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)

CALIFORNIA WIND ENERGY ASSOCIATION COMMENTS ON PROPOSED DECISION ON TRANSFERRING RESOURCE PORTFOLIOS FOR THE 2021-22 TRANSMISSION PLANNING PROCESS

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I. INTRODUCTION AND SUMMARY

Pursuant to Administrative Law Judge Fitch's proposed *Decision Transferring Electric Resource Portfolios to California Independent System Operator for 2021-2022 Transmission Planning Process* ("Proposed Decision" or "PD") issued on January 7, 2021, the California Wind Energy Association ("CalWEA") submits these opening comments.

In summary, CalWEA is disappointed that the Proposed Decision would miss an important opportunity to make real progress towards building the infrastructure that will be necessary to shift our electric system from one built around fossil-fuel generation facilities to one that reliably delivers a diverse array of clean energy resources from across the state to its load centers. Indeed, it is quite apparent that the goal of the PD and the methodology it would adopt is to avoid any major transmission upgrades, even if such upgrades would access lower-cost storage and solar resources, enable the closure of gas-fired plants while ensuring system reliability, provide air quality benefits to disadvantaged communities ("DACs"), and potentially provide access to offshore wind resources. In fact, the likely result of the PD would be to increase reliance on gas generation to the detriment of air quality in DACs or, alternatively, to eliminate the reliability value of a portion of batteries placed in local capacity resource areas ("LCRAs") due to a lack of charging capacity, hence, compromising the reliability of the grid, which is the primary purpose of adding storage.

The Proposed Decision promises little more than to produce information about transmission upgrades based on ill-conceived studies that seem designed to overstate the cost of accessing and delivering offshore wind resources. The sensitivity study for offshore wind at the Central Coast reflects an amount of development that few anticipate will occur within the next decade, if ever, and would study an amount of development at the North Coast that is too small to achieve economies of scale. Instead of planning strategically for least-regrets transmission upgrades that could offer access to offshore wind resources at the Central Coast as well as an abundance of low-cost Central Valley solar and storage resources, the PD offers gratuitous and injudicious statements about offshore wind that prejudge the outcome of the Commission's planned consideration, in this proceeding, of long-lead-time resources, including offshore wind, in the second quarter of this year.

Finally, the PD fails to properly characterize, let alone respond to, CalWEA's arguments for more holistic planning in the current transmission planning process ("TPP") cycle and entirely mischaracterizes CalWEA's comments on several important issues, including planning for out-of-state wind resources. Thus, we are left wondering whether our comments were truly considered or understood, reflecting one of the conclusions of Gridworks' evaluation of the IRP process, which found that "62% of [CPUC parties surveyed] do not believe the Commission understands their party's positions and nearly 60% were not confident that their participation was valued by the Commission."[1]

II. COMMENTS

A. The Proposed Busbar Mapping Methodology is Designed to Avoid Transmission Upgrades – The Very Purpose of This Process – And Could Result in Higher Costs, Reduced Reliability and Worsened Air Quality in DACs

The proposed busbar mapping methodology or, rather, the subjective decisions that are made possible by that methodology, are plainly designed to avoid transmission upgrades. As CalWEA explained in earlier comments, the CAISO interconnection queue is sufficiently rich that the Commission generally need not substitute its own judgement regarding the most promising resource development locations.[2] Nevertheless, the proposed methodology declines to

[1] Gridworks September 28, 2020 Final Evaluation of the California Public Utilities Commission Integrated Resource Planning Process, at p. 19.

[2] CalWEA opening comments on the October 20, 2020, Ruling Seeking Comments on Portfolios to Be Used in the 2021-22 Transmission Planning Process (Nov. 10, 2020) pp. 6-7.

rely on that objective criteria, which inherently and objectively accounts for all subjective criteria proposed to be used and, instead, interjects subjective criteria that are used to locate resources where demonstrated commercial interest is lacking with the stated purpose of avoiding transmission upgrades.[3] Further, while the PD states that "we do expect some transmission upgrades to be needed to realize the [46 MMT] portfolio" (referencing upgrades outside of the Los Angeles basin late in the second half of the next decade in particular[4]), it signals trouble for any other transmission upgrades that the CAISO might identify as needed.[5]

Thus, the very process that is intended to develop the transmission necessary to interconnect the most promising resources for avoiding climate catastrophe would be subverted by this Proposed Decision.[6] In so doing, the consequences of this PD would be to increase emissions in the Los Angeles ("LA") Basin, forestall the ability to retire natural-gas plants in DAC areas, increase resource costs, and/or delay achievement of the state's greenhouse gas goals.

Increased emissions in the LA Basin could occur under the PD because it would locate more battery storage in that LCRA than can be charged by out-of-basin system resources,

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[3] Proposed Decision, Attachment A. A few of many examples: at p. 21 ("To avoid exceeding the GLW-VEA transmission limit, resources are then reallocated …); at p. 32 ("Pumped Storage Hydro: … the amount mapped to the Red Bluff substation is selected to not exceed the estimated transmission limit in the Riverside Palm Spring inner zone"); at p. 26 ("The Westlands inner renewable transmission zone and the Southern PG&E outer renewable transmission zone do not have enough transmission capability to accommodate all the resource, so it is also reallocated to the Tehachapi and Pisgah resources …); at p. 35 ("Southern California Desert and Southern Nevada outer renewable transmission zone: … These adjustments likely reduce the risk of transmission constraints…"); at p. 37 ("Limiting solar resources mapped to the Gates 500 kV substation: … exceedance of the transmission limits for the Southern PG&E outer renewable transmission zone and the Westlands inner renewable transmission zone, even with the triggered transmission upgrades, required remapping of resources in Westlands Solar to the Gates 500 kV substation….).

[4] Proposed Decision at p. 20. Note that CalWEA could not find any specific reference to the "identified transmission upgrades that would be needed" to support the resources that were mapped to the Tehachapi region and the Southern PG&E territory.

[5] *Ibid.* ("We will continue to coordinate closely with the CAISO on specific projects identified as the TPP analysis progresses. We also expect that, because of the unprecedented amount of battery storage in this portfolio, we will need to continue to consult closely if the battery storage triggers additional transmission upgrades that we do not currently anticipate.")

[6] The Tehachapi Renewable Transmission Project would never have been built if the Commission had, in "planning" for needed transmission, "re-located" queued resources to a high-voltage substation where major transmission upgrades would not be necessary. In so doing, however, the Commission would have overlooked a resource area with demonstrated commercial interest (reflecting high resource quality and relatively low development costs) in favor of resources without demonstrated commercial value.

according to the CAISO.[7] Specifically, the PD would locate 1,809 MW of batteries in the Los Angeles Basin[8] when only 1,070 MW can be charged without relying on local gas resources.[9] Thus, 739 MW of batteries would have to be charged by in-basin gas resources, increasing local emissions in an area where there is a high percentage of DACs.[10]

If it is not possible to run LA-Basin gas plants harder because these plants are in a non-attainment zone for air quality, then the added storage could not be charged during critical periods and would thus carry no reliability value during critical periods – which is the very purpose of adding of these batteries. In touting the location of batteries in DACs, therefore, the PD is prioritizing the limited economic benefits that would flow to DACs over the harm of increased emissions or reduced reliability if batteries cannot be charged. Further, because the 46 MMT portfolio does not reduce the need for gas plants in the LA Basin or locate storage outside of the Basin where it is more economic, the PD would forestall the ability to retire natural-gas plants in DAC areas.

Locating storage in the LA Basin also increases costs because stand-alone batteries cannot benefit from federal investment tax credits that are available when storage is co-located with solar facilities. Queued resources are predominantly co-located outside of the LA Basin due to these benefits, along with lower land and labor costs.

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[7] The CAISO recently found significant battery-charging limitations in the LA Basin, where four-hour batteries were found to be capable of meeting just 1,070 MW of the local reliability need on a one-for-one basis. *See* CAISO presentation, *Preliminary Policy and Economic Assessments, 2020-21 Transmission Planning Process* (November 17, 2020) at PDF-p. 163.

[8] Calculation by CalWEA from spreadsheet: "Busbar Mapping Dashboard workbook - 46 MMT with 2019 IEPR base case portfolio," CPUC Portfolios & Modeling Assumptions for the 2021-2022 Transmission Planning Process (available at: https://www.cpuc.ca.gov/General.aspx?id=6442466555).

[9] The CAISO study referenced in footnote 7 concludes that only 1,070 MW of gas capacity in the LA Basin could be retired and replaced with batteries on a 1-for-1 basis (after that, storage durations above four hours would be required). By the same token (and absent any gas-plant retirements consistent with the PD's proposed 46 MMT portfolio), only 1,070 MW of the 1,809 MW of batteries added in the LA Basin under the PD's proposed 46 MMT portfolio can be charged by system resources through the existing transmission infrastructure. Hence, absent additional transmission, any batteries located in the Basin above 1,070 MW will have to be charged by resources inside of the Basin.

[10] *See* Comments of California Environmental Justice Alliance, Sierra Club, Natural Resources Defense on the Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes, at pp. 7-8 (June 15, 2020).

The Commission should, instead, as CalWEA discussed at length in earlier comments,[11] foster proactive and holistic transmission planning by adopting two 38-MMT base case portfolios to enable the CAISO to develop optimal, least-regrets backbone transmission solutions that would be needed for either portfolio, thus paving the way for a variety of resource futures. Such planning would lay a foundation for achieving longer-term greenhouse-gas-reduction goals by providing access to least-cost clean resources with high development potential, enabling the most cost-effective retirement of gas plants[12] and the charging of batteries within LCRAs, improving system reliability, and potentially providing access to offshore wind resources.

B. The Proposed Decision's Sensitivity Studies Are Likely to Overstate the Cost of Providing Access to Offshore Wind Energy Resources

Instead of planning strategically for least-regrets transmission upgrades that could access offshore wind at the Central Coast as well as the considerable solar and storage resources being commercially pursued in the Central Valley (as demonstrated by the CAISO's interconnection queue), as CalWEA advised, the Proposed Decision promises merely to produce information on transmission costs associated with offshore wind based on ill-conceived "sensitivity" studies. These studies seem designed to overstate the cost of accessing and delivering offshore wind resources based on unrealistic assumptions.

The proposed sensitivity for offshore wind includes 6.7 GW at the Central Coast (Morro Bay and Diablo Canyon) and 1.6 GW at Humboldt Bay, for a total of 8.3 GW of offshore wind ("OSW") by 2031, without any of Diablo Canyon's freed-up transmission deliverability assigned to offshore wind.[13] The 6.7 GW at the Central Coast is an unrealistic estimate of the OSW likely to be developed by 2031, if ever (CalWEA had recommended that 4 GW be studied) and, if not carefully studied in increments (such as 2 GW) by the CAISO, will produce exaggerated cost estimates. While it would not be reasonable to assume that offshore wind will obtain all the retired nuclear facilities' deliverability capacity, it is unreasonable to assume that it would obtain none of it. This assumption will also drive-up estimate costs.

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[11] *See* CalWEA's Opening Comments on the Commission's Ruling Seeking Comments on Portfolios to Be Used in the 2021-22 Transmission Planning Process (Nov. 10, 2020) at pp. 6-7.

[12] As we have noted earlier, whether gas plants would actually retire in 2031, or in years prior or hence, can be decided as that milestone is approached based on reliability criteria. However, planning is necessary to make that future possible.

[13] Proposed Decision, Attachment A, at pp. 14-15.

While the proposed sensitivity over-estimates the capacity likely at the Central Coast by 2031, it plans for only a small fraction of the development that is possible on the North Coast, where stronger wind resources will lower production costs. In so doing, the study will fail to capture the economies of scale that would be associated with a larger plausible buildout of the transmission system. Estimating transmission needs for just 1.6 GW of OSW in this remote area will trigger substantial upgrades, resulting in cost figures that will not be justified for this relatively small amount of capacity. As CalWEA previously advised, the study of North Coast offshore wind resources should be addressed in the longer-term "outlook" assessment.[14]

Further, the PD offers gratuitous and injudicious statements about offshore wind, asserting without explanation that "It is unlikely that the Commission will adopt a planning portfolio that includes large amounts of OSW for another several years."[15] This statement appears to prejudge the outcome of the Commission's planned consideration, in this proceeding, of long-lead-time resources, including offshore wind, in the second quarter of this year.[16]

C. The Proposed Decision Is Inconsistent with the Purpose of IRP

CalWEA is concerned with inconsistent and problematic reasoning in the PD. The PD laments that the Commission cannot send a 38-MMT plan to the CAISO because it has not yet analyzed the individual 38 MMT plans of the load-serving entities ("LSEs"). "[F]orwarding a 38 MMT portfolio now to the CAISO to be used in the TPP base case would risk planning for a 38 MMT future that is different from what the LSEs are actually planning to procure," the PD states.[17] This thinking is flawed for two important reasons.

First, the point of the IRP process is to develop a resource plan that is optimized for all LSEs overall. The Commission has yet to determine whether the sum of individual plans is efficient, reliable and otherwise achievable.

Second, the PD states that suboptimal transmission planning would occur if not based on the resources that LSEs plan to procure. But LSEs cannot procure resources that require transmission upgrades, nor do they have perfect information about the resources that will be

[14] CalWEA opening comments on the October 20, 2020, Ruling Seeking Comments on Portfolios to Be Used in the 2021-22 Transmission Planning Process (Nov. 10, 2020) at p. 4.

[15] PD at p. 25.

[16] R.20-05-003, Assigned Commissioner's Scoping Memo and Ruling (Sept. 24, 2020) at p. 12.

[17] PD at p. 19.

available to them in the market. What LSEs "are actually planning to procure" ultimately will be driven by the lowest-cost resources that developers are able to offer them (and potentially IRP procurement requirements). By using its own subjective considerations in the busbar mapping process, rather than the objective criteria of the expenditure of many millions of dollars by developers as reflected in their progress in interconnection queues, the Commission is undermining what could be offered to LSEs in the marketplace.

In so doing, the Commission will leave LSEs without competitive, lowest-cost resource options and will fail to optimize the system overall. The Commission must use the IRP process (which includes transmission cost estimates for the various resources) to identify the most promising resources available and leave it to the CAISO to determine what transmission upgrades are necessary to access those resources.

D. The Proposed Decision Mischaracterizes and Misstates CalWEA's Positions

The PD fails to properly characterize, let alone respond to, CalWEA's detailed arguments for more holistic planning in the base case associated with the current TPP cycle, as discussed in section II.A, above, and in earlier comments.[18] Further, the PD totally mischaracterizes CalWEA's comments on several other important issues:

- CalWEA did not comment that the Commission "should prioritize siting of batteries in disadvantaged communities and/or local capacity areas with air quality issues."[19] Quite the opposite. CalWEA advocated that the Commission locate thermal generation retirements in disadvantaged communities under the 38 MMT plans, while using the interconnection queues to map the locations of batteries,[20] with priority placed on co-location instead of arbitrarily locating batteries in Local Reliability Areas and DACs, as the PD proposes to do.
- CalWEA did not recommended including 1,163 MW of out-of-state ("OOS") wind in the 46 MMT case unconditionally, as implied in the PD.[21] Rather, CalWEA

[18] The PD, at p. 10, only states, imprecisely, that "CalWEA commented that the sensitivity cases should not just be used for better understanding of their transmission impacts, but also to work towards those plausible futures by being used for least-regrets planning."

[19] PD at p. 14.

[20] *Supra* note 14 at pp. 6-7.

[21] PD at p. 9.

recommended that the Commission make clear to the CAISO that at least 3 GW of OOS wind can be delivered to California loads on existing transmission lines.[22]

- CalWEA did not suggest that "studying north coast Humboldt locations are [sic] not necessary because the scale is insufficient to spur investment."[23] Rather, as indicated above, CalWEA stated that a larger scale of development on the North Coast should be studied in a longer-term "outlook" assessment.

CalWEA requests that these errors be corrected. We can only conclude from these oversights that CalWEA's comments were not truly considered or understood, a disappointing situation that other parties may find themselves in as well, given one of the conclusions of Gridworks' evaluation of the IRP process cited in the introduction to these comments.

III. CONCLUSION

Wherefore, for the foregoing reasons, the Commission should reject the Proposed Decision because it would virtually preclude the possibility that the transmission planning process will make progress on the transmission upgrades that will be needed to connect the state's most promising resource areas with California's load centers and thereby cost-effectively achieve the state's climate change goals. Instead, the Commission should adopt CalWEA's recommendation and submit two different 38-MMT resource portfolios to the CAISO, one of which contains offshore wind resources at the Central Coast, that would retire gas resources in the Los Angeles Basin, improve air quality in DACs, and access a diverse set of clean resources where clear demonstrations of commercial interest have been made. Transmission upgrades that are needed for both scenarios would constitute least-regrets transmission upgrades that would provide access to a variety of resource futures.

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[22] CalWEA opening comments on the October 20, 2020, Ruling Seeking Comments on Portfolios to Be Used in the 2021-22 Transmission Planning Process (Nov. 10, 2020) at section II.A.2, and reply comments (Nov. 20, 2020) at pp. 4-5.

[23] PD at p. 12.

Respectfully submitted,

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On behalf of the California Wind Energy Association

January 27, 2021

VERIFICATION

I, Nancy Rader, am the Executive Director of the California Wind Energy Association. I am authorized to make this Verification on its behalf. I declare under penalty of perjury that the statements in the foregoing copy of "California Wind Energy Association Comments on Proposed Decision on Transferring Resource Portfolios for the 2021-22 Transmission Planning Process" are true of my own knowledge, except as to the matters which are therein stated on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on January 27, 2021, at Berkeley, California.

/s/ *Nancy Rader*
Nancy Rader
Executive Director
California Wind Energy Association