MUNICIPAL ENERGY EFFICIENCY TECHNICAL ASSISTANCE PROGRAM

Helping Communities Navigate the World of Energy Saving Performance Contracting in Wisconsin

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NASEO ANNUAL MEETING, Providence Rhode Island
THE NEED FOR TECHNICAL ASSISTANCE

MEETAP - funded through 2013 SEP Competitive Award $400,000

Enabling Legislation - State of WI statutes 66.0133 allow for energy and life safety improvements (as well as critical deferred maintenance).

WI Statute 121.91(4)(o) Revenue Limit Exemption for Energy Conservation Purposes
WHY MEETAP?
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DEMAND IS FLAT

Technical assistance with complex projects is welcomed

Energy Costs are some of the few costs that schools and municipalities can control

Rate analysis and special focus on Demand charges
55 school districts raised $23 million in 2013 for energy projects.

In 2015 92 school districts have exceeded the revenue caps under this exemption raising nearly $40 million.

2016 is on track to dwarf both prior years.

A lot of new ESCOs in the market, education lags.
CHALLENGES FACED BY LOCAL UNITS OF GOVERNMENT

- Budget Concerns
- Building Consensus
- Long Term Planning
- Return on Investment
- Faith in Technology??
SCHOOLS FACE PARTICULAR CHALLENGES

Budget Concerns
Building Consensus
Long Term Planning
Return on Investment
Faith in Technology??
Infrastructure Investment vs Investment in the Children?
Proprietary controls technologies

Legacy of Efficiency- A total of 60 districts have certified at least one facility since 2000, with a total of 335 unique school buildings receiving a total of 564 certifications.
Simple Utility baseline

TEMPLATES

Look at ESPC as an alternative to traditional contracting and funding means to increase number of EE projects

Open to School districts, technical colleges and municipalities

Focus on small and medium-sized districts to realize the full benefits of working with an ESCO

Leverage state resources and experience to help guide locals through an often unfamiliar process

THE DELIVERY
NAVIGATING COMPLEX SYSTEMS

Control of cooling towers for chilled fluid systems
US 20110276182 A1 Johnson Controls
CHALLENGES

Slow start
Grant awarded in February of 2014
Engineer hired in August of 2014
Engineer’s position eliminated in the Governor’s Budget (Act 55) effective July 2015
Act 55 did not receive the same protests as seen here.
The more things change, the more they stay the same.
Converting 85 street lights from 150-watt metal halide fixtures to LEDs in Prairie du Chien will save the city about 54,728 kilowatt hours per year, an annual savings of about $7,052.

The LEDs have a five-year warranty
Life expectancy of 50,000 hours of on-time use
Run time of 4,300 hours per year
Expected life of eleven and a half years
Cost savings over 11.5 years estimated at $78,000.
Using PSCW and WDNR water utility regulatory filing databases to develop benchmarks for evaluating energy savings opportunities.

Energy cost savings were estimated for water utilities with multiple pumped wells, elevated storage, low well pump capacity factors and high pumping costs ($/kwh and $/1000 Gal).

MEETAP is reaching out to interested utilities with screening estimated savings greater than 20%.
MEASUREMENT & VERIFICATION

- Involve as many stakeholders as possible
- Tie in with K-12 Energy Education Project
- Use EPA Portfolio Manager
- Provide customized reports
  - Wireless Sub-meters
EN năng QUẢN LÝ HỆ THỐNG ĐIỆN NĂNG

Proof in the Pudding – Nate Boyd

bbs2013_boyd_proof_pudding_verifying_results.pdf
MEETAP IN A NUTSHELL

Planning Phase
Is ESPC is the right for you
“Up-Front” strategy

ESCO Selection Phase
Assist with creating RFP/ RFQ
Assist with proposal review
Identify Funding Methods

Audit Phase
Final ECM and R&R Matrix review
M&V, Training and Cx Plans review

Implementation Phase
Review proposed change orders
Assist with engineering and/or technical disputes
Verify proper training and Cx

Post Acceptance Phase
Review the initial M&V Reports
CURRENT STATUS

RFP for Engineer currently under review

Contract with current Measurement and Verification specialist open to local partners

25 projects underway including:

BTO grant with City of Milwaukee (negotiating MOU with Milwaukee Public Schools)

Midwest Tribal Energy Resource Association (MTERA)

Tribal Energy Grant

Training Wastewater Operators to collect energy information across all 1000 WWTPs in the state
What’s Next?
FART BACKPACKS IN SCHOOLS?

Aggregating resources
Focusing on Demand
Program will continue until the end of 2017
Partner Partner Partner
Focus on Energy
WWOA
USDOE
MREA- and so many more
Questions?