

Deliverability Straw Proposal

New York Independent System Operator

Joint Interconnection Issues Task Force (IITF)/
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Topics to Cover

- ◆ This presentation covers:
 - *Outline of Strawman Deliverability Implementation*
 - *Deliverability Test (description)*
 - *Transferable Capacity Deliverability Rights*
 - *Deliverability Test (implementation)*

Outline of Strawman Deliverability Implementation

- ◆ The deliverability of a new generator would be evaluated as part of the interconnection process.
- ◆ Two levels of interconnection service would be provided under the Large Facility Interconnection Procedures (Attachment X): Energy Resource Interconnection Service (ERIS) and Capacity Resource Interconnection Service (CRIS).
 - *ERIS would allow a generator to interconnect under the current Minimum Interconnection Standard, but would not permit the generator to sell capacity in NYISO's ICAP Market;*
 - *CRIS would permit the generator to sell capacity if it is found to be deliverable (or if it constructs upgrades making it deliverable). A project may be found to be partially deliverable and elect partial CRIS.*

Outline of Strawman Deliverability Implementation (cont'd)

- ◆ The NYISO would apply the deliverability test during the interconnection study process to determine the deliverability of projects electing CRIS and identify any upgrades to the transmission system necessary for the project to be deliverable.
 - *A generator electing CRIS that is found to be deliverable would be able to sell capacity, without being subject to reevaluation.*
 - *A generator taking full or partial ERIS may later elect to have deliverability of unit reevaluated.*

- ◆ The “but for” principle of cost allocation would remain in Attachment S, but would be expanded to indicate that a Developer is responsible for any “but for” costs of upgrades to satisfy the Minimum Interconnection Standard and, for a project electing CRIS, for the costs of any required deliverability upgrades.

- ◆ All existing capacity resources are assigned CRIS status.

- ◆ Existing generators, and new generators found to be deliverable, would be assigned Capacity Deliverability Rights which would be transferable subject to passing the Deliverability test.

The Deliverability Test Description



- ◆ A generator will be found to be deliverable if there are no limiting elements or constraints identified on Monitored Facilities. Upgrades identified for a generator to become deliverable will be limited to the Monitored Facilities.
- ◆ The Deliverability Test identifies “bottled generation” within the current definition of Capacity Zones. Major Inter-zonal (both load zones and Capacity Zones) Interfaces are excluded from the Monitored Facilities.
- ◆ This distinction is analogous to the “highways vs. byways” concept. The Deliverability test addresses congestion on the byways. The designation of capacity localities in NYISO addresses congestion on the highways.

Transferable Capacity Deliverability Rights

- ◆ New generation may contract with an existing generator (with assigned Capacity Deliverability Rights) to transfer some or all of the existing generator's capacity rights. The new generator will be allowed to acquire these rights upon meeting the deliverability test which is executed in the following manner:
 - *Prior to the Class Year study, both new and existing generator pair must indicate MW level of capacity rights to transfer.*
 - *Existing generator will be modeled for the deliverability test in the Class Year study at reduced generation levels (old level less capacity proposed to be transferred).*
 - *If deliverability test indicates new generator capacity is fully or partially deliverable under this condition, new generator will be allowed to acquire full or partial capacity rights as determined by the deliverability test.*
 - *Existing generator will be restricted in future capacity sales up to levels consistent with Capacity Deliverability Rights that were transferred to the new generator.*

The Deliverability Test Implementation



- ◆ **Constructing the Base case**
- ◆ **Monitored Facilities**
- ◆ **Conducting the test**

Base Case Assumptions

- ◆ Summer Peak Load Conditions
- ◆ Based on ATRA Case
- ◆ Set scheduled interchange to reflect firm transactions consistent with other assumptions, including UDRs
- ◆ External Capacity treated as per the IRM assumptions
- ◆ Set PARS consistent with IRM and other Planning Procedures
- ◆ Base Case dispatch of NYCA resources are set with all resources on and scaled back to balance the system

Base Case Assumptions (cont'd)

- ◆ Apply a deliverability adjustment factor in the base case power flow. This is a deration from the maximum MW value (or DMNC) that is tested in the power flow.
 - *Recognize some level of generation unavailability (approx. +5%, EFORd, or UCAP translation for intermittent).*
 - *Recognize some load uncertainty adjustment factor (approx. +3 to 6%) from either the IRM study or Expected value of Load Uncertainty.*
 - *Recognize some level of other uncertainties that impact the IRM.*

Monitored Facilities

- ◆ Monitored facilities would include all NYCA facilities 69 kV and above, with the exceptions noted below.
- ◆ All inter-zonal facilities that make up the MARS interfaces that are 230 kV and above are excluded.
- ◆ Any 345 kV and above intra-zonal circuits that are part of the “backbone” bulk power system are excluded. These are identified by performing shifts through the zone from external areas or an adjacent zone to another adjacent zone and those circuits with a shift factor greater than 10% are excluded (This is to identify the “radial or semi radial” circuits such as the Oswego area plant exits to the “backbone system”).

Testing for Deliverability

- ◆ Projects are evaluated on an aggregate basis by inserting them in their appropriate zone.
- ◆ The NYCA, present localities (NYC and Long Island) and remaining zones grouped together (as ROS) are evaluated for potential intra-zonal constraints, on an individual basis by export test:
 - *Bring all generation in the zonal grouping to their maximum MW level after adjustment by the deliverability adjustment factor*
 - *Scale load in the zonal grouping up by the load uncertainty adjustment factor and decrease generation in rest of NYCA*
 - *Identify potential constraint from the list of monitored element/contingency pairs*
- ◆ The amount of overload will be used to determine the amount of capacity that is assigned CRIS status.