

ATTACHMENT VII

New York Transmission Owners and NYISO
Consensus Deliverability Plan

The following is an outline of the basic components of a consensus generator deliverability process.

1. The deliverability test methodology will be part of the interconnection study process performed as part of the NYISO's Interconnection Feasibility Study, Interconnection System Reliability Impact Study ("SRIS") and Class Year Interconnection Facilities Study. A generator can elect to study Energy Resource Interconnection Service ("ERIS"), Capacity Resource Interconnection Service ("CRIS") or both at the time of the interconnection request but must finalize its decision when the Facilities Study Agreement is executed (conforms to FERC pro forma language section 3.2). The time periods for completion of the interconnection studies provided in the Large Facility Interconnection Procedures ("LFIP") may need to be adjusted to accommodate the expanded scope of the studies. Developers are responsible for interconnection study costs, including the deliverability analysis.
2. The generator deliverability test will be applied within each New York capacity region.¹ To be declared deliverable, a generator² must be deliverable throughout the relevant NYISO Capacity Region. By way of example, a generator located in the rest-of-state (ROS) region, would be required to demonstrate deliverability throughout the ROS region, but not be required to demonstrate deliverability to the locationally constrained markets, currently limited to the New York City and Long Island localities; a generator located in the New York City locality would be required to demonstrate deliverability within that locality, but not outside that locality.
3. New generators, or an increase in capacity to an existing generator (above a specified threshold), will be required to elect CRIS in order to participate in a particular NYISO capacity market. The amount of CRIS requested by a new generator cannot exceed the nameplate rating of the generator. Where a new generator elects CRIS, the NYISO will evaluate deliverability in the interconnection studies to identify necessary upgrades, if any, to address deliverability, and by funding or committing to fund the identified upgrades, as described below in paragraphs 9 and 10, the generator will be eligible to participate in the appropriate NYISO capacity market to the extent of its deliverable capability.

¹ The NYISO operates three distinct Installed Capacity markets: A statewide market and locational markets for New York City and Long Island. Within these markets, there are three capacity regions that are subsets of the statewide market: Rest of State (zones A through I), Long Island (zone K), and New York City (zone J) ("Capacity Regions").

² When used in this document, the term "generator" shall be understood to include a controllable transmission facility seeking UDRs. The quantity of UDRs awarded to a controllable transmission facility will be reduced (potentially to zero) if it is found not to be fully deliverable.

4. Small generators (20 MW or less), above a possible threshold size, will be subject to the deliverability requirement if they elect CRIS.
5. Where the pre-existing system (existing transmission and generation prior to the implementation of this deliverability requirement) demonstrates deliverability issues, a new interconnecting generator electing CRIS need only address the incremental deliverability of its interconnecting facility, not the deliverability of the pre-existing system. Likewise, Transmission Owners will not be responsible for curing any pre-existing issues related to the deliverability of generation.
6. A generator that elects to interconnect under the ERS requirements (and limit the interconnection costs that it is responsible for) will not be a CRIS and will not be eligible to participate in the applicable NYISO capacity markets. Rather, such a generator will be eligible to participate only in the energy and applicable ancillary service markets. When a generator elects ERS, the generator may at a later date ask the NYISO to reevaluate the generator's CRIS eligibility by including the generator in the deliverability study conducted as part of the next Class Year Facilities Study process to identify necessary upgrades, if any, to address deliverability, and by funding or committing to fund the identified upgrades, as described in paragraphs 9 and 10 below, the generator will be eligible to participate in the appropriate NYISO capacity market to the extent of its deliverable capability.
7. To ensure the greatest flexibility for generators, generators may elect partial ERS/CRIS service for a given unit. Generators qualifying for CRIS will have two CRIS values: one for the summer capability period and one for the winter capability period. The CRIS value for the summer capability period will be set using the deliverability test methodology and procedures described below. The CRIS value for the winter capability period will be set at a value that will maintain the same proportion of CRIS to ERS as the summer capability period.
8. For purposes of the deliverability test, transmission facilities will be designated Byways or Highways. "Byways" are all transmission facilities that are not "Highways". However, Byways will not include ties between Capacity Regions nor ties to control areas external to the NYISO.
9. A proposed new generator will pay 100% of the cost to upgrade a Byway when necessary to make a generator deliverable.
 - a.) The smallest feasible upgrade (consistent with good utility practice) of the Byway to allow a generator to be deliverable will be identified by the NYISO with input from the relevant Transmission Owners ("TO").
 - b.) A generator paying to upgrade a Byway will be eligible to receive headroom payments, if headroom is created.

- c.) In cases where headroom is created, a subsequent generator will pay its proportionate share of the final cost of the upgrade to the generator(s) that funded the upgrade (consistent with current Attachment S provisions)
 - d.) A generator paying to upgrade a Byway will receive any incremental TCCs created.
 - e.) A subsequent generator paying headroom will receive corresponding TCCs, if any.
10. "Highways" are major inter-zonal interfaces, but not ties between Capacity Regions nor ties to control areas external to the NYISO, and shall be treated as follows:
- a.) Highways are 115 kV through 345 kV transmission facilities that comprise the following NYCA interfaces: Dysinger East, West Central, Volney East, Moses South, Central East/Total East, UPNY-SENY and UPNY-ConEd, and their immediately connected, in series, Bulk Power System facilities in the New York State. Highways will also include 115 kV through 345 kV transmission facilities identified through a threshold sensitivity analysis to be "in series" with the interfaces identified above.
 - b.) A proposed new generator that is determined to require an increase in transfer limits on a Highway or Highways to achieve deliverability will be allocated costs for the upgrades under the threshold mechanism described in Paragraphs 10(d) and (e).
 - c.) The smallest feasible upgrade (consistent with good utility practice) of a Highway to allow a generator to be deliverable will be identified by the NYISO with input from the relevant TO.
 - d.) If the portion of the smallest feasible Highway upgrade (measured in MWs) required to make the generator deliverable is 90% or more of the total size of the upgrade, the generator will pay 100% of the cost of the upgrade.
 - e.) If the portion of the smallest feasible upgrade required to make the generator deliverable is less than 90% of the total size of the Highway upgrade, the generator will be required to pay or commit to pay for its proportionate share of the project cost. The generator may either (1) make a cash payment of its proportionate share of the upgrade, which will be held by the relevant TO in an interest bearing account; or (2) post Security (as defined in Attachment S) meeting the commercially reasonable requirements of the relevant TO for the generator's proportionate share of the cost of the upgrade. If the generator chooses to provide Security, its allocated cost will be increased by an annual construction-focused inflation index. The generator will update its Security on an annual basis to reflect this increase. Except for this adjustment for inflation, the cost allocated to the generator will not be increased if the estimated cost of

the project increases. However, the costs allocated to subsequent generators will be based on a current cost estimate of the upgrade.

- f.) The generator will be considered deliverable, and eligible for ICAP payments, when it is in service, provided it has paid its share of the total cost or made a satisfactory commitment to do so. Highway upgrades--where the smallest feasible upgrade is below the 90% threshold discussed in paragraph 10(e), above--will be constructed and funded either (i) according to subsections (1) and (2) below, or (ii) according to subsection (3) below.
 - 1) When a threshold of 60% of the most current cost estimate of the upgrade has been paid or posted as Security by generators, the upgrade will be built by the relevant TO; and
 - 2) The cost of the project above that paid for by generators will be funded by LSEs, based on their proportionate share of the ICAP requirement in the ROS region, reflecting locational capacity requirements; or
 - 3) If the NYISO Comprehensive Reliability Planning Process (CRPP) identifies a reliability need requiring a Highway facility to be constructed earlier, the facility will be constructed as determined in the CRPP with funds collected from generators (pursuant to paragraph 10(e), above) used to cover a portion of the regulated solution costs. These funds will be used as an offset to the total upgrade cost, with the remainder of the cost to be allocated per the requirements of the CRPP.
 - g.) Before construction of an identified highway upgrade is commenced, if a generator elects to be retested for deliverability (as described in paragraph 6) and is found to be deliverable without the upgrade, the generator's payment or Security posting will be returned.
 - h.) When the project is built, the resulting TCCs will be distributed to the generators and LSEs in proportion to their funding of the project.
 - i.) As new generators come on line and use the headroom created by a project on a Highway facility, they will pay their proportionate share of the final cost of the project. These payments will be used to reimburse the LSEs who funded a portion of the project. As new generators make these payments, the related TCCs will be transferred to them.
 - j.) A Transmission Owner or the generator being studied can elect to construct an upgrade larger than the smallest feasible upgrade. The party electing to construct the larger upgrade will pay for the incremental cost, *i.e.*, the difference in cost between the smallest feasible upgrade and the larger upgrade.
11. Details regarding the modeling of proposed generators and associated upgrades in interconnection studies for other generators will be developed.

12. The deliverability requirement will be applicable to the 2007 Class Year.³ No upgrades to address deliverability will be required of pre-2007 generators under these deliverability procedures. A pre-Class Year 2007 generator shall qualify for CRIS service so long as (1) its interconnection agreement is not terminated, and (2) it begins commercial operations within three years of the commercial operation date specified in its interconnection agreement.
13. Going forward, generators qualifying for CRIS will retain their CRIS status at the capacity level found deliverable in the Class Year deliverability study regardless of subsequent changes to the transmission system or the transfer of ownership, provided the unit remains capable of operating at the capacity level studied and is not deactivated. For generators pre-dating Class Year 2007, their CRIS capacity level will be set at the maximum DMNC level achieved over a set period. In the case of a deactivation, CRIS status at the capacity level eligible for CRIS found deliverable terminates three years after deactivation unless the deactivated generator takes one of the following actions before the end of the three-year period: (1) returns to service or (2) transfers capacity deliverability rights to another generator that becomes operational within three years from the deactivation of the original generator.
14. If a generator deactivates an existing unit and commissions a new one at the same location, CRIS status of the deactivated generator at its deliverable capacity level may be transferred to that same electrical location, provided that the new generator becomes operational within three years from deactivation of the original generator. The new generator will only acquire the assigned capacity rights once the new generator becomes operational.
15. Rights may also be transferred on a bilateral basis between an existing generator and a new generator at a different location to the extent that the new generator is found to be deliverable after the existing generator assumes ERS status or retires. The new generator may contract with an existing generator (with assigned capacity rights) to transfer some or all of the existing generator's assigned capacity rights. The new generator will be allowed to acquire these rights if it meets the deliverability test executed in the following manner:
 - Prior to the class year study, the new and existing generators involved in the transfer transaction must indicate the MW level of capacity rights to be transferred.
 - The existing generator will be modeled in 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, the new generator will be allowed to acquire full or partial capacity rights as determined by the deliverability test.

³ The NYISO is separately seeking clarification of a prior FERC order with regard to the application of a deliverability requirement to a pending UDR request from a Class Year 2006 project.

- The 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 new generator will only acquire the assigned capacity rights once the new generator becomes operational.

16. For interfaces into Capacity Regions, currently Zone J and Zone K, and external ties into NYCA, if a proposed generator degrades the transfer capability of the interface below the transfer capability identified in the current ATBA, then 100% of the cost of the transmission upgrade required to restore transfer capability will be paid for by the generator. The generator will be responsible for this cost only to the extent the degradation of transfer capability, compared to that in the ATBA, would not occur but for the generator. The NYISO will also develop a de minimis threshold to apply when evaluating degradation to interface capability.
17. The following deliverability test methodology and definition of NYCA deliverability will be used for both Highways and Byways.

Definition of NYCA Deliverability - The NYCA transmission system shall be able to deliver the aggregate of NYCA capacity resources to the aggregate of the NYCA load under summer peak load conditions. This is accomplished through ensuring generator deliverability in the three Capacity Regions in New York State; New York City (Zone J), Long Island (Zone K), or Rest-of-State (ROS, Zones A-I).

NYCA Deliverability Testing Methodology The appropriate Class Year ATRA will serve as the starting base case for testing (e.g., 2007 ATRA), under summer peak system conditions.

- a.) All proposed projects seeking CRIS will be evaluated on an aggregate basis. Deliverability will be determined through a shift from generation to generation within the Capacity Regions already defined in New York State; New York City (Zone J), Long Island (Zone K), and Rest-of-State (ROS, Zones A-I). Each Capacity Region will be tested on an individual basis.
- b.) A derated generator capacity incorporating availability is used, as opposed to full DMNC capability. This derated generator capacity is based on the unforced capacity or "UCAP" of each resource and can be referred to as the UCAP Deration Factor ("UCDF"). The EFORD derate used is the average from historic ICAP to UCAP translations on a capacity location basis (e.g., 5.08% ROS, 5.66% zone J, 5.28% zone K). This is approximately the average EFORD, which will be used for all non intermittent ICAP providers. For Intermittent resources, the actual translation will be used (for example, 90% for land based wind) The testing procedure will recognize some level of other generator availability uncertainties that impact the IRM similar to the probabilistic treatment in MARS studies. Other generation availability uncertainties (with approximate capacity impacts) include, for example,

Hydro Derate (1.25%), Intermittent derate (90% lands, 70% off shore), GT temperature derate (1%), and maintenance (.5%).

- c.) Load uncertainties will be addressed by taking the impact of Load Forecast Uncertainty ("LFU") from the most recent IRM.
- d.) Base Case conditioning steps will be consistent with those used for the IRM, RNA and Facilities Studies transfer limit calculation methodology. These procedures are in the process of being developed.
- e.) Emergency criteria and contingency testing corresponding to that used in NYSRC IRM and NYISO RNA studies will be applied in deliverability testing.⁴
- f.) The monitored facilities in the NYISO's deliverability analyses will be consistent with those monitored in the IRM and RNA studies as well as the facilities secured by the NYISO.
 - Screening test for monitored elements and contingencies -Harmers and helpers are identified using DFAX for each monitored element. All harmers are put to their maximum output and all helpers are backed off accordingly. The monitored pair loading is calculated from the DFAX. If no overload occurs for the worst case transfer conditions, then this combination does not need to be further considered. If an overload does occur, then it is a potential candidate to be tested using the deliverability test below. In the initial test a particular monitored element may be overloaded for more than one contingency condition (including the normal or pre-contingent condition). These multiple instances are reviewed for the worst monitored element pair as judged by the maximum line flow for the same blend of harmer and helper generators.
 - When performing individual deliverability studies the NYISO may add to the initial list of monitored elements and/or contingencies identified in the screening test described above as potential candidates for a deliverability testing or eliminate from the initial list monitored elements or contingencies where no potential for a deliverability problem is shown. These modifications will be reviewed by stakeholders as part of the SRIS Study approval process.
- g.) Deliverability testing will proceed as follows - The generation/load mix is split into two groups of generation and load, one upstream and one downstream of each tested monitored element. A 4% DFAX threshold for defining the scope of upstream generation will be applied. Flows from generators having a DFAX below 4% will not be considered. If there is excess generation upstream (that is, more upstream generation than is

⁴ Sections B-R1, B-R2, and B-R3 of the NYSRC Reliability Rules for Planning and Operating the New York State Power System regarding emergency transfers.

necessary to serve the upstream load plus LFU) then the generation excess, taking into account generator probabilistic uncertainties noted above, is assumed to displace downstream generation and imports. If the dispatch of the upstream excess generation causes an overload, this overload is flagged as a potential deliverability problem and will be used to determine the amount of capacity that is assigned CRIS status and the overload mitigation. In essence, this is a test of the amount of bottled generation.

- h.) Voltage limits as interface proxy will be included in the deliverability testing.
 - i.) External system imports will be adjusted as necessary to eliminate or minimize overloads, consistent with paragraph 18, below.
 - j.) Flows associated with generators physically located in the NYCA but selling capacity out of the market will be modeled in the base case.
 - k.) PARS will be adjusted as necessary to eliminate or minimize overloads without creating new ones. PARS controlling external ties may be adjusted from the base case recognizing firm commitments. Internal NYCA PARS may be adjusted in either direction recognizing that new overloads may not be created.
 - l.) For interfaces in ROS designated in paragraph 10(a), a proposed generator, whether or not it is otherwise deliverable, will not be considered deliverable if it degrades the transfer capability of the interface below the transfer capability identified in the ATBA and results in an increase to the NYCA IRM reflected in the base case study results from the last completed IRM study. The generator will be responsible for restoring transfer capability only to the extent the degradation of transfer capability, compared to that in the ATBA, would not occur but for the generator.
18. The deliverability of external resources will be considered through the annual process of setting import rights. Under this process, grandfathered import contract rights and the emergency assistance benefits will be honored. Subject to grandfathered import contract rights and the calculation of emergency assistance benefits, the remaining external ICAP import rights will be subject to the deliverability test.
19. The NYISO staff and market participants will work collaboratively to develop over the next three years criteria for the potential formation of additional locational ICAP zones.

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