

7. BLACK START CAPABILITY SERVICE

This section describes the black start capability service.

7.1 Description

Black start capability represents the key Generators that, following a system-wide blackout, can start without the availability of an outside electric supply and are available to participate in system restoration activities that are under the control of the NYISO or, in some cases, under local Transmission Owner Control. If a partial or system-wide blackout occurs, these units assist in the restoration of the New York Control Area (NYCA). Specific generating units, identified in the NYISO Restoration Plan or, in specific Transmission Owners' local restoration plan(s), have the capability and training required to start up without the presence of a synchronized grid to provide the necessary auxiliary station power.

The NYISO Restoration Plan and/or Transmission Owner restoration plan(s) are implemented if a partial or complete system blackout occurs. The NYISO selects the generating resources with black start capability by considering the following operating characteristics:

- electrical location in the NYCA
- startup time: from NYISO order to start to minimum output
- maximum response rate (MW/minute) above minimum output
- maximum power output

7.2 Source & Scheduling of Service

LSEs must purchase black start capability service from the NYISO. Generation Resources providing this service must successfully pass the test for black start capability.

The NYISO identifies the generating units that are in critical areas for NYS Power System restoration. During system restoration activities, the NYISO manages and deploys the black start capability, as needed, depending on the specific situation.

The NYISO develops and periodically reviews the Black Start Restoration Plan for the NYS Power System. The NYISO may amend this restoration plan and determine Black Start requirements to account for changes in system configuration if the NYISO determines that additional Black Start resources are needed. The NYISO has the flexibility to seek bids for new resources whenever it amends the current plan.

Although the NYISO plan will restore a major portion of the state electric system, portions of the local Transmission Owner restoration plans may require some additional Black Start Generators, which are located in local Transmission Owner areas and which are not presently listed in the NYISO restoration plan. The NYISO will make payments for local area Black Start Capability directly to the generating

facilities that provide that service. Those payments will be determined under the terms of ~~this~~ Rate Schedule 5 of the NYISO Market Services Tariff. The LSEs in those local Transmission Owner areas will be additionally charged for that Black Start Capability Service by the NYISO. Generating facilities, which are obligated to provide Black Start Service as a result of divestiture contract agreements, will not receive NYISO payments for that service if they are already compensated for such service as part of those divestiture contracts.

7.3 Payment for Service

Please refer to Rate Schedule 6 of the OATT, Rate Schedule 5 of the NYISO Market Services tariff, and the Accounting and Billing Manual for information about payments for Black Start.

~~Initially, the embedded costs and O & M expenses of the equipment required to provide black start capability service are recovered by the suppliers in return for making equipment available to provide Black Start capability service, to the NYISO. For more information, see the NYISO Accounting and Billing Manual (available from the NYISO Web site at <http://www.nyiso.com/public/documents/manuals/administrative.jsp>).~~

~~Payments are made to Generators that are included in the NYISO's Black Start Restoration Plan as well as to Generators included in any Transmission Owner's local restoration plan. The Generators that are designated in these plans are paid at a rate, which is approved by FERC.~~

~~By May 1st of each year, the following embedded cost information for Black Start equipment located at one of these Generators is provided to the NYISO based upon FERC Form No. 1 or equivalent data:~~

- ~~1. Capital and fixed operation and maintenance costs associated with only those facilities within Generators that provide Black Start Capability~~
- ~~2. Annual costs associated with training the Generator operators in system restoration.~~

~~LSEs taking service under the OATT pay a monthly Black Start Capability Charge on all Transactions to supply Load in the NYCA (including in-state Bilateral Transactions, purchases of Energy from the LBMP Market, and Import transactions) as follows:~~

$$BSC_{s,t} = ISOBSC_t \frac{L_{x,t}}{\sum_{x \in N} L_{x,t}} + TOBSC_t \frac{L_{x,t}}{\sum_{x \in T_x} L_{x,t}}$$

Where:

- ~~BSC_{x,t} = black start charge for LSE x during month t~~
- ~~ISOBSC_t = NYISO black start costs for month t~~
- ~~L_{x,t} = LSE x's load during month t~~

~~N = set of LSEs in the NYCA~~

~~$TOBSC_t$ = Transmission Owner black start costs for month t~~

~~T_x = set of LSEs in LSE x 's Transmission District~~

~~The NYISO (and Transmission Owner, when applicable) shall conduct Black Start Capability tests for providers of Black Start Capability. Any Generator, which is awarded Black Start Capability payments and fails a Black Start capability test, shall forfeit all Black Start capability payments made to that Generator since its last successful test. Payments to that Generator shall not resume until it successfully passes the Black Start Capability test.~~

7.4 Black Start Service Procedures

The following procedures apply to black start capability service:

NYISO Actions

The NYISO Staff shall perform the following:

1. On a periodic basis, determine the amount and location for black start capability generation.
2. Select the Generators for black start capability based on location, price, and quality of supply.
3. Notify the selected generators for black start testing.

Black Start Generator Actions

The Black Start suppliers shall perform the following:

1. On an annual basis, provide the NYISO with embedded cost information.
2. Submit to performance testing when requested by the NYISO.
3. On an annual basis, provide a letter to the NYISO confirming that they identify and maintain a list of critical components in their black start facilities (e.g., batteries, diesel back-up generators, inverters, etc.) and perform tests to verify the condition of these critical components in accordance with good industry practice.