How Does Texas A&M University Effectively Manage Utilities and Energy?
The Utilities & Energy Services (UES) Department produces, delivers, and manages utilities and energy serving 24 million GSF on the Texas A&M University campus. UES determines purchased energy requirements, manages extensive utility production and delivery systems for electricity, cooling, heating, water, and other services, manages automation systems to reliably and efficiently regulate building environmental conditions, and recovers all cost for utilities and energy services, while ensuring customer needs are effectively met. Other services provided include project review and management, solid waste and recycling management, domestic water production and delivery, and operation of two wastewater treatment facilities.

How Have Utilities and Energy Services Been Improved?
- Over $200 million invested in utility infrastructure since 2002 to upgrade capacity, reliability and efficiency of services on a growing campus
- 45 percent reduction in energy consumption per gross square foot over the last 13 years (FY02 to FY15), resulting in $200 million in cost avoidance
- Measurable improvement in safety, reliability, efficiency and customer service
- Expanded role by UES for building HVAC system operation and management
- Major HVAC and lighting efficiency upgrades in campus buildings
- Improved operation and management of utility and energy infrastructure

Utility Infrastructure Expansion and Upgrade – Since 2002
- Connected additional 5.5 million GSF of facilities into campus utility infrastructure
- Major upgrades in all four campus utility plants and distribution systems
- Upgraded on-site Combined Heat and Power (CHP) generation to 50 MW in 2011
- Installed 19 high-efficiency chillers and 16 high-efficiency boilers in utility plants
- 2,000 revenue-quality utility meters installed in 500 buildings and four utility plants
- Utility plant monitoring, control, and optimization upgrade
- Electrical generation, distribution, and monitoring upgrade
- Extensive cooling tower, pumping, and auxiliary system upgrades
- Significant improvement in capacity, safety, reliability, and efficiency of utility plant and building utility/energy systems – to meet growing campus needs

Reduced Energy Consumption and Cost – Since 2002
- 30% reduction in total energy consumption with 30% increase in campus GSF
- 25% reduction in domestic water consumption
- 40% reduction in Green House Gas (GHG) emissions
- $200 million in energy cost avoidance reinvested in upgraded infrastructure
- Over 60% of solid waste from campus diverted from landfill to recycled material

Energy Action Plan (EAP) 2015
- Energy Stewardship Program (ESP) reduces energy consumption and improves customer service through education, engagement, and increased awareness
- Comprehensive Building Automation and HVAC System Management
- Building Energy Efficiency Upgrades and Optimization
- Utility Production and Distribution Optimization
- Precise Utility Metering, Data Management and Cost Recovery
- Server Room Consolidation and Virtualization
- Academic and Research Collaboration and Partnering
- Support Sustainability - Environmental & Financial Benefit and GHG Reduction
- Collaboration through EAP 2015 Advisory Committee

Improved Building Automation and Control
- 150 buildings on TAMU building automation system – one of the largest and most sophisticated building monitoring and control systems in the world
- Precise control of environmentally sensitive areas, including BSL3 research labs
- Comprehensive management of all building automation and environmental control – resulting in improved safety, comfort, efficiency and customer service
- $19 million in HVAC, BAS, and lighting upgrades completed in campus buildings since 2012, with resulting cost avoidance exceeding $3 million annually
- Additional $11.3 million in campus efficiency upgrades ready for approval in April

To learn more, contact UES at 979.845.1210 or visit http://utilities.tamu.edu

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