

PJM Interconnection Policy Workshop

Pine Gate Feedback Regarding
FERC ANOPR and Interconnection
Cost Responsibility Options



Pine Gate Renewables, LLC

- Pine Gate Renewables (PGR) is a utility-scale renewable energy company focused on strategic development and financing of solar and energy storage projects in the United States.
- PGR currently has nearly 2,700 MWs of generation projects in the PJM queue.
- PGR's subsidiary company Pine Gate Mid-Atlantic is a PJM member.



Topics

- The Need for Reform
- Proposed Reforms – Enhanced Transmission Planning
- Cost Allocation
- Phased Compliance Structure
- Grid-Enhancing Technologies



Need for Reform

- There must be a large-scale build out of regional and interregional transmission infrastructure to decarbonize the electric grid in order to meet the ambitious policy goals established by states, local governments, utilities, customers, and other stakeholders.
- FERC's current transmission planning regulations have resulted in inadequate levels of infrastructure to achieve these goals. We have effectively shifted much of the task of planning new network facilities to the generator interconnection process.
- Existing transmission planning policy has produced a system that disproportionately yields projects that address only local reliability needs.
- Public policy must be considered alongside other drivers. It should not be considered separately as is the case under Order 1000.



Proposed Reforms – Enhanced Transmission Planning

FERC should require that transmission planning processes:

- Account for all benefits of a proposed transmission facility;
- Proactively account for future generation;
- Co-optimize solutions; and
- Consider projects and associated benefits on a portfolio basis.



Cost Allocation – 100% Participant Funding is Not J&R

- Any Participant Funding model that allocates 100% of the costs of Network Upgrades to Interconnection Customers is unjust and unreasonable and violates FERC’s “beneficiary pays” principle.
- Shared network upgrades resulting from generation interconnection requests provide economic and reliability benefits to loads and reduce congestion to improve grid efficiencies and operational flexibility.
- The failure to meaningfully proactively plan transmission that accounts for future generation, coupled with generator-funded network upgrades, creates a “free-rider” problem. Some system users receive significant benefits they bear no cost responsibility for, while others are funding those broader benefits.



Cost Allocation – PJM’s Proposed Alternatives

- PJM should consider the alternatives to be complementary (i.e., not mutually exclusive)
- Pine Gate supports the following alternative options:
 - State underwriting – states voluntarily take responsibility for funding network upgrades based on renewable portfolio goals
 - Enhancing baseline transmission – planning criteria changed to treat a defined set of network upgrades as baseline upgrades
 - Subscription model – based on analysis identifying multiple interconnection projects impacting the same electrical area, PJM examines the level of commercial interest before developing a “multi-interconnection network upgrade”



Phased Compliance Structure

- Certain aspects of the Final Rule could be expedited for compliance purposes.
- This approach recognizes that more complicated components of Final Rule, such as comprehensive transmission planning and associated cost allocation methodologies, are more difficult and should therefore have a longer compliance period.
- Examples of issues that could be expedited:
 - Ending Participant Funding in RTOs;
 - Requirement to consider Grid-Enhancing Technologies in interconnection process;
 - Requirement to consider future resources in transmission planning; and
 - Implementation of binding Network Upgrade costs assessment at specific point in interconnection process (subject to variance band)



Grid-Enhancing Technologies (GETs)

- What are GETs?
 - *Dynamic Line Ratings (DLR)* – Adjusts thermal ratings based on actual weather conditions including, at a minimum, ambient temperature and wind, in conjunction with real-time monitoring of resulting line behavior.
 - *Advanced Power Flow Control* – Injects voltage in series with a facility to increase or decrease effective reactance, thereby pushing power off overloaded facilities or pulling power on to under-utilized facilities.
 - *Topology Optimization* – Automatically finds reconfiguration to re-route flow around congested or overloaded facilities while meeting reliability criteria.
- Why GETs?
 - GETs enhance transmission operations and planning.
 - GETs complement building new transmission—they can help bridge the timing gap until permanent expansion solutions can be put in place.



Requirement to Consider GETs in Interconnection Process

- Efficient Grid Interconnection Act of 2021 (Castor bill)
- How it would work:
 - Interconnection customer may request the consideration of deployment of GET in addition to, or as a substitute to, carrying out a traditional transmission upgrade or addition.
 - Transmission Owner, subject to consultation with the RTO, has the ability to determine whether to deploy the technology.
 - If Transmission Owner elects not to deploy technology, interconnection customer may appeal determination to FERC.



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Thank You