Opportunities for PJM from Co-Location

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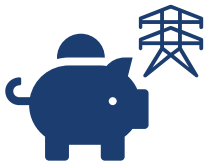
Win-Win Value Proposition of Co-Location

- Incentivize bring-your-own generation to ease resource adequacy tightness

- Facilitate speed-to-power for new large loads, expand the economy



- Reduce transmission expansion (and associated cost) for new large loads, increase utilization of existing transmission

"Saying [yes] to innovation is … a winning strategy—whether we're trying to win the AI race, bring back American manufacturing, or deliver the reliable and affordable energy on which families and small businesses depend."

--Paraphrasing Commissioner Rosner's Concurrence on PJM Co-Location in Docket No. EL25-49-000, December 18, 2025

Actual quote from Commr. Rosner: "Saying no to innovation is not a winning strategy"

Enabling co-location is a key solution to the challenge of reliable, timely, efficient connection of 20+ GW of new large load by 2030

Key Observations on PJM Concepts for Co-Located Transmission Service

- Proposal represents significant progress in facilitating co-location, will yield multiple benefits, among them incentivizing bring-your-own-capacity
- There is an opportunity on implementation to enhance synchronization of new generator + new load study processes, ideally achieving simultaneous processing of the supply and demand components of new co-located facilities
- Clarity is needed that load curtailment under non-firm services is only to the physical level of output of co-located generator (i.e., to zero net transmission system withdrawals)
- Proposal to limit non-firm service only to intervals with an outage of co-located generator means non-firm transmission service will not be available to Eligible Customers almost all of the time, **missing out on the benefits sought in FERC order** (below). Allowing non-firm transmission service all the time would increase the benefits of the proposal by avoiding unneeded transmission upgrades and increasing opportunities for trade between the energy market and the co-located facility when transmission capability is available

"We find that the new Non-Firm Contract Demand transmission service must be available during normal operations and curtailed during emergency operations"

Source: https://www.ferc.gov/media/e-1-el25-49-000-0

Benefits of Co-Location Transmission Service Options, Potential Enhancements
Co-Located NITS

Service	Benefit as Proposed	Implementation Challenge	Further Enhancement
Co-Located NITS	Avoids Tx upgrades and accelerates connection, because co-located generator included in load study as if it existed; allows full grid access for load	• Requirements for including a new co-located generator in load study model? • Relationship between gen and load?	• Synch gen and load studies to run simultaneously, instead of load-first or gen-first (applies to all Tx services and gen interconnection)

Benefits of Co-Location Transmission Service Options, Potential Enhancements
Interim Co-Located NITS

Service	Benefit as Proposed	Implementation Challenge	Further Enhancement
Interim Co-Located NITS	Same as NITS, plus even faster connection	• Curtailment dispatch protocol (SCED-dispatchable nodal curtailment like PRD?) • Reliance on Eligible Customer (e.g., LSE) curtailment operation for critical transmission reliability • RAS	• Clarify no obligation for customer to curtail below level of co-lo generator output • Remove gen size threshold to avoid precluding beneficial arrangements • Possible to handle RAS similarly to legacy BTM relay approach?

Benefits of Co-Location Transmission Service Options, Potential Enhancements
Firm Contract Demand Service

Service	Benefit as Proposed	Implementation Challenge	Further Enhancement
Firm Contract Demand Service	Avoids Tx upgrades and accelerates connection by reducing grid access for load	• RAS	• Consolidate with NITS but with a pre-nominated quantity? (Same as BTMG customer with residual load taking network service)

Benefits of Co-Location Transmission Service Options, Potential Enhancements
Non-Firm Contract Demand Service

Service	Benefit as Proposed	Implementation Challenge	Further Enhancement
Non-Firm Contract Demand Service	Avoids the most Tx upgrades and accelerates connection while allowing potentially full grid access for load by relying on controllability of load	• Limiting non-firm service only to intervals with an outage of co-lo gen precludes non-firm transmission service most of the time, **missing the benefits sought in FERC order (below)**	• **Allow non-firm service permanently** • Utilize dispatch method of Interim NITS • Clarify any tie to the capacity market; RA scarcity does not trigger curtailment (or triggers only net curtailment) • Use RT or DA market bids as reservation; or, borrow Non-Firm P2P precedent from Station Power (scheduled ex-post)

"We therefore direct PJM to develop two new transmission services that must be available to Eligible Customers taking transmission service on behalf of Co-Located Loads: (1) Firm Contract Demand transmission service, and (2) Non-Firm Contract Demand transmission service. These new transmission services will serve as permanent alternatives to existing transmission services"

We recognize that not all Co-Located Loads will necessarily plan to withdraw energy from the transmission system on a regular basis. Eligible Customers taking service on behalf of such loads may, however, still seek to withdraw energy from the transmission system from time to time when transmission capacity is available and not needed by firm customers.

…

We find that the new Non-Firm Contract Demand transmission service must be available during normal operations and curtailed during emergency operations"

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