



Stakeholder Comments

2017-2018 Draft Transmission Plan

Submitted by	Company	Date Submitted
Jin Noh 510-665-7811 x109 jnoh@storagealliance.org	California Energy Storage Alliance ("CESA")	February 22, 2018

CESA appreciates the opportunity to comment on the 2017-2018 Draft Transmission Plan and commends the California Independent System Operator (CAISO) for its extensive and detailed analysis and modeling in the Transmission Planning Process (TPP) to identify transmission needs and potential transmission solutions, including from non-wires alternatives such as energy storage.

Moorpark-Pardee 230-kV No. 4 Circuit Project

CESA remains uncertain on if CAISO's recommendation to approve the Moorpark-Pardee 230-kV No. 4 Circuit Project is ultimately best because CESA believes the likelihood of load shedding in the CAISO's proposal may be higher to a degree where a 'local generation' solution would be more appropriate. A key distinction in this matter is that the TPP should strive to promote outcomes that: (a) promote compliance in line with reliability standards while (b) avoiding outcomes that may cost money while not materially reducing the likelihood of load shedding. CESA, of course, respects the CAISO's right to make a determination and to comply with the Tariff-directed approaches of its transmission planning process. CESA notes, however, that the CAISO likely has some flexibility to determine where it may be in the ratepayer interest as well.

While the CAISO found Moorpark-Pardee No. 4 to be needed as a reliability project,¹ CESA is viewing the project from the point of view of the ratepayer, asking the question “for the amount of money being spent, how much is the potential for load shedding reduced?” This CESA position is based on our understanding that load shedding risks may be mostly the same despite the Moorpark-Pardee solution, and that this transmission expansion was rejected in the past for these reasons.² CESA believes key concerns may still remain related to the reliability of service delivery to customers in the Moorpark sub-area, and that local resources are needed to ensure a more resilient electric power supply in the case of severe transmission contingencies. If CESA is misinformed, we look forward to dialoguing with the CAISO to learn more.

The urgency to this decision should also be informed by results from an outstanding solicitation for energy storage and preferred resources in the affected area, which could presumably mitigate some or all of the need for transmission solutions. While the CAISO indicated that approval in March 2018 is needed to meet the requested in-service date in time for the scheduled once-through cooling generating unit retirements, an extra month or two of extra consideration will provide the CAISO some optionality to consider how local generation may resolve needs or demonstrate that non-wires solutions are available and viable, pending short-list information from SCE’s Moorpark Local Capacity Requirements (LCR) and Goleta Resilience Request for Proposals (RFP), which also address the sub-area’s LCR needs and to potentially avoid the need to approve the \$45-million Moorpark-Pardee 230-kV No. 4 Circuit Project. In the 2017-2018 Draft Transmission Plan, the CAISO noted that one of the areas where non-wires alternatives are particularly viable are those where conventional transmission solutions can serve as a backstop to meet the identified transmission need.³ The CAISO Board of Governors may benefit greatly from clarity on the actual probabilities of load-shedding and of any options that could materially reduce load-shedding risk and information on the optionality of waiting to authorize Moorpark-Pardee should be clarified in any Board approval proposal.

As the CAISO has noted in a separate proceeding, “the economic feasibility of the preferred resource portfolio can only be established through a new RFO”.⁴ If lower-than-expected costs

¹ 2017-2018 Draft Transmission Plan, p. 195.

² While the Moorpark-Pardee line may support compliance with applicable grid contingency standards, CESA remains unclear on if they sufficiently support local reliability for contingencies involving the entire transmission corridor, as conditions (e.g., wildfires, earthquakes, and mudslides) prompting an outage on any of the Moorpark-Pardee lines might very well affect both lines. Additionally, non-wire alternatives may address the same planning standards as the transmission solution while simultaneously addressing some of the reliability and service-delivery concerns in the Moorpark sub-area, thus these solutions may be superior. See CESA’s comments on January 18, 2018.

<http://www.storagealliance.org/sites/default/files/Filings/2018-01-18%20CESA%27s%20Comments%20on%20SCE%20Moorpark-Pardee%20230-kV%20No.%204%20Circuit%20Project%20-%20FINAL.pdf>

³ 2017-2018 Draft Transmission Plan, p. 26.

⁴ *CAISO Comments regarding Puente Power Project*, Docket 15-AFC-01, submitted on September 29, 2017. p. 2.

materialize from the competitive solicitation process, the CAISO could potentially redirect its TPP decision since circumstances would no longer support the need for the project. The CAISO has already done this with a number of projects in the 2017-2018 Draft Transmission Plan,⁵ and CESA believes it would be prudent to pursue a pathway that provides optionality for Moorpark customers to receive more reliable and resilient service and that validates cost assumptions made by the CAISO in its economic analysis.

South Bay-Moss Landing Projects

Given that this proposed project recommended for approval will have a significant impact on the LCR need for the competitive solicitation as required by the California Public Utilities Commission (CPUC) in Resolution E-4909,⁶ CESA requests clarity on the residual LCR need in the South Bay-Moss Landing sub-area. CESA salutes the CAISO for reviewing how transmission operating assumptions can greatly affect costs and local capacity needs.⁷⁸

Oakland Clean Energy Initiative

CESA supports the CAISO's recommendation to approve the Oakland Clean Energy Initiative as proposed by PG&E.⁹ This type of solution combining traditional transmission solutions with non-wires alternatives such as energy storage and preferred resources represents a major milestone toward actually sourcing and procuring non-wires alternatives to meet an identified transmission need. At the same time, the CAISO indicated that "additional economic evaluation" is necessary for this integrated solution.¹⁰ CESA agrees and believes that the CAISO should consider how the TPP process can be adjusted to account for robust and updated economic analysis of non-wires alternatives, especially since the CAISO cannot directly procure and approve non-transmission alternatives as projects or elements in the comprehensive

http://docketpublic.energy.ca.gov/PublicDocuments/15-AFC-01/TN221345_20170929T153404_CAISO_Comments_regarding_Puenete_Power_Project.pdf

⁵ 2017 Draft Transmission Plan, pp. 2-3, 6.

⁶ Resolution E-4909, *Authorizing PG&E to procure energy storage or preferred resources to address local deficiencies and ensure local reliability*, issued on January 11, 2018.

<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M200/K602/200602742.PDF>

⁷ The CAISO proposes a combination of reliability and economic projects that addresses identified transmission reliability issues and reduce the LCR need in the South Bay-Moss Landing sub-area by 400-600 MW, with many of the projects being in service by 2018 or 2019 and obviating the need for the Metcalf Energy Center in 2019.

⁸ *Ibid*, pp. 82, 87, 124-126, 260-262.

⁹ 2017-2018 Draft Transmission Plan, p. 128.

¹⁰ *Ibid*, p. 124.

transmission plan.¹¹ With the competitive solicitation process for non-wires alternatives occurring outside of the CAISO's TPP process, the CAISO has less visibility on the reported costs of non-wires alternative solutions, which could then serve as some basis for cost assumptions used in the economic analysis of non-wires alternatives to any identified transmission need. Generally, CESA strongly supports the Oakland Clean Energy Initiative and will be an active stakeholder in providing input and feedback on any additional economic analysis needed to refine the consideration of non-wires alternatives.

Storage as a Transmission Facility Initiative

CESA supports the CAISO's intent to address issues related to the utilization of electric storage resources for multiple services when receiving cost-based rate recovery,¹² as evidenced by the inclusion of a new Storage as Transmission Facility Initiative in the most recent CAISO Policy Initiatives Catalog.¹³ CESA reiterates its support in these comments and appreciates the CAISO's support for the new initiative in the 2017-2018 Draft Transmission Plan.

In effect, the Policy Statement (PL17-2) issued by the Federal Energy Regulatory Commission (FERC) answered the key threshold question of whether electric storage resources can provide transmission and clarified that providing services at both cost- and market-based rates is permissible as a matter of policy. In the Energy Storage Track 2 proceeding at the CPUC, new rules have been developed that would create a framework by which energy storage resources providing transmission deferral services may be also eligible to provide other grid services, depending on the application and needs being addressed. These CPUC rules should naturally continue to inform the new Storage as a Transmission Facility Initiative at the CAISO.

Special Studies

CESA thanks the CAISO for continuing to evaluate the benefits of bulk energy storage systems in the 2017-2018 TPP cycle and updating the analysis from previous TPP cycles dating back to the 2015-2016 TPP cycle with higher Renewable Portfolio Standard (RPS) portfolios and with additional sensitivity cases. CESA believes that energy storage systems have a major role to play in the state's pursuit of its ambitious renewable and climate goals, and bulk storage resources need to be evaluated and have pathways to compete to provide services. While appreciative of

¹¹ *Ibid*, p. 14.

¹² *Ibid*, pp. 27-28.

¹³ Policy Initiatives Catalog, published on December 7, 2017, p. 20.

<http://www.aiso.com/Documents/2018PolicyInitiativesCatalog.pdf>

the efforts thus far, CESA requests that a special study be conducted again in the 2018-2019 TPP cycle with updated Reference System Plan portfolios for the Integrated Resource Plan (IRP) proceeding and with additional test cases for the various types of bulk energy storage systems (e.g., compressed air energy storage, liquid air energy storage, pump-hydro storage). CESA requests these additional special studies because the CAISO acknowledged that the 2017-2018 special study analysis does not reflect the new planning assumptions coming from the IRP proceeding.¹⁴ Furthermore, with the adopted Reference System Plan recommending an additional 9,000 MW of utility-scale solar resources and 1,100 MW of wind resources in the system portfolio to reach the state's greenhouse gas (GHG) emission targets, CESA believes that it will be important to reassess the production cost and reliability benefits of bulk energy storage systems since pumped storage resources in the special study were found to be more effective with a high-solar RPS portfolio.¹⁵

CESA expects that the 2030 portfolio will consist of a solar-heavy resource mix where energy storage resources will increasingly provide needed flexibility and renewables integration.¹⁶ A number of sensitivities in the IRP modeling demonstrated the potential need for pumped storage and other storage resources.¹⁷ Given the potential need for storage combined with the long lead time for some bulk storage resources, CESA believes that continued special study efforts by the CAISO will greatly inform the CPUC in the IRP proceeding on potential modeling improvements and policy actions going forward, as well as potentially provide the CAISO with the flexible resource tools that may be needed to integrate a solar-heavy resource mix.

Conclusion

We appreciate CAISO's consideration of CESA's comments and look forward to ongoing participation in the TPP.

¹⁴ *Ibid*, p. 287.

¹⁵ *Ibid*, p. 293.

¹⁶ *Decision Setting Requirements for Load Serving Entities Filing Integrated Resource Plans*, D.18-02-018, issued on February 13, 2018. <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M209/K771/209771632.PDF>

¹⁷ *Comments of the California Energy Storage Alliance on the Proposed Decision Setting Requirements for Load Serving Entities Filing Integrated Resource Plans*, submitted on January 17, 2018 in R.16-02-007. pp. 6-8.

<http://www.storagealliance.org/sites/default/files/Filings/2018-01-17%20CESA%27s%20Comments%20on%20IRP%20Reference%20System%20Plan%20PD%20-%20FINAL.pdf>