

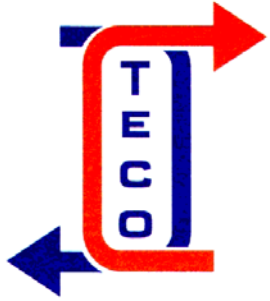
Thermal Energy Corporation

Resiliency from Microgrids, On Site Generation and Storage

Presented to

2018 Texas Energy Summit

September 27, 2018



Thermal Energy Corporation

- Largest CHP district chilled water system in the North America
- Serving the Texas Medical Center since 1968
 - 17 Institutions
 - 20.5 Million Square Feet
 - 7 hospitals
 - 9,200 hospital beds
 - 2 Medical Schools, 3 Nursing Schools, 1 Pharmacy School
 - \$2+ Billion of annual medical research
- TECO is a 501(c)-3 not-for-profit corporation
- Revenues - \$85 million, Total Assets over \$575 million



Texas Medical Center Campus





TECO's P. G. Bell, Jr. Energy Plant



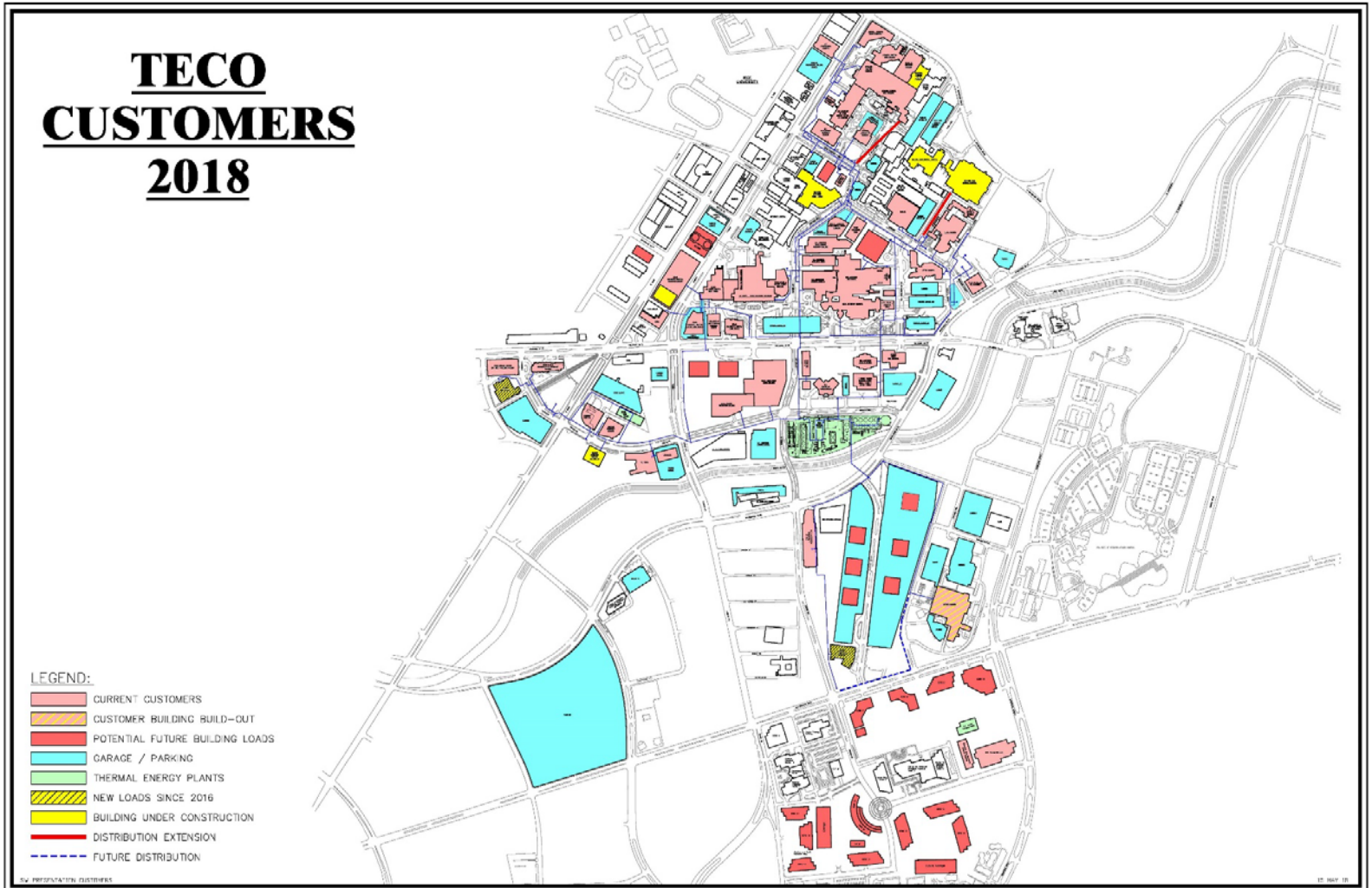


TECO's South Main Plant





TECO's Distribution System





Thermal Energy Corporation

- TECO is a microgrid
- 120,000 tons of total chilled water capacity
- 874,000 lbs/hr of total steam capacity
- 64 MW of power generation capacity
- Thermal Storage
 - 8.8 million gallons
 - 75,000 ton-hr, 8,000 ton-hr discharge



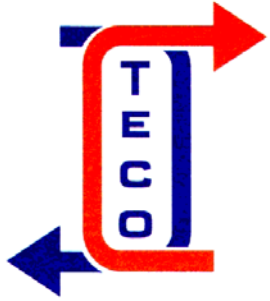
Thermal Energy Storage





Thermal Energy Corporation

- Resiliency:
 - Electric generation
 - Redundant equipment
- Resiliency is more:
 - Operations
 - Maintenance
 - Training
 - Instrumentation, Relaying
 - Infrastructure
 - Fuel



Control Center





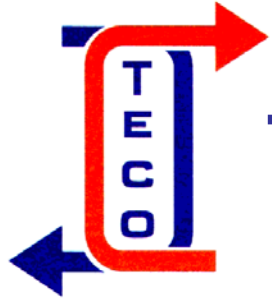
Flood Mitigation





Hurricane Harvey





Thermal Energy Corporation

Resiliency from Microgrids, On Site Generation and Storage

Presented to

2018 Texas Energy Summit

September 27, 2018