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## OVERVIEW OF THE REFORMING THE ENERGY VISION (REV) PROCEEDING IN NEW YORK STATE

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# NEW YORK'S "REFORMING THE ENERGY VISION" (REV)

- The New York (NY) Public Service Commission (PSC) found that significant technological innovation in software and hardware systems that improve the intelligence and flexibility of the delivery system have **significantly reduced the cost and increased the value of DERs**, and present the opportunity to **fundamentally improve how utilities meet their service obligations**.
- The NYPSC stated that business-as-usual is **no longer a viable option**.
- Utilities now have the ability to capture the value of third-party supplied customer-sited resources and a smarter grid to **improve the reliability, resiliency, and value of the system**.
- When enabled by adequate information and pricing, DERs can drive greater system efficiencies, facilitate the integration of variable renewable resources both in front of and behind the meter, and **reduce the overall energy bill for the benefit of all New York customers**.

*NYPSC Staff White Paper on Ratemaking and Utility Business Models, July 28, 2015.*

# NEW YORK REV – PROCEEDING DETAILS

- The NYPSC initiated a comprehensive docket ([\*Case 14-M-0101\*](#)) that investigates potentially sweeping electric industry regulation addressing perceived unmet market needs.
- The REV Proceeding introduced two principle questions for the electric utilities regulated by the NYPSC:
  1. **What role should the distribution utility play** in enabling system efficiency and market based deployment of DER and load management?
  2. **What changes are needed in New York’s regulatory, tariff, and market design and incentive structures** to better align utility interests with achieving policy objectives?
- Case opened in April 2014; utility plans and implementation scheduled in 2016; the original schedule has slipped.
- Some [key NYPSC documents](#):
  - [Reforming the Energy Vision DPS Staff Report and Proposal](#) (Apr 2014)
  - [White Paper on Ratemaking and Utility Business Models](#) (Jul 2015)
  - [Distributed System Implementation Plan Guidance](#) (Oct 2015)

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# Together

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# TWO “TRACKS” WILL GUIDE THE DEVELOPMENT OF NEW REGULATORY POLICY

**Track 1** – Focused developing the *Distribution System Platform* (“DSP”) model; also address the roles different entities will play, wholesale market impacts, customer engagement, and other key features.

**Track 2** – Evaluation of regulatory changes and ratemaking issues that must be considered in order to transition to a new mode of interaction with energy in New York.

## Track 1 – Distributed System Platform

1. REV outcomes, measurements, and policy goals alignment
2. DER ownership models
3. DSP Identity
4. Establishing a framework for measuring benefits and costs (“BCA Framework”)
5. Transition for existing clean energy programs
6. Enhanced services (from utilities and/or third parties)
7. Data Access (protection, privacy, market facilitation)
8. Other issues of interest to parties

## Track 2– Regulatory Issues

1. Outcomes-based ratemaking
  - Metrics and benchmarking
  - Incentives, disincentives, symmetry
  - Neutralizing utility CapEx bias
2. Long-term rate plans
  - Cost recovery, equity returns
  - Encouraging optimal investment
  - “Reopeners” (per performance)
  - Outputs vs. inputs (consideration of RIIO design elements)
3. Rate design
  - Internalizing externalities in rates
  - Pricing innovative services
  - New rate designs (e.g., standby rates)

# CHALLENGES AND OPPORTUNITIES ADDRESSED BY REV

Category	Challenges	Opportunities
Regulatory Models and Economic Efficiency	<ul style="list-style-type: none"> <li>• Distribution system, design, development, and utilization</li> <li>• Aging infrastructure and flat sales</li> <li>• Fuel Diversity</li> <li>• System Benefits Charge</li> </ul>	<ul style="list-style-type: none"> <li>• Modernized regulation and markets</li> <li>• Intelligent infrastructure investment</li> <li>• Stabilizing customer bills</li> <li>• Realizing the potential of storage and innovative technologies</li> </ul>
System Modernization	<ul style="list-style-type: none"> <li>• Information technology</li> <li>• Cyber security</li> </ul>	<ul style="list-style-type: none"> <li>• Customer choice and animating markets</li> <li>• Reliability and power quality</li> <li>• Resilience</li> <li>• System Security</li> </ul>
Clean Energy and Environment	<ul style="list-style-type: none"> <li>• Climate</li> <li>• Plug-in electric vehicles</li> <li>• Combined heat and power (CHP)</li> <li>• Integrating distributed renewable generation</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced emissions and system heat rate</li> <li>• Energy efficiency</li> <li>• Accommodate low-carbon generation</li> <li>• Electrification of transportation systems</li> <li>• Geothermal heating systems</li> </ul>
Universal Service	<ul style="list-style-type: none"> <li>• Affordability</li> <li>• Contraction of utilities' customer base</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain universal affordable service</li> <li>• Secure utilities' financial stability</li> </ul>

# PRODUCTS AND SERVICES ENVISIONED BY THE MDPT GROUP

Service Type	Description	Potential Sellers
Aggregation	This service involves assembling a portfolio of DERs for the purpose of enabling those smaller resources to participate in the wholesale or distribution markets for which each individual DER might be ineligible, or for which the costs or complexity of participation would make it infeasible for an individual DER.	<ul style="list-style-type: none"> <li>• ESCO</li> <li>• Conventional Demand Response Aggregator</li> <li>• Utility (as POLR)</li> </ul>
Billing	This service involves assembling customer usage data and combining it with the applicable rate structures to create a bill for the customer on a periodic basis.	<ul style="list-style-type: none"> <li>• Independent Contractor</li> <li>• Utility</li> <li>• ESCO</li> <li>• Meter Service Provider</li> </ul>
Customer Data Analytics	This service would consist of analyzing customer meter data and demographic, real estate and other energy related data to assist suppliers in their marketing efforts.	<ul style="list-style-type: none"> <li>• Data Analytics Provider</li> <li>• Utility</li> </ul>
Delivery Service	This service includes transporting electric power to customers from the transmission system.	<ul style="list-style-type: none"> <li>• DSP</li> </ul>
Data Exchange	The data exchange would be the clearinghouse for information about DERs, aggregators and customer engagement opportunities.	<ul style="list-style-type: none"> <li>• DSP</li> <li>• Independent Contactor</li> </ul>
DER Services	This suite of services includes sales and installation of any type of DER equipment, management of customer energy-using devices and their interaction with the markets, and the operations and maintenance the DER equipment.	<ul style="list-style-type: none"> <li>• DER Provider</li> <li>• ESCO</li> </ul>



# PRODUCTS AND SERVICES ENVISIONED BY THE MDPT GROUP (CONT.)

Service Type	Description	Potential Sellers
DG/DER Interconnection	This service involves processing a customer or DER provider request to interconnect a new or modified DER.	<ul style="list-style-type: none"> <li>• Utility as distribution owner/asset manager</li> </ul>
Energy Advisory	This service involves providing consulting services to customers seeking to install DERs.	<ul style="list-style-type: none"> <li>• ESCO</li> <li>• Aggregator</li> <li>• DSP</li> </ul>
Enhanced Reliability and Resiliency Services	This service involves providing premium levels of reliability and resiliency over and above reliable electricity delivery.	<ul style="list-style-type: none"> <li>• DER Provider</li> <li>• ESCO</li> <li>• Utility</li> </ul>
Financial Services	These services include a broad range of financial transactions, such as leases and loans to enable customers to install DERs and hedging services to provide customers with price stability or other benefits with respect to their energy costs.	<ul style="list-style-type: none"> <li>• Financial Service Providers</li> <li>• ESCO</li> <li>• Utility</li> <li>• NY Green Bank</li> </ul>
Market Settlement	This service involves processing market quantities into invoices and processing billing and collection of amounts transacted in the wholesale or distribution markets.	<ul style="list-style-type: none"> <li>• NYISO</li> <li>• DSP</li> </ul>
Metering	This service involves measuring the quantity of the product consumed by the customer.	<ul style="list-style-type: none"> <li>• Meter Service Providers</li> <li>• Utility</li> </ul>

# PRODUCTS AND SERVICES ENVISIONED BY THE MDPT GROUP (CONT.)

Service Type	Description	Potential Sellers
Monitoring and Verification	This service involves determining a baseline consumption level for DERs that do not have direct metering and are participating in DR programs and then comparing the baseline to the actual consumption to determine the demand response actions. These results are then communicated to appropriate parties, such as the NYISO, to settle.	<ul style="list-style-type: none"> <li>• ESCO</li> <li>• Aggregator</li> <li>• Utility</li> </ul>
Retail Supply (Generation and Energy)	This service includes all of the services that are required to serve the needs of retail customers, including energy, installed capacity, ancillary services and administrative costs of participating in the NYISO wholesale markets, and all administrative costs associated with metering, billing, back office and providing customer service.	<ul style="list-style-type: none"> <li>• ESCO</li> <li>• Utility (as POLR)</li> </ul>

# APPROVED REV DEMONSTRATION PROJECTS

*“The intent of early REV demonstrations is to advance the development of new utility and third party service or business models and to gain experience with integration of distributed energy resources. Demonstrations will inform regulatory changes, rate design, and provide utilities with the opportunity to learn how best to use these resources in system development, planning, and operations.”<sup>1</sup>*

Utility	Project Name	Description
Con Edison	Building Efficiency Marketplace	A clean energy project origination, bidding, and technical support platform for small commercial customers
Con Edison	Clean Virtual Power Plant	Aggregate and manage bundled solar and energy storage projects
Orange & Rockland	DER Residential Offering Platform	Platform to help customers find energy products and services
Iberdrola (NYSEG)	Community Energy Coordination	Empowers communities to achieve their clean energy goals
Iberdrola (RG&E)	Flexible Interconnect Capacity Solution	Offer new, less costly, and faster ways for customers and 3 <sup>rd</sup> parties to connect large DG projects to the utility grid
Central Hudson G&E	Central-E Exchange	Online portal for energy products and services
National Grid	Fruit Belt Community Solar	Help low to moderate income customers access clean energy through a local neighborhood solar program

<sup>1</sup> Case No. 14-M-0101, NYPSC Order Adopting Regulatory Policy Framework and Implementation Plan, February 26, 2015.