

164 FERC ¶ 61,161
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Kevin J. McIntyre, Chairman;
Cheryl A. LaFleur, Neil Chatterjee,
and Richard Glick.

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

ORDER DENYING COMPLAINT

(Issued August 31, 2018)

1. On February 2, 2017, pursuant to sections 206 and 306 of the Federal Power Act (FPA)¹ and Rules 206 and 212 of the Commission's Rules of Practice and Procedure,² the California Public Utilities Commission (CPUC), Northern California Power Agency (NCPA), City and County of San Francisco (San Francisco), the State Water Contractors (SWC), and the Transmission Agency of Northern California (TANC) (collectively, Complainants) filed a complaint (Complaint) against Pacific Gas and Electric Company (PG&E). The Complaint alleges that PG&E is in violation of its obligation under Order No. 890³ to conduct an open, coordinated, and transparent transmission planning process because more than 80 percent of PG&E's transmission planning is done on an internal

¹ 16 U.S.C. §§ 824e, 825e (2012).

² 18 C.F.R. §§ 385.206, 385.212 (2017).

³ *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, FERC Stats. & Regs. ¶ 31,241, *order on reh'g*, Order No. 890-A, FERC Stats. & Regs. ¶ 31,261 (2007), *order on reh'g*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh'g*, Order No. 890-C, 126 FERC ¶ 61,228, *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009).

basis without opportunity for stakeholder input or review. We deny the Complaint, as discussed below.

I. Background

A. Order No. 890

2. In Order No. 890, the Commission found that:

[R]eforms are needed to ensure that transmission infrastructure is evaluated, and if needed, constructed on a nondiscriminatory basis and is otherwise sufficient to support reliable and economic service to all eligible customers. As noted above, vertically-integrated utilities do not have an incentive to expand the grid to accommodate new entries or to facilitate the dispatch of more efficient competitors. Despite this, the existing *pro forma* [Open Access Transmission Tariff (OATT)] contains very few requirements regarding how transmission planning should be conducted to ensure that undue discrimination does not occur.⁴

The Commission went on to find that the existing *pro forma* OATT was insufficient in an era of increasing transmission congestion and the need for significant new transmission investment, explaining that “[w]e cannot rely on the self-interest of transmission providers to expand the grid in a non-discriminatory manner.”⁵

3. To remedy the Commission’s concern regarding the potential for undue discrimination and anticompetitive conduct in the expansion of the transmission grid, the Commission in Order No. 890 required all public utility transmission providers to revise their OATTs to incorporate a transmission planning process that satisfied the following nine transmission planning principles: (1) Coordination; (2) Openness; (3) Transparency; (4) Information Exchange; (5) Comparability; (6) Dispute Resolution; (7) Regional Participation; (8) Economic Planning Studies; and (9) Cost Allocation for New Projects.⁶

4. In addition, the Commission found that, in order for a Regional Transmission Organization’s (RTO) or Independent System Operator’s (ISO) transmission planning process to be open and transparent, transmission customers and stakeholders must be able

⁴ Order No. 890, FERC Stats. & Regs. ¶ 31,241 at P 57.

⁵ *Id.* P 422.

⁶ *Id.* PP 444-561.

to participate in each underlying transmission owner's planning process. Accordingly, as part of their Order No. 890 compliance filings, the Commission directed RTOs/ISOs to indicate how all transmission owners within their footprints would comply with Order No. 890's transmission planning requirements. The Commission emphasized that, while the mechanics of such compliance would be left to each RTO/ISO, it would nevertheless find an RTO's/ISO's transmission planning process insufficient if the RTO's/ISO's underlying transmission owners were not also obligated to engage in transmission planning that complies with Order No. 890.⁷ The Commission explained that, in many cases, RTO/ISO transmission planning processes may focus principally on regional problems and solutions, not local planning issues that may be addressed by individual transmission owners. These local planning issues, the Commission noted, may be critically important to transmission customers, such as those embedded within the service areas of individual transmission owners. Therefore, to ensure full compliance, the Commission in Order No. 890 stated that transmission owners must—to the extent that they perform transmission planning within an RTO/ISO—also comply with Order No. 890.⁸

5. In Order No. 890-A, the Commission noted that each RTO/ISO may fulfill its Order No. 890 obligations by delegating certain planning activities to, or otherwise relying on, its transmission-owning members, provided that the rights and responsibilities of all parties are clearly stated in the RTO/ISO OATT. The Commission concluded, however, that each RTO/ISO retains responsibility for demonstrating compliance with each of the nine Order No. 890 transmission planning principles because it is the entity with the transmission planning process on file with the Commission.⁹ The Commission thus stated that an RTO/ISO would not be able to satisfy the requirements of Order No. 890 if the plans its transmission-owning members developed, and upon which the RTO/ISO relied, did not also satisfy those requirements.¹⁰

B. CAISO's Order No. 890 Compliance Filings

6. In its initial Order No. 890 compliance filing, the California Independent System Operator Corp. (CAISO) explained that its transmission planning process (TPP) includes a request window, during which market participants may propose transmission upgrades for inclusion in the annual transmission plan, and a three-stage transmission planning

⁷ *Id.* P 440.

⁸ *Id.*

⁹ Order No. 890-A, FERC Stats. & Regs. ¶ 31,261 at P 175.

¹⁰ *Id.* P 176.

process.¹¹ In its order on CAISO's initial Order No. 890 compliance filing, the Commission expressed concern that the CAISO Tariff and Business Practice Manuals (BPM) did not clearly describe the relationship between CAISO's participating transmission owners (PTO) and CAISO with respect to the TPP. In particular, the Commission sought clarification regarding which projects are submitted through the CAISO request window and which projects may be submitted for approval outside the request window.¹² The Commission directed CAISO to: (1) explain the extent of any transmission planning that the PTOs perform and how such planning satisfies Order No. 890;¹³ and (2) revise its Tariff to ensure that stakeholder input will be incorporated into the planning process at an early stage of the development of the transmission plan for local facilities or other transmission planning that the PTOs conduct.¹⁴ However, the Commission further stated that the PTOs did not need to submit individual compliance filings because they had ceded functional control of their facilities to CAISO, and transmission service over these facilities is provided under the CAISO Tariff.¹⁵

7. The Commission accepted CAISO's second compliance filing, in which CAISO revised its tariff and relevant BPMs to specify the types of transmission projects that would be considered in CAISO's TPP and to specify that, in order to be considered in the TPP, all listed project types must be submitted through the TPP request window.¹⁶ In its second compliance filing, CAISO explained that what was then section 24.2.3 of its Tariff and sections 2.1.2.1 and 3.1 of the relevant BPM list and describe the categories of

¹¹ *Cal. Indep. Sys. Operator Corp.*, 123 FERC ¶ 61,283, at PP 16, 43-45 (2008).

¹² *Id.* PP 57-58.

¹³ *Id.* PP 16-17, 192-193.

¹⁴ *Id.* P 192. CAISO described local transmission planning to include planning for transmission facilities that are not part of the CAISO grid, but are interconnected to it, including those facilities that are inside its geographic footprint (e.g., generation ties and distribution facilities). CAISO stated that all changes to the PTOs' facilities, whether at the transmission or distribution level, must be provided to CAISO for incorporation into the foundational base cases. *Id.* PP 132-133.

¹⁵ *Id.* P 192.

¹⁶ *Cal. Indep. Sys. Operator Corp.*, 127 FERC ¶ 61,172, at P 65 (2009).

transmission projects and study requests that must be submitted to CAISO through the request window.¹⁷

8. In its order on CAISO's second compliance filing, the Commission found, as relevant to the categories of transmission projects described in section 24.2.3 of the CAISO Tariff and sections 2.1.2.1 and 3.1 of the relevant BPM, that CAISO and the PTOs had agreed on coordinating the PTOs' local planning responsibilities and CAISO's system planning responsibilities.¹⁸ As described in its second compliance filing, under the TPP, CAISO validates PTO planning data such as load forecasts and contingency files and incorporates this data into the united planning assumptions,¹⁹ which are subject to a stakeholder process and comments.²⁰ The PTOs are then responsible for developing their base cases for the NERC compliance assessments, pursuant to the applicable NERC requirements.²¹ The PTOs forward their base cases to CAISO, which publicly posts and takes comment on them and verifies that the modeling is consistent with the scope and assumptions set forth in CAISO's TPP study plan.²² CAISO will then post its preliminary study results and proposed mitigation plans on its website.²³ PTOs must submit the results from their studies to CAISO, and submit potential projects to resolve problems identified in the studies through the request window.²⁴ Stakeholders will then

¹⁷ CAISO Order No. 890 Compliance Filing, Docket No. OA08-62, at 14 (filed Oct. 31, 2008) (CAISO Order No. 890 Compliance Filing).

¹⁸ *Cal. Indep. Sys. Operator Corp.*, 127 FERC ¶ 61,172 at P 115. We note that this specific tariff section 24.2.3 is a "former" section, and is not currently in the Tariff, due to modifications to section 24 in the intervening years; however, it was the relevant section at the time.

¹⁹ All technical studies, whether performed by the CAISO, the PTOs, or other third parties, must use the united planning assumptions.

²⁰ *Cal. Indep. Sys. Operator Corp.*, 127 FERC ¶ 61,172 at P 116.

²¹ *Id.*

²² *Id.*

²³ *Id.* P 117.

²⁴ *Id.*

have an opportunity to submit alternative solutions to those proposed by the PTO prior to the closing date of the request window.²⁵

9. The Commission also found that under CAISO's TPP, stakeholders are able to participate early in the transmission planning process and provide input for developing planning assumptions. In addition, the Commission found that stakeholders are able to review the criteria, assumptions, and models used by each PTO, comment on the results of the studies, and offer alternatives to the transmission projects that the PTOs propose for local planning purposes. The Commission therefore concluded that "the local planning activities conducted by the [PTOs] are reasonable and the process, as set forth in the Tariff and business practice manual, is transparent."²⁶

10. Since Order No. 890, CAISO has further revised its TPP, both on its own and in response to Order No. 1000.²⁷ Currently, under the TPP, CAISO: (1) develops and posts a unified planning assumptions and study plan; (2) performs technical studies to identify transmission needs and proposed solutions to be included in the comprehensive transmission plan; and (3) evaluates proposals to construct and own transmission upgrades or additions specified in the comprehensive transmission plan through a competitive solicitation process. CAISO evaluates reliability, economic, public policy, and other needs specified in its Tariff at both the local level (low voltage facilities within a single PTO's footprint) and at the regional level (high voltage facilities). The roles and responsibilities of CAISO and its PTOs for transmission planning and development are set forth in the CAISO Tariff, BPMs, and Transmission Control Agreement (TCA).²⁸

²⁵ *Id.*

²⁶ *Id.* P 118.

²⁷ *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, FERC Stats. & Regs. ¶ 31,323 (2011), *order on reh'g*, Order No. 1000-A, 139 FERC ¶ 61,132, *order on reh'g and clarification*, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *aff'd sub nom. S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41 (D.C. Cir. 2014).

²⁸ The TCA is an agreement between CAISO and its PTOs; it contains the detailed terms and conditions for how CAISO and the PTOs discharge their respective duties and responsibilities, and covers (among other topics) transfer of operational control, maintenance standards, and expansion of transmission facilities.

II. Complaint

11. According to Complainants, PG&E is not complying with Order No. 890's transmission planning requirements because the majority of its capital transmission expenditures do not go through any CAISO or other public transmission planning process. Complainants state that PG&E's eighteenth annual transmission owner rate case²⁹ filing reveals that CAISO has or will review only 40 percent of PG&E's capital expenditures for 2016 and 2017. Further, Complainants explain, more than 60 percent of PG&E's capital transmission spending—constituting almost 80 percent of its individual transmission capital projects—is authorized through a self-approval process that involves only PG&E's Chief Financial Officer and Project Managers. According to Complainants, PG&E does not solicit stakeholder input at any phase of that process.³⁰

12. Complainants explain that PG&E groups its capital transmission expenditures into programs or Major Work Categories based on the primary project driver: line capacity and substation capacity; electric substation management; transmission line management; system reliability and automation; work requested by others; environmental; IT-infrastructure and technology; and common capital expenditures. According to Complainants, PG&E submits only two of those Major Work Categories, relating to line and substation capacity, as well as a portion of a third, related to Generator Interconnection Projects, to CAISO for review either through its TPP or its Generation Interconnection and Deliverability Allocation Procedures (GIDAP).³¹ Complainants state that among other things, PG&E provides no stakeholder process or external review before approving projects in the following programs:³²

Program	Description
Substation Management Projects	Projects to replace or upgrade substation equipment, including transformers, breakers, switches, ground grid, insulators, and bus structures.
Transmission Line Management Projects	Projects to replace deteriorating transmission line equipment and manage existing line assets, including projects to increase line ratings.
System Reliability and Automation	Projects to implement substation infrastructure improvements, integrated protection and control systems, and automated

²⁹ Pac. Gas & Elec. Co., Transmission Owner Tariff Rate Filing, Docket No. ER16-2320-000 (filed July 29, 2016) (PG&E TO18 Filing).

³⁰ Complaint at 27.

³¹ *Id.* at 28.

³² *Id.* at 29-30 (citing PG&E TO18 Filing, Ex. 9).

Projects	applications that automatically process and act on system data.
Work Requested by Others	Projects in this Major Work Category that are not submitted to CAISO include state infrastructure projects. These projects provide new and expanded services and replace existing facilities. (Generator Interconnection processes in this Major Work Category go through the GIDAP.)
Information Technology- Infrastructure and Technology	Project planning, requirements identification, business process design, data enhancement, software and hardware purchase, installation, configuration, testing, and deployment.
Common Expenditures	Allocated and direct-assigned expenditures for the acquisition and installation of computers, tools, and office equipment.

13. Complainants assert that PG&E's self-approved transmission work is within the scope of Order No. 890. Complainants explain that PG&E is capitalizing all the transmission work in the Major Work Categories listed above and including it in rates charged to its customers; none of the work is classified and expensed as operations and maintenance work. Complainants contend that all capitalized transmission work should go through an Order No. 890-compliant transmission planning process. According to Complainants, Commission precedent distinguishes between operations and maintenance work and capital work, and maintenance work is performed to ensure that existing facilities continue to operate, while capital work requires that a utility make an affirmative decision to replace or upgrade facilities. According to Complainants, capital investment in a company's transmission system involves a significant amount of discretion (e.g., whether a facility should be replaced as is, or replaced with several smaller facilities; whether a facility is still needed; and/or whether it should be upgraded to a new design or to increase capacity). Complainants contend that capital transmission investment is precisely the type of work that should go through a comprehensive transmission planning process, and that submitting only capital transmission work through an Order No. 890-compliant process will avoid the problem of having stakeholders weigh in on the replacement of individual nuts and bolts.³³

14. Complainants assert that the Commission approved CAISO's Order Nos. 890 and 1000 compliance filings with the understanding that all PG&E projects were submitted to CAISO's TPP.³⁴ However, Complainants state, that understanding does not reflect the scope of CAISO's current transmission planning and stakeholder process. According to Complainants, it appears that the information before the Commission when it considered CAISO's compliance with Order Nos. 890 and 1000, as well as the compliance of the

³³ *Id.* at 30-32.

³⁴ *Id.* at 33-38.

PTOs, was that all PTO transmission projects went through CAISO's request window. According to Complainants, CAISO assured the Commission in its Order No. 1000 compliance filing that "[its] transmission planning process governs *all* transmission upgrades to and expansions of the ISO controlled grid, and the ISO controlled grid includes all network transmission facilities – regional *and* local, high voltage *and* low voltage – that are owned by the participating transmission owners."³⁵ Complainants contend that the Commission had reason to believe that CAISO was conducting extensive local transmission planning, and its orders on CAISO's Order No. 890 compliance filings appear to state that it believed that local transmission planning was necessary for Order No. 890 compliance.³⁶

15. Complainants also assert that Commission precedent in other regions requires that local transmission planning be conducted in accordance with Order No. 890's transmission planning principles. Complainants explain that an Order to Show Cause³⁷ regarding Supplemental Projects³⁸ in the PJM Interconnection, L.L.C. (PJM) footprint made clear that Supplemental Projects must go through an Order No. 890-compliant transmission planning process. According to Complainants, PJM's response to the PJM Show Cause Order clarified that Supplemental Projects include "replacing equipment that has reached the end of its operational life, replacing failed equipment," "add[ing] new retail distribution customers," and "enhance[ing] system resiliency or security."³⁹ Complainants assert that, while the Commission did not discuss the distinction between maintenance expenses and capitalized expenditures in the PJM Show Cause Order, it made clear that Supplemental Projects must go through an Order No. 890-compliant transmission planning process, and did not carve out an exemption for "maintenance"

³⁵ *Id.* at 37-38 (citing Cal. Indep. Sys. Operator Corp., Order No. 1000 Compliance Filing, Docket No. ER13-103-000, at 15 (filed Oct. 11, 2012) (emphasis in original)).

³⁶ *Id.* at 39.

³⁷ *Monongahela Power Co.*, 156 FERC ¶ 61,134 (PJM Show Cause Order), *reh'g dismissed*, 157 FERC ¶ 61,178 (2016).

³⁸ PJM defines a Supplemental Project as a transmission expansion or enhancement that is not required for compliance with the following PJM criteria: system reliability, operational performance or economic criteria, pursuant to a determination by PJM, and is not a state public policy project pursuant to section 1.5.9(a)(ii) of Schedule 6 of the PJM Operating Agreement. *See* PJM, Intra-PJM Tariffs, Operating Agreement, Definitions S-T (10.0.1).

³⁹ Complaint at 39 (citing PJM Transmission Owners' Response to PJM Show Cause Order, Docket No. EL16-71-000, at 4 (filed Oct. 25, 2016)).

projects.⁴⁰ Complainants state that transmission owners in other transmission planning regions, such as ISO New England Inc. (ISO-NE) and the Midcontinent Independent System Operator, Inc. (MISO), also appear to include “replacement” projects in their Order No. 890 transmission planning processes.⁴¹

16. Next, Complainants state that applying Order No. 890’s transmission planning principles to PG&E’s projects will ensure that the CAISO grid is being comprehensively planned. According to Complainants, without comprehensive transmission planning, an individual PTO might, for instance, choose piecemeal replacement of existing facilities when a single regional transmission project could suffice. Similarly, Complainants argue that a transmission provider might find that it is in its financial interests to replace certain small facilities that will go into its own rate base instead of developing a bigger transmission project that triggers an RTO’s competitive solicitation process.⁴² Complainants state that PG&E’s massive expenditures on local transmission projects point to, among other things, an aversion to competitive processes, as well as a concerted effort to maximize the amount of its rate base as quickly as possible. Complainants state that they are not suggesting that regional transmission solutions are necessarily more cost-effective or efficient than local investments, but the lack of transparency and review undermines any ability to ensure that selected regional transmission solutions are more cost-effective than local ones and vice versa.⁴³

17. Complainants contend that CAISO’s current TPP does not require PG&E to submit its transmission projects for review, and that PG&E’s transmission owner tariff (TO Tariff) does not fill in the gaps. According to Complainants, while PTOs may submit a discrete set of non-reliability transmission projects to CAISO during Phase 2 of the TPP, the CAISO Tariff is silent on the planning process applicable to major work categories beyond those specifically enumerated. Complainants state that the CAISO Tariff appears to leave to the PTOs’ discretion the development of all other transmission projects, including those that maintain and improve a PTO’s transmission system, but whose primary purpose is not to directly increase transmission capacity. Complainants assert that PG&E, through its TO Tariff, should fill the gap left by the TPP with an Order No. 890-compliant transmission planning process for service area facilities, but it does

⁴⁰ *Id.* at 40 (citing PJM Show Cause Order, 156 FERC ¶ 61,134 at P 13).

⁴¹ *Id.* at 40-41.

⁴² *Id.* at 41.

⁴³ *Id.* at 42.

not currently have such a process and is not currently conducting any stakeholder processes.⁴⁴

18. Complainants assert that PG&E fails to comply with any of Order No. 890's transmission planning principles. They state that Commission staff has provided extensive guidance on what is required to satisfy Order No. 890's obligations, and that the Commission has referred to that guidance for assistance in drafting Order No. 890-compliant tariff language.⁴⁵ Complainants contend that, absent CAISO Tariff provisions addressing the transmission projects at issue, PG&E is obligated to include specific language in its TO Tariff and provide a stakeholder process consistent with Order No. 890's transmission planning principles. However, Complainants state, PG&E's TO Tariff does not provide even for a superficial version of the procedures contemplated by Order No. 890, because these transmission projects are studied, developed, and finalized through an entirely internal process wherein stakeholders have no right to participate at any point. Complainants assert that PG&E's failure to provide for any stakeholder process for its service area transmission planning is not consistent with Commission precedent in any region where it has considered the issue.⁴⁶

19. Complainants contend that an Order No. 890-compliant transmission planning process is necessary to contain escalating transmission rates. According to Complainants, PG&E has been investing hundreds of millions of dollars annually in transmission facilities that have received no third-party review, resulting in significant increases to CAISO's Transmission Access Charge (TAC) that may or may not be necessary. Complainants state that they support the construction of transmission where necessary to maintain a reliable grid that is sufficient to meet the needs of stakeholders. However, Complainants maintain that this support is premised on compliance with Commission requirements that the process for planning such transmission be open, inclusive, and transparent, and that it allow stakeholders to verify that only the reasonable costs of necessary and justifiable facilities are being passed through to ratepayers.⁴⁷

20. Complainants assert that stakeholder input as to where to strike the balance between cost and reliability is an important aspect of transmission planning that might

⁴⁴ *Id.* at 43-45.

⁴⁵ *Id.* at 46-47 (citing Preventing Undue Discrimination & Preference in Transmission Serv., Order No. 890 TPP Staff White Paper, Docket Nos. RM05-17-000, *et al.*, at 3-5 (Aug. 2, 2007)).

⁴⁶ *Id.* at 48-50.

⁴⁷ *Id.* at 54.

have made a difference in a number of PG&E self-approved projects already underway. For example, Complainants state that PG&E has substantially revised its default substation design to a “breaker-and-a-half” design,⁴⁸ and is rebuilding some substations to that configuration, versus implementing a more sectionalized configuration. According to Complainants, while a breaker-and-a-half substation will provide greater reliability, it is also significantly more expensive than previous designs. Complainants assert that a robust stakeholder process would ensure that the correct trade-offs are being made. Complainants also express concerns regarding PG&E’s programs to remediate sagging transmission lines and to increase the height of transmission line structures, which increases the conductor’s rating. According to Complainants, when and how to remediate sagging conductors raises a myriad of economic and reliability questions, including whether the lower conductor rating is even a problem. Complainants contend that stakeholders could provide valuable input into these questions.⁴⁹

21. Complainants assert that PG&E’s transmission rates have been increasing rapidly for years, in part due to its self-approved projects. For instance, PG&E’s wholesale revenue requirement has increased by an average of 9.72 percent over the past 11 of its rate cases (filed, except for one year, annually). Complainants state that in its current TO18 rate case, PG&E requests an increase to its currently effective wholesale transmission revenue requirement of \$386.6 million, or 29.3 percent. Complainants contend that these increases in PG&E’s revenue requirement have been a significant driver of the increase in CAISO’s TAC, which has tripled since 2008, outpacing every increase that CAISO has projected. According to Complainants, the fact that so much of PG&E’s transmission work does not go through an Order No. 890-compliant transmission planning process may be the reason for CAISO’s failure to correctly anticipate TAC increases, since CAISO has not been able to factor large amounts of transmission work into its forecasts.⁵⁰

22. According to Complainants, PG&E has the ultimate responsibility to comply with Order No. 890. Complainants state that, in the past, PG&E has relied on the CAISO TPP to demonstrate its compliance with Order No. 890’s transmission planning requirements, but CAISO’s current Tariff does not appear to provide for PTO Order No. 890-compliant local transmission planning processes or to explicitly require PTOs to submit the full range of their transmission projects through the TPP. Complainants assert that, if CAISO

⁴⁸ Breaker-and-a-half is a substation configuration consisting of two main buses, and featuring one circuit breaker between every two circuits, resulting in 1.5 breakers per circuit.

⁴⁹ Complaint at 55-56.

⁵⁰ *Id.* at 58-59.

is willing, PG&E could work with CAISO to revise the TPP to include all of PG&E's projects. However, Complainants explain, it is ultimately PG&E, not CAISO, with the obligation to comply with Order No. 890.⁵¹

23. Complainants request that the Commission: (a) set a refund effective date for the earliest possible date; and (b) direct PG&E to either reflect an Order No. 890-compliant transmission planning process in its own TO Tariff, or, if CAISO is amenable, direct PG&E to work with CAISO to require PTOs to submit all transmission projects to CAISO through expansion of the TPP.⁵²

24. Finally, Complainants assert that other PTOs in CAISO may be in violation of Order No. 890's transmission planning requirements. Complainants explain that they have filed the instant Complaint against PG&E because of the magnitude of PG&E's expenditures on self-approved projects, but data that Southern California Edison Company (SoCal Edison) and San Diego Gas and Electric Company (SDG&E) provided to the CPUC shows that a significant amount of their capital transmission work is not approved in the TPP. Consequently, Complainants suggest that the Commission may want to consider the issue of the PTOs' compliance with Order No. 890 more broadly in any subsequent proceedings it initiates in response to the Complaint.⁵³

III. Notice and Responsive Pleadings

25. Notice of the Complaint was published in the *Federal Register*, 82 Fed. Reg. 10,569 (2017), with interventions and protests due on or before February 22, 2017. Timely motions to intervene were filed by NextEra Energy Transmission West, LLC; Imperial Irrigation District; FirstEnergy Service Company; Trans Bay Cable LLC; California Municipal Utilities Association (CMUA); SDG&E; CAISO; LSP Transmission Holdings, LLC; Alliance for Retail Energy Markets; Western Power Trading Forum; the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California (Six Cities); PSEG Companies;⁵⁴ and SoCal Edison. Timely motions to intervene and comments were filed by the City of Santa Clara, California and the M-S-R Public Power Agency (SVP/M-S-R) and Modesto Irrigation District. CAISO, CMUA, and Six Cities filed timely comments.

⁵¹ *Id.* at 60-61.

⁵² *Id.* at 61.

⁵³ *Id.* at 61-62.

⁵⁴ PSEG Companies withdrew their Motion to Intervene on February 22, 2017.

26. On February 22, 2017, PG&E filed an answer to the Complaint. On March 8, 2017, Complainants filed a motion for leave to answer and answer.

27. On March 9, 2018, NCPA, SWC, and TANC filed a Motion to Lodge a Commission order issued in *Monongahela Power Company*, into this docket.⁵⁵ Movants assert that there are common questions of fact raised in the instant proceeding and the February 15 PJM Order, which the movants request the Commission take into consideration during its deliberation of the issues raised in this docket.⁵⁶

A. PG&E's Answer

28. PG&E denies that it does not comply with Order No. 890. PG&E asserts that the focus of Order No. 890 was the Commission's desire to prevent undue discrimination and preference in the provision of transmission service by ensuring that projects being planned to increase transmission capacity and address reliability concerns in the RTO and ISO control areas not show preference to one customer or group of customers over another. PG&E asserts that, since the issuance of Order No. 890, it is not aware of any complaint having been filed at the Commission alleging that the TPP in place for the CAISO footprint has resulted in any discrimination or undue preference in the way in which planning for increasing capacity and addressing system reliability issues has been conducted. According to PG&E, there is no allegation in the Complaint that the overarching goal of Order No. 890 has not been achieved in California. Instead, PG&E asserts, the Complaint focuses on Complainants' desire to be more involved in the evaluation of transmission projects that are not primarily needed to increase capacity or address reliability issues. PG&E contends that the Complaint makes clear that its focus is cost – not non-discriminatory access to transmission service.⁵⁷

29. PG&E asserts that the Commission has previously considered, and rejected, the very arguments raised in the Complaint. According to PG&E, throughout the Order No. 890 proceeding and the proceedings relating to CAISO's compliance with Order No. 890, NCPA repeatedly urged the Commission to require that each PTO have separate, utility-specific Order No. 890-compliant transmission planning processes on

⁵⁵ See *Monongahela Power Co.*, 162 FERC ¶ 61,129 (2018) (February 15 PJM Order). The Motion to Lodge was also filed in Docket No. ER18-370-000. The Commission denied the Motion to Lodge in that docket in an order issued on March 23, 2018. *S. Cal. Edison Co.*, 162 FERC ¶ 61,264 (2018) (March 2018 Order).

⁵⁶ Motion to Lodge at 1, 3-4.

⁵⁷ PG&E Answer at 2-3.

file.⁵⁸ PG&E states that the Commission considered, addressed, and rejected those arguments, and accepted CAISO's October 31, 2008 compliance filing.⁵⁹ PG&E asserts that the compliance filing clarified how local planning activities are conducted in CAISO and confirmed that individual PTOs did not need to have separate Order No. 890-compliant transmission planning processes. Accordingly, PG&E states that it is not, and never has been, out of compliance with Order No. 890, and it denies the allegations in the Complaint that assert otherwise.⁶⁰

30. PG&E argues that the primary focus of the work that is the subject of the Complaint is not on expanding capacity or increasing the reliability of the CAISO-controlled grid, nor is it the kind of work that was the focus of Order No. 890. PG&E explains that the Complaint is focused on projects and programs that every electric transmission utility is likely to have, in some form, to replace aging infrastructure at the end of its useful life, replace facilities damaged by accidents or storms, address the evolving reliability and security requirements of the North American Electric Reliability Corporation and the Western Electricity Coordinating Council, and address cybersecurity and physical security of important transmission facilities in the face of increasing threats. PG&E states that the categories of work consist of compliance, emergency response and replacements, infrastructure enhancement, infrastructure replacement, infrastructure security enhancement, operation support, and work at the request of others.⁶¹

31. PG&E states that Order No. 890-A clarified that RTOs/ISOs could fulfill some of their transmission planning obligations by delegating certain activities to their transmission-owning members.⁶² PG&E explains that, in the case of CAISO, the TPP focuses on capacity additions and reliability solutions, including both economic and policy driven projects. However, PG&E asserts, for day-to-day projects, the TCA provides that "[e]ach [PTO] shall inspect, maintain, repair, replace, and maintain the rating and technical performance of its facilities under the CAISO's operational

⁵⁸ *Id.* at 13.

⁵⁹ *Cal. Indep. Sys. Operator Corp.*, 127 FERC ¶ 61,172 at P 118 (stating that the Commission "does not share [NCPA's] concerns that market participants will be shut out of the transmission planning process, but rather find that the local planning activities conducted by the participating transmission owners are reasonable and the process, as set forth in the [CAISO] tariff and business practice manual, is transparent").

⁶⁰ PG&E Answer at 13.

⁶¹ *Id.* at 17, Att. 1, Dasso Aff. ¶¶ 7-14.

⁶² *Id.* at 18 (citing Order No. 890-A, FERC Stats. & Regs. ¶ 31,261 at P 175).

control.”⁶³ PG&E asserts that this longstanding approach is appropriate and is working effectively in meeting the Commission’s goal of ensuring the availability of transmission service free of undue discrimination or preference.⁶⁴

32. While acknowledging that the day-to-day work at issue here represents a substantial number of projects and a substantial percentage of the transmission capital expenditures it is incurring, PG&E argues that work should not be ordered to go through a stakeholder process. PG&E asserts that investor owned utilities must have the ability to replace failed or failing facilities, implement cyber and physical system security measures, and have in place the necessary software and controls to run the system. PG&E states that the Complaint asks the Commission to impose on PG&E the very process that NCPA urged on the Commission throughout the Order No. 890 proceeding and CAISO’s compliance filings, which the Commission concluded was not necessary in CAISO’s footprint. PG&E states that nothing has changed, and this request should again be denied.⁶⁵ In addition, PG&E asserts that Complainants’ “speculation” that “PG&E’s massive expenditures on local transmission projects certainly point to, among other things, an aversion to competitive processes, as well as a concerted effort to maximize the amount of its rate base as quickly as possible,”⁶⁶ is unsupported. PG&E states that it denies that speculation, and the Commission should reject it.⁶⁷

33. In response to Complainants’ argument regarding the PJM Show Cause Order, PG&E asserts that the order does not apply outside of PJM and, in any case, that Complainants mischaracterize that order. PG&E asserts that the transmission projects at issue in the PJM Show Cause Order are explicitly required under PJM’s tariff to go through the PJM Transmission Owner-specific transmission planning processes⁶⁸ and, unlike those projects, the categories of transmission work at issue here do not go through the CAISO TPP. In addition, PG&E contends that the PJM Show Cause Order is limited to the specific facts and circumstances of the PJM agreements and processes, which are fundamentally different than those that exist in CAISO. Similarly, in response to

⁶³ *Id.* (citing CAISO, Amended and Restated Transmission Control Agreement § 6.3 (2014), http://www.caiso.com/Documents/TCA_Effective_20140601.pdf).

⁶⁴ *Id.*

⁶⁵ *Id.* at 18-19.

⁶⁶ *Id.* at 19 (citing Complaint at 42).

⁶⁷ *Id.*

⁶⁸ *Id.* at 14.

Complainants' discussion of transmission planning processes in other RTOs/ISOs beyond PJM, PG&E asserts that the processes in those regions all differ from the Commission-approved transmission planning process applicable to PTOs in the CAISO footprint. According to PG&E, the Commission considered those differences in approving the TPP.⁶⁹

34. Notwithstanding its objections to Complainants' allegations, PG&E states that it will work with Complainants to put a stakeholder process in place with respect to PG&E's transmission projects that do not go through CAISO's TPP, and has reached out to Complainants' representatives to schedule the first meeting to begin talking through what an acceptable process would include.⁷⁰

B. Comments

1. CAISO

35. CAISO disputes Complainants' allegation that it stated in the Order No. 890 compliance proceedings that it would evaluate all capital transmission work that PG&E undertakes in the TPP. CAISO explains that, since its formation, it has never evaluated and approved all transmission-related work that PG&E has undertaken. CAISO states that, since its formation, there has been a Commission-approved division of roles and responsibilities between CAISO and its PTOs that distinguishes system expansions from other types of transmission-related work. According to CAISO, this distinction is reflected in the Commission-approved TCA that sets forth the respective roles and responsibilities of CAISO and each PTO. CAISO explains that 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, CAISO notes, TCA section 4.3 provides that the PTOs are responsible for operating and maintaining the transmission lines and associated facilities placed under CAISO's operational control in accordance with the TCA, applicable reliability criteria, and CAISO operating procedures and protocols. CAISO states that TCA section 6.3 requires PTOs to inspect, maintain, repair, replace, and maintain the rating and technical performance of their facilities under CAISO's operational control in accordance with the applicable reliability criteria and performance standards established under the TCA. CAISO also notes that, under TCA section 4.2, PTOs are responsible for informing CAISO of any change in their facility ratings, and following the specified process for ensuring that any rating changes can be implemented without a problem. CAISO

⁶⁹ *Id.* at 15-16.

⁷⁰ *Id.* at 20-21.

explains that this process occurs outside of the TPP. According to CAISO, the TCA does not require that non-expansion, non-reinforcement, maintenance, and compliance-type projects be approved through the TPP.⁷¹

36. CAISO argues that nothing in its Order No. 890 compliance filings indicated that capital maintenance-type projects, such as those described in the Complaint, would be subject to the TPP. CAISO explains that its initial 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 transmission system expansions, i.e., upgrades and additions.⁷² According to CAISO, the proposed compliance tariff language defined the transmission planning process as “[t]he process by which the CAISO assesses the CAISO Controlled Grid as set forth in Section 24 of Appendix EE.”⁷³ Thus, by definition, CAISO asserts, matters not referenced in CAISO Tariff section 24 were not subject to the TPP. CAISO argues that the Commission did not direct CAISO to revise its tariff to provide that it would evaluate other types of transmission-related work besides those specified in section 24. Conversely, states CAISO, the Commission subsequently accepted the proposed tariff language in its second compliance filing and expressly acknowledged CAISO’s statement that no other transmission projects would be evaluated in the TPP.⁷⁴ CAISO adds that section 24.2.3.1 of its tariff expressly recognized that there is other transmission-related work that does not go through its TPP in directing PTOs to provide “detailed power system models of their transmission systems that reflect transmission system changes, including equipment replacement not requiring approval by the CAISO.”⁷⁵

37. In particular, CAISO asserts, there was no discussion in the proposed tariff language or the Commission’s order on CAISO’s second Order No. 890 compliance filing to suggest that the Commission expected the TPP to evaluate capital maintenance projects, projects addressing transmission facility remediation, safety, security, or

⁷¹ CAISO Comments at 4-5.

⁷² *Id.* at 7 (citing CAISO Order No. 890 Compliance Filing).

⁷³ *Id.* (citing CAISO Order No. 890 Compliance Filing at Substitute Original Sheet No. 1454).

⁷⁴ *Id.* at 12 (citing *Cal. Indep. System Operator Corp.*, 127 FERC ¶ 61,172 at PP 62, 65).

⁷⁵ *Id.* at 8-9 (noting that this provision is currently in Tariff section 24.8.1).

environmental concerns, automation upgrades, or information technology upgrades.⁷⁶ Further, CAISO argues that neither its Order No. 1000 compliance filing nor the Commission's order accepting it expressly indicated that CAISO would evaluate and approve other types of transmission work, such as capital maintenance projects, non-expansion replacements of portions of facilities, information technology and automation projects, projects intended to address safety, security, or environmental concerns, or remedial work to comply with regulations or standards adopted by other authorities. CAISO states that it does not have authority to review and approve in its TPP transmission-related work that is not expressly specified in the CAISO Tariff, is not authorized under the TCA, and was not expressly authorized by the Commission.⁷⁷ CAISO explains that its statement in its Order No. 1000 compliance filing that it performs both local and regional planning means that CAISO conducts the transmission planning activities authorized in CAISO Tariff section 24 for all facilities under its operational control, which include facilities at all voltage levels and at all locations on the system. CAISO asserts that the statement did not mean, and cannot mean, that it evaluates and approves transmission work other than what is specified in that section.⁷⁸

2. Other Comments

38. CMUA, Six Cities, Modesto Irrigation District, and SVP/M-S-R support the Complaint. CMUA states that, as demonstrated in the Complaint, PG&E's wholesale transmission revenue requirement has averaged almost a 10 percent increase per year, and this trajectory of increase is unsustainable, particularly in light of the fact "that the majority of the investment does not comply with Order No. 890 requirements." CMUA states that it is telling that the CPUC has taken the extraordinary step of joining with public power entities to file the Complaint. CMUA asserts that the issues raised in the Complaint are matters of significant policy importance, and that the outcome of a robust and collaborative Order No. 890-compliant process that includes CAISO, the CPUC, PTOs, and stakeholders would likely result in more solid support for capital improvements, and more emphasis on cost-effective high-value projects, than the current process.⁷⁹

39. Six Cities support the relief requested in the Complaint. Six Cities state that there may be some transmission projects that are properly included in an expanded CAISO

⁷⁶ *Id.* at 12.

⁷⁷ *Id.* at 14-15.

⁷⁸ *Id.* at 15-16.

⁷⁹ CMUA Comments at 2-3.

TPP, and some that may be more appropriately included in a PG&E-specific transmission planning process. Six Cities suggest that affected parties within CAISO may benefit from a stakeholder process, technical conference, or similar forum to identify and discuss possible scope changes to the TPP and the development of a PTO-specific transmission planning process.⁸⁰ Six Cities also concur with Complainants that the Commission should consider whether any directives to adopt new or additional planning procedures that result from the Complaint should be expanded to apply to other PTOs.⁸¹ Six Cities note that, with respect to their entitlement and joint ownership interests that have been placed under CAISO's operational control, their jointly-held and minority ownership interests in the relevant facilities do not generally allow for them to make unilateral planning decisions or to exercise discretion on a unilateral basis to incur capital costs for such facilities. Rather, facility expansions and/or the incurrence of capital costs are undertaken pursuant to the terms of the contractual agreements with other owners who are not PTOs in CAISO that govern the operations, maintenance, planning, and use of the facilities. Six Cities assert that CAISO and the PTOs have acknowledged this in the TCA.⁸² As such, Six Cities argue that any new procedures for expanding planning activities within CAISO must continue to recognize and accommodate the limitations that some PTOs have associated with contractual transmission entitlement interests that are under CAISO's operational control.⁸³

C. Complainants' Answer to PG&E's Answer

40. Complainants assert that PG&E mischaracterizes Order No. 890's focus on undue discrimination. Complainants state that they agree with PG&E that a principal concern of Order No. 890 was the prevention of undue discrimination among customers; however, PG&E overlooks the fact that undue discrimination may occur in the transmission planning process when a transmission owner chooses to discriminate against customers, in its own favor, in the transmission projects that it chooses to prioritize. Complainants explain that they are concerned that this may be occurring, and only a transparent planning process can provide assurance that it is not. Complainants also state that PG&E mischaracterizes Order No. 890 by suggesting that the final rule did not intend to address the cost of transmission, while in fact Order No. 890 clearly recognized that preventing

⁸⁰ Six Cities Comments at 5-6.

⁸¹ *Id.* at 7.

⁸² *Id.* at 8 (citing CAISO TCA § 4.1.1).

⁸³ *Id.*

undue discrimination is intertwined with creating cost-effective solutions to transmission needs.⁸⁴

41. In response to assertions that the Commission has already found that CAISO's TPP complies with Order No. 890, Complainants state that the Commission did not view Order No. 890 as a static requirement, noting that Commission staff would "periodically monitor the implementation of the planning process to determine if adjustments [were] necessary."⁸⁵ Complainants assert that the Commission should revisit PG&E's Order No. 890 compliance because \$1.5 billion has been spent in 2016 and 2017 for projects that are not reviewed in the TPP or in any other public forum.⁸⁶ Complainants assert that PG&E's reliance on prior orders in which the Commission rejected NCPA's requests that the PTOs be required to file separate local transmission planning processes in their TO Tariffs conflates two related but discrete issues: PG&E's obligation to include a local transmission planning process in its TO Tariff and its underlying obligations to comply with Order No. 890's transmission planning requirements. Complainants assert that the Commission did not excuse PG&E or any other PTO from complying with Order No. 890.⁸⁷

42. Complainants argue that the affidavit included in PG&E's answer demonstrates that the considerations in PG&E's internal process should be shared with stakeholders in an Order No. 890-compliant transmission planning process, and are similar to the considerations associated with the transmission projects that go through the CAISO TPP. While Complainants concede that stakeholders may request information on PG&E's capital projects through the discovery process in PG&E's transmission rate cases, they assert that the information provided in those cases is limited for use in those particular proceedings and is only provided after transmission projects have been planned and their costs have been rolled into PG&E's rate base.⁸⁸

43. Finally, Complainants state that they would not object to the Commission holding the Complaint in abeyance as the parties hold discussions, but a Commission order on the Complaint will still be necessary to ensure PG&E is complying with Order No. 890 going

⁸⁴ Complainants' Answer at 2-3.

⁸⁵ *Id.* at 5-6.

⁸⁶ *Id.* at 6.

⁸⁷ *Id.* at 7.

⁸⁸ *Id.* at 8-9.

forward because any voluntary process that came out of such discussions would not be a substitute for a process on file with the Commission.⁸⁹

IV. May 2018 Technical Conference and Post-Conference Comments

44. On March 23, 2018, the Commission issued an order⁹⁰ in Docket No. ER18-370-000 accepting and suspending a filing by SoCal Edison proposing a new annual Transmission Maintenance and Compliance Review (TMCR) process whereby SoCal Edison will share and review certain information with interested stakeholders regarding transmission-related maintenance and compliance activities that are not subject to consideration through the TPP. In the March 2018 Order, the Commission found that questions raised in that docket were also applicable to the processes that other PTOs in CAISO use to identify transmission-related maintenance and compliance activities, including, but not limited to, capital additions, and that similar questions were raised in the pending complaint in Docket No. EL17-45-000. To further address these issues with regard to all PTOs and CAISO, the Commission directed its staff to hold a technical conference in new Docket No. AD18-12-000, which also included Docket Nos. EL17-45-000 and ER18-370-000.⁹¹ The technical conference was held on May 1, 2018. Following the technical conference, a supplemental notice was issued including additional questions for participants and providing a process for the submission of comments and reply comments.

A. Technical Conference Discussion

45. At the staff-led technical conference addressing transmission planning within CAISO in Docket Nos. AD18-12-000, EL17-45-000, and ER18-370-000, representatives from CAISO, the PTOs (SoCal Edison, PG&E, SDG&E), and GridLiance West Transco participated. Also participating in the conference were representatives for the CPUC, NCPA, TANC (collectively, Complainant Representatives),⁹² SWC, San Francisco,

⁸⁹ *Id.* at 10-11.

⁹⁰ March 2018 Order, 162 FERC ¶ 61,264.

⁹¹ *Id.* PP 24-25. Concurrently with the March 2018 Order, the Commission issued a Notice of Technical Conference in Docket Nos. AD18-12-000, EL17-45-000, and ER18-370-000 (March 23 Notice of Technical Conference).

⁹² In its post-technical conference comments, CPUC explains that the Complainant Representatives have coordinated their comments in order to fully address the issues raised at the Technical Conference and avoid duplication. CPUC also states that the Complainant Representatives participated in the technical conference on behalf of all of

California Department of Water Resources State Water Project, Six Cities, Modesto Irrigation District, Imperial Irrigation District, City of Santa Clara, California, and SVP/M-S-R.

46. At the technical conference, no participant asserted that CAISO's TPP was deficient. Rather, participants focused on the PTOs' internal processes for identification and approval of projects and activities that do not go through the TPP, and whether those processes should be more transparent and provide opportunities for stakeholder input. During discussions, the PTOs utilized the term "asset management" to encompass the transmission-related maintenance and compliance projects at issue in the proceedings. According to the PTOs, asset management refers to the activities necessary to maintain a safe, reliable, and compliant grid, based on existing grid topology. These activities include operations and maintenance and capital expenditure activities as part of the PTOs' compliance with the TCA. CAISO reiterated that the TCA does not require non-expansion, non-reinforcement, maintenance, or compliance-type projects that do not change the topology of the grid to be approved through the TPP.⁹³

47. As for the reasons for recent increases in its transmission expenditures, PG&E explained that it is making significant investments in transmission infrastructure because the infrastructure is reaching the end of its useful life. PG&E expressed that it is increasing its investment in order to maintain the performance of the grid, as it is obligated to do.⁹⁴

48. With respect to the definition of asset management, the PTOs explained that they use inspection-based maintenance programs that identify repairs and replacements based on observed asset conditions. The PTOs explained that when equipment needs to be replaced due to its age or as the result of a performance failure, they follow industry

the Complainants in the Complaint proceeding, including SWC and San Francisco. CPUC Initial Post-Technical Conference Comments at 1, 6 & n.4.

⁹³ The Commission's Post-Technical Conference questions included requests for participants to provide definitions for the terms "asset management" and "asset management programs." The Commission received the following responses: SoCal Edison Initial Post-Technical Conference Comments at 3-7; SDG&E Initial Post-Technical Conference Comments at 3; PG&E Initial Post-Technical Conference Comments at 10-11.

⁹⁴ Technical Conference Tr. at 99:7-21.

standards and best practices (such as ISO 55000)⁹⁵ in selecting the replacements. However, when old equipment is replaced, the new equipment may not be a one-to-one replacement, as it will most likely include newer, more advanced technology, which might result in additional benefits to the system, such as “incidental” increases in capacity. According to CAISO and the PTOs, an asset management project that involves an incidental increase in capacity is not required to be reviewed and approved through CAISO’s TPP because the incidental increase in capacity is a function of the more advanced technology of the equipment rather than the driver for the project.⁹⁶ However, the relevant PTO would reflect any such a change in the base case that the PTO provides to CAISO for its use in modeling the PTO’s system for the TPP.

49. The PTOs further explained that, in reviewing an asset management project, if a PTO determines that it can address a CAISO-identified need by expanding the scope of the asset management project, the additional work would be “incremental” to the asset management activity. To the extent that this incremental portion of the project increases transmission capacity to meet a CAISO-identified need, the incremental portion of the project would be reflected in the base case that the PTO submits to CAISO for modeling and would be reviewed under CAISO’s TPP.⁹⁷ If CAISO does not approve the incremental work, then the PTO would not expand the scope of its original asset management project.⁹⁸

50. CAISO stated that it has no interest in assuming responsibility for asset management because it does not want to assume liability for this work. Moreover, CAISO noted that it does not have access to the PTO-level system information needed to take on these activities, especially given the potential volume of asset management projects and activities and the skillsets required to assess them.⁹⁹ CAISO and the PTOs

⁹⁵ The ISO 55000 defines asset management as a coordinated activity of an organization to realize value from assets, including maintenance planning and asset evaluation.

⁹⁶ Technical Conference Tr. at 132:12-134:14; *see also* CAISO Initial Post-Technical Conference Comments at 6-7; PG&E Initial Post-Technical Conference Comments at 11.

⁹⁷ Technical Conference Tr. at 128:23-131:16; *see also* CAISO Initial Post-Technical Conference Comments at 6-11; SoCal Edison Initial Post-Technical Conference Comments at 8; SDG&E Initial Post-Technical Conference Comments at 4-5.

⁹⁸ Technical Conference Tr. at 131:3-16.

⁹⁹ *Id.* at 173:15-175:2.

also explained that the critical factor in whether a project is submitted to the TPP is the driver for the project. CAISO reiterated that its Tariff details the categories of transmission solutions that it must review through the TPP, and that it does not evaluate transmission-related activities that fall outside of those specified categories.¹⁰⁰

51. The PTOs addressed the potential for providing greater transparency in their asset management programs. SoCal Edison explained that its TMCR amendment to its tariff establishes a process for providing transparency for its asset management projects and activities. At the technical conference, the other PTOs expressed some willingness to consider developing a similar process for their asset management projects and activities.¹⁰¹ However, in post-conference comments, SDG&E argued that a new process would add administrative costs and constrain utilities from getting work done. SDG&E believes that the ratemaking process is the appropriate place to review asset management projects and activities. PG&E expressed some willingness to engage with stakeholders to work towards a consensual process that provides additional transparency, provided that the process does not unnecessarily burden or delay necessary asset management work. PG&E contends that the Commission should not impose any process.¹⁰²

52. Complainant Representatives argued that greater transparency concerning asset management projects and activities is necessary for the PTOs to comply with Order No. 890. At the technical conference, Complainant Representatives asserted that the PTOs are investing billions of dollars in new infrastructure through their asset management programs, the costs of which are included in transmission rates. They argued that the PTOs' asset management programs lack both transparency and opportunities for stakeholder input, and suggested that the PTOs should make public the criteria that they use to identify asset management projects and activities, as well as the factors that they consider to prioritize such projects. In addition, Complainant Representatives argued that the PTOs should provide multiple opportunities for stakeholder input regarding planned asset management projects and activities and the identified needs underlying them, and also provide stakeholders with the opportunity to suggest alternatives in advance of these asset management decisions.

¹⁰⁰ *Id.* at 47:3-52:10, 120:5-15.

¹⁰¹ *Id.* at 180:1-187:18.

¹⁰² SDG&E Initial Post-Technical Conference Comments at 8; PG&E Initial Post-Technical Conference Comments at 13.

B. Post-Technical Conference Comments

53. In their post-technical conference comments, Complainant Representatives further assert that the CAISO TAC has more than tripled since 2008, and self-approved projects like those at issue here are driving a great deal of that increase.¹⁰³ The CPUC provides information that it obtained via data requests on the magnitude of spending on capital addition projects, the category used for many of the maintenance-related activities. According to the CPUC, the three large PTOs' self-approved capital additions totaled approximately \$6.4 billion between 2007 and 2017, comprising 35.4 percent of all capital addition projects. Additionally, the CPUC forecasts a further \$3.3 billion in self-approved capital project expenditures from 2018-2022, comprising approximately 49.4 percent of total capital additions.¹⁰⁴ In this aggregate data, PG&E's expenditures (as PG&E is the largest of the three investor-owned PTOs) are significantly larger than those of SoCal Edison and SDG&E, and account for 63 percent of PG&E's total capital additions.¹⁰⁵

54. In support of their arguments that self-approved projects should go through an Order No. 890 process, Complainant Representatives rely upon the Commission's findings in the February 15 PJM Order.¹⁰⁶ Complainant Representatives argue that, in the PJM proceeding, the Commission ruled that Supplemental Projects must go through an Order No. 890-compliant process, and that the Commission should make the same determination here.¹⁰⁷

55. Complainant Representatives also assert that after-the-fact review in a PTO rate case is not sufficient to ensure that proper stakeholder input is provided. They argue that, while that review could increase transparency, it does not provide for information exchange or coordination between ratepayers and the PTO. Additionally, Complainant Representatives assert that PTO rate cases are inherently adversarial processes in which

¹⁰³ NCPA Initial Post-Technical Conference Comments at 2.

¹⁰⁴ CPUC Initial Post-Technical Conference Comments at 8-10.

¹⁰⁵ *Id.* at 9-10.

¹⁰⁶ February 15 PJM Order, 162 FERC ¶ 61,129 (finding that the PJM Transmission Owners are implementing the PJM Operating Agreement in a manner that is inconsistent with the transparency and coordination requirements of Order No. 890).

¹⁰⁷ NCPA Initial Post-Technical Conference Comments at 5-6; CPUC Initial Post-Technical Conference Comments at 3, 14.

transmission owners argue for higher rates while customers argue for lower ones.¹⁰⁸ Complainant Representatives contend that PTO rate cases provide a poor venue for risk analysis and proper assessment of whether a more expensive project is warranted under specific circumstances.¹⁰⁹ Further, they argue, these rate cases do not commit a transmission owner to a particular course of action; they merely set the appropriate level of the transmission rates.

56. NCPA also asserts that the PTOs are using their self-approved projects to discriminate against wholesale customers. As examples, NCPA asserts that PG&E did not provide needed repair work on circuits and believes that its member cities were incorrectly assessed as a single customer. NCPA argues that because these activities are not included in a formal transmission planning process, NCPA does not have information necessary to determine with certainty that there is discrimination against wholesale customers.¹¹⁰

57. NCPA (in conjunction with the Complainant Representatives) proposes an ongoing five-year transmission planning process. This process, which it calls the Transmission Planning and Prioritization Process (TPAP) would include three rounds of stakeholder review and input for asset management projects and activities. Under the proposed process, the PTO and stakeholders would first review the previous five-year plan and develop lessons learned. Second, the PTO and stakeholders would develop a Planning Standards and Investment Strategy Study Plan, similar to CAISO's unified planning assumptions. Third, the PTO would conduct a stakeholder meeting to share the results of all studies, after which stakeholders would have an opportunity to provide comments and propose solutions to the identified transmission needs. Finally, the PTO would develop a new five-year transmission plan, with updates from the current year's activities. The new five-year transmission plan would list each planned capital expenditure that is predicted to cost at least \$1 million over the next five years, as well as

¹⁰⁸ NCPA Initial Post-Technical Conference Comments at 3-5; TANC Initial Post-Technical Conference Comments at 7; CPUC Initial Post-Technical Conference Comments at 3.

¹⁰⁹ NCPA Initial Post-Technical Conference Comments at 3.

¹¹⁰ *Id.* at 7

information regarding the need for that expenditure. The PTO would take input from stakeholders on the draft five-year transmission plan before finalizing it.¹¹¹

58. In response to Complainant Representatives' TPAP proposal, SoCal Edison contends that having three separate meetings, each with a round of comments, is an inefficient use of time and resources. SoCal Edison explains that planning assumptions are unlikely to change significantly from year to year, so it makes little sense to spend significant time and resources to have a separate meeting and round of comments to address them each year. Further, SoCal Edison asserts that presenting a proposed solution at the same time that a need is identified is more useful than presenting a need without a solution. Also, SoCal Edison states, presenting a proposed solution contemporaneously with a need in no way precludes a stakeholder from proposing an alternative solution.¹¹²

59. SoCal Edison and CAISO both assert that Complainant Representatives' reliance upon Commission rulings regarding transmission planning in PJM is misplaced. They explain that in PJM (and also in ISO-NE),¹¹³ local transmission planning occurred outside of the respective regional transmission planning process. By contrast, transmission planning in CAISO, both regional and local, are within the purview of the CAISO TPP.¹¹⁴

60. In its reply comments, the CPUC requests that the Commission issue an order ruling that the PTOs' processes for identifying self-approved projects are transmission planning and that the PTOs are simply mischaracterizing these activities. The CPUC argues that planning for these projects is taking place now.¹¹⁵ The CPUC also requests

¹¹¹ NCPA Initial Post-Technical Conference Comments at 8-10; *see also* TANC Initial Post-Technical Conference Comments at 14-15; CPUC Initial Post-Technical Conference Comments at 12-13.

¹¹² SoCal Edison Post-Technical Conference Reply Comments at 1, 4-5.

¹¹³ *ISO New England Inc.*, 123 FERC ¶ 61,161, at P 97 (2008).

¹¹⁴ SoCal Edison Post-Technical Conference Reply Comments at 8-9; CAISO Post-Technical Conference Reply Comments at 9-10.

¹¹⁵ CPUC Post-Technical Conference Reply Comments at 5-7; *see also* Old Dominion Electric Cooperative Initial Post-Technical Conference Comments at 1-2.

that the Commission approve a mandatory Order No. 890-compliant transmission planning process for projects that all of the PTOs now self-approve.¹¹⁶

61. With its reply comments, the CPUC includes a Motion for Expedited Ruling Issuing Order to Show Cause in AD18-12-000 (Motion for Show Cause Order). In this motion, CPUC argues that on the basis of these large expenditures on self-approved projects, the Commission should issue an order to show cause: (1) affirming that Order No. 890 governs the PTOs' transmission planning for self-approved projects; (2) ordering new tariff provisions to implement the transmission planning process that NCPA proposed; (3) ordering the PTOs to hold in-person meetings twice monthly until agreement is reached with Complainants; (4) ordering the PTOs to provide a public version of their most current Five Year Plans; (5) clarifying that PTOs' forecasted costs for self-approved projects should be made publicly available; and (6) ordering the PTOs to provide Complainants with any other materials they use for planning self-approved projects.¹¹⁷

V. Discussion

A. Procedural Matters

62. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2017), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

63. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2017), prohibits an answer to an answer unless otherwise ordered by the decisional authority. We accept Complainants' answer because it provided information that assisted us in our decision-making process.

64. We deny the Motion to Lodge. Given that the Commission has knowledge of its own holdings, we find a motion to lodge prior Commission orders is unnecessary.¹¹⁸

¹¹⁶ *Id.* at 9-10.

¹¹⁷ *Id.* at 4. We address the Motion for Show Cause Order in an order issued concurrently in Docket No. ER18-370-000. *S. Cal. Edison Co.*, 164 FERC ¶ 61,160 (2018).

¹¹⁸ *Midcontinent Indep. Sys. Operator, Inc.*, 156 FERC ¶ 61,203, at P 12 (2016).

B. Substantive Matters

65. We deny the Complaint. Complainants have not met their burden of proof under FPA section 206 to demonstrate that PG&E's TO Tariff is unjust, unreasonable, unduly discriminatory, or preferential because it does not require asset management projects and activities¹¹⁹ to go through an Order No. 890-compliant transmission planning process. Under FPA section 206, "the burden of proof to show that any rate, charge, classification, rule, regulation, practice, or contract is unjust, unreasonable, unduly discriminatory, or preferential shall be upon . . . the complainant."¹²⁰ Accordingly, Complainants must demonstrate that PG&E's existing TO Tariff provisions, which the Commission has previously accepted as just and reasonable and not unduly discriminatory or preferential, have become unjust, unreasonable, unduly discriminatory, or preferential, or are unjust, unreasonable, unduly discriminatory, or preferential as applied to Complainants. We find that Complainants have not made such a demonstration, and we therefore deny the Complaint.

66. Complainants' assertion that PG&E's TO Tariff violates the transmission planning requirements of Order No. 890 is based on the premise that those requirements apply to any transmission-related projects and activities that are capitalized in a PTO's transmission rate base, including the asset management projects and activities at issue here. We disagree. While Order No. 890 does not explicitly define the scope of "transmission planning," the Commission adopted the transmission planning requirements in Order No. 890 to remedy opportunities for undue discrimination in *expansion* of the transmission grid.¹²¹ As discussed above, the Commission was concerned that transmission providers may have a disincentive to remedy the increased

¹¹⁹ The types of projects and activities at issue in this proceeding have been referred to variously as "self-approved projects;" "capital transmission expenditures;" "capital transmission projects;" "transmission-related maintenance and compliance activities, including, but not limited to, transmission-related capital additions;" "maintenance projects;" and "capital additions or investments." At the May 1, 2018 technical conference and in post-technical conference comments, the PTOs introduced the term "asset management" to describe these activities. While the definitions that the different PTOs offer vary slightly, they all encompass the maintenance, repair, and replacement work done on existing transmission facilities as necessary to maintain a safe, reliable, and compliant grid based on existing topology. To simplify the discussion, we use the term "asset management projects and activities" throughout the following determination.

¹²⁰ 16 U.S.C. § 824e(b).

¹²¹ See Order No. 890, FERC Stats. & Regs. ¶ 31,241 at PP 57-58, 421-422.

congestion caused by insufficient transmission capacity, explaining that “[w]e cannot rely on the self-interest of transmission providers to *expand* the grid in a non-discriminatory manner.”¹²² Thus, the transmission planning reforms that the Commission adopted in Order No. 890 were intended to address concerns regarding undue discrimination in grid expansion. Accordingly, to the extent that PG&E asset management projects and activities do not expand the grid, they do not fall within the scope of Order No. 890, regardless of whether they are capitalized in PG&E’s transmission rate base.¹²³

67. Based on the information in the record, we find that the specific asset management projects and activities at issue here do not, as a general matter, expand the CAISO grid. Rather, these asset management projects and activities include maintenance, repair, and replacement work, and infrastructure security, system reliability, and automation projects PG&E undertakes to maintain its existing electric transmission system and meet regulatory compliance requirements.

68. We recognize that there may be instances in which a PTO’s asset management project or activity may result in an incidental increase in transmission capacity that is not reasonably severable from the asset management project or activity. For example, CAISO explained that if a PTO, such as PG&E, needed to replace an aging 1940-vintage transformer at the end of its useful life, a like-for-like replacement with equipment from 1940 would not be feasible. Instead, CAISO states, the PTO would likely replace the old equipment with a modern transformer, which could be of a higher capacity if the PTO has standardized transformer sizes across its system to allow for sparing should the transformer fail.¹²⁴ Such an increase in transmission capacity would be incidental to, and not reasonably severable from, the asset management project or activity required to meet the PTO’s need. We find that this type of incidental increase in transmission capacity that is a function of advancements in technology of the replaced equipment, and is not reasonably severable from the asset management project or activity, would not render the asset management project or activity in question a transmission expansion that is subject to the transmission planning requirements of Order No. 890.

69. However, there may also be instances in which a PTO’s asset management project or activity may result in an increase in transmission capacity that is not incidental, for example, where a PTO determines that it can address a CAISO-identified transmission need by expanding the scope of an asset management project or activity to result in a

¹²² *Id.* P 422 (emphasis added).

¹²³ To the extent that Complainants have questions regarding PG&E’s accounting treatment of asset management projects and activities, such questions would be more appropriately addressed in PG&E’s annual transmission owner rate filing proceedings.

¹²⁴ *See* Technical Conference Tr. at 132:12-133:10.

capacity increase. In such a case, the additional work would not be incidental to but would be incremental to the asset management project or activity and would represent an expansion of the CAISO grid. Accordingly, the incremental portion of the asset management project or activity would be subject to the transmission planning requirements of Order No. 890 and would have to be submitted for consideration in CAISO's TPP through the request window. If CAISO did not approve the incremental work, then the PTO should not expand the scope of the original asset management project or activity without that work being subject to consideration through an Order No. 890-compliant transmission planning process.¹²⁵

70. We additionally note that CAISO's compliance filings for Order Nos. 890 and 1000 and the resulting TPP included certain subsets of the universe of transmission-related work that were expansion-related in nature. Nothing in the Commission's orders accepting CAISO's second Order No. 890 compliance filing or its Order No. 1000 compliance filing¹²⁶ indicated that CAISO would evaluate non-expansion transmission-related work.¹²⁷

71. In light of our finding that the asset management projects and activities at issue here are not subject to Order No. 890's transmission planning requirements, we find that Complainants have not demonstrated that PG&E failed to meet its responsibility to comply with Order No. 890.

72. We are also not persuaded by Complainants' assertions that the transmission planning practices in other ISOs/RTOs are instructive here. Specifically, we find that

¹²⁵ We note that, at the technical conference, PG&E (as well as SoCal Edison) agreed that such incremental additions would need to go through the TPP. *See* Technical Conference Tr. at 129:9-131:14.

¹²⁶ *Cal. Indep. Sys. Operator Corp.*, 127 FERC ¶ 61,172 at PP 62, 65; *Cal. Indep. Sys. Operator Corp.*, 143 FERC ¶ 61,057 (2013), *order on clarification and compliance*, 146 FERC ¶ 61,198, *order on reh'g and compliance*, 149 FERC ¶ 61,249 (2014).

¹²⁷ *See* *Cal. Indep. Sys. Operator Corp.*, Order No. 1000 Compliance Filing, Docket No. ER13-103-000, at 11 (filed Oct. 11, 2012) (stating that, in the TPP, CAISO determines the "appropriate transmission (or non-transmission) solutions to meet the following: reliability needs; economic needs; public policy requirements and directives; location-constrained resource interconnection facilities (which are radial generation tie facilities ultimately paid for by generators as they come on-line); maintaining the feasibility of long-term CRRs. [CAISO] also identifies merchant transmission proposals and additional components or expansions of facilities that will be reflected in large generator interconnection agreements.").

Complainants' reference to the Commission's recent order regarding Supplemental Projects in PJM¹²⁸ is inapposite. The question of whether asset management projects and activities that do not increase the capacity of the grid must go through an Order No. 890-compliant transmission planning process was not at issue in the February 15 PJM Order. Instead, the February 15 PJM Order examined the PJM Transmission Owners' implementation of the process for planning Supplemental Projects, a process that is set forth in the PJM Operating Agreement and Tariff. Similarly, we are not persuaded by Complainants' assertions that other regions, such as ISO-NE and MISO, consider asset management projects and activities through their regional transmission planning processes. Whether or not other transmission planning regions are considering asset management projects and activities through their regional transmission planning process does not, in and of itself, determine whether Order No. 890 requires them to do so.

73. We find that Complainants' assertions that other PTOs in CAISO may also be in violation of Order No. 890 are beyond the scope of this proceeding. Complainants brought the Complaint solely against PG&E, and the scope of this proceeding is therefore limited to whether PG&E's self-approval of asset management projects and activities violates the requirements of Order No. 890. We also find that NCPA has not provided evidentiary support for its assertion that the PTOs in general—and PG&E in particular—are using asset management projects and activities to discriminate against wholesale customers. To the extent that NCPA or its members have concerns regarding potential undue discrimination with regard to PG&E's asset management projects and activities, they retain their rights under FPA section 206 to seek redress from the Commission in a separate proceeding.

74. Although we are denying the Complaint, we understand Complainants' desire for more transparency into the PG&E costs that go into CAISO's TAC. Although the PG&E asset management projects and activities at issue here are not subject to the transmission planning requirements of Order No. 890, we nonetheless recognize that Complainants, other stakeholders, and PG&E are all likely to benefit from increased transparency into these projects and activities. Additional transparency may help interested parties to understand why such projects and activities are needed. In addition, greater transparency may allow stakeholders to express, and PG&E to address, concerns before capital investments related to these projects and activities are included in rate filings, which could help narrow the scope of disputes brought before the Commission. Therefore, we strongly encourage PG&E to continue its efforts to work with Complainants and other stakeholders to develop a process to share and review information with interested parties regarding asset management projects and activities that are not considered through the

¹²⁸ February 15 PJM Order, 162 FERC ¶ 61,129.

TPP.¹²⁹ In an order issued concurrently with this order in Docket No. ER18-370-000, we find that SoCal Edison's proposal for a new TMCR process through which SoCal Edison will share and review certain information regarding transmission-related maintenance and compliance activities with interested stakeholders is just and reasonable.¹³⁰ SoCal Edison's TMCR process may provide a useful example for PG&E and its stakeholders to consider.

The Commission orders:

The Complaint is hereby denied, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

¹²⁹ PG&E Answer at 20-21.

¹³⁰ *S. Cal. Edison Co.*, 164 FERC ¶ 61,160.