



## **Meeting Notes**

ISO-New England—VSPC Meeting

November 4, 2015

NOTE: The purpose of the following notes is to reflect the discussion that occurred in the meeting; not to serve as an interpretation, guideline or policy document. Questions remain about some issues discussed at the meeting, and these notes do not attempt to resolve those issues, which are the subject of continuing discussion in various forums.

### Introduction

- List of participants at end of document.
- Ground rules: focus on clarifying policies and procedures; no discussion of current applications.
- ISO-NE may develop a Frequently Asked Questions (FAQs) from material covered in this discussion.
- ISO-NE focus: address questions posed and share potentially helpful examples from experience with how other states have implemented PURPA.

### Qualifying Facilities (QFs) jurisdiction

- QFs arise from FERC and States' implementation of Public Utility Regulatory Policies Act (PURPA, Pub.L. 95–617, 92 Stat. 3117, enacted November 9, 1978).
- PURPA units/QFs are FERC-jurisdictional in so far as PURPA is a FERC-implemented statute. With respect to interconnection procedures, jurisdiction depends on several factors, including whether the generator intends to participate in the markets.
- Certain benefits or exemptions arise from being a QF, but any other requirements that would otherwise apply, do apply.

Do the Schedule 23 Small Generator Interconnection Procedures (SGIP) apply to QFs interconnecting under Vermont's (VT) implementation of PURPA?

- ISO is aware of VT's implementation of PURPA (i.e., provisions of Rule 4.100). For facilities that the interconnecting utility represents are QF consistent with Rule 4.100, the SGIP does not apply.

- ISO is reliant on the interconnecting utility (Interconnecting Transmission Owner or ITO) to determine that a QF is subject to the state process, rather than the SGIP. ISO learned from GMP that the VT approach has been recognized by FERC, however, ISO isn't in any position to judge whether a QF meets all of the requirements of the VT process. ISO shares the rights and responsibilities over the interconnection of new resources in New England; the ITO is responsible to confirm that the applicant qualifies for the state process. ISO relies solely on the representation of the ITO.
- Question: Isn't a QF required to sell all the power to the interconnecting utility in order to qualify for the state process vs Schedule 23? ISO: ISO understands that the Rule 4.100 program is Vermont's implementation of PURPA and relies on the ITO to confirm applicant is applying through that process and meets all of the associated requirements.

#### Questions related to the requirement of QF to obtain I.3.9 "no adverse impact" determination

- QFs have certain exemptions, like selling to host utility and other exemptions, but are not exempt from other requirements or constructs. The "no adverse impact" I.3.9 requirement has been in place for a long time, now in ISO tariff and before that in the NEPOOL tariff.
- I.3.9 requirement applies to all Market Participants and Transmission Owners (TO): no change to their system can be made that would have a significant adverse impact. This is implemented by reviewing all proposed changes. The process includes studies of the impact of a proposed generation addition.
- A generator must either be registered as a Market Participant to submit an I.3.9 application or the ITO can submit the I.3.9 application on the generator's behalf.
- Question: What if the interconnecting utility isn't a Participating Transmission Owner? ISO: All utilities are either PTOs themselves, or they take service from a TO that has the obligation to assure no adverse impact, or are Market Participants.
- Question: What triggers the I.3.9 requirement? ISO: "(i) any new or materially changed plan for additions to or changes to any generating and demand resources or transmission facilities rated 69 kV or above subject to control of such Market Participant or Transmission Owner, and (ii) any new or materially changed plan for any other action to be taken by the Market Participant or Transmission Owner, except for retirements of or reductions in the capacity of a generating resource or a demand resource, which may have a significant effect on the stability, reliability or operating characteristics of the Transmission Owner's transmission facilities, the transmission facilities of another Transmission Owner, or the system of a Market Participant." [ [http://www.iso-ne.com/static-assets/documents/regulatory/tariff/sect\\_1/sect\\_i.pdf](http://www.iso-ne.com/static-assets/documents/regulatory/tariff/sect_1/sect_i.pdf) ]
- Thresholds for the level of review and analysis performed are identified in Planning Procedure 5-1. Any proposed project at or above 1MW but less than 5 MW must submit a notification form to ISO. Projects at or above 5MW must send an application that

includes system analysis. These materials can be submitted by the generator if registered as Market Participant or the TO may submit the materials on their behalf.

- Question: is the decision about who applies for I.3.9 collaborative between the generator and TO? ISO: We do not know of an example that wasn't collaboratively decided. Examples exist of both the generator applying directly and the TO applying on the generator's behalf.
- Question: What if neither the TO nor the generator are Market Participants? ISO: The proposed plan application (PPA) for the I.3.9 approval must be brought forward by a Market Participant or the Transmission Owner.
- Question: What if neither party is willing to file the PPA? ISO: ISO will stay away from responding. We have a filed rate that is enforceable. If TO refuses to facilitate the process, it might expose TO to action. Thus far all examples have been collaborative. We hope that continues to be the case. The I.3.9 is a physical requirement. It does not matter how the QF wants to sell its output; the question is impact to the system.
- Question: What if interconnecting utility is not a signatory to the Transmission Operating Agreement (TOA). ISO: The requirement also applies to all Market Participants. It is the responsibility of Market Participants not to connect a generator without the I.3.9. The physical change cannot be made without the I.3.9 approval.

#### Standards of review/expectations

- Any generator coming thru Schedules 22 (Large Generator Interconnection Procedures) or Schedule 23 (Small Generator Interconnection Procedures) is subject to the minimum interconnection standard (MIS), now identified as the Network Capability Interconnection Standard. The same standard is used to demonstrate that the new generator meets the requirements of Section I.3.9. ISO still looks for no adverse impact to be demonstrated in a similar way or a way that at least meets the standard of the Network Capability Interconnection Standard. A generator cannot ask for a more stringent review under these two schedules. Other mechanisms exist that generators can invoke (such as Elective Transmission Upgrades or the pursuit of capacity interconnection service), but in terms of ISO's obligations to conduct the studies, ISO cannot impose a higher standard.

#### Market participation

- Question: Can units act as load reducers instead of participating in the market? ISO: Unit at or above 5MW can't be a load reducer.
- In ISO's experiences in MA and CT with QF implementation, the TO acts as the Lead Market Participant for the generator, making the presentation to the market as registered generator.
- Question: What if an interconnecting utility does not want to put its own generation in the market, i.e., to save the network service changes, etc. ISO: distributed generation

(DG) must be grossed up in the calculation of load. The TO is expected to reconstitute the load. Section 205 rights for that rate calculation are retained by TOs. (The TO is responsible for implementing the provisions of the tariff with respect to the definitions of the metering point.)

- ISO is not aware of units  $\geq 5\text{MW}$  connected to subtransmission or transmission (i.e., not including behind customer meter generation) that are not registered with markets. QFs may have their host utility as the Market Participants, but they are registered. Such QFs are generally self-scheduled in the energy market by the host TO.

How do operating procedures apply to QFs? Dispatch-related issues.

- Operating procedures (OPs) apply to any generating facility registered in the ISO markets. If a generator is registered in the market, OPs apply.
- Question: Does it matter whether or not the QF is a Market Participant? If they are FERC jurisdictional, doesn't that mean OPs apply? ISO: To the extent the resource is registered in the markets, the OPs apply.
- Question: What happens to dispatch instructions in a constrained area? ISO: If the generator is a registered generator, it will be managed like all other assets, including with respect to reliability. If the generator is one of a group of assets in a constrained area, it will be managed to allow reliable system operation. If it isn't a registered generator, ISO can't manage it and instead will manage the remaining resource to deal with the constraint. It is incumbent on the TO to ensure no adverse impact.
- Question: Simply put, if a facility is a QF, can ISO manage it? ISO: In our experience, these resources are self-scheduled.
  - Note: "Self-Scheduled" and "Settlement Only Resource" are terms defined in Section I.2.2 of the ISO Tariff. Load reducer is not a defined term in the ISO Tariff.
- Question: What does the "must run" check box in ISO system mean? ISO: ISO agreed to follow up with an answer to this question. Mr. Ettori was put in contact with an ISO resource to address the question.
- Currently, self-scheduling means receiving the nodal clearing, price which could mean paying up to \$150/MW (under negative pricing) to run.
- Question: Can QF be must-run? ISO: The meaning of "must-run" changes and continues to change based on changes in market. QF status does not change or limit ISO's ability to limit any facility including a QF for reliability purposes.
- Question: Will the intention to expand the use of the "Do not exceed" (DNE) instructions process to all intermittent units alleviate the dispatch issues? ISO: One of the reasons for DNE was deficiencies of self-scheduling, especially for intermittent resources. We will have to think through the different potential outcomes with that in place.

- Running under minimum load conditions is now an economic issue. We keep on the least expensive mix that ensures reliability. In existing constrained areas, there are known times when it is not possible to export all generation. If you interconnect a QF and we can't constrain it with other assets, existing assets that are market participants will be dispatched down more often and with greater output reductions. Self-scheduled assets will equate to the floor price. Assets not bidding the floor all the time will be taken off before the self-scheduled assets.
- Observations by VT group: The economic issue for generators will be how low they will bid. If they are load reducers, the QFs will not be on the table for curtailment. Injection of new intermittents will effect either at a pro-rata amount or worse.
- Question: Is there any requirement that  $\geq 5$  MW must register. ISO: Our rules apply to generators coming into the market. If a generator isn't coming into the market, it could be because it is behind the customer meter or is not using the transmission system. How can a generator interconnected to the transmission system move power if it isn't using the transmission system?
- Question: If the generator is selling directly to the interconnecting utility under some PURPA construct, could the host utility register the unit in some way so it was controllable by ISO? ISO: Yes, the host utility would meet with ISO registration team. If utility is selling any of the power it must be in the market.
- Question: Would a Vermont utility have to be registered as the lead market participant to do this? ISO: Yes.
- Question: Explain network capability vs capacity interconnection standard. Why would a generator choose one versus the other? ISO: These are two levels of testing. Network interconnection service provides the ability to sell energy. In the network/energy interconnection assessment study, we can reduce other resources by the amount of the new generator. In the case of the capacity interconnection assessment study we don't reduce other resources by amount of the new generation. One caveat: capacity analysis for intermittent resources is not run at nameplate, but rather at Forward Capacity Market (FCM) qualified capacity. Generators must identify at the time they apply whether they want to be just network or both network and capacity.
- Question: What if they later want to add capacity? ISO: Yes, one can make a request later by means of a new queue position.
- Question: Does this occur under the SGIP, or is it under the I.3.9? ISO: Becoming a capacity resource is separate from the I.3.9 process.

#### Information disclosure (e.g., reporting of export limit)

- The export limit should not be disclosed. Various forums where utilities are receiving information about proposed generators are covered by the ISO information policy. Participants must be aware of their responsibilities.



## Participants

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