Co-Located Load Use Cases

Co-Located Load Order Workshop

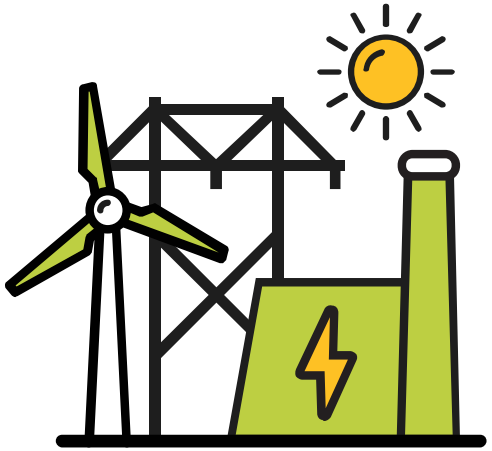
PJM Staff

March 16, 2026

Use Case Example Set Up

Co-Location Arrangement

PJM Grid

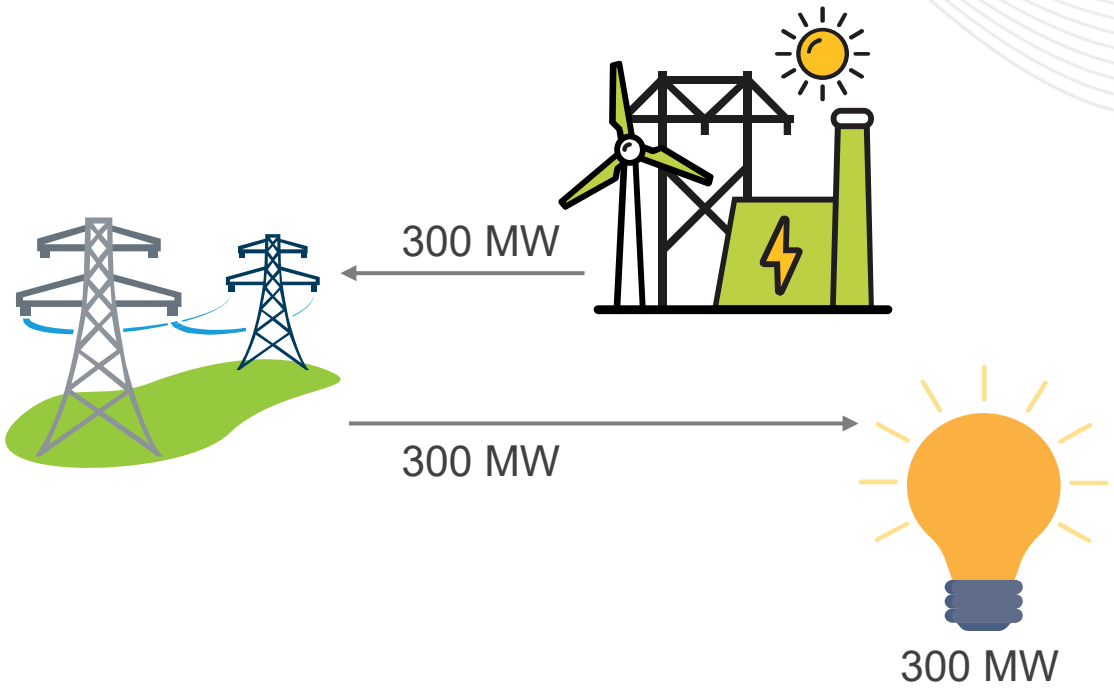


300 MW
Co-Located
Generator

300 - 500 MW*
Co-Located
Large Load

*MW amount may vary by example

Use Case 1: Co-Located Load Uses Network Integration Transmission Service (NITS)



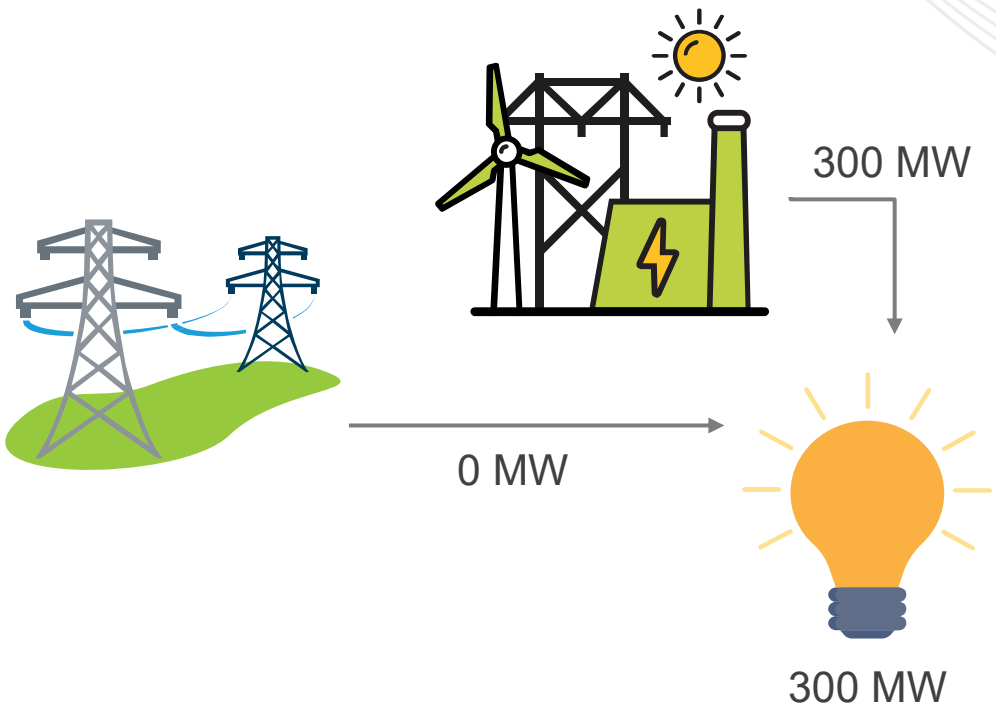
PJM plans all generation and transmission to serve the load, including any load growth

The co-located generator sells 100% of its energy and capacity to the PJM grid

Load purchases 100% of its gross energy needs from the PJM grid

300 MW of NITS service daily, regardless of RT Load	300 MW of capacity

Use Case 2: Co-Located Load Intends to Be Solely Supplied by the Co-Located Generation



PJM does not plan generation or transmission for this load.

The co-located generator will dedicate its energy and capacity to the co-located load. CIRs for MW dedicated to the load must be relinquished (300 MW).

The load will purchase the remainder of its energy and capacity from the grid (0 MW).

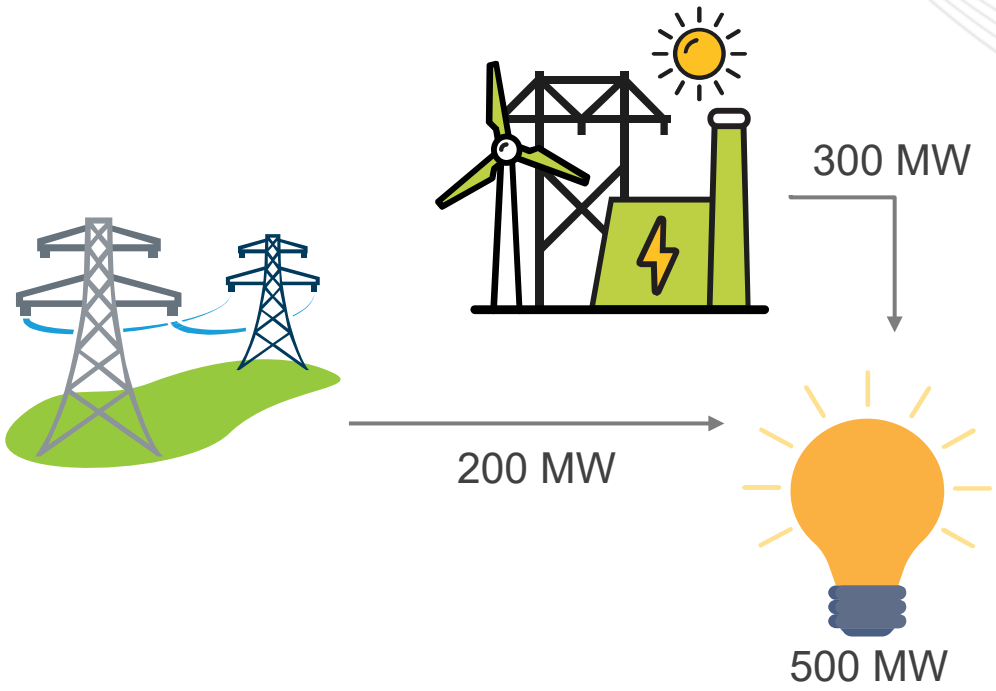
Load must sign a Transmission Service Agreement to cover the gross 300 MW of load. The agreement must request:

0 MW of Firm CDS	300 MW of Non-Firm CDS
(amount of load in excess of dedicated generation)	(to serve load on an as-available basis when dedicated generation is unavailable)

Use Case 2: RT Mechanics

- The load pays for 0 MW of Firm Contract Demand Service (CDS) and 0 MW of capacity daily, regardless of RT Load
- The load requests non-firm CDS in advance of times it anticipates the generator will not be fully available to serve its load (up to 300 MW). The load pays for any non-firm CDS requested and approved, regardless of whether it is actually used.
- The load's consumption from the PJM grid is limited to the requested and approved Non-Firm CDS.

Use Case 3: Co-Located Load Uses CDS and Generator Sells Full Output to the Load



In this scenario, the load is now 500 MW.

PJM plans generation and transmission only to serve the requested firm load and does not plan for addt'l load growth.

The co-located generator will dedicate its energy and capacity to the co-located load. CIRs for MW dedicated to the load must be relinquished (300 MW).

The load will purchase the remainder of its energy and capacity from the grid.

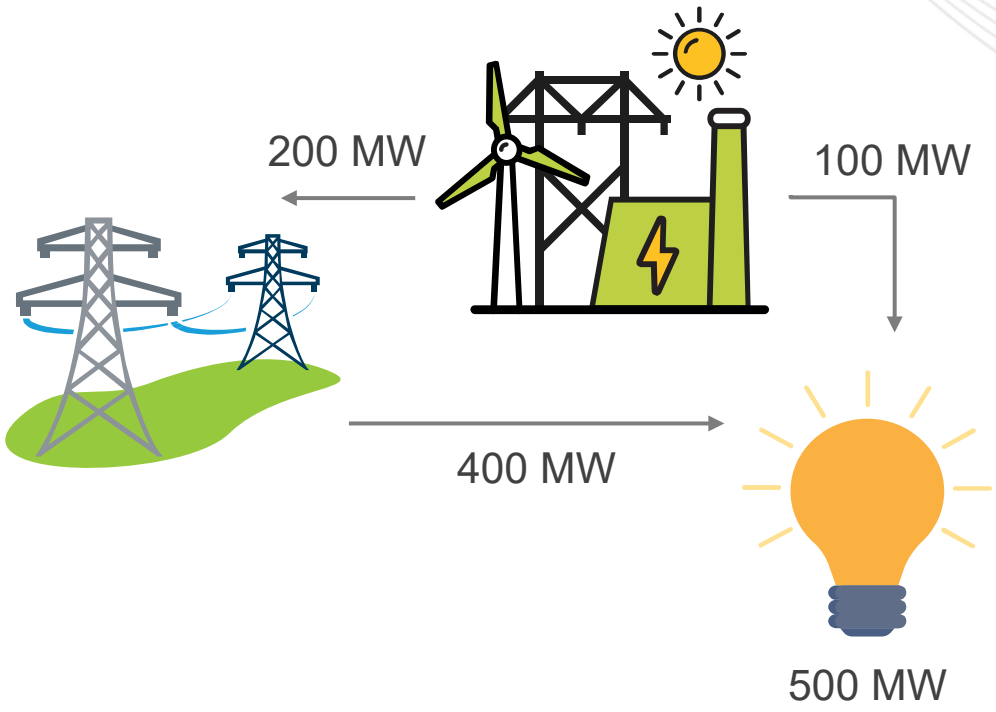
Load must sign a Transmission Service Agreement to cover the gross 500 MW of load. The agreement must request:

200 MW of Firm CDS	300 MW of Non-Firm CDS
(amount of load in excess of dedicated generation)	(to serve load on an as-available basis when dedicated generation is unavailable)

Use Case 3: RT Mechanics

- The load pays for 200 MW of Firm CDS and 200 MW of capacity daily, regardless of RT Load
- The load requests non-firm CDS in advance of times it anticipates the generator will not be fully available to serve its load. The load pays for any non-firm CDS requested and approved, regardless of whether it is actually used.
- The load's consumption from the PJM grid is limited to: the Firm CDS MW + requested and approved Non-Firm CDS

Use Case 4: Co-Located Load Uses CDS and Generator Sells Partial Output to the Load



PJM plans generation and transmission only to serve the requested firm load and does not plan for addt'l load growth.

The co-located generator will dedicate its energy and capacity to the co-located load. CIRs for MW dedicated to the load must be relinquished (100 MW).

The load will purchase the remainder of its energy and capacity from the grid.

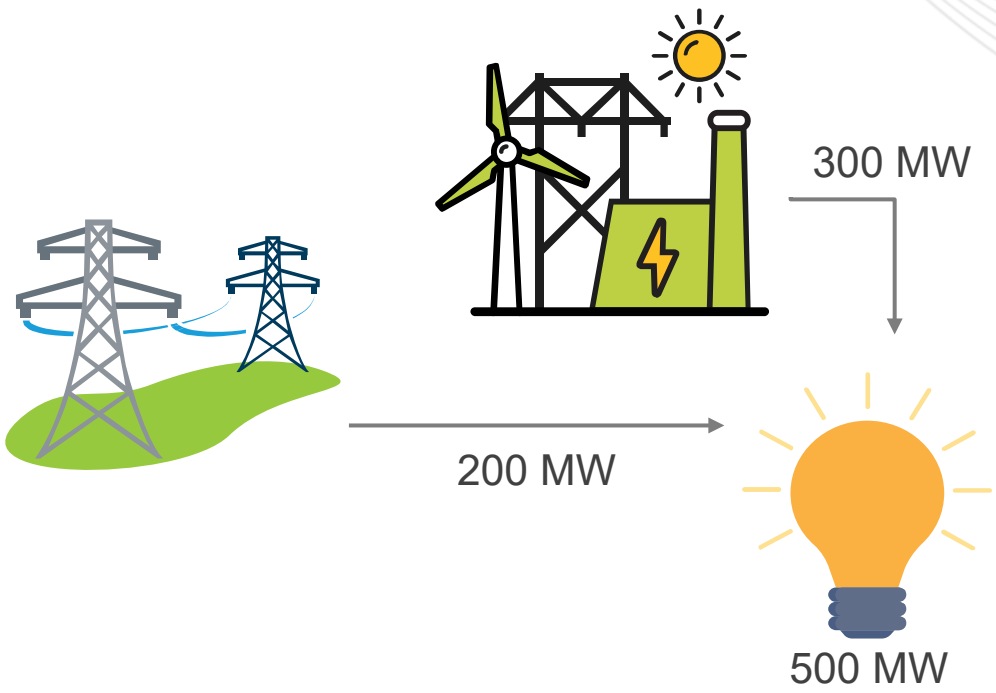
Load must sign a Transmission Service Agreement to cover the gross 500 MW of load. The agreement must request:

400 MW of Firm CDS	100 MW of Non-Firm CDS
(amount of load in excess of dedicated generation)	(to serve load on an as-available basis when dedicated generation is unavailable)

Use Case 4: RT Mechanics

- The load pays for 400 MW of Firm CDS and 400 MW of capacity daily, regardless of RT Load
- The load requests non-firm CDS in advance of times it anticipates the generator will not be fully available to serve its load. The load pays for any non-firm CDS requested and approved, regardless of whether it is actually used.
- The load's consumption from the PJM grid is limited to: the Firm CDS MW + requested and approved Non-Firm CDS
- The generator retains CIRs for the 200 MW not dedicated to the grid and may sell this remainder to the PJM grid.

Use Case 5: Co-Located Load Is Not Approved for Full Amount of Requested Firm Contract Demand Service



In this scenario, the load is 500 MW and requests 200 MW of firm CDS but is only granted 100 MW until transmission upgrades are completed

PJM plans generation and transmission only to serve the requested firm load (200 MW) and does not plan for addt'l load growth.

The co-located generator will dedicate its energy and capacity to the co-located load. CIRs for MW dedicated to the load must be relinquished (300 MW).

The load will purchase the remainder of its energy and capacity from the grid.

Load must sign a Transmission Service Agreement to cover the gross 500 MW of load. The agreement must request:

200 MW of Firm CDS	300 MW of Non-Firm CDS
(amount of load in excess of dedicated generation)	(to serve load on an as-available basis when dedicated generation is unavailable)

Use Case 5: RT Mechanics

- Because only 100 MW of Firm CDS can initially be provided, the load pays for 100 MW of Firm CDS and 100 MW of capacity daily, regardless of RT Load
  - This will increase to 200 MW once the transmission upgrades are complete and the entire amount of requested firm service can be reliably provided
- The non-firm CDS request remains limited to the MW of generation dedicated to the co-located load.
  - The load requests non-firm CDS in advance of times it anticipates the generator will not be fully available to serve its load. The load pays for any non-firm CDS requested and approved, regardless of whether it is actually used.
- The load's consumption from the PJM grid is limited to: the approved Firm CDS MW + requested and approved Non-Firm CDS
  - PJM will not allow the remainder of the gross demand to be served as firm or non-firm until transmission upgrades are complete

Interim NITS Load: Rights to Co-Located Generation

Will interim NITS load have rights to the energy from co-located generation when otherwise curtailed by PJM?

- Answer: Co-located load taking Interim NITS service will not have rights to the capacity/energy from any specific co-located generation.
  - The CDS option is available for load that wishes to exercise rights to the energy from co-located generation.

- This answer is guided by the following principles:
  - All Load that is non-firm, including interim-NITS and Non-firm contract demand, is subject to curtailment if the system cannot support it in real-time.
  - Interim NITS and Full NITS service is provided by "Network" resources, and the service is, by definition, not linked to any specific generator but to the resource pool.
  - Notwithstanding service from the network resource pool, PJM would endeavor to dispatch network resources, including co-located generation, to the maximum extent to reduce, but not eliminate, the risk of Interim NITS curtailment.

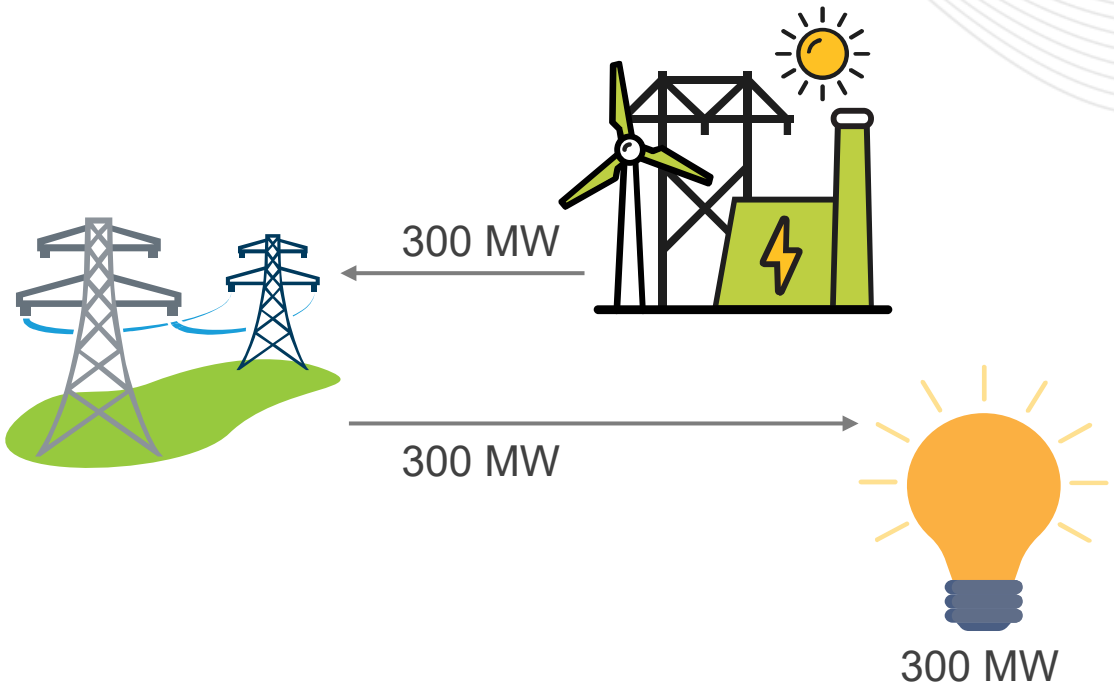
Interim NITS Use Case Variations

Co-Located Load Requests Interim NITS Service while waiting for completion of transmission upgrades needed to provide full NITS service:

1. Co-located with existing generation
2. Co-located with planned generation
    - Scenario A – Planned Co-Located Generation is still under construction and has no capability
    - Scenario B - Planned Co-Located Generation is partially operational with provisional service while waiting on completion of gen interconnection network upgrades
    - Scenario C - Planned Co-Located Generation is fully operational

Using the guiding principles on the prior slide, these variations all have the same outcome as depicted in the example on the following slide.

Use Case 6: Co-Located Load Uses Interim NITS



PJM plans all generation and transmission to serve the load, including any load growth

The co-located generator sells 100% of its energy and capacity to the PJM grid

Load purchases 100% of its gross energy needs from the PJM grid

300 MW of interim NITS service daily, regardless of RT Load	0 MW of capacity

Use Case 6: RT Mechanics

- The load pays for 300 MW of interim NITS service daily, regardless of RT Load
- The load does not pay for capacity
  - This will increase to 300 MW once the transmission upgrades are complete and the entire amount of requested firm service can reliably be provided
- The co-located generation is not dedicated to the co-located load since this load is being served under network service.
- PJM would endeavor to dispatch the co-located generation to the maximum extent to reduce, but not eliminate, the risk of curtailment to this interim NITS load.

Contact

Presenters:

Mark Stanisz,
Mark.Stanisz@pjm.com

Lisa Morelli
Lisa.Morelli@pjm.com

Augustine Caven
Augustine.Caven@pjm.com

Co-Located Load Use Cases

Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

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