

1. Transmission Nodes

A Transmission Node is a point on the NYS Transmission System at which Locational Based Marginal Prices (“LBMP”) will be calculated for Aggregations. Transmission Nodes reflect a collection of designated load buses on which individual DER are located and may participate together in an Aggregation. The NYISO DER and Aggregation participation model requires that individual DER be mapped to a Transmission Node. The NYISO’s Security Constrained Unit Commitment, Real-Time Commitment and Real-Time Dispatch software will calculate a LBMP for each Transmission Node. Each Aggregation located at a Transmission Node will be settled at the applicable Transmission Node LBMP. The Transmission Node LBMP shall be calculated consistent with the Services Tariff Section 17 bus calculation method.

Transmission nodes will also facilitate securing the transmission system by providing points at which dispatch may provide relief from a constraint.

Each DER shall be assigned to a single Transmission Node. An Aggregation may only comprise DER assigned to the same Transmission Node.

1.1. Identification

The NYISO shall identify each Transmission Node in consultation with the Member System in whose service territory the Transmission Node is located within the NYCA.

The collection of electric facilities that comprise a Transmission Node shall be limited to a single Member System service territory and to a single NYCA Load Zone. The NYISO, in consultation with each Member System, shall consider the transmission and distribution system topology and distribution load characteristics of the Member System service territories when identifying each Transmission Node. Each Member System service territory shall have at least one identified Transmission Node.

1.1.1. Member System Topology Considerations

The distribution system topology considerations identified below, along with each Member System’s use of good utility practices, will guide Transmission Node identification. The topology of each Member System is unique and therefore not all factors may apply. Additional factors may also be considered as distribution systems change.

1. Transmission and/or distribution load pockets

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2. Thermal limits of lines and protective equipment
3. Boundaries between Transmission Districts
4. Concentration of load relative to total average system load
5. Distribution area substation topology

Transmission Nodes shall be named for the substation of the identified Load bus along with the voltage class of the station.

1.1.2. Active Transmission Node List

The list of Transmission Nodes is provided as Attachment [placeholder] to this [Aggregation Manual], and under “General Information” at <https://www.nyiso.com/reports-information>.

1.2. Transmission Node Changes

The NYISO and Member Systems will evaluate the factors identified in Section 1.1.1 above to determine whether the set of Transmission Nodes should be modified. The NYISO may add Transmission Nodes when there is a change in the underlying system topology within the electrical area that requires dividing the electrical facilities behind a single Transmission Node into two (or more) Transmission Nodes. Additional Transmission Nodes will be identified if DER penetration impacts either transmission or distribution grid operations. Two or more Transmission Nodes may be consolidated to a single Transmission Node when the NYISO and applicable Member System determine that underlying system conditions have changed such that the existing Transmission Nodes are no longer needed to represent the system’s electrical characteristics.

The NYISO shall publish all changes to the list of Transmission Nodes its public website (at <https://www.nyiso.com/reports-information>) and update Attachment [placeholder] of this [Aggregation Manual] and provide stakeholders with an explanation of all such changes.

1.2.1. Transmission Node Change Timeline

The NYISO will annually review the identified Transmission Nodes with each Member System to determine whether changes are necessary. The results of the annual review will be published at least 90¹ days prior to the beginning of the Capability Year and effective on the first day of the capability year.

¹ Pursuant to the rules accepted in the Commission’s 2020 DER Order, the NYISO will post any changes to the set of Transmission Nodes at least ninety days prior to the start of a Capability Year. This timing may change depending on the Commission's Order in Docket No. ER21-2460.

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The NYISO will publicly post all changes to the identified Transmission Nodes via an update to Attachment [placeholder] of this [Aggregation Manual] and the posting on the NYISO’s website. Affected Aggregators shall also be notified as described in the Aggregation System User Guide. In the event of any change to Transmission Nodes, affected DER will be separated from its Aggregation.

1.3. Facility Designation to a Transmission Node

The applicable Member System for the territory to which the DER is interconnected will designate the appropriate Transmission Node for the DER.

The Member System will designate a Transmission Node for a DER where, based on the best electrical engineering judgement available to the Member System, the DER’s impact to the Bulk Electric System is most apparent during an analysis under Normal Operating conditions as determined by the Member System.

Member Systems shall provide Aggregators with an explanation of why a DER is attributed to a particular Transmission Node.

1.4. Aggregator Responsibilities

Aggregators will work with the applicable Member System to determine the ISO-identified Transmission Node, to which each individual DER is connected. The Aggregator will initiate this process with the applicable Transmission Owner and the Aggregator is responsible for certifying their Aggregations and each associated DER are designated to the correct Transmission Node.

After the ISO modifies the list of Transmission Nodes, the Aggregator may re-enroll affected DER in a new Aggregation utilizing the applicable Transmission Node. Aggregations assigned at an inactive Transmission Node will be retired and the Aggregator shall buy-out of any existing market obligations.

Any disputes arising out of the designation of a DER to a Transmission Node shall be resolved pursuant to Services Tariff Section 11.