

# Adversary vs. Partner

The Local Utility and the University

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VANDERBILT UNIVERSITY

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# Agenda

- A Complex Relationship
- Further University Issues
- Potential Solutions

# Vanderbilt University

- Located in downtown Nashville, Tennessee
- 12,000 students
- 330 acres
- 9 million square feet (university)
- Utility spend
  - Electricity: \$25M
  - Gas: \$8M
  - Water: \$4M

# A Complex Relationship

- Electricity
  - TVA - extremely reliable but a difficult business model
    - Fuel Cost Adjustment
  - NES
    - Customer focused
    - Rapid growth
    - VU owned substation
  - AVI and TVPPA
  - Co-Generated Electricity

# A Complex Relationship

- Natural Gas
  - Least customer focused of the utilities
  - Extremely essential
    - Steam
    - Chilled water
    - Co-generated Electricity
  - Broker
    - Delivery
    - Balance
  - Local Utility

# A Complex Relationship

- Water and Storm Water
  - Utility district
    - Nashville politics
    - Aging infrastructure – combined storm and sanitary
  - Least flexible of the utilities to deal with, as you would expect
  - Less flexible after Flint

# A Complex Relationship

- CHP – another level of complexity
  - Steam and Electricity
  - Chilled water
  - Coordination with electrical utility
  - On site compression station

# Further University Issues

- Nothing more than overhead
- Utilities are not given a high priority
- Deferred maintenance
- Out of sight, out of mind
- Lack of adequate planning and timing for capital projects
- Capital projects take on a “pet project” aspect based on the school or sponsor
- Growth in Nashville

# Further University Issues

- Town vs. Gown issues – how do you balance the needs of a “small city” with the needs of a neighborhood
  - Noise
  - Construction
  - Neighborhood expectations
    - Green
    - Open access
    - Non-intrusive
    - Expectations of un-limited funds
    - Well behaved students
    - Good football team

# Potential Solutions

# Potential Solutions

- Build Relationships
  - Relationships with each utility
    - Meetings with local representative
    - Meetings/groups hosted by local reps
  - Relationships with like-minded entities
    - Other universities in the area
    - Hospitals
    - Industry

# Potential Solutions

- Understand how utilities operate
  - Jurisdiction
    - Investor-owned utility reports to Public Service Commission
    - Public Service Commission reports to State Legislature
    - State Legislature has ultimate authority
  - Other considerations
    - Cooperative utilities
    - Municipal-owned utilities
    - TVA municipal-owned utilities

# Potential Solutions

- Be prepared for resistance to change
  - Sometimes there are issues that need arbitration
  - Before undertaking major changes, research similar cases
  - Have a plan in place for how you will achieve your objective

# Potential Solutions

- Example: Distributed Energy
  - Resistance
    - Universities are frequently turning to CHP, wind, and solar
    - Utilities generally see these entities as a threat
    - Utilities will work to dissuade, tactically delay, or take cases before the Public Utility Commission
      - Master Metering
        - Roads
        - Ditches
      - Standby tariffs

# Potential Solutions

- Example: Distributed Energy
  - Recourse
    - Explanation of rules
    - Rate case before Public Utility Commission
    - Lobbying state legislature

# Conclusions

- Relationships with all utilities can be difficult
- CHP adds another layer of complexity to this relationship
- Build relationship with Utilities/Local Entities
- Understand how utilities operate
- Be prepared for future actions

# Questions & Answers