# Short-Term Reliability Process

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# Background

- At the December 4 and December 19, 2018 ESPWG/TPAS the NYISO discussed with stakeholders a "Comprehensive System Planning Process Review" which included some 'concepts' regarding the Short-Term Reliability Process including, among other topics:
  - Improved management of workload for the NYISO and Transmission Owners
  - Opportunity to address Short-Term Reliability Needs beyond those that arise from generator deactivations
- The purpose of this presentation is to present to stakeholders the details of the concepts of the Short-Term Reliability Process

# Generator Deactivation and Reliability Planning Process (Today)

- Generator Deactivation Process is set forth in Attachment FF to the OATT (Section 38)
- Reliability Planning Process is set forth in Attachment Y to the OATT (Section 31.2)
- The associated studies and possible solutions overlap for years 1-6



## **Purpose of the Short-Term Reliability Process**

- The Short-Term Reliability Process (STRP) will provide the NYISO and stakeholders the means to conduct scheduled, orderly reliability assessments that evaluate changes impactful to the reliability of the BPTF in the short-term, including BPTF and non-BPTF impacts from Initiating Generators that have completed their Generator Deactivation Notice (GDN), all under one process
- The STRP will provide the NYISO with the ability to respond to changes on the system in a timely fashion while providing a better structure than the *ad-hoc* Generator Deactivation Process to address observed Short-Term Reliability Needs
- Much of the existing process under Attachment FF can be used for the STRP; in fact, much of Attachment FF would likely remain the same (completing a Generator Deactivation Notice, RMR, solicitation, *etc.*)
- Attachment Y will need some changes to coordinate with the Short-Term Assessment of Reliability (STAR) regarding the assessment for the first five years of the 10-year Reliability Planning Process



### **Short-Term Reliability Process**

• The STRP would start with quarterly Short-Term Assessment of Reliability (STAR)

#### A Short-Term Reliability Need will be comprised of

- Generator Deactivation Reliability Needs (as currently defined in Attachment FF) and other Reliability Needs (as currently defined in Attachment Y) on the BPTF that are identified in a STAR
- Reliability criteria violations identified on non-BPTF will only be Short-Term Reliability Needs if the Need can be resolved, in whole or in part, by an Initiating Generator
- Other criteria violations that do not qualify as Short-Term Reliability Needs may be included for informational purposes-only in the STAR report
- The study period for the STAR is the five years following each quarterly start date
  - The STAR will cover the 365-day notice period + 4 years instead of the 365-day notice period + 5 years used in the Generator Deactivation Process today
  - The Year 1 representation would be the summer peak period in the first calendar year following the start of the quarterly STAR
- The STRP and the longer term Reliability Planning Process (RPP) will include an overlap in assessing years 4-5 of the current Study Period
- Once the STRP is implemented, the RPP will focus on Years 4–10 of the Study Period



## **Short-Term Reliability Process**

- The STAR evaluations will include an evaluation of all Initiating Generators and will include other model updates in accordance with ISO procedures
  - Generators will still be required to have a "complete" Generator Deactivation Notice (GDN), including their proposed deactivation date, to enter into the next quarterly STAR
- For the STAR, the NYISO will assess the BPTF and, to address generator deactivations, the Responsible Transmission Owner(s) will assess the impact on their non-BPTF transmission facilities
  - As part of the STAR, the NYISO will designate the Responsible Transmission Owner(s) to assess the impact of completed GDNs on their non-BPTFs, consistent with the process described in Attachment FF
  - The NYISO will also make the STAR study model available to other NYCA Transmission Owners if they wish to evaluate the impact of the included model updates on their non-BPTF
  - The TOs will address non-BPTF impacts of system changes other than Generator Deactivations in their Local Transmission Plans



### **Short-Term Reliability Process**

- An assessment for an IIFO (OATT 38.3.4) would be done on an *ad-hoc* basis if, in the NYISO's judgment, it should not wait to perform a study and identify solutions until the next quarterly Short-Term Reliability Assessment
  - Any need identified in an *ad-hoc* study of an IIFO Generator would be a Short-Term Reliability Need
  - The NYISO may elect to address a Generator Deactivation Reliability Need identified in an ad-hoc study in the next STRP or RPP
- To address the Short-Term Reliability Needs observed in each STAR, a single solicitation for solutions will be issued by the NYISO
  - The solutions solicited in the STRP will address those designated as Short-Term Reliability Needs
  - The NYISO will follow the process outlined in Attachment FF for the solicitation and selection of the solution to identified Short-Term Reliability Needs
- Although the STAR allows for a more frequent assessment of the reliability of the transmission system, the STAR
  process may prove insufficient to respond to an imminent threat to the reliability of the Bulk Power
  Transmission System
  - The current Gap Solution process allows the NYISO to request Gap Solutions outside of its normal planning cycle if there appears to be an imminent threat to the reliability of the New York State Transmission System arising from causes other than deactivating generation
  - Therefore, the GAP Solution Process will remain in place in case it is needed (OATT 31.2.11)



### **Short-Term Reliability Assessment Start Dates**

• The STAR will be performed on a quarterly basis with the following start dates:

Deactivation Notice Complete by	STAR Start Date	STAR Completed:
January 14	January 15	90 days from January 15
April 14	April 15	90 days from April 15
July 14	July 15	90 days from July 15
October 14	October 15	90 days from October 15

 The 180-day Interim Service Provider ("ISP") rate (for Generator Deactivations), and the 365-day notice date (for Generator Deactivations) would be triggered from the STAR Start date

#### **Short-Term Assessment of Reliability Study Assumptions**

- Each STAR will incorporate model updates made in accordance with ISO procedures, including system updates such as:
  - Generator Deactivations and other Generator additions/removals (based on RPP inclusion rules)
  - Load forecast updates
  - Transmission/topology updates, including changes to Firm Local Transmission Plans (that are presented to Market Participants prior to the quarterly STAR start date) and transmission element forced outages that are expected to be in-effect occur during the peak period
  - Any other significant changes to the system that could impact the BPTF
- The key study assumptions for each STAR will be reviewed with ESPWG and TPAS



#### **Short-Term Reliability Process Solution Solicitation**

- The Responsible Transmission Owner(s) for a Short-Term Reliability Need on the BPTF shall be designated as the sole party/parties to provide transmission solutions on the BPTF and must submit permanent transmission solutions for each of the Short-Term Reliability Needs identified:
  - Within 3 years of the completion of the STAR for BPTF Reliability Needs, or
  - Within 3 years after the conclusion of the 365-day notice period for a Generator Deactivation Reliability Need
  - BPTF Short-Term Reliability Needs that are observed to occur in the fourth year or later from the start of the STAR will be addressed in the Reliability Planning Process (RPP) if the NYISO determines that the identified needs can be timely addressed in the RPP
  - If solutions are solicited for BPTF Short-Term Reliability Needs observed in year 4 or 5 as part of the STRP, the NYISO will follow the process outlined in Attachment FF for the evaluation and selection of solutions
- The full set of Generator Deactivation Solutions will be available to address BPTF Short-Term Reliability Needs

#### **Short-Term Reliability Process Solution Solicitation**

- The Responsible Transmission Owner(s) for an observed Short-Term Reliability Need on the non-BPTF (*i.e.*, a non-BPTF Generator Deactivation Reliability Need) shall be designated as the sole party or parties to provide a transmission solution to the Need and must submit a permanent transmission solution
  - All non-BPTF Short-Term Reliability Needs, regardless of the observed year of Need, will be addressed in the STRP
  - The full set of Generator Deactivation Solutions for non-BPTF Short-Term Reliability Needs will be available
- In the course of performing their STAR analyses, a Transmission Owner might observe criteria violations on their non-BPTF that are not caused, in whole or in part, by the deactivation of an Initiating Generator
  - The STAR report may identify these criteria violations for information, but NYISO will not solicit for solutions or provide cost allocation and recovery in the STRP
  - Rather, the Transmission Owner is expected to update its LTP to reflect its planned solution that addresses the identified criteria violation(s)
- If a Short-Term Reliability Need is found where two or more Initiating Generators could each resolve the identified Short-Term Reliability Need, then the Initiating Generator(s) with the latest completed notice date(s) would be the one(s) that would not be allowed to deactivate before the completion of the 365-day notice period



#### **Short-Term Reliability Process Solution Solicitation**

- Exacerbation of Short-Term Reliability Needs beyond the needs originally identified in the solicitation for solutions may be observed in subsequent STARs
- If the solution that was initially selected is determined to be insufficient based on the increased scope of a Short-Term Reliability Need, then the NYISO would solicit solutions to the unaddressed need, which may be the incremental need or the entire updated need if no selection has been yet made by the NYISO, in subsequent STRP or RPP processes
  - This may require additional solicitations, or invoking the halting process on an existing solution under development in order to consider different solutions that are better able to address the increased scope of the identified Short-Term Reliability Need
- Solutions selected in the STRP or RPP process will be included in subsequent STARs or RNAs, subject to the RPP inclusion rules contained in the RPP Manual



### **Next Steps**

- Please submit any comments to Leigh Bullock (<u>lbullock@nyiso.com</u>) and Keith Burrell (<u>kburrell@nyiso.com</u>) by September 11<sup>th</sup>
- Next presentation of the STRP will be September 23<sup>rd</sup>



# The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system



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