

ActOnEnergy[®]

Ameren Illinois
Preliminary Energy Efficiency
Portfolio

2011 - 2014

August 3, 2010



Agenda

- I. Key Points
- II. Portfolio Overview
- III. Residential Portfolio
- IV. Business Portfolio

I. Key Points

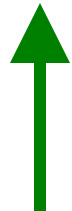
- Explanation for not achieving statutory savings
 - Maintain diversified portfolio and portfolio flexibility
 - Increased incentives for Business
 - Increased consumer education for select programs
- The need for deemed savings and deemed NTG
- Resolving Demand Response
- Maintaining the EMV model

Explanation for not achieving statutory savings

- Achievement of savings hindered by budget cap
- And portfolio costs are increasing:
 - 1) Impact of Energy Independence and Security Act of 2007 (EISA 2007)
 - 2) Remaining measures more expensive than lighting
 - 3) Maintaining a diversified portfolio
 - 4) Catering to all rate classes
 - 5) Low hanging fruit is gone; incentives need to increase especially for Business
 - 6) Increased consumer education for select programs

Statutory savings/budget provides decreasing \$/kWh

- \$/kWh (per Cycle 1 Plan):

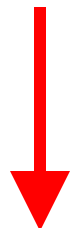


PY1: \$0.158

PY2: \$0.163

PY3: \$0.166

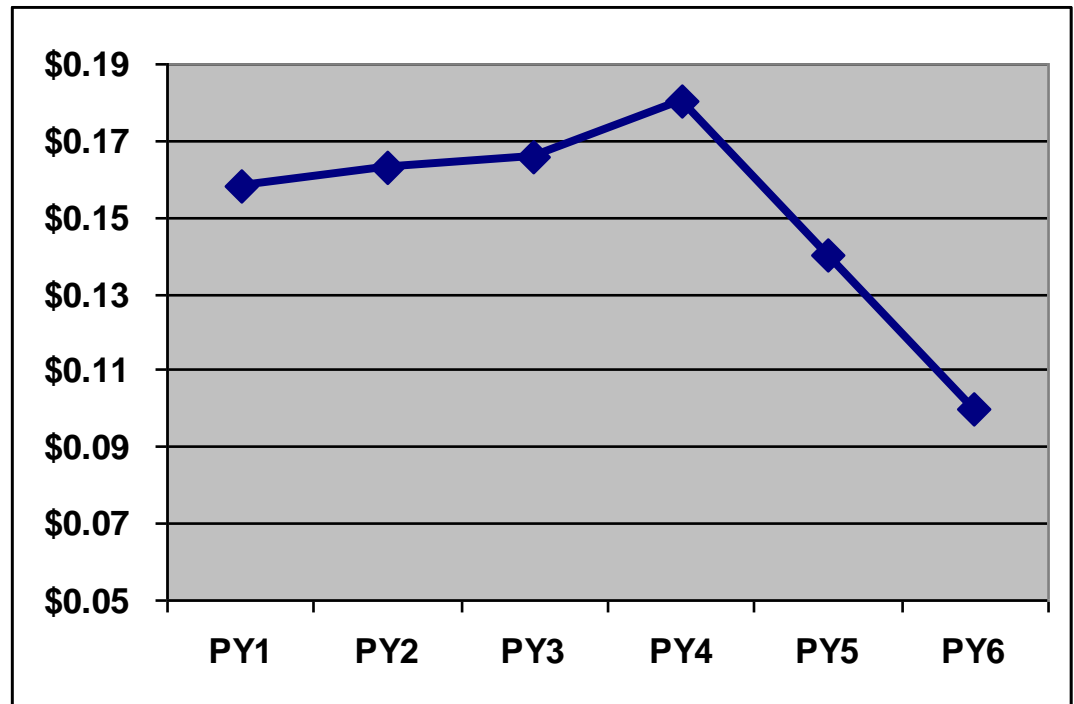
- \$/kWh (statutory):



PY4: \$0.18

PY5: \$0.14

PY6: \$0.10



EISA creates a transformed market

- Requires roughly 28 percent greater efficiency for incandescent light bulbs, phased in from 2012 through 2014. This effectively bans the sale of most current incandescent light bulbs.
- Very few specialty bulbs (appliance bulbs, colored lights, and 3-way bulbs) are exempt from these requirements.
- Requires roughly 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020.
- DOE is launching major consumer education campaign this fall

- **MA recently reduced NTG for general service CFLs to 25%**
- **CT discontinued CFL programs**
- **Northwest Regional Technical Forum reduced CFL deemed savings to 22 kwh**

What will be the NTG?



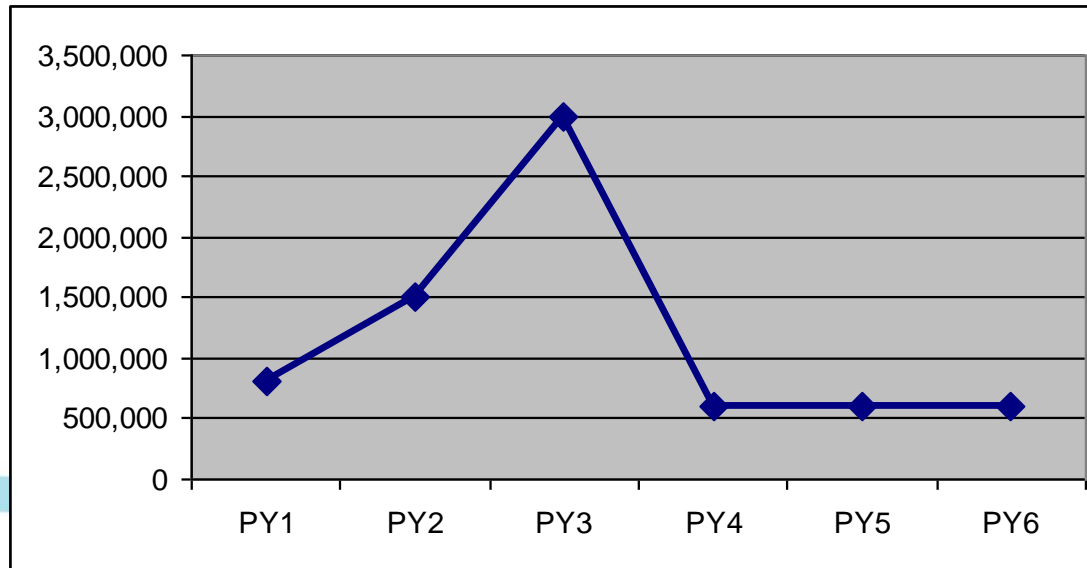
Thus, reducing dependence on CFLs

PY1 – PY3

- 800,000 to 3 million bulbs
- 35% of total portfolio savings

PY4 – PY6

- 600,000 bulbs per year
- 15-18% of the total portfolio savings



Without CFLs, we need to increase volume of other measures which are more expensive

Program Year 2	\$/kWh
RESIDENTIAL EE PROGRAM COSTS	
Lighting & Appliances	\$ 0.08
Multifamily	\$ 0.17
New HVAC	\$ 0.25
Appliance Recycling	\$ 0.26
Energy Star New Homes	\$ 0.42
Home Energy Performance	\$ 0.45
DR-Direct Load Control	\$ 3.56
Total Residential Programs	\$ 0.18
C&I EE PROGRAM COSTS	
Retro-commissioning	\$ 0.03
Custom	\$ 0.10
Prescriptive	\$ 0.12
Demand Credit	\$ 3.20
Total C&I Programs	\$ 0.10
Total Portfolio Costs	
	\$ 0.16

Savings not yet evaluated; Most net savings using .76 NTG. Includes all portfolio costs; all AI and Implementer admin, etc. Excluding DCEO.

If Lighting and Appliance were eliminated today, portfolio costs increase from \$0.16 to \$0.21/kWh

PY4 statutory savings/cap = \$0.18/kWh



Program Year 2		
	\$/kWh	If L&A was eliminated
RESIDENTIAL EE PROGRAM COSTS		
Lighting & Appliances	\$ 0.08	
Multifamily	\$ 0.17	\$ 0.17
New HVAC	\$ 0.25	\$ 0.25
Appliance Recycling	\$ 0.26	\$ 0.26
Energy Star New Homes	\$ 0.42	\$ 0.42
Home Energy Performance	\$ 0.45	\$ 0.45
DR-Direct Load Control	\$ 3.56	\$ 3.56
Total Residential Programs	\$ 0.18	\$ 0.44
C&I EE PROGRAM COSTS		
Retro-commissioning	\$ 0.03	\$ 0.03
Custom	\$ 0.10	\$ 0.10
Prescriptive	\$ 0.12	\$ 0.12
Demand Credit	\$ 3.20	\$ 3.20
Total C&I Programs	\$ 0.10	\$ 0.10
Total Portfolio Costs		
	\$ 0.16	\$ 0.21

Savings not yet evaluated; Most net savings using .76 NTG
Includes all portfolio costs; all AI and Implementer admin, etc
Excluding DCEO

Maintain Diversified Portfolio and Portfolio Flexibility

- Capture changes in technology
- Nimble react to changes in market
- Ability to grow successful programs and decrease/eliminate unsuccessful
- Ability to capture most cost-effective opportunities
- Provide options for consumers
- Enable all rate classes to participate

Diversification increases costs



Need for Increased Business Incentives

PY1	PY2
Finished 17-18% over goal	9% over goal as of 4/30/10, finished at 92% of goal - A loss of 17% (14,000 MWH)
Attained goal in March	Project commitments attained goal in April (but did not materialize)
Avg electric project: \$11,000	Avg electric project: \$5,358

- **Problem: March-April commitments run risk of non-completion by May**
- **Resolution: Need higher incentives to get commitment earlier and plan for % non-completion**
- **Business incentives on a portfolio basis increase from the \$0.05/kwh level in Cycle 1 to \$0.14/kwh in Cycle 2.**



Increased consumer education costs for select programs

- Business Motors - RES HP water heaters - RES Smart Power Strips

- Motors

- Tremendous untapped potential in the early replacement market. Requires facility audits, motor inventories and extensive meetings with plant/facility managers. Added \$1 million per year to the Business Standard admin costs to cover this work.

- HP Water Heaters

- Consumer and retail staff are unaware of efficiency benefits; discourage customers from spending \$1,500 on a water heater and point them to lower first cost conventional technologies.

Customers need to be convinced of the benefit to overcome the trouble and increased costs; especially if replacing.



Thus Cycle 2 reflects a higher \$/kWh (\$0.21 - \$0.23)

Due to:

- 1) Impact of EISA
- 2) Remaining measures more expensive than lighting
- 3) Committed to a diversified portfolio
- 4) Committed to catering to all rate classes
- 5) Low hanging fruit is gone; incentives need to increase especially for Business
- 6) Increased customer education associated with new technologies

	PY4	PY5	PY6
Cost/kWh	\$0.21	\$0.22	\$0.23



Legislation allows for reduction of savings

(d) **Notwithstanding** the requirements of subsections (b) and (c) of this Section, an electric utility shall **reduce the amount of energy efficiency and demand-response measures** implemented in any single year by an amount necessary to limit the estimated average increase in the amounts paid by retail customers in connection with electric service due to the cost of those measures to: (the budget cap)

Cycle 2 Savings and NTG

- Cycle 2 generally applies PY1 EMV savings and NTG values for programs in markets that are not expected to change significantly
- Uses a conservative .80 lighting NTG as compared to 1.0 EMV NTG

Cycle 2 NTG Planning Assumptions				
PROGRAM	Realization Rates	Net-to-Gross Ratios	Total NTG Factor	Method
Residential Lighting	1.00	0.80	0.80	Calculated at 1.0
Residential Efficient Products	1.00	0.80	0.80	New
Residential HVAC	1.00	0.80	0.80	EMV Reasonable
Residential Appliance Recycling	1.00	0.54	0.54	EMV Calculated
Residential Home Energy Performance	1.00	0.76	0.76	EMV Reasonable
Residential New Construction	1.00	0.80	0.80	Gas Program
Residential Multifamily	1.00	0.80	0.80	EMV Reasonable
Residential Behavioral Modification	1.00	0.80	0.80	New
Residential Warm Neighbors	1.00	0.76	0.76	New
Residential DR	1.00	1.00	1.00	Assumed
Business Standard	1.18	0.62	0.73	EMV Calculated
Business Custom	0.99	0.76	0.75	EMV Calculated
Business Retro-commissioning	1.00	0.80	0.80	New
Business New Construction	1.00	0.80	0.80	Not yet calculated

Deemed Savings and NTG

- Cost-Effectiveness should be focus and accountability
 - Especially with lack of funding to attain statutory Electric goals
 - Best stewardship and best use of limited EMV funds
 - At portfolio level (enabling diverse portfolio)
- Limited EM&V funds
 - Better used for process improvement and verification instead of determining NTG
- Flaws with determining NTG
 - Inexact and creates confusion



Deemed Savings and NTG

- Legislation does not require NTG
- Increased uncertainty for Ameren IL with
 - Fully integrated portfolio (Gas and Electric)
 - Larger scale Gas EE program
 - Increasingly transformed Electric EE market
 - Other utility Gas filings assuming deemed (do we have deemed Gas and not Electric portfolios?)
- Apply EMV results prospectively for each Cycle, not each year
 - More realistic planning opportunity
 - Especially since goals are annual and EMV results occur mid year



Resolving Demand Response

- **Lack of existing DR program to leverage**
 - Minimal purpose for DR as a MISO delivery service company
- **Costly and resource intensive**
- **Difficulty in achieving DR goal**
- **Limited customer value; low demand savings**
- **Limited business opportunity (“eligible retail customers”);**
 - under 400KW and may become lower
 - Increasing alternate supply market decreases business DR customer base
 - Discontinuing DR from BUS; becomes heavy burden for RES (6,000 per year at lower KW per unit)
- **Already occurring 40,000+ KW annual peak demand savings from portfolio**

- **DR Cost per customer: \$370**
- **Cost per KW: \$400**
- **Transfer to 30,000+ MWH Cycle 2 savings**
- **With additional KW portfolio savings**

FERC Order 719 allows aggregators to solicit customers for DR and bid DR directly into the RTO. In effect September 2010.

- **Why should utilities duplicate this effort and compete with aggregators?**

Maintain the current EMV model

- Current model:
 - EMV contracted to utilities with ICC oversight
- Benefits:
 - SAG interaction
 - Utility obtains ongoing advice during times of program changes
 - Utility manages market confusion during surveying, site visits
 - Deemed savings and NTG decreases independence risk and perceived conflict of interests
- If EM&V contracted exclusively with ICC:
 - Utility and SAG lose interaction, ongoing guidance, market coordination



Maintain the current EMV model

Ongoing EMV Market Coordination

Daily customer inquiries:

If surveyors and site visits are legitimate

How to activate gift cards (for site visits)

If equipment that was metered is damaged

Why is EMV asking these questions

Ongoing call center coordination is required

- Is ICC Staff going to manage this?***
- Who is responsible for customer satisfaction?***

Process and Impact Assessment is not separate

Assessment is integrated:

One customer survey assesses process and impact

One customer site visit assesses process and impact

Do we want customers to be contacted twice?

EMV would need two points of contact per utility (gas and electric)

- Not enough budget to accommodate duplication***