

Operational Modeling (Electric Distance) Related Questions

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- When resources inside PJM are considered deliverable, how does the proposed external impedance compare to internal impedances (deliverability requirements)?
 - *The proposed external impedance threshold is not related to deliverability. It is related to the operational risk and complexity of expanding and maintaining external network models*
 - *The electric distance is calculated as the equivalent impedance to the nearest PJM bus, so by definition, the electric distance of an internal unit is zero, and below the proposed threshold*

- What services can or cannot external resources provide relative to internal resources if the proposed PJM impedance values are used
 - *The impedance values do not impact the services that external units can provide (other than units that would be ineligible to Pseudo-Tie due to operational modelling requirement)*
 - *Units that meet all of the eligibility requirements to Pseudo-Tie may provide all services noted in Manual 12, Appendix F, Exhibit 22*

- How does the plus one substation addition change the original PJM proposal comparability.

Original Language:

Resources physically located one of the following areas:

- (1) in Tier 1 with some exclusions based on electrical distance
- (2) in Tier 2 AND close to the Tier 1 border

Current Language:

A Pseudo-Tie can be established for external resources with a minimum Electrical Distance impedance equal to or less than 0.065 or within 1 station of a transmission bus with a minimum Electrical Distance impedance equal to or less than 0.065.

- *The new proposed language is consistent with the original proposal, but is provides a more systematic, repeatable process to ensure consistent application for all requests*
- *The removal of the ‘Tier’ language addresses potential inconsistencies related to LBA geography*
- *The “plus on substation” equates to the “close to the Tier 1” in the original language*

- How many existing Pseudo-Tie resources would potentially be impacted if these changes were in place (recognizing that it would not apply in the current PJM proposal)?
 - The criteria was developed to address operational modelling concerns consistently across all PJM borders, and consistent with current modelling capabilities
 - The proposed criteria would have no impact on existing Pseudo-Ties from an operational modelling perspective