



An Exelon Company

Energy Efficiency and Capacity Auctions

An Update to One Utility's
Experience

Presented at the 2015 ACEEE
National Conference on Energy
Efficiency as a Resource

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The Portfolio

- ✓ ComEd's extensive portfolio of energy efficiency programs has yielded over 700 MW of annual summer demand reduction
- ✓ This does not include the Central AC Cycling program.
- ✓ Other programs are excluded either because they do not qualify as EE Resources, the program is too small to effectively measure, or the measures will "age out" prior to the auction

ComEd's Challenge

- ✓ EE Programs are starting to mature Illinois
 - Enabling legislation enacted in August 2007
 - Programs launched in June 2008
 - Now in our eighth year
- ✓ Customers have saved over \$1 Billion
- ✓ PJM process has evolved over time
 - PJM staff, ComEd and our evaluator developed a “standardized reporting spreadsheet”
 - In 2015, PJM implemented “Capacity Performance”
 - In response to 2014 Polar Vortex
 - Ensures that capacity is available when needed, year-round

Eligible Programs

Residential

- ✓ Residential Lighting Program (screw-in LEDs and CFL's, LED fixtures)
- ✓ Appliance Recycling (no longer eligible)
- ✓ Central Air Conditioner replacement
- ✓ Joint single-family and multi-family efficiency assessments and upgrades

Business

- ✓ Prescriptive Incentives (Lighting, Motors, HVAC)
- ✓ Custom Incentives (everything else)
- ✓ New Construction
- ✓ Small Business Efficiency Services
- ✓ Midstream Lighting

Ineligible Programs

- ✓ Retro-commissioning
 - Primarily a behavior-based program, adjusting equipment, correcting controls
 - Does not qualify as EE Resource
- ✓ Home Energy Reports
 - Promotes behavioral changes in residential sector
 - Does not involve installation of measures

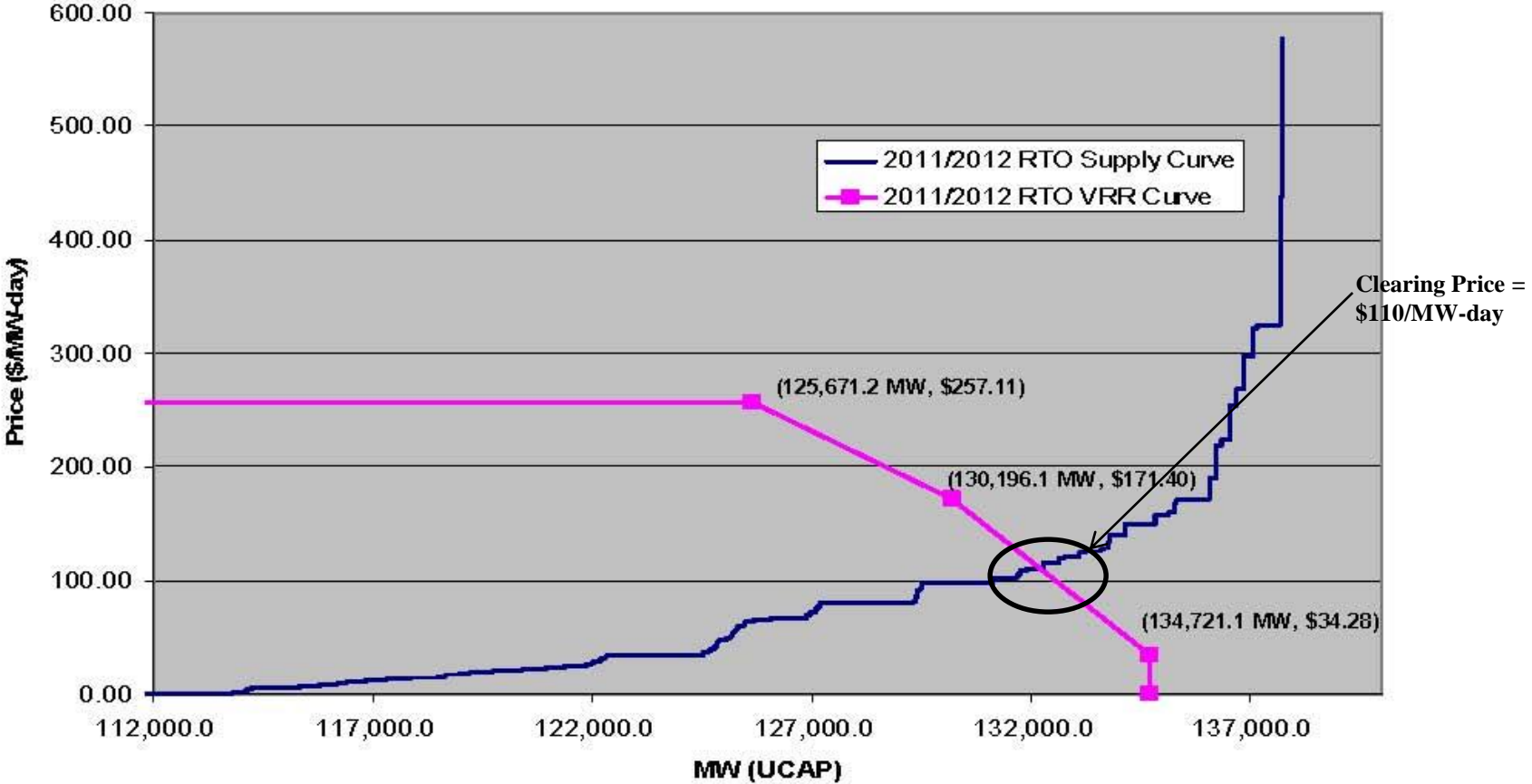
ComEd's Strategy

- ✓ Price-Taker – Offer resources at \$0
- ✓ Start with M&V plans from evaluation contractor
- ✓ Use program evaluations and Illinois Statewide Technical Reference Manual to establish measure savings
- ✓ Evaluator provides adjustment factors (e.g., coincidence factor, realization rate) to establish final values

The RPM Auction

- ✓ Clearing price is function of several factors
 - How much capacity is offered relative to forecast needs
 - Offer prices
 - Cost Of New Entry (CONE)
 - Transmission and transfer capacity
 - Firm Resources Requirements
 - Capacity Performance versus Base product

2011/2012 Base Residual Auction Clearing



Offering EE into the Auction

- ✓ EE resources have four years of capacity value
- ✓ All resources must show a demand reduction during the PJM EE performance hours (1 pm to 5 pm CDT on weekdays during June through August)
- ✓ Capacity Performance must also show demand reduction during winter performance hours (6-8 am and 6-5 pm CST on weekdays during January and February)
- ✓ Installation of more efficient devices or equipment or implementation of more efficient processes/systems meeting the requirements that exceed building codes, appliance standards, or other relevant standards at the time of installation.
- ✓ Fully implemented at all times during the Delivery Year, without any requirement of notice, dispatch, operator intervention.
 - If dispatchable, it would be a Demand Resource.

Value to ComEd

- ✓ Provides additional revenue stream
- ✓ Provides capacity value to EE in Illinois
 - Statutory goals focus on energy savings only
 - Capacity value enhances potential for Air Conditioning, Thermal Storage, and similar technologies

Outcome of Auctions

- ✓ ComEd offered between 386 and 726 MW of capacity into Base Residual Auctions
 - Gross capacity reduction (no free-ridership or spillover adjustment required by PJM)
 - PJM has always accepted ComEd's offers
 - No performance issues to date
- ✓ Clearing price has been volatile
 - Has ranged from \$16 to \$215 per MW/day
 - Capacity market revenues between \$2.4 and \$57 million per year

The Road Ahead

- ✓ FERC Order 745
 - Supreme Court granted certiorari, arguments scheduled for October
 - Outcome could affect how PJM treats EE
- ✓ PJM filed a proposal to shift EE from supply-side to demand-side
 - In response to Appellate ruling on FERC Order 745
 - Order does not directly address EE; however PJM proposed to move DR and EE to demand-side of capacity market if Supreme Court does not overturn appellate ruling
 - FERC denied request as premature

Questions?