Judson ISD Energy Management Department

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Our philosophy is simple; nothing we do under the banner of energy reduction, will negatively impact the Indoor Environmental Quality for our students, educators and staff.
The goal of the Energy Management Department is to help set the district on a clear path towards significant energy reduction and resource conservation that will have a positive impact on the students, educators, staff and taxpayers of the Judson Independent School District.
JUDSON INDEPENDENT SCHOOL DISTRICT

- Enrollment Count in 2015-2016 - 23,340
- We are 1 out of 19 school Districts in Bexar County
- District encompasses 55.87 Square Miles
- Serves Incorporated cities of Converse, Kirby and Selma as well as portions of Live Oak, Universal City, San Antonio and Schertz
- 4.3 million Square Feet of campus and support facilities
Utilities Servicing JISD

- CPS Energy – Electric/Gas
- Center Point – Gas
- San Antonio Water System – Water/Sewer
- City of Universal City - Water/Sewer
- City of Converse – Water/Sewer
- City of Kirby – Water/Sewer
- City of Live Oak - Water/Sewer
UTILITY BUDGET 2016-2016

- Electricity $4,100,070
- Natural Gas $340,910
- Water and Sewer 581,170
JISD Energy Management History Report

2011-2012

- 37 Campuses 3,699,010 Sq. Ft
- Total Electrical Cost $4,149,157.00 46,101,753 KWH
- Total Gas Cost $279,748.02
- Total Water Cost $285,147.48
- EUI 58.83
- Electrical Cost Sq ft $1.12

2015-2016

- 39 Campuses 4,300,657 Sq. Ft
- Total Electrical Cost $4,017,523.68 44,639,152 KWH
- Total Gas Cost $228,504.39
- Total Water Cost $278,272.26
- EUI 47.45
- Electrical Cost Sq ft $0.93
JISD Energy Management Report

2011-2012

- No Standard Normal Schedules
- No Standard Set points left up to Maintenance
- Event Schedule was run the entire school mentality
- Field devices went unchecked or left in hand
- No Consistency of monitoring of BAS systems
- Let system call the plants when ever equipment called to run

2015-2016

- Schedule Guidelines maintained for all campuses
- Set point Guidelines maintained and monitored through Energy Mgmt.
- Established Online event request for campuses with approval process
- Onsite and online monitoring of equipment in hand
- Setup monitoring and reporting process to maintenance
- Programed systems to let schedule and requests dictate when plant runs
JISD ENERGY MANAGEMENT PROGRAM ELEMENTS

- People
- Mechanical Systems
- Building Automation Control Systems
- Utility Companies
- Software Applications
PEOPLE
ENERGY CONSERVATION COMMITTEE

• Each Campus has a designated Energy Captain to assist us on Vampire Walk Audits before every break
• We meet regularly to share utility data on their campus and help report any issues we need to address on their campus.
ENERGY CONSERVATION ORGANIZATIONAL SUPPORT

- TEMA, AASMOCA, AUSTIN-SAN ANTONIO ASSOCIATION OF ENERGY ENGINEERS, US BUILDING GREEN COUNCIL
- With some we meet regularly networking and collaborating on ideas with Energy Conservation.
CUSTODIAL AND MAINTENANCE

• Projects
• Preventative maintenance
• On Site Monitoring of potential Energy waste
• IAQ issues
2015-2016

• Calibration of Sensors throughout District
• Establish Energy Committee representative at all campuses and meet with them regularly to give them utility updates
• Establish Incentive program to reduce Energy Sept- Dec and pay campuses back per reduction percentage
• Prior to all breaks perform Vampire Power Audits to make sure all residual loads are curtailed. And score campuses and award winners after break
• First 2 hours of every morning monitors entire BAS system and report problems to maintenance and contact campus administrators
BUILDING AUTOMATION CONTROL SYSTEMS
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- Routinely Monitoring and Trending of Systems
- Calibration of Sensors
- Scheduling Standards
- Set points Standard
UTILITY COMPANIES

- Know Your Account Representative
- Keep Updated on Incentive Programs that are offered
- Know your Rates
- Watch for anomalies
SOFTWARE APPLICATIONS

• Monitor and track your bills
• Trend your results
• Print Reports
• Watch for problems and errors routinely
QUESTIONS????