

# *Lessons Learned in Starting and Ramping Up Energy Efficiency Programs*

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# Agenda

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- Overview
- Ohio Legislative & Regulatory Requirements
- Where We Are Today
- Lessons Learned in Starting and Ramping Up EE/PDR Programs

# AEP Overview

## AEP

38,000 MW generation capacity  
(70% Coal fired)

39,000 miles of transmission

10% of Eastern Interconnect and  
11% of ERCOT (Texas)

### **AEP Ohio (90% Coal fired)**

1,500,000 customers

1,568 employees

Operating companies:

- Ohio Power Company
- Columbus Southern Power
- Wheeling Power



- SB 221 requires 22.2% cumulative kWh reductions through energy efficiency programs by 2025 and 7.75% cumulative demand reduction by 2018.
- SB 221 has 25% Alternative Energy Portfolio Standard: Minimum 12.5% from Renewables and the rest from Advanced Energy (a portion of which can include EE).

# Ohio SB 221 Requirements

SB221 energy savings			SB221 demand savings		
year	incremental	cumulative	year	incremental	cumulative
2009	0.3%	0.3%	2009	1.00%	1.00%
2010	0.5%	0.8%	2010	0.75%	1.75%
2011	0.7%	1.5%	2011	0.75%	2.50%
2012	0.8%	2.3%	2012	0.75%	3.25%
2013	0.9%	3.2%	2013	0.75%	4.00%
2014	1.0%	4.2%	2014	0.75%	4.75%
2015	1.0%	5.2%	2015	0.75%	5.50%
2016	1.0%	6.2%	2016	0.75%	6.25%
2017	1.0%	7.2%	2017	0.75%	7.00%
2018	1.0%	8.2%	2018	0.75%	7.75%
2019	2.0%	10.2%	<b>cumulative total</b>		<b>7.75%</b>
2020	2.0%	12.2%			
2021	2.0%	14.2%			
2022	2.0%	16.2%			
2023	2.0%	18.2%			
2024	2.0%	20.2%			
2025	2.0%	22.2%			
<b>cumulative total</b>		<b>22.2%</b>			

- Empty EE/PDR rider – Awaiting PUCO decision on cost recovery of \$161.9 million in program costs for the 2009-2011 period. Filed stipulated agreement with 10 parties representing interests of all customer classes.
- Actual plus Committed spending over \$19 million and growing.
- 2009 target – 137 gWhs
- Part yr convention achievement – 156 gWhs
- Normal annualized achievement – 241 gWhs

## Lessons Learned ☺

- The Collaborative process has been both helpful and instrumental in developing our program plans.
  - A pilot program fund is available to test current and future programs.
  - Plan to test Behavior Modification as well.
  - 10 Collaborative members signed on to the Stipulation agreement filed in support of the 2009-2011 Plan, cost recovery, distribution lost revenues and shared savings.
  - Green Rules final

## Lessons Learned ☺

- We have been very pleased thus far with our implementation contractors in delivering cost effective results and being responsive and flexible in meeting our needs. Without the resources they have brought to the table, none of the goals would have been attainable in 2009.
- We have two RFPs out for the Residential New Construction Program and the Residential Retrofit Program as well as contract negotiations underway with two other programs and hope to have the same initial success.
- We are focused on best practices programs.

## Lessons Learned ☺

- AEP Ohio has excellent relationships with its mid size to large commercial & industrial customers through long standing assigned account managers. Its key to why we have been successful in bringing over 940 business applications and the bulk of our energy savings in less than six months of program operation and these relationships will continue to assist in marketing programs to this customer group.
- One issue is a challenge in Ohio Power with a heavy industrial base that causes high EE/PDR compliance targets yet these customers continue to struggle in this economy. Program participation may become a concern.

## Challenges ☹️

- Financial penalties prescribed for failure to meet incremental targets on an annual basis; however, it is difficult for AEP Ohio to continue providing programs without cost recovery.

## Challenges ☹️

- Green rules require only incremental energy savings from a current codes or standards baseline, not an “as found” baseline.
- Encourages AEP Ohio not to be supportive of new codes and standards that raise the baseline and put us at risk of not reaching compliance mandates.

## Challenges ☹️

- The TRC is the principle test used now in Ohio; however, the UCT should be used as the principle cost effectiveness test, particularly in calculating utility incentives since it most closely mirrors a supply side investment decision.

## Challenges ☹️

- Part year convention for reporting in Ohio lowers first year savings significantly and doesn't match up the kWhs counted with the costs expended. It's also administratively burdensome.

# Opportunities on the Horizon

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- How DSM programs will be augmented by new technologies being deployed – e.g., Smart Grid Demonstration
  - Aligning goals through technology to enhance safety, reliability and **efficiency** of energy delivery
- How to leverage rate-payer funded utility programs with the increased funding from state and federal sources– e.g., ARRA Appliance Efficiency programs

# Questions