

Behind the Meter Net Generation Model – Cost Allocation for BTM Loads

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Background

- There have been several requests from generators that serve retail load to allow them to participate in the NYISO energy and capacity markets as a generator.
- They propose using the excess or 'net' generation (NG) capability that remains on their generators after serving their retail load. The NYISO refers to this as Behind-the-Meter Net Generation ("BTM:NG").
- The NYISO BPWG process has identified this as a market design deliverable for 2015.
 - Allow eligible behind the meter generation that serves retail load to sell the 'net' generation into the wholesale market.



Benefits of BTM:NG

- Improve awareness of resources not currently participating in the NYISO wholesale markets.
- Improve grid reliability and operational flexibility with access to this additional supply.
 - The NYISO is aware of over 100MW of behind the meter generator capacity not currently available to the wholesale markets.
- Provide more clarity and certainty for future resource investment within New York State.



Introduction

- Currently, behind the meter resources can register as a wholesale generator by:
 - Qualifying to and then selling the full capability into the wholesale markets ('coming out from behind the meter').
 - Moving the load they serve into the wholesale market via an LSE and,
 - Setting up a wholesale market bilateral contract between the generator and load.
- The BTM:NG model is designed to allow the generator to participate in the NYISO wholesale markets without:
 - Requiring the load to also become a wholesale customer; or
 - Requiring the generator to avail itself entirely to the NYISO wholesale market.



Today's Discussion

- Stakeholders have indicated that the discussion of cost allocation as an important aspect of BTM:NG initiative.
- The cost allocation for Behind the Meter (BTM) Loads was acknowledged as a related on-going effort to the BTM:NG project during the January 29th MIWG.
 - One cost allocation issue the NYISO will be looking at is whether any changes to the allocation of the costs of maintaining a reliable grid are warranted. Today the costs of maintaining a reliable grid are incorporated entirely into wholesale capacity and energy charges. The question is should costs of maintaining a reliable grid also be paid by load that is served by onsite generation when it relies on, and uses, grid-provided energy if its generation becomes unavailable.
- The NYISO wants to ensure that customers remaining attached to the grid while using distributed generation for some or all their electricity supply pay their fair share of the costs incurred by the NYISO to provide them with required grid reliability and standby service.



Scope

- Today, the NYISO satisfies the BTM load when the BTM generator is not available.
 - The NYISO relies on ancillary services like black start, voltage support and regulation services to meet these unexpected needs.
- A fair share of the costs incurred by the NYISO to provide BTM load with grid reliability and standby service should be collected from the load.
 - These costs would be in addition to the costs LSEs recover when the load is being served by the grid.
- This presentation is to facilitate a discussion on which costs are fairly allocated to BTM load, what allocation methodology should be used, and how charges should be assessed.
 - The NYISO is also in the process of hiring a consultant to study this issue and will share results when available.



Ancillary Service Charges

- Costs for the following ancillary services are currently charged to wholesale loads:
 - Rate Schedule 1 ISO Annual Budget Charge and Other Non-Budget Charges and Payments
 - The ISO Annual Budge Charge is also recovered from wholesale generators
 - Rate Schedule 2 Voltage Support Service
 - Rate Schedule 3 Regulation Service
 - Rate Schedule 4 Operating Reserves
 - Rate Schedule 5 Black Start and System Restoration Services
 - Rate Schedule 6 Quick Start Reserves
- The average cost for the ancillary services above, charged to a LSE is about \$1.66/MWh.
 - Includes cost of operations and reliability services (rate schedules 1 through 6).
 - Average costs for 2010-2014.
- The NYISO is interested in feedback on this topic. Please send comments to <u>Mdesocio@nyiso.com</u> and <u>Pganesan@nyiso.com</u>.



Next Steps

- Introduce the participation of BTM:NG in NYISO markets (September 19th, 2014 MIWG/ICAPWG)
- Review wholesale generator requirements to participate in NYISO markets (November 19th, 2014 MIWG)
- Introduce Energy Market design concepts for BTM:NG participation (January 29th, 2015 MIWG/ICAPWG)
- Introduce Capacity Market design concepts for BTM:NG participation (February 24th, 2015 ICAPWG)
- DMNCs, Net ICAP, Facility Availability and Net UCAP and Capacity Market Design Concepts (March 18th, 2015 ICAPWG)
- Energy Market design concepts and ERIS Requirements for BTM:NG participation (April 2nd, 2015 MIWG)
- Cost Allocation for Behind the Meter Loads (April 23rd, 2015 MIWG)
- Continue to discuss with stakeholders
 - April 2015 May 2015
- Present final proposal at BIC
 - June 2015



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