

Reforming the Energy Vision (REV)

May 12, 2014

Topics

- ▶ Background
 - Business As Usual
 - PSC Policy Goals
- ▶ REV Initiative
 - Track I: Distribution System Platform Provider
 - Opportunities for Improvement
 - Functions
 - Issues
 - Roll out
 - Track II: Regulatory Reforms
 - Current Framework
 - Opportunities for Improvement
 - Issues
- ▶ Working Groups
 - DSPP Markets and Customer Engagement
 - Platform Technology

Business As Usual

- ▶ Over the next decade, expected increase in spending on utility delivery and central generation infrastructure of over \$30 Billion, and on clean energy programs of over \$10 Billion
- ▶ These increases address aging infrastructure, load growth, increased need for storm resiliency and implementation of clean energy goals and increased customer demand for uninterrupted power
- ▶ Financial pressure on several generators in NY potentially affecting fuel diversity in the State
- ▶ Increased Reliance on Power
- ▶ Increased pressure on customer electric bills
- ▶ Is there a better way to provide improved energy service to customers at a lower cost and in a cleaner fashion?

PSC Policy Goals

- ▶ Improved system reliability and resiliency
- ▶ Improved system wide efficiency
- ▶ Enhanced customer knowledge and tools that support effective management of their total energy bill (customers are more tech savvy)
- ▶ Market animation of providers and products/services
- ▶ Maintain/improve fuel and resource diversity
- ▶ Emissions Reduction

Reforming the Energy Vision

Major Elements of this Initiative – Two Tracks

▶ Track I

- Distributed System Platform Provider – Functions, Issues, Rollout
- Customer Engagement

▶ Track II

- Regulatory Reforms – Outcome Based Ratemaking and Rate Design

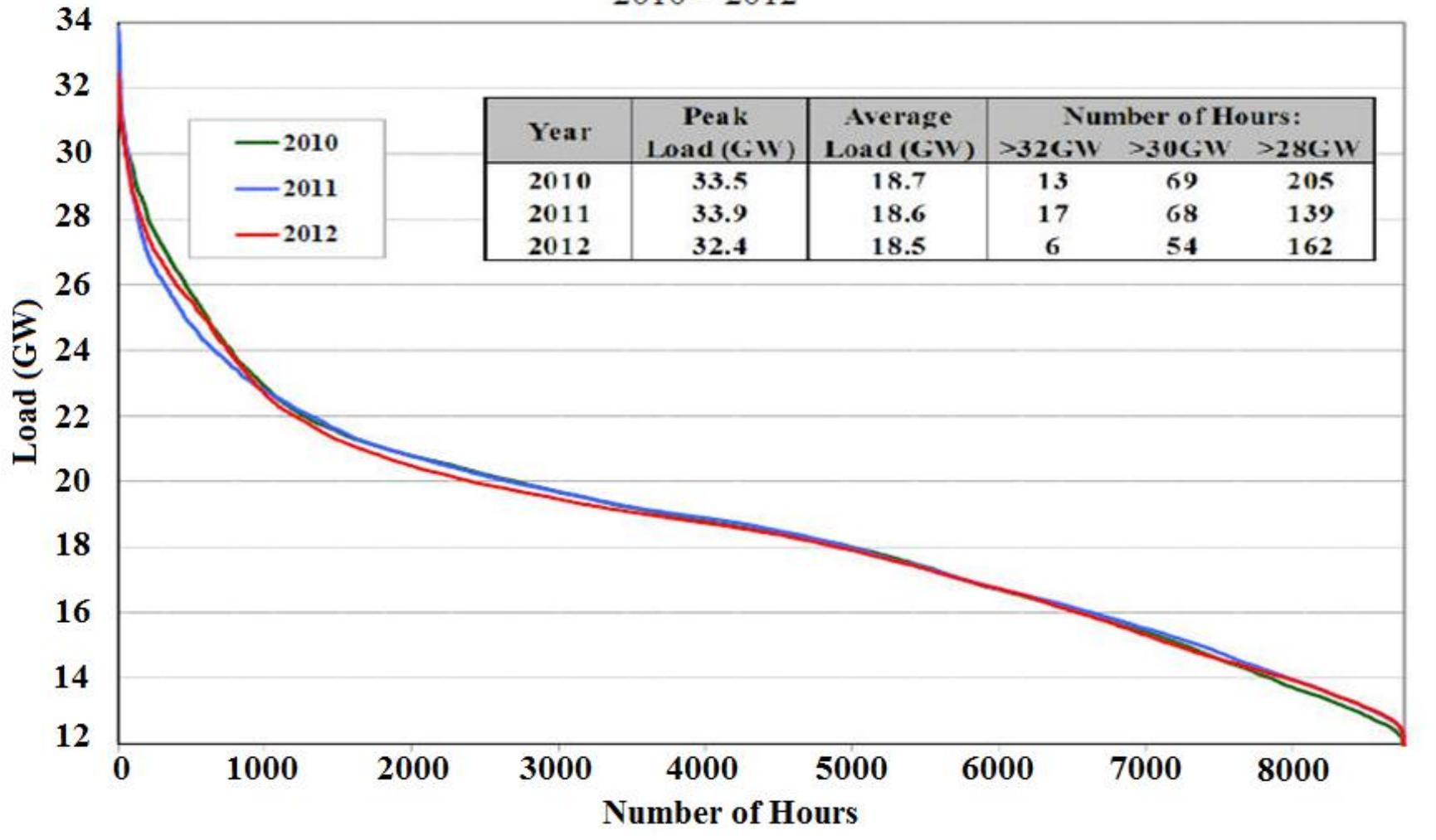
TRACK I

Opportunities for Improvement

- ▶ Distribution Utilities have the opportunity to:
 - Focus better on improving overall utility system efficiency to reduce long term costs to customers
 - Be more customer centric and address emerging customer reliability needs
 - Facilitate DER resources to participate in the market to meet resource needs

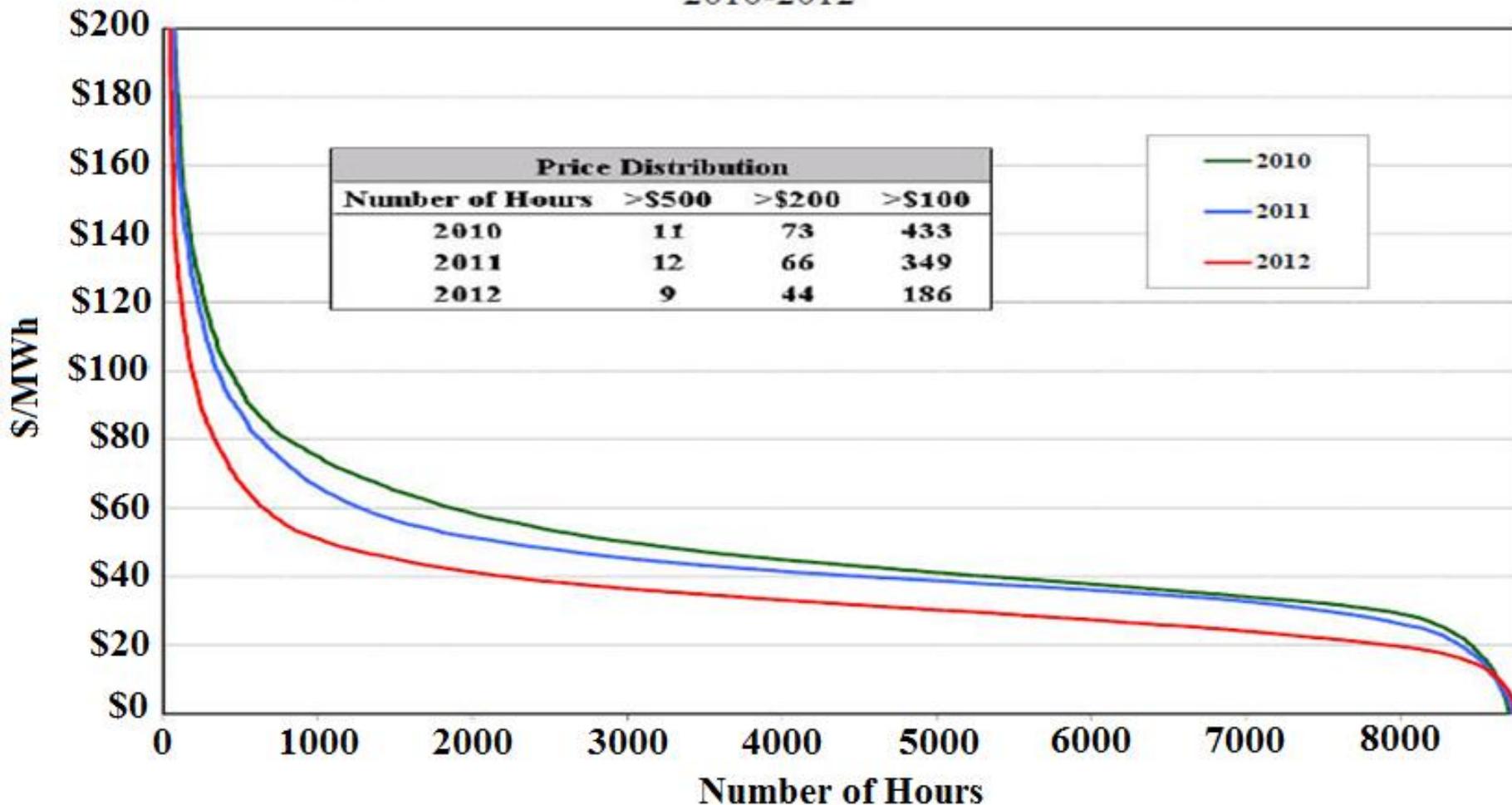
NYCA Load Duration Curve

Figure A-11: Load Duration Curves for New York State
2010 – 2012



NYCA Price Duration Curve

Figure A-4: Price Duration Curves for New York State
2010-2012



Customer Engagement

- ▶ Factors affecting Customer Participation
- ▶ Barriers and Opportunities
- ▶ Role of Energy Service providers
 - Creating new markets
 - Expanding role from commodity-only
 - Accountability

Track I Key Issues

- ▶ What products and services will the DSPPs purchase/sell from/to DER providers and customers? How will they be priced?
- ▶ Should utility be allowed to own/control DER resources? If so, above the line or below the line?
- ▶ How should benefits and costs be defined, measured and evaluated?
- ▶ How should advanced utility Distribution Management Systems and Communications Infrastructure be deployed?
- ▶ What strategies will maximize customer engagement?
- ▶ Should the incumbent distribution utilities serve as the DSPP or should the DSPP function be performed by an independent entity?

How should the vision be rolled out?

- ▶ Each utility would need to establish priorities based on its own system and customer needs and based on cost effectiveness of deployment
- ▶ Utilities to file their implementation plans in 2015, ideally in the context of rate case filings

TRACK II

General Framework Today

- ▶ NY Utility Regulatory Ratemaking Process contains the following key elements
 - Regulatory lag and earning sharing mechanisms provide short term cost cutting incentives
 - Performance incentives address reliability and customer service expectations
 - Revenue Decoupling Mechanisms remove disincentives for pursuing energy efficiency and insulate utilities from lower revenues generally
 - Mechanisms such as forward looking ratemaking, pass through of commodity costs, and various reconciliation elements for unpredictable costs tend to reduce utility risk

Opportunities for Improvement

- ▶ Ratemaking approach and rate design has to work to support the vision and utility models that come out of Track 1
- ▶ Longer Term Rate Plans
 - Better planning,
 - Powerful efficiency incentives
- ▶ Outcome based incentives
 - System efficiency,
 - Lower customer bills,
 - Reduction in carbon, etc

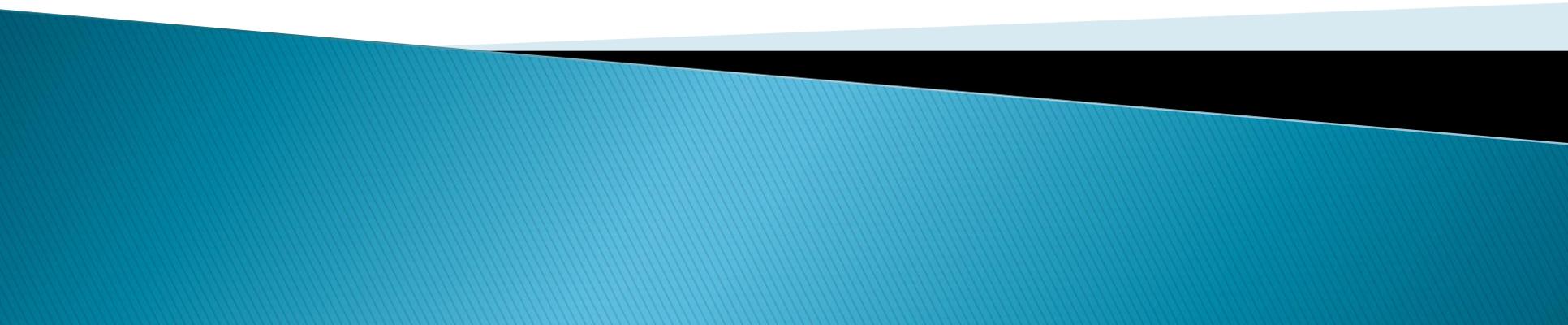
Track II Issues

- ▶ Long term rate plans – major components (term, starting point, reopeners, reconciliations, reporting requirements)
- ▶ Revisions to existing performance mechanisms
- ▶ Additional incentives needed to encourage desired outcomes
- ▶ Structure of incentive mechanisms (one-way vs symmetrical)
- ▶ Encouraging the most efficient investments (OPEX vs. CAPEX treatment)

Track II Issues continued

- ▶ Rate design modifications
- ▶ Impact on captive customers
- ▶ Definition of default service
- ▶ Commitment to affordable universal service
- ▶ Be cognizant of impacts on the financial stability of the utilities, bond ratings and the ability of utilities to raise capital

Track 1 WORKING GROUPS



Markets Working Group

- ▶ DSPP Markets and Pricing
 - Products and Services
 - Pricing

- ▶ Customer Engagement
 - Challenges and Opportunities
 - Third Party Supplier Facilitation

Platform Technology Working Group

- ▶ Platforms, Hardware and Software
 - Advanced Distribution Management Systems
 - Communication Infrastructure
 - Technologies and systems that may be needed to fully integrate DER

- ▶ Microgrids and Community Grids