



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Determining Potential for Energy Efficiency, Program Design and Implementation of Energy Efficiency Programs in Missouri

Goldie Tompkins

November 10, 2014



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Overview

- Missouri Energy Efficiency Investment Act (MEEIA)
- PSC Rules implementing MEEIA
- Potential Studies
- MEEIA Programs
- Program Evaluation, Measurement, and Verification (EM&V)



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Missouri Energy Efficiency Investment Act

- It shall be the policy of the state to value demand-side investments equal to traditional investments in supply and delivery infrastructure and allow recovery of all reasonable and prudent costs of delivering cost-effective demand-side programs.
- Mo. Rev. Stat. § 393.1075.3 (1)-(3)



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Missouri PSC Rules on Energy Efficiency

- Chapter 3 - Filing Requirements
 - Electric Utility Demand-Side Programs Investment Mechanisms Filing and Submission Requirements 4 CSR 240-3.163
 - Electric Utility Demand-Side Programs Filing and Submission Requirements 4 CSR 240-3.163
- Chapter 10 - Technical Requirements
 - Demand-Side Programs Investment Mechanisms 4 CSR 240-20.093
 - Demand-Side Programs 4 CSR 240-20.094



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Potential Studies

- When a utility files for approval of energy efficiency programs (demand side programs), the utility shall file a current market potential study.
 - Potential studies must be conducted by a third party
 - The data must be updated no less than every four (4) years
 - Include a clear description of the process used to determine the following potential:
 - Economic potential
 - Maximum achievable potential
 - Realistic achievable potential
 - Technical potential



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Economic Potential

- energy savings and demand savings relative to a utility's baseline energy forecast and baseline demand forecast, respectively, resulting from customer adoption of all cost-effective measures, regardless of customer preferences.



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Maximum achievable potential

- energy savings and demand savings relative to a utility's baseline energy forecast and baseline demand forecast, respectively, resulting from expected program participation and ideal implementation conditions. Maximum achievable potential establishes a maximum target for demand-side savings that a utility can expect to achieve through its demand-side programs and involves incentives that represent a very high portion of total programs costs and very short customer payback periods.



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Realistic achievable potential

- energy savings and demand savings relative to a utility's baseline energy forecast and baseline demand forecast, respectively, resulting from expected program participation and realistic implementation conditions. Realistic achievable potential establishes a realistic target for demand-side savings that a utility can expect to achieve through its demand-side programs and involves incentives that represent a moderate portion of total program costs and longer customer payback periods when compared to those associated with maximum achievable potential.



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Technical Potential

- energy savings and demand savings relative to a utility's baseline energy forecast and baseline demand forecast, respectively, resulting from a theoretical construct that assumes all feasible measures are adopted by customers of the utility regardless of cost or customer preference



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Utility Programs implemented under MEEIA

- Ameren Missouri
 - Residential Programs
 - Lighting
 - Energy Efficiency Products Kits
 - HVAC
 - Refrigerator Recycling
 - Home Energy Performance Pilot
 - ENERGY STAR New Homes
 - Low Income
 - Multi-Family Energy Efficiency
 - Business Programs
 - Standard
 - Custom
 - Retro-commissioning
 - New Construction



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Programs (cont'd)

- Kansas City Power & Light
 - Residential
 - Lighting Rebate
 - Appliance Recycling Rebate
 - Home Energy Analyzer
 - Home Energy Report
 - Income-eligible weatherization
 - Programmable thermostat
 - Air conditioning upgrade rebate
 - Business
 - Building Operator Certification
 - Business Energy Analyzer
 - Energy Efficiency Rebates – Custom
 - Energy Efficiency Rebates - Standard



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Programs (Cont'd)

- KCP&L Greater Missouri Operations Company
 - Residential
 - ENERGY STAR-Qualified New Homes
 - Appliance Rebates
 - Appliance Recycling Rebate
 - Home Energy Report Pilot
 - Lighting Rebate
 - Home Performance Rebate with ENERGY STAR
 - Income-Eligible Weatherization
 - Multi-Family Energy Efficiency Rebate
 - Programmable Thermostat
 - Air Conditioning Upgrade Rebate
 - Business
 - Building Operator Certification
 - Business Energy Analyzer
 - Energy Efficiency Rebates – Custom
 - Energy Efficiency Rebates – Standard
 - Demand Response Incentive



USAID
FROM THE AMERICAN PEOPLE



National
Association of
Regulatory
Utility
Commissioners

Programs (Cont'd)

- Empire District Electric Company
 - Residential
 - ENERGY STAR New Homes Program
 - High Efficiency AC Rebate Program
 - Home Performance with Energy Star Program
 - Low-Income New Homes
 - Low-Income Weatherization
 - Business
 - Commercial & Industrial Rebate Program
 - Building Operator Certification