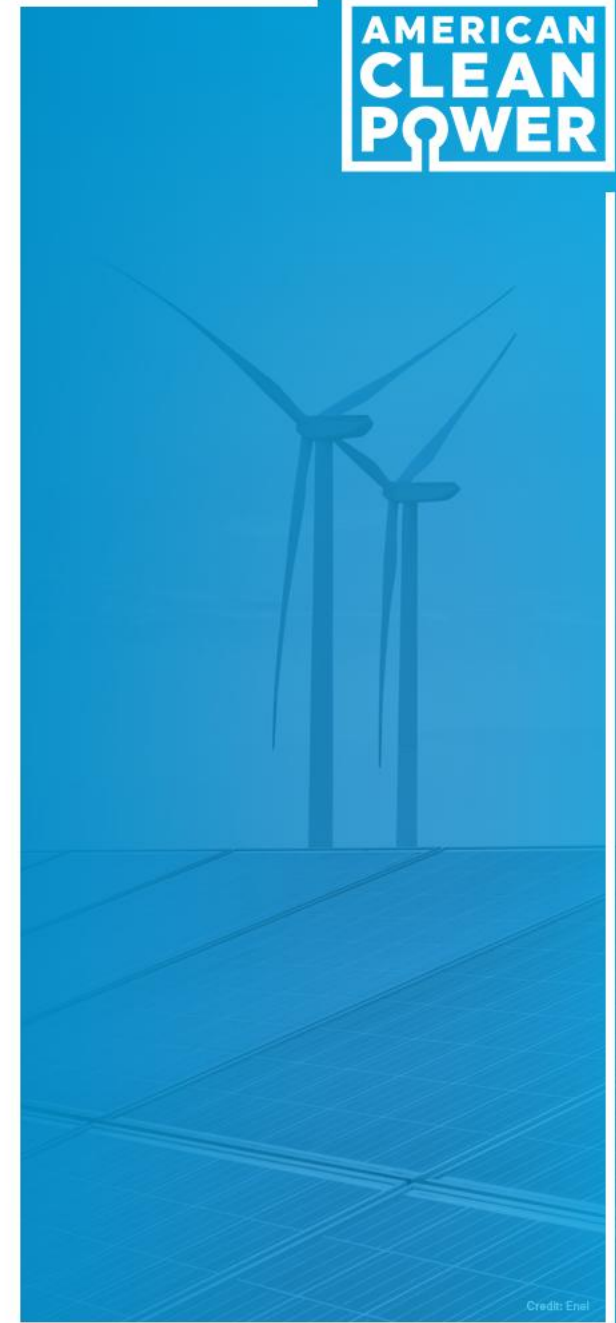


Surplus Interconnection Service

What is Surplus Interconnection Service?

- Surplus Interconnection Service (SIS) allows a new generating facility to use unused capacity at an existing interconnection point without triggering a full interconnection study for the host facility.
 - Speeds up interconnection timelines by bypassing major studies.
 - Avoids costly network upgrades for the new resource
 - Interconnection costs in ISO-NE typically range from \$100/kW to over \$600/kW, depending on project status, size, and technology.
 - Keeps all lanes of the transmission “highway” efficiently used.



SIS Examples

Example 1:

- Battery Paired with an Aging Oil Plant (100 MW oil-fired generator; runs only during peak demand, a few hundred hours/year).
- 25 MW / 100 MWh (4-hour) battery added behind the same point of interconnection. Battery charges from the grid during off-peak hours and discharges when the oil unit is offline
- Should be approved by ISO without triggering upgrade.

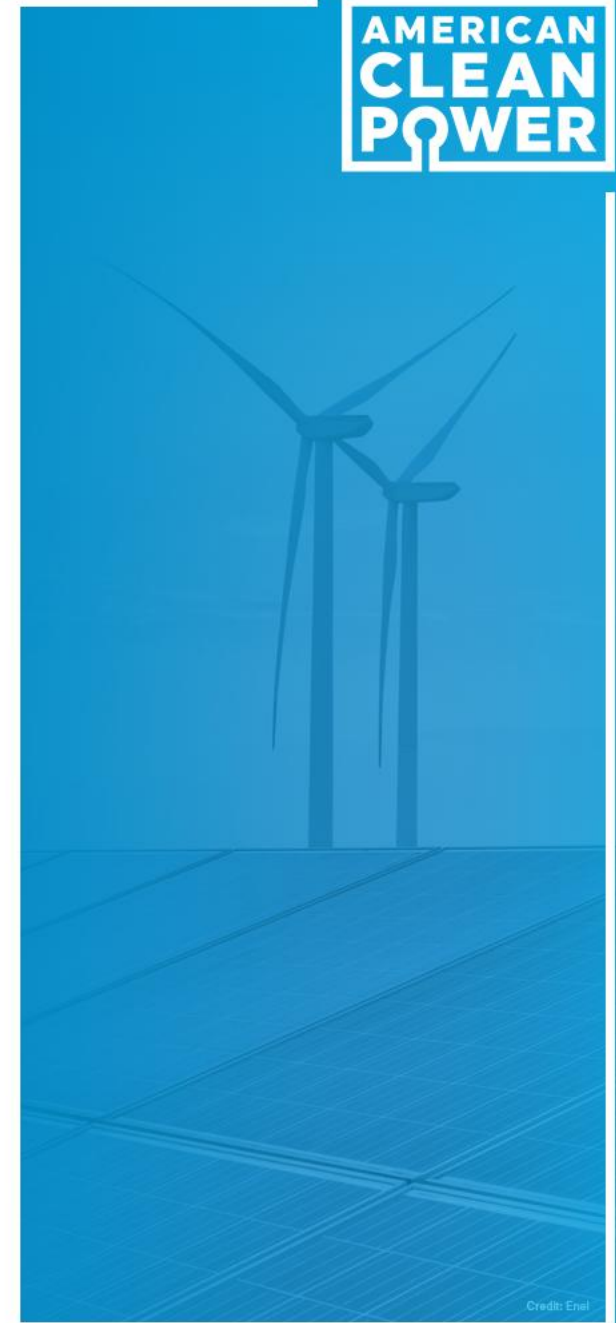
Example 2:

- 120 MW solar plant shares its POI with a 30 MW / 120 MWh (4-hour) battery.
- At night, when the solar plant is offline, the battery can discharge up to 30 MW for 4 hours.
- This uses “empty highway lanes” (available interconnection capacity) that would otherwise go unused



FERC Order 845 (2018)

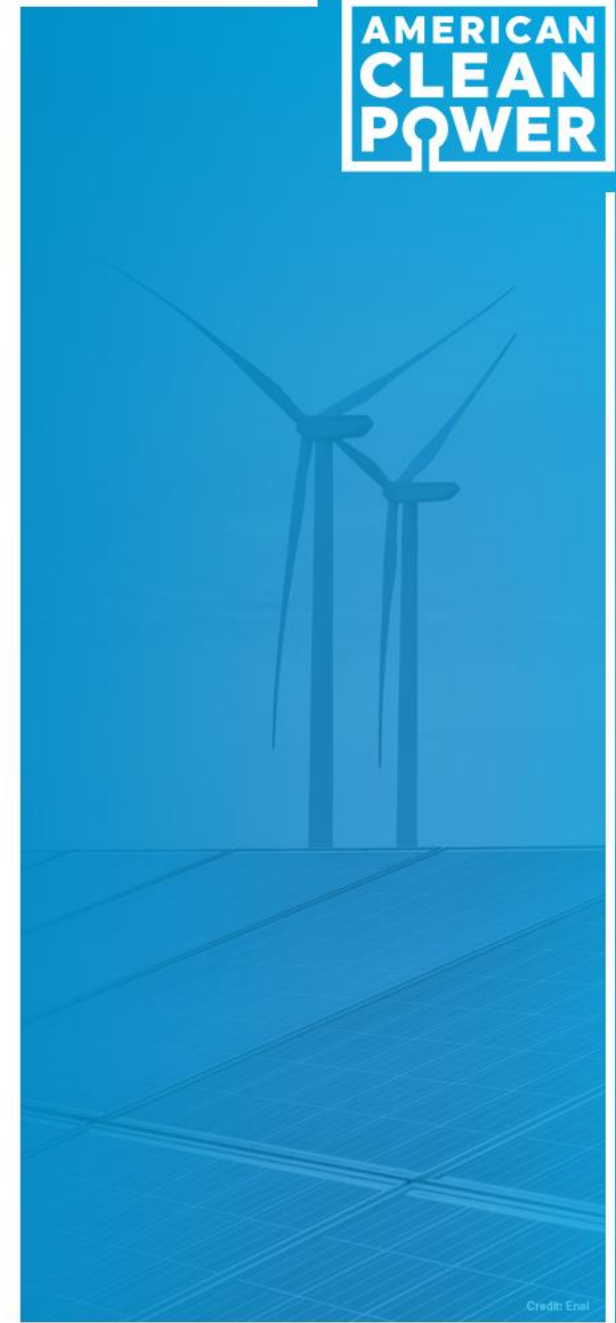
- Enables streamlined interconnection through Surplus Interconnection Service (SIS), allowing new generators to use unused POI capacity without triggering full studies or new queue positions, subject to system impact review.
- Address growing interconnection backlogs across RTOs and ISOs.
- Facilitate better use of existing transmission capacity.
- Supports renewable integration by making the process faster, more predictable, and better suited for storage and hybrid projects.



SIS in Midwest ISO

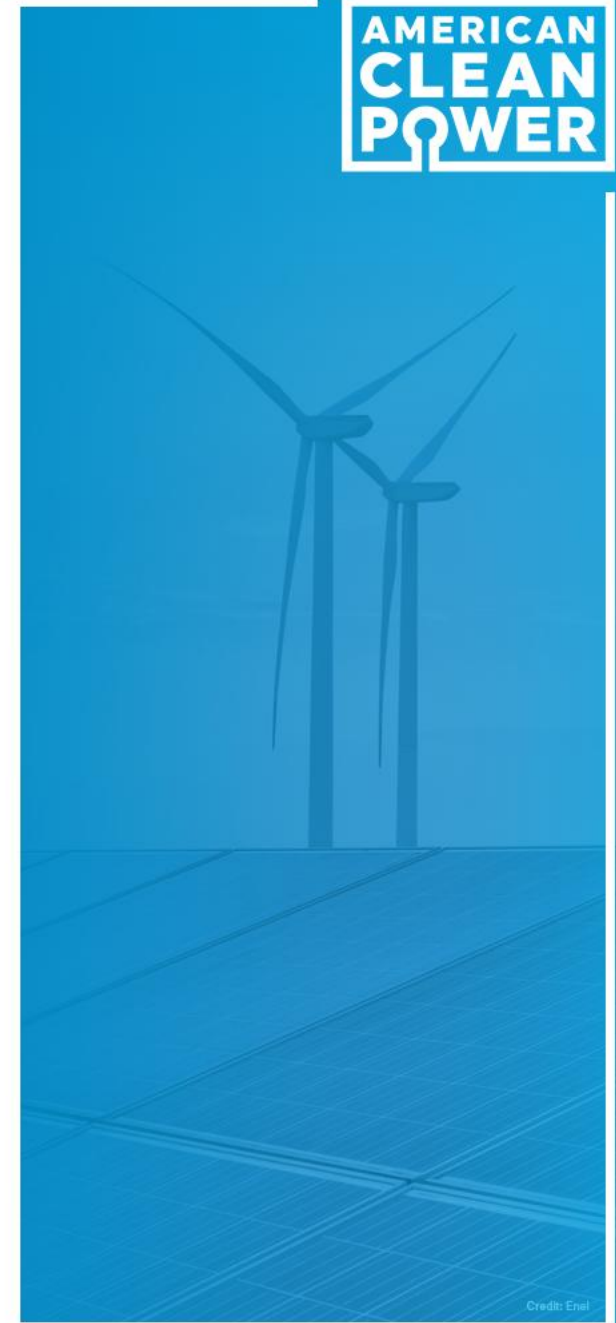
MISO

- Actively implements SIS across multiple states and technologies (solar, storage, hybrids)
- As of 2024:
 - ~4,000 MW of SIS capacity under review
 - 11 active SIS projects in study phase
 - 30+ additional surplus requests pending



SIS in Southwest Power Pool

- A recent study (GEN-2024-SR15) demonstrated real SIS in action:
 - SPP approved a **300 MW surplus injection** using existing interconnection capacity.
 - Battery approved under SIS behind existing thermal generator.
 - No additional network upgrades were required.
 - Reliability studies confirmed no negative system impacts



SIS in PJM

- Proposal filed Dec 2024, approved by FERC Feb 11, 2025.
- Allows SIS even with minor interconnection facility additions (e.g., substation improvements).
- Opens SIS to storage projects by correctly modeling their operational characteristics.
- Could unlock ~26 GW of capacity ahead of PJM's July 2026/27 capacity auction

