REV Update

Low Income Forum on Energy

2017 Regional Meetings

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NYS Department of Public Service
Reforming the Energy Vision
Case 14-M-0101
REV is Governor 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.
New York’s Electric Grid

- Current system built to meet peak demand during hottest summer days
  - Idle nearly half the time
  - Costs customers around $2B a year
- Overall demand for electricity is flat
  - Peak demand continues to increase, resulting in even higher costs to customers
- In last 10 years, maintaining grid has cost $17B
  - If not addressed, $30B will be spent in next decade
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.
Distributed energy resources

- On-site power
- Demand response
- Storage
- Distributed generation
- Microgrids
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
REV goals

- Make energy more affordable
- Support cleaner transportation
- Improve existing energy programs, infrastructure
- Build a more resilient energy system
- Help clean energy innovation grow
- Create new jobs and business opportunities
- Protect NY’s natural resources
- Empower New Yorkers to make more informed energy choices
Central Hudson “CenHub” marketplace
  - Online portal for energy products and services that provides customers with personalized recommendations and offers an enhanced data analytics package for customers who want greater insight into their energy use

Consolidated Edison - CONnectED Homes Marketplace
  - Marketing platform that targets residential customers with relevant messaging from DER providers on the bill, by email, and through an online marketplace
REV Demonstration Projects

• Orange and Rockland Utilities (O&R)
  – Residential Online Marketplace
    • Online engagement platform that leverages customer data and analytics to help customers find energy products and services that meet their needs

• Rochester Gas and Electric (RG&E)
  – Energy Marketplace e-commerce site
    • RG&E will test energy-related online transactions, customer satisfaction, and the delivery of more comprehensive energy solutions, allowing RG&E to connect with customers on a range of DER offerings through targeted marketing and tailored content
REV Demonstration Projects

- New York State Electric & Gas (NYSEG)
  - Community Energy Coordination (CEC)
  - NYSEG partners with a consulting firm to:
    - aggregate local demand for clean energy technologies
    - target outreach to areas where DERs can provide the greatest system benefits
    - orchestrate a bulk purchase from providers on behalf of customers to lower costs and increase benefits
REV Demonstration Projects

• National Grid
  – Demand Reduction Demonstration Project in Clifton Park
    • Tests infrastructure, customer outreach and engagement, deep energy insights and actionable information, as well as price signals and DER products and services
    • Incentivizes customers to reduce peak electric load and overall electric and gas energy use
  – Fruit Belt Neighborhood Solar – Buffalo
    • Helps low- to moderate-income customers access clean energy while reducing arrears through a utility-owned neighborhood solar project in an economically distressed area
    • Tests how solar can be paired with communications technologies to deliver benefits to the overall electricity system
Community Distributed Generation
15-E-0082
Community Distributed Generation

- 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
CDG Parameters

- Members must be located in the same utility territory and NYISO load zone as the project
- At least 10 members must participate
- Minimum member allocation of 1,000kWh annually
- Membership terms defined by sponsor/member contract
- Utility service not affected by participation status
- Members can alter, transfer or give up ownership after providing 30-day notice
CDG Proceeding Updates

- On March 9, 2017, the PSC reduced the minimum membership requirement for CDG projects proposed for multiple-unit buildings
- Several parties petitioned the PSC to waive previous ten-member minimum
- Waiver opens up project development in dense urban areas, better serves low income communities
PSC initially ordered Staff and interested parties to investigate, evaluate low income customer participation in CDG

Working groups examined key barriers to low income customer participation and develop solutions

Staff Report found no scalable solutions

Staff is investigating utility ownership
Value of Distributed Energy Resources

15-M-0751
Value of DER Order

- On March 9, 2017, the PSC enacted a new compensation structure to more accurately and efficiently value DER in NY
- Advances Clean Energy Standard
  - Half of New York’s electricity to be supplied by renewable energy by 2030
- Enables solar power, energy storage and other small, local clean energy systems to grow faster across NY
Value of DER Order

- First step in moving beyond ‘net metering’ (NEM) to an improved compensation system
- Establishes first phase of a multi-year effort to create a more market-driven approach to optimizing the use of clean, distributed energy systems
- Order provides a smooth transition, maintains NEM for existing solar energy systems
- Directs DPS Staff to issue recommendations on oversight of DER providers for PSC consideration
- Commences Phase Two to accelerate further improvements to the Value of DER methodology
Low Income Affordability

14-M-0565
Low Income Program Design

- Broad-based or targeted
- Arrears forgiveness
- Reconnection fee waivers
- Monthly discount
  - Fixed
  - Percentage/volumetric
  - Income-based
Program Goals

- Streamline utilities’ low income programs
- Work toward energy affordability
- Determine appropriate eligibility
- Discounts set at levels sufficient to achieve 6% energy burden on levelized monthly bills
- Maximize benefits
- Minimize costs
Adopts a policy that an energy burden at or below 6% of household income shall be the target level
Attempts to reach all 2.3 million low-income households in New York
Directs Staff to work with sister agencies to create an inter-agency task force
Directs utilities to open low income discount programs to all households that currently receive a HEAP benefit, regardless of fuel or benefit type
Low Income Order

- A default process of setting rate discount levels is established which varies levels based on need
  - Utilities allowed some flexibility in designing discounts
    - Alternatives must be shown to accomplish the same results and leave no class of participant underserved
- Monthly bill discounts – tiered system
  - Electric customers: between $11 and $44
  - Gas customers: between $3 and $33
- Customers enrolled in budget billing (opt-out permitted)
Low Income Order

- Program costs will be borne by all classes of customers
  - Specific mode of cost recovery will be determined in rate cases
- Total funding capped at 2% of total electric or gas revenues for sales to end-use customers
- Arrears forgiveness programs may continue if their funding remains below 10% of the total budget
  - Many will be curtailed or discontinued by the majority of utilities as the costs exceed budget limits
- Reconnection fee waivers also limited to no more than 1% of the budget
Low Income Order

Statewide, the enhanced low income discount program will serve approximately 1.65 million customers at a cost of approximately $260 million, an increase of approximately 87% to existing programs.
Low Income Order Modifications

- On February 16, 2017, the PSC approved implementation plans for the major utilities to increase the number of low-income households eligible to receive discounts
- Restored discounts to direct voucher/utility guarantee customers
- Heating discounts modified
  - Electric heating customers will receive up to $76, up from $27
  - Gas heating customers will receive discounts up to $67, an increase from $50
Utilities’ low income program implementation plans were approved with certain modifications.

Utilities must expand enrollment to all HEAP recipients by no later than December 31, 2017.

Tiered discount levels must be implemented by no later than December 31, 2018.

- Deadlines designed to allow utilities sufficient time to carry out the substantial system and programming changes – No additional funds for billing system updates.
Retail Energy Market

- PSC began encouraging competitive market for energy in 1994
- Customer can purchase gas and/or electric from an Energy Service Company (ESCO)
- ESCO must be approved by the PSC

Retail Access Order

- Amended Feb. 25, 2014
- Modifies Uniform Business Practices, structure of retail access
- Affects all residential customers
- Standardized format for renewal notices
- Sales reps must identify themselves and their employer
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Order Resetting Energy Markets

- Issued by PSC on Feb. 23, 2016
- Prohibits new ESCO contracts with residential or small non-residential customers unless they provide guaranteed cost savings, or at least 30% of supply is from renewable energy
- Requires ESCOs to obtain consent prior to renewing that customer from a fixed rate or guaranteed savings contract into a contract that provides renewable energy but no guaranteed savings
- Requires ESCO CEO or equivalent corporate officer to certify enrollments comply with Order
- Strengthen the process for revoking ESCO eligibility to do business in NY if ESCO violates State regulations
Order Resetting Energy Markets

- Several ESCOs filed a lawsuit against the PSC on March 3, 2016 in Albany County Supreme Court
- On March 4, 2016, the court issued a Temporary Restraining Order which stayed parts of the PSC Order
- The ordering clause strengthening the ESCO enforcement process was not stayed and is still in effect
Moratorium on Low Income Customer Enrollments and Renewals - July 15, 2016

- Directed ESCOs to de-enroll any customer identified by utility as a low income program participant
  - Existing contracts may continue until expiration
- Utilities must place a block to prevent all low income accounts from being enrolled with an ESCO
- Utilities must send letters to affected customers informing them that they are not eligible to take ESCO service and will be returned to full utility service
On September 28, 2016, a lawsuit was filed in Albany County Supreme Court against the Commission by several ESCOs.

On December 16, 2016 the Commission Adopted the Order on the Prohibition on Service to Low Income Customers by Energy Service Companies. A contempt motion was filed by ESCOs with the Supreme Court.

The decision on this case is expected by mid-May.
Hearings & Collaboratives

- PSC determined retail markets serving mass-market customers are not providing sufficient competition or innovation to properly serve consumers
- On December 2, 2016, PSC issued a Notice of Evidentiary and Collaborative Tracks and Deadline for Initial Testimony
- Track I - Evidentiary Hearing
  - Sworn testimony and exhibits, subject to cross examination, followed by filing of post-hearing briefs prior to PSC action
- Track II - Collaborative Meetings
  - Party meetings, collaborative or party reports or proposals, and comment period prior to PSC Action
PSC Considerations

- Should ESCOs be completely prohibited from serving their current products to mass-market customers?
- Should regulatory rules and the Uniform Business Practices applicable to ESCOs be modified to implement such a prohibition, to provide sufficient additional guidance as to acceptable rates and practices of ESCOs, or to create enforcement mechanisms to deter customer abuses and overcharging?
- Can new ESCO rules and products be developed to provide real value to mass-market customers at just and reasonable rates?
Questions?

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NYS Department of Public Service
Clean Energy Fund Updates
Focus on LMI Initiatives

2017 LIFE Regional Meeting Series
Clean Energy Fund (CEF)

- Reduce ratepayer collections
- Drive economic development
- Accelerate the use of clean energy and energy innovation
- Reduce greenhouse gas emissions
What is the CEF?

• 10-year, $5 billion funding commitment
• Supports Governor Cuomo’s Reforming the Energy Vision (REV), a strategy to build a clean, resilient, and affordable energy system for all New Yorkers
• Reduces cost of clean energy by accelerating adoption of energy efficiency to reduce load while increasing renewable energy to meet demand
The CEF Supports:

- Aggressive Clean Energy Standard commitment that requires 50% of New York State’s electricity come from renewable energy sources by 2030
- Goals to make 500,000 homes and 20,000 businesses more energy efficient, and bring solar to 150,000 new homes and businesses by 2020
- Customer savings
  - Reduction in total annual ratepayer collections for NYSERDA activities- $1.5 billion by 2025 ($91 million in 2016)
  - More than $39 billion in bill savings over 10 years of CEF
NYSERDA’s New Direction - Why

- Substantial restructuring of NYS programs through REV
- CES requires 50% of NYS electricity come from renewable sources by 2030
- New approaches meaningfully increase scale of clean energy in NYS and achieve the level of energy savings and greenhouse gas reductions that are core State policy objectives
- State resources can have more impact if expended in more strategic ways (i.e., by focusing on reducing soft costs as opposed to subsidizing hard costs)
NYSERDA’s Energy Programs and Investment Under the CEF

Four Portfolios:

• Market Development — $2.7B State funding; $8.9B private investment
• NY-Sun — $961M State funding; $9.2B private investment
• NY Green Bank — $782M State funding; $8B private investment
• Innovation and Research — $717M State funding; $3.3B private investment
Market Development

Reduce costs and accelerate customer demand for energy efficiency and other behind-the-meter clean energy solutions, and increase private investment.

Focus on strategies to reduce soft costs and other nonmonetary barriers:

• Provide information, data, and education
• Offer technical assistance and provide standardized, simple, robust tools
• Provide quality assurance
• Pilot, demonstrate, and replicate new technologies and business models
• Aggregation to reduce costs through economies of scale
NYSERDA LMI Portfolio

Initiatives to improve energy affordability for LMI households and improve access to clean energy solutions for LMI households and affordable building owners. $234.5 million of CEF funds committed over first three years of CEF.

- Standard Offer Programs
- Market Development Initiatives
- Awareness and Education
- Creative finance solutions
- Emphasis on aligning policy and deployment with other program administrators for greater impact and reduced admin burden
<table>
<thead>
<tr>
<th>Initiative</th>
<th>Target Market</th>
<th>Service Provided</th>
<th>Est. Annual Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>EmPower NY</td>
<td>1-4 family homes-owners and renters; renters in MF buildings</td>
<td>Energy efficiency, in-home education</td>
<td>$25 million</td>
</tr>
<tr>
<td>Assisted HPwES</td>
<td>1-4 family homes</td>
<td>Energy efficiency</td>
<td>$8 million</td>
</tr>
<tr>
<td>Multifamily Performance Program</td>
<td>Affordable multifamily buildings</td>
<td>Energy efficiency</td>
<td>$10 million</td>
</tr>
<tr>
<td>Affordable New Construction</td>
<td>Affordable low and high rise new construction</td>
<td>Building performance</td>
<td>$7 million</td>
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<tr>
<td>Affordable Solar (Rooftop)</td>
<td>Single family LMI homeowners</td>
<td>Incentives for rooftop solar</td>
<td>$7 million (multi-year budget)</td>
</tr>
<tr>
<td>Affordable Solar Predevelopment and Tech Assistance</td>
<td>Shared solar/multifamily solar that provide benefit to LMI residents</td>
<td>Tech assistance for the development of a shared solar project that benefits LMI residents</td>
<td>$3.6 million (multi-year budget)</td>
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## NYSERDA LMI Initiatives

### Market Development Initiatives

<table>
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<tbody>
<tr>
<td>RetrofitNY</td>
<td>Affordable multifamily buildings, A&amp;E firms, manufacturing, financiers</td>
<td>Solutions development through engagement with industry, design competition, and piloting solutions</td>
<td>$30.5 million (10 year budget)</td>
</tr>
<tr>
<td>REVitalize</td>
<td>Organizations that serve or represent lower income and environmental justice communities</td>
<td>Technical assistance for the planning/ development of community-scale clean energy projects</td>
<td>$325,000 (3 year budget)</td>
</tr>
<tr>
<td>Low-Income Forum on Energy</td>
<td>Organizations and individuals that serve low-income energy customers</td>
<td>Awareness and education</td>
<td>$1.3 million (10 year budget)</td>
</tr>
<tr>
<td>Healthy Homes Feasibility</td>
<td>Single family and multifamily buildings</td>
<td>Study the potential for integrated health, housing, and energy intervention</td>
<td>$215,000 (total budget)</td>
</tr>
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Upcoming Initiatives

• Community Energy Engagement Program
  – RFP 3588
  – Community outreach with focus on improving affordability and increasing deployment of clean energy solutions
  – Residential, multifamily, and small business

• Access to shared solar
  – Provide access and energy bill savings to LMI households
  – Expand/support the community solar market overall
  – Encourage community-driven projects and a range of project types/locations
  – Exploration of debt financing or tax equity support from NYGB

• LMI market characterization
Coordination

Interagency Task Force
- DPS, NYSERDA, HCR, OTDA, Gov’s Office
- 2017 SOTS 20k homes initiative

Clean Energy Advisory Council LMI Working Group
- 28 stakeholders
- Recommendations for improving the delivery of clean energy services to LMI households. Report filed February 2017, 43 recommendations
- Currently on hiatus

Philanthropic engagement
Questions

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