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Troutman Pepper Summary of FERC Order No. 2023 on Generator Interconnection Reform

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EXECUTIVE SUMMARY

On July 28, the Federal Energy Regulatory Commission (FERC or the Commission) issued Order No. 2023 (Order No. 2023 or Final Rule), which updates the procedures for interconnecting large generating facilities (20MW and above) and small generating facilities (under 20MW). As FERC explained in the Final Rule, the adopted reforms are intended to address interconnection queue backlogs, improve certainty in the interconnection process, and prevent undue discrimination for new technologies.

Order No. 2023 adopts a series of mandatory reforms in an attempt to bring uniformity to interconnections across the country. The most significant change is the move away from FERC's historic "first come, first served" serial approach to interconnections in favor of a "first ***ready***, first served" cluster study approach that requires generators to demonstrate commercial readiness to proceed through the queue.

Compliance Filings are due within 90 days of the Final Rule's publication in the Federal Register. Transmission providers proposing deviations from the Final Rule in their compliance filings must demonstrate that their deviations are "consistent with or superior to" standard (for non-RTO/ISO providers) or satisfy the "independent entity variation" standard (for RTOs/ISOs).

Summary of Key Reforms:

A. Reforms to Implement a First-Ready, First-Served Cluster Study Process

- **Facilitating Interconnection Information Access:**
  - Informational Study: The Final Rule does not require transmission providers to offer informational interconnection studies.
  - Heatmap: Transmission providers must maintain a publicly available visual representation (a heatmap) of available transmission capacity. The heatmap is not required to be publicly available until after the transition period.
- **Cluster Study Process:**

- Timelines: FERC adopted a single-phase 150-day cluster study process (exclusive of the Facilities and Affected Systems studies), preceded by a 45-calendar day Customer Request Window and 60-calendar day Customer Engagement Window (extended from the Notice of Proposed Rulemaking (NOPR) proposal of 30 days); individual scoping meetings are not required, only a single group scoping meeting.

- Restudies: Restudies are permitted in the event of higher- or equally queued withdrawals or modifications (certain modifications remain permissible regardless of impact); FERC otherwise declined to set limits on the number of allowable restudies per month.

- **Allocating Cluster Study Costs:**

  - Transmission providers may allocate between 10% and 50% of study costs on a per capita basis, with the remainder (between 90% and 50%) allocated pro rata by MW to members of the cluster.

- **Allocating Cluster Network Upgrade Costs:**

  - Network Upgrade costs are to be allocated based on a "proportional impact" (distribution factor) method so that each generator pays according to its contribution to the need for the upgrade, except that shared upgrades at substations must be allocated on a per capita basis to all interconnection customers interconnecting to the substation.

  - Customers sharing interconnection facilities may mutually agree to a per capita, or other, cost sharing arrangement.

- **Shared Network Upgrades:**

  - Transmission providers will not be required to allocate the costs of Network Upgrades shared by earlier and later clusters.

- **Increased Financial Commitments and Commercial Readiness Requirements:**

  - Study Deposits: Multiple deposits are not required, only a single deposit based on MW size of proposed generating facility.

  - Site Control: 90% of site control will be required at the interconnection request stage, with 100% required by Facilities Study agreement execution; no deposit will be permitted except for demonstration of "Regulatory" (federal, state, Tribal, or local law making it infeasible to otherwise timely obtain Site Control).

  - Commercial Readiness: No nonfinancial readiness demonstrations required, only financial deposits; transmission providers may adopt nonfinancial demonstrations if a variation is justified; Large Generator Interconnection Agreement (LGIA) deposit will be 20% of estimated Network Upgrade costs (rather than nine times the study deposit) and will be credited toward Network Upgrade costs.

- Withdrawal Penalties: Unless exceptions apply, customers will face increasing penalties based on study costs (for withdrawals before cluster restudy) or Network Upgrade cost estimate increases (for later withdrawals); distributed penalties pay first for the cluster's study, then for any Network Upgrades for the cluster, then refunded.

- **Transition Process:**

  - Transmission providers must offer three options: (1) transitional serial study for customers with a tendered Facilities Study agreement; (2) transitional cluster study; (3) withdrawal from the queue without penalty (at the outset; withdrawal penalty would apply after transition process commences).

  - Transmission providers with cluster studies, or transition plans, in progress do not need a new transition process.

B. Reforms to Increase the Speed of Interconnection Queue Processing

- **Elimination of the Reasonable Efforts Standard in Favor of Penalties for Delayed Studies:**

  - FERC adopted the NOPR proposal to eliminate the Reasonable Efforts standard governing the transmission provider's duty to timely complete cluster studies, cluster restudies, facilities studies, and affected system studies. Instead, FERC will impose financial penalties on transmission providers who fail to meet study deadlines.

  - Penalties (each subject to cap of 100% of study deposits collected): $1,000 per business day for delayed cluster studies; $2,000 per business day for delayed cluster restudies and affected system studies; $2,500 per business day for delayed facilities studies. Instead, FERC instituted penalties for late studies, as follows:

  - Penalty Relief: (1) penalty provisions don't apply until third cluster cycle; (2) no penalties if delay is corrected within 10 business days; (3) deadlines can be extended up to 30 business days by mutual agreement of cluster participants; (4) transmission providers can appeal penalty charges to FERC, arguing good cause to grant relief (customer-caused delay "would represent a potentially compelling basis for…good cause).

- **Coordination with Affected Systems:**

  - FERC adopted, with modifications, the NOPR's "affected system" coordination provisions, including a new *pro forma* affected system study agreement, *pro forma* affected system construction agreement.

  - Affected system transmission providers will be required to reimburse affected system interconnection customers for the costs of affected system Network Upgrades.

- **Optional Resource Solicitation Study:**

  - FERC declined to adopt this proposed NOPR reform.

C. Reforms to Incorporate Technological Advancements into the Interconnection Process

- **Increasing Flexibility in the Generator Interconnection Process:**
  - Co-Located Resources: FERC adopted (and revised) the NOPR proposal to require transmission providers to allow more than one generating facility to co-locate behind the same point of interconnection (POI) and to share an interconnection request, if desired by the generating facilities; a single request for multiple generating facilities must share the same POI.
  - Generating Facility Additions: FERC adopted the NOPR proposal, with modifications, to require evaluation of generating facility additions (*g.* storage) provided that (1) the addition is requested before submitting the executed facilities study agreement, and (2) the originally requested interconnection service level would be unchanged.
  - Availability of Surplus Service: FERC adopted the NOPR proposal to allow interconnection customers to access surplus service only once the original interconnection customer has executed the LGIA or requested the filing of an unexecuted LGIA.
  - Incorporating Operating Assumptions for Storage Resources:
    - FERC adopted the NOPR proposal (with some modifications) to require transmission providers, upon request by an interconnection customer, to use operating assumptions that reflect the proposed charging behavior of electric storage resources (whether standalone, co-located, or hybrid).
    - This reform does not require transmission providers to study charging as part of the interconnection process if they do not already do so (*g.* for transmission providers that study charging in the transmission service context).
- **Incorporating Alternative Transmission Technologies Into the Process:**
  - FERC adopted, with modifications, the NOPR proposal to require transmission providers to evaluate the following transmission technologies: static synchronous compensators; static VAR compensators; advanced power flow control devices; transmission switching; synchronous condensers; voltage source converters; advanced conductors; and tower lifting.
  - Transmission providers must evaluate these in the cluster process regardless of whether a customer requests.
  - Similar changes were adopted for the *pro forma* Small Generator Interconnection Procedures (SGIP).
  - FERC declined to adopt its NOPR proposal that would have required transmission providers to submit an annual information report on the list of alternative technologies considered.

- **Modeling and Ride-Through Requirements for Nonsynchronous Generating Facilities:**

  - Modeling: FERC adopted the NOPR proposal to require interconnection customers interconnecting nonsynchronous generating facilities to submit as part of their request: (1) a validated user-defined RMS positive sequence dynamic model; (2) an appropriately parameterized generic library RMS positive sequence dynamic model, including a model block diagram of the inverter control system and plant control system, that corresponds to a model listed in a new table of acceptable models or a model otherwise approved by WECC; and (3) a validated EMT model, if the transmission provider performs an EMT study as part of the interconnection study process.

  - Ride-Through: FERC adopted reforms that would: (1) obligate large and small generating facilities to ride-through, to the extent physically possible, abnormal frequency and voltage conditions with the "no trip zone" defined by NERC reliability Standard PRC-024-3; and (2) require that all newly interconnecting large generating facilities provide frequency and voltage ride through capability consistent with standards applicable to other generating facilities in the balancing authority area.

Compliance Procedures:

- The Final Rule is effective 60 days after publication in the *Federal Register*; however, each transmission provider's specific tariff revisions will not become effective until the Commission-approved effective date.

- Compliance filings are due within 90 calendar days of the Final Order's publication in the *Federal Register*.

- Transmission providers proposing deviations from the Final Rule will be held to the "consistent with or superior to" standard (for non-RTO/ISO providers) and "independent entity variation" standard for RTOs/ISOs.

- FERC rejected arguments that existing transmission provider reforms already meet the requirements of the rule or that FPA Section 206 requires individualized findings for each transmission provider; rather, such transmission providers must still justify deviations under the above-noted standards.

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To read the full summary, please click here.

For a copy of FERC's Order No. 2023, please click here.

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