Blackstart Resource Availability and Readiness in the Eastern and Western Interconnections
NERC and Regional Entity Staff Study, FERC Staff Observation

November 21, 2025

RRS Member & NYISO Responses

For each recommendation listed below please try to provide responses that address all applicable items listed below and any other items you deem relevant:

- Identify the standards, criteria, policy, procedures and/or market rules that are currently in place that fully or partially address the recommendation.
- List any actions that responder believes should be undertaken within the NYCA or its localities in response to the recommendation,
- Enumerate and explain any concerns or gaps within the current black start programs and system restoration plans that are currently in place in NYCA with regard to meeting the objectives of recommendation
- Indicate whether black start resources being located outside the NYCA or the applicable Locality may frustrate meeting the objectives of the recommendation
- Indicate whether planned or expected future generator retirements present a risk that would require additional standards, requirements, and procedures to be put in place to fulfill the objectives of the recommendation
- Indicate whether participation of transmission assets, such as HVDC transmission, that are deliver energy tied to resources located outside the NYCA (or Locality) in black start programs poses a risk that would require additional standards, requirements, and procedures to be put in place to fulfill the objectives of the recommendation
- Identify any additional concerns that may frustrate achieving the objectives of the recommendation within the NYCA

Recommendation 1**: Entities responsible for the development of system restoration plans and the selection of BSRs should consider reviewing and revising (as needed) internal processes to ensure that the selection and qualifications of BSRs include the consideration of currently effective NERC Reliability Standard EOP-012 3 operational data5 and capability under R2 or R3, as it pertains to blackstart service/capabilities, extreme cold weather preparedness, and operations. These entities should consider implementing more frequent **(perhaps annual, preseason) assessments or validation of blackstart capabilities of BSRs to ensure operational readiness for each winter season.

RRS Member / Organization: _____

Response to Recommendation 1:

***Recommendation 2**: Entities responsible for BSRs should ensure that the blackstart procedures contain specific extreme cold weather preparatory actions and considerations to help operators successfully perform in extreme cold weather conditions.*

RRS Member / Organization: _____

Response to Recommendation 2:

***Recommendation 3**: Entities responsible for, or capable of, providing blackstart service should systematically evaluate and identify generator cold weather critical components, including those components only used during system restoration.*

RRS Member / Organization: _____

Response to Recommendation 3:

Recommendation 4: *Entities responsible for development of system restoration plans should evaluate their restoration plans and the BSR capabilities and procedures to ensure that restoration plans consider and manage fuel availability risk under extreme cold weather conditions for blackstart service of designated BSRs.*

RRS Member / Organization: _____

Response to Recommendation 4:

Recommendation 4a: *Entities responsible for the implementation of system restoration plans with identified dual-fuel-capable BSRs should evaluate and establish/strengthen their documented requirements for a minimum amount of onsite or readily available backup fuel to successfully implement the plan.*

RRS Member / Organization: _____

Response to Recommendation 4a:

***Recommendation 5**: Entities responsible for the development and implementation of emission/environmental regulation waiver requests, as applicable, should evaluate the existing emission/environmental regulation waiver request processes and procedures to ensure that they will work during a system blackout and make sure that BSRs will be available when called upon. This waiver evaluation process should consider the entirety of the restoration plan beyond BSRs and establish clearly defined waiver triggers.*

RRS Member / Organization: _____

Response to Recommendation 5:

Recommendation 5a: *Emission/environmental waiver processes or procedures should consider requests to applicable air emission regulatory jurisdictions, which could include situations in which BSR(s) may be located in a different state (with a different environmental regulator outside the impacted area) and/or neighboring Reliability Coordinator area.*

RRS Member / Organization: _____

Response to Recommendation 5a:

Recommendation 6*: The joint study team reaffirms Recommendation 2 from the Precedent Study, emphasizing its continued relevance.6 Given the multijurisdictional nature of the Eastern and Western Interconnections encompassing multiple states and energy regulatory authorities, the joint study team recommends that each individual entity with system restoration plan requirements proactively collaborate, based on its regional electric system restoration assessments. These entities should also develop joint blackstart system restoration plans to address electric and natural gas system identified interdependency risks.*

RRS Member / Organization: _____

Response to Recommendation 6:

Recommendation 6a*: The joint study team recommends that subject matter experts (SME) from the electric and natural gas industries evaluate the potential impact of a wide-area electric blackout on natural gas system functionality, consequent impacts on electric system restoration, and potential single points of failure, as pertains to individual Transmission Operator area system restoration plans. These SMEs should also help develop system restoration plans that include solutions to resolve identified issues. It is recommended that such restoration plans include the following:*

i. Distinguishing between critical customer loads and system restoration critical loads, which includes natural gas supply, processing, storage, and delivery facilities; and

ii. *Requiring Transmission Owners/Operators with natural gas-fueled BSRs in their system restoration plans to jointly work with natural gas transmission and delivery facility owners to identify necessary natural gas supply route(s) supporting BSRs. It is recommended that these Transmission Owners/Operators also identify the source of the natural gas supply (including storage).*

RRS Member / Organization: _____

Response to Recommendation 6a:

Recommendation 7*: Dual-fuel BSRs should identify, mitigate, and communicate the residual risk related to their primary and alternate fuel supply availability and deliverability during a blackout scenario to the entities responsible for the applicable system restoration plans.*

i. *natural gas supply (including storage).*

RRS Member / Organization: _____

Response to Recommendation 7:

Recommendation 7a*: BSR owners should evaluate primary and backup communication methods with fuel suppliers and delivery entities (e.g., trucking or barge delivery of alternate fuels). This communication should include the identification of critical communication infrastructure that supports both the natural gas system and alternate fuel delivery necessary for BSR participation in restoration in the event of a blackout.*

RRS Member / Organization: _____

Response to Recommendation 7a:

***Recommendation 8a**: Entities responsible for developing and implementing a system restoration plan should consider incorporating a periodic (e.g., annual or pre-season) startup test with alternate fuel for dual fuel BSRs that indicate capability to start on an alternate fuel into dual-fuel BSR testing requirements. When possible and practical, entities should look for opportunities to perform these tests during extreme cold weather to verify performance in cold conditions.*

i. Tabletop exercises in lieu of winter tests (where winter tests are not feasible or practical) are acceptable to identify extreme cold weather-related gaps in blackstart startup and operating procedures.

RRS Member / Organization: _____

Response to Recommendation 8a:

Recommendation 8b*: Consider implementing fuel switching BSR testing to confirm the capability and time required to switch between primary and alternate fuel for an extreme cold weather blackstart event.*

RRS Member / Organization: _____

Response to Recommendation 8b:

***Recommendation 8c**: Consider including specific identified extreme cold weather considerations and actions in their system restoration plan to help operators perform successfully in cold weather conditions.*

RRS Member / Organization: _____

Response to Recommendation 8c:

Recommendation 9*: To strengthen the effectiveness of system restoration preparatory efforts, the joint study team recommends enhancements to existing simulator-based training to focus on system restoration during extreme cold weather operations.*

RRS Member / Organization: _____

Response to Recommendation 9: