

2025 Black Start Reliability Backstop Process for Fuel Assured Black Start

OC Special Session
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IMM



Monitoring Analytics

Black Start Backstop

- **PJM has proposed to implement the black start reliability backstop option.**
- **PJM has not explained whether there is a cross zonal solution.**
- **PJM has not explained whether there are black start resources that are factually fuel assured but did not respond to RFP for fuel assured.**
- **The IMM does not agree that PJM should implement the black start reliability backstop option.**
- **The black start reliability backstop option is defined in Manual 14D.**

Implementation

- **The reliability backstop in PJM Manual M14D allows TO ownership.**
- **Existing Reliability Backstop Process in PJM Manual M14D Section 10.3 to be implemented in the event of insufficient response to RTO wide RFP or future incremental RFP (2 failed RFP processes), to meet minimum of one black start site per zone meeting fuel assurance criteria and reliability criteria beyond minimum criteria for high impact black start sites.**
- **PJM: For Reliability Backstop RFP, TO required to submit RFP proposal.**

Reliability Backstop Process Step 1

- **PJM and TO discuss the Black Start shortage and the possibility of triggering the Reliability Backstop RFP.**
 - **Triggers for reliability Backstop**
 - **Black Start generation shortage or a failure to meet the Black Start Fuel Assurance criteria in a TO zone.**
 - **Two failed RFPs.**
 - **There are no available cross-zonal solutions.**
 - **No RTEP transmission solutions available.**
 - **Targeted Timeline: Within 5 days of determination of failed Second Incremental RFP.**



Reliability Backstop Process Step 2

- **PJM, TO and affected State(s) will discuss the Black Start shortage situation including the benefits and costs of the TO proposal and the implications of the shortage of Black Start to the restoration plan.**
- **Considering these discussions, PJM will determine whether to issue Reliability Backstop RFP.**
- **If Reliability Backstop RFP is not issued, PJM will actively monitor the Black Start shortage.**



Reliability Backstop Process Step 2

- If PJM and the TO do not agree on the decision concerning the Reliability Backstop RFP, PJM will initiate a review with the System Operation Subcommittee – Transmission (SOS-T) for additional technical assessment and if after the SOS-T evaluation, an agreement is not yet achieved, the PJM Dispute Resolution process will be employed.
 - Targeted Timeline: Within 10 days of determination of failed 2nd RFP.



Reliability Backstop Process Step 3

- **Once PJM determines that the Reliability Backstop Process is required, it will issue the Reliability Backstop RFP. The TO solution may be owned by the TO, by a generation owning affiliate or contracting for by the TO with a generation owning third party. The TO has the obligation to submit a solution proposal within the Reliability Backstop RFP. The RFP will indicate that any proposed Fuel Assured Black Start Unit or Black Start Unit, whether it is a TO proposed unit, or a GO proposed unit, will be used for Black Start purposes only. The unit will NOT participate in the capacity market, energy market or other ancillary service markets except Black Start.**

Reliability Backstop Process Step 3

- **The Reliability Backstop RFP will be conducted on an accelerated schedule of 30 days.**
- **Targeted Timeline: Within 15 days of determination of failed 2nd RFP .**



Reliability Backstop Process Step 4

- **PJM will evaluate any responses from the Reliability Backstop RFP in comparison with the TO solution. If the TO solution is the only option received (or the best option received), it will be implemented.**
- **It will be the responsibility of the TO to submit a filing with FERC under the Federal Power Act, as necessary, to recover costs.**



Reliability Backstop Process Step 4

- **Any Black Start generation acquired in the Reliability Backstop RFP (regardless of ownership or cost recovery method) must adhere to all Black Start testing and performance requirements as described in PJM OATT, Schedule 6A and the PJM Manuals.**



Fuel Assurance Issues: Role of TOs

- No reason to believe that TOs can procure black start more effectively than PJM.
- The IMM position is that TOs should not own generation. Inconsistent with competitive markets.
- PJM should recognize that existing black start resources meet the requirements to be fuel assured.
- PJM should continue efforts until goal is met, including cross zonal across multiple zones.
- It is PJM's responsibility to manage black start capability. *PJM*, 144 FERC ¶ 61,191 (2013).

PJM Fuel Assurance Requirement

- **A minimum of one fuel assured black start site allocated to the zone or two non-fuel assured black start sites connected to different pipelines.**
- **New or existing black start units that wish to be designated as fuel assured black start units must offer into the PJM fuel assured RFP.**

PJM Manual 36 page 73 and 74

PJM Manual 14D page 97



Fuel Assurance Requirements

- **Onsite fuel storage.**
- **Capable of operating independently on two or more interstate natural gas pipeline connections.**
- **Directly connected to a natural gas gathering system ahead of any interstate pipeline.**
- **Hydro Fuel Assured Black Start Unit(s) that meet the criteria identified in PJM Manual 12 Section 4.5.**
 - **Manual 12 Section 4.5.9: Has been evaluated by PJM to be capable of providing 16 hours of full load operation with 90 percent confidence.**

PJM Manual 36 page 74

PJM Manual 12 page 58



Fuel Assurance Requirements

- **Non-Hydro Intermittent or Hybrid Fuel Assured Black Start Unit(s) that meet the criteria identified in PJM Manual 12 Section 4.5 .**
 - **Manual 12 Section 4.5.9: Has been evaluated by PJM to be capable of providing 16 hours of full load operation with 90 percent confidence.**
- **A minimum of two gas only Black Start Units allocated to a TO zone that are connected to two separate interstate natural gas pipelines.**

PJM Manual 36 page 74

PJM Manual 12 page 58



The Reliability Backstop Is Not Needed

- **In every zone in the PJM service territory there is a least one unit that meets Fuel Assured Requirements.**
 - **Not all such resources have applied for fuel assured status and been approved by PJM.**
- **Since each zone has a unit that meets the Fuel Assured Requirements there is no need to go through the Reliability Backstop process to secure additional costly Black Start units.**

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