

CAISO OVERSIGHT OVER VEGETATION MANAGEMENT ASSOCIATED WITH TRANSMISSION FACILITIES

PG&E Answer to Wilbur Complaint, at pp.9-11 (June 27, 2011) :

3. The California Independent System Operator Corporation (CAISO) Manages Transmission Facilities Owned by Transmission Operators

CAISO was created as part of the 1996 California Electrical Restructuring, and is a nonprofit, public benefit corporation. CAISO is registered with NERC as the transmission operator of the bulk power system in which PG&E owns transmission lines. It is charged with ensuring the “efficient use and reliable operation of the transmission grid consistent with ... ***criteria no less stringent than those established by***” WECC and NERC. (Pub. Util. Code §§345, 345.5; see also www.caiso.com.) (emphasis supplied)

The General Provisions of the code sections that created CAISO make it clear that the California Legislature intended: (1) “that the delivery of electricity over transmission and distribution systems...will continue to be regulated to ensure system safety, reliability, environmental protection, and fair access...”; and (2) that California’s electric utilities “should commit control of their transmission facilities to the CAISO”. (Pub. Util. Code §330(f) and (m).)

Key to CAISO’s role, is the statutory directive to CAISO to develop inspection and maintenance standards for transmission. CAISO is required to adopt “inspection, maintenance, repair, and replacement standards for the transmission facilities under its control”, which take into account cost, local geography, weather, applicable codes, national electric industry practices, sound engineering judgment, and experience. (Pub. Util. Code §348.) These standards are incorporated into a Transmission Control Agreement with Participating Transmission Owners, which is approved by FERC. (California Independent System Operator Corporation, Transmission Control Agreement, Appendix C, ISO Transmission Maintenance Standards (October 11, 2006).) (Attached hereto as Exhibit “F.”) PG&E’s transmission facilities are under the operational control of CAISO.

In recognition of the “diverse environmental and climatic conditions, terrain, equipment, and design practices” throughout California, the standards require Participating Transmission Owners such as PG&E to develop and submit to CAISO their own maintenance practices, including vegetation management. The objective of the standards is to provide for a high quality, safe, and reliable transmission grid in California by ensuring that the grid’s facilities are available for use as required by the standards. PG&E’s Transmission Maintenance Practices, which includes PG&E’s TVMP, have been reviewed and accepted by CAISO. ***In other words, CAISO has adopted the maintenance practices of PG&E (and other similarly situated utilities) as its own required standards.*** (See Letter dated November 6, 2008 from CAISO to “All Californians” attached hereto as Exhibit G.) CAISO requires PG&E to comply with

these CAISO adopted maintenance practices. (*Id.*) Under the Transmission Control Agreement, CAISO performs annual audits to ensure that PG&E is adhering to its TVMP. CAISO relies on this audit mechanism (performed on PG&E and other similarly situated utilities) to ensure the responsible maintenance of the electric transmission system under its operational control.

Footnotes: ⁵ PG&E uses the same TVMP to ensure compliance with both NERC Standard FAC-003-1 and CAISO's requirements.

PG&E's Opening Brief in Wilbur v. PG&E, at pp.25-27 (June 29, 2012).

F. PG&E'S Relationship with CAISO

1. CAISO Is Charged With Ensuring the Reliable Operation of the Grid With Criteria No Less Stringent Than Applicable Federal Guidelines

CAISO was created as part of the 1996 California Electrical Restructuring, and is a nonprofit, public benefit corporation. CAISO is registered with NERC as the transmission operator of the bulk power system in which PG&E owns transmission lines. ⁹³ It is charged with ensuring the “*efficient use and reliable operation of the transmission grid consistent with ... criteria no less stringent than those established by*” the Western Electricity Coordinating Council (WECC) and North American Electric Reliability Corporation (NERC).⁹⁴ Among other PG&E facilities, the two 115 kV circuits on the Wilbur property are under the operational control of CAISO.⁹⁵

Key to CAISO's role is the statutory directive to CAISO to develop inspection and maintenance standards for transmission. CAISO is required to adopt “inspection, maintenance, repair, and replacement standards for the transmission facilities under its control,” which take into account cost, local geography, weather, applicable codes, national electric industry practices, sound engineering judgment, and experience.⁹⁶ These standards are incorporated into a Transmission Control Agreement with Participating Transmission Owners (PTOs), *which is approved by FERC* and forms part of CAISO's tariff.⁹⁷

CAISO does not prescribe any specific vegetation management practices or clearances. Since the Participating Transmission Owners throughout California operate in different environmental, climatic conditions and terrain (e.g. mountain, desert, forest, farmland), CAISO requires Participating Transmission Owners such as PG&E to develop and submit to CAISO their own maintenance practices, including vegetation management practices.⁹⁸ The objective of the standards is to provide for a high quality, safe, and reliable transmission grid in California by ensuring that the grid's facilities are available for use as required by the standards.⁹⁹ PG&E's Overhead Transmission Maintenance Practices (Maintenance Practices) were first reviewed and adopted by CAISO on January 7, 1998.¹⁰⁰ PG&E's Maintenance Practices cover all aspects of maintaining PG&E's transmission facilities, including vegetation management.¹⁰¹ Each subsequent iteration of the PG&E Maintenance Practices has also been reviewed and accepted by CAISO.^{102 103}

CAISO has enforcement capabilities as well. It may seek FERC permission for the imposition of penalties on a PTO should the PTO (a) exhibit significant degradation trends in availability due

to Maintenance; or (b) is grossly or willfully negligent with regard to Maintenance.¹⁰⁴ In addition to other actions or relief, CAISO may also impose a sanction in the amount of \$10,000 on a PTO for failing to take such “operating and maintenance practices necessary to avoid contributing to a major Outage or a prolonged response time.”¹⁰⁵

2. CAISO Has Oversight Over and Reviews Compliance With PG&E Maintenance of Transmission Lines, Including Vegetation Management

PG&E is required to comply with its CAISO adopted maintenance practices.¹⁰⁶ CAISO performs annual reviews of various transmission circuits selected in advance, which include field/site as well as maintenance record reviews¹⁰⁷ to ensure that PG&E is adhering to its Maintenance Practices.

Over the years, CAISO has raised occasional vegetation management issues as part of these reviews, either singly or in the form of a “punch list”, and sometimes asks to see additional vegetation management records.¹⁰⁸ PG&E has successfully resolved all of CAISO’s identified issues with vegetation management in connection with the CAISO review process.¹⁰⁹ CAISO has been supportive of PG&E’s vegetation management program generally. In its final reports of the annual maintenance reviews, CAISO has never documented a deviation to PG&E’s maintenance practices regarding vegetation management, including those related to tree-to-line clearances.¹¹⁰ CAISO has specifically supported PG&E’s removal of such orchard trees from transmission rights-of way where necessary to protect the reliability of the grid.¹¹¹

Footnotes:

93 The General Provisions of the code sections that created CAISO make it clear that the California Legislature intended: (1) “that the delivery of electricity over transmission and distribution systems ... will continue to be regulated to ensure system safety, reliability, environmental protection, and fair access ...”; and (2) that California’s electric utilities “should commit control of their transmission facilities to the CAISO”. (Pub. Util. Code §330(f) and (m).)

94 Pub. Util. Code §§345, 345.5; see also www.aiso.com. (Emphasis supplied.)

95 Filmer Testimony, A6 at p. 4, PG&E Exhibit PG&E-2-P.

96 Pub. Util. Code §348.

97 *California Independent System Operator Corporation, Transmission Control Agreement*, Appendix C, ISO Transmission Maintenance Standards (October 11, 2006) (TCA), PG&E Exhibit PG&E-1-P, Sub-Exhibit 19.

98 Filmer Testimony, A6 at p. 4, PG&E Exhibit PG&E-2-P. 99 Pub. Util. Code §348.

100 Filmer Testimony, A6 at p. 4, PG&E Exhibit PG&E-2-P.

101 Filmer Testimony, A8 at p. 5, PG&E Exhibit PG&E-2-P.

102 PG&E uses the same TVMP to ensure compliance with both NERC Standard FAC-003-1 and CAISO’s requirements.

103 Laura Mantz November 6, 2008 letter to “All Californians” (Laura Mantz Letter) (“These transmission owners are required to comply with the CAISO adopted maintenance practices.”) (PG&E Exhibit PG&E-2-P, Sub-Exhibit 18.)

104 TCA, at Section 9.3, *Imposition of Penalties in Absence of a Formal Program*, PG&E Exhibit PG&E-1-P, Sub- Exhibit 19.

105 CAISO Fifth Replacement Tariff, April 1, 2011, Section 37.2.3.2., attached as Appendix B, Exhibit 3 in PG&E's Response to the Data Request of ALJ Kenney.

106 Laura Mantz November 6, 2008 letter to "All Californians" (Laura Mantz Letter) ("These transmission owners are required to comply with the CAISO adopted maintenance practices." (PG&E Exhibit PG&E-2-P, Sub-Exhibit 18.)

107 TCA, Appendix C, Section 6, *Maintenance Record Keeping and Reporting*, PG&E Exhibit PG&E-2-P, Sub- Exhibit 19.

108 Filmer Testimony, A10-A11 at pp. 7-8, PG&E Exhibit PG&E-2-P.

109 Filmer Testimony, A16 at p. 8, PG&E Exhibit PG&E-2-P.

110 Filmer Testimony, A12 at p. 8, PG&E Exhibit PG&E-2-P.

111 Filmer Testimony, A15 at p. 8, PG&E Exhibit PG&E-2-P.