

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**Transmission Planning Within the California
Independent System Operator Corporation**

Docket No. AD18-12-000

**California Public Utilities Commission, Northern
California Power Agency, City and County of San
Francisco, State Water Contractors, and
Transmission Agency of Northern California**

Docket No. EL17-45-000

v.

**Pacific Gas and Electric Company
Southern California Edison Company**

Docket No. ER18-370-000

**REPLY COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION**

The California Independent System Operator Corporation (CAISO) submits these reply comments in response to initial post-technical conference comments.¹ The CAISO (1) shows that the CPUC's assertions that the CAISO, in its filings with the Commission, gave the impression that it would review in its Transmission Planning Process (TPP) all transmission maintenance and asset management activities conducted by CAISO participating transmission owners (PTOs) is baseless; (2) clarifies that the scope of the CAISO's local transmission planning activities is not the same as in PJM; and (3) explains that the impact of maintenance activities are considered in the TPP pursuant to existing planning standards.

**I. The CAISO Never Proposed or Implied that It Would Review or Approve
Transmission Maintenance or Asset Management Projects through the TPP**

The CPUC erroneously claims that the CAISO's filings in compliance with the Commission's Order No. 890 created an impression that the CAISO would review and approve all PTO transmission projects, including maintenance-related projects, through the CAISO's TPP. To the contrary, since CAISO start-up, there has been a Commission-

¹ The CAISO's reply comments respond primarily to initial comments submitted by the California Public Utilities Commission (CPUC), the California Wind Energy Association (CalWEA), Northern California Power Agency (NCPA), Old Dominion Electric Cooperative (ODEC), and the Transmission Agency of Northern California (TANC).

approved division of roles and responsibilities between the CAISO and its PTOs that distinguishes system expansions from other types of transmission-related work. The CAISO's compliance filings in response to the Commission's Order Nos. 890 and 1000 clearly maintained that longstanding division and further clarified what particular categories or transmission expansion projects must be reviewed and approved through the CAISO's TPP. As discussed below, the Commission's initial order on the CAISO's Order No. 890 compliance filing expressly recognized that expansion projects are processed through the CAISO's TPP, but replacement-type projects are not.

A. Background

The Commission-approved Transmission Control Agreement (TCA) sets forth the respective roles and responsibilities of the CAISO and each PTO. TCA Section 11, entitled *Expansion of Transmission Facilities*, provides that CAISO Tariff Sections 24 (Transmission Planning Process) and 25 (Generator Interconnection) will apply to any expansion and reinforcement of the transmission system. On the other hand, TCA Section 4.3 provides that the PTOs are responsible for operating and maintaining the transmission lines and associated facilities placed under the CAISO's operational control in accordance with the TCA, applicable reliability criteria, and the CAISO's operating procedures and protocols. TCA Section 6.3 requires each PTO to inspect, maintain, repair, replace, and maintain the rating and technical performance of their respective facilities under the CAISO's operational control in accordance with the applicable reliability criteria and performance standards established under the TCA.² Appendix C of the TCA defines maintenance as "inspection, assessment, maintenance, repair, and replacement activities performed with respect to Transmission Facilities." The TCA does not require that non-expansion, non-reinforcement, maintenance and compliance-type projects be approved through the CAISO's TPP.

Consistent with the TCA, the Commission's orders on the CAISO's start-up

² Under TCA Section 4.2, participating transmission owners are responsible for informing the CAISO of any change in their facility ratings.

recognized that the CAISO's TPP applied to the *expansion* of transmission facilities, in particular *expansions* to meet reliability and economic needs,³ and that each PTO was responsible for maintaining its own transmission lines.⁴

B. The CAISO's Order No. 890 Compliance Filings Did Not Provide that the CAISO Would Evaluate the PTO's Transmission-Related Maintenance Work in the TPP

The CAISO's Order No. 890 compliance filings consistently indicated that the CAISO would determine the necessity of transmission additions or upgrades to meet purposes specifically enumerated in its tariff and business practice manuals.⁵ In its Initial Post Technical Conference Comments, the CPUC asserts that based on the CAISO's Second Order No. 890 Compliance Filing, "FERC and customer representatives had reason to believe that all PTO projects would go through the CAISO's Request Window."⁶ However, this assertion is directly contradicted by the CAISO's Second Order No. 890 Compliance Filing, which specifically lists the categories of projects and study requests that must be submitted through the Request Window.⁷ These specific categories include reliability transmission upgrades or additions, economic transmission upgrades or additions, Location Constrained Interconnection Resource Facilities; and projects to preserve Long-term Congestion Revenue Rights. This list does not include capital maintenance or asset management type projects. Neither the CAISO's compliance filings, nor or the Commission's orders on them, indicated that capital maintenance-type and asset management projects would be subject to the CAISO's TPP.

³ *Pacific Gas & Electric Company, et al.*, 77 FERC ¶61,204 at 61,834-36 (1996), *order providing guidance*, 80 FERC ¶ 61,128 at 61,430-34 (1997), *order on reh'g*, 81 FERC ¶61,122 at 61,486-87 (1997).

⁴ *Pacific Gas & Electric Company, et al.*, 81 FERC ¶61,122 at 61,559. As discussed *infra*, the CAISO subsequently added other categories of transmission need (e.g., public policy) that it evaluates in its transmission planning process.

⁵ CAISO second Order No. 890 Compliance Filing, Docket No. OA08-62, (Oct. 31, 2008) (Second Order No. 890 Compliance Filing).

⁶ CPUC Initial Post-Technical Conference Comments, p. 7.

⁷ CAISO initial Order No. 890 Compliance Filing, Docket No. OA08-62 (Dec. 21, 2007), p. 14 (First Order No. 890 Compliance Filing); Draft Tariff Section 24.2.3; Draft Business Practice Manual Section 2.1.2.1.

1. The CAISO's First Order No. 890 Compliance Filing

The CAISO's First Order No. 890 Compliance Filing addressed planning for "*Transmission Expansion*," which was the title of CAISO Tariff Section 24. Consistent with the TCA, the CAISO Tariff contemplated that transmission planning would apply to system expansions, *i.e.*, upgrades and additions.⁸

The proposed tariff language in compliance with the Commission's order defined the TPP as "[t]he process by which the CAISO assesses the CAISO Controlled Grid as set forth in Section 24 of Appendix EE."⁹ Thus, by definition, matters not referenced in CAISO Tariff Section 24 were not subject to the CAISO's TPP. The tariff language the CAISO submitted in compliance to the Commission's order provided that the CAISO's TPP would apply to upgrades and additions to: (1) promote economic efficiency; (2) maintain system reliability;¹⁰ (3) satisfy the requirements of a Location Constrained Resource Interconnection Facility; or (4) maintain the simultaneous feasibility of Congestion Revenue Rights. The Commission acknowledged that this was the scope of the CAISO's TPP in its June 2008 Order on the CAISO's First Order No. 890 Compliance Filing, and the Commission did not add to the scope of the transmission work the CAISO considers in the TPP.¹¹ In particular, the Commission did not direct the CAISO to revise its tariff to provide that it would evaluate other types of transmission-related work that were not covered by one of the categories

⁸ First Order No. 890 Compliance Filing, at Substitute Original Sheet No. 1424.

⁹ *Id.* at Substitute Original Sheet No. 1454.

¹⁰ Reliability driven projects are transmission upgrades "required to ensure System Reliability consistent with all Applicable Reliability Criteria and CAISO Planning Standards." CAISO Order No. 890 Compliance Filing, CAISO Tariff Section 24.1.2. The CAISO Tariff defines Applicable Reliability Criteria as "[t]he Reliability Standards and reliability criteria established by NERC and WECC and Local Reliability Criteria..." The CAISO tariff defines Local Reliability Criteria as "[r]eliability Criteria unique to the transmission systems of each of the Participating TOs established at the later of: (1) CAISO Operations Date, or (2) the date upon which a New participating TO places its facilities under the control of the CAISO." In determining the need for a reliability solution, analysis must demonstrate that mitigation is needed to ensure compliance with applicable planning criteria. *Business Practice Manual for the Transmission Planning Process*, Section 4.7.1. Thus, to be considered a reliability driven transmission project for purposes of consideration in the transmission planning process, a project must be needed to meet reliability planning standards.

¹¹ *California Independent System Operator Corporation*, 123 FERC ¶61,283 at P 63 (2008) (June 2008 Order).

specified in CAISO Tariff Section 24 (e.g., transmission maintenance or asset management).¹² Nowhere in its filing did the CAISO state that it would review asset management and projects its TPP. Under these circumstances, there was no tangible basis to expect that the CAISO would evaluate transmission work beyond the work specified in the CAISO Tariff.

Further, any expectation that the CAISO would evaluate all transmission work in the planning process is contradicted by the fact the Commission accepted the following language proposed by the CAISO in its compliance filing in CAISO Tariff Section 24.2.3.1 – *Information Provided By Participating TOs:*

[i]n addition to any information that must be provided to the CAISO under the NERC Reliability Standards...the PTOs shall provide the CAISO on an annual or periodic basis...any information and data reasonably required by the CAISO to perform its Transmission Planning Process, including, but not limited to... (5) detailed *power system models of their transmission systems that reflect transmission system changes, including equipment replacement not requiring approval by the CAISO...*¹³

Thus, the Commission-approved tariff language expressly recognized that equipment replacement projects—which are encompassed by the definition of maintenance in the TCA – do not go through the CAISO’s TPP. The Commission specifically cited this tariff language in its initial order in noting that “all changes to the PTOs’ owned facilities, whether at the transmission or distribution level, must be provided to the CAISO for incorporation into foundation base cases...”¹⁴ The fact that the Commission specifically cited this tariff language belies the CPUC’s claim that the Commission was unaware that transmission system projects could occur outside of the CAISO’s TPP. As the June 2008 Order shows, the Commission was expressly aware that the tariff language it was approving provided that replacement projects would not be approved through the CAISO’s TPP.

In its June 2008 Order, the Commission directed the CAISO to make a compliance

¹² *Id.*

¹³ This requirement remains in the CAISO tariff today in section 24.8.1.

¹⁴ June 2008 Order at P 187, fn. 95. This footnote specifically refers to Section 24.2.3.1 of the CAISO tariff.

filing explaining the extent of any transmission planning performed by the PTOs and how it meets the requirements of Order No. 890.¹⁵ The Commission also directed the CAISO to clarify which projects must come through its TPP Request Window because it was unclear whether the CAISO Tariff required reliability projects—defined as solutions “required to ensure System Reliability consistent with all Applicable Reliability Criteria and CAISO Planning Standards”¹⁶—to come into the CAISO’s TPP through the request window.¹⁷ In addressing the role of the PTOs in the CAISO’s TPP, the Commission stated that “[t]he foundation of the planning process is a tariff that provides a sufficient level of detail for customers and other stakeholders to understand how the transmission provider will perform transmission planning and the method by which they can participate in decisions regarding *expansion* of the transmission system.”¹⁸ The Commission expressed concern that the CAISO’s proposed tariff provisions did “not clearly describe the relationship between its PTOs and the CAISO, how stakeholders can participate in the PTOs’ development of *needed expansions*, how and when PTO projects are evaluated by the CAISO, how those projects are assimilated into the CAISO transmission plan...”¹⁹

Thus, the Commission’s directive that the CAISO make a second compliance filing to address the deficiencies in its initial filing expressly recognized that the CAISO’s TPP pertained to *expansion* of the transmission system. The Commission used the term *expansion* not once, but twice. The June 2008 Order did not expressly state that the CAISO must evaluate capital maintenance and similar projects in its TPP.

2. The CAISO’s Second Order No. 890 Compliance Filing

The CAISO submitted its filing to comply with the Commission’s June 2008 Order on October 31, 2008.²⁰ In response to the Commission’s directive, the CAISO clarified what

¹⁵ June 2008 Order at P 193.

¹⁶ CAISO Tariff Section 24.4.6.2; formerly CAISO Tariff Section 24.1.2.

¹⁷ June 2008 Order at PP 57- 58.

¹⁸ *Id.* at P 15 (emphasis added).

¹⁹ *Id.* at P 16 (emphasis added).

²⁰ Second Order No. 890 Compliance Filing.

projects must come through the Request Window. The CAISO revised Section 24.2.3 of the CAISO Tariff and Sections 2.1.2.1 and 3.1 of the Business Practice Manual for the *Transmission Planning Process* to specify the categories of projects that were required to be submitted into the CAISO's TPP through the Request Window. These categories included: all reliability transmission project upgrades or additions; merchant transmission facilities; economic transmission upgrades or additions; location constrained interconnection resource facilities; projects to preserve long-term congestion revenue rights; demand response programs; certain generation projects; network upgrades identified through the small generator interconnection process and large generator interconnection process; and economic planning study requests.²¹ Contrary to the CPUC's assertion, the CAISO did not assert that *all* transmission-related projects, including maintenance projects – must be reviewed and approved through the CAISO's TPP, but rather the CAISO specifically identified the categories of transmission expansion projects that must be reviewed. Indeed, that would have been contrary to the tariff provisions the Commission approved regarding replacement projects not proceeding through the CAISO's TPP. The tariff language in compliance with Order No. 890 did not require transmission work pertaining to matters other than those specified in CAISO Tariff Section 24.2.3 to come through the Request Window. Accordingly, the Second Order No. 890 Compliance Filing did not provide that the CAISO would consider transmission maintenance or asset management projects in its TPP.

The Commission approved this framework in its May 2009 Order.²² The Commission found that the CAISO “adequately addressed our concerns regarding which projects enter the transmission planning process through the request window” and expressly acknowledged the CAISO's statement that no other projects would be evaluated in the TPP.²³

²¹ CPUC Initial Post-Technical Conference Comments, p. 8.

²² *California Independent System Operator Corporation*, 127 FERC ¶61,172 at PP 62-65 (2009) (May 2009 Order).

²³ *Id.* at PP 62, 65.

Thus, neither the CAISO's proposed tariff language in compliance with Order No. 890, nor the May 2009 Order, contemplated that the CAISO would evaluate transmission projects that did not fall into one of the categories specified in CAISO Tariff Section 24.2.3 in its TPP. In particular, there was no discussion in the proposed tariff language, or in the May 2009 Order, that the Commission expected that the CAISO's TPP would evaluate capital maintenance projects, projects addressing transmission facility remediation, safety, security or environmental concerns, automation upgrades, or IT upgrades – projects that never had been reviewed or approved through the CAISO's TPP and were not specified in CAISO Tariff Section 24.2.3.

3. The CAISO's 2010 Revised TPP Proposal Did Not Modify the Scope of Projects Reviewed and Approved through the TPP

In 2010, the CAISO filed proposed amendments to its TPP to include policy-driven transmission solutions as a new category of transmission facilities reviewed and approved through the CAISO's TPP.²⁴ The CPUC asserts that in the Revised TPP Proposal the CAISO “narrowed the scope of the Request Window, leaving to the PTOs’ discretion the development of all transmission projects not specifically enumerated” in the tariff.²⁵ As indicated above, this assertion is incorrect because the CAISO's Order No. 890 compliance filings provided an enumerated list of transmission solution categories that the CAISO would review and approve through its TPP. The Revised TPP Proposal did not modify this, but rather added the policy-driven transmission category to the existing categories.

The CPUC claims that through the Revised TPP Proposal the CAISO “eliminated the operative tariff language requiring PTOs to submit *all* network additions and upgrades through its Request Window,”²⁶ but the CPUC fails to provide a direct citation for this claim. It appears that the CPUC's claim is related to modifications in the application of the Request

²⁴ CAISO Revised Transmission Planning Process Proposal, ER10-1401 (June 4, 2010) (Revised TPP Proposal).

²⁵ CPUC Initial Post-Technical Conference Comments, p. 8.

²⁶ CPUC Initial Post-Technical Conference Comments, p. 8.

Window. The Revised TPP Proposal explained that the CAISO would continue to accept proposals for reliability-driven projects; Location Constrained Resource Interconnection Facility project proposals; demand response or generation proposals as alternatives to transmission additions or upgrades to meet reliability needs; and proposals for Merchant Transmission Facilities through the Request Window. However, the Revised TPP Proposal also explained that certain categories of projects – most notably, economic projects – would not be submitted through the Request Window. Instead, the Revised TPP Proposal provided that stakeholders could submit economic planning study requests during Phase 1 of the CAISO’s TPP to identify needs for potential economically-driven elements for inclusion in the transmission plan. The Commission accepted the Revised TPP Proposal in its December 2010 Order finding that it provided “opportunities for all interested parties to submit economic planning study and project proposals for consideration” in the CAISO’s TPP.²⁷ Importantly, this modification removed economic projects from the Request Window process, but it did not remove any class of transmission projects from being reviewed and approved through the CAISO’s TPP.²⁸

II. The CAISO Conducts All Local and Regional Transmission Expansion Planning Activities for its PTOs

As stated by Southern California Edison Company (SCE), “regional and local transmission at all voltage levels in CAISO operational control...is covered by the CAISO’s [TPP].”²⁹ Unlike PJM, in the CAISO control area there is no distinction between regional and local planning. Stated, differently, unlike in PJM, CAISO PTOs do not plan local public policy, economic, and reliability projects.³⁰ As the CAISO stated at the May 1 Technical

²⁷ *Cal. Indep. Sys. Operator Corp.*, 133 FERC ¶ 61,224 (December 2010 Order), at P 173.

²⁸ The CAISO notes that the Revised TPP Proposal did add the policy-driven transmission project category to the CAISO’s TPP.

²⁹ SCE Initial Post-Technical Conference Comments, p. 2.

³⁰ The CAISO has incorporated the local planning criteria of PTOs into the CAISO Planning Standards, which the CAISO applies in determining the need for reliability transmission solutions for all facilities under its operational control. CAISO Tariff Section 24.2.6.2; CAISO Appendix A, definition of Applicable Reliability Criteria and Local Reliability Criteria. Also, PTO projects to address security, safety, and environmental issues (*e.g.*, fencing) do not affect transmission capacity or operations and should not

Conference, all transmission expansion – both “regional” and “local”—is done through the CAISO’s processes.³¹

III. CalWEA’s Recommendations are Unnecessary or Outside the Scope of this Proceeding

CalWEA recommends that the Commission (1) require PTOs to submit into the CAISO’s TPP any bulk electric system operation and maintenance (O&M) project results in curtailment of one gigawatt-hour or more of electric generation and (2) require the CAISO to consider technological solutions that reduce the cost or curtailment of O&M outages.³² The first recommendation is entirely unnecessary because the CAISO already takes into account planned O&M outages in its TPP, consistent with North American Electric Reliability Corporation (NERC) Transmission Planning Standard TPL-001-4.³³ The second recommendation is designed to mitigate the economic impacts of O&M activities that are going forward, whereas the scope of this proceeding is to consider whether there should be a process in place to review and approve PTO capital maintenance or asset management projects. Mitigating the impact of necessary O&M is not within the scope of this proceeding.

Respectfully submitted,

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Dated: June 15, 2018 *Counsel for the California Independent System Operator Corp.*

require review in any transmission planning process.

³¹ May 1, 2018, Technical Conference Transcript at 9:12-16.

³² CalWEA Initial Post-Technical Conference Comments, pp. 3-5.

³³ TPL-001-4, Requirement R1, specifically requires Transmission Planners and Planning Coordinators to maintain System models that represent known outages of generation or Transmission Facilities with a duration of at least six months.

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service list for the above-referenced proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California, this 15th day of June, 2018.

Is/ Anna Pascuzzo

Anna Pascuzzo