

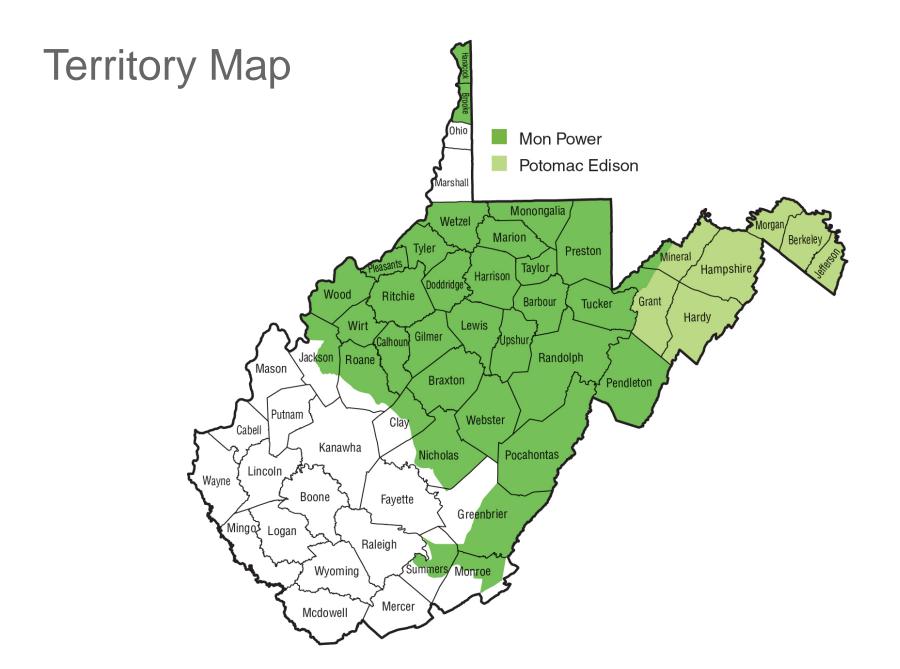
Mon Power • Potomac Edison

West Virginia Division of Energy: Economic Development Through Energy Efficiency Conference

Agenda

Purpose of todays presentation

- FirstEnergy's WV Operating Companies:
 - Potomac Edison
 - Monongahela Power
- Phase I Programs and Results
- Economic Impacts of Phase I Program Results
- Phase II Programs
- FirstEnergy Utilities' Programs in:
 - Maryland (MD)
 - Ohio (OH)
 - Pennsylvania (PA)





Phase I



Phase I Programs

Residential Low-Income "Home Check-Up" Program

- Targeted residential low-income customers at 200% of Federal Poverty Income Guidelines (FPIG)
- Provided direct installation of EE measures, such as CFLs, faucet aerators and refrigerators

Implementation Partner:

- Dollar Energy Fund, Inc. (DEF)
 - History of Running Low-Income Programs
 - DEF holds contracts with several State Weatherization agencies
- State Weatherization Agencies
 - Provided direct installation of measures
 - Coordinated this program with the State Weatherization Assistance program audit which provides HVAC and insulation measures.

Phase I Programs

■ Non-Residential Lighting Program

- Available to all eligible commercial, industrial and governmental customers
- Provided customer incentives for high efficiency lighting installations

Implementation Partner:

- Leidos
 - Experienced multi-state Commercial & Industrial Energy Efficiency implementation vendor
 - Conducted marketing, customer outreach and support, application processing and incentive payment
 - Developed and supported customer website for program promotion and on-line application processing

Low Income EE Program Performance

2012 – 2016 Cumulative results:

	Number of Participants			MWh Energy Savings		
	2012-2016	2012-2016		2012-2016	2012-2016	
Company	Plan	Actual	%	Plan	Actual	%
Mon Power	3,370	3,366	100%	3,729	3,434	92%
Potomac Edison	1,521	1,383	91%	1,683	1,863	111%
Total	4,891	4,749	97%	5,413	5,297	98%

Implementation Activity:

- In 2013 increased number of measures (CFLs, showerheads, aerators) eligible for direct installation and adjusted refrigerator replacement to increase kWh savings
- In 2013 Dollar Energy Fund began targeting multi-family buildings
- In 2014 added new measures to increase kWh savings: LED nightlights, smart power strips, hot water pipe insulation, furnace whistles and water heater tank temperature setback

Non-Residential Lighting Program Performance

□ 2012 – 2016 Cumulative results:

	Number of Participants			MWh Energy Savings		
	2012-2016	2012-2016		2012-2016	2012-2016	
Company	Plan	Actual	%	Plan	Actual	%
Mon Power	3,125	425	14%	46,347	54,359	117%
Potomac Edison	1,063	162	15%	15,678	28,091	179%
Total	4,189	587	14%	62,024	82,450	133%

Implementation Activity:

- Conducted Multiple Customer seminars
- Program Ally engagement through direct outreach and seminars
- Leidos actively engaged customer in completion of projects



Phase I Economic Impact

- **87,747 MWh Saved**
- Yearly Energy Bill Savings:
 - \$ 6.1 M *
- **Total Participants:**
 - **-** 5,336
- **Equivalent CO₂** ** Emissions from:
 - 6.9 M gallons of gasoline consumed
 - 9,106 homes' electricity use for one year
 - 2.1 M incandescent lamps replaced
- **Cost Effectiveness:**
 - Total Resource Cost Test (TRC) = 1.6 (as filed)





^{*} Averaged C&I Rate of 7.375¢/kWh & Residential Rate of 9.85¢/kWh for WV Customer –Source: ElectricityLocal.com

^{* *} Source: Environmental Protection Agency (EPA)

Phase II



Phase II Plan, Energy Efficiency and Demand Response Impacts, Objectives and Overview

The Phase II Plan was designed to achieve the Energy Efficiency targets for the period January 1, 2017, through May 31, 2018

- □ Approved by the WV PSC on September 23, 2016
- Programs began on January 1, 2017
- Designed to achieve 59,616 MWh savings for the period
- Expanded programs to include Residential Programs
- □ Total Resource Cost Test (TRC) value of 1.6 (as filed)

Phase II Low Income Program

□ Low-Income Home Check-Up Program:

- Provides eligible qualifying customers with the following:
 - Energy evaluation and energy-savings plan
 - Opportunity to receive energy-saving home improvements installed in the home
 - No payment is required for these installations/services
- Developed and Implemented Comprehensive Low-income Energy Efficiency Network Enrollment System
- Implementation Partners:
 - Dollar Energy Fund, Inc.
 - State Weatherization Agencies

Phase II Residential Programs

□ New for Phase II

- Mid-Stream Appliance Program
- Energy Conservation Kit Program
- Point of Sale Lighting Program
- Online Audit Program

Implementation Partners:

- Aclara / Power Direct: Home Energy Analyzer
- Honeywell: Energy Efficient Products
- Power Direct: Energy Conservation Kit



Phase II Commercial & Industrial Program

Non-Residential Lighting Program Measures:

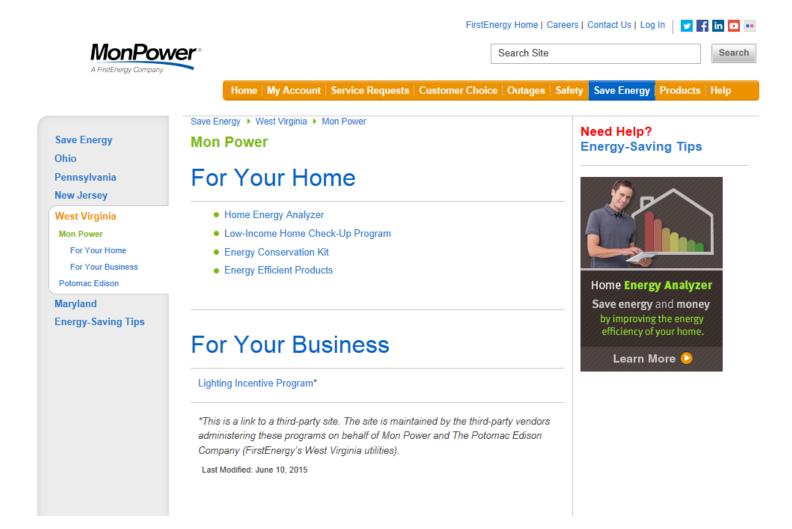
- CFL Fixtures & Lamps
- Lighting Controls
- Linear Fluorescents
- Linear LED
- LED Lamps (A19 / R20 / PAR20)
- Internal & External LED Fixtures
- LED Traffic Signals
- LED Reach In Refrigerator / Freezer Lights
- Street & Area Lighting (Customer Owned)

Implementation Partner:

Leidos



EnergySaveWV.com



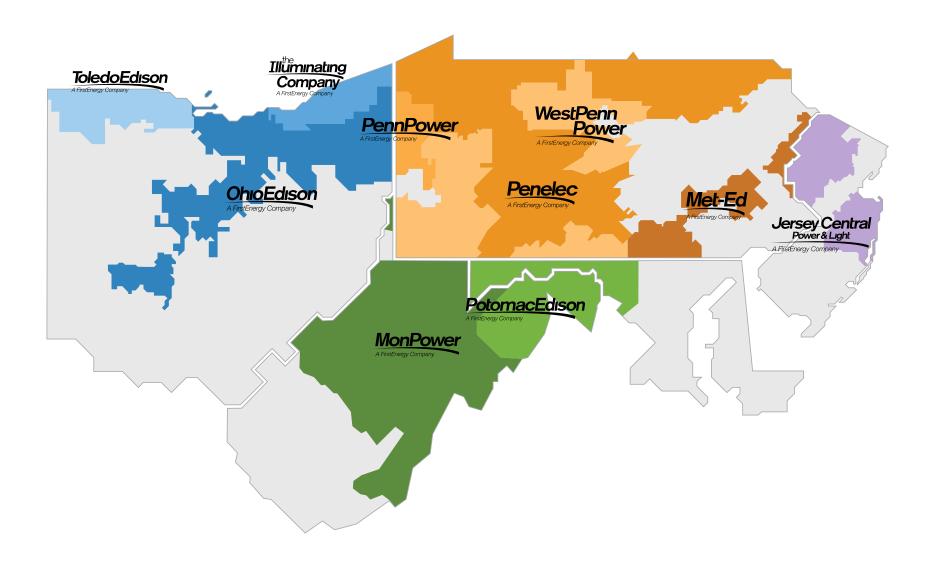




Energy Efficiency in MD / OH / PA



FirstEnergy's Utilities



Energy Efficiency Programs

- In Ohio, Pa. and Md., energy efficiency requirements result from individual state legislative mandates
- Programs offered in W. Va. are core components of programs offered in other states
 - W. Va. Phase II programs were selected based on success of Phase I Plan with consideration of stakeholder input, savings, costs and cost-effectiveness considerations
- Examples of additional programs offered in other states include:
 - Behavioral
 - Energy Audits
 - Appliance Recycling
 - HVAC and Water Heating
 - Prescriptive and Custom Equipment



Thank You

