



Energy Conservation Project



January 26, 2017

Overview of Utility Cost Reduction Services

- Energy service partner Ameresco
- Energy conservation measures for approximately 30 buildings on the TAMU-CC campus
- **Qualified Energy Conservation Bond (QECB)** program allows for projects with 20 year payback
- Provides loan subsidies to lower interest rate
- Third party review of project specifications
- Ameresco guarantees minimum savings sufficient to cover all costs
- Projected savings 5,966,754 kWh/yr
- 2,239 MCF/yr Natural Gas
- 1,408 Kgal/yr of water and sewer



Project Benefits

- Items Include
 - Central Plant Optimization
 - Chiller Replacement
 - Demand Response
 - Building Automation Expansion & Optimization
 - IAQ Ventilation
 - Irrigation Controllers
- Several of these are deferred maintenance items that the University needs to do
- Longer payback period allowed inclusion of traditional capital items that would normally be done without any sort of payback
- Budget neutral approach with a longer term enables a more comprehensive solution
- Financing the needed improvements at low interest through energy savings that won't otherwise occur, and are guaranteed by Ameresco to occur each year for 18 years, is an attractive implementation option



Financial

- **\$6,959,729** (\$7.1 million budget includes University contingency)
- **16.8** year simple payback on energy conservation measures
- **18** year financing term includes: project engineering, installation, financing costs, and ongoing measurement & verification and third party support services
- Paid from guaranteed energy savings
- Bond payments and ongoing support services averaged at **\$498,310** per year
- Project average savings of at least **\$499,417** per year (Expected average energy savings of at least **\$549,776** per year)
- Project includes some long payback items such as a replacement chiller
- Not doing the project does not save money, as the University would be paying the above amount in the form of higher bills
- For some items included, the University will have to replace the equipment regardless
- This project was approved by the Texas A&M System Board in April 2016



Summary

- Allows three major accomplishments
 - Reduce energy costs
 - Replace capital budget items that are in poor condition without additional capital dollars
 - Addresses key comfort and learning environment improvements for students, faculty and staff
- The cost will be paid by energy savings and guaranteed by Ameresco in a performance contract that has been reviewed by:
 - TAMUS' Office of General Counsel
 - TAMU-CC's CFO
 - A registered Professional Engineer in the State of Texas unaffiliated with the contract has provided the legally required third party review
- Seeking approval to move forward with the energy saving project

