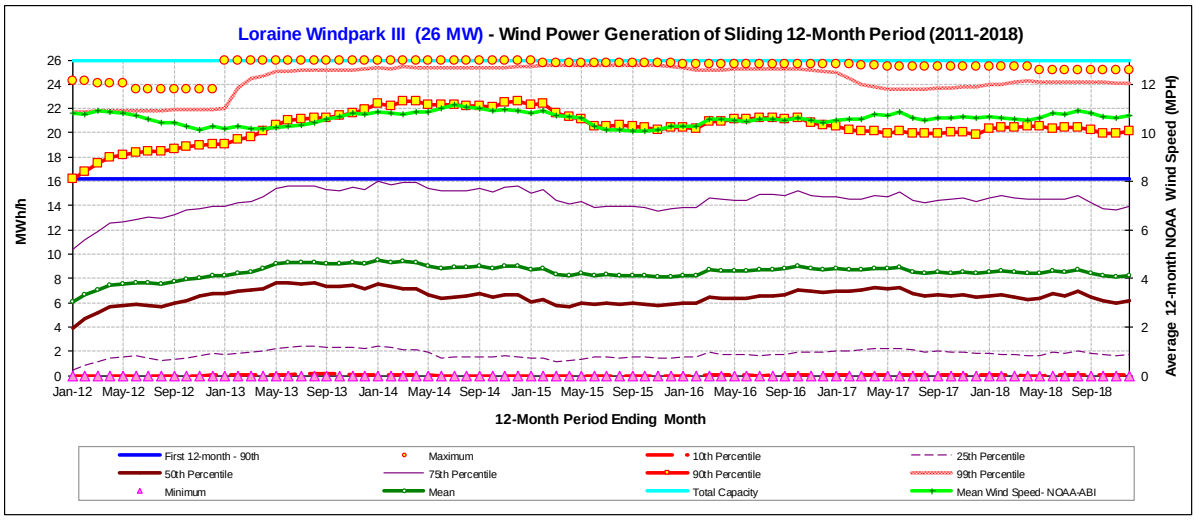


Figure B-57: Sliding 12-month Hourly Wind Power Generation for Loraine Windpark III

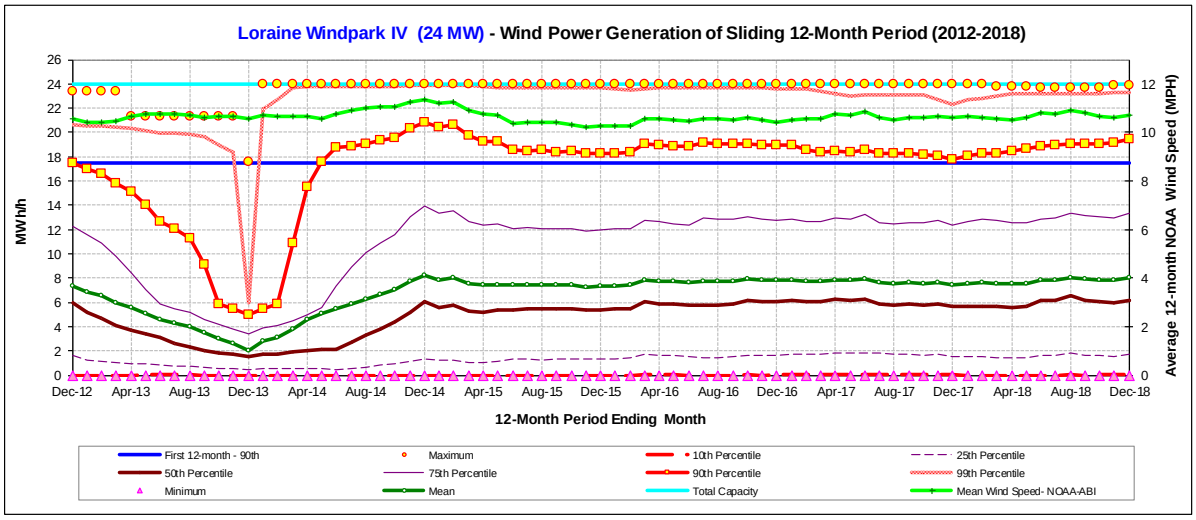


Figure B-58: Sliding 12-month Hourly Wind Power Generation for Loraine Windpark IV

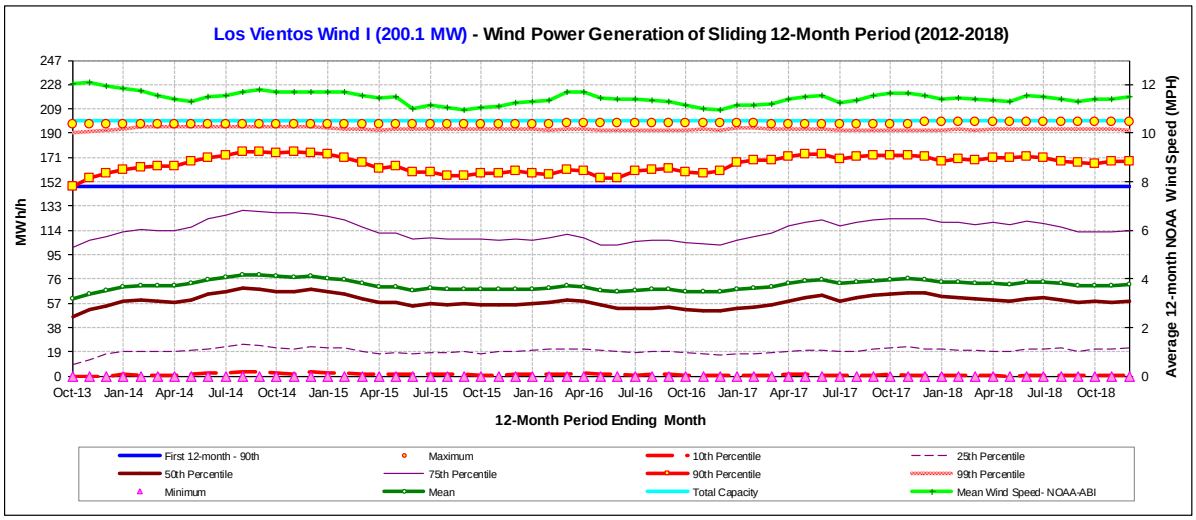


Figure B-59: Sliding 12-month Hourly Wind Power Generation for Los Vientos Wind I

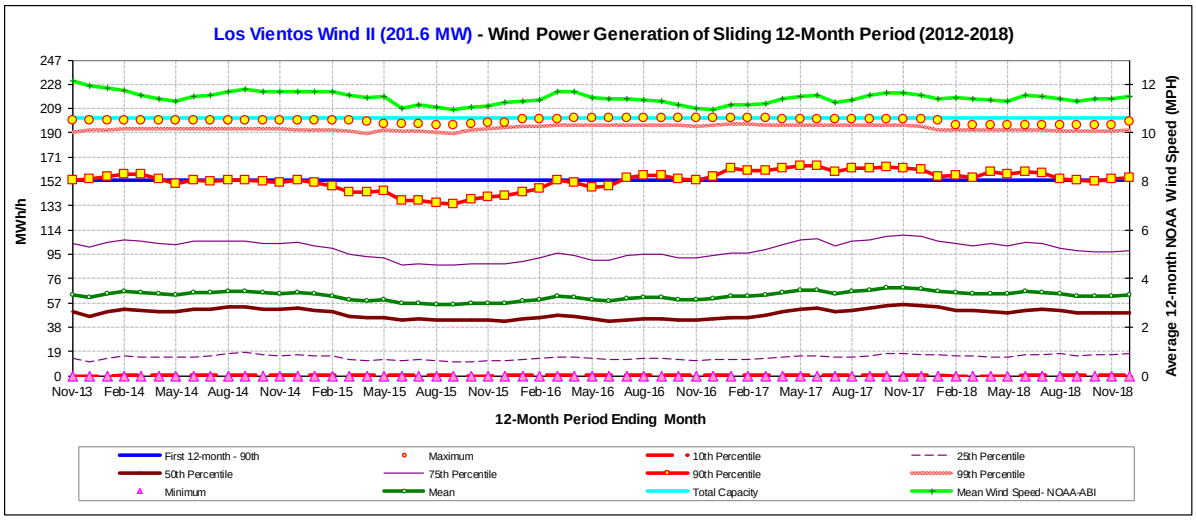


Figure B-60: Sliding 12-month Hourly Wind Power Generation for Los Vientos Wind II

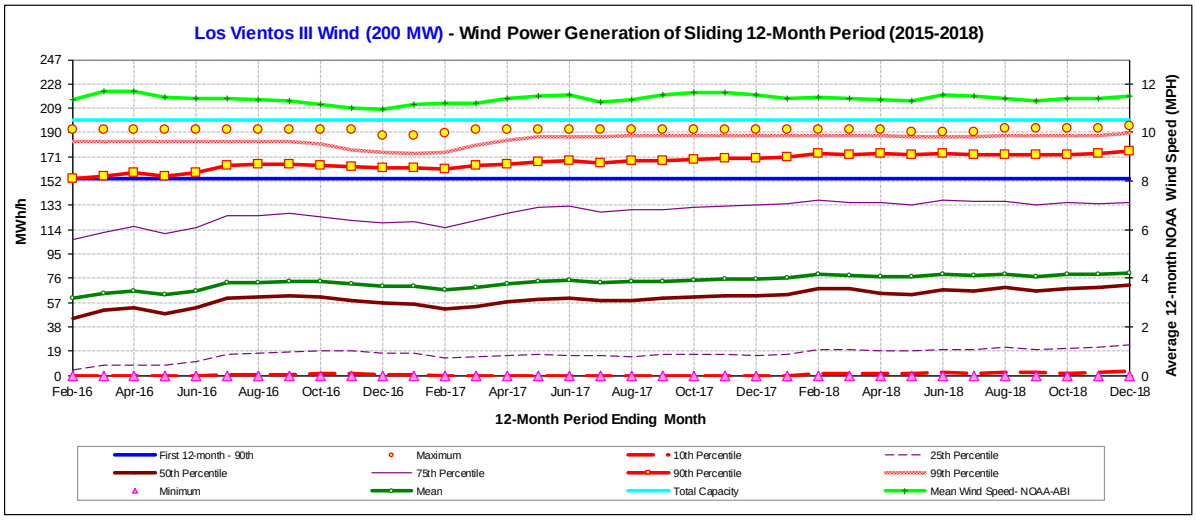


Figure B-61: Sliding 12-month Hourly Wind Power Generation for Los Vientos III Wind

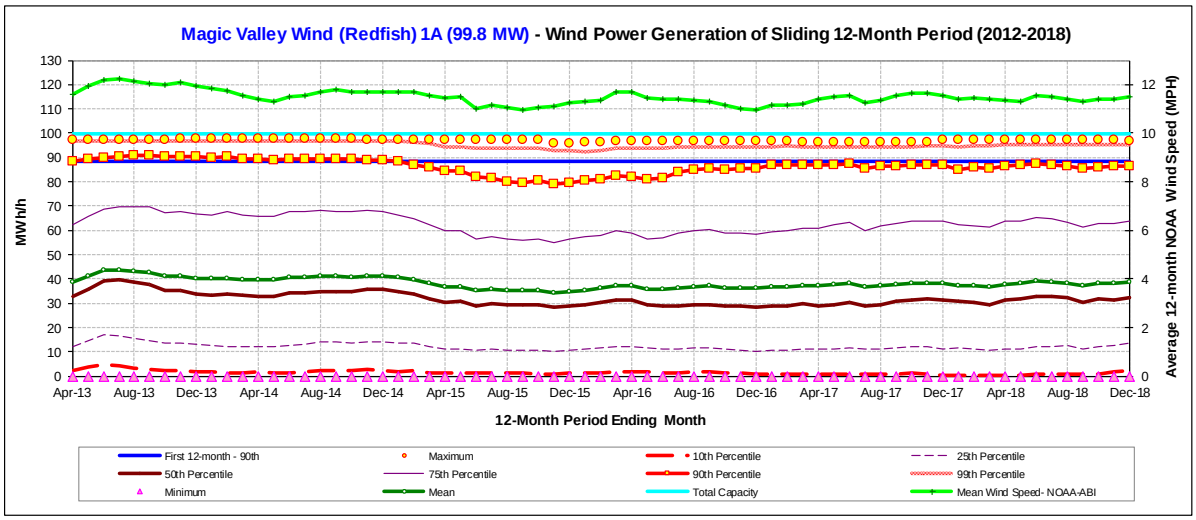


Figure B-62: Sliding 12-month Hourly Wind Power Generation for Magic Valley Wind (Redfish) 1A

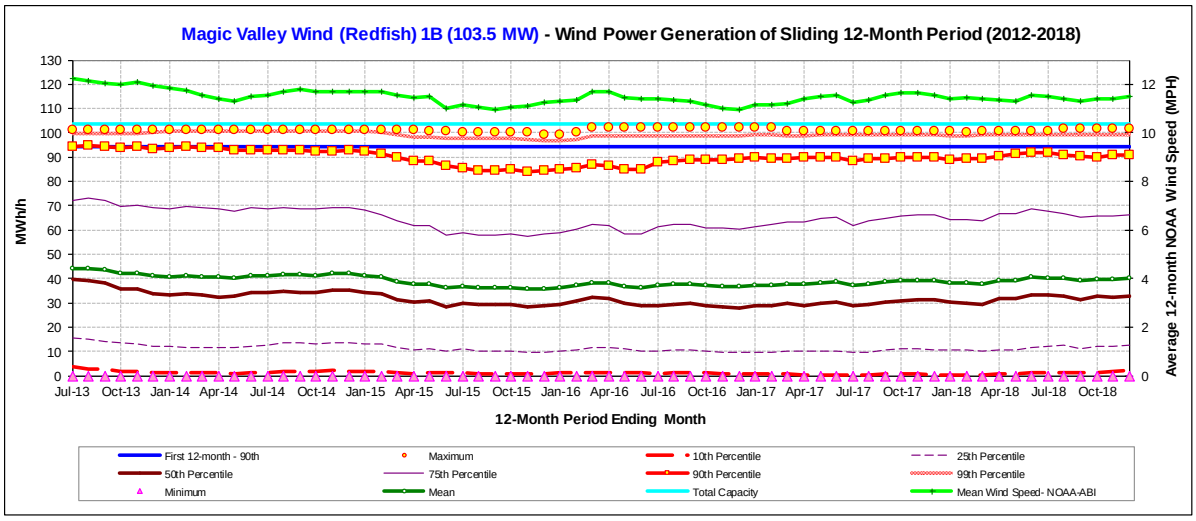


Figure B-63: Sliding 12-month Hourly Wind Power Generation for Magic Valley Wind (Redfish) 1B

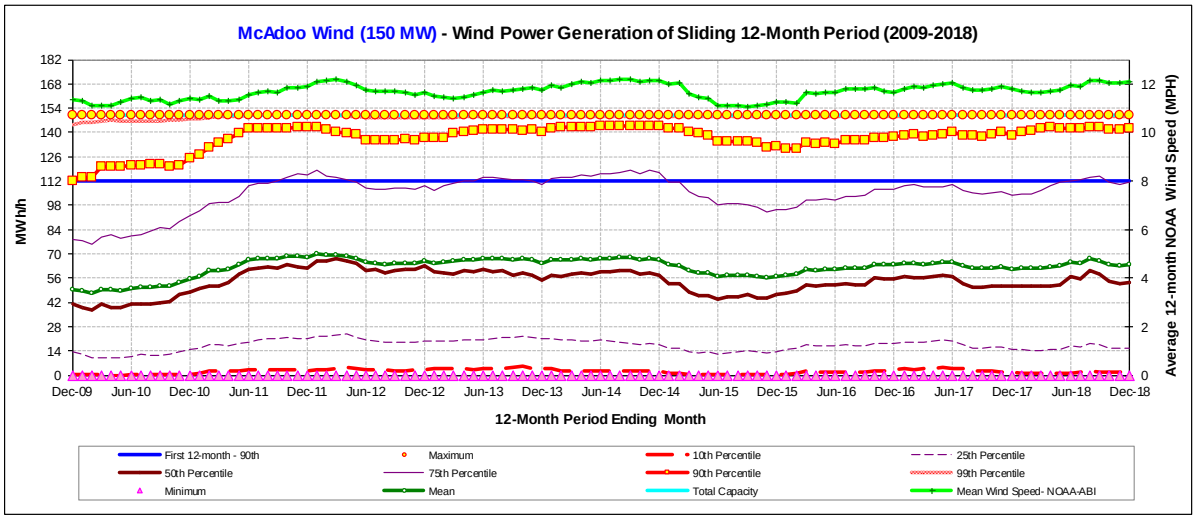


Figure B-64: Sliding 12-month Hourly Wind Power Generation for McAdoo Wind

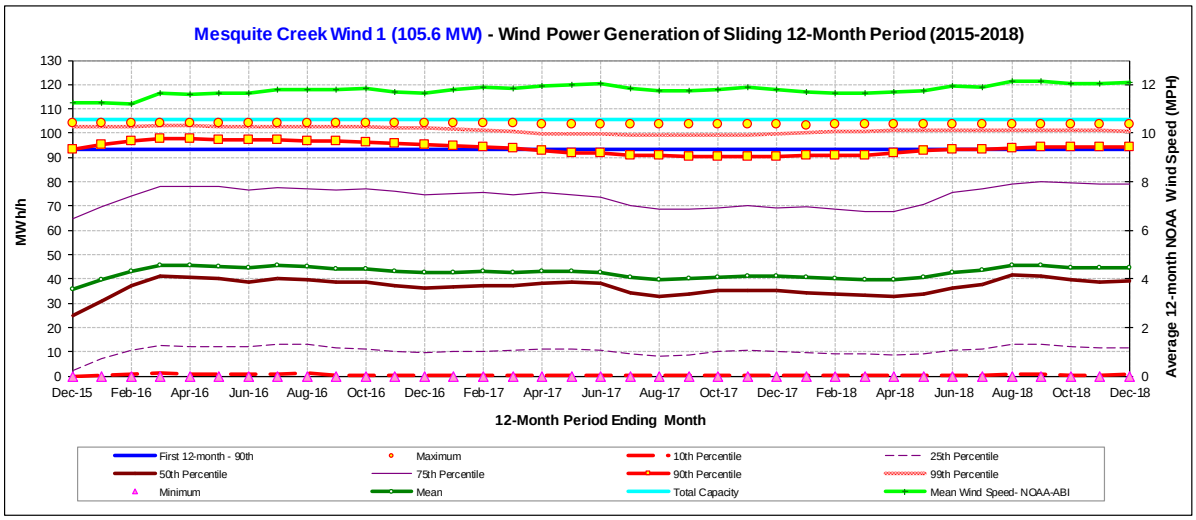


Figure B-65: Sliding 12-month Hourly Wind Power Generation for Mesquite Creek Wind 1

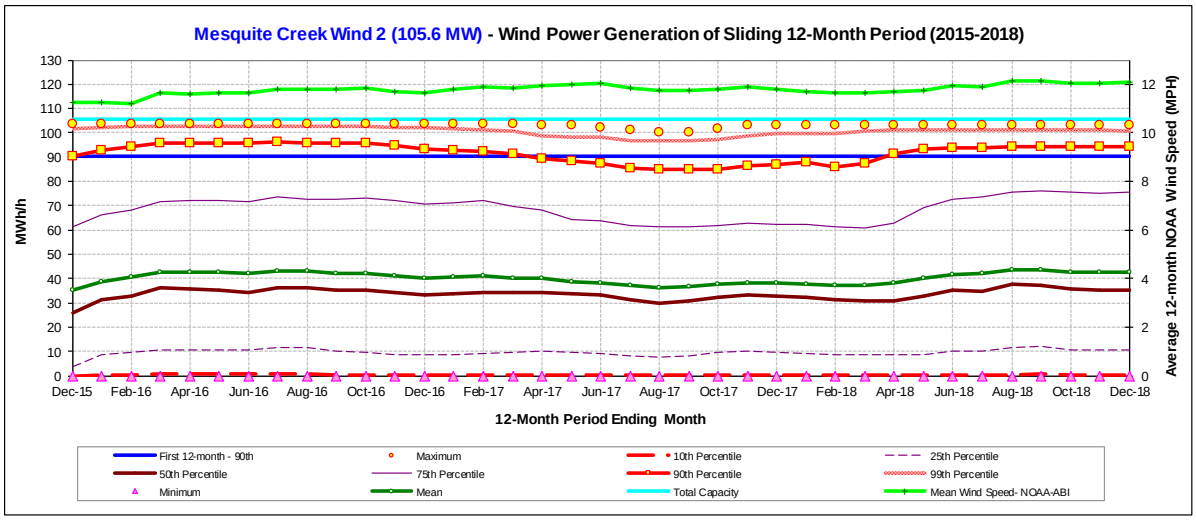


Figure B-66: Sliding 12-month Hourly Wind Power Generation for Mesquite Creek Wind 2

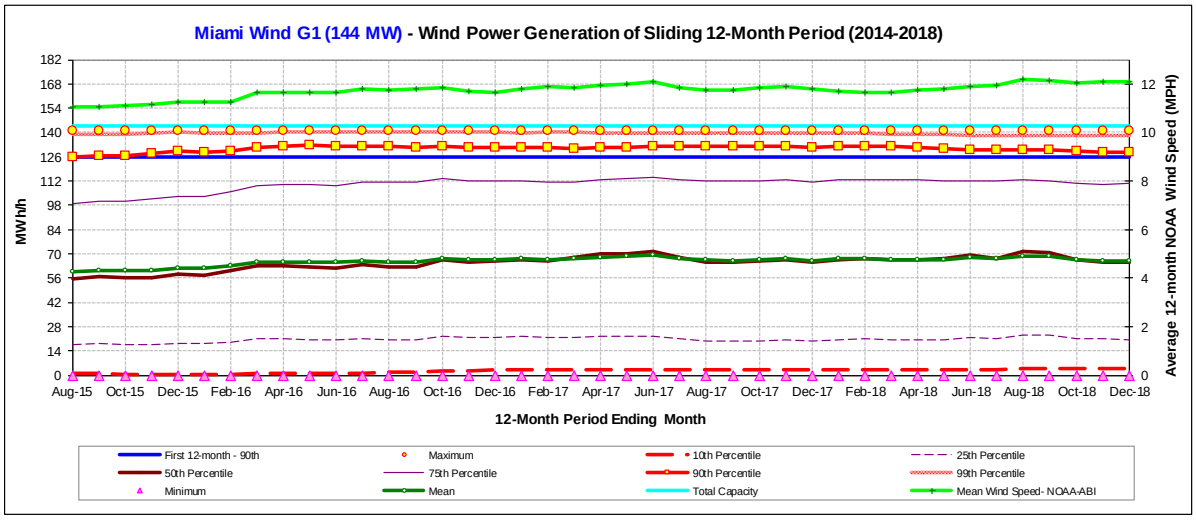


Figure B-67: Sliding 12-month Hourly Wind Power Generation for Miami Wind G1

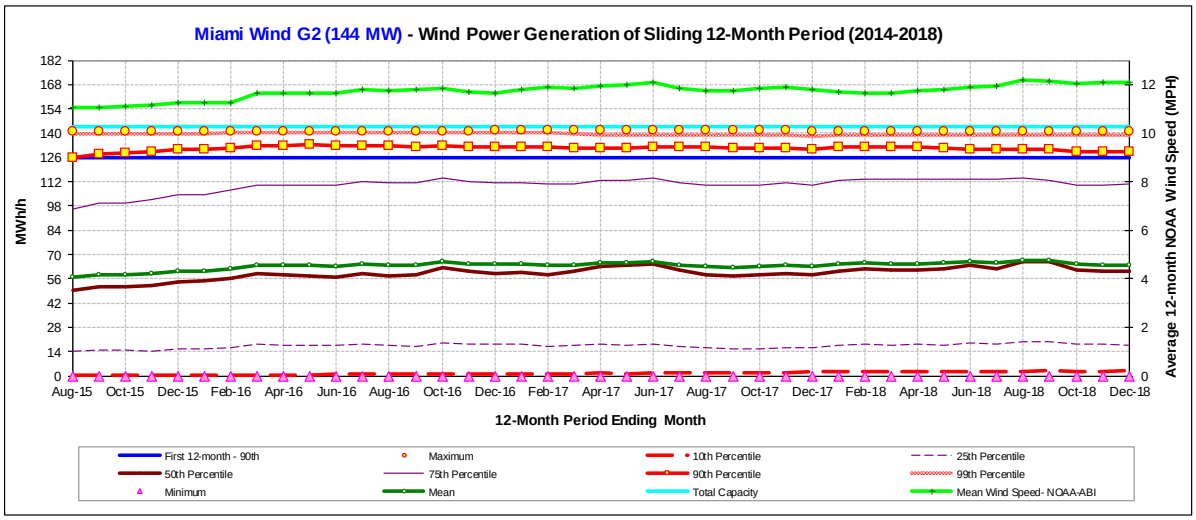


Figure B-68: Sliding 12-month Hourly Wind Power Generation for Miami Wind G2

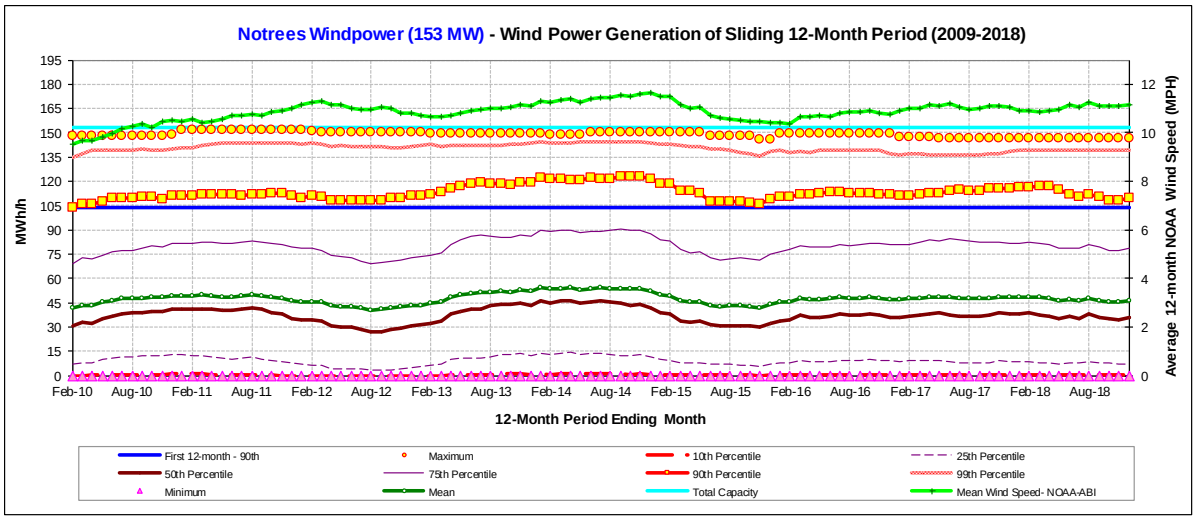


Figure B-69: Sliding 12-month Hourly Wind Power Generation for Notrees Windpower

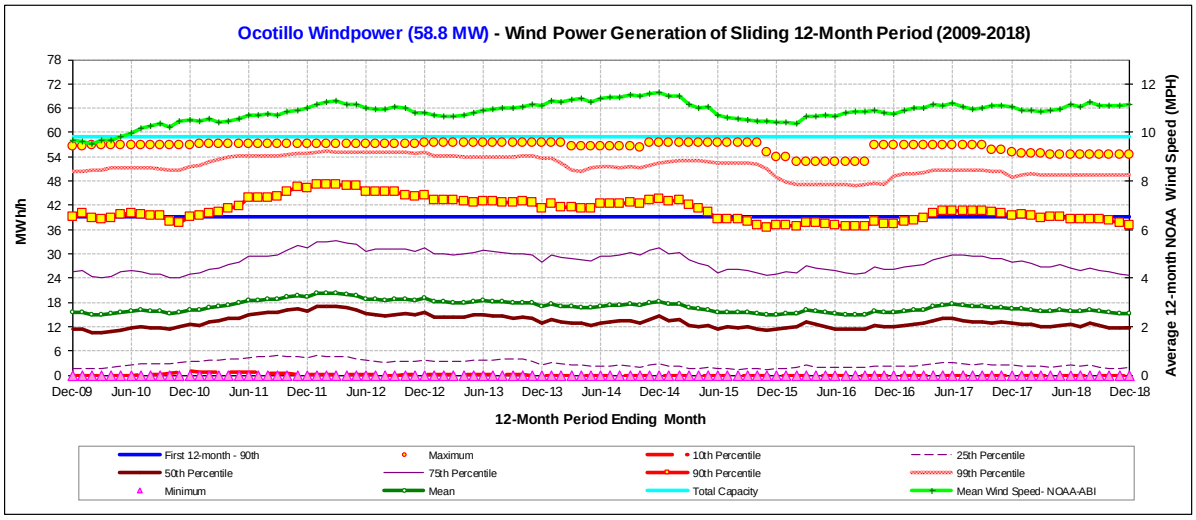


Figure B-70: Sliding 12-month Hourly Wind Power Generation for Ocotillo Windpower

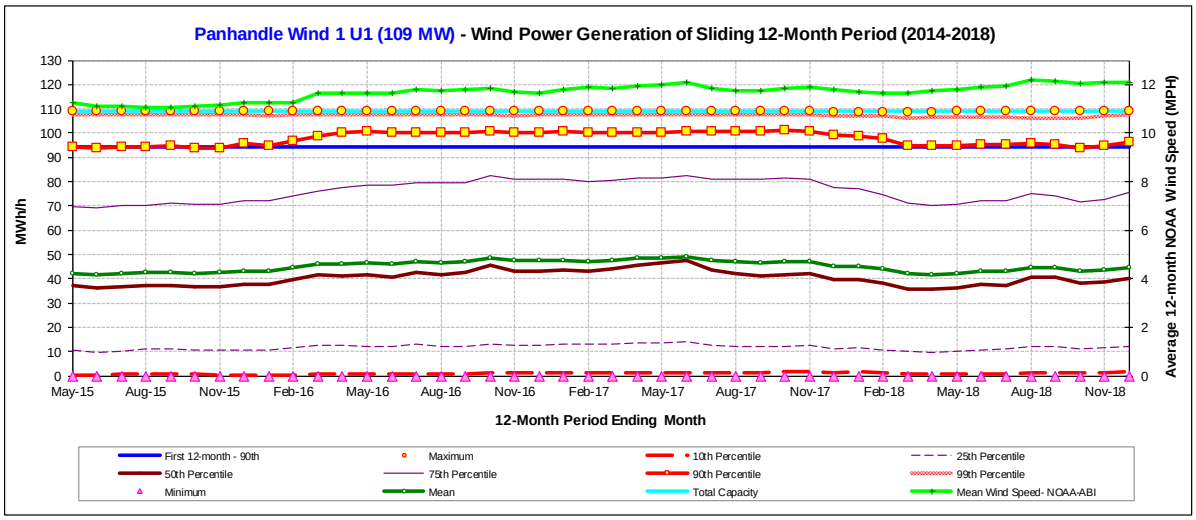


Figure B-71: Sliding 12-month Hourly Wind Power Generation for Panhandle Wind 1 U1

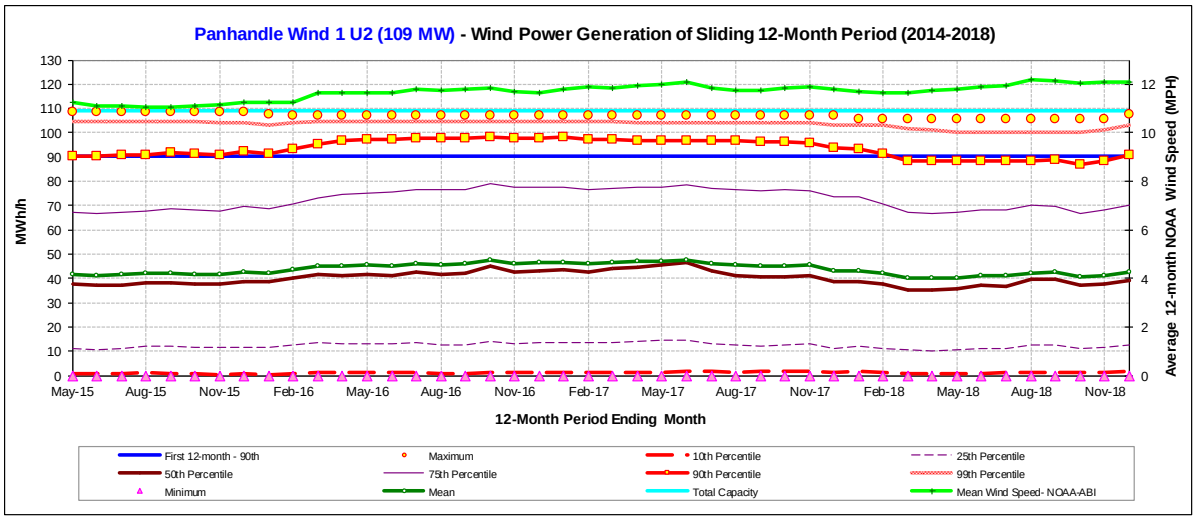


Figure B-72: Sliding 12-month Hourly Wind Power Generation for Panhandle Wind 1 U2

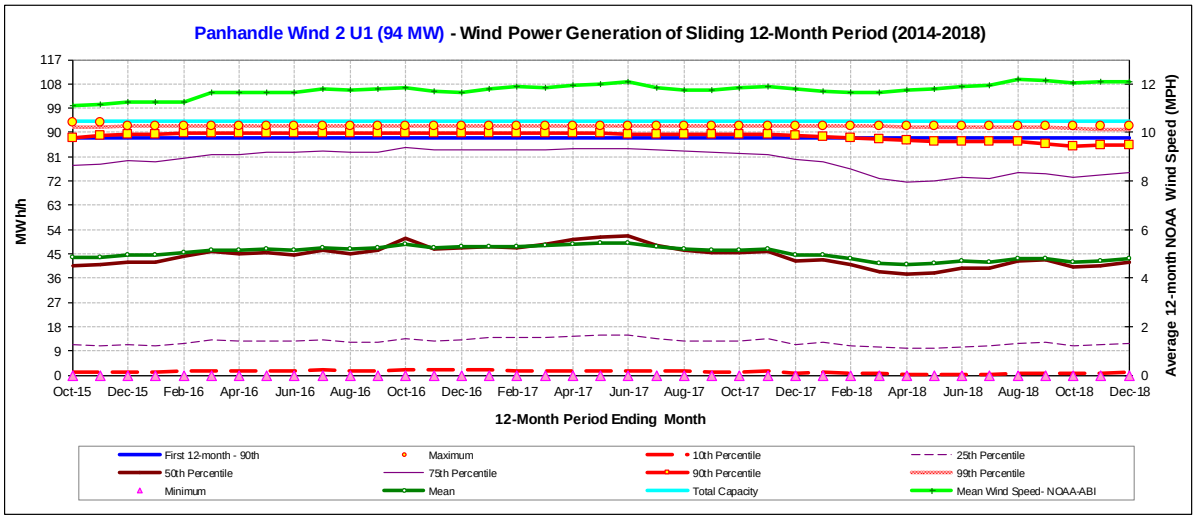


Figure B-73: Sliding 12-month Hourly Wind Power Generation for Panhandle Wind 2 U1

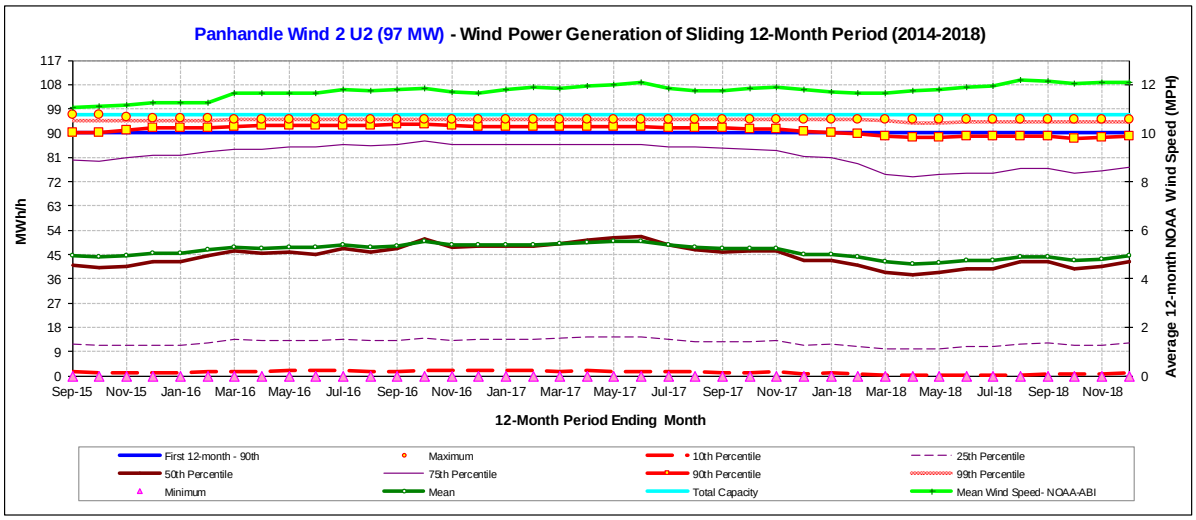


Figure B-74: Sliding 12-month Hourly Wind Power Generation for Panhandle Wind 2 U2

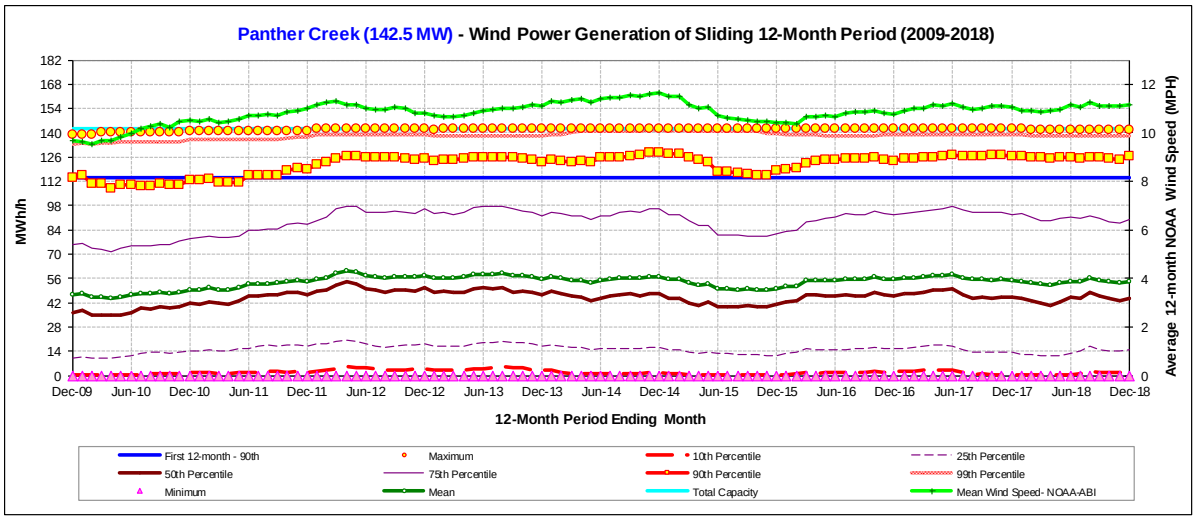


Figure B-75: Sliding 12-month Hourly Wind Power Generation for Panther Creek 1

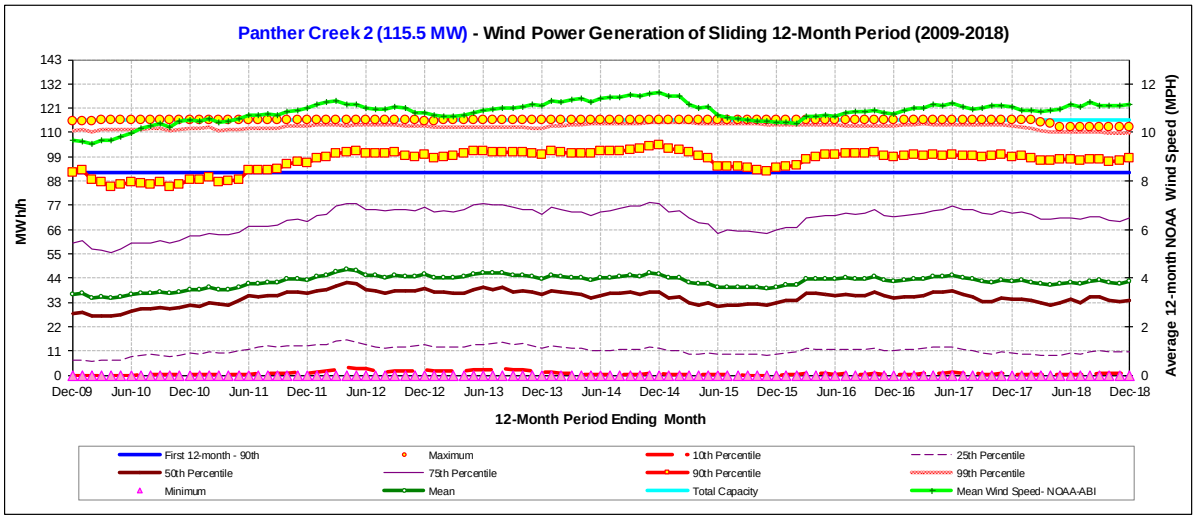


Figure B-76: Sliding 12-month Hourly Wind Power Generation for Panther Creek 2

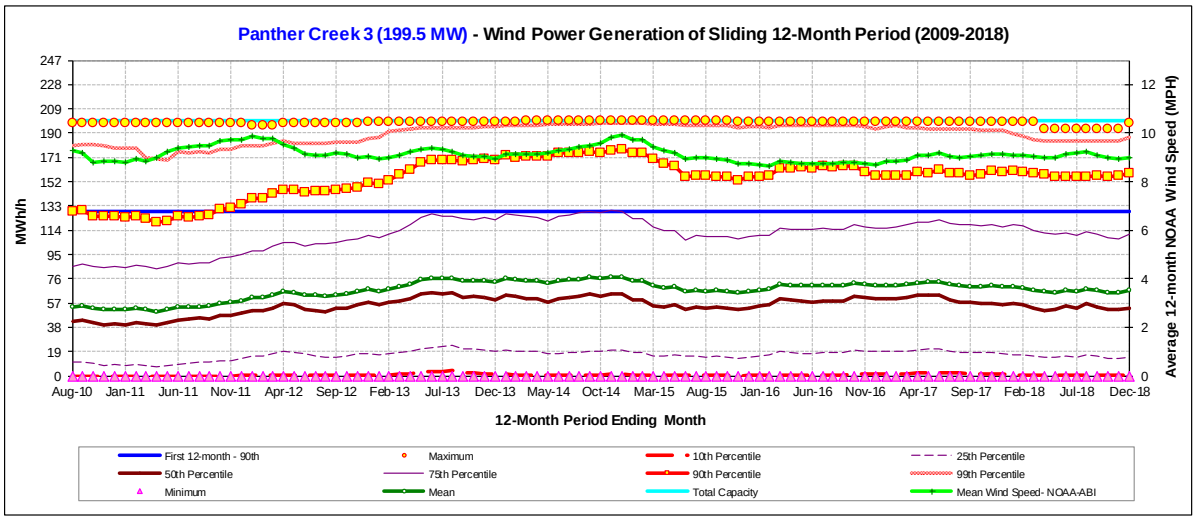


Figure B-77: Sliding 12-month Hourly Wind Power Generation for Panther Creek 3

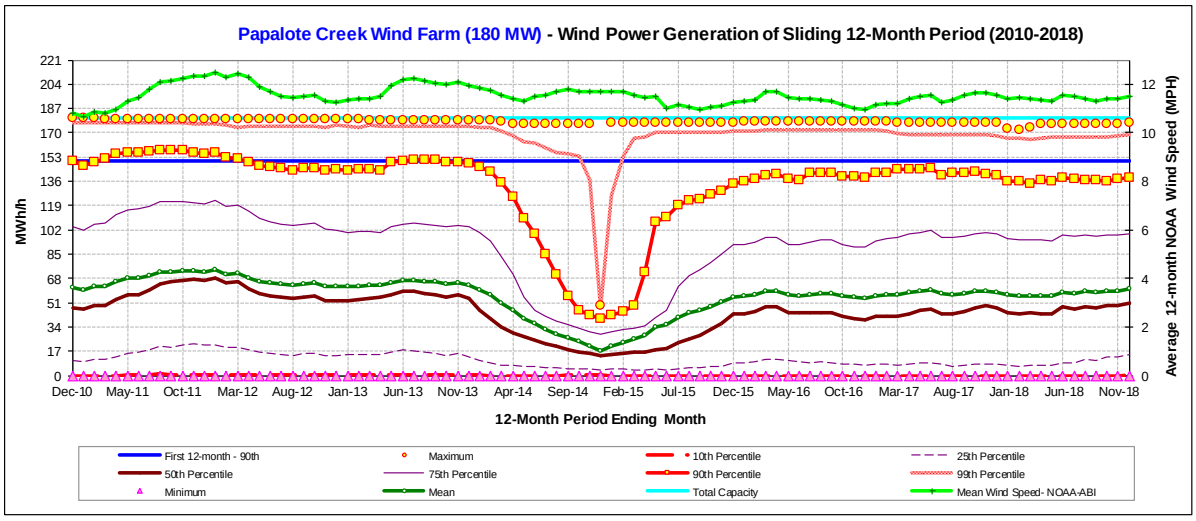


Figure B-78: Sliding 12-month Hourly Wind Power Generation for Papalote Creek Wind Farm

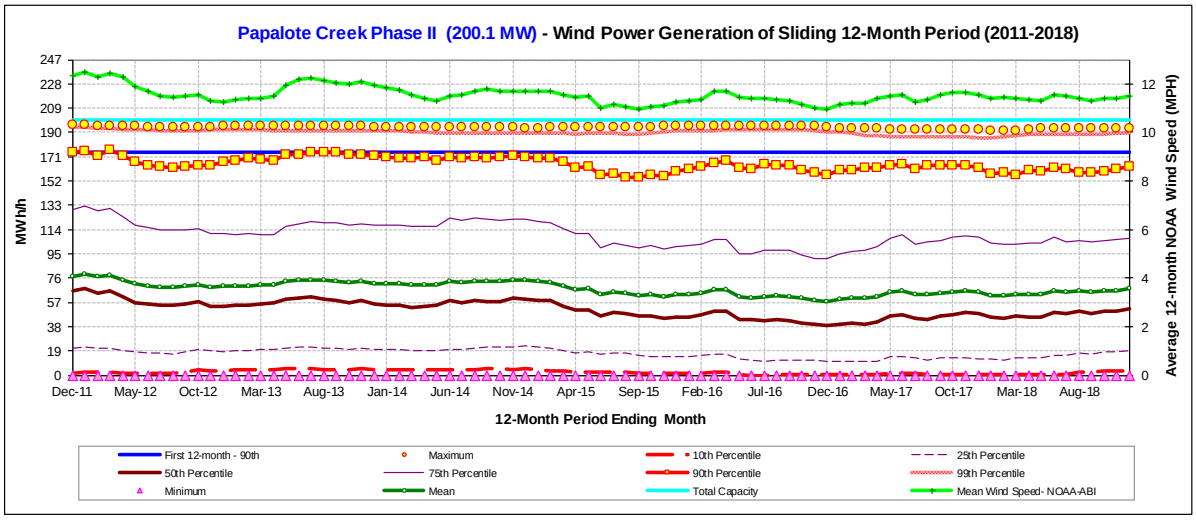


Figure B-79: Sliding 12-month Hourly Wind Power Generation for Papalote Creek Wind Farm II

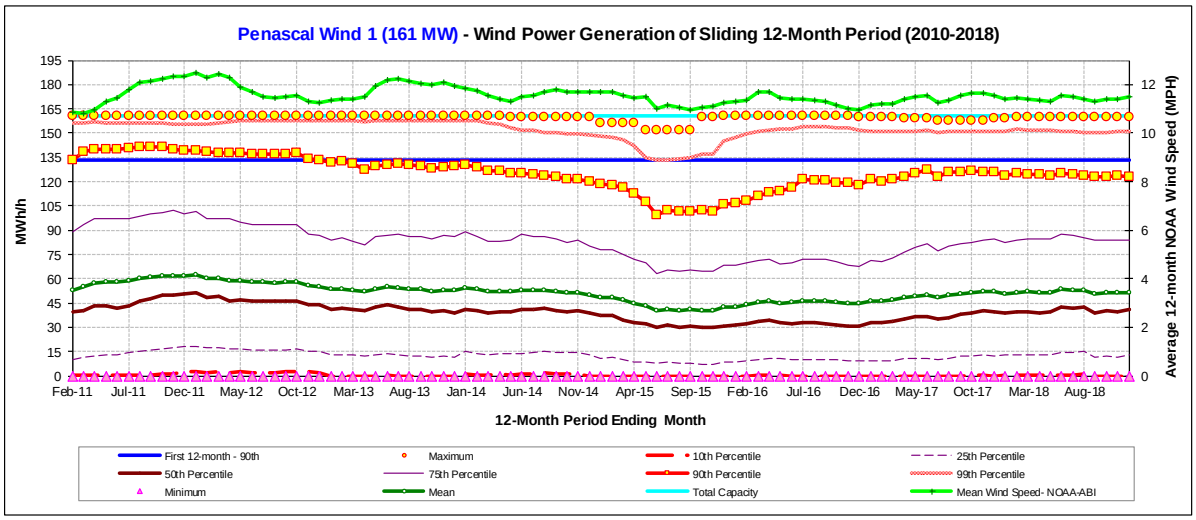


Figure B-80: Sliding 12-month Hourly Wind Power Generation for Penascal Wind 1

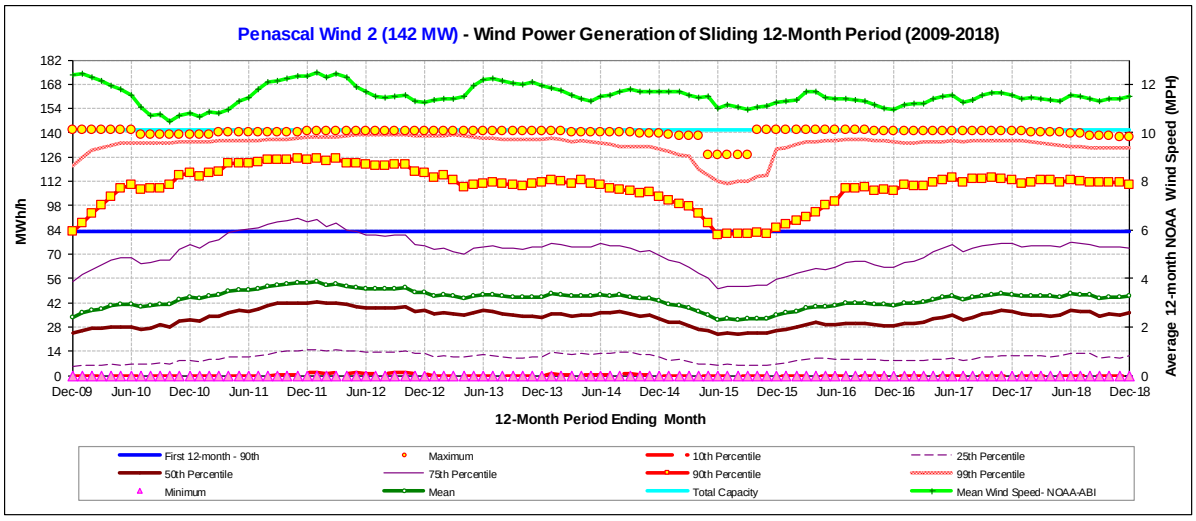


Figure B-81: Sliding 12-month Hourly Wind Power Generation for Penascal Wind 2

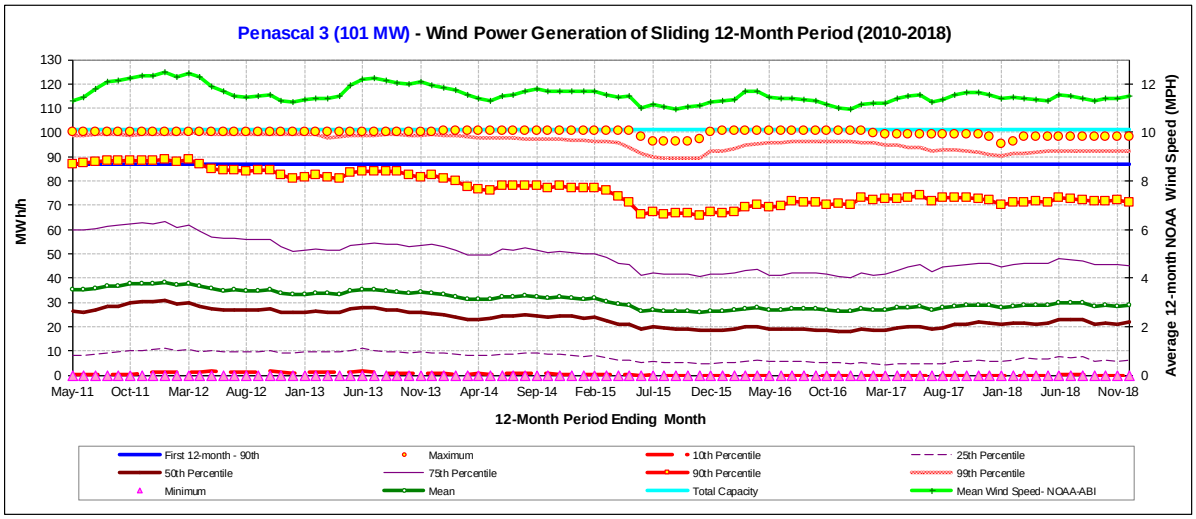


Figure B-82: Sliding 12-month Hourly Wind Power Generation for Penascal Wind 3

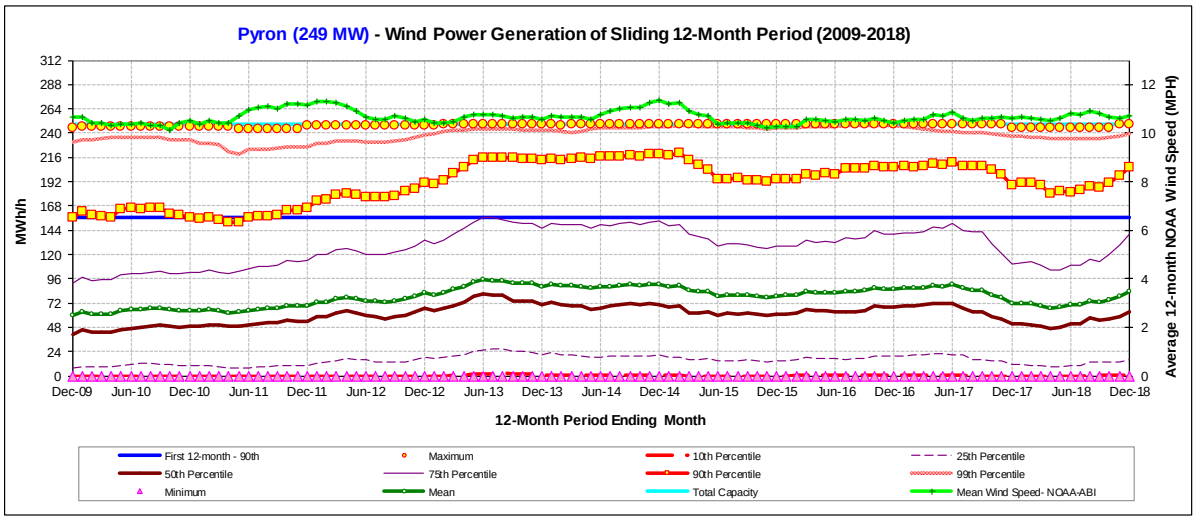


Figure B-83: Sliding 12-month Hourly Wind Power Generation for Pyron Wind

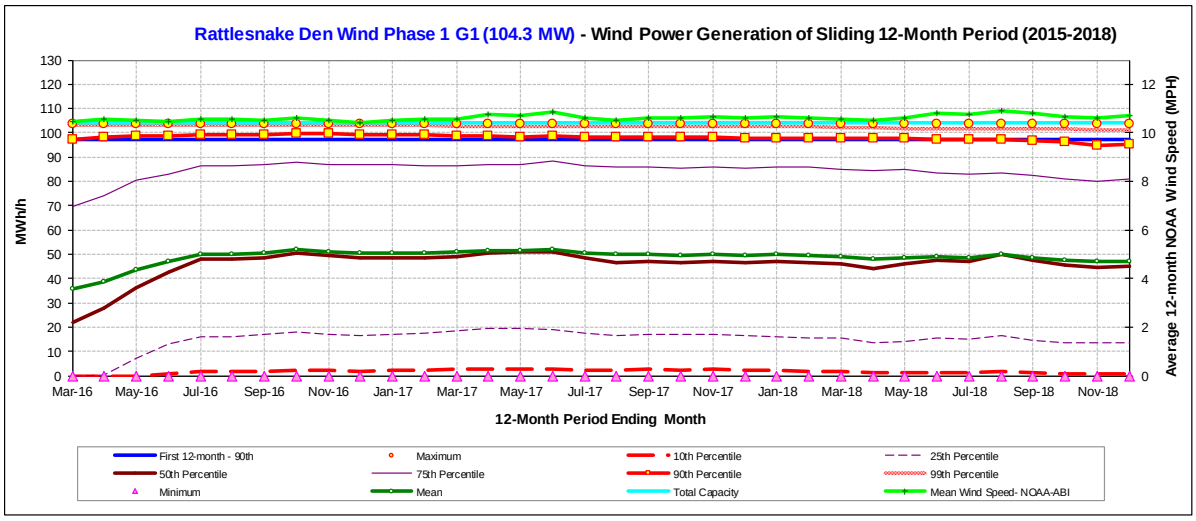


Figure B-84: Sliding 12-month Hourly Wind Power Generation for Rattlesnake Den Wind Phase 1 G1

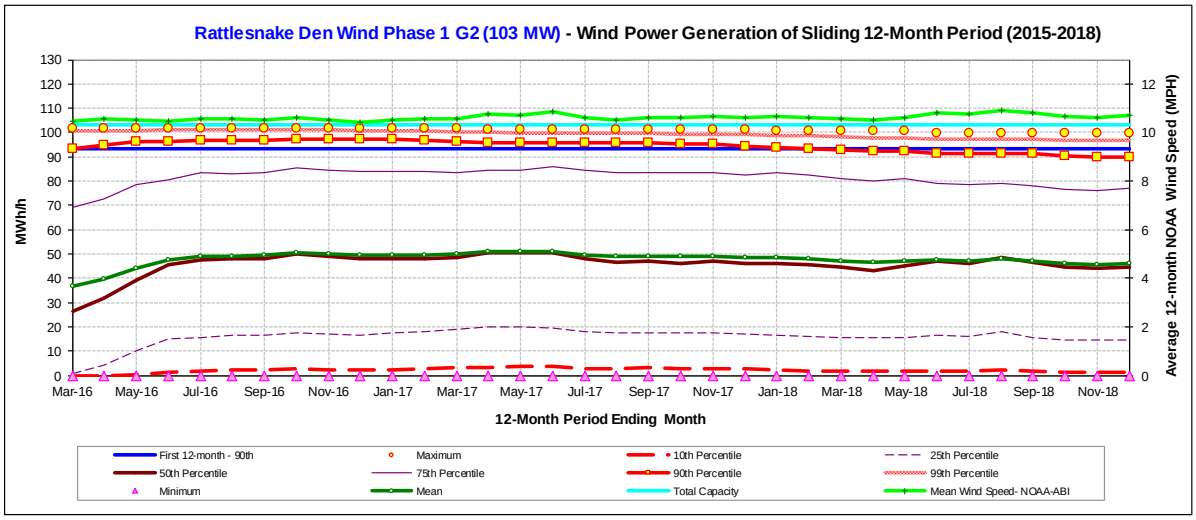


Figure B-85: Sliding 12-month Hourly Wind Power Generation for Rattlesnake Den Wind Phase 1 G2

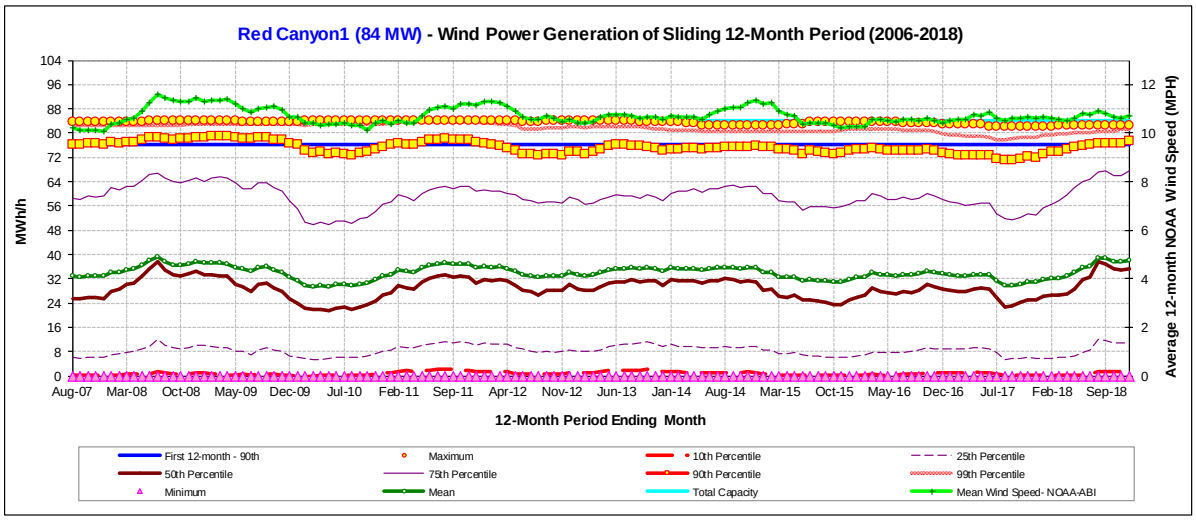


Figure B-86: Sliding 12-month Hourly Wind Power Generation for Red Canyon 1

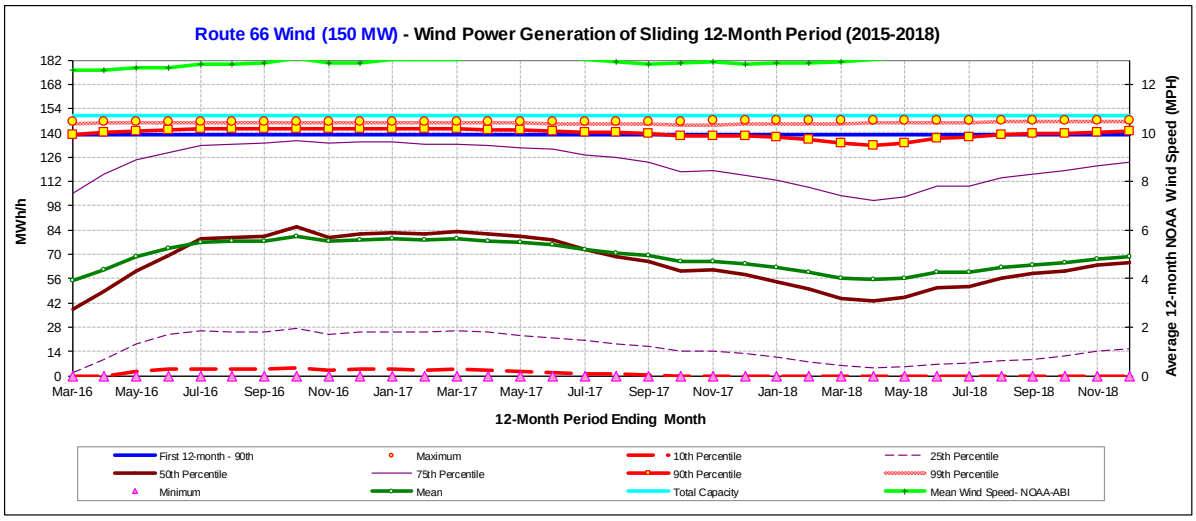


Figure B-87: Sliding 12-month Hourly Wind Power Generation for Red Canyon 1

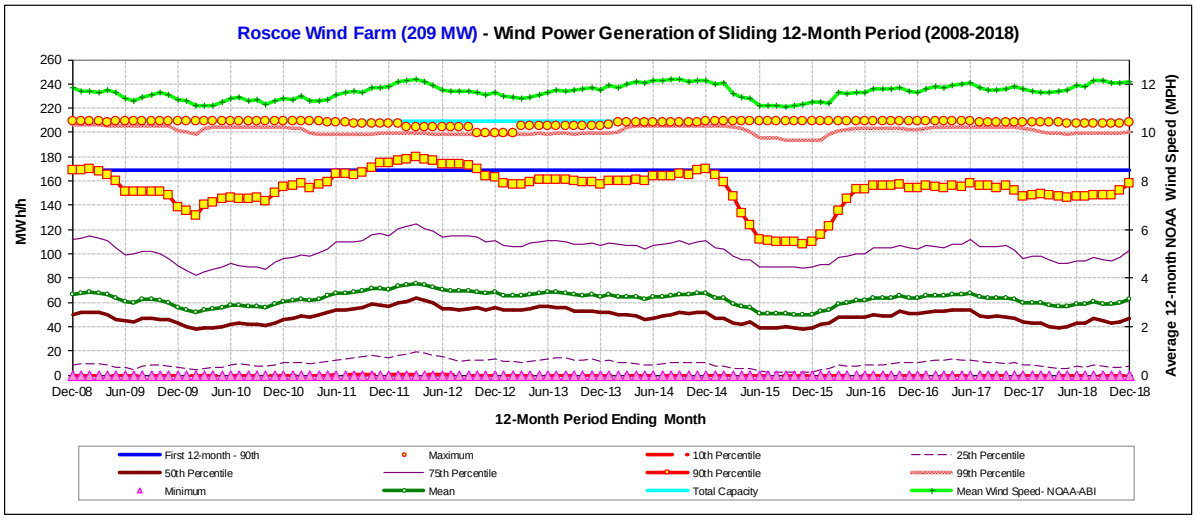


Figure B-88: Sliding 12-month Hourly Wind Power Generation for Roscoe Wind

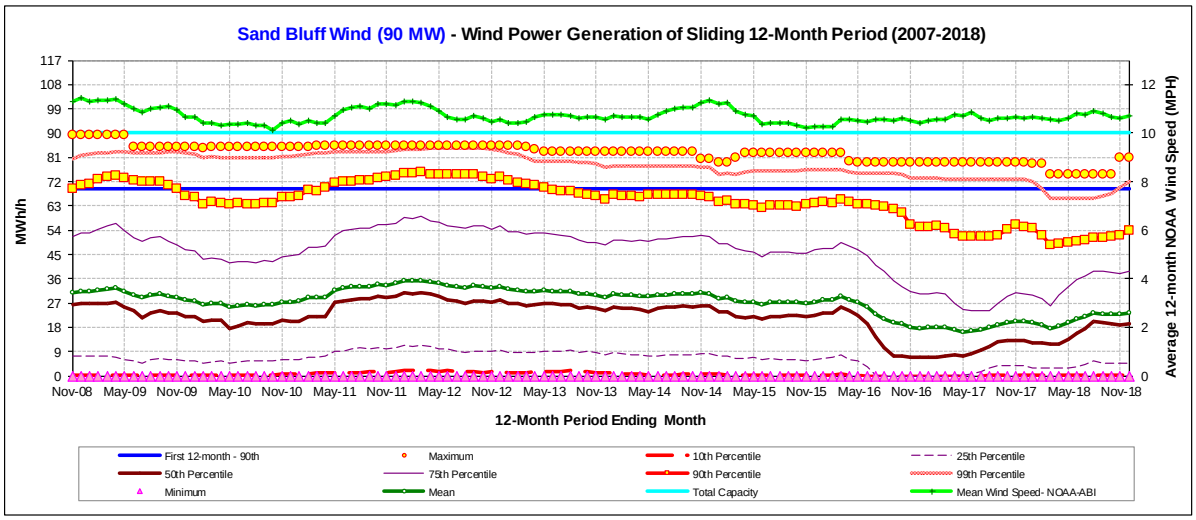


Figure B-89: Sliding 12-month Hourly Wind Power Generation for Sand Bluff Wind

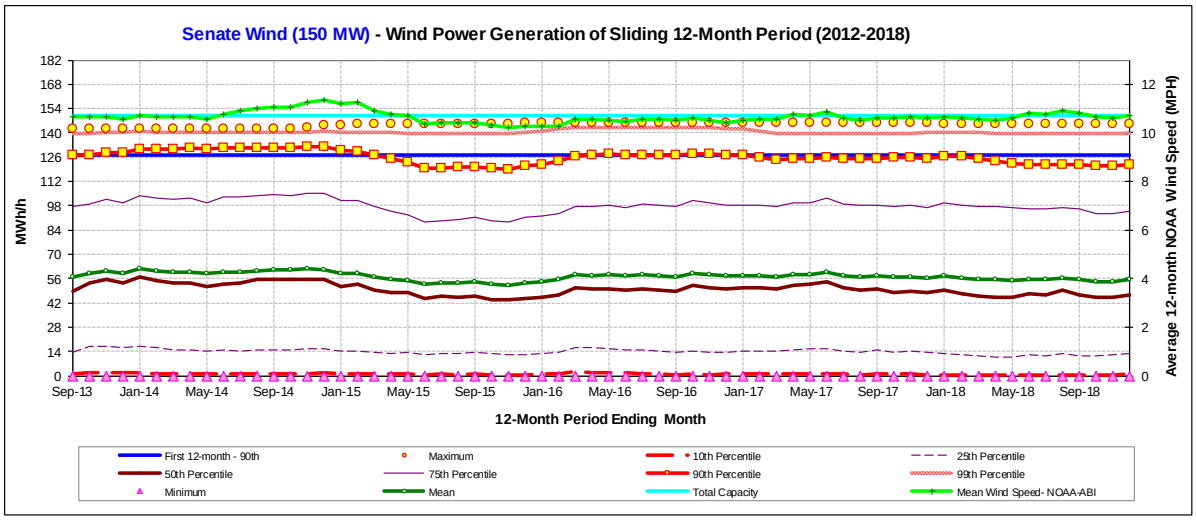


Figure B-90: Sliding 12-month Hourly Wind Power Generation for Senate Wind

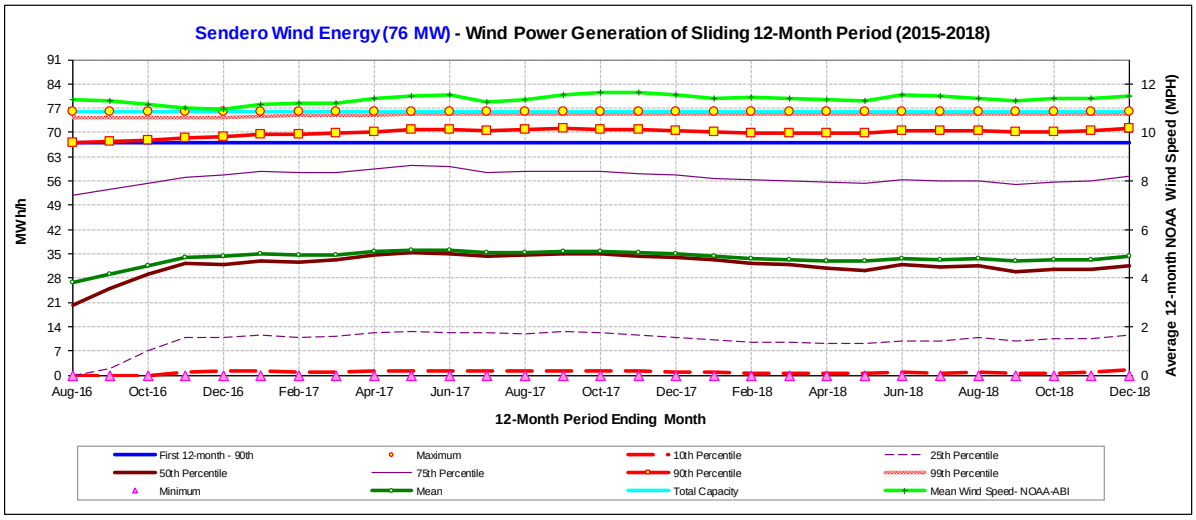


Figure B-91: Sliding 12-month Hourly Wind Power Generation for Sendero Wind Energy

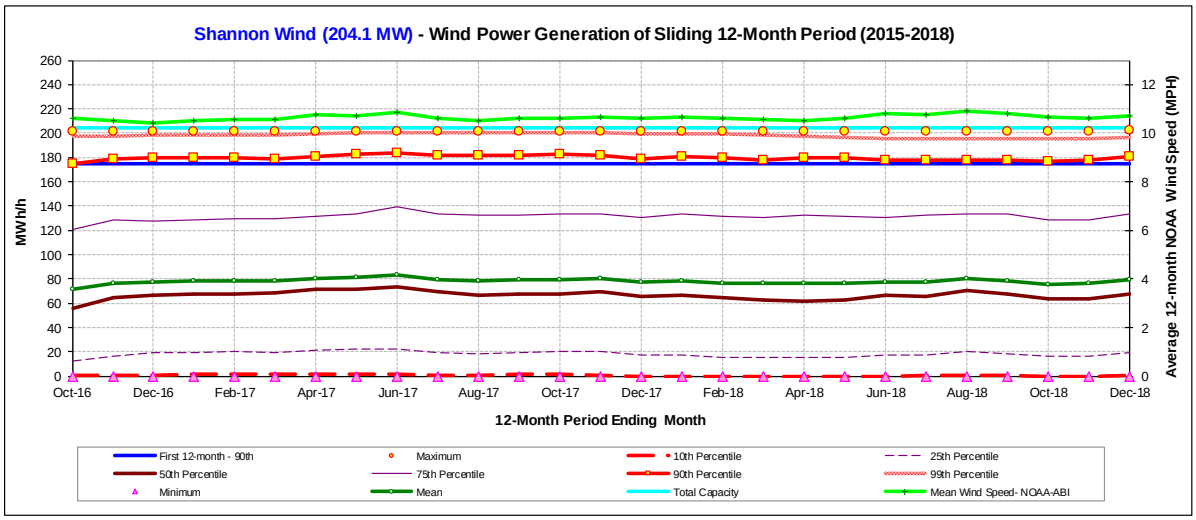


Figure B-92: Sliding 12-month Hourly Wind Power Generation for Shannon Wind

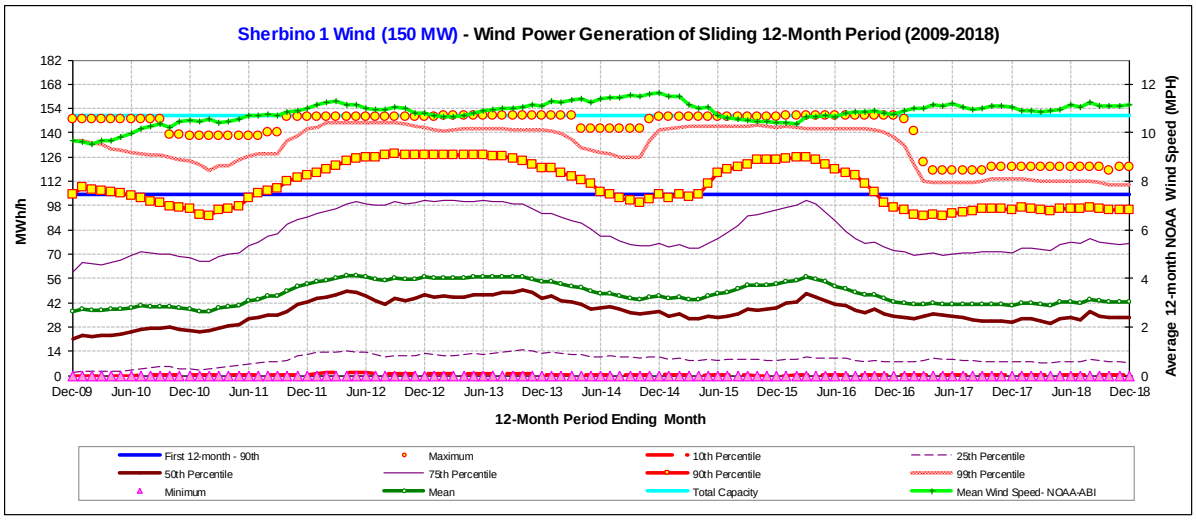


Figure B-93: Sliding 12-month Hourly Wind Power Generation for Sherbino 1 Wind

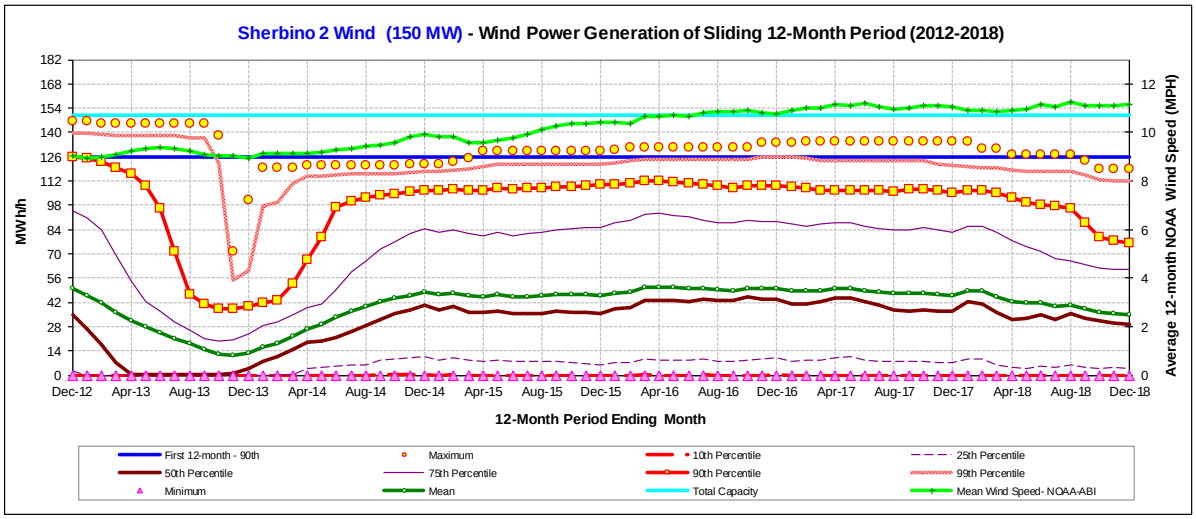


Figure B-94: Sliding 12-month Hourly Wind Power Generation for Sherbino 2 Wind

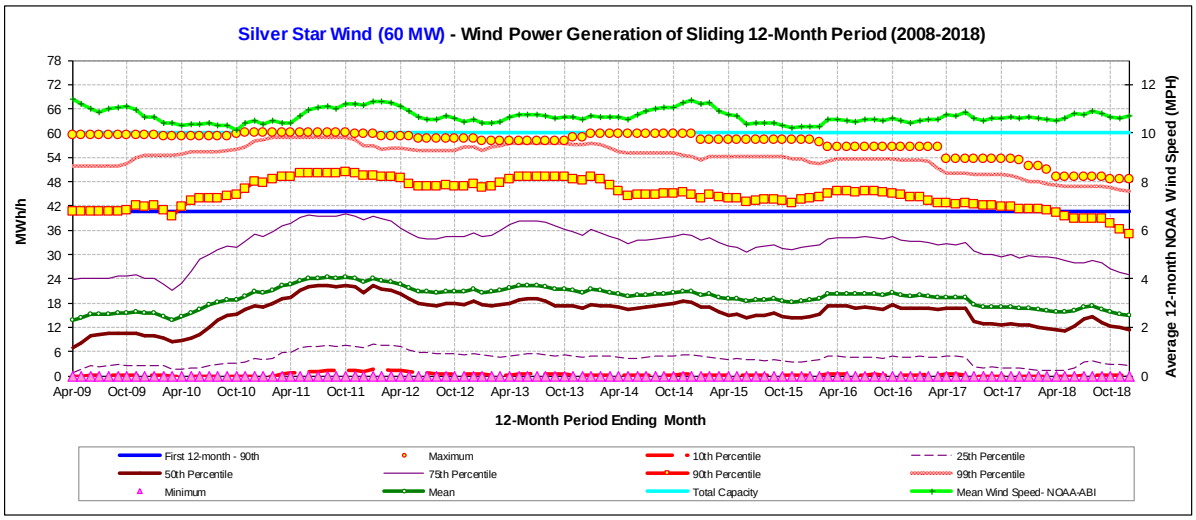


Figure B-95: Sliding 12-month Hourly Wind Power Generation for Silver Star Wind

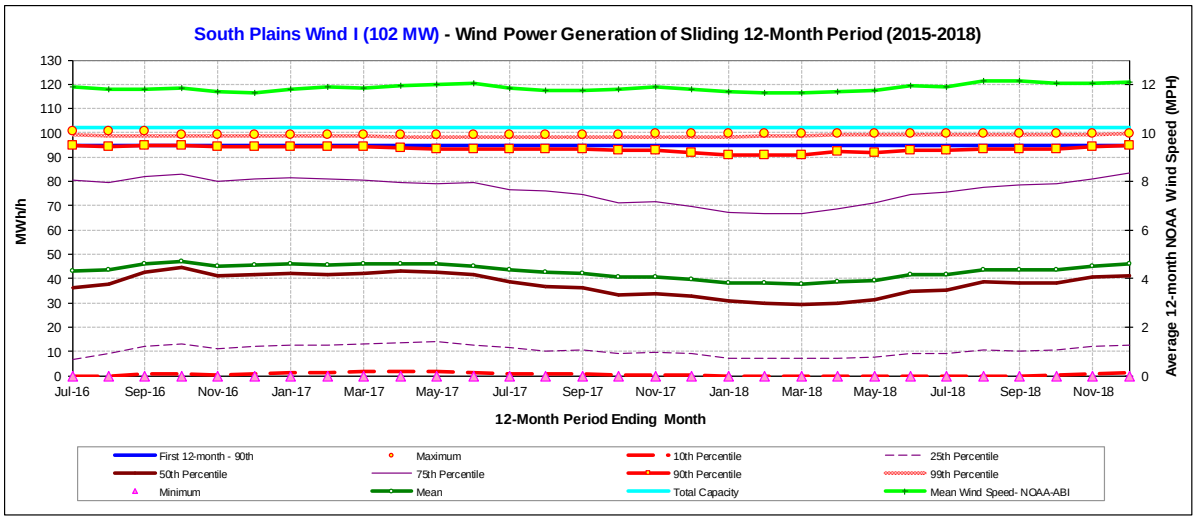


Figure B-96: Sliding 12-month Hourly Wind Power Generation for South Plains Wind I

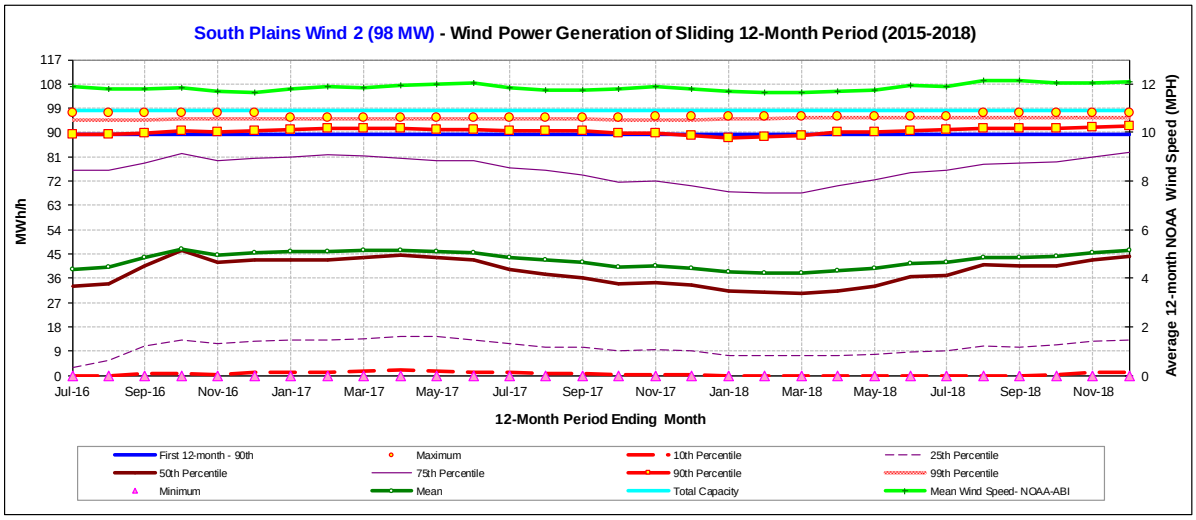


Figure B-97: Sliding 12-month Hourly Wind Power Generation for South Plains Wind 2

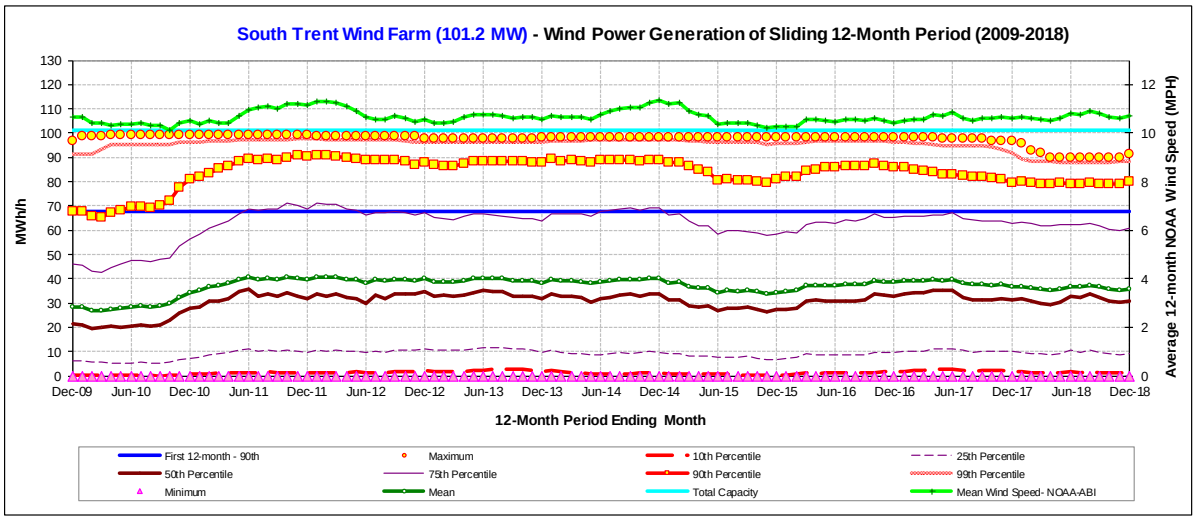


Figure B-98: Sliding 12-month Hourly Wind Power Generation for South Trent Wind

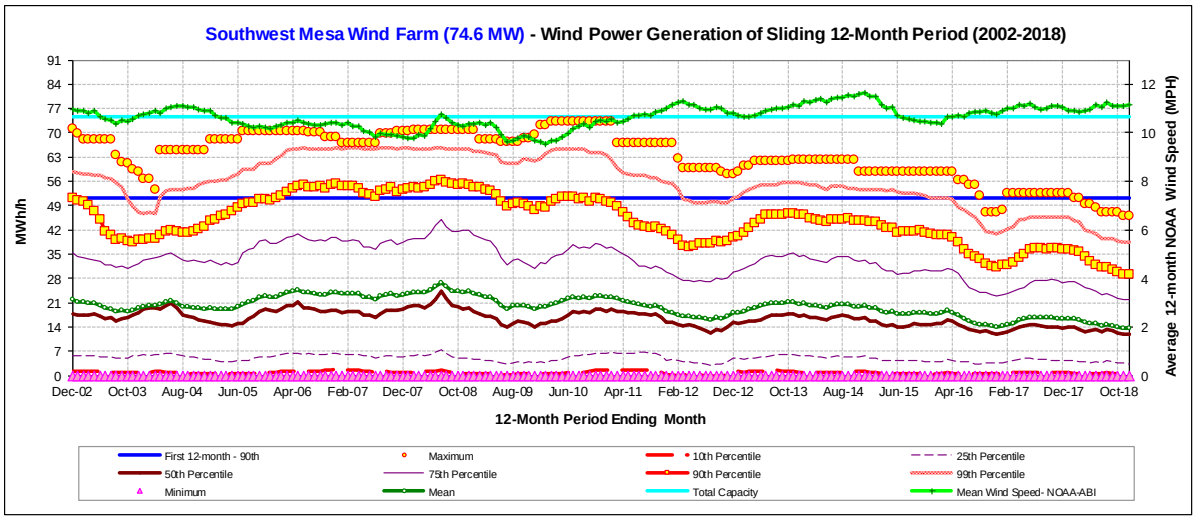


Figure B-99: Sliding 12-month Hourly Wind Power Generation for Southwest Mesa Wind

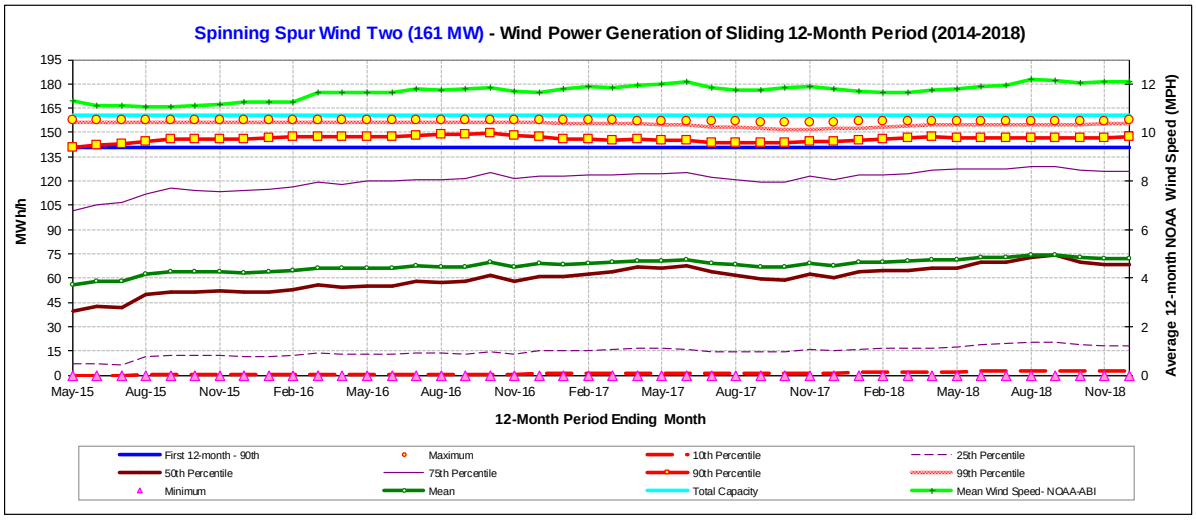


Figure B-100: Sliding 12-month Hourly Wind Power Generation for Spinning Spur Wind Two

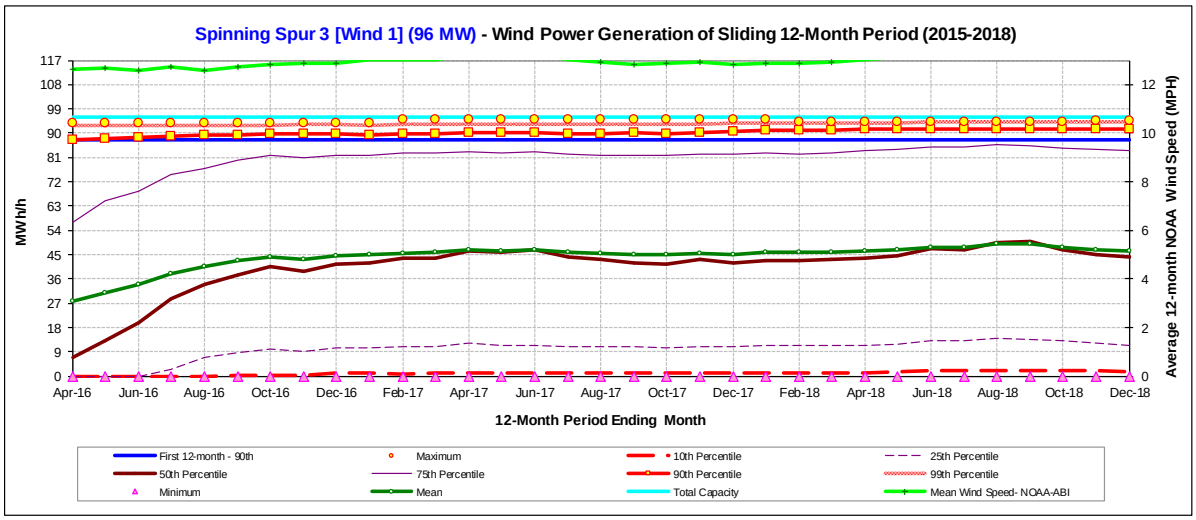


Figure B-101: Sliding 12-month Hourly Wind Power Generation for Spinning Spur 3 [Wind 1]

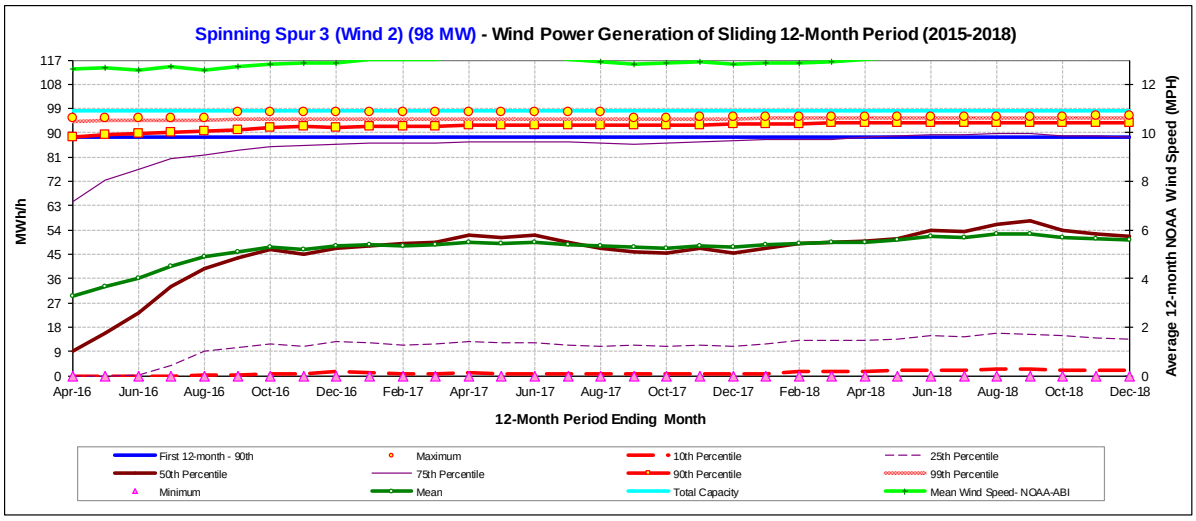


Figure B-102: Sliding 12-month Hourly Wind Power Generation for Spinning Spur 3 [Wind 2]

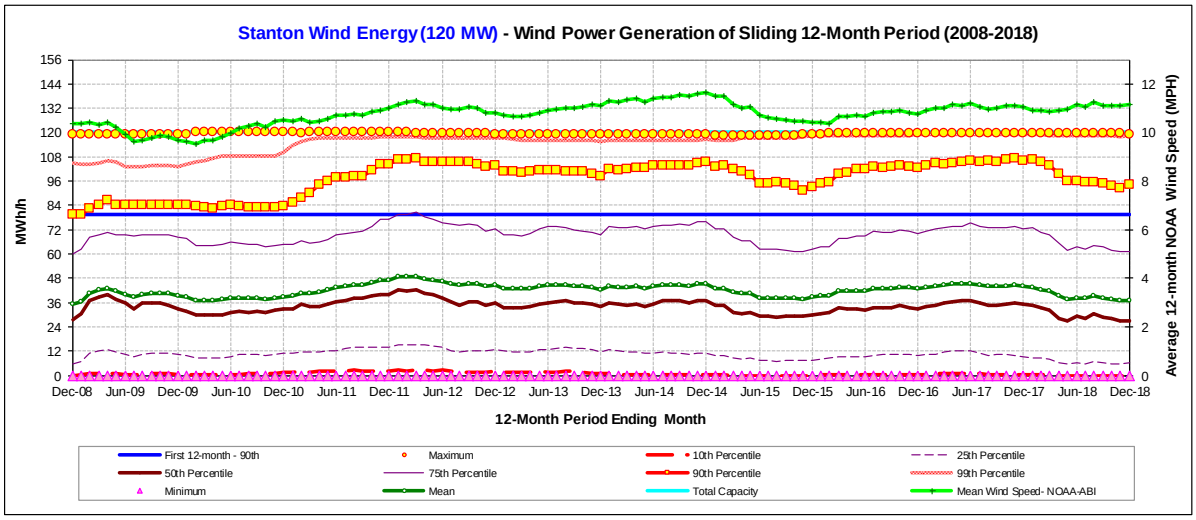


Figure B-103: Sliding 12-month Hourly Wind Power Generation for Stanton Wind Energy

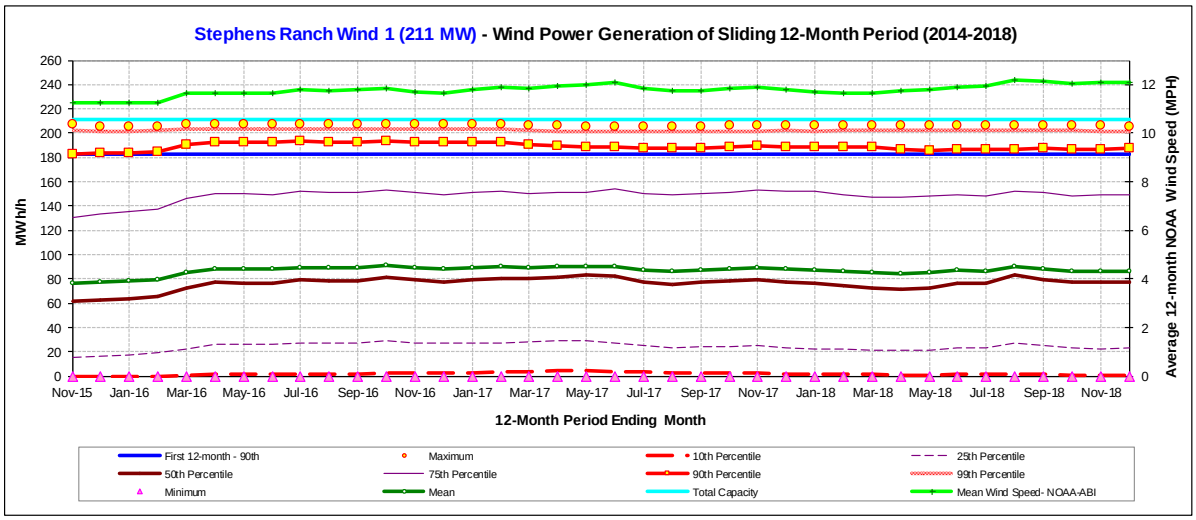


Figure B-104: Sliding 12-month Hourly Wind Power Generation for Stephens Ranch Wind 1

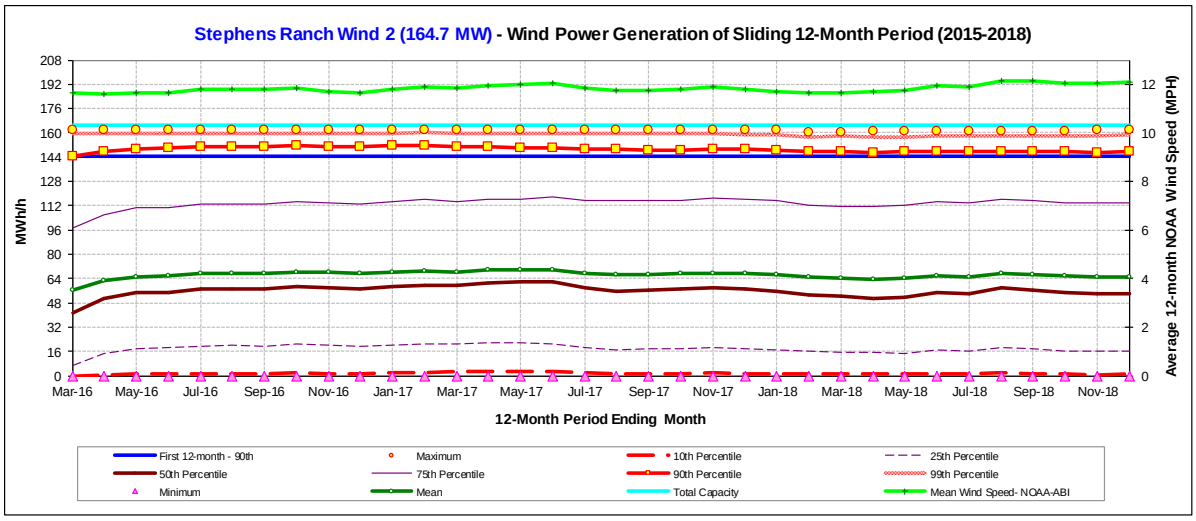


Figure B-105: Sliding 12-month Hourly Wind Power Generation for Stephens Ranch Wind 2

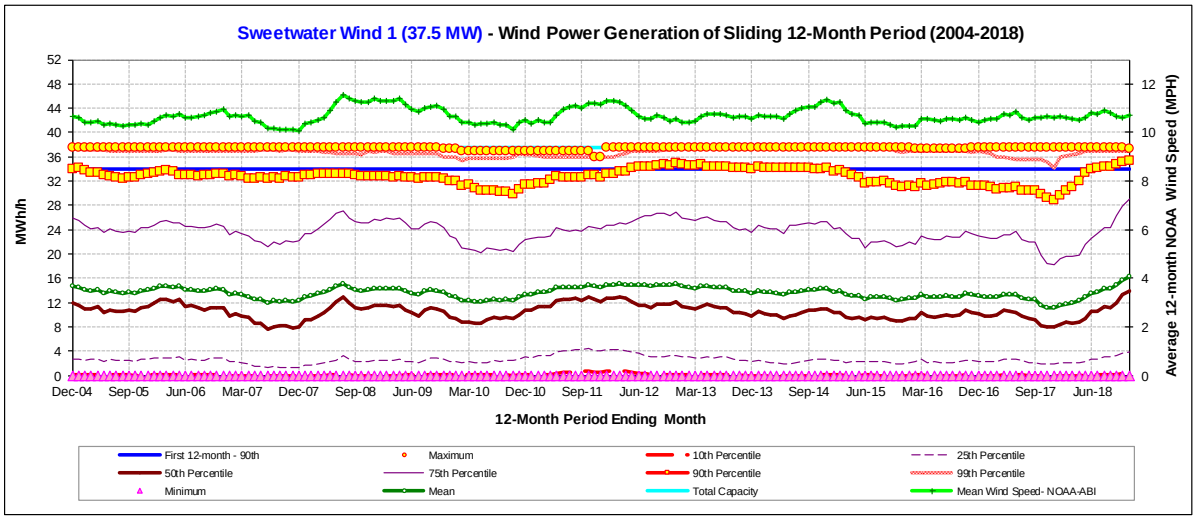


Figure B-106: Sliding 12-month Hourly Wind Power Generation for Sweetwater Wind 1

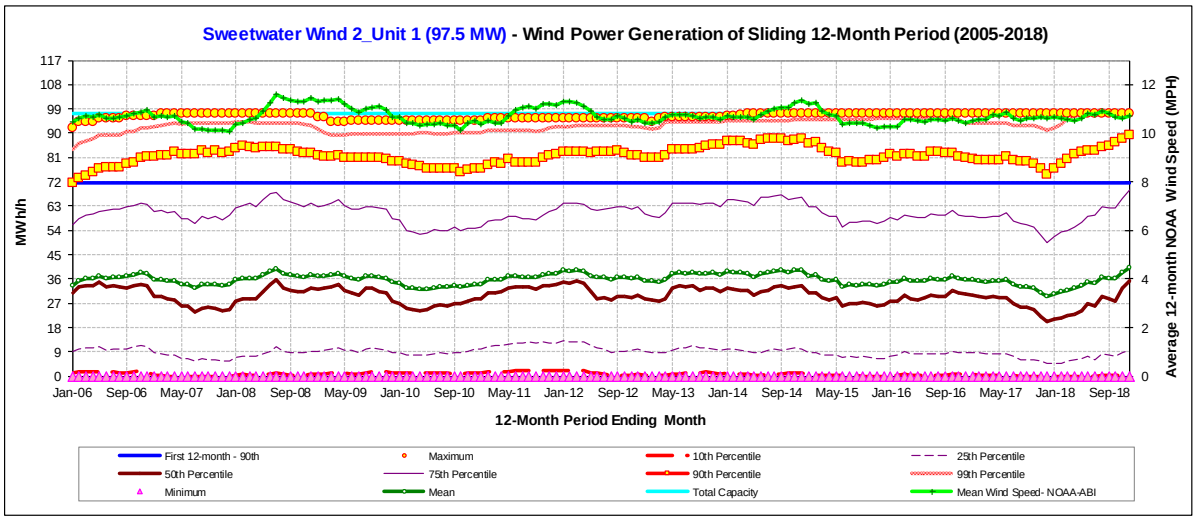


Figure B-107: Sliding 12-month Hourly Wind Power Generation for Sweetwater Wind 2 (Unit 1)

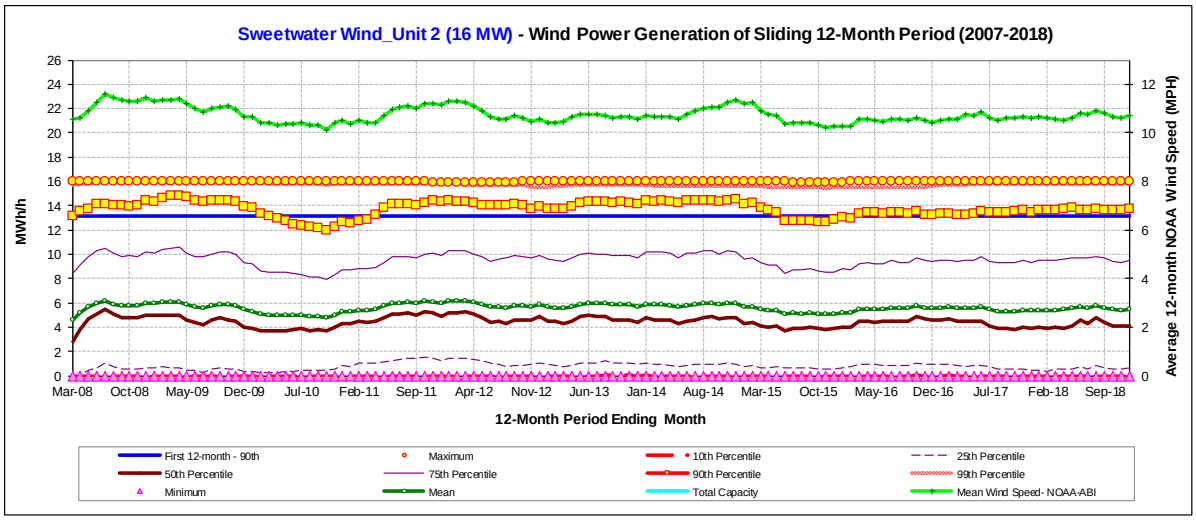


Figure B-108: Sliding 12-month Hourly Wind Power Generation for Sweetwater Wind 2 (Unit 2)

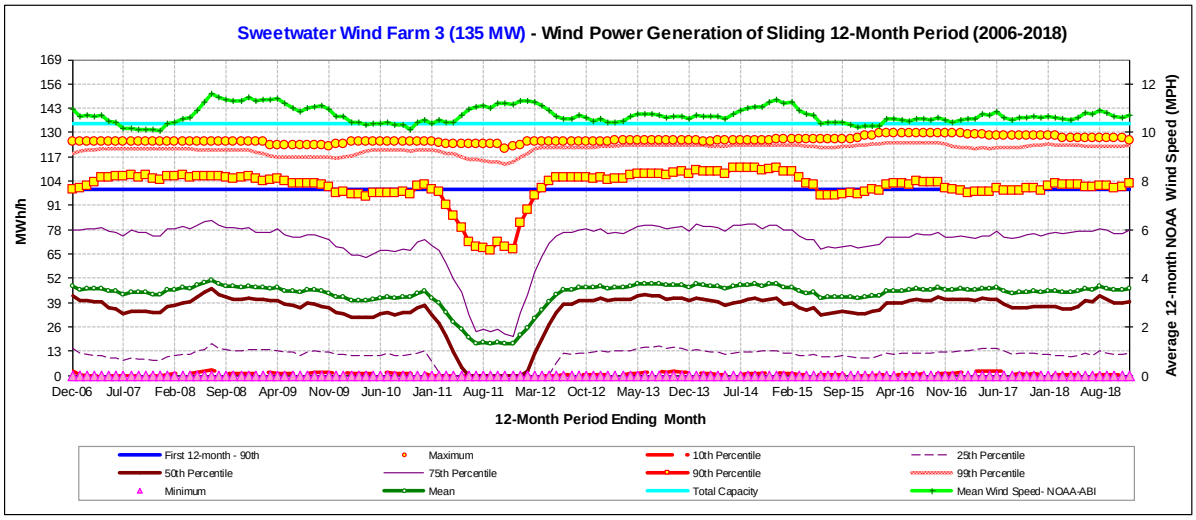


Figure B-109: Sliding 12-month Hourly Wind Power Generation for Sweetwater Wind 3

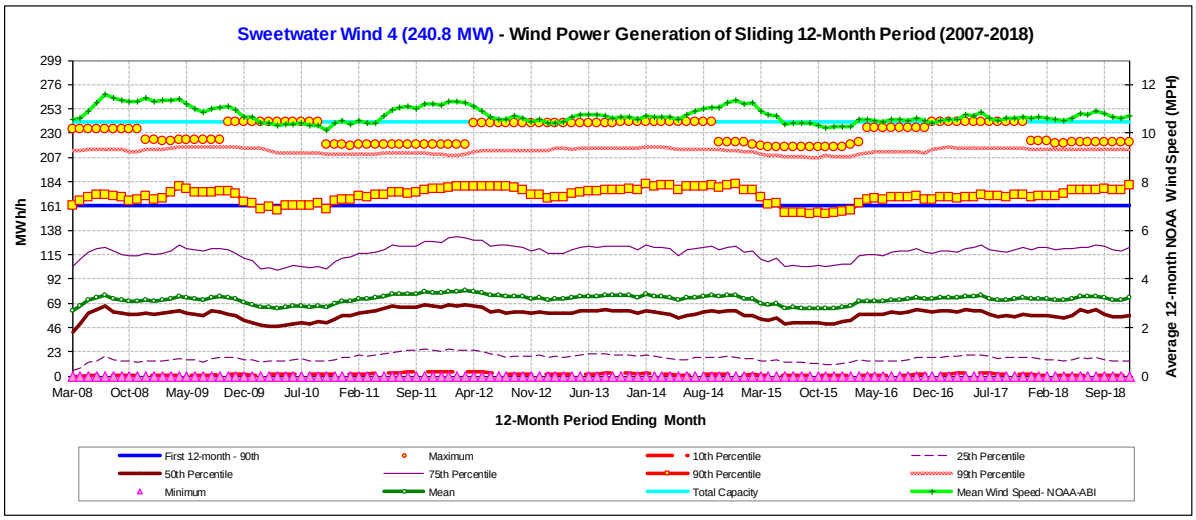


Figure B-110: Sliding 12-month Hourly Wind Power Generation for Sweetwater Wind 4

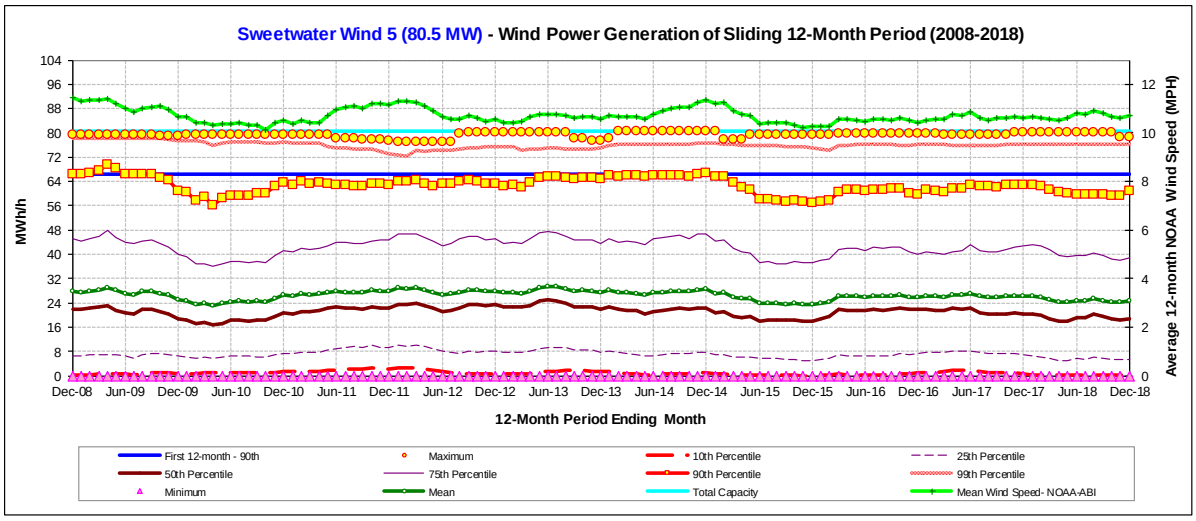


Figure B-111: Sliding 12-month Hourly Wind Power Generation for Sweetwater Wind 5

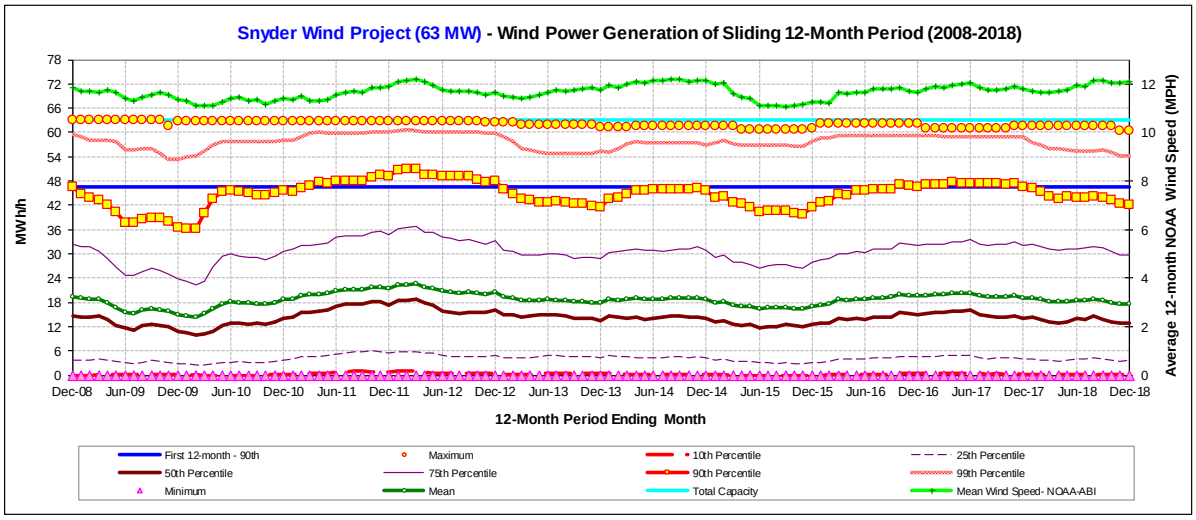


Figure B-112: Sliding 12-month Hourly Wind Power Generation for Snyder Wind Project

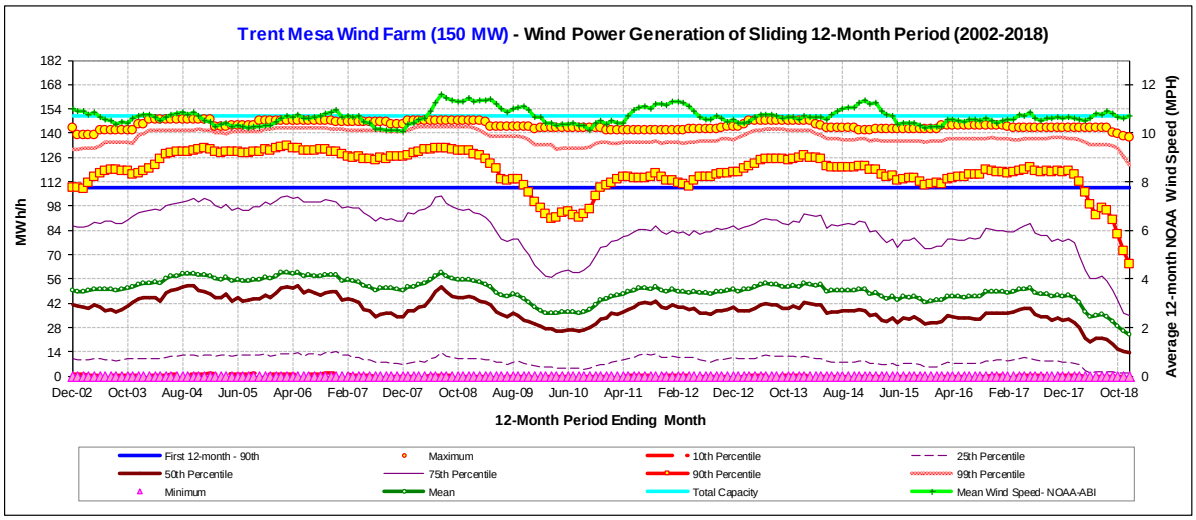


Figure B-113: Sliding 12-month Hourly Wind Power Generation for Trent Mesa Wind

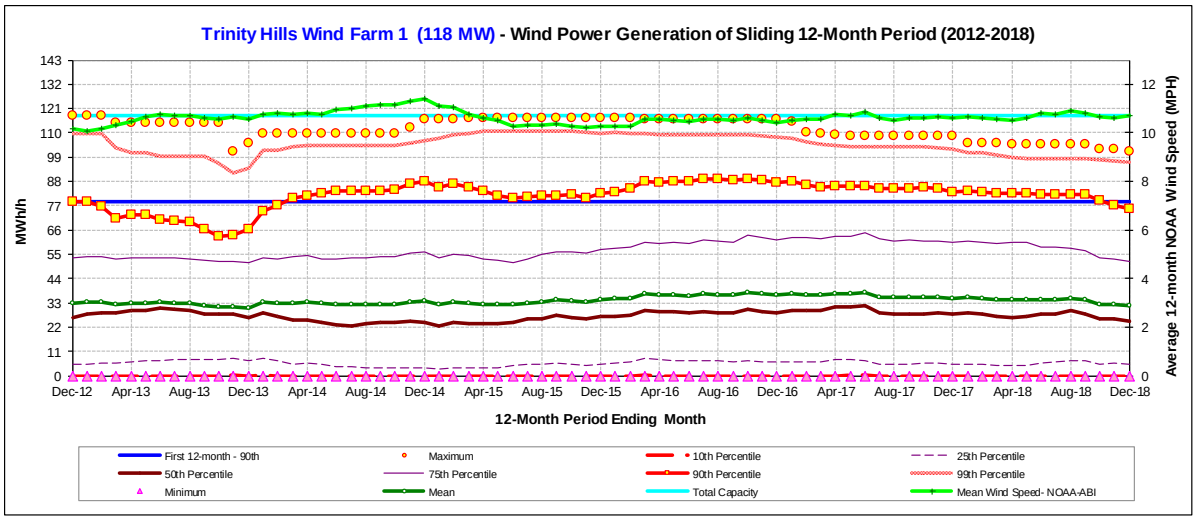


Figure B-114: Sliding 12-month Hourly Wind Power Generation for Trinity Hills Wind Farm 1

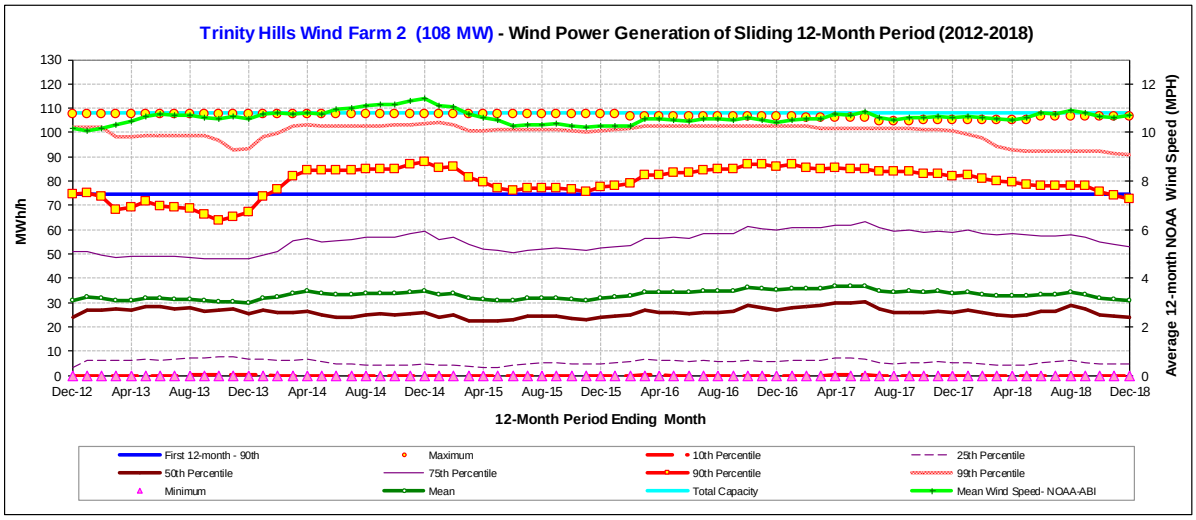


Figure B-115: Sliding 12-month Hourly Wind Power Generation for Trinity Hills Wind Farm 2

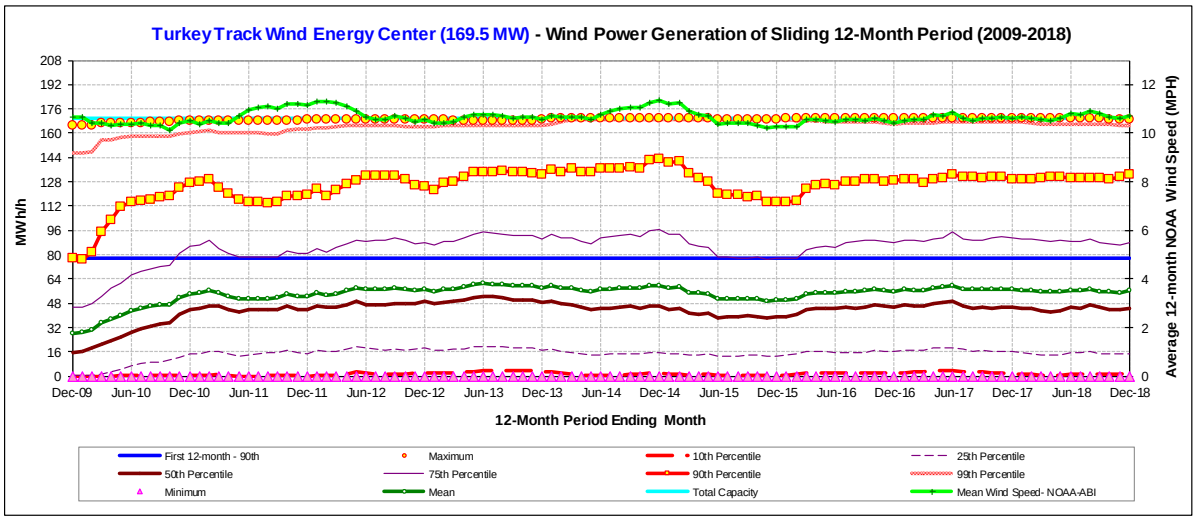


Figure B-116: Sliding 12-month Hourly Wind Power Generation for Turkey Track Wind Energy Center

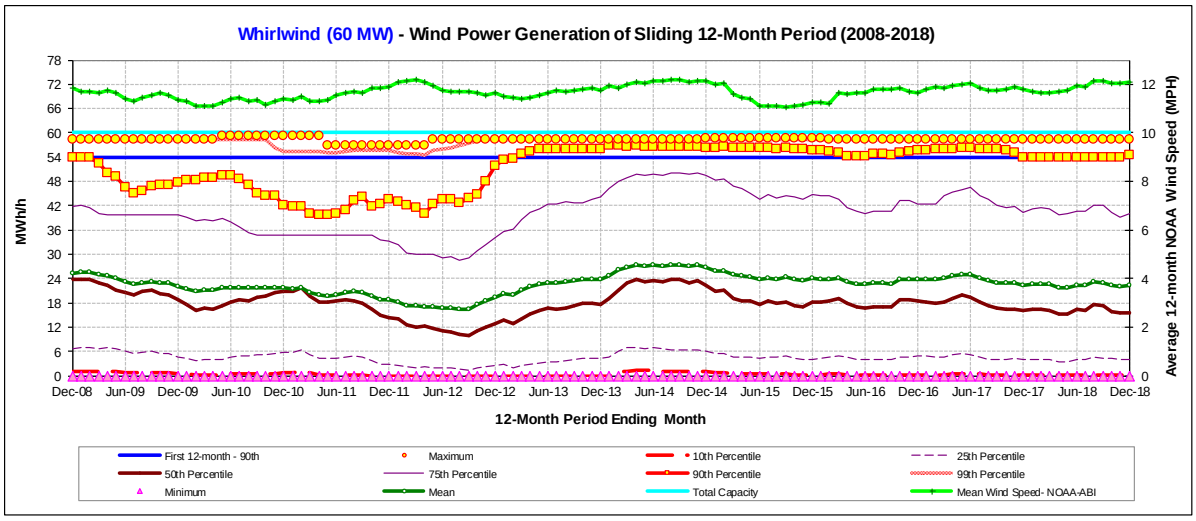


Figure B-117: Sliding 12-month Hourly Wind Power Generation for Whirlwind Wind

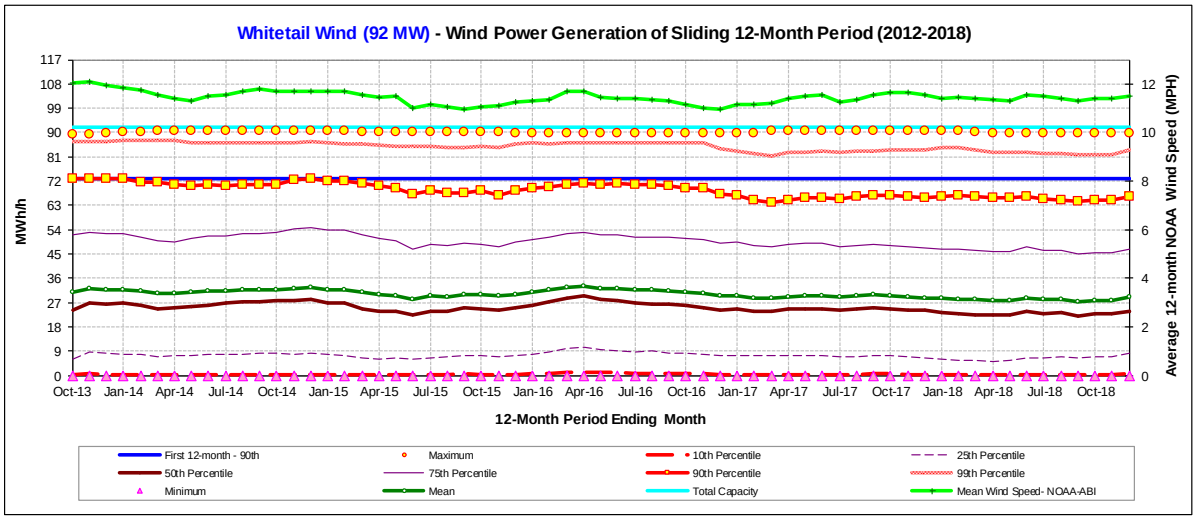


Figure B-118: Sliding 12-month Hourly Wind Power Generation for Whitetail Wind

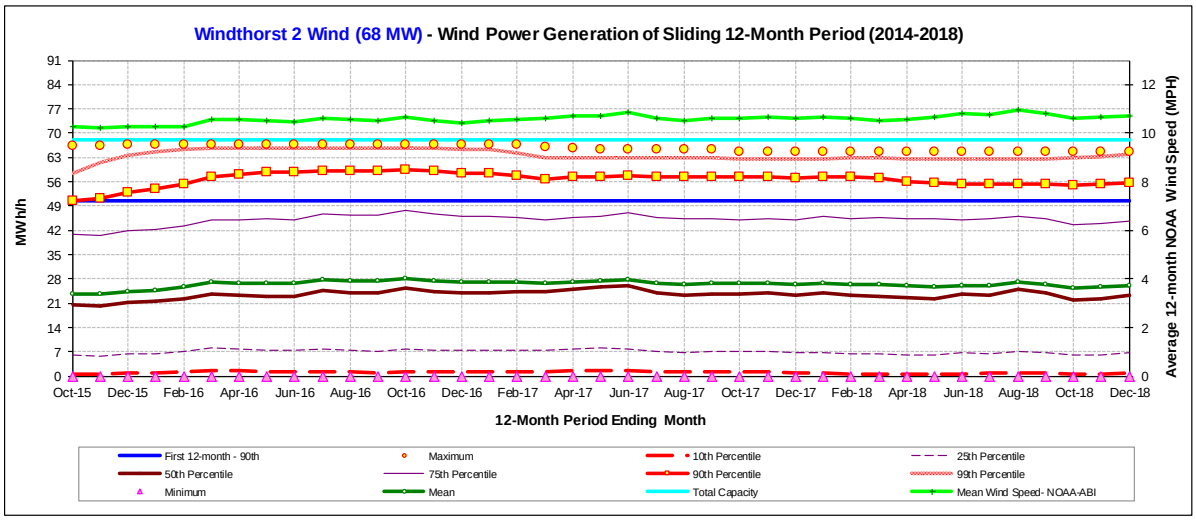


Figure B-119: Sliding 12-month Hourly Wind Power Generation for Windthorst 2 Wind

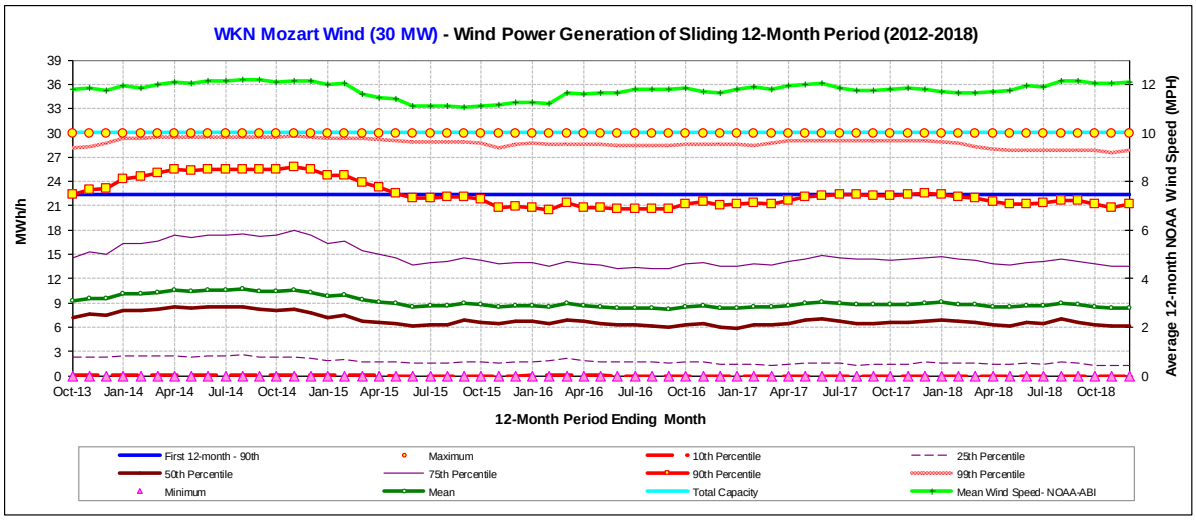


Figure B-120: Sliding 12-month Hourly Wind Power Generation for WKN Mozart Wind

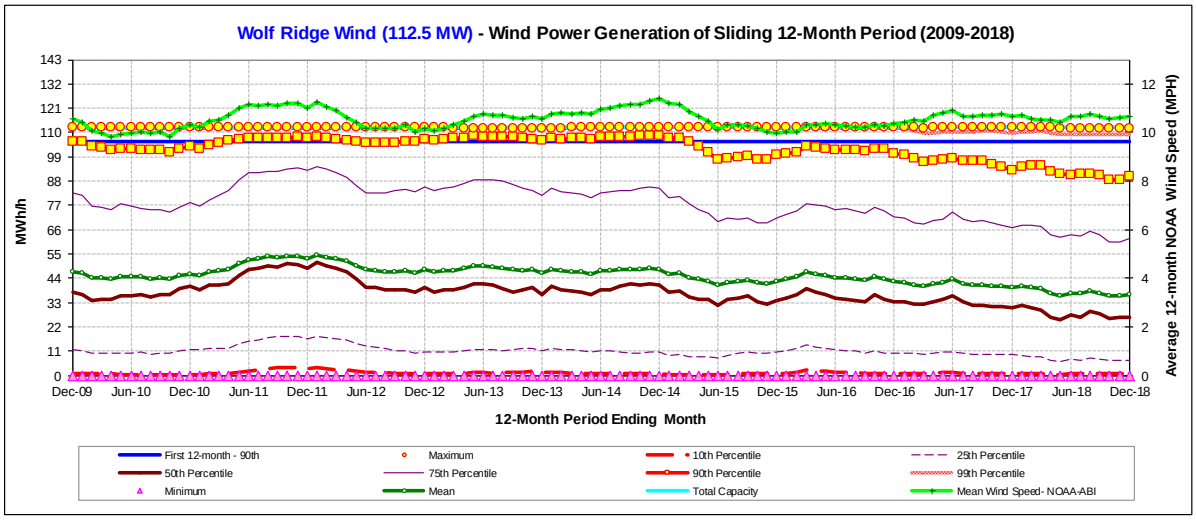


Figure B-121: Sliding 12-month Hourly Wind Power Generation for Wolf Ridge Wind

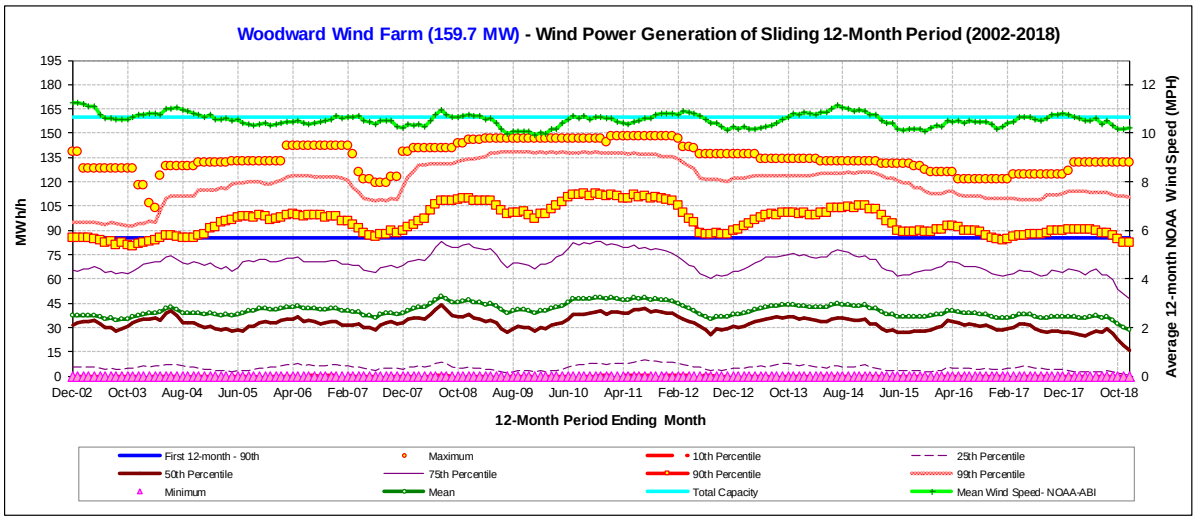


Figure B-122: Sliding 12-month Hourly Wind Power Generation for Woodward Mountain Ranch

APPENDIX C Electricity Generation Profile for Solar Photovoltaic Projects

The electricity generations for Biomass projects are discussed in sections C.1 to C.41. The hourly and daily total electricity generation profile for solar photovoltaic projects are shown for each project in Figure C-1 to Figure C-82.

C.1 ACACIA_UNIT_1

The power plant was in operation throughout the year. Figure C-1 shows the hourly electricity generation profile and Figure C-2 shows the daily total generation profile for the year 2018.

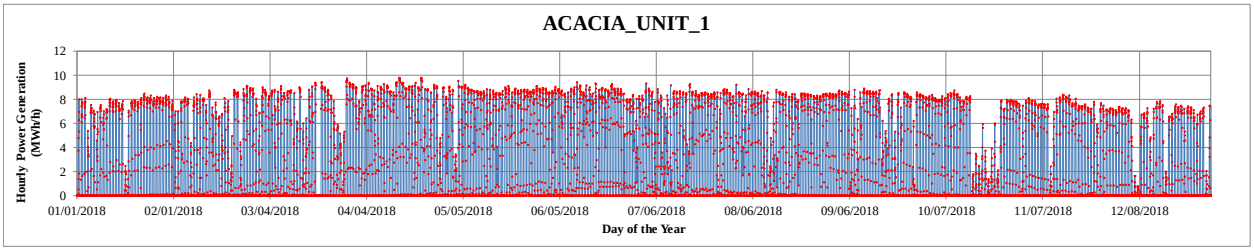


Figure C-1: Hourly Electricity Generation Profile for Solar Photovoltaic Project ACACIA_UNIT_1

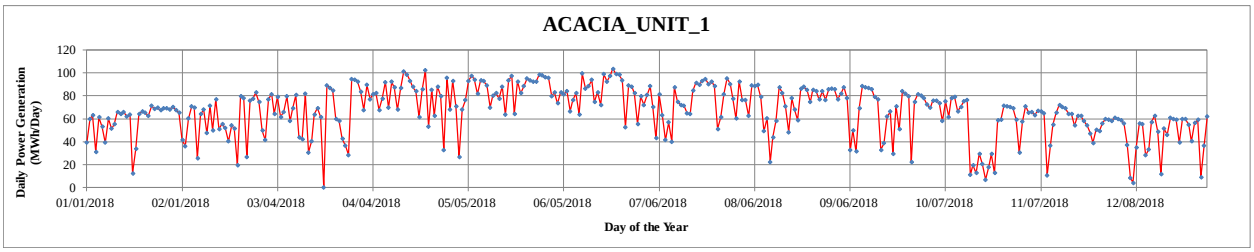


Figure C-2: Daily Total Electricity Generation Profile for Solar Photovoltaic Project ACACIA_UNIT_1

C.2 BOOTLEG_UNIT1

The power plant was in operation throughout the year. Figure C-3 shows the hourly electricity generation profile and Figure C-4 shows the daily total generation profile for the year 2018.

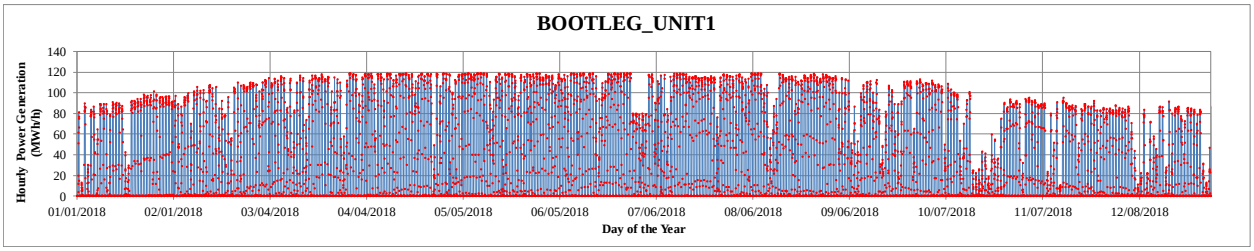


Figure C-3: Hourly Electricity Generation Profile for Solar Photovoltaic Project BOOTLEG_UNIT1

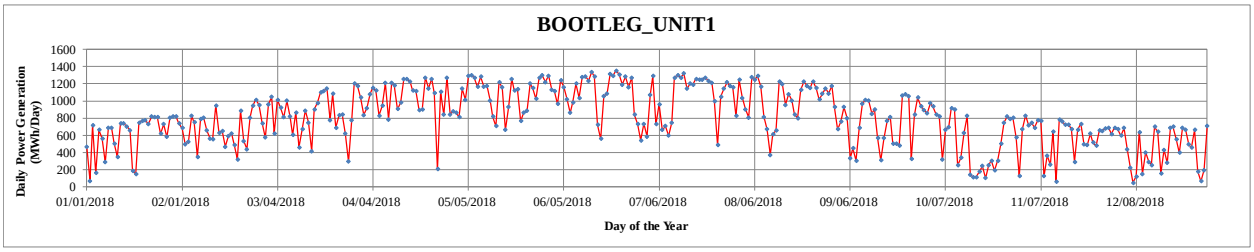


Figure C-4: Daily Total Electricity Generation Profile for Solar Photovoltaic Project BOOTLEG_UNIT1

C.3 CASL_GAP_UNIT1

The power plant was newly installed in 2018. There were no power generation data during the period from January 1st to March 17th. Figure C-5 shows the hourly electricity generation profile and Figure C-6 shows the daily total generation profile for the year 2018.

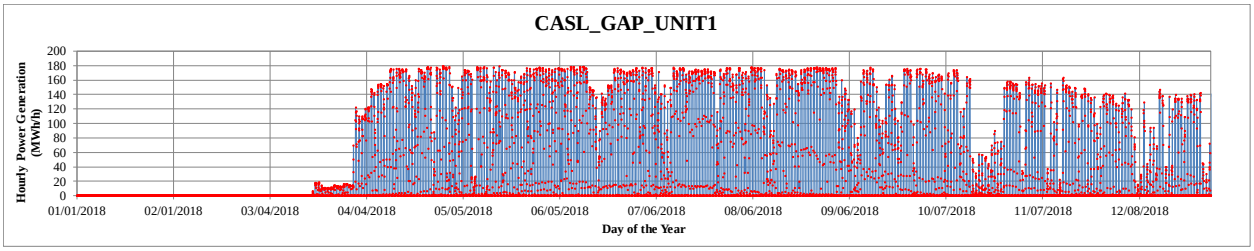


Figure C-5: Hourly Electricity Generation Profile for Solar Photovoltaic Project CASL_GAP_UNIT1

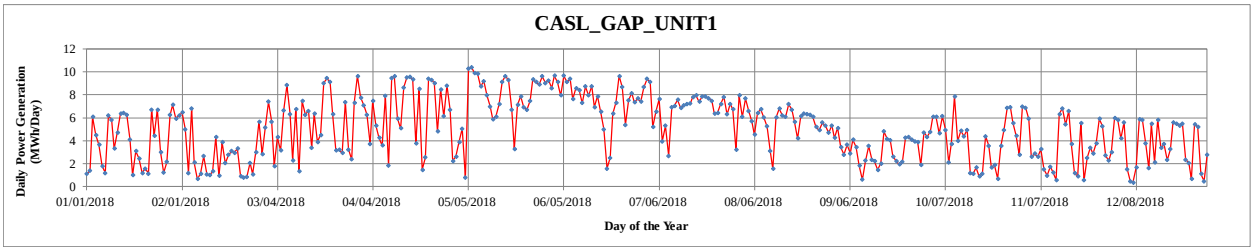


Figure C-6: Daily Total Electricity Generation Profile for Solar Photovoltaic Project CASL_GAP_UNIT1

C.4 CECSOLAR_DG_BECK1

The power plant was in operation throughout the year. Figure C-7 shows the hourly electricity generation profile and Figure C-8 shows the daily total generation profile for the year 2018.

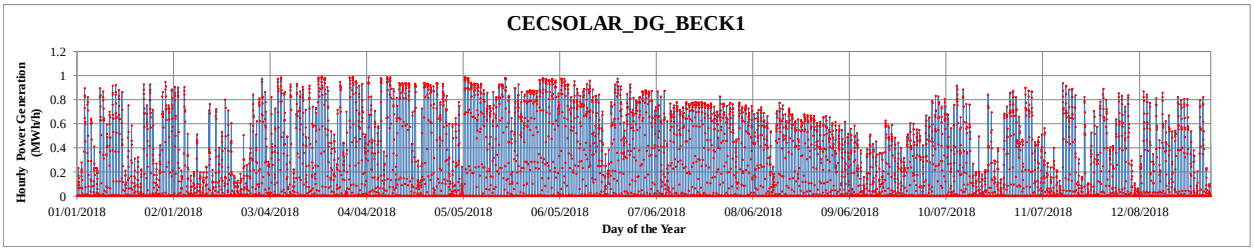


Figure C-7: Hourly Electricity Generation Profile for Solar Photovoltaic Project CECSOLAR_DG_BECK1

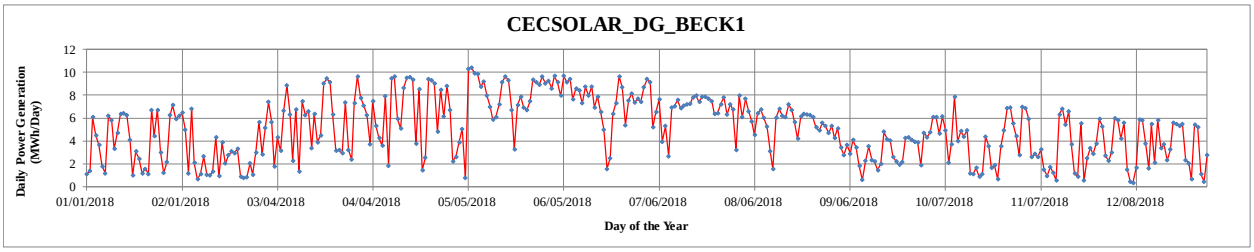


Figure C-8: Daily Total Electricity Generation Profile for Solar Photovoltaic Project CECSOLAR_DG_BECK1

C.5 COSERVSS_CSS1

The power plant was in operation throughout the year. Figure C-9 shows the hourly electricity generation profile and Figure C-10 shows the daily total generation profile for the year 2018.

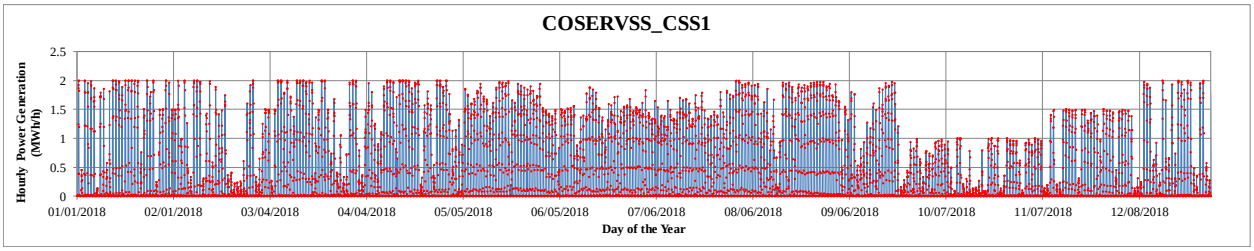


Figure C-9: Hourly Electricity Generation Profile for Solar Photovoltaic Project COSERVSS_CSS1

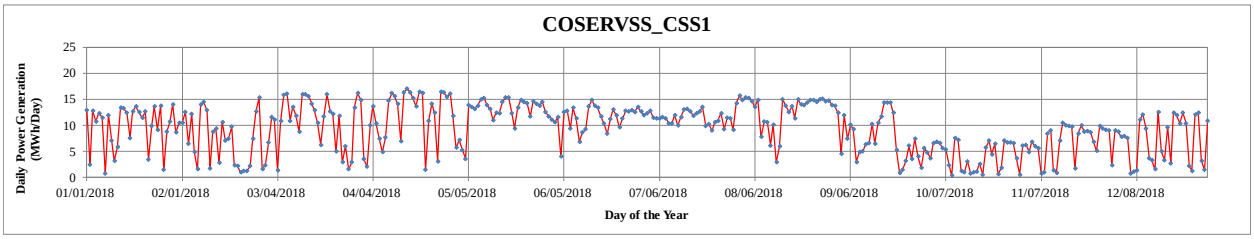


Figure C-10: Daily Total Electricity Generation Profile for Solar Photovoltaic Project COSERVSS_CSS1

C.6 DG_BROOK_1UNIT

The power plant was in operation throughout the year. Figure C-11 shows the hourly electricity generation profile and Figure C-12 shows the daily total generation profile for the year 2018.

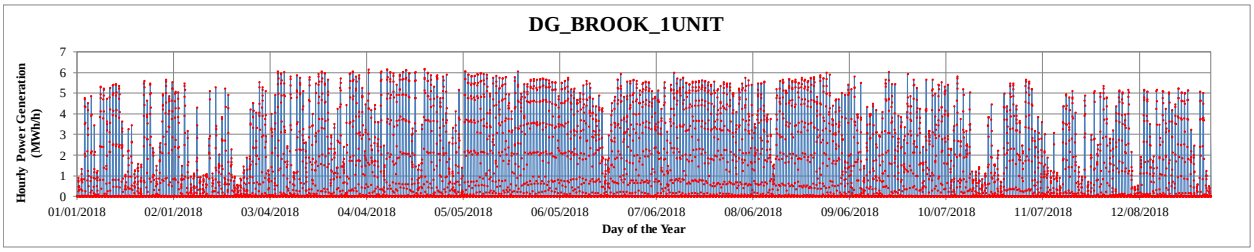


Figure C-11: Hourly Electricity Generation Profile for Solar Photovoltaic Project DG_BROOK_1UNIT

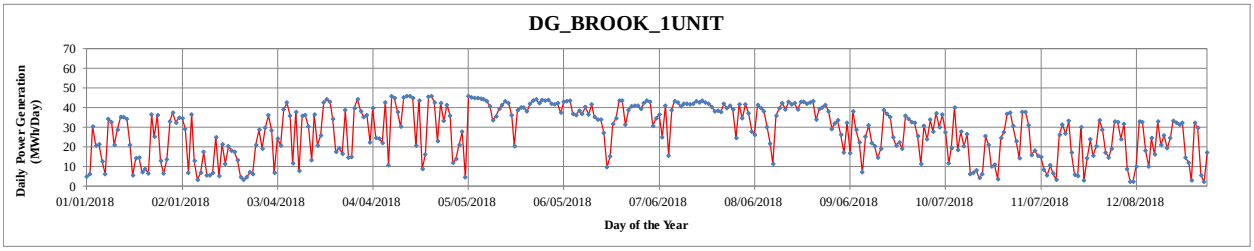


Figure C-12: Daily Total Electricity Generation Profile for Solar Photovoltaic Project DG_BROOK_1UNIT

C.7 DG_ELMEN_1UNIT

The power plant was in operation throughout the year. Figure C-13 shows the hourly electricity generation profile and Figure C-14 shows the daily total generation profile for the year 2018.

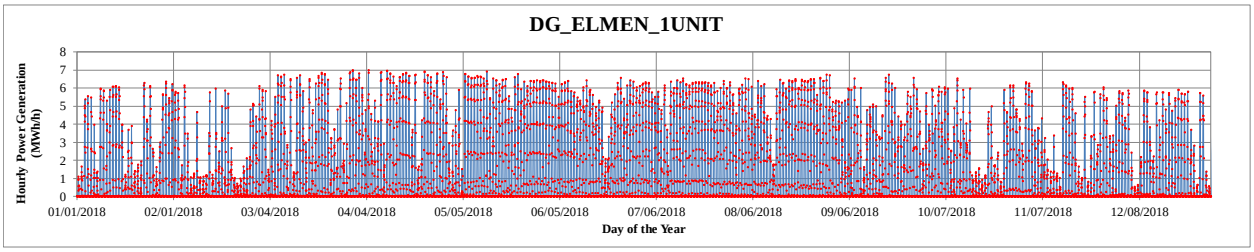


Figure C-13: Hourly Electricity Generation Profile for Solar Photovoltaic Project DG_ELMEN_1UNIT

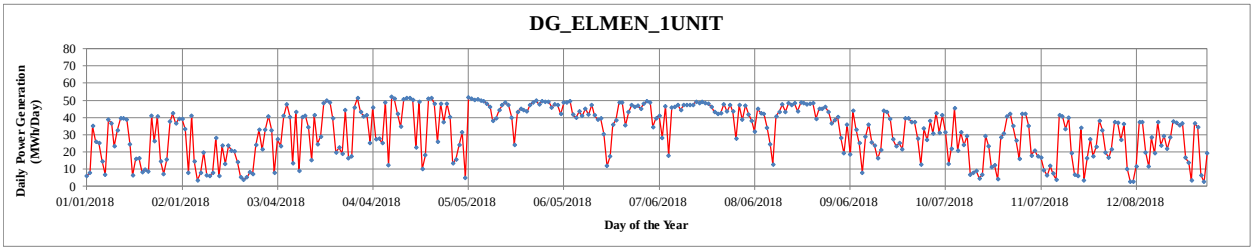


Figure C-14: Daily Total Electricity Generation Profile for Solar Photovoltaic Project DG_ELMEN_1UNIT

C.8 DG_SOME1_1UNIT

The power plant was in operation throughout the year. There was no power generation data during the period of February 23rd to March 1st. Figure C-15 shows the hourly electricity generation profile and Figure C-16 shows the daily total generation profile for the year 2018.

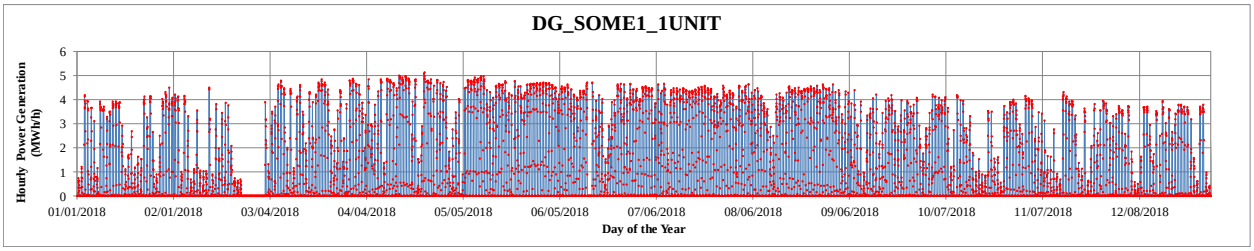


Figure C-15: Hourly Electricity Generation Profile for Solar Photovoltaic Project DG_SOME1_1UNIT

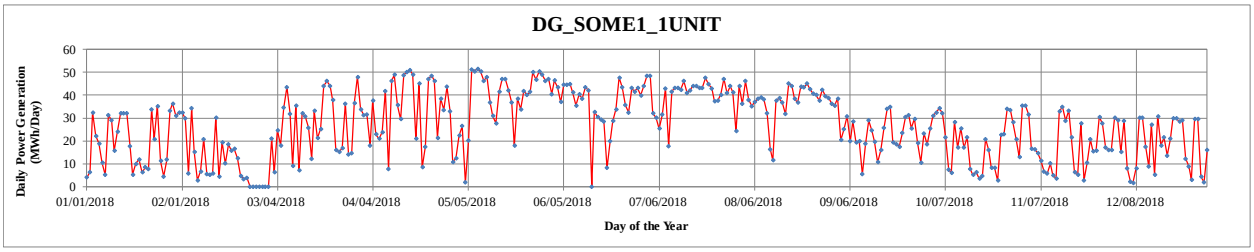


Figure C-16: Daily Total Electricity Generation Profile for Solar Photovoltaic Project DG_ SOME1_1UNIT

C.9 DG_SOME2_1UNIT

The power plant was in operation throughout the year. There was no power generation data during the period of February 23rd to March 1st. Figure C-17 shows the hourly electricity generation profile and Figure C-18 shows the daily total generation profile for the year 2018.

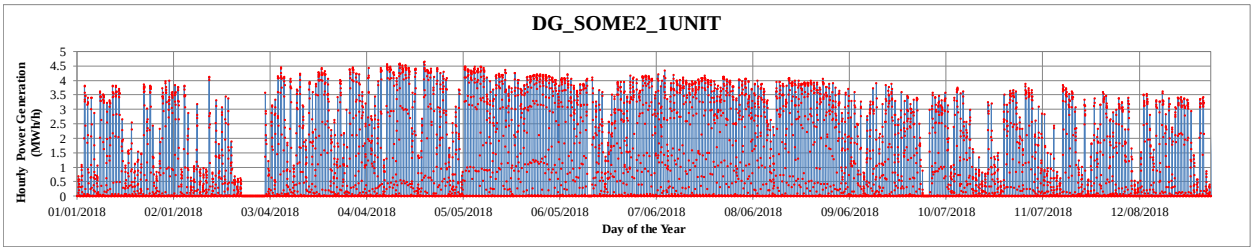


Figure C-17: Hourly Electricity Generation Profile for Solar Photovoltaic Project DG_SOME2_1UNIT

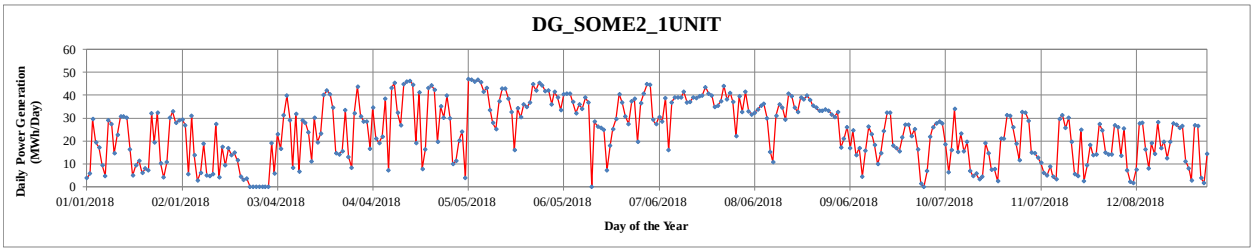


Figure C-18: Daily Total Electricity Generation Profile for Solar Photovoltaic Project DG_SOME2_1UNIT

C.10 DG_STHWG_UNIT1

The power plant was in operation throughout the year. Figure C-19 shows the hourly electricity generation profile and Figure C-20 shows the daily total generation profile for the year 2018.

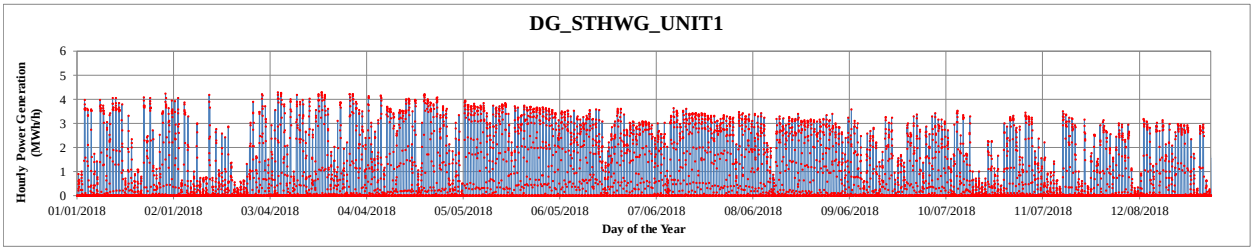


Figure C-19: Hourly Electricity Generation Profile for Solar Photovoltaic Project DG_STHWG_UNIT1

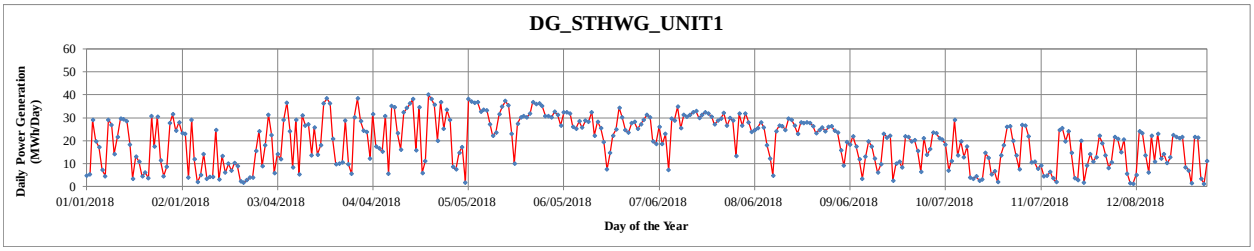


Figure C-20: Daily Total Electricity Generation Profile for Solar Photovoltaic Project DG_STHWG_UNIT1

C.11 DG_VALL1_1UNIT

The power plant was in operation throughout the year. Figure C-21 shows the hourly electricity generation profile and Figure C-22 shows the daily total generation profile for the year 2018.

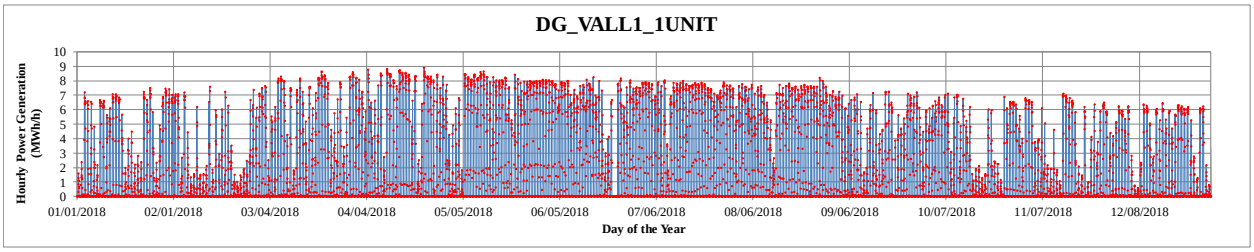


Figure C-21: Hourly Electricity Generation Profile for Solar Photovoltaic Project DG_VALL1_1UNIT

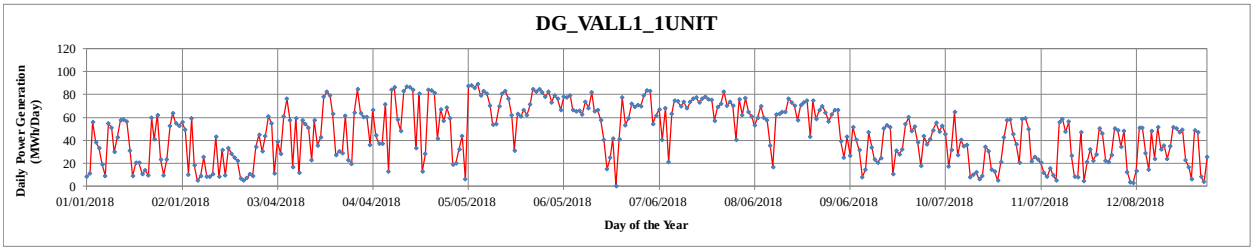


Figure C-22: Daily Total Electricity Generation Profile for Solar Photovoltaic Project DG_VALL1_1UNIT

C.12 DG_VALL2_1UNIT

The power plant was in operation throughout the year. Figure C-23 shows the hourly electricity generation profile and Figure C-24 shows the daily total generation profile for the year 2018.

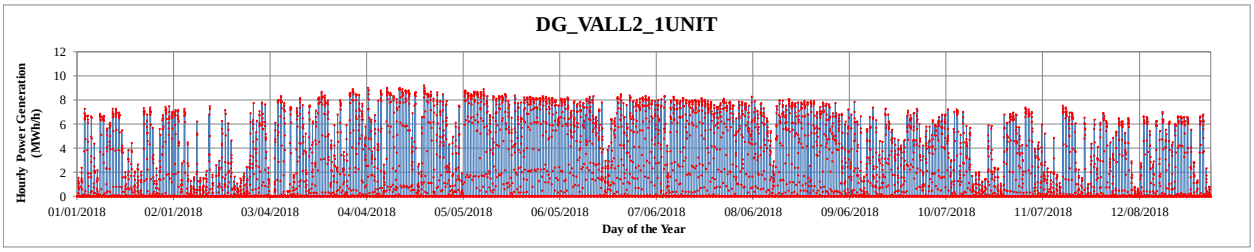


Figure C-23: Hourly Electricity Generation Profile for Solar Photovoltaic Project DG_VALL2_1UNIT

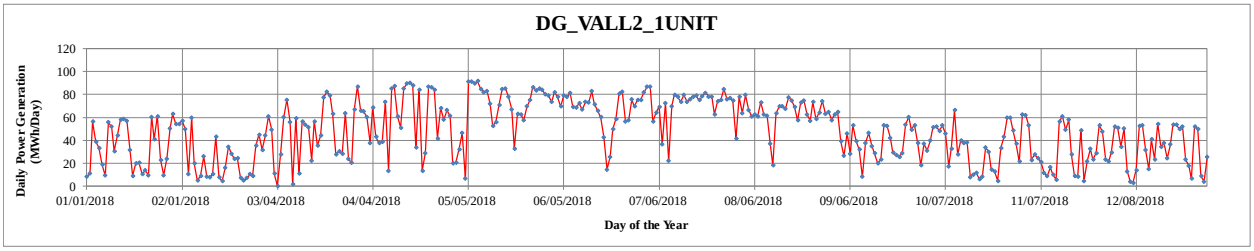


Figure C-24: Daily Total Electricity Generation Profile for Solar Photovoltaic Project DG_VALL2_1UNIT

C.13 DG_WALZM_UNIT1

The power plant was in operation throughout the year. Figure C-25 shows the hourly electricity generation profile and Figure C-26 shows the daily total generation profile for the year 2018.

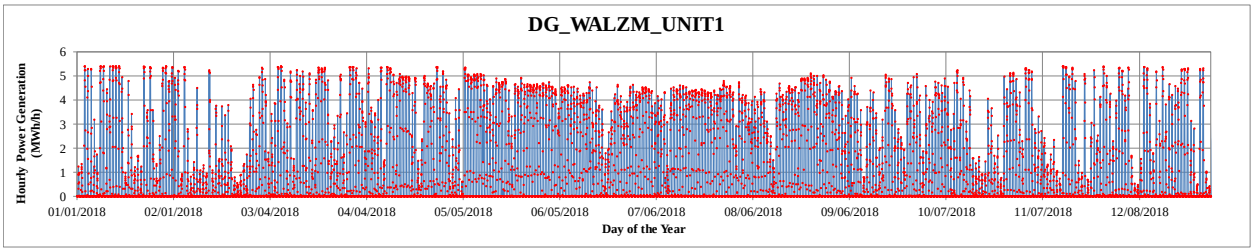


Figure C-25: Hourly Electricity Generation Profile for Solar Photovoltaic Project DG_WALZM_UNIT1

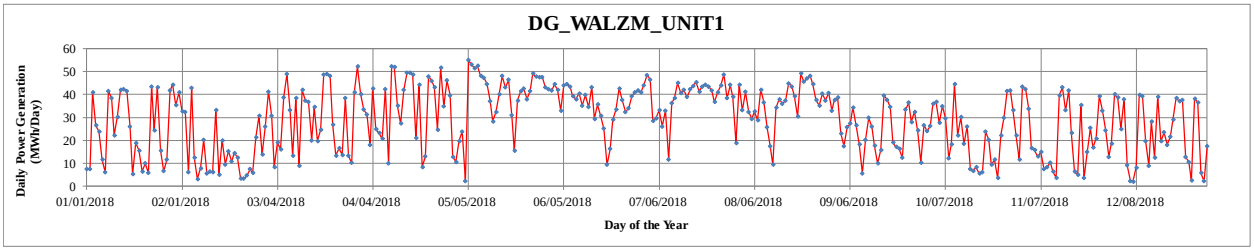


Figure C-26: Daily Total Electricity Generation Profile for Solar Photovoltaic Project DG_WALZM_UNIT1

C.14 DG_WHITNEY_SOLAR1

The power plant was in operation approximately second half of the year. There was no power generation data until June 17th. Figure C-27 shows the hourly electricity generation profile and Figure C-28 shows the daily total generation profile for the year 2018.

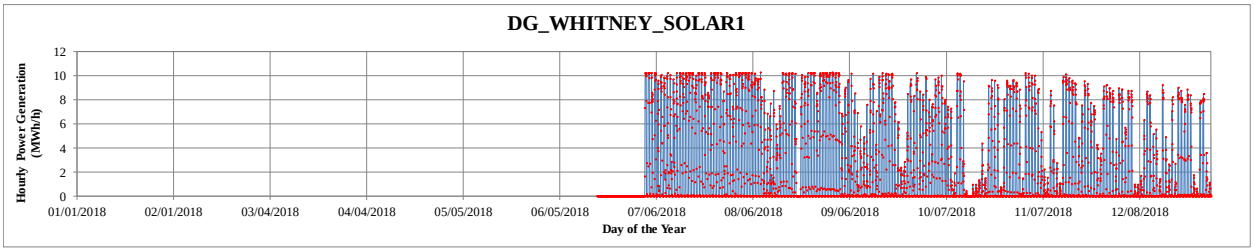


Figure C-27: Hourly Electricity Generation Profile for Solar Photovoltaic Project DG_WHITNEY_SOLAR1

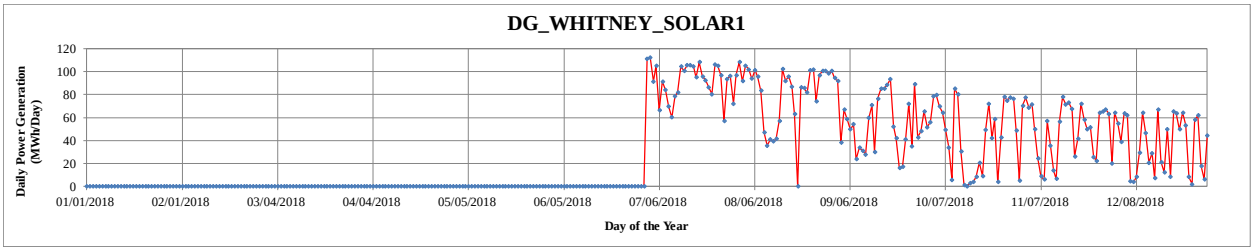


Figure C-28: Daily Total Electricity Generation Profile for Solar Photovoltaic Project DG_WHITNEY_SOLAR1

C.15 ECLIPSE_UNIT1

The power plant was in operation throughout the year. Figure C-29 shows the hourly electricity generation profile and Figure C-30 shows the daily total generation profile for the year 2018.

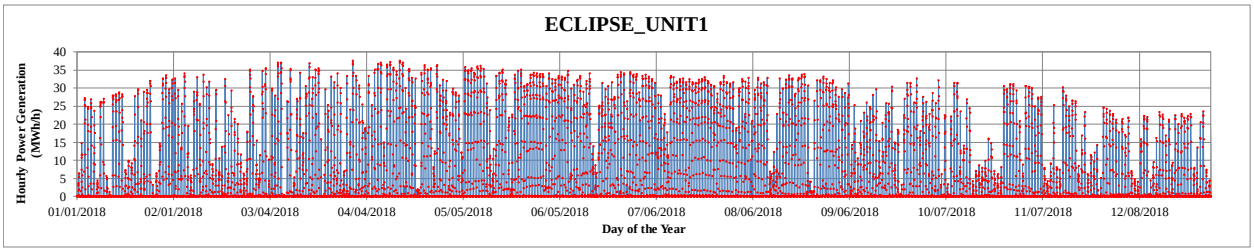


Figure C-29: Hourly Electricity Generation Profile for Solar Photovoltaic Project ECLIPSE_UNIT1

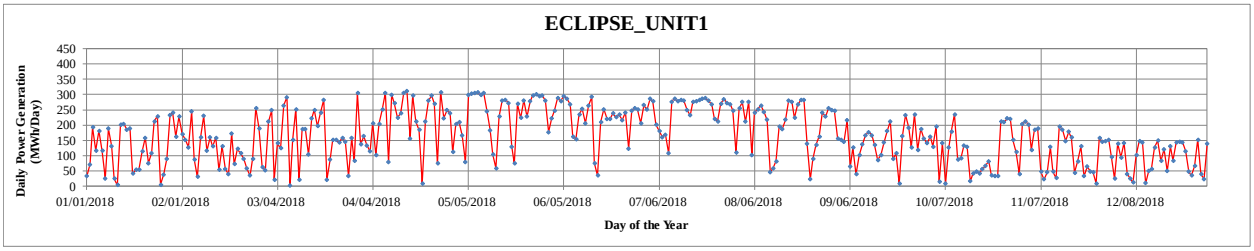


Figure C-30: Daily Total Electricity Generation Profile for Solar Photovoltaic Project ECLIPSE_UNIT1

C.16 FIFTHGS1_FGSOLAR1

The power plant was in operation throughout the year. There were no power generation data during the period March 17th to March 21st. Figure C-31 shows the hourly electricity generation profile and Figure C-32 shows the daily total generation profile for the year 2018.

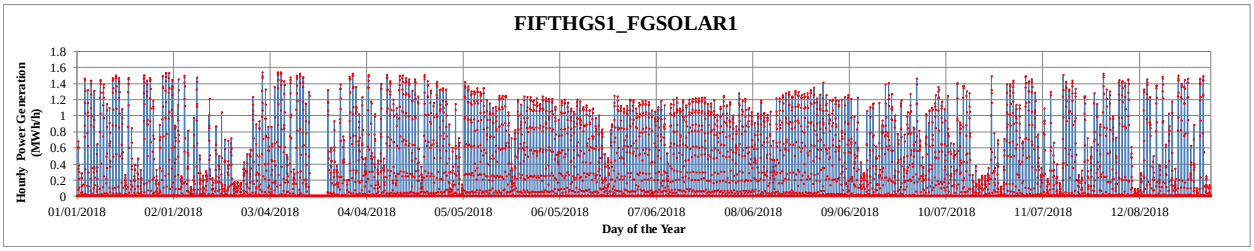


Figure C-31: Hourly Electricity Generation Profile for Solar Photovoltaic Project FIFTHGS1_FGSOLAR1

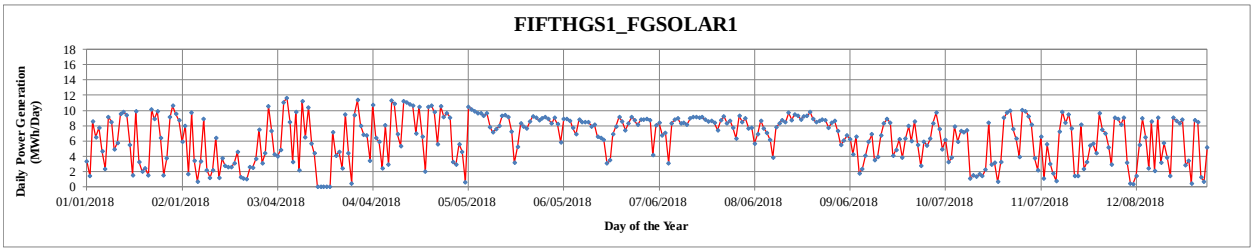


Figure C-32: Daily Total Electricity Generation Profile for Solar Photovoltaic Project FIFTHGS1_FGSOLAR1

C.17 HELIOS_UNIT1

The power plant was in operation throughout the year. Figure C-33 shows the hourly electricity generation profile and Figure C-34 shows the daily total generation profile for the year 2018.

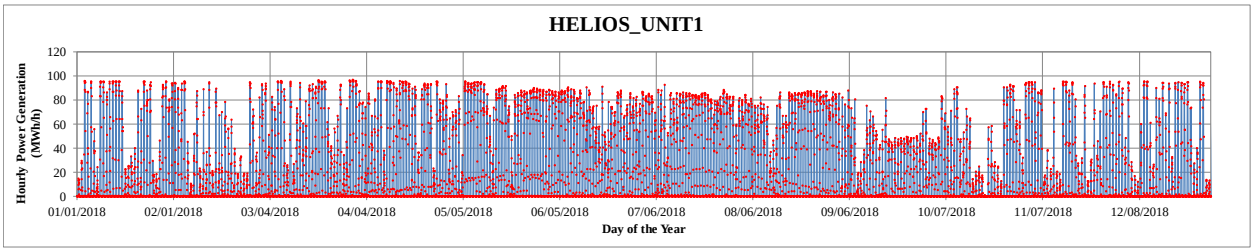


Figure C-33: Hourly Electricity Generation Profile for Solar Photovoltaic Project HELIOS_UNIT1

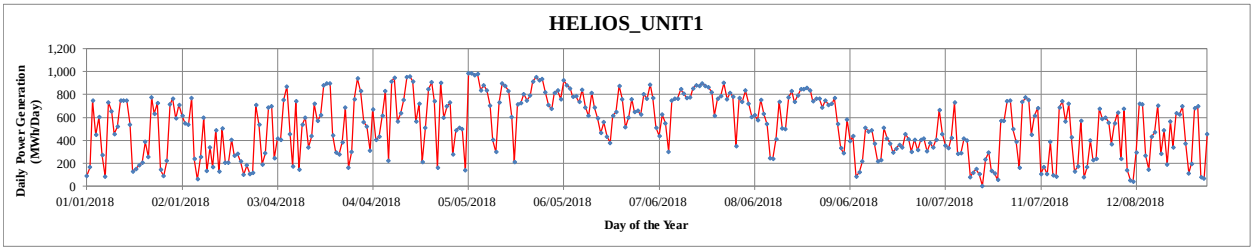


Figure C-34: Daily Total Electricity Generation Profile for Solar Photovoltaic Project HELIOS_UNIT1

C.18 HOVEY_UNIT1

The power plant was in operation throughout the year. Figure C-35 shows the hourly electricity generation profile and Figure C-36 shows the daily total generation profile for the year 2018.

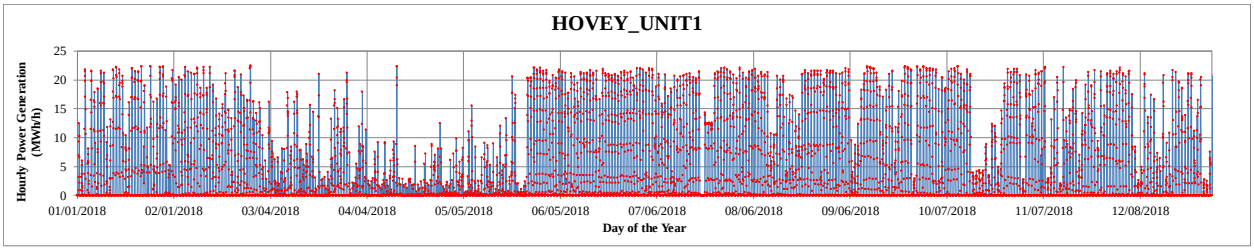


Figure C-35: Hourly Electricity Generation Profile for Solar Photovoltaic Project HOVEY_UNIT1

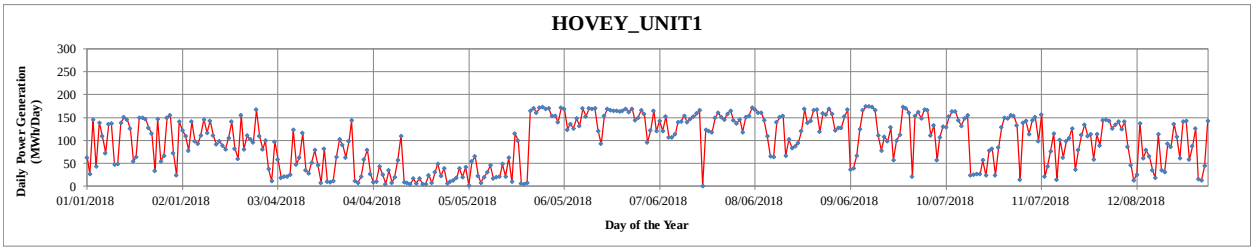


Figure C-36: Daily Total Electricity Generation Profile for Solar Photovoltaic Project HOVEY_UNIT1

C.19 HOVEY_UNIT2

The power plant was in operation throughout the year. Figure C-37 shows the hourly electricity generation profile and Figure C-38 shows the daily total generation profile for the year 2018.

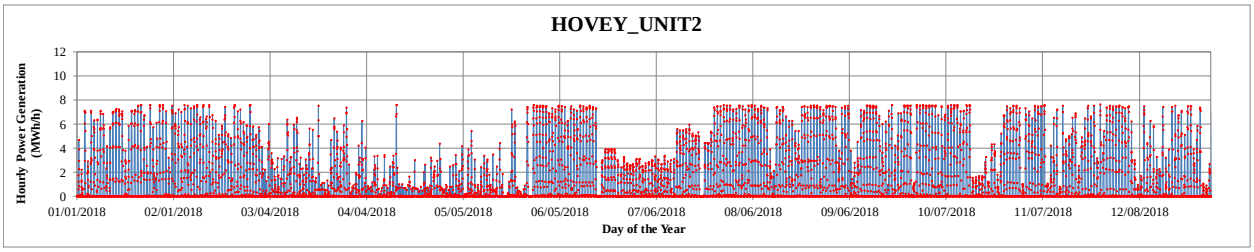


Figure C-37: Hourly Electricity Generation Profile for Solar Photovoltaic Project HOVEY_UNIT2

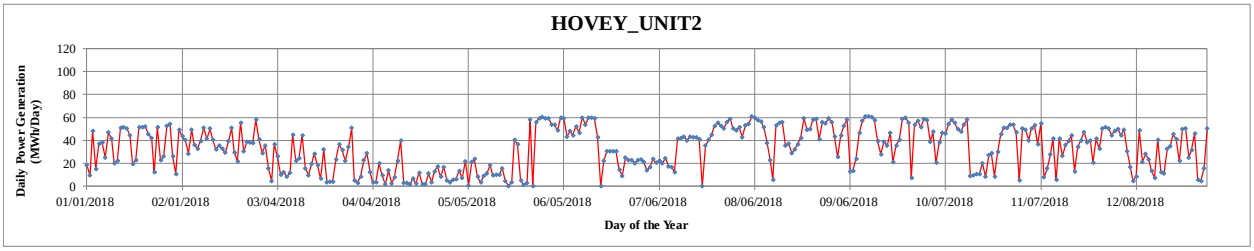


Figure C-38: Daily Total Electricity Generation Profile for Solar Photovoltaic Project HOVEY_UNIT2

C.20 HWY56_HWY56

The power plant was in operation throughout most of the year. There were no power generation data except a few hours data during the period of January 2nd to January 30th and no power generation data during the period of February 21st to February 27th. Figure C-39 shows the hourly electricity generation profile and Figure C-40 shows the daily total generation profile for the year 2018.

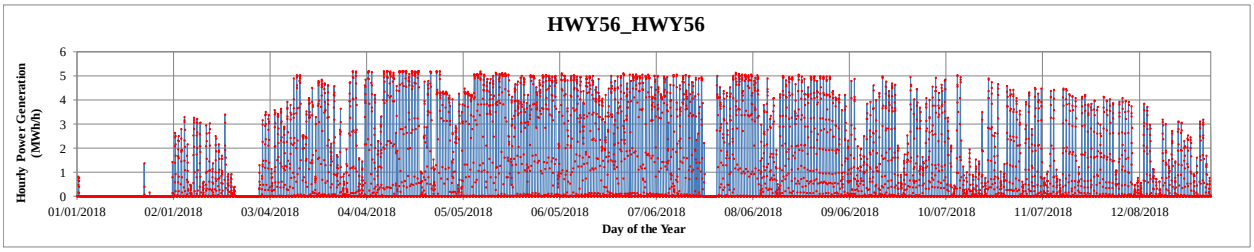


Figure C-39: Hourly Electricity Generation Profile for Solar Photovoltaic Project HWY56_HWY56

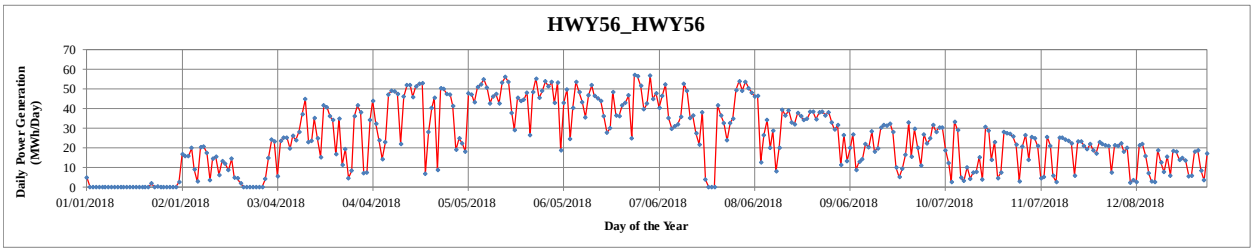


Figure C-40: Daily Total Electricity Generation Profile for Solar Photovoltaic Project HWY56_HWY56

C.21 LASSO_UNIT1

The power plant was in operation throughout the year. Figure C-41 shows the hourly electricity generation profile and Figure C-42 shows the daily total generation profile for the year 2018.

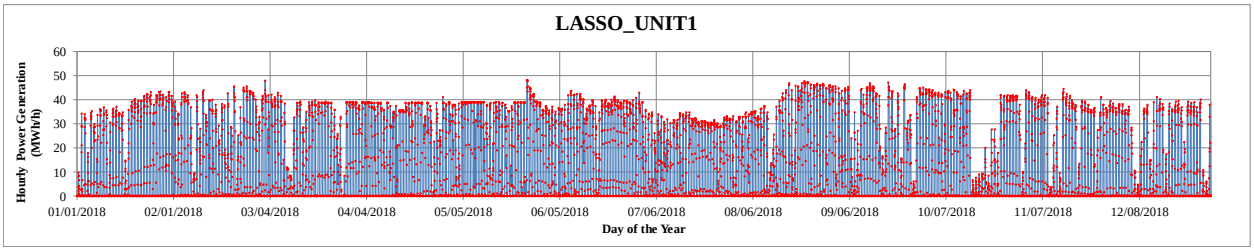


Figure C-41: Hourly Electricity Generation Profile for Solar Photovoltaic Project LASSO_UNIT1

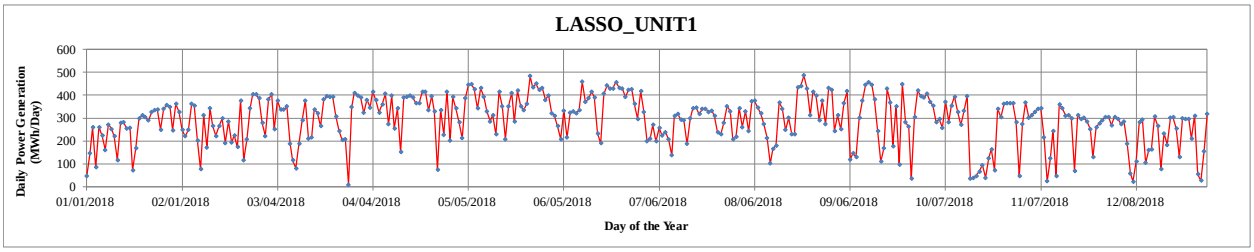


Figure C-42: Daily Total Electricity Generation Profile for Solar Photovoltaic Project LASSO_UNIT1

C.22 LEON_LEON

The power plant was in operation throughout most of the year. There were no power generation data except a few hours data during the period of January 1st to Janurary 25th and February 4th to February 11th. Figure C-43 shows the hourly electricity generation profile and Figure C-44 shows the daily total generation profile for the year 2018.

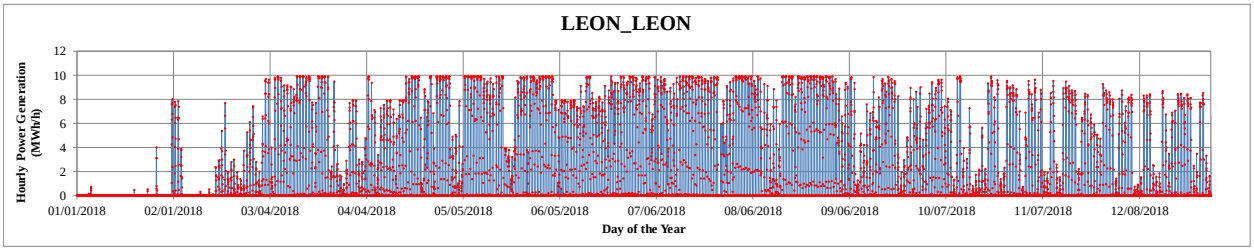


Figure C-43: Hourly Electricity Generation Profile for Solar Photovoltaic Project LEON_LEON

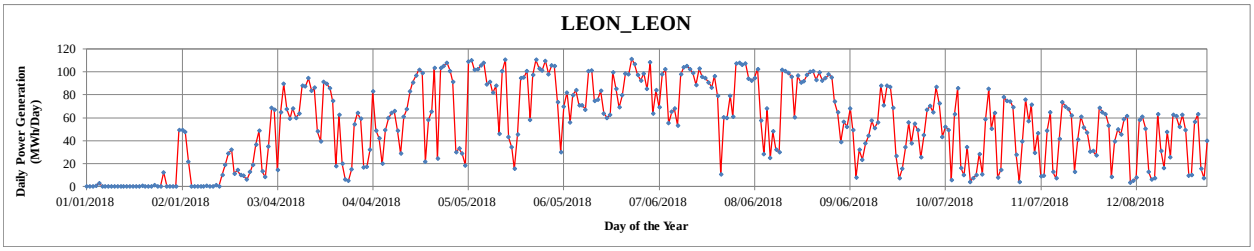


Figure C-44: Daily Total Electricity Generation Profile for Solar Photovoltaic Project LEON_LEON

C.23 LMESASLR_UNIT1

The power plant was in operation throughout the year. Figure C-45 shows the hourly electricity generation profile and Figure C-46 shows the daily total generation profile for the year 2018.

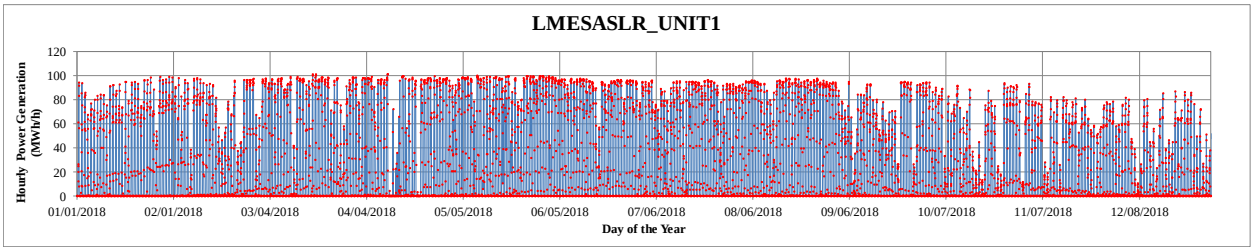


Figure C-45: Hourly Electricity Generation Profile for Solar Photovoltaic Project LMESASLR_UNIT1

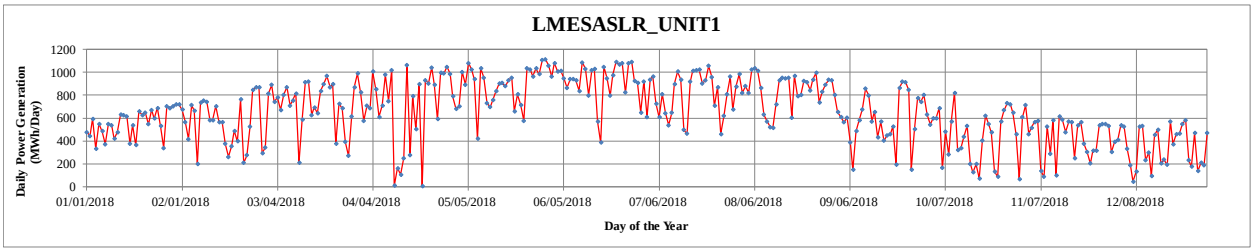


Figure C-46: Daily Total Electricity Generation Profile for Solar Photovoltaic Project LMESASLR_UNIT1

C.24 MARLIN_MARLIN

The power plant was in operation throughout most of the year. There were no power generation data during the period of January 1st to Janurary 4th, January 9th to January 15th, February 9th to February 16th, and July 4th to July 9th. Figure C-47 shows the hourly electricity generation profile and Figure C-48 shows the daily total generation profile for the year 2018.

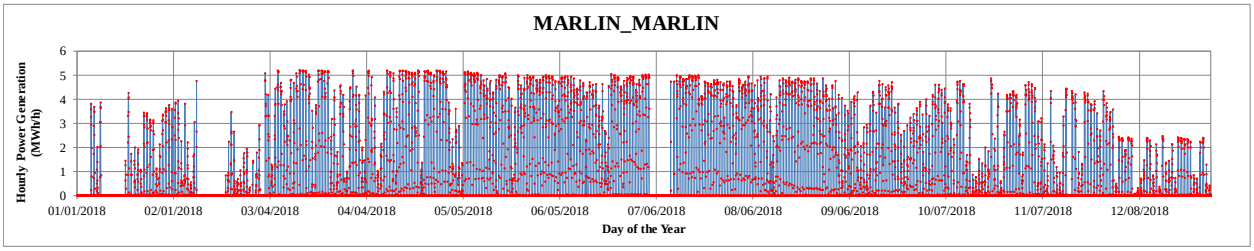


Figure C-47: Hourly Electricity Generation Profile for Solar Photovoltaic Project MARLIN_MARLIN

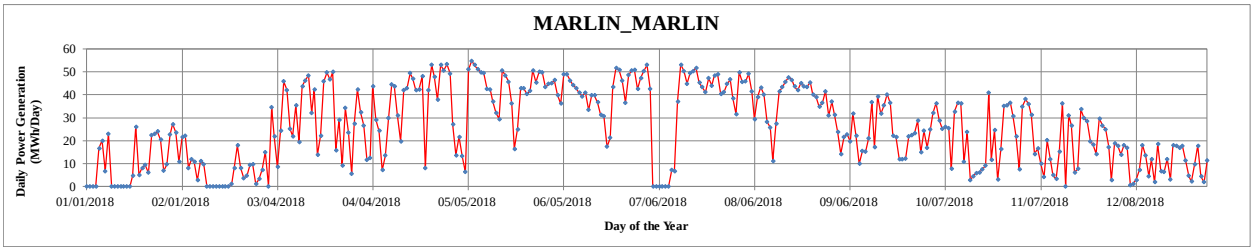


Figure C-48: Daily Total Electricity Generation Profile for Solar Photovoltaic Project MARLIN_MARLIN

C.25 NGNSVL_NGAINESV

The power plant was in operation throughout most of the year. There were no power generation data during the period of January 1st to Janurary 12th. Figure C-49 shows the hourly electricity generation profile and Figure C-50 shows the daily total generation profile for the year 2018.

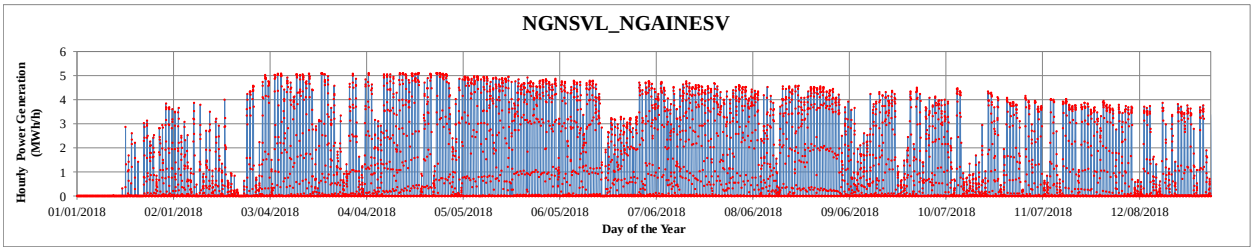


Figure C-49: Hourly Electricity Generation Profile for Solar Photovoltaic Project NGNSVL_NGAINESV

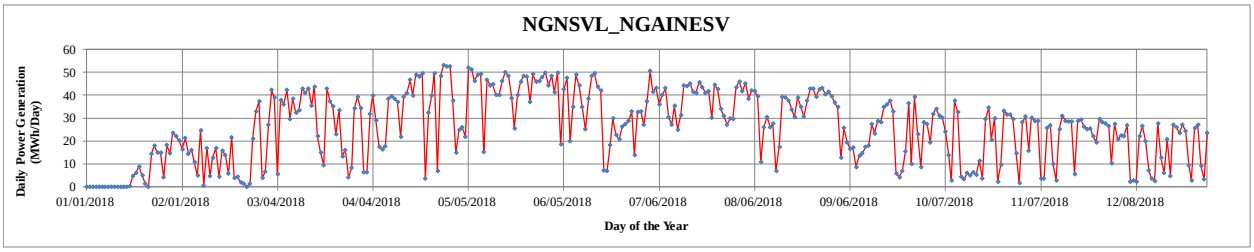


Figure C-50: Daily Total Electricity Generation Profile for Solar Photovoltaic Project NGNSVL_NGAINESV

C.26 OCI_ALM1_UNIT1

The power plant was in operation throughout the year. Figure C-51 shows the hourly electricity generation profile and Figure C-52 shows the daily total generation profile for the year 2018.

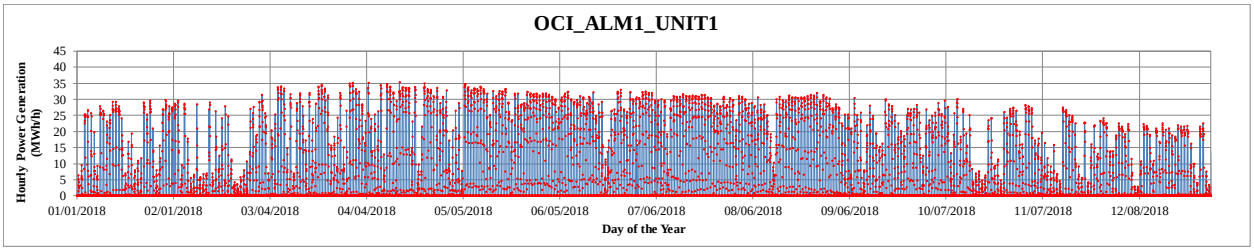


Figure C-51: Hourly Electricity Generation Profile for Solar Photovoltaic Project OCI_ALM1_UNIT1

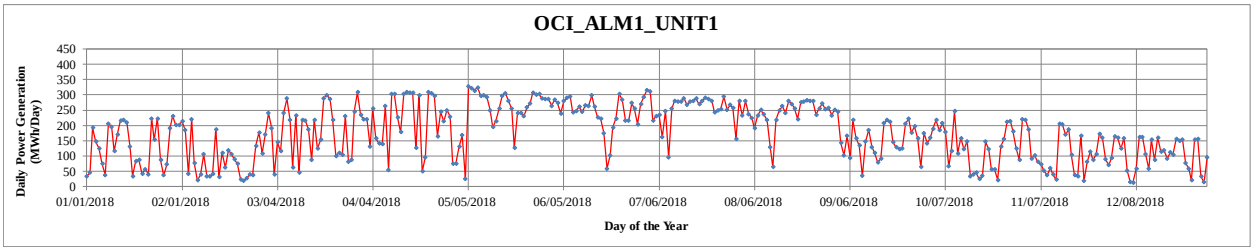


Figure C-52: Daily Total Electricity Generation Profile for Solar Photovoltaic Project OCI_ALM1_UNIT1

C.27 PCOMM_1UNIT

The power plant was newly installed in 2018. There were no power generation data for several days throughout the year. Figure C-53 shows the hourly electricity generation profile and Figure C-54 shows the daily total generation profile for the year 2018.

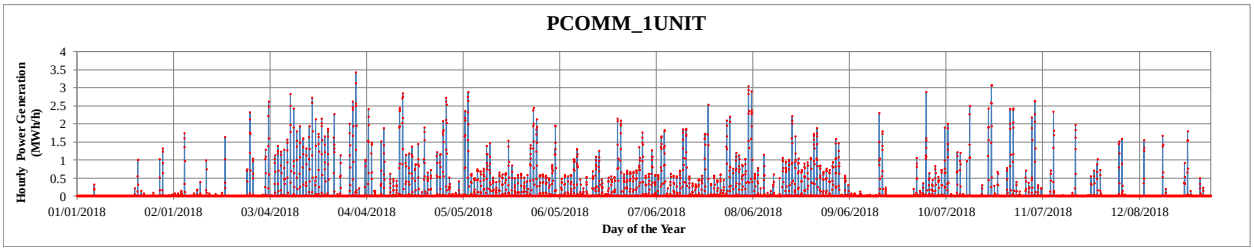


Figure C-53: Hourly Electricity Generation Profile for Solar Photovoltaic Project PCOMM_1UNIT

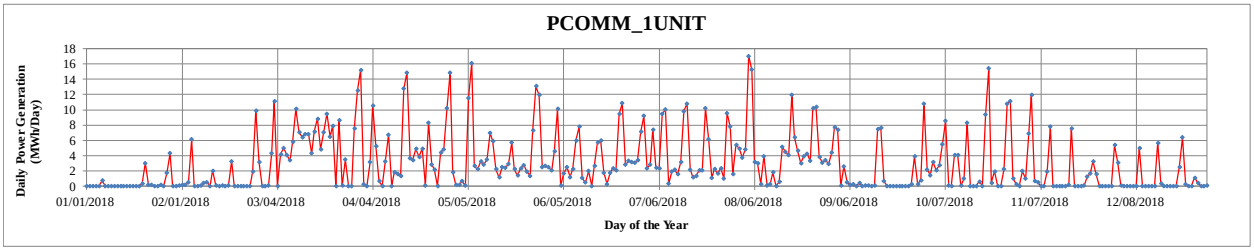


Figure C-54: Daily Total Electricity Generation Profile for Solar Photovoltaic Project PCOMM_1UNIT

C.28 PFK_PFKPV

The power plant was in operation throughout most of the year. There were no power generation data during the period of January 1st to Janurary 26th and February 4th and 5th. Figure C-55 shows the hourly electricity generation profile and Figure C-56 shows the daily total generation profile for the year 2018.

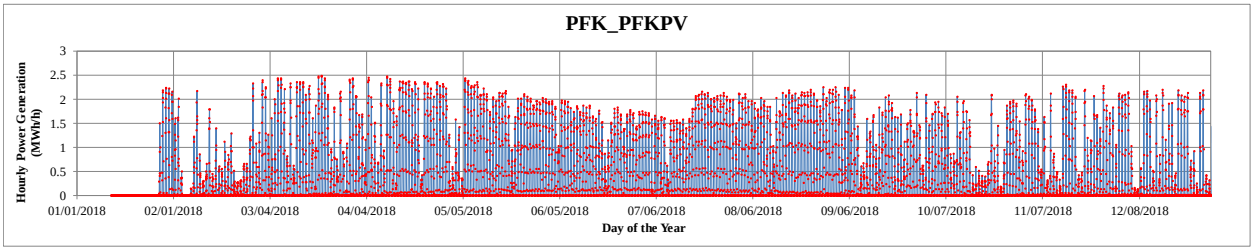


Figure C-55: Hourly Electricity Generation Profile for Solar Photovoltaic Project PFK_PFKPV

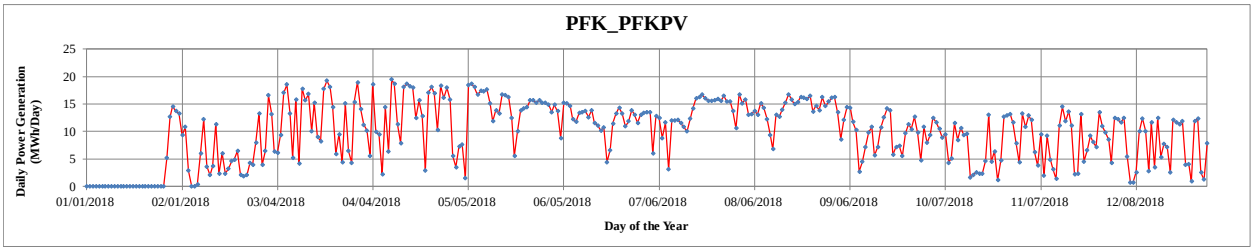


Figure C-56: Daily Total Electricity Generation Profile for Solar Photovoltaic Project PFK_PFKPV

C.29 REROCK_UNIT1

The power plant was in operation throughout the year. Figure C-57 shows the hourly electricity generation profile and Figure C-58 shows the daily total generation profile for the year 2018.

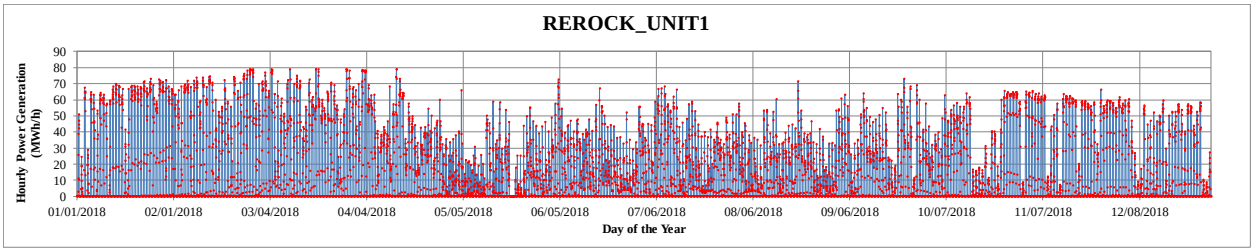


Figure C-57: Hourly Electricity Generation Profile for Solar Photovoltaic Project REROCK_UNIT1

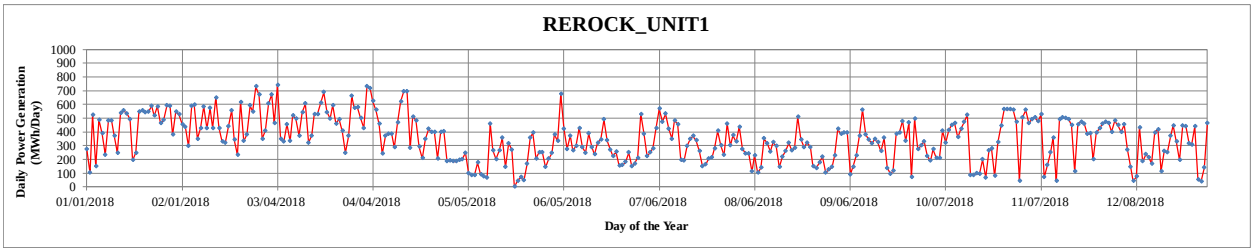


Figure C-58: Daily Total Electricity Generation Profile for Solar Photovoltaic Project REROCK_UNIT1

C.30 REROCK_UNIT2

The power plant was in operation throughout the year. Figure C-59 shows the hourly electricity generation profile and Figure C-60 shows the daily total generation profile for the year 2018.

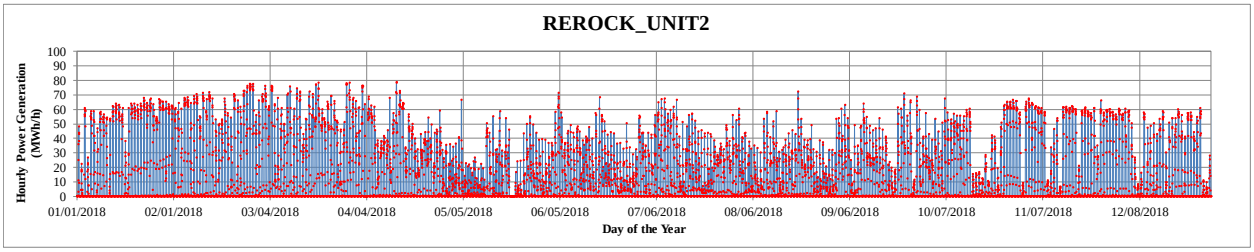


Figure C-59: Hourly Electricity Generation Profile for Solar Photovoltaic Project REROCK_UNIT2

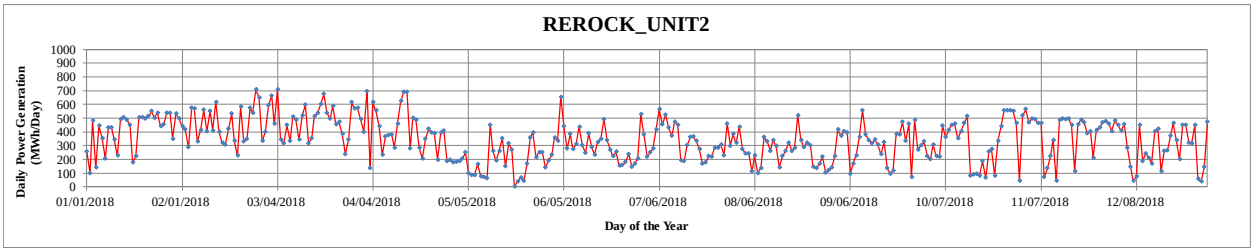


Figure C-60: Daily Total Electricity Generation Profile for Solar Photovoltaic Project REROCK_UNIT2

C.31 RIGGINS_UNIT1

The power plant was newly installed in 2018. The power plant was in operation after April 3rd. Figure C-61 shows the hourly electricity generation profile and Figure C-62 shows the daily total generation profile for the year 2018.

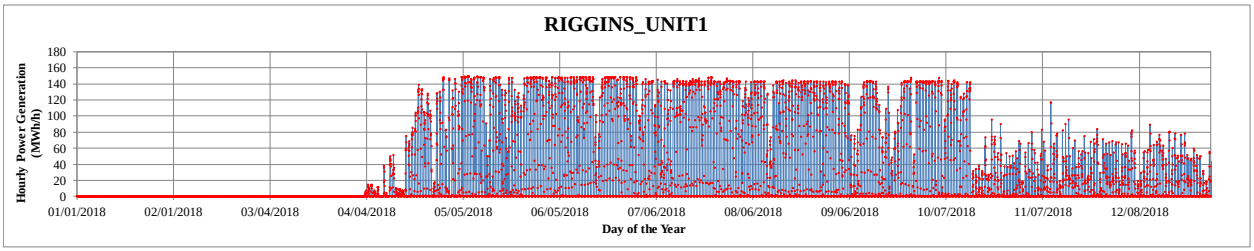


Figure C-61: Hourly Electricity Generation Profile for Solar Photovoltaic Project RIGGINS_UNIT1

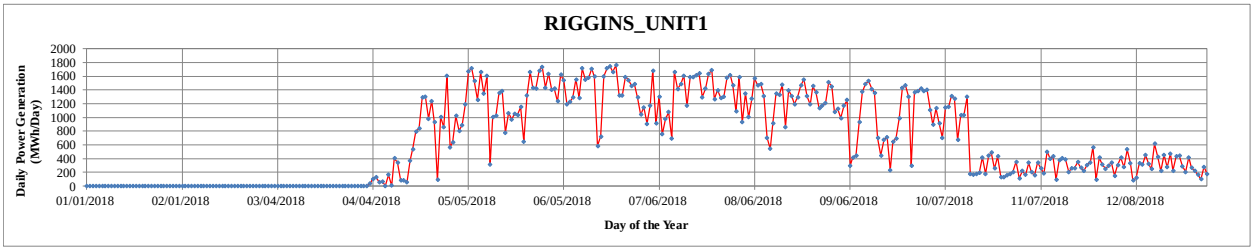


Figure C-62: Daily Total Electricity Generation Profile for Solar Photovoltaic Project RIGGINS_UNIT1

C.32 SEALY_1UNIT

The power plant was not in operation most of the time throughout the year. There were no power generation data until June 21st. Figure C-63 shows the hourly electricity generation profile and Figure C-64 shows the daily total generation profile for the year 2018.

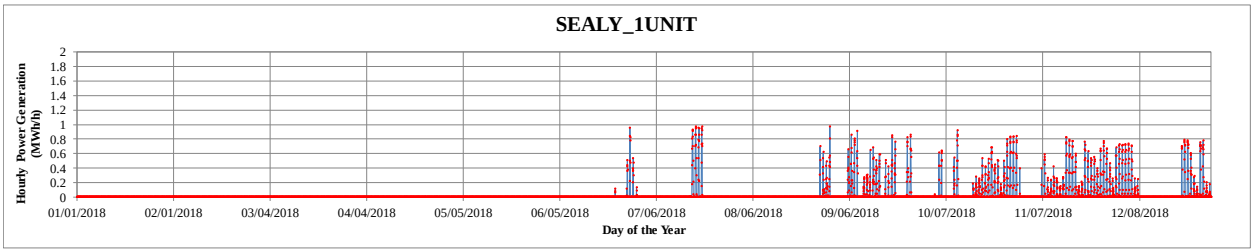


Figure C-63: Hourly Electricity Generation Profile for Solar Photovoltaic Project SEALY_1UNIT

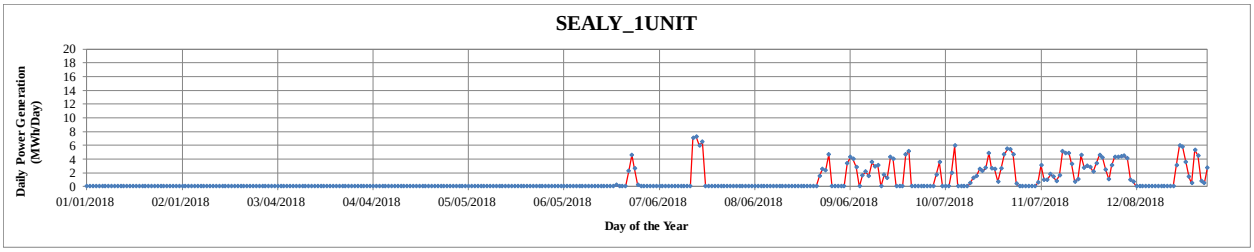


Figure C-64: Daily Total Electricity Generation Profile for Solar Photovoltaic Project SEALY_1UNIT

C.33 SIRUS_UNIT1

The power plant was in operation throughout the year. Figure C-65 shows the hourly electricity generation profile and Figure D-1 shows the daily total generation profile for the year 2018.

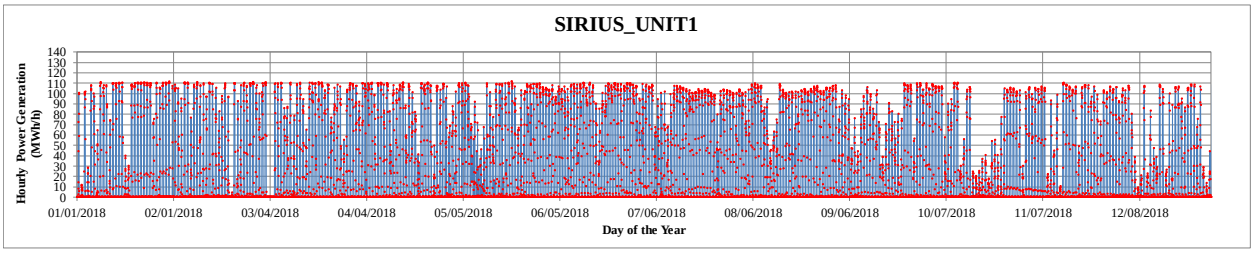


Figure C-65: Hourly Electricity Generation Profile for Solar Photovoltaic Project SIRUS_UNIT1

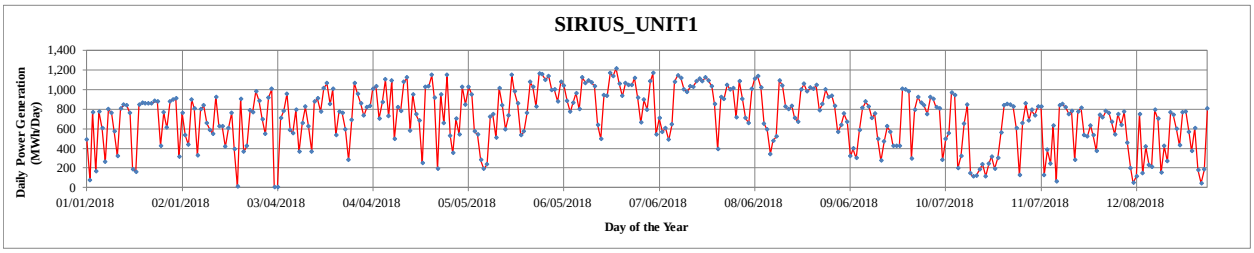


Figure C-66: Daily Total Electricity Generation Profile for Solar Photovoltaic Project SIRUS_UNIT1

C.34 SIRUS_UNIT2

The power plant was not in operation most of the time throughout the year. Figure C-67 shows the hourly electricity generation profile and Figure C-68 shows the daily total generation profile for the year 2018.

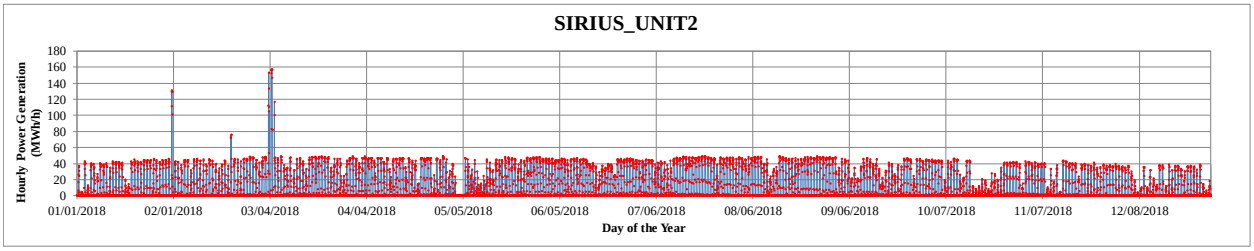


Figure C-67: Hourly Electricity Generation Profile for Solar Photovoltaic Project SIRUS_UNIT2

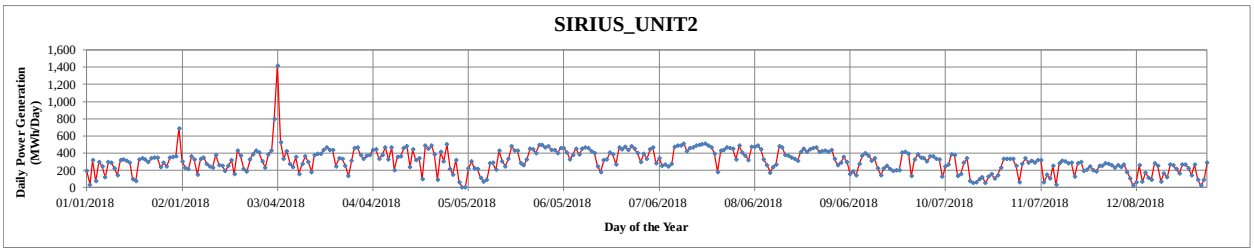


Figure C-68: Daily Total Electricity Generation Profile for Solar Photovoltaic Project SIRUS_UNIT2

C.35 SOLARA_UNIT1

The power plant was in operation throughout the year. Figure C-69 shows the hourly electricity generation profile and Figure C-70 shows the daily total generation profile for the year 2018.

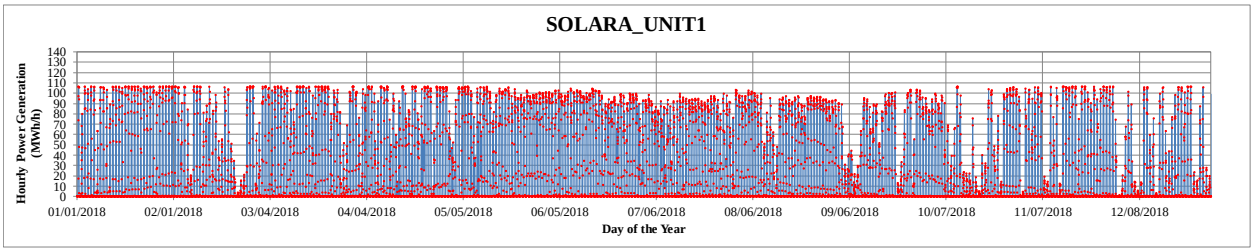


Figure C-69: Hourly Electricity Generation Profile for Solar Photovoltaic Project SOLARA_UNIT1

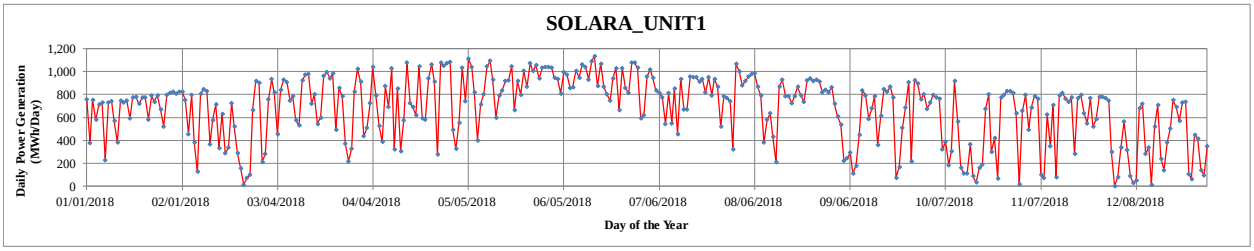


Figure C-70: Daily Total Electricity Generation Profile for Solar Photovoltaic Project SOLARA_UNIT1

C.36 SPTX12B_UNIT1

The power plant was in operation throughout the year. Figure C-71 shows the hourly electricity generation profile and Figure C-72 shows the daily total generation profile for the year 2018.

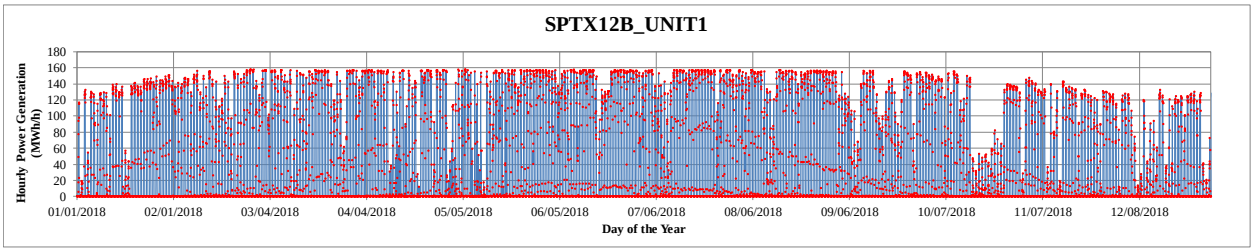


Figure C-71: Hourly Electricity Generation Profile for Solar Photovoltaic Project SPTX12B_UNIT1

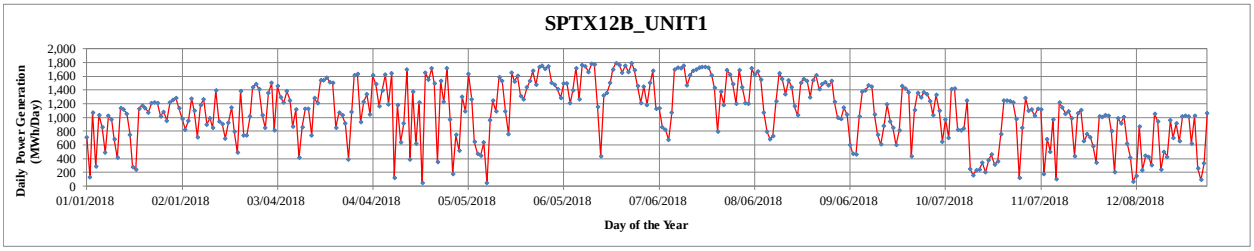


Figure C-72: Daily Total Electricity Generation Profile for Solar Photovoltaic Project SPTX12B_UNIT1

C.37 WBORO_WHTSBORO

The power plant was in operation most of the time throughout the year. There were no power generation data until January 16st. Figure C-73 shows the hourly electricity generation profile and Figure C-74 shows the daily total generation profile for the year 2018.

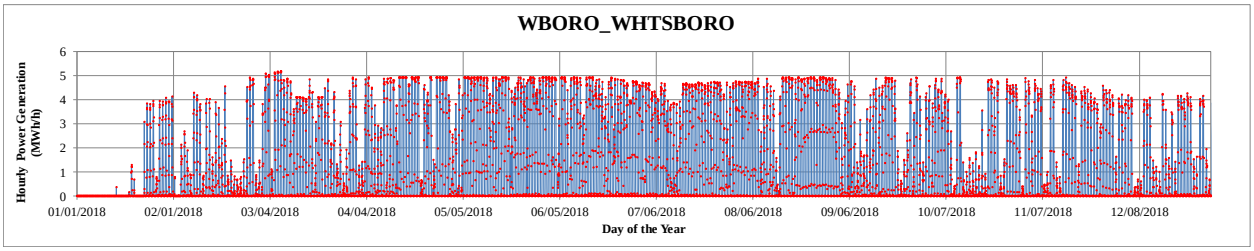


Figure C-73: Hourly Electricity Generation Profile for Solar Photovoltaic Project WBORO_WHTSBORO

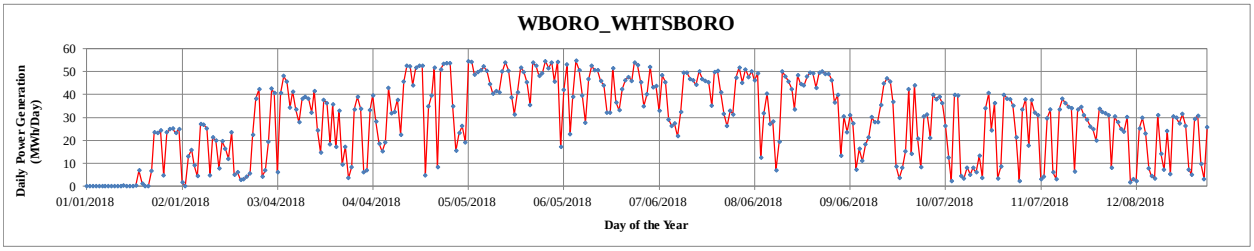


Figure C-74: Daily Total Electricity Generation Profile for Solar Photovoltaic Project WBORO_WHTSBORO

C.38 WBOROII_WHBOROII

The power plant was in operation most of the time throughout the year. There were no power generation data from January 3rd to January 16st. Figure C-75 shows the hourly electricity generation profile and Figure C-76 shows the daily total generation profile for the year 2018.

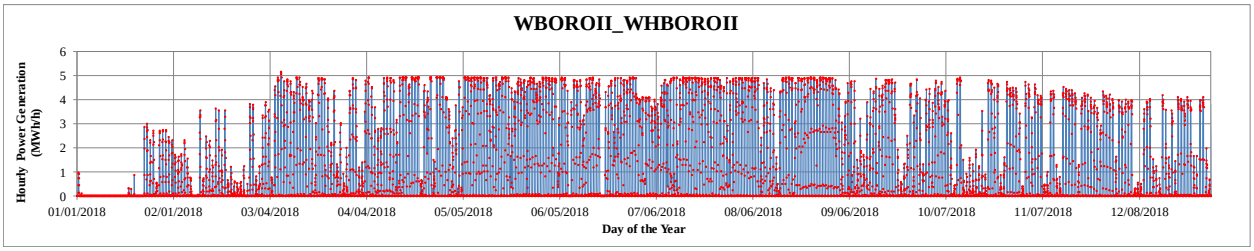


Figure C-75: Hourly Electricity Generation Profile for Solar Photovoltaic Project WBOROII_WHTSBOROII

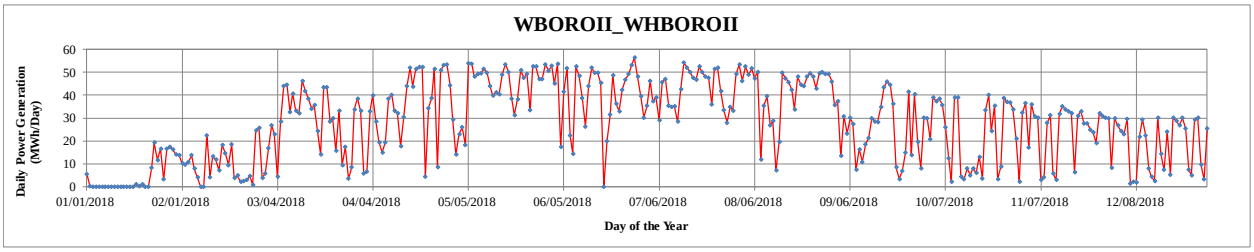


Figure C-76: Daily Total Electricity Generation Profile for Solar Photovoltaic Project WBOROII_WHTSBOROII

C.39 WEBBER_S_WSP1

The power plant was in operation throughout the year. Figure C-77 shows the hourly electricity generation profile and Figure C-78 shows the daily total generation profile for the year 2018.

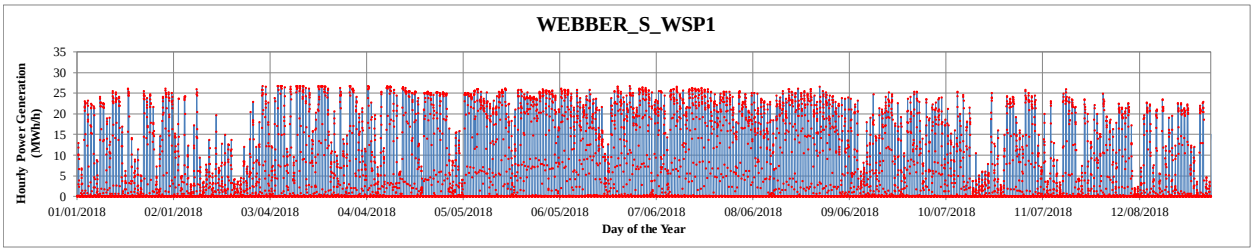


Figure C-77: Hourly Electricity Generation Profile for Solar Photovoltaic Project WEBBER_S_WSP1

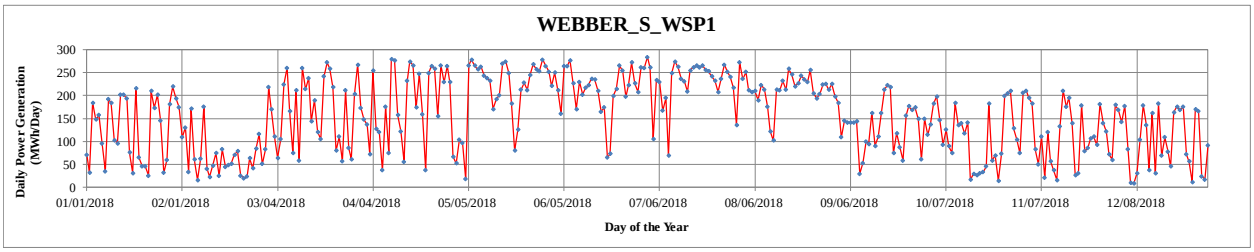


Figure C-78: Daily Total Electricity Generation Profile for Solar Photovoltaic Project WEBBER_S_WSP1

C.40 WHTRT_WHTRGHT

The power plant was in operation throughout most of the year. There were no power generation data until January 15th. Figure C-79 shows the hourly electricity generation profile and Figure C-80 shows the daily total generation profile for the year 2018.

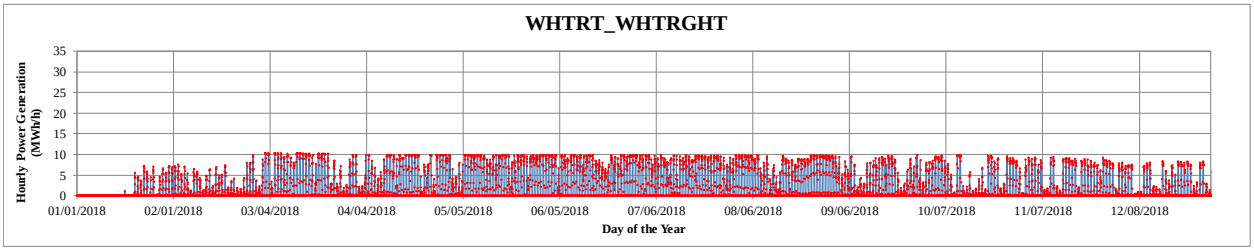


Figure C-79: Hourly Electricity Generation Profile for Solar Photovoltaic Project WHTRT_WHTRGHT

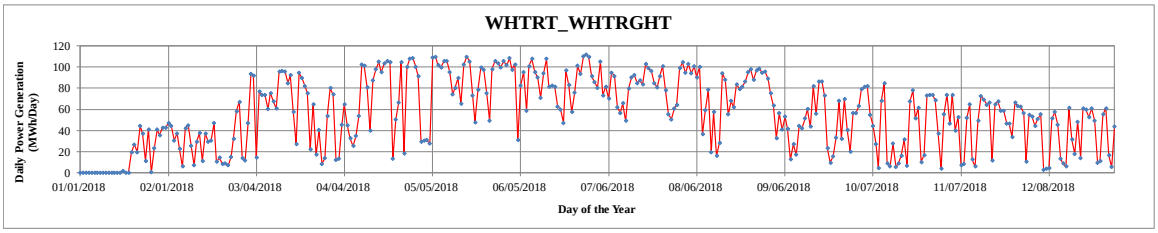


Figure C-80: Daily Total Electricity Generation Profile for Solar Photovoltaic Project WHTRT_WHTRGHT

C.41 WLNTSPRG_1UNIT

The power plant was in operation throughout the year. Figure C-81 shows the hourly electricity generation profile and Figure C-82 shows the daily total generation profile for the year 2018.

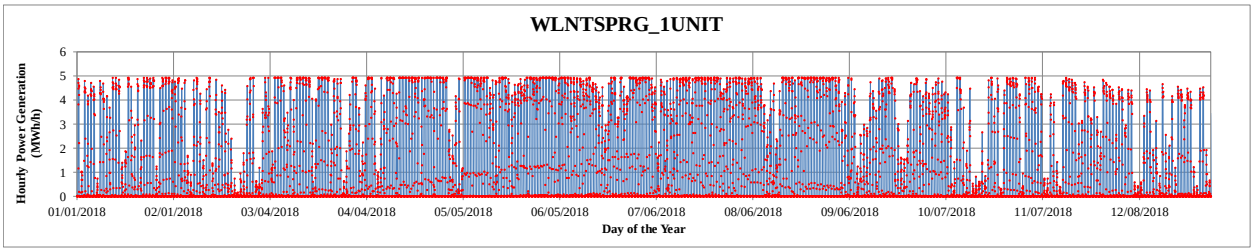


Figure C-81: Hourly Electricity Generation Profile for Solar Photovoltaic Project WLNTSPRG_1UNIT

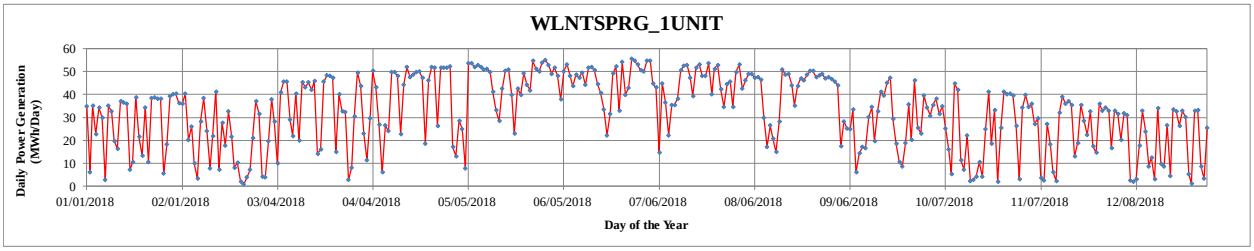


Figure C-82: Daily Total Electricity Generation Profile for Solar Photovoltaic Project WLNTSPRG_1UNIT

APPENDIX D Electricity Generation Profile for Biomass Projects

The electricity generations for Biomass projects are discussed in sections D.1 to D.14. The hourly and daily total electricity generation profile for each Biomass project are shown in Figure D-1 to Figure D-28.

D.1 AV_DG1

The Biomass power project AV_DG1 was in operation throughout the year. Figure D-1 shows hourly electricity generation profile and Figure D-2 shows daily total generation profile for the year 2018.

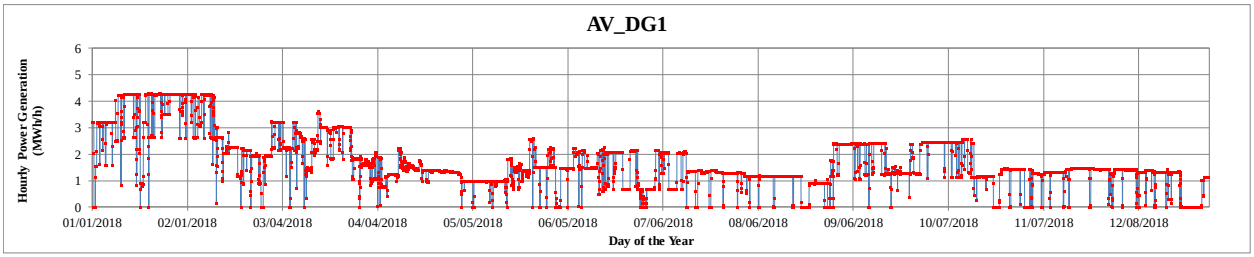


Figure D-1: Hourly Electricity Generation Profile for Biomass Project AV_DG1

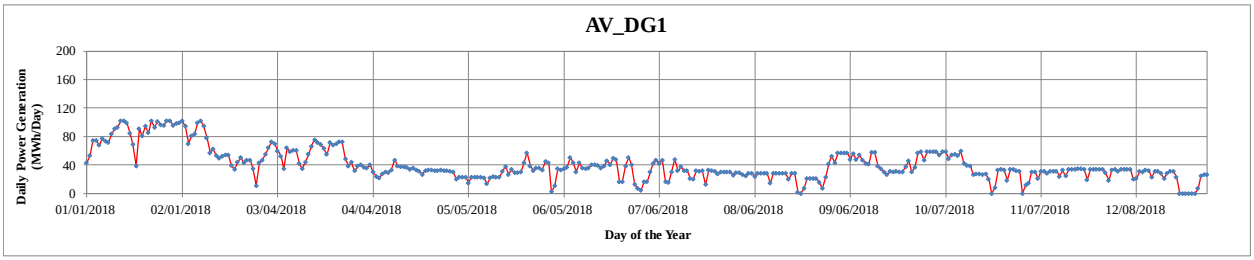


Figure D-2: Daily Total Electricity Generation Profile for Biomass Project AV_DG1

D.2 DG_78252_4UNITS

The Biomass power project DG_78252_4UNITS was in operation throughout the year. Figure D-3 shows hourly electricity generation profile and Figure D-4 shows daily total generation profile for the year 2018.

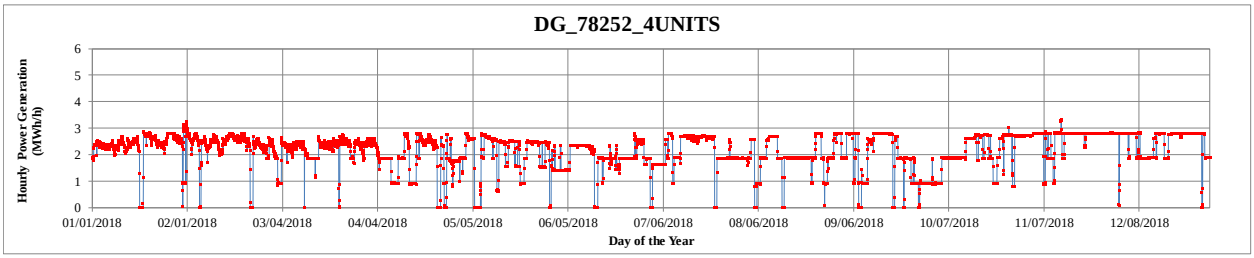


Figure D-3: Hourly Electricity Generation Profile for Biomass Project DG_78252_4UNITS

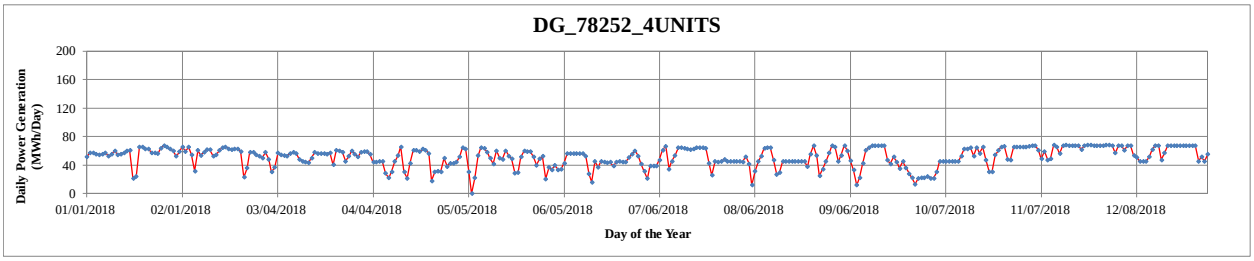


Figure D-4: Daily Total Electricity Generation Profile for Biomass Project DG_78252_4UNITS

D.3 DG_BIO2_4UNITS

The Biomass power project DG_BIO2_UNITS was in operation throughout the year. Figure D-5 shows hourly electricity generation profile and Figure D-6 shows daily total generation profile for the year 2018.

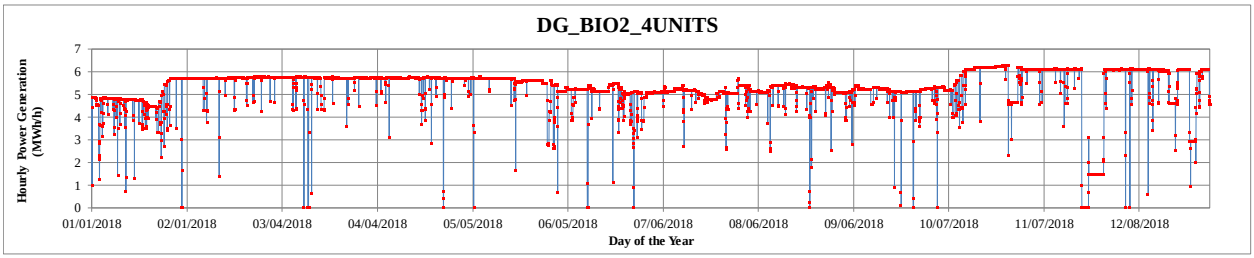


Figure D-5: Hourly Electricity Generation Profile for Biomass Project DG_BIO2_4UNITS

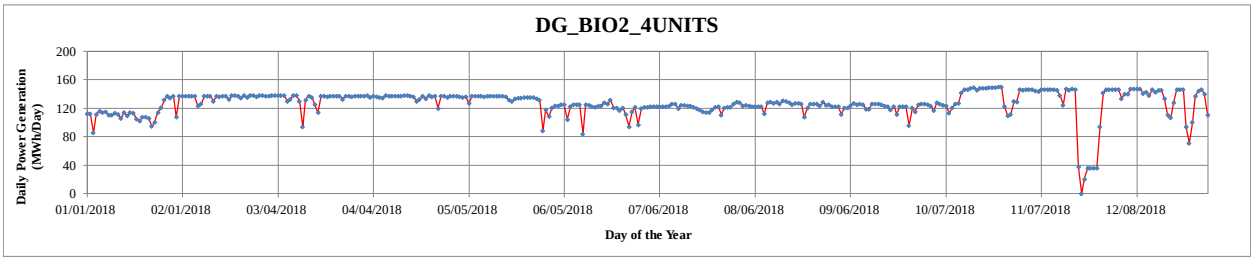


Figure D-6: Daily Total Electricity Generation Profile for Biomass Project DG_BIO2_4UNITS

D.4 DG_BIOE_2UNITS

The Biomass power project DG_BIOE_2UNITS was in operation throughout the year. Figure D-7 shows hourly electricity generation profile and Figure D-8 shows daily total generation profile for the year 2018.

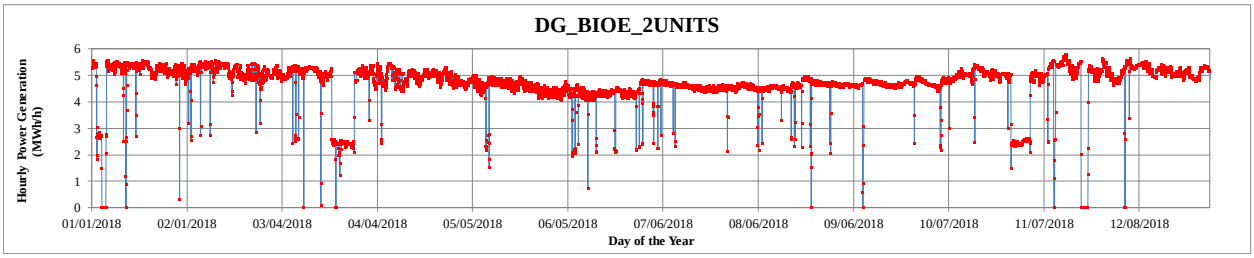


Figure D-7: Hourly Electricity Generation Profile for Biomass Project DG_BIOE_2UNITS

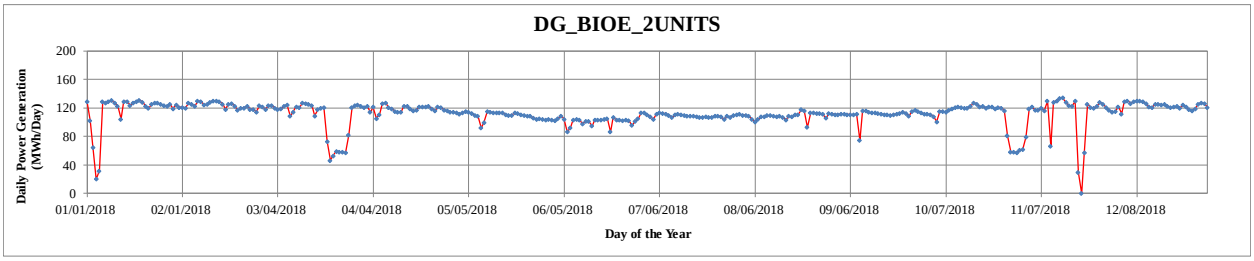


Figure D-8: Daily Total Electricity Generation Profile for Biomass Project DG_BIOE_2UNITS

D.5 DG_FERIS_4_UNITS

The Biomass power project DG_FERIS_4_UNITS was in continuous operation throughout the year except several days in May. Figure D-9 shows hourly electricity generation profile and Figure D-10 shows daily total generation profile for the year 2018.

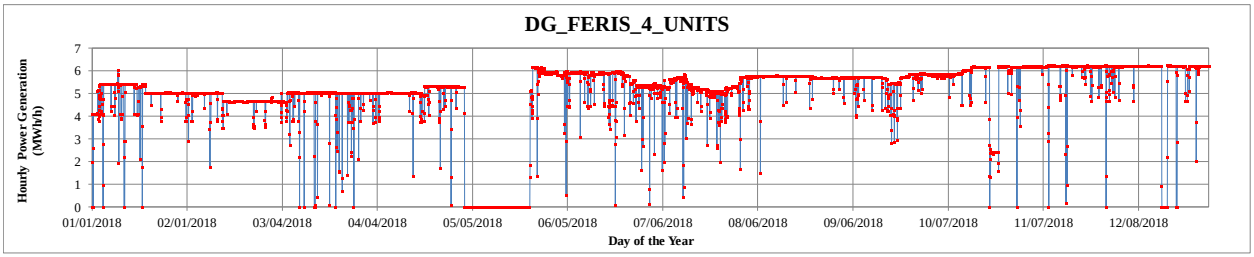


Figure D-9: Hourly Electricity Generation Profile for Biomass Project DG_FERIS_4_UNITS

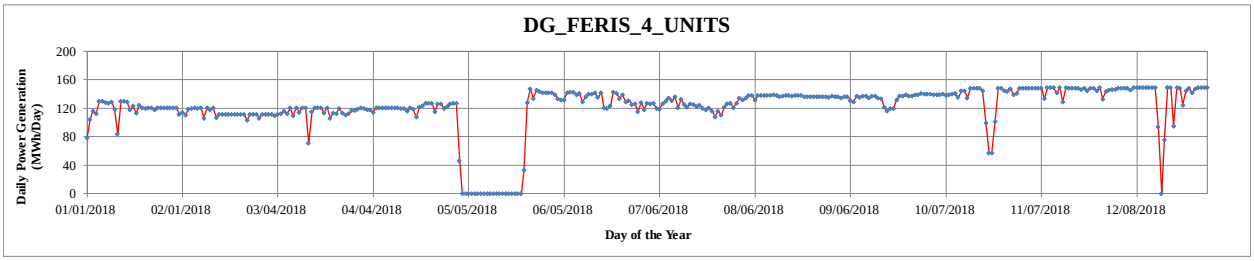


Figure D-10: Daily Total Electricity Generation Profile for Biomass Project DG_FERIS_4_UNITS

D.6 DG_FREIH_2UNITS

The Biomass power project DG_FREIH_2UNITS was mostly operated throughout the entire year. Figure D-11 shows hourly electricity generation profile and Figure D-12 shows daily total generation profile for the year 2018.

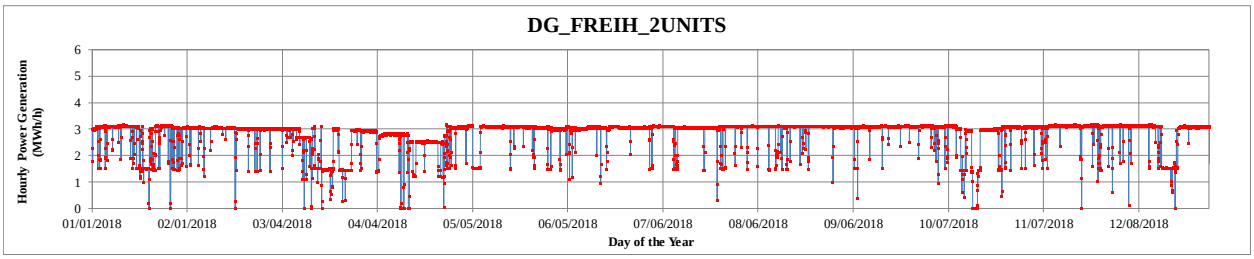


Figure D-11: Hourly Electricity Generation Profile for Biomass Project DG_FREIH_2UNITS

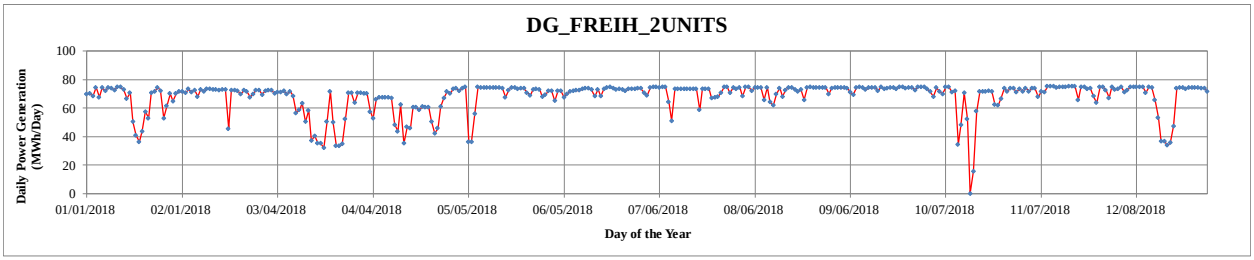


Figure D-12: Daily Total Electricity Generation Profile for Biomass Project DG_FREIH_2UNITS

D.7 DG_HBR_2UNITS

The Biomass power project DG_HBR_2UNITS was in operation throughout the year. Figure D-13 shows hourly electricity generation profile and Figure D-14 shows daily total generation profile for the year 2018.

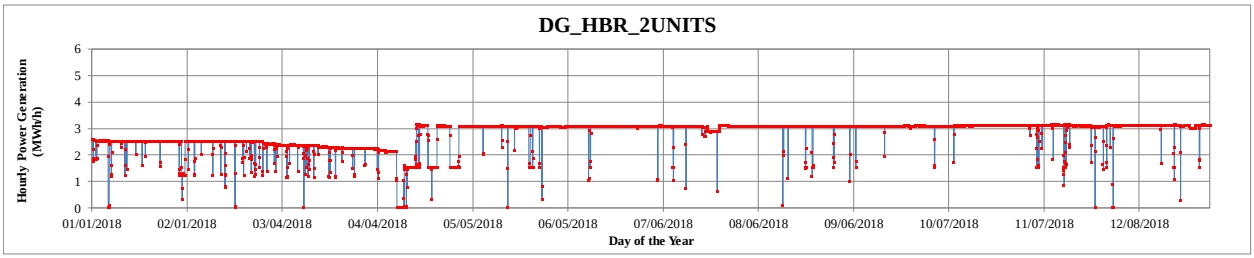


Figure D-13: Hourly Electricity Generation Profile for Biomass Project DG_HBR_2UNITS

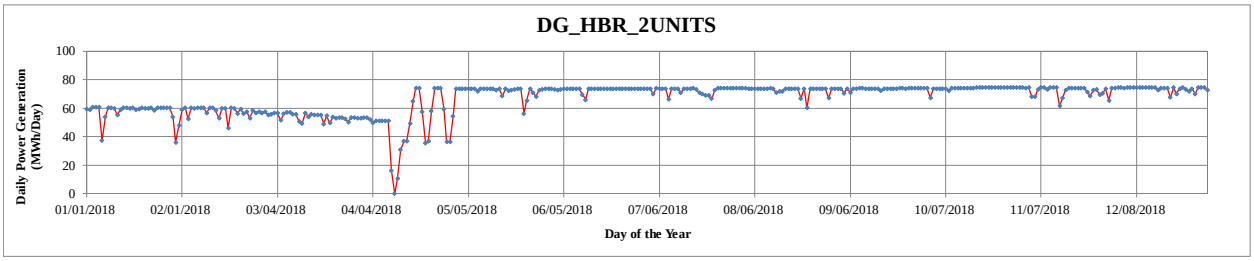


Figure D-14: Daily Total Electricity Generation Profile for Biomass Project DG_HBR_2UNITS

D.8 DG_MEDIN_1UNIT

The Biomass power project DG_MEDIN_1UNIT was in operation throughout the year. Figure D-15 shows hourly electricity generation profile and Figure D-16 shows daily total generation profile for the year 2018.

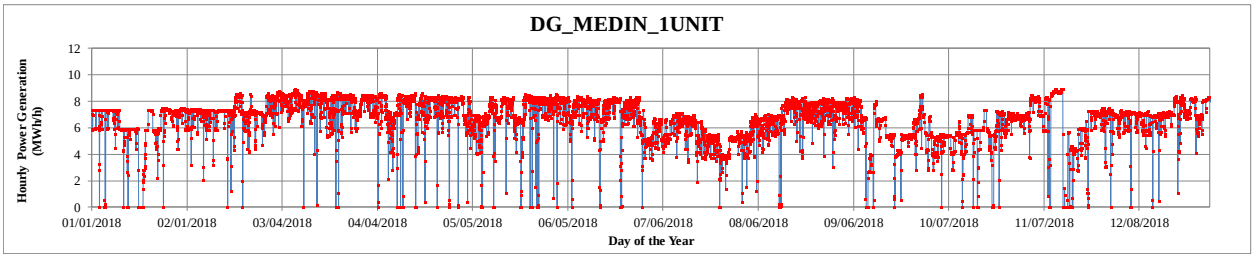


Figure D-15: Hourly Electricity Generation Profile for Biomass Project DG_MEDIN_1UNIT

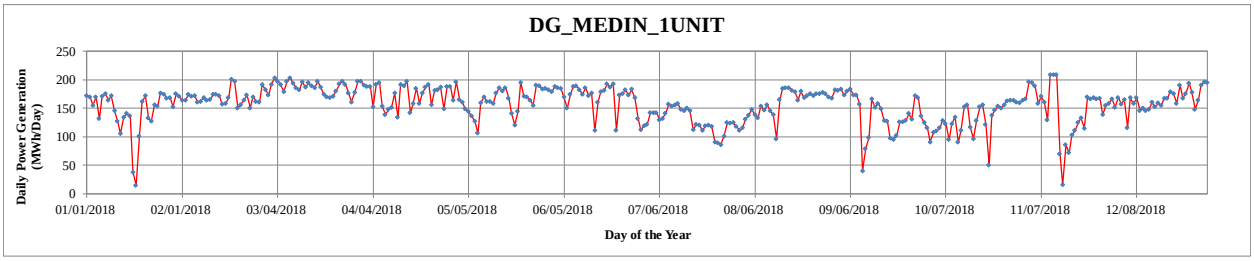


Figure D-16: Daily Total Electricity Generation Profile for Biomass Project DG_MEDIN_1UNIT

D.9 DG_S_SNR_UNIT1

The Biomass power project DG_S_SNR_UNIT1 for majority of the time during the year did not have power generation except for few days occurring in different months. Figure D-17 shows hourly electricity generation profile and Figure D-18 shows daily total generation profile for the year 2018.

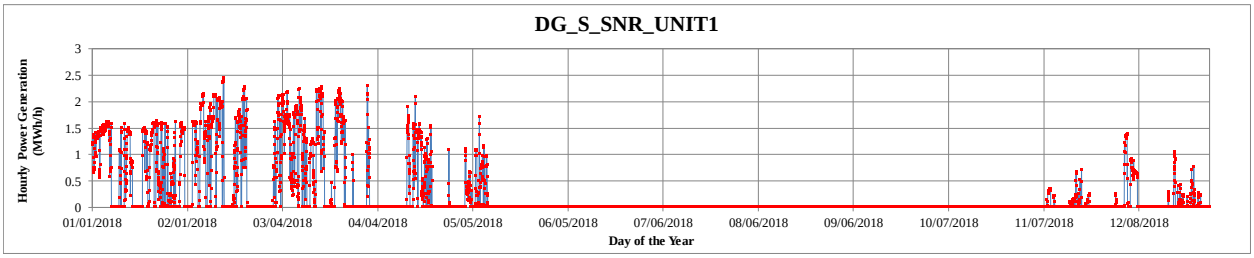


Figure D-17: Hourly Electricity Generation Profile for Biomass Project DG_S_SNR_UNIT1

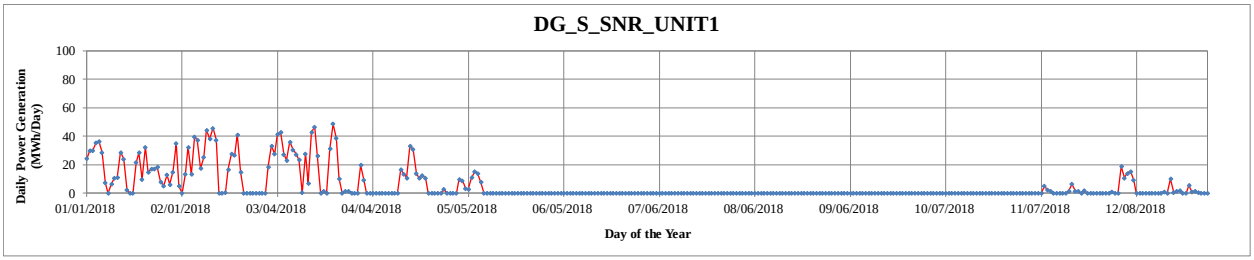


Figure D-18: Daily Total Electricity Generation Profile for Biomass Project DG_S_SNR_UNIT1

D.10 DG_SPRIN_4UNITS

The Biomass power project DG_SPRN_4UNITS was in operation throughout the year. Figure D-19 shows hourly electricity generation profile and Figure D-20 shows daily total generation profile for the year 2018.

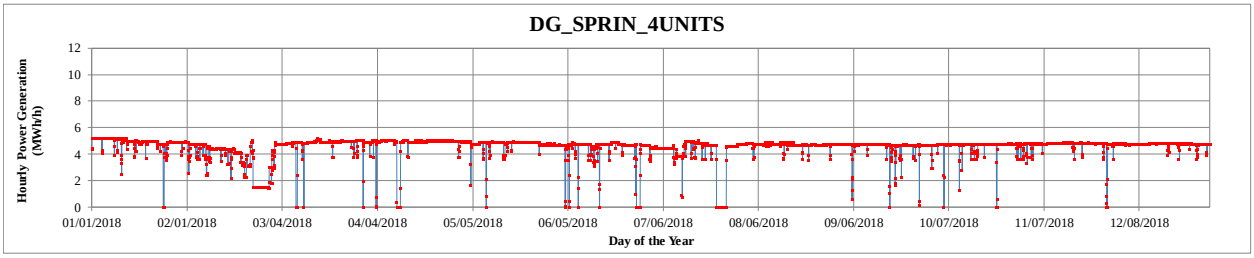


Figure D-19: Hourly Electricity Generation Profile for Biomass Project DG_SPRIN_4UNITS

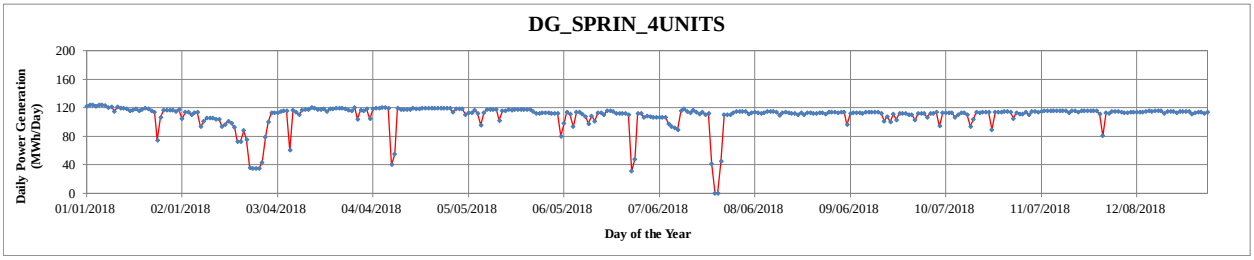


Figure D-20: Daily Total Electricity Generation Profile for Biomass Project DG_SPRIN_4UNITS

D.11 DG_WALZE_4UNITS

The Biomass power project DG_WALZE_4UNITS was in continuous operation throughout the entire year. Figure D-21 shows hourly electricity generation profile and Figure D-22 shows daily total generation profile for the year 2018.

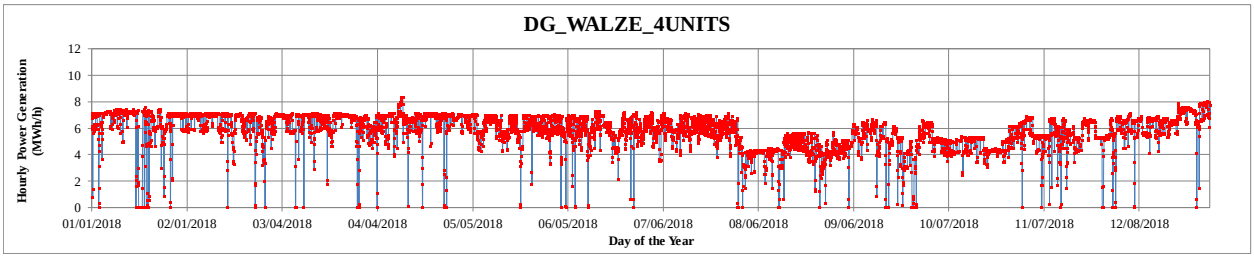


Figure D-21: Hourly Electricity Generation Profile for Biomass Project DG_WALZE_4UNITS

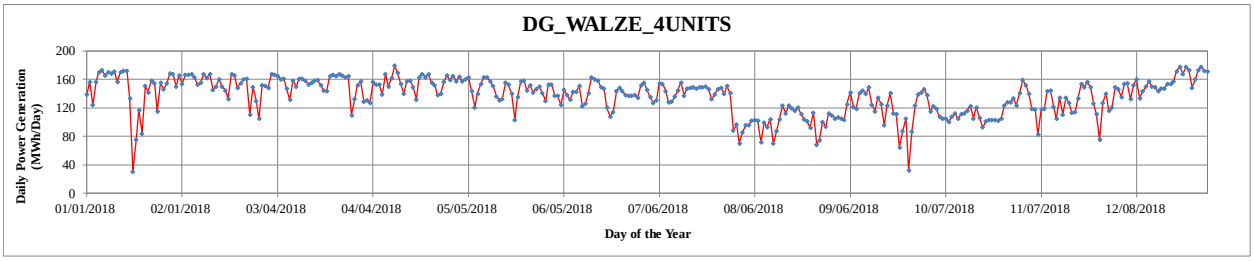


Figure D-22: Daily Total Electricity Generation Profile for Biomass Project DG_WALZE_4UNITS

D.12 DG_WSTHL_3UNITS

The Biomass power project DG_WSTHL_3UNITS was in operation throughout the entire year. Two levels of power generation were observed throughout the year. Figure D-23 shows hourly electricity generation profile and Figure D-24 shows daily total generation profile for the year 2018.

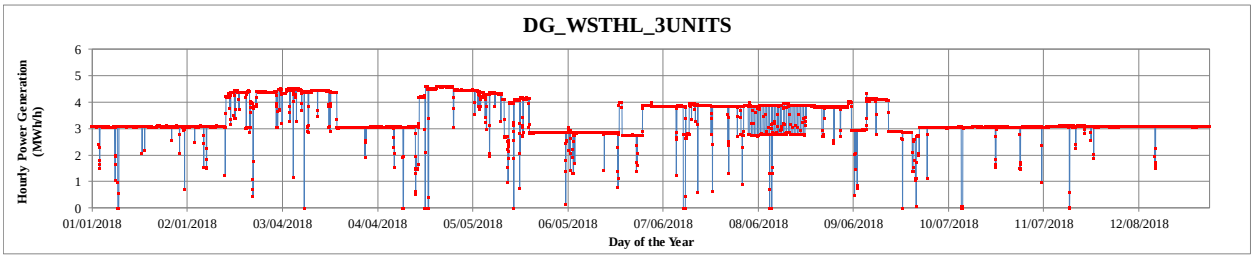


Figure D-23: Hourly Electricity Generation Profile for Biomass Project DG_WSTHL_3UNITS

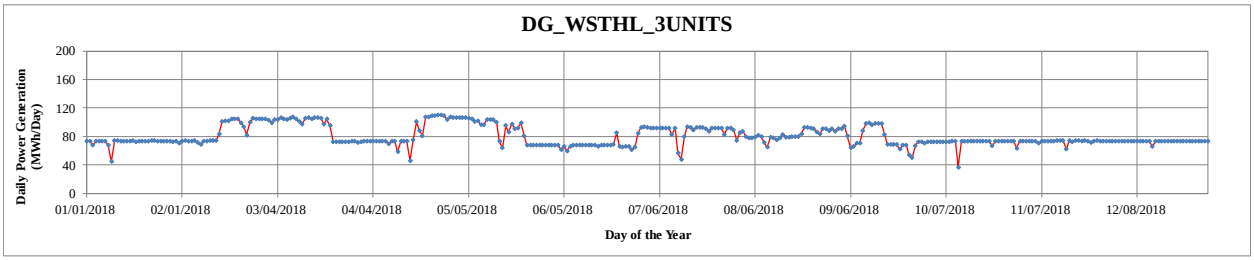


Figure D-24: Daily Total Electricity Generation Profile for Biomass Project DG_WSTHL_3UNITS

D.13 HB_DG1

The Biomass power project HB_DG1 was not in operation most of the year except in January and February. Figure D-25 shows hourly electricity generation profile and Figure D-26 shows daily total generation profile for the year 2018.

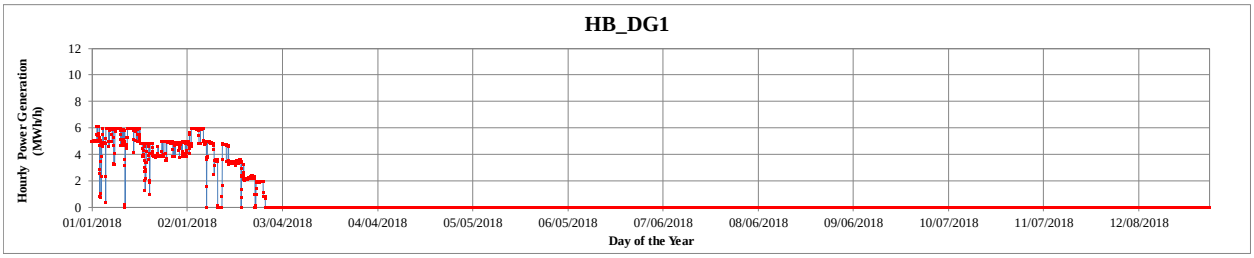


Figure D-25: Hourly Electricity Generation Profile for Biomass Project HB_DG1

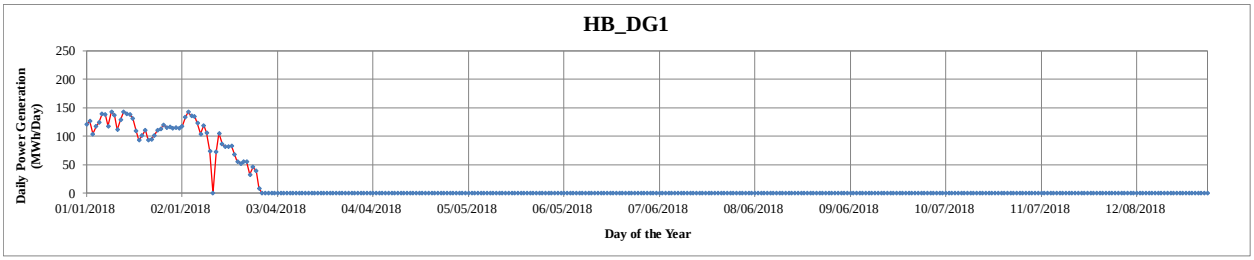


Figure D-26: Daily Total Electricity Generation Profile for Biomass Project HB_DG1

D.14 NACPW_UNIT1

The Biomass power project NACPW_UNIT1 for majority of the time during the year did not have power generation except for few days occurring in different months. Figure D-27 shows hourly electricity generation profile and Figure D-28 shows daily total generation profile for the year 2018.

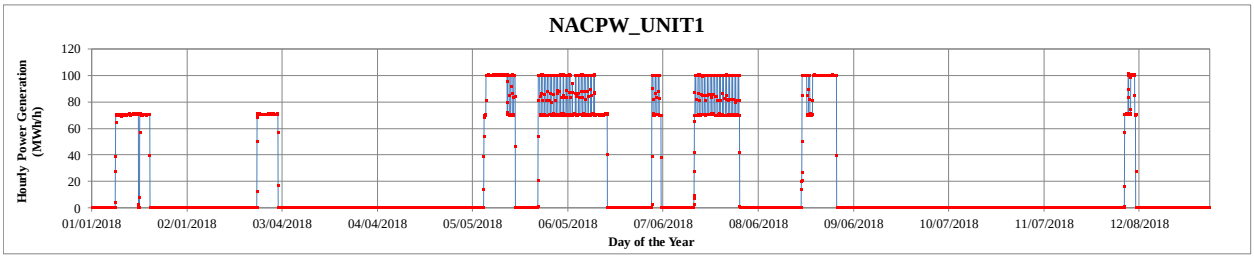


Figure D-27: Hourly Electricity Generation Profile for Biomass Project NACPW_UNIT1

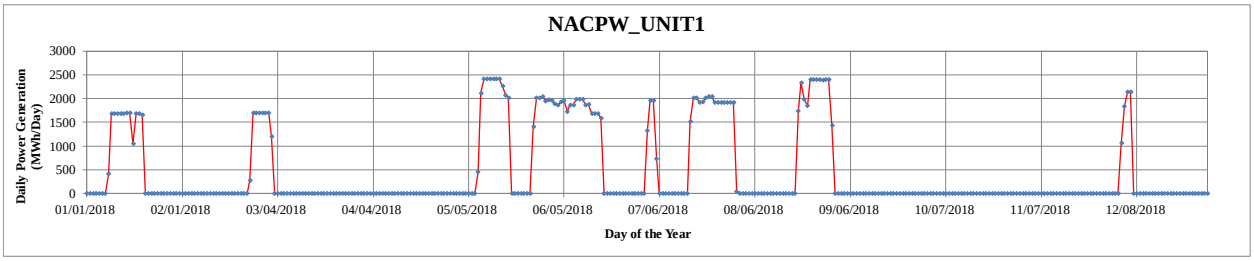


Figure D-28: Daily Total Electricity Generation Profile for Biomass Project NACPW_UNIT1

APPENDIX E Electricity Generation Profile for Hydroelectric Projects

The electricity generations for Hydroelectric projects are discussed in sections E.1 to E.29. The hourly and daily total electricity generation profile for each Hydroelectric project are shown in Figure E-1 to Figure E-58.

E.1 AMISTAD_AMISTAG1

The hydro power project AMISTAD_AMISTAG1, was in operation for majority of the time during the year except several days in every month. Figure E-1 shows hourly electricity generation profile. Figure E-2 shows daily total generation profile for the year 2018.

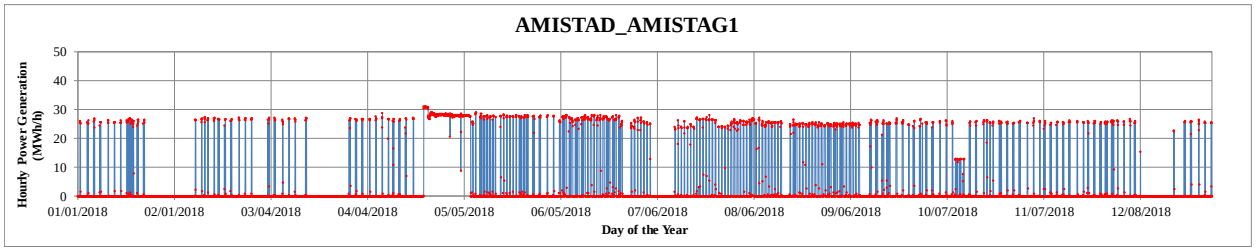


Figure E-1: Hourly Electricity Generation Profile for Hydroelectric Project AMISTAD_AMISTAG1

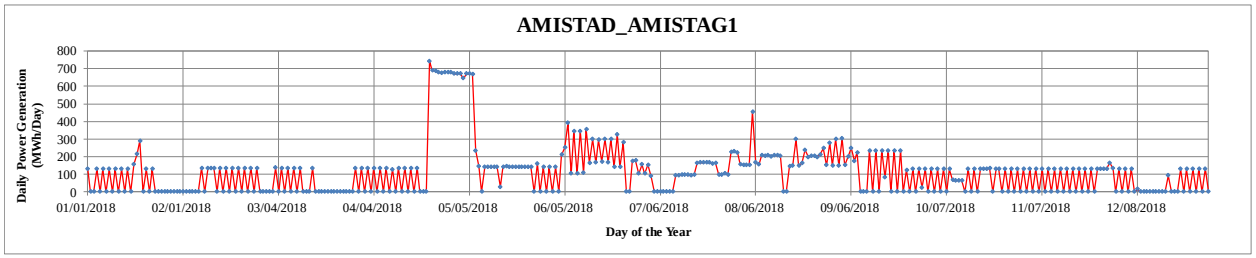


Figure E-2: Daily Total Electricity Generation Profile for Hydroelectric Project AMISTAD_AMISTAG1

E.2 AMISTAD_AMISTAG2

The hydro power project AMISTAD_AMISTAG2, was also in operation for majority of the time during the year except several days in every month. Figure E-3 shows hourly electricity generation profile. Figure E-4 shows daily total generation profile for the year 2018.

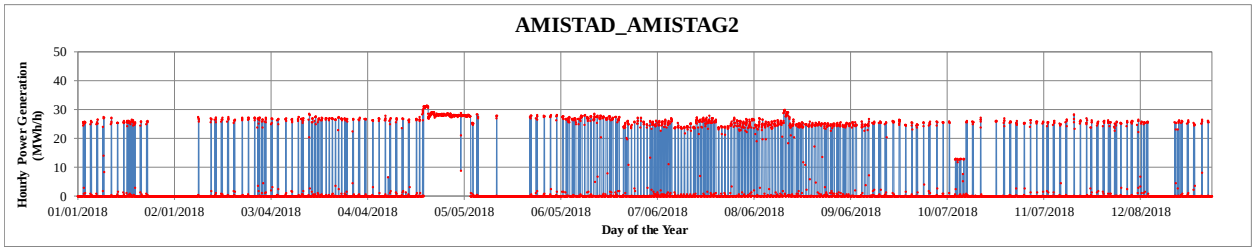


Figure E-3: Hourly Electricity Generation Profile for Hydroelectric Project AMISTAD_AMISTAG2

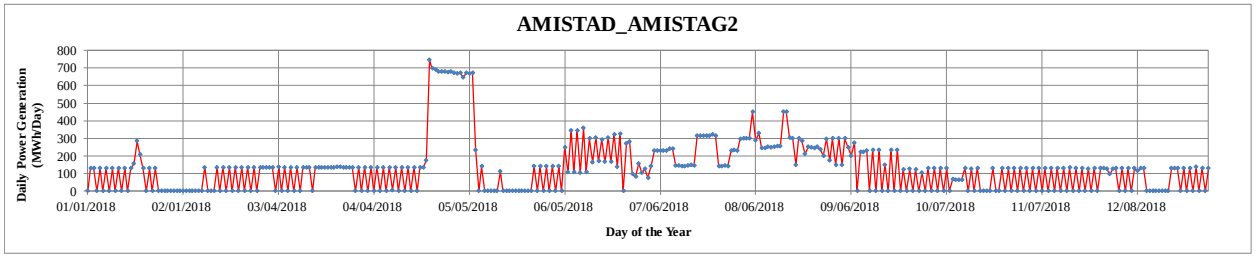


Figure E-4: Daily Total Electricity Generation Profile for Hydroelectric Project AMISTAD_AMISTAG2

E.3 AUSTPL_AUSTING1

The hydro power project AUSTPL_AUSTING1 was in operation during about the only half of the entire year. Most power was generated during the months of May to December. Figure E-5 shows hourly electricity generation profile. Figure E-6 shows daily total generation profile for the year 2018.

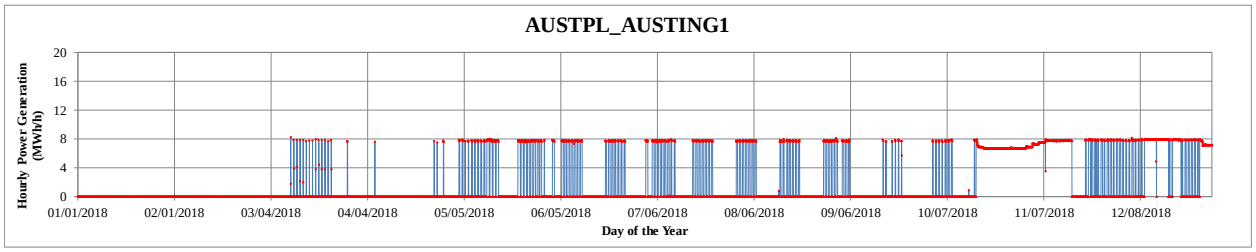


Figure E-5: Hourly Electricity Generation Profile for Hydroelectric Project AUSTPL_AUSTING1

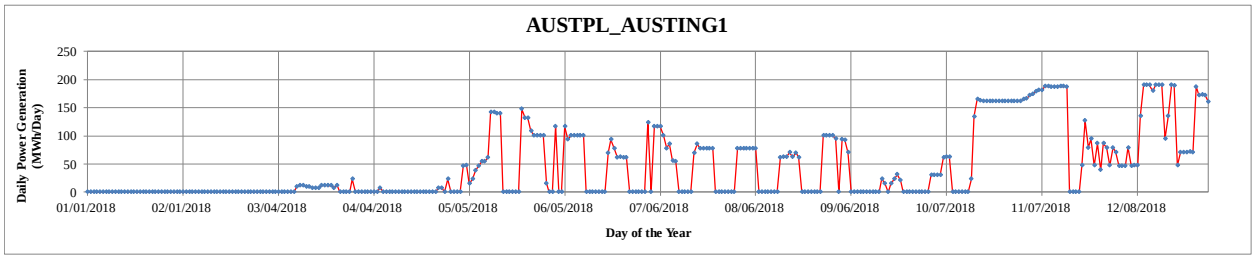


Figure E-6: Daily Total Electricity Generation Profile for Hydroelectric Project AUSTPL_AUSTING1

E.4 AUSTPL_AUSTING2

The hydro power project AUSTPL_AUSTING2 was in operation during about the only half of the entire year. Most power was generated during the months of May to December. Figure E-7 shows hourly electricity generation profile. Figure E-8 shows daily total generation profile for the year 2018.

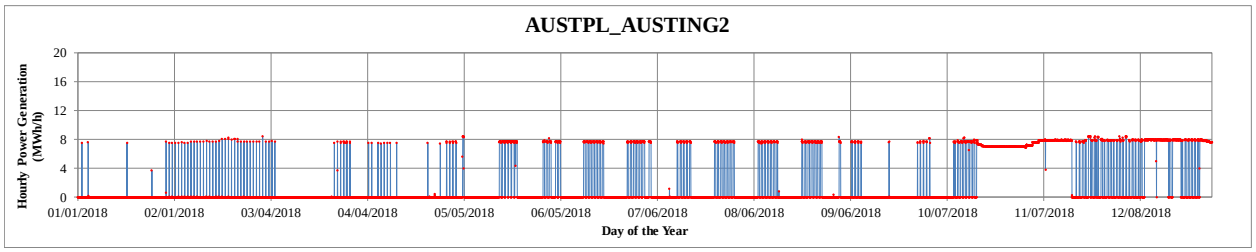


Figure E-7: Hourly Electricity Generation Profile for Hydroelectric Project AUSTPL_AUSTING2

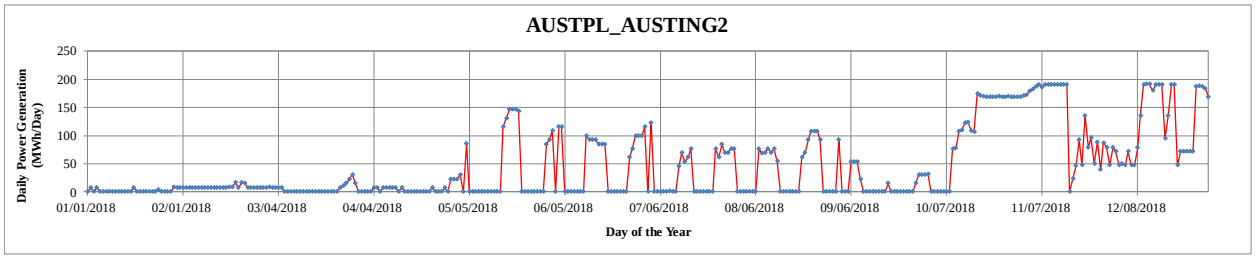


Figure E-8: Daily Total Electricity Generation Profile for Hydroelectric Project AUSTPL_AUSTING2

E.5 BUCHAN_BUCHANG1

The hydro power project BUCHAN_BUCHANG1 was not operated for most of the year excluding a few days in May to December. Figure E-9 shows hourly electricity generation profile and Figure E-10 shows daily total generation profile for the year 2018.

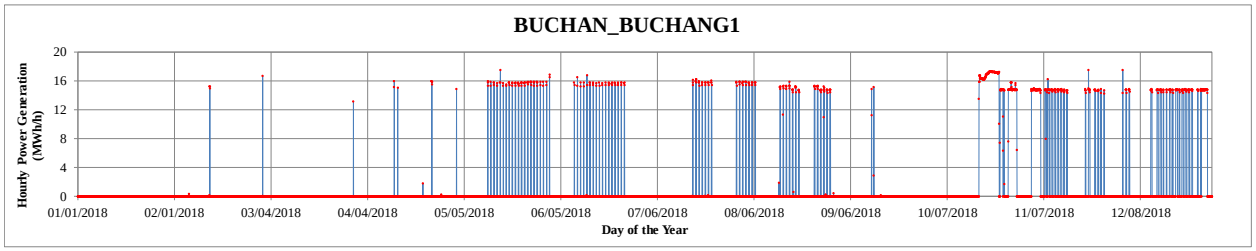


Figure E-9: Hourly Electricity Generation Profile for Hydroelectric Project BUCHAN_BUCHANG1

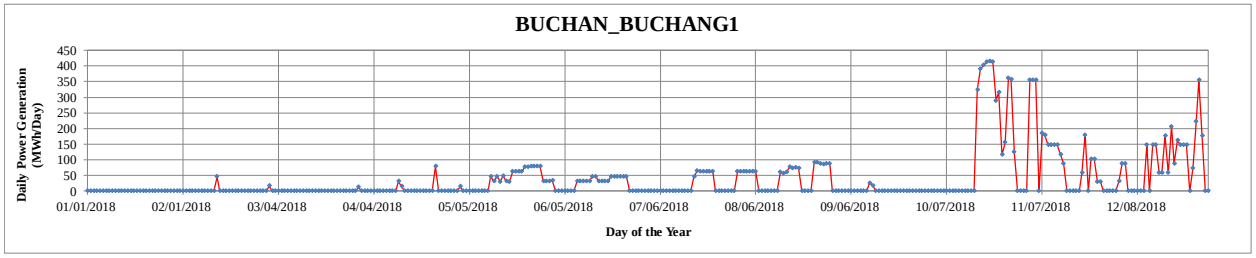


Figure E-10: Daily Total Electricity Generation Profile for Hydroelectric Project BUCHAN_BUCHANG1

E.6 BUCHAN_BUCHANG2

The hydro power project BUCHAN_BUCHANG2 was not in operation for majority of the time during the year except several days from May to december. Figure E-11 shows hourly electricity generation profile and Figure E-12 shows daily total generation profile for the year 2018.

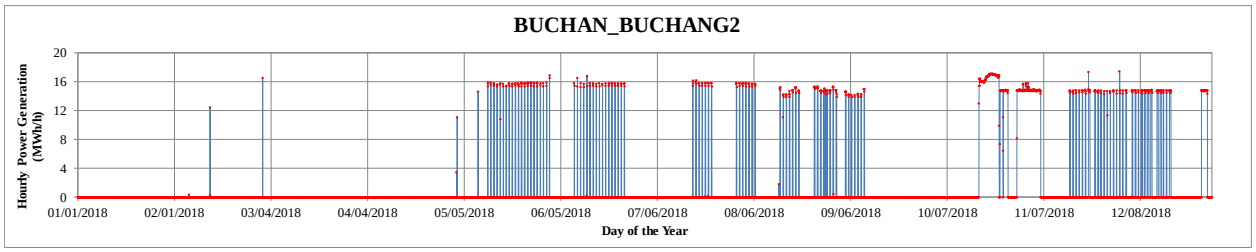


Figure E-11: Hourly Electricity Generation Profile for Hydroelectric Project BUCHAN_BUCHANG2

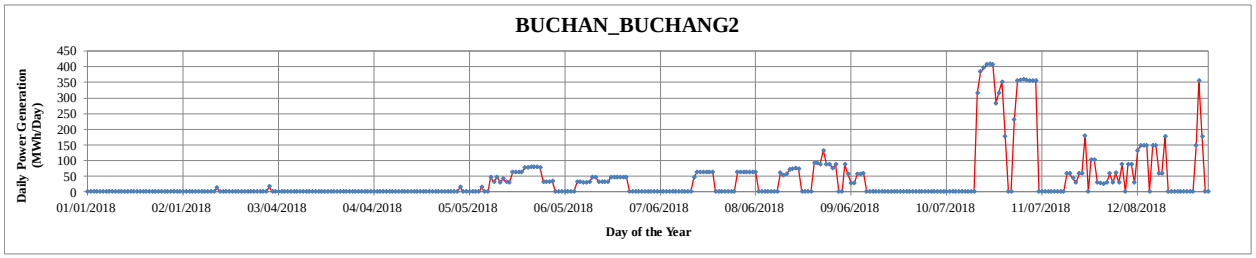


Figure E-12: Daily Total Electricity Generation Profile for Hydroelectric Project BUCHAN_BUCHANG2

E.7 BUCHAN_BUCHANG3

The hydro power project BUCHAN_BUCHANG3 was also not in operation for majority of the time during the year except several days, mainly from October to December. Figure E-13 shows hourly electricity generation profile and Figure E-14 shows daily total generation profile for the year 2018.

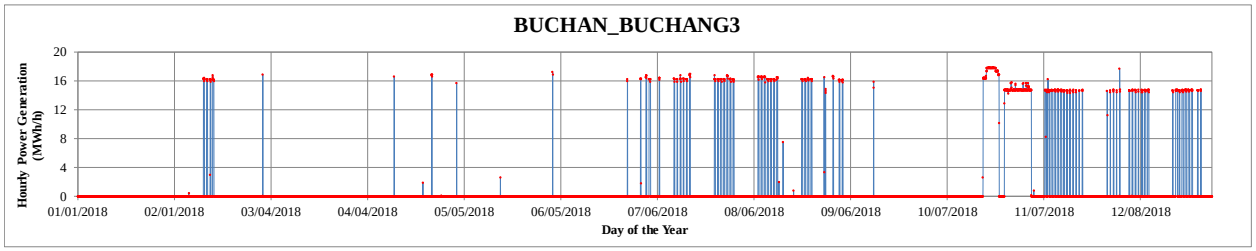


Figure E-13: Hourly Electricity Generation Profile for Hydroelectric Project BUCHAN_BUCHANG3

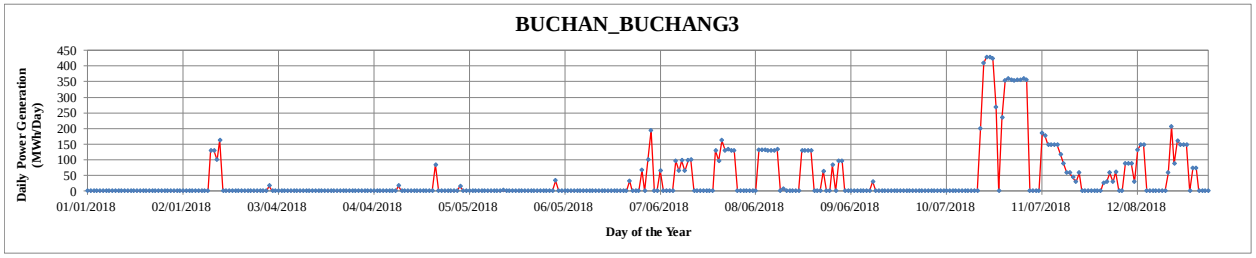


Figure E-14: Daily Total Electricity Generation Profile for Hydroelectric Project BUCHAN_BUCHANG3

E.8 CANYHY_CANYHYG1

The hydro power project CANYHY_CANYHYG1 was not in operation for majority of the time during the year except for the many days during October to December. Figure E-15 shows hourly electricity generation profile and Figure E-16 shows daily total generation profile for the year 2018.

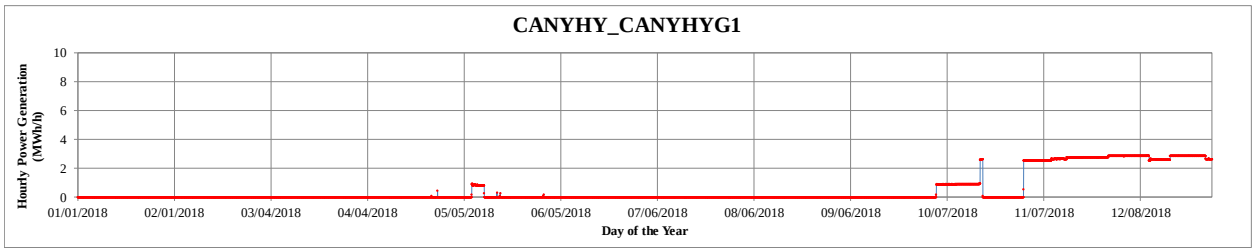


Figure E-15: Hourly Electricity Generation Profile for Hydroelectric Project CANYHY_CANYHYG1

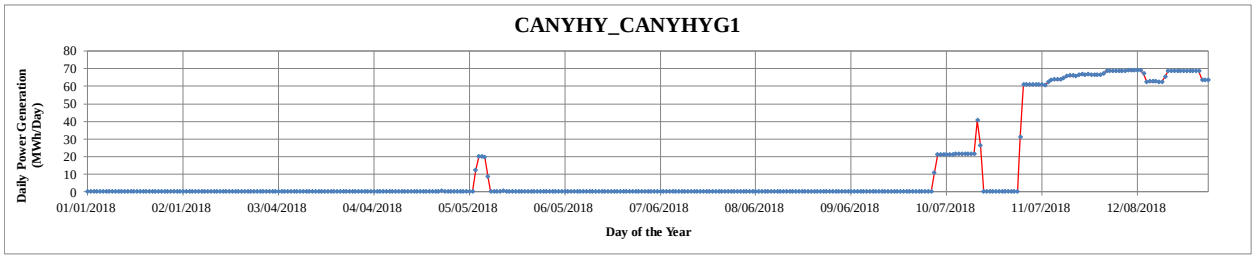


Figure E-16: Daily Total Electricity Generation Profile for Hydroelectric Project CANYHY_CANYHYG1

E.9 DG_LKWDT_2UNITS

The hydro power project DG_LKWDT_2UNITS was in operation for majority of the time during the year. Figure E-17 shows hourly electricity generation profile and Figure E-18 shows daily total generation profile for the year 2018.

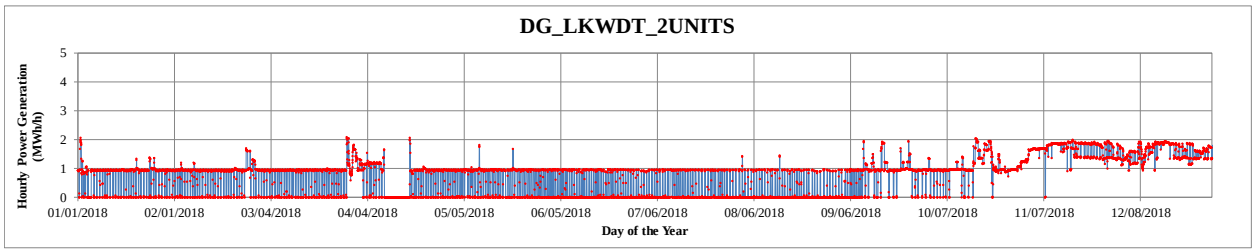


Figure E-17: Hourly Electricity Generation Profile for Hydroelectric Project DG_LKWDT_2UNITS

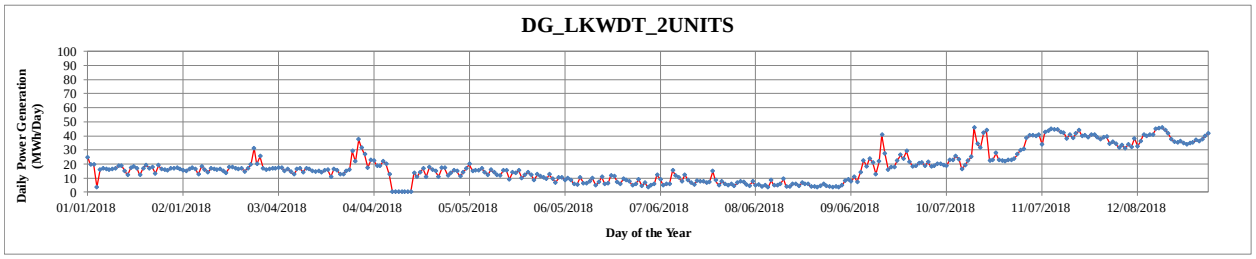


Figure E-18: Daily Total Electricity Generation Profile for Hydroelectric Project DG_LKWDT_2UNITS

E.10 DG_LWSVL_1UNIT

The hydro power project DG_LWSVL_1UNIT w was also not in operation for majority of the time during the year except for the many days during March to April and June to September. Figure E-19 shows hourly electricity generation profile and Figure E-20 shows daily total generation profile for the year 2018.

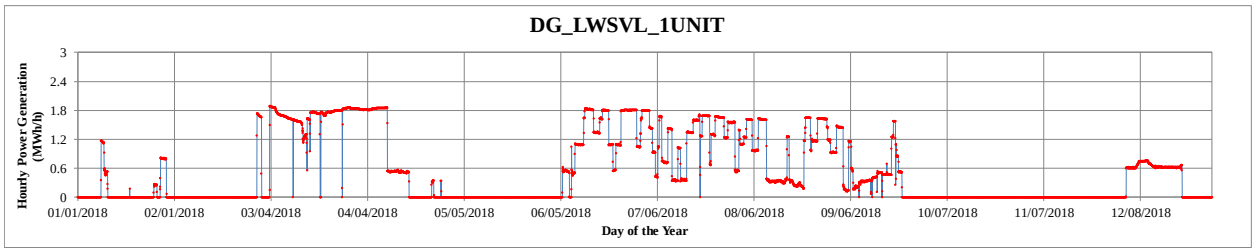


Figure E-19: Hourly Electricity Generation Profile for Hydroelectric Project DG_LWSVL_1UNIT

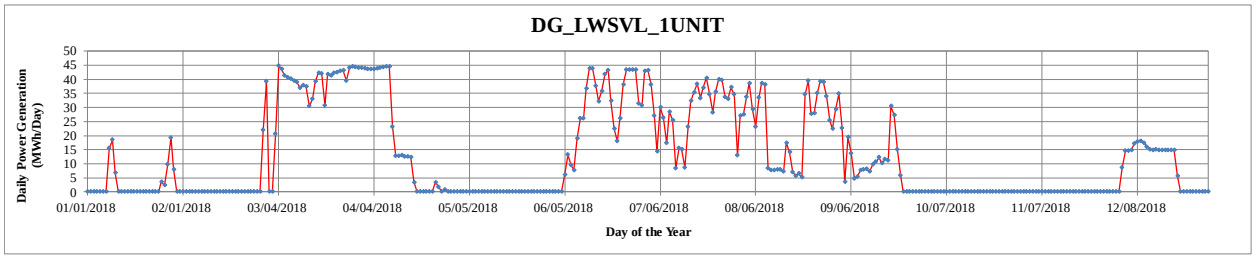


Figure E-20: Daily Total Electricity Generation Profile for Hydroelectric Project DG_LWSVL_1UNIT

E.11 DG_MCQUE_5UNITS

The hydro power project DG_MCQUE_5UNITS was in operation for majority of the time during the year. Figure E-21 shows hourly electricity generation profile and Figure E-22 shows daily total generation profile for the year 2018.

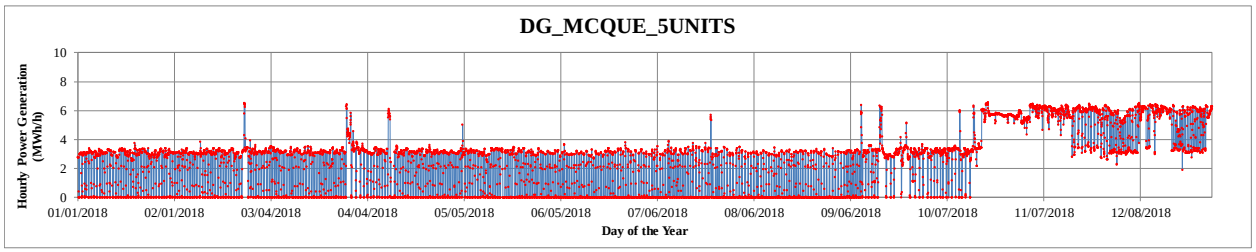


Figure E-21: Hourly Electricity Generation Profile for Hydroelectric Project DG_MCQUE_5UNITS

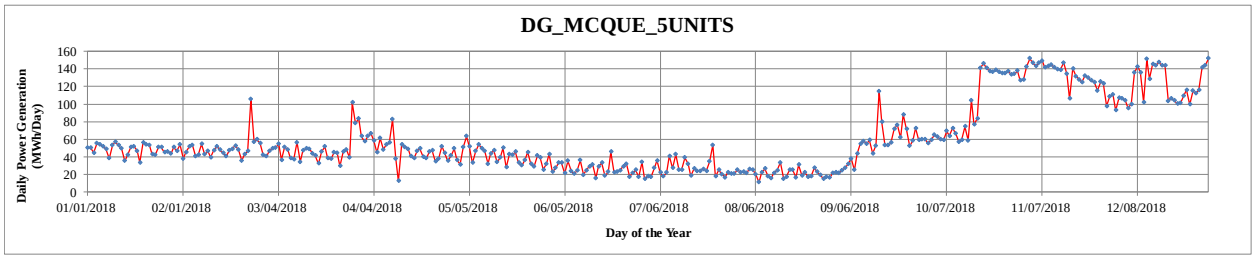


Figure E-22: Daily Total Electricity Generation Profile for Hydroelectric Project DG_MCQUE_5UNITS

E.12 DG_OAKHL_1UNIT

The hydro power project DG_OAKHL_1UNIT was not in operation for majority of the time during the year except several days from June to September. Figure E-23 shows hourly electricity generation profile and Figure E-24 shows daily total generation profile for the year 2018.

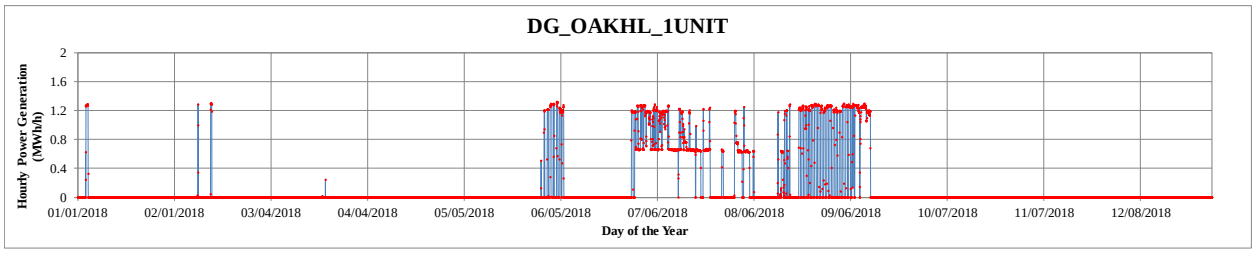


Figure E-23: Hourly Electricity Generation Profile for Hydroelectric Project DG_OAKHL_1UNIT

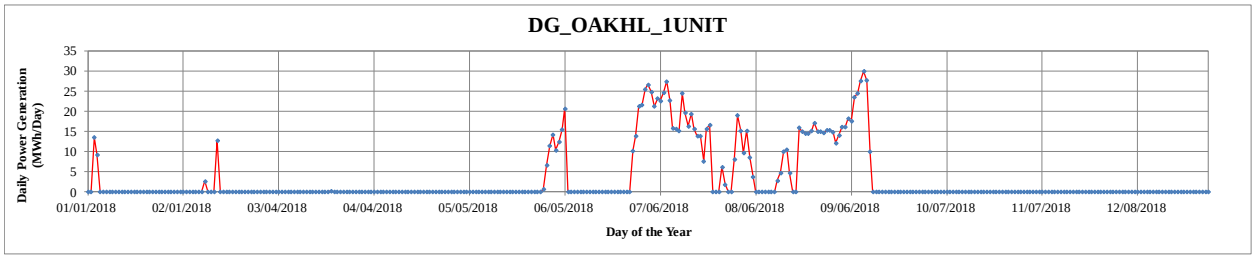


Figure E-24: Daily Total Electricity Generation Profile for Hydroelectric Project DG_OAKHL_1UNIT

E.13 DG_SCHUM_2UNITS

The hydro power project DG_SCHUM_2UNITS was in continuous operation throughout the entire year. Figure E-25 shows hourly electricity generation profile and Figure E-26 shows daily total generation profile for the year 2018.

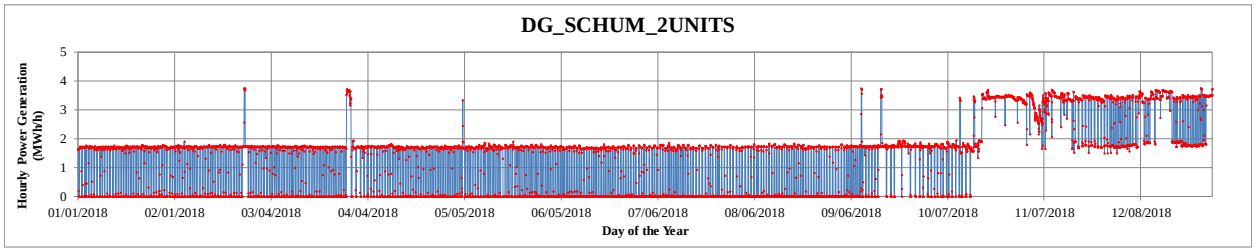


Figure E-25: Hourly Electricity Generation Profile for Hydroelectric Project DG_SCHUM_2UNITS

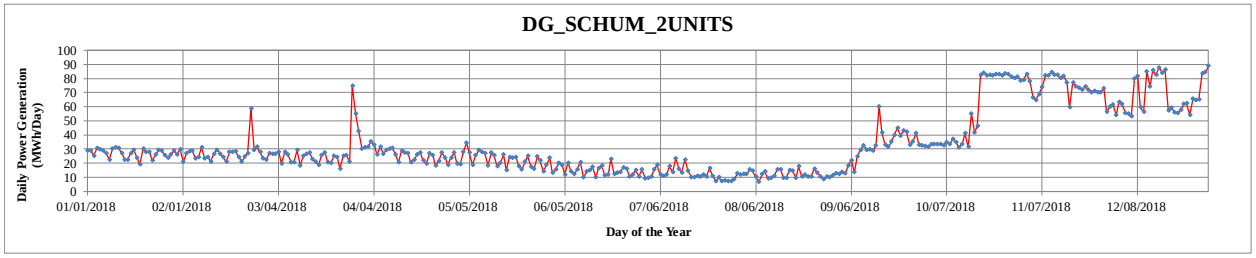


Figure E-26: Daily Total Electricity Generation Profile for Hydroelectric Project DG_SCHUM_2UNITS

E.14 DNDAM_DENISOG1

The hydro power project DNDAM_DENISOG1 was not in operation during the year except a few days from June to December. Figure E-27 shows hourly electricity generation profile and Figure E-28 shows daily total generation profile for the year 2018.

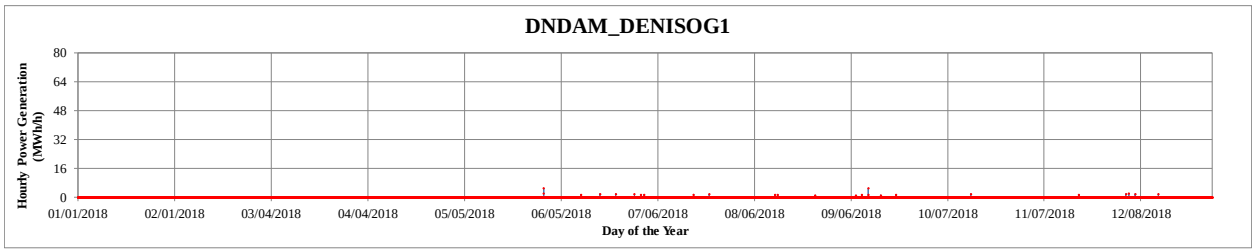


Figure E-27: Hourly Electricity Generation Profile for Hydroelectric Project DNDAM_DENISOG1

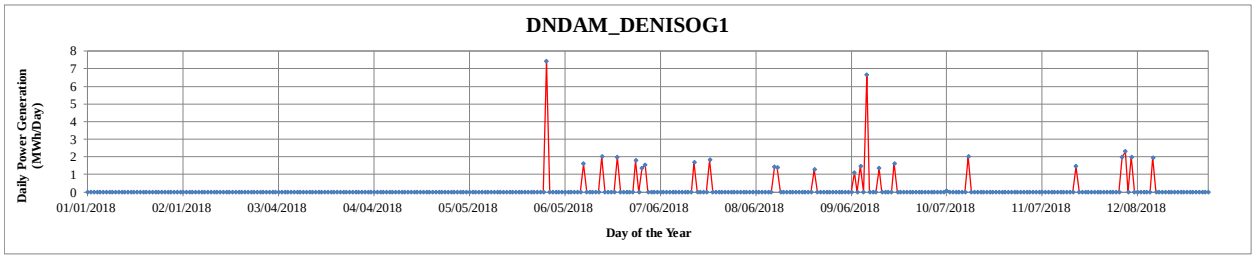


Figure E-28: Daily Total Electricity Generation Profile for Hydroelectric Project DNDAM_DENISOG1

E.15 DNDAM_DENISOG2

The hydro power project DNDAM_DENISOG2 was in continuous operation throughout the entire year. Figure E-29 shows hourly electricity generation profile and Figure E-30 shows daily total generation profile for the year 2018.

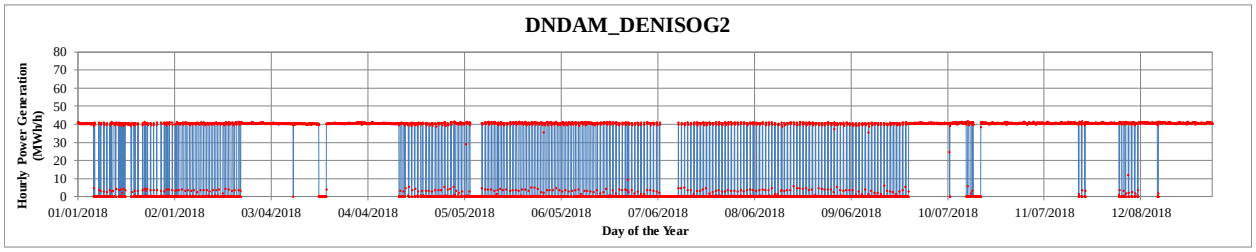


Figure E-29: Hourly Electricity Generation Profile for Hydroelectric Project DNDAM_DENISOG2

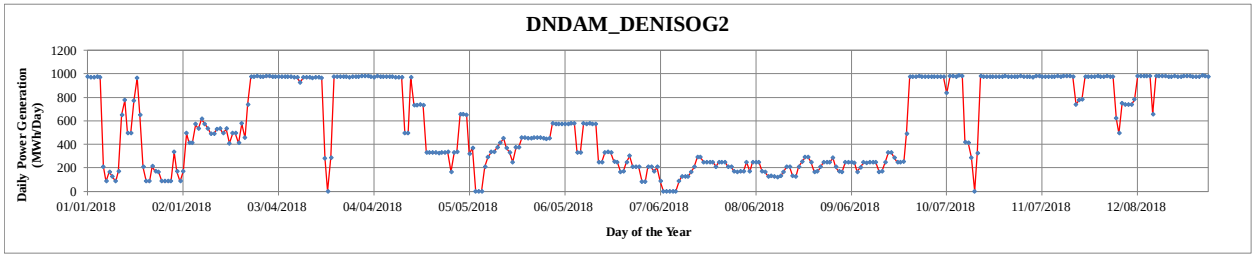


Figure E-30: Daily Total Electricity Generation Profile for Hydroelectric Project DNDAM_DENISOG2

E.16 EAGLE_HY_EAGLE_HY

The hydro power project EAGLE_HY_EAGLE_HY was in continuous operation for majority of the time during the year except for several days in October and November. Figure E-31 shows hourly electricity generation profile and Figure E-32 shows daily total generation profile for the year 2018.

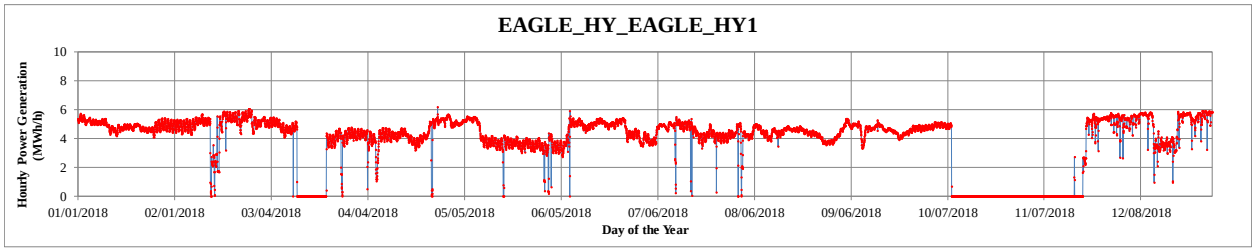


Figure E-31: Hourly Electricity Generation Profile for Hydroelectric Project EAGLE_HY_EAGLE_HY

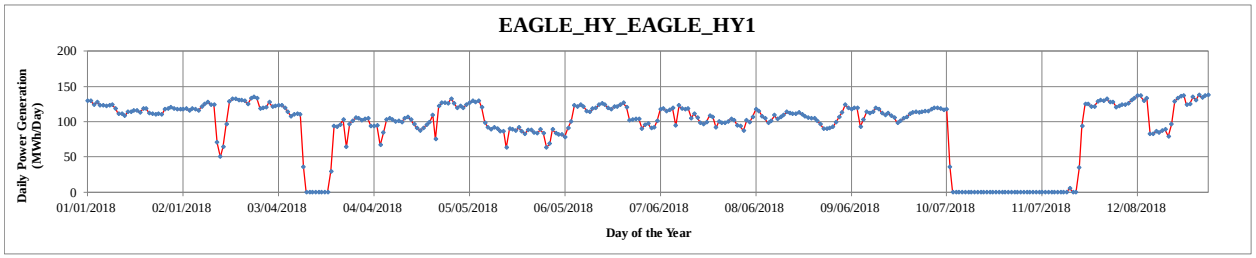


Figure E-32: Daily Total Electricity Generation Profile for Hydroelectric Project EAGLE_HY_EAGLE_HY

E.17 FALCON_FALCONG1

The hydro power project FALCON_FALCONG1 was in operation only for few months in the entire year. Figure E-33 shows hourly electricity generation profile and Figure E-34 shows daily total generation profile for the year 2018.

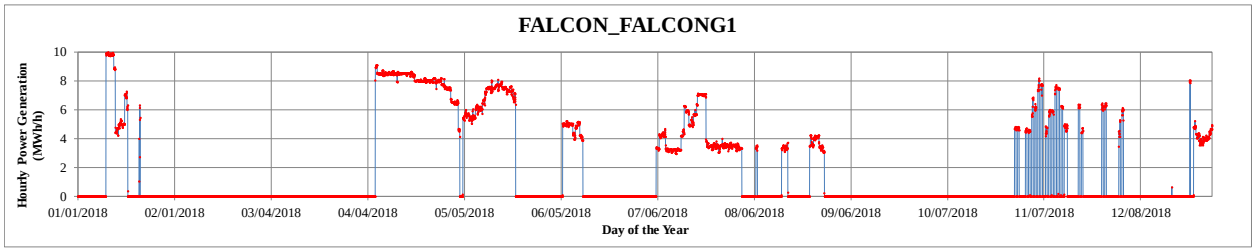


Figure E-33: Hourly Electricity Generation Profile for Hydroelectric Project FALCON_FALCONG1

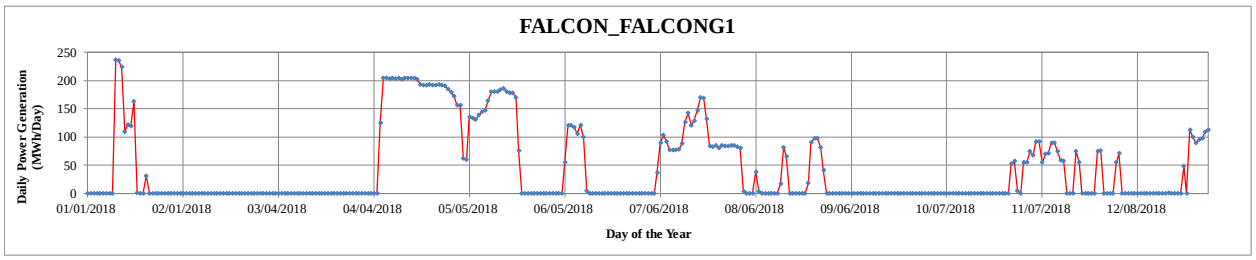


Figure E-34: Daily Total Electricity Generation Profile for Hydroelectric Project FALCON_FALCONG1

E.18 FALCON_FALCONG2

The hydro power project FALCON_FALCONG2 was not in operation for majority of the time during the year except most of the times during January to June. Figure E-35 shows hourly electricity generation profile and Figure E-36 shows daily total generation profile for the year 2018.

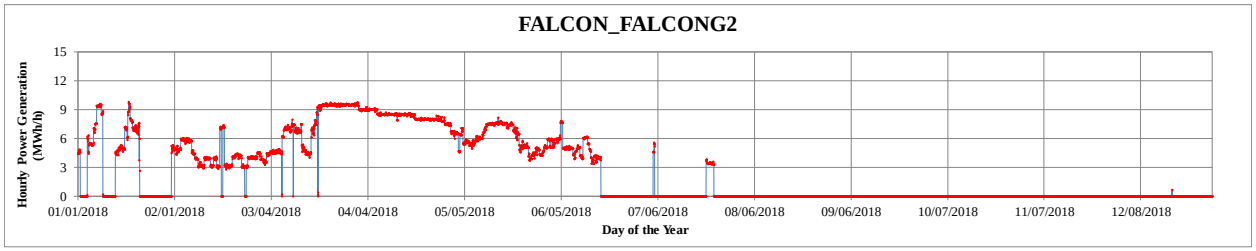


Figure E-35: Hourly Electricity Generation Profile for Hydroelectric Project FALCON_FALCONG2

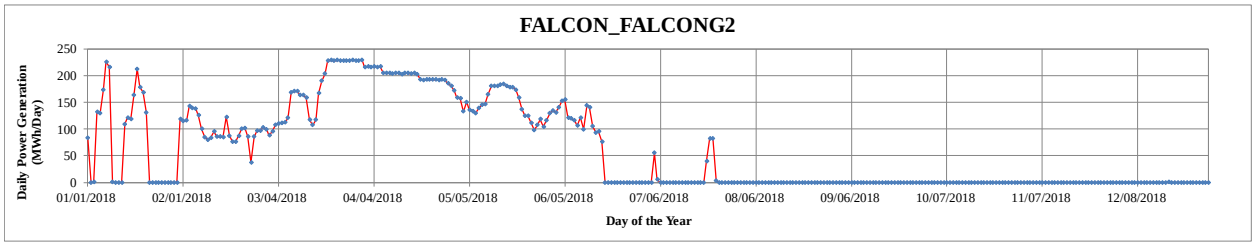


Figure E-36: Daily Total Electricity Generation Profile for Hydroelectric Project FALCON_FALCONG2

E.19 FALCON_FALCONG3

Similar to FALCON_FALCONG2, the hydro power project FALCON_FALCONG3 was in operation for majority of the time during the year except a few months. Figure E-37 shows hourly electricity generation profile and Figure E-38 shows daily total generation profile for the year 2018.

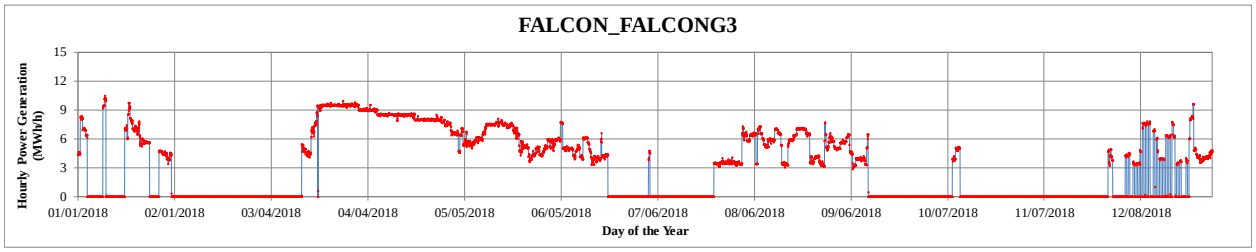


Figure E-37: Hourly Electricity Generation Profile for Hydroelectric Project FALCON_FALCONG3

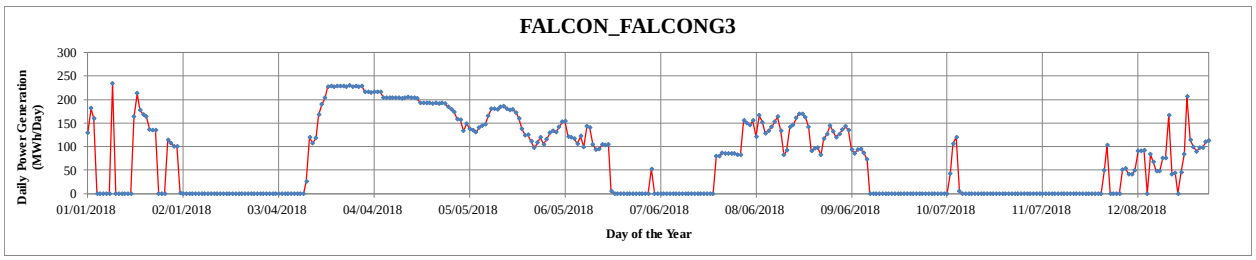


Figure E-38: Daily Total Electricity Generation Profile for Hydroelectric Project FALCON_FALCONG3

E.20 INKSDA_INKS_G1

The hydro power project INKSDA_INKS_G1 was not in operation for the majority of the time during the year. The electricity generation was very consistent. Figure E-39 shows hourly electricity generation profile and Figure E-40 shows daily total generation profile for the year 2018.

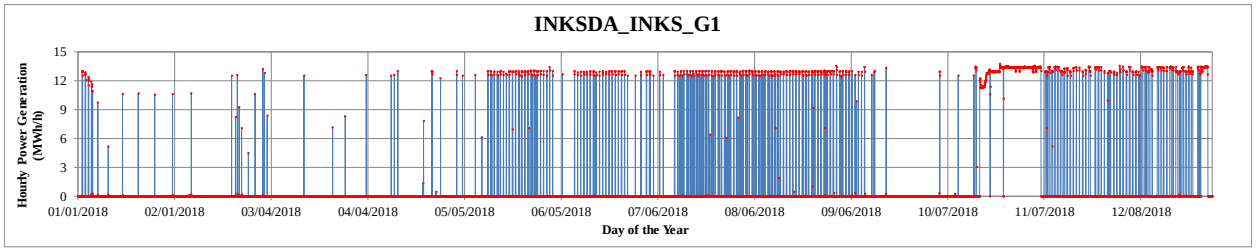


Figure E-39: Hourly Electricity Generation Profile for Hydroelectric Project INKSDA_INKS_G1

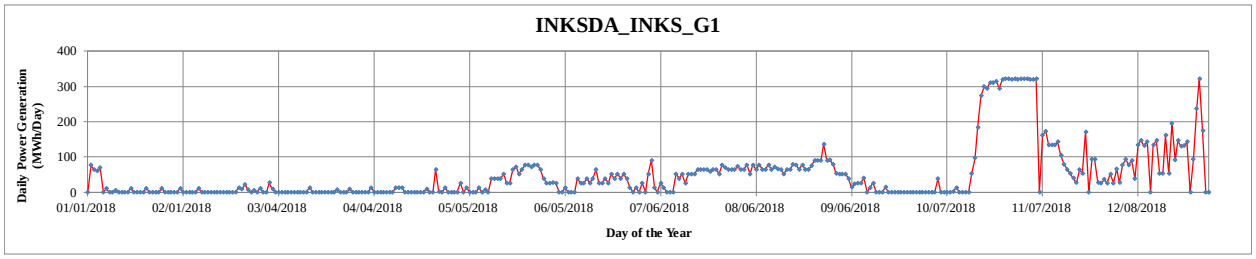


Figure E-40: Daily Total Electricity Generation Profile for Hydroelectric Project INKSDA_INKS_G1

E.21 MARBFA_MARBFAG1

The hydro power project MARBFA_MARBFAG1 was not in operation for majority of the time during the year. Figure E-41 shows hourly electricity generation profile and Figure E-42 shows daily total generation profile for the year 2018.

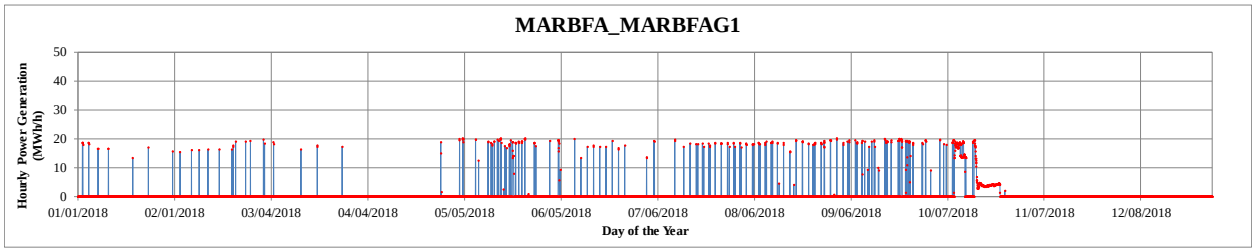


Figure E-41: Hourly Electricity Generation Profile for Hydroelectric Project MARBFA_MARBFAG1

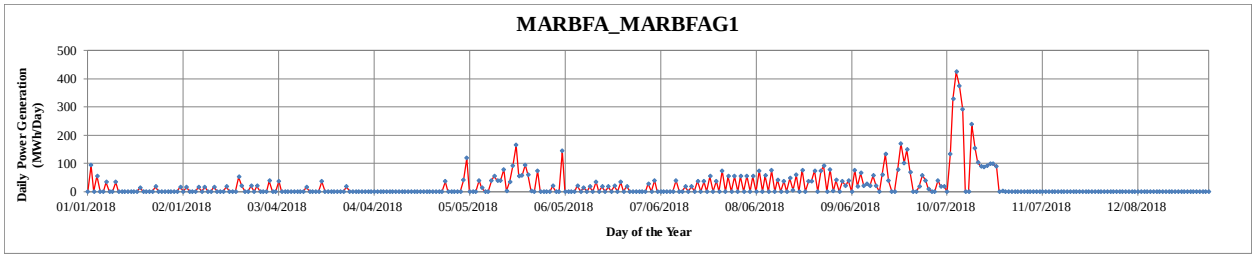


Figure E-42: Daily Total Electricity Generation Profile for Hydroelectric Project MARBFA_MARBFAG1

E.22 MARBFA_MARBFAG2

The hydro power project MARBFA_MARBFAG2 was not in operation for the majority of the time during the year. Figure E-43 shows hourly electricity generation profile and Figure E-44 shows daily total generation profile for the year 2018.

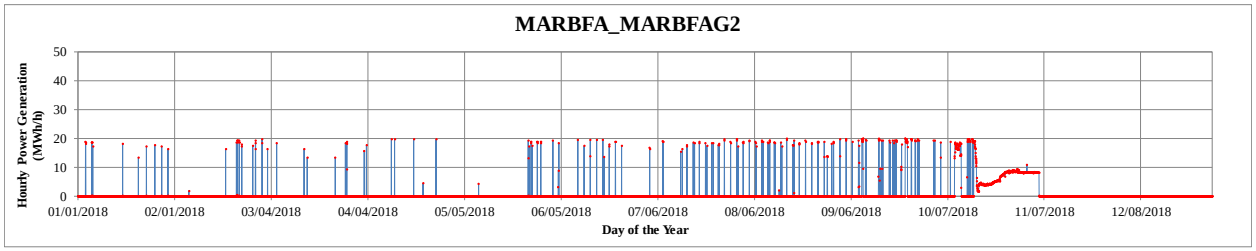


Figure E-43: Hourly Electricity Generation Profile for Hydroelectric Project MARBFA_MARBFAG2

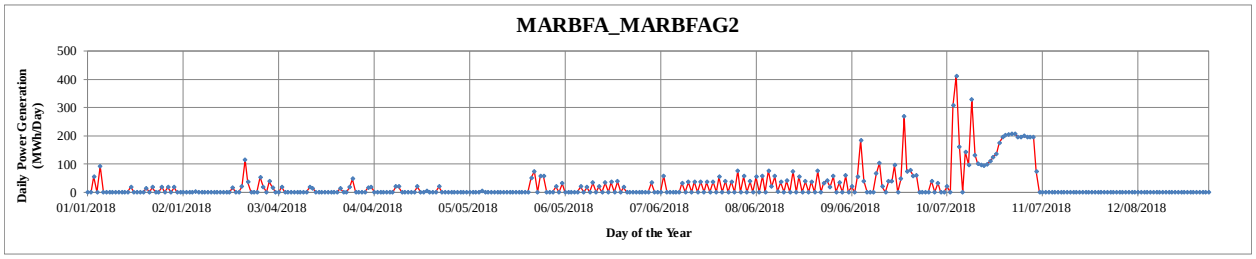


Figure E-44: Daily Total Electricity Generation Profile for Hydroelectric Project MARBFA_MARBFAG2

E.23 MARSFO_MARSFOG1

The hydro power project MARSFO_MARSFOG1 was also not in operation for majority of the time during the year with intermittent electric generation. Figure E-45 shows hourly electricity generation profile and Figure E-46 shows daily total generation profile for the year 2018.

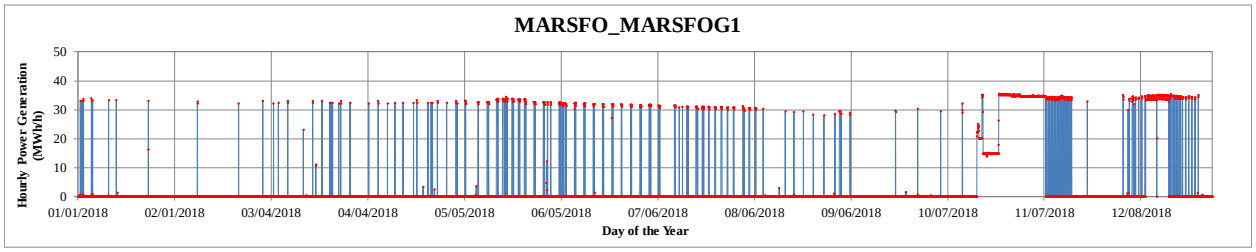


Figure E-45: Hourly Electricity Generation Profile for Hydroelectric Project MARSFO_MARSFOG1

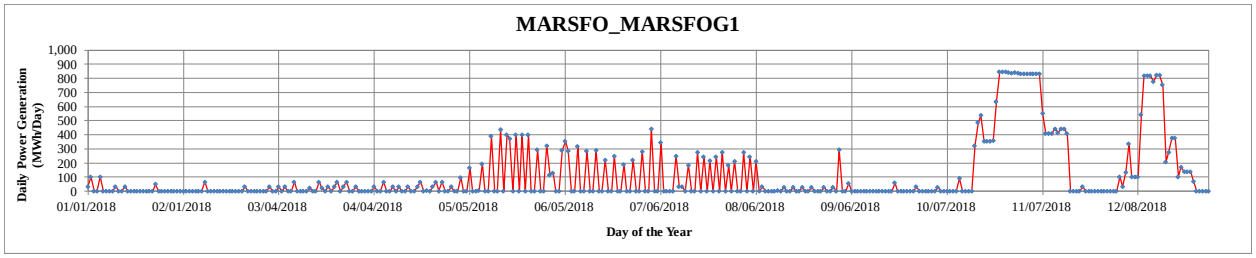


Figure E-46: Daily Total Electricity Generation Profile for Hydroelectric Project MARSFO_MARSFOG1

E.24 MARSFO_MARSFOG2

The hydro power project MARSFO_MARSFOG2 was also not in operation for majority of the time during the year with intermittent electric generation. Figure E-47 shows hourly electricity generation profile and Figure E-48 shows daily total generation profile for the year 2018.

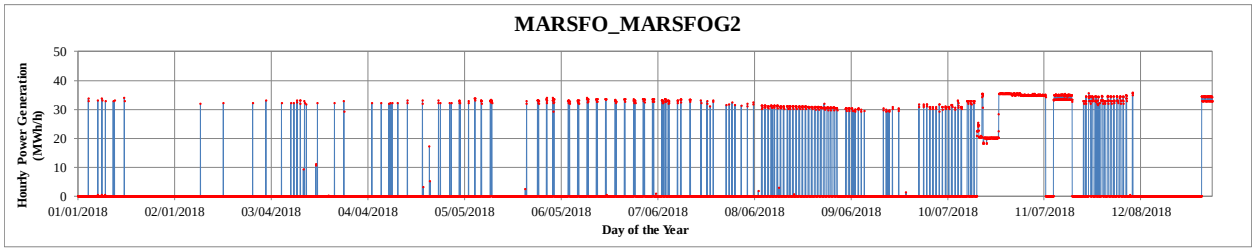


Figure E-47: Hourly Electricity Generation Profile for Hydroelectric Project MARSFO_MARSFOG2

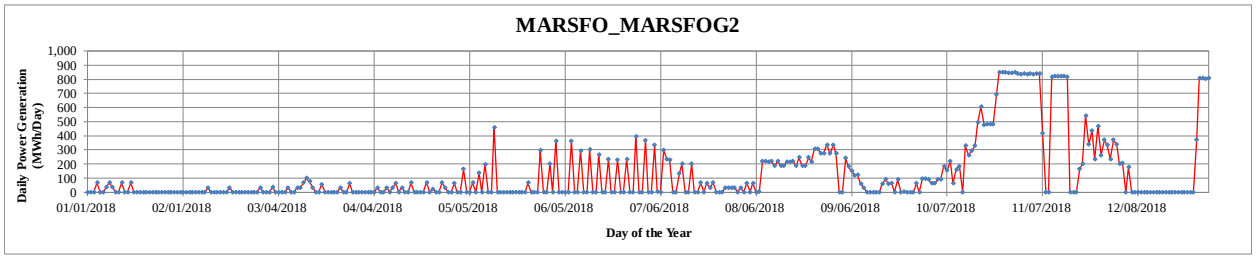


Figure E-48: Daily Total Electricity Generation Profile for Hydroelectric Project MARSFO_MARSFOG2

E.25 MARSFO_MARSFOG3

The hydro power project MARSFO_MARSFOG3 was also not in operation for majority of the time during the year with intermittent electric generation. Figure E-49 shows hourly electricity generation profile and Figure E-50 shows daily total generation profile for the year 2018.

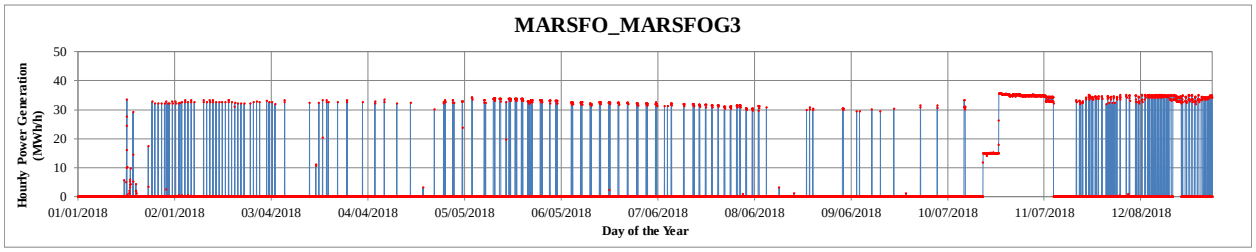


Figure E-49: Hourly Electricity Generation Profile for Hydroelectric Project MARSFO_MARSFOG3

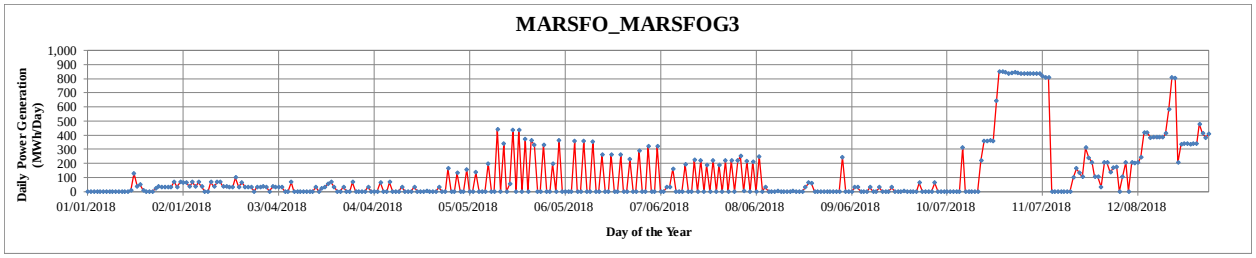


Figure E-50: Daily Total Electricity Generation Profile for Hydroelectric Project MARSFO_MARSFOG3

E.26 WIRTZ_WIRTZ_G1

The hydro power project WIRTZ_WIRTZ_G1 was in intermittent operations throughout the entire year with few days in operation for each month. Figure E-51 shows hourly electricity generation profile and Figure E-52 shows daily total generation profile for the year 2018.

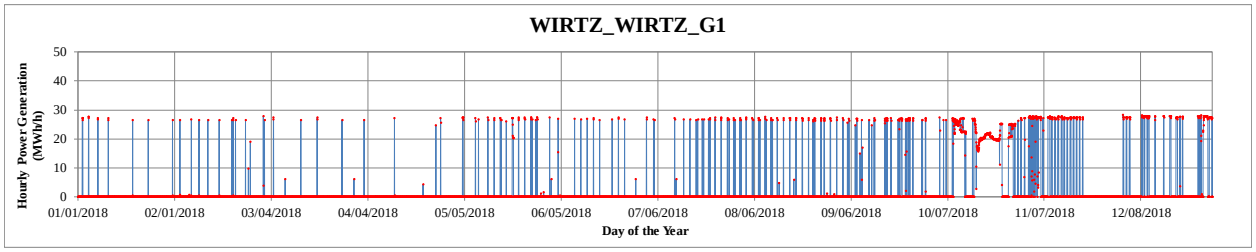


Figure E-51: Hourly Electricity Generation Profile for Hydroelectric Project WIRTZ_WIRTZ_G1

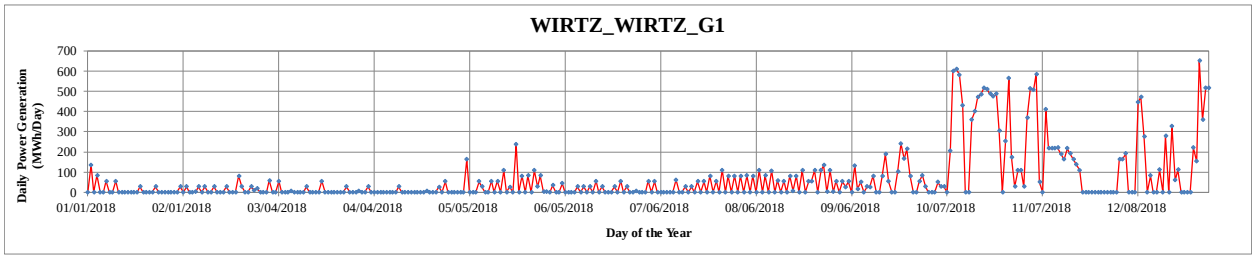


Figure E-52: Daily Total Electricity Generation Profile for Hydroelectric Project WIRTZ_WIRTZ_G1

E.27 WIRTZ_WIRTZ_G2

The hydro power project WIRTZ_WIRTZ_G2 was also in intermittent operations throughout the entire year with few days in operation for each month. Figure E-53 shows hourly electricity generation profile and Figure E-54 shows daily total generation profile for the year 2018.

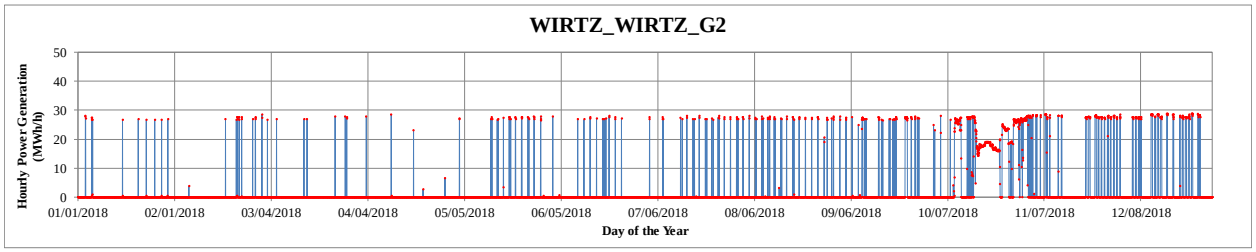


Figure E-53: Hourly Electricity Generation Profile for Hydroelectric Project WIRTZ_WIRTZ_G2

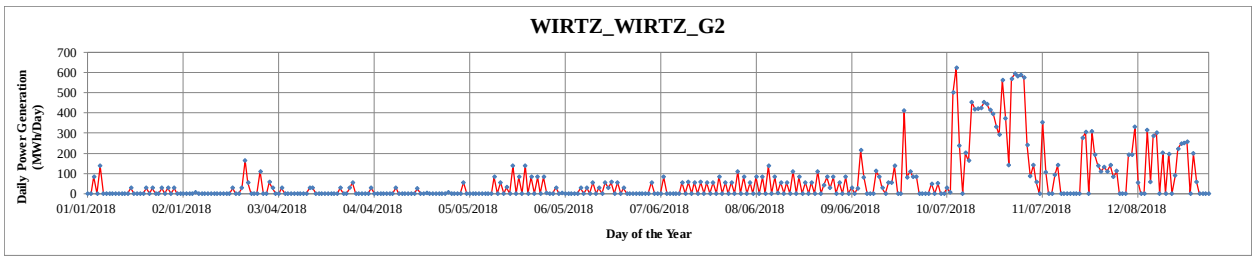


Figure E-54: Daily Total Electricity Generation Profile for Hydroelectric Project WIRTZ_WIRTZ_G2

E.28 WND_WHITNEY1

The hydro power project WND_WHITNEY1 was also in intermittent operations throughout the entire year with few days in operation for several month. Figure E-55 shows hourly electricity generation profile and Figure E-56 shows daily total generation profile for the year 2018.

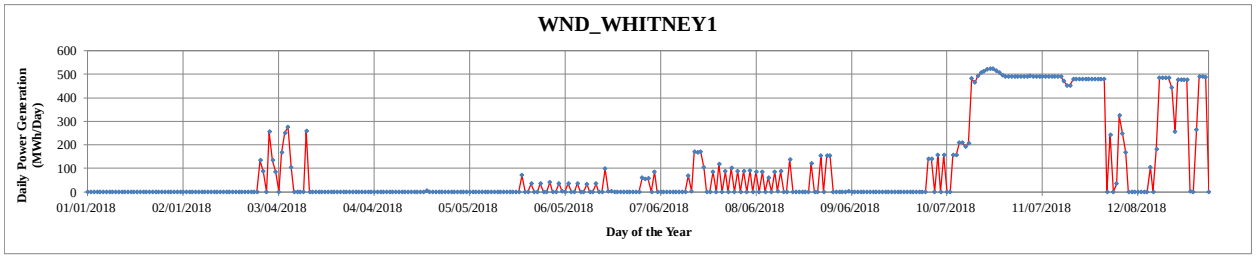


Figure E-55: Hourly Electricity Generation Profile for Hydroelectric Project WND_WHITNEY1

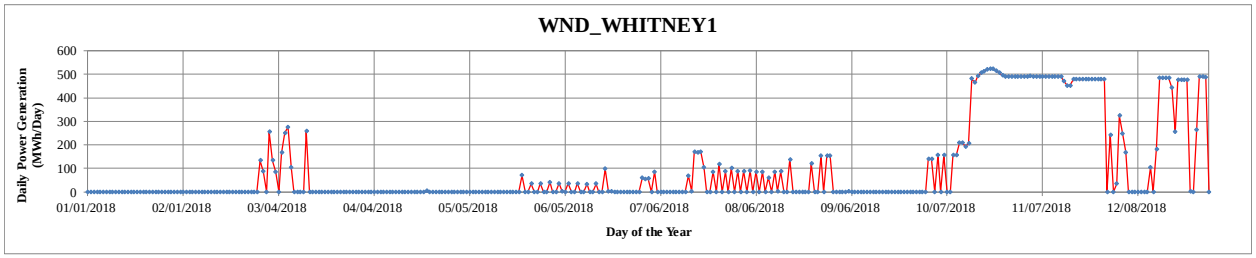


Figure E-56: Daily Total Electricity Generation Profile for Hydroelectric Project WND_WHITNEY1

E.29 WND_WHITNEY2

The hydro power project WND_WHITNEY2 was also in intermittent operations throughout the entire year with few days in operation for several month. Figure E-57 shows hourly electricity generation profile and Figure E-58 shows daily total generation profile for the year 2018.

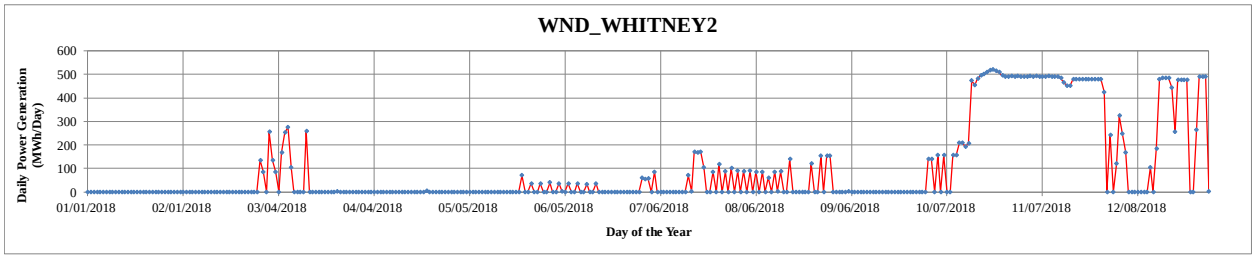


Figure E-57: Hourly Electricity Generation Profile for Hydroelectric Project WND_WHITNEY2

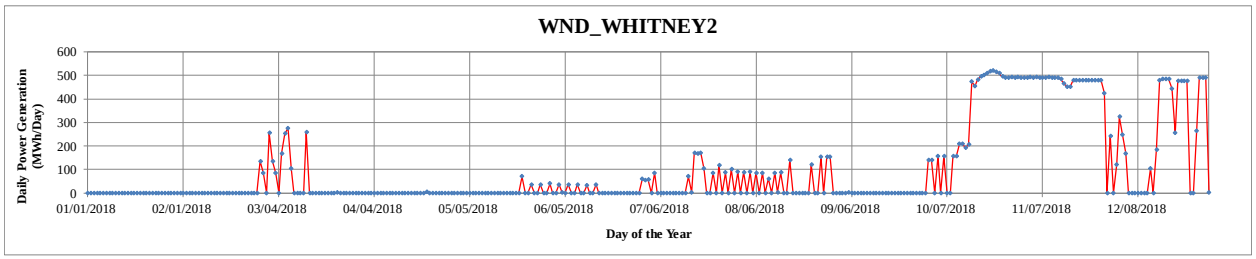


Figure E-58: Daily Total Electricity Generation Profile for Hydroelectric Project WND_WHITNEY2

APPENDIX F Lists of Renewable Projects

This appendix includes lists of the identified solar PV projects, solar thermal projects, geothermal projects, and landfill gas-fired projects.

- Solar PV projects: a total of 4,794 solar PV projects were reported in the present report and all of the identified solar PV projects can be found in Table F-1.
- Solar thermal projects: unfortunately, none of new solar thermal projects was found for the present report. As a result, the present report has the same number of solar thermal projects with the previous report, which was 38 projects. The list of all the projects is shown in Table F-3
- Geothermal projects: unfortunately, none of new geothermal projects was found for the present report. As a result, the present report has the same number of geothermal projects with the previous report, which was 286. Table F-4 shows the list of the geothermal projects
- Landfill gas-fired projects: 37 operational, 53 candidate, 34 potential, 3 construction, 18 shutdown, 2 planned, and 3 other landfill gas-fired projects were identified in the present report. All of the operational, candidate, potential, construction, shutdown, planned, and other projects are listed in Table F-5 through Table F-11, respectively.

Table F-1: Solar Photovoltaic Projects: Data and Information up to 2018

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1	Travis	Travis	78704	TX	1.26	7611	6/9/2004	30.24	-97.77
2	Travis	Travis	78756	TX	2.51	15667	8/2/2004	30.32	-97.74
3	Travis	Travis	78746	TX	3.01	18456	8/4/2004	30.31	-97.82
4	Travis	Travis	78704	TX	3.36	22173	8/9/2004	30.24	-97.77
5	Travis	Travis	78756	TX	2.67	14348	8/25/2004	30.32	-97.74
6	Travis	Travis	78745	TX	2.97	18930	8/27/2004	30.21	-97.80
7	Travis	Travis	78704	TX	2.88	20252	9/13/2004	30.24	-97.77
8	Travis	Travis	78753	TX	3.00	19800	9/20/2004	30.39	-97.67
9	Travis	Travis	78751	TX	2.97	19528	9/20/2004	30.31	-97.73
10	Travis	Travis	78731	TX	3.00	20458	9/27/2004	30.35	-97.77
11	Travis	Travis	78753	TX	2.97	19315	10/1/2004	30.39	-97.67
12	Travis	Travis	78704	TX	3.15	20350	10/4/2004	30.24	-97.77
13	Travis	Travis	78746	TX	3.34	19825	10/4/2004	30.31	-97.82
14	Travis	Travis	78751	TX	3.00	19200	10/6/2004	30.31	-97.73
15	Travis	Travis	78731	TX	3.01	18973	10/8/2004	30.35	-97.77
16	Travis	Travis	78722	TX	2.88	20794	10/9/2004	30.30	-97.70
17	Travis	Travis	78704	TX	3.00	19800	10/13/2004	30.24	-97.77
18	Travis	Travis	78757	TX	3.30	21455	10/13/2004	30.35	-97.74
19	Travis	Travis	78731	TX	3.34	23704	10/22/2004	30.35	-97.77
20	Travis	Travis	78746	TX	3.01	19323	10/22/2004	30.31	-97.82
21	Travis	Travis	78751	TX	3.00	18253	10/22/2004	30.31	-97.73
22	Travis	Travis	78704	TX	3.00	18283	10/25/2004	30.24	-97.77
23	Travis	Travis	78754	TX	3.20	21000	10/25/2004	30.36	-97.65
24	Travis	Travis	78703	TX	2.88	20497	10/26/2004	30.29	-97.77
25	Travis	Travis	78756	TX	2.97	19875	10/27/2004	30.32	-97.74
26	Travis	Travis	78703	TX	3.01	18973	10/28/2004	30.29	-97.77
27	Travis	Travis	78704	TX	3.24	19800	11/1/2004	30.24	-97.77
28	Travis	Travis	78746	TX	3.00	18981	11/2/2004	30.31	-97.82
29	Travis	Travis	78723	TX	2.97	19529	11/4/2004	30.31	-97.68
30	Travis	Travis	78703	TX	3.01	18253	11/10/2004	30.29	-97.77
31	Travis	Travis	78750	TX	3.01	18973	11/10/2004	30.43	-97.80
32	Travis	Travis	78731	TX	3.00	20164	11/19/2004	30.35	-97.77
33	Travis	Travis	78759	TX	2.97	19490	11/22/2004	30.40	-97.75
34	Travis	Travis	78702	TX	3.30	20923	11/22/2004	30.26	-97.71
35	Travis	Travis	78731	TX	6.32	35531	11/29/2004	30.35	-97.77
36	Travis	Travis	78751	TX	3.01	19000	11/29/2004	30.31	-97.73
37	Travis	Travis	78703	TX	2.55	19578	12/3/2004	30.29	-97.77
38	Travis	Travis	78727	TX	2.97	19578	12/3/2004	30.43	-97.71
39	Travis	Travis	78745	TX	3.01	18973	12/10/2004	30.21	-97.80
40	Travis	Travis	78704	TX	2.04	14300	12/15/2004	30.24	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
41	Travis	Travis	78704	TX	3.00	19000	12/15/2004	30.24	-97.77
42	Travis	Travis	78704	TX	2.97	20600	12/16/2004	30.24	-97.77
43	Travis	Travis	78704	TX	2.97	22780	12/16/2004	30.24	-97.77
44	Travis	Travis	78746	TX	1.36	12447	12/22/2004	30.31	-97.82
45	Travis	Travis	78723	TX	11.52	69684	12/22/2004	30.31	-97.68
46	Travis	Travis	78702	TX	4.80	29008	12/22/2004	30.26	-97.71
47	Travis	Travis	78701	TX	2.97	20405	12/27/2004	30.27	-97.74
48	Travis	Travis	78759	TX	3.36	22530	12/28/2004	30.40	-97.75
49	Travis	Travis	78703	TX	3.00	18470	12/29/2004	30.29	-97.77
50	Travis	Travis	78745	TX	2.97	20001	12/29/2004	30.21	-97.80
51	Travis	Travis	78703	TX	1.26	6962	1/4/2005	30.29	-97.77
52	Travis	Travis	78751	TX	3.01	18973	1/4/2005	30.31	-97.73
53	Travis	Travis	78756	TX	3.00	18981	1/13/2005	30.32	-97.74
54	Travis	Travis	78703	TX	1.98	15000	1/19/2005	30.29	-97.77
55	Travis	Travis	78731	TX	2.04	14300	1/21/2005	30.35	-97.77
56	Travis	Travis	78701	TX	3.01	18253	1/21/2005	30.27	-97.74
57	Travis	Travis	78750	TX	3.00	18981	1/24/2005	30.43	-97.80
58	Travis	Travis	78704	TX	3.00	18973	1/24/2005	30.24	-97.77
59	Travis	Travis	78746	TX	3.01	19583	1/26/2005	30.31	-97.82
60	Travis	Travis	78745	TX	21.12	125022	1/28/2005	30.21	-97.80
61	Travis	Travis	78746	TX	3.01	18973	1/31/2005	30.31	-97.82
62	Travis	Travis	78734	TX	3.15	21000	2/11/2005	30.37	-97.95
63	Travis	Travis	78731	TX	3.01	18253	2/11/2005	30.35	-97.77
64	Travis	Travis	78703	TX	3.01	18253	2/16/2005	30.29	-97.77
65	Travis	Travis	78703	TX	3.00	18253	2/16/2005	30.29	-97.77
66	Travis	Travis	78759	TX	3.00	18600	2/17/2005	30.40	-97.75
67	Travis	Travis	78748	TX	2.99	18492	2/24/2005	30.17	-97.82
68	Travis	Travis	78744	TX	24.00	136162	2/25/2005	30.20	-97.73
69	Travis	Travis	78732	TX	3.01	18253	3/1/2005	30.38	-97.90
70	Travis	Travis	78734	TX	3.15	21323	3/8/2005	30.37	-97.95
71	Travis	Travis	78752	TX	17.28	129612	3/9/2005	30.33	-97.70
72	Travis	Travis	78745	TX	21.12	125022	3/11/2005	30.20	-97.79
73	Travis	Travis	78756	TX	3.00	18973	3/15/2005	30.32	-97.74
74	Travis	Travis	78731	TX	3.15	22190	3/16/2005	30.35	-97.77
75	Travis	Travis	78731	TX	3.15	19000	3/16/2005	30.35	-97.77
76	Travis	Travis	78704	TX	0.70	9989	3/17/2005	30.24	-97.77
77	Travis	Travis	78704	TX	3.15	20528	3/17/2005	30.24	-97.77
78	Travis	Travis	78731	TX	3.00	18253	3/18/2005	30.35	-97.77
79	Travis	Travis	78738	TX	3.06	21668	3/24/2005	30.31	-97.98
80	Travis	Travis	78722	TX	3.34	20964	3/24/2005	30.30	-97.70

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
81	Travis	Travis	78731	TX	2.88	19707	3/24/2005	30.35	-97.77
82	Travis	Travis	78738	TX	3.15	20535	3/24/2005	30.31	-97.98
83	Travis	Travis	78734	TX	3.15	19805	3/30/2005	30.37	-97.95
84	Travis	Travis	78746	TX	2.97	19300	4/4/2005	30.31	-97.82
85	Travis	Travis	78730	TX	2.24	15792	4/4/2005	30.37	-97.84
86	Travis	Travis	78751	TX	3.15	19886	4/18/2005	30.31	-97.73
87	Travis	Travis	78704	TX	3.15	20663	4/21/2005	30.24	-97.77
88	Travis	Travis	78745	TX	3.15	20895	4/22/2005	30.21	-97.80
89	Travis	Travis	78704	TX	3.01	22374	4/22/2005	30.24	-97.77
90	Travis	Travis	78723	TX	3.34	21250	5/3/2005	30.31	-97.68
91	Travis	Travis	78731	TX	3.17	20615	5/6/2005	30.35	-97.77
92	Travis	Travis	78703	TX	3.01	19379	5/6/2005	30.29	-97.77
93	Travis	Travis	78703	TX	2.80	16450	5/11/2005	30.29	-97.77
94	Travis	Travis	78731	TX	3.00	21003	5/13/2005	30.35	-97.77
95	Travis	Travis	78757	TX	3.00	18973	5/31/2005	30.35	-97.74
96	Travis	Travis	78746	TX	3.00	19235	5/31/2005	30.31	-97.82
97	Travis	Travis	78733	TX	3.15	24276	6/1/2005	30.33	-97.87
98	Travis	Travis	78702	TX	2.88	22800	6/10/2005	30.26	-97.71
99	Travis	Travis	78723	TX	3.00	18047	6/15/2005	30.31	-97.68
100	Williamson	Williamson	78729	TX	2.00	14208	6/16/2005	30.45	-97.76
101	Travis	Travis	78704	TX	2.99	21000	6/17/2005	30.24	-97.77
102	Travis	Travis	78738	TX	3.06	19085	6/17/2005	30.31	-97.98
103	Travis	Travis	78756	TX	3.15	21202	6/17/2005	30.32	-97.74
104	Travis	Travis	78653	TX	3.01	18973	6/17/2005	30.34	-97.50
105	Travis	Travis	78703	TX	3.01	18973	6/17/2005	30.29	-97.77
106	Williamson	Williamson	78729	TX	3.40	22899	6/20/2005	30.45	-97.76
107	Travis	Travis	78747	TX	3.34	20969	6/21/2005	30.13	-97.73
108	Travis	Travis	78704	TX	3.34	19508	6/30/2005	30.24	-97.77
109	Travis	Travis	78751	TX	2.17	15175	6/30/2005	30.31	-97.73
110	Travis	Travis	78704	TX	3.06	18500	7/7/2005	30.24	-97.77
111	Travis	Travis	78735	TX	21.00	124600	7/7/2005	30.26	-97.86
112	Williamson	Williamson	78729	TX	3.00	21003	7/8/2005	30.45	-97.76
113	Travis	Travis	78703	TX	3.01	18973	7/8/2005	30.29	-97.77
114	Travis	Travis	78704	TX	1.75	12899	7/15/2005	30.24	-97.77
115	Travis	Travis	78731	TX	2.51	16520	7/26/2005	30.35	-97.77
116	Travis	Travis	78705	TX	2.70	18358	7/27/2005	30.30	-97.74
117	Travis	Travis	78748	TX	2.34	15184	7/27/2005	30.17	-97.82
118	Travis	Travis	78746	TX	20.88	123650	7/28/2005	30.31	-97.82
119	Travis	Travis	78734	TX	3.15	20873	7/29/2005	30.37	-97.95
120	Travis	Travis	78746	TX	3.20	18951	8/3/2005	30.31	-97.82

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
121	Travis	Travis	78744	TX	21.78	144122	8/3/2005	30.20	-97.73
122	Travis	Travis	78746	TX	2.70	18190	8/8/2005	30.31	-97.82
123	Travis	Travis	78703	TX	3.34	21377	8/8/2005	30.29	-97.77
124	Travis	Travis	78758	TX	21.12	123398	8/10/2005	30.39	-97.70
125	Travis	Travis	78704	TX	3.34	18740	8/11/2005	30.24	-97.77
126	Travis	Travis	78705	TX	3.15	19089	8/12/2005	30.30	-97.74
127	Travis	Travis	78731	TX	3.00	18859	8/17/2005	30.35	-97.77
128	Travis	Travis	78735	TX	2.34	15816	8/17/2005	30.26	-97.86
129	Travis	Travis	78748	TX	3.20	18920	8/17/2005	30.17	-97.82
130	Travis	Travis	78745	TX	3.30	18962	8/23/2005	30.21	-97.80
131	Travis	Travis	78735	TX	3.20	19500	8/24/2005	30.26	-97.86
132	Travis	Travis	78752	TX	2.97	18500	8/24/2005	30.33	-97.70
133	Travis	Travis	78751	TX	3.06	20453	8/30/2005	30.31	-97.73
134	Travis	Travis	78703	TX	2.97	18500	8/30/2005	30.29	-97.77
135	Travis	Travis	78744	TX	18.04	127183	8/30/2005	30.20	-97.73
136	Travis	Travis	78660	TX	3.20	19027	8/31/2005	30.46	-97.60
137	Travis	Travis	78727	TX	3.01	18988	8/31/2005	30.43	-97.71
138	Travis	Travis	78734	TX	2.97	18500	8/31/2005	30.37	-97.95
139	Travis	Travis	78758	TX	21.78	130000	8/31/2005	30.39	-97.70
140	Travis	Travis	78759	TX	3.34	19426	9/6/2005	30.40	-97.75
141	Travis	Travis	78746	TX	3.34	21307	9/7/2005	30.31	-97.82
142	Travis	Travis	78723	TX	3.01	18500	9/12/2005	30.31	-97.68
143	Travis	Travis	78733	TX	3.13	19000	9/14/2005	30.33	-97.87
144	Travis	Travis	78745	TX	2.97	18500	9/16/2005	30.21	-97.80
145	Travis	Travis	78703	TX	3.01	19738	9/20/2005	30.29	-97.77
146	Williamson	Williamson	78729	TX	2.72	18022	9/20/2005	30.45	-97.76
147	Travis	Travis	78704	TX	2.88	18540	9/28/2005	30.24	-97.77
148	Travis	Travis	78757	TX	3.00	19098	9/28/2005	30.35	-97.74
149	Travis	Travis	78745	TX	16.70	93521	9/28/2005	30.21	-97.80
150	Travis	Travis	78704	TX	3.30	19771	9/29/2005	30.24	-97.77
151	Travis	Travis	78703	TX	3.34	20011	9/29/2005	30.29	-97.77
152	Travis	Travis	78746	TX	4.01	23900	10/6/2005	30.31	-97.82
153	Travis	Travis	78727	TX	3.40	19894	10/6/2005	30.43	-97.71
154	Travis	Travis	78745	TX	3.15	20870	10/6/2005	30.21	-97.80
155	Travis	Travis	78734	TX	3.34	18620	10/13/2005	30.37	-97.95
156	Travis	Travis	78703	TX	3.01	18540	10/14/2005	30.29	-97.77
157	Travis	Travis	78745	TX	3.01	19379	10/18/2005	30.21	-97.80
158	Travis	Travis	78734	TX	3.15	19885	10/18/2005	30.37	-97.95
159	Travis	Travis	78727	TX	3.20	18500	10/19/2005	30.43	-97.71
160	Travis	Travis	78753	TX	3.15	22385	10/20/2005	30.39	-97.67

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
161	Travis	Travis	78722	TX	3.01	21040	10/25/2005	30.30	-97.70
162	Travis	Travis	78734	TX	3.34	19552	10/28/2005	30.37	-97.95
163	Travis	Travis	78756	TX	0.50	2556	10/31/2005	30.32	-97.74
164	Travis	Travis	78731	TX	3.30	20881	11/3/2005	30.35	-97.77
165	Travis	Travis	78751	TX	3.34	20296	11/3/2005	30.31	-97.73
166	Travis	Travis	78704	TX	3.01	22701	11/3/2005	30.24	-97.77
167	Travis	Travis	78751	TX	3.40	19630	11/3/2005	30.31	-97.73
168	Travis	Travis	78703	TX	2.10	16837	11/5/2005	30.29	-97.77
169	Travis	Travis	78731	TX	3.06	18902	11/7/2005	30.35	-97.77
170	Travis	Travis	78702	TX	2.67	17750	11/8/2005	30.26	-97.71
171	Travis	Travis	78754	TX	3.01	20004	11/9/2005	30.36	-97.65
172	Travis	Travis	78704	TX	2.70	18834	11/11/2005	30.24	-97.77
173	Travis	Travis	78731	TX	3.15	23431	11/15/2005	30.35	-97.77
174	Travis	Travis	78705	TX	2.04	15291	11/17/2005	30.30	-97.74
175	Travis	Travis	78704	TX	3.00	20770	11/17/2005	30.24	-97.77
176	Travis	Travis	78749	TX	3.01	19470	11/23/2005	30.22	-97.86
177	Travis	Travis	78741	TX	3.06	20750	11/28/2005	30.23	-97.71
178	Travis	Travis	78732	TX	3.30	21647	11/30/2005	30.38	-97.90
179	Travis	Travis	78752	TX	3.06	19751	11/30/2005	30.33	-97.70
180	Travis	Travis	78731	TX	3.40	21795	12/2/2005	30.35	-97.77
181	Travis	Travis	78723	TX	2.04	14810	12/6/2005	30.31	-97.68
182	Travis	Travis	78732	TX	3.06	18500	12/6/2005	30.38	-97.90
183	Travis	Travis	78757	TX	2.88	18500	12/6/2005	30.35	-97.74
184	Travis	Travis	78727	TX	3.40	20567	12/9/2005	30.43	-97.71
185	Travis	Travis	78751	TX	3.40	21647	12/13/2005	30.31	-97.73
186	Travis	Travis	78733	TX	3.40	20091	12/13/2005	30.33	-97.87
187	Travis	Travis	78731	TX	3.01	19735	12/14/2005	30.35	-97.77
188	Travis	Travis	78746	TX	3.06	20226	12/14/2005	30.31	-97.82
189	Travis	Travis	78731	TX	4.59	28957	12/14/2005	30.35	-97.77
190	Travis	Travis	78756	TX	3.28	21486	12/14/2005	30.32	-97.74
191	Travis	Travis	78745	TX	3.06	20376	12/20/2005	30.21	-97.80
192	Travis	Travis	78722	TX	3.20	20570	12/21/2005	30.30	-97.70
193	Travis	Travis	78704	TX	1.65	12368	12/22/2005	30.24	-97.77
194	Travis	Travis	78746	TX	3.06	19603	12/22/2005	30.31	-97.82
195	Travis	Travis	78703	TX	3.06	20305	12/22/2005	30.29	-97.77
196	Travis	Travis	78730	TX	3.40	20817	1/4/2006	30.37	-97.84
197	Travis	Travis	78746	TX	3.40	21381	1/10/2006	30.31	-97.82
198	Travis	Travis	78705	TX	21.76	125000	1/10/2006	30.30	-97.74
199	Travis	Travis	78704	TX	3.04	18500	1/17/2006	30.24	-97.77
200	Travis	Travis	78733	TX	3.06	18500	1/17/2006	30.33	-97.87

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
201	Travis	Travis	78733	TX	3.06	19000	1/17/2006	30.33	-97.87
202	Travis	Travis	78757	TX	2.72	17073	1/18/2006	30.35	-97.74
203	Travis	Travis	78738	TX	3.40	21441	1/20/2006	30.31	-97.98
204	Travis	Travis	78750	TX	3.40	21790	1/20/2006	30.43	-97.80
205	Travis	Travis	78704	TX	3.06	20401	1/20/2006	30.24	-97.77
206	Travis	Travis	78733	TX	3.40	21181	1/24/2006	30.33	-97.87
207	Travis	Travis	78749	TX	1.70	13687	1/26/2006	30.22	-97.86
208	Travis	Travis	78723	TX	3.06	19910	1/30/2006	30.31	-97.68
209	Travis	Travis	78704	TX	1.70	14548	1/30/2006	30.24	-97.77
210	Travis	Travis	78758	TX	3.40	20910	1/31/2006	30.39	-97.70
211	Travis	Travis	78752	TX	17.85	109036	2/1/2006	30.33	-97.71
212	Travis	Travis	78728	TX	3.06	19539	2/3/2006	30.46	-97.68
213	Travis	Travis	78731	TX	3.40	24837	2/3/2006	30.35	-97.77
214	Travis	Travis	78756	TX	3.40	20929	2/3/2006	30.32	-97.74
215	Travis	Travis	78752	TX	1.80	12507	2/6/2006	30.33	-97.70
216	Travis	Travis	78734	TX	3.40	22410	2/6/2006	30.37	-97.95
217	Travis	Travis	78733	TX	3.06	18700	2/6/2006	30.33	-97.87
218	Travis	Travis	78746	TX	3.20	18956	2/7/2006	30.31	-97.82
219	Travis	Travis	78722	TX	3.20	21490	2/7/2006	30.30	-97.70
220	Travis	Travis	78705	TX	3.20	22514	2/8/2006	30.30	-97.74
221	Travis	Travis	78752	TX	17.85	109037	2/8/2006	30.33	-97.70
222	Travis	Travis	78723	TX	3.30	24281	2/18/2006	30.31	-97.68
223	Travis	Travis	78704	TX	3.06	20380	2/22/2006	30.24	-97.77
224	Travis	Travis	78746	TX	3.00	18700	2/22/2006	30.31	-97.82
225	Travis	Travis	78731	TX	3.40	20978	2/24/2006	30.35	-97.77
226	Travis	Travis	78733	TX	2.91	19523	2/24/2006	30.33	-97.87
227	Travis	Travis	78730	TX	3.34	20842	2/24/2006	30.37	-97.84
228	Travis	Travis	78705	TX	3.00	20185	2/24/2006	30.30	-97.74
229	Travis	Travis	78731	TX	2.72	19211	3/1/2006	30.35	-97.77
230	Travis	Travis	78759	TX	3.06	21367	3/3/2006	30.40	-97.75
231	Travis	Travis	78731	TX	3.40	22897	3/7/2006	30.35	-97.77
232	Travis	Travis	78746	TX	3.00	20800	3/7/2006	30.31	-97.82
233	Travis	Travis	78759	TX	3.06	18700	3/7/2006	30.40	-97.75
234	Travis	Travis	78758	TX	3.34	20568	3/8/2006	30.39	-97.70
235	Travis	Travis	78735	TX	3.40	21217	3/13/2006	30.26	-97.86
236	Travis	Travis	78704	TX	3.40	20929	3/13/2006	30.24	-97.77
237	Travis	Travis	78704	TX	3.01	19814	3/14/2006	30.24	-97.77
238	Travis	Travis	78746	TX	3.06	22706	3/14/2006	30.31	-97.82
239	Travis	Travis	78746	TX	2.40	19550	3/15/2006	30.31	-97.82
240	Travis	Travis	78702	TX	1.53	12117	3/15/2006	30.26	-97.71

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
241	Travis	Travis	78753	TX	3.06	21752	3/15/2006	30.39	-97.67
242	Travis	Travis	78759	TX	3.06	23329	3/15/2006	30.40	-97.75
243	Travis	Travis	78748	TX	3.06	20965	3/15/2006	30.17	-97.82
244	Travis	Travis	78746	TX	3.15	20998	3/15/2006	30.31	-97.82
245	Travis	Travis	78731	TX	3.06	20191	3/24/2006	30.35	-97.77
246	Travis	Travis	78704	TX	3.20	19495	3/27/2006	30.24	-97.77
247	Travis	Travis	78733	TX	2.04	15102	3/27/2006	30.33	-97.87
248	Travis	Travis	78761	TX	3.40	23390	3/31/2006	30.33	-97.70
249	Travis	Travis	78757	TX	1.70	13347	4/3/2006	30.35	-97.74
250	Travis	Travis	78745	TX	3.06	20150	4/3/2006	30.21	-97.80
251	Travis	Travis	78730	TX	3.40	20729	4/4/2006	30.37	-97.84
252	Travis	Travis	78730	TX	3.08	18700	4/4/2006	30.37	-97.84
253	Travis	Travis	78734	TX	3.60	22296	4/4/2006	30.37	-97.95
254	Travis	Travis	78732	TX	3.12	18500	4/14/2006	30.38	-97.90
255	Travis	Travis	78750	TX	3.12	18700	4/14/2006	30.43	-97.80
256	Travis	Travis	78758	TX	3.12	19800	4/14/2006	30.39	-97.70
257	Travis	Travis	78727	TX	3.20	20486	4/18/2006	30.43	-97.71
258	Travis	Travis	78734	TX	5.18	35406	4/18/2006	30.37	-97.95
259	Travis	Travis	78731	TX	3.00	19847	4/19/2006	30.35	-97.77
260	Travis	Travis	78746	TX	3.12	19800	4/19/2006	30.31	-97.82
261	Travis	Travis	78757	TX	3.12	22281	4/25/2006	30.35	-97.74
262	Travis	Travis	78746	TX	3.06	20192	4/26/2006	30.31	-97.82
263	Travis	Travis	78749	TX	3.06	19830	4/26/2006	30.22	-97.86
264	Travis	Travis	78727	TX	3.15	20931	4/27/2006	30.43	-97.71
265	Travis	Travis	78703	TX	2.04	18066	4/27/2006	30.29	-97.77
266	Williamson	Williamson	78729	TX	2.60	19897	4/27/2006	30.45	-97.76
267	Travis	Travis	78734	TX	3.12	18700	5/1/2006	30.37	-97.95
268	Travis	Travis	78731	TX	3.15	22922	5/3/2006	30.35	-97.77
269	Travis	Travis	78722	TX	2.80	21371	5/4/2006	30.30	-97.70
270	Travis	Travis	78746	TX	3.40	25113	5/9/2006	30.31	-97.82
271	Travis	Travis	78732	TX	3.20	23932	5/9/2006	30.38	-97.90
272	Travis	Travis	78730	TX	5.10	26189	5/9/2006	30.37	-97.84
273	Travis	Travis	78701	TX	4.50	60086	5/10/2006	30.27	-97.74
274	Travis	Travis	78746	TX	3.12	18700	5/12/2006	30.31	-97.82
275	Travis	Travis	78748	TX	3.12	18950	5/12/2006	30.17	-97.82
276	Travis	Travis	78704	TX	3.12	18271	5/12/2006	30.24	-97.77
277	Travis	Travis	78733	TX	3.33	21411	5/18/2006	30.33	-97.87
278	Travis	Travis	78733	TX	2.72	19018	5/18/2006	30.33	-97.87
279	Travis	Travis	78704	TX	3.20	19532	5/19/2006	30.24	-97.77
280	Travis	Travis	78731	TX	3.50	21189	5/19/2006	30.35	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
281	Travis	Travis	78704	TX	3.33	21977	5/25/2006	30.24	-97.77
282	Travis	Travis	78730	TX	3.12	18700	5/30/2006	30.37	-97.84
283	Travis	Travis	78747	TX	3.12	20418	5/30/2006	30.13	-97.73
284	Travis	Travis	78704	TX	3.01	19682	5/31/2006	30.24	-97.77
285	Travis	Travis	78757	TX	3.12	18826	6/1/2006	30.35	-97.74
286	Travis	Travis	78730	TX	3.34	19973	6/2/2006	30.37	-97.84
287	Travis	Travis	78746	TX	3.15	20217	6/16/2006	30.31	-97.82
288	Travis	Travis	78731	TX	3.06	20601	6/16/2006	30.35	-97.77
289	Travis	Travis	78746	TX	1.87	13566	6/20/2006	30.31	-97.82
290	Travis	Travis	78702	TX	3.40	22351	6/22/2006	30.26	-97.71
291	Travis	Travis	78746	TX	3.64	25966	6/22/2006	30.31	-97.82
292	Travis	Travis	78704	TX	2.67	19582	6/22/2006	30.24	-97.77
293	Travis	Travis	78731	TX	3.01	20853	6/22/2006	30.35	-97.77
294	Travis	Travis	78746	TX	2.63	17779	6/29/2006	30.31	-97.82
295	Travis	Travis	78750	TX	3.06	21416	6/29/2006	30.43	-97.80
296	Travis	Travis	78748	TX	3.15	23903	7/20/2006	30.17	-97.82
297	Travis	Travis	78746	TX	12.04	105031	7/21/2006	30.31	-97.82
298	Travis	Travis	78702	TX	3.50	21820	7/25/2006	30.26	-97.71
299	Travis	Travis	78702	TX	3.15	20461	7/25/2006	30.26	-97.71
300	Travis	Travis	78702	TX	3.15	20461	7/25/2006	30.26	-97.71
301	Travis	Travis	78746	TX	3.34	22345	7/26/2006	30.31	-97.82
302	Tarrant	Tarrant	76107	TX	1.80	7417	7/31/2006	32.74	-97.37
303	Travis	Travis	78746	TX	3.15	19142	8/6/2006	30.31	-97.82
304	Travis	Travis	78759	TX	3.40	19283	8/7/2006	30.40	-97.75
305	Travis	Travis	78727	TX	3.38	19283	8/7/2006	30.43	-97.71
306	Travis	Travis	78731	TX	23.30	166023	8/17/2006	30.35	-97.77
307	Travis	Travis	78704	TX	3.15	20016	8/18/2006	30.24	-97.77
308	Travis	Travis	78727	TX	3.12	19586	8/21/2006	30.43	-97.71
309	Travis	Travis	78704	TX	3.12	19500	8/21/2006	30.24	-97.77
310	Travis	Travis	78705	TX	3.00	18541	8/21/2006	30.30	-97.74
311	Travis	Travis	78722	TX	2.50	17124	8/22/2006	30.30	-97.70
312	Travis	Travis	78734	TX	3.15	20000	8/23/2006	30.37	-97.95
313	Travis	Travis	78759	TX	3.15	20367	8/23/2006	30.40	-97.75
314	Travis	Travis	78704	TX	2.04	15316	8/28/2006	30.24	-97.77
315	Travis	Travis	78746	TX	3.06	21557	8/31/2006	30.31	-97.82
316	Travis	Travis	78758	TX	3.15	20467	8/31/2006	30.39	-97.70
317	Travis	Travis	78757	TX	3.12	19280	9/5/2006	30.35	-97.74
318	Travis	Travis	78759	TX	3.12	19500	9/5/2006	30.40	-97.75
319	Travis	Travis	78727	TX	3.50	27852	9/8/2006	30.43	-97.71
320	Travis	Travis	78703	TX	8.40	51051	9/12/2006	30.29	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
321	Travis	Travis	78703	TX	2.91	21378	10/3/2006	30.29	-97.77
322	Travis	Travis	78703	TX	2.91	21378	10/3/2006	30.29	-97.77
323	Travis	Travis	78704	TX	1.04	11115	10/4/2006	30.24	-97.77
324	Travis	Travis	78705	TX	3.74	26002	10/4/2006	30.30	-97.74
325	Travis	Travis	78757	TX	3.15	21104	10/13/2006	30.35	-97.74
326	Travis	Travis	78704	TX	2.91	19855	10/16/2006	30.24	-97.77
327	Travis	Travis	78759	TX	3.33	22471	10/20/2006	30.40	-97.75
328	Travis	Travis	78704	TX	3.06	20948	10/20/2006	30.24	-97.77
329	Williamson	Williamson	78729	TX	3.15	20474	10/23/2006	30.45	-97.76
330	Travis	Travis	78732	TX	3.20	20152	10/24/2006	30.38	-97.90
331	Travis	Travis	78747	TX	3.06	20877	10/30/2006	30.13	-97.73
332	Travis	Travis	78759	TX	3.15	21345	11/1/2006	30.40	-97.75
333	Travis	Travis	78746	TX	3.74	25919	11/8/2006	30.31	-97.82
334	Travis	Travis	78703	TX	3.15	21926	11/13/2006	30.29	-97.77
335	Travis	Travis	78704	TX	3.06	25082	11/14/2006	30.24	-97.77
336	Travis	Travis	78745	TX	3.15	21224	11/20/2006	30.21	-97.80
337	Travis	Travis	78704	TX	3.15	20525	11/20/2006	30.24	-97.77
338	Travis	Travis	78702	TX	3.12	22385	11/21/2006	30.26	-97.71
339	Travis	Travis	78750	TX	3.50	29136	11/21/2006	30.43	-97.80
340	Travis	Travis	78746	TX	3.20	21508	11/28/2006	30.31	-97.82
341	Travis	Travis	78704	TX	3.06	21331	12/4/2006	30.24	-97.77
342	Travis	Travis	78735	TX	3.15	21595	12/11/2006	30.26	-97.86
343	Travis	Travis	78723	TX	2.91	19819	1/12/2007	30.31	-97.68
344	Travis	Travis	78749	TX	2.91	19855	1/12/2007	30.22	-97.86
345	Travis	Travis	78759	TX	3.33	22460	1/12/2007	30.40	-97.75
346	Travis	Travis	78759	TX	2.91	19657	1/12/2007	30.40	-97.75
347	Travis	Travis	78703	TX	3.33	22064	1/23/2007	30.29	-97.77
348	Travis	Travis	78731	TX	3.33	21624	1/25/2007	30.35	-97.77
349	Travis	Travis	78759	TX	3.33	21440	1/25/2007	30.40	-97.75
350	Travis	Travis	78704	TX	3.12	20982	1/29/2007	30.24	-97.77
351	Travis	Travis	78759	TX	3.33	22475	1/31/2007	30.40	-97.75
352	Travis	Travis	78727	TX	3.15	19800	1/31/2007	30.43	-97.71
353	Travis	Travis	78704	TX	3.33	22504	1/31/2007	30.24	-97.77
354	Travis	Travis	78734	TX	3.33	21898	2/1/2007	30.37	-97.95
355	Travis	Travis	78759	TX	3.15	20133	2/2/2007	30.40	-97.75
356	Travis	Travis	78702	TX	3.40	22875	2/5/2007	30.26	-97.71
357	Travis	Travis	78750	TX	3.15	21828	2/8/2007	30.43	-97.80
358	Travis	Travis	78705	TX	9.52	68213	2/9/2007	30.30	-97.74
359	Travis	Travis	78754	TX	16.66	157849	2/9/2007	30.36	-97.65
360	Travis	Travis	78754	TX	3.36		2/9/2007	30.36	-97.65

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
361	Travis	Travis	78704	TX	3.15	20554	2/13/2007	30.24	-97.77
362	Travis	Travis	78748	TX	18.90	115864	2/13/2007	30.17	-97.82
363	Travis	Travis	78704	TX	3.12	22683	2/20/2007	30.24	-97.77
364	Travis	Travis	78704	TX	3.12	22017	2/21/2007	30.24	-97.77
365	Travis	Travis	78731	TX	2.41	19306	2/21/2007	30.35	-97.77
366	Travis	Travis	78751	TX	2.45	13024	2/21/2007	30.31	-97.73
367	Travis	Travis	78703	TX	3.15	21992	2/23/2007	30.29	-97.77
368	Travis	Travis	78746	TX	2.99	21248	2/26/2007	30.31	-97.82
369	Travis	Travis	78746	TX	5.10	57396	2/26/2007	30.31	-97.82
370	Travis	Travis	78746	TX	3.12	20508	3/1/2007	30.31	-97.82
371	Travis	Travis	78746	TX	3.15	21000	3/5/2007	30.31	-97.82
372	Travis	Travis	78746	TX	3.06	24169	3/9/2007	30.31	-97.82
373	Travis	Travis	78735	TX	2.38	17116	3/9/2007	30.26	-97.86
374	Travis	Travis	78754	TX	3.15	21251	3/12/2007	30.36	-97.65
375	Travis	Travis	78701	TX	23.30	166551	3/12/2007	30.27	-97.74
376	Travis	Travis	78703	TX	3.15	21906	3/13/2007	30.29	-97.77
377	Travis	Travis	78702	TX	8.24	66505	3/15/2007	30.26	-97.71
378	Travis	Travis	78746	TX	3.15	20325	3/19/2007	30.31	-97.82
379	Travis	Travis	78746	TX	2.13	17956	3/27/2007	30.31	-97.82
380	Travis	Travis	78703	TX	3.06	21249	3/27/2007	30.29	-97.77
381	Travis	Travis	78758	TX	3.33	22998	3/27/2007	30.39	-97.70
382	Travis	Travis	78724	TX	3.20	19800	3/28/2007	30.29	-97.62
383	Collin	Collin	75173	TX	2.50	23500	3/31/2007	33.05	-96.42
384	Travis	Travis	78756	TX	2.38	17258	4/5/2007	30.32	-97.74
385	Travis	Travis	78704	TX	3.01	24013	4/5/2007	30.24	-97.77
386	Travis	Travis	78732	TX	4.12	42245	4/5/2007	30.38	-97.90
387	Travis	Travis	78735	TX	3.87	27911	4/5/2007	30.26	-97.86
388	Travis	Travis	78704	TX	3.40	23969	4/6/2007	30.24	-97.77
389	Travis	Travis	78746	TX	3.15	19515	4/10/2007	30.31	-97.82
390	Travis	Travis	78749	TX	3.20	20454	4/13/2007	30.22	-97.86
391	Travis	Travis	78722	TX	3.12	23394	4/16/2007	30.30	-97.70
392	Travis	Travis	78704	TX	2.80	17217	4/19/2007	30.24	-97.77
393	Travis	Travis	78741	TX	3.15	19827	4/19/2007	30.23	-97.71
394	Travis	Travis	78704	TX	3.15	20508	4/20/2007	30.24	-97.77
395	Travis	Travis	78759	TX	3.34	22941	4/24/2007	30.40	-97.75
396	Travis	Travis	78734	TX	3.15	20122	4/27/2007	30.37	-97.95
397	Travis	Travis	78731	TX	3.15	21016	4/27/2007	30.35	-97.77
398	Travis	Travis	78731	TX	3.33	24261	5/15/2007	30.35	-97.77
399	Travis	Travis	78746	TX	3.33	21169	5/15/2007	30.31	-97.82
400	Travis	Travis	78724	TX	3.15	20022	5/15/2007	30.29	-97.62

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
401	Travis	Travis	78731	TX	3.06	24020	5/24/2007	30.35	-97.77
402	Travis	Travis	78745	TX	2.98	20534	5/29/2007	30.21	-97.80
403	Travis	Travis	78746	TX	22.44	164315	5/29/2007	30.31	-97.82
404	Harris	Harris	77058	TX	28.00	400000	6/4/2007	29.56	-95.09
405	Travis	Travis	78730	TX	3.06	36450	6/5/2007	30.37	-97.84
406	Travis	Travis	78730	TX	2.55	30458	6/5/2007	30.37	-97.84
407	Travis	Travis	78703	TX	3.15	21741	6/12/2007	30.29	-97.77
408	Travis	Travis	78731	TX	3.50	27243	6/12/2007	30.35	-97.77
409	Travis	Travis	78705	TX	15.75	103357	6/14/2007	30.30	-97.74
410	Travis	Travis	78746	TX	3.01	22698	6/18/2007	30.31	-97.82
411	Travis	Travis	78733	TX	3.12	20761	6/19/2007	30.33	-97.87
412	Travis	Travis	78734	TX	3.15	19078	6/25/2007	30.37	-97.95
413	Travis	Travis	78723	TX	3.15	20583	6/29/2007	30.31	-97.68
414	Travis	Travis	78733	TX	3.15	20832	7/3/2007	30.33	-97.87
415	Travis	Travis	78758	TX	3.24	20179	7/9/2007	30.39	-97.70
416	Travis	Travis	78733	TX	2.50	19551	7/10/2007	30.33	-97.87
417	Travis	Travis	78759	TX	3.15	21172	7/11/2007	30.40	-97.75
418	Travis	Travis	78735	TX	3.33	23433	7/11/2007	30.26	-97.86
419	Williamson	Williamson	78729	TX	2.85	20071	7/12/2007	30.45	-97.76
420	Travis	Travis	78748	TX	5.61	43337	7/17/2007	30.17	-97.82
421	Travis	Travis	78746	TX	3.15	20331	7/18/2007	30.31	-97.82
422	Travis	Travis	78751	TX	3.50	22758	7/24/2007	30.31	-97.73
423	Travis	Travis	78759	TX	3.15	20771	7/24/2007	30.40	-97.75
424	Travis	Travis	78751	TX	3.40	23728	7/24/2007	30.31	-97.73
425	Travis	Travis	78704	TX	1.62	18219	7/31/2007	30.24	-97.77
426	Travis	Travis	78731	TX	1.00	7658	7/31/2007	30.35	-97.77
427	Travis	Travis	78731	TX	3.00	22973	8/1/2007	30.35	-97.77
428	Travis	Travis	78724	TX	11.40	242805	8/1/2007	30.29	-97.62
429	Travis	Travis	78758	TX	3.15	20620	8/6/2007	30.39	-97.70
430	Travis	Travis	78757	TX	3.15	19917	8/7/2007	30.35	-97.74
431	Travis	Travis	78730	TX	3.15	20011	8/7/2007	30.37	-97.84
432	Travis	Travis	78730	TX	2.80	17787	8/7/2007	30.37	-97.84
433	Travis	Travis	78703	TX	3.15	21116	8/7/2007	30.29	-97.77
434	Travis	Travis	78731	TX	3.12	21508	8/13/2007	30.35	-97.77
435	Travis	Travis	78748	TX	3.33	22500	8/13/2007	30.17	-97.82
436	Travis	Travis	78704	TX	3.10	20297	8/14/2007	30.24	-97.77
437	Travis	Travis	78704	TX	3.20	23778	8/14/2007	30.24	-97.77
438	Travis	Travis	78754	TX	3.42	21392	8/15/2007	30.36	-97.65
439	Travis	Travis	78703	TX	3.01	23461	8/21/2007	30.29	-97.77
440	Travis	Travis	78734	TX	3.15	21276	8/22/2007	30.37	-97.95

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
441	Travis	Travis	78746	TX	3.15	21089	8/22/2007	30.31	-97.82
442	Bexar	Bexar	78255	TX	4.55	32999	8/24/2007	29.67	-98.64
443	Travis	Travis	78734	TX	3.24	21961	8/28/2007	30.37	-97.95
444	Travis	Travis	78734	TX	3.15	22407	8/28/2007	30.37	-97.95
445	Travis	Travis	78746	TX	3.15	21430	8/28/2007	30.31	-97.82
446	Travis	Travis	78704	TX	3.50	28200	9/5/2007	30.24	-97.77
447	Travis	Travis	78746	TX	3.24	22061	9/11/2007	30.31	-97.82
448	Travis	Travis	78751	TX	3.15	21934	9/13/2007	30.31	-97.73
449	Travis	Travis	78759	TX	3.15	20937	9/13/2007	30.40	-97.75
450	Travis	Travis	78727	TX	3.15	21600	9/13/2007	30.43	-97.71
451	Bexar	Bexar	78231	TX	2.82		9/14/2007	29.58	-98.56
452	Travis	Travis	78722	TX	3.12	22702	9/18/2007	30.30	-97.70
453	Travis	Travis	78756	TX	3.15	23298	9/18/2007	30.32	-97.74
454	Travis	Travis	78704	TX	13.77	104652	9/18/2007	30.24	-97.77
455	Travis	Travis	78752	TX	3.15	21906	9/21/2007	30.33	-97.70
456	Travis	Travis	78733	TX	3.23	21555	9/25/2007	30.33	-97.87
457	Travis	Travis	78733	TX	3.04	20287	9/25/2007	30.33	-97.87
458	Travis	Travis	78732	TX	3.15	21508	9/25/2007	30.38	-97.90
459	Travis	Travis	78751	TX	3.12	20858	9/26/2007	30.31	-97.73
460	Travis	Travis	78746	TX	3.69	32308	9/27/2007	30.31	-97.82
461	Travis	Travis	78746	TX	3.15	20388	9/27/2007	30.31	-97.82
462	Travis	Travis	78747	TX	2.63	16990	9/27/2007	30.13	-97.73
463	Travis	Travis	78746	TX	3.15	20611	9/28/2007	30.31	-97.82
464	Travis	Travis	78731	TX	3.20	21625	10/1/2007	30.35	-97.77
465	Travis	Travis	78732	TX	3.20	21625	10/1/2007	30.38	-97.90
466	Travis	Travis	78746	TX	3.20	22160	10/1/2007	30.31	-97.82
467	Travis	Travis	78746	TX	3.20	22160	10/1/2007	30.31	-97.82
468	Travis	Travis	78753	TX	0.16	1446	10/2/2007	30.39	-97.67
469	Travis	Travis	78746	TX	3.42	28247	10/2/2007	30.31	-97.82
470	Travis	Travis	78703	TX	3.15	21898	10/2/2007	30.29	-97.77
471	Travis	Travis	78703	TX	2.45	21898	10/2/2007	30.29	-97.77
472	Travis	Travis	78730	TX	3.24	18623	10/2/2007	30.37	-97.84
473	Travis	Travis	78730	TX	3.24	18623	10/2/2007	30.37	-97.84
474	Travis	Travis	78704	TX	3.84	20799	10/2/2007	30.24	-97.77
475	Travis	Travis	78704	TX	0.58	3825	10/2/2007	30.24	-97.77
476	Travis	Travis	78733	TX	3.15	20299	10/9/2007	30.33	-97.87
477	Travis	Travis	78734	TX	2.80	18044	10/9/2007	30.37	-97.95
478	Travis	Travis	78746	TX	3.30	23700	10/9/2007	30.31	-97.82
479	Travis	Travis	78746	TX	3.42	23397	10/9/2007	30.31	-97.82
480	Travis	Travis	78704	TX	3.01	21501	10/9/2007	30.24	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
481	Travis	Travis	78759	TX	2.45	17028	10/10/2007	30.40	-97.75
482	Travis	Travis	78750	TX	3.15	21322	10/10/2007	30.43	-97.80
483	Travis	Travis	78748	TX	3.15	20662	10/16/2007	30.17	-97.82
484	Bexar	Bexar	78231	TX	4.59		10/24/2007	29.59	-98.56
485	Travis	Travis	78756	TX	0.70	4732	10/24/2007	30.32	-97.74
486	Collin	Collin	75173	TX	1.50	18000	10/31/2007	33.06	-96.38
487	Travis	Travis	78758	TX	3.15	20720	11/4/2007	30.39	-97.70
488	Travis	Travis	78738	TX	14.00	94053	11/8/2007	30.31	-97.98
489	Travis	Travis	78703	TX	3.10	20086	11/15/2007	30.29	-97.77
490	Travis	Travis	78731	TX	3.20	23150	11/16/2007	30.35	-97.77
491	Travis	Travis	78727	TX	3.15	21636	11/21/2007	30.43	-97.71
492	Travis	Travis	78759	TX	3.15	22017	11/21/2007	30.40	-97.75
493	Travis	Travis	78746	TX	2.45	15402	11/21/2007	30.31	-97.82
494	Travis	Travis	78703	TX	3.15	22828	11/21/2007	30.29	-97.77
495	Travis	Travis	78734	TX	3.15	22015	11/21/2007	30.37	-97.95
496	Travis	Travis	78704	TX	3.12	22702	11/26/2007	30.24	-97.77
497	Travis	Travis	78739	TX	3.15	20915	11/29/2007	30.19	-97.90
498	Travis	Travis	78704	TX	2.99	21310	12/4/2007	30.24	-97.77
499	Travis	Travis	78704	TX	3.40	22594	12/4/2007	30.24	-97.77
500	Travis	Travis	78702	TX	3.15	22369	12/4/2007	30.26	-97.71
501	Travis	Travis	78732	TX	3.34	23825	12/4/2007	30.38	-97.90
502	Travis	Travis	78723	TX	3.15	23446	12/4/2007	30.31	-97.68
503	Travis	Travis	78735	TX	3.33	28787	12/4/2007	30.26	-97.86
504	Travis	Travis	78704	TX	3.15	21279	12/6/2007	30.24	-97.77
505	Travis	Travis	78731	TX	3.15	20620	12/6/2007	30.35	-97.77
506	Travis	Travis	78751	TX	10.80	70258	12/12/2007	30.31	-97.73
507	Bexar	Bexar	78232	TX	4.01		12/13/2007	29.58	-98.47
508	Travis	Travis	78749	TX	3.20	21850	12/13/2007	30.22	-97.86
509	Travis	Travis	78745	TX	3.46	20050	12/14/2007	30.21	-97.80
510	Travis	Travis	78759	TX	3.15	21014	12/18/2007	30.40	-97.75
511	Travis	Travis	78748	TX	3.15	21013	12/18/2007	30.17	-97.82
512	Travis	Travis	78724	TX	3.15	21833	12/18/2007	30.29	-97.62
513	Bexar	Bexar	78232	TX	4.00		12/19/2007	29.60	-98.49
514	Travis	Travis	78746	TX	3.24	20814	12/19/2007	30.31	-97.82
515	Travis	Travis	78758	TX	3.33	23573	12/20/2007	30.39	-97.70
516	Travis	Travis	78759	TX	3.28	27073	12/20/2007	30.40	-97.75
517	Travis	Travis	78702	TX	3.34	23527	12/20/2007	30.26	-97.71
518	Travis	Travis	78734	TX	3.50	30661	12/26/2007	30.37	-97.95
519	Travis	Travis	78733	TX	3.15	21071	12/27/2007	30.33	-97.87
520	Travis	Travis	78734	TX	3.15	21701	12/28/2007	30.37	-97.95

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
521	Travis	Travis	78735	TX	3.28	27774	1/4/2008	30.26	-97.86
522	Travis	Travis	78703	TX	2.00	18456	1/8/2008	30.29	-97.77
523	Travis	Travis	78746	TX	3.02	22230	1/8/2008	30.31	-97.82
524	Travis	Travis	78746	TX	2.81	22107	1/8/2008	30.31	-97.82
525	Travis	Travis	78757	TX	3.33	150672	1/10/2008	30.35	-97.74
526	Travis	Travis	78759	TX	3.15	20668	1/15/2008	30.40	-97.75
527	Bexar	Bexar	78248	TX	2.15		1/16/2008	29.57	-98.52
528	Travis	Travis	78748	TX	2.91	20595	1/17/2008	30.17	-97.82
529	Travis	Travis	78759	TX	3.34	23771	1/17/2008	30.40	-97.75
530	Travis	Travis	78751	TX	3.28	28091	1/18/2008	30.31	-97.73
531	Travis	Travis	78734	TX	3.33	24808	1/18/2008	30.37	-97.95
532	Travis	Travis	78660	TX	3.02	21188	1/18/2008	30.46	-97.60
533	Travis	Travis	78730	TX	3.02	21141	1/18/2008	30.37	-97.84
534	Travis	Travis	78730	TX	2.81	21042	1/18/2008	30.37	-97.84
535	Travis	Travis	78741	TX	3.15	21169	1/29/2008	30.23	-97.71
536	Travis	Travis	78735	TX	3.15	20662	1/29/2008	30.26	-97.86
537	Travis	Travis	78702	TX	3.37	20361	1/31/2008	30.26	-97.71
538	Travis	Travis	78758	TX	2.56	19815	2/1/2008	30.39	-97.70
539	Travis	Travis	78746	TX	3.50	32834	2/6/2008	30.31	-97.82
540	Travis	Travis	78734	TX	3.15	21287	2/6/2008	30.37	-97.95
541	Travis	Travis	78751	TX	3.12	20966	2/7/2008	30.31	-97.73
542	Travis	Travis	78704	TX	3.13	22872	2/12/2008	30.24	-97.77
543	Travis	Travis	78749	TX	3.15	21192	2/13/2008	30.22	-97.86
544	Travis	Travis	78746	TX	2.45	19383	2/13/2008	30.31	-97.82
545	Travis	Travis	78704	TX	3.15	22076	2/19/2008	30.24	-97.77
546	Travis	Travis	78703	TX	3.34	24847	2/25/2008	30.29	-97.77
547	Travis	Travis	78746	TX	3.15	21396	2/25/2008	30.31	-97.82
548	Travis	Travis	78724	TX	3.20	21246	2/25/2008	30.29	-97.62
549	Travis	Travis	78759	TX	3.15	20995	2/25/2008	30.40	-97.75
550	Travis	Travis	78731	TX	3.15	25210	2/26/2008	30.35	-97.77
551	Travis	Travis	78746	TX	3.15	46392	2/26/2008	30.31	-97.82
552	Travis	Travis	78746	TX	1.89	17397	2/26/2008	30.31	-97.82
553	Travis	Travis	78731	TX	3.28	25892	2/26/2008	30.35	-97.77
554	Travis	Travis	78727	TX	3.20	20875	2/26/2008	30.43	-97.71
555	Travis	Travis	78738	TX	3.15	23977	2/26/2008	30.31	-97.98
556	Travis	Travis	78705	TX	23.10	174726	2/27/2008	30.30	-97.74
557	Travis	Travis	78738	TX	2.25	17127	2/28/2008	30.31	-97.98
558	Travis	Travis	78731	TX	3.12	25274	2/29/2008	30.35	-97.77
559	Travis	Travis	78746	TX	1.58	11549	3/4/2008	30.31	-97.82
560	Tarrant	Tarrant	76107	TX	1.04	7680	3/5/2008	32.74	-97.37

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
561	Travis	Travis	78704	TX	2.94	25514	3/5/2008	30.24	-97.77
562	Travis	Travis	78702	TX	3.02	21603	3/10/2008	30.26	-97.71
563	Travis	Travis	78747	TX	3.15	21216	3/12/2008	30.13	-97.73
564	Travis	Travis	78727	TX	1.58	9421	3/12/2008	30.43	-97.71
565	Travis	Travis	78722	TX	1.71	17656	3/21/2008	30.30	-97.70
566	Travis	Travis	78741	TX	3.15	18316	3/21/2008	30.23	-97.71
567	Travis	Travis	78751	TX	23.10	173532	3/24/2008	30.31	-97.73
568	Travis	Travis	78701	TX	1.23	9180	3/24/2008	30.27	-97.74
569	Travis	Travis	78705	TX	2.80	18621	3/24/2008	30.30	-97.74
570	Travis	Travis	78748	TX	3.15	32794	3/26/2008	30.17	-97.82
571	Travis	Travis	78748	TX	1.05	8199	3/26/2008	30.17	-97.82
572	Travis	Travis	78752	TX	3.20	24073	3/26/2008	30.33	-97.70
573	Travis	Travis	78703	TX	3.20	21520	3/26/2008	30.29	-97.77
574	Travis	Travis	78702	TX	3.20	21443	3/31/2008	30.26	-97.71
575	Travis	Travis	78746	TX	3.15	21000	3/31/2008	30.31	-97.82
576	Travis	Travis	78750	TX	3.15	21234	3/31/2008	30.43	-97.80
577	Travis	Travis	78750	TX	3.15	20905	3/31/2008	30.43	-97.80
578	Travis	Travis	78746	TX	3.69	30164	4/8/2008	30.31	-97.82
579	Travis	Travis	78745	TX	23.10	175341	4/8/2008	30.21	-97.80
580	Travis	Travis	78730	TX	3.15	36176	4/9/2008	30.37	-97.84
581	Travis	Travis	78756	TX	3.33	26408	4/10/2008	30.32	-97.74
582	Travis	Travis	78705	TX	3.15	21249	4/17/2008	30.30	-97.74
583	Travis	Travis	78731	TX	3.13	25366	4/17/2008	30.35	-97.77
584	Travis	Travis	78734	TX	3.06	23164	4/22/2008	30.37	-97.95
585	Travis	Travis	78749	TX	3.20	22741	4/22/2008	30.22	-97.86
586	Travis	Travis	78723	TX	3.20	22275	4/22/2008	30.31	-97.68
587	Travis	Travis	78759	TX	3.04	21984	4/23/2008	30.40	-97.75
588	Travis	Travis	78759	TX	3.15	21127	4/24/2008	30.40	-97.75
589	Travis	Travis	78704	TX	3.15	24326	4/30/2008	30.24	-97.77
590	Travis	Travis	78751	TX	3.50	23422	4/30/2008	30.31	-97.73
591	Travis	Travis	78704	TX	3.33	23400	5/2/2008	30.24	-97.77
592	Travis	Travis	78745	TX	23.63	147099	5/2/2008	30.21	-97.80
593	Travis	Travis	78705	TX	23.10	164150	5/2/2008	30.30	-97.74
594	Travis	Travis	78735	TX	3.40	20650	5/7/2008	30.26	-97.86
595	Travis	Travis	78750	TX	3.15	21176	5/7/2008	30.43	-97.80
596	Travis	Travis	78727	TX	10.50	76495	5/14/2008	30.43	-97.71
597	Travis	Travis	78701	TX	2.80	26667	5/16/2008	30.27	-97.74
598	Kendall	Bexar	78006	TX	3.06		5/20/2008	29.78	-98.73
599	Kendall	Bexar	78006	TX	2.28		5/20/2008	29.69	-98.65
600	Travis	Travis	78747	TX	3.15	20970	5/21/2008	30.13	-97.73

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
601	Travis	Travis	78751	TX	3.15	21360	5/22/2008	30.31	-97.73
602	Travis	Travis	78660	TX	3.24	24226	5/29/2008	30.46	-97.60
603	Travis	Travis	78703	TX	3.00	23759	5/29/2008	30.29	-97.77
604	Travis	Travis	78703	TX	3.15	20700	6/2/2008	30.29	-97.77
605	Travis	Travis	78704	TX	3.15	23340	6/2/2008	30.24	-97.77
606	Travis	Travis	78732	TX	3.00	22889	6/3/2008	30.38	-97.90
607	Travis	Travis	78746	TX	3.50	28096	6/5/2008	30.31	-97.82
608	Travis	Travis	78750	TX	3.24	21803	6/9/2008	30.43	-97.80
609	Bexar	Bexar	78248	TX	4.90	24682	6/9/2008	29.59	-98.52
610	Travis	Travis	78734	TX	3.04	22558	6/10/2008	30.37	-97.95
611	Travis	Travis	78735	TX	3.04	22558	6/10/2008	30.26	-97.86
612	Travis	Travis	78724	TX	3.15	21538	6/10/2008	30.29	-97.62
613	Travis	Travis	78756	TX	3.12	20966	6/16/2008	30.32	-97.74
614	Travis	Travis	78704	TX	3.15	23328	6/16/2008	30.24	-97.77
615	Travis	Travis	78746	TX	23.27	201824	6/16/2008	30.31	-97.82
616	Travis	Travis	78759	TX	3.15	24887	6/17/2008	30.40	-97.75
617	Travis	Travis	78758	TX	23.63	175415	6/17/2008	30.39	-97.70
618	Travis	Travis	78757	TX	8.75	69325	6/18/2008	30.35	-97.74
619	Travis	Travis	78746	TX	3.24	21544	6/19/2008	30.31	-97.82
620	Travis	Travis	78733	TX	3.15	22840	6/19/2008	30.33	-97.87
621	Williamson	Williamson	78729	TX	3.15	20991	6/19/2008	30.45	-97.76
622	Bexar	Bexar	78221	TX	10.50		6/30/2008	29.35	-98.53
623	Bexar	Bexar	78023	TX	3.96		6/30/2008	29.56	-98.71
624	Travis	Travis	78723	TX	3.28	25483	6/30/2008	30.31	-97.68
625	Travis	Travis	78704	TX	7.00	54885	6/30/2008	30.24	-97.77
626	Travis	Travis	78759	TX	3.15	21182	7/1/2008	30.40	-97.75
627	Travis	Travis	78746	TX	3.20	22175	7/1/2008	30.31	-97.82
628	Travis	Travis	78733	TX	3.06	20156	7/3/2008	30.33	-97.87
629	Travis	Travis	78731	TX	3.15	21242	7/8/2008	30.35	-97.77
630	Travis	Travis	78733	TX	3.24	21613	7/8/2008	30.33	-97.87
631	Travis	Travis	78746	TX	3.15	22845	7/8/2008	30.31	-97.82
632	Travis	Travis	78727	TX	17.50	129954	7/18/2008	30.43	-97.71
633	Travis	Travis	78733	TX	3.04	24898	7/21/2008	30.33	-97.87
634	Travis	Travis	78746	TX	3.24	20864	7/21/2008	30.31	-97.82
635	Travis	Travis	78746	TX	3.34	25850	7/22/2008	30.31	-97.82
636	Travis	Travis	78722	TX	1.38	15929	7/22/2008	30.30	-97.70
637	Travis	Travis	78727	TX	0.70	9161	7/23/2008	30.43	-97.71
638	Travis	Travis	78724	TX	3.15	21094	7/28/2008	30.29	-97.62
639	Travis	Travis	78757	TX	3.24	21514	7/28/2008	30.35	-97.74
640	Travis	Travis	78734	TX	3.15	20992	7/28/2008	30.37	-97.95

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
641	Travis	Travis	78724	TX	3.24	21406	7/29/2008	30.29	-97.62
642	Travis	Travis	78705	TX	14.00	106917	7/29/2008	30.30	-97.74
643	Travis	Travis	78746	TX	3.20	24332	8/4/2008	30.31	-97.82
644	Travis	Travis	78746	TX	3.20	21421	8/4/2008	30.31	-97.82
645	Travis	Travis	78746	TX	3.42	29193	8/4/2008	30.31	-97.82
646	Travis	Travis	78746	TX	3.14	23686	8/4/2008	30.31	-97.82
647	Travis	Travis	78745	TX	3.34	25204	8/6/2008	30.21	-97.80
648	Travis	Travis	78759	TX	3.14	23826	8/6/2008	30.40	-97.75
649	Travis	Travis	78741	TX	3.06	24000	8/7/2008	30.23	-97.71
650	Travis	Travis	78731	TX	3.14	24226	8/11/2008	30.35	-97.77
651	Travis	Travis	78746	TX	3.14	20231	8/11/2008	30.31	-97.82
652	Travis	Travis	78746	TX	2.69	20047	8/11/2008	30.31	-97.82
653	Williamson	Williamson	78729	TX	23.68	164142	8/12/2008	30.45	-97.76
654	Travis	Travis	78745	TX	3.20	21380	8/13/2008	30.21	-97.80
655	Travis	Travis	78759	TX	8.75	69325	8/13/2008	30.40	-97.75
656	Travis	Travis	78748	TX	3.15	23782	8/13/2008	30.17	-97.82
657	Travis	Travis	78733	TX	2.24	17366	8/15/2008	30.33	-97.87
658	Travis	Travis	78703	TX	3.24	22567	8/18/2008	30.29	-97.77
659	Travis	Travis	78734	TX	3.14	22455	8/18/2008	30.37	-97.95
660	Travis	Travis	78734	TX	3.14	22455	8/18/2008	30.37	-97.95
661	Travis	Travis	78734	TX	3.17	26935	8/18/2008	30.37	-97.95
662	Travis	Travis	78746	TX	3.15	25565	8/18/2008	30.31	-97.82
663	Travis	Travis	78758	TX	3.15	21033	8/18/2008	30.39	-97.70
664	Travis	Travis	78758	TX	3.15	21033	8/18/2008	30.39	-97.70
665	Travis	Travis	78653	TX	3.15	19053	8/18/2008	30.34	-97.50
666	Travis	Travis	78751	TX	2.56	20323	8/20/2008	30.31	-97.73
667	Travis	Travis	78746	TX	3.42	26847	8/25/2008	30.31	-97.82
668	Travis	Travis	78757	TX	3.15	20869	8/25/2008	30.35	-97.74
669	Travis	Travis	78739	TX	3.15	21601	8/25/2008	30.19	-97.90
670	Travis	Travis	78704	TX	2.10	17385	8/27/2008	30.24	-97.77
671	Bexar	Bexar	78261	TX	4.00		9/5/2008	29.70	-98.44
672	Bexar	Bexar	78232	TX	5.34		9/5/2008	29.58	-98.47
673	Travis	Travis	78757	TX	3.14	24000	9/8/2008	30.35	-97.74
674	Travis	Travis	78704	TX	25.20	169926	9/9/2008	30.24	-97.77
675	Travis	Travis	78749	TX	3.00	21056	9/10/2008	30.22	-97.86
676	Travis	Travis	78749	TX	1.80	21056	9/10/2008	30.22	-97.86
677	Travis	Travis	78723	TX	3.50	23782	9/10/2008	30.31	-97.68
678	Travis	Travis	78734	TX	5.33	40105	9/10/2008	30.37	-97.95
679	Travis	Travis	78749	TX	3.10		9/12/2008	30.23	-97.84
680	Travis	Travis	78733	TX	3.15	21837	9/12/2008	30.33	-97.87

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
681	Travis	Travis	78732	TX	3.00	24851	9/12/2008	30.38	-97.90
682	Travis	Travis	78732	TX	3.00	24851	9/12/2008	30.38	-97.90
683	Travis	Travis	78759	TX	3.04	20994	9/15/2008	30.40	-97.75
684	Travis	Travis	78759	TX	2.72	20420	9/15/2008	30.40	-97.75
685	Travis	Travis	78746	TX	3.15	24306	9/15/2008	30.31	-97.82
686	Bexar	Bexar	78201	TX	4.32		9/18/2008	29.48	-98.55
687	Travis	Travis	78756	TX	2.52	17663	9/22/2008	30.32	-97.74
688	Travis	Travis	78704	TX	3.06	22810	9/22/2008	30.24	-97.77
689	Travis	Travis	78734	TX	3.17	22516	9/22/2008	30.37	-97.95
690	Travis	Travis	78734	TX	3.17	22516	9/22/2008	30.37	-97.95
691	Travis	Travis	78732	TX	3.17	21200	9/22/2008	30.38	-97.90
692	Travis	Travis	78732	TX	3.17	21200	9/22/2008	30.38	-97.90
693	Travis	Travis	78746	TX	3.08	37547	9/23/2008	30.31	-97.82
694	Travis	Travis	78746	TX	1.85	14080	9/23/2008	30.31	-97.82
695	Travis	Travis	78759	TX	2.97	21190	9/23/2008	30.40	-97.75
696	Travis	Travis	78759	TX	0.99	7200	9/23/2008	30.40	-97.75
697	Travis	Travis	78759	TX	3.24	20567	9/24/2008	30.40	-97.75
698	Travis	Travis	78703	TX	3.00	23148	9/24/2008	30.29	-97.77
699	Travis	Travis	78703	TX	3.00	23148	9/24/2008	30.29	-97.77
700	Travis	Travis	78703	TX	10.82	73581	9/25/2008	30.29	-97.77
701	Travis	Travis	78703	TX	15.60	106126	9/25/2008	30.29	-97.77
702	Travis	Travis	78733	TX	3.00	23059	9/25/2008	30.33	-97.87
703	Travis	Travis	78733	TX	3.00	23059	9/25/2008	30.33	-97.87
704	Travis	Travis	78733	TX	6.29	30000	9/25/2008	30.33	-97.87
705	Travis	Travis	78704	TX	3.14	22455	9/29/2008	30.24	-97.77
706	Travis	Travis	78704	TX	3.14	22455	9/29/2008	30.24	-97.77
707	Travis	Travis	78759	TX	3.17	24202	9/29/2008	30.40	-97.75
708	Travis	Travis	78730	TX	3.15	45042	9/29/2008	30.37	-97.84
709	Travis	Travis	78730	TX	3.15	22521	9/29/2008	30.37	-97.84
710	Travis	Travis	78702	TX	1.80	13756	9/29/2008	30.26	-97.71
711	Travis	Travis	78733	TX	4.00	34821	9/29/2008	30.33	-97.87
712	Travis	Travis	78704	TX	3.15	22582	9/30/2008	30.24	-97.77
713	Travis	Travis	78704	TX	3.15	22582	9/30/2008	30.24	-97.77
714	Travis	Travis	78703	TX	2.52	20826	9/30/2008	30.29	-97.77
715	Travis	Travis	78704	TX	3.00	23758	9/30/2008	30.24	-97.77
716	Travis	Travis	78704	TX	3.00	23758	9/30/2008	30.24	-97.77
717	Travis	Travis	78703	TX	3.15	25856	9/30/2008	30.29	-97.77
718	Travis	Travis	78731	TX	2.66	19907	9/30/2008	30.35	-97.77
719	Travis	Travis	78731	TX	2.66	19907	9/30/2008	30.35	-97.77
720	Travis	Travis	78746	TX	2.80	26744	9/30/2008	30.31	-97.82

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
721	Travis	Travis	78746	TX	2.80	22609	9/30/2008	30.31	-97.82
722	Travis	Travis	78746	TX	2.52	18601	9/30/2008	30.31	-97.82
723	Travis	Travis	78746	TX	2.52	18601	9/30/2008	30.31	-97.82
724	Travis	Travis	78732	TX	3.17	23500	10/1/2008	30.38	-97.90
725	Travis	Travis	78732	TX	3.17	20000	10/1/2008	30.38	-97.90
726	Travis	Travis	78724	TX	3.24	20768	10/1/2008	30.29	-97.62
727	Travis	Travis	78724	TX	3.24	20738	10/1/2008	30.29	-97.62
728	Bexar	Bexar	78023	TX	3.71		10/3/2008	29.57	-98.67
729	Bexar	Bexar	78213	TX	3.60		10/6/2008	29.53	-98.51
730	Bexar	Bexar	78258	TX	16.00		10/6/2008	29.61	-98.49
731	Bexar	Bexar	78253	TX	4.81		10/8/2008	29.43	-98.76
732	Travis	Travis	78722	TX	3.50	27334	10/8/2008	30.30	-97.70
733	Travis	Travis	78733	TX	2.34	12883	10/8/2008	30.33	-97.87
734	Travis	Travis	78704	TX	2.28	26504	10/12/2008	30.24	-97.77
735	Travis	Travis	78704	TX	2.10	17786	10/13/2008	30.24	-97.77
736	Travis	Travis	78734	TX	2.67	21803	10/13/2008	30.37	-97.95
737	Travis	Travis	78727	TX	3.42	21426	10/14/2008	30.43	-97.71
738	Travis	Travis	78731	TX	3.42	22233	10/14/2008	30.35	-97.77
739	Travis	Travis	78723	TX	3.42	21196	10/20/2008	30.31	-97.68
740	Travis	Travis	78744	TX	3.20	21538	10/20/2008	30.20	-97.73
741	Travis	Travis	78703	TX	3.15	27312	10/21/2008	30.29	-97.77
742	Travis	Travis	78741	TX	3.15	26376	10/21/2008	30.23	-97.71
743	Bexar	Bexar	78229	TX	3.96		10/22/2008	29.51	-98.56
744	Travis	Travis	78653	TX	3.15	19053	10/22/2008	30.34	-97.50
745	Travis	Travis	78727	TX	10.50	91152	10/24/2008	30.43	-97.71
746	Travis	Travis	78731	TX	2.28	21019	11/3/2008	30.35	-97.77
747	Travis	Travis	78751	TX	3.15	26354	11/3/2008	30.31	-97.73
748	Travis	Travis	78731	TX	3.15	24489	11/3/2008	30.35	-97.77
749	Travis	Travis	78745	TX	7.56	64864	11/3/2008	30.21	-97.80
750	Travis	Travis	78746	TX	3.24	21245	11/4/2008	30.31	-97.82
751	Travis	Travis	78757	TX	3.15	21091	11/4/2008	30.35	-97.74
752	Travis	Travis	78759	TX	3.15	22132	11/4/2008	30.40	-97.75
753	Travis	Travis	78747	TX	3.24	21622	11/4/2008	30.13	-97.73
754	Travis	Travis	78746	TX	3.15	26422	11/5/2008	30.31	-97.82
755	Travis	Travis	78704	TX	3.06	22810	11/5/2008	30.24	-97.77
756	Travis	Travis	78734	TX	3.15	23506	11/5/2008	30.37	-97.95
757	Travis	Travis	78746	TX	3.15	25565	11/10/2008	30.31	-97.82
758	Travis	Travis	78752	TX	3.15	26847	11/17/2008	30.33	-97.70
759	Travis	Travis	78734	TX	3.20	20957	11/17/2008	30.37	-97.95
760	Travis	Travis	78704	TX	3.15	18427	11/17/2008	30.24	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
761	Travis	Travis	78753	TX	3.36	23839	11/17/2008	30.39	-97.67
762	Travis	Travis	78756	TX	3.15	21900	11/17/2008	30.32	-97.74
763	Bexar	Bexar	78249	TX	4.32		11/20/2008	29.58	-98.57
764	Travis	Travis	78746	TX	3.06	21320	11/24/2008	30.31	-97.82
765	Travis	Travis	78746	TX	3.04	24263	11/24/2008	30.31	-97.82
766	Travis	Travis	78751	TX	6.66	48589	11/24/2008	30.31	-97.73
767	Travis	Travis	78746	TX	4.32	24290	11/25/2008	30.31	-97.82
768	Travis	Travis	78746	TX	1.08	5300	11/25/2008	30.31	-97.82
769	Travis	Travis	78750	TX	3.15	20928	11/25/2008	30.43	-97.80
770	Travis	Travis	78750	TX	3.15	20928	11/25/2008	30.43	-97.80
771	Travis	Travis	78722	TX	3.15	21745	11/25/2008	30.30	-97.70
772	Travis	Travis	78727	TX	3.15	21774	11/25/2008	30.43	-97.71
773	Travis	Travis	78745	TX	3.06	19082	11/26/2008	30.21	-97.80
774	Travis	Travis	78746	TX	23.63	149233	11/26/2008	30.31	-97.82
775	Bexar	Bexar	78212	TX	2.78		12/5/2008	29.46	-98.49
776	Travis	Travis	78745	TX	3.17	22700	12/8/2008	30.21	-97.80
777	Travis	Travis	78732	TX	3.17	23500	12/8/2008	30.38	-97.90
778	Travis	Travis	78750	TX	3.15	21295	12/10/2008	30.43	-97.80
779	Travis	Travis	78751	TX	3.36	29769	12/11/2008	30.31	-97.73
780	Travis	Travis	78730	TX	3.01	21637	12/12/2008	30.37	-97.84
781	Travis	Travis	78749	TX	3.24	21898	12/12/2008	30.22	-97.86
782	Travis	Travis	78746	TX	3.15	20901	12/12/2008	30.31	-97.82
783	Hays	Hays	78737	TX	6.00	36000	12/15/2008	30.23	-98.00
784	Travis	Travis	78759	TX	3.17	24380	12/15/2008	30.40	-97.75
785	Travis	Travis	78731	TX	3.17	28093	12/15/2008	30.35	-97.77
786	Travis	Travis	78748	TX	2.85	21412	12/15/2008	30.17	-97.82
787	Travis	Travis	78704	TX	3.15	23834	12/15/2008	30.24	-97.77
788	Travis	Travis	78734	TX	2.63	15850	12/17/2008	30.37	-97.95
789	Travis	Travis	78702	TX	3.74	22471	12/19/2008	30.26	-97.71
790	Travis	Travis	78758	TX	3.24	21961	12/22/2008	30.39	-97.70
791	Travis	Travis	78750	TX	3.15	19995	12/23/2008	30.43	-97.80
792	Travis	Travis	78750	TX	3.15	19245	12/23/2008	30.43	-97.80
793	Travis	Travis	78750	TX	2.88	19378	12/23/2008	30.43	-97.80
794	Travis	Travis	78750	TX	2.88	19378	12/23/2008	30.43	-97.80
795	Travis	Travis	78704	TX	23.63	163060	12/23/2008	30.24	-97.77
796	Bexar	Bexar	78209	TX	1.02		12/30/2008	29.50	-98.46
797	Travis	Travis	78746	TX	3.15	22394	12/31/2008	30.31	-97.82
798	Hays	Hays	78737	TX	6.00	36000	1/1/2009	30.23	-98.00
799	Bexar	Bexar	78148	TX	2.80		1/8/2009	29.57	-98.31
800	Bexar	Bexar	78249	TX	3.99		1/8/2009	29.56	-98.61

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
801	Bexar	Bexar	78249	TX	2.09		1/8/2009	29.56	-98.61
802	Travis	Travis	78746	TX	3.15	22541	1/9/2009	30.31	-97.82
803	Travis	Travis	78746	TX	1.05	7513	1/9/2009	30.31	-97.82
804	Travis	Travis	78731	TX	3.17	23065	1/9/2009	30.35	-97.77
805	Travis	Travis	78732	TX	3.17	23500	1/9/2009	30.38	-97.90
806	Travis	Travis	78746	TX	5.25	34448	1/9/2009	30.31	-97.82
807	Travis	Travis	78703	TX	6.12	41249	1/9/2009	30.29	-97.77
808	Travis	Travis	78733	TX	3.15	23941	1/12/2009	30.33	-97.87
809	Williamson	Williamson	78729	TX	3.15	22189	1/13/2009	30.45	-97.76
810	Travis	Travis	78745	TX	3.15	28708	1/14/2009	30.21	-97.80
811	Travis	Travis	78735	TX	3.28	29803	1/14/2009	30.26	-97.86
812	Travis	Travis	78722	TX	3.15	22332	1/21/2009	30.30	-97.70
813	Travis	Travis	78745	TX	3.15	25949	1/23/2009	30.21	-97.80
814	Bexar	Bexar	78261	TX	3.60		1/30/2009	29.70	-98.42
815	Bexar	Bexar	78212	TX	6.80		1/30/2009	29.47	-98.48
816	Bexar	Bexar	78232	TX	4.86		1/30/2009	29.58	-98.51
817	Travis	Travis	78703	TX	3.15	22782	2/2/2009	30.29	-97.77
818	Travis	Travis	78703	TX	3.15	22782	2/2/2009	30.29	-97.77
819	Travis	Travis	78733	TX	3.24	21488	2/3/2009	30.33	-97.87
820	Travis	Travis	78723	TX	3.15	20710	2/3/2009	30.31	-97.68
821	Travis	Travis	78746	TX	3.15	30914	2/4/2009	30.31	-97.82
822	Travis	Travis	78747	TX	3.02	22271	2/4/2009	30.13	-97.73
823	Travis	Travis	78747	TX	3.02	22271	2/4/2009	30.13	-97.73
824	Travis	Travis	78733	TX	3.15	20412	2/5/2009	30.33	-97.87
825	Travis	Travis	78733	TX	6.09	39610	2/5/2009	30.33	-97.87
826	Travis	Travis	78759	TX	3.15	28354	2/6/2009	30.40	-97.75
827	Travis	Travis	78727	TX	3.15	27000	2/6/2009	30.43	-97.71
828	Travis	Travis	78734	TX	1.84	16084	2/6/2009	30.37	-97.95
829	Travis	Travis	78751	TX	3.15	24162	2/6/2009	30.31	-97.73
830	Travis	Travis	78749	TX	3.15	25050	2/12/2009	30.22	-97.86
831	Travis	Travis	78745	TX	3.14	21775	2/12/2009	30.21	-97.80
832	Travis	Travis	78704	TX	3.15	28568	2/12/2009	30.24	-97.77
833	Travis	Travis	78724	TX	1.58	15023	2/18/2009	30.29	-97.62
834	Travis	Travis	78703	TX	3.15	22376	2/19/2009	30.29	-97.77
835	Travis	Travis	78704	TX	12.18	91282	2/19/2009	30.24	-97.77
836	Bexar	Bexar	78254	TX	4.00		2/20/2009	29.53	-98.66
837	Travis	Travis	78732	TX	3.14	23794	2/23/2009	30.38	-97.90
838	Travis	Travis	78759	TX	3.12	22631	2/23/2009	30.40	-97.75
839	Travis	Travis	78735	TX	3.15	20520	2/24/2009	30.26	-97.86
840	Travis	Travis	78731	TX	3.15	21745	2/24/2009	30.35	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
841	Travis	Travis	78734	TX	3.24	22620	2/24/2009	30.37	-97.95
842	Travis	Travis	78734	TX	3.15	21431	2/24/2009	30.37	-97.95
843	Travis	Travis	78731	TX	3.15	26385	2/25/2009	30.35	-97.77
844	Travis	Travis	78704	TX	3.15	27300	2/25/2009	30.24	-97.77
845	Travis	Travis	78746	TX	22.91	201352	2/25/2009	30.31	-97.82
846	Travis	Travis	78730	TX	3.20	23174	2/27/2009	30.37	-97.84
847	Travis	Travis	78746	TX	3.20	24230	2/27/2009	30.31	-97.82
848	Travis	Travis	78728	TX	3.15	19924	2/27/2009	30.46	-97.68
849	Travis	Travis	78704	TX	3.20	22720	2/27/2009	30.24	-97.77
850	Williamson	Williamson	78729	TX	3.85	35925	2/27/2009	30.45	-97.76
851	Travis	Travis	78756	TX	11.65	87516	3/2/2009	30.32	-97.74
852	Travis	Travis	78727	TX	6.05	53859	3/2/2009	30.43	-97.71
853	Travis	Travis	78702	TX	3.12	20882	3/6/2009	30.26	-97.71
854	Travis	Travis	78732	TX	3.17	23500	3/9/2009	30.38	-97.90
855	Travis	Travis	78746	TX	3.15	22743	3/10/2009	30.31	-97.82
856	Travis	Travis	78703	TX	3.15	21405	3/10/2009	30.29	-97.77
857	Travis	Travis	78734	TX	3.15	29421	3/11/2009	30.37	-97.95
858	Tarrant	Tarrant	76020	TX	2.70	24300	3/11/2009	32.99	-97.55
859	Travis	Travis	78704	TX	23.10	166798	3/16/2009	30.24	-97.77
860	Travis	Travis	78746	TX	3.60	26321	3/17/2009	30.31	-97.82
861	Travis	Travis	78746	TX	3.60	26321	3/17/2009	30.31	-97.82
862	Travis	Travis	78751	TX	3.15	22518	3/17/2009	30.31	-97.73
863	Travis	Travis	78724	TX	3.24	21961	3/17/2009	30.29	-97.62
864	Travis	Travis	78757	TX	6.30	89938	3/24/2009	30.35	-97.74
865	Lamar	Hunt	75421	TX	2.46	19862	3/26/2009	33.65	-95.72
866	Grayson	Collin	75090	TX	4.32	24367	3/27/2009	33.60	-96.56
867	Grayson	Collin	75021	TX	2.10	16792	3/27/2009	33.74	-96.47
868	Harris	Harris	77401	TX	2.87	17238	3/28/2009	29.71	-95.46
869	Harris	Harris	77401	TX	2.87	19871	3/28/2009	29.71	-95.46
870	Travis	Travis	78734	TX	3.15	21810	3/30/2009	30.37	-97.95
871	Travis	Travis	78704	TX	3.15	20749	4/1/2009	30.24	-97.77
872	Travis	Travis	78731	TX	3.15	25987	4/6/2009	30.35	-97.77
873	Travis	Travis	78756	TX	3.85	42462	4/6/2009	30.32	-97.74
874	Travis	Travis	78727	TX	2.80	26708	4/6/2009	30.43	-97.71
875	Travis	Travis	78734	TX	9.45	65887	4/8/2009	30.37	-97.95
876	Travis	Travis	78736	TX	3.15	24845	4/10/2009	30.25	-97.95
877	Travis	Travis	78745	TX	3.15	23121	4/10/2009	30.21	-97.80
878	Travis	Travis	78752	TX	23.40	125124	4/10/2009	30.33	-97.70
879	Travis	Travis	78703	TX	2.04	15711	4/14/2009	30.29	-97.77
880	Dallas	Dallas	75214	TX	3.50	3652	4/15/2009	32.82	-96.74

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
881	Bexar	Bexar	78201	TX	13.37		4/15/2009	29.46	-98.52
882	Travis	Travis	78734	TX	3.17	25673	4/15/2009	30.37	-97.95
883	Grayson	Collin	75090	TX	4.32	34994	4/21/2009	33.60	-96.56
884	Bexar	Bexar	78212	TX	3.68		4/21/2009	29.46	-98.50
885	Grayson	Collin	75020	TX	2.10	16792	4/21/2009	33.78	-96.60
886	Hood	Hood	76035	TX	6.53	48820	4/24/2009	32.55	-97.63
887	Comal	Comal	78163	TX	3.96		4/30/2009	29.77	-98.43
888	Travis	Travis	78759	TX	1.58	11010	4/30/2009	30.40	-97.75
889	Travis	Travis	78741	TX	11.55	71343	4/30/2009	30.23	-97.71
890	Travis	Travis	78703	TX	4.20	34860	4/30/2009	30.29	-97.77
891	Travis	Travis	78701	TX	3.15	20378	5/1/2009	30.27	-97.74
892	Travis	Travis	78746	TX	3.15	21242	5/1/2009	30.31	-97.82
893	Travis	Travis	78731	TX	6.30	39000	5/1/2009	30.35	-97.77
894	Travis	Travis	78733	TX	4.20	27554	5/1/2009	30.33	-97.87
895	Travis	Travis	78749	TX	3.15	22466	5/4/2009	30.22	-97.86
896	Travis	Travis	78723	TX	3.02	23579	5/4/2009	30.31	-97.68
897	Travis	Travis	78756	TX	2.59	21678	5/4/2009	30.32	-97.74
898	Travis	Travis	78704	TX	24.48	198246	5/4/2009	30.24	-97.77
899	Bexar	Bexar	78216	TX	4.40		5/5/2009	29.56	-98.52
900	Travis	Travis	78752	TX	23.40	166495	5/5/2009	30.33	-97.70
901	Smith	Smith	75703	TX	2.31	20790	5/9/2009	32.24	-95.36
902	Bexar	Bexar	78210	TX	1.05		5/11/2009	29.40	-98.47
903	Dallas	Dallas	75214	TX	3.50	26894	5/12/2009	32.82	-96.74
904	Travis	Travis	78750	TX	7.00	43616	5/13/2009	30.43	-97.80
905	Travis	Travis	78741	TX	6.60	37311	5/14/2009	30.23	-97.71
906	Travis	Travis	78750	TX	2.16	21859	5/15/2009	30.43	-97.80
907	Travis	Travis	78727	TX	3.20	24695	5/19/2009	30.43	-97.71
908	Travis	Travis	78701	TX	3.20	24300	5/19/2009	30.27	-97.74
909	Travis	Travis	78731	TX	3.20	23748	5/19/2009	30.35	-97.77
910	Denton	Denton	75007	TX	2.10	18522	5/20/2009	33.01	-96.89
911	Bexar	Bexar	78216	TX	3.20		5/20/2009	29.57	-98.51
912	Smith	Smith	75771	TX	5.00	42500	5/20/2009	32.56	-95.44
913	Smith	Smith	75771	TX	5.38	39600	5/20/2009	32.56	-95.44
914	Travis	Travis	78731	TX	4.20	27519	5/21/2009	30.35	-97.77
915	Travis	Travis	78703	TX	4.38	33313	5/21/2009	30.29	-97.77
916	Travis	Travis	78710	TX	5.25	44738	5/21/2009	30.34	-97.66
917	Travis	Travis	78751	TX	5.78	49629	5/21/2009	30.31	-97.73
918	Smith	Smith	75703	TX	2.00	26460	5/22/2009	32.25	-95.41
919	Travis	Travis	78758	TX	3.15	21477	5/25/2009	30.39	-97.70
920	Travis	Travis	78749	TX	3.78	28049	5/26/2009	30.22	-97.86

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
921	Travis	Travis	78733	TX	5.60	38374	5/26/2009	30.33	-97.87
922	Travis	Travis	78731	TX	6.30	39774	5/26/2009	30.35	-97.77
923	Travis	Travis	78759	TX	3.15	22154	5/26/2009	30.40	-97.75
924	Travis	Travis	78734	TX	3.15	20130	5/26/2009	30.37	-97.95
925	Tarrant	Tarrant	76034	TX	3.02	24849	5/27/2009	32.89	-97.15
926	Travis	Travis	78731	TX	3.15	22660	5/27/2009	30.35	-97.77
927	Bexar	Bexar	78210	TX	2.45		5/28/2009	29.41	-98.45
928	Bexar	Bexar	78209	TX	2.60		5/28/2009	29.48	-98.47
929	Tarrant	Tarrant	76180	TX	5.76	41000	6/1/2009	32.84	-97.23
930	Travis	Travis	78723	TX	3.17	23000	6/1/2009	30.31	-97.68
931	Dallas	Dallas	75063	TX	6.00	45979	6/3/2009	32.91	-96.98
932	Dallas	Dallas	75231	TX	6.27	47922	6/3/2009	32.88	-96.75
933	Collin	Collin	75070	TX	3.50	29094	6/3/2009	33.18	-96.70
934	Travis	Travis	78745	TX	2.38	16656	6/8/2009	30.21	-97.80
935	Travis	Travis	78748	TX	3.24	21534	6/8/2009	30.17	-97.82
936	Bexar	Bexar	78215	TX	200.00	1350000	6/9/2009	29.44	-98.48
937	Hill	Ellis	76645	TX	10.08	71580	6/9/2009	32.02	-97.14
938	Travis	Travis	78704	TX	4.20	26139	6/10/2009	30.24	-97.77
939	Travis	Travis	78751	TX	4.20	26559	6/10/2009	30.31	-97.73
940	Travis	Travis	78723	TX	7.80	51847	6/10/2009	30.31	-97.68
941	Travis	Travis	78746	TX	6.12	45360	6/12/2009	30.31	-97.82
942	Panola	Rusk	75633	TX	32.00	288679	6/15/2009	32.15	-94.27
943	Travis	Travis	78746	TX	3.15	27646	6/16/2009	30.31	-97.82
944	Travis	Travis	78746	TX	4.05	32874	6/16/2009	30.31	-97.82
945	Lamar	Hunt	75421	TX	2.46	19862	6/18/2009	33.64	-95.71
946	Travis	Travis	78701	TX	3.20	24300	6/18/2009	30.27	-97.74
947	Tarrant	Tarrant	76040	TX	3.24	25722	6/19/2009	32.82	-97.10
948	Tarrant	Tarrant	76131	TX	2.87	25311	6/19/2009	32.90	-97.36
949	Travis	Travis	78745	TX	3.15	22945	6/19/2009	30.21	-97.80
950	Travis	Travis	78757	TX	3.15	19308	6/19/2009	30.35	-97.74
951	Grayson	Collin	75092	TX	4.50	35590	6/20/2009	33.68	-96.73
952	Bell	Williamson	76543	TX	3.15	21232	6/23/2009	31.14	-97.67
953	Bell	Williamson	76542	TX	2.10	18810	6/23/2009	31.01	-97.72
954	Bell	Williamson	76542	TX	5.04	32799	6/23/2009	31.01	-97.72
955	Travis	Travis	78754	TX	3.24	21304	6/23/2009	30.36	-97.65
956	Travis	Travis	78751	TX	3.50	23876	6/24/2009	30.31	-97.73
957	Travis	Travis	78723	TX	3.15	22421	6/24/2009	30.31	-97.68
958	Travis	Travis	78735	TX	2.00	15827	6/24/2009	30.26	-97.86
959	Travis	Travis	78757	TX	3.15	22956	6/24/2009	30.35	-97.74
960	Travis	Travis	78704	TX	4.32	26848	6/24/2009	30.24	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
961	Smith	Smith	75703	TX	2.94	26894	6/25/2009	32.27	-95.33
962	Smith	Smith	75703	TX	2.31	20790	6/25/2009	32.27	-95.33
963	Travis	Travis	78733	TX	7.80	56000	6/25/2009	30.33	-97.87
964	Travis	Travis	78749	TX	7.70	53274	6/26/2009	30.22	-97.86
965	Travis	Travis	78750	TX	6.83	44578	6/26/2009	30.43	-97.80
966	Travis	Travis	78703	TX	4.80	39769	6/29/2009	30.29	-97.77
967	Travis	Travis	78730	TX	7.00	44343	6/29/2009	30.37	-97.84
968	Travis	Travis	78746	TX	8.00	57708	6/30/2009	30.31	-97.82
969	Dallas	Dallas	75234	TX	3.10	30934	7/1/2009	32.92	-96.86
970	Rockwall	Rockwall	75087	TX	4.69	26650	7/1/2009	32.95	-96.44
971	Travis	Travis	78746	TX	3.24	33055	7/2/2009	30.31	-97.82
972	Ellis	Ellis	75125	TX	10.08	66800	7/4/2009	32.52	-96.64
973	Tarrant	Tarrant	76179	TX	2.05	12880	7/7/2009	32.92	-97.46
974	Tarrant	Tarrant	76164	TX	236.13	1471931	7/7/2009	32.78	-97.35
975	Nacogdoches	Rusk	75964	TX	10.08	75089	7/7/2009	31.59	-94.77
976	Collin	Collin	75002	TX	4.00	42196	7/8/2009	33.09	-96.61
977	Williamson	Williamson	78665	TX	8.20	52036	7/8/2009	30.35	-98.53
978	Smith	Smith	75771	TX	9.86	78900	7/10/2009	32.56	-95.44
979	Tarrant	Tarrant	76180	TX	5.76	42169	7/10/2009	32.86	-97.21
980	Ellis	Ellis	75125	TX	3.15	22000	7/10/2009	32.52	-96.64
981	Travis	Travis	78749	TX	7.70	54000	7/13/2009	30.21	-97.86
982	Travis	Travis	78727	TX	2.16	14060	7/13/2009	30.43	-97.71
983	Travis	Travis	78703	TX	4.68	31533	7/13/2009	30.29	-97.77
984	Travis	Travis	78751	TX	23.63	179500	7/13/2009	30.31	-97.73
985	Travis	Travis	78751	TX	23.63	177876	7/13/2009	30.31	-97.73
986	Travis	Travis	78745	TX	23.33	206224	7/13/2009	30.21	-97.80
987	Collin	Collin	75098	TX	4.50	31860	7/14/2009	33.02	-96.51
988	Travis	Travis	78759	TX	3.85	23110	7/14/2009	30.40	-97.75
989	Travis	Travis	78746	TX	3.08	22887	7/14/2009	30.31	-97.82
990	Travis	Travis	78746	TX	9.75	60520	7/14/2009	30.31	-97.82
991	Collin	Collin	75093	TX	1.13	8195	7/15/2009	33.04	-96.82
992	Travis	Travis	78702	TX	3.15	22499	7/15/2009	30.26	-97.71
993	Travis	Travis	78725	TX	3.15	22512	7/15/2009	30.23	-97.62
994	Travis	Travis	78727	TX	5.76	37811	7/15/2009	30.43	-97.71
995	Travis	Travis	78750	TX	3.96	25018	7/17/2009	30.43	-97.80
996	Travis	Travis	78749	TX	7.70	54000	7/18/2009	30.18	-97.86
997	Travis	Travis	78723	TX	3.42	21398	7/21/2009	30.31	-97.68
998	Travis	Travis	78704	TX	3.24	20714	7/21/2009	30.24	-97.77
999	Travis	Travis	78728	TX	2.52	17246	7/21/2009	30.46	-97.68
1000	Travis	Travis	78727	TX	3.24	20714	7/21/2009	30.43	-97.71

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1001	Travis	Travis	78732	TX	11.16	74435	7/21/2009	30.38	-97.90
1002	Travis	Travis	78724	TX	3.24	26515	7/22/2009	30.29	-97.62
1003	Travis	Travis	78730	TX	3.24	20714	7/22/2009	30.37	-97.84
1004	Travis	Travis	78749	TX	1.48	19500	7/22/2009	30.22	-97.86
1005	Tarrant	Tarrant	76051	TX	6.00	44000	7/23/2009	32.95	-97.09
1006	Travis	Travis	78746	TX	3.50	30728	7/23/2009	30.31	-97.82
1007	Travis	Travis	78759	TX	3.15	26274	7/23/2009	30.40	-97.75
1008	Travis	Travis	78733	TX	13.65	112773	7/23/2009	30.33	-97.87
1009	Travis	Travis	78704	TX	4.20	30538	7/23/2009	30.24	-97.77
1010	Travis	Travis	78704	TX	5.52	39344	7/23/2009	30.24	-97.77
1011	Bexar	Bexar	78213	TX	1.80	14188	7/23/2009	29.50	-98.52
1012	Collin	Collin	75023	TX	3.00	24933	7/24/2009	33.06	-96.71
1013	Travis	Travis	78747	TX	3.85	22626	7/27/2009	30.13	-97.73
1014	Travis	Travis	78704	TX	6.24	48547	7/27/2009	30.24	-97.77
1015	Travis	Travis	78754	TX	7.70	46435	7/28/2009	30.36	-97.65
1016	Travis	Travis	78730	TX	3.85	26196	7/28/2009	30.37	-97.84
1017	Travis	Travis	78734	TX	3.15	23305	7/29/2009	30.37	-97.95
1018	Williamson	Williamson	78729	TX	4.20	26050	7/29/2009	30.45	-97.76
1019	Travis	Travis	78753	TX	6.15	36002	7/29/2009	30.39	-97.67
1020	Travis	Travis	78728	TX	5.35	33000	7/29/2009	30.46	-97.68
1021	Travis	Travis	78723	TX	19.38	111264	7/29/2009	30.31	-97.68
1022	Travis	Travis	78746	TX	3.15	25565	8/1/2009	30.31	-97.82
1023	Henderson	Henderson	75156	TX	2.80		8/3/2009	32.31	-96.14
1024	Denton	Denton	76249	TX	2.46	19170	8/3/2009	33.29	-97.29
1025	Denton	Denton	76249	TX	2.87	19560	8/3/2009	33.29	-97.29
1026	Mclennan	Ellis	76708	TX	47.25	363310	8/3/2009	31.64	-97.21
1027	Tarrant	Tarrant	76116	TX	3.36	25455	8/3/2009	32.71	-97.43
1028	Travis	Travis	78731	TX	3.15	20264	8/4/2009	30.35	-97.77
1029	Travis	Travis	78723	TX	6.30	36361	8/5/2009	30.31	-97.68
1030	Travis	Travis	78746	TX	4.40	31900	8/5/2009	30.31	-97.82
1031	Travis	Travis	78745	TX	11.03	69090	8/6/2009	30.21	-97.80
1032	Travis	Travis	78745	TX	3.15	20000	8/6/2009	30.21	-97.80
1033	Travis	Travis	78746	TX	4.92	28913	8/6/2009	30.31	-97.82
1034	Travis	Travis	78723	TX	15.39	91000	8/6/2009	30.31	-97.68
1035	Anderson	Henderson	75801	TX	10.08	61152	8/7/2009	31.76	-95.54
1036	Bexar	Bexar	78254	TX	8.40	45792	8/7/2009	29.53	-98.78
1037	Jefferson	Jefferson	77706	TX	9.63	80171	8/10/2009	30.10	-94.17
1038	Ellis	Ellis	75125	TX	4.05	27720	8/10/2009	32.52	-96.64
1039	Travis	Travis	78759	TX	7.18	45212	8/10/2009	30.40	-97.75
1040	Travis	Travis	78727	TX	5.40	35985	8/10/2009	30.43	-97.71

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1041	Dallas	Dallas	75247	TX	101.64		8/11/2009	32.82	-96.88
1042	Navarro	Ellis	76681	TX	7.02	59718	8/15/2009	31.91	-96.52
1043	Dallas	Dallas	75006	TX	4.20	33218	8/15/2009	32.97	-96.89
1044	Travis	Travis	78746	TX	9.45	73043	8/18/2009	30.31	-97.82
1045	Travis	Travis	78746	TX	5.60	39209	8/18/2009	30.31	-97.82
1046	Travis	Travis	78731	TX	10.85	70851	8/18/2009	30.35	-97.77
1047	Travis	Travis	78723	TX	23.36	167758	8/18/2009	30.31	-97.68
1048	Hamilton	Hood	76531	TX	9.75	71858	8/19/2009	31.68	-98.18
1049	Tarrant	Tarrant	76051	TX	6.00	44581	8/19/2009	32.95	-97.07
1050	Dallas	Dallas	75228	TX	4.68	46800	8/19/2009	32.83	-96.68
1051	Collin	Collin	75093	TX	8.10	63273	8/19/2009	33.04	-96.80
1052	Tarrant	Tarrant	76107	TX	3.85	33746	8/19/2009	32.74	-97.38
1053	Bell	Williamson	76502	TX	2.71	20987	8/19/2009	31.11	-97.41
1054	Bastrop	Bastrop	78621	TX	2.38	18445	8/19/2009	30.34	-97.37
1055	Navarro	Ellis	76681	TX	7.20	59718	8/19/2009	31.90	-96.43
1056	Dallas	Dallas	75043	TX	4.60	31955	8/19/2009	32.85	-96.59
1057	Tarrant	Tarrant	76179	TX	9.60	67634	8/19/2009	32.92	-97.46
1058	Hopkins	Hunt	75482	TX	2.85	40670	8/19/2009	33.18	-95.60
1059	Bell	Williamson	76579	TX	10.00	51106	8/19/2009	31.18	-97.20
1060	Travis	Travis	78730	TX	3.12	21103	8/19/2009	30.37	-97.84
1061	Travis	Travis	78722	TX	4.29	35435	8/19/2009	30.30	-97.70
1062	Travis	Travis	78746	TX	5.70	35066	8/20/2009	30.31	-97.82
1063	Tarrant	Tarrant	76020	TX	6.30	47725	8/21/2009	32.92	-97.55
1064	Travis	Travis	78727	TX	7.00	40921	8/21/2009	30.43	-97.71
1065	Travis	Travis	78750	TX	4.20	25794	8/21/2009	30.43	-97.80
1066	Travis	Travis	78738	TX	8.75	46619	8/21/2009	30.31	-97.98
1067	Travis	Travis	78721	TX	4.73	26204	8/21/2009	30.27	-97.68
1068	Travis	Travis	78744	TX	3.15	20227	8/21/2009	30.20	-97.73
1069	Travis	Travis	78731	TX	3.15	19794	8/21/2009	30.35	-97.77
1070	Nacogdoches	Rusk	75961	TX	10.80	67188	8/22/2009	31.59	-94.60
1071	Travis	Travis	78733	TX	5.20	30330	8/24/2009	30.33	-97.87
1072	Travis	Travis	78749	TX	2.78	17271	8/24/2009	30.22	-97.86
1073	Travis	Travis	78704	TX	3.33	18714	8/24/2009	30.24	-97.77
1074	Travis	Travis	78758	TX	3.46	22257	8/26/2009	30.39	-97.70
1075	Travis	Travis	78727	TX	3.14	21897	8/31/2009	30.43	-97.71
1076	Travis	Travis	78733	TX	5.78	34307	8/31/2009	30.33	-97.87
1077	Hill	Ellis	76645	TX	10.08	71580	9/1/2009	32.02	-97.14
1078	Denton	Denton	75007	TX	5.85	38420	9/1/2009	33.01	-96.89
1079	Travis	Travis	78745	TX	4.36	31201	9/1/2009	30.21	-97.80
1080	Travis	Travis	78746	TX	4.50	37255	9/1/2009	30.31	-97.82

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1081	Travis	Travis	78745	TX	3.46	27064	9/1/2009	30.21	-97.80
1082	Travis	Travis	78721	TX	2.72	18019	9/1/2009	30.27	-97.68
1083	Travis	Travis	78721	TX	3.15	20231	9/1/2009	30.27	-97.68
1084	Travis	Travis	78721	TX	3.15	20231	9/1/2009	30.27	-97.68
1085	Bell	Williamson	76513	TX	10.00	64825	9/4/2009	31.07	-97.50
1086	Travis	Travis	78723	TX	0.79	6500	9/6/2009	30.31	-97.68
1087	Travis	Travis	78732	TX	3.15	22082	9/8/2009	30.38	-97.90
1088	Bexar	Bexar	78253	TX	7.20	58222	9/8/2009	29.47	-98.81
1089	Travis	Travis	78727	TX	5.76	31735	9/9/2009	30.43	-97.71
1090	Travis	Travis	78733	TX	6.65	39890	9/9/2009	30.33	-97.87
1091	Travis	Travis	78759	TX	6.65	41962	9/9/2009	30.40	-97.75
1092	Travis	Travis	78728	TX	3.15	20732	9/9/2009	30.46	-97.68
1093	Travis	Travis	78749	TX	6.30	37144	9/9/2009	30.22	-97.86
1094	Travis	Travis	78748	TX	7.56	41424	9/9/2009	30.17	-97.82
1095	Travis	Travis	78749	TX	3.15	19644	9/9/2009	30.22	-97.86
1096	Travis	Travis	78702	TX	3.17	22589	9/11/2009	30.26	-97.71
1097	Travis	Travis	78754	TX	5.78	34998	9/11/2009	30.36	-97.65
1098	Travis	Travis	78731	TX	7.00	49877	9/11/2009	30.35	-97.77
1099	Comal	Comal	78132	TX	3.96	30000	9/14/2009	29.74	-98.20
1100	Bell	Williamson	76513	TX	6.11	42212	9/15/2009	31.07	-97.50
1101	Bell	Williamson	76502	TX	10.00	67981	9/15/2009	31.11	-97.41
1102	Collin	Collin	75069	TX	2.10	25631	9/15/2009	33.16	-96.59
1103	Collin	Collin	75013	TX	7.20	59529	9/15/2009	33.11	-96.70
1104	Travis	Travis	78747	TX	23.99	135100	9/15/2009	30.13	-97.73
1105	Travis	Travis	78746	TX	23.63	141845	9/15/2009	30.31	-97.82
1106	Collin	Collin	75098	TX	4.50	31500	9/16/2009	33.02	-96.51
1107	Leon	Montgomery	77865	TX	1.08	10260	9/16/2009	31.22	-96.30
1108	Denton	Denton	75007	TX	5.40	35050	9/16/2009	33.01	-96.89
1109	Travis	Travis	78749	TX	6.34	37760	9/16/2009	30.22	-97.86
1110	Travis	Travis	78746	TX	7.00	39063	9/18/2009	30.31	-97.82
1111	Travis	Travis	78733	TX	10.08	54250	9/18/2009	30.33	-97.87
1112	Travis	Travis	78728	TX	5.95	31803	9/18/2009	30.46	-97.68
1113	Travis	Travis	78705	TX	4.10	22923	9/21/2009	30.30	-97.74
1114	Travis	Travis	78753	TX	10.37	52823	9/21/2009	30.39	-97.67
1115	Travis	Travis	78750	TX	8.19	41658	9/21/2009	30.43	-97.80
1116	Travis	Travis	78749	TX	2.88	21932	9/21/2009	30.22	-97.86
1117	Collin	Collin	75075	TX	2.25	16675	9/23/2009	33.02	-96.74
1118	Travis	Travis	78746	TX	14.00	68567	9/23/2009	30.31	-97.82
1119	Travis	Travis	78759	TX	8.41	45246	9/23/2009	30.40	-97.75
1120	Travis	Travis	78747	TX	3.33	47352	9/23/2009	30.13	-97.73

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1121	Ellis	Ellis	75165	TX	5.25	37500	9/24/2009	32.40	-96.79
1122	Ellis	Ellis	75125	TX	10.08	66800	9/24/2009	32.52	-96.64
1123	Tarrant	Tarrant	76016	TX	7.20	54000	9/24/2009	32.69	-97.18
1124	Parker	Parker	76008	TX	8.19	53889	9/24/2009	32.69	-97.63
1125	Dallas	Dallas	75081	TX	7.84	36924	9/24/2009	32.96	-96.70
1126	Travis	Travis	78730	TX	5.58	48757	9/25/2009	30.37	-97.84
1127	Travis	Travis	78757	TX	7.40	42577	9/25/2009	30.35	-97.74
1128	Travis	Travis	78745	TX	3.33	19157	9/25/2009	30.21	-97.80
1129	Travis	Travis	78704	TX	22.94	137761	9/25/2009	30.24	-97.77
1130	Travis	Travis	78746	TX	7.20	55379	9/28/2009	30.31	-97.82
1131	Cherokee	Smith	75766	TX	4.92	52100	9/29/2009	31.93	-95.35
1132	Collin	Collin	75093	TX	1.13	8195	9/29/2009	33.04	-96.80
1133	Smith	Smith	75762	TX	10.00	74000	9/29/2009	32.21	-95.40
1134	Travis	Travis	78704	TX	5.78	36777	9/29/2009	30.24	-97.77
1135	Travis	Travis	78744	TX	4.20	26212	9/29/2009	30.20	-97.73
1136	Travis	Travis	78732	TX	6.30	34358	10/1/2009	30.38	-97.90
1137	Travis	Travis	78732	TX	6.24	36658	10/1/2009	30.38	-97.90
1138	Travis	Travis	78732	TX	4.20	23009	10/1/2009	30.38	-97.90
1139	Travis	Travis	78730	TX	8.40	47977	10/1/2009	30.37	-97.84
1140	Travis	Travis	78731	TX	3.08	22027	10/2/2009	30.35	-97.77
1141	Travis	Travis	78702	TX	4.56	29278	10/2/2009	30.26	-97.71
1142	Dallas	Dallas	75230	TX	6.44	37640	10/4/2009	32.90	-96.80
1143	Hood	Hood	76035	TX	6.27	45785	10/5/2009	32.57	-97.62
1144	Cameron	Nueces	78523	TX	4.10	23380	10/5/2009	26.00	-97.57
1145	Bexar	Bexar	78253	TX	6.30	36058	10/5/2009	29.47	-98.81
1146	Tarrant	Tarrant	76051	TX	2.70	27701	10/6/2009	32.95	-97.07
1147	Travis	Travis	78746	TX	7.77	48163	10/7/2009	30.31	-97.82
1148	Travis	Travis	78704	TX	13.39	101284	10/7/2009	30.24	-97.77
1149	Anderson	Henderson	75801	TX	10.08	61152	10/9/2009	31.76	-95.54
1150	Denton	Denton	75007	TX	4.20	26480	10/9/2009	33.01	-96.89
1151	Travis	Travis	78759	TX	2.45	14191	10/9/2009	30.40	-97.75
1152	Travis	Travis	78746	TX	3.15	18959	10/9/2009	30.31	-97.82
1153	Bexar	Bexar	78253	TX	3.73	18072	10/9/2009	29.47	-98.81
1154	Smith	Smith	75762	TX	3.15	28350	10/10/2009	32.21	-95.37
1155	Smith	Smith	75703	TX	3.50	24500	10/12/2009	32.27	-95.33
1156	Parker	Parker	76087	TX	2.40	30448	10/12/2009	32.61	-97.83
1157	Travis	Travis	78746	TX	2.73	20789	10/12/2009	30.31	-97.82
1158	Travis	Travis	78727	TX	2.45	12397	10/12/2009	30.43	-97.71
1159	Travis	Travis	78733	TX	12.95	70017	10/12/2009	30.33	-97.87
1160	Travis	Travis	78759	TX	3.15	17482	10/12/2009	30.40	-97.75

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1161	Dallas	Dallas	75229	TX	3.08	19583	10/13/2009	32.90	-96.86
1162	Collin	Collin	75287	TX	1.75	10500	10/13/2009	33.00	-96.84
1163	Williamson	Williamson	78665	TX	2.63	21056	10/13/2009	30.35	-98.53
1164	Travis	Travis	78746	TX	2.45	14940	10/13/2009	30.31	-97.82
1165	Travis	Travis	78702	TX	3.33	18478	10/14/2009	30.26	-97.71
1166	Collin	Collin	75074	TX	10.80		10/15/2009	33.02	-96.67
1167	Williamson	Williamson	78682	TX	100.62	655813	10/15/2009	30.52	-97.67
1168	Travis	Travis	78759	TX	9.00	64027	10/15/2009	30.40	-97.75
1169	Travis	Travis	78731	TX	8.80	50200	10/16/2009	30.35	-97.77
1170	Travis	Travis	78748	TX	3.15	20779	10/19/2009	30.17	-97.82
1171	Travis	Travis	78732	TX	3.15	19486	10/19/2009	30.38	-97.90
1172	Travis	Travis	78734	TX	13.48	72896	10/19/2009	30.37	-97.95
1173	Travis	Travis	78759	TX	7.18	37055	10/19/2009	30.40	-97.75
1174	Travis	Travis	78748	TX	5.25	29690	10/19/2009	30.17	-97.82
1175	Travis	Travis	78730	TX	8.19	54203	10/20/2009	30.37	-97.84
1176	Dallas	Dallas	75234	TX	3.01	20000	10/21/2009	32.92	-96.89
1177	Collin	Collin	75075	TX	2.25	16675	10/22/2009	33.02	-96.74
1178	Ellis	Ellis	75125	TX	4.05	27720	10/22/2009	32.52	-96.64
1179	Nacogdoches	Rusk	75961	TX	10.80	67188	10/22/2009	31.57	-94.54
1180	Travis	Travis	78753	TX	6.05	30059	10/22/2009	30.39	-97.67
1181	Travis	Travis	78704	TX	17.48	130940	10/22/2009	30.24	-97.77
1182	Williamson	Williamson	78729	TX	4.55	30986	10/23/2009	30.45	-97.76
1183	Travis	Travis	78704	TX	4.32	28892	10/27/2009	30.24	-97.77
1184	Tarrant	Tarrant	76020	TX	6.30	45000	10/28/2009	32.96	-97.55
1185	Travis	Travis	78723	TX	7.00	34595	10/28/2009	30.31	-97.68
1186	Travis	Travis	78733	TX	14.00	80740	11/2/2009	30.33	-97.87
1187	Travis	Travis	78750	TX	8.80	44877	11/3/2009	30.43	-97.80
1188	Williamson	Williamson	78729	TX	4.73	27181	11/4/2009	30.45	-97.76
1189	Travis	Travis	78746	TX	7.88	39155	11/5/2009	30.31	-97.82
1190	Travis	Travis	78747	TX	3.68	20599	11/5/2009	30.13	-97.73
1191	Bell	Williamson	76513	TX	3.12	21210	11/6/2009	31.07	-97.50
1192	Dallas	Dallas	75248	TX	3.89	28432	11/6/2009	32.97	-96.78
1193	Bell	Williamson	76571	TX	5.25	31372	11/6/2009	30.93	-97.59
1194	Collin	Collin	75023	TX	3.03	24933	11/6/2009	33.05	-96.70
1195	Travis	Travis	78756	TX	4.50	28125	11/9/2009	30.32	-97.74
1196	Travis	Travis	78731	TX	7.35	36729	11/9/2009	30.35	-97.77
1197	Travis	Travis	78746	TX	23.63	147233	11/9/2009	30.31	-97.82
1198	Travis	Travis	78758	TX	3.78	25621	11/10/2009	30.39	-97.70
1199	Travis	Travis	78746	TX	3.15	21784	11/10/2009	30.31	-97.82
1200	Collin	Collin	75074	TX	10.08	89700	11/11/2009	33.02	-96.67

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1201	Tom Green	Williamson	76935	TX	5.18	29289	11/11/2009	30.99	-100.30
1202	Eastland	Hood	76470	TX	3.15	22780	11/11/2009	32.49	-98.64
1203	Rockwall	Rockwall	75087	TX	7.20	55500	11/11/2009	32.95	-96.44
1204	Johnson	Johnson	76033	TX	3.00	23205	11/11/2009	32.29	-97.50
1205	Bell	Williamson	76513	TX	7.48	51986	11/11/2009	31.07	-97.50
1206	Bell	Williamson	76513	TX	7.59	53130	11/12/2009	31.07	-97.50
1207	Winkler	El Paso	79745	TX	1.12	7339	11/12/2009	31.84	-102.85
1208	Dallas	Dallas	75214	TX	2.16	19262	11/12/2009	32.82	-96.74
1209	Smith	Smith	75706	TX	10.80	54627	11/14/2009	32.41	-95.28
1210	Tarrant	Tarrant	76107	TX	1.10	8320	11/15/2009	32.74	-97.38
1211	Tarrant	Tarrant	76017	TX	2.10	15750	11/15/2009	32.66	-97.15
1212	Tarrant	Tarrant	76108	TX	3.60	31010	11/15/2009	32.79	-97.50
1213	Denton	Denton	76209	TX	3.30	27579	11/15/2009	33.23	-97.11
1214	Ellis	Ellis	75119	TX	6.30	78750	11/15/2009	32.32	-96.62
1215	Somervell	Hood	76043	TX	8.20	97920	11/15/2009	32.19	-97.76
1216	Travis	Travis	78746	TX	6.30	38250	11/16/2009	30.31	-97.82
1217	Bexar	Bexar	78261	TX	20.80	124000	11/16/2009	29.70	-98.41
1218	Collin	Collin	75002	TX	4.40	34776	11/17/2009	33.09	-96.61
1219	Dallas	Dallas	75006	TX	4.20	33218	11/17/2009	32.97	-96.89
1220	Williamson	Williamson	78664	TX	3.76	21244	11/17/2009	30.50	-97.64
1221	Tarrant	Tarrant	76051	TX	5.54	33803	11/17/2009	32.95	-97.07
1222	Dallas	Dallas	75275	TX	15.30		11/18/2009	32.84	-96.78
1223	Travis	Travis	78750	TX	4.62	24486	11/18/2009	30.43	-97.80
1224	Dallas	Dallas	75234	TX	24.30	198502	11/19/2009	32.92	-96.89
1225	Grayson	Collin	75021	TX	2.46	29520	11/19/2009	33.74	-96.47
1226	Dallas	Dallas	75050	TX	7.39	53311	11/19/2009	32.78	-97.02
1227	Dallas	Dallas	75216	TX	4.38	27138	11/20/2009	32.70	-96.80
1228	Tarrant	Tarrant	76020	TX	6.30	47725	11/20/2009	32.96	-97.55
1229	Bell	Williamson	76571	TX	5.25	31197	11/20/2009	30.93	-97.59
1230	Mclennan	Ellis	76705	TX	10.00	90000	11/20/2009	31.59	-97.07
1231	Travis	Travis	78759	TX	3.15	18664	11/23/2009	30.40	-97.75
1232	Travis	Travis	78760	TX	0.70	4148	11/23/2009	30.21	-97.73
1233	Travis	Travis	78727	TX	2.16	14507	11/23/2009	30.43	-97.71
1234	Comal	Comal	78132	TX	0.60	3250	11/23/2009	29.74	-98.20
1235	Bexar	Bexar	78251	TX	4.68	27138	11/23/2009	29.47	-98.68
1236	Bexar	Bexar	78209	TX	2.80	24200	11/23/2009	29.49	-98.45
1237	Travis	Travis	78732	TX	9.66	56074	11/24/2009	30.38	-97.90
1238	Smith	Smith	75762	TX	3.15	28350	11/25/2009	32.21	-95.40
1239	Collin	Collin	75023	TX	7.88	45815	11/25/2009	33.06	-96.71
1240	Dallas	Dallas	75220	TX	10.50	68250	11/25/2009	32.86	-96.87

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1241	Collin	Collin	75002	TX	5.40	55532	11/25/2009	33.09	-96.61
1242	Travis	Travis	78723	TX	12.43	56535	11/25/2009	30.31	-97.68
1243	Travis	Travis	78703	TX	3.15	25289	11/25/2009	30.29	-97.77
1244	El Paso	El Paso	79934	TX	2.05	13424	11/28/2009	31.94	-106.45
1245	Travis	Travis	78723	TX	4.73	22825	11/30/2009	30.31	-97.68
1246	Travis	Travis	78738	TX	7.18	38740	11/30/2009	30.31	-97.98
1247	Tarrant	Tarrant	76123	TX	1.62	9720	12/1/2009	32.62	-97.39
1248	Dallas	Dallas	75150	TX	4.32	48000	12/1/2009	32.82	-96.63
1249	Travis	Travis	78759	TX	5.25	27438	12/1/2009	30.40	-97.75
1250	Travis	Travis	78759	TX	5.60	29963	12/1/2009	30.40	-97.75
1251	Somervell	Hood	76043	TX	8.28	54324	12/2/2009	32.16	-97.83
1252	Collin	Collin	75023	TX	3.02	24933	12/2/2009	33.06	-96.71
1253	Travis	Travis	78745	TX	3.33	19409	12/2/2009	30.21	-97.80
1254	Travis	Travis	78734	TX	3.15	16882	12/2/2009	30.37	-97.95
1255	Travis	Travis	78723	TX	5.78	28887	12/3/2009	30.31	-97.68
1256	Denton	Denton	76247	TX	8.28	47840	12/4/2009	33.11	-97.33
1257	Bell	Williamson	76559	TX	4.92	31415	12/4/2009	31.09	-97.62
1258	Travis	Travis	78732	TX	7.14	48025	12/4/2009	30.38	-97.90
1259	Dallas	Dallas	75001	TX	4.20	29947	12/5/2009	32.97	-96.83
1260	Tarrant	Tarrant	76179	TX	8.80	53967	12/7/2009	32.92	-97.46
1261	Galveston	Galveston	77546	TX	3.15	23256	12/7/2009	29.51	-95.20
1262	Mclennan	Ellis	76708	TX	5.10	53570	12/7/2009	31.64	-97.21
1263	Bell	Williamson	76543	TX	1.58	8062	12/8/2009	31.14	-97.67
1264	Dallas	Dallas	75248	TX	4.20	31550	12/8/2009	32.97	-96.78
1265	Denton	Denton	75022	TX	5.06	32894	12/8/2009	33.02	-97.13
1266	Dallas	Dallas	75214	TX	2.10	16238	12/8/2009	32.82	-96.74
1267	Travis	Travis	78733	TX	5.00	28400	12/8/2009	30.33	-97.87
1268	Bell	Williamson	76542	TX	2.00	18810	12/9/2009	31.01	-97.72
1269	Travis	Travis	78723	TX	8.75	39248	12/10/2009	30.31	-97.68
1270	Williamson	Williamson	78681	TX	7.00	35151	12/11/2009	30.54	-97.73
1271	Lampasas	Williamson	76539	TX	5.25	26511	12/11/2009	31.04	-97.98
1272	Collin	Collin	75173	TX	8.05	45100	12/11/2009	33.06	-96.38
1273	Ellis	Ellis	75154	TX	10.12	58448	12/11/2009	32.51	-96.77
1274	Liberty	Liberty	77575	TX	10.15	50540	12/11/2009	30.05	-94.75
1275	Dallas	Dallas	75230	TX	3.04	23945	12/11/2009	32.90	-96.80
1276	Travis	Travis	78705	TX	1.58	8155	12/11/2009	30.30	-97.74
1277	Travis	Travis	78721	TX	2.80	18975	12/11/2009	30.27	-97.68
1278	Bexar	Bexar	78230	TX	5.25	32084	12/11/2009	29.54	-98.56
1279	Bexar	Bexar	78254	TX	3.78	21012	12/11/2009	29.53	-98.78
1280	Montgomery	Montgomery	77304	TX	2.80	20728	12/13/2009	30.33	-95.51

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1281	Montgomery	Montgomery	77381	TX	5.00	36136	12/13/2009	30.17	-95.51
1282	Denton	Denton	75067	TX	9.03	38562	12/13/2009	33.01	-97.00
1283	Smith	Smith	75703	TX	5.40	34284	12/13/2009	32.27	-95.33
1284	Montgomery	Montgomery	77357	TX	5.60	34562	12/13/2009	30.18	-95.04
1285	Dallas	Dallas	75116	TX	2.64	14520	12/14/2009	32.66	-96.92
1286	Dallas	Dallas	75205	TX	5.52	31350	12/14/2009	32.83	-96.80
1287	Dallas	Dallas	75204	TX	2.70	17318	12/14/2009	32.80	-96.79
1288	Denton	Denton	76208	TX	10.08	54927	12/15/2009	33.20	-97.06
1289	Dallas	Dallas	75019	TX	2.70	25074	12/15/2009	32.96	-97.00
1290	Angelina	Rusk	75904	TX	5.85	35275	12/15/2009	31.33	-94.83
1291	Dallas	Dallas	75116	TX	1.05	17840	12/15/2009	32.66	-96.92
1292	Tarrant	Tarrant	76107	TX	1.05	17840	12/15/2009	32.74	-97.38
1293	Dallas	Dallas	75048	TX	3.04	29049	12/15/2009	32.96	-96.58
1294	Collin	Collin	75009	TX	1.05	17840	12/15/2009	33.32	-96.77
1295	Somervell	Hood	76043	TX	8.28	54324	12/16/2009	32.19	-97.76
1296	Galveston	Galveston	77546	TX	4.20	26800	12/16/2009	29.51	-95.20
1297	Travis	Travis	78723	TX	8.75	39586	12/16/2009	30.31	-97.68
1298	Travis	Travis	78723	TX	6.91	39313	12/16/2009	30.31	-97.68
1299	Mclennan	Ellis	76705	TX	0.37	3000	12/17/2009	31.59	-97.07
1300	Collin	Collin	75074	TX	0.72	5000	12/17/2009	33.02	-96.67
1301	Dallas	Dallas	75217	TX	3.28	54152	12/17/2009	32.71	-96.67
1302	Tarrant	Tarrant	76108	TX	9.80	70153	12/17/2009	32.79	-97.50
1303	Williamson	Williamson	78665	TX	9.45	66506	12/17/2009	30.35	-98.53
1304	Tarrant	Tarrant	76051	TX	10.50	53901	12/17/2009	32.95	-97.07
1305	Tarrant	Tarrant	76022	TX	1.60	13151	12/18/2009	32.83	-97.14
1306	Travis	Travis	78660	TX	6.30	29319	12/18/2009	30.46	-97.60
1307	Ellis	Ellis	75165	TX	4.73	34358	12/18/2009	32.40	-96.79
1308	Ellis	Ellis	75165	TX	5.25	35000	12/18/2009	32.40	-96.79
1309	Smith	Smith	75706	TX	10.80	55000	12/19/2009	32.41	-95.28
1310	Travis	Travis	78750	TX	3.15	16685	12/21/2009	30.43	-97.80
1311	Travis	Travis	78750	TX	10.32	60607	12/21/2009	30.43	-97.80
1312	Travis	Travis	78730	TX	7.36	43736	12/21/2009	30.37	-97.84
1313	Collin	Collin	75023	TX	4.56	34800	12/22/2009	33.06	-96.73
1314	Midland	El Paso	79707	TX	5.46	34500	12/23/2009	32.06	-102.23
1315	Midland	El Paso	79707	TX	5.98	35500	12/23/2009	32.06	-102.23
1316	Travis	Travis	78756	TX	3.85	19212	12/23/2009	30.32	-97.74
1317	Tarrant	Tarrant	76051	TX	2.16	12806	12/28/2009	32.90	-97.12
1318	Smith	Smith	75706	TX	10.80	54627	12/29/2009	32.45	-95.33
1319	Collin	Collin	75074	TX	49.14	276828	12/29/2009	33.02	-96.67
1320	Bell	Williamson	76571	TX	12.25	96032	12/29/2009	30.93	-97.59

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1321	Travis	Travis	78617	TX	8.40	40559	12/29/2009	30.15	-97.59
1322	Travis	Travis	78754	TX	7.70	37780	12/29/2009	30.36	-97.65
1323	Travis	Travis	78759	TX	3.78	17387	12/29/2009	30.40	-97.75
1324	Travis	Travis	78731	TX	6.30	26788	12/29/2009	30.35	-97.77
1325	Travis	Travis	78704	TX	3.15	13965	12/29/2009	30.24	-97.77
1326	Tarrant	Tarrant	76012	TX	5.25	48550	12/30/2009	32.76	-97.14
1327	Tarrant	Tarrant	76117	TX	5.04	34020	12/30/2009	32.81	-97.28
1328	Bell	Williamson	76513	TX	21.60	117825	12/30/2009	31.07	-97.50
1329	Jim Wells	Nueces	78332	TX	5.18	36200	12/30/2009	27.74	-98.09
1330	Travis	Travis	78759	TX	4.62	18235	12/30/2009	30.40	-97.75
1331	Travis	Travis	78732	TX	5.25	22494	12/30/2009	30.38	-97.90
1332	Travis	Travis	78704	TX	10.50	33000	12/30/2009	30.24	-97.77
1333	Travis	Travis	78732	TX	6.30	25843	12/30/2009	30.38	-97.90
1334	Travis	Travis	78704	TX	3.33	21341	12/30/2009	30.24	-97.77
1335	Travis	Travis	78735	TX	2.80	19942	12/30/2009	30.26	-97.86
1336	Travis	Travis	78723	TX	5.00	23196	12/30/2009	30.31	-97.68
1337	Williamson	Williamson	78729	TX	3.85	18674	12/30/2009	30.45	-97.76
1338	Travis	Travis	78723	TX	3.89	17680	12/30/2009	30.31	-97.68
1339	Travis	Travis	78660	TX	14.69	79827	12/30/2009	30.46	-97.60
1340	Travis	Travis	78731	TX	28.00	150289	12/30/2009	30.35	-97.77
1341	Bell	Williamson	76505	TX	5.52	48836	12/31/2009	31.10	-97.34
1342	Gregg	Gregg	75605	TX	5.52	48836	12/31/2009	32.56	-94.71
1343	Harris	Harris	77447	TX	215.60	1300000	12/31/2009	30.02	-95.86
1344	Johnson	Johnson	76033	TX	2.76		1/1/2010	32.29	-97.50
1345	Denton	Denton	75007	TX	0.45	3000	1/1/2010	33.01	-96.89
1346	Travis	Travis	78731	TX	7.00	34361	1/4/2010	30.35	-97.77
1347	Bexar	Bexar	78260	TX	4.20	22649	1/4/2010	29.69	-98.50
1348	Bexar	Bexar	78216	TX	8.75	45523	1/4/2010	29.55	-98.50
1349	Comal	Comal	78266	TX	6.30	41236	1/4/2010	29.63	-98.32
1350	Smith	Smith	75706	TX	10.80	56189	1/6/2010	32.45	-95.33
1351	Travis	Travis	78723	TX	5.00	23196	1/6/2010	30.29	-97.70
1352	Travis	Travis	78704	TX	3.33	18714	1/7/2010	30.24	-97.77
1353	Travis	Travis	78704	TX	3.33	18714	1/7/2010	30.24	-97.77
1354	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1355	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1356	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1357	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1358	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1359	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1360	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1361	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1362	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1363	Travis	Travis	78703	TX	2.96	17120	1/7/2010	30.29	-97.77
1364	Travis	Travis	78703	TX	2.96	17120	1/7/2010	30.29	-97.77
1365	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1366	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1367	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1368	Travis	Travis	78703	TX	2.96	17120	1/7/2010	30.29	-97.77
1369	Travis	Travis	78703	TX	2.96	17120	1/7/2010	30.29	-97.77
1370	Travis	Travis	78703	TX	2.96	17120	1/7/2010	30.29	-97.77
1371	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1372	Travis	Travis	78703	TX	2.22	12840	1/7/2010	30.29	-97.77
1373	Travis	Travis	78703	TX	2.96	17120	1/7/2010	30.29	-97.77
1374	Travis	Travis	78703	TX	7.44	45000	1/7/2010	30.29	-97.77
1375	Travis	Travis	78703	TX	2.22	14000	1/7/2010	30.29	-97.77
1376	Travis	Travis	78703	TX	2.22	14000	1/7/2010	30.29	-97.77
1377	Hunt	Hunt	75428	TX	10.20	100000	1/8/2010	33.28	-95.92
1378	Hunt	Hunt	75422	TX	10.20	100000	1/8/2010	33.14	-95.92
1379	Travis	Travis	78703	TX	14.40	69936	1/8/2010	30.29	-97.77
1380	Travis	Travis	78703	TX	3.81	31494	1/8/2010	30.29	-97.77
1381	Henderson	Henderson	75758	TX	10.80	58808	1/9/2010	32.30	-95.47
1382	Jefferson	Jefferson	77706	TX	10.08	61002	1/10/2010	30.10	-94.17
1383	Dallas	Dallas	75229	TX	2.10	20459	1/10/2010	32.90	-96.86
1384	Dallas	Dallas	75006	TX	1.41	27648	1/10/2010	32.97	-96.89
1385	Johnson	Johnson	76033	TX	5.98	43154	1/11/2010	32.29	-97.50
1386	Dallas	Dallas	75019	TX	2.03	14175	1/11/2010	32.96	-97.00
1387	Tarrant	Tarrant	76182	TX	4.60	36354	1/11/2010	32.73	-97.32
1388	Denton	Denton	76247	TX	8.28	47840	1/11/2010	33.11	-97.33
1389	Collin	Collin	75074	TX	10.08	56980	1/11/2010	33.02	-96.67
1390	Hidalgo	Nueces	78539	TX	37.80	179250	1/12/2010	26.42	-98.18
1391	Hidalgo	Nueces	78539	TX	67.50	300750	1/12/2010	26.42	-98.18
1392	Angelina	Rusk	75904	TX	5.85	35275	1/12/2010	31.33	-94.83
1393	Williamson	Williamson	78665	TX	5.46	26648	1/13/2010	30.35	-98.53
1394	Dallas	Dallas	75248	TX	4.32	33055	1/13/2010	32.97	-96.78
1395	Denton	Denton	76247	TX	3.50	23038	1/13/2010	33.11	-97.33
1396	Hunt	Hunt	75422	TX	9.60	100000	1/13/2010	33.14	-95.92
1397	Williamson	Williamson	76574	TX	7.18	37075	1/13/2010	30.57	-97.37
1398	Williamson	Williamson	78664	TX	102.00	693924	1/13/2010	30.50	-97.64
1399	Travis	Travis	78723	TX	3.50	15540	1/13/2010	30.31	-97.68
1400	Ellis	Ellis	75154	TX	10.12	58177	1/14/2010	32.52	-96.80

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1401	Midland	El Paso	79707	TX	5.46	34800	1/14/2010	32.06	-102.23
1402	Dallas	Dallas	75248	TX	6.15	44900	1/14/2010	32.97	-96.78
1403	Collin	Collin	75173	TX	8.05	45100	1/14/2010	33.06	-96.38
1404	Collin	Collin	75070	TX	4.23	34500	1/14/2010	33.18	-96.70
1405	Rockwall	Rockwall	75087	TX	3.96	32374	1/14/2010	32.95	-96.44
1406	Bexar	Bexar	78230	TX	5.40	23847	1/15/2010	29.57	-98.57
1407	Collin	Collin	75252	TX	7.00	38286	1/15/2010	33.00	-96.80
1408	Denton	Denton	75065	TX	4.60	26169	1/15/2010	33.12	-97.02
1409	Dallas	Dallas	75205	TX	8.40	43113	1/15/2010	32.83	-96.80
1410	Tarrant	Tarrant	76135	TX	7.92	38584	1/15/2010	32.84	-97.47
1411	Comal	Comal	78163	TX	8.40	56445	1/15/2010	29.77	-98.51
1412	Comal	Comal	78132	TX	8.05	42422	1/15/2010	29.74	-98.20
1413	Comal	Comal	78163	TX	10.50	68485	1/15/2010	29.77	-98.51
1414	Tarrant	Tarrant	76116	TX	3.85	25000	1/15/2010	32.73	-97.42
1415	Tarrant	Tarrant	76179	TX	5.95	38664	1/19/2010	32.92	-97.46
1416	Smith	Smith	75709	TX	7.88	52500	1/19/2010	32.32	-95.38
1417	Travis	Travis	78723	TX	3.50	15540	1/19/2010	30.29	-97.70
1418	Denton	Denton	76262	TX	4.00	25639	1/19/2010	33.02	-97.23
1419	Midland	El Paso	79707	TX	5.38	31512	1/20/2010	32.06	-102.23
1420	Dallas	Dallas	75243	TX	3.44	61161	1/20/2010	32.91	-96.74
1421	Dallas	Dallas	75229	TX	5.25	37861	1/20/2010	32.90	-96.86
1422	Travis	Travis	78704	TX	3.33	18714	1/20/2010	30.24	-97.77
1423	Travis	Travis	78702	TX	11.90	65030	1/20/2010	30.26	-97.71
1424	Travis	Travis	78731	TX	5.00	25972	1/20/2010	30.35	-97.77
1425	Williamson	Williamson	76574	TX	4.48	22000	1/21/2010	30.57	-97.37
1426	Tarrant	Tarrant	76116	TX	3.85	25349	1/21/2010	32.71	-97.43
1427	Travis	Travis	78731	TX	3.15	26020	1/21/2010	30.35	-97.77
1428	Travis	Travis	78759	TX	6.30	25853	1/21/2010	30.40	-97.75
1429	Travis	Travis	78734	TX	4.20	22020	1/21/2010	30.37	-97.95
1430	Kendall	Bexar	78015	TX	3.96	32635	1/21/2010	29.75	-98.65
1431	Bexar	Bexar	78253	TX	5.25	17432	1/22/2010	29.47	-98.81
1432	Mclennan	Ellis	76710	TX	3.15	17745	1/25/2010	31.53	-97.20
1433	Tarrant	Tarrant	76051	TX	2.24	13280	1/28/2010	32.95	-97.07
1434	Dallas	Dallas	75048	TX	3.04	29033	1/28/2010	32.96	-96.57
1435	Collin	Collin	75025	TX	1.00	8817	1/28/2010	33.09	-96.76
1436	Tarrant	Tarrant	76021	TX	3.64	21912	1/28/2010	32.85	-97.13
1437	Tarrant	Tarrant	76107	TX	2.16	18450	1/28/2010	32.74	-97.38
1438	Tarrant	Tarrant	76034	TX	11.76	40700	1/28/2010	32.89	-97.15
1439	Dallas	Dallas	75225	TX	2.80	23184	1/29/2010	32.87	-96.79
1440	Tarrant	Tarrant	76132	TX	1.80	14312	1/29/2010	32.66	-97.42

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1441	Tarrant	Tarrant	76036	TX	3.12	12362	1/29/2010	32.58	-97.43
1442	Travis	Travis	78763	TX	25.80	143528	1/29/2010	30.30	-97.77
1443	Bexar	Bexar	78218	TX	25.80	143528	1/29/2010	29.49	-98.39
1444	Bexar	Bexar	78249	TX	5.94	33558	1/29/2010	29.57	-98.61
1445	Webb	Nueces	78043	TX	8.40	42722	1/31/2010	27.51	-99.48
1446	Travis	Travis	78734	TX	3.17	21127	2/1/2010	30.37	-97.95
1447	Tarrant	Tarrant	76131	TX	2.80	23698	2/2/2010	32.90	-97.36
1448	Travis	Travis	78723	TX	6.30	28292	2/2/2010	30.31	-97.68
1449	Denton	Denton	76249	TX	10.50	59531	2/3/2010	33.29	-97.29
1450	Denton	Denton	76249	TX	9.80	54614	2/3/2010	33.29	-97.29
1451	Travis	Travis	78746	TX	3.15	16480	2/3/2010	30.31	-97.82
1452	Travis	Travis	78759	TX	9.80	62611	2/3/2010	30.40	-97.75
1453	Travis	Travis	78704	TX	3.33	17485	2/4/2010	30.24	-97.77
1454	Travis	Travis	78723	TX	3.50	15911	2/4/2010	30.31	-97.68
1455	Travis	Travis	78731	TX	3.33	22024	2/4/2010	30.35	-97.77
1456	Travis	Travis	78705	TX	24.32	175278	2/4/2010	30.30	-97.74
1457	Hill	Ellis	76055	TX	2.45	16400	2/5/2010	32.13	-97.20
1458	Travis	Travis	78734	TX	6.30	34071	2/5/2010	30.37	-97.95
1459	Bexar	Bexar	78233	TX	5.16	26588	2/5/2010	29.56	-98.36
1460	Dallas	Dallas	75275	TX	15.30	86445	2/8/2010	32.78	-96.80
1461	Grayson	Collin	75495	TX	5.28	29400	2/8/2010	33.43	-96.55
1462	Dallas	Dallas	75228	TX	3.60	29520	2/8/2010	32.83	-96.68
1463	Grayson	Collin	75092	TX	3.01	26827	2/8/2010	33.64	-96.73
1464	Tarrant	Tarrant	76051	TX	5.06	23158	2/8/2010	32.95	-97.07
1465	Montgomery	Montgomery	77384	TX	8.46	45595	2/9/2010	30.24	-95.49
1466	Bell	Williamson	76502	TX	4.36	32654	2/9/2010	31.11	-97.41
1467	Bell	Williamson	76502	TX	2.69	19680	2/9/2010	31.11	-97.41
1468	Montgomery	Montgomery	77384	TX	8.46	44087	2/9/2010	30.24	-95.49
1469	Collin	Collin	75074	TX	3.24	24658	2/10/2010	33.02	-96.67
1470	Denton	Denton	75007	TX	1.26	11151	2/12/2010	33.01	-96.89
1471	Dallas	Dallas	75104	TX	5.20	35500	2/12/2010	32.59	-96.99
1472	Collin	Collin	75252	TX	10.20	49939	2/12/2010	33.00	-96.80
1473	Collin	Collin	75074	TX	8.10	48600	2/15/2010	33.04	-96.68
1474	Denton	Denton	76210	TX	95.04	462641	2/16/2010	33.14	-97.08
1475	Collin	Collin	75025	TX	2.80	17717	2/16/2010	33.09	-96.76
1476	Travis	Travis	78746	TX	3.20	22000	2/16/2010	30.31	-97.82
1477	Travis	Travis	78736	TX	6.30	29051	2/16/2010	30.25	-97.95
1478	Ector	El Paso	79762	TX	10.58	82944	2/17/2010	31.91	-102.45
1479	Bexar	Bexar	78209	TX	8.40	48080	2/17/2010	29.49	-98.45
1480	Bexar	Bexar	78023	TX	3.15	18946	2/17/2010	29.62	-98.73

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1481	Denton	Denton	75022	TX	4.73	28086	2/18/2010	33.02	-97.13
1482	Rockwall	Rockwall	75087	TX	2.30		2/18/2010	32.95	-96.44
1483	Williamson	Williamson	78665	TX	3.85	19308	2/18/2010	30.35	-98.53
1484	Bexar	Bexar	78256	TX	6.00	51850	2/18/2010	29.62	-98.62
1485	Kendall	Bexar	78006	TX	3.15	17042	2/18/2010	29.92	-98.70
1486	Travis	Travis	78721	TX	3.15	20231	2/19/2010	30.27	-97.68
1487	Travis	Travis	78762	TX	2.20	14627	2/19/2010	30.26	-97.72
1488	Travis	Travis	78721	TX	1.58	11731	2/19/2010	30.27	-97.68
1489	Travis	Travis	78721	TX	2.80	18464	2/19/2010	30.27	-97.68
1490	Travis	Travis	78721	TX	2.80	15819	2/19/2010	30.27	-97.68
1491	Travis	Travis	78762	TX	3.15	16962	2/19/2010	30.26	-97.72
1492	Travis	Travis	78762	TX	5.20	27383	2/19/2010	30.26	-97.72
1493	Bexar	Bexar	78230	TX	5.06	23847	2/19/2010	29.54	-98.56
1494	Grayson	Collin	75076	TX	2.00	12567	2/22/2010	33.77	-96.73
1495	Collin	Collin	75098	TX	1.00	34000	2/22/2010	33.02	-96.51
1496	Travis	Travis	78759	TX	5.60	28172	2/22/2010	30.40	-97.75
1497	Travis	Travis	78745	TX	2.99	19435	2/22/2010	30.21	-97.80
1498	Bexar	Bexar	78245	TX	8.40	43453	2/22/2010	29.40	-98.74
1499	Collin	Collin	75002	TX	5.40	31376	2/23/2010	33.09	-96.61
1500	Denton	Denton	75007	TX	3.24	25784	2/23/2010	33.01	-96.89
1501	Collin	Collin	75002	TX	8.40	44533	2/23/2010	33.09	-96.61
1502	Tarrant	Tarrant	76108	TX	5.60	28820	2/23/2010	32.78	-97.55
1503	Tarrant	Tarrant	76034	TX	4.20	32581	2/23/2010	32.89	-97.15
1504	Travis	Travis	78703	TX	13.33	112251	2/23/2010	30.29	-97.77
1505	Cameron	Nueces	78566	TX	10.00	53636	2/24/2010	26.11	-97.42
1506	Taylor	Hood	79605	TX	3.50	23026	2/24/2010	32.44	-99.78
1507	Tarrant	Tarrant	76107	TX	10.20	73244	2/24/2010	32.74	-97.38
1508	Dallas	Dallas	75238	TX	7.00	42559	2/24/2010	32.88	-96.71
1509	Cooke	Denton	76240	TX	21.00	151200	2/25/2010	33.64	-97.14
1510	Cooke	Denton	76240	TX	25.60	134816	2/25/2010	33.64	-97.14
1511	Dallas	Dallas	75248	TX	10.50	58116	2/26/2010	32.97	-96.80
1512	Dallas	Dallas	75214	TX	2.25	22000	2/28/2010	32.82	-96.74
1513	Dallas	Dallas	75214	TX	1.10	8872	2/28/2010	32.82	-96.74
1514	Travis	Travis	78704	TX	9.66	73346	3/1/2010	30.24	-97.77
1515	Travis	Travis	78723	TX	8.75	39248	3/1/2010	30.31	-97.68
1516	Travis	Travis	78746	TX	6.30	26711	3/1/2010	30.31	-97.82
1517	Hardin	Hardin	77659	TX	5.00	30000	3/2/2010	30.15	-94.46
1518	Denton	Denton	75007	TX	7.43	41695	3/2/2010	33.01	-96.89
1519	Midland	El Paso	79707	TX	5.46	38763	3/2/2010	32.06	-102.23
1520	Travis	Travis	78759	TX	6.30	30020	3/2/2010	30.40	-97.75

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1521	Travis	Travis	78704	TX	6.30	32174	3/2/2010	30.24	-97.77
1522	Travis	Travis	78704	TX	3.33	17485	3/3/2010	30.24	-97.77
1523	Dallas	Dallas	75214	TX	2.31	15573	3/3/2010	32.84	-96.75
1524	Smith	Smith	75701	TX	1.05	17640	3/4/2010	32.32	-95.30
1525	Dallas	Dallas	75248	TX	9.45	46022	3/4/2010	32.97	-96.80
1526	Travis	Travis	78746	TX	5.18	29217	3/4/2010	30.31	-97.82
1527	Tarrant	Tarrant	76137	TX	9.98	58669	3/5/2010	32.85	-97.30
1528	Tarrant	Tarrant	76036	TX	3.50	27845	3/5/2010	32.58	-97.43
1529	Dallas	Dallas	75220	TX	4.40	24531	3/5/2010	32.86	-96.87
1530	Denton	Denton	75034	TX	9.72	50438	3/5/2010	33.15	-96.87
1531	Travis	Travis	78660	TX	2.31	14063	3/5/2010	30.46	-97.60
1532	Travis	Travis	78704	TX	3.33	17485	3/5/2010	30.24	-97.77
1533	Travis	Travis	78702	TX	3.50	15110	3/5/2010	30.26	-97.71
1534	Travis	Travis	78754	TX	3.24	16617	3/8/2010	30.36	-97.65
1535	Bexar	Bexar	78213	TX	3.80	20175	3/8/2010	29.50	-98.52
1536	Bexar	Bexar	78259	TX	10.30	57147	3/8/2010	29.62	-98.43
1537	Travis	Travis	78728	TX	11.70	45396	3/9/2010	30.46	-97.68
1538	Williamson	Williamson	78681	TX	6.65	33613	3/9/2010	30.52	-97.71
1539	Montgomery	Montgomery	77301	TX	5.25	31902	3/10/2010	30.31	-95.43
1540	Tarrant	Tarrant	76012	TX	5.25	37318	3/10/2010	32.76	-97.14
1541	Smith	Smith	75703	TX	4.50	27000	3/10/2010	32.27	-95.33
1542	Williamson	Williamson	78626	TX	6.16	27342	3/10/2010	30.70	-97.59
1543	Travis	Travis	78704	TX	5.98	31938	3/10/2010	30.24	-97.77
1544	Travis	Travis	78746	TX	3.17	25744	3/10/2010	30.31	-97.82
1545	Travis	Travis	78723	TX	1.28	11043	3/10/2010	30.31	-97.68
1546	Denton	Denton	75022	TX	10.12	38011	3/11/2010	33.03	-97.10
1547	Dallas	Dallas	75229	TX	42.50	250000	3/11/2010	32.90	-96.86
1548	Denton	Denton	75022	TX	10.12	39960	3/11/2010	33.02	-97.13
1549	Montgomery	Montgomery	77365	TX	1.05	10500	3/12/2010	30.12	-95.29
1550	Montgomery	Montgomery	77365	TX	1.10	10500	3/12/2010	30.12	-95.29
1551	Angelina	Rusk	75901	TX	6.94	34284	3/12/2010	31.29	-94.67
1552	Angelina	Rusk	75904	TX	7.17	34284	3/12/2010	31.33	-94.83
1553	Bexar	Bexar	78258	TX	5.60	37979	3/12/2010	29.65	-98.47
1554	Comal	Comal	78266	TX	3.50	22685	3/12/2010	29.63	-98.32
1555	Bexar	Bexar	78217	TX	14.80	87171	3/13/2010	29.54	-98.42
1556	Collin	Collin	75023	TX	4.56	33850	3/15/2010	33.05	-96.73
1557	Grayson	Collin	75076	TX	10.12	42058	3/16/2010	33.77	-96.73
1558	Travis	Travis	78660	TX	7.20	34046	3/16/2010	30.46	-97.60
1559	Tarrant	Tarrant	76060	TX	8.51	56837	3/16/2010	32.64	-97.22
1560	Travis	Travis	78703	TX	4.46	35079	3/16/2010	30.29	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1561	Bexar	Bexar	78249	TX	10.08	57658	3/16/2010	29.57	-98.61
1562	Bexar	Bexar	78209	TX	3.85	20269	3/16/2010	29.49	-98.45
1563	Denton	Denton	76262	TX	4.20	14700	3/17/2010	33.02	-97.23
1564	Travis	Travis	78732	TX	9.20	45540	3/17/2010	30.38	-97.90
1565	Travis	Travis	78733	TX	6.30	32853	3/17/2010	30.33	-97.87
1566	Travis	Travis	78745	TX	3.68	16573	3/19/2010	30.21	-97.80
1567	Travis	Travis	78759	TX	3.33	17120	3/19/2010	30.40	-97.75
1568	Bexar	Bexar	78250	TX	3.50	16004	3/19/2010	29.50	-98.67
1569	Jim Wells	Nueces	78332	TX	2.59	11895	3/23/2010	27.74	-98.09
1570	Dallas	Dallas	75248	TX	6.93	53708	3/23/2010	32.97	-96.80
1571	Dallas	Dallas	75062	TX	5.52	23263	3/25/2010	32.85	-96.97
1572	Travis	Travis	78759	TX	5.25	29999	3/25/2010	30.40	-97.75
1573	Williamson	Williamson	78664	TX	8.19	49688	3/26/2010	30.50	-97.66
1574	Travis	Travis	78731	TX	6.21	44601	3/26/2010	30.35	-97.77
1575	Dallas	Dallas	75214	TX	3.87	36000	3/28/2010	32.82	-96.74
1576	Cooke	Denton	76252	TX	5.88	30000	3/29/2010	33.69	-97.42
1577	Dallas	Dallas	75205	TX	2.00	19073	3/29/2010	32.83	-96.80
1578	Tarrant	Tarrant	76054	TX	6.67	35910	3/30/2010	32.86	-97.18
1579	Jim Wells	Nueces	78332	TX	2.00	12000	4/1/2010	27.74	-98.09
1580	Travis	Travis	78749	TX	5.64	29789	4/2/2010	30.22	-97.86
1581	Taylor	Hood	79601	TX	10.08		4/5/2010	32.57	-99.68
1582	Bowie	Upshur	75570	TX	10.08	53600	4/5/2010	33.49	-94.44
1583	Dallas	Dallas	75229	TX	5.40	36336	4/5/2010	32.90	-96.86
1584	Travis	Travis	78727	TX	3.15	24901	4/5/2010	30.43	-97.71
1585	Travis	Travis	78738	TX	6.30	29316	4/5/2010	30.31	-97.98
1586	Bexar	Bexar	78261	TX	1.48	22980	4/5/2010	29.70	-98.41
1587	Bexar	Bexar	78212	TX	5.25	21638	4/5/2010	29.46	-98.50
1588	Bexar	Bexar	78245	TX	23.10	111572	4/5/2010	29.40	-98.74
1589	Bexar	Bexar	78259	TX	5.88	33588	4/5/2010	29.62	-98.43
1590	Tarrant	Tarrant	76052	TX	2.16	17152	4/6/2010	32.97	-97.37
1591	Bexar	Bexar	78245	TX	5.40	25774	4/7/2010	29.43	-98.66
1592	Galveston	Galveston	77546	TX	11.20	61985	4/7/2010	29.51	-95.20
1593	Travis	Travis	78753	TX	5.60	25964	4/7/2010	30.39	-97.67
1594	Travis	Travis	78703	TX	5.25	33651	4/7/2010	30.29	-97.77
1595	Travis	Travis	78660	TX	4.73	24035	4/8/2010	30.46	-97.60
1596	Travis	Travis	78660	TX	8.93	40859	4/8/2010	30.46	-97.60
1597	Travis	Travis	78762	TX	1.58	12244	4/8/2010	30.26	-97.72
1598	Travis	Travis	78723	TX	4.73	21169	4/8/2010	30.31	-97.68
1599	Smith	Smith	75704	TX	6.15	26064	4/9/2010	32.40	-95.41
1600	Denton	Denton	76226	TX	5.76	39979	4/9/2010	33.12	-97.16

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1601	Collin	Collin	75002	TX	10.15	51688	4/9/2010	33.09	-96.61
1602	Williamson	Williamson	78665	TX	1.75	10649	4/9/2010	30.55	-97.62
1603	Bexar	Bexar	78260	TX	7.00	60707	4/9/2010	29.69	-98.50
1604	Bexar	Bexar	78213	TX	1.10	5338	4/9/2010	29.50	-98.52
1605	Hidalgo	Nueces	78573	TX	10.75	62359	4/12/2010	26.29	-98.30
1606	Travis	Travis	78753	TX	2.52	11858	4/13/2010	30.39	-97.67
1607	Travis	Travis	78757	TX	5.25	22979	4/13/2010	30.35	-97.74
1608	Taylor	Hood	79601	TX	10.08	68040	4/14/2010	32.55	-99.66
1609	Denton	Denton	75022	TX	10.80	58870	4/14/2010	33.02	-97.13
1610	Travis	Travis	78702	TX	3.15	18792	4/14/2010	30.26	-97.71
1611	Travis	Travis	78735	TX	2.46	16800	4/14/2010	30.26	-97.86
1612	Bexar	Bexar	78258	TX	5.25	29565	4/14/2010	29.65	-98.47
1613	Bexar	Bexar	78254	TX	7.00	39182	4/14/2010	29.53	-98.78
1614	Bexar	Bexar	78248	TX	7.00	34259	4/14/2010	29.59	-98.53
1615	Bexar	Bexar	78232	TX	3.50	23230	4/14/2010	29.59	-98.46
1616	Bexar	Bexar	78255	TX	5.25	25687	4/14/2010	29.66	-98.67
1617	Bexar	Bexar	78212	TX	4.60	26780	4/14/2010	29.46	-98.50
1618	Bexar	Bexar	78249	TX	7.00	37713	4/15/2010	29.57	-98.61
1619	El Paso	El Paso	79934	TX	2.87	15613	4/17/2010	31.94	-106.45
1620	Collin	Collin	75093	TX	12.15		4/19/2010	33.04	-96.82
1621	Travis	Travis	78702	TX	3.15	22089	4/19/2010	30.26	-97.71
1622	Bexar	Bexar	78209	TX	2.40	29194	4/20/2010	29.49	-98.45
1623	Bexar	Bexar	78245	TX	5.40	25774	4/20/2010	29.40	-98.74
1624	Bexar	Bexar	78231	TX	3.85	23062	4/20/2010	29.58	-98.54
1625	Dallas	Dallas	75224	TX	6.90	39775	4/21/2010	32.71	-96.84
1626	Comal	Comal	78266	TX	42.30	423000	4/21/2010	29.63	-98.32
1627	Williamson	Williamson	78626	TX	2.30	11960	4/22/2010	30.70	-97.59
1628	Collin	Collin	75075	TX	5.52	34320	4/23/2010	33.02	-96.74
1629	Archer	Parker	76351	TX	9.50	37193	4/23/2010	33.60	-98.68
1630	Henderson	Henderson	75156	TX	10.12	86020	4/26/2010	32.24	-96.08
1631	Travis	Travis	78762	TX	2.80	15752	4/26/2010	30.26	-97.72
1632	Travis	Travis	78704	TX	4.97	34776	4/26/2010	30.24	-97.77
1633	Travis	Travis	78733	TX	5.64	32994	4/26/2010	30.33	-97.87
1634	Travis	Travis	78704	TX	4.20	22924	4/26/2010	30.24	-97.77
1635	Travis	Travis	78758	TX	1.38	9315	4/26/2010	30.39	-97.70
1636	Travis	Travis	78721	TX	2.52	14793	4/27/2010	30.27	-97.68
1637	Travis	Travis	78704	TX	3.33	19000	4/28/2010	30.24	-97.77
1638	Travis	Travis	78704	TX	3.33	19000	4/28/2010	30.24	-97.77
1639	Travis	Travis	78704	TX	3.33	19000	4/28/2010	30.24	-97.77
1640	Travis	Travis	78704	TX	3.33	19000	4/28/2010	30.24	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1641	Travis	Travis	78704	TX	3.33	19000	4/28/2010	30.24	-97.77
1642	Travis	Travis	78704	TX	3.33	19000	4/28/2010	30.24	-97.77
1643	Travis	Travis	78704	TX	3.33	19000	4/28/2010	30.24	-97.77
1644	Travis	Travis	78704	TX	3.33	19000	4/28/2010	30.24	-97.77
1645	Travis	Travis	78704	TX	3.33	19000	4/28/2010	30.24	-97.77
1646	Travis	Travis	78704	TX	3.33	19000	4/28/2010	30.24	-97.77
1647	Travis	Travis	78704	TX	3.33	19000	4/28/2010	30.24	-97.77
1648	Travis	Travis	78731	TX	4.44	21712	4/28/2010	30.35	-97.77
1649	Bell	Williamson	76502	TX	2.82	19035	4/30/2010	31.11	-97.41
1650	Tarrant	Tarrant	76051	TX	3.01	29498	4/30/2010	32.95	-97.07
1651	Collin	Collin	75075	TX	5.52	33520	5/3/2010	33.02	-96.74
1652	Smith	Smith	75789	TX	10.00	55995	5/3/2010	32.14	-95.08
1653	Dallas	Dallas	75062	TX	3.40	17170	5/3/2010	32.85	-96.97
1654	Travis	Travis	78745	TX	4.38	21989	5/3/2010	30.21	-97.80
1655	Dallas	Dallas	75224	TX	4.09	46924	5/4/2010	32.71	-96.84
1656	Dallas	Dallas	75050	TX	50.40	272700	5/5/2010	32.76	-96.96
1657	Bexar	Bexar	78253	TX	20.64	157500	5/5/2010	29.49	-98.71
1658	Bexar	Bexar	78259	TX	5.46	27871	5/5/2010	29.63	-98.44
1659	Dallas	Dallas	75051	TX	100.80	511100	5/5/2010	32.74	-97.02
1660	Tarrant	Tarrant	76148	TX	5.10	25755	5/5/2010	32.86	-97.25
1661	Travis	Travis	78749	TX	3.15	25007	5/5/2010	30.22	-97.86
1662	Travis	Travis	78727	TX	4.93	26473	5/5/2010	30.43	-97.71
1663	Bexar	Bexar	78255	TX	4.72	25059	5/5/2010	29.66	-98.67
1664	Bexar	Bexar	78230	TX	5.80	36874	5/5/2010	29.54	-98.56
1665	Webb	Nueces	78043	TX	30.45	146690	5/6/2010	27.58	-99.15
1666	Bell	Williamson	76502	TX	5.98	42813	5/6/2010	31.11	-97.41
1667	Grimes	Montgomery	77868	TX	10.50	77734	5/7/2010	30.34	-96.03
1668	Bexar	Bexar	78247	TX	2.45	13727	5/7/2010	29.59	-98.41
1669	Medina	Bexar	78056	TX	4.20	22337	5/7/2010	29.51	-98.99
1670	Webb	Nueces	78043	TX	30.45	146690	5/9/2010	27.51	-99.48
1671	Kendall	Bexar	78015	TX	10.80	51001	5/10/2010	29.73	-98.63
1672	Tarrant	Tarrant	76021	TX	251.50		5/10/2010	32.85	-97.14
1673	Nueces	Nueces	78373	TX	6.36	32580	5/10/2010	27.67	-97.18
1674	Travis	Travis	78703	TX	3.15	19466	5/10/2010	30.29	-97.77
1675	Travis	Travis	78758	TX	6.30	28791	5/10/2010	30.39	-97.70
1676	Travis	Travis	78703	TX	4.65	43655	5/10/2010	30.29	-97.77
1677	Johnson	Johnson	76028	TX	7.88	42061	5/11/2010	32.53	-97.29
1678	Smith	Smith	75703	TX	8.10	52650	5/11/2010	32.27	-95.33
1679	Dallas	Dallas	75230	TX	5.52	34500	5/12/2010	32.90	-96.80
1680	Collin	Collin	75025	TX	6.97	46351	5/12/2010	33.09	-96.76

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1681	Travis	Travis	78746	TX	5.03	29009	5/12/2010	30.31	-97.82
1682	Travis	Travis	78741	TX	2.80	9592	5/12/2010	30.23	-97.71
1683	Bexar	Bexar	78258	TX	5.25	28000	5/13/2010	29.65	-98.47
1684	Bexar	Bexar	78209	TX	5.25	27792	5/13/2010	29.49	-98.45
1685	Dallas	Dallas	75214	TX	7.36	41584	5/14/2010	32.82	-96.74
1686	Mclennan	Ellis	76712	TX	10.12	48447	5/14/2010	31.53	-97.25
1687	Bexar	Bexar	78259	TX	5.46	28871	5/14/2010	29.62	-98.43
1688	Hidalgo	Nueces	78596	TX	5.16	35393	5/17/2010	26.17	-97.98
1689	Travis	Travis	78617	TX	2.80	12291	5/18/2010	30.15	-97.59
1690	Bexar	Bexar	78232	TX	4.86	21892	5/19/2010	29.56	-98.47
1691	Travis	Travis	78735	TX	5.46	26220	5/19/2010	30.26	-97.86
1692	Bell	Williamson	76549	TX	9.60	64345	5/20/2010	31.00	-97.81
1693	Collin	Collin	75035	TX	6.93	52282	5/24/2010	33.15	-96.76
1694	Travis	Travis	78730	TX	5.78	28411	5/24/2010	30.37	-97.84
1695	Travis	Travis	78748	TX	2.52	14282	5/26/2010	30.17	-97.82
1696	Travis	Travis	78732	TX	5.88	27935	5/26/2010	30.38	-97.90
1697	Smith	Smith	75704	TX	6.48	42120	5/27/2010	32.40	-95.41
1698	Mclennan	Ellis	76710	TX	2.37	13950	5/28/2010	31.53	-97.20
1699	Williamson	Williamson	78626	TX	7.92	34411	5/28/2010	30.70	-97.59
1700	Travis	Travis	78703	TX	5.07	43217	5/28/2010	30.29	-97.77
1701	Travis	Travis	78746	TX	6.44	43470	5/28/2010	30.31	-97.82
1702	Brewster	El Paso	79830	TX	3.15	20957	6/1/2010	29.93	-103.45
1703	Travis	Travis	78730	TX	5.55	29634	6/1/2010	30.37	-97.84
1704	Tarrant	Tarrant	76010	TX	2.64	17261	6/2/2010	32.73	-97.08
1705	Dallas	Dallas	75214	TX	7.48	41584	6/2/2010	32.82	-96.74
1706	Bexar	Bexar	78253	TX	20.64	157500	6/2/2010	29.47	-98.81
1707	Bexar	Bexar	78148	TX	4.00	26000	6/2/2010	29.55	-98.30
1708	Bexar	Bexar	78217	TX	3.00	20774	6/2/2010	29.54	-98.42
1709	Bexar	Bexar	78233	TX	4.20	21148	6/2/2010	29.56	-98.36
1710	Kendall	Bexar	78015	TX	10.00	27911	6/2/2010	29.75	-98.65
1711	Bexar	Bexar	78232	TX	4.86	22206	6/2/2010	29.59	-98.46
1712	Williamson	Williamson	78665	TX	2.82	19035	6/3/2010	30.55	-97.62
1713	Williamson	Williamson	78665	TX	5.64	38634	6/3/2010	30.55	-97.62
1714	Collin	Collin	75024	TX	9.66	33810	6/4/2010	33.08	-96.81
1715	Johnson	Johnson	76028	TX	9.86	51757	6/4/2010	32.53	-97.29
1716	Travis	Travis	78732	TX	4.62	19964	6/4/2010	30.38	-97.90
1717	Comal	Comal	78266	TX	42.30	423000	6/4/2010	29.63	-98.32
1718	Tarrant	Tarrant	76012	TX	3.52	19585	6/5/2010	32.76	-97.14
1719	Collin	Collin	75024	TX	4.05	37265	6/5/2010	33.08	-96.81
1720	Brewster	El Paso	79830	TX	3.53	19173	6/7/2010	29.93	-103.45

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1721	Dallas	Dallas	75229	TX	6.90	41400	6/7/2010	32.90	-96.86
1722	Travis	Travis	78741	TX	4.90	29890	6/8/2010	30.23	-97.71
1723	Travis	Travis	78748	TX	5.94	54039	6/8/2010	30.17	-97.82
1724	Bell	Williamson	76513	TX	7.92	45540	6/9/2010	31.07	-97.50
1725	Coryell	Williamson	76522	TX	2.80	17095	6/10/2010	31.22	-97.94
1726	Travis	Travis	78723	TX	6.30	28261	6/10/2010	30.31	-97.68
1727	Wichita	Denton	76305	TX	10.08	54985	6/11/2010	34.00	-98.35
1728	El Paso	El Paso	79932	TX	4.84	33611	6/14/2010	31.89	-106.62
1729	Montgomery	Montgomery	77318	TX	3.15	20612	6/14/2010	30.43	-95.54
1730	Wichita	Denton	76305	TX	10.08	52174	6/14/2010	34.00	-98.35
1731	Midland	El Paso	79705	TX	10.12	101120	6/14/2010	32.06	-102.06
1732	Travis	Travis	78721	TX	2.80	14947	6/14/2010	30.27	-97.68
1733	Bexar	Bexar	78209	TX	7.60	64255	6/14/2010	29.49	-98.45
1734	El Paso	El Paso	79912	TX	1.84	12880	6/15/2010	31.86	-106.52
1735	Wichita	Denton	76309	TX	10.00	31573	6/15/2010	33.90	-98.54
1736	Brewster	El Paso	79831	TX	10.56	67785	6/16/2010	30.41	-103.74
1737	Bexar	Bexar	78260	TX	7.90	39022	6/17/2010	29.69	-98.50
1738	Cooke	Denton	76240	TX	19.46	136500	6/18/2010	33.64	-97.14
1739	Bell	Williamson	76542	TX	6.48	29813	6/18/2010	31.01	-97.72
1740	Limestone	Ellis	76642	TX	10.08	34600	6/18/2010	31.53	-96.56
1741	Comal	Comal	78266	TX	6.21	45000	6/21/2010	29.63	-98.32
1742	El Paso	El Paso	79912	TX	4.40	35689	6/21/2010	31.86	-106.52
1743	Collin	Collin	75074	TX	4.32	24389	6/21/2010	33.02	-96.67
1744	Archer	Parker	76366	TX	10.08	52174	6/21/2010	33.71	-98.79
1745	Travis	Travis	78754	TX	24.00	114100	6/21/2010	30.36	-97.65
1746	Bexar	Bexar	78204	TX	4.14	21371	6/21/2010	29.40	-98.50
1747	Bexar	Bexar	78023	TX	11.00	61366	6/21/2010	29.62	-98.73
1748	Bexar	Bexar	78216	TX	5.60	26870	6/21/2010	29.55	-98.50
1749	Travis	Travis	78727	TX	6.30	45413	6/22/2010	30.43	-97.71
1750	Travis	Travis	78723	TX	6.48	27785	6/22/2010	30.31	-97.68
1751	Tarrant	Tarrant	76063	TX	3.12	15565	6/23/2010	32.58	-97.16
1752	Tarrant	Tarrant	76108	TX	6.30	37142	6/28/2010	32.78	-97.55
1753	Orange	Orange	77632	TX	5.04	34550	6/29/2010	30.22	-93.80
1754	Collin	Collin	75093	TX	12.15	64550	6/29/2010	33.04	-96.80
1755	Travis	Travis	78733	TX	5.52	30150	6/29/2010	30.33	-97.87
1756	Bexar	Bexar	78245	TX	1.08	3704	7/1/2010	29.40	-98.74
1757	Bexar	Bexar	78253	TX	5.94	25835	7/1/2010	29.47	-98.81
1758	El Paso	El Paso	79912	TX	3.96	27720	7/1/2010	31.86	-106.52
1759	Kaufman	Kaufman	75114	TX	6.30	37142	7/1/2010	32.61	-96.44
1760	Tarrant	Tarrant	76135	TX	7.00	38438	7/1/2010	32.84	-97.47

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1761	Denton	Denton	75068	TX	6.30	35630	7/7/2010	33.19	-96.95
1762	Bexar	Bexar	78233	TX	2.00	10621	7/8/2010	29.56	-98.36
1763	Bexar	Bexar	78258	TX	8.75	50449	7/8/2010	29.65	-98.47
1764	El Paso	El Paso	79912	TX	4.20	28896	7/8/2010	31.86	-106.52
1765	El Paso	El Paso	79912	TX	3.87	27090	7/8/2010	31.86	-106.52
1766	El Paso	El Paso	79907	TX	5.04	33667	7/8/2010	31.71	-106.33
1767	Orange	Orange	77632	TX	9.80	54566	7/8/2010	30.22	-93.80
1768	Henderson	Henderson	75163	TX	1.14	9000	7/8/2010	32.15	-96.08
1769	Bexar	Bexar	78233	TX	1.10	8244	7/12/2010	29.56	-98.36
1770	El Paso	El Paso	79925	TX	1.76	12320	7/12/2010	31.78	-106.36
1771	El Paso	El Paso	79821	TX	5.98	41664	7/12/2010	31.99	-106.59
1772	Tarrant	Tarrant	76118	TX	10.08	34600	7/12/2010	32.79	-97.17
1773	Travis	Travis	78730	TX	14.00	88130	7/13/2010	30.37	-97.84
1774	Hardin	Hardin	77659	TX	2.52	9938	7/14/2010	30.15	-94.46
1775	El Paso	El Paso	79925	TX	1.80	12000	7/14/2010	31.79	-106.34
1776	Dallas	Dallas	75206	TX	4.59	23180	7/15/2010	32.82	-96.78
1777	Galveston	Galveston	77546	TX	9.90	53000	7/18/2010	29.51	-95.20
1778	Denton	Denton	75010	TX	39.03	304395	7/19/2010	33.03	-96.93
1779	El Paso	El Paso	79912	TX	5.40	25000	7/20/2010	31.86	-106.52
1780	Dallas	Dallas	75060	TX	2.64	13264	7/20/2010	32.80	-96.95
1781	Brewster	El Paso	79830	TX	2.82	11721	7/21/2010	29.93	-103.45
1782	Comal	Comal	78266	TX	42.30	476300	7/22/2010	29.63	-98.32
1783	Bexar	Bexar	78253	TX	11.16	81382	7/22/2010	29.47	-98.81
1784	Tarrant	Tarrant	76179	TX	5.81	48646	7/22/2010	32.92	-97.46
1785	Dallas	Dallas	75228	TX	2.37	19819	7/22/2010	32.83	-96.68
1786	Dallas	Dallas	75248	TX	6.45	54051	7/22/2010	32.97	-96.80
1787	Collin	Collin	75074	TX	9.46	79275	7/22/2010	33.02	-96.67
1788	Ellis	Ellis	76065	TX	5.16	43241	7/22/2010	32.48	-96.96
1789	Tarrant	Tarrant	76063	TX	4.30	36034	7/22/2010	32.58	-97.16
1790	Johnson	Johnson	76028	TX	6.02	50478	7/22/2010	32.53	-97.29
1791	Tarrant	Tarrant	76116	TX	5.16	43241	7/22/2010	32.71	-97.43
1792	Collin	Collin	75025	TX	5.16	43241	7/22/2010	33.09	-96.76
1793	Dallas	Dallas	75229	TX	5.81	48646	7/22/2010	32.90	-96.86
1794	Tarrant	Tarrant	76051	TX	3.44	28827	7/22/2010	32.95	-97.07
1795	Collin	Collin	75002	TX	5.59	46844	7/22/2010	33.09	-96.61
1796	Denton	Denton	75028	TX	6.02	50448	7/22/2010	33.05	-97.06
1797	Dallas	Dallas	75229	TX	2.37	18819	7/22/2010	32.90	-96.86
1798	Tarrant	Tarrant	76001	TX	5.16	43241	7/22/2010	32.63	-97.15
1799	Tarrant	Tarrant	76132	TX	9.89	82878	7/22/2010	32.66	-97.42
1800	Travis	Travis	78731	TX	7.20	45000	7/22/2010	30.35	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1801	Dallas	Dallas	75104	TX	6.56	54973	7/23/2010	32.59	-96.99
1802	Tarrant	Tarrant	76052	TX	8.61	72152	7/23/2010	32.97	-97.37
1803	Collin	Collin	75025	TX	9.89	82878	7/23/2010	33.09	-96.76
1804	Dallas	Dallas	75104	TX	5.81	48646	7/23/2010	32.59	-96.99
1805	Collin	Collin	75071	TX	6.02	50448	7/23/2010	33.24	-96.69
1806	Tarrant	Tarrant	76140	TX	7.74	64861	7/23/2010	32.63	-97.28
1807	Tarrant	Tarrant	76126	TX	3.44	28827	7/23/2010	32.65	-97.50
1808	Ellis	Ellis	75165	TX	6.02	73665	7/24/2010	32.40	-96.79
1809	Gregg	Gregg	75662	TX	11.28	57809	7/26/2010	32.38	-94.87
1810	Smith	Smith	75791	TX	7.20	40268	7/28/2010	32.23	-95.21
1811	Smith	Smith	75791	TX	1.07	6988	7/29/2010	32.23	-95.21
1812	Smith	Smith	75791	TX	3.15	17609	7/29/2010	32.23	-95.21
1813	Franklin	Hunt	75480	TX	4.00	24525	7/30/2010	33.04	-95.21
1814	Hidalgo	Nueces	78504	TX	2.10	10500	7/30/2010	26.39	-98.24
1815	Falls	Williamson	76570	TX	6.30	37142	7/30/2010	31.10	-96.90
1816	Henderson	Henderson	75778	TX	5.85	36134	7/30/2010	32.30	-95.71
1817	Leon	Montgomery	77871	TX	9.66	34031	8/2/2010	31.05	-96.13
1818	Bowie	Upshur	75503	TX	5.90	37626	8/2/2010	33.53	-94.13
1819	Dallas	Dallas	75220	TX	7.20	56592	8/2/2010	32.86	-96.87
1820	Smith	Smith	75703	TX	9.43	48384	8/2/2010	32.27	-95.33
1821	El Paso	El Paso	79915	TX	10.08	69250	8/3/2010	31.74	-106.38
1822	Kaufman	Kaufman	75114	TX	10.12	56257	8/3/2010	32.61	-96.44
1823	Tarrant	Tarrant	76092	TX	7.80	37963	8/3/2010	32.95	-97.15
1824	Tarrant	Tarrant	76140	TX	7.74	46550	8/3/2010	32.63	-97.28
1825	Bexar	Bexar	78229	TX	2.30	14145	8/5/2010	29.51	-98.58
1826	Bexar	Bexar	78222	TX	11.90	85510	8/5/2010	29.37	-98.39
1827	Bexar	Bexar	78260	TX	5.25	27537	8/5/2010	29.69	-98.50
1828	Bexar	Bexar	78240	TX	8.75	21671	8/5/2010	29.53	-98.61
1829	Tarrant	Tarrant	76034	TX	10.08	57977	8/5/2010	32.89	-97.15
1830	Hardin	Hardin	77625	TX	2.52	12000	8/9/2010	30.41	-94.36
1831	Johnson	Johnson	76009	TX	5.04	26121	8/9/2010	32.44	-97.20
1832	Howard	Hood	79720	TX	9.03	39988	8/9/2010	32.24	-101.48
1833	Bell	Williamson	76504	TX	8.97	40309	8/9/2010	31.11	-97.36
1834	Travis	Travis	78759	TX	3.24	15750	8/9/2010	30.40	-97.75
1835	Lamar	Hunt	75460	TX	25.60	127084	8/10/2010	33.60	-95.62
1836	Tarrant	Tarrant	76116	TX	6.38	27332	8/10/2010	32.71	-97.43
1837	Tarrant	Tarrant	76118	TX	10.40	79800	8/11/2010	32.79	-97.17
1838	Navarro	Ellis	75155	TX	5.40	32976	8/11/2010	32.21	-96.47
1839	Dallas	Dallas	75214	TX	2.26	15574	8/11/2010	32.82	-96.74
1840	Tarrant	Tarrant	76118	TX	1.00	82000	8/11/2010	32.79	-97.17

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1841	Mclennan	Ellis	76707	TX	5.04	28979	8/12/2010	31.56	-97.16
1842	Tarrant	Tarrant	76016	TX	3.69	26770	8/12/2010	32.69	-97.18
1843	Travis	Travis	78703	TX	4.44	25663	8/12/2010	30.29	-97.77
1844	Travis	Travis	78703	TX	4.44	25663	8/12/2010	30.29	-97.77
1845	Wichita	Denton	76310	TX	7.74	52646	8/13/2010	33.80	-98.46
1846	Bexar	Bexar	78221	TX	2.10	10386	8/16/2010	29.30	-98.50
1847	Bee	San Patricio	78102	TX	3.22	17574	8/16/2010	28.41	-97.74
1848	Collin	Collin	75093	TX	4.84	15040	8/16/2010	33.04	-96.80
1849	Collin	Collin	75074	TX	4.84	16488	8/16/2010	33.02	-96.67
1850	Van Zandt	Henderson	75790	TX	5.06	26000	8/17/2010	32.52	-95.62
1851	Henderson	Henderson	75148	TX	6.30	37142	8/17/2010	32.10	-96.00
1852	Dallas	Dallas	75247	TX	101.64	576440	8/17/2010	32.82	-96.88
1853	Ellis	Ellis	75152	TX	5.85	36134	8/18/2010	32.44	-96.70
1854	Navarro	Ellis	76641	TX	5.85	36134	8/18/2010	32.02	-96.77
1855	Travis	Travis	78746	TX	5.08	32558	8/18/2010	30.31	-97.82
1856	Dallas	Dallas	75138	TX	44.10		8/20/2010	32.66	-96.90
1857	Dallas	Dallas	75138	TX	88.20		8/20/2010	32.66	-96.90
1858	Dallas	Dallas	75138	TX	53.55		8/20/2010	32.66	-96.90
1859	Collin	Collin	75002	TX	101.66	448955	8/20/2010	33.09	-96.61
1860	Bexar	Bexar	78254	TX	1.75	8048	8/23/2010	29.53	-98.78
1861	Bexar	Bexar	78254	TX	3.00	25050	8/23/2010	29.53	-98.78
1862	Kendall	Bexar	78006	TX	12.76	59943	8/23/2010	29.92	-98.70
1863	Bexar	Bexar	78257	TX	12.10	94919	8/23/2010	29.66	-98.58
1864	Bexar	Bexar	78233	TX	8.36	45851	8/23/2010	29.56	-98.36
1865	Bexar	Bexar	78258	TX	8.40	43951	8/23/2010	29.65	-98.47
1866	Kendall	Bexar	78015	TX	3.15	18558	8/23/2010	29.75	-98.65
1867	El Paso	El Paso	79936	TX	2.20	15898	8/23/2010	31.80	-106.29
1868	Angelina	Rusk	75901	TX	6.90	32706	8/23/2010	31.29	-94.67
1869	Travis	Travis	78745	TX	3.01	24000	8/23/2010	30.21	-97.80
1870	Bexar	Bexar	78023	TX	3.08	17244	8/26/2010	29.62	-98.73
1871	El Paso	El Paso	79912	TX	5.04	34625	8/26/2010	31.86	-106.52
1872	Archer	Parker	76351	TX	30.08	160779	8/30/2010	33.60	-98.68
1873	Montgomery	Montgomery	77382	TX	4.40	21810	8/31/2010	30.20	-95.55
1874	Henderson	Henderson	75156	TX	10.32	61405	8/31/2010	32.24	-96.08
1875	Bell	Williamson	76543	TX	6.88	40244	9/1/2010	31.15	-97.68
1876	Bell	Williamson	76513	TX	5.94	27267	9/1/2010	31.07	-97.50
1877	Mclennan	Ellis	76712	TX	2.24	11850	9/1/2010	31.53	-97.25
1878	Collin	Collin	75002	TX	70.84	408357	9/1/2010	33.09	-96.61
1879	Bexar	Bexar	78211	TX	10.80	51001	9/3/2010	29.35	-98.57
1880	Bexar	Bexar	78254	TX	6.48	28184	9/3/2010	29.53	-98.78

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1881	Bell	Williamson	76513	TX	5.38	33600	9/3/2010	31.07	-97.50
1882	Bell	Williamson	76501	TX	71.52	307382	9/3/2010	31.08	-97.24
1883	Hidalgo	Nueces	78573	TX	10.32	58750	9/6/2010	26.29	-98.30
1884	Bexar	Bexar	78209	TX	4.20	26021	9/7/2010	29.49	-98.45
1885	Bexar	Bexar	78251	TX	3.24	15990	9/7/2010	29.47	-98.68
1886	Bexar	Bexar	78023	TX	11.50	68569	9/7/2010	29.62	-98.73
1887	Parker	Parker	76088	TX	10.08	106103	9/7/2010	32.85	-97.89
1888	Tarrant	Tarrant	76001	TX	4.30	30136	9/8/2010	32.63	-97.15
1889	Ellis	Ellis	75165	TX	10.08	106103	9/8/2010	32.40	-96.79
1890	Dallas	Dallas	75220	TX	30.36	133408	9/9/2010	32.87	-96.89
1891	Montgomery	Montgomery	77385	TX	4.62	18480	9/9/2010	30.20	-95.43
1892	Montgomery	Montgomery	77385	TX	4.20	16800	9/9/2010	30.20	-95.43
1893	Dallas	Dallas	75220	TX	30.36	133408	9/9/2010	32.86	-96.87
1894	Jefferson	Jefferson	77713	TX	6.30	47000	9/9/2010	30.13	-94.21
1895	Collin	Collin	75093	TX	3.68	20200	9/10/2010	33.04	-96.82
1896	Bexar	Bexar	78257	TX	8.28	49408	9/10/2010	29.66	-98.58
1897	Bexar	Bexar	78216	TX	7.92	48439	9/10/2010	29.55	-98.50
1898	Bexar	Bexar	78261	TX	2.03	12000	9/13/2010	29.70	-98.41
1899	Bell	Williamson	76543	TX	10.34	69795	9/13/2010	31.15	-97.68
1900	Tarrant	Tarrant	76116	TX	3.22	18565	9/13/2010	32.71	-97.43
1901	Cameron	Nueces	78575	TX	11.52	55400	9/15/2010	26.02	-97.54
1902	Collin	Collin	75025	TX	4.14	38600	9/16/2010	33.09	-96.76
1903	Denton	Denton	75007	TX	8.40	43595	9/16/2010	33.01	-96.89
1904	Maverick	Bexar	78852	TX	3.60	18114	9/17/2010	28.71	-100.46
1905	Tarrant	Tarrant	76013	TX	9.45	79191	9/17/2010	32.72	-97.15
1906	Denton	Denton	76210	TX	9.66	80951	9/17/2010	33.14	-97.08
1907	Wichita	Denton	76310	TX	5.40	32874	9/17/2010	33.80	-98.46
1908	Ellis	Ellis	75101	TX	6.44	37142	9/17/2010	32.27	-96.69
1909	Dallas	Dallas	75116	TX	53.55	437119	9/17/2010	32.65	-96.91
1910	Dallas	Dallas	75116	TX	44.10	399731	9/17/2010	32.65	-96.91
1911	Dallas	Dallas	75116	TX	88.20	564661	9/17/2010	32.65	-96.91
1912	Dallas	Dallas	75050	TX	10.80		9/20/2010	32.78	-97.02
1913	Dallas	Dallas	75080	TX	4.14	48650	9/20/2010	32.98	-96.74
1914	Collin	Collin	75023	TX	2.25	16830	9/20/2010	33.05	-96.73
1915	Dallas	Dallas	75019	TX	4.14	21907	9/20/2010	32.96	-97.00
1916	Tarrant	Tarrant	76114	TX	5.52	11610	9/21/2010	32.78	-97.40
1917	Tarrant	Tarrant	76126	TX	5.04	24450	9/21/2010	32.65	-97.50
1918	Wichita	Denton	76367	TX	5.40	32136	9/21/2010	33.98	-98.70
1919	Dallas	Dallas	75050	TX	10.37	70000	9/22/2010	32.78	-97.02
1920	Travis	Travis	78722	TX	2.40	17399	9/22/2010	30.30	-97.70

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1921	Collin	Collin	75013	TX	101.66		9/23/2010	33.11	-96.70
1922	El Paso	El Paso	79912	TX	10.12	58092	9/23/2010	31.86	-106.52
1923	Bexar	Bexar	78230	TX	4.90	22915	9/24/2010	29.54	-98.56
1924	Bexar	Bexar	78246	TX	4.72	23108	9/24/2010	29.53	-98.48
1925	Bexar	Bexar	78209	TX	4.20	20364	9/24/2010	29.49	-98.45
1926	Bexar	Bexar	78259	TX	5.60	32560	9/24/2010	29.62	-98.43
1927	Bexar	Bexar	78240	TX	9.45	47420	9/24/2010	29.53	-98.61
1928	Dallas	Dallas	75230	TX	11.25	58335	9/24/2010	32.90	-96.79
1929	Dallas	Dallas	75050	TX	50.40		9/24/2010	32.78	-97.02
1930	El Paso	El Paso	79928	TX	2.20	16230	9/28/2010	31.66	-106.13
1931	Waller	Waller	77445	TX	9.66	43888	9/28/2010	30.09	-96.05
1932	Tarrant	Tarrant	76133	TX	3.08	15900	9/28/2010	32.65	-97.38
1933	Hidalgo	Nueces	78577	TX	5.52	37550	9/29/2010	26.15	-98.19
1934	Bell	Williamson	76502	TX	3.14	20384	9/29/2010	31.11	-97.41
1935	Travis	Travis	78704	TX	3.33	20300	9/29/2010	30.24	-97.77
1936	Travis	Travis	78733	TX	6.35	32137	9/29/2010	30.33	-97.87
1937	Rockwall	Rockwall	75087	TX	3.99	23540	9/30/2010	32.97	-96.46
1938	Dallas	Dallas	75062	TX	103.68	576405	9/30/2010	32.85	-96.97
1939	Denton	Denton	75007	TX	3.96	21306	9/30/2010	33.01	-96.89
1940	Travis	Travis	78745	TX	26.46	109704	10/1/2010	30.21	-97.80
1941	Travis	Travis	78752	TX	10.58	53405	10/1/2010	30.33	-97.70
1942	Travis	Travis	78756	TX	6.30	31665	10/1/2010	30.32	-97.74
1943	Dallas	Dallas	75137	TX	1.29	10000	10/3/2010	32.62	-96.94
1944	Bexar	Bexar	78261	TX	2.03	11539	10/4/2010	29.70	-98.41
1945	Montgomery	Montgomery	77380	TX	6.48	67657	10/5/2010	30.13	-95.47
1946	Hidalgo	Nueces	78596	TX	9.90	61256	10/5/2010	26.17	-97.98
1947	Bowie	Upshur	75503	TX	5.76	16838	10/5/2010	33.53	-94.13
1948	Van Zandt	Henderson	75103	TX	10.14	55666	10/5/2010	32.54	-95.86
1949	Williamson	Williamson	78665	TX	101.64	553661	10/5/2010	30.55	-97.62
1950	Dallas	Dallas	75253	TX	4.14	36800	10/5/2010	32.69	-96.59
1951	Williamson	Williamson	78664	TX	7.92	41958	10/5/2010	30.50	-97.66
1952	Travis	Travis	78759	TX	6.30	33732	10/7/2010	30.40	-97.75
1953	Travis	Travis	78735	TX	6.30	20976	10/7/2010	30.26	-97.86
1954	Travis	Travis	78746	TX	6.30	30694	10/7/2010	30.31	-97.82
1955	Rockwall	Rockwall	75087	TX	4.03	23540	10/8/2010	32.95	-96.44
1956	Collin	Collin	75025	TX	3.22	17458	10/8/2010	33.09	-96.76
1957	Dallas	Dallas	75228	TX	5.60	29748	10/11/2010	32.83	-96.68
1958	Collin	Collin	75098	TX	10.08	106103	10/11/2010	33.02	-96.51
1959	Dallas	Dallas	75248	TX	9.45	53258	10/12/2010	32.97	-96.80
1960	Collin	Collin	75025	TX	1.40	13750	10/13/2010	33.09	-96.76

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
1961	Tarrant	Tarrant	76179	TX	7.74	64861	10/14/2010	32.92	-97.46
1962	Denton	Denton	76210	TX	7.53	63060	10/14/2010	33.14	-97.08
1963	Collin	Collin	75075	TX	8.19	68632	10/14/2010	33.02	-96.74
1964	Collin	Collin	75287	TX	7.10	59456	10/14/2010	33.00	-96.84
1965	Tarrant	Tarrant	76110	TX	5.16	43241	10/14/2010	32.70	-97.34
1966	Dallas	Dallas	75230	TX	7.74	64861	10/14/2010	32.90	-96.80
1967	Tarrant	Tarrant	76040	TX	7.56	63353	10/14/2010	32.82	-97.10
1968	Ellis	Ellis	76065	TX	2.76	13883	10/14/2010	32.48	-96.96
1969	Tarrant	Tarrant	76052	TX	6.44	32200	10/14/2010	32.97	-97.37
1970	Bexar	Bexar	78230	TX	8.10	53800	10/15/2010	29.54	-98.56
1971	Bexar	Bexar	78258	TX	4.20	20178	10/15/2010	29.65	-98.47
1972	Bexar	Bexar	78260	TX	3.24	16910	10/15/2010	29.69	-98.50
1973	Bexar	Bexar	78148	TX	6.30	36000	10/15/2010	29.55	-98.30
1974	Bexar	Bexar	78256	TX	4.91	30871	10/15/2010	29.62	-98.62
1975	Bexar	Bexar	78255	TX	9.80	45088	10/15/2010	29.66	-98.67
1976	Bexar	Bexar	78023	TX	3.96	17902	10/15/2010	29.62	-98.73
1977	Bexar	Bexar	78258	TX	5.25	26881	10/15/2010	29.65	-98.47
1978	Wichita	Denton	76302	TX	49.40	232735	10/18/2010	33.87	-98.49
1979	Dallas	Dallas	75238	TX	8.39	70266	10/18/2010	32.88	-96.71
1980	Tarrant	Tarrant	76018	TX	5.81	48646	10/18/2010	32.67	-97.08
1981	Collin	Collin	75023	TX	4.30	36034	10/18/2010	33.05	-96.73
1982	Ellis	Ellis	75119	TX	7.56	63353	10/18/2010	32.32	-96.62
1983	Williamson	Williamson	78681	TX	5.16	25710	10/18/2010	30.52	-97.71
1984	Denton	Denton	76210	TX	10.08	34600	10/18/2010	33.14	-97.08
1985	Bexar	Bexar	78209	TX	6.65	36552	10/19/2010	29.49	-98.45
1986	Brewster	El Paso	79830	TX	3.68	24840	10/19/2010	29.93	-103.45
1987	Tarrant	Tarrant	76040	TX	6.93	58073	10/19/2010	32.82	-97.10
1988	Bexar	Bexar	78204	TX	2.23	13579	10/20/2010	29.40	-98.50
1989	Knox	Parker	76371	TX	45.83	311397	10/20/2010	33.49	-99.66
1990	Dallas	Dallas	75063	TX	9.40	57960	10/20/2010	32.91	-96.98
1991	Tarrant	Tarrant	76021	TX	251.32	1326849	10/20/2010	32.85	-97.13
1992	Travis	Travis	78750	TX	23.52	134652	10/20/2010	30.43	-97.80
1993	Williamson	Williamson	78664	TX	7.20	41075	10/21/2010	30.50	-97.66
1994	Wichita	Denton	76309	TX	5.60	52980	10/21/2010	33.90	-98.54
1995	Cherokee	Smith	75785	TX	1.54	9500	10/22/2010	31.75	-95.18
1996	Tarrant	Tarrant	76108	TX	5.88	49274	10/22/2010	32.78	-97.55
1997	Dallas	Dallas	75115	TX	66.24	150000	10/22/2010	32.60	-96.86
1998	Collin	Collin	75093	TX	3.68	20200	10/27/2010	33.04	-96.80
1999	Travis	Travis	78731	TX	8.51	43265	10/28/2010	30.35	-97.77
2000	Dallas	Dallas	75050	TX	100.80		10/29/2010	32.78	-97.02

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2001	Tarrant	Tarrant	76109	TX	6.44	39975	11/1/2010	32.70	-97.38
2002	Bexar	Bexar	78240	TX	5.25	28694	11/1/2010	29.53	-98.61
2003	Bexar	Bexar	78251	TX	2.03	11539	11/1/2010	29.47	-98.68
2004	Bexar	Bexar	78236	TX	10.80	48549	11/1/2010	29.39	-98.61
2005	Comal	Comal	78163	TX	9.00	47458	11/1/2010	29.77	-98.51
2006	Gregg	Gregg	75601	TX	76.50	297655	11/1/2010	32.51	-94.72
2007	Travis	Travis	78723	TX	6.11	30542	11/1/2010	30.31	-97.68
2008	Bexar	Bexar	78217	TX	6.20	36907	11/2/2010	29.54	-98.42
2009	Bexar	Bexar	78211	TX	3.44	24403	11/2/2010	29.35	-98.57
2010	Bexar	Bexar	78109	TX	3.04	25600	11/2/2010	29.47	-98.30
2011	Bexar	Bexar	78209	TX	9.45	58150	11/2/2010	29.49	-98.45
2012	Brewster	El Paso	79830	TX	2.35	12820	11/2/2010	29.93	-103.45
2013	Collin	Collin	75002	TX	3.96	21712	11/2/2010	33.09	-96.61
2014	Dallas	Dallas	75230	TX	4.30	36034	11/3/2010	32.90	-96.80
2015	Collin	Collin	75287	TX	6.02	50448	11/3/2010	33.00	-96.84
2016	Denton	Denton	75007	TX	3.36	28157	11/3/2010	33.01	-96.89
2017	Denton	Denton	76262	TX	8.39	70266	11/3/2010	33.02	-97.23
2018	Tarrant	Tarrant	76179	TX	10.08	84471	11/3/2010	32.92	-97.46
2019	Parker	Parker	76008	TX	10.08	90504	11/3/2010	32.69	-97.63
2020	Tarrant	Tarrant	76054	TX	4.73	39637	11/5/2010	32.86	-97.18
2021	Tarrant	Tarrant	76034	TX	10.08	84470	11/5/2010	32.89	-97.15
2022	Tarrant	Tarrant	76137	TX	7.56	63353	11/5/2010	32.85	-97.30
2023	Dallas	Dallas	75052	TX	10.08	84470	11/5/2010	32.68	-97.03
2024	Tarrant	Tarrant	76123	TX	5.18	43442	11/5/2010	32.62	-97.40
2025	Bexar	Bexar	78209	TX	3.96	22123	11/8/2010	29.49	-98.45
2026	Bexar	Bexar	78255	TX	5.40	27052	11/8/2010	29.66	-98.67
2027	Bexar	Bexar	78223	TX	4.50	21797	11/8/2010	29.30	-98.41
2028	Bexar	Bexar	78261	TX	10.11	44513	11/9/2010	29.70	-98.41
2029	Collin	Collin	75002	TX	6.84	38870	11/9/2010	33.09	-96.61
2030	Collin	Collin	75075	TX	9.89	65039	11/10/2010	33.02	-96.74
2031	Collin	Collin	75075	TX	1.32	9729	11/10/2010	33.02	-96.74
2032	Erath	Hood	76401	TX	10.68	54710	11/11/2010	32.31	-98.27
2033	Dallas	Dallas	75234	TX	9.45	79191	11/11/2010	32.92	-96.89
2034	Tarrant	Tarrant	76054	TX	5.16	43241	11/11/2010	32.86	-97.18
2035	Dallas	Dallas	75081	TX	7.56	63353	11/11/2010	32.96	-96.70
2036	Tarrant	Tarrant	76018	TX	8.60	72068	11/11/2010	32.67	-97.08
2037	Tarrant	Tarrant	76112	TX	10.32	86482	11/11/2010	32.75	-97.21
2038	Dallas	Dallas	75149	TX	3.78	31676	11/11/2010	32.76	-96.59
2039	Dallas	Dallas	75205	TX	6.30	41641	11/11/2010	32.83	-96.80
2040	El Paso	El Paso	79925	TX	2.20	15400	11/12/2010	31.78	-106.36

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2041	Tarrant	Tarrant	76001	TX	9.89	82878	11/12/2010	32.63	-97.15
2042	Collin	Collin	75002	TX	1.05	7751	11/12/2010	33.09	-96.61
2043	Wichita	Denton	76309	TX	7.84	49753	11/15/2010	33.90	-98.54
2044	Bell	Williamson	76513	TX	3.74	29985	11/15/2010	31.07	-97.50
2045	Travis	Travis	78727	TX	4.73	25114	11/16/2010	30.43	-97.71
2046	Comal	Comal	78132	TX	11.04	48342	11/17/2010	29.74	-98.20
2047	Comal	Comal	78266	TX	23.76	209773	11/17/2010	29.63	-98.32
2048	Bexar	Bexar	78258	TX	6.65	36425	11/17/2010	29.65	-98.47
2049	Bowie	Upshur	75501	TX	2.88	16958	11/17/2010	33.39	-94.13
2050	Dallas	Dallas	75051	TX	17.82	89100	11/18/2010	32.73	-96.99
2051	Tarrant	Tarrant	76126	TX	6.09	51034	11/18/2010	32.65	-97.50
2052	Collin	Collin	75023	TX	5.88	49274	11/18/2010	33.05	-96.73
2053	Tarrant	Tarrant	76148	TX	8.40	70392	11/18/2010	32.86	-97.25
2054	Dallas	Dallas	75051	TX	11.88	59400	11/18/2010	32.73	-96.99
2055	Dallas	Dallas	75051	TX	17.82	89100	11/19/2010	32.73	-96.99
2056	Dallas	Dallas	75019	TX	3.96	22596	11/23/2010	32.96	-97.00
2057	Bexar	Bexar	78245	TX	7.82	35593	11/24/2010	29.40	-98.74
2058	Bexar	Bexar	78217	TX	8.40	65594	11/24/2010	29.54	-98.42
2059	Bexar	Bexar	78261	TX	6.03	36000	11/24/2010	29.70	-98.41
2060	Bexar	Bexar	78261	TX	2.03	11539	11/24/2010	29.70	-98.41
2061	Denton	Denton	76210	TX	99.84	459955	11/24/2010	33.14	-97.08
2062	Parker	Parker	76087	TX	6.09	51034	11/29/2010	32.68	-97.81
2063	Presidio	El Paso	79843	TX	5.46	31000	11/30/2010	30.27	-104.47
2064	Nolan	Hood	79556	TX	10.12	53000	11/30/2010	32.42	-100.39
2065	Williamson	Williamson	78729	TX	10.80		11/30/2010	30.45	-97.76
2066	Montgomery	Montgomery	77304	TX	4.20	22590	12/1/2010	30.33	-95.53
2067	Tom Green	Williamson	76934	TX	9.66	38000	12/1/2010	31.61	-100.69
2068	Tom Green	Williamson	76901	TX	9.66	38000	12/1/2010	31.60	-100.57
2069	Travis	Travis	78735	TX	10.50	58681	12/2/2010	30.26	-97.86
2070	Bexar	Bexar	78244	TX	5.25	25183	12/3/2010	29.47	-98.35
2071	Bexar	Bexar	78255	TX	3.53	14801	12/3/2010	29.66	-98.67
2072	Comal	Comal	78266	TX	17.30	88597	12/3/2010	29.63	-98.32
2073	Bexar	Bexar	78244	TX	39.60	239002	12/3/2010	29.47	-98.35
2074	Bexar	Bexar	78216	TX	6.29	31945	12/3/2010	29.55	-98.50
2075	Clay	Parker	76357	TX	2.82	22900	12/3/2010	34.08	-98.20
2076	Hamilton	Hood	76531	TX	2.64	22550	12/4/2010	31.68	-98.18
2077	Bexar	Bexar	78023	TX	11.96	54556	12/6/2010	29.62	-98.73
2078	El Paso	El Paso	79932	TX	5.24	34622	12/6/2010	31.89	-106.62
2079	Tarrant	Tarrant	76021	TX	6.93	58073	12/6/2010	32.85	-97.13
2080	Travis	Travis	78745	TX	6.29	25573	12/6/2010	30.21	-97.80

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2081	Dallas	Dallas	75048	TX	2.03	7955	12/6/2010	32.97	-96.59
2082	Johnson	Johnson	76084	TX	10.13	53303	12/7/2010	32.44	-97.10
2083	Collin	Collin	75023	TX	2.10	11525	12/7/2010	33.05	-96.73
2084	Travis	Travis	78738	TX	6.48	30803	12/8/2010	30.31	-97.98
2085	El Paso	El Paso	79932	TX	10.47	66400	12/8/2010	31.90	-106.64
2086	Tarrant	Tarrant	76248	TX	2.00	13395	12/9/2010	32.93	-97.23
2087	El Paso	El Paso	79912	TX	10.34	60749	12/10/2010	31.86	-106.52
2088	Dallas	Dallas	75019	TX	5.59	46844	12/10/2010	32.96	-97.00
2089	Tarrant	Tarrant	76034	TX	9.46	79275	12/10/2010	32.89	-97.15
2090	Dallas	Dallas	75060	TX	5.46	45755	12/10/2010	32.80	-96.95
2091	Tarrant	Tarrant	76021	TX	5.59	46844	12/10/2010	32.85	-97.13
2092	Bexar	Bexar	78247	TX	4.14	20493	12/13/2010	29.59	-98.41
2093	Bexar	Bexar	78201	TX	6.90	44110	12/13/2010	29.46	-98.52
2094	Bexar	Bexar	78247	TX	53.36	243984	12/17/2010	29.59	-98.41
2095	Travis	Travis	78756	TX	3.04	17300	12/21/2010	30.32	-97.74
2096	Rockwall	Rockwall	75189	TX	2.82	16900	12/22/2010	32.94	-96.30
2097	Parker	Parker	76087	TX	5.22	38200	12/22/2010	32.61	-97.83
2098	Bexar	Bexar	78255	TX	11.28	53917	12/23/2010	29.66	-98.67
2099	Comal	Comal	78163	TX	3.96	22383	12/23/2010	29.77	-98.51
2100	Bexar	Bexar	78259	TX	3.90	16866	12/23/2010	29.62	-98.43
2101	Bexar	Bexar	78232	TX	4.20	26235	12/27/2010	29.59	-98.46
2102	Travis	Travis	78732	TX	6.66	29980	12/27/2010	30.38	-97.90
2103	Bexar	Bexar	78216	TX	7.00	36532	12/28/2010	29.55	-98.50
2104	Titus	Upshur	75455	TX	80.50		12/28/2010	33.15	-94.97
2105	Bexar	Bexar	78212	TX	22.77	124641	12/28/2010	29.46	-98.50
2106	Denton	Denton	75007	TX	1.26	11151	12/28/2010	33.01	-96.89
2107	Orange	Orange	77632	TX	6.00	30000	12/28/2010	30.18	-93.76
2108	Bexar	Bexar	78232	TX	6.30	30355	12/29/2010	29.59	-98.46
2109	Bexar	Bexar	78209	TX	4.90	30147	12/29/2010	29.49	-98.45
2110	Bexar	Bexar	78209	TX	4.86	23204	12/29/2010	29.49	-98.45
2111	Bexar	Bexar	78148	TX	6.00	32704	12/30/2010	29.55	-98.30
2112	Bexar	Bexar	78109	TX	3.29	24500	12/30/2010	29.47	-98.30
2113	Bexar	Bexar	78109	TX	8.64	42149	12/30/2010	29.47	-98.30
2114	Travis	Travis	78736	TX	6.66	26403	1/3/2011	30.25	-97.95
2115	Travis	Travis	78748	TX	3.68	20082	1/4/2011	30.17	-97.82
2116	Brewster	El Paso	79830	TX	50.83	394507	1/7/2011	29.93	-103.45
2117	Brewster	El Paso	79830	TX	10.12	80780	1/7/2011	29.93	-103.45
2118	Travis	Travis	78704	TX	5.98	29003	1/7/2011	30.24	-97.77
2119	Brewster	El Paso	79830	TX	2.82	17500	1/10/2011	29.93	-103.45
2120	Travis	Travis	78746	TX	2.96	17574	1/10/2011	30.31	-97.82

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2121	Travis	Travis	78736	TX	4.86	17038	1/10/2011	30.25	-97.95
2122	Travis	Travis	78723	TX	3.33	15473	1/10/2011	30.31	-97.68
2123	Bexar	Bexar	78238	TX	3.78	21618	1/11/2011	29.47	-98.62
2124	Bexar	Bexar	78238	TX	2.30	19354	1/11/2011	29.47	-98.62
2125	Bexar	Bexar	78251	TX	3.87	19988	1/11/2011	29.47	-98.68
2126	Bexar	Bexar	78148	TX	2.16	11408	1/11/2011	29.55	-98.30
2127	Travis	Travis	78723	TX	6.66	31028	1/11/2011	30.31	-97.68
2128	Bexar	Bexar	78223	TX	9.68	48808	1/13/2011	29.30	-98.41
2129	Bexar	Bexar	78223	TX	3.01	24500	1/13/2011	29.30	-98.41
2130	Bexar	Bexar	78260	TX	5.28	28608	1/13/2011	29.69	-98.50
2131	Orange	Orange	77632	TX	6.00	10000	1/13/2011	30.22	-93.80
2132	Henderson	Henderson	75770	TX	5.64	36050	1/17/2011	32.12	-95.67
2133	Jeff Davis	El Paso	79734	TX	9.90	52470	1/17/2011	30.77	-104.01
2134	Montgomery	Montgomery	77385	TX	4.62	18480	1/18/2011	30.20	-95.43
2135	Travis	Travis	78746	TX	6.11	33341	1/19/2011	30.31	-97.82
2136	Travis	Travis	78758	TX	6.35	32151	1/19/2011	30.39	-97.70
2137	El Paso	El Paso	79912	TX	2.30	13857	1/19/2011	31.86	-106.55
2138	Travis	Travis	78759	TX	6.50	30255	1/20/2011	30.40	-97.75
2139	Dallas	Dallas	75235	TX	75.46	349939	1/20/2011	32.83	-96.85
2140	El Paso	El Paso	79903	TX	2.35	14800	1/23/2011	31.79	-106.44
2141	Travis	Travis	78745	TX	6.44	27131	1/25/2011	30.21	-97.80
2142	Young	Parker	76450	TX	10.08	54339	1/27/2011	33.10	-98.62
2143	Bexar	Bexar	78248	TX	5.06	27577	1/31/2011	29.59	-98.53
2144	Comal	Comal	78132	TX	6.11	32591	1/31/2011	29.74	-98.20
2145	Bexar	Bexar	78217	TX	3.15	19693	1/31/2011	29.54	-98.42
2146	Bexar	Bexar	78233	TX	4.14	23050	1/31/2011	29.56	-98.36
2147	Bexar	Bexar	78242	TX	6.23	33051	1/31/2011	29.35	-98.61
2148	Bexar	Bexar	78230	TX	5.28	24266	1/31/2011	29.54	-98.56
2149	Bexar	Bexar	78023	TX	12.22	67155	1/31/2011	29.62	-98.73
2150	Travis	Travis	78704	TX	4.56	21651	1/31/2011	30.24	-97.77
2151	Travis	Travis	78731	TX	3.19	18726	1/31/2011	30.35	-97.77
2152	El Paso	El Paso	79925	TX	5.28	31627	1/31/2011	31.80	-106.36
2153	Travis	Travis	78746	TX	6.58	39480	2/1/2011	30.31	-97.82
2154	El Paso	El Paso	79915	TX	30.00	180000	2/1/2011	31.74	-106.35
2155	Dallas	Dallas	75063	TX	3.53	15525	2/1/2011	32.91	-96.99
2156	El Paso	El Paso	79912	TX	6.16	42134	2/1/2011	31.86	-106.55
2157	El Paso	El Paso	79930	TX	3.76	19910	2/1/2011	31.81	-106.47
2158	El Paso	El Paso	79912	TX	5.24	36278	2/2/2011	31.86	-106.55
2159	El Paso	El Paso	79904	TX	6.08	42525	2/2/2011	31.87	-106.48
2160	El Paso	El Paso	79912	TX	8.10	53865	2/2/2011	31.86	-106.55

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2161	El Paso	El Paso	79932	TX	5.24	34622	2/2/2011	31.89	-106.62
2162	El Paso	El Paso	79934	TX	3.20	19800	2/2/2011	31.98	-106.42
2163	Collin	Collin	75075	TX	6.00	30300	2/4/2011	33.02	-96.74
2164	El Paso	El Paso	79912	TX	3.52	22719	2/7/2011	31.86	-106.55
2165	Bexar	Bexar	78222	TX	59.28	298178	2/8/2011	29.37	-98.39
2166	Bexar	Bexar	78232	TX	7.00	38465	2/8/2011	29.59	-98.46
2167	Dallas	Dallas	75220	TX	10.00	63555	2/8/2011	32.86	-96.87
2168	Bexar	Bexar	78210	TX	1.80	16193	2/10/2011	29.40	-98.47
2169	Bexar	Bexar	78254	TX	3.78	21168	2/10/2011	29.53	-98.78
2170	Bexar	Bexar	78112	TX	5.52	24485	2/10/2011	29.21	-98.39
2171	Bexar	Bexar	78260	TX	33.60	176098	2/10/2011	29.69	-98.50
2172	Bexar	Bexar	78232	TX	9.25	44700	2/10/2011	29.59	-98.46
2173	Bexar	Bexar	78216	TX	200.00	1586948	2/10/2011	29.55	-98.50
2174	Bexar	Bexar	78231	TX	4.14	34795	2/11/2011	29.58	-98.54
2175	Tarrant	Tarrant	76063	TX	5.94	30600	2/14/2011	32.56	-97.14
2176	Travis	Travis	78741	TX	3.80	19896	2/14/2011	30.23	-97.71
2177	Tarrant	Tarrant	76063	TX	5.94	30600	2/14/2011	32.56	-97.14
2178	Denton	Denton	76205	TX	11.13	31000	2/15/2011	33.20	-97.15
2179	Montgomery	Montgomery	77384	TX	5.04	19966	2/15/2011	30.24	-95.49
2180	El Paso	El Paso	79922	TX	4.40	28627	2/15/2011	31.83	-106.58
2181	Travis	Travis	78730	TX	8.05	39390	2/16/2011	30.37	-97.84
2182	El Paso	El Paso	79912	TX	3.96	25542	2/17/2011	31.86	-106.55
2183	Travis	Travis	78723	TX	2.76	15180	2/18/2011	30.31	-97.68
2184	Van Zandt	Henderson	75103	TX	5.16	31020	2/18/2011	32.54	-95.86
2185	El Paso	El Paso	79902	TX	2.14	15530	2/21/2011	31.79	-106.49
2186	El Paso	El Paso	79902	TX	2.64	17595	2/23/2011	31.79	-106.49
2187	Dallas	Dallas	75223	TX	5.40	27615	2/24/2011	32.79	-96.74
2188	Presidio	El Paso	79845	TX	9.80	63700	2/24/2011	29.92	-104.54
2189	Mclennan	Ellis	76707	TX	80.08	332515	2/25/2011	31.56	-97.16
2190	Williamson	Williamson	78664	TX	100.80	485000	2/25/2011	30.50	-97.66
2191	El Paso	El Paso	79924	TX	4.14	21945	2/26/2011	31.90	-106.43
2192	Travis	Travis	78722	TX	200.00		2/28/2011	30.28	-97.72
2193	Dallas	Dallas	75253	TX	10.92	91510	2/28/2011	32.69	-96.59
2194	Cass	Upshur	75563	TX	22.05	85000	2/28/2011	33.02	-94.38
2195	Travis	Travis	78732	TX	6.21	33969	3/1/2011	30.38	-97.89
2196	El Paso	El Paso	79938	TX	5.72	34749	3/1/2011	31.84	-105.92
2197	Bexar	Bexar	78112	TX	7.92	39389	3/2/2011	29.21	-98.39
2198	Travis	Travis	78660	TX	23.04	93390	3/2/2011	30.43	-97.60
2199	Bexar	Bexar	78257	TX	6.90	33189	3/3/2011	29.66	-98.58
2200	Bexar	Bexar	78251	TX	5.98	29375	3/3/2011	29.47	-98.68

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2201	Comal	Comal	78266	TX	8.46	41031	3/3/2011	29.63	-98.32
2202	Bexar	Bexar	78229	TX	5.39	41900	3/3/2011	29.51	-98.58
2203	Bexar	Bexar	78261	TX	11.28	61476	3/3/2011	29.70	-98.41
2204	Bexar	Bexar	78244	TX	2.94	16611	3/3/2011	29.47	-98.35
2205	Travis	Travis	78730	TX	4.56	27808	3/3/2011	30.37	-97.84
2206	Travis	Travis	78704	TX	6.27	27001	3/4/2011	30.25	-97.77
2207	Kendall	Bexar	78006	TX	0.62	2000	3/5/2011	29.84	-98.59
2208	Bexar	Bexar	78244	TX	4.05	27990	3/7/2011	29.47	-98.35
2209	Bexar	Bexar	78217	TX	4.50	22304	3/7/2011	29.54	-98.42
2210	Bexar	Bexar	78202	TX	2.76	15650	3/7/2011	29.43	-98.46
2211	Comal	Comal	78266	TX	7.76	42265	3/7/2011	29.63	-98.32
2212	Bexar	Bexar	78240	TX	4.60	26439	3/7/2011	29.53	-98.61
2213	Bexar	Bexar	78251	TX	3.29	28500	3/7/2011	29.47	-98.68
2214	Bexar	Bexar	78240	TX	9.20	50600	3/7/2011	29.53	-98.61
2215	Bexar	Bexar	78231	TX	2.53	24800	3/7/2011	29.58	-98.54
2216	Bexar	Bexar	78211	TX	4.14	22800	3/7/2011	29.35	-98.57
2217	Bexar	Bexar	78209	TX	7.20	35114	3/8/2011	29.49	-98.45
2218	Cameron	Nueces	78550	TX	72.40		3/10/2011	26.19	-97.70
2219	Travis	Travis	78759	TX	3.33	18072	3/10/2011	30.40	-97.75
2220	El Paso	El Paso	79932	TX	2.25	16928	3/10/2011	31.89	-106.62
2221	Bexar	Bexar	78211	TX	400.00	1615757	3/11/2011	29.35	-98.57
2222	Bexar	Bexar	78148	TX	28.20	134091	3/11/2011	29.55	-98.30
2223	Bexar	Bexar	78232	TX	12.21	58279	3/11/2011	29.59	-98.46
2224	Bexar	Bexar	78249	TX	6.24	32195	3/11/2011	29.57	-98.61
2225	Bexar	Bexar	78148	TX	4.60	21641	3/11/2011	29.55	-98.30
2226	Bexar	Bexar	78248	TX	6.75	29910	3/11/2011	29.59	-98.53
2227	Bexar	Bexar	78232	TX	6.21	38193	3/11/2011	29.59	-98.46
2228	Bexar	Bexar	78023	TX	5.94	32246	3/11/2011	29.62	-98.73
2229	Guadalupe	Guadalupe	78154	TX	21.60	107643	3/11/2011	29.59	-98.28
2230	Bexar	Bexar	78257	TX	8.64	52416	3/11/2011	29.66	-98.58
2231	Bexar	Bexar	78213	TX	6.58	36190	3/11/2011	29.50	-98.52
2232	Bexar	Bexar	78148	TX	6.24	32694	3/11/2011	29.55	-98.30
2233	Travis	Travis	78745	TX	6.48	30096	3/14/2011	30.22	-97.80
2234	El Paso	El Paso	79912	TX	5.28	31930	3/14/2011	31.86	-106.55
2235	Jim Wells	Nueces	78332	TX	10.13	51900	3/15/2011	27.74	-98.09
2236	Grayson	Collin	75021	TX	6.84		3/18/2011	33.74	-96.47
2237	Guadalupe	Guadalupe	78154	TX	74.06		3/21/2011	29.56	-98.27
2238	Denton	Denton	75068	TX	128.80		3/21/2011	33.17	-96.95
2239	Travis	Travis	78735	TX	4.32	20964	3/21/2011	30.26	-97.86
2240	Montgomery	Montgomery	77384	TX	1.26	4500	3/21/2011	30.24	-95.49

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2241	Bexar	Bexar	78251	TX	5.40	28759	3/22/2011	29.47	-98.68
2242	Bexar	Bexar	78217	TX	5.40	29318	3/22/2011	29.54	-98.42
2243	Bexar	Bexar	78260	TX	6.44	27010	3/22/2011	29.69	-98.50
2244	Atascosa	Wilson	78052	TX	9.66	51713	3/22/2011	29.20	-98.77
2245	Bexar	Bexar	78219	TX	16.30	107895	3/22/2011	29.45	-98.39
2246	Bexar	Bexar	78232	TX	33.60	236905	3/22/2011	29.59	-98.46
2247	Bexar	Bexar	78260	TX	11.96	62158	3/22/2011	29.69	-98.50
2248	El Paso	El Paso	79936	TX	6.44	43148	3/22/2011	31.76	-106.29
2249	El Paso	El Paso	79924	TX	4.14	25875	3/22/2011	31.90	-106.43
2250	Travis	Travis	78746	TX	3.50	19250	3/24/2011	30.31	-97.82
2251	Travis	Travis	78731	TX	5.13	27367	3/24/2011	30.35	-97.77
2252	Travis	Travis	78731	TX	5.00	30867	3/24/2011	30.35	-97.77
2253	Hopkins	Hunt	75482	TX	188.50	952739	3/25/2011	33.18	-95.60
2254	Bexar	Bexar	78260	TX	6.44	27010	3/28/2011	29.69	-98.50
2255	Williamson	Williamson	78613	TX	8.33	43548	3/28/2011	30.51	-97.82
2256	El Paso	El Paso	79938	TX	3.24	21000	3/28/2011	31.84	-105.92
2257	Guadalupe	Guadalupe	78154	TX	12.24	96387	3/29/2011	29.59	-98.28
2258	Angelina	Rusk	75901	TX	26.46	134050	3/29/2011	31.34	-94.67
2259	Tarrant	Tarrant	76137	TX	5.46	45755	3/29/2011	32.85	-97.30
2260	Bexar	Bexar	78213	TX	8.10	44500	3/30/2011	29.50	-98.52
2261	Bexar	Bexar	78209	TX	10.50	57712	3/30/2011	29.49	-98.45
2262	Bexar	Bexar	78214	TX	6.44	33810	3/30/2011	29.32	-98.47
2263	Kendall	Bexar	78006	TX	7.20	42469	3/30/2011	29.92	-98.70
2264	Kendall	Bexar	78015	TX	5.20	26884	3/30/2011	29.75	-98.65
2265	Bexar	Bexar	78240	TX	3.08	12147	3/30/2011	29.53	-98.61
2266	Travis	Travis	78744	TX	92.70	516648	3/30/2011	30.20	-97.73
2267	Denton	Denton	76226	TX	6.30	52794	3/30/2011	33.12	-97.16
2268	Dallas	Dallas	75230	TX	7.31	42853	3/30/2011	32.90	-96.79
2269	El Paso	El Paso	79836	TX	5.06	34155	3/30/2011	31.57	-106.19
2270	Bexar	Bexar	78209	TX	4.76	33750	3/31/2011	29.49	-98.45
2271	Bexar	Bexar	78245	TX	3.68	24950	3/31/2011	29.40	-98.74
2272	Atascosa	Wilson	78052	TX	5.40	24590	3/31/2011	29.20	-98.77
2273	Bexar	Bexar	78264	TX	3.60	18832	3/31/2011	29.17	-98.51
2274	Bexar	Bexar	78240	TX	6.24	32195	3/31/2011	29.53	-98.61
2275	Bexar	Bexar	78023	TX	5.24	29960	3/31/2011	29.62	-98.73
2276	Bexar	Bexar	78023	TX	5.22	26960	3/31/2011	29.62	-98.73
2277	Bexar	Bexar	78221	TX	4.32	22034	3/31/2011	29.30	-98.50
2278	Travis	Travis	78741	TX	2.96	12291	3/31/2011	30.23	-97.71
2279	Travis	Travis	78723	TX	3.33		3/31/2011	30.31	-97.68
2280	Travis	Travis	78746	TX	5.74	52240	3/31/2011	30.31	-97.82

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2281	Dallas	Dallas	75041	TX	84.96	893235	3/31/2011	32.88	-96.65
2282	Travis	Travis	78723	TX	6.11	26502	4/1/2011	30.31	-97.68
2283	Dallas	Dallas	75247	TX	10.92	65577	4/1/2011	32.82	-96.88
2284	Hidalgo	Nueces	78596	TX	16.92	111489	4/4/2011	26.17	-97.98
2285	Bexar	Bexar	78249	TX	12.00	69250	4/6/2011	29.57	-98.61
2286	Bexar	Bexar	78209	TX	2.70	15609	4/6/2011	29.49	-98.45
2287	Bexar	Bexar	78251	TX	1.80	11380	4/6/2011	29.47	-98.68
2288	Bexar	Bexar	78242	TX	12.00	70000	4/6/2011	29.35	-98.61
2289	Bexar	Bexar	78209	TX	12.00	70200	4/6/2011	29.49	-98.45
2290	Bexar	Bexar	78254	TX	4.37	24469	4/6/2011	29.53	-98.78
2291	Bexar	Bexar	78240	TX	17.94	99926	4/6/2011	29.53	-98.61
2292	Bexar	Bexar	78216	TX	37.20	193510	4/6/2011	29.55	-98.50
2293	Bexar	Bexar	78209	TX	7.92	44249	4/6/2011	29.49	-98.45
2294	Webb	Nueces	78043	TX	10.12	47554	4/6/2011	27.55	-99.26
2295	El Paso	El Paso	79924	TX	4.52	38289	4/6/2011	31.90	-106.43
2296	El Paso	El Paso	79938	TX	2.07	14302	4/7/2011	31.84	-105.92
2297	El Paso	El Paso	79821	TX	5.32	26600	4/8/2011	31.99	-106.59
2298	Bexar	Bexar	78249	TX	14.58	98422	4/11/2011	29.57	-98.61
2299	Bexar	Bexar	78023	TX	9.45	47264	4/11/2011	29.62	-98.73
2300	El Paso	El Paso	79912	TX	5.06	34206	4/11/2011	31.86	-106.55
2301	Travis	Travis	78721	TX	2.85	14643	4/12/2011	30.27	-97.68
2302	Tarrant	Tarrant	76119	TX	101.66	473401	4/13/2011	32.68	-97.28
2303	Johnson	Johnson	76033	TX	3.68	25576	4/13/2011	32.29	-97.50
2304	Bexar	Bexar	78230	TX	7.38	36075	4/14/2011	29.54	-98.56
2305	Bexar	Bexar	78256	TX	8.28	40312	4/14/2011	29.62	-98.62
2306	Bexar	Bexar	78237	TX	5.40	25900	4/14/2011	29.41	-98.57
2307	Bexar	Bexar	78152	TX	6.90	34500	4/14/2011	29.42	-98.20
2308	Bexar	Bexar	78244	TX	5.76	30017	4/14/2011	29.47	-98.35
2309	Bexar	Bexar	78240	TX	6.12	31500	4/14/2011	29.53	-98.61
2310	Bexar	Bexar	78209	TX	10.80	53500	4/14/2011	29.49	-98.45
2311	Bexar	Bexar	78228	TX	4.60	33900	4/14/2011	29.46	-98.56
2312	Bexar	Bexar	78209	TX	12.42	60858	4/14/2011	29.49	-98.45
2313	Bexar	Bexar	78212	TX	5.50	30751	4/14/2011	29.46	-98.50
2314	Travis	Travis	78704	TX	16.70	71664	4/14/2011	30.25	-97.77
2315	Travis	Travis	78758	TX	1.67		4/14/2011	30.39	-97.70
2316	Travis	Travis	78732	TX	7.77	46233	4/14/2011	30.38	-97.89
2317	Hidalgo	Nueces	78539	TX	8.46	46530	4/14/2011	26.27	-98.19
2318	El Paso	El Paso	79912	TX	3.76	13912	4/15/2011	31.86	-106.55
2319	Bexar	Bexar	78239	TX	2.80	21276	4/18/2011	29.52	-98.36
2320	Bexar	Bexar	78232	TX	18.60	78559	4/19/2011	29.59	-98.46

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2321	Travis	Travis	78733	TX	6.24	30410	4/19/2011	30.33	-97.87
2322	Travis	Travis	78738	TX	6.00	31763	4/19/2011	30.30	-97.97
2323	Bexar	Bexar	78023	TX	8.00	38146	4/20/2011	29.62	-98.73
2324	Bexar	Bexar	78258	TX	5.06	25775	4/20/2011	29.65	-98.47
2325	Bexar	Bexar	78245	TX	7.29	40811	4/20/2011	29.40	-98.74
2326	Bexar	Bexar	78255	TX	11.50	72299	4/20/2011	29.66	-98.67
2327	Bexar	Bexar	78217	TX	5.75	32167	4/20/2011	29.54	-98.42
2328	Montgomery	Montgomery	77365	TX	10.35	43332	4/20/2011	30.12	-95.29
2329	Bexar	Bexar	78263	TX	5.06	23145	4/21/2011	29.36	-98.32
2330	Travis	Travis	78704	TX	6.44	31118	4/21/2011	30.25	-97.77
2331	Travis	Travis	78723	TX	5.55	26365	4/22/2011	30.31	-97.68
2332	Travis	Travis	78723	TX	9.77	36708	4/22/2011	30.31	-97.68
2333	Travis	Travis	78723	TX	3.33	26365	4/22/2011	30.31	-97.68
2334	Comal	Comal	78132	TX	6.18	38405	4/25/2011	29.74	-98.20
2335	Comal	Comal	78163	TX	12.21	60647	4/25/2011	29.77	-98.51
2336	Bexar	Bexar	78258	TX	11.96	67012	4/26/2011	29.65	-98.47
2337	Kendall	Bexar	78015	TX	9.20	47338	4/26/2011	29.75	-98.65
2338	Travis	Travis	78723	TX	6.24	28980	4/26/2011	30.31	-97.68
2339	Bexar	Bexar	78218	TX	39.00	227555	4/27/2011	29.49	-98.39
2340	Travis	Travis	78723	TX	6.11	26365	4/28/2011	30.31	-97.68
2341	Johnson	Johnson	76028	TX	5.46	45755	4/28/2011	32.53	-97.29
2342	Cameron	Nueces	78550	TX	106.08	492492	4/28/2011	26.26	-97.65
2343	Bexar	Bexar	78261	TX	11.96	63110	4/29/2011	29.70	-98.41
2344	Bexar	Bexar	78069	TX	11.04	49901	4/29/2011	29.19	-98.67
2345	Bexar	Bexar	78255	TX	2.20	11485	4/29/2011	29.66	-98.67
2346	Kendall	Bexar	78015	TX	3.52	19139	4/29/2011	29.75	-98.65
2347	Johnson	Johnson	76028	TX	10.08	84470	4/29/2011	32.53	-97.29
2348	Johnson	Johnson	76028	TX	6.93	55301	4/29/2011	32.53	-97.29
2349	Tarrant	Tarrant	76102	TX	9.87		4/30/2011	32.76	-97.32
2350	Travis	Travis	78701	TX	105.28		4/30/2011	30.27	-97.74
2351	Travis	Travis	78701	TX	28.20		4/30/2011	30.27	-97.74
2352	Tarrant	Tarrant	76115	TX	552.72		5/1/2011	32.68	-97.34
2353	Bexar	Bexar	78217	TX	5.04	32500	5/2/2011	29.54	-98.42
2354	Travis	Travis	78745	TX	2.86	27539	5/2/2011	30.22	-97.80
2355	Bexar	Bexar	78261	TX	2.17	11539	5/3/2011	29.70	-98.41
2356	Bexar	Bexar	78209	TX	1.00	9658	5/3/2011	29.49	-98.45
2357	Medina	Bexar	78016	TX	11.20	54870	5/3/2011	29.19	-98.95
2358	Jim Wells	Nueces	78332	TX	10.13	51900	5/4/2011	27.74	-98.09
2359	El Paso	El Paso	79932	TX	5.28	36245	5/4/2011	31.89	-106.62
2360	Denton	Denton	76247	TX	8.28	46386	5/5/2011	33.11	-97.33

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2361	Travis	Travis	78723	TX	4.56	20061	5/6/2011	30.31	-97.68
2362	Bexar	Bexar	78259	TX	4.86	25770	5/10/2011	29.62	-98.43
2363	Travis	Travis	78723	TX	6.11	26365	5/10/2011	30.31	-97.68
2364	Bexar	Bexar	78261	TX	3.68	15293	5/11/2011	29.70	-98.41
2365	Bexar	Bexar	78215	TX	39.00	203955	5/11/2011	29.44	-98.48
2366	Bexar	Bexar	78224	TX	4.60	23816	5/11/2011	29.32	-98.54
2367	Bexar	Bexar	78209	TX	1.00	9658	5/11/2011	29.49	-98.45
2368	Real	Bexar	78873	TX	9.60	33024	5/11/2011	29.85	-99.68
2369	El Paso	El Paso	79912	TX	8.97	57815	5/11/2011	31.86	-106.55
2370	El Paso	El Paso	79915	TX	19.68	112176	5/12/2011	31.74	-106.38
2371	Bexar	Bexar	78254	TX	5.28	27878	5/16/2011	29.53	-98.78
2372	Bexar	Bexar	78211	TX	3.43	25580	5/16/2011	29.35	-98.57
2373	Atascosa	Wilson	78052	TX	2.82	23900	5/16/2011	29.20	-98.77
2374	El Paso	El Paso	79902	TX	6.16	34603	5/16/2011	31.79	-106.49
2375	Bexar	Bexar	78258	TX	6.51	48750	5/17/2011	29.65	-98.47
2376	Orange	Orange	77611	TX	9.66	37258	5/18/2011	30.00	-93.81
2377	Bexar	Bexar	78259	TX	6.44	34112	5/19/2011	29.62	-98.43
2378	Bexar	Bexar	78216	TX	3.29	19700	5/19/2011	29.55	-98.50
2379	Bexar	Bexar	78249	TX	39.60	200000	5/19/2011	29.57	-98.61
2380	Bexar	Bexar	78232	TX	4.95	23601	5/19/2011	29.59	-98.46
2381	Travis	Travis	78744	TX	4.14	22750	5/20/2011	30.20	-97.73
2382	Bexar	Bexar	78247	TX	9.20	48259	5/23/2011	29.59	-98.41
2383	Bexar	Bexar	78152	TX	11.66	52426	5/23/2011	29.42	-98.20
2384	Bexar	Bexar	78210	TX	5.98	30777	5/23/2011	29.40	-98.47
2385	Bexar	Bexar	78247	TX	5.98	32107	5/23/2011	29.59	-98.41
2386	Travis	Travis	78723	TX	4.07		5/23/2011	30.31	-97.68
2387	Travis	Travis	78734	TX	6.36	46229	5/23/2011	30.37	-97.95
2388	Kendall	Bexar	78015	TX	41.20	264000	5/24/2011	29.75	-98.65
2389	Bexar	Bexar	78259	TX	4.60	26172	5/24/2011	29.62	-98.43
2390	Bexar	Bexar	78251	TX	3.15	21748	5/24/2011	29.47	-98.68
2391	Travis	Travis	78746	TX	6.44	28269	5/24/2011	30.31	-97.82
2392	Williamson	Williamson	78717	TX	6.72	31254	5/24/2011	30.49	-97.77
2393	Montague	Denton	76255	TX	3.85	23287	5/24/2011	33.78	-97.74
2394	Collin	Collin	75024	TX	16.20	129600	5/27/2011	33.08	-96.81
2395	El Paso	El Paso	79912	TX	3.29	18924	5/27/2011	31.86	-106.55
2396	Dallas	Dallas	75048	TX	1.18	4604	5/28/2011	32.97	-96.59
2397	Bexar	Bexar	78229	TX	181.30	871507	5/31/2011	29.51	-98.58
2398	Kendall	Bexar	78015	TX	4.60	29154	5/31/2011	29.75	-98.65
2399	Bexar	Bexar	78221	TX	7.20	36381	5/31/2011	29.30	-98.50
2400	Bexar	Bexar	78253	TX	4.60	27490	5/31/2011	29.47	-98.81

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2401	Tarrant	Tarrant	76137	TX	5.06	40379	5/31/2011	32.85	-97.30
2402	Travis	Travis	78758	TX	200.00	1081081	6/2/2011	30.39	-97.72
2403	Travis	Travis	78704	TX	1.92	12028	6/2/2011	30.25	-97.77
2404	Travis	Travis	78745	TX	6.44	33086	6/2/2011	30.22	-97.80
2405	Bexar	Bexar	78232	TX	3.76	26800	6/3/2011	29.59	-98.46
2406	Bexar	Bexar	78245	TX	4.70	32900	6/3/2011	29.40	-98.74
2407	Bexar	Bexar	78239	TX	4.35	26910	6/3/2011	29.52	-98.36
2408	Bexar	Bexar	78259	TX	2.90	13786	6/3/2011	29.62	-98.43
2409	Bexar	Bexar	78240	TX	11.44	104610	6/3/2011	29.53	-98.61
2410	Bexar	Bexar	78216	TX	3.01	22800	6/3/2011	29.55	-98.50
2411	Montgomery	Montgomery	77302	TX	8.28	34162	6/5/2011	30.21	-95.33
2412	Bexar	Bexar	78218	TX	4.70	32900	6/6/2011	29.49	-98.39
2413	Bexar	Bexar	78208	TX	41.40	204102	6/7/2011	29.44	-98.46
2414	Travis	Travis	78745	TX	3.84		6/7/2011	30.22	-97.80
2415	Travis	Travis	78704	TX	7.68	53292	6/7/2011	30.25	-97.77
2416	Travis	Travis	78704	TX	4.08	19509	6/7/2011	30.25	-97.77
2417	Travis	Travis	78704	TX	4.17	19509	6/7/2011	30.25	-97.77
2418	Travis	Travis	78704	TX	4.17	18923	6/7/2011	30.25	-97.77
2419	Travis	Travis	78704	TX	5.04	23328	6/7/2011	30.25	-97.77
2420	Travis	Travis	78704	TX	5.04	23328	6/7/2011	30.25	-97.77
2421	Travis	Travis	78745	TX	7.15	45211	6/7/2011	30.22	-97.80
2422	El Paso	El Paso	79912	TX	16.95	161201	6/7/2011	31.86	-106.55
2423	El Paso	El Paso	79903	TX	9.88	57000	6/7/2011	31.79	-106.44
2424	Tyler	Hardin	77664	TX	10.80	54700	6/9/2011	30.59	-94.36
2425	Bexar	Bexar	78261	TX	6.11	32591	6/10/2011	29.70	-98.41
2426	Bexar	Bexar	78239	TX	6.90	33465	6/10/2011	29.52	-98.36
2427	Bexar	Bexar	78212	TX	2.00	12784	6/13/2011	29.46	-98.50
2428	Bexar	Bexar	78214	TX	5.76	30012	6/13/2011	29.32	-98.47
2429	Bexar	Bexar	78233	TX	3.45	14801	6/13/2011	29.56	-98.36
2430	El Paso	El Paso	79936	TX	2.35	12455	6/13/2011	31.76	-106.29
2431	Travis	Travis	78731	TX	6.66	30077	6/14/2011	30.35	-97.77
2432	Travis	Travis	78746	TX	6.16	37748	6/14/2011	30.31	-97.82
2433	El Paso	El Paso	79936	TX	2.82	16638	6/14/2011	31.76	-106.29
2434	Hidalgo	Nueces	78539	TX	3.06	15510	6/15/2011	26.27	-98.19
2435	Travis	Travis	78750	TX	3.01	20198	6/16/2011	30.43	-97.80
2436	Williamson	Williamson	78664	TX	5.00	19174	6/16/2011	30.50	-97.66
2437	Harrison	Harrison	75672	TX	7.59	36596	6/16/2011	32.42	-94.27
2438	Bexar	Bexar	78213	TX	8.28	42289	6/17/2011	29.50	-98.52
2439	Bexar	Bexar	78240	TX	4.32	33328	6/17/2011	29.53	-98.61
2440	Travis	Travis	78723	TX	4.80	20363	6/17/2011	30.31	-97.68

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2441	Travis	Travis	78723	TX	4.17	16703	6/17/2011	30.31	-97.68
2442	El Paso	El Paso	79912	TX	7.59	53510	6/17/2011	31.86	-106.55
2443	Bexar	Bexar	78259	TX	5.55	28071	6/20/2011	29.62	-98.43
2444	Bexar	Bexar	78259	TX	2.80	27007	6/20/2011	29.62	-98.43
2445	Bexar	Bexar	78240	TX	4.32	33328	6/20/2011	29.53	-98.61
2446	Comal	Comal	78266	TX	2.76	19082	6/20/2011	29.63	-98.32
2447	Bexar	Bexar	78232	TX	4.70	28300	6/21/2011	29.59	-98.46
2448	Bexar	Bexar	78250	TX	4.60	23690	6/21/2011	29.50	-98.67
2449	Bexar	Bexar	78222	TX	5.75	28191	6/22/2011	29.37	-98.39
2450	Travis	Travis	78746	TX	6.66	31970	6/23/2011	30.31	-97.82
2451	Montgomery	Montgomery	77318	TX	10.00	51744	6/23/2011	30.43	-95.54
2452	Travis	Travis	78748	TX	3.53	17123	6/27/2011	30.17	-97.82
2453	Travis	Travis	78723	TX	19.40	205675	6/28/2011	30.31	-97.68
2454	Tarrant	Tarrant	76126	TX	9.72	50890	6/28/2011	32.65	-97.50
2455	Tarrant	Tarrant	76112	TX	5.06	36271	6/29/2011	32.75	-97.21
2456	Tarrant	Tarrant	76135	TX	5.06	38143	6/29/2011	32.84	-97.47
2457	Tarrant	Tarrant	76112	TX	50.83	300428	6/29/2011	32.75	-97.21
2458	Tarrant	Tarrant	76109	TX	50.83	309788	6/29/2011	32.70	-97.38
2459	Tarrant	Tarrant	76133	TX	5.06	35023	6/29/2011	32.65	-97.38
2460	Travis	Travis	78723	TX	5.00	21251	6/30/2011	30.31	-97.68
2461	Travis	Travis	78723	TX	3.33	15071	6/30/2011	30.31	-97.68
2462	Travis	Travis	78749	TX	4.80	20447	6/30/2011	30.22	-97.86
2463	Colorado	Fort Bend	77434	TX	6.44	32099	6/30/2011	29.52	-96.34
2464	Nolan	Hood	79556	TX	19.00		7/1/2011	32.42	-100.39
2465	El Paso	El Paso	79901	TX	20.13	114000	7/1/2011	31.76	-106.49
2466	El Paso	El Paso	79904	TX	20.13	114000	7/1/2011	31.83	-106.43
2467	Bexar	Bexar	78258	TX	6.44	32452	7/5/2011	29.65	-98.47
2468	Bexar	Bexar	78209	TX	5.52	32568	7/5/2011	29.49	-98.45
2469	Bexar	Bexar	78259	TX	4.28	24437	7/5/2011	29.62	-98.43
2470	Travis	Travis	78704	TX	6.37	28553	7/5/2011	30.25	-97.77
2471	Travis	Travis	78723	TX	5.00	20857	7/5/2011	30.31	-97.68
2472	Bexar	Bexar	78230	TX	5.28	31605	7/6/2011	29.54	-98.56
2473	Aransas	San Patricio	78382	TX	4.92	19328	7/6/2011	28.09	-97.07
2474	Travis	Travis	78721	TX	3.92	18311	7/6/2011	30.27	-97.68
2475	Lamar	Hunt	75460	TX	99.82	495685	7/7/2011	33.60	-95.62
2476	Cameron	Nueces	78550	TX	72.38	649904	7/7/2011	26.26	-97.65
2477	Cameron	Nueces	78586	TX	243.46	1826292	7/7/2011	26.10	-97.63
2478	Montgomery	Montgomery	77384	TX	9.66	54438	7/7/2011	30.24	-95.49
2479	El Paso	El Paso	79906	TX	20.13	363190	7/7/2011	31.81	-106.41
2480	El Paso	El Paso	79901	TX	20.13	361903	7/7/2011	31.76	-106.48

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2481	Travis	Travis	78723	TX	5.92	26983	7/11/2011	30.31	-97.68
2482	Brewster	El Paso	79830	TX	1.84	12880	7/11/2011	29.72	-103.22
2483	Bexar	Bexar	78023	TX	5.17	45000	7/13/2011	29.62	-98.73
2484	Dallas	Dallas	75104	TX	152.80		7/13/2011	32.59	-96.95
2485	El Paso	El Paso	79938	TX	2.35	14805	7/13/2011	31.84	-105.92
2486	Travis	Travis	78723	TX	11.07	48048	7/14/2011	30.31	-97.68
2487	Travis	Travis	78723	TX	3.43	29677	7/14/2011	30.31	-97.68
2488	Travis	Travis	78723	TX	4.44	25373	7/14/2011	30.31	-97.68
2489	Travis	Travis	78723	TX	9.18	29373	7/14/2011	30.31	-97.68
2490	Travis	Travis	78723	TX	1.48		7/14/2011	30.31	-97.68
2491	Travis	Travis	78723	TX	6.37	29228	7/14/2011	30.31	-97.68
2492	Travis	Travis	78723	TX	6.66	29198	7/14/2011	30.31	-97.68
2493	Montgomery	Montgomery	77381	TX	4.14	15110	7/14/2011	30.17	-95.51
2494	Bexar	Bexar	78023	TX	4.70	43113	7/15/2011	29.62	-98.73
2495	Guadalupe	Guadalupe	78154	TX	5.55	29502	7/15/2011	29.59	-98.28
2496	Galveston	Galveston	77546	TX	4.60	18572	7/15/2011	29.54	-95.20
2497	Bexar	Bexar	78233	TX	22.77	107399	7/20/2011	29.56	-98.36
2498	Bexar	Bexar	78250	TX	1.08	4325	7/20/2011	29.50	-98.67
2499	Travis	Travis	78723	TX	6.37	15502	7/21/2011	30.31	-97.68
2500	Travis	Travis	78723	TX	3.19	29342	7/21/2011	30.31	-97.68
2501	Denton	Denton	75056	TX	10.64	69230	7/21/2011	33.08	-96.91
2502	El Paso	El Paso	79902	TX	4.14	28773	7/21/2011	31.79	-106.49
2503	Kendall	Bexar	78015	TX	82.30	575957	7/22/2011	29.75	-98.65
2504	Grayson	Collin	75092	TX	7.36	43245	7/22/2011	33.68	-96.73
2505	Travis	Travis	78741	TX	170.45		7/25/2011	30.23	-97.71
2506	Travis	Travis	78723	TX	9.44	26335	7/26/2011	30.31	-97.68
2507	Travis	Travis	78723	TX	6.37	28430	7/26/2011	30.31	-97.68
2508	Travis	Travis	78723	TX	1.48	22940	7/26/2011	30.31	-97.68
2509	Travis	Travis	78723	TX	6.13	23090	7/26/2011	30.31	-97.68
2510	Travis	Travis	78723	TX	6.11	27500	7/26/2011	30.31	-97.68
2511	Travis	Travis	78721	TX	5.15	23217	7/26/2011	30.27	-97.68
2512	Tarrant	Tarrant	76063	TX	10.29	105000	7/26/2011	32.56	-97.14
2513	Dallas	Dallas	75115	TX	10.29	105000	7/26/2011	32.60	-96.86
2514	Tarrant	Tarrant	76021	TX	10.29	105000	7/27/2011	32.85	-97.13
2515	Travis	Travis	78723	TX	5.76	25375	7/28/2011	30.31	-97.68
2516	Hidalgo	Nueces	78596	TX	9.20	57736	7/28/2011	26.17	-97.98
2517	Tarrant	Tarrant	76102	TX	98.70		7/31/2011	32.76	-97.32
2518	Travis	Travis	78723	TX	5.64	24828	8/2/2011	30.31	-97.68
2519	Travis	Travis	78723	TX	4.66	22397	8/2/2011	30.31	-97.68
2520	Travis	Travis	78723	TX	5.15	23722	8/2/2011	30.31	-97.68

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2521	Bexar	Bexar	78254	TX	3.50	18673	8/3/2011	29.53	-98.78
2522	Bexar	Bexar	78023	TX	6.11	44569	8/3/2011	29.62	-98.73
2523	Bexar	Bexar	78211	TX	2.94	22080	8/3/2011	29.35	-98.57
2524	Travis	Travis	78723	TX	4.17	20024	8/4/2011	30.31	-97.68
2525	Travis	Travis	78723	TX	5.88	26818	8/4/2011	30.31	-97.68
2526	Travis	Travis	78723	TX	6.13	28260	8/4/2011	30.31	-97.68
2527	Travis	Travis	78723	TX	6.37	29031	8/4/2011	30.31	-97.68
2528	Bexar	Bexar	78253	TX	8.40	45540	8/5/2011	29.47	-98.81
2529	Bexar	Bexar	78023	TX	7.20	36000	8/9/2011	29.62	-98.73
2530	Bexar	Bexar	78222	TX	8.28	41262	8/9/2011	29.37	-98.39
2531	Bexar	Bexar	78209	TX	3.29	21097	8/9/2011	29.49	-98.45
2532	Bexar	Bexar	78233	TX	10.81	54567	8/9/2011	29.56	-98.36
2533	Comal	Comal	78266	TX	7.00	57359	8/9/2011	29.63	-98.32
2534	Bexar	Bexar	78255	TX	5.52	25890	8/9/2011	29.66	-98.67
2535	Orange	Orange	77611	TX	3.24	15000	8/9/2011	30.04	-93.81
2536	Travis	Travis	78723	TX	5.92	25373	8/9/2011	30.31	-97.68
2537	Travis	Travis	78723	TX	5.76	26335	8/9/2011	30.31	-97.68
2538	Dallas	Dallas	75180	TX	10.29	105000	8/9/2011	32.72	-96.62
2539	Dallas	Dallas	75230	TX	7.48	41794	8/9/2011	32.90	-96.79
2540	Tarrant	Tarrant	76248	TX	10.12		8/10/2011	32.93	-97.23
2541	Orange	Orange	77611	TX	3.24	11500	8/10/2011	30.00	-93.81
2542	El Paso	El Paso	79927	TX	7.13	45728	8/10/2011	31.64	-106.28
2543	Comal	Comal	78163	TX	5.55	35600	8/11/2011	29.77	-98.51
2544	Travis	Travis	78723	TX	5.13	28810	8/11/2011	30.31	-97.68
2545	Travis	Travis	78738	TX	15.19	73023	8/11/2011	30.30	-97.97
2546	Harris	Harris	77429	TX	1.11		8/15/2011	30.01	-95.67
2547	Dallas	Dallas	75235	TX	299.52	1813647	8/15/2011	32.83	-96.85
2548	Dallas	Dallas	75006	TX	3.60	24734	8/15/2011	32.97	-96.89
2549	Jeff Davis	El Paso	79734	TX	3.68	25760	8/17/2011	30.77	-104.01
2550	Montgomery	Montgomery	77357	TX	29.40	147311	8/17/2011	30.16	-95.20
2551	Montgomery	Montgomery	77301	TX	29.40	142766	8/17/2011	30.31	-95.43
2552	Travis	Travis	78733	TX	4.23	21786	8/18/2011	30.33	-97.87
2553	Tarrant	Tarrant	76051	TX	6.21	60934	8/18/2011	32.95	-97.07
2554	Collin	Collin	75069	TX	52.17		8/19/2011	33.16	-96.59
2555	Travis	Travis	78723	TX	7.11	26265	8/19/2011	30.31	-97.68
2556	Travis	Travis	78723	TX	2.94		8/19/2011	30.31	-97.68
2557	Travis	Travis	78723	TX	3.67	26931	8/19/2011	30.31	-97.68
2558	Travis	Travis	78723	TX	7.34	28810	8/19/2011	30.31	-97.68
2559	Travis	Travis	78723	TX	4.66	18360	8/19/2011	30.31	-97.68
2560	Travis	Travis	78723	TX	8.33	51143	8/19/2011	30.31	-97.68

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2561	Travis	Travis	78723	TX	6.13	28253	8/19/2011	30.31	-97.68
2562	Archer	Parker	76366	TX	10.12	57000	8/19/2011	33.71	-98.79
2563	Archer	Parker	76366	TX	10.12	58000	8/19/2011	33.71	-98.79
2564	Tom Green	Williamson	76904	TX	9.87	40750	8/19/2011	31.26	-100.30
2565	Travis	Travis	78723	TX	5.70	24379	8/22/2011	30.31	-97.68
2566	Travis	Travis	78723	TX	6.27	26853	8/22/2011	30.31	-97.68
2567	Dallas	Dallas	75104	TX	10.29	105000	8/23/2011	32.59	-96.99
2568	Webb	Nueces	78040	TX	35.00	245000	8/23/2011	27.52	-99.51
2569	Orange	Orange	77632	TX	6.58	41515	8/23/2011	30.22	-93.80
2570	Bexar	Bexar	78254	TX	5.52	24918	8/24/2011	29.53	-98.78
2571	Bexar	Bexar	78232	TX	5.52	25658	8/24/2011	29.59	-98.46
2572	Bexar	Bexar	78203	TX	20.60	124005	8/24/2011	29.41	-98.45
2573	Bexar	Bexar	78250	TX	4.10	21114	8/24/2011	29.50	-98.67
2574	Travis	Travis	78723	TX	5.13	27373	8/25/2011	30.31	-97.68
2575	Travis	Travis	78723	TX	6.37	28401	8/25/2011	30.31	-97.68
2576	Travis	Travis	78736	TX	6.21	36215	8/25/2011	30.25	-97.95
2577	Bosque	Hood	76634	TX	8.28	48171	8/25/2011	31.84	-97.55
2578	Grayson	Collin	75491	TX	5.64	33276	8/26/2011	33.48	-96.39
2579	Travis	Travis	78723	TX	5.76	25373	8/26/2011	30.31	-97.68
2580	Travis	Travis	78723	TX	3.19		8/26/2011	30.31	-97.68
2581	Travis	Travis	78723	TX	6.13	25836	8/26/2011	30.31	-97.68
2582	Travis	Travis	78723	TX	8.09	49841	8/26/2011	30.31	-97.68
2583	Travis	Travis	78723	TX	5.15	23578	8/26/2011	30.31	-97.68
2584	Travis	Travis	78723	TX	3.43	26819	8/29/2011	30.31	-97.68
2585	Travis	Travis	78723	TX	9.68	26423	8/29/2011	30.31	-97.68
2586	Travis	Travis	78723	TX	6.25	26062	8/29/2011	30.31	-97.68
2587	Kendall	Bexar	78015	TX	11.04	54600	8/30/2011	29.75	-98.65
2588	Travis	Travis	78723	TX	2.21	26365	8/30/2011	30.31	-97.68
2589	Travis	Travis	78723	TX	10.03	26983	8/30/2011	30.31	-97.68
2590	Travis	Travis	78723	TX	3.43	12693	8/30/2011	30.31	-97.68
2591	Travis	Travis	78723	TX	6.13	28428	8/30/2011	30.31	-97.68
2592	Travis	Travis	78723	TX	4.66	21127	8/30/2011	30.31	-97.68
2593	Travis	Travis	78723	TX	5.88	26637	8/30/2011	30.31	-97.68
2594	El Paso	El Paso	79927	TX	6.44	41860	8/30/2011	31.64	-106.28
2595	Bexar	Bexar	78235	TX	10.10	48939	8/31/2011	29.35	-98.44
2596	Bexar	Bexar	78251	TX	5.28	31680	8/31/2011	29.47	-98.68
2597	Bexar	Bexar	78255	TX	4.44	27436	8/31/2011	29.66	-98.67
2598	Bexar	Bexar	78258	TX	6.21	34340	8/31/2011	29.65	-98.47
2599	Travis	Travis	78723	TX	2.75	17253	8/31/2011	30.31	-97.68
2600	Tarrant	Tarrant	76016	TX	10.29	105000	8/31/2011	32.69	-97.18

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2601	Travis	Travis	78746	TX	5.92	25572	9/1/2011	30.31	-97.82
2602	Travis	Travis	78756	TX	3.42	16539	9/1/2011	30.32	-97.74
2603	Bosque	Hood	76665	TX	9.00	51761	9/1/2011	31.92	-97.72
2604	Collin	Collin	75069	TX	52.17	386704	9/1/2011	33.17	-96.64
2605	Travis	Travis	78746	TX	3.70	17222	9/2/2011	30.31	-97.82
2606	Travis	Travis	78746	TX	4.90	26278	9/2/2011	30.31	-97.82
2607	Galveston	Galveston	77573	TX	7.82	46836	9/7/2011	29.49	-95.09
2608	Travis	Travis	78723	TX	5.25	21980	9/8/2011	30.31	-97.68
2609	Travis	Travis	78723	TX	1.50		9/8/2011	30.31	-97.68
2610	Travis	Travis	78723	TX	6.34	22330	9/8/2011	30.31	-97.68
2611	Travis	Travis	78734	TX	8.35	55245	9/8/2011	30.37	-97.95
2612	Travis	Travis	78723	TX	5.55	23310	9/8/2011	30.31	-97.68
2613	El Paso	El Paso	79930	TX	4.14	28773	9/8/2011	31.81	-106.47
2614	El Paso	El Paso	79912	TX	2.53	18950	9/8/2011	31.86	-106.55
2615	El Paso	El Paso	79912	TX	6.21	44091	9/8/2011	31.86	-106.55
2616	Bexar	Bexar	78023	TX	2.93	12595	9/9/2011	29.62	-98.73
2617	Bexar	Bexar	78023	TX	10.21	58670	9/9/2011	29.62	-98.73
2618	Bexar	Bexar	78230	TX	9.43	52144	9/9/2011	29.54	-98.56
2619	Bexar	Bexar	78258	TX	12.00	68484	9/9/2011	29.65	-98.47
2620	Bexar	Bexar	78023	TX	9.72	46371	9/9/2011	29.62	-98.73
2621	Bexar	Bexar	78260	TX	5.95	30885	9/9/2011	29.69	-98.50
2622	Travis	Travis	78723	TX	2.25		9/9/2011	30.31	-97.68
2623	Travis	Travis	78722	TX	4.47	24108	9/9/2011	30.29	-97.71
2624	Travis	Travis	78723	TX	7.50	26499	9/9/2011	30.31	-97.68
2625	Travis	Travis	78723	TX	5.25	26771	9/9/2011	30.31	-97.68
2626	Travis	Travis	78747	TX	10.24	57513	9/9/2011	30.13	-97.73
2627	Travis	Travis	78723	TX	5.75	24337	9/10/2011	30.31	-97.68
2628	Travis	Travis	78723	TX	6.50	26830	9/10/2011	30.31	-97.68
2629	Travis	Travis	78723	TX	6.00	25232	9/10/2011	30.31	-97.68
2630	Travis	Travis	78723	TX	8.25	43973	9/10/2011	30.31	-97.68
2631	Travis	Travis	78723	TX	2.25		9/10/2011	30.31	-97.68
2632	Travis	Travis	78723	TX	9.50	40194	9/10/2011	30.31	-97.68
2633	Travis	Travis	78723	TX	3.92	29036	9/10/2011	30.31	-97.68
2634	Travis	Travis	78723	TX	2.45		9/10/2011	30.31	-97.68
2635	Travis	Travis	78723	TX	6.25	25925	9/10/2011	30.31	-97.68
2636	Travis	Travis	78723	TX	5.64	25775	9/10/2011	30.31	-97.68
2637	Travis	Travis	78723	TX	5.64	25671	9/10/2011	30.31	-97.68
2638	Orange	Orange	77632	TX	6.56		9/11/2011	30.19	-93.81
2639	Travis	Travis	78732	TX	6.37	35614	9/11/2011	30.38	-97.89
2640	Travis	Travis	78723	TX	4.00	16720	9/11/2011	30.31	-97.68

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2641	Travis	Travis	78723	TX	6.00	24832	9/11/2011	30.31	-97.68
2642	Bexar	Bexar	78254	TX	7.59	39876	9/12/2011	29.53	-98.78
2643	Travis	Travis	78738	TX	6.35	40791	9/13/2011	30.30	-97.97
2644	Travis	Travis	78746	TX	6.50	31503	9/13/2011	30.31	-97.82
2645	Bell	Williamson	76559	TX	3.68	21070	9/13/2011	31.08	-97.62
2646	Bexar	Bexar	78260	TX	5.52	26658	9/14/2011	29.69	-98.50
2647	Comal	Comal	78266	TX	1.60	17120	9/14/2011	29.63	-98.32
2648	Bexar	Bexar	78261	TX	5.98	30885	9/14/2011	29.70	-98.41
2649	Bexar	Bexar	78261	TX	5.98	34385	9/14/2011	29.70	-98.41
2650	Comal	Comal	78163	TX	6.10	31467	9/14/2011	29.77	-98.51
2651	Bexar	Bexar	78257	TX	38.64	238308	9/14/2011	29.66	-98.58
2652	Bexar	Bexar	78247	TX	26.91	154936	9/14/2011	29.59	-98.41
2653	Travis	Travis	78727	TX	4.60	20326	9/16/2011	30.43	-97.71
2654	Travis	Travis	78744	TX	9.58	45000	9/16/2011	30.20	-97.73
2655	Travis	Travis	78745	TX	6.35	29405	9/16/2011	30.22	-97.80
2656	Travis	Travis	78727	TX	6.35	26974	9/16/2011	30.43	-97.71
2657	Travis	Travis	78750	TX	6.11	27787	9/16/2011	30.43	-97.80
2658	Travis	Travis	78757	TX	6.21	23142	9/16/2011	30.35	-97.74
2659	Travis	Travis	78660	TX	3.36		9/16/2011	30.43	-97.60
2660	Travis	Travis	78746	TX	5.76	29610	9/16/2011	30.31	-97.82
2661	Travis	Travis	78660	TX	3.12	31232	9/16/2011	30.43	-97.60
2662	Travis	Travis	78723	TX	2.22	11654	9/17/2011	30.31	-97.68
2663	Travis	Travis	78723	TX	5.50	23900	9/17/2011	30.31	-97.68
2664	Travis	Travis	78723	TX	5.50	23510	9/17/2011	30.31	-97.68
2665	Travis	Travis	78723	TX	6.25	26412	9/17/2011	30.31	-97.68
2666	Travis	Travis	78723	TX	5.00	20767	9/17/2011	30.31	-97.68
2667	Travis	Travis	78723	TX	6.25	26416	9/17/2011	30.31	-97.68
2668	Travis	Travis	78723	TX	3.75		9/18/2011	30.31	-97.68
2669	Travis	Travis	78723	TX	4.50	21680	9/18/2011	30.31	-97.68
2670	Travis	Travis	78723	TX	2.25		9/18/2011	30.31	-97.68
2671	Travis	Travis	78723	TX	9.38	51905	9/18/2011	30.31	-97.68
2672	Travis	Travis	78723	TX	3.00		9/18/2011	30.31	-97.68
2673	Travis	Travis	78723	TX	8.00	47655	9/18/2011	30.31	-97.68
2674	Travis	Travis	78723	TX	4.00	26738	9/18/2011	30.31	-97.68
2675	Travis	Travis	78723	TX	7.75	18920	9/18/2011	30.31	-97.68
2676	Travis	Travis	78723	TX	8.15	51960	9/18/2011	30.31	-97.68
2677	Montgomery	Montgomery	77384	TX	6.21	25200	9/18/2011	30.24	-95.49
2678	Bexar	Bexar	78255	TX	4.70	24166	9/19/2011	29.66	-98.67
2679	Travis	Travis	78748	TX	5.06	24128	9/19/2011	30.17	-97.82
2680	Travis	Travis	78723	TX	6.25	26417	9/19/2011	30.31	-97.68

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2681	Travis	Travis	78723	TX	5.75	26674	9/19/2011	30.31	-97.68
2682	Travis	Travis	78723	TX	2.25		9/19/2011	30.31	-97.68
2683	Travis	Travis	78723	TX	7.50	26580	9/19/2011	30.31	-97.68
2684	Travis	Travis	78751	TX	8.37	57084	9/19/2011	30.31	-97.73
2685	Travis	Travis	78723	TX	4.00		9/19/2011	30.31	-97.68
2686	Travis	Travis	78723	TX	8.50	52581	9/19/2011	30.31	-97.68
2687	Travis	Travis	78723	TX	4.41	20455	9/19/2011	30.31	-97.68
2688	Dallas	Dallas	75115	TX	5.04	24200	9/19/2011	32.60	-96.86
2689	Tyler	Hardin	77664	TX	5.64	39870	9/19/2011	30.59	-94.36
2690	Bexar	Bexar	78255	TX	3.50	18637	9/20/2011	29.66	-98.67
2691	Bexar	Bexar	78209	TX	3.29	20400	9/20/2011	29.49	-98.45
2692	Travis	Travis	78723	TX	4.07	16804	9/20/2011	30.31	-97.68
2693	Travis	Travis	78723	TX	3.33	14983	9/20/2011	30.31	-97.68
2694	Travis	Travis	78723	TX	6.16	26906	9/20/2011	30.31	-97.68
2695	Travis	Travis	78723	TX	7.40	45507	9/20/2011	30.31	-97.68
2696	Travis	Travis	78723	TX	3.99	26537	9/20/2011	30.31	-97.68
2697	Travis	Travis	78723	TX	1.48		9/20/2011	30.31	-97.68
2698	Travis	Travis	78723	TX	7.59	25373	9/20/2011	30.31	-97.68
2699	Travis	Travis	78723	TX	5.92	29506	9/20/2011	30.31	-97.68
2700	Travis	Travis	78723	TX	4.44	25373	9/20/2011	30.31	-97.68
2701	Travis	Travis	78723	TX	3.33	28292	9/20/2011	30.31	-97.68
2702	Travis	Travis	78723	TX	9.25	24450	9/20/2011	30.31	-97.68
2703	Travis	Travis	78723	TX	1.67	21646	9/20/2011	30.31	-97.68
2704	Travis	Travis	78723	TX	3.89	17474	9/20/2011	30.31	-97.68
2705	Travis	Travis	78723	TX	3.68	16198	9/20/2011	30.31	-97.68
2706	Grayson	Collin	75491	TX	5.64	33276	9/20/2011	33.48	-96.39
2707	El Paso	El Paso	79936	TX	25.38	108856	9/21/2011	31.76	-106.29
2708	Travis	Travis	78705	TX	5.06	24794	9/22/2011	30.30	-97.74
2709	Travis	Travis	78704	TX	2.50	12725	9/22/2011	30.25	-97.77
2710	Travis	Travis	78728	TX	4.80	23000	9/22/2011	30.46	-97.68
2711	Travis	Travis	78759	TX	5.29	24840	9/22/2011	30.40	-97.75
2712	Travis	Travis	78704	TX	2.82	13873	9/22/2011	30.25	-97.77
2713	Travis	Travis	78704	TX	5.25	27600	9/22/2011	30.25	-97.77
2714	Travis	Travis	78703	TX	3.64	21793	9/22/2011	30.29	-97.77
2715	Travis	Travis	78759	TX	9.10	42417	9/22/2011	30.40	-97.75
2716	Travis	Travis	78733	TX	6.48	30451	9/22/2011	30.33	-97.87
2717	Travis	Travis	78735	TX	6.11	35000	9/22/2011	30.26	-97.86
2718	Travis	Travis	78746	TX	3.44		9/23/2011	30.31	-97.82
2719	Travis	Travis	78723	TX	4.50	32820	9/23/2011	30.31	-97.68
2720	Travis	Travis	78723	TX	2.82	22583	9/23/2011	30.31	-97.68

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2721	Travis	Travis	78723	TX	3.29		9/23/2011	30.31	-97.68
2722	Travis	Travis	78723	TX	5.98	25866	9/23/2011	30.31	-97.68
2723	Travis	Travis	78723	TX	6.24	28205	9/23/2011	30.31	-97.68
2724	Travis	Travis	78731	TX	12.65	55091	9/23/2011	30.35	-97.77
2725	Travis	Travis	78735	TX	9.17	49248	9/23/2011	30.26	-97.86
2726	Travis	Travis	78723	TX	6.85	19321	9/24/2011	30.31	-97.68
2727	Travis	Travis	78723	TX	2.00	18342	9/24/2011	30.31	-97.68
2728	Travis	Travis	78723	TX	2.25		9/24/2011	30.31	-97.68
2729	Travis	Travis	78723	TX	7.25	26380	9/24/2011	30.31	-97.68
2730	Travis	Travis	78723	TX	6.88	17143	9/24/2011	30.31	-97.68
2731	Travis	Travis	78723	TX	7.25	45232	9/24/2011	30.31	-97.68
2732	Travis	Travis	78723	TX	3.24	28787	9/24/2011	30.31	-97.68
2733	Travis	Travis	78723	TX	5.25	22332	9/25/2011	30.31	-97.68
2734	Travis	Travis	78723	TX	3.25		9/25/2011	30.31	-97.68
2735	Travis	Travis	78723	TX	6.25	26243	9/25/2011	30.31	-97.68
2736	Travis	Travis	78723	TX	2.50	21853	9/25/2011	30.31	-97.68
2737	Travis	Travis	78723	TX	4.95	20539	9/25/2011	30.31	-97.68
2738	Travis	Travis	78723	TX	7.75	46844	9/25/2011	30.31	-97.68
2739	Travis	Travis	78723	TX	2.50		9/25/2011	30.31	-97.68
2740	Travis	Travis	78723	TX	6.25	26492	9/25/2011	30.31	-97.68
2741	Travis	Travis	78723	TX	8.95	26159	9/25/2011	30.31	-97.68
2742	Travis	Travis	78723	TX	3.50	20804	9/25/2011	30.31	-97.68
2743	Travis	Travis	78723	TX	8.00	44055	9/25/2011	30.31	-97.68
2744	Travis	Travis	78723	TX	3.71	15879	9/25/2011	30.31	-97.68
2745	Travis	Travis	78723	TX	6.25	26763	9/25/2011	30.31	-97.68
2746	Travis	Travis	78723	TX	6.37	29045	9/25/2011	30.31	-97.68
2747	Travis	Travis	78752	TX	5.52	21482	9/26/2011	30.33	-97.71
2748	Travis	Travis	78734	TX	6.90	41193	9/26/2011	30.37	-97.95
2749	Travis	Travis	78745	TX	4.07	19324	9/26/2011	30.22	-97.80
2750	Travis	Travis	78749	TX	4.07	19392	9/26/2011	30.22	-97.86
2751	Travis	Travis	78704	TX	5.55	25351	9/26/2011	30.25	-97.77
2752	Travis	Travis	78747	TX	5.00	23485	9/26/2011	30.13	-97.73
2753	Travis	Travis	78731	TX	6.11	28504	9/26/2011	30.35	-97.77
2754	Travis	Travis	78759	TX	2.99	14044	9/26/2011	30.40	-97.75
2755	Travis	Travis	78744	TX	3.70	17278	9/26/2011	30.20	-97.73
2756	Travis	Travis	78732	TX	3.70	17363	9/26/2011	30.38	-97.89
2757	Travis	Travis	78731	TX	5.40	24850	9/26/2011	30.35	-97.77
2758	Wichita	Denton	76310	TX	9.80	54984	9/26/2011	33.79	-98.51
2759	Dallas	Dallas	75006	TX	3.22	44046	9/26/2011	32.97	-96.89
2760	Bexar	Bexar	78222	TX	5.52	25751	9/27/2011	29.37	-98.39

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2761	Bexar	Bexar	78247	TX	6.11	32685	9/27/2011	29.59	-98.41
2762	Bexar	Bexar	78247	TX	8.14	42260	9/27/2011	29.59	-98.41
2763	Bexar	Bexar	78254	TX	1.05	5339	9/27/2011	29.53	-98.78
2764	Bexar	Bexar	78216	TX	5.64	26525	9/27/2011	29.55	-98.50
2765	Wise	Denton	76426	TX	170.02		9/27/2011	33.17	-97.85
2766	Travis	Travis	78704	TX	4.50	19220	9/27/2011	30.25	-97.77
2767	Travis	Travis	78723	TX	2.50	20155	9/27/2011	30.31	-97.68
2768	Travis	Travis	78723	TX	2.25		9/27/2011	30.31	-97.68
2769	Travis	Travis	78746	TX	8.50	51959	9/27/2011	30.31	-97.82
2770	Travis	Travis	78705	TX	1.75		9/27/2011	30.30	-97.74
2771	Travis	Travis	78723	TX	6.25	19282	9/27/2011	30.31	-97.68
2772	Travis	Travis	78746	TX	11.02	57085	9/27/2011	30.31	-97.82
2773	Travis	Travis	78702	TX	4.00	18346	9/27/2011	30.26	-97.71
2774	Travis	Travis	78753	TX	6.13	27584	9/27/2011	30.39	-97.67
2775	Travis	Travis	78703	TX	6.50	27742	9/27/2011	30.29	-97.77
2776	Travis	Travis	78723	TX	4.50	22601	9/27/2011	30.31	-97.68
2777	Grimes	Montgomery	77868	TX	3.76	17715	9/27/2011	30.34	-96.03
2778	El Paso	El Paso	79912	TX	9.89	67147	9/27/2011	31.86	-106.55
2779	Bexar	Bexar	78217	TX	4.23	25104	9/28/2011	29.54	-98.42
2780	Bexar	Bexar	78227	TX	4.14	20493	9/28/2011	29.41	-98.63
2781	Travis	Travis	78703	TX	4.14	23183	9/28/2011	30.29	-97.77
2782	Travis	Travis	78756	TX	1.38		9/28/2011	30.32	-97.74
2783	Travis	Travis	78704	TX	2.76	12420	9/28/2011	30.25	-97.77
2784	Travis	Travis	78756	TX	3.68	21252	9/28/2011	30.32	-97.74
2785	Travis	Travis	78703	TX	10.73	44405	9/28/2011	30.29	-97.77
2786	Travis	Travis	78746	TX	6.30	38208	9/28/2011	30.31	-97.82
2787	Dallas	Dallas	75150	TX	10.29	105000	9/28/2011	32.82	-96.63
2788	Tyler	Hardin	77664	TX	5.64		9/29/2011	30.59	-94.36
2789	Travis	Travis	78749	TX	1.41		9/29/2011	30.22	-97.86
2790	Travis	Travis	78736	TX	2.53	11511	9/29/2011	30.25	-97.95
2791	Travis	Travis	78749	TX	4.60	28166	9/29/2011	30.22	-97.86
2792	Travis	Travis	78749	TX	4.23	30674	9/29/2011	30.22	-97.86
2793	Travis	Travis	78749	TX	5.77	18113	9/29/2011	30.22	-97.86
2794	Travis	Travis	78749	TX	1.84		9/29/2011	30.22	-97.86
2795	Travis	Travis	78759	TX	11.47	53451	9/29/2011	30.40	-97.75
2796	Travis	Travis	78734	TX	6.96	45267	9/29/2011	30.37	-97.95
2797	Travis	Travis	78747	TX	6.12	29986	9/29/2011	30.13	-97.73
2798	Travis	Travis	78746	TX	6.11	29954	9/29/2011	30.31	-97.82
2799	Travis	Travis	78749	TX	1.67		9/29/2011	30.22	-97.86
2800	Travis	Travis	78660	TX	6.21	37123	9/29/2011	30.43	-97.60

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2801	Travis	Travis	78752	TX	4.70	22810	9/29/2011	30.33	-97.71
2802	Travis	Travis	78757	TX	6.44	29243	9/29/2011	30.35	-97.74
2803	Bexar	Bexar	78249	TX	36.00		9/30/2011	29.57	-98.61
2804	Travis	Travis	78735	TX	3.76	22903	9/30/2011	30.26	-97.86
2805	Travis	Travis	78723	TX	3.96	17700	9/30/2011	30.31	-97.68
2806	Travis	Travis	78723	TX	1.08		9/30/2011	30.31	-97.68
2807	Travis	Travis	78723	TX	2.94		9/30/2011	30.31	-97.68
2808	Travis	Travis	78723	TX	6.21	26082	9/30/2011	30.31	-97.68
2809	Travis	Travis	78722	TX	9.81	34444	9/30/2011	30.29	-97.71
2810	Travis	Travis	78723	TX	1.62		9/30/2011	30.31	-97.68
2811	Travis	Travis	78723	TX	5.92	27461	9/30/2011	30.31	-97.68
2812	Travis	Travis	78723	TX	7.31	25658	9/30/2011	30.31	-97.68
2813	Travis	Travis	78756	TX	6.48	50097	9/30/2011	30.32	-97.74
2814	Travis	Travis	78723	TX	7.07	44463	9/30/2011	30.31	-97.68
2815	Travis	Travis	78723	TX	3.53	26944	9/30/2011	30.31	-97.68
2816	Travis	Travis	78723	TX	7.37	25118	9/30/2011	30.31	-97.68
2817	Travis	Travis	78722	TX	1.85	25385	9/30/2011	30.29	-97.71
2818	Travis	Travis	78723	TX	5.92	26064	9/30/2011	30.31	-97.68
2819	Travis	Travis	78723	TX	3.33	14666	9/30/2011	30.31	-97.68
2820	Travis	Travis	78723	TX	1.67	18190	9/30/2011	30.31	-97.68
2821	Travis	Travis	78723	TX	7.45	22058	9/30/2011	30.31	-97.68
2822	Travis	Travis	78723	TX	3.70	16291	9/30/2011	30.31	-97.68
2823	Travis	Travis	78759	TX	0.94		9/30/2011	30.40	-97.75
2824	Travis	Travis	78723	TX	6.11	25393	9/30/2011	30.31	-97.68
2825	Travis	Travis	78723	TX	6.62	28800	9/30/2011	30.31	-97.68
2826	Travis	Travis	78759	TX	4.23	28331	9/30/2011	30.40	-97.75
2827	Travis	Travis	78757	TX	6.35	30997	9/30/2011	30.35	-97.74
2828	Travis	Travis	78723	TX	6.35	25791	9/30/2011	30.31	-97.68
2829	Travis	Travis	78723	TX	14.75	66300	9/30/2011	30.31	-97.68
2830	Travis	Travis	78723	TX	6.37	26501	9/30/2011	30.31	-97.68
2831	Travis	Travis	78734	TX	8.14	22169	9/30/2011	30.37	-97.95
2832	Travis	Travis	78723	TX	5.55	24434	9/30/2011	30.31	-97.68
2833	Travis	Travis	78704	TX	1.60	8651	10/1/2011	30.25	-97.77
2834	Dallas	Dallas	75082	TX	5.85	40536	10/3/2011	33.00	-96.66
2835	Ellis	Ellis	75154	TX	10.29	105000	10/3/2011	32.51	-96.77
2836	Cherokee	Smith	75766	TX	10.25	56900	10/3/2011	31.93	-95.27
2837	Denton	Denton	75022	TX	10.12	28000	10/4/2011	33.03	-97.10
2838	Denton	Denton	75022	TX	10.12	35857	10/4/2011	33.02	-97.13
2839	Brewster	El Paso	79830	TX	4.90	29280	10/5/2011	29.72	-103.22
2840	Dallas	Dallas	75082	TX	4.83	25000	10/6/2011	33.00	-96.66

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2841	Denton	Denton	76226	TX	1.26	8262	10/6/2011	33.12	-97.16
2842	Orange	Orange	77632	TX	5.40	26550	10/6/2011	30.22	-93.80
2843	Dallas	Dallas	75211	TX	3.53	19388	10/7/2011	32.74	-96.89
2844	Travis	Travis	78757	TX	6.44	33000	10/8/2011	30.35	-97.74
2845	Medina	Bexar	78059	TX	8.50	42300	10/10/2011	29.18	-98.85
2846	Walker	Montgomery	77320	TX	23.00	79524	10/10/2011	30.82	-95.52
2847	Clay	Parker	76365	TX	10.34	52925	10/11/2011	33.79	-98.22
2848	Travis	Travis	78746	TX	7.76	35002	10/11/2011	30.31	-97.82
2849	Travis	Travis	78723	TX	3.91		10/11/2011	30.31	-97.68
2850	Travis	Travis	78723	TX	8.28	54498	10/11/2011	30.31	-97.68
2851	Travis	Travis	78731	TX	5.76	34527	10/11/2011	30.35	-97.77
2852	Dallas	Dallas	75211	TX	5.16	41177	10/11/2011	32.74	-96.89
2853	Gregg	Gregg	75662	TX	11.12	59089	10/12/2011	32.38	-94.87
2854	Travis	Travis	78723	TX	3.33	14668	10/12/2011	30.31	-97.68
2855	Wichita	Denton	76310	TX	32.40	312775	10/12/2011	33.79	-98.51
2856	Travis	Travis	78746	TX	6.13	25042	10/13/2011	30.31	-97.82
2857	Montgomery	Montgomery	77306	TX	4.60	17560	10/13/2011	30.27	-95.32
2858	Montgomery	Montgomery	77306	TX	5.98	36840	10/13/2011	30.27	-95.32
2859	Bexar	Bexar	78258	TX	8.28	41234	10/14/2011	29.65	-98.47
2860	Bexar	Bexar	78260	TX	1.00	9180	10/14/2011	29.69	-98.50
2861	Dallas	Dallas	75088	TX	20.58	215250	10/14/2011	32.90	-96.55
2862	Comal	Comal	78266	TX	6.66	33896	10/17/2011	29.63	-98.32
2863	Bexar	Bexar	78230	TX	36.00	237787	10/17/2011	29.54	-98.56
2864	Bexar	Bexar	78259	TX	10.58	46890	10/17/2011	29.62	-98.43
2865	Dallas	Dallas	75052	TX	10.29	105000	10/17/2011	32.68	-97.03
2866	Dallas	Dallas	75052	TX	10.29	105000	10/17/2011	32.68	-97.03
2867	Van Zandt	Henderson	75790	TX	6.48	35400	10/17/2011	32.51	-95.64
2868	Comal	Comal	78266	TX	28.80	144000	10/18/2011	29.63	-98.32
2869	Bexar	Bexar	78258	TX	6.58	39480	10/18/2011	29.65	-98.47
2870	Dallas	Dallas	75052	TX	10.29	105000	10/18/2011	32.68	-97.03
2871	Dallas	Dallas	75052	TX	10.29	105000	10/18/2011	32.68	-97.03
2872	Dallas	Dallas	75019	TX	4.07	22156	10/18/2011	32.96	-97.00
2873	Harris	Harris	77055	TX	5.00	7500	10/19/2011	29.79	-95.49
2874	El Paso	El Paso	79902	TX	10.34	53251	10/20/2011	31.79	-106.49
2875	Collin	Collin	75013	TX	4.08	21431	10/21/2011	33.11	-96.70
2876	Travis	Travis	78733	TX	4.14	21126	10/21/2011	30.33	-97.87
2877	Travis	Travis	78723	TX	6.66	29500	10/21/2011	30.31	-97.68
2878	Parker	Parker	76087	TX	2.50	13800	10/21/2011	32.61	-97.83
2879	Travis	Travis	78660	TX	7.77	33455	10/21/2011	30.43	-97.60
2880	El Paso	El Paso	79938	TX	4.60	32430	10/21/2011	31.84	-105.92

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2881	Morris	Upshur	75571	TX	5.40	23500	10/23/2011	33.19	-94.75
2882	Dallas	Dallas	75051	TX	10.29	105000	10/24/2011	32.73	-96.99
2883	Dallas	Dallas	75051	TX	10.29	105000	10/24/2011	32.73	-96.99
2884	Jeff Davis	El Paso	79734	TX	2.69	20591	10/24/2011	30.77	-104.01
2885	Bexar	Bexar	78247	TX	5.98	35745	10/25/2011	29.59	-98.41
2886	Bexar	Bexar	78254	TX	18.48	101455	10/25/2011	29.53	-98.78
2887	Bexar	Bexar	78249	TX	36.00	237787	10/25/2011	29.57	-98.61
2888	Archer	Parker	76366	TX	10.80	104258	10/25/2011	33.71	-98.79
2889	Dallas	Dallas	75082	TX	5.85	40536	10/25/2011	33.00	-96.66
2890	Dallas	Dallas	75052	TX	73.92		10/26/2011	32.68	-97.03
2891	Dallas	Dallas	75243	TX	5.17		10/26/2011	32.91	-96.74
2892	Travis	Travis	78732	TX	6.44	30500	10/26/2011	30.38	-97.89
2893	Dallas	Dallas	75019	TX	2.40	8589	10/26/2011	32.96	-97.00
2894	Dallas	Dallas	75048	TX	5.52	24190	10/27/2011	32.96	-96.57
2895	Brown	Hood	76890	TX	5.22	28665	10/27/2011	31.71	-98.77
2896	Collin	Collin	75002	TX	5.28	27675	10/28/2011	33.10	-96.64
2897	Dallas	Dallas	75230	TX	2.99	44935	10/28/2011	32.90	-96.79
2898	El Paso	El Paso	79901	TX	10.80	140000	10/28/2011	31.76	-106.48
2899	El Paso	El Paso	79925	TX	3.76	18919	10/30/2011	31.80	-106.36
2900	Travis	Travis	78747	TX	3.52	21242	10/31/2011	30.13	-97.73
2901	Travis	Travis	78747	TX	3.50	21301	10/31/2011	30.13	-97.73
2902	Travis	Travis	78747	TX	3.50	20790	10/31/2011	30.13	-97.73
2903	Travis	Travis	78744	TX	3.50	20790	10/31/2011	30.20	-97.73
2904	Travis	Travis	78744	TX	3.52	21049	10/31/2011	30.20	-97.73
2905	Travis	Travis	78744	TX	3.52	21301	10/31/2011	30.20	-97.73
2906	Travis	Travis	78744	TX	3.50	21301	10/31/2011	30.20	-97.73
2907	Travis	Travis	78617	TX	3.50	20790	10/31/2011	30.15	-97.59
2908	Travis	Travis	78617	TX	3.52	21301	10/31/2011	30.15	-97.59
2909	Cherokee	Smith	75766	TX	20.50	77800	10/31/2011	31.93	-95.27
2910	Travis	Travis	78722	TX	7.59	50913	11/1/2011	30.29	-97.71
2911	Travis	Travis	78723	TX	3.68		11/1/2011	30.31	-97.68
2912	Travis	Travis	78723	TX	6.29	28680	11/1/2011	30.31	-97.68
2913	Dallas	Dallas	75082	TX	5.25	41895	11/1/2011	33.00	-96.66
2914	Tarrant	Tarrant	76018	TX	4.70	37506	11/1/2011	32.67	-97.08
2915	Rusk	Rusk	75654	TX	2.67	24241	11/1/2011	32.12	-94.94
2916	El Paso	El Paso	79912	TX	8.46	41454	11/1/2011	31.86	-106.55
2917	Clay	Parker	76365	TX	10.34	52925	11/2/2011	33.79	-98.22
2918	Denton	Denton	75056	TX	5.52	31063	11/3/2011	33.08	-96.91
2919	Bexar	Bexar	78230	TX	9.20	52440	11/4/2011	29.54	-98.56
2920	Bexar	Bexar	78209	TX	5.98	35804	11/4/2011	29.49	-98.45

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2921	Bexar	Bexar	78222	TX	43.68	219710	11/4/2011	29.37	-98.39
2922	Bexar	Bexar	78209	TX	5.17	26392	11/4/2011	29.49	-98.45
2923	Bexar	Bexar	78209	TX	8.97	48199	11/4/2011	29.49	-98.45
2924	Bexar	Bexar	78209	TX	4.90	25119	11/4/2011	29.49	-98.45
2925	Bexar	Bexar	78244	TX	8.28	37708	11/4/2011	29.47	-98.35
2926	Collin	Collin	75002	TX	5.28	27675	11/4/2011	33.10	-96.64
2927	Bexar	Bexar	78227	TX	81.54	298205	11/7/2011	29.41	-98.63
2928	Bexar	Bexar	78251	TX	6.00	29048	11/7/2011	29.47	-98.68
2929	Kendall	Bexar	78015	TX	7.48	35515	11/7/2011	29.75	-98.65
2930	Bexar	Bexar	78253	TX	4.32	24480	11/7/2011	29.47	-98.81
2931	Bexar	Bexar	78264	TX	31.68	139350	11/7/2011	29.17	-98.51
2932	Bexar	Bexar	78249	TX	10.50	46850	11/7/2011	29.57	-98.61
2933	Travis	Travis	78756	TX	19.60		11/7/2011	30.32	-97.74
2934	Dallas	Dallas	75229	TX	3.29	18095	11/8/2011	32.90	-96.87
2935	Tarrant	Tarrant	76063	TX	41.16	432180	11/8/2011	32.56	-97.14
2936	Dallas	Dallas	75229	TX	3.29	18095	11/8/2011	32.90	-96.87
2937	Dallas	Dallas	75234	TX	5.52	31063	11/8/2011	32.92	-96.87
2938	Denton	Denton	75007	TX	2.53	13770	11/9/2011	33.01	-96.89
2939	Collin	Collin	75023	TX	10.29	105000	11/9/2011	33.06	-96.73
2940	Dallas	Dallas	75236	TX	3.91	23640	11/10/2011	32.69	-96.94
2941	Tarrant	Tarrant	76133	TX	5.29	31740	11/11/2011	32.65	-97.38
2942	Montgomery	Montgomery	77378	TX	5.40	30001	11/11/2011	30.49	-95.33
2943	Tarrant	Tarrant	76133	TX	2.30	13800	11/14/2011	32.65	-97.38
2944	Montgomery	Montgomery	77382	TX	5.17	17381	11/14/2011	30.20	-95.55
2945	Bexar	Bexar	78260	TX	5.98	18884	11/15/2011	29.69	-98.50
2946	Kendall	Bexar	78006	TX	5.98	18884	11/15/2011	29.92	-98.70
2947	Bexar	Bexar	78263	TX	8.46	29837	11/15/2011	29.36	-98.32
2948	Dallas	Dallas	75211	TX	3.76	19388	11/15/2011	32.74	-96.89
2949	Denton	Denton	75007	TX	2.53	12770	11/15/2011	33.01	-96.89
2950	El Paso	El Paso	79936	TX	6.21	41545	11/15/2011	31.76	-106.29
2951	Bexar	Bexar	78233	TX	5.98	25385	11/16/2011	29.56	-98.36
2952	Brown	Hood	76801	TX	27.73	199656	11/16/2011	31.81	-99.06
2953	El Paso	El Paso	79936	TX	1.41	7755	11/16/2011	31.76	-106.29
2954	Taylor	Hood	79602	TX	10.12		11/18/2011	32.32	-99.66
2955	Travis	Travis	78746	TX	5.61	26026	11/18/2011	30.31	-97.82
2956	Dallas	Dallas	75244	TX	6.90	40482	11/18/2011	32.93	-96.84
2957	Leon	Montgomery	75846	TX	10.12	43790	11/18/2011	31.32	-96.17
2958	Travis	Travis	78703	TX	150.00		11/20/2011	30.31	-97.77
2959	Panola	Rusk	75633	TX	21.60	111521	11/20/2011	32.15	-94.27
2960	Tarrant	Tarrant	76051	TX	5.81	46324	11/21/2011	32.95	-97.07

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
2961	Collin	Collin	75093	TX	6.45	51471	11/21/2011	33.04	-96.82
2962	Ellis	Ellis	75154	TX	9.03	72059	11/21/2011	32.51	-96.77
2963	Montgomery	Montgomery	77385	TX	4.08	27200	11/21/2011	30.20	-95.43
2964	Coryell	Williamson	76538	TX	6.90	44331	11/21/2011	31.63	-97.89
2965	Dallas	Dallas	75214	TX	7.20	37675	11/22/2011	32.82	-96.74
2966	Dallas	Dallas	75243	TX	5.17	34845	11/22/2011	32.91	-96.74
2967	Navarro	Ellis	75155	TX	7.36	42574	11/22/2011	32.21	-96.47
2968	Robertson	Williamson	76629	TX	4.86	14489	11/22/2011	31.16	-96.69
2969	El Paso	El Paso	79912	TX	7.99	33718	11/22/2011	31.86	-106.55
2970	El Paso	El Paso	79924	TX	5.40	34560	11/22/2011	31.90	-106.43
2971	Collin	Collin	75013	TX	4.08	21431	11/23/2011	33.11	-96.70
2972	El Paso	El Paso	79901	TX	26.91	135313	11/23/2011	31.76	-106.48
2973	El Paso	El Paso	79901	TX	9.88	54125	11/23/2011	31.76	-106.48
2974	Bexar	Bexar	78232	TX	33.60		11/27/2011	29.59	-98.46
2975	Bexar	Bexar	78244	TX	6.11	33094	11/28/2011	29.47	-98.35
2976	Dallas	Dallas	75218	TX	4.80	31950	11/28/2011	32.84	-96.70
2977	Smith	Smith	75771	TX	10.12	59634	11/28/2011	32.53	-95.41
2978	El Paso	El Paso	79922	TX	9.75	53743	11/28/2011	31.83	-106.58
2979	El Paso	El Paso	79928	TX	3.68	23920	11/28/2011	31.66	-106.13
2980	Bexar	Bexar	78239	TX	6.66	29357	11/29/2011	29.52	-98.36
2981	Smith	Smith	75703	TX	14.85	76726	11/29/2011	32.26	-95.32
2982	Cherokee	Smith	75766	TX	6.35	37100	11/29/2011	31.93	-95.27
2983	El Paso	El Paso	79912	TX	6.58	32242	11/29/2011	31.86	-106.55
2984	El Paso	El Paso	79902	TX	7.05	3660	11/29/2011	31.79	-106.49
2985	El Paso	El Paso	79936	TX	5.17	32500	11/29/2011	31.76	-106.29
2986	El Paso	El Paso	79936	TX	3.96	10600	11/29/2011	31.76	-106.29
2987	El Paso	El Paso	79936	TX	1.88	15040	11/29/2011	31.76	-106.29
2988	El Paso	El Paso	79912	TX	0.94	4888	11/29/2011	31.86	-106.55
2989	Comal	Comal	78163	TX	2.64	13945	11/30/2011	29.77	-98.51
2990	Bexar	Bexar	78209	TX	12.00	46802	11/30/2011	29.49	-98.45
2991	Gregg	Gregg	75603	TX	16.80	76300	11/30/2011	32.38	-94.71
2992	El Paso	El Paso	79922	TX	9.66	60625	11/30/2011	31.83	-106.58
2993	El Paso	El Paso	79932	TX	10.06	57683	11/30/2011	31.89	-106.62
2994	El Paso	El Paso	79925	TX	1.08	7895	11/30/2011	31.80	-106.36
2995	El Paso	El Paso	79936	TX	2.99	17818	11/30/2011	31.76	-106.29
2996	El Paso	El Paso	79925	TX	7.20	45360	11/30/2011	31.80	-106.36
2997	El Paso	El Paso	79902	TX	9.89	53864	11/30/2011	31.79	-106.49
2998	El Paso	El Paso	79932	TX	5.06	30049	11/30/2011	31.89	-106.62
2999	El Paso	El Paso	79912	TX	4.94	28898	11/30/2011	31.86	-106.55
3000	El Paso	El Paso	79912	TX	9.40	64017	11/30/2011	31.86	-106.55

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3001	El Paso	El Paso	79912	TX	10.24	64500	11/30/2011	31.86	-106.55
3002	El Paso	El Paso	79932	TX	6.58	42770	11/30/2011	31.89	-106.62
3003	El Paso	El Paso	79912	TX	2.76	16747	11/30/2011	31.86	-106.55
3004	El Paso	El Paso	79912	TX	3.91	23560	11/30/2011	31.86	-106.55
3005	El Paso	El Paso	79911	TX	2.82	16615	11/30/2011	31.89	-106.54
3006	El Paso	El Paso	79821	TX	6.60	36300	11/30/2011	31.99	-106.59
3007	El Paso	El Paso	79932	TX	5.06	30461	11/30/2011	31.89	-106.62
3008	El Paso	El Paso	79912	TX	10.24	64500	11/30/2011	31.86	-106.55
3009	El Paso	El Paso	79932	TX	6.58	61060	11/30/2011	31.89	-106.62
3010	Travis	Travis	78705	TX	13.20	70825	12/1/2011	30.30	-97.74
3011	Travis	Travis	78759	TX	21.10	106623	12/1/2011	30.40	-97.75
3012	Travis	Travis	78744	TX	20.20	160512	12/1/2011	30.20	-97.73
3013	Ellis	Ellis	75165	TX	10.08	153770	12/1/2011	32.38	-96.77
3014	Ellis	Ellis	75154	TX	10.29	102900	12/1/2011	32.51	-96.77
3015	Ellis	Ellis	76065	TX	10.29	102900	12/1/2011	32.48	-96.96
3016	Tarrant	Tarrant	76054	TX	9.99	32054	12/1/2011	32.86	-97.18
3017	Dallas	Dallas	75235	TX	31.40		12/2/2011	32.83	-96.85
3018	Ellis	Ellis	76065	TX	9.03	72059	12/2/2011	32.48	-96.96
3019	Tarrant	Tarrant	76107	TX	2.58	20588	12/2/2011	32.74	-97.38
3020	Tarrant	Tarrant	76040	TX	9.89	78922	12/2/2011	32.82	-97.10
3021	Ellis	Ellis	76065	TX	10.08	102900	12/2/2011	32.48	-96.96
3022	Ellis	Ellis	75154	TX	10.29	102900	12/2/2011	32.51	-96.77
3023	Ellis	Ellis	75154	TX	10.29	102900	12/2/2011	32.51	-96.77
3024	Dallas	Dallas	75089	TX	5.15	51450	12/2/2011	32.94	-96.55
3025	Mclennan	Ellis	76708	TX	5.28	39000	12/4/2011	31.62	-97.21
3026	Tarrant	Tarrant	76179	TX	10.08	100800	12/4/2011	32.92	-97.46
3027	Dallas	Dallas	75043	TX	10.29	102900	12/4/2011	32.85	-96.59
3028	Tarrant	Tarrant	76034	TX	9.66	46592	12/4/2011	32.89	-97.15
3029	Bexar	Bexar	78253	TX	4.60	26220	12/5/2011	29.47	-98.81
3030	Travis	Travis	78758	TX	3.29	17668	12/5/2011	30.39	-97.70
3031	Travis	Travis	78736	TX	2.16	8180	12/5/2011	30.25	-97.95
3032	Travis	Travis	78758	TX	3.29	17668	12/5/2011	30.39	-97.70
3033	Dallas	Dallas	75006	TX	11.04	72034	12/5/2011	32.97	-96.89
3034	Tarrant	Tarrant	76182	TX	9.17	73137	12/5/2011	32.88	-97.21
3035	Tarrant	Tarrant	76012	TX	6.02	48040	12/5/2011	32.76	-97.14
3036	Dallas	Dallas	75238	TX	4.31	34354	12/5/2011	32.88	-96.71
3037	Orange	Orange	77611	TX	17.28	57769	12/5/2011	30.00	-93.81
3038	El Paso	El Paso	79936	TX	5.06	12650	12/5/2011	31.76	-106.29
3039	Bexar	Bexar	78216	TX	23.20	204876	12/6/2011	29.55	-98.50
3040	Travis	Travis	78732	TX	2.31	7757	12/6/2011	30.38	-97.89

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3041	Travis	Travis	78745	TX	6.11	28996	12/6/2011	30.22	-97.80
3042	Travis	Travis	78723	TX	6.44	26315	12/6/2011	30.31	-97.68
3043	Dallas	Dallas	75062	TX	101.64	483437	12/6/2011	32.84	-96.98
3044	Tarrant	Tarrant	76052	TX	3.52	21565	12/6/2011	32.98	-97.38
3045	Tarrant	Tarrant	76036	TX	3.52	21565	12/6/2011	32.57	-97.42
3046	Ellis	Ellis	75165	TX	9.03	72059	12/6/2011	32.38	-96.77
3047	Tarrant	Tarrant	76148	TX	5.16	41177	12/6/2011	32.86	-97.25
3048	Denton	Denton	75007	TX	3.45	34500	12/6/2011	33.01	-96.89
3049	Williamson	Williamson	78674	TX	4.68	16280	12/6/2011	30.67	-97.59
3050	Dallas	Dallas	75214	TX	7.20	37675	12/6/2011	32.82	-96.74
3051	Dallas	Dallas	75220	TX	15.84	31600	12/7/2011	32.87	-96.89
3052	Dallas	Dallas	75220	TX	15.84	6000	12/7/2011	32.86	-96.87
3053	Tarrant	Tarrant	76053	TX	4.73	37745	12/7/2011	32.82	-97.19
3054	Collin	Collin	75287	TX	2.59	20628	12/7/2011	33.00	-96.84
3055	Bell	Williamson	76513	TX	10.80	64891	12/7/2011	31.07	-97.50
3056	Smith	Smith	75701	TX	19.44	83000	12/7/2011	32.32	-95.30
3057	Smith	Smith	75703	TX	7.92	33500	12/7/2011	32.26	-95.32
3058	Dallas	Dallas	75089	TX	10.29	102900	12/7/2011	32.94	-96.55
3059	Dallas	Dallas	75217	TX	10.29	102900	12/7/2011	32.71	-96.67
3060	Rockwall	Rockwall	75032	TX	11.28	48000	12/7/2011	32.86	-96.42
3061	Dallas	Dallas	75248	TX	11.00	44447	12/7/2011	32.97	-96.78
3062	Dallas	Dallas	75230	TX	5.76	48300	12/7/2011	32.90	-96.79
3063	Ellis	Ellis	76065	TX	12.22	41900	12/7/2011	32.48	-96.96
3064	Lamar	Hunt	75473	TX	9.89	52624	12/7/2011	33.82	-95.49
3065	Gregg	Gregg	75604	TX	9.60	49000	12/7/2011	32.50	-94.80
3066	Red River	Upshur	75554	TX	4.10	28175	12/7/2011	33.55	-94.79
3067	Bowie	Upshur	75501	TX	4.10	28175	12/7/2011	33.39	-94.13
3068	Bowie	Upshur	75503	TX	4.10	28175	12/7/2011	33.53	-94.13
3069	El Paso	El Paso	79922	TX	3.22	8850	12/7/2011	31.83	-106.58
3070	Travis	Travis	78746	TX	4.70	20235	12/8/2011	30.31	-97.82
3071	Tarrant	Tarrant	76054	TX	6.02	48040	12/8/2011	32.86	-97.18
3072	Williamson	Williamson	78681	TX	7.92	35640	12/8/2011	30.52	-97.71
3073	Tarrant	Tarrant	76108	TX	8.97	35505	12/8/2011	32.77	-97.51
3074	Bell	Williamson	76548	TX	7.32	30171	12/8/2011	31.07	-97.67
3075	El Paso	El Paso	79912	TX	2.40	5950	12/9/2011	31.86	-106.55
3076	El Paso	El Paso	79936	TX	30.36	192032	12/11/2011	31.76	-106.29
3077	Bexar	Bexar	78258	TX	6.11	31221	12/12/2011	29.65	-98.47
3078	Bexar	Bexar	78233	TX	1.00	6198	12/12/2011	29.56	-98.36
3079	Travis	Travis	78747	TX	6.30	25784	12/12/2011	30.13	-97.73
3080	Bexar	Bexar	78260	TX	4.62	20800	12/14/2011	29.69	-98.50

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3081	Bexar	Bexar	78232	TX	5.98	27508	12/14/2011	29.59	-98.46
3082	Bexar	Bexar	78255	TX	4.50	25560	12/14/2011	29.66	-98.67
3083	Matagorda	Brazoria	77404	TX	26.52		12/14/2011	28.96	-95.97
3084	Tarrant	Tarrant	76244	TX	4.16	21840	12/14/2011	32.95	-97.28
3085	Travis	Travis	78703	TX	2.88	11553	12/15/2011	30.29	-97.77
3086	Comal	Comal	78163	TX	4.00	21057	12/16/2011	29.77	-98.51
3087	Bexar	Bexar	78213	TX	5.94	28684	12/16/2011	29.50	-98.52
3088	Bexar	Bexar	78216	TX	8.46	39547	12/16/2011	29.55	-98.50
3089	Bexar	Bexar	78260	TX	9.20	51060	12/16/2011	29.69	-98.50
3090	Bexar	Bexar	78249	TX	5.76	30240	12/16/2011	29.57	-98.61
3091	Bexar	Bexar	78255	TX	5.06	27336	12/16/2011	29.66	-98.67
3092	Grayson	Collin	75491	TX	3.84	26110	12/16/2011	33.48	-96.39
3093	Parker	Parker	76087	TX	2.76	15800	12/16/2011	32.61	-97.83
3094	El Paso	El Paso	79912	TX	2.40	9341	12/17/2011	31.84	-106.53
3095	Bexar	Bexar	78023	TX	4.17	21000	12/19/2011	29.62	-98.73
3096	Bexar	Bexar	78240	TX	7.20	34861	12/19/2011	29.53	-98.61
3097	Bexar	Bexar	78023	TX	5.52	24597	12/19/2011	29.62	-98.73
3098	Dallas	Dallas	75081	TX	22.75		12/19/2011	32.96	-96.70
3099	Orange	Orange	77662	TX	7.10		12/19/2011	30.17	-94.01
3100	Travis	Travis	78731	TX	6.35	28369	12/19/2011	30.35	-97.77
3101	Williamson	Williamson	78681	TX	3.53	23400	12/19/2011	30.52	-97.71
3102	Bexar	Bexar	78250	TX	6.48	30772	12/21/2011	29.50	-98.67
3103	Callahan	Hood	79510	TX	10.80	79715	12/21/2011	32.22	-99.50
3104	Jefferson	Jefferson	77705	TX	8.46	61160	12/21/2011	29.96	-94.11
3105	Orange	Orange	77662	TX	7.05	34650	12/21/2011	30.17	-94.01
3106	Bexar	Bexar	78225	TX	18.00	85052	12/22/2011	29.39	-98.53
3107	El Paso	El Paso	79902	TX	76.38	422400	12/22/2011	31.78	-106.51
3108	El Paso	El Paso	79902	TX	108.42	557600	12/22/2011	31.78	-106.51
3109	Travis	Travis	78705	TX	8.00	26036	12/22/2011	30.30	-97.74
3110	Gregg	Gregg	75601	TX	14.40	65000	12/26/2011	32.51	-94.72
3111	Travis	Travis	78746	TX	6.11	24931	12/27/2011	30.31	-97.82
3112	Travis	Travis	78723	TX	2.04	8178	12/27/2011	30.31	-97.68
3113	El Paso	El Paso	79901	TX	36.96	241000	12/28/2011	31.76	-106.49
3114	Bell	Williamson	76513	TX	9.68	38695	12/28/2011	31.07	-97.50
3115	Jefferson	Jefferson	77710	TX	8.46		12/29/2011	30.05	-94.08
3116	Travis	Travis	78753	TX	6.24	21900	12/29/2011	30.39	-97.67
3117	Travis	Travis	78744	TX	1.48		12/29/2011	30.20	-97.73
3118	Travis	Travis	78744	TX	5.44	43878	12/29/2011	30.20	-97.73
3119	Travis	Travis	78727	TX	4.32		12/29/2011	30.43	-97.71
3120	Travis	Travis	78723	TX	5.28	33742	12/29/2011	30.31	-97.68

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3121	Travis	Travis	78747	TX	3.52	21242	12/29/2011	30.13	-97.73
3122	Wilbarger	Parker	76384	TX	10.80	104258	12/29/2011	34.20	-99.32
3123	Bexar	Bexar	78249	TX	33.10	157096	12/30/2011	29.57	-98.61
3124	Bexar	Bexar	78249	TX	139.70	616935	12/30/2011	29.57	-98.61
3125	Bexar	Bexar	78259	TX	3.60	18417	12/30/2011	29.62	-98.43
3126	Bexar	Bexar	78258	TX	5.52	30250	12/30/2011	29.65	-98.47
3127	Bexar	Bexar	78264	TX	12.42	49680	12/30/2011	29.17	-98.51
3128	Bexar	Bexar	78264	TX	6.11	20385	12/30/2011	29.17	-98.51
3129	Bexar	Bexar	78233	TX	4.86	19391	12/30/2011	29.56	-98.36
3130	Schleicher	Bexar	76936	TX	9.75	158115	12/31/2011	30.91	-100.71
3131	Schleicher	Bexar	76936	TX	9.75	158115	12/31/2011	30.91	-100.71
3132	Montgomery	Montgomery	77302	TX	10.12	58685	12/31/2011	30.21	-95.33
3133	Galveston	Galveston	77546	TX	10.12	52389	12/31/2011	29.54	-95.20
3134	Comal	Comal	78266	TX	15.66	53009	1/3/2012	29.63	-98.32
3135	Bexar	Bexar	78254	TX	4.05	18225	1/3/2012	29.53	-98.78
3136	Kendall	Bexar	78015	TX	5.76	31680	1/3/2012	29.75	-98.65
3137	Travis	Travis	78759	TX	6.08	25260	1/3/2012	30.40	-97.75
3138	Travis	Travis	78730	TX	6.09	29503	1/3/2012	30.37	-97.84
3139	Travis	Travis	78704	TX	6.08	23263	1/3/2012	30.25	-97.77
3140	Travis	Travis	78746	TX	5.16	21549	1/3/2012	30.31	-97.82
3141	Bexar	Bexar	78247	TX	4.14	15682	1/4/2012	29.59	-98.41
3142	Bexar	Bexar	78254	TX	3.50	18673	1/5/2012	29.53	-98.78
3143	Travis	Travis	78749	TX	5.96	24991	1/5/2012	30.22	-97.86
3144	Travis	Travis	78745	TX	3.09	12250	1/5/2012	30.22	-97.80
3145	Bexar	Bexar	78209	TX	26.88	124561	1/6/2012	29.49	-98.45
3146	Travis	Travis	78732	TX	6.19	24677	1/6/2012	30.38	-97.89
3147	Travis	Travis	78732	TX	2.78		1/6/2012	30.38	-97.89
3148	Travis	Travis	78732	TX	2.78	21296	1/6/2012	30.38	-97.89
3149	Travis	Travis	78731	TX	9.28	42016	1/6/2012	30.35	-97.77
3150	Travis	Travis	78723	TX	5.67	20783	1/6/2012	30.31	-97.68
3151	Bexar	Bexar	78023	TX	13.44	73920	1/9/2012	29.62	-98.73
3152	Travis	Travis	78703	TX	2.95		1/9/2012	30.29	-97.77
3153	Travis	Travis	78734	TX	6.19	25912	1/9/2012	30.37	-97.95
3154	Travis	Travis	78749	TX	7.27	50365	1/9/2012	30.22	-97.86
3155	Bexar	Bexar	78253	TX	4.60	27129	1/10/2012	29.47	-98.81
3156	Travis	Travis	78733	TX	10.30	63677	1/17/2012	30.33	-97.87
3157	Travis	Travis	78733	TX	5.33	19872	1/18/2012	30.33	-97.87
3158	Travis	Travis	78733	TX	5.20		1/18/2012	30.33	-97.87
3159	Travis	Travis	78733	TX	11.32	27386	1/18/2012	30.33	-97.87
3160	Travis	Travis	78733	TX	5.92	67652	1/18/2012	30.33	-97.87

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3161	Travis	Travis	78746	TX	5.76	32062	1/18/2012	30.31	-97.82
3162	Travis	Travis	78759	TX	5.34	25908	1/19/2012	30.40	-97.75
3163	Travis	Travis	78753	TX	6.24	21900	1/19/2012	30.39	-97.67
3164	Travis	Travis	78703	TX	6.12	29100	1/19/2012	30.29	-97.77
3165	Travis	Travis	78727	TX	6.24	23088	1/19/2012	30.43	-97.71
3166	Travis	Travis	78704	TX	6.37	23263	1/19/2012	30.25	-97.77
3167	Travis	Travis	78723	TX	2.04	8178	1/19/2012	30.31	-97.68
3168	Travis	Travis	78731	TX	6.35	28369	1/19/2012	30.35	-97.77
3169	Travis	Travis	78746	TX	5.40	21549	1/19/2012	30.31	-97.82
3170	Travis	Travis	78732	TX	2.31	7757	1/19/2012	30.38	-97.89
3171	Travis	Travis	78723	TX	3.24	12952	1/19/2012	30.31	-97.68
3172	Travis	Travis	78723	TX	6.27	26983	1/19/2012	30.31	-97.68
3173	Bexar	Bexar	78233	TX	8.64	28952	1/20/2012	29.56	-98.36
3174	Bexar	Bexar	78233	TX	5.17	21456	1/20/2012	29.56	-98.36
3175	Comal	Comal	78070	TX	13.16	67493	1/20/2012	29.87	-98.42
3176	Bexar	Bexar	78259	TX	7.36	37801	1/20/2012	29.62	-98.43
3177	Bexar	Bexar	78023	TX	4.60	20240	1/20/2012	29.62	-98.73
3178	Travis	Travis	78731	TX	5.20	20495	1/20/2012	30.35	-97.77
3179	Bexar	Bexar	78258	TX	10.80	58895	1/24/2012	29.65	-98.47
3180	Bexar	Bexar	78213	TX	6.60	29700	1/24/2012	29.50	-98.52
3181	Bexar	Bexar	78112	TX	10.58	58394	1/24/2012	29.21	-98.39
3182	Bexar	Bexar	78112	TX	9.17	43804	1/24/2012	29.21	-98.39
3183	Travis	Travis	78702	TX	15.20	68394	1/24/2012	30.26	-97.71
3184	Travis	Travis	78702	TX	4.90	22063	1/24/2012	30.26	-97.71
3185	Montgomery	Montgomery	77382	TX	4.14	17497	1/24/2012	30.20	-95.55
3186	Montgomery	Montgomery	77382	TX	4.14	17497	1/24/2012	30.20	-95.55
3187	Bexar	Bexar	78260	TX	7.52	30005	1/27/2012	29.69	-98.50
3188	Bexar	Bexar	78212	TX	6.21	33388	1/27/2012	29.46	-98.50
3189	Bexar	Bexar	78247	TX	5.98	18885	1/27/2012	29.59	-98.41
3190	Bexar	Bexar	78260	TX	7.36	28460	1/27/2012	29.69	-98.50
3191	Travis	Travis	78733	TX	10.32	63677	1/27/2012	30.33	-97.87
3192	Bexar	Bexar	78256	TX	6.90	56140	1/30/2012	29.62	-98.62
3193	Bexar	Bexar	78263	TX	11.10	44841	1/30/2012	29.36	-98.32
3194	Bexar	Bexar	78212	TX	12.65	60793	1/30/2012	29.46	-98.50
3195	Bexar	Bexar	78209	TX	5.88	26891	1/30/2012	29.49	-98.45
3196	Bexar	Bexar	78261	TX	4.86	15917	2/2/2012	29.70	-98.41
3197	Bexar	Bexar	78230	TX	10.18	41981	2/2/2012	29.54	-98.56
3198	Bexar	Bexar	78244	TX	1.02	3464	2/2/2012	29.47	-98.35
3199	Bexar	Bexar	78256	TX	15.84	66186	2/2/2012	29.62	-98.62
3200	Bexar	Bexar	78256	TX	7.02	33134	2/2/2012	29.62	-98.62

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3201	Travis	Travis	78763	TX	13.44	35702	2/2/2012	30.30	-97.77
3202	Travis	Travis	78763	TX	6.91		2/2/2012	30.30	-97.77
3203	Travis	Travis	78763	TX	5.50	98000	2/2/2012	30.30	-97.77
3204	Travis	Travis	78736	TX	6.37	27386	2/2/2012	30.25	-97.95
3205	Travis	Travis	78746	TX	6.11	24931	2/2/2012	30.31	-97.82
3206	Travis	Travis	78759	TX	6.30	25260	2/2/2012	30.40	-97.75
3207	Travis	Travis	78731	TX	5.39	20495	2/2/2012	30.35	-97.77
3208	Travis	Travis	78730	TX	6.34	29503	2/2/2012	30.37	-97.84
3209	Travis	Travis	78734	TX	6.48	25912	2/2/2012	30.37	-97.95
3210	Travis	Travis	78759	TX	5.50	25908	2/2/2012	30.40	-97.75
3211	Johnson	Johnson	76084	TX	5.88	30400	2/3/2012	32.44	-97.10
3212	Travis	Travis	78735	TX	6.02	23400	2/3/2012	30.26	-97.86
3213	Travis	Travis	78756	TX	5.99	26651	2/3/2012	30.32	-97.74
3214	Travis	Travis	78704	TX	2.43	10368	2/3/2012	30.25	-97.77
3215	Travis	Travis	78702	TX	4.90	22063	2/3/2012	30.26	-97.71
3216	Travis	Travis	78702	TX	15.19	68394	2/3/2012	30.26	-97.71
3217	El Paso	El Paso	79836	TX	2.46	16880	2/6/2012	31.57	-106.19
3218	Travis	Travis	78723	TX	6.27	24275	2/7/2012	30.31	-97.68
3219	Bexar	Bexar	78261	TX	7.52	43144	2/9/2012	29.70	-98.41
3220	Bexar	Bexar	78251	TX	5.28	23232	2/9/2012	29.47	-98.68
3221	Bexar	Bexar	78209	TX	6.58	30268	2/10/2012	29.49	-98.45
3222	Bexar	Bexar	78260	TX	6.90	35438	2/10/2012	29.69	-98.50
3223	Bexar	Bexar	78245	TX	4.32	15970	2/10/2012	29.40	-98.74
3224	Bexar	Bexar	78240	TX	28.75	128920	2/10/2012	29.53	-98.61
3225	Bexar	Bexar	78023	TX	6.00	30000	2/10/2012	29.62	-98.73
3226	Bexar	Bexar	78233	TX	6.60	31136	2/10/2012	29.56	-98.36
3227	Travis	Travis	78746	TX	7.63	20196	2/10/2012	30.31	-97.82
3228	Travis	Travis	78746	TX	4.00	27075	2/10/2012	30.31	-97.82
3229	Travis	Travis	78757	TX	6.08	26186	2/13/2012	30.35	-97.74
3230	Collin	Collin	75070	TX	6.11		2/13/2012	33.18	-96.70
3231	Comal	Comal	78163	TX	7.76	37224	2/14/2012	29.77	-98.51
3232	Bexar	Bexar	78239	TX	5.85	21324	2/14/2012	29.52	-98.36
3233	Bexar	Bexar	78239	TX	6.37	23846	2/14/2012	29.52	-98.36
3234	Bexar	Bexar	78261	TX	12.22	62322	2/14/2012	29.70	-98.41
3235	Bexar	Bexar	78233	TX	10.00	37021	2/14/2012	29.56	-98.36
3236	Bexar	Bexar	78247	TX	13.50	49046	2/14/2012	29.59	-98.41
3237	Bexar	Bexar	78215	TX	16.92	83754	2/14/2012	29.44	-98.48
3238	Bexar	Bexar	78215	TX	16.92	83754	2/14/2012	29.44	-98.48
3239	Bexar	Bexar	78215	TX	17.62	87243	2/14/2012	29.44	-98.48
3240	Bexar	Bexar	78215	TX	17.62	87243	2/14/2012	29.44	-98.48

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3241	Bexar	Bexar	78213	TX	5.28	25236	2/15/2012	29.50	-98.52
3242	Bexar	Bexar	78232	TX	8.10	48619	2/15/2012	29.59	-98.46
3243	Travis	Travis	78724	TX	5.61	20196	2/15/2012	30.29	-97.62
3244	Travis	Travis	78757	TX	6.30	26186	2/15/2012	30.35	-97.74
3245	Travis	Travis	78735	TX	6.24	23400	2/15/2012	30.26	-97.86
3246	Travis	Travis	78733	TX	2.16	11385	2/15/2012	30.33	-97.87
3247	Travis	Travis	78745	TX	3.22	12250	2/15/2012	30.22	-97.80
3248	Travis	Travis	78749	TX	4.50	21265	2/15/2012	30.22	-97.86
3249	Travis	Travis	78733	TX	5.52	19872	2/15/2012	30.33	-97.87
3250	Travis	Travis	78751	TX	6.12	24317	2/15/2012	30.31	-97.73
3251	Travis	Travis	78749	TX	6.21	24991	2/15/2012	30.22	-97.86
3252	Travis	Travis	78733	TX	14.46	56872	2/15/2012	30.33	-97.87
3253	Travis	Travis	78733	TX	2.45	10780	2/15/2012	30.33	-97.87
3254	Travis	Travis	78756	TX	6.24	26651	2/15/2012	30.32	-97.74
3255	Travis	Travis	78732	TX	6.48	23974	2/15/2012	30.38	-97.89
3256	Travis	Travis	78705	TX	8.00	26036	2/15/2012	30.30	-97.74
3257	Travis	Travis	78704	TX	2.53	10368	2/15/2012	30.25	-97.77
3258	Bexar	Bexar	78257	TX	2.76	16293	2/16/2012	29.66	-98.58
3259	Bexar	Bexar	78069	TX	9.60	41000	2/16/2012	29.19	-98.67
3260	Bexar	Bexar	78233	TX	2.76	11084	2/16/2012	29.56	-98.36
3261	Bexar	Bexar	78259	TX	6.24	26520	2/16/2012	29.62	-98.43
3262	Bexar	Bexar	78209	TX	3.29	18260	2/16/2012	29.49	-98.45
3263	Bexar	Bexar	78209	TX	5.98	26570	2/16/2012	29.49	-98.45
3264	Bexar	Bexar	78225	TX	33.80	143143	2/16/2012	29.39	-98.53
3265	Bexar	Bexar	78209	TX	5.06	20746	2/16/2012	29.49	-98.45
3266	Kendall	Bexar	78015	TX	6.44	24445	2/16/2012	29.75	-98.65
3267	Travis	Travis	78731	TX	1.27		2/16/2012	30.35	-97.77
3268	Travis	Travis	78745	TX	6.19	27332	2/16/2012	30.22	-97.80
3269	Travis	Travis	78745	TX	7.25	43530	2/16/2012	30.22	-97.80
3270	Bexar	Bexar	78217	TX	5.30	24288	2/17/2012	29.54	-98.42
3271	Bexar	Bexar	78209	TX	9.66	34182	2/17/2012	29.49	-98.45
3272	Galveston	Galveston	77546	TX	10.12	52389	2/20/2012	29.54	-95.20
3273	Travis	Travis	78734	TX	3.18	15558	2/21/2012	30.37	-97.95
3274	Travis	Travis	78734	TX	3.18	17661	2/21/2012	30.37	-97.95
3275	Travis	Travis	78749	TX	2.44	11146	2/21/2012	30.22	-97.86
3276	Travis	Travis	78754	TX	5.79	19500	2/22/2012	30.36	-97.65
3277	Travis	Travis	78724	TX	9.73	40560	2/22/2012	30.29	-97.62
3278	Travis	Travis	78728	TX	2.32		2/22/2012	30.46	-97.68
3279	Travis	Travis	78757	TX	5.52	23073	2/23/2012	30.35	-97.74
3280	Travis	Travis	78728	TX	6.24	20280	2/23/2012	30.46	-97.68

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3281	Travis	Travis	78724	TX	6.24	20280	2/23/2012	30.29	-97.62
3282	Travis	Travis	78745	TX	6.35	27332	2/23/2012	30.22	-97.80
3283	Travis	Travis	78734	TX	3.33	15558	2/23/2012	30.37	-97.95
3284	Travis	Travis	78745	TX	2.58	15490	2/23/2012	30.22	-97.80
3285	Travis	Travis	78734	TX	3.33	17661	2/23/2012	30.37	-97.95
3286	Travis	Travis	78731	TX	6.24	28040	2/23/2012	30.35	-97.77
3287	Travis	Travis	78746	TX	6.44	27075	2/23/2012	30.31	-97.82
3288	Travis	Travis	78746	TX	6.00	32062	2/23/2012	30.31	-97.82
3289	Travis	Travis	78731	TX	3.22	18041	2/23/2012	30.35	-97.77
3290	Travis	Travis	78733	TX	6.19	23974	2/24/2012	30.33	-97.87
3291	Bexar	Bexar	78216	TX	7.77	38694	2/27/2012	29.55	-98.50
3292	Bexar	Bexar	78255	TX	5.80	20880	2/27/2012	29.66	-98.67
3293	Travis	Travis	78732	TX	5.04	19435	2/27/2012	30.38	-97.89
3294	Travis	Travis	78745	TX	4.65	20600	2/27/2012	30.22	-97.80
3295	Travis	Travis	78745	TX	3.08	17757	2/27/2012	30.22	-97.80
3296	Bexar	Bexar	78254	TX	4.60	17127	2/28/2012	29.53	-98.78
3297	Montgomery	Montgomery	77302	TX	10.12	46267	2/29/2012	30.21	-95.33
3298	Dallas	Dallas	75006	TX	30.55		3/1/2012	32.97	-96.89
3299	Dallas	Dallas	75006	TX	30.55		3/1/2012	32.97	-96.89
3300	Travis	Travis	78727	TX	9.92	21874	3/1/2012	30.43	-97.71
3301	Travis	Travis	78727	TX	1.76	24640	3/1/2012	30.43	-97.71
3302	Travis	Travis	78754	TX	6.00	19500	3/1/2012	30.36	-97.65
3303	Travis	Travis	78757	TX	5.72	23073	3/1/2012	30.35	-97.74
3304	Travis	Travis	78732	TX	6.48	24677	3/1/2012	30.38	-97.89
3305	Travis	Travis	78732	TX	5.76	21296	3/1/2012	30.38	-97.89
3306	Travis	Travis	78749	TX	2.58	11146	3/1/2012	30.22	-97.86
3307	Travis	Travis	78733	TX	6.48	23974	3/1/2012	30.33	-97.87
3308	Bexar	Bexar	78261	TX	4.55	27941	3/2/2012	29.70	-98.41
3309	Bexar	Bexar	78260	TX	6.44	24276	3/2/2012	29.69	-98.50
3310	Tarrant	Tarrant	76248	TX	8.97		3/2/2012	32.93	-97.23
3311	Bexar	Bexar	78023	TX	9.87	37013	3/2/2012	29.62	-98.73
3312	Bexar	Bexar	78258	TX	5.64	22530	3/2/2012	29.65	-98.47
3313	Bexar	Bexar	78073	TX	5.52	24326	3/2/2012	29.24	-98.63
3314	Travis	Travis	78751	TX	5.79	20595	3/2/2012	30.31	-97.73
3315	Bexar	Bexar	78209	TX	7.29	32846	3/5/2012	29.49	-98.45
3316	Travis	Travis	78744	TX	5.67	22109	3/5/2012	30.20	-97.73
3317	Hidalgo	Nueces	78539	TX	3.06	14357	3/5/2012	26.27	-98.19
3318	El Paso	El Paso	79836	TX	217.10		3/5/2012	31.58	-106.23
3319	Bexar	Bexar	78207	TX	26.88	122991	3/6/2012	29.42	-98.52
3320	Travis	Travis	78744	TX	5.56	18720	3/6/2012	30.20	-97.73

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3321	Travis	Travis	78732	TX	7.48	27606	3/7/2012	30.38	-97.89
3322	Travis	Travis	78732	TX	1.68	16420	3/7/2012	30.38	-97.89
3323	Hidalgo	Nueces	78572	TX	11.28	51400	3/7/2012	26.20	-98.37
3324	Travis	Travis	78751	TX	6.00	20595	3/7/2012	30.31	-97.73
3325	Travis	Travis	78727	TX	6.30	24640	3/7/2012	30.43	-97.71
3326	Travis	Travis	78744	TX	5.88	22109	3/7/2012	30.20	-97.73
3327	Travis	Travis	78763	TX	18.72	98000	3/7/2012	30.30	-97.77
3328	Travis	Travis	78759	TX	5.78	23345	3/8/2012	30.40	-97.75
3329	Travis	Travis	78724	TX	4.63	15600	3/8/2012	30.29	-97.62
3330	Travis	Travis	78704	TX	5.00	27485	3/8/2012	30.25	-97.77
3331	Maverick	Bexar	78852	TX	6.48	31035	3/8/2012	28.80	-100.22
3332	Travis	Travis	78704	TX	2.55	11850	3/9/2012	30.25	-97.77
3333	Travis	Travis	78704	TX	3.69	16388	3/9/2012	30.25	-97.77
3334	Denton	Denton	76207	TX	5.64		3/12/2012	33.22	-97.19
3335	Bexar	Bexar	78253	TX	5.20	24856	3/14/2012	29.47	-98.81
3336	Bexar	Bexar	78233	TX	7.20	34560	3/14/2012	29.56	-98.36
3337	Bexar	Bexar	78239	TX	5.76	21072	3/14/2012	29.52	-98.36
3338	Bexar	Bexar	78232	TX	5.17	28435	3/14/2012	29.59	-98.46
3339	Bexar	Bexar	78230	TX	10.00	48377	3/14/2012	29.54	-98.56
3340	Bexar	Bexar	78249	TX	6.11	31000	3/14/2012	29.57	-98.61
3341	Bexar	Bexar	78230	TX	6.70	34608	3/14/2012	29.54	-98.56
3342	Bexar	Bexar	78261	TX	5.64	30722	3/14/2012	29.70	-98.41
3343	Bexar	Bexar	78255	TX	3.89	41623	3/15/2012	29.66	-98.67
3344	Bexar	Bexar	78245	TX	7.20	32838	3/15/2012	29.40	-98.74
3345	Travis	Travis	78744	TX	5.76	18720	3/15/2012	30.20	-97.73
3346	Travis	Travis	78732	TX	5.28	19435	3/15/2012	30.38	-97.89
3347	Travis	Travis	78732	TX	3.48	16420	3/15/2012	30.38	-97.89
3348	Travis	Travis	78732	TX	6.11	27606	3/15/2012	30.38	-97.89
3349	Travis	Travis	78745	TX	4.84	20600	3/15/2012	30.22	-97.80
3350	Travis	Travis	78703	TX	5.76	21874	3/15/2012	30.29	-97.77
3351	Bexar	Bexar	78223	TX	2.99	13103	3/20/2012	29.30	-98.41
3352	Bexar	Bexar	78207	TX	48.00	391634	3/22/2012	29.42	-98.52
3353	Bexar	Bexar	78229	TX	132.60	798617	3/22/2012	29.51	-98.58
3354	Bexar	Bexar	78207	TX	141.68	761459	3/22/2012	29.42	-98.52
3355	Bexar	Bexar	78263	TX	5.28	18976	3/22/2012	29.36	-98.32
3356	Travis	Travis	78724	TX	4.80	15600	3/22/2012	30.29	-97.62
3357	Travis	Travis	78704	TX	2.66	11850	3/22/2012	30.25	-97.77
3358	Bell	Williamson	76544	TX	684.00	3000000	3/27/2012	31.12	-97.79
3359	Bexar	Bexar	78209	TX	5.00	21697	3/27/2012	29.49	-98.45
3360	Bexar	Bexar	78217	TX	6.38	24244	3/27/2012	29.54	-98.42

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3361	Bexar	Bexar	78255	TX	4.32	24955	3/27/2012	29.66	-98.67
3362	Bexar	Bexar	78209	TX	4.70	26085	3/27/2012	29.49	-98.45
3363	El Paso	El Paso	79934	TX	10.24	62190	3/27/2012	31.98	-106.42
3364	Travis	Travis	78758	TX	6.00	19500	3/29/2012	30.39	-97.70
3365	Travis	Travis	78735	TX	5.25	20338	3/29/2012	30.26	-97.86
3366	Travis	Travis	78733	TX	6.48	24975	3/29/2012	30.33	-97.87
3367	Travis	Travis	78735	TX	6.24	23088	3/29/2012	30.26	-97.86
3368	Travis	Travis	78735	TX	6.25	20313	3/29/2012	30.26	-97.86
3369	Travis	Travis	78723	TX	4.07	12243	3/29/2012	30.31	-97.68
3370	Travis	Travis	78730	TX	6.24	22919	3/29/2012	30.37	-97.84
3371	Travis	Travis	78731	TX	6.30	21389	3/29/2012	30.35	-97.77
3372	Travis	Travis	78704	TX	3.80	17222	3/29/2012	30.25	-97.77
3373	Travis	Travis	78746	TX	1.52	5746	3/29/2012	30.31	-97.82
3374	Travis	Travis	78727	TX	6.76	24637	3/29/2012	30.43	-97.71
3375	Travis	Travis	78704	TX	3.42	14826	3/29/2012	30.25	-97.77
3376	Travis	Travis	78704	TX	4.56	19492	3/29/2012	30.25	-97.77
3377	Travis	Travis	78704	TX	2.66	11850	3/29/2012	30.25	-97.77
3378	Travis	Travis	78704	TX	4.18	17868	3/29/2012	30.25	-97.77
3379	Travis	Travis	78704	TX	4.18	17929	3/29/2012	30.25	-97.77
3380	Travis	Travis	78704	TX	2.66	11850	3/29/2012	30.25	-97.77
3381	Travis	Travis	78704	TX	4.56	20855	3/29/2012	30.25	-97.77
3382	Travis	Travis	78704	TX	2.66	11850	3/29/2012	30.25	-97.77
3383	Travis	Travis	78750	TX	5.94	21705	3/29/2012	30.43	-97.80
3384	Bexar	Bexar	78258	TX	24.03	79299	3/30/2012	29.65	-98.47
3385	Bexar	Bexar	78210	TX	25.76	99102	4/2/2012	29.40	-98.47
3386	Bexar	Bexar	78229	TX	9.12	44561	4/2/2012	29.51	-98.58
3387	Bexar	Bexar	78261	TX	3.48	15777	4/4/2012	29.70	-98.41
3388	Bexar	Bexar	78261	TX	6.67	25346	4/4/2012	29.70	-98.41
3389	Bexar	Bexar	78256	TX	5.00	22529	4/4/2012	29.62	-98.62
3390	Bexar	Bexar	78230	TX	3.50	15342	4/4/2012	29.54	-98.56
3391	Bexar	Bexar	78237	TX	3.50	15490	4/4/2012	29.41	-98.57
3392	Bexar	Bexar	78251	TX	3.05	12335	4/4/2012	29.47	-98.68
3393	Bexar	Bexar	78260	TX	6.11	31161	4/4/2012	29.69	-98.50
3394	Bexar	Bexar	78232	TX	4.81	19096	4/4/2012	29.59	-98.46
3395	Bexar	Bexar	78261	TX	4.35	19140	4/4/2012	29.70	-98.41
3396	Bexar	Bexar	78250	TX	5.80	26726	4/4/2012	29.50	-98.67
3397	Dallas	Dallas	75006	TX	3.15	20530	4/4/2012	32.97	-96.89
3398	El Paso	El Paso	79934	TX	4.31	26622	4/4/2012	31.98	-106.42
3399	El Paso	El Paso	79912	TX	10.34	42394	4/5/2012	31.86	-106.55
3400	Travis	Travis	78736	TX	6.00	19500	4/5/2012	30.25	-97.95

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3401	Travis	Travis	78732	TX	5.40	21120	4/5/2012	30.38	-97.89
3402	Travis	Travis	78732	TX	6.58	29434	4/5/2012	30.38	-97.89
3403	Travis	Travis	78704	TX	4.56	19492	4/5/2012	30.25	-97.77
3404	Travis	Travis	78731	TX	4.86	18977	4/5/2012	30.35	-97.77
3405	Bexar	Bexar	78258	TX	6.48	23198	4/6/2012	29.65	-98.47
3406	Bexar	Bexar	78213	TX	6.11	24588	4/9/2012	29.50	-98.52
3407	Bexar	Bexar	78261	TX	24.96	129792	4/9/2012	29.70	-98.41
3408	Collin	Collin	75070	TX	5.51	32333	4/10/2012	33.18	-96.70
3409	Dallas	Dallas	75211	TX	1.65	9050	4/11/2012	32.74	-96.89
3410	Comal	Comal	78266	TX	18.10	87103	4/11/2012	29.63	-98.32
3411	Comal	Comal	78266	TX	28.91	135350	4/11/2012	29.63	-98.32
3412	Bexar	Bexar	78209	TX	4.60	18501	4/12/2012	29.49	-98.45
3413	Bexar	Bexar	78233	TX	5.52	22818	4/12/2012	29.56	-98.36
3414	Bexar	Bexar	78240	TX	5.00	24600	4/13/2012	29.53	-98.61
3415	Gregg	Gregg	75605	TX	10.00	37000	4/13/2012	32.56	-94.71
3416	Travis	Travis	78748	TX	6.00	23880	4/13/2012	30.17	-97.82
3417	Travis	Travis	78746	TX	6.25	22500	4/13/2012	30.31	-97.82
3418	Travis	Travis	78748	TX	5.40	21086	4/13/2012	30.17	-97.82
3419	Travis	Travis	78759	TX	6.12	23345	4/13/2012	30.40	-97.75
3420	El Paso	El Paso	79904	TX	10.24	62190	4/17/2012	31.87	-106.48
3421	Dallas	Dallas	75082	TX	2.40	10700	4/18/2012	33.00	-96.66
3422	Travis	Travis	78753	TX	5.50	20625	4/19/2012	30.39	-97.67
3423	Travis	Travis	78753	TX	6.00	20600	4/19/2012	30.39	-97.67
3424	Jim Wells	Nueces	78332	TX	2.35	10700	4/19/2012	27.74	-98.09
3425	Dallas	Dallas	75211	TX	1.65	9050	4/19/2012	32.74	-96.89
3426	Travis	Travis	78747	TX	6.50	24500	4/19/2012	30.13	-97.73
3427	Travis	Travis	78744	TX	6.25	23438	4/19/2012	30.20	-97.73
3428	Travis	Travis	78735	TX	6.00	23225	4/19/2012	30.26	-97.86
3429	Travis	Travis	78744	TX	5.50	20750	4/19/2012	30.20	-97.73
3430	Travis	Travis	78732	TX	6.11	25482	4/19/2012	30.38	-97.89
3431	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3432	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3433	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3434	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3435	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3436	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3437	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3438	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3439	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3440	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3441	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3442	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3443	Dallas	Dallas	75212	TX	0.92	7820	4/20/2012	32.78	-96.88
3444	Bexar	Bexar	78210	TX	5.94	22269	4/23/2012	29.40	-98.47
3445	Bexar	Bexar	78253	TX	10.32	39883	4/24/2012	29.47	-98.81
3446	Bexar	Bexar	78148	TX	35.72	190950	4/24/2012	29.55	-98.30
3447	Bexar	Bexar	78207	TX	6.58	36900	4/24/2012	29.42	-98.52
3448	Bexar	Bexar	78148	TX	6.58	35400	4/24/2012	29.55	-98.30
3449	Bexar	Bexar	78109	TX	6.58	33900	4/24/2012	29.47	-98.30
3450	Cameron	Nueces	78550	TX	5.64	25700	4/24/2012	26.26	-97.65
3451	Hidalgo	Nueces	78501	TX	11.28	51400	4/24/2012	26.22	-98.23
3452	Cameron	Nueces	78550	TX	5.64	25700	4/24/2012	26.26	-97.65
3453	Guadalupe	Guadalupe	78154	TX	46.08		4/25/2012	29.59	-98.28
3454	Travis	Travis	78747	TX	6.13	23275	4/25/2012	30.13	-97.73
3455	Travis	Travis	78745	TX	3.19	12103	4/25/2012	30.22	-97.80
3456	Travis	Travis	78727	TX	9.24	29990	4/25/2012	30.43	-97.71
3457	Travis	Travis	78723	TX	5.76	19095	4/25/2012	30.31	-97.68
3458	Hood	Hood	76049	TX	2.85	18269	4/30/2012	32.46	-97.72
3459	Bexar	Bexar	78258	TX	6.09	27405	5/2/2012	29.65	-98.47
3460	Bexar	Bexar	78249	TX	4.35	15008	5/2/2012	29.57	-98.61
3461	El Paso	El Paso	79907	TX	167.55	1080000	5/2/2012	31.71	-106.33
3462	Travis	Travis	78744	TX	6.00	22500	5/3/2012	30.20	-97.73
3463	Travis	Travis	78748	TX	6.00	23880	5/3/2012	30.17	-97.82
3464	Travis	Travis	78724	TX	3.50	12600	5/3/2012	30.29	-97.62
3465	Travis	Travis	78759	TX	5.94	22775	5/3/2012	30.40	-97.75
3466	Travis	Travis	78746	TX	3.75	14800	5/3/2012	30.31	-97.82
3467	Travis	Travis	78731	TX	5.64	21413	5/3/2012	30.35	-97.77
3468	Travis	Travis	78734	TX	6.00	22500	5/3/2012	30.37	-97.95
3469	Travis	Travis	78759	TX	2.75	9900	5/3/2012	30.40	-97.75
3470	Travis	Travis	78759	TX	5.76	23952	5/3/2012	30.40	-97.75
3471	Travis	Travis	78732	TX	6.38	27112	5/3/2012	30.38	-97.89
3472	Travis	Travis	78731	TX	5.00	21737	5/3/2012	30.35	-97.77
3473	Travis	Travis	78723	TX	6.50	24275	5/3/2012	30.31	-97.68
3474	Travis	Travis	78704	TX	3.80	16388	5/3/2012	30.25	-97.77
3475	Travis	Travis	78735	TX	6.48	22709	5/3/2012	30.26	-97.86
3476	Bexar	Bexar	78260	TX	7.59	28089	5/4/2012	29.69	-98.50
3477	Bexar	Bexar	78232	TX	9.87	39993	5/4/2012	29.59	-98.46
3478	Bexar	Bexar	78023	TX	4.35	21228	5/4/2012	29.62	-98.73
3479	Duval	Nueces	78341	TX	6.84	38451	5/4/2012	27.62	-98.53
3480	Bexar	Bexar	78231	TX	12.65	59016	5/7/2012	29.58	-98.54

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3481	Williamson	Williamson	78665	TX	8.50	32000	5/7/2012	30.55	-97.62
3482	El Paso	El Paso	79925	TX	3.53	17520	5/7/2012	31.80	-106.36
3483	El Paso	El Paso	79922	TX	7.05	19470	5/7/2012	31.83	-106.58
3484	El Paso	El Paso	79925	TX	20.68	84788	5/7/2012	31.80	-106.36
3485	Tarrant	Tarrant	76133	TX	2.76	16560	5/9/2012	32.65	-97.38
3486	Travis	Travis	78733	TX	6.24	25200	5/9/2012	30.33	-97.87
3487	Travis	Travis	78744	TX	3.52	20790	5/9/2012	30.20	-97.73
3488	Travis	Travis	78744	TX	3.52	20790	5/9/2012	30.20	-97.73
3489	Travis	Travis	78617	TX	3.52	21301	5/9/2012	30.15	-97.59
3490	Travis	Travis	78617	TX	3.50	20790	5/9/2012	30.15	-97.59
3491	Travis	Travis	78744	TX	3.52	21301	5/9/2012	30.20	-97.73
3492	Travis	Travis	78744	TX	3.50	20790	5/9/2012	30.20	-97.73
3493	Travis	Travis	78744	TX	3.52	21049	5/9/2012	30.20	-97.73
3494	Travis	Travis	78747	TX	3.50	20790	5/9/2012	30.13	-97.73
3495	Travis	Travis	78747	TX	3.52	21242	5/9/2012	30.13	-97.73
3496	Travis	Travis	78747	TX	3.52	21242	5/9/2012	30.13	-97.73
3497	Bexar	Bexar	78245	TX	5.28	27427	5/10/2012	29.40	-98.74
3498	Bexar	Bexar	78207	TX	5.06	20493	5/10/2012	29.42	-98.52
3499	Guadalupe	Guadalupe	78154	TX	16.30	84069	5/11/2012	29.59	-98.28
3500	Bexar	Bexar	78259	TX	25.92	57008	5/11/2012	29.62	-98.43
3501	El Paso	El Paso	79934	TX	5.64	21432	5/13/2012	31.98	-106.42
3502	Callahan	Hood	79510	TX	10.80	75600	5/16/2012	32.22	-99.50
3503	Callahan	Hood	79510	TX	10.80	75600	5/16/2012	32.22	-99.50
3504	Bexar	Bexar	78256	TX	23.35	157222	5/17/2012	29.62	-98.62
3505	Bexar	Bexar	78257	TX	6.53	29588	5/17/2012	29.66	-98.58
3506	Bexar	Bexar	78258	TX	4.35	20010	5/17/2012	29.65	-98.47
3507	Bexar	Bexar	78209	TX	6.67	26846	5/17/2012	29.49	-98.45
3508	Bexar	Bexar	78249	TX	4.35	15008	5/17/2012	29.57	-98.61
3509	Bexar	Bexar	78254	TX	4.60	19043	5/17/2012	29.53	-98.78
3510	Travis	Travis	78754	TX	6.25	23437	5/17/2012	30.36	-97.65
3511	Travis	Travis	78723	TX	6.00	22625	5/17/2012	30.31	-97.68
3512	Travis	Travis	78748	TX	4.66	18527	5/17/2012	30.17	-97.82
3513	Travis	Travis	78745	TX	3.19	12103	5/17/2012	30.22	-97.80
3514	Travis	Travis	78748	TX	4.66	18527	5/17/2012	30.17	-97.82
3515	Travis	Travis	78745	TX	3.00	11400	5/17/2012	30.22	-97.80
3516	Travis	Travis	78748	TX	5.39	20482	5/17/2012	30.17	-97.82
3517	Travis	Travis	78724	TX	6.25	22500	5/17/2012	30.29	-97.62
3518	Travis	Travis	78745	TX	5.04	21462	5/17/2012	30.22	-97.80
3519	Travis	Travis	78753	TX	3.06	14300	5/17/2012	30.39	-97.67
3520	Travis	Travis	78750	TX	6.58	26517	5/17/2012	30.43	-97.80

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3521	Travis	Travis	78704	TX	4.37	19591	5/17/2012	30.25	-97.77
3522	Travis	Travis	78744	TX	3.52	21301	5/17/2012	30.20	-97.73
3523	Travis	Travis	78747	TX	3.52	21301	5/17/2012	30.13	-97.73
3524	Collin	Collin	75023	TX	2.55	15096	5/18/2012	33.06	-96.73
3525	El Paso	El Paso	79936	TX	15.84	75695	5/18/2012	31.76	-106.29
3526	Bell	Williamson	76549	TX	9.00	33750	5/22/2012	31.00	-97.81
3527	Bowie	Upshur	75501	TX	4.60	18000	5/23/2012	33.39	-94.13
3528	Taylor	Hood	79562	TX	10.80	75600	5/24/2012	32.25	-99.89
3529	Webb	Nueces	78045	TX	1.74	7000	5/24/2012	27.82	-99.68
3530	Travis	Travis	78748	TX	4.34	16110	5/24/2012	30.17	-97.82
3531	Travis	Travis	78732	TX	8.36	26794	5/24/2012	30.38	-97.89
3532	Travis	Travis	78732	TX	3.63	14467	5/24/2012	30.38	-97.89
3533	Travis	Travis	78753	TX	6.63	25352	5/24/2012	30.39	-97.67
3534	Travis	Travis	78749	TX	14.88	44760	5/27/2012	30.22	-97.86
3535	Cherokee	Smith	75766	TX	10.37	48000	5/28/2012	31.93	-95.27
3536	Bexar	Bexar	78261	TX	5.22	23686	5/29/2012	29.70	-98.41
3537	Bexar	Bexar	78217	TX	6.11	30352	5/29/2012	29.54	-98.42
3538	Bexar	Bexar	78247	TX	5.06	19270	5/29/2012	29.59	-98.41
3539	Bexar	Bexar	78255	TX	6.00	27681	5/29/2012	29.66	-98.67
3540	Williamson	Williamson	78665	TX	6.25	23438	5/29/2012	30.55	-97.62
3541	Ellis	Ellis	75154	TX	1.11	5915	5/29/2012	32.51	-96.77
3542	Nueces	Nueces	78412	TX	9.00	45214	5/29/2012	27.70	-97.35
3543	Bexar	Bexar	78023	TX	5.04	22447	5/30/2012	29.62	-98.73
3544	Tarrant	Tarrant	76002	TX	7.76	27500	5/30/2012	32.63	-97.09
3545	Collin	Collin	75023	TX	4.60	16560	5/30/2012	33.06	-96.73
3546	Travis	Travis	78748	TX	6.13	24378	5/30/2012	30.17	-97.82
3547	Bexar	Bexar	78247	TX	3.42	15390	6/1/2012	29.59	-98.41
3548	El Paso	El Paso	79935	TX	7.85	45102	6/1/2012	31.76	-106.33
3549	El Paso	El Paso	79912	TX	7.68	46830	6/1/2012	31.86	-106.55
3550	Bexar	Bexar	78255	TX	11.70	51716	6/4/2012	29.66	-98.67
3551	Comal	Comal	78266	TX	7.98	33256	6/4/2012	29.63	-98.32
3552	Bexar	Bexar	78261	TX	9.60	52800	6/4/2012	29.70	-98.41
3553	Dallas	Dallas	75243	TX	8.46		6/4/2012	32.91	-96.74
3554	El Paso	El Paso	79928	TX	9.24	55440	6/4/2012	31.66	-106.13
3555	Hidalgo	Nueces	78537	TX	11.28	49400	6/4/2012	26.16	-98.06
3556	El Paso	El Paso	79927	TX	6.11	18330	6/5/2012	31.64	-106.28
3557	Bexar	Bexar	78255	TX	4.35	20010	6/6/2012	29.66	-98.67
3558	Bexar	Bexar	78255	TX	6.67	32651	6/6/2012	29.66	-98.67
3559	Bexar	Bexar	78258	TX	4.35	20010	6/6/2012	29.65	-98.47
3560	Bexar	Bexar	78258	TX	8.33	35122	6/6/2012	29.65	-98.47

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3561	Bexar	Bexar	78152	TX	20.70	77550	6/6/2012	29.42	-98.20
3562	Bexar	Bexar	78023	TX	8.60	43027	6/6/2012	29.62	-98.73
3563	Bexar	Bexar	78249	TX	28.91	124900	6/6/2012	29.57	-98.61
3564	Bexar	Bexar	78254	TX	28.91	124900	6/6/2012	29.53	-98.78
3565	Comal	Comal	78266	TX	8.99	30926	6/6/2012	29.63	-98.32
3566	Bexar	Bexar	78251	TX	7.79	32622	6/7/2012	29.47	-98.68
3567	Travis	Travis	78735	TX	6.25	23438	6/7/2012	30.26	-97.86
3568	Johnson	Johnson	76031	TX	8.97	29566	6/7/2012	32.35	-97.33
3569	Dallas	Dallas	75244	TX	11.28	50760	6/7/2012	32.93	-96.84
3570	Dallas	Dallas	75244	TX	7.05	31725	6/7/2012	32.93	-96.84
3571	Dallas	Dallas	75244	TX	10.34	46530	6/7/2012	32.93	-96.84
3572	Dallas	Dallas	75244	TX	6.11	27495	6/7/2012	32.93	-96.84
3573	Dallas	Dallas	75244	TX	25.38	114210	6/7/2012	32.93	-96.84
3574	Dallas	Dallas	75244	TX	18.33	82485	6/7/2012	32.93	-96.84
3575	Dallas	Dallas	75244	TX	9.17	41243	6/7/2012	32.93	-96.84
3576	Dallas	Dallas	75244	TX	9.17	41243	6/7/2012	32.93	-96.84
3577	Travis	Travis	78744	TX	6.00	20625	6/7/2012	30.20	-97.73
3578	Travis	Travis	78759	TX	6.25	23563	6/7/2012	30.40	-97.75
3579	Travis	Travis	78748	TX	6.37	24525	6/7/2012	30.17	-97.82
3580	Travis	Travis	78735	TX	6.25	23563	6/7/2012	30.26	-97.86
3581	Travis	Travis	78732	TX	6.00	23334	6/7/2012	30.38	-97.89
3582	Travis	Travis	78735	TX	5.75	21688	6/7/2012	30.26	-97.86
3583	Travis	Travis	78732	TX	5.08	19437	6/7/2012	30.38	-97.89
3584	Travis	Travis	78703	TX	3.60	13847	6/7/2012	30.29	-97.77
3585	Travis	Travis	78759	TX	4.00	12400	6/7/2012	30.40	-97.75
3586	Travis	Travis	78701	TX	1.71	7487	6/7/2012	30.27	-97.74
3587	Travis	Travis	78701	TX	1.71	7487	6/7/2012	30.27	-97.74
3588	Travis	Travis	78701	TX	1.71	7487	6/7/2012	30.27	-97.74
3589	Travis	Travis	78701	TX	1.71	7487	6/7/2012	30.27	-97.74
3590	Dallas	Dallas	75229	TX	6.48	23680	6/8/2012	32.90	-96.87
3591	Dallas	Dallas	75052	TX	3.24	12540	6/8/2012	32.68	-97.03
3592	Dallas	Dallas	75089	TX	8.70	33189	6/8/2012	32.94	-96.55
3593	Bexar	Bexar	78261	TX	5.00	15335	6/11/2012	29.70	-98.41
3594	Bexar	Bexar	78261	TX	5.40	21576	6/11/2012	29.70	-98.41
3595	Bexar	Bexar	78239	TX	5.60	23124	6/11/2012	29.52	-98.36
3596	Bexar	Bexar	78216	TX	28.91	124900	6/11/2012	29.55	-98.50
3597	Bexar	Bexar	78216	TX	28.91	124900	6/11/2012	29.55	-98.50
3598	Bexar	Bexar	78251	TX	28.91	124900	6/11/2012	29.47	-98.68
3599	Bexar	Bexar	78251	TX	28.91	124900	6/11/2012	29.47	-98.68
3600	Denton	Denton	75056	TX	10.80	37177	6/11/2012	33.08	-96.91

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3601	Dallas	Dallas	75006	TX	1.84	11791	6/11/2012	32.97	-96.89
3602	Wichita	Denton	76367	TX	4.86	46916	6/12/2012	33.95	-98.73
3603	El Paso	El Paso	79936	TX	2.01	6225	6/12/2012	31.76	-106.29
3604	Bosque	Hood	76665	TX	1.44		6/13/2012	31.92	-97.72
3605	Dallas	Dallas	75218	TX	4.80	16000	6/13/2012	32.84	-96.70
3606	Palo Pinto	Parker	76067	TX	5.40	18900	6/13/2012	32.77	-98.18
3607	Aransas	San Patricio	78382	TX	3.76	22781	6/15/2012	28.09	-97.07
3608	Dallas	Dallas	75150	TX	4.13	33000	6/16/2012	32.82	-96.63
3609	Travis	Travis	78732	TX	8.40	36795	6/17/2012	30.38	-97.89
3610	El Paso	El Paso	79836	TX	10.56	47973	6/18/2012	31.57	-106.19
3611	Brazoria	Brazoria	77515	TX	7.11	15425	6/19/2012	29.17	-95.44
3612	Tarrant	Tarrant	76137	TX	5.50	16398	6/19/2012	32.85	-97.30
3613	Archer	Parker	76366	TX	10.80	104258	6/19/2012	33.71	-98.79
3614	Travis	Travis	78739	TX	7.00	23438	6/20/2012	30.19	-97.90
3615	Dallas	Dallas	75230	TX	9.90	66040	6/20/2012	32.90	-96.79
3616	Travis	Travis	78723	TX	6.25	23563	6/20/2012	30.31	-97.68
3617	Travis	Travis	78734	TX	6.25	23438	6/20/2012	30.37	-97.95
3618	Travis	Travis	78732	TX	6.00	23335	6/20/2012	30.38	-97.89
3619	Travis	Travis	78732	TX	9.25	20313	6/20/2012	30.38	-97.89
3620	Travis	Travis	78734	TX	6.25	23437	6/20/2012	30.37	-97.95
3621	Travis	Travis	78732	TX	4.50	17100	6/20/2012	30.38	-97.89
3622	Travis	Travis	78730	TX	6.24	26880	6/20/2012	30.37	-97.84
3623	Travis	Travis	78732	TX	6.00	23334	6/20/2012	30.38	-97.89
3624	Travis	Travis	78732	TX	4.35	16651	6/20/2012	30.38	-97.89
3625	Travis	Travis	78732	TX	5.80	23147	6/20/2012	30.38	-97.89
3626	Travis	Travis	78732	TX	4.64	18518	6/20/2012	30.38	-97.89
3627	Travis	Travis	78731	TX	6.25	26460	6/20/2012	30.35	-97.77
3628	Travis	Travis	78732	TX	9.50	39615	6/20/2012	30.38	-97.89
3629	Travis	Travis	78702	TX	1.71	7199	6/20/2012	30.26	-97.71
3630	Travis	Travis	78734	TX	4.56	18240	6/20/2012	30.37	-97.95
3631	Travis	Travis	78748	TX	6.30	25200	6/20/2012	30.17	-97.82
3632	Tarrant	Tarrant	76103	TX	4.14	26303	6/21/2012	32.75	-97.26
3633	Hunt	Hunt	75401	TX	6.44	25938	6/22/2012	33.17	-96.17
3634	Bexar	Bexar	78260	TX	6.11	24725	6/25/2012	29.69	-98.50
3635	Bexar	Bexar	78258	TX	6.96	24247	6/25/2012	29.65	-98.47
3636	Bexar	Bexar	78251	TX	5.40	19973	6/25/2012	29.47	-98.68
3637	Tarrant	Tarrant	76148	TX	8.46	30636	6/25/2012	32.86	-97.25
3638	Mclennan	Ellis	76712	TX	100.80	500000	6/25/2012	31.53	-97.29
3639	Dallas	Dallas	75218	TX	8.28	43198	6/26/2012	32.84	-96.70
3640	Bexar	Bexar	78207	TX	27.26	108495	6/27/2012	29.42	-98.52

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3641	Bexar	Bexar	78023	TX	7.92	39525	6/27/2012	29.62	-98.73
3642	Bexar	Bexar	78249	TX	9.86	46072	6/27/2012	29.57	-98.61
3643	Nueces	Nueces	78412	TX	9.00	38264	6/27/2012	27.70	-97.35
3644	Bexar	Bexar	78254	TX	10.32	39800	6/28/2012	29.53	-98.78
3645	Ellis	Ellis	75119	TX	11.28	50552	6/28/2012	32.32	-96.62
3646	Brown	Hood	76801	TX	1.32	6270	6/29/2012	31.81	-99.06
3647	Brown	Hood	76801	TX	9.69	59280	6/29/2012	31.81	-99.06
3648	Taylor	Hood	79562	TX	9.72	46456	6/29/2012	32.25	-99.89
3649	Cameron	Nueces	78550	TX	5.64	25700	7/2/2012	26.26	-97.65
3650	Kendall	Bexar	78015	TX	14.25	54538	7/3/2012	29.75	-98.65
3651	Bexar	Bexar	78253	TX	8.70	36105	7/3/2012	29.47	-98.81
3652	Bexar	Bexar	78253	TX	5.76	21600	7/3/2012	29.47	-98.81
3653	Bexar	Bexar	78209	TX	10.80	59885	7/3/2012	29.49	-98.45
3654	Bexar	Bexar	78260	TX	3.19	8944	7/5/2012	29.69	-98.50
3655	Bexar	Bexar	78023	TX	4.80	28800	7/5/2012	29.62	-98.73
3656	Nueces	Nueces	78418	TX	4.50	22414	7/5/2012	27.62	-97.29
3657	Bexar	Bexar	78148	TX	7.99	28914	7/5/2012	29.55	-98.30
3658	Travis	Travis	78733	TX	5.88	21600	7/5/2012	30.33	-97.87
3659	Travis	Travis	78747	TX	6.00	22500	7/5/2012	30.13	-97.73
3660	Travis	Travis	78724	TX	6.00	22500	7/5/2012	30.29	-97.62
3661	Travis	Travis	78758	TX	5.50	20750	7/5/2012	30.39	-97.70
3662	Travis	Travis	78732	TX	6.00	24300	7/5/2012	30.38	-97.89
3663	Travis	Travis	78753	TX	4.00	15000	7/5/2012	30.39	-97.67
3664	Travis	Travis	78727	TX	6.25	23438	7/5/2012	30.43	-97.71
3665	Travis	Travis	78738	TX	6.72	29232	7/5/2012	30.30	-97.97
3666	Travis	Travis	78745	TX	3.00	11400	7/5/2012	30.22	-97.80
3667	Travis	Travis	78747	TX	6.24	25800	7/5/2012	30.13	-97.73
3668	Travis	Travis	78753	TX	5.87	22119	7/5/2012	30.39	-97.67
3669	Travis	Travis	78724	TX	5.25	19688	7/5/2012	30.29	-97.62
3670	Travis	Travis	78732	TX	5.50	21390	7/5/2012	30.38	-97.89
3671	Travis	Travis	78748	TX	7.92	26534	7/5/2012	30.17	-97.82
3672	Travis	Travis	78732	TX	6.25	24923	7/5/2012	30.38	-97.89
3673	Travis	Travis	78732	TX	6.25	24168	7/5/2012	30.38	-97.89
3674	Travis	Travis	78746	TX	6.25	23750	7/5/2012	30.31	-97.82
3675	Bexar	Bexar	78217	TX	3.84	19200	7/5/2012	29.54	-98.42
3676	Bexar	Bexar	78261	TX	4.50	20858	7/5/2012	29.70	-98.41
3677	Bexar	Bexar	78258	TX	5.22	23686	7/5/2012	29.65	-98.47
3678	Rockwall	Rockwall	75032	TX	10.12	42435	7/6/2012	32.86	-96.42
3679	Dallas	Dallas	75063	TX	5.52	23246	7/6/2012	32.91	-96.99
3680	Cherokee	Smith	75766	TX	9.63	42950	7/7/2012	31.93	-95.27

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3681	Harris	Harris	77024	TX	813.00		7/9/2012	29.78	-95.47
3682	Williamson	Williamson	78634	TX	9.00	34900	7/9/2012	30.56	-97.55
3683	Dallas	Dallas	75080	TX	9.36		7/10/2012	32.95	-96.73
3684	Parker	Parker	76008	TX	6.44	24828	7/10/2012	32.69	-97.63
3685	Tarrant	Tarrant	76132	TX	10.56		7/11/2012	32.66	-97.42
3686	Williamson	Williamson	78665	TX	6.25	22118	7/11/2012	30.55	-97.62
3687	Mclennan	Ellis	76712	TX	9.75	30930	7/12/2012	31.53	-97.29
3688	Bell	Williamson	76542	TX	9.24	32192	7/12/2012	31.01	-97.72
3689	Travis	Travis	78617	TX	6.63	24850	7/12/2012	30.15	-97.59
3690	Travis	Travis	78732	TX	6.00	24300	7/12/2012	30.38	-97.89
3691	Travis	Travis	78732	TX	4.35	17360	7/12/2012	30.38	-97.89
3692	Travis	Travis	78748	TX	5.15	16721	7/12/2012	30.17	-97.82
3693	Travis	Travis	78732	TX	6.00	23147	7/12/2012	30.38	-97.89
3694	Travis	Travis	78738	TX	6.25	25279	7/12/2012	30.30	-97.97
3695	Travis	Travis	78730	TX	6.24	23000	7/12/2012	30.37	-97.84
3696	Travis	Travis	78745	TX	6.24	25081	7/12/2012	30.22	-97.80
3697	Travis	Travis	78732	TX	5.22	23335	7/12/2012	30.38	-97.89
3698	Travis	Travis	78727	TX	6.00	22500	7/12/2012	30.43	-97.71
3699	Travis	Travis	78732	TX	6.25	24307	7/12/2012	30.38	-97.89
3700	Travis	Travis	78732	TX	5.75	23147	7/12/2012	30.38	-97.89
3701	Travis	Travis	78731	TX	8.75	28875	7/12/2012	30.35	-97.77
3702	Travis	Travis	78745	TX	6.24	23914	7/12/2012	30.22	-97.80
3703	Travis	Travis	78723	TX	5.70	21456	7/12/2012	30.31	-97.68
3704	Travis	Travis	78723	TX	6.90	24730	7/12/2012	30.31	-97.68
3705	Travis	Travis	78731	TX	6.25	29372	7/12/2012	30.35	-97.77
3706	Guadalupe	Guadalupe	78154	TX	28.91	124900	7/13/2012	29.59	-98.28
3707	Tarrant	Tarrant	76126	TX	11.28	47199	7/13/2012	32.65	-97.50
3708	Bexar	Bexar	78232	TX	28.91	124900	7/13/2012	29.59	-98.46
3709	Tarrant	Tarrant	76016	TX	5.06	18216	7/15/2012	32.69	-97.18
3710	Dallas	Dallas	75233	TX	5.06	20791	7/16/2012	32.70	-96.87
3711	Mclennan	Ellis	76708	TX	9.00	48500	7/16/2012	31.62	-97.21
3712	El Paso	El Paso	79922	TX	3.84	14976	7/16/2012	31.83	-106.58
3713	Wichita	Denton	76310	TX	11.88	95040	7/16/2012	33.79	-98.51
3714	Bexar	Bexar	78228	TX	5.20	23524	7/17/2012	29.46	-98.56
3715	Bexar	Bexar	78207	TX	49.92	254713	7/17/2012	29.42	-98.52
3716	Williamson	Williamson	76530	TX	8.88	30271	7/17/2012	30.71	-97.42
3717	Bexar	Bexar	78259	TX	1.40	22896	7/17/2012	29.62	-98.43
3718	Bexar	Bexar	78230	TX	7.99	39601	7/17/2012	29.54	-98.56
3719	Bexar	Bexar	78261	TX	20.88	81432	7/17/2012	29.70	-98.41
3720	Bexar	Bexar	78258	TX	7.83	31535	7/17/2012	29.65	-98.47

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3721	Bexar	Bexar	78240	TX	25.00	98850	7/17/2012	29.53	-98.61
3722	Bexar	Bexar	78259	TX	6.48	20252	7/17/2012	29.62	-98.43
3723	Bexar	Bexar	78257	TX	4.10	20692	7/17/2012	29.66	-98.58
3724	Bexar	Bexar	78263	TX	8.10	26723	7/17/2012	29.36	-98.32
3725	Bexar	Bexar	78259	TX	5.22	23686	7/17/2012	29.62	-98.43
3726	Bexar	Bexar	78023	TX	3.06	14353	7/18/2012	29.62	-98.73
3727	Bexar	Bexar	78258	TX	8.16	32503	7/18/2012	29.65	-98.47
3728	Dallas	Dallas	75236	TX	6.00		7/18/2012	32.69	-96.94
3729	Bexar	Bexar	78216	TX	4.99	32922	7/18/2012	29.55	-98.50
3730	El Paso	El Paso	79902	TX	9.60	57390	7/18/2012	31.79	-106.49
3731	Bexar	Bexar	78230	TX	11.75	45825	7/18/2012	29.54	-98.56
3732	Tarrant	Tarrant	76120	TX	51.94	233708	7/19/2012	32.77	-97.18
3733	Dallas	Dallas	75061	TX	14.57	65565	7/19/2012	32.82	-96.96
3734	Travis	Travis	78745	TX	6.63	23250	7/19/2012	30.22	-97.80
3735	Travis	Travis	78734	TX	6.25	23563	7/19/2012	30.37	-97.95
3736	Travis	Travis	78732	TX	6.00	24300	7/19/2012	30.38	-97.89
3737	Travis	Travis	78732	TX	5.00	20000	7/19/2012	30.38	-97.89
3738	Travis	Travis	78732	TX	6.00	23147	7/19/2012	30.38	-97.89
3739	Travis	Travis	78732	TX	5.80	23147	7/19/2012	30.38	-97.89
3740	Travis	Travis	78723	TX	6.24	25045	7/19/2012	30.31	-97.68
3741	Travis	Travis	78732	TX	6.25	22500	7/19/2012	30.38	-97.89
3742	Travis	Travis	78732	TX	6.00	21000	7/19/2012	30.38	-97.89
3743	Travis	Travis	78732	TX	6.25	22500	7/19/2012	30.38	-97.89
3744	Travis	Travis	78732	TX	4.75	17548	7/19/2012	30.38	-97.89
3745	Travis	Travis	78746	TX	6.24	29238	7/19/2012	30.31	-97.82
3746	Travis	Travis	78749	TX	4.95	31165	7/19/2012	30.22	-97.86
3747	Travis	Travis	78750	TX	6.24	29427	7/19/2012	30.43	-97.80
3748	Travis	Travis	78732	TX	6.24	24572	7/19/2012	30.38	-97.89
3749	Tarrant	Tarrant	76120	TX	24.44	109980	7/23/2012	32.77	-97.18
3750	Collin	Collin	75407	TX	3.68	19362	7/23/2012	33.16	-96.47
3751	Bosque	Hood	76689	TX	8.10	18351	7/23/2012	31.66	-97.55
3752	Tarrant	Tarrant	76132	TX	10.56	52536	7/23/2012	32.66	-97.42
3753	Dallas	Dallas	75052	TX	5.52	21341	7/23/2012	32.68	-97.03
3754	Denton	Denton	76210	TX	3.06	12500	7/23/2012	33.14	-97.08
3755	Tarrant	Tarrant	76120	TX	56.64	254858	7/23/2012	32.77	-97.18
3756	Tarrant	Tarrant	76120	TX	7.05	31725	7/23/2012	32.77	-97.18
3757	Tarrant	Tarrant	76120	TX	22.56	101520	7/23/2012	32.77	-97.18
3758	Tarrant	Tarrant	76120	TX	11.28	50760	7/23/2012	32.77	-97.18
3759	Tarrant	Tarrant	76120	TX	6.11	27495	7/23/2012	32.77	-97.18
3760	Bexar	Bexar	78260	TX	10.15	43645	7/24/2012	29.69	-98.50

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3761	Bexar	Bexar	78247	TX	4.64	23200	7/24/2012	29.59	-98.41
3762	Bexar	Bexar	78240	TX	6.50	31320	7/24/2012	29.53	-98.61
3763	Galveston	Galveston	77573	TX	5.39	13951	7/24/2012	29.49	-95.09
3764	Dallas	Dallas	75229	TX	2.41	29176	7/24/2012	32.90	-96.87
3765	Bexar	Bexar	78261	TX	3.48	16312	7/24/2012	29.70	-98.41
3766	Bexar	Bexar	78261	TX	5.22	23686	7/24/2012	29.70	-98.41
3767	Bexar	Bexar	78259	TX	3.30	11715	7/24/2012	29.62	-98.43
3768	Bexar	Bexar	78258	TX	5.06	20691	7/24/2012	29.65	-98.47
3769	Bexar	Bexar	78254	TX	5.00	23037	7/24/2012	29.53	-98.78
3770	Collin	Collin	75024	TX	5.15	36315	7/25/2012	33.08	-96.81
3771	Bexar	Bexar	78230	TX	4.23	24323	7/25/2012	29.54	-98.56
3772	El Paso	El Paso	79912	TX	3.36	23365	7/25/2012	31.86	-106.55
3773	Mclennan	Ellis	76705	TX	2.25	13500	7/25/2012	31.59	-97.07
3774	Dallas	Dallas	75219	TX	21.39	96233	7/25/2012	32.81	-96.81
3775	Dallas	Dallas	75219	TX	52.88	237938	7/25/2012	32.81	-96.81
3776	Bexar	Bexar	78205	TX	47.80	248102	7/25/2012	29.42	-98.49
3777	Bexar	Bexar	78258	TX	5.22	29841	7/25/2012	29.65	-98.47
3778	Bexar	Bexar	78260	TX	5.17	26109	7/25/2012	29.69	-98.50
3779	Bexar	Bexar	78221	TX	4.00	17920	7/25/2012	29.30	-98.50
3780	Bexar	Bexar	78112	TX	3.96	13583	7/25/2012	29.21	-98.39
3781	Bexar	Bexar	78228	TX	4.86	19996	7/25/2012	29.46	-98.56
3782	Bexar	Bexar	78228	TX	9.99	34166	7/25/2012	29.46	-98.56
3783	Bexar	Bexar	78231	TX	5.17	27574	7/25/2012	29.58	-98.54
3784	Bexar	Bexar	78263	TX	15.93	57672	7/25/2012	29.36	-98.32
3785	Bexar	Bexar	78258	TX	14.56	63821	7/25/2012	29.65	-98.47
3786	Bexar	Bexar	78261	TX	6.11	30389	7/25/2012	29.70	-98.41
3787	Dallas	Dallas	75061	TX	61.10	274950	7/26/2012	32.82	-96.96
3788	Gregg	Gregg	75601	TX	10.12	29000	7/26/2012	32.51	-94.72
3789	Wilbarger	Parker	76384	TX	10.80	104258	7/26/2012	34.20	-99.32
3790	Travis	Travis	78732	TX	5.00	18225	7/26/2012	30.38	-97.89
3791	Travis	Travis	78735	TX	5.39	20372	7/26/2012	30.26	-97.86
3792	Travis	Travis	78757	TX	6.25	23750	7/26/2012	30.35	-97.74
3793	Travis	Travis	78738	TX	5.80	23147	7/26/2012	30.30	-97.97
3794	Travis	Travis	78733	TX	9.60	35077	7/26/2012	30.33	-97.87
3795	Travis	Travis	78733	TX	7.26	26382	7/26/2012	30.33	-97.87
3796	Travis	Travis	78748	TX	6.00	27000	7/26/2012	30.17	-97.82
3797	Travis	Travis	78738	TX	11.00	39462	7/26/2012	30.30	-97.97
3798	Travis	Travis	78747	TX	4.00	16200	7/26/2012	30.13	-97.73
3799	Travis	Travis	78734	TX	3.87	12852	7/26/2012	30.37	-97.95
3800	Travis	Travis	78704	TX	5.24	27485	7/26/2012	30.25	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3801	Travis	Travis	78734	TX	3.68	14707	7/26/2012	30.37	-97.95
3802	Bexar	Bexar	78023	TX	5.40	21066	7/26/2012	29.62	-98.73
3803	Rockwall	Rockwall	75032	TX	10.12	43421	7/27/2012	32.86	-96.42
3804	Travis	Travis	78660	TX	2.76	15012	7/27/2012	30.43	-97.60
3805	Webb	Nueces	78043	TX	8.05	36500	7/27/2012	27.55	-99.26
3806	El Paso	El Paso	79912	TX	1.00	3000	7/27/2012	31.86	-106.55
3807	Denton	Denton	75065	TX	9.36	42214	7/30/2012	33.12	-97.02
3808	Nueces	Nueces	78414	TX	10.00	66845	7/30/2012	27.65	-97.36
3809	Tarrant	Tarrant	76034	TX	8.28	32854	7/30/2012	32.89	-97.15
3810	Williamson	Williamson	78626	TX	7.50	31957	7/30/2012	30.65	-97.63
3811	Smith	Smith	75771	TX	7.56	28000	7/30/2012	32.53	-95.41
3812	Dallas	Dallas	75243	TX	3.68	15047	7/30/2012	32.91	-96.74
3813	Angelina	Rusk	75904	TX	8.28	34272	7/30/2012	31.33	-94.83
3814	Gregg	Gregg	75605	TX	11.04	40627	7/30/2012	32.56	-94.71
3815	Hopkins	Hunt	75482	TX	87.78	343266	7/30/2012	33.18	-95.60
3816	Galveston	Galveston	77546	TX	7.92	40062	7/30/2012	29.54	-95.20
3817	Dallas	Dallas	75052	TX	7.82	36676	7/31/2012	32.68	-97.03
3818	Tarrant	Tarrant	76011	TX	1.92	9344	7/31/2012	32.75	-97.09
3819	Dallas	Dallas	75244	TX	8.28	36375	7/31/2012	32.93	-96.84
3820	Collin	Collin	75074	TX	5.06	21751	7/31/2012	33.02	-96.67
3821	Williamson	Williamson	78665	TX	10.00	38850	7/31/2012	30.55	-97.62
3822	Dallas	Dallas	75051	TX	4.70	17090	7/31/2012	32.73	-96.99
3823	Tarrant	Tarrant	76179	TX	10.00	44300	7/31/2012	32.92	-97.46
3824	Dallas	Dallas	75054	TX	3.40	13600	8/1/2012	32.59	-97.06
3825	Denton	Denton	75022	TX	11.04	17500	8/1/2012	33.03	-97.10
3826	Collin	Collin	75070	TX	8.50	36264	8/1/2012	33.18	-96.70
3827	Tarrant	Tarrant	76103	TX	4.14	16560	8/1/2012	32.75	-97.26
3828	Tarrant	Tarrant	76016	TX	5.52	21726	8/1/2012	32.69	-97.18
3829	Dallas	Dallas	75209	TX	9.89	39560	8/1/2012	32.85	-96.82
3830	Denton	Denton	75034	TX	912.00		8/2/2012	33.10	-96.82
3831	Williamson	Williamson	76574	TX	10.00	38500	8/2/2012	30.57	-97.37
3832	El Paso	El Paso	79930	TX	2.82	14587	8/2/2012	31.81	-106.47
3833	Travis	Travis	78741	TX	5.25	19938	8/2/2012	30.23	-97.71
3834	Travis	Travis	78733	TX	5.39	18326	8/2/2012	30.33	-97.87
3835	Travis	Travis	78617	TX	5.25	19813	8/2/2012	30.15	-97.59
3836	Travis	Travis	78759	TX	4.25	16188	8/2/2012	30.40	-97.75
3837	Travis	Travis	78750	TX	5.64	21413	8/2/2012	30.43	-97.80
3838	Travis	Travis	78732	TX	6.38	24621	8/2/2012	30.38	-97.89
3839	Travis	Travis	78735	TX	14.75	65732	8/2/2012	30.26	-97.86
3840	Travis	Travis	78704	TX	2.93	20260	8/2/2012	30.25	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3841	Travis	Travis	78746	TX	6.12	27114	8/2/2012	30.31	-97.82
3842	Travis	Travis	78745	TX	3.24	17757	8/2/2012	30.22	-97.80
3843	Travis	Travis	78730	TX	6.11	28130	8/2/2012	30.37	-97.84
3844	Travis	Travis	78702	TX	3.06	15275	8/2/2012	30.26	-97.71
3845	Kendall	Bexar	78006	TX	10.00	40845	8/6/2012	29.92	-98.70
3846	Bexar	Bexar	78251	TX	4.17	22981	8/6/2012	29.47	-98.68
3847	Bell	Williamson	76549	TX	9.50	35850	8/6/2012	31.00	-97.81
3848	El Paso	El Paso	79936	TX	10.05	41000	8/6/2012	31.76	-106.29
3849	Bexar	Bexar	78209	TX	6.58	29610	8/6/2012	29.49	-98.45
3850	Bexar	Bexar	78209	TX	8.60	42595	8/6/2012	29.49	-98.45
3851	Bexar	Bexar	78251	TX	5.30	25397	8/6/2012	29.47	-98.68
3852	Bexar	Bexar	78255	TX	9.89	37608	8/6/2012	29.66	-98.67
3853	Bexar	Bexar	78209	TX	7.05	27743	8/6/2012	29.49	-98.45
3854	Bexar	Bexar	78231	TX	14.04	50039	8/6/2012	29.58	-98.54
3855	Bexar	Bexar	78247	TX	2.12	3670	8/6/2012	29.59	-98.41
3856	Bexar	Bexar	78218	TX	5.92	20898	8/6/2012	29.49	-98.39
3857	Bexar	Bexar	78002	TX	13.16	55290	8/6/2012	29.29	-98.73
3858	El Paso	El Paso	79932	TX	9.87	46733	8/8/2012	31.89	-106.62
3859	Travis	Travis	78704	TX	8.82	29850	8/9/2012	30.25	-97.77
3860	Travis	Travis	78754	TX	6.25	23350	8/9/2012	30.36	-97.65
3861	Travis	Travis	78732	TX	5.04	20254	8/9/2012	30.38	-97.89
3862	Travis	Travis	78738	TX	6.00	24300	8/9/2012	30.30	-97.97
3863	Travis	Travis	78738	TX	6.00	23335	8/9/2012	30.30	-97.97
3864	Travis	Travis	78723	TX	5.94	20783	8/9/2012	30.31	-97.68
3865	Travis	Travis	78732	TX	6.00	23147	8/9/2012	30.38	-97.89
3866	Bexar	Bexar	78069	TX	10000.00		8/13/2012	29.19	-98.67
3867	Anderson	Henderson	75763	TX	9.66	40480	8/13/2012	32.03	-95.54
3868	Ellis	Ellis	75154	TX	10.56		8/14/2012	32.51	-96.77
3869	Cherokee	Smith	75766	TX	2.96	13350	8/14/2012	31.93	-95.27
3870	Midland	El Paso	79705	TX	1.96	9448	8/14/2012	32.07	-102.09
3871	Ellis	Ellis	75119	TX	7.92	36613	8/14/2012	32.32	-96.62
3872	Dallas	Dallas	75006	TX	10.00	45500	8/16/2012	32.97	-96.89
3873	Travis	Travis	78703	TX	7.50	28125	8/16/2012	30.29	-97.77
3874	Travis	Travis	78744	TX	5.00	18875	8/16/2012	30.20	-97.73
3875	Travis	Travis	78747	TX	6.25	23438	8/16/2012	30.13	-97.73
3876	Travis	Travis	78727	TX	5.50	21075	8/16/2012	30.43	-97.71
3877	Travis	Travis	78759	TX	6.00	23470	8/16/2012	30.40	-97.75
3878	Travis	Travis	78759	TX	6.25	24513	8/16/2012	30.40	-97.75
3879	Travis	Travis	78738	TX	6.00	24300	8/16/2012	30.30	-97.97
3880	Travis	Travis	78734	TX	6.00	22900	8/16/2012	30.37	-97.95

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3881	Travis	Travis	78747	TX	6.25	23438	8/16/2012	30.13	-97.73
3882	Travis	Travis	78732	TX	6.00	23100	8/16/2012	30.38	-97.89
3883	Travis	Travis	78733	TX	6.25	20313	8/16/2012	30.33	-97.87
3884	Travis	Travis	78750	TX	6.00	23300	8/16/2012	30.43	-97.80
3885	Travis	Travis	78748	TX	6.25	25318	8/16/2012	30.17	-97.82
3886	Travis	Travis	78750	TX	6.50	22150	8/16/2012	30.43	-97.80
3887	Travis	Travis	78727	TX	8.36	31058	8/16/2012	30.43	-97.71
3888	Travis	Travis	78738	TX	6.00	24300	8/16/2012	30.30	-97.97
3889	Travis	Travis	78744	TX	6.25	23563	8/16/2012	30.20	-97.73
3890	Travis	Travis	78727	TX	6.25	21875	8/16/2012	30.43	-97.71
3891	Travis	Travis	78749	TX	6.08	24000	8/16/2012	30.22	-97.86
3892	Travis	Travis	78733	TX	5.50	22275	8/16/2012	30.33	-97.87
3893	Travis	Travis	78753	TX	4.00	16623	8/16/2012	30.39	-97.67
3894	Travis	Travis	78747	TX	6.16	35780	8/16/2012	30.13	-97.73
3895	Travis	Travis	78703	TX	3.50	15732	8/16/2012	30.29	-97.77
3896	Travis	Travis	78704	TX	4.50	22729	8/16/2012	30.25	-97.77
3897	Travis	Travis	78703	TX	3.60	16178	8/16/2012	30.29	-97.77
3898	Travis	Travis	78703	TX	3.60	16178	8/16/2012	30.29	-97.77
3899	Travis	Travis	78703	TX	4.68	20849	8/16/2012	30.29	-97.77
3900	Tarrant	Tarrant	76116	TX	10.56		8/18/2012	32.72	-97.44
3901	Smith	Smith	75707	TX	10.34	36900	8/19/2012	32.32	-95.16
3902	El Paso	El Paso	79912	TX	3.60	21836	8/19/2012	31.86	-106.55
3903	Bexar	Bexar	78230	TX	20.01	92038	8/20/2012	29.54	-98.56
3904	Bexar	Bexar	78259	TX	6.96	29841	8/20/2012	29.62	-98.43
3905	Bexar	Bexar	78244	TX	3.12	13127	8/20/2012	29.47	-98.35
3906	Bexar	Bexar	78259	TX	5.52	28410	8/20/2012	29.62	-98.43
3907	Tarrant	Tarrant	76133	TX	4.56		8/20/2012	32.65	-97.38
3908	Bexar	Bexar	78223	TX	5.06	20575	8/20/2012	29.30	-98.41
3909	Bexar	Bexar	78259	TX	6.66	17851	8/20/2012	29.62	-98.43
3910	Bexar	Bexar	78258	TX	5.22	23686	8/20/2012	29.65	-98.47
3911	Bexar	Bexar	78261	TX	6.48	25221	8/20/2012	29.70	-98.41
3912	Bexar	Bexar	78265	TX	16.50	64321	8/20/2012	29.54	-98.42
3913	Ellis	Ellis	75165	TX	5.76	28800	8/20/2012	32.38	-96.77
3914	El Paso	El Paso	79928	TX	2.59	10469	8/20/2012	31.66	-106.13
3915	Comal	Comal	78132	TX	6.58	31829	8/20/2012	29.74	-98.20
3916	Bexar	Bexar	78251	TX	1.08	5087	8/20/2012	29.47	-98.68
3917	Comal	Comal	78163	TX	5.88	22101	8/20/2012	29.77	-98.51
3918	Bexar	Bexar	78230	TX	7.20	32400	8/20/2012	29.54	-98.56
3919	Bexar	Bexar	78250	TX	1.08	5131	8/20/2012	29.50	-98.67
3920	Tarrant	Tarrant	76135	TX	8.80		8/21/2012	32.84	-97.47

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3921	Dallas	Dallas	75248	TX	9.90		8/21/2012	32.97	-96.78
3922	Harris	Harris	77507	TX	53.46		8/21/2012	29.63	-95.09
3923	Denton	Denton	75068	TX	10.64	28526	8/21/2012	33.17	-96.95
3924	Bexar	Bexar	78240	TX	2.21	20409	8/21/2012	29.53	-98.61
3925	Dallas	Dallas	75182	TX	9.18	38000	8/21/2012	32.81	-96.55
3926	Galveston	Galveston	77573	TX	11.76	53767	8/21/2012	29.49	-95.09
3927	Tarrant	Tarrant	76016	TX	5.50	28823	8/22/2012	32.69	-97.18
3928	El Paso	El Paso	79911	TX	5.28	22992	8/22/2012	31.89	-106.54
3929	El Paso	El Paso	79912	TX	4.32	22826	8/22/2012	31.86	-106.55
3930	El Paso	El Paso	79911	TX	1.92	10560	8/22/2012	31.89	-106.54
3931	El Paso	El Paso	79912	TX	1.92	10560	8/22/2012	31.86	-106.55
3932	El Paso	El Paso	79938	TX	1.92	10560	8/22/2012	31.84	-105.92
3933	El Paso	El Paso	79938	TX	3.36	17472	8/22/2012	31.84	-105.92
3934	El Paso	El Paso	79938	TX	3.36	17472	8/22/2012	31.84	-105.92
3935	El Paso	El Paso	79912	TX	4.32	22826	8/22/2012	31.86	-106.55
3936	Travis	Travis	78746	TX	4.00	14400	8/23/2012	30.31	-97.82
3937	El Paso	El Paso	79924	TX	5.50	19142	8/23/2012	31.90	-106.43
3938	El Paso	El Paso	79912	TX	6.25	26500	8/23/2012	31.86	-106.55
3939	El Paso	El Paso	79901	TX	5.28	21330	8/23/2012	31.76	-106.48
3940	El Paso	El Paso	79938	TX	3.36	17472	8/23/2012	31.84	-105.92
3941	El Paso	El Paso	79912	TX	1.92	10560	8/23/2012	31.86	-106.55
3942	El Paso	El Paso	79934	TX	1.92	10560	8/23/2012	31.98	-106.42
3943	Jim Wells	Nueces	78332	TX	11.04	46950	8/23/2012	27.74	-98.09
3944	Travis	Travis	78748	TX	8.00	23400	8/23/2012	30.17	-97.82
3945	Travis	Travis	78748	TX	6.50	24375	8/23/2012	30.17	-97.82
3946	Travis	Travis	78732	TX	7.00	26548	8/23/2012	30.38	-97.89
3947	Travis	Travis	78735	TX	6.30	22994	8/23/2012	30.26	-97.86
3948	Travis	Travis	78652	TX	7.50	28250	8/23/2012	30.14	-97.88
3949	Travis	Travis	78748	TX	7.75	28481	8/23/2012	30.17	-97.82
3950	Travis	Travis	78732	TX	6.00	24905	8/23/2012	30.38	-97.89
3951	Travis	Travis	78746	TX	6.25	33723	8/23/2012	30.31	-97.82
3952	Travis	Travis	78757	TX	5.28	25000	8/23/2012	30.35	-97.74
3953	Travis	Travis	78758	TX	6.00	24305	8/23/2012	30.39	-97.70
3954	Travis	Travis	78733	TX	4.41	14994	8/23/2012	30.33	-97.87
3955	Travis	Travis	78738	TX	5.50	22275	8/23/2012	30.30	-97.97
3956	Travis	Travis	78732	TX	5.80	23727	8/23/2012	30.38	-97.89
3957	Travis	Travis	78750	TX	6.25	27121	8/23/2012	30.43	-97.80
3958	Travis	Travis	78732	TX	6.00	24300	8/23/2012	30.38	-97.89
3959	Travis	Travis	78731	TX	2.10	8732	8/23/2012	30.35	-97.77
3960	Travis	Travis	78730	TX	5.15	29988	8/23/2012	30.37	-97.84

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
3961	Travis	Travis	78759	TX	6.25	18810	8/23/2012	30.40	-97.75
3962	Travis	Travis	78727	TX	4.75	18063	8/23/2012	30.43	-97.71
3963	Travis	Travis	78731	TX	4.50	16200	8/23/2012	30.35	-97.77
3964	Travis	Travis	78617	TX	6.00	24300	8/23/2012	30.15	-97.59
3965	Travis	Travis	78745	TX	5.50	19250	8/23/2012	30.22	-97.80
3966	Travis	Travis	78745	TX	4.75	16625	8/23/2012	30.22	-97.80
3967	Travis	Travis	78735	TX	5.76	20870	8/23/2012	30.26	-97.86
3968	Travis	Travis	78749	TX	6.24	25552	8/23/2012	30.22	-97.86
3969	Travis	Travis	78732	TX	7.04	25510	8/23/2012	30.38	-97.89
3970	Travis	Travis	78704	TX	10.00	39796	8/23/2012	30.25	-97.77
3971	Travis	Travis	78703	TX	2.88	13284	8/23/2012	30.29	-97.77
3972	Travis	Travis	78703	TX	4.32	19329	8/23/2012	30.29	-97.77
3973	Tarrant	Tarrant	76148	TX	6.72		8/24/2012	32.86	-97.25
3974	Archer	Parker	76366	TX	10.80	104258	8/25/2012	33.71	-98.79
3975	Williamson	Williamson	78613	TX	7.99	28038	8/27/2012	30.51	-97.82
3976	Bexar	Bexar	78213	TX	5.63	24483	8/27/2012	29.50	-98.52
3977	Tarrant	Tarrant	76039	TX	8.80		8/27/2012	32.87	-97.08
3978	Tarrant	Tarrant	76116	TX	10.56	52536	8/27/2012	32.72	-97.44
3979	Bexar	Bexar	78216	TX	25.30	113214	8/27/2012	29.55	-98.50
3980	Ellis	Ellis	75154	TX	10.56	52536	8/27/2012	32.51	-96.77
3981	Dallas	Dallas	75211	TX	5.72	28457	8/27/2012	32.74	-96.89
3982	Bell	Williamson	76542	TX	4.50	16875	8/27/2012	31.01	-97.72
3983	Bexar	Bexar	78220	TX	8.28	18230	8/28/2012	29.41	-98.39
3984	Tarrant	Tarrant	76039	TX	8.80	43780	8/28/2012	32.87	-97.08
3985	Dallas	Dallas	75062	TX	6.24	31044	8/28/2012	32.84	-96.98
3986	Tarrant	Tarrant	76135	TX	8.80	43780	8/28/2012	32.84	-97.47
3987	Dallas	Dallas	75248	TX	9.90	49253	8/29/2012	32.97	-96.78
3988	Tarrant	Tarrant	76133	TX	4.56	22686	8/29/2012	32.65	-97.38
3989	Dallas	Dallas	75211	TX	5.72		8/30/2012	32.74	-96.89
3990	Travis	Travis	78746	TX	5.50	20625	8/30/2012	30.31	-97.82
3991	Travis	Travis	78732	TX	4.35	17360	8/30/2012	30.38	-97.89
3992	Travis	Travis	78727	TX	6.37	21875	8/30/2012	30.43	-97.71
3993	Travis	Travis	78746	TX	6.00	28212	8/30/2012	30.31	-97.82
3994	Travis	Travis	78759	TX	6.27	23965	8/30/2012	30.40	-97.75
3995	Travis	Travis	78733	TX	6.00	23142	8/30/2012	30.33	-97.87
3996	Travis	Travis	78703	TX	3.36	14326	8/30/2012	30.29	-97.77
3997	Travis	Travis	78703	TX	5.76	25380	8/30/2012	30.29	-97.77
3998	Travis	Travis	78735	TX	6.24	24860	8/30/2012	30.26	-97.86
3999	Travis	Travis	78703	TX	3.60	13631	8/30/2012	30.29	-97.77
4000	Cameron	Nueces	78575	TX	3.36	15000	8/31/2012	26.04	-97.56

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4001	Brown	Hood	76802	TX	3.22	14490	9/3/2012	31.71	-98.91
4002	Dallas	Dallas	75062	TX	6.24		9/4/2012	32.84	-96.98
4003	El Paso	El Paso	79936	TX	4.32	10800	9/4/2012	31.76	-106.29
4004	El Paso	El Paso	79936	TX	5.04	21168	9/4/2012	31.76	-106.29
4005	Grayson	Collin	75020	TX	49.55	173460	9/4/2012	33.78	-96.60
4006	El Paso	El Paso	79934	TX	1.92	10560	9/4/2012	31.98	-106.42
4007	El Paso	El Paso	79912	TX	1.92	10560	9/5/2012	31.86	-106.55
4008	El Paso	El Paso	79911	TX	1.92	10560	9/5/2012	31.89	-106.54
4009	El Paso	El Paso	79911	TX	1.92	10560	9/5/2012	31.89	-106.54
4010	El Paso	El Paso	79911	TX	1.92	10560	9/5/2012	31.89	-106.54
4011	Bexar	Bexar	78261	TX	4.35	20010	9/6/2012	29.70	-98.41
4012	Travis	Travis	78735	TX	7.50	28250	9/6/2012	30.26	-97.86
4013	Travis	Travis	78732	TX	6.00	23147	9/6/2012	30.38	-97.89
4014	Travis	Travis	78732	TX	6.00	24300	9/6/2012	30.38	-97.89
4015	Travis	Travis	78723	TX	1.00	3150	9/6/2012	30.31	-97.68
4016	Travis	Travis	78704	TX	5.75	19350	9/6/2012	30.25	-97.77
4017	Travis	Travis	78731	TX	5.50	18315	9/6/2012	30.35	-97.77
4018	Travis	Travis	78732	TX	5.40	22459	9/6/2012	30.38	-97.89
4019	Travis	Travis	78735	TX	6.24	18750	9/6/2012	30.26	-97.86
4020	Travis	Travis	78733	TX	6.37	20313	9/6/2012	30.33	-97.87
4021	Travis	Travis	78733	TX	5.76	24300	9/6/2012	30.33	-97.87
4022	Travis	Travis	78732	TX	6.00	23335	9/6/2012	30.38	-97.89
4023	Bexar	Bexar	78223	TX	2.90	12495	9/7/2012	29.30	-98.41
4024	Tarrant	Tarrant	76052	TX	5.52		9/10/2012	32.98	-97.38
4025	Tarrant	Tarrant	76012	TX	6.24		9/10/2012	32.76	-97.14
4026	Cherokee	Smith	75766	TX	1.44	9800	9/10/2012	31.93	-95.27
4027	Bexar	Bexar	78261	TX	10.26	38860	9/11/2012	29.70	-98.41
4028	Tarrant	Tarrant	76012	TX	6.24	31044	9/11/2012	32.76	-97.14
4029	Bexar	Bexar	78109	TX	4.35	17661	9/11/2012	29.47	-98.30
4030	Denton	Denton	75007	TX	10.14	50447	9/11/2012	33.01	-96.89
4031	Tarrant	Tarrant	76052	TX	5.52	27462	9/11/2012	32.98	-97.38
4032	Rockwall	Rockwall	75032	TX	10.20	26278	9/11/2012	32.86	-96.42
4033	Dallas	Dallas	75172	TX	9.20	27606	9/11/2012	32.60	-96.68
4034	Bexar	Bexar	78231	TX	7.35	33075	9/12/2012	29.58	-98.54
4035	Tarrant	Tarrant	76148	TX	6.72	33432	9/12/2012	32.86	-97.25
4036	Collin	Collin	75093	TX	6.76	26364	9/12/2012	33.04	-96.82
4037	El Paso	El Paso	79936	TX	5.28	20064	9/12/2012	31.76	-106.29
4038	Dallas	Dallas	75244	TX	5.10	16720	9/12/2012	32.93	-96.84
4039	Travis	Travis	78732	TX	7.50	28750	9/13/2012	30.38	-97.89
4040	Travis	Travis	78748	TX	6.25	23563	9/13/2012	30.17	-97.82

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4041	Travis	Travis	78727	TX	5.00	18750	9/13/2012	30.43	-97.71
4042	Travis	Travis	78753	TX	5.50	21650	9/13/2012	30.39	-97.67
4043	Williamson	Williamson	78729	TX	2.25	18750	9/13/2012	30.46	-97.75
4044	Travis	Travis	78732	TX	3.29	18671	9/13/2012	30.38	-97.89
4045	Travis	Travis	78758	TX	4.50	18750	9/13/2012	30.39	-97.70
4046	Travis	Travis	78732	TX	6.00	24300	9/13/2012	30.38	-97.89
4047	Travis	Travis	78733	TX	6.25	20313	9/13/2012	30.33	-97.87
4048	Travis	Travis	78744	TX	6.25	21875	9/13/2012	30.20	-97.73
4049	Travis	Travis	78745	TX	6.37	20833	9/13/2012	30.22	-97.80
4050	Travis	Travis	78733	TX	6.25	20313	9/13/2012	30.33	-97.87
4051	Travis	Travis	78732	TX	6.00	24300	9/13/2012	30.38	-97.89
4052	Travis	Travis	78746	TX	6.59	29813	9/13/2012	30.31	-97.82
4053	Travis	Travis	78733	TX	4.50	17360	9/13/2012	30.33	-97.87
4054	Travis	Travis	78703	TX	3.96	16095	9/13/2012	30.29	-97.77
4055	Travis	Travis	78703	TX	4.32	19492	9/13/2012	30.29	-97.77
4056	Travis	Travis	78746	TX	6.11	30616	9/13/2012	30.31	-97.82
4057	Travis	Travis	78746	TX	6.11	32416	9/13/2012	30.31	-97.82
4058	Dallas	Dallas	75209	TX	4.48	15500	9/14/2012	32.85	-96.82
4059	Dallas	Dallas	75205	TX	5.76	25056	9/14/2012	32.83	-96.80
4060	Collin	Collin	75075	TX	7.00	22544	9/14/2012	33.02	-96.74
4061	Collin	Collin	75093	TX	6.72	33432	9/14/2012	33.04	-96.82
4062	Wichita	Denton	76309	TX	10.80	92027	9/17/2012	33.90	-98.54
4063	Bexar	Bexar	78259	TX	6.21	24522	9/19/2012	29.62	-98.43
4064	Bexar	Bexar	78229	TX	50.40	274000	9/19/2012	29.51	-98.58
4065	Bexar	Bexar	78230	TX	5.17	25075	9/19/2012	29.54	-98.56
4066	Travis	Travis	78732	TX	7.50	26375	9/20/2012	30.38	-97.89
4067	Travis	Travis	78732	TX	7.50	29500	9/20/2012	30.38	-97.89
4068	Travis	Travis	78723	TX	4.50	17200	9/20/2012	30.31	-97.68
4069	Travis	Travis	78732	TX	7.50	29125	9/20/2012	30.38	-97.89
4070	Travis	Travis	78758	TX	3.42	14752	9/20/2012	30.39	-97.70
4071	Travis	Travis	78733	TX	6.00	24300	9/20/2012	30.33	-97.87
4072	Travis	Travis	78723	TX	5.25	20768	9/20/2012	30.31	-97.68
4073	Travis	Travis	78735	TX	6.00	24305	9/20/2012	30.26	-97.86
4074	Travis	Travis	78727	TX	6.25	21875	9/20/2012	30.43	-97.71
4075	Travis	Travis	78733	TX	4.75	17908	9/20/2012	30.33	-97.87
4076	Travis	Travis	78732	TX	5.50	22275	9/20/2012	30.38	-97.89
4077	Travis	Travis	78735	TX	6.25	25313	9/20/2012	30.26	-97.86
4078	Travis	Travis	78738	TX	6.00	24300	9/20/2012	30.30	-97.97
4079	Travis	Travis	78732	TX	12.00	24300	9/20/2012	30.38	-97.89
4080	Travis	Travis	78735	TX	6.00	24300	9/20/2012	30.26	-97.86

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4081	Travis	Travis	78735	TX	6.00	24300	9/20/2012	30.26	-97.86
4082	Hunt	Hunt	75458	TX	1.96	10362	9/24/2012	33.22	-96.29
4083	Bexar	Bexar	78224	TX	28.80	107633	9/25/2012	29.32	-98.54
4084	Tarrant	Tarrant	76108	TX	47.04		9/25/2012	32.77	-97.51
4085	Travis	Travis	78724	TX	8.46	41487	9/25/2012	30.29	-97.62
4086	El Paso	El Paso	79925	TX	3.84	14592	9/27/2012	31.80	-106.36
4087	Travis	Travis	78738	TX	7.75	27748	9/27/2012	30.30	-97.97
4088	Travis	Travis	78723	TX	6.24	18831	9/27/2012	30.31	-97.68
4089	Travis	Travis	78732	TX	6.25	21152	9/27/2012	30.38	-97.89
4090	Travis	Travis	78736	TX	6.00	24905	9/27/2012	30.25	-97.95
4091	Travis	Travis	78738	TX	6.25	21875	9/27/2012	30.30	-97.97
4092	Travis	Travis	78732	TX	6.24	24305	9/27/2012	30.38	-97.89
4093	Travis	Travis	78733	TX	6.00	24600	9/27/2012	30.33	-97.87
4094	Travis	Travis	78703	TX	3.52	16985	9/27/2012	30.29	-97.77
4095	Bexar	Bexar	78249	TX	5.17	15769	9/28/2012	29.57	-98.61
4096	Bexar	Bexar	78249	TX	4.50	16200	9/28/2012	29.57	-98.61
4097	Bexar	Bexar	78213	TX	8.10	27054	9/28/2012	29.50	-98.52
4098	Bexar	Bexar	78255	TX	5.92	20824	9/28/2012	29.66	-98.67
4099	Atascosa	Wilson	78052	TX	6.72	24301	9/28/2012	29.20	-98.77
4100	Bexar	Bexar	78073	TX	6.38	20608	9/28/2012	29.24	-98.63
4101	Bexar	Bexar	78251	TX	5.76	22447	9/28/2012	29.47	-98.68
4102	Bexar	Bexar	78210	TX	4.70	23480	9/28/2012	29.40	-98.47
4103	Bexar	Bexar	78222	TX	4.60	18225	10/1/2012	29.37	-98.39
4104	Bexar	Bexar	78023	TX	5.52	17090	10/2/2012	29.62	-98.73
4105	Comal	Comal	78266	TX	7.50	28500	10/2/2012	29.63	-98.32
4106	Bexar	Bexar	78255	TX	6.53	24260	10/2/2012	29.66	-98.67
4107	Bexar	Bexar	78232	TX	2.16	10185	10/2/2012	29.59	-98.46
4108	Bexar	Bexar	78258	TX	5.92	28577	10/2/2012	29.65	-98.47
4109	Bexar	Bexar	78253	TX	6.72	22982	10/2/2012	29.47	-98.81
4110	Bexar	Bexar	78258	TX	6.38	18885	10/2/2012	29.65	-98.47
4111	Bexar	Bexar	78251	TX	5.06	20161	10/3/2012	29.47	-98.68
4112	Bexar	Bexar	78245	TX	7.56	40787	10/3/2012	29.40	-98.74
4113	Bexar	Bexar	78258	TX	9.62	37442	10/3/2012	29.65	-98.47
4114	Bexar	Bexar	78217	TX	28.44	112311	10/3/2012	29.54	-98.42
4115	El Paso	El Paso	79932	TX	1.05	7720	10/3/2012	31.89	-106.62
4116	Bexar	Bexar	78249	TX	7.05	34085	10/4/2012	29.57	-98.61
4117	Travis	Travis	78738	TX	5.00	32452	10/4/2012	30.30	-97.97
4118	Hamilton	Hood	76436	TX	9.90	34551	10/5/2012	31.89	-98.20
4119	Tarrant	Tarrant	76179	TX	10.29	37330	10/6/2012	32.92	-97.46
4120	Collin	Collin	75002	TX	5.88	19295	10/8/2012	33.10	-96.64

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4121	Tarrant	Tarrant	76051	TX	5.88	21780	10/8/2012	32.95	-97.07
4122	Dallas	Dallas	75082	TX	6.37	26590	10/8/2012	33.00	-96.66
4123	Johnson	Johnson	76028	TX	6.44	23040	10/8/2012	32.53	-97.29
4124	Comal	Comal	78163	TX	15.00	74500	10/8/2012	29.77	-98.51
4125	Bexar	Bexar	78023	TX	24.50	128650	10/8/2012	29.62	-98.73
4126	Comal	Comal	78163	TX	15.00	78445	10/8/2012	29.77	-98.51
4127	Comal	Comal	78163	TX	24.50	128650	10/8/2012	29.77	-98.51
4128	Denton	Denton	75007	TX	10.14		10/9/2012	33.01	-96.89
4129	Tarrant	Tarrant	76052	TX	7.20		10/9/2012	32.98	-97.38
4130	El Paso	El Paso	79936	TX	4.94	28441	10/9/2012	31.76	-106.29
4131	Bexar	Bexar	78023	TX	2.50	10000	10/10/2012	29.62	-98.73
4132	Bexar	Bexar	78260	TX	7.85	36718	10/10/2012	29.69	-98.50
4133	Bexar	Bexar	78201	TX	2.90	14429	10/10/2012	29.46	-98.52
4134	Travis	Travis	78704	TX	7.92	56575	10/10/2012	30.25	-97.77
4135	Travis	Travis	78723	TX	5.00	17325	10/10/2012	30.31	-97.68
4136	Travis	Travis	78702	TX	7.50	28125	10/10/2012	30.26	-97.71
4137	Travis	Travis	78732	TX	12.00	49211	10/10/2012	30.38	-97.89
4138	Travis	Travis	78703	TX	7.68	26000	10/10/2012	30.29	-97.77
4139	Travis	Travis	78732	TX	6.25	20938	10/10/2012	30.38	-97.89
4140	Travis	Travis	78744	TX	5.39	20213	10/10/2012	30.20	-97.73
4141	Travis	Travis	78723	TX	6.13	22642	10/10/2012	30.31	-97.68
4142	Travis	Travis	78744	TX	3.60	12820	10/10/2012	30.20	-97.73
4143	Travis	Travis	78734	TX	6.24	40000	10/10/2012	30.37	-97.95
4144	Travis	Travis	78746	TX	6.25	23750	10/10/2012	30.31	-97.82
4145	Travis	Travis	78744	TX	7.35	29315	10/10/2012	30.20	-97.73
4146	Travis	Travis	78750	TX	3.06	15966	10/10/2012	30.43	-97.80
4147	Travis	Travis	78746	TX	5.00	16600	10/10/2012	30.31	-97.82
4148	Travis	Travis	78733	TX	6.25	20313	10/10/2012	30.33	-97.87
4149	Travis	Travis	78703	TX	2.64	9880	10/10/2012	30.29	-97.77
4150	Travis	Travis	78703	TX	1.44	5616	10/10/2012	30.29	-97.77
4151	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4152	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4153	Travis	Travis	78703	TX	2.88	11232	10/10/2012	30.29	-97.77
4154	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4155	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4156	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4157	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4158	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4159	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4160	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4161	Travis	Travis	78703	TX	2.88	11232	10/10/2012	30.29	-97.77
4162	Travis	Travis	78703	TX	1.44	5616	10/10/2012	30.29	-97.77
4163	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4164	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4165	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4166	Travis	Travis	78703	TX	2.88	11232	10/10/2012	30.29	-97.77
4167	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4168	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4169	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4170	Travis	Travis	78703	TX	1.44	5616	10/10/2012	30.29	-97.77
4171	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4172	Travis	Travis	78703	TX	2.88	11232	10/10/2012	30.29	-97.77
4173	Travis	Travis	78703	TX	1.44	5616	10/10/2012	30.29	-97.77
4174	Travis	Travis	78703	TX	2.16	8424	10/10/2012	30.29	-97.77
4175	Travis	Travis	78745	TX	6.24	32430	10/10/2012	30.22	-97.80
4176	Bexar	Bexar	78073	TX	5.80	26171	10/10/2012	29.24	-98.63
4177	Bexar	Bexar	78229	TX	8.60	36720	10/10/2012	29.51	-98.58
4178	Bexar	Bexar	78250	TX	5.30	25080	10/10/2012	29.50	-98.67
4179	Bexar	Bexar	78073	TX	13.40	54626	10/12/2012	29.24	-98.63
4180	Cameron	Nueces	78559	TX	576.73	NA	10/15/2012	26.12	-97.52
4181	Bexar	Bexar	78240	TX	2.21	14250	10/16/2012	29.53	-98.61
4182	Bexar	Bexar	78240	TX	2.21	14250	10/16/2012	29.53	-98.61
4183	Bexar	Bexar	78023	TX	6.12	25492	10/16/2012	29.62	-98.73
4184	Bexar	Bexar	78247	TX	3.68	24645	10/16/2012	29.59	-98.41
4185	Bexar	Bexar	78240	TX	2.21	14250	10/16/2012	29.53	-98.61
4186	Bexar	Bexar	78240	TX	2.21	14250	10/16/2012	29.53	-98.61
4187	Bexar	Bexar	78109	TX	5.40	17010	10/16/2012	29.47	-98.30
4188	Bexar	Bexar	78240	TX	2.21	14250	10/16/2012	29.53	-98.61
4189	Bexar	Bexar	78216	TX	4.68	19582	10/16/2012	29.55	-98.50
4190	Nueces	Nueces	78401	TX	1500.00	NA	10/16/2012	27.80	-97.39
4191	Travis	Travis	78741	TX	7.50	23900	10/17/2012	30.23	-97.71
4192	Travis	Travis	78723	TX	10.97	38577	10/17/2012	30.31	-97.68
4193	Travis	Travis	78702	TX	5.00	19250	10/17/2012	30.26	-97.71
4194	Travis	Travis	78749	TX	3.36	11770	10/17/2012	30.22	-97.86
4195	Travis	Travis	78734	TX	8.40	24480	10/17/2012	30.37	-97.95
4196	Travis	Travis	78749	TX	5.04	16452	10/17/2012	30.22	-97.86
4197	Travis	Travis	78724	TX	3.00	24000	10/17/2012	30.29	-97.62
4198	Travis	Travis	78734	TX	7.99	30000	10/17/2012	30.37	-97.95
4199	Travis	Travis	78734	TX	6.25	21875	10/17/2012	30.37	-97.95
4200	Travis	Travis	78746	TX	6.25	24420	10/17/2012	30.31	-97.82

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4201	Travis	Travis	78738	TX	5.50	20626	10/17/2012	30.30	-97.97
4202	Travis	Travis	78732	TX	4.75	18525	10/17/2012	30.38	-97.89
4203	Travis	Travis	78756	TX	6.54	29538	10/17/2012	30.32	-97.74
4204	Travis	Travis	78746	TX	4.08	16882	10/17/2012	30.31	-97.82
4205	Travis	Travis	78732	TX	6.24	27249	10/17/2012	30.38	-97.89
4206	Travis	Travis	73301	TX	4.50	NA	10/17/2012	30.31	-97.68
4207	Bexar	Bexar	78239	TX	12.42	60854	10/18/2012	29.52	-98.36
4208	Bexar	Bexar	78258	TX	9.60	39820	10/18/2012	29.65	-98.47
4209	Bexar	Bexar	78209	TX	3.29	18874	10/18/2012	29.49	-98.45
4210	Bexar	Bexar	78209	TX	7.85	36154	10/18/2012	29.49	-98.45
4211	Bexar	Bexar	78260	TX	3.20	22500	10/18/2012	29.69	-98.50
4212	Bexar	Bexar	78209	TX	11.47	56228	10/18/2012	29.49	-98.45
4213	Travis	Travis	73301	TX	3.00	NA	10/18/2012	30.31	-97.68
4214	Bexar	Bexar	78255	TX	7.52	29279	10/19/2012	29.66	-98.67
4215	Bexar	Bexar	78260	TX	8.64	38900	10/19/2012	29.69	-98.50
4216	Bexar	Bexar	78205	TX	10.00	40392	10/19/2012	29.42	-98.49
4217	Collin	Collin	75407	TX	5.88	25500	10/19/2012	33.16	-96.47
4218	Travis	Travis	78745	TX	4.00	12125	10/19/2012	30.22	-97.80
4219	Travis	Travis	78735	TX	5.00	15268	10/19/2012	30.26	-97.86
4220	Travis	Travis	78734	TX	7.50	26400	10/19/2012	30.37	-97.95
4221	Travis	Travis	78747	TX	7.50	28125	10/19/2012	30.13	-97.73
4222	Travis	Travis	78738	TX	7.25	24892	10/19/2012	30.30	-97.97
4223	Travis	Travis	78733	TX	6.25	30277	10/19/2012	30.33	-97.87
4224	Travis	Travis	78749	TX	6.63	20885	10/19/2012	30.22	-97.86
4225	Travis	Travis	78727	TX	5.00	20000	10/19/2012	30.43	-97.71
4226	Travis	Travis	78733	TX	6.24	22340	10/19/2012	30.33	-97.87
4227	Travis	Travis	78735	TX	6.44	26929	10/19/2012	30.26	-97.86
4228	Travis	Travis	78704	TX	8.82	37882	10/19/2012	30.25	-97.77
4229	Travis	Travis	78735	TX	5.25	22138	10/19/2012	30.26	-97.86
4230	Travis	Travis	78738	TX	6.00	22897	10/19/2012	30.30	-97.97
4231	Travis	Travis	78745	TX	5.75	23363	10/19/2012	30.22	-97.80
4232	Travis	Travis	78722	TX	4.50	17875	10/19/2012	30.29	-97.71
4233	Travis	Travis	78749	TX	5.04	18256	10/19/2012	30.22	-97.86
4234	Travis	Travis	73301	TX	6.00	NA	10/19/2012	30.31	-97.68
4235	Travis	Travis	73301	TX	6.20	NA	10/20/2012	30.31	-97.68
4236	Travis	Travis	73301	TX	5.28	NA	10/21/2012	30.31	-97.68
4237	Travis	Travis	73301	TX	6.48	NA	10/21/2012	30.31	-97.68
4238	Collin	Collin	75025	TX	4.90	19400	10/22/2012	33.09	-96.76
4239	Bexar	Bexar	78201	TX	20	NA	10/22/2012	29.60	-98.49
4240	Winkler	El Paso	79745	TX	1.23	4617	10/23/2012	31.75	-102.85

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4241	Bexar	Bexar	78201	TX	10.32	NA	10/23/2012	29.60	-98.49
4242	Bexar	Bexar	78238	TX	5.88	22791	10/24/2012	29.47	-98.62
4243	Bexar	Bexar	78260	TX	5.89	27870	10/24/2012	29.69	-98.50
4244	Guadalupe	Guadalupe	78154	TX	6.96	24290	10/24/2012	29.59	-98.28
4245	Galveston	Galveston	77539	TX	8.51	32000	10/24/2012	29.45	-95.03
4246	El Paso	El Paso	79928	TX	6.72	15440	10/24/2012	31.66	-106.13
4247	El Paso	El Paso	79928	TX	4.80	29550	10/24/2012	31.66	-106.13
4248	Bexar	Bexar	78250	TX	4.23	18240	10/24/2012	29.50	-98.67
4249	Bexar	Bexar	78201	TX	7.5	NA	10/24/2012	29.60	-98.49
4250	Travis	Travis	78748	TX	4.50	14175	10/25/2012	30.17	-97.82
4251	Travis	Travis	78746	TX	8.25	30113	10/25/2012	30.31	-97.82
4252	Travis	Travis	78732	TX	7.00	25200	10/25/2012	30.38	-97.89
4253	Travis	Travis	78746	TX	7.92	34074	10/25/2012	30.31	-97.82
4254	Travis	Travis	78758	TX	4.75	18875	10/25/2012	30.39	-97.70
4255	Travis	Travis	78733	TX	7.00	26200	10/25/2012	30.33	-97.87
4256	Travis	Travis	78753	TX	3.00	11250	10/25/2012	30.39	-97.67
4257	Travis	Travis	78733	TX	4.41	15015	10/25/2012	30.33	-97.87
4258	Travis	Travis	78736	TX	6.00	24905	10/25/2012	30.25	-97.95
4259	Travis	Travis	78733	TX	6.25	20313	10/25/2012	30.33	-97.87
4260	Travis	Travis	78730	TX	7.50	20396	10/25/2012	30.37	-97.84
4261	Travis	Travis	78733	TX	7.84	27400	10/25/2012	30.33	-97.87
4262	Travis	Travis	78746	TX	2.63	34800	10/25/2012	30.31	-97.82
4263	Bexar	Bexar	78201	TX	3.66	NA	10/25/2012	29.60	-98.49
4264	Kendall	Bexar	78006	TX	10.12	42754	10/26/2012	29.92	-98.70
4265	Collin	Collin	75013	TX	5.88	21750	10/26/2012	33.11	-96.70
4266	El Paso	El Paso	79905	TX	1.92	12462	10/26/2012	31.77	-106.42
4267	Bexar	Bexar	78219	TX	22.50	89550	10/26/2012	29.45	-98.39
4268	El Paso	El Paso	79904	TX	2.40	10392	10/29/2012	31.87	-106.48
4269	Dallas	Dallas	75220	TX	5.88	23250	10/30/2012	32.86	-96.87
4270	Dallas	Dallas	75104	TX	7.35	27750	10/30/2012	32.59	-96.99
4271	Kaufman	Kaufman	75142	TX	5.88	23200	10/30/2012	32.59	-96.26
4272	Collin	Collin	75023	TX	5.88	24200	10/30/2012	33.06	-96.73
4273	Dallas	Dallas	75063	TX	8.33	35700	10/30/2012	32.91	-96.99
4274	Tarrant	Tarrant	76001	TX	4.66	20102	10/30/2012	32.63	-97.15
4275	El Paso	El Paso	79911	TX	1.92	10560	10/30/2012	31.89	-106.54
4276	El Paso	El Paso	79911	TX	1.92	10560	10/30/2012	31.89	-106.54
4277	El Paso	El Paso	79911	TX	1.92	10560	10/30/2012	31.89	-106.54
4278	Bexar	Bexar	78204	TX	50.00	189924	10/30/2012	29.40	-98.50
4279	Nueces	Nueces	78414	TX	5.50	29036	10/31/2012	27.65	-97.36
4280	Bexar	Bexar	78232	TX	12.47	44608	11/1/2012	29.59	-98.46

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4281	Bexar	Bexar	78261	TX	5.64	30338	11/1/2012	29.70	-98.41
4282	Dallas	Dallas	75202	TX	42.84		11/1/2012	32.78	-96.80
4283	El Paso	El Paso	79912	TX	4.08	20808	11/1/2012	31.86	-106.55
4284	Gregg	Gregg	75601	TX	2.99	13200	11/1/2012	32.51	-94.72
4285	Travis	Travis	78738	TX	5.00	16000	11/1/2012	30.30	-97.97
4286	Travis	Travis	78750	TX	5.25	18675	11/1/2012	30.43	-97.80
4287	Travis	Travis	78735	TX	5.00	18700	11/1/2012	30.26	-97.86
4288	Travis	Travis	78731	TX	6.12	19500	11/1/2012	30.35	-97.77
4289	Travis	Travis	78732	TX	5.94	24705	11/1/2012	30.38	-97.89
4290	Travis	Travis	78745	TX	7.65	29209	11/1/2012	30.22	-97.80
4291	Travis	Travis	78748	TX	5.00	22625	11/1/2012	30.17	-97.82
4292	Travis	Travis	78746	TX	6.25	23455	11/1/2012	30.31	-97.82
4293	Bexar	Bexar	78230	TX	36.00		11/3/2012	29.54	-98.56
4294	Bexar	Bexar	78240	TX	5.75	25617	11/5/2012	29.53	-98.61
4295	Bexar	Bexar	78232	TX	4.86	20655	11/5/2012	29.59	-98.46
4296	Bexar	Bexar	78261	TX	8.41	20744	11/5/2012	29.70	-98.41
4297	El Paso	El Paso	79938	TX	1.92	10560	11/5/2012	31.84	-105.92
4298	El Paso	El Paso	79911	TX	1.92	10560	11/5/2012	31.89	-106.54
4299	Bexar	Bexar	78232	TX	5.20	44648	11/5/2012	29.59	-98.46
4300	Bexar	Bexar	78232	TX	2.82	15694	11/6/2012	29.59	-98.46
4301	El Paso	El Paso	79911	TX	1.92	10560	11/6/2012	31.89	-106.54
4302	El Paso	El Paso	79911	TX	1.92	10560	11/6/2012	31.89	-106.54
4303	El Paso	El Paso	79938	TX	1.92	10560	11/6/2012	31.84	-105.92
4304	Bexar	Bexar	78230	TX	4.70	24675	11/8/2012	29.54	-98.56
4305	Bexar	Bexar	78218	TX	4.14	12050	11/8/2012	29.49	-98.39
4306	Comal	Comal	78266	TX	7.92	32087	11/8/2012	29.63	-98.32
4307	Bexar	Bexar	78023	TX	6.44	28010	11/8/2012	29.62	-98.73
4308	Travis	Travis	78732	TX	4.00	12525	11/8/2012	30.38	-97.89
4309	Travis	Travis	78733	TX	7.50	28125	11/8/2012	30.33	-97.87
4310	Travis	Travis	78734	TX	6.50	19595	11/8/2012	30.37	-97.95
4311	Travis	Travis	78732	TX	6.00	22647	11/8/2012	30.38	-97.89
4312	Travis	Travis	78749	TX	7.00	23800	11/8/2012	30.22	-97.86
4313	Travis	Travis	78727	TX	5.64	18246	11/8/2012	30.43	-97.71
4314	Travis	Travis	78748	TX	5.15	16721	11/8/2012	30.17	-97.82
4315	Travis	Travis	78738	TX	6.38	20604	11/8/2012	30.30	-97.97
4316	Travis	Travis	78759	TX	7.50	25500	11/8/2012	30.40	-97.75
4317	Travis	Travis	78727	TX	5.64	18246	11/8/2012	30.43	-97.71
4318	Travis	Travis	78735	TX	5.10	17950	11/8/2012	30.26	-97.86
4319	Travis	Travis	78759	TX	5.23	26042	11/8/2012	30.40	-97.75
4320	Travis	Travis	78757	TX	6.25	20440	11/8/2012	30.35	-97.74

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4321	Travis	Travis	78730	TX	6.00	23350	11/8/2012	30.37	-97.84
4322	Travis	Travis	78746	TX	6.12	24603	11/8/2012	30.31	-97.82
4323	Travis	Travis	78731	TX	6.24	27309	11/8/2012	30.35	-97.77
4324	Bexar	Bexar	78253	TX	4.32	14708	11/8/2012	29.47	-98.81
4325	Medina	Bexar	78059	TX	8.50	33671	11/8/2012	29.18	-98.85
4326	Bexar	Bexar	78213	TX	6.48	38423	11/8/2012	29.50	-98.52
4327	El Paso	El Paso	79928	TX	10.56	33933	11/9/2012	31.66	-106.13
4328	El Paso	El Paso	79927	TX	7.20	24360	11/11/2012	31.64	-106.28
4329	El Paso	El Paso	79938	TX	6.72	23520	11/12/2012	31.84	-105.92
4330	El Paso	El Paso	79936	TX	24.00	81374	11/12/2012	31.76	-106.29
4331	Bexar	Bexar	78213	TX	5.94	19127	11/12/2012	29.50	-98.52
4332	El Paso	El Paso	79927	TX	3.84	12338	11/13/2012	31.64	-106.28
4333	El Paso	El Paso	79934	TX	11.77	65596	11/13/2012	31.98	-106.42
4334	El Paso	El Paso	79938	TX	1.92	10560	11/13/2012	31.84	-105.92
4335	El Paso	El Paso	79938	TX	1.92	10560	11/13/2012	31.84	-105.92
4336	El Paso	El Paso	79905	TX	106.56	604800	11/13/2012	31.77	-106.42
4337	Medina	Bexar	78059	TX	10.12	47276	11/14/2012	29.18	-98.85
4338	El Paso	El Paso	79934	TX	1.23	7463	11/14/2012	31.98	-106.42
4339	El Paso	El Paso	79911	TX	8.16	28973	11/14/2012	31.89	-106.54
4340	El Paso	El Paso	79924	TX	2.75	11655	11/14/2012	31.90	-106.43
4341	El Paso	El Paso	79907	TX	7.05	27476	11/14/2012	31.71	-106.33
4342	El Paso	El Paso	79904	TX	14.88	56008	11/14/2012	31.87	-106.48
4343	Bexar	Bexar	78204	TX	21.00	76000	11/14/2012	29.40	-98.50
4344	El Paso	El Paso	79936	TX	7.20	24951	11/15/2012	31.76	-106.29
4345	El Paso	El Paso	79932	TX	6.87	29452	11/15/2012	31.89	-106.62
4346	El Paso	El Paso	79932	TX	10.26	43429	11/15/2012	31.89	-106.62
4347	El Paso	El Paso	79934	TX	5.00	18481	11/15/2012	31.98	-106.42
4348	El Paso	El Paso	79905	TX	4.32	23760	11/15/2012	31.77	-106.42
4349	El Paso	El Paso	79905	TX	48.06	229450	11/15/2012	31.77	-106.42
4350	El Paso	El Paso	79905	TX	33.60	151200	11/15/2012	31.77	-106.42
4351	Travis	Travis	78732	TX	7.00	25386	11/15/2012	30.38	-97.89
4352	Williamson	Williamson	78729	TX	6.58	23300	11/15/2012	30.46	-97.75
4353	Travis	Travis	78759	TX	6.00	21288	11/15/2012	30.40	-97.75
4354	Travis	Travis	78746	TX	7.50	27390	11/15/2012	30.31	-97.82
4355	Travis	Travis	78704	TX	7.91	27152	11/15/2012	30.25	-97.77
4356	Travis	Travis	78746	TX	15.81	53597	11/15/2012	30.31	-97.82
4357	Travis	Travis	78749	TX	5.50	19250	11/15/2012	30.22	-97.86
4358	Williamson	Williamson	78729	TX	5.00	18050	11/20/2012	30.46	-97.75
4359	Travis	Travis	78748	TX	5.00	15000	11/20/2012	30.17	-97.82
4360	Travis	Travis	78748	TX	7.50	22125	11/20/2012	30.17	-97.82

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4361	Travis	Travis	78756	TX	6.75	25938	11/20/2012	30.32	-97.74
4362	Travis	Travis	78741	TX	3.50	10920	11/20/2012	30.23	-97.71
4363	Travis	Travis	78759	TX	7.50	18725	11/20/2012	30.40	-97.75
4364	Travis	Travis	78733	TX	7.00	22750	11/20/2012	30.33	-97.87
4365	Travis	Travis	78731	TX	6.50	22100	11/20/2012	30.35	-97.77
4366	Travis	Travis	78759	TX	7.50	28375	11/20/2012	30.40	-97.75
4367	Travis	Travis	78746	TX	7.50	29150	11/20/2012	30.31	-97.82
4368	Travis	Travis	78748	TX	5.00	16250	11/20/2012	30.17	-97.82
4369	Travis	Travis	78738	TX	8.25	34330	11/20/2012	30.30	-97.97
4370	Travis	Travis	78733	TX	6.37	30776	11/20/2012	30.33	-97.87
4371	Travis	Travis	78748	TX	5.28	16632	11/20/2012	30.17	-97.82
4372	Travis	Travis	78735	TX	2.94	11465	11/20/2012	30.26	-97.86
4373	Travis	Travis	78727	TX	3.60	11897	11/20/2012	30.43	-97.71
4374	Collin	Collin	75093	TX	6.00		11/27/2012	33.04	-96.82
4375	Val Verde	Bexar	78840	TX	5.52	20900	11/27/2012	29.67	-100.85
4376	Mclennan	Ellis	76691	TX	2.40	6000	11/28/2012	31.78	-97.10
4377	Mclennan	Ellis	76691	TX	2.40	6000	11/28/2012	31.78	-97.10
4378	Rusk	Rusk	75652	TX	11.86	56000	11/28/2012	32.22	-94.77
4379	Cameron	Nueces	78559	TX	15.68	58500	11/28/2012	26.15	-97.82
4380	Bexar	Bexar	78232	TX	28.91	119955	11/28/2012	29.59	-98.46
4381	Bexar	Bexar	78216	TX	28.91	119955	11/28/2012	29.55	-98.50
4382	Guadalupe	Guadalupe	78154	TX	28.91	119955	11/28/2012	29.59	-98.28
4383	Bexar	Bexar	78251	TX	28.91	119955	11/28/2012	29.47	-98.68
4384	Webb	Nueces	78045	TX	4.60	19500	11/28/2012	27.82	-99.68
4385	Cameron	Nueces	78559	TX	10.78	58500	11/28/2012	26.15	-97.82
4386	Cameron	Nueces	78559	TX	11.76	58500	11/28/2012	26.15	-97.82
4387	Cameron	Nueces	78559	TX	11.76	58500	11/28/2012	26.15	-97.82
4388	Travis	Travis	78749	TX	6.35	22100	11/28/2012	30.22	-97.86
4389	Travis	Travis	78759	TX	4.50	13950	11/28/2012	30.40	-97.75
4390	Travis	Travis	78732	TX	2.70	6734	11/28/2012	30.38	-97.89
4391	Travis	Travis	78731	TX	7.80	26993	11/28/2012	30.35	-97.77
4392	Travis	Travis	78732	TX	5.39	17063	11/28/2012	30.38	-97.89
4393	Travis	Travis	78759	TX	5.00	31000	11/28/2012	30.40	-97.75
4394	Travis	Travis	78745	TX	6.00	36000	11/28/2012	30.22	-97.80
4395	Travis	Travis	78749	TX	5.00	31000	11/28/2012	30.22	-97.86
4396	Travis	Travis	78732	TX	5.56	26735	11/28/2012	30.38	-97.89
4397	Bexar	Bexar	78253	TX	9.36	42140	11/28/2012	29.47	-98.81
4398	Bexar	Bexar	78251	TX	28.91	119955	11/29/2012	29.47	-98.68
4399	Gregg	Gregg	75662	TX	9.80	30600	11/29/2012	32.38	-94.87
4400	Travis	Travis	78721	TX	6.00	19074	11/29/2012	30.27	-97.68

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4401	Travis	Travis	78749	TX	5.00	18165	11/29/2012	30.22	-97.86
4402	Travis	Travis	78738	TX	6.72	21968	11/29/2012	30.30	-97.97
4403	Travis	Travis	78746	TX	7.80	24149	11/29/2012	30.31	-97.82
4404	Travis	Travis	78723	TX	6.11	21166	11/29/2012	30.31	-97.68
4405	Travis	Travis	78727	TX	4.56	14330	11/29/2012	30.43	-97.71
4406	Travis	Travis	78759	TX	6.30	22898	11/29/2012	30.40	-97.75
4407	Travis	Travis	78732	TX	6.24	23086	11/29/2012	30.38	-97.89
4408	Travis	Travis	78759	TX	2.00	5000	11/29/2012	30.40	-97.75
4409	Travis	Travis	78735	TX	6.37	20296	11/29/2012	30.26	-97.86
4410	Travis	Travis	78735	TX	4.80	17262	11/29/2012	30.26	-97.86
4411	Harrison	Harrison	75672	TX	7.99	39500	11/30/2012	32.42	-94.27
4412	Hidalgo	Nueces	78516	TX	12.74	53244	12/3/2012	26.12	-98.11
4413	Bexar	Bexar	78219	TX	61.60	199058	12/4/2012	29.45	-98.39
4414	Bexar	Bexar	78260	TX	12.76	44996	12/4/2012	29.69	-98.50
4415	Bexar	Bexar	78219	TX	67.60	219218	12/4/2012	29.45	-98.39
4416	Bexar	Bexar	78219	TX	113.96	347344	12/4/2012	29.45	-98.39
4417	Taylor	Hood	79601	TX	11.76		12/6/2012	32.57	-99.68
4418	Comal	Comal	78163	TX	5.17	25075	12/7/2012	29.77	-98.51
4419	Kendall	Bexar	78006	TX	7.52	35794	12/7/2012	29.92	-98.70
4420	Collin	Collin	75069	TX	3.33	8844	12/7/2012	33.14	-96.62
4421	Comal	Comal	78132	TX	5.15	21040	12/7/2012	29.74	-98.20
4422	Travis	Travis	78732	TX	2.90	7839	12/7/2012	30.38	-97.89
4423	Travis	Travis	78736	TX	4.90	18015	12/7/2012	30.25	-97.95
4424	Travis	Travis	78617	TX	5.00	29975	12/7/2012	30.15	-97.59
4425	Travis	Travis	78702	TX	3.36	12398	12/7/2012	30.26	-97.71
4426	Travis	Travis	78735	TX	5.25	29988	12/7/2012	30.26	-97.86
4427	Travis	Travis	78744	TX	4.16	13000	12/7/2012	30.20	-97.73
4428	Travis	Travis	78748	TX	5.00	15950	12/7/2012	30.17	-97.82
4429	Travis	Travis	78748	TX	7.28	22750	12/7/2012	30.17	-97.82
4430	Travis	Travis	78733	TX	7.50	27317	12/7/2012	30.33	-97.87
4431	Travis	Travis	78748	TX	8.00	29929	12/7/2012	30.17	-97.82
4432	Travis	Travis	78733	TX	6.63	21170	12/7/2012	30.33	-97.87
4433	Travis	Travis	78734	TX	5.36	19898	12/7/2012	30.37	-97.95
4434	Travis	Travis	78730	TX	7.91	27900	12/7/2012	30.37	-97.84
4435	Travis	Travis	78738	TX	4.59	17918	12/7/2012	30.30	-97.97
4436	Bexar	Bexar	78240	TX	5.50	21186	12/10/2012	29.53	-98.61
4437	El Paso	El Paso	79905	TX	20.28	210000	12/11/2012	31.77	-106.42
4438	Comal	Comal	78266	TX	8.50	25415	12/12/2012	29.63	-98.32
4439	Bexar	Bexar	78209	TX	6.24	23666	12/12/2012	29.49	-98.45
4440	Bexar	Bexar	78254	TX	6.67	21451	12/12/2012	29.53	-98.78

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4441	Bexar	Bexar	78212	TX	4.08	16336	12/12/2012	29.46	-98.50
4442	Travis	Travis	78732	TX	5.75	18151	12/13/2012	30.38	-97.89
4443	Travis	Travis	78735	TX	2.50	10463	12/13/2012	30.26	-97.86
4444	Travis	Travis	78759	TX	6.50	23871	12/13/2012	30.40	-97.75
4445	Travis	Travis	78746	TX	4.68	14265	12/13/2012	30.31	-97.82
4446	Travis	Travis	78745	TX	4.00	15600	12/13/2012	30.22	-97.80
4447	Travis	Travis	78759	TX	7.50	33369	12/13/2012	30.40	-97.75
4448	Travis	Travis	78653	TX	7.50	24000	12/13/2012	30.33	-97.55
4449	Travis	Travis	78738	TX	7.85	37032	12/13/2012	30.30	-97.97
4450	Travis	Travis	78733	TX	10.29	39068	12/13/2012	30.33	-97.87
4451	Travis	Travis	78738	TX	7.60	24225	12/13/2012	30.30	-97.97
4452	Travis	Travis	78738	TX	7.60	24684	12/13/2012	30.30	-97.97
4453	Travis	Travis	78732	TX	5.75	18688	12/13/2012	30.38	-97.89
4454	Travis	Travis	78746	TX	5.88	23284	12/13/2012	30.31	-97.82
4455	Travis	Travis	78746	TX	6.24	28608	12/13/2012	30.31	-97.82
4456	Bexar	Bexar	78233	TX	13.92	37000	12/17/2012	29.56	-98.36
4457	Polk	Hardin	75939	TX	3.50	15822	12/17/2012	31.02	-94.85
4458	Bexar	Bexar	78254	TX	28.91	119955	12/17/2012	29.53	-98.78
4459	Bexar	Bexar	78258	TX	13.05	38498	12/17/2012	29.65	-98.47
4460	Bexar	Bexar	78212	TX	35.64	153196	12/17/2012	29.46	-98.50
4461	Bexar	Bexar	78231	TX	6.12	23228	12/17/2012	29.58	-98.54
4462	Bexar	Bexar	78258	TX	13.92	41064	12/17/2012	29.65	-98.47
4463	Bexar	Bexar	78258	TX	20.88	61596	12/17/2012	29.65	-98.47
4464	Bexar	Bexar	78251	TX	28.91	119955	12/17/2012	29.47	-98.68
4465	Travis	Travis	78735	TX	5.72	18218	12/21/2012	30.26	-97.86
4466	Travis	Travis	78702	TX	15.18	45905	12/21/2012	30.26	-97.71
4467	Travis	Travis	78748	TX	6.86	24468	12/21/2012	30.17	-97.82
4468	Travis	Travis	78757	TX	3.75	16366	12/21/2012	30.35	-97.74
4469	Travis	Travis	78745	TX	6.50	21074	12/21/2012	30.22	-97.80
4470	Travis	Travis	78733	TX	6.00	24300	12/21/2012	30.33	-97.87
4471	Travis	Travis	78746	TX	5.28	16368	12/21/2012	30.31	-97.82
4472	Travis	Travis	78735	TX	4.35	17360	12/21/2012	30.26	-97.86
4473	Travis	Travis	78735	TX	5.28	16368	12/21/2012	30.26	-97.86
4474	Bexar	Bexar	78258	TX	5.80	22040	12/21/2012	29.65	-98.47
4475	Bexar	Bexar	78260	TX	7.52	36472	12/26/2012	29.69	-98.50
4476	Bexar	Bexar	78223	TX	1.92	8688	12/26/2012	29.30	-98.41
4477	Bexar	Bexar	78258	TX	7.50	35227	12/26/2012	29.65	-98.47
4478	Bexar	Bexar	78260	TX	7.14	28560	12/26/2012	29.69	-98.50
4479	Bexar	Bexar	78244	TX	1.48	6669	12/26/2012	29.47	-98.35
4480	Bexar	Bexar	78258	TX	7.75	36720	12/26/2012	29.65	-98.47

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4481	Travis	Travis	78735	TX	6.00	20625	12/27/2012	30.26	-97.86
4482	Travis	Travis	78735	TX	7.50	27360	12/27/2012	30.26	-97.86
4483	Travis	Travis	78747	TX	7.50	27160	12/27/2012	30.13	-97.73
4484	Travis	Travis	78752	TX	5.28	18112	12/27/2012	30.33	-97.71
4485	Travis	Travis	78731	TX	6.00	24300	12/27/2012	30.35	-97.77
4486	Bexar	Bexar	78259	TX	13.20	37286	12/28/2012	29.62	-98.43
4487	Bexar	Bexar	78259	TX	9.43	56052	12/28/2012	29.62	-98.43
4488	Bexar	Bexar	78261	TX	1.44	10500	12/28/2012	29.70	-98.41
4489	Bexar	Bexar	78259	TX	1.44	10500	12/28/2012	29.62	-98.43
4490	Bexar	Bexar	78254	TX	8.16	27657	12/28/2012	29.53	-98.78
4491	Bexar	Bexar	78254	TX	6.96	23316	12/28/2012	29.53	-98.78
4492	Bexar	Bexar	78261	TX	1.44	10500	12/28/2012	29.70	-98.41
4493	Bexar	Bexar	78251	TX	7.28	25929	12/28/2012	29.47	-98.68
4494	Tarrant	Tarrant	76244	TX	5.00	18745	2/1/2013	31.02	-94.85
4495	Travis	Travis	78745	TX	8.00	25500	2/5/2013	30.23	-97.81
4496	Tarrant	Tarrant	76244	TX	5.00	18211	2/19/2013	31.02	-94.85
4497	Dallas	Dallas	75228	TX	8.25	29987	2/27/2013	32.87	-96.70
4498	Dallas	Dallas	75053	TX	5.50	22605	2/28/2013	33.04	-96.83
4499	Bell	Williamson	76543	TX	4.50	18621	3/8/2013	31.02	-94.85
4500	Bexar	Bexar	78205	TX	60.00	NA	4/1/2013	29.42	-98.49
4501	Dallas	Dallas	75254	TX	9.75	29250	4/4/2013	32.87	-96.70
4502	Rockwall	Rockwall	75087	TX	3.00	14336	5/3/2013	33.04	-96.83
4503	Collin	Collin	75074	TX	8.00		5/3/2013	33.02	-96.67
4504	Bexar	Bexar	78258	TX	4.16	16557	5/8/2013	29.63	-98.51
4505	Dallas	Dallas	75048	TX	7.50	26635	5/9/2013	33.04	-96.83
4506	Hunt	Hunt	75135	TX	9.75	36664	5/9/2013	33.06	-96.38
4507	Tarrant	Tarrant	76051	TX	8.25	27663	5/13/2013	32.95	-97.08
4508	Collin	Collin	75023	TX	4.50	18660	5/14/2013	33.06	-96.73
4509	Dallas	Dallas	75209	TX	11.76		5/24/2013	32.85	-96.82
4510	Dallas	Dallas	75006	TX	16.17		6/14/2013	32.97	-96.89
4511	Dallas	Dallas	75048	TX	5.10	19355	6/26/2013	33.04	-96.83
4512	Travis	Travis	78704	TX	202.00	NA	6/26/2013	30.24	-97.77
4513	Travis	Travis	78745	TX	52.00	NA	7/5/2013	30.21	-97.80
4514	Dallas	Dallas	75062	TX	14.00		8/5/2013	32.84	-96.98
4515	Dallas	Dallas	75080	TX	226.92		8/6/2013	32.95	-96.73
4516	Collin	Collin	75075	TX	3.75	17181	8/13/2013	33.02	-96.74
4517	Kaufman	Kaufman	75126	TX	5.23	25575	8/27/2013	33.06	-96.38
4518	Dallas	Dallas	75041	TX	3.12		8/28/2013	32.88	-96.65
4519	Bexar	Bexar	78259	TX	5.40	18900	9/2/2013	29.61	-98.44
4520	Ellis	Ellis	75125	TX	9.80	35809	9/6/2013	33.06	-96.38

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4521	Travis	Travis	78723	TX	169.00	NA	9/11/2013	30.30	-97.69
4522	Dallas	Dallas	75050	TX	14.00		9/23/2013	32.78	-97.02
4523	Collin	Collin	75093	TX	1.50		10/31/2013	33.04	-96.82
4524	Tarrant	Tarrant	76051	TX	275.52		11/6/2013	32.95	-97.07
4525	Collin	Collin	75025	TX	440.16		11/6/2013	33.09	-96.76
4526	Dallas	Dallas	75234	TX	258.72		11/6/2013	32.92	-96.87
4527	Dallas	Dallas	75082	TX	264.11		11/12/2013	33.00	-96.66
4528	El Paso	El Paso	79916	TX	8.64		11/15/2013	31.82	-106.41
4529	Dallas	Dallas	75235	TX	5.00		11/15/2013	32.83	-96.85
4530	Collin	Collin	75025	TX	3.00	9526	1/6/2014	33.09	-96.76
4531	Collin	Collin	75025	TX	9.00	27959	1/6/2014	33.09	-96.76
4532	Dallas	Dallas	75214	TX	5.83	17845	1/8/2014	32.82	-96.74
4533	Collin	Collin	75024	TX	5.00	15876	1/13/2014	33.08	-96.81
4534	Collin	Collin	75025	TX	7.50	23814	1/13/2014	33.09	-96.76
4535	Loving	El Paso	79754	TX	119.00		1/15/2014	31.82	-103.66
4536	Loving	El Paso	79754	TX	59.50		1/15/2014	31.82	-103.66
4537	Bexar	Bexar	78231	TX	23.04		1/15/2014	29.58	-98.54
4538	Collin	Collin	75023	TX	7.00	21746	1/20/2014	33.06	-96.73
4539	Collin	Collin	75023	TX	5.50	17464	1/20/2014	33.06	-96.73
4540	Denton	Denton	75034	TX	7.00	23000	1/20/2014	33.14	-96.86
4541	Collin	Collin	75075	TX	5.00	15533	1/27/2014	33.02	-96.74
4542	Collin	Collin	75075	TX	4.00	12426	1/27/2014	33.02	-96.74
4543	Dallas	Dallas	75230	TX	7.25	26566	1/27/2014	32.87	-96.70
4544	Collin	Collin	75035	TX	5.00	18975	2/3/2014	33.15	-96.76
4545	Collin	Collin	75023	TX	4.75	13918	2/3/2014	33.06	-96.73
4546	Collin	Collin	75023	TX	4.50	13980	2/3/2014	33.06	-96.73
4547	Collin	Collin	75075	TX	8.75	27183	2/10/2014	33.02	-96.74
4548	Collin	Collin	75075	TX	4.50	14288	2/10/2014	33.02	-96.74
4549	Harris	Harris	77032	TX	81.86		2/15/2014	29.97	-95.32
4550	Collin	Collin	75074	TX	6.00	18640	2/17/2014	33.02	-96.67
4551	Collin	Collin	75074	TX	8.00	24853	2/17/2014	33.02	-96.67
4552	Collin	Collin	75075	TX	4.00	12426	2/24/2014	33.02	-96.74
4553	Collin	Collin	75075	TX	2.50	7767	2/24/2014	33.02	-96.74
4554	Collin	Collin	75093	TX	3.25	10096	2/24/2014	33.04	-96.82
4555	Collin	Collin	75093	TX	5.50	17464	3/3/2014	33.04	-96.82
4556	Collin	Collin	75093	TX	4.50	14288	3/3/2014	33.04	-96.82
4557	Collin	Collin	75075	TX	2.50	7767	3/3/2014	33.02	-96.74
4558	Collin	Collin	75074	TX	5.50	20983	3/10/2014	33.02	-96.67
4559	Collin	Collin	75074	TX	10.00	34226	3/10/2014	33.02	-96.67
4560	Dallas	Dallas	75209	TX	10.00	23505	3/20/2014	32.85	-96.82

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4561	Dallas	Dallas	75229	TX	5.40	15555	3/21/2014	32.90	-96.87
4562	Collin	Collin	75078	TX	10.00	34986	3/24/2014	33.24	-96.80
4563	Ellis	Ellis	75154	TX	2.00	7350	4/3/2014	32.51	-96.77
4564	Collin	Collin	75024	TX	5.60	16648	4/10/2014	33.08	-96.81
4565	Kaufman	Kaufman	75126	TX	8.80	26290	6/17/2014	32.75	-96.40
4566	Collin	Collin	75075	TX	6.88	16104	7/2/2014	33.02	-96.74
4567	Collin	Collin	75075	TX	5.40	12500	7/3/2014	33.02	-96.74
4568	Dallas	Dallas	75040	TX	0.25		7/9/2014	32.94	-96.63
4569	Dallas	Dallas	75040	TX	0.25		7/9/2014	32.94	-96.63
4570	Dallas	Dallas	75040	TX	9.50		7/9/2014	32.94	-96.63
4571	Dallas	Dallas	75040	TX	0.25		7/9/2014	32.94	-96.63
4572	Dallas	Dallas	75040	TX	1.00		7/9/2014	32.94	-96.63
4573	Dallas	Dallas	75040	TX	1.00		7/9/2014	32.94	-96.63
4574	Dallas	Dallas	75040	TX	0.50		7/9/2014	32.94	-96.63
4575	Dallas	Dallas	75040	TX	1.00		7/9/2014	32.94	-96.63
4576	Dallas	Dallas	75041	TX	0.25		7/9/2014	32.88	-96.65
4577	Dallas	Dallas	75041	TX	0.50		7/9/2014	32.88	-96.65
4578	Dallas	Dallas	75041	TX	0.25		7/9/2014	32.88	-96.65
4579	Dallas	Dallas	75040	TX	4.00		7/9/2014	32.94	-96.63
4580	Dallas	Dallas	75040	TX	0.25		7/9/2014	32.94	-96.63
4581	Dallas	Dallas	75043	TX	0.25		7/9/2014	32.85	-96.59
4582	Dallas	Dallas	75043	TX	0.25		7/9/2014	32.85	-96.59
4583	Dallas	Dallas	75043	TX	7.59		7/9/2014	32.85	-96.59
4584	Dallas	Dallas	75042	TX	0.50		7/9/2014	32.92	-96.68
4585	Dallas	Dallas	75042	TX	0.25		7/9/2014	32.92	-96.68
4586	Dallas	Dallas	75043	TX	7.50		7/9/2014	32.85	-96.59
4587	Dallas	Dallas	75043	TX	1.00		7/9/2014	32.85	-96.59
4588	Dallas	Dallas	75043	TX	1.00		7/9/2014	32.85	-96.59
4589	Dallas	Dallas	75043	TX	1.00		7/9/2014	32.85	-96.59
4590	Dallas	Dallas	75043	TX	4.20		7/9/2014	32.85	-96.59
4591	Dallas	Dallas	75044	TX	0.25		7/9/2014	32.96	-96.67
4592	Collin	Collin	75075	TX	8.00	15400	7/11/2014	33.02	-96.74
4593	Collin	Collin	75025	TX	4.00	7840	7/14/2014	33.09	-96.76
4594	Collin	Collin	75023	TX	5.50	12443	7/18/2014	33.06	-96.73
4595	Collin	Collin	75093	TX	4.32	9492	7/21/2014	33.04	-96.82
4596	Collin	Collin	75093	TX	6.05	13695	7/25/2014	33.04	-96.82
4597	Collin	Collin	75013	TX	338.92		7/25/2014	33.11	-96.70
4598	Dallas	Dallas	75244	TX	9.72	19631	7/28/2014	32.93	-96.84
4599	Collin	Collin	75093	TX	4.40	9252	8/5/2014	33.04	-96.82
4600	Collin	Collin	75093	TX	4.05	9072	8/8/2014	33.04	-96.82

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4601	Collin	Collin	75025	TX	6.88	15132	8/11/2014	33.09	-96.76
4602	Collin	Collin	75023	TX	3.30	7633	8/11/2014	33.06	-96.73
4603	Dallas	Dallas	75019	TX	358.39		8/13/2014	32.96	-97.00
4604	Dallas	Dallas	75225	TX	20.00		8/15/2014	32.87	-96.79
4605	Collin	Collin	75025	TX	4.13	8800	8/21/2014	33.09	-96.76
4606	Collin	Collin	75075	TX	6.05	12463	8/25/2014	33.02	-96.74
4607	Travis	Travis	78748	TX	3.50	14400	8/26/2014	30.16	-97.81
4608	Collin	Collin	75023	TX	5.50	12705	8/27/2014	33.06	-96.73
4609	Collin	Collin	75025	TX	7.70	33384	9/3/2014	33.09	-96.76
4610	Collin	Collin	75093	TX	7.02	18613	9/11/2014	33.04	-96.82
4611	Collin	Collin	75024	TX	5.00	10626	9/16/2014	33.08	-96.81
4612	Collin	Collin	75023	TX	6.00	12100	9/19/2014	33.06	-96.73
4613	Tarrant	Tarrant	76180	TX	6.75	15535	9/22/2014	32.84	-97.23
4614	Dallas	Dallas	75141	TX	1379.21	3000000	10/1/2014	32.66	-96.71
4615	Dallas	Dallas	75182	TX	5.50	11742	10/7/2014	32.81	-96.55
4616	Collin	Collin	75074	TX	4.25	7565	10/10/2014	33.02	-96.67
4617	Collin	Collin	75023	TX	3.85	8605	10/13/2014	33.06	-96.73
4618	Collin	Collin	75409	TX	5.23	11704	10/17/2014	33.33	-96.51
4619	Collin	Collin	75093	TX	3.85	8889	10/20/2014	33.04	-96.82
4620	Collin	Collin	75074	TX	4.40	9306	10/21/2014	33.02	-96.67
4621	Tarrant	Tarrant	76002	TX	4.50	13752	10/27/2014	32.63	-97.09
4622	Collin	Collin	75023	TX	2.00	9552	10/29/2014	33.06	-96.73
4623	Tarrant	Tarrant	76118	TX	21.00	48600	10/29/2014	32.79	-97.17
4624	Collin	Collin	75075	TX	4.08	12000	10/30/2014	33.02	-96.74
4625	Collin	Collin	75075	TX	5.50	11798	10/31/2014	33.02	-96.74
4626	Collin	Collin	75093	TX	50.50		11/11/2014	33.04	-96.82
4627	Denton	Denton	75067	TX	10.50		12/1/2014	33.01	-97.00
4628	Lamar	Hunt	75462	TX	10.00	33740	12/9/2014	33.54	-95.52
4629	Dallas	Dallas	75146	TX	112.25		12/10/2014	32.57	-96.76
4630	Tarrant	Tarrant	76092	TX	487.56		12/17/2014	32.95	-97.15
4631	Grayson	Collin	75076	TX	5.00	12950	12/18/2014	33.77	-96.73
4632	Dallas	Dallas	75134	TX	665.23		n.d./2014	32.64	-96.80
4633	Travis	Travis	78701	TX	149.76		n.d./2014	30.27	-97.74
4634	Travis	Travis	78701	TX	33.66		n.d./2014	30.27	-97.75
4635	Williamson	Williamson	78717	TX	258.30		n.d./2014	30.48	-97.78
4636	Travis	Travis	78723	TX	74.15		n.d./2014	30.32	-97.67
4637	Travis	Travis	78739	TX	8.85		n.d./2014	30.19	-97.87
4638	Travis	Travis	78753	TX	260.00		n.d./2014	30.34	-97.69
4639	Travis	Travis	78754	TX	227.00		n.d./2014	30.33	-97.67
4640	Travis	Travis	78757	TX	260.00		n.d./2014	30.35	-97.73

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4641	Hill	#N/A	76692	TX	8.28	39628	1/7/2015	31.96	-97.31
4642	Collin	Collin	75023	TX	4.50	9310	1/14/2015	33.05	-96.73
4643	Harris	Harris	77034	TX	5.25		1/20/2015	29.62	-95.18
4644	Dallas	Dallas	75048	TX	10.00	24900	2/4/2015	32.96	-96.57
4645	Dallas	Dallas	75248	TX	9.90	25245	2/10/2015	32.97	-96.79
4646	Dallas	Dallas	75146	TX	677.00		2/13/2015	32.57	-96.74
4647	Tarrant	Tarrant	76108	TX	11.2	23759	3/26/2015	32.77	-97.52
4648	Collin	Collin	75070	TX	7	19903	3/31/2015	33.18	-96.67
4649	Collin	Collin	75023	TX	7	12970	4/3/2015	33.05	-96.73
4650	Ellis	Ellis	76065	TX	7	17220	5/21/2015	32.46	-96.98
4651	Dallas	Dallas	75209	TX	6.16	12781	5/28/2015	32.84	-96.82
4652	Dallas	Dallas	75243	TX	6	18199	6/10/2015	32.91	-96.73
4653	Collin	Collin	75025	TX	8.75	17223	6/12/2015	33.08	-96.74
4654	Tarrant	Tarrant	76102	TX	136		6/17/2015	32.75	-97.32
4655	Collin	Collin	75070	TX	10	26360	6/19/2015	33.18	-96.67
4656	Harris	Harris	77030	TX	85.32		6/26/2015	29.70	-95.40
4657	Dallas	Dallas	75225	TX	6.325	9919	7/2/2015	32.86	-96.79
4658	Dallas	Dallas	75243	TX	8.96	19367	7/10/2015	32.91	-96.73
4659	Denton	Denton	75022	TX	9.52	27668	7/11/2015	33.01	-97.13
4660	Dallas	Dallas	75243	TX	8.96	43727	7/13/2015	32.91	-96.73
4661	Hill	#N/A	76692	TX	8.28	43727	7/20/2015	31.96	-97.31
4662	Harris	Harris	77433	TX	10		7/31/2015	29.88	-95.70
4663	Travis	Travis	78660	TX	8.68	34470	8/14/2015	30.44	-97.59
4664	Collin	Collin	75002	TX	11.76	40760	8/21/2015	33.09	-96.63
4665	Hill	#N/A	76692	TX	3.45	15649	9/15/2015	31.96	-97.31
4666	Nolan	Nolan	79556	TX	25.2		9/16/2015	32.51	-100.30
4667	Dallas	Dallas	75243	TX	8.4	20850	9/17/2015	32.91	-96.73
4668	Rockwall	Rockwall	75189	TX	9.455	32090	9/21/2015	32.96	-96.36
4669	Rockwall	Rockwall	75189	TX	9.455	32086	9/28/2015	32.96	-96.36
4670	Tarrant	Tarrant	76134	TX	100		10/1/2015	32.64	-97.33
4671	Ellis	Ellis	76065	TX	883.5		10/12/2015	32.46	-96.98
4672	Rockwall	Rockwall	75087	TX	10.2	23856	10/21/2015	32.95	-96.43
4673	Collin	Collin	75013	TX	9.8	32500	11/23/2015	33.10	-96.67
4674	Denton	Denton	76203	TX	21	66570	12/4/2015	33.21	-97.13
4675	Dallas	Dallas	75209	TX	12.6	45990	12/18/2015	32.84	-96.82
4676	Denton	Denton	75077	TX	7.42	25161	12/22/2015	33.07	-97.07
4677	Dallas	Dallas	75251	TX	76.5	234852	1/8/2016	32.92	-96.77
4678	Dallas	Dallas	75042	TX	44.88	136884	1/15/2016	32.91	-96.67
4679	Ellis	Ellis	76651	TX	11.925	35540	1/25/2016	32.18	-96.85
4680	Dallas	Dallas	75254	TX	10.07	31831	1/29/2016	32.94	-96.80

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4681	Denton	Denton	75068	TX	11.13	35416	2/2/2016	33.18	-96.95
4682	Grayson	Collin	75090	TX	5.565	20592	2/5/2016	33.60	-96.55
4683	Denton	Denton	76207	TX	19.08	50152	2/12/2016	33.23	-97.18
4684	Tarrant	Tarrant	76016	TX	13.5	42274	2/17/2016	32.69	-97.19
4685	Tarrant	Tarrant	76103	TX	4.88	14395	2/18/2016	32.75	-97.27
4686	Hunt		75422	TX	9.54	31920	2/19/2016	33.14	-95.93
4687	Dallas	Dallas	75089	TX	7.32	21269	2/24/2016	32.94	-96.55
4688	Dallas	Dallas	75218	TX	7.625	27383	2/26/2016	32.84	-96.70
4689	Tarrant	Tarrant	76126	TX	4.76	17426	3/2/2016	32.64	-97.50
4690	Dallas	Dallas	75248	TX	10.81	40828	3/14/2016	32.97	-96.80
4691	Dallas	Dallas	75207	TX	19.08	59663	3/15/2016	32.79	-96.82
4692	Collin	Collin	75075	TX	9.96	32292	3/22/2016	33.02	-96.74
4693	Denton	Denton	75034	TX	17.1	51025	3/25/2016	33.15	-96.86
4694	Rockwall	Rockwall	75032	TX	10.6	27095	3/28/2016	32.86	-96.43
4695	Denton	Denton	75010	TX	7.95	22844	3/28/2016	33.05	-96.87
4696	Dallas	Dallas	75230	TX	17.5	40265	4/6/2016	32.90	-96.79
4697	Collin	Collin	75025	TX	1.96	5596	4/8/2016	33.09	-96.74
4698	Dallas	Dallas	75243	TX	1.68	6861	4/8/2016	32.91	-96.74
4699	Ellis	Ellis	76065	TX	7.2	17493	4/11/2016	32.47	-96.99
4700	Harris	Harris	77004	TX	48.96		4/13/2016	29.72	-95.36
4701	Collin	Collin	75024	TX	21.35	75185	4/25/2016	33.08	-96.80
4702	Grayson	Collin	75020	TX	14.28		4/28/2016	33.77	-96.60
4703	Denton	Denton	75077	TX	5.175	26557	5/4/2016	33.08	-97.06
4704	Tarrant	Tarrant	76036	TX	12.81	32979	5/20/2016	32.58	-97.42
4705	Denton	Denton	75022	TX	13.78	40943	5/24/2016	32.83	-97.15
4706	Dallas	Dallas	75014	TX	4.88	10221	6/6/2016	32.86	-96.98
4707	Dallas	Dallas	75116	TX	72.96		6/7/2016	32.66	-96.91
4708	Collin	Collin	75082	TX	10.335	25318	6/10/2016	32.99	-96.68
4709	Ellis	Ellis	76065	TX	3.35	7775	6/16/2016	32.46	-96.98
4710	Ellis	Ellis	75152	TX	15.96	21000	6/20/2016	32.44	-96.67
4711	Tarrant	Tarrant	76132	TX	6.1	14774	6/29/2016	32.66	-97.41
4712	Denton	Denton	75028	TX	6.6	17925	7/5/2016	33.03	-97.08
4713	Collin	Collin	75023	TX	9.65	25775	7/11/2016	33.05	-96.73
4714	Dallas	Dallas	75206	TX	6.71	20706	7/20/2016	32.83	-96.77
4715	Denton	Denton	75028	TX	94.6		7/22/2016	33.03	-97.08
4716	Johnson	Johnson	76033	TX	16.58	25365	7/29/2016	32.34	-97.38
4717	Collin	Collin	75093	TX	16.47	53565	8/8/2016	33.03	-96.81
4718	Collin	Collin	75075	TX	31191		8/11/2016	33.02	-96.73
4719	Denton	Denton	76201	TX	107.7		8/12/2016	33.22	-97.14
4720	Collin	Collin	75013	TX	6.89	22420	8/26/2016	33.10	-96.67

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4721	Collin	Collin	75023	TX	9.65	25775	7/11/2016	33.05	-96.73
4722	Dallas	Dallas	75206	TX	6.71	20706	7/20/2016	32.83	-96.77
4723	Denton	Denton	75028	TX	94.6		7/22/2016	33.03	-97.08
4724	Johnson	Johnson	76033	TX	16.58	25365	7/29/2016	32.34	-97.38
4725	Collin	Collin	75093	TX	16.47	53565	8/8/2016	33.03	-96.81
4726	Collin	Collin	75075	TX	31191		8/11/2016	33.02	-96.73
4727	Denton	Denton	76201	TX	107.7		8/12/2016	33.22	-97.14
4728	Collin	Collin	75013	TX	6.89	22420	8/26/2016	33.10	-96.67
4729	Harris	Harris	77449	TX	23.56		9/1/2016	29.83	-95.73
4730	Denton	Denton	76266	TX	28.16	85800	10/7/2016	33.36	-97.20
4731	Collin	Collin	75023	TX	5.4	14151	10/7/2016	33.05	-96.73
4732	Collin	Collin	75075	TX	12.2	29031	10/14/2016	33.02	-96.73
4733	Dallas	Dallas	75220	TX	4.77	12196	10/20/2016	32.86	-96.87
4734	Dallas	Dallas	75220	TX	4.77	12196	10/21/2016	32.86	-96.87
4735	Collin	Collin	75069	TX	5.4	16740	11/1/2016	33.20	-96.61
4736	Grayson	Collin	75090	TX	99.99		11/1/2016	33.64	-96.58
4737	Collin	Collin	75069	TX	7.02	23450	11/3/2016	33.20	-96.61
4738	Dallas	Dallas	75224	TX	90.1		11/15/2016	32.71	-96.83
4739	Tarrant	Tarrant	76180	TX	5.52	20171	11/16/2016	32.86	-97.21
4740	Midland	El Paso	79703	TX	76.175		11/18/2016	31.97	-102.13
4741	Collin	Collin	75082	TX	6.4	15423	11/18/2016	32.99	-96.68
4742	Collin	Collin	75023	TX	11.04	39345	11/22/2016	33.05	-96.73
4743	Dallas	Dallas	75225	TX	8.28	28965	11/22/2016	32.86	-96.79
4744	Dallas	Dallas	75050	TX	51.3		11/22/2016	32.77	-97.00
4745	Collin	Collin	75025	TX	11.16	30100	12/2/2016	33.08	-96.74
4746	Dallas	Dallas	75217	TX	98.8		12/9/2016	32.71	-96.68
4747	Dallas	Dallas	75238	TX	81.25		12/9/2016	32.87	-96.70
4748	Collin	Collin	75252	TX	98.8		12/9/2016	32.99	-96.78
4749	Denton	Denton	75034	TX	10.08	49640	12/9/2016	33.13	-96.83
4750	Dallas	Dallas	75204	TX	4.16	22845	12/29/2016	32.80	-96.78
4751	Dallas	Dallas	75211	TX	1111.59		1/6/2017	32.74	-96.91
4752	Tarrant	Tarrant	76140	TX	8.48	25779	1/9/2017	32.62	-97.27
4753	Harris	Harris	77388	TX	11.42	40000	1/27/2017	30.06	-95.46
4754	Denton	Denton	75056	TX	26		1/31/2017	33.09	-96.90
4755	Shelby	Shelby	75935	TX	134.4		2/10/2017	31.76	-94.20
4756	Dallas	Dallas	75212	TX	100.32		2/10/2017	32.78	-96.88
4757	Jack	Jack	76458	TX	10.08	35299	2/22/2017	33.30	-98.15
4758	Bowie	Upshur	75501	TX	110.55		3/10/2017	33.36	-94.21
4759	Harris	Harris	77449	TX	20.46		3/24/2017	29.84	-95.74
4760	Dallas	Dallas	75080	TX	10.37	18740	4/18/2017	32.97	-96.74

Table F-1: Solar Photovoltaic Projects: Data and Information (cont.)

Project No.	County in Texas	County for ECALC	Zipcode	State	Size (kW DC)	Cost	Date Installed	Latitude	Longitude
4761	Collin	Collin	75074	TX	7.32	22440	4/19/2017	33.03	-96.67
4762	Tarrant	Tarrant	76006	TX	14.64	38092	5/2/2017	32.79	-97.09
4763	Collin	Collin	75023	TX	12.2	27082	5/3/2017	33.06	-96.73
4764	Collin	Collin	75075	TX	7.625	21885	5/5/2017	33.02	-96.74
4765	Dallas	Dallas	75207	TX	75.95		5/13/2017	32.79	-96.82
4766	Collin	Collin	75075	TX	6.1	16840	5/20/2017	33.02	-96.74
4767	Tarrant	Tarrant	76107	TX	4.41	13559	6/6/2017	32.74	-97.38
4768	Collin	Collin	75023	TX	3.05	4397	6/9/2017	33.06	-96.73
4769	Dallas	Dallas	75218	TX	10.23	32971	6/13/2017	32.84	-96.70
4770	Collin	Collin	75024	TX	42.93		6/16/2017	33.08	-96.80
4771	Collin	Collin	75069	TX	6.71	20282	6/28/2017	33.20	-96.62
4772	Tarrant	Tarrant	76131	TX	48.96		6/30/2017	32.91	-97.37
4773	Cooke	Cooke	76240	TX	21.78		7/7/2017	33.70	-97.08
4774	Dallas	Dallas	75215	TX	50.66		7/14/2017	32.75	-96.76
4775	Travis	Travis	78701	TX	183.54		7/28/2017	30.27	-97.74
4776	Collin	Collin	75098	TX	68.44		8/18/2017	33.01	-96.54
4777	Tarrant	Tarrant	76133	TX	22.62		8/25/2017	32.65	-97.38
4778	Collin	Collin	75002	TX	12.54	27025	8/29/2017	33.10	-96.63
4779	Dallas	Dallas	75205	TX	14.85	20927	9/14/2017	32.84	-96.80
4780	Collin	Collin	75024	TX	8791.35		9/15/2017	33.08	-96.80
4781	Tarrant	Tarrant	76013	TX	161.16		11/3/2017	32.72	-97.15
4782	Dallas	Dallas	75204	TX	90.1	232260	11/16/2017	32.80	-96.79
4783	Travis	Travis	78753	TX	474		11/17/2017	30.38	-97.68
4784	Tarrant	Tarrant	76010	TX	65.88		11/20/2017	32.72	-97.08
4785	Dallas	Dallas	75204	TX	9.9	28541	11/25/2017	32.80	-96.79
4786	Dallas	Dallas	75243	TX	6.03	20500	12/28/2017	32.91	-96.73
4787	Wise	Denton	76023	TX	13.55	45900	3/9/2018	33.0504	-97.5897
4788	Henderson	Henderson	75752	TX	41.54		2/9/2018	32.2914	-95.7932
4789	Tarrant	Tarrant	76244	TX	7.8	27450	2/9/2018	32.9459	-97.2761
4790	Tarrant	Tarrant	76034	TX	5.775		1/3/2018	32.8861	-97.1467
4791	Collin	Collin	75035	TX	6	17400	8/3/2018	33.1541	-96.7601
4792	Collin	Collin	75034	TX	24.095	90990	7/11/2018	33.1377	-96.8565
4793	Denton	Denton	75067	TX	384.975		8/15/2018	33.0067	-96.9961
4794	Collin	Collin	75075	TX	1.71		12/7/2018	33.0209	96.7387

Table F-2: Solar Thermal Projects up to 2018

Project No	City	County	County for eCalc	Project Purpose	Model	Collector Area (sqft)	Number of collectors	Total Area (sqft)	Slope (degree)	Azimuth (i.e. South=0, West (-) and East (+))	Fluid
1	Austin	Travis	Travis	Domestic Hot Water (DHW)	N/A	N/A	2	N/A	N/A	0	Antifreeze
2	Austin	Travis	Travis	Domestic Hot Water (DHW)	SS HX Drainback	26.25	3	78.75	20	0	Water
3	Round Rock	Williamson	Williamson	Domestic Hot Water (DHW)	SS HX Drainback	26.25	2	52.5	20	-90	Water
4	Dripping Springs	Hays	Hays	Domestic Hot Water (DHW)	SS HX Drainback	26.25	2	52.5	20	20	Water
5	San Antonio	Bexar	Bexar	Domestic Hot Water (DHW)	SS HX Drainback	26.25	2	52.5	20	0	Water
6	San Antonio	Bexar	Bexar	Pool Heating System	FS collector	32	8	256	20	-45	Water
7	N/A	N/A	N/A	Domestic Hot Water (DHW)	SS HX Drainback	26.25	3	78.75	20	-45	Water
8	N/A	N/A	N/A	Domestic Hot Water (DHW)	SS HX Drainback	26.25	2	52.5	20	-45	Water
9	Midland	Midland	El paso	Pool Heating System-city of midland aquatic center	HC 50 collectors-make:APS	50	256	12800	N/A	N/A	Water
10	Lubbock	Lubbock	Parker	Pool Heating System-Lubbock TX State School	HC 50 collectors-make:APS	50	36	1800	N/A	N/A	Water
11	Corpus Christi	Nueces	Nueces	Pool Heating System-Corpus Christi TX State School	HC 50 collectors-make:APS	50	36	1800	N/A	N/A	Water
12	Richmond	Fort Bend	Fort Bend	Pool Heating System-Richmond TX State School	HC 50 collectors-make:APS	50	36	1800	N/A	N/A	Water
13	Elpaso	El paso	El paso	Pool Heating System-University of Elpaso recreation facility	HC 50 collectors-make:APS	50	120	6000	N/A	N/A	Water
14	Elpaso	El paso	El paso	Pool Heating System-University of Elpaso recreation facility	HC 50 collectors-make:APS	50	128	6400	N/A	N/A	Water
15	edinburg	Hidalgo	Nueces	Pool heating system for Gym spa	make : APS	N/A	34	600+	N/A	N/A	Water
16	pearland	Brazoria	Brazoria	Pool heating system-residential	make : APS	N/A	7	N/A	N/A	N/A	Water
17	cleveland	Liberty	Liberty	Domestic Hot Water (DHW)	make : APS	N/A	N/A	N/A	N/A	N/A	Water
18	Austin	Travis	Travis	Pool hating system at the Jester Club	make: FAFCO	N/A	N/A	N/A	N/A	N/A	Water
19	Austin	Travis	Travis	pool heating at Quenciera@Barton Creek	make: FAFCO	N/A	N/A	N/A	N/A	N/A	Water
20	Laredo	Webb	Nueces	Pool heating at Tijerina Ranch	make: FAFCO	N/A	N/A	N/A	N/A	N/A	Water
21	San Antonio	Bexar	Bexar	DHW system-Apartment high rise-The army resident community	30 tube Apricus collectors	25.8	180	4644	N/A	N/A	Water
22	San Antonio	Bexar	Bexar	DHW system-Assisted Living Facility-The army resident community	30 tube Apricus collectors	25.8	5	129	N/A	N/A	Water
23	Victoria	Victoria	Victoria	Domestic Hot Water (DHW)	30 tube Apricus collectors	25.8	2	51.6	N/A	N/A	Water
24	Kingsville	Kleberg	Nueces	DHW system-Texas A&M Kingsville residence hall	Evacuated tube collectors	N/A	66	N/A	N/A	N/A	Water
25	Austin	Travis	Travis	DHW system-University of Texas	Evacuated tube collectors	N/A	185	N/A	N/A	N/A	Water
26	San Antonio	Bexar	Bexar	DHW system-Army Residence Community High-Rise Apartment Building	Evacuated tube collectors	N/A	176	N/A	N/A	N/A	Water
27	San Antonio	Bexar	Bexar	DHW system-Bexar County Adult Detention Center Annex	Evacuated tube collectors	N/A	216	N/A	N/A	N/A	Water
28	San Antonio	Bexar	Bexar	DHW system-Bexar County Jail Annex	AP-30 solar collectors	N/A	220	N/A	N/A	N/A	Water
29	San Antonio	Bexar	Bexar	Domestic Hot Water (DHW)-resident project by Brooks energy & sutainability lab	N/A	N/A	N/A	N/A	N/A	N/A	Water
30	San Antonio	Bexar	Bexar	Domestic Hot Water (DHW at city public service-northside	N/A	N/A	N/A	5000	N/A	N/A	Water
31	San Antonio	Bexar	Bexar	Domestic Hot Water (DHW)-Bexar County Adult Jail Annex	N/A	N/A	N/A	N/A	N/A	N/A	Water
32	San Antonio	Bexar	Bexar	Domestic Hot Water (DHW)	Progressive Tube Technology	N/A	N/A	N/A	N/A	N/A	Water
33	San Antonio	Bexar	Bexar	Historic Gardens phase II project by SADA	N/A	N/A	N/A	N/A	N/A	N/A	Water
34	San Antonio	Bexar	Bexar	Domestic Hot Water (DHW)-Fort sam Houston, public hot water supply	RMT modules	N/A	29	1377.95	N/A	N/A	Water
35	San Antonio	Bexar	Bexar	Domestic Hot Water (DHW)-Imagine homes	N/A	N/A	N/A	54	N/A	N/A	Water
36	San Antonio	Bexar	Bexar	Domestic Hot Water (DHW)Veterans Administration Hospitals	EC-40-1.5	N/A	320	N/A	N/A	N/A	Water
37	Killeen	Bell	Williamson	DHW system-Ft. Hood Army Base	TitanPowerPlus SU2 series	N/A	93	N/A	N/A	N/A	Water
38	San Angelo	Travis	Travis	17th Security Forces Squadron (SFS) roof at Goodfellow Air Force Base outside of San Angelo, Texas.	N/A	N/A	2	N/A	N/A	0	Antifreeze

Table F-3: Solar Thermal Special Project

Special Case	
Location	Fort Sam Houston, San Antonio TX
Date	3-Jun
Collector	Roof Mounted Parabolic Trough
Number of collectors	129
Total Aperture area (sqft)	4515
Maximum operation temperature (°F)	400
Annual Energy Consumption (KWh/yr)	270583
Annual Energy Consumption OSD (KWh/yr) (KWh/yr)	741.3

Table F-4: Geothermal Heat Pump Energy Projects up to 2018

Project No	Project	County	Implementation Date	Capacity (ton)	Area (sqft)
1	Birdville High School Campus	Denton	2001	N/A	N/A
2	Texas Motor Speedway	Denton	1998	N/A	N/A
3	George W. Bush's ranch	McLennan	2001	14	N/A
4	Esperanza del Sol, Dallas (Hope of the Sun)	Dallas	1994	18	15,276
5	Hillside Oaks, East Dallas	Dallas	1997	366	276,120
6	Pease Elementary School, Austin	Travis	1994	90	39,162
7	Brooke Elementary School	Travis	1993	150	51,605
8	Govalle Elementary School	Travis	1994	230	89,319
9	Bailey Middle School, Austin	Travis	1992	512	200,000
10	Home in Iowa Park	Wichita	1997	1	1,668
11	The Home of the Future	Dallas	1997	13	4,573
12	Birdville Athletic Complex / Stadium	Tarrant	post 1992	N/A	60,000
13	Frisco ISD Administration Building and Network Operations Center	Collin	post 1992	N/A	20,000+
14	Aubrey Athletic Complex / Stadium	Denton	post 2002	64	25,807
15	Lake Dallas Athletic Complex / Stadium	Denton	post 2001	63	43,500
16	Wakeland High School	Collin	post 1992	1,010	335,932
17	Lovejoy High School	Collin	post 2004	793	216,290
18	Grand Prairie High Ninth Grade Center	Dallas	post 2000	598	150,000+
19	South Grand Prairie High Ninth Grade Center	Dallas	post 2001	atleast 133	100,000+
20	Renovations to HVAC System at South Grand Prairie High School	Dallas	post 2001	69	12,500
21	Renovations to HVAC System at South Grand Prairie High School	Dallas	post 2002	64	49,000
22	David Daniels Elementary	Dallas	post 1992	N/A	70,000+
23	Edelweiss Daniels Elementary	Dallas	post 2000	305	72,872
24	Crockett Elementary	Dallas	post 2000	305	72,872
25	Kirby Elementary	Dallas	post 2000	305	72,872
26	Renovations to HVAC System at Lee Middle School	Dallas	post 1992	214	136,600 +
27	Rebuild of Lee Middle School (Fire Damage)	Dallas	post 2000	64	2,800
28	Renovations/Additions to Adams Middle School	Dallas	post 1992	N/A	N/A
29	Renovations/Additions to North Oaks Middle School	Tarrant	post 1992	N/A	71,000+
30	Renovations/Additions to North Richland Middle School	Tarrant	post 1992	273	80,000+

Table F-4: Geothermal Heat Pump Energy Projects up to 2018 (cont.)

Project No	Project	County	Implementation Date	Capacity (ton)	Area (sqft)
31	Watauga Middle School	Tarrant	post 2000	N/A	80,000+
32	HVAC Renovation for Watauga Middle School	Tarrant	post 1992	23	1987 added
33	Renovations to HVAC System at Eisenhower Elementary	Dallas	post 1992	N/A	N/A
34	Renovations/Additions to Rayburn Elementary	Dallas	post 1992	N/A	38,000+
35	Renovations/Additions to Watauga Elementary School	Tarrant	post 1992	N/A	56,000+
36	Renovations/Additions to Smithfield Elementary School	Tarrant	post 1992	N/A	56,000+
37	Renovations to David E. Smith Elementary School	Tarrant	2003	30	45,000+
38	Renovations/Additions to Green Valley Elementary School	Tarrant	post 2000	8	50,000+
39	Renovations/Additions to Richland Elementary School	Tarrant	post 1992	221	38,000+
40	Renovations/Additions to Birdville Elementary School	Tarrant	post 1992	N/A	32,000+
41	Renovations/Additions to Grace Hardeman Elementary	Tarrant	post 2000	12	N/A
42	W.A. Porter Elementary School	Tarrant	post 2000	N/A	48,000+
43	Renovations/Additions to W.A. Porter Elementary School	Tarrant	post 2000	12	1963 added
44	Haltom Middle School	Tarrant	post 1992	N/A	109,000
45	HVAC Renovation for Haltom Middle School	Tarrant	post 2000	22	6730 added
46	HVAC Renovation for Richland Middle School`	Tarrant	post 1992	N/A	91,000
47	HVAC Renovation for North Oaks Middle School	Tarrant	post 1992	N/A	70,000
48	HVAC Renovation for North Richland Middle School	Tarrant	post 1992	N/A	75,000
49	Holiday Heights Elementary	Tarrant	post 2000	N/A	40,000
50	HVAC Renovation for Holiday Heights Elementary	Tarrant	post 2000	12	2923 added
51	HVAC Renovation for Watuaga Elementary	Tarrant	post 1992	N/A	40,000
52	HVAC Renovation for David E. Smith Elementary	Tarrant	post 1992	N/A	35,000
53	HVAC Renovation for West Birdville Elementary	Tarrant	post 1992	N/A	42,000
54	HVAC Renovation for Glenview Elementary	Tarrant	post 1992	N/A	40,000
55	HVAC Renovation for South Birdville Elementary	Tarrant	post 1992	149	38,000
56	HVAC Renovation for WT Francisco Elementary	Tarrant	post 2000	26	31,000
57	HVAC Renovation for Foster Village Elementary	Tarrant	post 2000	12	66,000
58	Snow Heights Elementary	Tarrant	post 2000	124	33,000
59	Renovations/Additions to Snow Heights Elementary School	Tarrant	post 2000	8	1963 added
60	HVAC Renovation for OH Stowe Elementary	Tarrant	post 1992	N/A	40,000

Table F-4: Geothermal Heat Pump Energy Projects up to 2018 (cont.)

Project No	Project	County	Implementation Date	Capacity (ton)	Area (sqft)
61	Jackson Middle School	Dallas	post 2000	365	100,000+
62	Renovations to HVAC System at Jackson Middle School	Dallas	post 2000	N/A	N/A
63	Renovations/Additions to Richland Elementary School	Tarrant	post 1992	N/A	38,000+
64	Renovations/Additions to Birdville Elementary School	Tarrant	post 1992	N/A	32,000+
65	HVAC Renovation for Rayburn Elementary School	Dallas	post 1992	N/A	N/A
66	HVAC Renovation for North Oaks Middle School	Tarrant	post 1992	204	70,000
67	HVAC Renovation for Watuaga Elementary	Tarrant	post 2000	26	40,000
68	Anchor Church	Tarrant	post 1992	N/A	40,000+
69	Little Elm Elementary	Denton	post 2001	218	70,000+
70	Griffen Parc Middle School	Collin	2004	383	151,566
71	Riddle Elementary	Collin	2003	238	70,000+
72	Boals Elementary	Collin	2003	238	74,300
73	Lake Dallas Middle School	Denton	post 2003	538	250,000+
74	North Elementary	Tarrant	post 1992	N/A	110,000+
75	Isbell Elementary	Collin	2004	279	75,904
76	Bledsoe Elementary	Collin	2005	279	75,904
77	Roach Middle School	Collin	post 1992	N/A	120,000+
78	Fowler Middle School	Collin	2006	488	138,651
79	North Star Elementary	Tarrant	post 1992	N/A	70,000+
80	Hometown Elementary School	Tarrant	post 1992	N/A	70,000+
81	Liberty High School	Collin	2007	1,051	306,179
82	Ashley Elementary	Collin	2005	279	75,325
83	Ogle Elementary	Collin	2006	279	75,904
84	Sem Elementary	Collin	post 1992	N/A	70,000+
85	Corbell Elementary	Collin	2005	279	76,814
86	Taylor Elementary	Collin	post 1992	N/A	70,000+
87	Middle School #5	Tarrant	post 1992	N/A	1,40,000+
88	Intermediate School #5	Tarrant	post 1992	N/A	1,20,000+
89	Liberty Elementary	Tarrant	post 1992	N/A	70,000+
90	Stafford Middle School	Collin	2008	509	142,108

Table F-4: Geothermal Heat Pump Energy Projects up to 2018 (cont.)

Project No	Project	County	Implementation Date	Capacity (ton)	Area (sqft)
91	Scoggins Middle School	Collin	2008	512	124,108
92	Elementary #10	Tarrant	post 1992	N/A	70,000+
93	Elementary #11	Tarrant	post 1992	N/A	70,000+
94	Elementary #12	Tarrant	post 1992	N/A	70,000+
95	Elementary #13	Tarrant	post 1992	N/A	70,000+
96	Middle School #4	Tarrant	2006	624	151,417
97	Robertson Elementary	Collin	2007	291	75,902
98	Mooneyham Elementary	Collin	2007	291	75,902
99	Carrol Elementary	Collin	2007	292	75,902
100	Brookstone Elementary	Collin	2008	292	75,902
101	Tadlock Elementary	Collin	2008	307	77,184
102	Aubrey Intermediate/Middle School	Denton	post 2004	210	80,000+
103	Florence Hill Elementary	Dallas	post 2003	160	70,000+
104	Garner Elementary	Dallas	post 2004	160	70,000+
105	Bowie Elementary	Dallas	post 2004	44	25,000+
106	High School #5	Collin	post 1992	N/A	300,000+
107	High School #6	Collin	post 1992	N/A	300,000+
108	Memorial Stadium Field House	Collin	2004	27	10,000+
109	Rogers Elementary	Collin	post 2006	221	63,000+
110	Camp Wisdom Elementary	Dallas	post 1992	N/A	70,000+
111	Additions to Anderson Elementary	Collin	2003	30	9,000+
112	Additions to Borchardt Elementary	Collin	post 1992	N/A	9,000+
113	Bright Elementary	Collin	2004	30	9,000+
114	Additions to Christi Elementary	Collin	2004	30	9,000+
115	Additions to Curtsinger Elementary	Collin	post 1992	N/A	9,000+
116	Additions to Fisher Elementary	Collin	2003	30	9,000+
117	Additions to Shawnee Trail Elementary	Collin	post 1992	N/A	9000 +
118	CATE Center (Career and Technology)	Collin	2008	402	100, 000+
119	CTE at Centennial High School (Career and Technology)	Collin	2007	16	9000+
120	Staley Middle School Field House	Collin	2004	12	6000+

Table F-4: Geothermal Heat Pump Energy Projects up to 2018 (cont.)

Project No	Project	County	Implementation Date	Capacity (ton)	Area (sqft)
121	West Transportation Facility	Collin	2008	80	26,148
122	McKinney Lofts	Dallas	N/A	N/A	N/A
123	Havana Club Apartments	Bexar	N/A	N/A	N/A
124	Hogg Palace Lofts	Harris	N/A	N/A	N/A
125	South Main Baptist Church	Harris	N/A	N/A	N/A
126	The Tower	Tarrant	N/A	N/A	N/A
127	Edgemere	Dallas	N/A	N/A	N/A
128	Radisson Carlson Park	Bexar	N/A	N/A	N/A
129	Biggs Field Project	El Paso	N/A	N/A	N/A
130	Denison Housing Authority	Grayson	N/A	N/A	N/A
131	Fort Sam Houston Barracks	Bexar	N/A	N/A	N/A
132	Fort Sam Houston Building 905/906	Bexar	N/A	N/A	N/A
133	Fort Walters	Palo pinto	N/A	N/A	N/A
134	Drury Inn & Suites	Bexar	N/A	N/A	N/A
135	Lexington Hotel Suites	Tarrant	N/A	N/A	N/A
136	Arnold Middle School	Dallas	N/A	N/A	N/A
137	Shaner Hotel	Bexar	N/A	N/A	N/A
138	Holiday Inn Northwest	Bexar	N/A	N/A	N/A
139	2ND Home Suites	Dallas	N/A	N/A	N/A
140	Homewood Suites	Bexar	N/A	N/A	N/A
141	Air Dynamics	Dallas	N/A	N/A	N/A
142	Radiatas	Webb	N/A	N/A	N/A
143	Hensley Field Operations Center	Dallas	N/A	N/A	N/A
144	Southwest Plaza Base Bldg	Dallas	N/A	N/A	N/A
145	Air Performance	Dallas	N/A	N/A	N/A
146	Meadwest VA Co.	Harris	N/A	N/A	N/A
147	Gap #1550 Mockingbird Station	Dallas	N/A	N/A	N/A
148	Kirby Building	Dallas	N/A	N/A	N/A
149	USSA Towers	Bexar	N/A	N/A	N/A
150	Trinity Towers	Nueces	N/A	N/A	N/A

Table F-4: Geothermal Heat Pump Energy Projects up to 2018 (cont.)

Project No	Project	County	Implementation Date	Capacity (ton)	Area (sqft)
151	Sonny Bryans BBQ	Dallas	N/A	N/A	N/A
152	L'Etoile Restaurant	Bexar	N/A	N/A	N/A
153	Sweeny Ind.Sch. Dist.Warehouse	Brazoria	N/A	N/A	N/A
154	Freylands Elementary	Chambers	N/A	N/A	N/A
155	Mustang Mech. Montwood High	El Paso	N/A	N/A	N/A
156	Boerne Elementary School	Kendall	N/A	N/A	N/A
157	City View Schools	Wichita	N/A	N/A	N/A
158	Montwood High School Addition	El Paso	N/A	N/A	N/A
159	Montwood High School Auditorium	El Paso	N/A	N/A	N/A
160	The Island on Lake Travis	Travis	N/A	N/A	N/A
161	Allen Campus	Brazos	N/A	N/A	N/A
162	Judson Lofts	Bexar	N/A	N/A	N/A
163	pink elemtary school	Collin	2005	286	75,904
164	Griffin middle school	Collin	2002	N/A	N/A
165	Joslin Elementary	Travis	1991	N/A	N/A
166	Brent wood Elementary	Travis	1991	N/A	N/A
167	Walnut Creek Elementary	Travis	1991	N/A	N/A
168	Sims Elementary	Travis	1991	N/A	N/A
169	F R Rice Elementary	Travis	1991	N/A	N/A
170	T A Brown Elementary	Travis	1991	N/A	N/A
171	Canyon Ridge Middle School	Williamson	2004	N/A	N/A
172	Vista Ridge High School	Williamson	2004	N/A	N/A
173	Pleasant Hill Elemtary	Williamson	2005	N/A	N/A
174	Good Night Middle school	Hays	1985	N/A	N/A
175	Santa Teresa Elementary	Hays	N/A	125	N/A
176	Santa Teresa Middle School	Hays	N/A	200	N/A
177	Esconreras primary kindergarten	Hays	N/A	105	N/A
178	Mullendore Elementary	Tarrant	post 1995	N/A	N/A
179	O.H. Stowe Elementary	Tarrant	post 1995	N/A	N/A
180	Austin Elementary School GPISD	Dallas	post 2000	91	atleast 21,100

Table F-4: Geothermal Heat Pump Energy Projects up to 2018 (cont.)

Project No	Project	County	Implementation Date	Capacity (ton)	Area (sqft)
181	Fannin Elementary School GPISD	Dallas	2004	221	N/A
182	Peaster Elementary	Parker	post 1995	N/A	N/A
183	Frisco Elementary School #15	Collin	post 1995	N/A	N/A
184	Lone Star Elementary - Frisco ISD	Collin	post 1995	N/A	N/A
185	Woodland Springs Elementary - Keller ISD	Tarrant	post 1995	N/A	N/A
186	Bette Perot Elementary - Keller ISD	Tarrant	post 1995	N/A	N/A
187	Granbury Middle School East Site	Hood	post 1995	N/A	N/A
188	Frisco Elementary #18 - Shaddock	Collin	post 2007	N/A	N/A
189	Shiver Road Elementary #18 Keller ISD	Tarrant	post 2007	N/A	N/A
190	Woodland Springs Elementary #17 Keller ISD	Tarrant	post 2007	N/A	N/A
191	McDonwell Elementary (Keller ISD)	Tarrant	post 2007	N/A	N/A
192	Keller Intermediate School #5 Keller ISD	Tarrant	post 2007	N/A	N/A
193	Shady Shores Elementary	Denton	post 2007	393	75,904
194	Alta Vista Middle School #5 Keller ISD	Tarrant	post 2007	N/A	N/A
195	Brewer High School (White Settlement ISD)	Tarrant	post 2007	N/A	N/A
196	Leaky High school	Gillespie	N/A	120	N/A
197	Canutillo High School	El Paso	N/A	1,200	N/A
198	Lubbock Christian University	Lubbock	N/A	N/A	N/A
199	Rice University	Harris	N/A	N/A	N/A
200	brown building lofts	Travis	N/A	N/A	N/A
201	Wheeler county Court House	Wheeler	N/A	N/A	N/A
202	Ballinger housing authority	Runnels	N/A	N/A	N/A
203	Project under category miscellaneous cited by FHP manufacturing	Travis	N/A	N/A	N/A
204	Foreman independent school district	Bowie	N/A	N/A	N/A
205	Timber Creek High School #4	Tarrant	post '2008	117	361,141
206	Ed Wilkie Middle School #5: Geothermal Design Services	Travis	post '2008	643	N/A
207	William & Abbie Allen Elementary School	Collin	post '2008	339	83,960
208	Career & Technology Education Center	N/A	post '2008	799	247,880
209	Early Childhood School	Collin	post '2008	385	54,861
210	Burleson Elementary School #11	N/A	post '2008	284	N/A

Table F-4: Geothermal Heat Pump Energy Projects up to 2018 (cont.)

Project No	Project	County	Implementation Date	Capacity (ton)	Area (sqft)
211	Killeen Police Headquarters: Geothermal Design	Bell	post '2008	208	88,663
212	Burleson High School #2	Tarrant	post '2008	2,126	490,447
213	Secondary Instructional Facility	Travis	post '2008	745	184,824
214	Lamar & Norma Hunt Middle School #10	Collin	post '2008	512	147,096
215	Elizabeth Cash Maus Middle School #11	Collin	post '2008	512	147,096
216	Robert Cobb Middle School #12	Collin	post '2008	512	147,096
217	D'Guisseppe (Gerald Sonntag) Elementary School: 2003 New ES	Collin	post '2008	310	77,184
218	Aubrey High School	Denton	post '2008	225	N/A
219	DFW Airport: EAD Annex	Travis	post 2009	18	N/A
220	2009 Capital Improvements @ Various Campuses	Travis	post 2009	148	N/A
221	Pre-Kindergarten School	Denton	post 2009	164	60,391
222	George & Debra Purefoy Elementary School #30	N/A	post 2009	304	N/A
223	Elementary School #14: Geothermal Design Services	N/A	post 2009	Y	N/A
224	Patricia Dean Boswell McCall Elementary School	Parker	2007	367	89,642
225	Aubrey Intermediate:Add/Reno	Denton	2007	234	69,519
226	Sam Carter Service Center	Collin	2007	116	49,377
227	Dr. Monaco Elementary School	Denton	2007	263	74,544
228	Caprock Elementary School #20	Tarrant	2007	304	92,768
229	Trinity Springs Middle School: Add.	Tarrant	2007	121	36,136
230	Milam Elementary School: 2007 Bond HVAC Replacement	Dallas	2008	131	N/A
231	Truman Middle School: HVAC Retrofit Phase 2	Dallas	under progress	146	N/A
232	Alta Vista Elementary School	Tarrant	under progress	573	N/A
233	Sandshell Elementary School #21	Travis	under progress	278	N/A
234	Corinth Primary	Denton	under progress	238	N/A
235	All Saints Episcopal School	Travis	under progress	337	N/A
236	Alliance for Children	Travis	under progress	33	N/A
237	Faithbridge Presbyterian Church	Collin	under progress	165	N/A
238	Heritage High School	Collin	2007	1,042	325,693
239	Cotulla High School	La Salle	N/A	N/A	N/A
240	Marlin Hospital	Falls	N/A	N/A	N/A

Table F-4: Geothermal Heat Pump Energy Projects up to 2018 (cont.)

Project No	Project	County	Implementation Date	Capacity (ton)	Area (sqft)
241	Stacy Park Pool	Travis	N/A	N/A	N/A
242	1505, elm street	Dallas	N/A	N/A	N/A
243	Covington high school	Hill	N/A	N/A	N/A
244	Residential project by energyhomes.org	N/A	N/A	50	N/A
245	Residential project by reported Trane	Coryell	N/A	4	N/A
246	Golden Sands disaster recovery dome, Texas	Travis	N/A	N/A	N/A
247	Liberty county co production	Liberty	N/A	N/A	N/A
248	Department of defense-Fort Bliss project	El Paso	N/A	N/A	N/A
249	Department of defense-Fort Bliss project (Family housing)	El Paso	N/A	N/A	N/A
250	Department of defense-Fort Hood project (Family housing)	Bell	N/A	N/A	N/A
251	Department of defense-Fort Hood project (Administrative)	Bell	N/A	N/A	40,782
252	Department of defense-Dyes AFB project	Taylor	N/A	N/A	N/A
253	Rice University	Harris	2008	N/A	1,400
254	Trail Driver	Hays	N/A	N/A	N/A
255	Seregetti International Office Bldg.	Harris	N/A	18	10,000
256	Lone Star Calibration Lab	Harris	N/A	5	1,200
257	McDonalds Restaurant	Montgomery	N/A	30	2,000
258	Asia House	Harris	N/A	200	30,000
259	Rosewood Funeral Home	Harris	N/A	50	5,000
260	Leakey ISD	Real	N/A	120	45,000
261	Canutillo HS	El Paso	N/A	1,200	465,000
262	El Paso Chamb of Commerce	El Paso	N/A	100	30,000
263	South Houston Police	Harris	N/A	60	15,000
264	Conroe Medical Office Building	Montgomery	N/A	40	5,000
265	Kingwood Village Estates	Harris	N/A	150	60,000
266	Laughlin AFB	Val Verde	N/A	150	45,000
267	Texas Gov Mansion	Travis	N/A	40	12,000
268	Lubbock Christian University	Lubbock	N/A	800	350,000
269	Early Childhood Development	El Paso	N/A	100	45,000
270	Harlandale ISD	Bexar	N/A	80	25,000

Table F-4: Geothermal Heat Pump Energy Projects up to 2018 (cont.)

Project No	Project	County	Implementation Date	Capacity (ton)	Area (sqft)
271	Shargri La Botanical Gardens	Orange	N/A	50	25,000
272	Galveston Coast Guard Station	Galveston	N/A	100	30,000
273	Billy Dade MS	Dallas	N/A	500	190,000
274	South Houston Police Station, South Houston, TX	Harris	NA	NA	NA
275	Texas Governor's Mansion in Austin	Travis	NA	NA	NA
276	Austin ISD -several schools, Austin, TX	Travis	NA	NA	NA
277	Goliad Co. Coproduction	Goliad	NA	NA	NA
278	William Beaumont New Hospital, Ft. Bliss, El Paso, TX	El Paso	NA	NA	NA
279	Finnell residence	Travis	NA	NA	NA
280	Bryan Army Reserve Center	Brazos	NA	90	49,144
281	National K Works	Harris	NA	200	60,000
282	Menil Museum Bookstore & Cafe	Harris	NA	70	10,000
283	Texas Automotive Muscle Museum	Waller	NA	70	22,000
284	Monarch School	Harris	NA	3	1,500
285	Metro National Tech Center	Harris	NA	30	10,000
286	Blue Bonnett Elec Coop Display Home	Washington	NA	3	1,200

Table F-5: Landfill Gas-Fired Power Plants up to 2018: Operational

Project No	Landfill Name	City	County	Waste In Place (tons)	Landfill Owner Organization	Project Status	Project Start Date	MW Capacity	Year Landfill Opened	LFG Flow to Project (mmSCFD)
1	121 Regional Disposal Facility	Melissa	Collin	9,702,480	North Texas Municipal Water District, TX	Operational	12/15/2017		2004	3.40
2	121 Regional Disposal Facility	Melissa	Collin	9,702,480	North Texas Municipal Water District, TX	Operational	6/1/2018		2004	2.20
3	Arlington LF	Euless	Tarrant	24,711,918	City of Arlington, TX	Operational	4/1/2003	5.0	1965	2.90
4	Atascocita RDF	Humble	Harris	35,199,268	Waste Management, Inc.	Operational	5/2/2018		1983	4.84
5	Austin Community RDF	Austin	Travis	21,025,608	Waste Management, Inc.	Operational	9/1/2007	6.4	1981	3.17
6	Blue Ridge LF	Fresno	Fort Bend	21,307,420	Republic Services, Inc.	Operational	12/1/2009		1993	4.32
7	Camelot Landfill	Lewisville	Denton	19,561,446	City of Farmers Branch, TX	Operational	2/1/2011	3.2	1980	
8	City of Denton Landfill	Denton	Denton	4,040,499	City of Denton, TX	Operational	12/17/2008	1.6	1984	0.98
9	City of Edinburg Landfill	Edinburg	Hidalgo	10,938,023	City of Edinburg, TX	Operational	5/3/2016		1977	2.30
10	City of Victoria Landfill	Bloomington	Victoria	4,571,630	City of Victoria, TX	Operational	3/27/2014		1983	1.58
11	Coastal Plains RDF	Alvin	Galveston	21,244,224	Waste Management, Inc.	Operational	1/10/2003	6.7	1986	
12	Covel Gardens RDF	San Antonio	Bexar	33,184,907	Waste Management, Inc.	Operational	12/20/2005	9.6	1993	
13	DFW Recycling & Disposal Facility	Lewisville	Denton	68,239,232	Waste Management, Inc.	Operational	1/1/1988	3.2	1972	
14	DFW Recycling & Disposal Facility	Lewisville	Denton	68,239,232	Waste Management, Inc.	Operational	7/1/2009	6.4	1972	
15	Fort Bend Regional Landfill	Needville	Fort Bend	9,316,426	WCA Waste Corporation	Operational	6/2/2013		2004	2.45
16	Fort Bend Regional Landfill	Needville	Fort Bend	9,316,426	WCA Waste Corporation	Operational	5/31/2018		2004	2.05
17	Fort Worth Regional LF	Haltom City	Tarrant	4,950,848	City of Fort Worth, TX	Operational	12/27/2006	1.6	1979	0.72
18	Greenwood Farms Landfill	Tyler	Smith	10,276,336	City of Tyler, TX	Operational	4/22/2009		1989	2.30
19	IESI Turkey Creek Landfill	Alvarado	Johnson	11,022,493	Waste Connections, Inc.	Operational	9/30/2012		1983	1.92
20	IESI Turkey Creek Landfill	Alvarado	Johnson	11,022,493	Waste Connections, Inc.	Operational	1/1/2017		1983	0.86
21	McCarty Road LF	Houston	Harris	94,228,220	Republic Services, Inc.	Operational	3/1/1986		1972	8.00
22	McCarty Road LF	Houston	Harris	94,228,220	Republic Services, Inc.	Operational	5/22/2009		1972	6.48
23	McCommas Bluff Landfill	Dallas	Dallas	49,938,938	City of Dallas, TX	Operational	1/1/2008		1981	7.00
24	McCommas Bluff Landfill	Dallas	Dallas	49,938,938	City of Dallas, TX	Operational	1/1/2012		1981	3.00
25	McCommas Bluff Landfill	Dallas	Dallas	49,938,938	City of Dallas, TX	Operational	1/1/2014		1981	2.50
26	McKinney Landfill	McKinney	Collin	6,539,355	North Texas Municipal Water District, TX	Operational	5/27/2011	3.2	1968	
27	Mesquite Creek LF	New Braunfels	Comal	9,989,528	Waste Management, Inc.	Operational	12/31/2010	3.1	1975	
28	Nelson Gardens LF	San Antonio	Bexar	11,802,410	City of San Antonio, TX	Operational	4/1/2014	4.2	1980	
29	Pine Hill LF	Kilgore	Gregg	12,352,362	Four-S Oil Company	Operational	7/31/2017		1980	2.16
30	Seabreeze Environmental Landfill	Angleton	Brazoria	22,710,307	Waste Connections Inc. - Central Region	Operational	3/31/2018		1974	3.50
31	Security Recycling and Disposal LF	Cleveland	Montgomery	11,556,181	Waste Management, Inc.	Operational	5/1/2003	5.0	1988	
32	Skyline LF	Ferris	Ellis	23,098,337	Waste Management, Inc.	Operational	6/13/2007	6.4	1950	3.40
33	Sunset Farms Landfill	Austin	Travis	22,281,720	Republic Services, Inc.	Operational	12/1/1996	3.0	1982	2.09
34	Tessman Road Landfill	San Antonio	Bexar	30,815,589	Republic Services, Inc.	Operational	10/10/2002	5.4	1982	2.90
35	Tessman Road Landfill	San Antonio	Bexar	30,815,589	Republic Services, Inc.	Operational	5/1/2003	2.7	1982	1.45
36	Tessman Road Landfill	San Antonio	Bexar	30,815,589	Republic Services, Inc.	Operational	10/1/2015	1.3	1982	0.73
37	Westside RDF	Aledo	Tarrant	12,328,360	Waste Management, Inc.	Operational	3/15/2010	4.8	1975	

Table F-6: Landfill Gas-Fired Power Plants up to 2018: Candidate

Project No	Landfill Name	City	County	Waste In Place (tons)	Landfill Owner Organization	Project Status	Project Start Date	MW Capacity	Year Landfill Opened	Landfill Closure Year
1	Abilene Environmental Landfill	Abilene	Jones	1,379,243	Abilene Environmental Landfill Inc.	Candidate	1/0/1900		2006	2067
2	Abilene Regional Landfill	Abilene	Jones	7,921,300	Republic Services, Inc.	Candidate	1/0/1900		1982	2224
3	Angelina County Waste Management Center	Lufkin	Angelina	3,063,833	Angelina County, TX	Candidate	1/0/1900		1992	2038
4	Blossom Prairie Landfill	Blossom	Lamar	1,135,780	Josh Bray DBA Sanitation Solutions	Candidate	1/0/1900		2010	2210
5	Brownsville Municipal Landfill	Brownsville	Cameron	5,654,552	City of Brownsville, TX	Candidate	1/0/1900		1979	2050
6	Caliche Canyon LF	Lubbock	Lubbock	5,872,546	City of Lubbock, TX	Candidate	1/0/1900		1970	2025
7	Cefe Valenzuela Landfill	Robstown	Nueces	4,504,301	City of Corpus Christi, TX	Candidate	1/0/1900		2007	2095
8	Charles M Hinton Jr Regional Landfill	Rowlett	Dallas	6,142,110	City of Garland, TX	Candidate	1/0/1900		2002	2053
9	Charter Waste Landfill	Odessa	Ector	6,899,412	Republic Services, Inc.	Candidate	1/0/1900		1992	2070
10	City of Amarillo Landfill	Amarillo	Potter	8,434,229	City of Amarillo, TX	Candidate	1/0/1900		1975	2110
11	City of Beaumont LF	Beaumont	Jefferson	8,199,181	City of Beaumont, TX	Candidate	1/0/1900		1982	2065
12	City of Corsicana LF	Corsicana	Navarro	3,524,134	City of Corsicana, TX	Candidate	1/0/1900		1976	2110
13	City of Fort Worth Southeast Landfill	Forest Hill	Tarrant	15,139,384	City of Fort Worth, TX	Candidate	1/0/1900		1969	2039
14	City of Laredo LF	Laredo	Webb	9,505,656	City of Laredo, TX	Candidate	1/0/1900		1986	2030
15	City of Midland MSW Landfill	Midland	Midland	4,870,973	City of Midland, TX	Candidate	1/0/1900		1985	2083
16	City of Nacogdoches Landfill	Nacogdoches	Nacogdoches	2,173,417	City of Nacogdoches	Candidate	1/0/1900		1976	2050
17	City of Pampa LF	Pampa	Gray	1,359,894	City of Pampa, TX	Candidate	1/0/1900		1940	2119
18	City of Perryton Landfill	Perryton	Ochiltree	1,631,100	City of Perryton, TX	Candidate	1/0/1900		1979	
19	City of Port Arthur Landfill	Beaumont	Jefferson	4,161,152	City of Port Arthur, TX	Candidate	1/0/1900		1974	2105
20	City of Snyder Landfill	Snyder	Scurry	1,009,968	City of Snyder, TX	Candidate	1/0/1900		1980	2143
21	City of Sweetwater LF	Sweetwater	Nolan	1,283,800	City of Sweetwater, TX	Candidate	1/0/1900		1976	2040
22	City of Wichita Falls LF	Iowa Park	Wichita	4,694,751	City of Wichita Falls, TX	Candidate	1/0/1900		1981	2277
23	Clint Landfill	El Paso	El Paso	9,638,747	City of El Paso, TX	Candidate	1/0/1900		1983	2039
24	Colorado City Landfill	Colorado City	Mitchell	1,545,200	City of Colorado City, TX	Candidate	1/0/1900		1975	2020
25	CSC Disposal and Landfill	Avalon	Ellis	5,141,735	Republic Services, Inc.	Candidate	1/0/1900		1980	3000
26	ECD Landfill	Ennis	Ellis	5,869,302	Republic Services, Inc.	Candidate	1/0/1900		1988	2125
27	El Centro Landfill	Robstown	Nueces	3,908,801	Republic Services, Inc.	Candidate	1/0/1900		2000	2072
28	Fort Hood Landfill	Fort Hood	Coryell	2,240,000	US Army Fort Hood	Candidate	1/0/1900		1978	2060
29	Golden Triangle Landfill	Beaumont	Jefferson	10,112,133	Republic Services, Inc.	Candidate	1/0/1900		1993	2047
30	Hillside Landfill	Sherman	Grayson	4,607,942	Waste Management, Inc.	Candidate	1/0/1900		1977	2039

Table F-6: Landfill Gas-Fired Power Plants up to 2018: Candidate (cont.)

Project No	Landfill Name	City	County	Waste In Place (tons)	Landfill Owner Organization	Project Status	Project Start Date	MW Capacity	Year Landfill Opened	Landfill Closure Year
31	IESI Buffalo Creek Landfill	Iowa Park	Wichita	3,715,586	Waste Connections, Inc.	Candidate	1/0/1900		1983	2102
32	IESI East Texas Regional Landfill	Henderson	Rusk	2,133,092	Waste Connections, Inc.	Candidate	1/0/1900		1979	2068
33	IESI Weatherford Landfill	Weatherford	Parker	3,177,646	Waste Connections, Inc.	Candidate	1/0/1900		1977	2019
34	Itasca Landfill	Itasca	Hill	11,719,978	Republic Services, Inc.	Candidate	1/0/1900		1977	2097
35	La Gloria Ranch Landfill	Edinburg	Hidalgo	1,615,453	Republic Services, Inc.	Candidate	1/0/1900		2013	2250
36	Lacy Lakeview RDF	Waco	McLennan	3,882,662	Waste Management, Inc.	Candidate	1/0/1900		1983	2024
37	Maloy Landfill	Campbell	Hunt	4,455,460	Republic Services, Inc.	Candidate	1/0/1900		1979	2042
38	Mexia Landfill	Mexia	Limestone	1,539,994	Republic Services, Inc.	Candidate	1/0/1900		1983	2136
39	New Boston Landfill	New Boston	Bowie	6,641,061	Waste Management, Inc.	Candidate	1/0/1900		1968	2073
40	Newton County Landfill	Buna	Newton	5,048,259	Waste Management, Inc.	Candidate	1/0/1900		1998	2161
41	Paris Landfill	Powderly	Lamar	4,211,085	Waste Management, Inc.	Candidate	1/0/1900		1982	2061
42	Pleasant Oaks Landfill	Mount Pleasant	Titus	2,568,870	City of Mount Pleasant	Candidate	1/0/1900		1960	2161
43	Polk County Landfill	Livingston	Polk	1,963,106	Polk County, TX	Candidate	1/0/1900		1981	2060
44	Rio Grande Valley	Donna	Hidalgo	8,828,412	Republic Services, Inc.	Candidate	1/0/1900		1994	2014
45	Royal Oaks Landfill	Jacksonville	Cherokee	3,275,425	City of Jacksonville, TX	Candidate	1/0/1900		1984	2038
46	San Angelo Landfill	San Angelo	Tom Green	5,273,906	City of San Angelo, TX	Candidate	1/0/1900		1970	2034
47	Southwest Landfill	Canyon	Randall	7,007,008	Republic Services, Inc.	Candidate	1/0/1900		1985	2193
48	Temple Recycling & Disposal Facility	Temple	Bell	7,438,513	City of Temple, TX	Candidate	1/0/1900		1979	2028
49	Texoma Area Solid Waste Authority Landfill	Whitesboro	Grayson	1,604,712	Texoma Area Solid Waste Authority, TX	Candidate	1/0/1900		2005	2092
50	Twin Oaks Landfill	Anderson	Grimes	2,080,763	Brazos Valley SWMA, TX	Candidate	1/0/1900		2011	2046
51	West Texas Region Disposal Facility	Abernathy	Lubbock	4,664,339	City of Lubbock, TX	Candidate	1/0/1900		1999	2266
52	Whispering Pines LF	Houston	Harris	10,248,859	Republic Services, Inc.	Candidate	1/0/1900		1978	2041
53	Williamson County LF	Hutto	Williamson	7,825,064	Williamson County, TX	Candidate	1/0/1900		1985	2091

Table F-7: Landfill Gas-Fired Power Plants up to 2018: Potential

Project No	Landfill Name	City	County	Waste In Place (tons)	Landfill Owner Organization	Project Status	Project Start Date	MW Capacity	Year Landfill Opened	Landfill Closure Year
1	Altair Disposal Services LLC	Altair	Colorado	8,581,378	Clean Harbors	Low Potential			1973	2027
2	Bell County/Sparks LF	Holland	Bell	343,200	Bell County	Low Potential			1994	2001
3	Bell Processing Inc. LF	Wichita Falls	Wichita		Bell Processing Inc	Low Potential			1990	2001
4	Bellfort Boulevard Landfill	Houston	Harris	9,731,720	City of Houston, TX	Low Potential			1954	1970
5	Best Pak Disposal Inc. LF	Pattison	Waller		Waste Management, Inc.	Low Potential				2001
6	BFI LF	Abilene	Taylor	745,888	Pine Street Salvage Company	Low Potential			1993	1997
7	C&T Regional Landfill	Linn	Hidalgo	3,844,000	Republic Services, Inc.	Low Potential			1984	2004
8	City of Brownwood Landfill	Brownwood	Brown	1,300,100	City of Brownwood, TX	Low Potential			1983	2040
9	City of Garland Castle Drive Landfill	Garland	Dallas	5,507,951	City of Garland, TX	Low Potential			1978	2003
10	City of Kingsville Landfill	Kingsville	Kleberg	583,309	City of Kingsville, TX	Future Potential			1977	2067
11	City of Luling Landfill	Luling	Caldwell			Low Potential			1965	1993
12	City of Nederland Landfill	Nederland	Jefferson		Mid County Municipal League, TX	Low Potential				1990
13	City of Richardson LF	Richardson	Collin	825,218	City of Richardson, TX	Low Potential			1975	1990
14	Eastside Landfill	Fort Worth	Tarrant	2,700,462	City of Fort Worth, TX	Low Potential			1970	1993
15	El Campo Landfill	El Campo	Wharton			Low Potential			1985	1994
16	Ellis County LF	Palmer	Ellis	892,320	Waste Management, Inc.	Future Potential			1994	
17	Fort Bliss Municipal Solid Waste Landfill	El Paso	El Paso	205,818	United States Army	Low Potential			1974	2013
18	Hallettsville Landfill	Hallettsville	Lavaca		City of Hallettsville, TX	Low Potential			1928	1992
19	Hunter Ferrell Landfill	Irving	Dallas	3,730,518	City of Irving, TX	Low Potential			1982	2077
20	Hutchins Landfill	Hutchins	Dallas	1,000,000	Republic Services, Inc.	Low Potential			1978	1992
21	IESI Hardin County Landfill	Kountze	Hardin	930,514	Waste Connections, Inc.	Future Potential			1999	2018
22	J.C. Elliott LF	Corpus Christi	Nueces	8,979,475	City of Corpus Christi, TX	Low Potential			1972	2007
23	Kerrville Landfill	Kerrville	Kerr	722,608	City of Kerrville, TX	Future Potential			1984	2040
24	Laidlaw/Wilmer LF	Wilmer	Dallas	686,400	Landfill Owner of Laidlaw/Wilmer LF	Low Potential			1992	2001
25	Lewisville Landfill	Lewisville	Denton		Republic Services, Inc.	Low Potential			1986	2003
26	Maxwell Creek LF	Wylie	Collin	4,593,218	North Texas Municipal Water District, TX	Low Potential			1982	2005
27	McCombs LF	El Paso	El Paso	2,428,756	City of El Paso, TX	Low Potential			1977	2079
28	Mill Creek LF	Fort Worth	Tarrant	4,815,500	Republic Services, Inc.	Low Potential			1973	2001
29	Orange County LF	Orange	Orange	1,517,000	Orange County, TX	Low Potential			1975	1993
30	Pecan Prairie Landfill	Celeste	Hunt	1,439,824	Waste Management, Inc.	Low Potential			1985	1998
31	Quail Canyon	Lubbock	Lubbock	200,200	Republic Services, Inc.	Low Potential			1977	1993
32	Rock Prairie Road Landfill	College Station	Brazos	4,905,978	Brazos Valley SWMA, TX	Low Potential			1982	2011
33	Sinton Landfill	Sinton	San Patricio	1,851,756	Republic Services, Inc.	Low Potential			1972	2002
34	Tricil Environmental Response/Altar SLF	Altair	Colorado	1,980,400	Safety Clean	Low Potential			1976	2002

Table F-8: Landfill Gas-Fired Power Plants up to 2018: Construction

Project No	Landfill Name	City	County	Waste In Place (tons)	Landfill Owner Organization	Project Status	Project Start Date	MW Capacity	Year Landfill Opened	Landfill Closure Year
1	Arlington LF	Euless	Tarrant	24,711,918	City of Arlington, TX	Construction	12/31/2018		1965	2065
2	Blue Ridge LF	Fresno	Fort Bend	21,307,420	Republic Services, Inc.	Construction	12/31/2018		1993	2099
3	City of Grand Prairie LF	Grand Prairie	Dallas	4,311,833	City of Grand Prairie, TX	Construction	3/31/2019		1978	2047

Table F-9: Landfill Gas-Fired Power Plants up to 2018: Shutdown

Project No	Landfill Name	City	County	Waste In Place (tons)	Landfill Owner Organization	Project Status	Project Start Date	MW Capacity	LFG Flow to Project (mmSCFD)	Project Shutdown Date
1	Atascocita RDF	Humble	Harris	35,199,268	Waste Management, Inc.	Shutdown	6/1/2003	8.5	3.96	2/28/2018
2	Atascocita RDF	Humble	Harris	35,199,268	Waste Management, Inc.	Shutdown	1/1/2004	1.7	0.792	2/28/2018
3	Austin Community RDF	Austin	Travis	21,025,608	Waste Management, Inc.	Shutdown	1/1/1998			1/1/2000
4	Baytown Landfill	Baytown	Chambers	9,491,273	Waste Management, Inc.	Shutdown	1/24/2003	3.9	1.73	1/1/2016
5	Blue Bonnet LF	Houston	Harris	2,564,239	Waste Management, Inc.	Shutdown	3/1/2003	1.9	0.928	1/1/2016
6	Blue Ridge LF	Fresno	Fort Bend	21,307,420	Republic Services, Inc.	Shutdown	12/1/2009	1.6	0.648	12/31/2010
7	City of Brownwood Landfill	Brownwood	Brown	1,300,100	City of Brownwood, TX	Shutdown	1/1/1998		0.4	12/31/2007
8	City of Conroe LF	Conroe	Montgomery	3,684,509	Waste Management, Inc.	Shutdown	3/1/2003	2.9		1/1/2011
9	City of Denton Landfill	Denton	Denton	4,040,499	City of Denton, TX	Shutdown	3/1/2005		0.432	4/1/2008
10	City of Denton Landfill	Denton	Denton	4,040,499	City of Denton, TX	Shutdown	1/1/2016		0.432	1/31/2019
11	City of Garland Castle Drive Landfill	Garland	Dallas	5,507,951	City of Garland, TX	Shutdown	5/1/2000		1.1	12/31/2004
12	City of Waco LF	Woodway	McLennan	7,470,500	City of Waco, TX	Shutdown	3/1/2004	1.5	1.5	3/1/2007
13	City of Waco LF	Woodway	McLennan	7,470,500	City of Waco, TX	Shutdown	2/28/2008		1.5	2/24/2013
14	FM 812 Landfill	Austin	Travis	4,623,197	City of Austin, TX	Shutdown	2/1/2004	0.2		12/31/2006
15	Fort Bend County Landfill	Rosenberg	Fort Bend	2,649,100	Fort Bend County, TX	Shutdown	1/1/2000		1	1/1/2011
16	McCommas Bluff Landfill	Dallas	Dallas	49,938,938	City of Dallas, TX	Shutdown	1/1/2000		5.45	12/31/2006
17	McCommas Bluff Landfill	Dallas	Dallas	49,938,938	City of Dallas, TX	Shutdown	1/1/2007		2.8	12/31/2007
18	Trinity Oaks Landfill	Dallas	Dallas	6,838,600	Republic Services, Inc.	Shutdown	2/24/2009	3.2		7/1/2014

Table F-10: Landfill Gas-Fired Power Plants up to 2018: Planned

Project No	Landfill Name	City	County	Waste In Place (tons)	Landfill Owner Organization	Project Status	Project Start Date	MW Capacity	Year Landfill Opened	Landfill Closure Year
1	Galveston County LF	Alta Loma	Galveston	17,382,058	Republic Services, Inc.	Planned	1/1/2019		1973	2075
2	Texas Disposal Systems LF	Creedmoor	Travis	14,678,932	Texas Disposal Systems	Planned	6/1/2018		1991	2035

Table F-11: Landfill Gas-Fired Power Plants up to 2018: Other

Project No	Landfill Name	City	County	Waste In Place (tons)	Landfill Owner Organization	Project Status	Project Start Date	MW Capacity	Year Landfill Opened	Landfill Closure Year
1	City of Cleburne Landfill	Cleburne	Johnson	1,583,200		Unknown			1976	
2	Hazelwood Enterprises, Inc. LF	Baytown			Landfill Owner of Hazelwood Enterprises, Inc. LF	Unknown				
3	North County C&D Landfill	Dickinson	Galveston		Republic Services, Inc.	Unknown				

APPENDIX G List of ERCOT REC Generators

The list of ERCOT REC generators of biomass, hydro, landfill gas, solar, and wind are shown in Table G-1.

Table G-1: ERCOT REC Generator List up to 2018 (Reference: https://www.texasrenewables.com/publicReports/rpt1.asp)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Aspen Power LLC	Aspen Power LLC	7.91294E+12	Lufkin Biomass	LFBIO	156	Neil Leibman	Biomass	38864
Bio Energy (Austin) LLC	Bio Energy Austin LLC	DG_WALZE	DG_WALZE	DG_WALZE	38	Dennis Bollinger	Biomass	25512
Biofuels Power Corporation	Biofuels Power Inc.	20174	BFP Conroe	35861	116	Christopher Dufour	Biomass	35861
Biofuels Power Corporation	Biofuels Power Corporation	20174	Oak Ridge North	DG_RA	118	Chris Dufour	Biomass	34211
East Texas Electric Cooperative, Inc.	East Texas Electric Cooperative	East Texas Electric Cooperative	Woodville Renewable Power Plant	Woodville Renewable Power Plant	220	LA Williams	Biomass	42692
MeadWestvaco Texas LP	MeadWestvaco Texas LP	Evadale Opertions	MeadWestvaco Evadale Pulp and Paper Mill	Evadale Texas	63	JiNia Bradford	Biomass	31646
Nacogdoches Power LLC	Nacogdoches Power LLC	8.32386E+12	Nacogdoches Power LLC	NACPW	176	Jay McFarland	Biomass	36159
Nelson Gardens Energy, LLC	Nelosn Gardens Energy, LLC	Nelson Gardens Energy	DG_78252	DG_78252	208	W. Gary Craig	Biomass	42188
Orange County Container Group LLC	Orange County Container Group LLC	Corrugated Services Inc	Liner Mill Bio-boiler	Liner Mill Bio-boiler	149	Mike Brasovan	Biomass	37531
Rio Grande Valley Sugar Growers Inc.	RGVSG	2	DG_S_SNR	DG_S_SNR	162	Mark Nittler	Biomass	39181
Rio Grande Valley Sugar Growers Inc.	RGVSG	1	Santa Rosa Sugar Mill	Santa Rosa Old TG Building	175	Mark Nittler	Biomass	40005
Rio Grande Valley Sugar Growers, Inc.	RGVSugar	RGVSugar	RGVSugar	RGVSugar	97	Steve Bearden	Biomass	33421
Rio Grande Valley Sugar Growers, Inc.	RGVSG	2	Santa Rosa	2	152	Mark Nittler	Biomass	39181
Snider Industries, LLP	Snider Industries, LLP	Snider_1	Snider_1	Snider_1	109	Julianna Parr	Biomass	35526
Guadalupe-Blanco River Authority	Guadalupe-Blanco River Authority	05-631-1608-3000	DG_Schumansville	DG_Schum	3	Jeff McKee	Hydro	20028
Guadalupe-Blanco River Authority	Guadalupe-Blanco River Authority	05-631-1608-3000	DG-MCQUEENEY	DG_MCQUE	4	Jeff McKee	Hydro	20028
Guadalupe-Blanco River Authority	Guadalupe-Blanco River Authority	05-631-1608-3000	DG_LAKEWOOD TAP	DG_LKWDT	11	Jeff McKee	Hydro	20028
Guadalupe-Blanco River Authority	Guadalupe-Blanco River Authority	05-631-1608-3000	CANYON	DG_CANYON	12	Jeff McKee	Hydro	20028
Maverick County Water Control	Maverick County Water	861499895	EAGLE_HY	EAGLE_HY_EAGLE_HY1	92	Maverick County Water	Hydro	34674
Small Hydro of Texas, Inc.	Small Hydro of Texas, Inc.	71	DG_CUERO CSW	CUECPL	13	Linda A. Parker	Hydro	24191

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Tarrant Regional Water District	Tarrant Regional Water District	DG_OAKHL	Arlington Outlet Hydroelectric Facility	DG_OAKHL	237	Gabriel Savage	Hydro	44787
Bio Energy (Texas), LLC	Bio Energy (Texas) LLC	32079	Covel Gardens Landfill Gas Power Station	DG_MEDIN	61	John M. Love	Landfill gas	20140
Cromeco, Inc.	Cromeco, Inc.	Cromeco, Inc.	Cromeco, Inc.	Cromeco, Inc.	76	Steve Cromeens	Landfill gas	29520
Denton Power, LLC	Denton Power, LLC	Denton Power	Denton Power	Denton Power	140	Frank Prior	Landfill gas	36717
Fort Worth Methane LLC	G2 Energy (FW Regional) LLC	77-998-1765	DG_RDLML_1 Unit	FW Regional	64	Michael Caplan	Landfill gas	32558
Gas Recovery Systems, Inc.	Gas Recovery Systems	20066	Sunset Farms Electric	Sunset Farms Electric	37	Michael Caplan	Landfill gas	24199
McKinney LFG, LLC	McKinney LFG, LLC	McKinney LFG, LLC	McKinney LFG, LLC	DG_MKNSW	160	Sharon R. Frank	Landfill gas	39210
Renovar Arlington, Ltd.	Renovar Arlington, Ltd.	Rnvr-1	Village Creek	Vcreek	53	Robb Finnemore	Landfill gas	31083
Renovar Arlington, Ltd.	Renovar Arlington, Ltd.	Rnvr-2	Village Creek	Vcreek	54	Robb Finnemore	Landfill gas	31083
Trinity Oaks LLC	G2 Energy (Trinity Oaks) LLC	828961529	Trinity Oaks LFG Generating Facility	DG KLBRG	136	Michael Caplan	Landfill gas	36679
TX LFG Energy, LP - Atascocita	Viridis Energy, LP - Atascocita	93-01-87393	ATASCOCITA	HB	29	Sharon Frank	Landfill gas	26813
TX LFG Energy, LP - Baytown	Viridis Energy, LP - Baytown	01-62-16561	BAYTOWN	TRM	33	Sharon Frank	Landfill gas	26811
TX LFG Energy, LP - Blue Bonnet	Viridis Energy, LP - Blue Bonnet	93-01-27472	BLUE BONNET	LB	34	Sharon Frank	Landfill gas	26809
TX LFG Energy, LP - Conroe	Viridis Energy, LP - Conroe	Conroe	Conroe	Conroe	35	Sharon Frank	Landfill gas	26808
TX LFG Energy, LP - Security	Viridis Energy, LP - Security	SECURITY	SECURITY	SECURITY	36	Sharon Frank	Landfill gas	26810
TX LFG Energy, LP- Coastal Plains	Viridis Energy, LP - Coastal Plains	93-01-16145	COASTAL PLAINS	ALVIN	32	Sharon Frank	Landfill gas	26812
WM Renewable Energy, LLC	WM Renewable Energy, LLC	WM Renewable Energy Offset	DG_BIOE	DG_BIOE_2UNITS	26	Clayton Gumpert	Landfill gas	42395
WM Renewable Energy, LLC	WM Renewable Energy, L.L.C.	Skyline	Skyline	DG_FERIS	83	Josh Kuba	Landfill gas	20161
WM Renewable Energy, LLC	WM Renewable Energy II, LLC	Austin	Austin	DG_SPRIN	95	Steven Korsgaard	Landfill gas	34906
WM Renewable Energy, LLC	WM Renewable Energy, L.L.C.	???	DFW II	DG_BIO2	143	Jim Kilpatrick	Landfill gas	36832

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
WM Renewable Energy, LLC	WM Renewable Energy, LLC IV	Westside	Westside	DG_WSTHL	155	Phil Keim	Landfill gas	37711
WM Renewable Energy, LLC	WM Renewable Energy, LLC VI	DG_HBR	Farmers Branch Landfill gas-to-energy	DG_HBR	157	LaToya Glenn	Landfill gas	38696
WM Renewable Energy, LLC	WM Renewable Energy, L.L.C. V	Mesquite Creek	Mesquite Creek	DG_FREIH	187	Tim Hopkins	Landfill gas	38611
1 Solar Holdings LLC	1 Solar Holdings LLC	1 Solar Holdings LLC	Commerce Solar Farm	Commerce Solar Farm	1326	Hemal Doshi	Solar	47513
1 Solar Holdings LLC	1 Solar Holdings LLC	1 Solar Holdings LLC	BAPS	BAPS	1374	Hemal Doshi	Solar	49130
1 Solar Holdings LLC	1 Solar Holdings LLC	1 Solar Holdings LLC	Sulphur Springs Solar Farm 1	Sulphur Springs Solar Farm 1	1375	Hemal Doshi	Solar	49129
Alamo 6 LLC	OCI Alamo 6 LLC	20358	West Texas Solar	SIRIUS	1276	Russell Tomlinson	Solar	44745
Barilla Solar, LLC	Barilla Solar, LLC	Barilla Solar	HOVEY UNIT 1	BARL	219	Jeff King	Solar	42202
Bluebell Solar, LLC	Bluebell Solar, LLC	Bluebell Solar, LLC	Bluebell Solar, LLC	Bluebell Solar, LLC	1356	John Alvarez	Solar	48094
BNB Lamesa Solar LLC	BNB Lamesa Solar LLC	20404	LAMESA SOLAR	LMESASLR	1268	Chase Smith	Solar	46180
Bovine Solar, LLC	Bovine Solar, LLC	Bovine Solar, LLC	Bovine Solar, LLC	Bovine Solar, LLC	1369	Rebecca Goold	Solar	47972
Bronson Solar, LLC	Bronson Solar, LLC	Bronson Solar, LLC	Bronson Solar, LLC	Bronson Solar, LLC	1370	Rebecca Goold	Solar	47974
Bryan Solar LLC	Bryan Solar, LLC	Bryan Solar, LLC	Bryan Solar, LLC	Bryan Solar, LLC	203	Scott Pryor	Solar	40598
Buckthorn Westex, LLC	Buckthorn Westex LLC (RE)	Riggins_Unit1	Riggins	Riggins_Unit1	1367	Jamie Corey	Solar	47338
CEC Solar #1112, LLC	CEC Solar #1112, LLC	CEC Solar #1112, LLC	CEC Solar #1112, LLC	CEC Solar #1112, LLC	1351	Amy Miller	Solar	45326
CED Alamo 3 LLC	OCI Alamo 3 LLC	OCI Alamo 3	WALZEM SOLAR	DG_WALZM	223	Patrick Kim	Solar	42749
CED Alamo 5 LLC	CED Alamo 5 LLC	CED Alamo 5	Alamo 5	Alamo5	1253	Cathy Williams	Solar	44277
CED Alamo 7 LLC	CED Alamo 7, LLC	7.97691E+11	PAINT CREEK SOLAR	SOLARA	1280	Patrick Kim	Solar	45295
CED Upton County Solar, LLC	CED Upton county Solar, LLC	CED Upton County Solar	SP-TX-12B	SP-TX-12B	1299	Patrick Kim	Solar	46949
Chisum Solar, LLC	Chisum Solar, LLC	Chisum Solar, LLC	Chisum Solar, LLC	Chisum Solar, LLC	1368	Rebecca Goold	Solar	4080

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Clean Energy Collective	CEC SOLAR 1111 LLC	CEC SOLAR 1111 LLC	DG_BECK1	CECSOLAR	1263	William Serene	Solar	45594
Constellation Solar Texas,LLC	Constellation Solar Texas, LLC	Johnson City I	Johnson City I	Johnson City I	1337	Lisa Horst	Solar	48165
Constellation Solar Texas,LLC	Constellation Solar Texas, LLC	Johnson City II	Johnson City II	Johnson City II	1338	Lisa Horst	Solar	48164
Constellation Solar Texas,LLC	Constellation Solar Texas, LLC	Perrin I	Perrin I	Perrin I	1339	Lisa Horst	Solar	48170
Constellation Solar Texas,LLC	Constellation Solar Texas, LLC	Perrin II	Perrin II	Perrin II	1340	Lisa Horst	Solar	48171
Constellation Solar Texas,LLC	Constellation Solar Texas, LLC	Perrin III	Perrin III	Perrin III	1341	Lisa Horst	Solar	48172
Constellation Solar Texas,LLC	Constellation Solar Texas, LLC	Perrin IV	Perrin IV	Perrin IV	1342	Lisa Horst	Solar	48173
Constellation Solar Texas,LLC	Constellation Solar Texas, LLC	Stout Drake I	Stout Drake I	Stout Drake I	1343	Lisa Horst	Solar	48166
Constellation Solar Texas,LLC	Constellation Solar Texas, LLC	Stout Drake II	Stout Drake II	Stout Drake II	1344	Lisa Horst	Solar	48167
Constellation Solar Texas,LLC	Constellation Solar Texas, LLC	Stout Drake III	Stout Drake III	Stout Drake III	1345	Lisa Horst	Solar	48168
Constellation Solar Texas,LLC	Constellation Solar Texas, LLC	Stout Drake IV	Stout Drake IV	Stout Drake IV	1346	Lisa Horst	Solar	48169
Constellation Solar Texas,LLC	Constellation Solar Texas, LLC	Fritz I	Fritz I	Fritz I	1347	Lisa Horst	Solar	48138
East Pecos Solar LLC	East Pecos Solar LLC	20385	East Pecos Solar	BOOTLEG	1258	Erik Olsen	Solar	45767
Eddy Solar II, LLC	Eddy Solar II, LLC	Eddy Solar II, LLC	Eddy Solar II, LLC	Eddy Solar II, LLC	1365	Rebecca Goold	Solar	47085
El Paso Electric Company	El Paso Electric Company	EPE	Newman	Newman Solar PV #1	172	Brad Green	Solar	39175
El Paso Electric Company	El Paso Electric Company	EPE	Wrangler	Wrangler Solar Facility	179	Roberto Favela	Solar	40387
El Paso Electric Company	El Paso Electric Company	EPE	Stanton	Stanton Solar Installation	180	Roberto Favela	Solar	40386
El Paso Electric Company	El Paso Electric Company	EPE	EPCC Solar Installation	EPCC Solar Installation	181	Roberto Favela	Solar	40385
El Paso Electric Company	El Paso Electric Company	EPE	Van Horn Solar Power Facility	Van Horn Solar Power Facility	206	Roberto Favela	Solar	42283
El Paso Electric Company	El Paso Electric Company	EPE	MPS Texas Community Solar	Texas Community Solar 1	1281	Brad Green	Solar	47018

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
El Paso Electric Company	El Paso Electric Company	EPE	Microgenerator Aggregator	Microgenerator Aggregator	1295	Brad Green	Solar	47660
El Paso Electric Company	El Paso Electric Company	EPE	Microgenerator Aggregator 2	Microgenerator Aggregator 2	1320	Brad Green	Solar	47780
El Paso Electric Company	El Paso Electric Company	EPE	Microgenerator Aggregator 3	Microgenerator Aggregator 3	1350	Brad Green	Solar	48160
Farmers Electric Cooperative	Farmers Electric Co-op	Farmers EC	01_Greenville 58.3	Farmers EC	1297	Ryan Landis	Solar	47488
FRV AE Solar, LLC	FRV AE Solar,	FRV AE	FRV AE	FRV AE	163	Scott Pryor	Solar	39808
Harvest Moon Renewable Energy Company LLC	Harvest Moon Renewable Energy Company LLC	471	HM SEALY	SEALY	1247	Joey Romano	Solar	45519
Highway 56 Solar, LLC	Highway 56, LLC	Highway 56, LLC	Highway 56, LLC	Highway 56, LLC	1332	Rebecca Goold	Solar	47119
Iain Howe	Iain A. Howe	1	Blairview	Blairview	1352	Iain A Howe	Solar	48090
Leon Solar, LLC	Leon Solar LLC	Leon Solar LLC	Leon Solar LLC	Leon Solar LLC	1336	Rebecca Goold	Solar	47345
Mark Duane Butler	Mark Duane Butler	N/A	N/A	N/A	231	Mark Butler	Solar	44631
Marlin Solar, LLC	Marlin Solar, LLC	Marlin Solar, LLC	Marlin Solar, LLC	Marlin Solar, LLC	1330	Rebecca Goold	Solar	47082
Michael Laurie Blank	Michael Laurie Blank	Solar	Michael Laurie Blank	Texas	148	Michael Laurie Blank	Solar	37542
Midway Solar LLC	Midway Solar LLC	8.1013E+11	Waymark Solar Project	Waymark	1361	Jonathan Kett	Solar	48319
Newman Solar, LLC	Newman Solar	Newman Solar	Newman Solar	Newman Solar	224	Bill Diffley	Solar	43861
North Gainesville Solar, LLC	North Gainesville Solar, LLC	North Gainesville Solar, LLC	North Gainesville Solar, LLC	North Gainesville Solar, LLC	1333	Rebecca Goold	Solar	47083
NRG Residential Solar Solutions LLC	NRG Residential Solar Solutions, LLC.	NRG RSS LLC	SolarSPARC	NRG RSS LLC	217	Jennifer Rodriguez	Solar	42517
NRG Solar SC Stadium LLC	NRG Solar SC Stadium LLC	NRG Solar	NRG Stadium	NRG Solar	1241	Thomas Neri	Solar	45102
OCI Alamo 1 LLC	OCI ALAMO 1 LLC	OCI ALAMO 1	OCI ALAMO 1	OCI_ALM1	201	Guy B. Pickrel	Solar	41465
OCI Alamo 2, LLC	OCI ALAMO 2 LLC	OCI ALAMO 2	ST HEDWIG SOLAR	DG_STHWG	205	Guy B Pickrel	Solar	41777
OCI Alamo 4 LLC	OCI Alamo 4 LLC	OCI Alamo 4	BRACKETTVILLE SOLAR	ECLIPSE	207	F. Lee Samaie	Solar	42208

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
OCI Lamesa Solar II, LLC	Lamesa Solar II, LLC	8.03533E+11	Lamesa Solar	LMESASLR	1360	Jonathan Kett	Solar	48531
OCI Solar TRE LLC	OCI Solar TRE LLC	OCI Solar TRE	Pearl Solar	SIRIUS	1256	Jaro Nummikoski	Solar	45643
PowerFin ASL 1 LLC	PowerFin ASL 1, LLC	20450	POWERFIN KINGSBERY	PFK	1300	PowerFin Partners	Solar	47787
RE Roserock LLC	RE Roserock LLC	45217	RE Roserock Solar Plant	REROCK	1261	Erik Olsen	Solar	45217
Renewable Ventures	Nuon Renewable Ventures	NRV	Green Mountain Solar at Upper Kirby	USAPV003	19	Nuon Renewable Ventures	Solar	26410
Renewable Ventures	Nuon Renewable Ventures	NRV	Green Mountain Solar at The Winston School	USAPV002	20	Nuon Renewable Ventures	Solar	26411
SoCore Operations Management LLC	Bandera Electric Cooperative	BEC	Bandera Electric Coop Leakey TX	Bandera Electric Coop Leakey TX	1286	Bandera Leakey Texas	Solar	46859
SoCore Operations Management LLC	Bandera Electric Cooperative	BEC	Bandera Electric Coop Leakey TX North	Bandera Electric Coop Leakey TX	1287	Bandera Leakey Texas	Solar	46860
SolaireHolman 1 LLC	SolaireHolman 1 LLC	LASSO	LASSO	LASSO	1282	Cesar Seymour	Solar	46832
Sterling Solar, LLC	Sterling Solar, LLC	Sterling Solar, LLC	Sterling Solar, LLC	Sterling Solar, LLC	1358	Rebecca Goold	Solar	47344
SunE CPS1LLC	SunE CPS1, LLC	n/a	n/a	n/a	173	Elyssa Jaffe	Solar	40012
SunE CPS2, LLC	Sune CPS2, LLC	n/a	n/a	n/a	174	Elyssa Jaffe	Solar	40014
SunE CPS3, LLC	SunE CPS3, LLC	n/a	n/a	n/a	191	Elyssa Jaffe	Solar	40013
The Tangent Group, LLC.	The Tangent Group, LLC.	42473	Hanger Solar 1	N/A	210	The Tangent Group, LLC.	Solar	42473
The University of Texas - Houston	University of Texas - Houston	UTHSC	University Center Tower	University Center Tower	42	Rahsaan Arscott	Solar	No. 77027
TPE Whitney Solar	TPE Whitney Solar	48764	TPE Whitney Solar	48764	1364	Tim Holder	Solar	48764
TX Solar I LLC	TX Solar I LLC	TX Solar I	TX Solar I	DG BROOK	153	Cynthia Peterson	Solar	38359
TX Solar I LLC	TX Solar I LLC	TX Solar I	TX Solar I	DG ELMEN	154	Cynthia Peterson	Solar	38359
Upton County Solar 2 LLC	Upton County Solar 2 LLC	Upton County Solar 2 LLC	CASL_GAP	CASL_GAP_UNIT1	1353	Jeff Seidel	Solar	48100
Walnut Springs Solar, LLC	Walnut Springs Solar, LLC	Walnut Springs Solar, LLC	Walnut Springs Solar, LLC	Walnut Springs Solar, LLC	1264	Chris Frantz	Solar	46158

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
West Moore II Solar, LLC	West Moore II Solar, LLC	West Moore II Solar, LLC	West Moore II Solar, LLC	West Moore II Solar, LLC	1366	Rebecca Goold	Solar	47145
Whitesboro II Solar, LLC	Whitesboro Solar II LLC	Whitesboro Solar II LLC	Whitesboro Solar II LLC	Whitesboro Solar II LLC	1335	Rebecca Goold	Solar	47447
Whitesboro Solar, LLC	Whitesboro Solar LLC	Whitesboro Solar LLC	Whitesboro Solar LLC	Whitesboro Solar LLC	1334	Rebecca Goold	Solar	47446
Whitewright Solar, LLC	Whitewright Solar, LLC	Whitewright Solar, LLC	Whitewright Solar, LLC	Whitewright Solar, LLC	1331	Rebecca Goold	Solar	47084
Yellow Jacket Solar, LLC	Yellow Jacket Solar, LLC	Yellow Jacket Solar, LLC	Yellow Jacket Solar, LLC	Yellow Jacket Solar, LLC	1357	Rebecca Goold	Solar	47971
Aeolus Wind LLC	Aeolus Wind, LLC	Aeolus Wind, LLC	North Texas	NA	51	Dan McAllister	Wind	29341
American Wind Power Center	American Wind Power Center	Lubbock	AWPC	AWPC#1	60	Coy F. Harris	Wind	32470
Anacacho Wind Farm, LLC	Anacacho Wind Farm, LLC	Anacacho	Anacacho Wind Farm, LLC	ANACACHO	196	Michelle Strong	Wind	40732
Astra Wind LLC	ASTRA WIND LLC	ASTRA	ASTRA	ASTRA	1285	Leandro Alves	Wind	46742
Avangrid Renewables, LLC	Barton Chapel Wind LLC	Barton Chapel	Barton Chapel	Barton Chapel	138	Bobby Clark	Wind	36825
Avangrid Renewables, LLC	Penascal Wind Power LLC	Penascal	Penascal	Penascal	139	Dan Pitts	Wind	36829
Avangrid Renewables, LLC	Penascal Wind Power LLC	Penascal/STEC	Penascal/STEC	Penascal/STEC	142	Dan Pitts	Wind	36829
Avangrid Renewables, LLC	Penascal II Wind Project, LLC	Penascal II	Penascal II	Penascal II	171	Dan Piits	Wind	38237
Avangrid Renewables, LLC	Baffin Wind LLC	Baffin	Baffin	Baffin	229	Adam Cherry	Wind	44483
Bearkat Wind Energy I, LLC	Bearkat Wind Energy I, LLC	20477	NIELS BOHR	NBOHR	1325	Chris Glimco	Wind	47849
Bethel Wind Farm LLC	Bethel Wind Farm LLC	BETH	Bethel Wind Farm	BETH	1266	Dean Sorrell	Wind	46153
Blue Cloud Wind Energy, LLC	Blue Cloud Wind Energy, LLC	20482	Blue Cloud Wind Energy, LLC	BCW1	1376	Chris Glimco	Wind	48878
Blue Summit Wind II, LLC	Blue Summit II Wind, LLC	Blue Summit II Wind, LLC	Blue Summit II Wind, LLC	Blue Summit II Wind, LLC	1355	John Alvarez	Wind	48514
Blue Summit Wind, LLC	Blue Summit Wind LLC	BLSUMMIT	BLUE SUMMIT	BLSUMMIT	188	Daniel Gerard	Wind	40710
Bobcat Bluff Wind Project, LLC	Bobcat Bluff Wind Project, LLC	BCATWIND	Bobcat Bluff Wind Project	BCATWIND	190	Jay Temple	Wind	20295

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Brazos Wind, LP	Brazos Wiind LP	Brazos Wind	Green Mountain Energy Wind Farm at Brazos	BRAZ_WND1	44	Scott McBride	Wind	29025
Brazos Wind, LP	Brazos Wind LP	Brazos Wind	Green Mountain Energy Wind Farm at Brazos	BRAZ_WND2	45	Scott McBride	Wind	29025
Briscoe Wind Farm, LLC	BRISCOE WIND FARM LLC	7.96189E+11	BRISCOE WIND FARM	BRISCOE	1239	Jon Faltis	Wind	43892
Bruennings Breeze Wind Farm, LLC	Bruennings Breeze Wind Farm, LLC	20432	Bruennings Breeze	BBREEZE	1324	Michelle Strong	Wind	47779
Buckthorn Wind Project, LLC	Buckthorn Wind Project, LLC	Buckthorn Wind Project, LLC	BUCKTHORN WIND	BUCKTHRN	1319	Jamie Shahan	Wind	47193
Buffalo Gap Wind Farm 2, LLC	Buffalo Gap Wind Farm 2, LLC	603768792	Buffalo Gap Wind Farm	BUFF_GAP	81	William Barnes	Wind	33477
Buffalo Gap Wind Farm 3, LLC	Buffalo Gap Wind Farm 3, LLC	Buffalo Gap Wind Farm 3, LLC	Buffalo Gap Wind Farm	BUFF_GAP	110	Fang Qing	Wind	35247
Buffalo Gap Wind Farm LLC	Buffalo Gap Wind Farm, LLC	Buffalo Gap	Buffalo Gap Wind Farm	Buffalo Gap	56	Gabe Vaca	Wind	31412
Bull Creek Wind LLC	Bull Creek Wind LLC	Bull Creek Wind LLC	Bull Creek Wind LLC	Bull Creek Wind LLC	131	Seiichi Seo	Wind	36239
Cameron Wind I, LLC	Cameron Wind I, LLC	Cameron Wind	Cameron Wind	Cameron Wind	1245	Meghan McIver	Wind	45042
Cap Ridge Wind II LLC	CAP RIDGE WIND II LLC	CAP RIDGE WIND II LLC	CAPRIDGE	CAPRIDGE_CR2	1327	Kevin Kelly	Wind	47560
Cap Ridge Wind III LLC	CAP Ridge Wind 3 LLC	CAP Ridge Wind 3 LLC	CAPRIDGE	CAPRIDGE_CR3	1321	Kevin Kelly	Wind	47561
Capricorn Ridge Wind IV, LLC	Capricorn Ridge Wind II, LLC	CR4	CR4	CR4	114	Daniel Sexton	Wind	35488
Capricorn Ridge Wind, LLC	Capricorn Ridge Wind, LLC	Capricorn Ridge Wind	Capricorn Ridge	CAPRIDGE	93	Brian Harris	Wind	34549
Capricorn Ridge Wind, LLC	Capricorn Ridge Wind, LLC	Capricorn Ridge Wind	Capricorn Ridge	CAPRIDGE	146	Brian Harris	Wind	34549
Capricorn Ridge Wind, LLC	Capricorn Ridge Wind, LLC	Capricorn Ridge Wind	Capricorn Ridge	CAPRIDGE	147	Brian Harris	Wind	34549
Cedro Hill Wind, LLC	Cedro Hill Wind, LLC	CEDROHIL	Cedro Hill Wind Farm	CEDROHIL	158	Joe LoCoco	Wind	38336
Champion Wind Farm, LLC	Airtricity Champion Wind Farm, LLC	242	Champion Wind Farm	TKWSW	99	Michelle Strong	Wind	35177
Chapman Ranch Wind I, LLC	Chapman Ranch Wind I LLC	20381	Santa Cruz	SANTACRU	1291	Tim Gibson	Wind	Docket No. 47339
Cirrus Wind 1, LLC	Cirrus Wind 1, LLC	Cirrus	Cirrus	Cirrus	197	Jason Yang	Wind	41071

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Colbecks Corner, LLC	Colbecks Corner Wind Farm	Colbecks Corner	GRANDVIEW WIND FARM	GRANDVW1_2	1250	Michelle Strong	Wind	45598
Cotton Plains Wind I, LLC	Cotton Plains Wind I, LLC	COTPLNS_COTTONPL	COTPLNS	COTPLNS	1283	Elise Hertzberg	Wind	46737
Delaware Mountain Wind Farm LLC	DELAWARE MOUNTAIN WIND FARM LP	16	DELAWARE MOUNTAIN	DELAWARE	9	Linda Brandi	Wind	23705
Dermott Wind, LLC	Dermott Wind, LLC	DERMOTT	DERMOTT WIND	DERMOTT	1288	Rob Keiser	Wind	47126
Desert Sky Wind Farm 1 LP	Indian Mesa Power Parners I, L.P.	999	Indian Mesa I Wind Power	INDNENR	16	Richard Walker	Wind	24921
Desert Sky Wind Farm 2 LP	Indian Mesa Power Parners II, L.P.	999	Indian Mesa II Wind Power	INDNENR	17	Richard Walker	Wind	24922
Desert Sky Wind Farm LP	AEP Desert Sky Wind Farm LP	999	Desert Sky Wind Farm LP	INDNENR	215	Jay Oliver	Wind	24922
DeWind Frisco LLC	DeWind Frisco, LLC	DeWind Frisco	DeWind Frisco	DeWind Frisco	170	John Kim	Wind	39974
Diamond Shamrock Refining Company LP	Sunray Wind, LLC	20234	Sunray Wind, LLC Wind Farm	Sunray Wind, LLC	132	William Root	Wind	36672
ECR Panther Creek Wind Farm III, LLC	ECR Panther Creek Creek Wind Farm III, LLC	ECR Panther Creek Creek Wind Farm III,	PANTHER3	PANTHER3	141	Michelle Strong	Wind	37092
El Paso Electric Company	El Paso Electric	EPE	Hueco Mountain Wind Ranch	EPE1	1	Monica Garcia	Wind	23631
Elbow Creek Wind Project, LLC	Elbow Creek Wind Project LLC	Elbow Creek	Elbow Creek	Elbow Creek	127	Steve Ranes	Wind	36188
Electra Wind, LLC	Electra Wind, LLC	20399	Electra Wind	DIGBY	1272	Rita Brady	Wind	46273
Exelon Wind 1 LLC	JD Wind 1	20137	JD Wind 1	JD Wind 1	65	Steve Maller	Wind	32802
Exelon Wind 10 LLC	JD Wind 10	20195	JD Wind 10	JD Wind 10	106	Steven Maller	Wind	34992
Exelon Wind 11 LLC	JD Wind 11	20196	JD Wind 11	JD Wind 11	107	Steven Maller	Wind	34993
Exelon Wind 2 LLC	JD Wind 2	20138	JD Wind 2	JD Wind 2	66	Steve Maller	Wind	32803
Exelon Wind 3 LLC	JD Wind 3	20139	JD Wind 3	JD Wind 3	67	Steve Maller	Wind	32804
Exelon Wind 4 LLC	JD Wind 4	20153	JD Wind 4	JD Wind 4	75	Steven Maller	Wind	33760
Exelon Wind 5 LLC	JD Wind 5	20154	JD Wind 5	JD Wind 5	71	Steven Maller	Wind	33299

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Exelon Wind 6 LLC	JD Wind 6	20155	JD Wind 6	JD Wind 6	72	Steven Maller	Wind	33473
Exelon Wind 7 LLC	JD Wind 7	20193	JD Wind 7	JD Wind 7	108	Steven Maller	Wind	34990
Exelon Wind 8 LLC	JD Wind 8	20194	JD Wind 8	JD Wind 8	105	Steven Maller	Wind	34991
Exelon Wind 9 LLC	JD Wind 9	20189	JD Wind 9	JD Wind 9	104	Steve Maller	Wind	34924
Flat Top Wind I, LLC	Flat Top Wind I, LLC	15INR0082	Flat Top Wind Substation	FTWIND	1293	Matt Allsup	Wind	47311
Fluvanna Wind Energy LLC	Fluvanna Wind Energy, LLC	8.01994E+11	FLUVANNA WIND	FLUVANNA	1328	Chris Jones	Wind	47160
Fluvanna Wind Energy LLC	Fluvanna Wind Energy, LLC	8.01994E+11	FLUVANNA WIND	FLUVANNA	1329	Chris Jones	Wind	47160
Forest Creek Wind Farm, LLC	Airtricity Forest Creek Wind Farm, LLC	210	Forest Creek Wind Farm	MCDLD	74	Michelle Strong	Wind	33686
FPL Energy Callahan Wind LP (Callahan Divide)	FPL Energy Callahan Divide	30385	Callahan Wind Energy	30385	55	David Gonzalez	Wind	30385
FPL Energy Horse Hollow Wind II LLC	FPL Energy Horse Hollow II, LP	Horse Hollow II	Horse Hollow II	Horse Hollow II	69	John Mantyh	Wind	32524
FPL Energy Horse Hollow Wind LLC	FPL Energy Horse Hollow Wind	0	Horse Hollow Wind Energy	0	57	John Mantyh	Wind	31594
FPL Energy Upton Wind I LLC	FPL Energy Upton Wind I, LP	94	KING MOUNTAIN SW	KING_SW	6	Jesse Nevarez	Wind	24538
FPL Energy Upton Wind II, LLC	FPL Energy Upton Wind II, LP	96	KING MOUNTAIN NW	KING_NW	7	Jesse Nevarez	Wind	24539
FPL Energy Upton Wind III LLC	FPL Energy Upton Wind III, LP	96	KING MOUNTAIN NE	KING_NE	14	Jesse Nevarez	Wind	24540
FPL Energy Upton Wind IV, LLC	FPL Energy Upton Wind IV, LP	96	KING MOUNTAIN SE	KING_SE	15	Jesse Nevarez	Wind	24541
FPL Pecos Wind 1, LLC	FPL Pecos Wind I II, LP	93	WOODWARD1	WOODWRD1	2	Jesse Nevarez	Wind	24296
FPL Pecos Wind 2, LLC	FPL Energy Pecos Wind III, LP	93	WOODWARD 2	WOODWRD2	8	Jesse Nevarez	Wind	24296
Goat Wind, LP	Goat Wind, LP	809226603	GOAT WIND LP	GOAT WIND	98	Johnny Johnson	Wind	35439
Golden Spread Panhandle Wind Ranch, LLC	Golden Spread Panhandle Wind Ranch, LLC	Golden Spread Panhandle Wind	Golden Spread Panhandle Wind Ranch, LLC	Golden Spread Panhandle Wind	161	Matt Moore	Wind	39641
GRANDVIEW WIND FARM, LLC	Grandview Wind Farm	Grandview	GRANDVW1	grandvw1_gv1a	221	Michelle Strong	Wind	42781

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Great Plains Windpark Legacy, LLC	Great Plains Windpark Legacy, LLC	Great Plains Windpark Legacy,	Great Plains Windpark Legacy, LLC	Great Plains Windpark Legacy,	120	Bree Maria	Wind	36122
Green Pastures Wind I, LLC	GREEN PASTURES WIND I LLC	7.93386E+11	GREEN PASTURES WIND	GPASTURE	232	Jon Faltis	Wind	42762
Green Pastures Wind II, LLC	GREEN PASTURES WIND II LLC	7.94187E+11	GREEN PASTURES WIND	GPASTURE	235	Jon Faltis	Wind	43885
Gunsight Mountain Wind Energy LLC	Gunsight Mountain Wind Energy LLC	GUNMTN	Gunsight Mountain	GUNMTN	1251	Patrick York	Wind	45628
Hackberry Wind, LLC	Hackberry Wind LLC	HWFLLC	Hackberry Wind Farm	HWF	124	Ben Scarbrough	Wind	34708
Harbor Wind LLC	Harbor Wind LLC	20289	HARBOR WIND	DG_NUECE	182	Tibor Hegedus	Wind	40407
Hidalgo Wind Farm LLC	Hidalgo Wind Farm LLC	484	Los Mirasoles Wind	Mirasole	1273	David Christiansen	Wind	46344
Hidalgo Wind Farm LLC	Hidalgo Wind Farm LLC	484	Los Mirasoles Wind	Mirasole	1274	David Christiansen	Wind	46344
Hidalgo Wind Farm LLC	Hidalgo Wind Farm LLC	484	Los Mirasoles Wind	Mirasole	1275	David Christiansen	Wind	46344
High Majestic Wind II, LLC	High Majestic Wind II, LLC	Majestic II	Majestic II	Majestic II	177	William Mundt	Wind	40397
High Plains Wind Power LLC	High Plains Wind Power LLC	20197	High Plains Wind Power	High Plains Wind Power	111	Steven Maller	Wind	34994
Horse Creek Wind, LLC	Horse Creek Wind, LLC	20398	Horse Creek Wind	HORSECRK	1271	Rita Brady	Wind	46272
Horse Hollow Wind III LLC	Horse Hollow Wind 3 LLC	Horse Hollow Wind 3 LLC	HHOLLOW3	HHOLLOW3_WND_1	1322	Kevin Kelly	Wind	47243
Horse Hollow Wind IV LLC	HORSE HOLLOW WIND 4 LLC	HORSE HOLLOW WIND 4 LLC	HHOLLOW4	HHOLLOW4_WND1	1323	Kevin Kelly	Wind	47400
Inadale Wind Farm, LLC	Inadale Wind Farm, LLC	Inadale Wind Farm, LLC	Inadale Wind Farm, LLC	INDL_INADALE1	134	Michelle Strong	Wind	36500
Indian Mesa Wind Farm LLC	NWP INDIAN MESA WIND FARM LP	17	INDIAN MESA NWP	INDNNWP	10	Linda Brandi	Wind	23745
Invenergy	Goldthwaite Wind Energy LLC	Goldthwaite Wind	Goldthwaite Wind Energy Center	GWEC	202	Patrick York	Wind	41670
Javelina Wind Energy II, LLC	Javelina Wind Energy II, LLC	JAVEL2_A	JAVEL2_A	BORDAS2_JAVEL2_A	1277	Ingrid Chapman	Wind	46386
Javelina Wind Energy II, LLC	Javelina Wind Energy II LLC B	JAVEL2_B	JAVEL2_B	BORDAS2_JAVEL2_B	1278	Ingrid Chapman	Wind	46386
Javelina Wind Energy II, LLC	Javelina Wind Energy II C LLC	JAVEL2_C	JAVEL2_C	BORDAS	1279	Ingrid Chapman	Wind	46386

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Javelina Wind Energy LLC	Javelina Wind Energy, LLC	20377	Javelina Wind	20377	1242	Business Management, attn:	Wind	45416
Keechi Wind, LLC	Keechi Wind, LLC	20330	Keechi_U1	Keechi Wind	218	Mitchell Kerley	Wind	42632
KODE Novus I	KODE Novus I	KODE Novus I	KODE Novus I	KODE Novus I	186	seongman Lim	Wind	40421
KODE Novus II	KODE Novus II	KODE Novus II	KODE Novus II	KODE Novus II	184	seongman Lim	Wind	40502
Langford Wind Power, LLC	Langford Wind Power, LLC	Langford Wind Power, LLC	Langford	Langford	145	Scott McBride	Wind	37206
Little Pringle 1 LLC	LittlePringle1, LLC	Little Pringle 1	Little Pringle 1	Little Pringle 1	164	John Kim	Wind	39653
Little Pringle 2 LLC	LittlePringle2, LLC	Little Pringle 2	Little Pringle 2	Little Pringle 2	165	John Kim	Wind	39701
Live Oak WInd Project, LLC	Live Oak Wind Park LLC	20473	WILSON RANCH SUBSTATION	WL_RANCH	1363	Scott Dibbs	Wind	48535
Llano Estacado	Llano Estacado Wind Ranch at White Deer	Shell	White Deer	White Deer Wind	18	Dale Pilon	Wind	23633
Logans Gap Wind LLC	Logans Gap Wind LLC	7.9253E+11	Logans Gap Wind LLC	LGW	227	Sergio Gonsales	Wind	44235
Longhorn Wind Project, LLC	Longhorn Wind Project, LLC	Longhorn Wind Project, LLC	Longhorn Wind	LHORN_N	1237	Dan Summa	Wind	44408
Loraine Windpark Project, LLC	LORAINE WINDPARK PROJECT LLC	LORAINE WINDPARK	LORAINE WINDPARK PROJECT LLC	LONEWOLF	150	Jim Kutey	Wind	37533
Los Vientos Windpower IA, LLC	Los Vientos Windpower IA, LLC	LV1A	Los Vientos Windpower IA, LLC	LV1A	193	Eric Rodriguez	Wind	40781
Los Vientos Windpower IB, LLC	Los Vientos Windpower IB, LLC	LV1B	Los Vientos Windpower IB, LLC	LV1B	194	Eric Rodriguez	Wind	40782
Los Vientos Windpower III, LLC	Los Vientos Windpower III, LLC	20356	Los Vientos III	LV3	236	George Flynn	Wind	44638
Los Vientos Windpower IV, LLC	Los Vientos Windpower IV, LLC	1017583M80355DEL SOL	Los Vientos Windpower IV	LV4_Unit_1	1255	Cynthia Peterson	Wind	45668
Los Vientos Windpower V, LLC	Los Vientos Windpower V, LLC	20374	Los Vientos V	LV5	1244	George Flynn	Wind	45258
Lubbock Wind, LLC	Lubbock Wind, LLC	Lubbock Wind	Lubbock Wind Ranch	Lubbock Wind	204	Karen Burks	Wind	41833
Magic Valley Wind Farm I, LLC	Magic Valley Wind Farm I, LLC	MVI	MAGIC VALLEY I	REDFISH	178	Michelle Strong	Wind	40353
Majestic Wind Power LLC	Majestic Wind Power LLC	Majestic Wind Power LLC	Majestic Wind Power LLC	Majestic Wind Power LLC	117	Kim Takayesu	Wind	35871

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Mariah Del Norte	Mariah del Norte	20401	Mariah del Norte	Mariah del Norte	1269	Mariah del Norte, c/o CAMS	Wind	46186
McAdoo Wind Energy LLC	McAdoo Wind Energy LLC	McAdoo Wind	McAdoo Wind Energy Center	MWEC	119	Patrick York	Wind	35935
Mesquite Creek Wind LLC	Mesquite Creek Wind LLC	Mesquite Creek Wind	Mesquite Creek Wind	Mesquite Creek Wind	225	Casey Keller	Wind	42905
Mesquite Wind, LLC	Mesquite Wind LLC	Horizon Wind	Horizon Wind	Horizon Wind	68	Daniel Saldanha	Wind	32936
Miami Wind I, LLC	Miami Wind I, LLC	Miami Wind	Miami Wind Energy Center	MIAMI	209	Patrick York	Wind	42350
Midway Wind, LLC	Midway Wind, LLC	MIDWIND	MIDWIND	MIDWIND	1373	Scott Francis	Wind	48894
Mission Wind LLC	Wildorado Wind, LLC	Mission Wind	Mission Wind	Mission Wind	94	Maria Litos	Wind	32900
Mozart Wind, LLC	BayWa r.e. Wind, LLC	20303	Mozart_Wind_1	09INR0061	199	Joerg Beland	Wind	41303
Notrees Windpower, LP	Notrees Windpower LP	Notrees	Notrees Windfarm	NWF	137	James Montgomery	Wind	36350
Ocotillo Windpower, LP	Ocotillo Windpower LP	Ocotillo Windpower	Ocotillo Windfarm	OWF	122	James Montgomery	Wind	35453
Old Settler Wind, LLC	Old Settler Wind LLC	COTPLNS_OLDSETLR	COTPLNS	COTPLNS	1284	Elise Hertzberg	Wind	46738
Palo Duro Wind Energy, LLC	Palo Duro Wind Energy, LLC	Palo Duro Wind Energy, LLC	Palo Duro Wind Energy, LLC	Palo Duro Wind Energy, LLC	226	Juan Hernandez	Wind	43618
Panther Creek Wind Farm I and II, LLC	ECR Panther Creek Wind Farm I, LLC.	259	PANTHER CREEK	PC_NORTH	113	Michelle Strong	Wind	35779
Panther Creek Wind Farm I and II, LLC	EC and R Panther Creek Wind Farm II, LLC	259	PANTHER CREEK	PC_SOUTH	126	Michelle Strong	Wind	35779
Papalote Creek I LLC	ECR Papalote I, LLC	ECR Papalote I, LLC	ECR Papalote I, LLC	ECR Papalote I, LLC	144	Michelle Strong	Wind	37352
Papalote Creek II LLC	ECR Papalote Creek II, LLC	Papalote II	ECR Papalote Creek II, LLC	Papalote II	159	Michelle Strong	Wind	38252
Pattern Gulf Wind LLC	Pattern Gulf Wind LLC	Pattern Gulf Wind LLC	Texas Gulf Wind	TGW	151	Anh Le	Wind	37781
Pattern Panhandle Wind 2 LLC	PATTERN PANHANDLE WIND 2 LLC	7.92237E+11	PATTERN PANHANDLE WIND 2	PH2	212	SERGIO GONSALES	Wind	42293
Pattern Panhandle Wind LLC	PATTERN PANHANDLE WIND LLC	7.92237E+11	PATTERN PAHANDLE WIND	PH1	213	SERGIO GONSALES	Wind	42246
Pleasant Hill Wind Energy, LLC	Pleasant Hill Wind Energy, LLC	20370	Pleasant Hill Wind Energy	none	1243	Pleasant Hill Wind Energy	Wind	45130

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Post Oak Wind, LLC	Post Oak Wind	Post Oak Wind	Post Oak Wind	Post Oak Wind	78	Brian Hayes	Wind	33801
Post Wind Farm LP	Post Wind Farm, LP	Post Wind	Post Wind	Post Wind	70	John Cote	Wind	32525
PYCO Industries, Inc.	PYCO Industries, Inc.	70047	PYCO Industries Plant #2	2	125	PYCO Industries, Inc. Wind Farm	Wind	36175
Pyron Wind Farm, LLC	Pyron Wind Farm, LLC	Pyron Wind Farm, LLC	Pyron Wind Farm, LLC	PYR_PYRON1	135	Michelle Strong	Wind	36501
Ralls Wind Farm LLC	Ralls Wind Farm LLC	Ralls	Ralls Wind Farm	Ralls	185	David Liu	Wind	40455
Rattlensake Power, LLC	RATTLESNAKE POWER LLC	RTS WIND	RTS WIND POWER PROJECT	RTS	1348	Keith Kurtz	Wind	47952
Rattlesnake Wind I LLC	Rattlesnake Wind I LLC	RSNAKE	Rattlesnake Wind I Energy Center	RSNAKE	233	Seyi Adeyemi	Wind	44475
Rocksprings Val Verde Wind LLC	Rocksprings Val Verde Wind, LLC	Rocksprings Val Verde	FERMI	Rocksprings Val Verde	1298	Regina Sweet	Wind	47467
Roscoe Wind Farm, LLC	Airtricity Roscoe Wind Farm, LLC	243	Roscoe Wind Farm	TKWSW1	100	Michelle Strong	Wind	35176
Route 66 Wind Power, LLC	Route 66 Wind Power	ROUTE_66	ROUTE_66	ROUTE_66_WIND1	1238	Mike Collins	Wind	43912
Salt Fork Wind, LLC	Salt Fork Wind, LLC	Salt Fork Wind, LLC	SALT FORK WIND	SALTFORK	1265	Daniel Summa	Wind	46142
San Roman Wind 1, LLC	San Roman Wind I, LLC	45126	San Roman Wind I	SANROMAN	1267	Daniel Sadik	Wind	46021
Sand Bluff Wind Farm, LLC	Airtricity Sand Bluff Wind Farm, LLC	211	Sand Bluff Wind Farm	MCDLD	77	Michelle Strong	Wind	33845
Santa Rita East Wind Energy LLC	Santa Rita East Wind Energy LLC	Santa Rita East Wind	Santa Rita East Wind Energy Center	Santa Rita East	1359	Patrick York	Wind	48789
Santa Rita Wind Energy LLC	Santa Rita Wind Energy LLC	20437	Santa Rita Wind Energy	HICKMAN	1292	Janet Peck	Wind	47459
Scurry County Wind II LLC	Scurry County Wind II LLC	scurry county wind II	Camp Springs Energy Center	CSEC	101	Patrick York	Wind	35290
Scurry County Wind, L.P.	Scurry County Wind, L.P.	scurry county wind	Camp Springs Energy Center	CSEC	80	Patrick York	Wind	33902
Senate Wind, LLC	Senate Wind, LLC	Senate	Senate	Senate	189	Patrick Taylor	Wind	40734
Sendero Wind Energy, LLC	Sendero Wind Energy, LLC	45202	Sendero	Sendero	1252	Dan Heim	Wind	45202
Seymour Hills Wind Project, LLC	Seymour Hills Park, LLC	20485	S Hills Wind Project	S_Hills	1377	Scott Dibbs	Wind	49237

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Shannon Wind, LLC	Shannon Wind, LLC	11INR0079	Shannon Wind	SHANNONW	1246	Matt Allsup	Wind	44674
Sherbino I Wind Farm LLC	Sherbino I Wind Farm, LLC	20220	Sherbino I Wind Farm	KEO	121	Katharine Descamps	Wind	35887
Sherbino II Wind Farm LLC	Sherbino II Wind Farm LLC	20274	Sherbino II Wind Farm	KEO	166	James Holly	Wind	39664
Silver Star I Power Partners, LLC	Silver Star I Power Partners LLC	20186	Silver Star Wind	FLTCK	123	James C Holly	Wind	35551
Snyder Wind Farm, LLC	Snyder Wind Farm, LLC	20187	Snyder Wind Farm	ENAS	96	Tracie Brennan	Wind	34754
SOUTH PLAINS WIND ENERGY	SOUTH PLAINS WIND ENERGY	SPLAIN1	SPLAIN1	SPLAIN1_WIND1	1240	Donald Theriault	Wind	45027
South Plains Wind Energy II, LLC	South Plains Wind Energy II, LLC	SPLAIN2	SPLAIN2	SPLAIN2_WIND21	1249	Mike Collins	Wind	45642
South Trent Wind LLC	South Trent Wind LLC	35778	South Trent Wind Farm	STWF	115	Kim Takayesu	Wind	35750
SP Cactus Flats Wind Energy LLC	SP Cactus Flats Wind Energy LLC	20445	CFLATS SUBSTATION	CFLATS	1296	Chase Smith	Wind	47732
Spinning Spur Wind 1	Spinning Spur 1	Spinning Spur 1	Spinning Spur 1	Spinning Spur 1	1371	Carla Hoffman	Wind	40821
Spinning Spur Wind 2	Spinning Spur 2	Spinning Spur 2	Spinning Spur 2	Spinning Spur 2	1372	Carla Hoffman	Wind	42500
Spinning Spur Wind Three, LLC	Spinning Spur Wind Three, LLC	7.96067E+11	Spinning Spur Wind Three	SSPURTWO	1248	Alicia Ramsey	Wind	45101
Spinning Spur Wind Two LLC	Spinning Spur Wind Two LLC	7.84585E+11	SPINNING SPUR WIND TWO	SSPURTWO	216	Dwynne Igau	Wind	42500
Spinning Spur Wind, LLC	Spinning Spur Wind	Spinning Spur Wind	Spinning Spur Wind	Spinning Spur Wind	192	Jeff Shultz	Wind	40821
Stanton Wind Energy LLC	Stanton Wind Energy LLC	stanton wind	Stanton Wind Energy LLC	SWEC	102	Patrick York	Wind	35206
Stella Wind Farm, LLC	Stella Wind Farm LLC	20469	Stella Wind	STELLA	1362	Michelle Strong	Wind	48757
Stephens Ranch Wind Energy II, LLC	Stephens Ranch Wind Energy II, LLC	7.94208E+11	Stephens Ranch Wind Energy Project Phase 2	SRWE1	230	Rita Brady	Wind	44634
Stephens Ranch Wind Energy, LLC	Stephens Ranch Wind Energy, LLC	7.92803E+11	Stephens Ranch Wind Energy Project Phase 1	SRWE1	222	Rita Brady	Wind	43485
Suzlon Project VIII, LLC	Suzlon Project VIII, LLC	Suzlon Project VIII, LLC	Suzlon Project VIII, LLC	Suzlon Project VIII, LLC	198	M. Hope Whitfield	Wind	40954
Sweetwater Wind Power LLC	Sweetwater Wind 1 LLC	137899477	Sweetwater Wind 1	SWEETWND	43	Rob Robertson	Wind	28924

Table G-1: ERCOT REC Generator List up to 2018 (cont.)

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Sweetwater Wind Power LLC	Sweetwater Wind 2 LLC	Sweet Wind 2	Sweetwater Wind 2	SWEETWND2	52	Rob Robertson	Wind	30462
Sweetwater Wind Power LLC	Sweetwater Wind Power	603943148	Sweetwater Wind 3 LLC_AE	SWEETWND3	58	Rob Robertson	Wind	31983
Sweetwater Wind Power LLC	Sweetwater Wind Power	603943148-3000	Sweetwater Wind 3 LLC_CPS	SWEETWND3	59	Rob Robertson	Wind	31983
Sweetwater Wind Power LLC	Sweetwater Wind 4 LLC	Sweetwater Wind 4 LLC	Sweetwater Wind 4 LLC	Sweetwater Wind 4 LLC	79	Rob Robertson	Wind	34058
Sweetwater Wind Power LLC	Sweetwater Wind 5 LLC	Sweetwater Wind 5 LLC	Sweetwater Wind 5 LLC	SWEETWN5	82	Rob Robertson	Wind	34709
Tahoka Wind, LLC	Tahoka Wind, LLC	20468	TAHOKA WIND	TAHOKA	1349	Robert Keiser	Wind	48425
Texas Gulf Wind LLC	Texas Gulf Wind LLC	Texas Gulf Wind LLC	Texas Gulf Wind LLC	TGW	112	Kim Takayesu	Wind	35810
Texas State Technical College	Texas State Technical College West Texas	TSTC	TSTC West Texas	DG ROSC2	133	Ray Fried	Wind	36692
Torrecillas Wind Energy, LLC	Torrecillas Wind Energy, LLC	Torrecillas Wind Energy, LLC	Torrecillas Wind Energy, LLC	Torrecillas Wind Energy, LLC	1354	John Alvarez	Wind	48513
Trent Wind Farm, L.P.	Trent Wind Farm, L.P.	70	TRENT MESA WIND FARM	TRENT	5	Richard Walker	Wind	24322
Trinity Hills Wind Farm LLC	Trinity Hills Wind Farm LLC	20277	Trinity Hills Wind Farm LLC	TRINITY	168	James Holly	Wind	40082
Trinity Hills Wind Farm LLC	Trinity Hills Wind Farm LLC	20277	Trinity Hills Wind Farm LLC	TRINITY	169	James Holly	Wind	40082
Turkey Track Wind Energy LLC	Turkey Track Wind Energy LLC	Turkey Track Wind	Turkey Track Wind Energy Center	TTWEC	128	Patrick York	Wind	36369
TX Hereford Wind, LLC	TX Hereford Wind LLC	TX Hereford Wind LLC	Hereford Wind	HRFDWIND	228	Dwynne Igau	Wind	43785
TX Jumbo Road Wind, LLC	TX Jumbo Road Wind, LLC	TX Jumbo Road Wind, LLC	HRFDWIND	HRFDWIND_JRDWIND1 and	234	Janet Peck	Wind	44202
Tyler Bluff Wind Project, LLC	Tyler Bluff Wind Project LLC	Tyler Bluff Wind Project LLC	Tyler Bluff Wind	TYLRWIND	1262	Dwynne Igau	Wind	46136
Wake Wind Energy LLC	Wake Wind Energy LLC	WAKEWE	Wake Wind Energy	WAKEWE	1254	Chase Smith	Wind	45852
Whirlwind Energy, LLC	Whirlwind Energy, LLC	WELLC	Whirlwind Energy Center	WEC	103	Matthew Burt	Wind	33835
Whitetail Wind Energy, LLC	Exelon Wind, LLC	20137	Whitetail Wind Energy, LLC	Whitetail Wind	195	Daniel Heim	Wind	41063
Willow Springs Windfarm, LLC	Willow Springs Windfarm, LLC	20429	WILLOW SPRINGS WINDFARM	SALVTION	1294	Rob Keiser	Wind	47506

Table G-1: ERCOT REC Generator List up to 2018

Company Name	Power Generating Company Name	Power Generating Company Code	Generator Site Name	Generator Site Code	Facility Identification Number	Unit Contact Information	Technology Type	Facility Noncompetitive Certification Data
Windthorst-2, LLC	Windthorst-2	WNDTHST2	Windthorst-2	WNDTHST2	214	Dwynne Igau	Wind	42391
Wolf Ridge Wind, LLC	Wolf Ridge Wind, LLC	C41483	WOLF RIDGE	WLFRIDGE	129	Rory Robinson	Wind	36015