

169 FERC ¶ 61,044
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Richard Glick and Bernard L. McNamee.

Nevada Hydro Company, Inc.

Docket No. EL19-81-000

v.

California Independent System Operator Corporation

ORDER DENYING COMPLAINT

(Issued October 17, 2019)

1. On June 17, 2019, Nevada Hydro Company, Inc. (Nevada Hydro) filed a complaint alleging that the California Independent System Operator Corporation (CAISO) failed to follow its tariff in studying the Lake Elsinore Advanced Pumped Storage Project (LEAPS) as a transmission facility in CAISO's 2018-2019 transmission planning process. In this order, we deny the complaint.

I. Background

2. LEAPS is a proposed pumped hydroelectric facility¹ with a pumping capacity of 600 MW and planned power production capacity of 500 MW, and has been in development since the late 1990s. It will be located approximately midway between Los Angeles and San Diego in Riverside County, California at Lake Elsinore, which will serve as the lower reservoir for the LEAPS facility. The proposed LEAPS project will include two new 500 kV interconnecting transmission lines, two new 500 kV substations, three new 500/230 kV transformers, three new phase shifting transformers, and one new 230 kV transmission line. The total energy storage available will be approximately 6,000 MWh per day, allowing for 12 hours of operation at the full plant capacity of 500 MW. Nevada Hydro states that these facilities will have the capability to serve the transmission systems of San Diego Gas & Electric Company (SDG&E) and Southern California Edison Company.²

¹ The hydroelectric license application for LEAPS is currently pending before the Commission in Docket No. P-14227-003.

² Complaint at 11-12.

3. In response to the first of two prior requests by Nevada Hydro for LEAPS to be treated as a transmission asset and for transmission rate incentives, the Commission found that it would not be appropriate to require, as Nevada Hydro requested, that CAISO assume any level of operational control over LEAPS or functionalize it as transmission for rate recovery purposes. The Commission denied the request that LEAPS be placed under CAISO's operational control and explained that LEAPS' costs were not properly recovered through CAISO's transmission access charge (TAC). The Commission stated that the purpose of the TAC is to recover the costs of transmission facilities under the control of CAISO, not to recover the costs of bundled services. The Commission added that, absent information that justified treating LEAPS differently from existing pumped storage facilities in CAISO's footprint, allowing LEAPS to receive a guaranteed revenue stream through CAISO's TAC would create an undue preference for LEAPS compared to similarly situated pumped storage generators.³

4. In 2018, the Commission dismissed Nevada Hydro's second request that the Commission declare that the proposed LEAPS facility is a transmission facility and is thus eligible for recovery of its costs through CAISO's TAC.⁴ The Commission found that, because LEAPS had not been studied in CAISO's transmission planning process to determine whether the facility addresses an identified transmission need, the Commission could not make a reasoned decision on whether LEAPS is a transmission project and thus eligible for cost recovery under the TAC. The Commission stated that, if CAISO ultimately were to identify LEAPS as a solution to identified transmission needs and Nevada Hydro wished to seek cost recovery through the TAC, then Nevada Hydro would need to demonstrate to the Commission how the manner in which LEAPS would operate to address the transmission need makes it a transmission facility.⁵

5. Nevada Hydro proposed LEAPS as a transmission project for study by CAISO in the 2018-2019 transmission planning cycle. CAISO studied LEAPS in that transmission planning cycle and produced its final Transmission Plan on March 29, 2019,⁶ in which

³ *Nevada Hydro Co., Inc.*, 122 FERC ¶ 61,272, at PP 82-85 (2008).

⁴ *Nevada Hydro Co., Inc.*, 164 FERC ¶ 61,197 (2018) (Declaratory Order).

⁵ *Id.* PP 22-25.

⁶ 2018-2019 CAISO Transmission Plan, Board Approved-Updated (March 29, 2018), http://www.caiso.com/Documents/ISO_BoardApproved-2018-2019_Transmission_Plan.pdf (Transmission Plan).

CAISO determined that it had not identified a need for any new transmission projects in Southern California, including the LEAPS project.⁷

II. Complaint

6. Nevada Hydro states that it submitted LEAPS as a transmission solution to eight transmission reliability violations (thermal overloads) that CAISO identified on the SDG&E system over CAISO's 10-year planning horizon. Nevada Hydro asserts that its analysis showed that LEAPS would permanently resolve six of these violations. Nevada Hydro argues that CAISO failed to study LEAPS as a reliability solution to solve any of the eight reliability violations. Rather, Nevada Hydro claims that the transmission planning report makes clear that CAISO had already decided to rely on other measures, including battery storage and demand response selected by the California Public Utilities Commission (CPUC) in its Integrated Resource Planning (IRP) process, as well as remedial action schemes, to address these issues. Nevada Hydro contends that CAISO did not attribute any cost to the batteries, demand response, or remedial action schemes, and did not compare them to the cost of LEAPS to determine which would be more cost effective. Nevada Hydro contends that failing to do the comparative analysis violates Section 24.4.6.2 of the CAISO tariff, which requires CAISO to "determine the solution that meets the identified reliability need in the more efficient or cost effective manner." Further, Nevada Hydro asserts that CAISO did not discuss the pros and cons of selecting a short-term operational fix versus a long-term physical solution. Thus, Nevada Hydro asserts that CAISO gave batteries and demand response an undue preference and denied LEAPS comparable treatment in the transmission planning study.⁸

7. Nevada Hydro also argues that CAISO failed to follow its tariff requirements for evaluating LEAPS as an economic study request and, as a result, underestimated the benefits of LEAPS. Nevada Hydro notes that the focal point of CAISO's evaluation of an economic study request under Section 24.4.6.7 of the CAISO tariff is a proper benefits calculation. Further, Nevada Hydro states that the procedures for evaluating the costs and benefits of a potential transmission solution are set forth in section 4.7.1 of the business practice manual for the transmission planning process, and asserts that these procedures require any such analysis to be consistent with CAISO's transmission economic assessment methodology (TEAM). According to Nevada Hydro, TEAM identifies the following five key elements to be considered in any economic evaluation of proposed transmission upgrades: (1) production cost savings benefits, (2) local capacity benefits, (3) public policy benefits, by reducing the cost of reaching renewable energy

⁷ *Id.* at 184-190.

⁸ Complaint at 21-22, 26-29; Exhibit NHI-2 at 16-23 (Alaywan Testimony).

resource targets, (4) improved deliverability benefits, and (5) avoided cost of other projects' benefits.⁹

8. Nevada Hydro contends that CAISO failed to apply the tariff or TEAM to conduct a reasonable, open, and transparent benefits assessment of LEAPS. Nevada Hydro points to a study CAISO conducted of the costs and benefits of hypothetical pumped hydro projects (2018 Sensitivity Studies)¹⁰ and contends that, following the methods and assumptions CAISO used in that study, Nevada Hydro demonstrated that LEAPS would provide economic benefits to ratepayers in excess of LEAPS's annual revenue requirement in a ratio between 1.52 and 1.72 to 1, which exceeds the tariff requirement of a 1-to-1 benefit-to-cost ratio to make projects eligible for cost recovery through the TAC.¹¹ Nevada Hydro complains that CAISO calculated its benefit-to-cost ratio based on estimates of: (1) the production cost impact on California alone, (2) LEAPS' net market revenues, and (3) local capacity requirement savings, while ignoring other categories of benefits required by TEAM.¹²

9. Nevada Hydro argues that CAISO failed to give LEAPS proper credit for production cost savings benefits because its analysis was distorted by materially false assumptions. Nevada Hydro contends that CAISO's reliance on CPUC's default generation supply portfolio (CPUC Default Scenario), which includes 4,183 MW of allegedly non-existent generation at zero cost, and the inclusion of an allegedly non-existent 2,000 MW export limit, is unreasonable. Nevada Hydro asserts that the CPUC Default Scenario portfolio includes 4,183 MW of theoretical solar, wind, and battery storage facilities that have neither CPUC-approved contracts, nor construction permits. Therefore, Nevada Hydro argues that these resources do not have a place in the analysis, and that their inclusion depresses prices in California for modeling purposes by artificially increasing supply.¹³

⁹ Complaint at 19-21, 29-31; Alaywan Testimony at 24-60.

¹⁰ CAISO, 2016-2017 Transmission Planning Process, Supplemental Sensitivity Analysis: Benefits of Large Energy Storage, at 7 (Jan. 4, 2018), available at: <http://www.caiso.com/Documents/SupplementalSensitivityAnalysis-BenefitsAnalysisofLargeEnergyStorage.pdf> (attached as Ex. NHI-4).

¹¹ Complaint at 21. In comparison, CAISO's economic studies showed a benefit-to-cost ratio for LEAPS of 0.34 to 1.0, at best. Ex. CAISO-1 at 22 (Millar Testimony).

¹² Complaint at 23; Alaywan Testimony at 31-32.

¹³ Complaint at 31-33; Alaywan Testimony at 32.

10. Nevada Hydro asserts that the imposition of a 2,000 MW export limit, which is not part of the Western Electricity Coordinating Council (WECC) full network model, further depresses prices by preventing CAISO generation from serving out-of-state needs. In addition, Nevada Hydro notes that CPUC appears to use a 2,000 MW export limit in its IRP to guard against over-procurement, but argues that this assumption is inapplicable to transmission planning and inconsistent with the TEAM guidelines. Also, Nevada Hydro contends that CAISO failed to disclose and explain its use of this export limit in the Unified Planning Assumptions, in violation of CAISO tariff Section 24.3.2. Nevada Hydro claims that CAISO's use of this assumption results in an erroneous finding that LEAPS would increase production costs by \$34 million per year, in comparison to the results of CAISO's own 2018 Sensitivity Studies, which analyzed production cost savings resulting from modeling a hypothetical pumped storage facility identical to LEAPS, and found a production cost savings of \$51 million per year.¹⁴

11. Nevada Hydro also argues that TEAM requires CAISO to credit LEAPS with WECC-wide production cost savings and not just those savings limited to California. According to Nevada Hydro, TEAM requires a WECC-wide production cost perspective "for projects with obvious interregional impacts."¹⁵ Nevada Hydro contends that LEAPS has clear interregional benefits based on the finding of \$51 million per year WECC-wide production cost savings in the 2018 Sensitivity Studies. Nevada Hydro asserts that CAISO has no reasoned basis for using the \$34 million per year cost increase instead of the WECC-wide savings result. Further, Nevada Hydro claims that the \$51 million per year production cost savings figure was the result of a more reliable computer model than the program that yielded the production cost increases. Nevada Hydro states that the PLEXOS computer model CAISO used resulted in the production cost savings shown in the 2018 Sensitivity Studies, whereas CAISO used the GridView computer model for its TEAM analysis of LEAPS. According to Nevada Hydro, CAISO has acknowledged that PLEXOS provides better results and yet did not explain why it relied on the GridView results instead to assess the benefits of LEAPS, and also failed to reconcile its findings in the transmission planning study with the results of the 2018 Sensitivity Studies.¹⁶

12. Further, Nevada Hydro argues that CAISO undercounted LEAPS' benefits by failing to account for renewable portfolio standard (RPS) savings. Nevada Hydro contends that RPS savings is a benefit from projects that "reduce the cost of reaching renewable energy targets by facilitating the integration of lower cost renewable resources

¹⁴ Complaint at 33-36; Alaywan Testimony at 36-38.

¹⁵ Complaint at 36 (citing Ex. NHI-6 at 10 (TEAM Guidelines)); Alaywan Testimony at 33-34, 38-39.

¹⁶ Complaint at 37-38; Alaywan Testimony at 33-36.

located in remote area[s], or by avoiding over-build.”¹⁷ Nevada Hydro asserts that the 2018 Sensitivity Studies showed that a hypothetical 500 MW pumped storage facility in Southern California could yield ratepayer savings associated with avoided renewable generation costs that ranged between \$25 million per year and \$74 million per year, but contends that CAISO did not study this benefit for LEAPS. Nevada Hydro argues that CAISO’s argument that RPS savings were already accounted for in the CPUC Default Scenario portfolio is without merit and turns on a faulty interpretation of the CAISO tariff. Specifically, Nevada Hydro states that Section 24.4.6.7 of the tariff lists four criteria that CAISO must consider in deciding whether it needs additional transmission solutions, two of which address congestion, one that addresses local capacity needs, and the fourth is for resource integration. Nevada Hydro emphasizes that, even though the resource integration factor is separated from the rest of the list by the word “or”, which implies that any of the four factors would be sufficient on its own to support a finding of a transmission need, CAISO appears to erroneously interpret those criteria as requiring an economic project to address both congestion relief and resource integration. Nevada Hydro disputes CAISO’s stated conclusion that California has sufficient renewable generation available during the 10-year planning horizon as a reason for not calculating RPS savings for LEAPS, arguing that this assertion fails because: (1) CAISO advised CPUC that the “Hybrid Conforming Portfolio” proposed by CPUC in its IRP did not provide sufficient capacity to meet needs during critical net load hours, (2) the CPUC Hybrid Conforming Portfolio did not account for the supply needs of community choice aggregators, and (3) CAISO’s use of the CPUC Default Scenario resource portfolio, which included 4,183 MW of planned-for renewable generation at zero cost, made it impossible for LEAPS to economically displace any of that generation or to test how much of that generation was avoidable.¹⁸

13. Nevada Hydro also faults CAISO’s calculation of local capacity requirement savings in its TEAM benefits analysis. Nevada Hydro notes that, in the 2017-2018 planning cycle, CAISO used its tariff-based capacity procurement mechanism soft offer cap of \$6.31/kW-month as a proxy for capacity costs. In the current transmission study, however, Nevada Hydro complains that CAISO started with values of \$3.18/kW-month (for San Diego) and \$3.48/kW-month (for the Los Angeles Basin), which represents the historic weighted average capacity cost reported by CPUC in 2018, and then further reduced those values by comparing them to the costs of local system capacity for SDG&E and Southern California Edison Company and the cost of system capacity in southern California south of Path 26. Nevada Hydro claims that the resulting values are unreasonable because CAISO did not attempt to estimate what the capacity might be

¹⁷ Complaint at 38-39 (citing TEAM Guidelines at 2).

¹⁸ *Id.* at 38-43; Alaywan Testimony at 39-46.

worth in 2028 (the year it used for purposes of estimating energy prices in its production cost simulation) and performed no capacity price sensitivity analysis. Thus, Nevada Hydro argues that CAISO did not substantiate its departure from the capacity valuation method used in the recent past. Nevada Hydro states that reverting to CAISO's previous use of the soft offer cap value would produce additional present value benefits from LEAPS of about \$384 million.¹⁹

14. Additionally, Nevada Hydro contends that CAISO undercounted the benefits of LEAPS by omitting analysis of (1) avoided interconnection costs, (2) improved deliverability benefits, and (3) reliability cost savings, without providing any reason for leaving them out of the calculation. Nevada Hydro estimates the present value of avoided interconnection costs at \$114 million, an improved deliverability benefit of \$31 million per year, and a reliability cost savings of approximately \$33 million per year based on avoided curtailment payments to renewable generators and out-of-market dispatch payments to natural gas-fired generators.²⁰

15. Nevada Hydro argues that CAISO undercounted potential LEAPS market revenues, which would be credited against the project's cost-based revenue requirement, by focusing only on one year, 2028. Nevada Hydro asserts that TEAM contemplates the use of at least two years, five and 10 years in the future, to indicate whether the benefits are rising or falling, as well as sensitivities to account for significant long-term changes such as fuel costs and RPS requirements. Nevada Hydro states that it performed studies that project market prices for 2026, 2030, and 2045 in order to reflect the market during critical dates in California's RPS compliance future and to account for the potential retirement of significant natural gas-fired generation.²¹

16. Finally, Nevada Hydro argues that CAISO failed to determine how LEAPS can be operated to address transmission reliability and economic efficiency needs. Nevada Hydro contends that the transmission study wrongly assumed that LEAPS will be operated in a way that maximizes market revenues instead of providing transmission benefits. Nevada Hydro asserts that CAISO's failure to assess how CAISO would operate LEAPS to meet transmission system needs ignores the Commission's directive in

¹⁹ Complaint at 43-46; Alaywan Testimony at 51-54.

²⁰ Complaint at 46-48; Alaywan Testimony at 46-51.

²¹ Nevada Hydro states that its analysis projects average annual market revenues for LEAPS of \$91 million, compared to CAISO's estimate of \$73 million. Complaint at 48-50; Alaywan Testimony at 56-57, 59.

the Declaratory Order to assess “how CAISO would require LEAPS to be operated to meet [transmission] needs.”²²

17. Nevada Hydro argues that CAISO materially undervalued LEAPS’ benefits through unjust and unreasonable study results calculated in a manner that violates the CAISO tariff. Nevada Hydro asserts that, as a result of this study process, it has been foreclosed from participation in CAISO’s Transmission Plan, and therefore cannot recover its costs through the TAC. Nevada Hydro states that LEAPS cannot be financed and constructed without a predictable revenue stream.²³ Thus, Nevada Hydro requests that the Commission: (1) find that CAISO failed to follow its tariff and otherwise failed to perform an open, transparent, comparable, and not unduly discriminatory study of LEAPS, (2) order CAISO to correct its alleged modeling errors and produce new results using the data it already has, (3) find that doing so would lead to a determination that LEAPS is the more economic and cost effective solution for identified reliability needs, (4) find that LEAPS far exceeds the benefits necessary for selection as an economic transmission solution, and (5) direct CAISO to include LEAPS in the 2018-2019 Transmission Plan as a fully approved project. In addition, Nevada Hydro requests that, to the extent the TEAM study methods significantly affect the rate and the Commission believes those metrics should be included in the tariff, it should direct CAISO to do so.²⁴

III. Notice of Filing

18. Notice of the complaint was published in the *Federal Register*, 84 Fed. Reg. 29,511 (2019), with interventions or protests due on or before July 8, 2019. On June 20, 2019, CAISO filed a motion requesting an extension of time until July 22, 2019 to answer the complaint. CAISO’s request was granted in a notice issued June 28, 2019.

19. Timely motions to intervene were filed by Southern California Edison Company; Modesto Irrigation District; Pacific Gas and Electric Company; San Diego Gas & Electric Company; and NextEra Energy Resources, LLC (NextEra). Timely motions to intervene and protests were filed by the Northern California Power Agency (NCPA); the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California (Six Cities); the California Municipal Utilities Association (CMUA); and the California Department of Water Resources State Water Project (SWP). A timely notice of intervention and protest was filed by CPUC. A motion to intervene out-of-time was filed on July 23, 2019 by

²² Complaint at 51-52 (citing Declaratory Order, 164 FERC ¶ 61,197 at P 23).

²³ *Id.* at 52-53.

²⁴ *Id.* at 9, 56.

GridLiance West LLC. CAISO filed a timely motion to intervene and answer to the complaint.

20. On August 6, 2019, Nevada Hydro filed an answer to CAISO's answer. On August 7, 2019, NextEra filed comments in support of CAISO's answer. On August 21, 2019, CAISO filed an answer to Nevada Hydro's answer. On September 5, 2019, Nevada Hydro filed an answer to CAISO's answer. On September 20, 2019, CAISO filed an answer to Nevada Hydro's September 5 answer. On October 7, 2019, Nevada Hydro filed an answer to CAISO's September 20 answer.

IV. CAISO's July 22 Answer

21. CAISO argues that Nevada Hydro has failed to meet its burden under the Federal Power Act (FPA) section 206²⁵ to show that CAISO did not comply with its tariff in evaluating LEAPS in the 2018-2019 transmission planning cycle. CAISO asserts that Nevada Hydro's claims regarding the conduct of CAISO's reliability and economic studies and application of those studies to LEAPS rely on mischaracterizations of the relevant tariff processes, lack sufficient evidentiary support, and are factually incorrect.²⁶

22. CAISO asserts that it studied LEAPS as a reliability solution, consistent with the requirements of tariff Section 24.4.6.2, and properly found no need for LEAPS or any other new transmission solution to address the thermal overload issues on the SDG&E system. CAISO states that its tariff requires it, in determining whether there is a need for any transmission solutions, to "consider lower cost solutions, such as acceleration or expansion of existing transmission solutions, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads, storage facilities or reactive support."²⁷ CAISO states that, consistent with this requirement, certain existing facilities or those under construction, or other operational measures such as remedial action schemes and storage projects, were included in the Unified Planning Assumptions and Study Plan. CAISO states that these measures can address the thermal overloads in the SDG&E system and, therefore, once the assumptions were applied it found no need for any new transmission solution to address the identified issue. CAISO acknowledges that its tariff requires it to "determine the solution that meets the identified reliability need in the more efficient or cost effective manner,"²⁸ but explains that, because the projects and

²⁵ 16 U.S.C. § 824e (2018).

²⁶ CAISO July 22, 2019 Answer at 37-41 (CAISO July Answer).

²⁷ *Id.* at 45 (citing CAISO Tariff, § 24.4.6.2).

²⁸ *Id.*

measures identified in the Unified Planning Assumptions are already in operation or under construction, they present no new additional capital costs to consider. Thus, because it found no reliability need and the existing solutions presented no new capital costs, CAISO maintains that there was no need to engage in a comparison of the relative cost effectiveness of LEAPS versus the solutions already planned or in place. Further, CAISO contends that Nevada Hydro offers no evidence that CAISO's identified operational solutions will be inadequate, whereas even Nevada Hydro has acknowledged that LEAPS would not eliminate the need for remedial action schemes to address the thermal overloads.²⁹

23. CAISO also maintains that it properly studied LEAPS under the economic study request provisions of its tariff, as requested by Nevada Hydro, and also studied LEAPS in an additional configuration that Nevada Hydro did not propose. CAISO emphasizes that the Transmission Plan includes extensive discussion of the production cost simulation results, a local capacity reduction benefit evaluation, evaluation of potential reliability solutions with potential material economic benefits, six economic study planning requests—including LEAPS—and a detailed investigation of congestion and economic benefits in 12 areas of the CAISO grid, and an examination of the costs and benefits of potential solutions to address any needs in those areas. CAISO contends that it calculated a benefit-to-cost ratio for each of the projects studied using the same assumptions and methodology applied to LEAPS and asserts that no further comparative analysis was required because the relevant projects all had benefit-to-cost ratios far below 1.0.³⁰

24. CAISO disputes Nevada Hydro's claims that CAISO failed to give LEAPS full credit for production cost savings benefits. CAISO asserts that its use of the CPUC Default Scenario resource portfolio was reasonable and consistent with the CAISO tariff and documented practice. CAISO notes that its tariff and other transmission planning documents recognize the importance of CAISO-CPUC coordination and the use of CPUC resource planning inputs in the transmission planning process to help ensure the right infrastructure solutions with the least risk of stranded investment. CAISO explains that it gave stakeholders opportunity to comment on its plan to use the CPUC Default Scenario resource portfolio, which includes the 4,183 MW of what Nevada Hydro characterizes as nonexistent generation, in the Unified Planning Assumptions and Study Plan, but notes that Nevada Hydro raised no concerns about this during the process. CAISO argues that Nevada Hydro's objection to the CPUC portfolio essentially second guesses CPUC's procurement decisions and seeks to displace resources selected by CPUC in its IRP process with LEAPS. CAISO also avers that use of the 2,000 MW export limit in the assumptions was reasonable because it reflects market realities and respects all physical limits on the interties. CAISO maintains that it did not modify the actual physical

²⁹ *Id.* at 41-48; Millar Testimony at 9-14.

³⁰ CAISO July Answer at 48-50 (citing Transmission Plan at 225-398).

transfer/export capabilities of any transmission lines in its transmission planning studies. Moreover, CAISO asserts that stakeholders were aware of the 2,000 MW net export limit during the development of the Unified Planning Assumptions and had opportunity to comment, which Nevada Hydro did not. Further, CAISO contends that increasing the export limit, which Nevada Hydro implies CAISO should have done, would actually diminish the value of LEAPS because the additional exports of low-cost surplus renewable generation output would likely increase energy prices at times when LEAPS is expected to be pumping.³¹

25. In addition, CAISO argues that crediting LEAPS with only California savings, rather than WECC-wide savings, was consistent with how it has traditionally conducted economic planning studies and with TEAM. CAISO notes that TEAM makes clear that “CAISO will rely primarily on [the] CAISO ratepayer perspective when evaluating the economic viability of a potential transmission upgrade since the cost of covering transmission upgrades is collected from ratepayers” through the TAC.³² CAISO emphasizes that it has consistently applied this approach in its transmission planning process and explains that, while WECC-wide benefits are considered, those benefits are used primarily for informational purposes and can also inform the economic assessment of interregional transmission projects. CAISO asserts that Nevada Hydro did not submit LEAPS as an interregional project, either to CAISO or any other planning region in WECC, and has not sought to allocate any cost of LEAPS to entities in other WECC planning regions. Moreover, CAISO highlights that, even if LEAPS had “obvious interregional impacts,” as claimed by Nevada Hydro, it still fails to meet the benefit-to-cost ratio for selection as a CAISO regional solution.³³

26. With respect to Nevada Hydro’s argument that GridView is a less reliable computer model than PLEXOS, CAISO explains that it uses GridView for transmission planning studies and uses PLEXOS when undertaking studies to inform CPUC generation planning. CAISO asserts that GridView has superior capability in dealing with transmission constraints and contingencies, which is especially important in the transmission planning context. CAISO notes that its statement about PLEXOS providing better results, cited by Nevada Hydro, was made in the context of the role of preferred generation resources to provide system and flexible capacity benefits. CAISO asserts that it explained the different uses of the respective computer models in the Transmission

³¹ *Id.* at 52-63; Millar Testimony at 26-27.

³² CAISO July Answer at 64-65 (citing TEAM Guidelines at 4).

³³ *Id.* at 63-69; Millar Testimony at 32-36.

Plan.³⁴ CAISO avers that it has consistently used GridView in its annual transmission planning process to conduct economic planning studies, evaluate the need for new economic transmission projects, and compare alternative transmission solutions.³⁵

27. Additionally, CAISO argues that Nevada Hydro's reliance on the 2018 Sensitivity Studies is misplaced. CAISO explains that the 2018 Sensitivity Studies were not conducted to determine specific transmission planning needs, but were conducted on an information-only basis to inform resource planning decisions, particularly CPUC's IRP, on a system-wide basis. CAISO asserts that the informational studies assumed that the storage resources under consideration would be added to the system as generation resources, not transmission assets. Thus, CAISO contends that it is unsurprising that studies conducted for entirely different purposes, using different parameters, and examining different potential benefits, arrived at different results.³⁶

28. CAISO defends its calculation of benefits in the remaining TEAM categories as reasonably conservative and prudent. CAISO states that it conducted the local capacity benefit analysis using power flow modeling to assess the effectiveness of LEAPS and other proposals to reduce reliance on current gas-fired local capacity resources. CAISO points out that in the 2017-2018 planning cycle it used the \$6.31/kW-month capacity price as an estimate for the high end of the range of the local capacity benefit, but also used "half of the local capacity price" as the reasonable low end of the range. Thus, CAISO argues that Nevada Hydro's claim that CAISO previously used a single high value in its analysis is incorrect. CAISO also asserts that it used a conservative value because studies showed no shortage of local capacity in the relevant area. Further, CAISO notes that it used the same assumptions regarding the value of local capacity to evaluate all economic planning studies in this cycle and, therefore, Nevada Hydro was not harmed by CAISO's use of a value other than the previous cycle's high-end estimate of \$6.31/kW-month as a proxy for the value of local capacity. Finally, CAISO highlights that even if it adopted Nevada Hydro's proposed calculation of the local capacity benefit, LEAPS' benefit-to-cost ratio would still be below 1.0.³⁷

29. CAISO maintains that there is no basis for crediting LEAPS with additional benefits from other TEAM categories. CAISO contends that LEAPS was not entitled to any savings benefit related to avoiding the need to build additional resources to satisfy California's RPS mandate or avoided interconnection costs because these potential

³⁴ CAISO July Answer at 71-72 (citing Transmission Plan at 227, 235).

³⁵ *Id.* at 70-73.

³⁶ *Id.* at 73-84.

³⁷ *Id.* at 85-90; Millar Testimony at 36-40.

benefits were already considered and included in the CPUC Default Scenario portfolio and, therefore, were reflected in the Unified Planning Assumptions applied to the 2018-2019 transmission planning process. CAISO asserts that TEAM recognizes that CAISO will use renewable resource portfolios from CPUC for purposes of examining additional TEAM benefits such as RPS savings. CAISO argues that the IRP is the more appropriate forum to compare pumped storage against competing generation options to meet the state's environmental goals. In contrast, CAISO asserts that the tariff-defined purpose of its economic planning transmission study process is to determine whether the benefits of a particular transmission solution outweigh the costs. CAISO claims that Nevada Hydro's arguments regarding CPUC's Hybrid Conforming Portfolio, which was not used as an input in the transmission planning process, and alleged deficiency in accounting for the supply needs of community choice aggregators, demonstrate that Nevada Hydro is seeking to second guess and circumvent CPUC's generation portfolio determinations through CAISO's transmission planning process. CAISO disputes Nevada Hydro's assertion that CAISO's failure to grant LEAPS any benefits in this TEAM category turns on a faulty tariff interpretation. It asserts that the specific tariff language cited by Nevada Hydro pertains to the conditions under which CAISO may conduct an economic planning study, and not the standard for determining whether a particular solution constitutes an economically-driven transmission solution whose benefits outweigh the costs.³⁸

30. Next, CAISO contends that LEAPS is not entitled to any deliverability benefits because there is no capacity deficit in the region at issue. CAISO asserts that, under TEAM, the deliverability benefit only arises if there will be a capacity deficit in the region being studied. Further, CAISO maintains that LEAPS is not entitled to reliability cost savings because CAISO has identified no need for the six transmission upgrades used by Nevada Hydro in its calculation of savings.³⁹

31. CAISO argues that its analysis of LEAPS's market revenues is consistent with the TEAM guidelines and CAISO's practice, which involves using a five-year time horizon and a 10-year time horizon. However, CAISO explains that the 10-year planning case is the primary case for both congestion analysis and benefit calculation, and the five-year planning case is generally only used if the 10-year case indicates sufficient benefits for any of the high-priority study areas to warrant developing the additional five-year data point. Moreover, CAISO notes that, in this case, the five-year time horizon is inapplicable because the planned in-service date for LEAPS is not until 2025. Further, CAISO asserts that, pursuant to TEAM, revenues beyond ten years are assumed to stay constant. In contrast, CAISO argues that Nevada Hydro's use of market projections for 2026, 2030, and 2045, and its use of escalated revenues beyond the 10-year planning

³⁸ CAISO July Answer at 91-102; Millar Testimony at 40-43.

³⁹ CAISO July Answer at 102-107; Millar Testimony at 43-46.

horizon, are inconsistent with TEAM. CAISO also argues that Nevada Hydro's claim that CAISO failed to include sensitivities to account for uncertainties in its analysis of LEAPS is incorrect because CAISO did, in fact, explore key sensitivities such as renewable curtailment pricing, locational impacts, and no export limits.⁴⁰

32. Finally, CAISO disputes Nevada Hydro's claim that its study of LEAPS wrongly assumed that LEAPS would operate to maximize market benefits rather than transmission benefits. CAISO avers that it studied LEAPS with all of attributes, capabilities, and operating characteristics described in Nevada Hydro's submission. CAISO argues that nowhere in the Transmission Plan does it suggest that LEAPS was unable to operate to mitigate thermal overloads or provide transmission-related reliability services. Rather, CAISO contends that it did not need to determine how it would operate LEAPS to maximize the transmission benefits because it did not find a reliability need for any of the transmission services that LEAPS could provide.⁴¹

33. CAISO argues that, because Nevada Hydro has not met its burden to show that CAISO failed to follow its tariff or discriminated against LEAPS, there is no basis for the Commission to direct CAISO to produce new results. Moreover, CAISO points out that, even if the Commission were to order CAISO to produce new results, it would need to study all the proposed transmission projects, some of which had benefit-to-cost ratios comparable to or higher than LEAPS. Thus, even if the Commission were to grant Nevada Hydro the requested relief, CAISO still might reasonably determine that some alternative solution represents the best solution to an identified need. Accordingly, CAISO argues that declaring LEAPS to be an approved transmission solution in the Transmission Plan would be inconsistent with the CAISO tariff and could run afoul of CAISO's competitive solicitation process.⁴² With regard to Nevada Hydro's request that the Commission, to the extent it deems necessary, direct CAISO to include the TEAM study metrics in the tariff, CAISO contends that the Commission has already considered and rejected arguments to include additional detail related to the methods and metrics by which CAISO evaluates economic projects.⁴³

⁴⁰ CAISO July Answer at 107-111.

⁴¹ *Id.* at 111-124.

⁴² *Id.* at 124-129.

⁴³ *Id.* at 129 (citing *Cal. Indep. Sys. Operator Corp.*, 143 FERC ¶ 61,057, at P 62 (2013)).

V. Protests

34. CMUA, CPUC, NextEra, Six Cities, and SWP assert that the Commission should deny Nevada Hydro's complaint. In general, protestors argue that CAISO complied with its tariff in its analysis of LEAPS⁴⁴ and that LEAPS is primarily a generation facility whose costs should be recovered through market revenues and not through the TAC.⁴⁵ NextEra objects to the inclusion of LEAPS' costs in the TAC without a finding that LEAPS resolves an identified transmission need.⁴⁶

35. More specifically, CMUA and Six Cities argue that CAISO's reliance on the assumed battery storage, demand response, and existing remedial action schemes to address the identified thermal issues conforms with CAISO's tariff requirement to consider lower cost alternatives to transmission additions or upgrades. They maintain that since CAISO found no reliability need for LEAPS and relied on existing operational measures instead, CAISO is not required to conduct a comparative cost analysis of the LEAPS project in the reliability phase of its transmission studies.⁴⁷ Relatedly, CMUA and Six Cities assert that CAISO's economic study of LEAPS is also consistent with its tariff and that the benefit-to-cost ratio for LEAPS was not sufficient for CAISO to find a need for the project.⁴⁸ NCPA and SWP support CAISO's findings that the costs of the project overwhelmingly outweigh the benefits.⁴⁹

36. According to CPUC, some of the claims made by Nevada Hydro in its complaint misrepresent the IRP process and are intended to benefit Nevada Hydro at the cost of California ratepayers by creating a duplicative and inefficient planning processes.⁵⁰ CPUC argues that Nevada Hydro's assertion that CAISO failed to consider RPS integration benefits, deliverability savings, the cost of avoided transmission projects, or reliability cost savings is moot. CPUC asserts that the resource portfolio it developed in the IRP process, which was transmitted to CAISO for use in the 2018-2019 transmission

⁴⁴ See, e.g., CMUA Protest at 2; Six Cities Protest at 7.

⁴⁵ See, e.g., CMUA Protest at 9-10; SWP Protest at 4; NCPA Protest at 4.

⁴⁶ NextEra Comments at 4.

⁴⁷ CMUA Protest at 5-6; Six Cities Protest at 3-4.

⁴⁸ CMUA Protest at 7; Six Cities Protest at 6.

⁴⁹ NCPA Protest at 3; SWP Protest at 4.

⁵⁰ CPUC Protest at 3.

planning process, already captures all of the above-mentioned benefits. CPUC explains that the model it uses in the IRP process accounts for renewable portfolio integration benefits, deliverability savings, the cost of avoided transmission, and reliability cost savings when optimizing amongst various candidate resources and selecting those that meet state policy goals at least cost while ensuring reliability.⁵¹ CPUC also disputes Nevada Hydro's claim that CAISO used unexplained and unjustified modeling assumptions, and argues that there is nothing "theoretical" about the CPUC Default Scenario resource portfolio, which includes 4,183 MW of resources that do not yet have contracts or identifiable locations. CPUC explains that load serving entities in California are required to plan for this amount of resources and CPUC has authority to enforce that the appropriate amount of resources are available and online when needed.⁵²

37. CPUC further argues that Nevada Hydro's claim regarding the omission of community choice aggregators' supply needs in the transmission planning process is false because the CPUC portfolio includes resources that will need to be procured by community choice aggregators. Moreover, CPUC states that it is aware of concerns that the community choice aggregators may not meet their RPS requirements but has the enforcement mechanisms in place to address this issue.⁵³

38. Six Cities and CPUC point out that since Nevada Hydro did not submit LEAPS for an interregional project evaluation, LEAPS was not studied by any of the other Western Planning Regions and therefore does not warrant consideration of WECC-wide benefits. They assert that, if LEAPS were approved, ratepayers in CAISO would be solely responsible for paying for the project, even though other regions would experience most of the benefits, and therefore only the production cost impacts for the CAISO area would be relevant.⁵⁴ Moreover, Six Cities note that the potential benefits associated with the operation of LEAPS as a generation resource outlined in the Alaywan Testimony do not support the functionalization of LEAPS as transmission.⁵⁵

39. CMUA notes that CPUC is evaluating the costs and benefits of long-lead time resources such as pumped-storage in the IRP proceeding's new procurement track. Thus,

⁵¹ *Id.* at 6.

⁵² *Id.* at 4-6.

⁵³ *Id.* at 8.

⁵⁴ *Id.* at 7; Six Cities Protest at 8-9, 12.

⁵⁵ Six Cities Protest at 9-12.

CMUA asserts, LEAPS would be best addressed in this planning and procurement mechanism of the IRP instead of CAISO's transmission planning process.⁵⁶

40. NextEra argues that Nevada Hydro's complaint lacks merit for the reasons set forth in the other protests submitted in this case. NextEra emphasizes that if the Commission finds that pumped storage can be considered an economic transmission project, a competitive solicitation process for the development of long-duration energy storage resources is necessary for ensuring just and reasonable rates.⁵⁷

VI. Other Answers

41. Nevada Hydro argues that CAISO's answer demonstrates that CAISO did not perform a proper comparability analysis of LEAPS. It contends that CAISO is incorrect to claim that LEAPS failed the comparability test because the identified need is resolved through operating procedures and planned resources, arguing that those procedures and resources do not in fact eliminate the threat to the SDG&E system. Nevada Hydro argues that, even after the measures cited by CAISO are applied, CAISO is forecast to be capacity deficient in the SDG&E zone by 2023, and that LEAPS would help to compensate for the capacity deficiency. Nevada Hydro also contends that SDG&E disagrees with CAISO's reliability assessment and has expressed a preference for permanent solutions over the use of new remedial action schemes.⁵⁸

42. Nevada Hydro argues that failing to count economic benefits in the evaluation of reliability projects violates Order No. 1000's⁵⁹ method for selecting the more efficient or cost effective solution because it fails to sum benefits across categories as Order No. 1000 envisions.⁶⁰ Nevada Hydro contends that CAISO's analysis is further flawed

⁵⁶ CMUA Protest at 7-9.

⁵⁷ NextEra Comments at 3-6.

⁵⁸ Nevada Hydro August 6, 2019 Answer at 8-12 (Nevada Hydro August Answer); Ex. NHI-10 at 7-11 (Alaywan Rebuttal Testimony).

⁵⁹ *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, 136 FERC ¶ 61,051 (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).

⁶⁰ Nevada Hydro August Answer at 12 (citing Order No. 1000-A, 139 FERC ¶ 61,132 at P 168).

because several of the solutions discussed by CAISO, such as generator curtailment, exceptional dispatch, and remedial action schemes, are discretionary, not mandatory. Nevada Hydro maintains that a proper TEAM analysis calculates benefits of LEAPS well in excess of its expected present value cost, even if the value of reliability benefits is excluded. Thus, Nevada Hydro argues that LEAPS is, in essence, a free solution to the reliability need that is not met by CAISO's operating procedures.⁶¹

43. Nevada Hydro also contends that CAISO's answer confirms that it did not give LEAPS proper credit for benefits that are mandatory TEAM categories. With regard to production cost savings, Nevada Hydro maintains that a WECC-wide analysis is required because this result is consistent with other studies that CAISO has performed over the past several years to show the value of pumped storage to California. Nevada Hydro asserts that the \$34 million cost increase estimate calculated by CAISO using the California ratepayer perspective that cannot be correct because a major purpose of LEAPS is to reduce the need for curtailments. Further, Nevada Hydro disagrees with CAISO's claim that WECC-wide production costs do not count outside of the interregional transmission planning process because the WECC-wide method has been part of TEAM since 2004, which predated the interregional planning requirements of Order No. 1000. Nevada Hydro argues that CAISO's approach fails to recognize the central concern of TEAM, which is to develop reasonable cost estimates for transmission projects given the uncertainty of long-term planning.⁶²

44. Nevada Hydro contends that CAISO's reliance on the California ratepayer perspective fails for two additional reasons. First, Nevada Hydro contends that CAISO measured curtailment payments instead of congestion costs, which constitutes a material and unexplained change to the CAISO ratepayer perspective method of calculating production costs. Second, Nevada Hydro contends that a project like LEAPS that will reduce the need for curtailments cannot possibly cause curtailment costs to increase as CAISO's method purports to show. Nevada Hydro claims that CAISO's calculation does not consider the payments between the generator and the load serving entity under a power purchase agreement, but instead credits ratepayers with a non-existent net benefit in the pre-LEAPS scenario. Nevada Hydro argues that CAISO's calculation is inconsistent with cost causation principles because it implies that the more negative generation there is, the better it is for CAISO ratepayers. Nevada Hydro requests that, if the Commission determines that the CAISO ratepayer perspective is the correct one, it

⁶¹ *Id.* at 12-14.

⁶² *Id.* at 15-17.

must direct CAISO to eliminate the erroneous curtailment credit from the calculation, and that the result is a net benefit from LEAPS of \$171 million.⁶³

45. Nevada Hydro surmises that CAISO materially undercounted the benefits of large-scale storage like LEAPS in its transmission planning process in the hope that CPUC will procure LEAPS through the IRP. Nevada Hydro asserts that CAISO has repeatedly found that long-duration storage facilities are critical to transmission system reliability in light of California's increasing reliance on renewable generation.⁶⁴ Nevada Hydro emphasizes that CAISO is obligated under the FPA to address reliability concerns impacting the interstate transmission grid, and should not be attempting to shift this responsibility to a state regulator that has no jurisdiction over or responsibility for transmission reliability.⁶⁵

46. Nevada Hydro asserts that cost allocation concerns are not a reason to reject the WECC-wide production cost savings calculation because Phase 2 of the transmission planning process is concerned solely with project selection to meet transmission needs. Also, Nevada Hydro contends that the CAISO ratepayer perspective calculation fails to measure the actual curtailment costs ultimately borne by ratepayers and does not take into account that LEAPS will reduce curtailments, thereby reducing customer liability for the cost of energy. Moreover, Nevada Hydro asserts that CAISO can seek to allocate a portion of the costs of LEAPS to CAISO's neighbors through the interregional planning process. Nevada Hydro argues that TEAM states that the WECC-wide perspective "is especially important for projects with interregional benefits."⁶⁶

47. Nevada Hydro argues that CAISO has no justification for denying LEAPS credit for avoided RPS overbuild cost savings. According to Nevada Hydro, CAISO agrees that "LEAPS could potentially reduce the quantity of new renewable resources that must be built to meet state RPS goals,"⁶⁷ but nevertheless asserts that the TEAM RPS overbuild criterion depends on public policy considerations that inappropriately shift responsibility

⁶³ *Id.* at 18-25; Alaywan Rebuttal Testimony at 14-22.

⁶⁴ Nevada Hydro August Answer at 26 (citing CAISO Comments, *Order Instituting Rulemaking to Develop an Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements*, CPUC Rulemaking 16-02-007, at 11-12 (Jul. 22, 2019)).

⁶⁵ *Id.* at 27-29.

⁶⁶ *Id.* at 31 (citing TEAM Guidelines at 15).

⁶⁷ *Id.* at 32 (citing CAISO July Answer at 95).

to CPUC. Nevada Hydro contends that TEAM does not contemplate that valuation of the benefits in any TEAM category will be performed by anyone but CAISO. Nevada Hydro insists that CAISO was required to use its independent judgment in estimating the cost savings to consumers if LEAPS reduces the need to build new renewable resources. ⁶⁸

48. Nevada Hydro also contends that CAISO has no credible defense for denying LEAPS the benefit of local capacity reduction savings calculated using the proxy value soft offer cap of \$6.31/kW-month, as CAISO has done in previous years. Nevada Hydro notes that CAISO's tariff requires a study before CAISO can modify the soft offer cap that applies to CAISO's backstop capacity procurement mechanism (CPM). Nevada Hydro asserts that no such study has been done and, therefore, there is no basis for CAISO to change the capacity prices it uses in its transmission planning process. Further, Nevada Hydro argues that there is no relationship between the prices used by CAISO in the 2018-2019 transmission planning process and the CPM prices that have been accepted by the Commission.⁶⁹ Nevada Hydro suggests that uncertainty about resource retirements and the ensuing resource mix supports the use of higher, not lower, capacity prices. Nevada Hydro argues that adding its local capacity benefit estimate of \$38 million per year to corrected calculations for other benefit categories would increase LEAPS' margin of clearance over the required benefit-to-cost ratio.⁷⁰

49. Nevada Hydro disputes CAISO's finding that LEAPS is not entitled to a deliverability benefit. It asserts that LEAPS will both address a capacity deficiency and increase transmission deliverability into SDG&E. Nevada Hydro highlights that CAISO has acknowledged that LEAPS can provide "voltage support and relieve flows on transmission lines,"⁷¹ and would at least "partially mitigate" transmission reliability needs in the SDG&E zone.⁷² Nevada Hydro claims that its witness, Mr. Alaywan, has demonstrated in his rebuttal testimony that the SDG&E needs arise from a capacity

⁶⁸ *Id.* at 32-36.

⁶⁹ *Id.* at 36 (stating that the Commission has accepted prices for CAISO's CPM that range between the going-forward cost of existing generation and the cost of new entry for generating plants).

⁷⁰ *Id.* at 36-38.

⁷¹ *Id.* at 38 (citing CAISO July Answer at 39).

⁷² *Id.* (citing Millar Testimony at 15).

deficiency that LEAPS would help to relieve, and that LEAPS would increase deliverability on high voltage transmission lines into SDG&E by 311 MW.⁷³

50. Finally, Nevada Hydro argues that CAISO is not justified in rejecting LEAPS as a transmission asset merely because LEAPS will also convert stored energy for sale in the wholesale market. Nevada Hydro asserts that CAISO raised, and the Commission rejected, similar arguments that a storage facility is not a transmission facility if it does not increase the transfer capability of any lines or move energy over a distance in previous proceedings. Nevada Hydro asserts that Commission policy holds that storage can be transmission, distribution, or generation depending how the facility owner intends to operate it.⁷⁴ Nevada Hydro contends that the Commission's concern is not the amount of market revenues earned by the owner for the services it provides, but that the storage owner not double recover its revenue requirement.⁷⁵

51. In its August 21, 2019 answer, CAISO argues that Nevada Hydro's answer fails to respond meaningfully to CAISO's refutation of numerous claims in the complaint and instead invokes new and erroneous theories about the allegedly flawed 2018-2019 transmission planning process. CAISO contends that Nevada Hydro's new analysis, which purports to show the inadequacy of measures identified by CAISO to address thermal overload issues in the SDG&E area, suffers from two key errors: (1) a failure to take into account all of the resources available in the area to mitigate overloads, and (2) an incorrect limit on generation re-dispatch. CAISO asserts that accounting for these errors eliminates the purported deficiencies.⁷⁶

52. CAISO denies that it ignored SDG&E's advice on the use of existing remedial action schemes and operational measures to address the identified reliability concerns. According to CAISO, SDG&E advocated only that CAISO should "strive to minimize

⁷³ *Id.* at 38-39.

⁷⁴ *Id.* at 39-40 (citing Declaratory Order, 164 FERC ¶ 61,197 at PP 22-23; *Western Grid Development, LLC*, 130 FERC ¶ 61,056, at P 44, *reh'g denied*, 133 FERC ¶ 61,029 (2010)).

⁷⁵ *Id.* at 40-42.

⁷⁶ CAISO August 21, 2019 Answer at 10-14 (CAISO August Answer); Ex. CAISO-4 at 3-6 (Millar Rebuttal Testimony).

the addition of new [remedial action schemes] and eliminate existing ones where feasible and cost-effective.”⁷⁷

53. CAISO maintains that it properly utilized the CPUC Default Scenario resource portfolio in its transmission planning process. CAISO argues that Nevada Hydro continues to conflate procuring sufficient resources to serve load with approving transmission solutions for reliable operation of grid. CAISO avers that it does not, and cannot under its tariff, make different resource procurement decisions and undermine CPUC’s generation procurement authority. CAISO asserts that its comments urging CPUC to consider renewable integration and reliability goals simultaneously were intended for the purpose of providing detailed information regarding the economic and reliability benefits of particular generation portfolios, but does not provide evidence that large-scale pumped storage resources are necessary to maintain transmission reliability.⁷⁸

54. CAISO asserts that it properly applied TEAM and based its economic planning studies on CAISO ratepayer benefits rather than WECC-wide benefits. CAISO disputes Nevada Hydro’s claim that CAISO can simply allocate a portion of LEAPS’ cost to its neighbors through the interregional planning process because LEAPS, which is located solely within the CAISO planning region and, therefore, does not qualify as an interregional transmission project. CAISO contends that discussion of WECC-wide benefits in the TEAM document since 2004 does not support Nevada Hydro’s argument that TEAM requires CAISO to calculate benefits on a WECC-wide basis. CAISO asserts that TEAM expressly states that CAISO has relied on the CAISO ratepayer perspective since it introduced the methodology. Further, according to CAISO, Nevada Hydro ignores that interregional coordination at CAISO was occurring before Order No. 1000.⁷⁹

55. CAISO contends that Nevada Hydro’s new arguments that CAISO measured curtailment costs instead of congestion costs, and did not correctly estimate the curtailment costs associated with LEAPS, are incorrect. CAISO asserts that the Transmission Plan specifically provides the congestion changes associated with LEAPS, which, along with sensitivity studies, demonstrate that resolving local congestion played an immaterial role in the benefits LEAPS can provide.⁸⁰ In addition, CAISO explains that the \$132 million in gross CAISO load payments is attributable to LEAPS triggering a

⁷⁷ CAISO August Answer at 16 (citing Ex. NHI-11 at 53).

⁷⁸ *Id.* at 17-21, 41-44.

⁷⁹ *Id.* at 23-29.

⁸⁰ *Id.* at 32-33 (citing Transmission Plan at 234-246, 346-354; Millar Rebuttal Testimony at 8).

steep increase in locational marginal prices when it charges, an outcome that has become more typical due the increasing frequency of negative prices.⁸¹ Further, CAISO asserts that power purchase agreement prices do not factor into the ratepayer benefit calculation under TEAM because they do not impact the benefits associated with a proposed transmission project.⁸²

56. CAISO reiterates that LEAPS is not entitled to a deliverability benefit because, under TEAM, the deliverability benefit is only available if there is a capacity deficiency in the local area. CAISO asserts that LEAPS' potential capability of providing some transmission service or benefit is not the same thing as CAISO having identified a specific transmission need for those services that requires a new transmission solution.⁸³

57. CAISO maintains that it did not err in not valuing local capacity in the San Diego area at the CPM soft offer cap price. CAISO asserts that its tariff does not require it to use that value in its transmission planning process, nor does it require CAISO to present a study to use a different value for transmission planning purposes. CAISO contends that using a constant value would ignore that capacity prices change over time.⁸⁴

58. Regarding Nevada Hydro's claim that CAISO's transmission planning process violates Order No. 1000 by segregating the reliability analysis and economic study requests, CAISO argues that the Commission has already considered and rejected similar arguments.⁸⁵

59. Finally, CAISO denies that it rejected LEAPS as a transmission asset simply because it will convert stored energy for sale in the wholesale market. CAISO maintains that it studied every possible permutation of LEAPS' operation and counted every benefit that it could provide, but rejected LEAPS because there is no reliability transmission need for it and because LEAPS' costs overwhelmingly outweigh the projection of its benefits.⁸⁶

⁸¹ CAISO August Answer at 34-38; Millar Rebuttal Testimony at 12-13.

⁸² CAISO August Answer at 38-39; Millar Rebuttal Testimony at 13-14.

⁸³ CAISO August Answer at 44-45.

⁸⁴ *Id.* at 45-50.

⁸⁵ *Id.* at 50-51 (citing *Cal. Indep. Sys. Operator Corp.*, 143 FERC ¶ 61,057 at P 58).

⁸⁶ *Id.* at 52-57.

60. In its September 5, 2019 answer, Nevada Hydro disputes CAISO's finding of no need for new transmission solutions in the San Diego area. Nevada Hydro highlights that, based on the data provided by CAISO in the Transmission Plan, Mr. Alaywan's analysis demonstrated capacity shortages in the SDG&E zone in 2023 and 2027. Nevada Hydro claims that CAISO has failed to identify the resources on which it will allegedly rely to avoid the deficiencies and, therefore, contends that CAISO's analysis suffers from a material data deficiency. Nevada Hydro therefore asserts that, at a minimum, a trial-type hearing is necessary to resolve the dispute.⁸⁷ Nevada Hydro also contends that CAISO's answer confirms that it departed from TEAM by attributing a \$132 million curtailment cost to LEAPS. To the contrary, Nevada Hydro asserts that TEAM expressly counts the avoidance of renewable generation curtailments due to over-supply as a benefit to load, not a cost.⁸⁸ Nevada Hydro alleges that CAISO treated LEAPS differently from other transmission projects in assessing curtailment costs and benefits.⁸⁹

61. Nevada Hydro disputes that CAISO is required to adopt CPUC inputs without critical evaluation. Nevada Hydro asserts that CAISO's own Unified Planning Assumptions limited CAISO to using only generation that has contracts or permits in modeling new renewable resources in the transmission planning process.⁹⁰

62. In its September 20, 2019 answer, CAISO asserts that there are no material issues of fact warranting a hearing. It states that it identified the 201 MW of storage resources on which it relied in its reliability studies and explains that the Unified Planning Assumptions discussed how those resources would be used in the studies.⁹¹ CAISO also details the resources that can be curtailed to address overloads in the San Diego area.⁹²

63. CAISO argues that Nevada Hydro misrepresents the economic planning study results and its statements pertaining to those studies. CAISO asserts that Nevada Hydro's

⁸⁷ Nevada Hydro September 5, 2019 Answer at 2-8 (Nevada Hydro September Answer); Ex. NHI-13 at 2-6 (Alaywan Sur-Rebuttal Testimony).

⁸⁸ Nevada Hydro September Answer at 9-10 (citing TEAM Guidelines, §§ 2.2.2 and 2.5.5).

⁸⁹ *Id.* at 8-14; Alaywan Sur-Rebuttal Testimony at 6-14.

⁹⁰ Nevada Hydro September Answer at 14-16.

⁹¹ CAISO September 20, 2019 Answer at 6-11, 15-17 (citing CAISO Ex. 5 at 3-4 (Millar Sur-Rebuttal Testimony); Unified Planning Assumptions at 26).

⁹² *Id.* at 12-15 (citing Millar Sur-Rebuttal Testimony at 7-14).

allegation that the negative \$132 million production costs attributed to LEAPS comes entirely from curtailment costs is overly simplistic and fails to account for the full scope of CAISO's production cost simulation. CAISO avers that, consistent with TEAM and as described in the Transmission Plan, its production cost model reflected all of the costs and revenues arising from LEAPS to determine CAISO ratepayer benefits.⁹³

64. CAISO disagrees with Nevada Hydro that its study methodology prevents storage resources from being economic. It argues that Nevada Hydro identifies no specific flaws in CAISO's production cost simulation and instead relies on unsupported assumptions about the general curtailment benefits of pumped storage. CAISO argues that Nevada Hydro offers no evidence to demonstrate that CAISO used different methodologies to study different projects; rather, CAISO emphasizes that the results cited by Nevada Hydro demonstrate that transmission lines in different locations can have different impacts on costs. CAISO also reiterates that, for purposes of studying the incremental impact of a transmission addition, prices in power purchase agreements are irrelevant.⁹⁴

65. CAISO argues that LEAPS is not entitled to any public policy, or RPS savings, benefit under section 2.5.5 of TEAM based on avoided curtailments. CAISO states that Nevada Hydro's position constitutes an attempt to dictate or second guess CPUC's procurement decisions. Further, CAISO asserts that section 2.5.5 of TEAM does not contemplate a benefit based on calculating the energy costs of curtailed generation, which renders Nevada Hydro's calculation inconsistent TEAM.⁹⁵ Finally, CAISO reiterates that it properly considered and adopted the CPUC Default Scenario portfolio. CAISO notes that the Unified Planning Assumptions permit CAISO to supplement the CPUC portfolio, but do not suggest that CAISO could or should ignore resources in CPUC's renewable generation portfolios. CAISO emphasizes the importance of coordination with CPUC in the transmission planning process and contends that Nevada Hydro's call for CAISO to use its independent judgment to evaluate CPUC generation procurement and planning decisions would significantly undermine the coordination efforts that have allowed CAISO to identify needed transmission projects.⁹⁶

66. In its October 7, 2019 Answer, Nevada Hydro again challenges CAISO's finding of no reliability need for new transmission solutions in the San Diego area. Nevada Hydro argues that the operational measures and other assumptions used by CAISO in its

⁹³ *Id.* at 17-20.

⁹⁴ *Id.* at 20-29.

⁹⁵ *Id.* at 30-33.

⁹⁶ *Id.* at 33-36.

analysis will not be sufficient to address contingencies because CAISO's planning model failed to adjust for plants repowering at lower output, overstated the capacity of other plants and the availability of hydroelectric plants during the summer peak, and failed to consider the need for generating capacity to rebalance the system within 15 minutes.⁹⁷

67. Nevada Hydro also contends that CAISO has failed to substantiate the \$132 million production cost increase finding in its economic study of LEAPS. Nevada Hydro asserts that this calculation is demonstrably wrong because LEAPS will reduce excess supply during negative pricing hours, thereby lowering the cost of energy ultimately paid by load through power purchase agreements. Nevada Hydro argues that this cost reduction passes directly to load and is an unambiguous benefit of LEAPS. Nevada Hydro asserts that CAISO has not documented the savings differential between generators that are, and are not, under power purchase agreements or otherwise explained how the distinction could matter. Additionally, Nevada Hydro contends that CAISO has admitted that its curtailment cost calculation is wrong at a recent transmission planning conference when it reported that its curtailment calculations in the transmission planning model have serious flaws.⁹⁸

68. In addition, Nevada Hydro claims that CAISO discriminated against LEAPS by calculating a \$73 million market benefit from LEAPS and not calculating a benefit based on the energy costs of curtailed generation. Nevada Hydro also repeats its prior argument that CAISO erred by claiming that the renewable resources identified by CPUC in the Default Scenario portfolio already account for the benefit associated with avoided renewable resource overbuild. Nevada Hydro maintains that reliance on the CPUC portfolio is an improper jurisdictional abdication.⁹⁹

VII. Discussion

A. Procedural Matters

69. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2019), we grant GridLiance West LLC's late-filed motion to intervene

⁹⁷ Nevada Hydro October 7, 2019 Answer at 2-8; Ex. NHI-14 at 3-4, 7; Ex. NHI-15 at 3.

⁹⁸ Nevada Hydro October 7, 2019 Answer at 8-11.

⁹⁹ *Id.* at 11-12.

given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

70. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2)(2019), prohibits an answer to a protest or answer unless otherwise ordered by the decisional authority. We accept the answers filed by Nevada Hydro, NextEra, and CAISO because they have provided information that assisted us in our decision-making process.

B. Substantive Matters

71. We deny the complaint because we find that Nevada Hydro has not demonstrated that CAISO violated its tariff in its study of LEAPS as both a proposed reliability-driven transmission solution and a proposed economic transmission project as part of the 2018-2019 transmission planning cycle, or that the results of that process are unjust and unreasonable or unduly discriminatory against Nevada Hydro.

72. Section 24.4.6.2 of the CAISO tariff addresses the identification of reliability-driven transmission solutions. Pursuant to this section, CAISO must identify the need for any transmission solutions required to ensure system reliability and, in making this determination, "shall consider lower cost solutions, such as acceleration or expansion of existing transmission solutions, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads, storage facilities or reactive support." As CAISO explains, the solutions that Nevada Hydro questions (i.e., the storage and demand response solutions authorized by CPUC, as well as existing remedial action schemes) were already part of the assumptions applied by CAISO in its analysis of a potential need for new transmission solutions to address thermal overload concerns on the SDG&E's transmission system. Further, as measures that are already in place or under construction, these solutions present no new incremental costs to be considered.

73. We find that CAISO followed tariff Section 24.4.6.2 in its examination of a potential transmission reliability need for the San Diego area, and in arriving at its finding of no necessary new transmission solutions once it considered all existing and approved solutions. Application of the published planning assumptions does not constitute an undue preference for certain solutions or undue discrimination against LEAPS. Because CAISO's studies found no need for new transmission solutions, and because the existing solutions present no new capital costs, we find that CAISO's tariff does not require it to compare the cost effectiveness of LEAPS with that of reliability solutions that are already in operation or under construction, or discuss the pros and cons of relying on existing measures that adequately ensure reliability versus investing in new transmission assets.

74. Nevada Hydro bases its assertion that CAISO was obligated to perform a comparability analysis on its claim that CAISO erred in finding no new reliability need.

We find this line of argument to be unavailing. Mr. Alaywan's evaluations reach different reliability conclusions, but that is not a demonstration that CAISO violated its tariff. Moreover, we do not find that Nevada Hydro's alternative reliability conclusions raise an issue of material fact that warrants the initiation of a hearing. CAISO has explained the source of the full 201 MW of storage resources relied upon in its studies and has also identified both the specific additional generation it can curtail, and other operational measures it can use, to address the identified reliability needs in the San Diego area.¹⁰⁰ We find the record before us sufficient to determine that Nevada Hydro has not met its FPA section 206 burden to demonstrate that CAISO violated its tariff and Order No. 1000 principles in the 2018-2019 transmission planning process.

75. We reject Nevada Hydro's allegation that CAISO's transmission planning process violates any Order No. 1000 principle for selecting the more efficient or cost effective solutions by allegedly failing to count economic benefits in the evaluation of reliability projects.¹⁰¹ First of all, as discussed above, CAISO found no reliability need that required a new transmission solution, and therefore it was appropriate for CAISO's review of LEAPS as a proposed reliability-driven transmission project to end with that finding, thus treating LEAPS as a proposed economic transmission project from that point forward. Had there been a reliability need that required a new transmission solution, then the Commission has already found that, although CAISO considers different categories of potential transmission needs in a sequential manner, it "does not consider these categories in isolation; instead, CAISO subsequently reevaluates whether a particular transmission solution would also solve other transmission needs."¹⁰² We continue to find that CAISO's transmission planning process is designed in a manner that considers the full benefits of any proposed transmission solution, and that CAISO applied its process correctly with respect to its study of LEAPS. In particular, the fact that CAISO found no reliability need that required a new transmission solution, and therefore did not continue to study LEAPS as a proposed reliability-driven transmission project that would ultimately be evaluated for its benefits, does not violate Order No. 1000.

76. We also find that CAISO followed its tariff and TEAM when studying LEAPS as an economic project. Section 24.4.6.7 of the CAISO tariff sets forth the parameters for CAISO's assessment of economically-driven transmission projects. In particular, this tariff section specifies that "in determining whether additional transmission solutions are needed, the CAISO shall consider the degree to which, if any, the benefits of the transmission solutions outweigh the costs," and further states that the "benefits of the

¹⁰⁰ CAISO September Answer at 6-15; Millar Sur-Rebuttal Testimony at 3-5, 7-14.

¹⁰¹ Nevada Hydro August Answer at 12.

¹⁰² *Cal. Indep. Sys. Operator Corp.*, 143 FERC ¶ 61,057 at P 58.

solutions may include a calculation of any reduction in production costs, [c]ongestion costs, [t]ransmission losses, capacity or other electric supply costs resulting from improved access to cost-efficient resources.”¹⁰³ With regard to Nevada Hydro’s objection to CAISO’s use of the 4,183 MW of generation and 2,000 MW export limit identified in the CPUC Default Scenario portfolio, we note that, as part of CAISO’s transmission planning process, stakeholders are provided the opportunity to comment on CAISO’s intended planning assumptions in the first phase of the transmission planning process. Once the planning assumptions and study plan are adopted, those assumptions are locked in for the rest of the transmission planning cycle. Nevada Hydro did not raise objections to either of those inputs during the planning assumption phase of the transmission planning process¹⁰⁴ and, therefore, we find that raising such objections here is an improper attempt to second guess the planning assumptions that were properly adopted by CAISO pursuant to the relevant tariff and business practice manual procedures. Additionally, we find that it is reasonable for CAISO to rely on the CPUC resource portfolio in informing its transmission planning process in order to ensure that the transmission grid is developed in a way that can accommodate the resources selected by CPUC through its IRP process.

77. We find no merit in Nevada Hydro’s assertion that CAISO abdicated its responsibilities as a regional transmission organization by adopting the CPUC Default Scenario portfolio. As noted by CAISO, its role is transmission planning, not resource procurement, and nothing in its tariff requires CAISO to second guess or reverse CPUC’s resource procurement decisions or dictate what resources CPUC-jurisdictional entities can or cannot procure.¹⁰⁵ Moreover, as discussed by CPUC in its protest, the resources identified in the CPUC Default Scenario portfolio are not theoretical, as alleged by Nevada Hydro, because load serving entities are required to plan for that amount of resources and CPUC has the authority to enforce that the appropriate amount of resources is available and online when needed to ensure reliability.¹⁰⁶ Nevada Hydro articulates no authority or justification for CAISO to substitute alternative inputs.

78. Further, we agree with CAISO that nothing in the CAISO tariff or TEAM guidelines requires CAISO to credit LEAPS with WECC-wide production cost savings. To the contrary, TEAM makes clear that CAISO’s economic analysis “focuses on the

¹⁰³ CAISO Tariff, § 24.4.6.7.

¹⁰⁴ CAISO July Answer at 54.

¹⁰⁵ *Id.* at 26-29, 93-96; CAISO August Answer at 42.

¹⁰⁶ CPUC Protest at 6.

benefits that would accrue to those entities funding the upgrade.”¹⁰⁷ The TEAM guidelines also expressly state that in applying the cost-benefit framework for economically driven transmission projects, the “net benefits should be the summation of the benefits for all market participants who pay for the project less their costs.”¹⁰⁸ Further, as stated by CAISO, LEAPS is located only within the CAISO footprint and, as such, its costs cannot be involuntarily assigned to any other planning region.¹⁰⁹ Moreover, Nevada Hydro has not submitted LEAPS for study and cost allocation to any other planning region as an interregional project.¹¹⁰ That TEAM pre-dates interregional transmission coordination under Order No. 1000 is inapposite. CAISO’s efforts at interregional coordination prior to Order No. 1000 do not invalidate TEAM’s clear focus on the CAISO ratepayer perspective. Thus, we find that CAISO properly limited its analysis of LEAPS’s net benefits to CAISO production cost savings.

79. We find that Nevada Hydro’s reliance on the results of CAISO’s 2018 Sensitivity Studies is misplaced, both with reference to CAISO’s alleged obligation to credit LEAPS with WECC-wide production cost savings and to the potential benefits of LEAPS more generally. Nevada Hydro ignores that the 2018 Sensitivity Studies were performed for the purpose of informing the CPUC IRP, and not to identify a need for specific transmission projects. Thus, when the 2018 Sensitivity Studies identified the benefits of a hypothetical large pumped storage facility, the benefits were evaluated in relation to generation and not transmission assets. We find no basis for concluding that CAISO was obligated to select LEAPS as a transmission solution simply because it found potential benefits of a large pumped storage facility as a generation resource.¹¹¹ Finally, the 2018

¹⁰⁷ TEAM Guidelines at 20.

¹⁰⁸ *Id.* at 18.

¹⁰⁹ CAISO Tariff, Appendix A, Definitions – Interregional Transmission Project: Means a proposed new transmission project that would directly interconnect electrically to existing or planned transmission facilities *in two or more Planning Regions . . .* (emphasis added).

¹¹⁰ CAISO August Answer at 26-27.

¹¹¹ This difference in purpose also renders moot Nevada Hydro’s argument that the PLEXOS computer model is superior to the GridView model. As discussed by CAISO, it has traditionally used GridView in the transmission planning process because of its superior capability in modeling transmission constraints and contingencies. CAISO July Answer at 25.

Sensitivity Studies were based on a different CPUC portfolio than the Transmission Plan, which diminishes the persuasiveness of any direct comparison between the results.

80. We are likewise not persuaded by Nevada Hydro's arguments concerning CAISO's calculation of congestion and curtailment costs. Nevada Hydro's claim that CAISO did not calculate congestion costs is incorrect. The Transmission Plan expressly includes a detailed discussion of how CAISO assessed congestion and congestion costs,¹¹² and also specifically discusses the congestion changes associated with three different LEAPS configurations.¹¹³ Despite Nevada Hydro's repeated insistence that assessing curtailment costs instead of benefits to a facility that can reduce curtailments is counterintuitive, we find that Nevada Hydro demonstrates no violation of CAISO's tariff or TEAM in how CAISO assessed the impact of curtailments on LEAPS' benefit-to-cost ratio. Rather, Nevada Hydro's arguments on this point, particularly its argument that CAISO's calculation fails to account for payments under power purchase agreements, represent an alternative calculation methodology that is not required by TEAM. We find no merit in Nevada Hydro's claim that CAISO treated LEAPS differently from traditional transmission projects in its calculation of curtailment costs and benefits.¹¹⁴ That CAISO's analysis produced a different result for different projects does not demonstrate undue discrimination or any tariff violation, but merely shows that two different projects, at different locations, have different impacts on congestion and what load ends up paying.

81. With regard to CAISO's calculation of local capacity cost savings, nothing in the CAISO tariff or TEAM guidelines specifies the value that CAISO should use. Thus, CAISO's decision to use a more conservative value than it had in the previous transmission planning cycles does not constitute a tariff violation. In addition, we find that CAISO's explanation of its rationale for taking a more conservative approach in the 2018-2019 transmission planning cycle, i.e., that its studies did not show a shortage of local capacity in the relevant area, is reasonable.¹¹⁵

82. We further find that Nevada Hydro's reliance on the CPM soft offer cap of \$6.31/kW-month is misplaced for several reasons. First, as noted by CAISO, the use of

¹¹² Transmission Plan at 234-246.

¹¹³ *Id.* at 346-354.

¹¹⁴ Nevada Hydro provides an example where CAISO found, in its study of a proposed 500 kV transmission line, a production cost reduction associated with reduced curtailments in comparison to CAISO's finding that LEAPS will increase production costs despite reducing curtailments. Nevada Hydro September Answer at 11.

¹¹⁵ Transmission Plan at 232.

that value in the previous transmission planning cycle represents the upper value in a range of values used, and not the sole value used,¹¹⁶ as argued by Nevada Hydro. Second, the study referenced by Nevada Hydro as a prerequisite for changing the soft offer cap¹¹⁷ applies only to the use of that value within the context of CPM and has no relevance to the transmission planning process.¹¹⁸ Third, as noted by CAISO, even if it had applied the \$6.31/kW-month value, as requested by Nevada Hydro, the benefit-to-cost ratio for LEAPS still would have been below the 1.0 threshold. Thus, we are not persuaded that CAISO's calculation of local capacity savings provides any basis for granting the relief requested by Nevada Hydro. Finally, we find that there was no undue discrimination against LEAPS or an undue preference for other projects with regard to the calculation of local capacity benefits because CAISO applied the same value in its study of all proposed economic projects, including LEAPS.¹¹⁹

83. With regard to Nevada Hydro's arguments about CAISO undercounting or not counting benefits in the other TEAM benefit categories, we find that neither the tariff nor TEAM requires CAISO to credit a project with benefits in every category, as not all types of benefits will be applicable to all projects under consideration. Indeed, in this case, we agree with CAISO that benefits related to RPS savings and avoided interconnection costs are inapplicable to LEAPS because any such benefits were already accounted for in the CPUC Default Scenario portfolio.¹²⁰ We find that many of Nevada Hydro's complaints related to RPS savings benefits, such as its allegation that CAISO's conclusions about sufficient renewable capacity throughout the 10-year planning horizon are wrong, constitute an effort to second guess CPUC's resource planning decisions. Importantly, Nevada Hydro relies on the CPUC Hybrid Conforming Portfolio to illustrate a deficiency in renewable resources, but CAISO used the CPUC Default Scenario portfolio, and not the Hybrid Conforming Portfolio, in the 2018-2019 transmission planning process. As discussed above, we find that CAISO properly adopted the CPUC Default Scenario portfolio as part of its Unified Planning Assumptions and provided opportunity for stakeholder comment. Nevada Hydro points to nothing in the CAISO tariff or TEAM that would require CAISO to second guess CPUC resource planning decisions as part of the transmission planning process. We also reject Nevada Hydro's argument that, even if the potential RPS benefits were accounted for in the CPUC Default Scenario portfolio,

¹¹⁶ CAISO August Answer at 46; CAISO July Answer at 86-87.

¹¹⁷ Nevada Hydro August Answer at 37.

¹¹⁸ See CAISO Tariff, §§ 43A4.1.1 and 43A.4.1.1.1.

¹¹⁹ CAISO July Answer at 90.

¹²⁰ *Id.* at 94-95; CPUC Protest at 8.

CAISO had an independent mandate to evaluate how much generating capacity could be avoided by building LEAPS. We find this line of argument to be merely a slight restatement of Nevada Hydro's objection to CAISO's use of the CPUC resource portfolio in its planning assumptions, and we have already addressed that objection above.

84. Nevada Hydro also fails to establish that CAISO violated its tariff or TEAM by finding that LEAPS is not entitled to increased deliverability benefits. TEAM expressly states that the "deliverability benefit can only materialize when there will be capacity deficit in the region under full study."¹²¹ CAISO found no capacity deficit in the San Diego/Imperial Valley region. Therefore, we find that CAISO correctly determined that LEAPS is not entitled to benefits in this category. Nevada Hydro disagrees with CAISO's conclusion that there will be no capacity deficit in the San Diego/Imperial Valley region over the 10-year planning horizon, but its claim that LEAPS can free up capacity on an existing line into San Diego cannot be counted as a benefit under TEAM when the services to be provided are not needed to remedy a deficiency. For similar reasons, we reject Nevada Hydro's argument that CAISO erred by not crediting LEAPS with benefits for avoided costs associated with other approved reliability or policy projects. CAISO has not identified a reliability need for the transmission upgrades used by Nevada Hydro to estimate reliability cost savings and, therefore, building LEAPS cannot avoid the costs of upgrades that are not needed and have not been approved by CAISO.

85. We also find that CAISO's calculation of market revenues for LEAPS was consistent with TEAM. TEAM specifies that "[i]n the CAISO's economic planning, five-year and ten-year studies are conducted to get the benefits for these two years."¹²² In this case, CAISO could not study the five-year time horizon because LEAPS is not planned to become operational until 2025. Further, as noted by CAISO, it will typically only develop a five-year planning case if the 10-year case indicates sufficient benefits to warrant developing the additional data point.¹²³ Thus, we find that CAISO's use of the 2028 market revenue calculations adheres to the TEAM guidelines. In contrast, Nevada Hydro provides no valid justification for calculating market revenues using projected prices from 2026, 2030, and 2045, which bear no relation to the TEAM study framework. Further, the TEAM guidelines state that, for calculations beyond the 10-year timeframe, "benefits are assumed to be flat at the same value as the ten-year benefit."¹²⁴ CAISO's

¹²¹ TEAM Guidelines, § 2.5.3.

¹²² *Id.* at 19.

¹²³ CAISO July Answer at 108 (citing 2016-2017 Transmission Plan at 169; 2017-2018 Transmission Plan at 224).

¹²⁴ TEAM Guidelines at 19.

calculation applied this assumption, whereas Nevada Hydro's calculation deviated from the TEAM requirements by escalating the benefits annually beyond the 10-year horizon. Accordingly, we are not persuaded by Nevada Hydro's argument on this point.

86. We find no evidence that CAISO's study of LEAPS was biased by a predetermined conclusion that LEAPS is generation asset or that storage cannot qualify as transmission. Rather, for the reasons discussed above, we find that CAISO studied LEAPS consistent with the processes and requirements set forth in its tariff and related transmission planning documents, including TEAM, without reference to whether the proposed facility is a generator or transmission. CAISO does not deny that LEAPS can provide transmission benefits, but that potential does not equate to a transmission need and does not, in itself, guarantee eligibility to recover costs through transmission rates. In the Declaratory Order, the Commission rejected Nevada Hydro's attempt to secure cost-base rate recovery when it found that "Nevada Hydro's arguments that LEAPS is a transmission facility are too general to support such a finding . . ." ¹²⁵ The Commission found that, if CAISO identified LEAPS "as a more efficient or cost-effective solution to identified transmission needs," then Nevada Hydro could make a filing for cost recovery through the CAISO TAC. ¹²⁶ Further, in the Declaratory Order, the Commission stated that, if CAISO found that LEAPS would meet an identified transmission need, the Commission would need information on how LEAPS would be operated to make a reasoned decision on whether it would be eligible for cost recovery under the TAC. ¹²⁷ Here, as discussed above, CAISO has not identified a reliability need for LEAPS and has found that the economic benefits are far outweighed by the costs. Thus, we do not require any additional information about how CAISO would operate LEAPS as a transmission asset since, at this time, we cannot find that LEAPS can recover costs under the TAC.

87. We reject Nevada Hydro's request to direct CAISO to include additional metrics from the TEAM Guidelines in the tariff. The Commission has previously considered and rejected arguments that CAISO should include in its tariff additional detail related to the methods and metrics by which CAISO evaluates economic transmission projects, finding that CAISO's tariff included sufficient detail on this topic. ¹²⁸ Nevada Hydro has presented no compelling reason in this proceeding to reconsider that determination.

¹²⁵ Declaratory Order, 164 FERC ¶ 61,197 at P 24.

¹²⁶ *Id.* P 25.

¹²⁷ *Id.* P 22.

¹²⁸ *Cal. Indep. Sys. Operator Corp.*, 143 FERC ¶ 61,057 at P 62.

The Commission orders:

Nevada Hydro's 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.