

California Independent System Operator Corporation  
Fifth Replacement Electronic Tariff

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## **5. Black Start and System Restoration**

### **5.1 Black Start Capability**

The CAISO shall determine the amount and location of Black Start Generation it requires through a system restoration plan that meets the requirements of Applicable Reliability Criteria. In making this determination, the CAISO shall consult with Participating Transmission Owners.

Participating Transmission Owners with their own system restoration plans that include transmission lines and associated facilities that are part of the CAISO Controlled Grid shall upon the request of the CAISO provide the CAISO with these system restoration plans. The CAISO shall consider Participating Transmission Owners' system restoration plans in developing a system restoration plan for the CAISO Balancing Authority Area and may identify Black Start Generation needs for the CAISO Balancing Authority Area not identified in Participating Transmission Owner's system restoration plans.

### **5.2 Black Start Units**

The CAISO shall contract annually (or for such other period as the CAISO may determine is economically advantageous) for Black Start services. The CAISO will select Black Start Generating Units in locations where adequate transmission capacity can be made readily available (assuming no transmission damage) to connect the Black Start Generating Unit to energize the station service bus or dead transmission bus of a Generating Unit designated by the CAISO. Black Start Generating Units:

- (a) must be located in the CAISO Balancing Authority Area;
- (b) may be located anywhere in the CAISO Balancing Authority Area provided that the Black Start Generating Unit is capable of meeting the CAISO performance requirements for starting and interconnecting to the CAISO Controlled Grid; but
- (c) must be dispersed throughout the CAISO Balancing Authority Area.

### **5.3 Black Start Services**

- (a) All Participating Generators with Black Start Generating Units must satisfy technical requirements specified in Appendix D of the CAISO Tariff and the Participating Generators' Black Start Agreement in relation to the Black Start Generating Units.

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- (b) The CAISO shall from time to time undertake performance tests, with or without prior notification.
- (c) The CAISO shall have the sole right to determine when the operation of Black Start Generating Units is required to respond to conditions on the CAISO Controlled Grid.
- (d) If the CAISO has suspended the market for Energy and/or Ancillary Services pursuant to Section 7.7.3, the price paid by the CAISO for Black Start services shall be sufficient to permit the relevant Participating Generator to recover its costs over the period that it is directed to operate by the CAISO.
- (e) If a Black Start Generating Unit fails to achieve a Black Start when called upon by the CAISO, or fails to pass a performance test administered by the CAISO, the Market Participant that has contracted to supply Black Start service from the Generating Unit shall be subject to remedies or penalties as specified in its Black Start Agreement.
- (f) The CAISO will dispatch Black Start Generating Units as required in accordance with the applicable Black Start Agreement.