

CARIS Database Extension:

External Areas

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External Area Modeling Guiding Principles

- Extend database in a manner similar to RNA methodologies to replicate a 20 year RNA.
- Per NYSRC Policy 5-2
 - "The primary consideration for developing the final load and capacity models for the Outside World Areas is to avoid overdependence on the Outside World Areas for emergency capacity support."
 - "...Outside World Area's LOLE cannot be lower than its own LOLE criterion.
 - "...its IRM can be no higher than that Area's minimum requirement."
- Any assumptions for the external areas must have a reasonable basis.
- Level of work required to develop model must be reasonable.



External Area Modeling Options Considered

- Option 1
 - Grow load at NYCA forecast rate
 - Grow capacity to maintain the reserve margin from year 10
 - Concern:
 - No basis for determining the type, size or location for new capacity additions
- Option 2
 - Grow load at NYCA forecast rate
 - Grow capacity based on a blend of projects in the external area's queue
 - Concern:
 - Very time consuming and subjective
 - Relies on projects that may not materialize or even represent the likely mix and location of completed facilities.

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External Area Modeling Options Considered

- Option 3
 - Freeze both load and capacity at year 10 values.
 - Benefits:
 - The net impact on NY for injection/withdrawal remains the same as first ten years.
 - Maintains constant reserve margin to avoid over dependence on neighbors.
 - Avoids speculation on developments
 - Presents a middle ground between scenarios that could over or under represent external impacts.



External Area's Modeling Methods

Review of PJM and New England's external area modeling has shown minimal detail for external areas.



The New York Independent System Operator (NYISO) is a not-for-profit corporation that began operations in 1999. The NYISO operates New York's bulk electricity grid, administers the state's wholesale electricity markets, and provides comprehensive reliability planning for the state's bulk electricity system.

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