



Interconnection Jurisdiction for Distributed Energy Resources

Proposed modification such that distribution-connected generating facilities would always proceed through the state interconnection process

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SYSTEM PLANNING



Project Title: Interconnection Jurisdiction for Distributed Energy Resources

Proposed Effective Date: August 2022

- The ISO is proposing revisions to the rules under which the appropriate interconnection process for Distributed Energy Resources (DERs) is determined
 - Proposing that all DERs connecting to distribution facilities proceed through the state interconnection process
- First Transmission Committee presentation
 - Introduction of the issues and the ISO proposal



HOW DOES JURISDICTIONAL DETERMINATION WORK TODAY?

Background



Determining Whether the Interconnection is State- or FERC-Jurisdictional

- **Step One: Point of Interconnection**

- Is the line to which the DER plans to interconnect a Transmission or Distribution Facility?
 - Transmission Facilities include:
 - Pool-transmission facilities (PTFs)— 115 kV and above and all grandfathered 69 kV that meets the definition of PTF
 - Non-PTF (transmission) facilities that have become part of the administered system for interconnection purposes
 - Distribution Facilities include:
 - Low-voltage electric power lines (typically < 69 kV)
 - Can be either Federal Energy Regulatory Commission (FERC)-jurisdictional or state-jurisdictional for interconnection purposes

Background information slide:
Jurisdictional determinations
under the current rules



Determining Whether Interconnection is State- or FERC-Jurisdictional, *continued*

- **Step Two: Status of Line**

- If the line that the DER will be interconnected to is part of the distribution system, then the Participating Transmission Owner needs to determine whether there is any wholesale activity on the line. For example, if there are any generators already connected to the feeder:
 - If an existing generator is connected to the feeder, then the next step in the analysis is to determine whether that generator participates in ISO markets (regardless of type, *e.g.*, Settlement Only Resource (SOR), full Market Participant, etc.) for the purpose of selling energy or capacity
 - If it does, then the feeder is FERC-jurisdictional for the purposes of interconnection and wholesale sales under the “dual-use” doctrine*

*Established in Order No. 2003, the “dual-use” doctrine states that where the “distribution” facilities have a dual use, *i.e.*, the facilities are used for both wholesale sales and retail sales, FERC jurisdiction applies to interconnections to these facilities only for the purpose of making sales of electric energy for resale in interstate commerce. Order No. 2003 at P 804. FERC clarified in Order No. 2003-A that it exercises jurisdiction only over “interconnections to a ‘distribution’ facility when the facility is included in a public utility’s Commission-filed OATT and the interconnection is for the purpose of facilitating a jurisdictional wholesale sale of electric energy.” Order No. 2003-A at P 730.

Background information slide:
Jurisdictional determinations
under the current rules



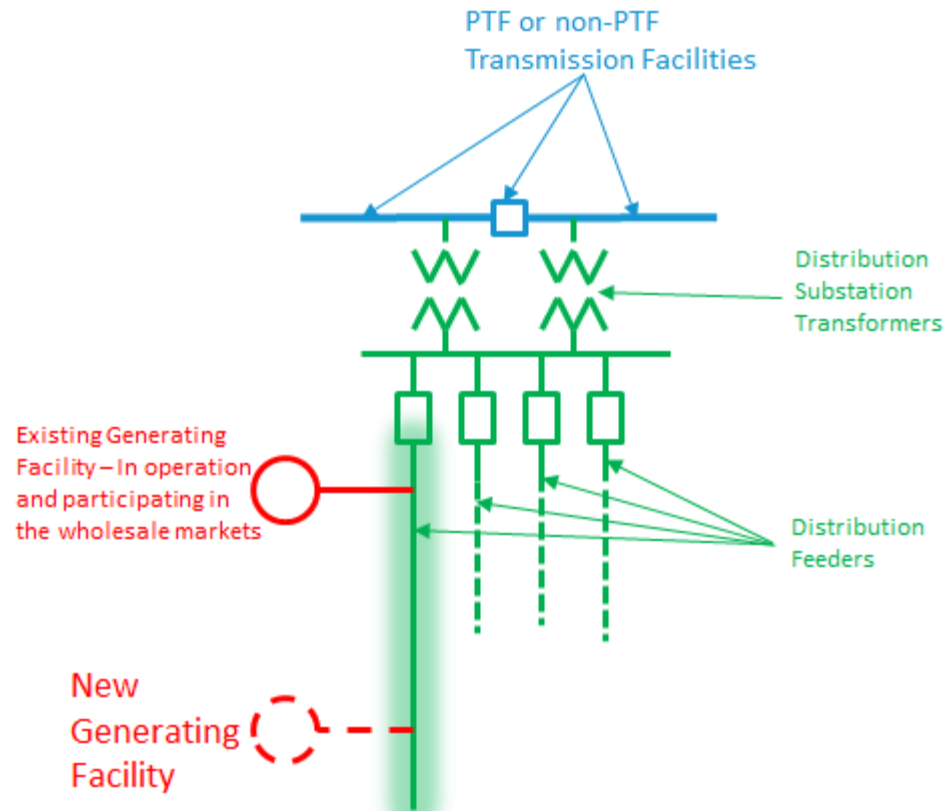
Determining Whether Interconnection is State- or FERC-Jurisdictional, *continued*

- **Step Three: Determine Intent of New DER/If Exemptions Apply**
 - The next step in the analysis is to determine whether the new DER project qualifies for any exemptions under the ISO Tariff
 - Retail customers interconnecting a new generating facility whose energy will ONLY be consumed at a retail customer's site
 - The generating facility will not be used to make wholesale sales of electricity in interstate commerce (i.e., the generating facility will be used to sell electricity through retail net metering or another state-procurement program)
 - Qualifying facility defined by the Public Utility Regulatory Policies Act (PURPA), where the facility's owner intends to sell 100% of its output to its interconnected electric utility under a PURPA contract
 - If any exemptions apply, then the interconnection process of the relevant state applies
 - If no exemptions apply, then the ISO interconnection process applies

Background information slide:
Jurisdictional determinations
under the current rules



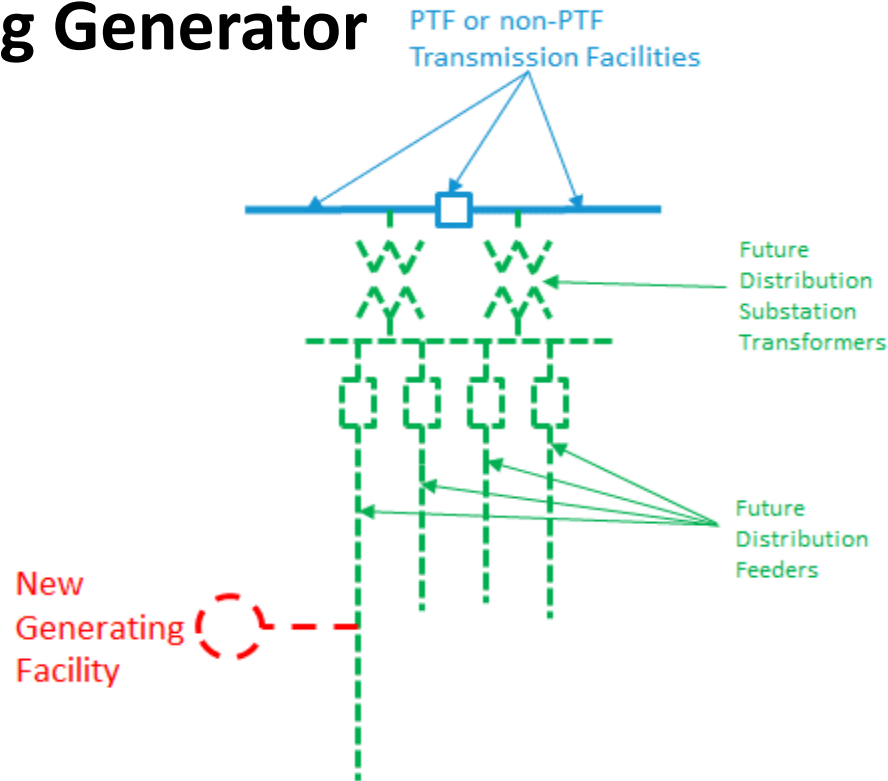
Example of Jurisdictional Determination: Feeder With Existing Generator



A request to connect a Generation Facility to the Distribution System at a distribution facility that does host an existing wholesale transaction at the time of the request is subject to the ISO's Interconnection Procedures (under the current rules), unless one of the exemptions applies

Background information slide:
Jurisdictional determinations
under the current rules

Example of Jurisdictional Determination: Feeder Without Existing Generator



In assessing a request to connect a Generation Facility to an existing distribution facility that the Participating Transmission Owner (PTO) has determined is non-Open Access Transmission Tariff (OATT) distribution, a PTO may identify the need to build out the Distribution System in order to accommodate the request (as opposed to simply connecting to the existing distribution facility). The ISO's Interconnection Procedures have not been triggered in this scenario.

Background information slide:
Jurisdictional determinations
under the current rules

Notes on Determining Jurisdictional Status of a Distribution Facility

- The ISO does not have visibility into the distribution system
- EDCs and PTOs determine whether a given distribution facility is subject to the OATT
- Individual EDC/PTO processes for making this determination and/or assumptions underlying the determination may vary
- Modifications to existing generators - in the form of increased capacity/other physical changes, or a decision to participate in the ISO's markets after a project is already in service - may also trigger the ISO's Interconnection Procedures
 - Subject to the determinations described earlier in the presentation

Recent Developments and Updates

- **FERC Order 2222** requires that ISOs and RTOs allow [DERs](#) to participate in the wholesale markets and to provide all services that they are technically capable of providing through an aggregation
 - FERC required that DERs participating in an aggregation be exempt from the ISO's Interconnection Procedures
 - More details on the ISO's Order No. 2222 compliance proposal can be found on ISO's [Key Project Page](#)
- ISO has determined that a developer exercising its **capacity buyout** rights does not constitute a wholesale transaction such that a feeder becomes FERC-jurisdictional

HOW THE I.3.9 PROCESS IS APPLIED FOR STATE JURISDICTIONAL DER INTERCONNECTIONS (NO CHANGES TO THE I.3.9 PROCESS ARE PROPOSED)

Background

Applicable ISO New England Tariff Planning Processes

- Two primary ISO New England Tariff processes are potentially applicable to the interconnection review of new DERs:
 - 1. ISO's Interconnection Process**, pursuant to Schedules 22 and 23 of the 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

Background information slide:
How the I.3.9 process is applied.
No changes are proposed to the I.3.9 process.

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. The ISO will determine whether such interconnections will have a cumulative impact on facilities used for the provision of regional transmission service.
- In the case of non-OATT interconnections, the ISO's review of cumulative impact is conducted as part of the Section 1.3.9 process
 - ***Participating Transmission Owner's early engagement with ISO New England helps to ensure successful preparation for the 1.3.9 review***

Background information slide:
How the 1.3.9 process is applied.
No changes are proposed to the 1.3.9 process.

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



Background information slide:
How the I.3.9 process is applied.
No changes are proposed to the I.3.9 process.

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

- If the generator owner is not a Market Participant, then the Participating Transmission Owner must make the PPA submittal to the ISO on the generator's behalf
- The submittal must be supported by a transmission study that meets the requirements of ISO New England Planning Procedures to ensure there is 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 Participating Transmission Owner is responsible for scoping and conducting the study, in coordination with the ISO
- Once the study is complete, the Participating 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

Background information slide:
How the I.3.9 process is applied.
No changes are proposed to the I.3.9 process.

Interconnection Review Process for DER Proposals



DER Proposal > 1 MW and < 5 MW

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

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

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

DER Proposal \geq 5 MW

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

Participating 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 that 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

PROBLEM STATEMENT



Problem Statement

- The application of two interconnection processes to the same electrical facilities results in multiple coordination problems and inefficiencies
 - With the recent volumes of DER interconnections, tracking the time-dependent interconnection jurisdiction status of thousands of feeders throughout the region is extremely challenging and time-consuming
 - Errors have resulted in adverse outcomes
 - Exemptions to the ISO process already apply (and will expand under Order 2222)
 - This can lead to different outcomes with two interconnection processes applying at the same time on the same feeders
 - Coordination of more than one process on the same feeders and across neighboring feeders is expected to become prohibitively difficult
 - Exemptions are situation- and time-dependent and can change
 - Some developers are being forced to complete two interconnection processes (first the state process, then the ISO process) with no reliability need to do so
 - ISO does not have models of the distribution system
 - Distribution impacts are studied by the EDC in either case

PROPOSED SOLUTION



Proposal

- The ISO is proposing updates to the rules determining the appropriate interconnection process for distribution-connected generating facilities
 - Proposing that all distribution-connected generation should proceed through the state interconnection process
 - The application of the I.3.9 process to state jurisdictional interconnections will be unchanged
 - Consistency of reliability review throughout the region
 - Visibility and transparency to the ISO and to stakeholders
 - Single coordinated approach to organizing interconnections in the relevant state

Conclusion

- The ISO is proposing revisions to the rules under which the appropriate interconnection process for distribution-connected generating facilities are determined
 - Proposing that all distribution-connected generation should proceed through the state interconnection process
- Next step:
 - The ISO will present Tariff redlines at the next Transmission Committee meeting

Stakeholder Schedule

Stakeholder Committee and Date	Scheduled Project Milestone
Transmission Committee March 23, 2022	Initial Presentation
Transmission Committee April 14, 2022	Present Tariff Redlines
Transmission Committee May 31, 2022	Respond to questions, if any, and vote
Participants Committee June 2, 2022	Vote

FERC filing in June with an effective date in August 2022

Questions

