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ISO New England's Role in the Interconnection Review Process for Distributed Generation

Massachusetts Department of Public Utilities

Docket No. 19-55

Alan McBride

DIRECTOR, TRANSMISSION STRATEGY AND SERVICES

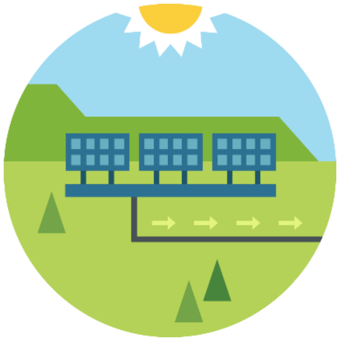
Applicable ISO New England Tariff Planning Processes

- Two primary ISO New England Tariff processes are potentially applicable to the interconnection review of new distributed generation (DG) resources:

  1. **ISO's Interconnection Process**, pursuant to Schedules 22 and 23 of the Open Access Transmission Tariff (OATT)
     - Is the project interconnecting to a state- or FERC-jurisdictional distribution facility?

  2. **ISO's Proposed Plan Application (PPA) Process**, pursuant to ISO Tariff Section I.3.9
     - Could the project have an adverse impact on the reliability or operating characteristics of the ISO-administered system or any other affected system?
       – Can apply regardless of the jurisdiction for interconnection

ISO New England's Section I.3.9 Process: Applicability



- The ISO's Section I.3.9 process applies to the interconnection of the following DG resources:
  - **New or increased generation ≥ 5 MW**
    - These projects must include PPA forms in their Section I.3.9 submittals to the ISO
  - **New or increased generation > 1 MW and < 5 MW**, where the ISO has determined such interconnection(s) will have a *cumulative impact* on the regional transmission system
    - Generator Notification Forms (GNF) are submitted to the ISO for projects of this size, unless the ISO identifies that a PPA is required
- As the Regional Transmission Organization (RTO) for New England, the ISO is responsible for reviewing and approving proposed system changes because these changes may impact the **stability**, **reliability**, or **operating characteristics** of the New England power system

ISO New England's Role in Identifying Cumulative Impacts to the Regional Power System

- From the **Transmission Operating Agreement**, Section 3.03(b):
  - The Participating Transmission Owner or its distribution company Affiliate, as applicable, shall notify the ISO of situations where the interconnection of multiple generators to distribution facilities that are not OATT Interconnection Distribution Facilities may have cumulative impacts affecting the facilities used for the provision of regional transmission service and shall, in such situations, consult with the ISO in its performance of such studies. <u>The ISO will determine whether such interconnections will have a cumulative impact on facilities used for the provision of regional transmission service.</u>
- In the case of non-OATT interconnections, the ISO's review of cumulative impact is conducted as part of the Section I.3.9 process
  - Transmission Owner's **early engagement** with ISO New England helps to ensure successful preparation for the I.3.9 review

ISO New England's Section I.3.9 Process: Key Points

- If the generator owner is not a Market Participant, the **Transmission Owner** must make the PPA or GNF submittal to the ISO on the generator's behalf
  - The ISO has 60 days to issue a **determination** (or 90 days if additional time is needed, with written notification to the Market Participant or Transmission Owner)
- The submittal must be supported by a transmission study that meets the requirements of ISO New England Planning Procedures to ensure **no significant adverse effect** upon the reliability or operating characteristics of the utility's transmission facilities, the transmission facilities of another utility, or the system of a Market Participant
- The Transmission Owner is **responsible** for scoping and conducting the study, in coordination with the ISO
- Once the study is complete, the Transmission Owner must present the study results and identification of any needed upgrades to the New England Power Pool (NEPOOL) **Reliability Committee** for an advisory vote
- After an advisory vote by the Reliability Committee, the ISO will issue a **determination** approving or denying the PPA or GNF

Interconnection Review Process for DG Proposals

DG Proposal > 1 MW and < 5 MW

Transmission Owner submits DG description(s) and any proposed groupings of projects to ISO New England

→ ISO New England determines whether project(s) require additional study by the Transmission Owner

→ ISO New England communicates level of study needed (e.g., limited review or full transmission system impact study)

DG Proposal ≥ 5 MW

Transmission Owner conducts study that meets the requirements of ISO New England's Planning Procedures

→ Transmission Owner submits PPA or GNF and supporting study to ISO New England for review and approval

→ PPA or GNF is added to NEPOOL Reliability Committee agenda for upcoming monthly meeting

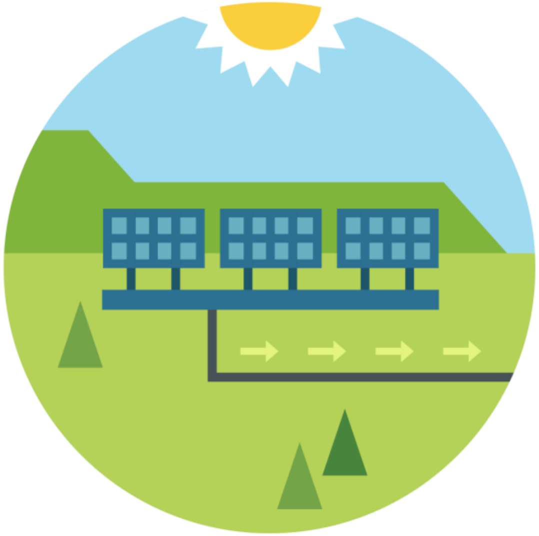
NEPOOL Reliability Committee votes on whether to recommend the proposed plan would have no significant adverse effect

→ ISO New England concludes PPA or GNF review, with advisory input from NEPOOL Reliability Committee

→ ISO New England issues determination approving or denying PPA or GNF

Successful Study Coordination in the Region

- Large volumes of DG projects throughout New England have been presented to the NEPOOL Reliability Committee and approved by ISO New England in recent months
  - **September 2019 Reliability Committee Meeting:**
    - 20 DG projects, representing 72 MW
  - **August 2019 Reliability Committee Meeting:**
    - 50 DG projects, representing 174 MW
  - **July 2019 Reliability Committee Meeting:**
    - 7 DG projects, representing 27 MW
  - **June 2019 Reliability Committee Meeting:**
    - 8 DG projects, representing 19 MW
  - **May 2019 Reliability Committee Meeting:**
    - 31 DG projects, representing 100 MW



- Continued successful study coordination between the Transmission Owner and the ISO will facilitate continued Section I.3.9 approval of DG projects

Role of ISO New England in State DG Interconnection Proceedings

- ISO New England has made itself available to state agencies, developers, and other stakeholders to **explain** the Section I.3.9 process and **clarify** the ISO's role in the interconnection review process
- ISO New England will continue to serve as a **technical resource** in the Massachusetts Department of Public Utilities' 19-55 proceeding, and other state proceedings

Questions