

Response to Stakeholder Comments on Revised Draft Tariff Language Black Start and System Restoration Phase 2

ISO Tariff Section	Stakeholder Comment	Explanation of Change
General	<p>The Six Cities comments that the draft tariff language does not include any description of the procedure for Black Start procurement. The Six Cities believes that the tariff should include a description of the Black Start procurement procedure. In a second round of comments, the Six Cities reiterated its concern that the tariff should include at least a general description of the black start procurement procedure and selection criteria.</p>	<p>The ISO has existing tariff authority to contract for Black Start (See ISO tariff section 8.3.1). In connection with this initiative, the ISO is undertaking a competitive procurement process to secure incremental Black Start capability in the Greater Bay Area. The ISO expects this process to occur infrequently and does not believe additional tariff requirements are necessary. The ISO will select a resource or resources to provide Black Start and then will negotiate a Black Start Agreement based on the resource's ability to meet specified technical criteria as well as costs. Similar to a Reliability Must Run Agreement, any Black Start Agreement will be filed with the Federal Energy Regulatory Commission by the seller and reflect cost of service rates.</p>
4.9.4.5	<p>The Six Cities requests an explanation for the deletion of the current language in this section.</p>	<p>The ISO's system restoration plan is developed to comply with NERC Reliability Standard EOP-005-02, which does not recognize the ability of an MSS operator to self-provide black start. Black Start Generating Units incorporated into the system restoration plan are subject to a Black Start Agreement. The language in ISO tariff section 4.9.4.5 reflects the possibility that the ISO would operate an auction market for Black Start service and that a metered subsystem may be able to self-supply Black</p>



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		Start service to reduce charges for the service it may otherwise face.
5.2	PG&E comments that tariff language related to the ability to energize a dead transmission bus should appear in this section consistent with draft technical specifications the ISO shared with stakeholders for the procurement of incremental black start capability in the Greater Bay Area. PG&E also recommends the ISO change the reference to black start resource to the defined term Black Start Generating Unit.	The ISO has made these recommended changes.
5.3(e)	<p>The Six Cities comments that the new language proposed in this sub-section is substantively different from the previous language of Section 8.2.3.4.2(e). The proposed version of Section 5.3(e) excludes the following language from the currently-effective Section 8.2.3.4.2(e):</p> <p>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 re-pay to the CAISO any reserve payment(s) that it has received since the administration of the last performance test or the last occasion upon which it successfully achieved a Black Start when called upon by the CAISO, whichever is the shorter period.</p>	<p>The ISO believes that inclusion of tariff language that would rescind payments under a Black Start Agreement for failure to pass a performance test will strongly discourage resource owners to provide Black Start capability. Currently, the ISO's Black Start Agreements have a zero price term and the payment rescission language in section 8.2.3.4.2(e) of the ISO tariff has no force and effect because there are no payments to rescind. As part of any Black Start Agreement, the ISO is proposing that payments would not be made to a Black Start Generating Unit until it has passed a performance test to provide Black Start service.</p> <p>Under applicable NERC reliability standards, the ISO must conduct performance tests of Black Start Generating Units included in a system restoration plan. (See EOP-005-02, Requirement 9.) In addition to other requirements, each Generator Operator with a</p>



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	<p>The Six Cities suggest that the currently-effective language requiring repayment of Black Start capability payments in the event a Black Start resource fails to perform be retained in addition to the new Section 5.3(e) reference to penalties specified in the Black Start Agreement. Ratepayers should not be required to pay, and Black Start resources should not be permitted to retain, payments for service that the resource is not able to provide.</p> <p>Alternatively, recognizing that the potential obligation to re-pay Black Start capability payments imposes a risk on Black Start resources, the Six Cities could accept deletion of the payback language provided that both the Tariff and Black Start Agreements (i) require the CAISO to administer and a Black Start resource to pass successfully performance tests, conducted no less frequently than annually, to demonstrate capability to provide Black Start service, and (ii) provide that if a resource subject to a Black Start Agreement fails such a performance test, capability payments will be suspended immediately and until the resource successfully passes a subsequent performance test. This approach would limit the risk of unjustified payments by ratepayers to no more than one year, and the requirement for annual tests should reduce the potential for resource failures to perform during a system emergency.</p>	<p>Black Start Generating Unit must notify its transmission operator of any known changes to the capabilities of that Black Start Generating Unit affecting the ability to meet the transmission operator's restoration plan within 24 hours following such change. (See EOP-005-02, Requirement 9.) The ISO believes these provisions mitigate the risk of any unjustified payments by ratepayers. The requirements applicable to Black Start Generating Units under EOP-005-2 should also mitigate the risk that a Black Start Generating Unit may fail to perform during a system emergency. Finally, a Black Start Generating Unit could face a direct allocation of a reliability standards penalty assessed against the ISO in the event its conduct contributed, in whole or in part, to the violation(s) at issue.</p>



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8.1	<p>The Six Cities requests an explanation for deletion of “(iv) Voltage Support” from the third line from the top of page 2 and note that Section 8.3.5 continues to address Voltage Support.</p> <p>PG&E seeks clarification on the change to strike Voltage Support from the list of Ancillary Services referenced in Sections 8.1 and 11.10.2. PG&E seeks to understand whether this deletion is due to a policy change with respect to the provision and compensation for resources providing Voltage Support or is merely an incidental tariff clean-up item.</p>	<p>The ISO has modified its draft tariff changes to leave references to Voltage Support in Section 8.1. Voltage Support (like Black Start) is not an Ancillary Service that the ISO market procures through its Day-Ahead and Real-Time markets or that scheduling coordinators self-provide through these markets. However, this initiative focuses on Black Start and the ISO. The ISO may make additional tariff clarifications to reflect the fact that Voltage Support is not an Ancillary Service the ISO procures through its markets. The ISO made similar changes in a 2013 tariff clarification filing. (See FERC Docket ER13-1274.)</p>
8.2.3.4.1 and 8.2.3.4.2	<p>The Six Cities comments that the draft tariff language does not propose to modify existing Section 8.2.3.4, but many or most other references to Black Start service in earlier sub-sections of Section 8 are being deleted or moved to Section 8.8 or Appendix D. The Six Cities request that the ISO provide an explanation for the guiding objectives or approach underlying the proposed deletions and/or relocations of existing tariff language in Section 8.</p>	<p>The ISO has moved language from these tariff sections to a new Section 5 and Appendix D in an effort to consolidate tariff language related to Black Start.</p>
8.3.1	<p>With respect to the proposed deletion of the next to last sentence in the section (appearing on page 5 of the draft), the Six Cities recommends leaving the language in place or, alternatively, including the language in Section 8.8.1. [Note: This tariff language states that the ISO will</p>	<p>The ISO has proposed similar language in Section 5 that states: “The CAISO shall contract annually (or for such other period as the CAISO may determine is economically advantageous) for Black Start services.” This contracting authority could use Reliability Must Run contracts or Black Start Agreements.</p>



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	procure Black Start capability through individual contracts with scheduling coordinators for Reliability Must Run Units and other Generating Units that have Black Start capability.]	
8.4.6.1	The Six Cities recommends inserting the words “[NOT USED]” for the section title.	The ISO has made this recommended change.
8.8(b)	<p>NRG recommends the ISO make the following change:</p> <p>may be located anywhere in the CAISO Balancing Authority Area provided that the Black Start resource is capable of meeting the CAISO performance requirements for starting and interconnection interconnecting to the CAISO Controlled Grid; but ...”</p>	The ISO has made this recommended change.
8.9.13	The Six Cities requests an explanation for the proposed deletion of this section, as performance audits for Black Start services do not appear to be addressed elsewhere in the draft tariff language.	The ISO has deleted tariff language related to performance audits of Black Start Generating Units because the requirements to test Black Start Generating Units are included in a system restoration plan that is part of the ISO’s compliance with NERC Reliability Standard EOP-005-2. The ISO’s responsibility to test these resources and monitor performance during a Black Start event are also set forth in proposed tariff Section 5.3.



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11.5.6.5	<p>The Six Cities states that the currently proposed version of Section 11.10.1.5 contemplates that the Black Start Agreement can specify a different price other than the Exceptional Dispatch Settlement price. That possibility should be recognized in this section as well, perhaps by inserting “Unless otherwise specified in the Black Start Agreement,” at the beginning of the section.</p>	<p>The ISO has made this recommended change.</p>
11.10.1.5	<p>The Six Cities recommends that since Black Start will no longer be defined as an Ancillary Service, it seems out of place to include what is currently numbered as Section 11.10.1.5 as a sub-section of Section 11.10.1, which applies to Ancillary Services. Consider using Section 11.4, currently marked as “[NOT USED]” with a caption of “Black Start Settlements” and re-number internal cross-references accordingly.</p>	<p>The ISO has made these recommended changes.</p>
11.10.8.1	<p>NRG recommends the ISO make the following changes:</p> <p>The CAISO shall allocate payments for Black Start capability under a Black Start Agreement as Reliability Services Costs to the Participating Transmission Owner <u>in whose Service Area in which</u> where the Black Start Generating Unit is located.</p> <p>The Six Cities recommends the ISO consider moving the two sub-sections currently numbered</p>	<p>The ISO has made this recommended change.</p> <p>The ISO will move the provisions of these sub-sections to section 11.4. The ISO anticipates that during a</p>



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	<p>as 11.10.8.1 and 11.10.8.2 to Section 11.4, as recommended above, since Black Start will no longer be defined as an Ancillary Service.</p> <p>Also, with respect to the sub-section currently numbered as 11.10.8.1, the Six Cities questions why should any exports that occurred during a Settlement Period when Black Start Energy was needed be excluded from the calculation of the Black Start Energy payment user rate or the quantity of Measured Demand for that Settlement Period?</p>	<p>market disruption that requires a Black Start procedure, the ISO market will not support exports until the ISO restores internal load.</p>
11.27	<p>The Six Cities asks what is the rationale for continuing to keep Black Start and Voltage Support together in this section in view of the deletion of Black Start from the definition of Ancillary Services? The Six Cities further asks if this section is needed at all, or if it is redundant.</p>	<p>The section provides a cross-reference to tariff provisions that explain the settlement of these services. The ISO will remove the reference to Black Start and related ISO tariff section references in section 11.27.</p>
Appendix A Definition of Interim Black Start Agreement	<p>The Six Cities comments that in light of the proposed revisions to the text of the definition, that the word “Interim” be deleted from the title of the definition.</p>	<p>The ISO has made this recommended change.</p>
Appendix A Definition of Reliability Services Costs	<p>The Six Cities recommends changing the last sentence of the definition to read as follows (underlined text reflect additions) “Reliability Services Costs include costs charged by the CAISO to a Participating TO associated with service provided under a Reliability Must-Run Contract, <u>or a Black Start Agreement</u>, <u>as well as</u>”</p>	<p>The ISO has made this recommended change.</p>

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Appendix D	<p>NRG seeks clarification regarding the following language:</p> <p>“Each Black Start Generating Unit must be capable of sustaining its output for a minimum period of twelve (12) hours from the time when it first starts delivering Energy.” In particular, NRG requests clarification in that does this minimum 12-hour energy requirement apply to the Black Start Generating Unit at all times, or only when the Black Start Generating Unit has been started up pursuant to a Black Start Exceptional Dispatch? NRG asks if the requirements of Appendix D (12 hours) and the CAISO’s technical specification document (48 hours) should be the same.</p>	<p>The minimum 12 hour run time identified in Appendix D relates to when the Generating Unit is dispatched pursuant to a Black Start Exceptional Dispatch. The minimum operation time for a Black Start Generator is currently 12 hours under the ISO tariff. The ISO may propose a longer minimum operating time as part of an individual Black Start Agreement to support the ISO’s system restoration plan.</p>
Appendix D Section (g)	<p>NRG comments that the proposed changes to the ISO tariff state “No Load served by the Black Start Generating Unit may be restored until the CAISO has confirmed that the need for such Black Start service has passed.”</p> <p>NRG requests clarification in regards to the Black Start Generating Unit not being aware whether or not it was serving any other load. NRG asks if this requirement would not apply to the Scheduling Coordinator for the Black Start Generating Unit. Further, NRG seeks clarification if this would not include any station service load required to keep the Black Start Generating Unit in operation.</p>	<p>The ISO incorporated this language from existing ISO tariff section 8.4.2. The ISO believes that NRG’s restatement improves the existing tariff language. The ISO has made this recommended change.</p>



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	NRG requests if this language could be restated to read: "The Scheduling Coordinator for the Black Start Generating Unit shall not use the Black Start Generating Unit to serve any load other than station service load required by the Black Start Generating Unit until the CAISO has confirmed that the need for such Black Start service has passed."	