

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue  
Electric Integrated Resource Planning and  
Related Procurement Processes.

Rulemaking 20-05-003  
(Filed May 7, 2020)

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE ON THE  
PROPOSED DECISION TRANSFERRING ELECTRIC RESOURCE PORTFOLIOS TO  
CALIFORNIA INDEPENDENT SYSTEM OPERATOR FOR 2021-2022  
TRANSMISSION PLANNING PROCESS**

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the California Energy Storage Alliance (“CESA”) hereby submits these comments to the *Proposed Decision Transferring Electric Resource Portfolios to California Independent System Operator for 2021-2022 Transmission Planning Process* (“PD”), issued by Administrative Law Judge (“ALJ”) Julie A. Fitch on January 7, 2021.

**I. INTRODUCTION.**

CESA recognizes the efforts of the Commission, the California Independent System Operator (“CAISO”), and the California Energy Commission (“CEC”) to develop a robust methodology that can translate the results derived from the Integrated Resource Planning (“IRP”) process into actionable inputs for the Transmission Planning Process (“TPP”). CESA is generally supportive of the PD, as it includes significant improvements relative to the busbar mapping of storage resources such as considering means to maximize available solar for charging; reducing congestion and curtailment; and, reducing air criteria pollutants, especially in disadvantaged communities (“DACs”). CESA considers the inclusion of these factors will improve reliability and the TPP process while advancing California’s decarbonization goals.

In the PD, the Commission states that it is not necessary for it to formally adopt the framework put forward by staff, opting instead to continuously update it considering party feedback.<sup>1</sup> Given this conclusion, CESA offers a series of recommendations to continue strengthening the TPP process. In these comments, CESA reiterates a recommendation offered in comments filed November 2020 and shares proposals to further link the IRP and TPP processes with the state’s ambitious clean energy targets. CESA’s comments can be summarized as follows:

- The Commission should formally integrate loss-of-load expectation (“LOLE”) studies and greenhouse gas (“GHG”) emissions checks into future portfolios transferred to the TPP process to avoid potential shortcomings of the transmission upgrades identified in the TPP.
- The Commission should consider the source of air pollutant emissions within the TPP to support the displacement of fossil-fueled generation.
- The Commission should use the Procurement Track of the IRP proceeding to effectively reduce the use of or fully replace polluting assets.

**II. THE COMMISSION SHOULD FORMALLY INTEGRATE LOLE STUDIES AND GHG EMISSIONS CHECKS INTO FUTURE PORTFOLIOS TRANSFERRED TO THE TPP PROCESS TO AVOID POTENTIAL SHORTCOMINGS OF THE TRANSMISSION UPGRADES IDENTIFIED IN THE TPP.**

In comments filed under this proceeding on November 2020, CESA supported the Framework for TPP Portfolio Selection (“Framework”) put forth by Commission staff.<sup>2</sup> The Framework established a set of guiding principles for the selection of portfolios, as well as a set of criteria any selected portfolio must comply with in order to be used for TPP purposes.<sup>3</sup> In those comments, however, CESA noted that the portfolios considered for the 2021-2022 TPP failed to

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<sup>1</sup> PD, Conclusion of Law 1, at 30.

<sup>2</sup> See Administrative Law Judge’s Ruling seeking comments on portfolios to be used in the 2021-22 Transmission Planning Process – Attachment A.

<sup>3</sup> See Administrative Law Judge’s Ruling seeking comments on portfolios to be used in the 2021-22 Transmission Planning Process – Attachment A, at 5-6.

match the criteria as outlined by the Framework, particularly considering the lack of a robust reliability analysis as requested by the CAISO.<sup>4</sup>

CESA understands the Commission’s decision to decline to formally adopt the Framework as a commitment to collaborate with parties in order to strengthen the TPP’s development. In light of the growth of energy- and use-limited resources, the system’s capability to cover load during all hours of the day has become increasingly important. As a result, performing reliability checks beyond meeting the potentially outdated planning reserve margin (“PRM”) has become a necessity. Thus, CESA reiterates its recommendation for the Commission to perform LOLE studies on the portfolios selected for the TPP prior to transferring them to the CAISO.

Attachment A of the October 2020 Ruling included a guiding principle stating selected portfolios for the purposes of the TPP must “meet state goals and CPUC requirements, such as meeting [Renewable Portfolio Standard] RPS and [greenhouse gas] GHG reduction targets, and should provide overall supply adequacy reliability.”<sup>5</sup> In contrast, the attachment to the PD does not include said guiding principle, instead focusing on procedural and methodological goals such as the relationship between the TPP and IRP processes and the minimization of post-processing following transferal.<sup>6</sup> CESA considers the omission of said guiding principle increases the risk of using inadequate portfolios for the TPP in future cycles, especially with relation to reliability and emission targets.

In comments in response to the individual IRP filings made by load-serving entities (“LSEs”), the CAISO conducted analyses of the 38 and 46 million metric ton (“MMT”) IRP

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<sup>4</sup> See CAISO, “Assessment of the CPUC-Selected 38 MMT Integrated Resource Plan Portfolio”, October 23, 2020.

<sup>5</sup> See Administrative Law Judge’s Ruling seeking comments on portfolios to be used in the 2021-22 Transmission Planning Process – Attachment A, at 5.

<sup>6</sup> Attachment A, at 5-6.

portfolios, noting that: (1) the 46 MMT IRP portfolio surpasses the emission metric associated to its name, resulting in 50.3 MMT of carbon dioxide emissions; (2) the 38 MMT portfolio did not meet the 0.1 day per year LOLE reliability criterion in 2026 or in 2030; and, (3) the 38 MMT portfolio also exceeded the emission metric associated to its name, resulting in 41.2 MMT of carbon dioxide emissions.<sup>7</sup> These results demonstrate that the current IRP modeling process is not equipped to produce portfolios that consistently meet reliability and emission criteria.

Recent events, such as the August 2020 heatwave and the ongoing revision of the Resource Adequacy (“RA”) framework, have underscored the need for more detailed reliability resource and transmission planning that are aligned with reliability. In this context, the fact that the transferred portfolios have been developed to solely to meet the 15% PRM merits revision and improvement. The lack of analysis regarding the reliability of a portfolio used for TPP should not be the norm; therefore, to minimize the adverse effects related to the IRP’s modeling limitations, CESA reiterates its recommendation to perform additional GHG emission and reliability vetting of the portfolios derived from the IRP process and used for TPP, including, *ad minimum*: (1) a LOLE evaluation for all TPP-bound portfolios and their respective study years; and (2) the requirement that portfolios selected for the TPP pass the emission constraint not only in RESOLVE, but in the following SERVM evaluation. CESA understands this recommendation might not be possible to apply for the current TPP cycle; hence, CESA urges the Commission to consider its formal adoption for upcoming cycles.

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<sup>7</sup> See CAISO, “Assessment of the CPUC-Selected 38 MMT Integrated Resource Plan Portfolio”, October 23, 2020, at 1-2.

**III. THE COMMISSION SHOULD CONSIDER THE SOURCE OF AIR POLLUTANT EMISSIONS WITHIN THE TPP TO SUPPORT THE DISPLACEMENT OF FOSSIL-FUELED GENERATION.**

CESA supports the Commission's decision to utilize the TPP's storage busbar mapping process to advance the decarbonization of DACs and areas with air quality issues. By incorporating these policy targets into the busbar mapping methodology, the Commission has increased the feasibility of eventually displacing fossil-fueled resources with cleaner assets. While this is a valuable first step, CESA recommends additional potential improvements to the methodology.

As CESA understands it, the consideration of areas with air quality issues is based on the CalEnviroScreen dataset and the Environmental Protection Agency's ("EPA") Green Book.<sup>8</sup> These sources compile geographic data on areas with high levels of air pollutants, which the Commission would leverage to inform mapping decisions in an effort to improve air quality. This methodology is well-equipped to identify the areas with significant air pollution; nevertheless, it is possible that mapping resources in these areas would have a marginal effect on air quality if the sources of those emissions lie in other zones.

The issue of determining the sources of air pollutants has been studied and improved upon in recent years. As pollutants such as carbon dioxide and NOx emissions are released into the atmosphere, wind currents and their trajectories play a significant role dispersing them regionally. The inclusion of these considerations into the TPP is relevant insofar as it could better inform the mapping of resources in order to minimize the use of polluting generation in favor of storage assets. Foregoing the possibility to identify the sources of air pollutants could result in the suboptimal mapping and deployment of storage assets. Moreover, for the purposes of the TPP, mapping thousands of MW of energy storage in specific locations based on their respective air quality

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<sup>8</sup> Attachment A, at 15.

readings could trigger upgrades that would not necessarily result in air quality improvements due to the omission of a source analysis. Hence, CESA recommends the Commission direct staff to improve upon the methodology developed for identifying areas with poor air quality by developing a means to better understand the sources of such pollutants. In order to do so, CESA recommends the Commission consider this issue in the scope of the Modeling Advisory Group (“MAG”) related to the IRP proceeding. CESA understands this recommendation might not be possible to apply for the current TPP cycle; hence, CESA urges the Commission to consider its adoption for upcoming cycles.

**IV. THE COMMISSION SHOULD USE THE PROCUREMENT TRACK OF THE IRP PROCEEDING TO EFFECTIVELY REDUCE THE USE OF OR FULLY REPLACE POLLUTING ASSETS.**

In Attachment A of the PD, the Commission staff notes that the mapping of storage assets does not directly relate to the replacement or retirement of fossil-fueled generation given the potential need for these resources in the context of system sufficiency.<sup>9</sup> CESA understands that the Commission seeks to leverage the potential energy storage has to minimize the use of or displace the generation of polluting assets in locally constrained areas. Nevertheless, the current methodology falls short of establishing a process that links the IRP modeling efforts, the TPP, and the CAISO’s Local Capacity Technical Studies (“LCTS”) into actionable directives that would achieve the aforementioned goal.

The IRP modeling process has been set up to identify a least-cost portfolio that enables the compliance of California’s overarching energy and environmental goals. As such, using IRP results to inform the TPP is sensible and should be a continued practice. By establishing a process that is able to determine transmission upgrades based on the optimal grid mix, the Commission

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<sup>9</sup> Attachment A, at 15.

has the opportunity to go a step further and evaluate procurement directives that could materialize the replacement of polluting resources that the Commission envisions. To do so, CESA recommends evaluating the TPP results in light of those shared in the LCTS. This process would enable the Commission to identify areas where the amount and characteristics of storage mapped are equivalent to those indicated in the LCTS, facilitating the issuance of procurement directives that ensure said resources will be timely deployed. While this process would require considering system reliability, a requirement that could be eased by performing a more adequate reliability check on the initial portfolios as mentioned in Section II of these comments.

V. **CONCLUSION.**

CESA appreciates the opportunity to submit these comments to the PD and looks forward to working with the Commission and other stakeholders in this proceeding.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jin Noh', written in a cursive style.

Jin Noh  
Policy Director  
**CALIFORNIA ENERGY STORAGE ALLIANCE**

Date: January 27, 2021