

WORK PLAN

DEVELOPMENT OF NYSRC RESOURCE PLANNING AND OPERATING RESILIENCY CRITERIA FOR MITIGATING THE RELIABILITY IMPACTS OF EXTREME WEATHER EVENTS

A. PURPOSE THE WORK PLAN:

The objective of this Work Plan is to develop NYSRC criteria for resource planning and operating the NYCA system, the purpose of which will be to increase the *resiliency* of the NYS Power System in the event of extreme weather events. This objective shall be implemented by installing additional resource capacity – above that determined by IRM studies – and consideration of new operating measures if needed - for mitigating the loss of load impact of such events. Development of such “extreme weather resiliency criteria” was recommended in the NYSRC white paper, *Development of NYSRC Rules for Mitigating Extreme System Conditions*, approved by the NYSRC Executive Committee on July 8, 2022. This effort will be conducted by an ad hoc work group reporting to the NYSRC Reliability Rules Subcommittee (RRS).

A separate working group will be formed for the purpose of developing “extreme weather transmission planning criteria” for planning the NYPA transmission system for mitigating extreme weather reliability impacts.

B. DELIVERABLES:

- Recommended resource planning criteria for improving NYCA resilience to extreme weather events.
- Recommended NYISO operating criteria requiring measures, e.g., operating reserve requirements, for improving extreme weather resiliency, if any, that would supplement operating measures included in the NYISO *Extreme Weather Resiliency Operating Plan* required by PRR 150.
- Justification for the above recommended resource planning and operating resiliency criteria, including the parameters and analyzes used as the basis for determining the recommended resource resiliency criteria, including the alternate metrics considered.
- A MARS case study illustrating application of the recommended resource resiliency criterion.
- Estimated computer modeling and other costs of implementing any recommended extreme weather criteria.
- Estimated time to implement the recommended any criteria following Executive Committee approval.
- A report including the above deliverables.

C. EXTREME WEATHER RESILIENCY CRITERIA DEVELOPMENT CONSIDERATIONS:

- Examples of metrics to be considered for a recommended resource resiliency criterion are the LOLE, EUE, or the LOLH metrics.
- Consideration of new operating measures.
- The recommended resource resiliency criterion shall be designed to mitigate or reduce the expected loss of load and duration caused by extreme weather events, but not necessarily down to a LOLE of 0.1 days/year level, or equivalent.
- It is recognized that the degree of loss of load mitigation designed by applying a resource resiliency criterion may be based on judgment.
- As part of its review, the working group should research similar analyzes conducted by other electric power systems.
- The working group shall recognize NYISO personal and computer limitations and capabilities needed for developing extreme weather models.
- The working group shall monitor NYISO development of an extreme weather model and provide recommendations as appropriate.

D. STUDY COMPLETION & RESILIENCE CRITERIA IMPLEMENTATION TARGET DATES

- Working Group study recommendations: December 2024
- Criteria implementation: December 2025

E. WORKING GROUP MEMBERS: