

NU Guidance on ISO-NE Proposed Plan Application (PPA) Process for Generators Connecting to the NU Distribution System

Introduction

This Proposed Plan Application (PPA) primer will assist Interconnection Customers (ICs) who are looking to interconnect generators at a distribution voltage in the NU service area as they go through the ISO-NE PPA process. For purposes of this process, “distribution connected generators” is defined as generators interconnecting at voltages less than 69-kV. The Distribution requirements are located on their company’s websites as listed in Table 5.

This PPA primer provides guidance with a broad overview covering the following topics:

1. **Who must submit an ISO-NE PPA**
2. **Understanding the PPA Process**
3. **Requirements of the PPA Process**
4. **Requirements for a FERC or State Jurisdictional project**

1.) Who must submit an ISO-NE Proposed Plan Application (PPA)

The PPA process ensures that each Interconnection Customer (IC) or Interconnecting Transmission Owner (ITO) submits plans to the ISO New England (ISO-NE), which are also reviewed by the NEPOOL Reliability Committee (RC) for additions or changes in their generation facilities that might have a significant effect on the stability, reliability or operating characteristics of the Transmission System. Generators connected to any distribution system are included in the process because the energy from these sources may impact the flow on the transmission system. The ISO-NE procedure PP5-1 is located at

http://www.iso-ne.com/rules_proceeds/isone_plan/index.html

The PPA process is applied to all generators interconnecting to either the transmission or the distribution systems and having any of the following criteria listed below. Any increase in generation is measured from the last approved PPA. Such IC’s will need to file a PPA application to ISO-NE (also called an I.3.9 application).

Criteria for submitting a PPA

- An incremental net output of 5 MW or more, or
- An increase or decrease (lead or lag) of 5 MVAR or more in net output for a single unit, or
- An increase or decrease (lead or lag) of 10 MVAR or more in total net station output, since the last time a PPA was approved

Interconnection Customers' projects with an increase of less than 5 MW since the last PPA filing that was completed for the site, will need to submit the ISO-NE Generator Notification Form for Units of Changes of Less than 5 MW to ISO-NE and will not need to file a PPA. Please refer to the ISO-NE Planning Procedures PP5-1 for more information.

The Distribution and Transmission Company will determine if any studies will be required. The Governance participant sends the ISO-NE Generator Notification Form for Units or Changes of less than 5 MW (from the ISO-NE Planning Procedure 5-1) to ISO-NE. If the IC is not a Governance Participant, then the Interconnecting Transmission Owner is responsible for submitting this form to ISO-NE.

Table 1: PPA notification criteria		
Generator Size (cumulative total from your last PPA)	ISO-NE Notification Form for Units or Changes of Less than 5 MW per PP5-1	PPA Required
Less than 1 MW	Yes	No
Less than 5 MW	Yes	No
Greater than or equal to 5 MW	No	Yes

2) Understanding the PPA Process

The PPA is filed by the appropriate governance participant. A governance participant is defined by ISO-NE as a NEPOOL Participant who signs the Counterpart signature page of the Second Restated NEPOOL Agreement (RNA) or individual participant who signs the signature page of the Participants Agreement (PA). A list of NEPOOL Participant can be found on the ISO-NE website (http://www.iso-ne.com/committees/nepool_part/list_of_nepool_participants.pdf)

If the IC is not a governance participant, then the Interconnecting Transmission Owner (ITO) will submit the PPA on the customer's behalf. The generator PPA forms are located on the ISO-NE website (http://www.iso-ne.com/rules_proceeds/isone_plan/index.html). The PPA for the generator is completed by the IC. The Transmission Owner submits the PPA for any transmission facilities that will be owned by the Transmission Owner, including network upgrades.

After the required Transmission studies are completed and any needed network upgrades are identified, the results are shared with the Interconnection Customer.

The IC must commit to pay for any network upgrades identified in the study process. The completed studies are then submitted to the appropriate working groups and task forces(s) for review and they in turn make a recommendation to the RC.

In general, the Stability and Transmission Working Groups and Task Forces will review and comment on the studies. Once those meetings are completed and no further information is needed, the studies and the comments are forwarded to the RC at least two weeks prior to their meeting. The RC will usually meet once a month. If additional information is requested from the Task Forces and/or Working Groups, the action would be tabled to a future meeting.

The RC will make a positive recommendation to ISO-NE as long as there is no significant adverse effect created by the IC project. Once the RC approves the project, ISO-NE reviews all of this information and issues a PPA letter to the Governance Participant, which will complete the PPA process.

The time needed for the various committees to review the studies could affect the project's schedule. Several months may be needed depending on the schedule of three ISO committee meetings. The ISO committees estimate to review the studies is outlined in the following table.

Table 2: ISO Groups to Review Study Results		
Technical Groups to Review Study Results	Submit Studies prior to appropriate meeting	Estimated minimum completion time
Stability Study Group Stability Task Force	At least two weeks	One to two months
Transmission Working Group Transmission Task Force	At least two weeks	One to two months
ISO-NE Reliability Committee	At least two weeks	One month (RC recommends reliability determination is complete)

Note: The task forces and working groups may work in parallel, while the Reliability Committee work is performed after the task forces and working groups are finished.

3) Requirements of the PPA Process

The requirements, procedures and application forms that are used in the submittal process for the PPA and/or I.3.9 application are found in the ISO-NE Planning Procedures PP5-1 (http://www.iso-ne.com/rules_proceeds/isone_plan/index.html) the process assures that the generation additions do no harm to the Regional Transmission System. The requirement to follow the PPA process applies to both State and FERC jurisdictional interconnection customers.

Table 3: Forms	ISO-NE Procedure
Generator PPA form	PP5-1 Generator Proposed Plan Application
Hydro-Electric PPA form	PP5-1 Proposed Plan Application Data Requirements for Hydro-Electric Facilities
Transmission Facilities PPA form	PP5-1 Transmission Facilities Proposed Plan Application
Generator units or changes of less than 5MW form	PP5-1 ISO-NE Generator Notification Form For Units or Changes of Less Than 5 MW

Once the PPA has been approved by the Reliability Committee, the Interconnection Customer can build the assets per the specifications outlined in the PPA or notification form, whichever is applicable according to Schedule 22, Schedule 23, or the state process. In all situations, the Interconnection Customer must notify ISO-NE or the Distribution Company once the unit has achieved commercial operation.

Table 6 outlines the PPA requirements and responsibilities for State and FERC Jurisdictional Projects:

4.) Requirements for project that are FERC or State Jurisdictional

The issue of whether the IC’s generator is State or FERC (Interconnection Requests to the ISO) jurisdictional is outside the PPA process. However, whether the project is FERC or State jurisdictional determines how the technical studies are performed and who will submit the PPA to ISO-NE.

The IC should contact the appropriate NU Distribution Company representative prior to filing their application for guidance on whether the project is State or FERC jurisdictional. Please see Table 4 for general guidelines on the jurisdiction for your generation project.

All generation requests that fall under State jurisdiction should be forwarded to the appropriate NU Distribution Interconnection Group, and any requests that are FERC jurisdictional should be submitted to ISO-NE. See Table 5 for contact information on the Distribution Companies of Northeast Utilities

Table 4 – Determination of Jurisdiction		
Connection Type	Jurisdictional	Contacts
Load Reducer with or without exporting power to NU	State	Distribution Company
Sell entire excess output to NU through retail rates or Qualifying Facility with a power purchase agreement	State	Distribution Company
First wholesale transaction on the Distribution circuit	State	Distribution Company
Second wholesale transaction on the Distribution circuit	FERC	ISO-NE who will contact the Transmission Company

Table 5: Contact Information for Distribution Connected Generators			
Generator Location	Phone Number	Web site	Address of Electric Distribution Company
CL&P Service Territory	1-866-324-2437	http://www.cl-p.com/GeneratorInter/Generator_Interconnection/	The Connecticut Light & Power Co. Distributed Resources Group P.O. Box 1409 Hartford, CT 06143-1409
WMECO Service Territory	1-413-585-1750.	http://www.wmeco.com/Business/UnderstandBill/RatesRules/DistribGenRequirements.aspx	WMECO Attention: Cindy Janke 55 Russell St. Hadley, MA 01035-9455
PSNH Service Territory	1-603-634-2312 or Michael Motta at 1-603-634-2920	http://www.psnh.com/RenewableEnergy/For-Business/Renewable-Energy-Options.aspx	PSNH Supplemental Energy Sources Dept Attention: Michael Motta 780 N. Commercial St. P. O. Box 330 Manchester, NH 03105

Table 6: PPA Requirements for NU State/FERC Jurisdictional Projects

Interconnection Jurisdiction	Submit Interconnection Request to	Size of Generator	Working Groups/Task Forces	Governance Participant	Reliability Committee
State	Distribution Co.	< 5 MW or 5 MVAR	N/A	No	Notification Form sent to RC by ITO
				Yes	Notification Form sent to RC by IC
		≥ 5 MW or 5 MVAR	Studies to the Working Groups/Task Forces by TO	No	PPA (I.3.9) Form and Studies sent to RC by ITO
				Yes	Generator PPA Form and Studies sent to RC by IC Transmission PPA Form and Studies sent to RC by ITO
FERC	ISO-NE	< 5MW or 5 MVAR	N/A	No	Notification Form sent to RC by ISO-NE
				Yes	Notification Form sent to RC by IC
		≥ 5 MW	Studies to the Working Groups/Task Forces by ISO	No	PPA (I.3.9) Form and Studies sent to RC by ISO-NE
				Yes	Generator PPA Form and Studies sent to RC by IC Transmission PPA Form and Studies sent to RC by ITO