



Energy Forum: Demand Side Management & DSE2 Avoidance

May 6, 2010



COSE

Join your cause.

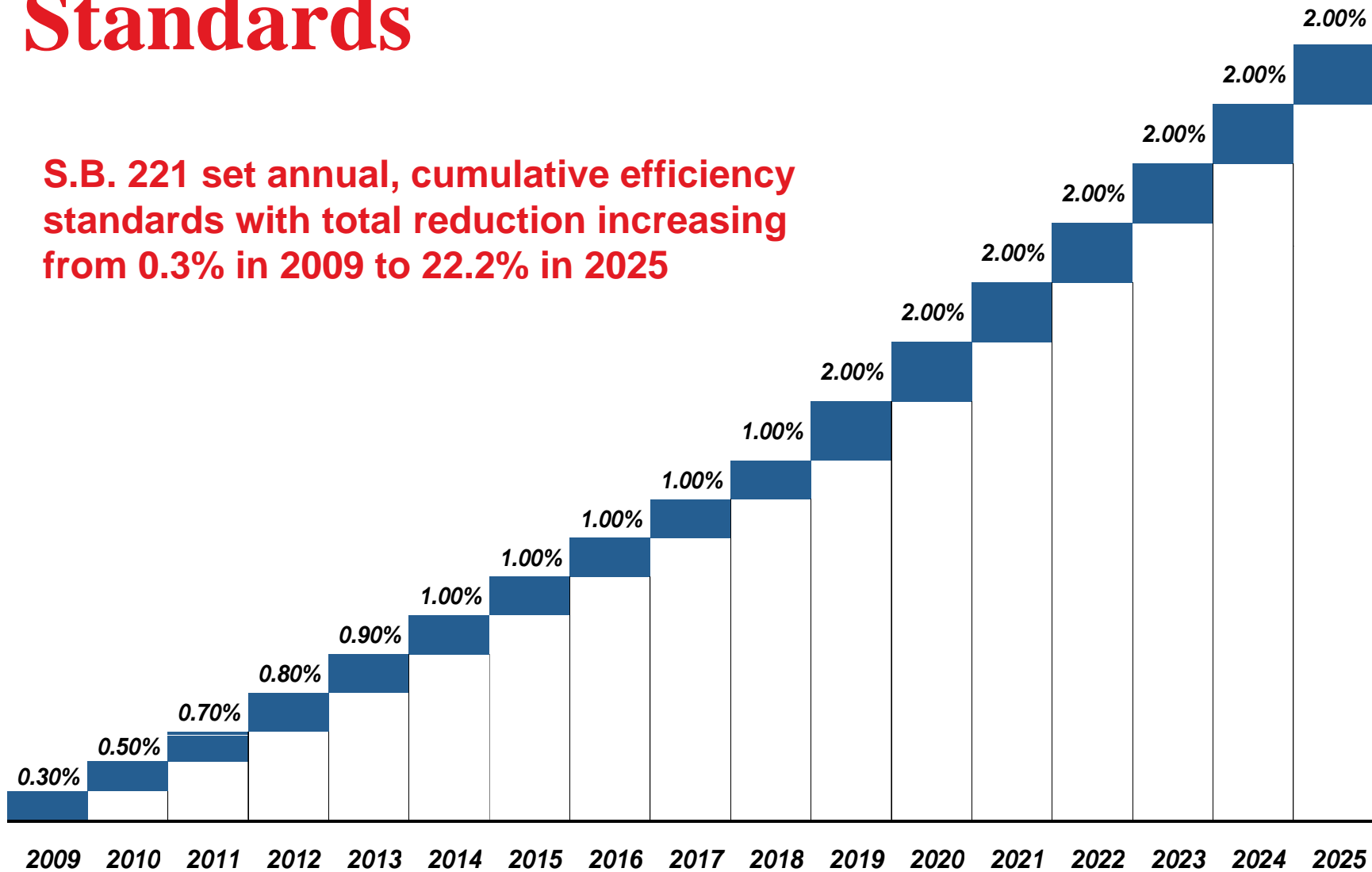


Ohio Legislation

- S.B. 221 responds to concerns about rising electricity prices seen in states with expiring price caps
- S.B. 221 became effective in 2008 and includes framework for Energy Efficiency and Peak Demand Management, and Alternative Energy Resource Requirements

SB 221 – Energy Efficiency Standards

S.B. 221 set annual, cumulative efficiency standards with total reduction increasing from 0.3% in 2009 to 22.2% in 2025



Mercantile Customer Energy Efficiency Rider Exemption

- **Mercantile customers MAY qualify to avoid certain charges in the Demand Side Management and Energy Efficiency (DSE) Rider**
- **Who is considered “mercantile”?**
 - A “mercantile customer” means a commercial or industrial customer if the electricity consumed is for nonresidential use and the customer consumes more than 700,000 kWh per year or is part of a national account involving multiple facilities in one or more states.” (O.R.C. Sec 4928.01)
- **Minimum energy efficiency saving requirements**
 - Energy savings and/or peak demand reductions from customer’s self-directed projects equal to or greater than the statutory benchmarks to which the Company is subject

Examples of DSE2 Rider Impact

Rate Schedule:	*DSE2 Charge Per kWh:		
	CEI	TE	OE
GS	0.1392¢	0.0776¢	0.1252¢

Typical CEI Customer Example:

750,000 kWh per year GS customer = \$1,044 per year

1,500,000 kWh per year GS customer = \$2,088 per year

** Ohio EEPDR Plan is still unapproved so these numbers are subject to change*

How Can You Participate?

- Submit project application detailing information
 - Include all supporting documentation for measuring and verifying energy savings
 - Must prove projects are installed and operating
 - Must provide basis for kWh savings claimed
 - Must allow access for inspection by Commission and/or the Company
- Agreement between YOU and FirstEnergy
 - Customer commits EE savings for utility compliance use
- Joint Application between FirstEnergy and YOU to PUCO
- PUCO has final authority to exempt customers
- ****Details of this program are not final and are subject to change***

COSE Energy Solutions

- Utility Savings Programs
 - Natural Gas Savings through Integrys Energy
 - Electric Savings through FirstEnergy Solutions
- Green Plus Sustainability Certification
- Energy Efficiency (DSE2 Rider) Program)
- *Lighting Retrofit Program (*Coming Soon*)

Demand Side Management and DSE2 Process



XpenseSolutions

- *“In today’s complex business environment, it is crucial to reduce expense and drive efficiency.”*
John Verdile, President
- *We live in a time of **Great Uncertainty**. Never before have American manufactures and businesses been under more Global pressure to perform.*
- *Strategic Energy Management offers companies a tremendous opportunity to **reduce their cost of doing business**.*
- ***Total Cost of Energy = Supply Price + Cost to Consume***



Current State of the Union

- **What is Certain.....Energy Prices Remain Volatile**
- **Today a False Economy – With the Industrial Market in the Tank, natural gas and electric power prices are artificially low.**
 - Natural gas prices will remain at their current low levels until steel, automotive and other primary industrials recover.
 - New Demand driven by Electric Deregulation.
 - Gas Fired Peaking Plants
 - Distributed Generation



Getting Started...What is Demand?

- ***Demand – The call for something.***
 - The amount of energy needed to run your facility
- ***Total Cost of Energy***
 - Cost – The Cost of Energy Through Your Facility
 - Price – The Price of Energy at the Meter
- Cost – Controlled by **You**
- Price – Controlled by the **Market**



Getting Started...What is DSM?

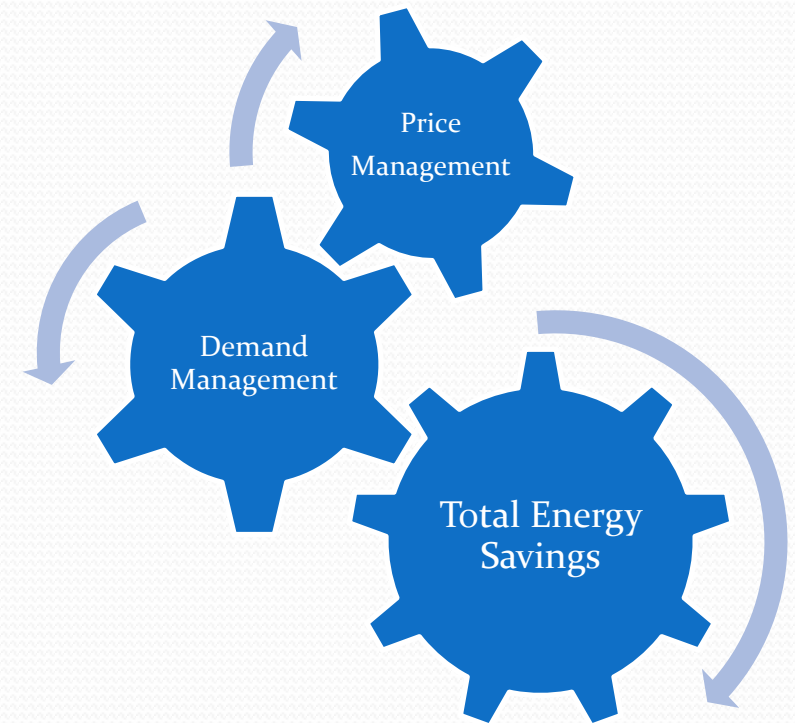
- **Demand Side Management** – managing the consumption of energy after the meter.
 - The Gas, Electric or Water Meter is the point of *Demarcation* between Supply Side and Demand Side Management.
 - Before the Meter = Supply Side Management
 - After the Meter = Demand Side Management

Energy Demand Side

The Least Expensive Unit of Energy is the One You Never Use

Target Savings

- Energy 25%
- Operational 25%



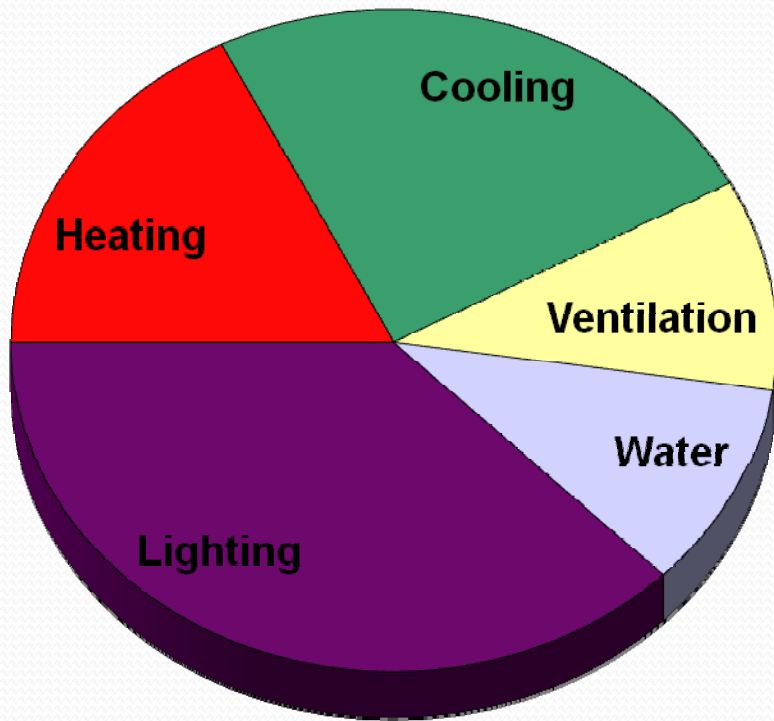


Demand Side Management

- Example areas of investigation
 - Heating – *Target 15% Savings*
 - Cooling – *Target 30% Savings*
 - Lighting – *Target 70% Savings*
 - Ventilation – *Target 20% Savings*
 - Water Consumption – *Target 25% Savings*

Energy Savings Potential

Operational Savings Not Included



\$2,000,000

15% Heating \$ 69,000

45% Lighting \$189,000

30% Cooling \$ 96,000

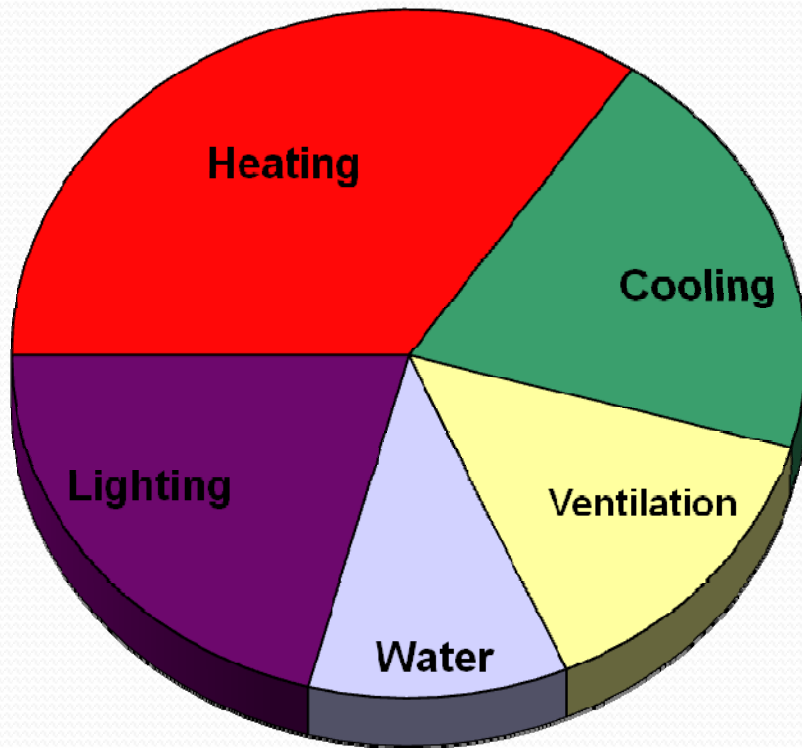
20% Ventilation \$ 40,000

25% Water \$ 40,000

21.7% \$434,000

*Operational Savings can increase savings by an additional 20% +

New Energy Inventory



\$1,566,000

25%	Heating	\$391,000
15%	Lighting	\$231,000
14%	Cooling	\$224,000
10%	Ventilation	\$160,000
8%	Water	\$120,000
28%	Misc.	\$440,000



Reporting DSM is Reporting DSE 2

- Reporting the results of your Demand Side Management Programs is ***what we need to report to avoid*** the Demand Side 2 Rider.
 - Lighting
 - Ventilation
 - Motors
 - Operational
- We need to Account for Energy Reduction, Proof of Installation, Proof of Payment and Performance.

Step 1 ...Sign Up

Customer Name: _____

FE Utility: OE CEI TE
(circle all that apply)

Address: _____

Contact Name: _____

Telephone No. _____

E-Mail: _____

The undersigned, being a duly authorized representative of the business entity identified above ("Customer"), does hereby acknowledge and agree to the following (initial all that apply):

_____ Customer has selected _____ COSE _____
[Name of Administrator]

as its administrator for purposes of coordinating Customer's participation in energy efficiency and/or demand response programs offered by the FirstEnergy utility/utilities identified above (individually and collectively "Utility"). Said Administrator will be responsible for the following Customer Numbers as set forth on Customer's electric bill:

[attach additional sheets if necessary]

_____ Customer acknowledges that its election of the above named Administrator will continue until Customer provides the Utility with written notice of its intent to discontinue the use of said Administrator, with such notice being sent by U.S. mail to: FirstEnergy Service Company, 76 South Main Street Akron, OH 44308; Atten: Victoria Nofziger, or alternatively by electronic mail to vmnofziger@firstenergycorp.com.

_____ Customer acknowledges that its name will be included on a list of customers being served by Administrator that will be posted to a FirstEnergy website, unless this box [] is checked.

READ, UNDERSTOOD and AGREED:

By: _____

Title: _____

Date: _____

Step 2....Gather Data



Customer Legal Name See Note 1

Site Name See Note 2

Operating Co.
(OE, TE, or CEI)

Customer Number	Corresponding Account Number	Address

Energy Project Documents Needed:

- Engineering Study (s)
- Project Contract
- Purchase Order (s)
- Invoice (s)
- Photos
- EPACt Audit
- Product Cut Sheets (Brochures of Installed Equipment)

Step 3... Fill Out Application

Customer Information

Account Number	_____	Customer Account Rep	_____
Premise Number	_____	Rate Tariff	_____
Premise Number	_____	Rate Tariff	_____
Premise Number	_____	Rate Tariff	_____
Company Name	_____	Op Co	_____
Address: <small>FirstEnergy</small>	_____	City/State	_____
Contact Person	_____	Energy Manager	_____
Phone No.	_____	Phone No.	_____
E-Mail	_____	E-Mail	_____

Usage/Demand Information

Annual Usage (kWh)	Annual Demand (kW)	Load Factor
2008 _____	2008 _____	_____
2007 _____	2007 _____	_____
<small>FirstEnergy</small> 2006 _____	2006 _____	_____

Business Information

Please describe your business model / type of business in the space provided below

NAICS Number _____

FirstEnergy Specify hours of operation per day (e.g., 8:00 a.m. - 5:00p.m.) _____ - _____

Specify days of operation per week (e.g., Monday - Friday) _____ - _____

Please describe any seasonal outages or ramp-ups applicable to your business.

I understand that the project(s) reported in this document may be inspected by an independent evaluation contractor to confirm project completion, savings, and use conditions.



Step 4...Review and Sign Agreements

**BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of)
[redacted] and [redacted])
For Approval of a Special Arrangement) **Case No. 10- [redacted]-EL-EEC**
Agreement With A Mercantile)
Customer)
)

**JOINT APPLICATION FOR APPROVAL OF A SPECIAL ARRANGEMENT WITH A
MERCANTILE CUSTOMER AND EXEMPTION FROM PAYMENT OF COSTS
INCLUDED IN RIDER DSE2**

Applicants, [redacted] (“Company”), and [redacted] (“Customer”) (collectively, “Applicants”), hereby submit their application, pursuant to Rule 4901:1-39-05(G) of the Ohio Administrative Code (“O.A.C.”), for the Commission’s approval of the special arrangement described in and pursuant to the Mercantile Customer Project Commitment Agreement (“Agreement”), which is attached as Exhibit 1 and which includes a provision that will exempt Customer from paying costs included in the Company’s Rider DSE2. In support of this Application, Applicants state as follows:

Mercantile Customer Project Commitment Agreement

THIS MERCANTILE CUSTOMER PROJECT COMMITMENT AGREEMENT (“Agreement”) is made and entered into by and between [redacted], its successors and assigns (hereinafter called the “Company”) and [redacted], its permitted successors and assigns (hereinafter called the “Customer”) (collectively the “Parties” or individually the “Party”) and is effective on the date last executed by the Parties as indicated below.

WITNESSETH

WHEREAS, the Company is an electric distribution utility and electric light company, as both of these terms are defined in R.C. § 4928.01(A); and

WHEREAS, Customer believes that it is a mercantile customer, as that term is defined in R.C. § 4928.01(A), doing business within the Company’s certified service territory; and

WHEREAS, R.C. § 4928.66 (the “Statute”) requires the Company to meet certain energy efficiency and demand reduction (“EEDR”) benchmarks; and

WHEREAS, when complying with certain EEDR benchmarks the Company may include mercantile customer-sited EEDR projects; and

WHEREAS, Customer has certain energy project(s) as set forth in attached Exhibit A (the “Customer Energy Project(s)”) that it desires to commit to the Company for integration into Company’s EEDR benchmark compliance plan (“Company Plan”) that Company will implement in order to comply with the Statute; and

WHEREAS, the Customer, pursuant to and consistent with the Statute, desires to pursue exemption from paying charges included in the Company’s then current cost recovery mechanism (hereinafter, “Rider”) as approved by the Public Utilities Commission of Ohio (“Commission”) for recovery of the costs associated with the Company Plan..

NOW THEREFORE, in consideration of the mutual promises set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties, intending to be legally bound, do hereby agree as follows:



Step 5...Package and Submit

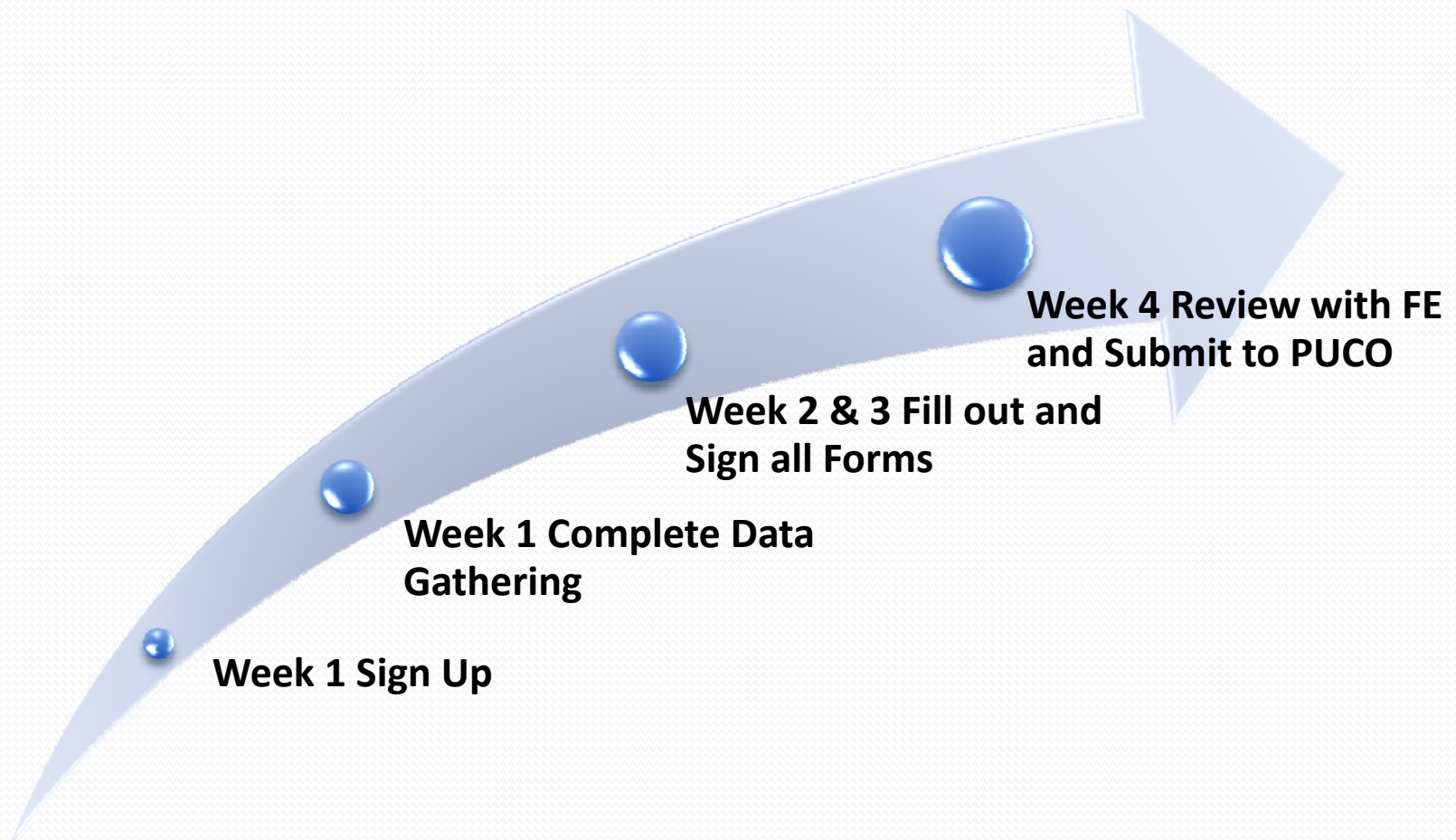
1. Mercantile Customer Project Commitment Agreement
2. Joint Filling Application
3. Mercantile Project Application
4. Exhibits and Data Request Matrix
5. Engineering Study
6. Before and After Photos
7. Invoices
8. EPACt Audit



Step 6...Annual Report

- (A) A demonstration that energy savings and peak-demand reductions associated with the mercantile customer's program are the result of investments that meet the total resource cost test, or that the electric utility's avoided cost exceeds the cost to the electric utility for the mercantile customer's program.
- (B) A statement distinguishing programs implemented before and after January 1, 2009, or in future reports filed for years subsequent to 2009, before and after the most recent year.
- (C) A quantification of the energy savings or peak-demand reductions for programs initiated prior to 2009 in the baseline period, recognizing that programs may have diminishing effects over time as technology evolves or equipment degrades.
- (D) A recognition that the energy saving and demand reduction effects during the electric utility's baseline period of any mercantile customer-sited energy efficiency or peak-demand reduction programs that are integrated into an electric utility's programs are excluded from the electric utility's baselines by increasing its baseline for energy savings and baseline for peak-demand reductions by the amount of mercantile customer energy savings and demand reductions.
- (E) A listing and description of the customer programs implemented, including measures taken, devices or equipment installed, processes modified, or other actions taken to increase energy efficiency and reduce peak demand, including specific details such as the number, type, and efficiency levels both of the installed equipment and the old equipment that is being replaced, if applicable.
- (F) An accounting of expenditures made by the mercantile customer for each program and its component energy savings and electric utility peak-demand reduction attributes.
- (G) The timeline showing when each program went into effect, and when the energy savings and peak-demand reductions occurred.
- (H) Any request for an exemption may be combined with any other reasonable arrangement, approved pursuant to Chapter [4901:1-38](#) of the Administrative Code, if such reasonable arrangement contains appropriate measurements and verification of program results.

Schedule 4 Weeks



Opportunities for CEM's and PE's

- DSE2 Auditors
- COSE Auditing Network

Questions and Comments

Thank You!