



Reforming the
Energy Vision

A Deeper Look Into REV

Low Income Forum on Energy

Albany, New York

May 26, 2016

New York State Department of Public Service

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Overview of presentation

1. Overview of REV foundations
2. Examples and developments to date
3. Where is REV headed next?

Session objectives

- REV developments in the context of low-income
- Learning together through open discourse
- Q & A

Reforming the Energy Vision – REV

REV is Governor Andrew Cuomo's strategy to build a cleaner, more resilient and affordable energy system for all New Yorkers.

REV places clean, locally-produced power at the core of New York's energy system,
protecting the environment by reducing greenhouse gas emissions & increasing our use of renewable energy.

Business-as-usual is no longer an acceptable option for New Yorkers

CHALLENGES:

- Aging infrastructure
- Poor system efficiency
- Flat load growth
- Climate change

OPPORTUNITIES:

- Rapidly falling technology costs
- Rise of the digital economy and new capabilities from IT
- Proliferation of new business models to create customer value

Historical regulatory approach and utility business models are not well adapted to address challenges and capture opportunities



The current system is unsustainable

- The present system is built to meet “peak” demand during the hottest summer days and is idle nearly half the time, costing customers around \$2 billion a year.
- While overall demand for electricity is flat, “peak” demand continues to increase, resulting in even higher costs to customers.
- Maintaining the power grid has cost New Yorkers \$17 billion over the past ten years. If trends are not addressed, \$30 billion will be spent in the coming decade.



Reforming the Energy Vision is...



Empowering customers to better manage energy...



...through animating markets for distributed energy resources...



... in order to drive toward higher efficiency, lower environmental impacts and increased affordability.

Steps to a Transformed Electricity System



- Current policy often leads to distributed projects being “bolted-on” to an already-inefficient system
- **REV solution:** a networked, “smart grid” that combines the cost benefits of a central production and distribution system with the innovation and flexibility of distributed solutions.



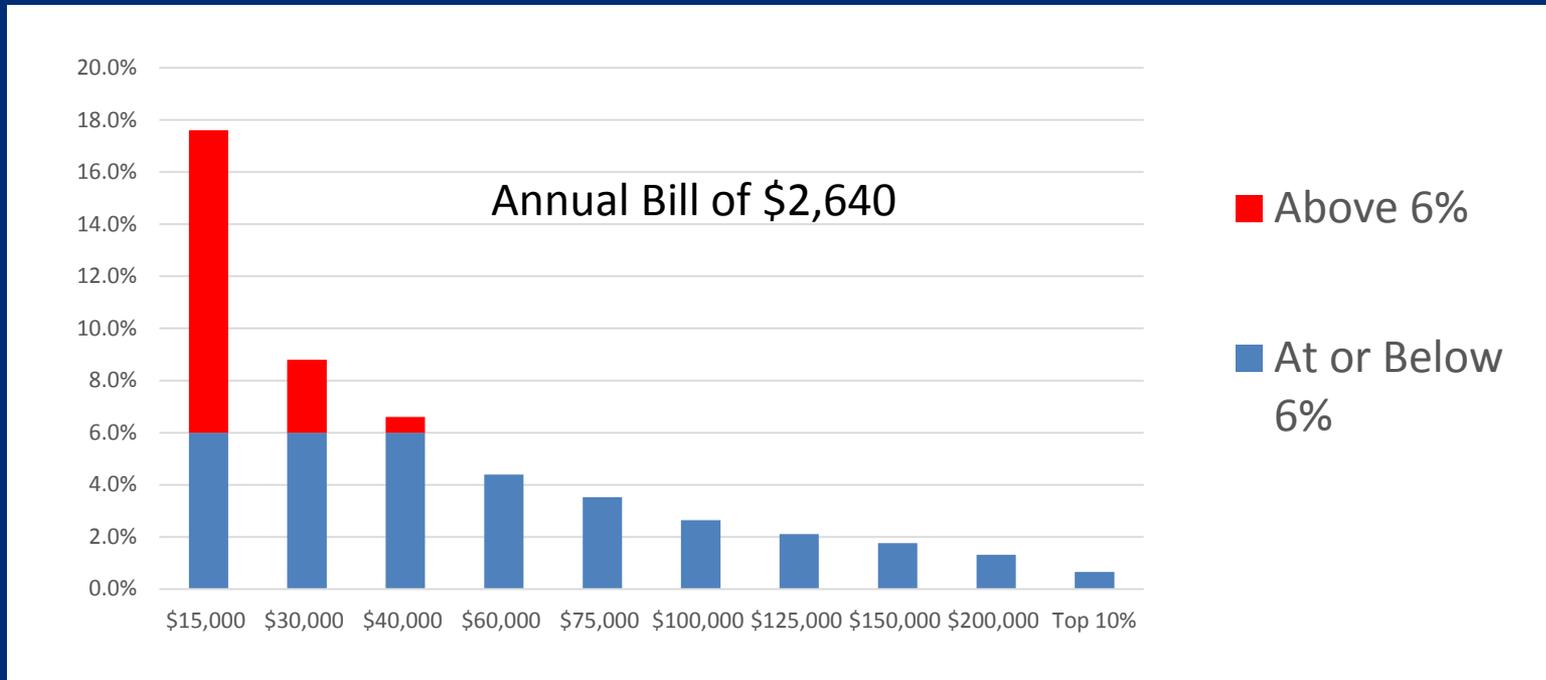
Reforming the Energy Vision: Goals

- Making energy more **affordable**
- Putting **customers at the center**
- Creating new **jobs** and business **opportunities**
- Building a more **resilient energy system**
- **Improving** our existing energy programs and infrastructure
- Protecting New York's **natural resources**
- **Empowering New Yorkers** to make more informed energy choices
- Supporting **cleaner transportation** options
- Helping **clean energy innovation** grow

Engaging Communities & Customers

- Distributed System Implementation Plans (due June 2016)
- Community Solar / Distributed Generation
- Reforming ESCO rules
- Increase the informational value of customer bills
- Full value for Distributed Resources and Energy Efficiency

Energy Bill as a Percentage of Income



REV Demo – National Grid Solar Fruit Belt

- 100 rooftop solar systems for LMI customers
- Solar will be in front of the meter
- Available for customers that host a system & those that do not
- Located in Buffalo's Fruit Belt neighborhood
- Solar bill credits + energy efficiency = energy bill savings
- Opportunity to test grid benefits of localized solar

REV Demo – National Grid Solar Fruit Belt

	Tier I	Tier II	Tier III
Customer Benefits	100 Participants	50 Participants	Additional 150 Participants
Energy Efficiency Services	✓	✓	✓
Rooftop Solar Engineering Assessment	✓	✓	✓
Solar Bill Credits	✓	✓	
Rooftop Solar PV System	✓		
Minor Roof & Electric Panel Repairs (if needed)	✓		

REV Demo – Brooklyn Queens Demand Management

- Need - \$1.2 billion substation to accommodate demand, current system will be overloaded by 69 MW by 2018
- Solution – 52 MW through EE, DM and clean generation, 17 MW through traditional investment (12 MW needed this summer)
- 310,000 customers in the area, including...
- 29,000 public housing apartments in 60 buildings

REV Demo – Brooklyn Queens Demand Management

- 720 multi-unit buildings / 5,000 apartments are already participating for a load reduction of 3 MW
- More than 3,800 small businesses have taken or have agreed to take energy efficiency steps for an additional reduction of nearly 5.5 MW
- What does customer engagement look like?

Community Distributed Generation (CDG)

- Critical tool to effectuate many REV principles
- Expand access and increase affordability
- Compliment to other programs and policies
- Embodies the commitment to low-income energy users as part of the REV initiative



Overview of CDG foundations

- At least 10 members must participate
- Members must be located in the same utility territory and NYISO load zone as the project
- Minimum member allocation of 1,000 kWh annually
- Maximum Member Allocation of the member's historic average annual consumption

Overview of CDG foundations

- Membership terms, including exit or transfer, are defined by sponsor/member contract
- Utility service will not be affected if a member's participation is terminated by the sponsor, for non-payment or otherwise
- Members can alter, transfer or give up ownership after providing 30-day notice

CDG Low-Income Stakeholder Collaborative

- Investigate barriers and deliberate solutions
- Working Groups
 - Financing
 - Energy Usage Data
 - CDG Customer
 - Incentives
 - Oversight
- Report and recommendations forthcoming

Low-income affordability Order

- Address the energy affordability crisis
- Energy burden at or below 6% of household income
- Inter-agency task force
- Enhanced low income discount programs will serve 1.65 million customers

REV Track 2 – Affordability metrics

- In the long-term, utility revenues need to reflect incentives to maintain affordability for lower-income customers, in the near-term, REV steps forward
- Scorecards - Measure desired outcomes, but no direct impact on regulated earnings opportunities
 - Reductions in both terminations and arrearages
 - Increased DER participation
 - Household energy burden
 - Identify high usage customers and customers with high arrearages as priority for energy efficiency measures
- Earnings Adjustment Mechanisms - uniform approach for reducing terminations and arrearages; consider on case-by-case basis



REV Track 2 – Rate Design

- Improvements in rate design are essential for customer and system benefits
- Accurate price signals are key
- Rate design improvements must be coordinated with a place to reduce overall energy burden
- Staff to consult with stakeholders to define scope of rate design study that will analyze potential impacts of a range of mass-market rate reform scenarios

REV – Clean Energy Advisory Council (CEAC)

- CEAC formed as part of the Clean Energy Fund
- Working group structure w/ broad participation
- Working Group on low/moderate-income clean energy
 - Investigate alternative approaches to improve consumer value of clean energy services
 - Report will inform NYSERDA's LMI investment plans and utility energy efficiency programs

Other REV developments impacting low-income

- Clean Energy Standard
- Value of Distributed Energy Resources
- Community Choice Aggregation
- ConEd AMI Order
- Data, data, data



Thank you!

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