

vary per request. The information listed below is intended to provide more insight as to how Dynamic Transfer requests are processed.

Submitting Requests

All requests must be complete before it will be moved forward in the process. The request form can be found at the following link: [Dynamic Transfer Form](#). PJM may request any additional information essential to properly process the request. PJM will inform submitter once PJM considers the request to be complete. **Please note, PJM will not consider a request complete until the submitter has formally notified the Native Balancing Authority of the request to Pseudo-Tie and provide PJM with evidence of such notification. Additionally, a request should not be made until the resource exists in the Native Balancing Authority's planning queue.**

Administrative Fee

Once a Pseudo-Tie request is considered complete by PJM, the submitter will be required to execute a System Modification Cost Reimbursement Agreement. Additionally, with the execution of the Agreement, the submitter must provide PJM with the Administration Fee as described before the process can move forward.

Pseudo-Tie Approval Process

All generator Pseudo-Tie requests, once the Administrative Fee is received by PJM, must go through the Pseudo-Tie Approval Process. The process consists of planning, modeling and markets eligibility tests and criteria. As each criterion is evaluated, PJM will inform the submitter of the results. All eligibility requirements must be met in order for the request to be approved. Each criterion is described in detail below.

Planning Eligibility Criteria

PJM has established a process in which the study of the generation seeking to pseudo-tie to PJM requires the review of the transmission planning studies, for that portion of the study conducted outside of the PJM footprint, as well as providing assistance to the entity seeking to pseudo-tie that generation in the event that the transmission planning studies are not approved as sufficient. The review of these studies conducted outside of PJM's footprint, by PJM, will allow PJM to determine if the studies performed will meet, are similar to, or exceed the requirements associated with the studies of generation seeking to connect to the PJM footprint. The requirement to review these studies conducted outside of the PJM footprint allows PJM to determine if that generation seeking to pseudo-tie to PJM is similar in its deliverability, when comparing to the generation directly connected to the PJM footprint, as it relates to the criteria used to test the system and the extent to which the system is reinforced for the deliverability of that generation and the system surrounding that generation. The initial study of generation inside the PJM footprint is conducted under procedures as outlined in PJM Manual 14A, under the feasibility and system impact study requirements of sections 2.1.6 and 2.2.2, as well as the general study procedures as outlined in Section C.7 of Attachment C, and Attachment G of PJM Manual 14B. Ongoing study requirements for the study of generation in the PJM footprint must be maintained under these same standards as is conducted in the annual RTEP studies.

Any entity seeking to pseudo-tie a generation resource to PJM may consult with PJM to review the criteria to be utilized in the transmission planning studies which may be performed, by entities outside of PJM during the conduct of required transmission service studies, in order to allow PJM to provide comment as to the potential need for additional study beyond those transmission service studies. In order to allow PJM to conduct this evaluation, the entity seeking

to pseudo-tie to PJM shall provide to PJM the criteria requirements used to both study the individual generation to be pseudo-tied to as well as provide the criteria which shall be used on an on-going basis to study the PJM system surrounding that generation. This will allow PJM to evaluate both the current process for study as well as that process which may be used to continue to ensure the system is reinforced appropriately.

Alternately, if the transmission service studies have already been completed, the entity seeking to pseudo-tie to PJM may provide the study reports which documented the studies performed to grant the transmission service on those systems outside of PJM. PJM will review these studies to determine if other studies are required in order to allow certification of that initial study. This review will ensure that the study criteria used meets, is similar to, or exceeds the requirements associated with the studies of generation seeking to connect to the PJM footprint. The entity seeking to pseudo-tie to PJM must also provide the criteria which shall be used on an on-going basis to study the system surrounding that generation.

If the studies conducted, or that will be conducted, to allow the external Transmission Service Providers/Balancing Authority to grant transmission service to the entity seeking to pseudo-tie to PJM, as well as the studies conducted which will examine the system surrounding the generation on an on-going basis, meet the PJM transmission planning criteria requirements, then no additional work will be required to meet the transmission planning requirements associated with the process to pseudo-tie generation to PJM and PJM will provide certification of this. If the studies which were conducted, or that will be conducted, do not meet PJM criteria, then PJM shall delineate what the deficiencies are, such that if the deficiencies are alleviated, then PJM will provide certification. If the studies which were conducted, or that will be conducted, do not meet the PJM criteria requirements, the entity seeking to pseudo-tie generation to PJM will be required to engage a consultant to perform studies to ensure that all studies, taken together, can be assured as meeting the PJM criteria requirements. PJM will not require performance of duplicate studies in the event that additional studies are to be performed by a consultant.

The entity wishing to pseudo-tie to PJM should also understand that, beyond any initial studies to verify that the generation is deliverable to PJM under the same criteria as is used to study existing generation internal to the PJM footprint, the entity seeking to pseudo-tie generation will be required to continue to demonstrate, on an on-going basis, that studies performed on the system surrounding the generation are conducted in a manner such that the PJM transmission planning criteria continues to be used. This will again ensure that the system capabilities are being maintained to be consistent with the system capabilities associated with the generation directly connected to PJM.

In the event that any study conducted to certify the transmission planning requirements of the systems outside of PJM's footprint identifies the need for system reinforcement through documentation of a constraint in the study, the entity seeking to pseudo-tie generation to PJM must complete upgrades as needed to eliminate any constraints identified in those studies. This will require that the entity seeking to pseudo-tie generation to PJM engage the external Transmission Service Providers/Balancing Authority to complete the required upgrades as well as demonstrate to PJM that those upgrades are completed.

PJM will allow the option to reduce the pseudo-tie quantity to meet PJM's Planning criteria in order to avoid or reduce the amount of potential transmission upgrades. In the event that the pseudo-tied quantity is reduced due to constraints outside the PJM footprint, the customer must then also reduce the Network External Designated Transmission Service (NEDTS) held in PJM.

executing a new agreement, such that the MW quantity for both the deliverable MW outside PJM and the NEDTS provide the same MW quantity.

Modeling Eligibility Criteria

In order for a requested Pseudo-Tie to be approved, the particular resource must meet the following two modeling criteria: (1) Electrical Distance Test and (2) Seams Coordination Model Consistency. Each of the aforementioned criteria is described in detail below

Electrical Distance Test

PJM staff will evaluate the feasibility of upgrading the PJM Energy Management System (EMS) model to explicitly model the pseudo-tied resource by performing an electrical distance test, from the highest connected voltage at the station the unit is inter-connected, to determine the Thevenin equivalent impedance into PJM. If determined to be feasible, meaning the resulting equivalent impedance is determined to be less than or equal to .065 plus one adjacent bus, the cost of the model upgrade will be borne by the Market Participant requesting to Pseudo-Tie.

Seams Coordination Model Consistency

The EMS Models for PJM and the external Balancing Authority Areas, where the external resource impacts may be required to coordinate flowgates, need to ensure that the models align for effective operation of the requested Pseudo-Tie. This alignment is measured by calculating shift factors of coordinated flowgates and ensuring they are within $\pm 2\%$ of each other's models. Any deviation of more than $\pm 2\%$ will cause requested Pseudo-Tie to fail the 2% Modeling Accuracy Test. PJM will make their best effort to align the models with the respective External Entity without adding unnecessary risk to the PJM State Estimator and operational reliability.

Markets Eligibility Criteria

In order for a requested Pseudo-Tie to be approved, the particular generator must meet the following two markets criteria: (1) Market-to-Market Flowgate Test and (2) Transfer of Firm Allocation Eligibility. Each of the aforementioned criteria is described in detail below

Market-to-Market Flowgate Test

There must be at least one flexible internal PJM generator, which includes generation physically located inside of the PJM region and has the capability to have an economic minimum less than the economic maximum, with at least 1.5% impact on each eligible coordinated flowgate, measured with respect to the PJM RTO load, as a result of the requested Generation Pseudo-Tie.

Test Details:

1. Identify new coordinate flowgates impacted by requested Pseudo-Tie pursuant to any interregional agreements.
2. Identify flexible internal PJM Generation.
3. Perform analysis to determine the percentage of flow impact (shift factor) for a transfer of flow from the flexible internal PJM Generation with respect to the PJM RTO load on coordinated flowgates previously identified.
4. Identify which coordinated flowgates have a flexible internal PJM generator with at least ± 1.5 impact.