



Pilot Project Initiative

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Background

- ◆ **The NYISO's Project list for 2017 includes the development and implementation of a framework to permit small-scale pilot project integration**
- ◆ **Initial stage of this initiative has been to investigate how other ISO/RTOs have used pilot projects in their markets**
- ◆ **NYISO will develop a framework to establish pilot project programs in coming months**

Overview of ISO/RTO Pilot Project Programs

- ◆ Other ISO/RTOs developed initiatives to permit testing of new technology/resources
- ◆ For example:
 - *PJM: Customer Load Reduction Pilot Program (2000); Advanced Technology Pilot Program (2010)*
 - *California ISO: Participating Load Pilot Agreements (2009); AES Energy Storage Agreement (2010)*
 - *ISO-NE: Demand Response Reserve Pilot Project (2005); Alternative Technologies Regulation Pilot Program (2008)*

Overview of ISO/RTO Pilot Project Programs (cont'd)

- ◆ Pilot project programs have common themes, but details vary:
 - *Participants – open to existing ISO/RTO MPs and to entities that are not MPs*
 - *Duration – both fixed time or open-ended*
 - *Program size – cap on MW, number of participants, or both*
 - *Payments – made through existing tariff structure, other method (e.g., out of market payments), or none at all*

Example: ISO-NE Regulation Service from Alternative Technologies

- ◆ **2008 pilot program to permit physical load resources (*i.e.*, demand response) to provide regulation when:**
 - *Resource was dispatchable by ISO-NE*
 - *Capable of receiving and responding to 4-second AGC signals*
- ◆ **ISO-NE had not previously permitted DR resources to provide Regulation service; goal was to test capabilities prior to establishing permanent tariff rules**

Example: ISO-NE Regulation Service from Alternative Technologies (cont'd)

◆ Participation:

- *Participants required to meet a number of eligibility and technical requirements including interconnection and metering requirements*

◆ Duration:

- *ISO-NE expected a 12-month trial period*
- *The testing period was subsequently extended for further review*

◆ Size:

- *Limited to 13 MW total participation;*
- *No more than 10 MW from a single technology or 5 MW from a single resource*

Example: ISO-NE Regulation Service from Alternative Technologies (cont'd)

◆ Payments:

- *Resources were paid through the market, but*
 - Resources did not submit offers into the Regulation Market
 - Resource bids were not used in the determination of the Regulation Clearing Price
- *Participating resources were paid a “mileage payment” (based on movement within the regulating range, and a “time-on” payment (based on the amount of time the resource is online and available)*
 - Pilot project participation payments were charged to Market Participants proportionally (based on “Adjusted Regulation Obligations”) in accordance with ISO-NE Market Rule 1

NYISO Considerations

- ◆ **NYISO is seeking to test enabling technologies (e.g., software and communication systems) and the physical capabilities of DER prior to drafting final DER integration rules**
- ◆ **Will be developing pilot project program market design concepts in Q1 and Q2 2017, and intends to begin reviewing pilot project proposals by the end of 2017**
- ◆ **NYISO is not intending to pursue software changes for pilot projects at this time**
- ◆ **NYISO is evaluating what (if any) tariff changes are required to enable pilot projects**

Pilot Project Examples

- ◆ **Potential future pilot initiatives include:**
 - *Developing appropriate NYISO – Utility coordination procedures*
 - *Testing whether heterogeneous aggregations are able to provide accurate performance profiles and follow ISO dispatch instructions*
 - *Studying prequalification and certification testing for aggregations*
 - *Developing appropriate DER metering rules and metering configurations*
 - *Studying appropriate baseline methodologies for DER that are load reduction resources*
 - *Investigating the effectiveness and usability of granular pricing to market participants*

Next Steps

- ◆ **There are still many issues to address including:**
 - ***Participation: NYISO intends to open pilot projects to existing MPs and to developers who have not previously participated in NYISO markets***
 - ***Duration and Size: The duration and size of pilot projects are expected to vary; NYISO will work with stakeholders to develop appropriate caps to project duration and size***
 - **Reliability considerations will be factored into the limitations for pilot project duration and size caps**

Next Steps (cont'd)

- ◆ **Other issues the NYISO will address:**
 - *Payments: How are participants paid (if at all) for the services provided, and how are those costs allocated*
 - *Software – How can the NYISO integrate pilot projects into its existing software, and what changes may be necessary in future years*
 - *Timeline – Certain pilot initiatives can be developed more quickly, while more complex initiatives are on a longer time horizon (e.g., those projects that require software enhancements)*

Next Steps (cont'd)

- ◆ **Will present progress at upcoming MIWGs**
 - *March – General framework discussion*
 - *April – Initial Pilot Project ideas*
- ◆ **Intend to have a full pilot project framework design by end of Q2**
- ◆ **Request an initial set of project proposals by Q4 2017**

The mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefit to consumers by:

- *Maintaining and enhancing regional reliability*
- *Operating open, fair and competitive wholesale electricity markets*
- *Planning the power system for the future*
- *Providing factual information to policy makers, stakeholders and investors in the power system*

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