Stakeholder Engagement Conference
Customer Data – Monitoring & Control – Hosting Capacity
Q & A Sessions
August 18, 2016

Time	Topic
9:00 - 9:15	Introductions & Stakeholder Engagement Process Overview
9:15 – 9:45	Overview of Customer Data
9:45 – 10:15	Customer Data Q&A
10:15 – 10:45	Overview of Monitoring & Control
10:45 – 11:15	Monitoring & Control Q&A
11:15 – 11:45	Overview of Hosting Capacity
11:45 – 12:15	Hosting Capacity Q&A
12:15 – 1S2:30	Wrap-up & Next Steps

The presentation material used during the webinar is provided on the joint utilities website. The Q&A portion of the webinar incorporated questions submitted in advance and during the webinar. For additional information please contact info@jointutilitiesofny.org.

Customer Data

How was the scope of Market Operations - Customer Data topic determined?

- The scope of Customer Data subject was determined on the requirements of NY REV.
- PSC Guidance defined a number of topics that the JU were directed to respond to in the sDSIP
- JU worked with Stakeholders to form an Advisory Group which brought together stakeholders and JU members to review and approve the Customer Data related topics identified in the Guidance
- Those topics were incorporated into a Charter for the customer data engagement group and were the basis for the Stakeholder Engagement Group discussions that took place over the past 6 weeks.

You indicated that the JU may charge a fee for certain types of data – specifically "value added" data. Could you please explain why?

- Data sets that are not routinely developed or require customized analysis requires additional work to create, validate and communicate.
- This type of data also has inherent market value, which a requestor should compensate the utility for providing. These fees can be returned to the benefit of all ratepayers and this approach is consistent with the objectives of REV, in terms of creating future revenue streams

Why is aggregated customer usage data considered value-added and subject to a fee for producing?

- The creation of standard and non-standard aggregated data reports meet the criteria we have established that define Value-Added services, which is subject to a fee.
- Aggregated data, whether standard or non-standard, has inherent value which should be captured through a fee and can be returned to the benefit of all ratepayers. This approach is consistent with the objectives of REV, in terms of creating future revenue streams

What will the fee be for value added data?

- Any fees or charges for value-added data will be determined under Track 2 proceeding

Regarding Customer Enrollment and Third Party authorization: Are the JU's willing to work with DER providers and other stakeholders to develop an enrollment and authorization process that improves the customer experience?

- Yes, the JU would like to work with stakeholders to understand the business requirements and customer needs from the stakeholder perspective
- Customer experience is one of several key considerations.
- Needs to be balanced with privacy considerations

How does the implementation of Green Button or other protocols impact ESCOs?

- ESCOs view Green Button as a customer friendly approach that enables customer to see their energy data in a more detailed way.
- ESCOs already have a relationship with the customer and already receive customer data via EDI.
- In order for ESCOs to fully utilize this more advanced data, the data needs to be bill quality, as granular as possible and as near to real time as possible.
- There also has to be an automated method for ESCOs to obtain the data. Receiving the data and having the ability to use it for billing purposes, would open up the market to a variety of different products and value add services that currently are not available to NY customers.

Is consumer privacy an issue when it comes to ESCOs accessing the customer's data?

- No. ESCOs must obtain the consumer's permission to access the data.
- This normally occurs either before or at the time the customer signs up for ESCO service.
- The permission allows ESCO's to receive the customer's usage data in order to bill for products and services provided.

What types of different products could be offered that are not offered in the market place today?

- Products like a "free power day", or "free evenings and weekends" (similar to what the cell phone industry used to offer), prepaid products, and true time of use products are some examples of additional products that could be offered in the market.
- In addition, and probably more importantly, the data could be used to show customers the immediate impact of changed behavior on usage costs (ex. turning off specific appliances).

What type of data would be required to support these new products described in Q9?

- Receive monthly, bill quality hourly interval data via EDI; and
- Next-day AMI meter data via a file transfer protocol (FTP)
- EDI is already in use as an industry standard for many transactions and is fully automated
- Ideal requirements for data delivery frequency and granularity:
- Allow transfer of monthly, bill quality 15- minute interval data via EDI; and
- Next-day AMI meter data in 15-minute intervals via a file transfer protocol (FTP)

Monitoring & Control

What are the ways the JU is considering energy storage ahead and behind the meter to provide capacity, any other service?

- Such assets will likely be incorporated in the dispatch and monitoring of the system.
- There have been discussions with NYISO on these assets in recent meetings. While the discussions aren't very mature yet, the JU is currently considering these assets
- Storage will likely be a resource provided to the DSP

Are the ongoing NYISO discussions re storage anything beyond the official projects?

- The NYISO and Joint Utilities recognize that the technologies are evolving, this also applies to energy storage. Utilities will work together and with the stakeholders to understand markets and operation, however all of the things discussed in M&C and NYISO / DSP coordination apply.
  - o i.e. an energy storage device looks like a generator and a load and all rules would likely apply.

Hosting Capacity

What is the difference between hosting capacity and constraint analysis?

- Hosting capacity is how much DER can be accommodated without major system upgrades.
- Constraint analysis is part of yearly planning process where each utility evaluates existing peak loads and future projections to identify if the existing systems are capable of providing increased load projections. The results of constraint analyses are typically utility based projects to upgrade or install new assets to meet higher load needs. As we go forward, utility alternatives to meet constraint needs will include non-traditional DER solutions to manage load requirements below equipment ratings.

What do the utility DSIPs say about how energy storage will play a role in increasing Hosting Capacity?

- Utilities see a role for storage in the space for managing/increasing Hosting Capacity over time
- The utilities are working with Parties in New York State DPS lead interconnection technical working group where the initial focus is on connecting larger scale solar PV systems. The technical discussions in that platform have focused on the implications of back feeding utility substations and the risk of creating an unintended electrical island as key immediate concerns with active projects in queue within New York State.
- Within the Hosting Capacity EG, it is was highlighted that there were multiple revenue streams for Energy Storage and increasing HC is likely a lower tier value stream behind customer peak load shaving, participation in the NYISO market or utility Demand Response programs.
- Using Storage to increase Hosting Capacity will necessarily depend on a utility understanding its local HC constraints and adequate monitoring and control systems to inform control schemes and feedback loops.
- Overtime, storage will likely be in the form of a contract – where a utility will ask for energy storage to be part of a portfolio to increase hosting capacity within a controlled environment

How does hosting capacity apply within a DER provider's business process?

- The utilities have approached calculating and communicating HC as a primary benefit to DER providers looking to site facilities in the territories
- Once calculated, the utilities will expect to use HC in the following ways:
  - To help inform employees processing small to mid-sized systems with regards to whether utilities have headroom to host a new system. To the extent feasible, utilities will consider including these values in the application review process.
  - As utilities seek to evolve distribution system planning processes, Hosting Capacity values will help identify areas where there is limited capacity to host new or future DG systems and for the utilities to focus reviews on what means are likely to increase capacity in those areas. This will be dependent on policy drivers to expend funds to increase HC whether charged directly to a DER provider or rate based and allocated to all ratepayers.
- Utilities will expect to use HC results to help inform policy drivers where shared DER provider costs may be beneficial based on the available HC in an area.
- Hosting Capacity limitations may be due to a variety of factors such as voltage, thermal, protection. Vendor solutions address different issues (Examples were explored in the EG discussions around increasing hosting capacity).

How does hosting capacity fit into the REV process and REV goals? Explain importance of providing value to DER providers and how DER impacts the distribution system as a whole.

- REV serves to support the State's Vision and Policy goals
  - Enhanced customer knowledge and tools to support management of the total bill
  - Goal to achieve 50% renewable resources in NYS by 2030
  - Goal of reducing GHG emissions by 40% from the 1990 levels
  - Driving major enhancements in statewide EE.

- The development of Hosting Capacity as enabling DER Provider base knowledge as to area marketing, also providing a better understanding of locations where interconnection costs will be lower and considering the data and tools that will be needed in a higher DER penetration future.
- Both the Utilities and Stakeholders have identified the need for more granular grid edge information and the effort to enhance existing data availability and to work on the appropriate tools to evolve design capabilities are key to future success. A great example is the work that EPRI has done to incorporate their programming of a streamlined approach to HC with existing powerflow program providers, such as CYME, Milsoft and Synergi.
- Utilities also see the communication of Hosting Capacity via their corporate websites as additional transparency into our system capabilities and we see this as useful information for third parties seeking to better understand locations where they can site facilities in a more cost effective manner.

What is meant by "unconstrained storage" in the context of hosting capacity?

- Power systems can be assessed in unconstrained or constrained conditions. Unconstrained storage assumes the system is at all time capable of assimilating Distributed Energy Resources.
- As DER levels increase it is expected that parts of the system will have no headroom to accommodate DERs. Storage may be coordinated in such a way that it can provide more headroom.
- For additional information on storage as a constraint relief tool, please see the non-wire alternatives (NWA) engagement group materials.

Please send any further questions or feedback to info@jointutilitiesofny.org