



7/28/2015

2nd Incremental Request for Proposal (RFP) for Replacement Black Start Resources

PJM has determined that there is a need for additional black start capability within Northeastern Ohio and Western Pennsylvania. Therefore, PJM is seeking bids for additional black start capability in accordance with the Black Start Replacement Process documented in [PJM Manual M14D](#), Generator Operational Requirements, Section 10.2.

In order to be deemed feasible, responses would ideally be physically located within either the Duquesne (DUQ), First Energy South (FE-S), First Energy West (FE-W), Penelec(PN) or American Electric Power (AEP) Transmission zones as shown in Attachment A. Within these geographic constraints, examples of acceptable responses include:

- Conversion of existing generation to become black start capable
- New (or interconnection queue) generation that can become black start capable
- Black start capable generation that serves only a portion of the total MW requirements, assuming that an aggregation of RFP responses can be used to serve the total MW requirements.
- Refurbishment of existing black start generators

Note: Proposed replacement black start solutions located beyond the designated geographic areas (i.e. in adjacent bordering PJM Transmission Owner (TO) zones outside of the DUQ, FE-S, FE-W, PN, or AEP transmission zones) may also be submitted for consideration in the evaluation process.

RFP responders are required to use the Word document link below for RFP responses. This Word document includes general information about black start along with a set of detailed RFP response questions. This document should be filled out and emailed to blackstart@pjm.com along with any relevant attachments.

<http://www.pjm.com/~media/markets-ops/ancillary/incremental-rfp-response-template-and-general-information.ashx>

Black Start Requirements

PJM is requesting black start service offers that are capable of maintaining adequate frequency control during auxiliary equipment motor startup from resources located within the DUQ, FE-S, FE-W, PN, or AEP transmission zones. MVAR capabilities of proposed black start units will be considered during evaluation of black start proposals since this parameter is location specific.

The black start service may be designated as a critical asset, and as such, will comply with applicable NERC standards.



The preference is for black start capability at sites where critical black start units do not already exist. PJM and the TOs will evaluate the offers received based on the best fit with the system restoration plan, and is open to adjusting the restoration plan if necessary.

Offers should be for resources capable of providing black start service no later than **November 1, 2016**. All black start service offers should clearly state their annual revenue requirements as provided for in Schedule 6A of the [PJM Open Access Transmission Tariff \(OATT\)](#). Proposals with cost recovery terms that are not within the cost recovery terms allowed by Schedule 6A of the PJM OATT will be considered but will require FERC approval if selected.

Market Window

This posting marks the beginning of a “Market Window” which will last 90 calendar days from the date of the notification. The Market Window will therefore close on **October 28, 2015**. PJM will be reviewing pending generator interconnection projects and other projects that are received within the Market Window. Bids to provide black start service as specified above should be emailed to blackstart@pjm.com.

Submitting Black Start Replacement Bids

All bids submitted for the replacement black start resource must include an estimate of projected capital costs (if applicable), annual operations & maintenance costs, and fuel storage costs (if applicable) consistent with the details in Section 18 of Schedule 6A of the PJM OATT. Detailed breakdown of any projected capital costs and annual operations & maintenance costs must also be provided.

Summary of Black Start Replacement Process from M14-D

PJM will review each generation interconnection request pending under Part IV of the PJM Tariff at the time a Market Window is opened (as described above) and each request from black start units and each interconnection request it receives during such Market Window, to evaluate whether the project proposed in the request could meet the black start replacement criteria for which the Market Window was established.

The TOs will also have the option of negotiating a cost based bi-lateral contract in accordance with the existing process outlined in PJM Manual M14D with a Generator Owner (GO) for black start services. The TOs may provide the alternative as one of the bids for the black start replacement that will be evaluated by PJM pending FERC approval.

If PJM and the TOs determine that more than one of the proposed projects within the 90 day market window meets the replacement criteria, the most cost-effective resource for the black start replacement will be chosen, provided the identified resource accepts and maintains designation as a market solution under Section 216 of the PJM Tariff and executes the agreement(s) required there under. Submitted projects costs must be consistent with Schedule 6A of the PJM OATT. If no projects are received during the 90 day



Market Window, PJM and the TOs will modify the location and capability requirements for the replacement black start resource, as well as the Market Window, if necessary, to allow more resources to become viable as replacements, even if suboptimal. If no projects are identified after the modified search criteria and Market Window, PJM and the TOs will investigate the cause for the absence of bids, and recommend corrective action in accordance with the existing cost based service process outlined in Schedule 6A of the PJM OATT, or addressing other barriers to entry identified by such investigation within the bounds of the existing tariff. In the process of this investigation, PJM will also identify limits for adjusting the cost of entry and other corrective actions within the bounds of Schedule 6A of the PJM OATT, beyond which, PJM will discontinue efforts to incent a replacement black start unit.

After PJM and the TOs have identified the most cost-effective replacement resource, PJM and the TOs will coordinate with the GO for the GO's acceptance under the PJM Tariff as a black start unit. The replacement black start unit will be compensated for provision of the black start service in accordance with the existing process outlined in the PJM OATT. Schedule 6A of the PJM Tariff sets forth a formula for payments to generators for black start service and the collection of such costs from transmission customers. The annual black start service revenue requirements of each generator are determined pursuant to this formula. The Schedule 6A formula includes allocation factors for fixed and variable generation costs, which are to be used "unless another value is supported by the documentation of costs." The GO may choose compensation under the formulaic rate by submitting the formulaic black start costs to PJM or by filing for recovery of actual costs, with accompanying documentation, to FERC. M-12 Attachment C contains forms for generation owners to submit formulaic cost data.

ATTACHMENT A
Location Map for Replacement Black Start Service

