Black start service supplies electricity for system restoration in the unlikely event that the entire grid would lose power.

In the event that power would be lost across the entire PJM Interconnection grid, black start service would be used to supply electricity to help restore the system.

Black start service is provided by strategically located generating units that have the ability to start up and deliver power to the grid without an outside source of power – or to remain in operation at reduced output levels when disconnected from the grid.

Such units must be able to reconnect to the grid within three hours or less after a request from PJM. They also must be able to maintain frequency and voltage under varying loads.

To be designated as a black start unit, a generating facility must pass a series of performance tests, which are repeated annually. The owners of black start units receive a revenue requirement each year for providing the service to the grid.

In a system-restoration situation, black start units help rebuild the system. Once connected, they supply start-up power to other generating units and help restore critical load such as nuclear safe shutdown facilities and natural gas infrastructure. This must be a careful, deliberate process that keeps generation in balance with load in order to avoid the possibility of another loss of service. PJM conducts annual drills with its transmission owners to simulate this critical restoration process.

April 24, 2017