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**CAISO Procedures to Identify the Need for or the Need  
to Terminate CAISO Operational Control over  
Transmission Facilities**



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## I. Executive Summary

The California Independent System Operator Corporation (CAISO) uses the CAISO Register of transmission facilities (TR) as the official record of transmission facilities and rights owned and maintained by the Participating Transmission Owners (PTOs) and placed under the Operational Control of the CAISO. Upon review, it is apparent that the CAISO needs to be more specific in the methodology used to determine what facilities should be placed under the CAISO's Operational Control.

To address this need, this paper documents the following:

- a set of procedures to determine what facilities are to be placed under the Operational Control of the CAISO going forward; and
- procedures to terminate CAISO Operational Control over facilities.

## II. Introduction

The TR is a repository used by the Participating Transmission Owners to identify and populate all PTO equipment under the Operational Control of the CAISO. This is in accordance with Transmission Control Agreement (TCA) Section 4.2. The information in the TR is used throughout the CAISO as the official data for transmission facilities under CAISO Operational Control. TR data is used by many programs at the CAISO, including Outage Management System, Scheduling and Logging for the ISO in California, Power Systems Load Flow, and the Full Network Model.

Initially, the PTOs provided the CAISO with a set of drawings delineating which transmission facilities were agreed upon by the PTOs, the CAISO, and ultimately FERC to be under CAISO Operational Control. These drawings are often referred to as the “red and black” drawings. The “red and black” drawings use these two colors to distinguish transmission facilities that are under CAISO Operational Control from those that are not under the Operational Control of the CAISO.

Several members of the CAISO's Grid Assets team reviewed these drawings as part of a recent initiative and noted that the criteria used in determining which facilities were placed under CAISO Operational Control are not clearly enough set forth in the CAISO's governing documents.

The purpose of this paper is to provide a set of procedures that can be applied to all PTOs to determine which facilities should be identified to be included under the CAISO's Operational Control. For guidelines in determining these procedures, FERC has concluded that the CAISO must independently determine which facilities it deems necessary to fulfill its responsibilities.<sup>1</sup> If the CAISO determines that a facility that is currently under CAISO Operational Control should be removed from such control, see



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Attachment 3 for procedures that the CAISO will follow to terminate its Operational Control.

### **III. Definitions**

Except as set forth below, terms used with initial capitalization in this paper have the meanings set forth in the Master Definitions Supplement, Appendix A to the CAISO Tariff.

- **Mansfield Factors:** A set of factors that FERC has used in its orders to determine whether or not an electric facility is integrated (networked) with the transmission system.
- **Sectionalizing Facility:** A device used to divide the electrical system into insulated component sections. This permits disconnection of a section without the need to shut down other sections. Examples of sectionalizing facilities include: circuit breakers, circuit switchers, fuses, line switches, and disconnects.
- **Seven Factor Test:** A set of factors that FERC has used in its orders in distinguishing whether a facility performs a transmission or distribution function.

### **IV. Methodology**

To develop the procedures, the CAISO's Grid Assets team took the following approach. First, the team members conducted a cursory review of the red and black drawings and developed a list of criteria applicable to typical transmission facilities. The team also reviewed several FERC orders ~~to determine~~ where rulings were issued on the question of whether or not a facility was a network facility and, if so, what criteria would make it eligible to be under the Operational Control of the CAISO. In addition, the team also reviewed FERC orders that made use of the Seven Factor Test. After examining the list of criteria, the team developed a hypothetical power system one line diagram. The purpose of the hypothetical system was to provide examples of complex interconnections. The team then used this one line diagram to identify which facilities should be under CAISO Operational Control. The team tabulated the justification for each facility delineated in the model power system, and this formed the basis of the procedures. The single line drawing for the hypothetical power system and table of facility justifications are depicted respectively in Attachments 4 and 5.



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## V. Procedures

Except where (i) facilities with historical CAISO Operational Control assignments are grandfathered, (ii) the CAISO deems it necessary to assume Operational Control of facilities to fulfill its responsibilities for reasons not covered by the procedures, or (iii) the CAISO and a PTO agree to a different classification of a facility than specified in the procedures, the following procedures shall apply:

P1. With rare exceptions, such as distribution equipment, including data acquisition and metering facilities, used for CAISO billing and Settlements<sup>2</sup>, generally only transmission facilities are to be placed under the Operational Control of the CAISO.<sup>10</sup> Use FERC's Seven Factor Test to determine whether or not an electric facility should be considered transmission or distribution. A summary of the Seven Factor Test is in Attachment 1.

P2. Integrated transmission facilities are to be placed under CAISO Operational Control. Non-integrated transmission facilities are not placed under the Operational Control of the CAISO. Use the Mansfield Factors to determine whether or not an electric facility is integrated (networked). FERC has held that in order to be considered "integrated" with the transmission system, a facility need only satisfy one of the factors.<sup>3, 8</sup> A summary of the Mansfield Factors is in Attachment 2.

P3. Critical Protective Systems, including Remedial Action Schemes (RAS) or Special Protection Systems (SPS), Underfrequency Load Shedding (UFLS), Under Voltage Load Shedding (UVLS), and associated facilities that may be provided for the protection of facilities under CAISO Operational Control, or directly assignable radial lines and associated facilities used to interconnect to Generating Units contracted to provide Black Start or Voltage Support are to be placed under the Operational Control of the CAISO.<sup>4</sup>

P4. Transmission facilities that can tie two or more busses together within the same substation are to be placed under the Operational Control of the CAISO.<sup>5</sup>

P5. With the exception of facilities described under P3 above, generator interconnection facilities and related electric facilities that are not "at or beyond" the point of interconnection between (i) generating facilities and (ii) the Network Upgrades and other integrated transmission facilities under the CAISO's Operational Control, and through which power normally flows in one direction only, are not placed under the Operational Control of the CAISO.<sup>6</sup>

P6. Sectionalizing Facilities located at the interconnection between (i) transmission facilities under CAISO Operational Control and (ii) generating facilities are to be placed under the Operational Control of the CAISO.<sup>9</sup>



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P7. The CAISO exercises full operating authority over facilities over which it has Operational Control that are 100% owned by a PTO. For facilities whose ownership is shared between a PTO and a non-PTO, the CAISO's strong preference is that the facilities be subject to an operating agreement between the owners and the CAISO that specifies the extent and manner in which the CAISO may exercise operating authority over the facilities. In rare cases where there is no operating agreement addressing the exercise of operating authority over a jointly-owned facility, the CAISO will exercise operating authority to the extent and in the manner permitted by the Transmission Control Agreement and any applicable project agreements among the joint owners and will apply the provisions of Section 17 and related provisions of the CAISO Tariff regarding Transmission Ownership Rights to protect the rights of the non-PTO in the CAISO's exercise of its Operational Control and any associated operating authority.

## **VI. Conventions**

C1. Red is used to delineate non-CAISO Operational Control for transmission facilities on Attachment 4.

C2. Black is used to delineate facilities under the Operational Control of the CAISO on Attachment 4.

## **VII. Conclusions**

This paper lists a set of procedures to identify PTO owned transmission facilities that are to be placed under the Operational Control of the CAISO. A hypothetical power system is included as an example to illustrate the application of these procedures. These procedures use principles identified in prior FERC orders, including the Seven Factor Test and the Mansfield Factors.

Where facilities have already been specified to be under CAISO Operational Control or not pursuant to FERC orders and actions of the PTOs and the CAISO, those facilities retain their existing status regarding CAISO Operational Control as originally approved, unless the CAISO can show that the status needs to be changed from non-CAISO Operational Control to CAISO Operational Control to maintain the reliability of the grid or the CAISO and a PTO agree to a different classification of a facility. These procedures will be used for new facilities going forward from January 1, 2012.



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**Attachment 1: Summary of the Seven Factor Test<sup>7</sup>**

1. Local distribution facilities are normally in close proximity to retail customers.
2. Local distribution facilities are primarily radial in character.
3. Power flows into local distribution systems; it rarely, if ever, flows out.
4. When power enters a local distribution system, it is not reconsigned or transported on to some other market.
5. Power entering a local distribution system is consumed in a comparatively restricted geographical area.
6. Meters are based at the transmission/local distribution interface to measure flows into the local distribution system.
7. Local distribution systems will be of reduced voltage.



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**Attachment 2: Mansfield Factors<sup>8</sup>**

1. Whether the facilities are radial, or whether they loop back into the transmission system;
2. Whether energy flows only in one direction, from the transmission system to the customer over the facilities, or in both directions, from the transmission system to the customer, and from the customer to the transmission system;
3. Whether the transmission provider is able to provide transmission service to itself or other transmission customers ... over the facilities in question;
4. Whether the facilities provide benefits to the transmission grid in terms of capability or reliability, and whether the facilities can be relied on for coordinated operation of the grid; and
5. Whether an outage on the facilities would affect the transmission system.



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**Attachment 3: Transmission Control Agreement Terms and Procedures for CAISO Operational Control Termination (Attachment 3 Section numbers are from TCA)**

***4.4. Sale or Disposal of Transmission Facilities or Entitlements.***

For further details in this arena of terminating CAISO Operational Control, see TCA sections 4.4.1, 4.4.2, and 4.4.3

***4.7. Termination of CAISO's Operational Control.***

***4.7.1 Release from CAISO's Operational Control.***

Subject to TCA Section 4.7.2, the CAISO may relinquish its Operational Control over any transmission lines and associated facilities constituting part of the CAISO Controlled Grid if, after consulting the Participating TOs owning or having Entitlements to them, the CAISO determines that it no longer requires to exercise Operational Control over them in order to meet its Balancing Authority Area responsibilities and they constitute:

- i. directly assignable radial lines and associated facilities interconnecting Generation (other than lines and facilities interconnecting CAISO Controlled Grid Critical Protective Systems or Generators contracted to provide Black Start or Voltage Support);
- ii. lines and associated facilities which, by reason of changes in the configuration of the CAISO Controlled Grid, should be classified as "local distribution" facilities in accordance with FERC's applicable technical and functional test, or should otherwise be excluded from the facilities subject to CAISO Operational Control consistent with FERC established criteria; or
- iii. lines and associated facilities which are to be retired from service in accordance with Good Utility Practice.

***4.7.2 Procedures.***

Before relinquishing Operational Control over any transmission lines or associated facilities pursuant to TCA section 4.7.1, the CAISO shall inform the public through the CAISO Website of its intention to do so and of the basis for its determination pursuant to TCA Section 4.7.1. The CAISO shall give interested parties not less than 45 days within which to submit written objections to the proposed removal of such lines or facilities from the CAISO's Operational Control. If the CAISO cannot resolve any timely



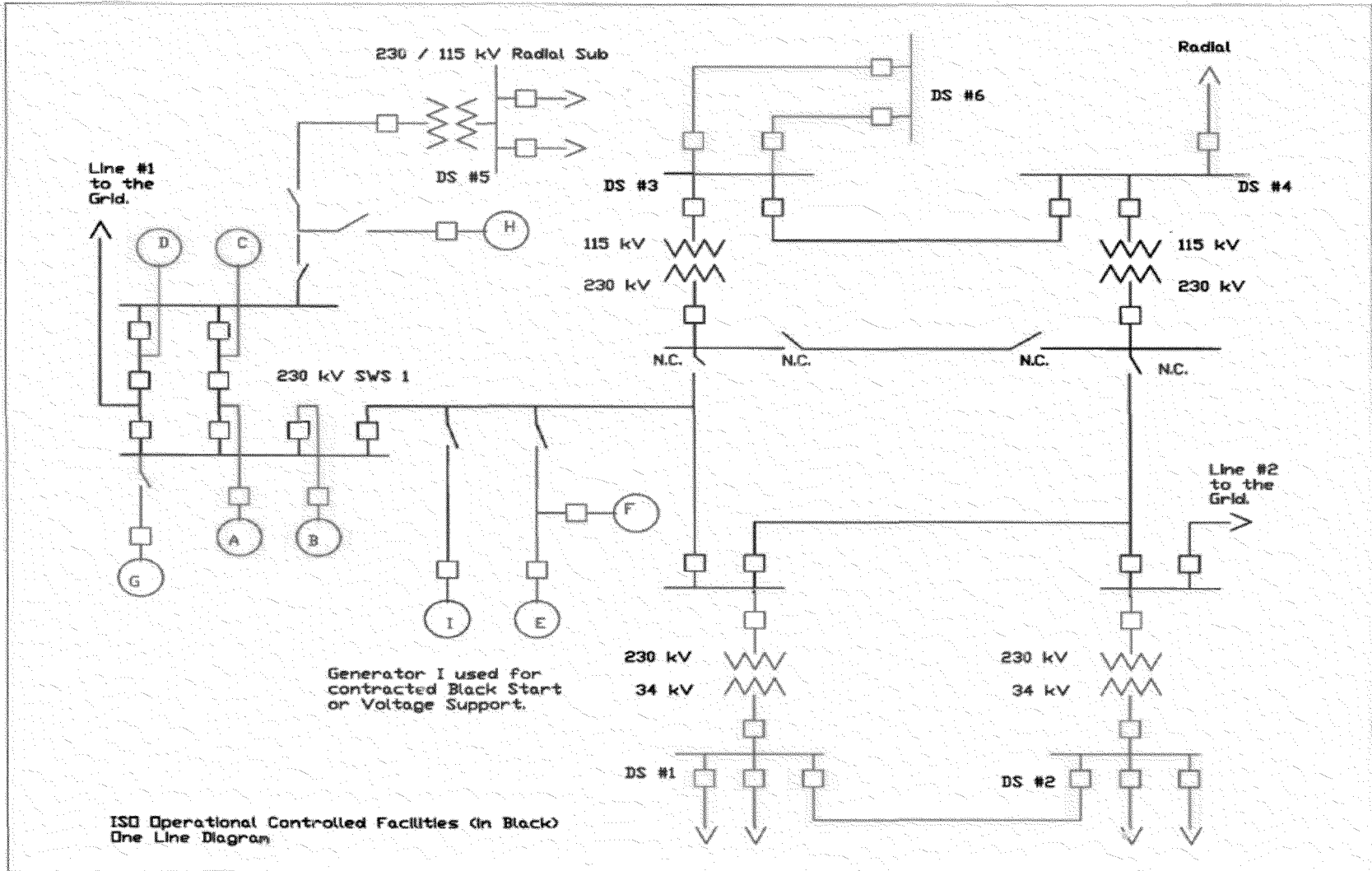


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objections to the satisfaction of the objecting parties and the Participating TOs owning or having Entitlements to the lines and facilities, such parties, Participating TOs, or the CAISO may refer any disputes for resolution pursuant to the CAISO ADR Procedures in Section 13 of the CAISO Tariff. Alternatively, the CAISO may apply to FERC for its approval of the CAISO's proposal.



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Attachment 4: Hypothetical Power System



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## Attachment 5 - Table of Facility Justifications

Facility	Facility Description	Component Type	Voltage	Justification Procedure Number	Justification Description	ISO Status
SWS 1	SWS 1 to G at SWS 1	DISC	230	P7	Not 100% owned by PTO and no operating agreement	N
SWS 1	SWS 1 to G at SWS 1	TERM	230	P7	Not 100% owned by PTO and no operating agreement	N
[TRANSMISSION LINE]	SWS 1 to G	COND	230	P7	Not 100% owned by PTO and no operating agreement	N
SWS 1	SWS 1 to A	TERM	230	P4 and P6	Bus Tie Reliability & CAISO Independent Decision	Y
G	Breaker at G	CB	230	P5	Beyond POI on generator side	N
[TRANSMISSION LINE]	SWS 1 to A (Beyond POI)	COND	230	P5	Beyond POI on generator side	N
A	Breaker at A	CB	230	P5	Beyond POI on generator side	N
[TRANSMISSION LINE]	SWS 1 to B (Beyond POI)	COND	230	P5	Beyond POI on generator side	N
B	Breaker at B	CB	230	P5	Beyond POI on generator side	N
[TRANSMISSION LINE]	SWS 1 to C (Beyond POI)	COND	230	P5	Beyond POI on generator side	N
[TRANSMISSION LINE]	SWS 1 to D (Beyond POI)	COND	230	P5	Beyond POI on generator side	N
SWS 1	North Bus to H Jct.	DISC	230	P6	At or Beyond & CAISO Independent Decision	Y
SWS 1	SWS 1 to H Jct.	TERM	230	P6	At or Beyond & CAISO Independent Decision	Y
[TRANSMISSION LINE]	SWS 1 to H Jct. (TERM only)	TLS	230	P6	At or Beyond & CAISO Independent Decision	Y
[TRANSMISSION LINE]	SWS 1 to H Jct. (Beyond TERM)	TLS	230	P1	FERC Seven Factor Test (Radial)	N
[TRANSMISSION LINE]	SWS 1 to H Jct. (Beyond SWS 1 DISC)	COND	230	P1	FERC Seven Factor Test (Radial)	N
[TRANSMISSION LINE]	H Jct. to DS #5	DISC	230	P1	FERC Seven Factor Test (Radial)	N
[TRANSMISSION LINE]	H Jct. to H	DISC	230	P5	Beyond POI on generator side	N



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Facility	Facility Description	Component Type	Voltage	Justification Procedure Number	Justification Description	ISO Status
[TRANSMISSION LINE]	H Jct. to H	COND	230	P5	Beyond POI on generator side	N
H	Breaker at H	CB	230	P5	Beyond POI on generator side	N
[TRANSMISSION LINE]	H Jct. to DS #5	COND	230	P1	FERC Seven Factor Test (Radial)	N
DS #5	XFMR High Side Breaker at DS #5	CB	230	P1	FERC Seven Factor Test (Radial)	N
DS #5	Bank 1	XFMR BANK	230	P1	FERC Seven Factor Test (Radial)	N
DS #5	Bay 1	XFMR BAY	230	P1	FERC Seven Factor Test (Radial)	N
DS #5	North Low Side Line Breaker at DS #5	CB	115	P1	FERC Seven Factor Test (Radial)	N
DS #5	South Low Side Line Breaker at DS #5	CB	115	P1	FERC Seven Factor Test (Radial)	N
DS #5	Low Side Bus at DS #5	BUS	115	P1	FERC Seven Factor Test (Radial)	N
SWS 1	South Bus	BUS	230	P1	FERC Seven Factor Test (Loop through)	Y
SWS 1	North Bus	BUS	230	P1	FERC Seven Factor Test (Loop through)	Y
SWS 1	North Bus Breaker for D	CB	230	P4 and P6	Bus Tie Reliability & CAISO Independent Decision	Y
SWS 1	North Bus Breaker for C	CB	230	P4 and P6	Bus Tie Reliability & CAISO Independent Decision	Y
SWS 1	Middle Breaker for D and Line #1	CB	230	P4 and P6	Bus Tie Reliability & CAISO Independent Decision	Y
SWS 1	South Line #1 Breaker	CB	230	P1 and P4	Bus Tie Reliability & Loop through	Y
SWS 1	South Bus Breaker for A	CB	230	P4 and P6	Bus Tie Reliability & CAISO Independent Decision	Y
SWS 1	South Bus Breaker for B	CB	230	P6	At or Beyond & CAISO Independent Decision	Y
SWS 1	Middle Breaker for A & C	CB	230	P4 and P6	Bus Tie Reliability and At or Beyond	Y
SWS 1	North Bus DISC for SWS 1 to H Jct.	DISC	230	P6	At or Beyond & CAISO Independent Decision	Y
SWS 1	South Bus Breaker for SWS 1 to I to E & F to DS #3 to DS #1	CB	230	P1	FERC Seven Factor Test (Loop through)	Y
[TRANSMISSION LINE]	DISC at I Gen Tie Tap	DISC	230	P2 or P3	Black Start or Voltage Support or Mansfield	Y
[TRANSMISSION LINE]	I Gen Tie Tap to I	COND	230	P2 or P3	Black Start or Voltage Support or Mansfield	Y



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Facility	Facility Description	Component Type	Voltage	Justification Procedure Number	Justification Description	ISO Status
I	Breaker at I	CB	230	P2 or P3	Black Start or Voltage Support or Mansfield	Y
[TRANSMISSION LINE]	COND from SWS 1 through I Jct to DS #1 and DS #3	COND	230	P1	FERC Seven Factor Test (Loop through)	Y
E	Breaker at E	CB	230	P5	Beyond POI on generator side	N
F	Breaker at F	CB	230	P5	Beyond POI on generator side	N
[TRANSMISSION LINE]	DISC at line tap for E and F	DISC	230	P6	At or Beyond & CAISO Independent Decision	Y
[TRANSMISSION LINE]	COND from line tap DISC to E and F Jct	COND	230	P5	Beyond POI on generator side	N
[TRANSMISSION LINE]	COND from E and F Jct to E	COND	230	P5	Beyond POI on generator side	N
[TRANSMISSION LINE]	COND from E and F Jct to F	COND	230	P5	Beyond POI on generator side	N
DS #1	BUS (High Side) at DS #1	BUS	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #1	East High Side Line Breaker @ DS #1	CB	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #1	West High Side Line Breaker @ DS #1	CB	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #1	XFMR Bk High Side Breaker @ DS #1	CB	230	P1	FERC Seven Factor Test (To Distribution Load Only)	N
DS #1	Bank 1	XFMR BANK	230	P1	FERC Seven Factor Test (To Distribution Load Only)	N
DS #1	Bay 1	XFMR BAY	230	P1	FERC Seven Factor Test (To Distribution Load Only)	N
DS #1	East Low Side Line Breaker @ DS #1	CB	34	P1	FERC Seven Factor Test (Distribution Voltage Level)	N
DS #1	West Low Side Line Breaker @ DS #1	CB	34	P1	FERC Seven Factor Test (Distribution Voltage Level)	N
DS #1	Middle Low Side Line Breaker @ DS #1	CB	34	P1	FERC Seven Factor Test (Distribution Voltage Level)	N
DS #1	XFMR Bk Low Side Breaker @ DS #1	CB	34	P1	FERC Seven Factor Test (Distribution Voltage Level)	N
DS #1	BUS (Low Side) at DS #1	BUS	34	P1	FERC Seven Factor Test (Distribution Voltage Level)	N
[TRANSMISSION LINE]	COND from DS #1 to DS #2 (Low Side)	COND	34	P1	FERC Seven Factor Test (Distribution Voltage Level)	N
DS #2	East Low Side Line Breaker @ DS #2	CB	34	P1	FERC Seven Factor Test (Distribution Voltage Level)	N
DS #2	BUS (Low Side) at DS #2	BUS	34	P1	FERC Seven Factor Test (Distribution Voltage Level)	N
DS #2	West Low Side Line Breaker @ DS #2	CB	34	P1	FERC Seven Factor Test (Distribution Voltage Level)	N



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Facility	Facility Description	Component Type	Voltage	Justification Procedure Number	Justification Description	ISO Status
DS #2	Middle Low Side Line Breaker @ DS #2	CB	34	P1	FERC Seven Factor Test (Distribution Voltage Level)	N
DS #2	XFMR Bk Low Side Breaker @ DS #2	CB	34	P1	FERC Seven Factor Test (Distribution Voltage Level)	N
DS #2	BUS (High Side) at DS #2	BUS	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #2	West High Side Line Breaker @ DS #2	CB	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #2	Line #2 Breaker @ DS #2	CB	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #2	XFMR Bk High Side Breaker @ DS #2	CB	230	P1	FERC Seven Factor Test (To Distribution Load Only)	N
DS #2	Bank 1	XFMR BANK	230	P1	FERC Seven Factor Test (To Distribution Load Only)	N
DS #2	Bay 1	XFMR BAY	230	P1	FERC Seven Factor Test (To Distribution Load Only)	N
[TRANSMISSION LINE]	COND from DS #1 to DS #2 to DS #4(High Side)	COND	230	P1	FERC Seven Factor Test (Loop through)	Y
[TRANSMISSION LINE]	COND from DS #3 to DS #4(High Side)	COND	230	P1	FERC Seven Factor Test (Loop through)	Y
[TRANSMISSION LINE]	COND from DS #3 to DS #4(Low Side)	COND	115	P1	FERC Seven Factor Test (Loop through)	Y
[TRANSMISSION LINE]	COND from DS #3 to DS #6(East Side)	COND	115	P1	FERC Seven Factor Test (Not parallel to Grid facility)	N
[TRANSMISSION LINE]	COND from DS #3 to DS #6(West Side)	COND	115	P1	FERC Seven Factor Test (Not parallel to Grid facility)	N
DS #6	BUS at DS #6	BUS	115	P1	FERC Seven Factor Test (Not parallel to Grid facility)	N
DS #6	North Line Breaker @ DS #6	CB	115	P1	FERC Seven Factor Test (Not parallel to Grid facility)	N
DS #6	South Line Breaker @ DS #6	CB	115	P1	FERC Seven Factor Test (Not parallel to Grid facility)	N
DS #3	Northeast Low Side Line Breaker @ DS #3	CB	115	P1	FERC Seven Factor Test (Not parallel to Grid facility)	N
DS #3	BUS (Low Side) at DS #3	BUS	115	P1	FERC Seven Factor Test (Loop through)	Y
DS #3	Northwest Low Side Line Breaker @ DS #3	CB	115	P1	FERC Seven Factor Test (Not parallel to Grid facility)	N
DS #3	XFMR Bk Low Side Breaker @ DS #3	CB	115	P1	FERC Seven Factor Test (Loop through)	Y
DS #3	BUS (High Side) at DS #3	BUS	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #3	XFMR Bk High Side Breaker @ DS #3	CB	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #3	Bank 1	XFMR BANK	230	P1	FERC Seven Factor Test (Loop through)	Y



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Facility	Facility Description	Component Type	Voltage	Justification Procedure Number	Justification Description	ISO Status
DS #3	Bay 1	XFMR BAY	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #4	East Low Side Line Breaker @ DS #4	CB	115	P1 & P2	FERC Seven Factor Test (Radial facility) and Mansfield non-integrated	N
DS #4	BUS (Low Side) at DS #4	BUS	115	P1	FERC Seven Factor Test (Loop through)	Y
DS #4	West Low Side Line Breaker @ DS #4	CB	115	P1	FERC Seven Factor Test (Loop through)	Y
DS #4	XFMR Bk Low Side Breaker @ DS #4	CB	115	P1	FERC Seven Factor Test (Loop through)	Y
DS #4	BUS (High Side) at DS #4	BUS	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #4	XFMR Bk High Side Breaker @ DS #4	CB	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #4	Bank 1	XFMR BANK	230	P1	FERC Seven Factor Test (Loop through)	Y
DS #4	Bay 1	XFMR BAY	230	P1	FERC Seven Factor Test (Loop through)	Y

Note: The first sentence of Procedure 7 applies to all components in the one line diagram that are color-coded black.



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## References

1. *Pacific Gas and Electric Company, et al*, 77 FERC ¶ 61,204 at 61,822 (1996); *Pacific Gas and Electric Company et al.*, 81 FERC ¶ 61,122 at 61,456, 61,515 (1997).
2. *Pacific Gas and Electric Company et al.*, 81 FERC ¶ 61,122 at 61,516 (1997).
3. *See, e.g., See City of Anaheim, et al.*, 113 FERC ¶ 61,091 at PP 34-36 (2005).
4. The CAISO's exercise of Operational Control over Critical Protective Systems and directly assignable radial lines and associated facilities used to interconnect to Generating Units contracted to provide Black Start or Voltage Support is consistent with CAISO Transmission Control Agreement, §§ 4.1.1 and 8 and is pursuant to the CAISO's independent determination which facilities are necessary to fulfill its responsibilities pursuant to reference note 1.
5. The CAISO's exercise of Operational Control over transmission facilities that can tie two or more buses together in the same substation is consistent with the Mansfield Factors in Attachment 2 and reference notes 3 and 8 and is pursuant to the CAISO's independent determination which facilities are necessary to fulfill its responsibilities pursuant to reference note 1.
6. CAISO Transmission Control Agreement §§ 4.1.1(i) and 4.7.1(i); *See, e.g., Nevada Power Co.*, 101 FERC ¶ 61,036 at PP 6-9 (2002); *Nevada Power Co.*, 111 FERC ¶ 61,161 at PP 12-13, 161844 (2002); *Nevada Power Order on Remand* ( ), *order on reh'g*, 113 FERC ¶ 61,007 (2005); *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at PP 21, 66, 676 (2003), *order on reh'g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160, *order on reh'g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh'g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007). *See also Southern California Edison Company*, 117 FERC ¶ 61,103 at PP 70-74 (2006) ("Whitewater"); *Southern California Edison Company*, 128 FERC ¶ 63,003 at PP 7-9, 20-21, 46, 74-78, 91, 95-97, 117 (2009) (ALJ decision) ("Green Borders") (exceptions to the "at or beyond" test). Note that while the primary focus of these cases and rulemakings has been the allocation of costs based on the "at or beyond" test, the cases and rulemakings include useful explanations of FERC's view of the appropriate classification of facilities for purposes of exercise of operational control.





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7. *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, 61 FR 21540 (May 10, 1996), FERC Stats. & Regs. ¶ 31,036 (1996), *order on reh'g*, Order No. 888-A, 62 FR 12274 (Mar. 14, 1997), FERC Stats. & Regs. ¶ 31,048 (1997), *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in relevant part sub nom. Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000) (TAPS v. FERC), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002), at 31,771.
8. *Mansfield Municipal Electric Dept.*, 97 FERC ¶ 61,134 at 61,613 (2001), *reh'g denied*, Opinion 454-A, 98 FERC ¶ 61,115 (2002).
9. The CAISO's exercise of Operational Control over sectionalizing facilities located at the interconnection between (i) transmission facilities under CAISO Operational Control and (ii) generating facilities is consistent with the Mansfield Factors in Attachment 2 and reference notes 3 and 8 and the "at or beyond" test in reference note 6 and is pursuant to the CAISO's independent determination which facilities are necessary to fulfill its responsibilities pursuant to reference note 1.
10. CAISO Transmission Control Agreement §§ 4.1.1(ii) and 4.7.1(ii and iii).