

**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

**CALIFORNIA WIND ENERGY ASSOCIATION
COMMENTS ON PROPOSED PREFERRED SYSTEM PLAN**

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*On behalf of the California Wind
Energy Association*

September 27, 2021

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I. INTRODUCTION AND SUMMARY

Pursuant to Administrative Law Judge Ruling Seeking Comments on Proposed Preferred System Plan issued on August 17, 2021 (Ruling), the California Wind Energy Association (CalWEA) submits these opening comments on the Ruling.

In summary, CalWEA highlights the major points in our comments:

- Meeting the formidable challenge of achieving the state’s greenhouse gas (GHG) goals will require the Commission to act with a heavier hand.
- CalWEA strongly supports the Ruling’s proposed adoption of the 38 million metric ton (MMT) Core Portfolio as the Preferred System Plan (PSP), which is necessary to drive any necessary transmission upgrades and to support the development of resources that will be required for that portfolio.
- The details of the plan matter. It would be neither appropriate nor desirable to require LSEs that proposed more-diverse resource portfolios in their individual resource plans to deliver on those plans when other LSEs are not held to the same standard. To achieve the resource mix in the Proposed PSP, the Commission must require all LSEs to share in its achievement, as it did in its mid-term reliability (MTR) decision (D. 21-06-035). Specifically, resource requirements reflecting the diversity in the Proposed PSP should apply to all LSEs mid-decade, as well as in 2030 and 2032. This will ensure that resources that are not necessarily least-cost on a strict, direct-price basis, but that offer valuable system benefits as part of the overall portfolio, as recognized in Integrated Resource Planning (IRP)

modeling results, will materialize. This includes all non-solar, non-battery resources, and is particularly true for offshore wind resources. We note that the risk-reduction benefits of resource diversity *per se* have not been fully considered or factored into the Proposed PSP; thus, PSP represents the *minimum* amount of resource diversity that may be warranted.

- Developers must have confidence that, if they successfully invest in California’s risky, time-consuming, and costly development process for resources reflected in the plan, they will find offtakers. The sooner the Commission enforces a resource-diversity requirement, the greater the ability that LSEs will have to shape their future portfolios accordingly. Conversely, the longer the Commission waits to enforce resource diversity, and a fair sharing of integration resources more generally, the harder it will become to course-correct.
- Unless needed resources are both planned for *and procured*, they will not become available to fulfill the short-term contracting requirements of the Resource Adequacy program.
- The Commission should allocate requirements for the additional diverse resources in the Proposed PSP among the LSEs in consideration of each LSE’s existing resource mix to encourage existing portfolio diversity to be maintained. We suggest two alternative approaches.
- The challenges associated with floating offshore wind development – particularly if that development is to meet expectations of delivering substantial California economic and workforce development benefits – will require the Commission’s support of mid-decade offshore wind projects. The Commission should ensure that any demonstration and small-commercial offshore wind project that can meet the many challenges they face and deploy mid-decade – as well as full-scale projects in 2032 and beyond – will have an off-taker, while addressing the associated special circumstances. In this effort, the Commission should consult with the Bureau of Ocean Energy Management (BOEM) - California Intergovernmental Renewable Energy Task Force and the Energy Commission in its leadership role in implementing AB 525.

- Regarding transmission, the Commission should investigate three options for providing grid access to Central Coast offshore wind projects:
 - The most efficient and timely option would be for the CAISO to reform its deliverability assessment methodology in conjunction with the Commission’s planned structural reforms to its Resource Adequacy program. By making more efficient use of existing transmission assets, such reforms would deliver substantial ratepayer benefits and immediately create additional transmission deliverability.
 - The second-best option would be for the Commission to request that the CAISO seek to purchase the necessary Transmission Planning Deliverability (“TPD”) capacity for at least 1.7 GW of offshore wind from PG&E and its retiring nuclear plant. The payment offered by CAISO (to be recovered in the Transmission Access Charge) would be based on the avoided cost of building new transmission, and the proceeds would benefit PG&E ratepayers.
 - A longer-term option that should be pursued in any case is a least-regrets upgrade between the Los Angeles Basin and Central California that would deliver multiple benefits: relieve transmission congestion in the Basin, alleviate North-South (Path 26) congestion, reduce dependency on Aliso Canyon, enable significant resource development in the Central Valley, and deliver local air quality benefits. A subsea cable connection would also avoid wildfire-related transmission risks and the complications of overland siting and permitting. Such an upgrade would also provide additional capacity for Central Coast offshore wind should one or both other options described above not come to fruition.
- Finally, sensitivity studies should be conducted to evaluate the cost of the high level of behind-the-meter solar that was forced into the IRP model as an input. Such sensitivities will also inform the impact that this assumption has on the IRP’s selection of resources and may further support resource diversity requirements.

II. RESPONSES TO QUESTIONS IN THE RULING

Question 1. Please comment on the individual IRP portfolio aggregation performed by Commission staff.

CalWEA commends staff for building a strong tool for aggregating the individual resource portfolios that, as stated, allowed staff (apparently with considerable expenditure of time) to conduct substantial quality control, identify and seek correction of errors in the plans, and recognize double counting of certain of the LSEs' planned resources. The fact that up to six re-submission requests were required to correct and clarify contract information presented in several of the plans does not, however, inspire confidence as to the quality of the submitted plans.

Regarding the Ruling's note that the diversity of resources planned to meet both the 46 MMT and 38 MMT targets is greater in the plans of the community choice aggregators (CCAs) than for investor-owned utilities (IOUs) or electric service providers (ESPs),¹ it is important to consider the *overall* diversity of LSE portfolios. Potentially higher levels of resource diversity in the existing IOU portfolios should be recognized and may justify less diversity in their planned additions, as discussed below in response to Question 13.²

Question 2. Comment on the reliability analysis of the aggregated 38 MMT LSE plans.

No comment at this time.

Question 3. Comment on the appropriateness of the scenarios and sensitivities developed in RESOLVE to be considered as the preferred portfolio. Suggest any alternative sensitivities or changes to the analysis.

In the previous IRP cycle, as in the current cycle, high levels of behind-the-meter (BTM) solar were forced into the model as an input. In the previous cycle, however, the added cost associated with that assumption was at least evaluated in a sensitivity analysis and shown to be grossly non-cost-effective.³ These BTM solar assumptions are based on the CEC's demand

¹ Ruling at p. 8.

² We note that the implementation of the Commission's Voluntary Allocation and Market Offer (VAMO) process for Renewables Portfolio Standard (RPS) energy resources under R.17-06-026 may affect these portfolios and should be considered in this process.

³ See, in R.16-02-007, September 19, 2017, Ruling Seeking Comment on the Proposed Reference System Plan and Related Commission Policy Actions at Attachment A, PDF-page 202. (The model assumed 16 gigawatts (GW) of BTM PV by 2030 based on the CEC's 2016 IEPR Mid case, which assumed indefinite

forecast, which extrapolates based on past levels of solar adoptions which have not been evaluated in the current IRP cycle for cost-effectiveness or for their impacts on the IRP's resource portfolio selection. The Commission should aim to better understand the electric rate, total resource cost, and resource portfolio implications of BTM solar adoption through sensitivity analyses.

In the present Net Energy Metering (NEM) Proceeding (R.20-08-020), CalWEA submitted testimony showing the results of our evaluation of the SB 100 RESOLVE model testing for a 50 percent reduction in the similarly high assumed levels of rooftop solar. CalWEA found that, very conservatively, such a reduction would bring present-value savings of nearly \$1.26 billion per year compared to the high level of assumed BTM solar. CalWEA also found that the total need for utility-scale renewable energy resources would go up by less than 1 percent (less than 500 MW) if the level of BTM solar were cut in half. CalWEA also found that the need for long duration and battery storage capacity is *reduced* by about 7.4 GW when BTM solar is cut in half.

While counter-intuitive, these results can be explained by observing that, without so much storage on the system driven by BTM solar, wind and geothermal resources – which produce energy outside of solar-production periods and generally have higher capacity factors than utility-scale solar – become more cost-effective. This finding, and anticipated reforms to the current NEM tariff, further supports the need for the resource diversity requirements discussed in response to Questions 12 and 13.

While CalWEA's modeling showed that more existing gas-fired capacity is retained to provide capacity, that capacity is present to meet Resource Adequacy capacity needs but is operated very rarely; thus, greenhouse gas emissions can be kept at the same level as the SB-100 core scenario.

We attach our testimony from R.20-08-020 as Appendix 1 to these comments.⁴ We recommend that several sensitivity model runs be conducted to assess various possible successor tariff outcomes.

continuation of the current NEM tariff. The RESOLVE results showed that reducing BTM PV to 9 GW would have saved ratepayers \$682 million/year in the 42 MMT case.)

⁴ Also see CalWEA's August 31, 2021, brief in that proceeding.

<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M404/K292/404292212.PDF>

Question 4. Comment on the SERVVM analysis and results of the 38 MMT Core Portfolio.

No comment at this time.

Question 5. Comment on the appropriateness of the 38 MMT Core Portfolio as the PSP.

CalWEA strongly supports the Ruling’s proposed adoption of the 38 MMT Core Portfolio as the Preferred System Plan.⁵ This is particularly necessary given the long lead-time required to realize any transmission upgrades necessary to achieve the SB 100 goals (although, as discussed in response to Question 21, CalWEA believes that existing transmission assets could be far more efficiently used) as well as to support the development of the resources that will be required for that portfolio.

We underscore, however, that the details matter. Developers must have confidence that, if they successfully invest in California’s risky, time-consuming, and costly development process for resources reflected in the plan, they will find offtakers. The Commission can assure adequate offtake opportunities only by requiring all LSEs to procure the resources that are not necessarily least-cost on a strict, direct-price basis, but that offer valuable system benefits as part of the overall portfolio, as recognized in IRP modeling results.

This is true for all non-solar, non-battery resources, and is particularly true for offshore wind resources. The potential broad economic and employment benefits to the state that are associated with offshore wind⁶ will only be realized with a concerted effort to develop the state’s infrastructure and workforce to support offshore wind projects. The Commission should do all that it can to ensure that any demonstration and small-commercial offshore wind projects that

⁵ Ruling at pp. 21-22.

⁶ An August 2021 report by the USC Schwarzenegger Institute summarized the benefits of developing 10 GW of offshore wind as: “contribut[ing] toward total resource cost savings of approximately \$1 billion; creat[ing] up to 65,000 jobs during the construction phases and up to 4,500 operation and maintenance jobs for the entire lifetime of the facilities; improv[ing] reliability of electricity services due to its higher and more stable capacity factors and the timing of its peak electricity generation”; and bringing the following additional benefits ... Potential reduction of 4.73 million metric tons of carbon dioxide equivalents by the year 2040, translating into the prevention of \$340.45 million of global climate change damages, minimization/reduction of environmental impacts associated with the construction of land-based energy infrastructures such as onshore wind and solar, improvements in environmental justice through the reduction of ordinary air pollution in socioeconomically disadvantaged urban areas of the state and construction of OSW facilities in some of its lagging regions.”

<http://schwarzenegger.usc.edu/institute-in-action/article/new-study-from-schwarzenegger-institute-finds-offshore-wind-critical-to-sol>

can meet the many challenges they face and deploy by mid-decade – as well as full-scale projects in 2032 and beyond – will have an offtaker.

Question 6. Comment on whether the load forecast assumptions should be adjusted to include higher load, particularly related to EV adoption or high electrification more broadly.

No comment at this time.

Question 7. Comment on the proposal to use the 38 MMT Core Portfolio as the reliability and policy-driven base case in the TPP.

Please see CalWEA’s responses to Questions 5 and 21.

Question 8. Comment on the proposed policy-driven sensitivity portfolio for the TPP based on the 30 MMT GHG limit in 2030 with the high electrification load assumptions. Suggest any additional or alternative scenarios that should be analyzed as policy-driven sensitivities.

No comment at this time.

Question 9. Comment on whether and how the Commission should act to encourage specific non-transmission alternatives to be built, if identified as part of the CAISO TPP process, both for the two specific projects identified in the 2020-2021 TPP, as well as in general for future such opportunities.

Please see CalWEA’s responses to Questions 13 and 21.

Question 10. Comment on the options raised in Section 7.2 of this ruling to address procurement for system benefit more broadly. Suggest whether and how a particular cost recovery framework can be adopted quickly or discuss additional considerations that should be explored.

Please see CalWEA’s responses to Questions 13 and 21.

Question 11. Comment on the busbar mapping approach.

No comment at this time.

Question 12. Comment on whether the Commission should require the procurement of resources contained in the individual IRP filings and have LSEs face penalties and/or backstop procurement requirements with cost allocation arrangements, similar to those for D.19-11-016 and D.21-06-035.

The Ruling is correct to question whether reliance on individual IRPs, “along with existing markets and programs, is sufficient to ensure meeting the 2030 goals or whether

additional Commission action is required to ensure the LSE plans are actualized.”⁷ Indeed, the Commission must require LSEs to collectively deliver the resource diversity contained in its PSP or, indeed, to face penalties and/or backstop procurement requirements similar to those for D.19-11-016 and D.21-06-035.

It would be neither appropriate nor desirable to require LSEs to procure the resources contained in their individual IRPs, particularly those resources whose added value derives from their system and strategic benefits that will accrue to other LSEs and the public generally. Developing the resources that are needed to diversify the portfolio, realize the PSP, and achieve the longer-term benefits and goals associated with that portfolio will require higher PPA prices than the solar and battery resources that dominate the PSP and the current market. The Commission should not expect that the LSEs who volunteered to include diverse resources in their plans will necessarily be able to deliver on their aspirations (tackling the complex and difficult task of the large-scale build-out of offshore wind) when other LSEs are not held to the same requirements. Instead, as discussed in response to Question 13, the Commission must require all LSEs to share in the achievement of the balanced *overall* resource mix including both the existing resources that underlie the Proposed PSP and the new resources in the Proposed PSP, including biomass, geothermal, and land-based and offshore wind, and particularly the 120 MW of offshore wind resources by 2026, 195 MW by 2028, and 1.7 GW by 2032. This should be done by allocating additional needed resources among LSEs in view of their current resource mix, as discussed in our response to Question 13.

1. The Commission cannot rely on Individual IRPs to achieve its policy goals

The Commission cannot rely on Individual IRPs to achieve the policy goals embedded in the Proposed PSP (including GHG goals, reliability and resource diversity) for several reasons:

- a. LSEs appear to be averse to investing in new resources generally.** Staff’s production cost modeling found that the aggregated LSE plans were less diverse in quantity of resources than what the Commission required in its MTR decision and failed to meet GHG and reliability targets “due to insufficient new capacity ... which may indicate an over-reliance on existing resources by some LSEs, to the extent that LSEs are planning for more existing resources than actually exist in the baseline.”⁸

⁷ Ruling at pp. 32-33.

⁸ Ruling at pp. 8 and 10.

LSEs' apparent aversion to investing in new and diverse resources suggests a need to require investments in such resources included in the PSP.

b. The Commission rightly forced procurement of diverse resources through its MTR order. The Commission has already recognized, in its MTR decision, the need to require all LSEs to share in the obligation to support new, long-lead-time resources that are needed for system reliability and resource diversity.⁹ While CalWEA supports a shared obligation for such resources, the MTR decision was flawed in two respects. First, the mandate for new, firm renewable generation resources, which is most likely to be fulfilled by geothermal resources, was not supported by the Commission's Reference System Plan (RSP) or any additional analysis of which CalWEA is aware. Second, the mandate did not include those resources that *were* included in the RSP due to their system values – namely, wind energy resources. The RSP selects wind energy for the portfolio because wind energy most cost-effectively delivers in the evening net peak hours, which promotes system reliability. Wind energy also provides resource diversity, which the Commission also used to justify the firm renewable generation requirement.

As evidence that wind energy will require supportive procurement policy, CalWEA reports that a new, fully permitted, in-state Northern California wind project has been unable to find a buyer over the past few years even though its revenue requirement falls within the range assumed in previous RESOLVE modeling.¹⁰ This circumstance indicates a reluctance by LSEs to volunteer to bear the higher direct cost of wind resources despite their system value. This will be even more true for offshore wind, as discussed below.

c. The Commission cannot count on the LSEs that aspire to procure diverse resources, and new technologies in particular, to deliver on those aspirations.

The Ruling and workshop slides contain no information about the resource diversity

⁹ D. 21-06-035 at pp. 25 and 37.

¹⁰ CalWEA is puzzled by the wind resource cost changes represented in slide 10 of Attachment A to the Ruling, particularly the cost drop that occurs in 2024-25. We are also uncertain whether higher California development costs are reflected, as well as the quality of specific wind resource areas at current hub heights exceeding 100 meters. Improved wind technology creates the potential for commercial development in wind resource areas with annual average windspeeds of 6 meters/second. All these factors may expand the areas previously considered. We hope to discuss these issues with staff.

of the individual plans and most of the individual IRPs include redactions, which makes it impossible for parties to fully assess the 40-odd plans, assuming they have the bandwidth to do so.¹¹ It seems reasonable to assume, however, that individual resource plans are likely to vary significantly in their resource diversity (both type and amount). Those LSEs that hope to procure a more diverse resource portfolio are nonetheless likely to face significant challenges, not the least of which is the generally higher cost of non-solar/battery resources which will make it more difficult for LSEs to keep their rates in line with competing LSEs.¹² It is not reasonable to expect an LSE to volunteer to bear higher costs and make itself less competitive for the good of all other LSEs and the system overall.

These challenges will be intensified for the first commercial developments of offshore wind energy in California. We know, for instance, that only three LSEs have volunteered to support initial developments of offshore wind and that they face substantial challenges in doing so:

- The 38-MMT, 2030 preferred portfolio of Redwood Coast Energy Authority (RCEA) includes 40 MW of offshore wind – a portion of a planned public-private partnership for a 120-MW offshore wind project in federal waters off Humboldt Bay for which RCEA is expected to be a principal off-taker.¹³ RCEA has made significant efforts to support the development of this resource and hopes to build the project as soon as 2026, which is apparently reflected in the proposed PSP.¹⁴ However, it is not clear whether this timeline is feasible given that the BOEM federal auction is scheduled for late 2022 and, absent streamlining, is expected to be followed by at least six years of permitting. It is also unclear whether RCEA

¹¹ It would be helpful for staff to provide some description regarding the degree to which individual LSE plans differ in terms of their existing and planned portfolio diversity.

¹² For example, CCAs generally aim to keep their basic-product rates at or below the rates of the IOUs and strive to retain their commercial and industrial customers who can be served by Electric Service Providers (ESPs).

¹³ See 2020 IRP of RCEA (September 1, 2020) at PDF-pages 19, 22 and 43.
https://redwoodenergy.org/wp-content/uploads/2020/09/rcea_-v1-1.pdf

¹⁴ Ruling, Table 2 “New Resource Buildout of 38 MMT Core (Cumulative MW).” The offshore wind in the portfolios of RCEA, 3CE and CPA totals 295 MW by 2030. CalWEA was unable to discern how staff translated these plans as 120 MW in 2026, 195 MW in 2028 and 2030, and whether the lower values in the PSP are a result of CCAs double counting shared resources.

has secured interest from other offtakers to fully subscribe the project. In addition, this proposed development faces numerous challenges related to lack of transmission infrastructure.¹⁵

- Clean Power Alliance of Southern California (CPA) includes 100 MW of Central Coast offshore wind in its 38 MMT plan for 2030.¹⁶ However, there are no details or discussion in CPA’s IRP regarding its planning for this resource, or the challenges associated with those plans, and CalWEA could not readily find such materials on CPA’s website or otherwise.
- Central Coast Community Energy (3CE) includes 75 MW of Central Coast offshore wind in its preferred plan, noting the many challenges to developing the first utility-scale wind farm off the California coast.¹⁷ 3CE was also recently quoted as saying that it “would only buy the power if the price is right for its customers.”¹⁸

2. The challenges associated with floating offshore wind development, particularly if it is to come with substantial California economic development benefits, will require the Commission’s support of mid-decade projects.

It is neither fair nor reasonable to expect a subset of relatively small LSEs to attempt, let alone fulfill, the responsibility of fostering resources that are an essential part of achieving California’s SB 100 goals. Rather, the Commission must play an active role, in cooperation with the BOEM - California Intergovernmental Renewable Energy Task Force and the Energy Commission, in its leadership role in implementing AB 525,¹⁹ to provide offtake opportunities

¹⁵ Schatz Energy Research Center, California North Coast Offshore Wind Studies Interconnection Constraints and Pathways, September 2020, <http://schatzcenter.org/pubs/2020-OSW-R8.pdf>

¹⁶ 2020 IRP of Clean Power Alliance at Table 15. https://cleanpoweralliance.org/wp-content/uploads/2020/09/cpasc_v1-PUBLIC.pdf

¹⁷ 2020 IRP of Monterey Bay Clean Energy (now part of 3CE) at Table 6 and p. 34 https://3cenergy.org/wp-content/uploads/2020/09/MBCPA_IRP_2020_v1_PUBLIC.pdf

¹⁸ “The path to offshore wind in California is clear, but it could take a decade,” *Monterey County Weekly* (June 5, 2021). https://www.montereycountyweekly.com/news/local_news/the-path-to-offshore-wind-in-california-is-clear-but-it-could-take-a-decade/article_0d538d12-c3e0-11eb-a54f-8bb01947a7e3.html

¹⁹ AB 525, which was recently enacted into law, requires state agencies, led by the California Energy Commission, to develop a strategic plan for offshore wind resources in California. <https://www.offshorewind.biz/2021/09/24/californias-offshore-wind-bill-signed-into-law/>

for early offshore wind projects that are able to make their way through California’s challenging permitting, leasing approval and grid interconnection processes. Offshore wind deployment targets, backed by vocal and consistent support from state government champions, have been the principal driver of the tremendous recent growth of the offshore wind industry in East Coast states. California must send similarly clear market signals to attract the attention of, and investment by, the domestic and international offshore wind supply chains. These state-government-set targets on the East Coast have led to capacity procurements, which in turn have resulted in individual project offtake awards as large as 1.5 GW. Site control (from the federal government), state and federal permitting approvals, and an offtake agreement, among other factors, are essential to enabling offshore wind developers to attract capital and achieve financial close on their projects. In turn, these projects, crucially, should support development of the supply chain and workforce that are essential to deliver on the expectation of thousands of jobs associated with offshore wind.²⁰

If California is to capture the critical reliability benefits that offshore wind offers with its production profile that complements the solar resource and mediates the “duck curve,” in addition to realizing benefits to its economy and workforce, it must address the challenges associated with building an offshore wind industry. The West Coast differs from the locations where most offshore wind projects have been deployed to date: California’s waters are deeper, and the maritime environmental, workforce, and stakeholder aspects are complex. In addition, the required floating offshore wind technology is relatively new and the deployment of floating offshore wind platforms for 12- to 15-MW turbines has not been demonstrated anywhere in the world to date. Only three floating wind platform designs have been deployed at scale to date and none of these is in U.S. waters. The technical, environmental, economic, and social aspects of commercial offshore wind in California have likewise not been demonstrated in real-world conditions.

Offshore wind is a global, competitive industry, and California project developers will face considerable market pressure to source foreign-manufactured and constructed inputs rather than locally made products. A key immediate challenge is that California is starting from behind.

²⁰ See, White House and Office of Governor Newsom May 25, 2021, statements on California offshore wind. <https://www.gov.ca.gov/2021/05/25/california-announces-historic-agreement-with-federal-partners-to-advance-offshore-wind-development/> and <https://www.gov.ca.gov/2021/05/25/california-announces-historic-agreement-with-federal-partners-to-advance-offshore-wind-development/>.

Europe has already deployed floating offshore wind projects at pilot scale, with recent awards in the United Kingdom at the 100-MW scale.²¹ Early deployments of floating offshore wind technology, such as those being contemplated by the three LSEs noted above, as well as two proposed demonstration projects in state waters,²² will be crucial to foster the development of a local supply chain, ports, and workforce to support California’s offshore wind industry. Ports will be needed to assemble the floating foundations as well as the “mating” of the turbines and foundations. These activities will require ports at coastal locations near offshore wind development sites and will be of huge scale with unprecedented logistical challenges. California or U.S. manufacturing of floating foundation components, anchoring systems and potentially other components (blades, nacelles, substations, cables, etc.) would also require considerable time and planning to allow sufficient time for the local supply chain to mature. Add to these challenges the weak Northern California grid that will take at least a decade to strengthen, and upgrades that will be required at the Central Coast if more efficient and timelier means of providing deliverable capacity are not pursued (see response to Question 21).

For these reasons, the Commission cannot let the future of offshore wind rest on the voluntary goals of relatively small market actors. Instead, it must play an active role, in cooperation with the BOEM - California Offshore Wind Task Force and the Energy Commission in its leadership role in implementing AB 525, to foster the development of a domestic offshore wind industry including by providing offtake opportunities for all early offshore wind projects that are successful in navigating the many challenges.

Question 13. Comment on whether you would prefer an approach where the Commission determines procurement need for GHG-free resources or the GHG-free attributes of resources at the system level and then uses a need allocation methodology to assign procurement to individual LSEs. If you propose this type of alternative approach, please address the following aspects:

²¹ See, The Crown Estate, “Three new test and demonstration floating wind projects in the Celtic Sea to progress to next stage” (July 27, 2021). <https://www.thecrownestate.co.uk/en-gb/media-and-insights/news/three-new-test-and-demonstration-floating-wind-projects-in-the-celtic-sea-to-progress-to-next-stage/>.

²² The California State Lands Commission has received, and staff is evaluating, two applications for floating offshore wind projects in state waters. The two projects are the CADEMO Demonstration Project, which would demonstrate two different floating wind technologies by installing four 12-15 MW floating wind turbines in the area; and the Ideol Vandenberg Air Force Pilot Project, which would install four floating offshore wind turbines with a maximum generation capacity of 10MW each. <https://www.slc.ca.gov/renewable-energy/offshore-wind-applications/>.

- Need allocation, by year
- How to address new and existing resources
- Whether procurement should be all-source or resource-specific
- Resource attributes required (MW, MWh, percentage of GHG-free energy, etc.)
- Duration (through 2030, 2032, interim milestones, etc.)
- Cost allocation
- Compliance, monitoring, and enforcement arrangements.

1. To achieve the portfolio mix in the Proposed PSP and maintain overall portfolio diversity, the Commission should establish resource-specific requirements for each LSE.

As explained in response to Question 12, the Commission must require all LSEs to share in the achievement of the resource mix in the Preferred System Plan if that plan (which ensures system reliability) and the state’s longer-term SB 100 goals are to be realized. Moreover, unless needed resources are planned for *and procured*, they will not become available to fulfill the short-term contracting requirements of the Resource Adequacy program.

Further, the Commission should ensure that the *overall* resource mix – including the existing diverse resources that underlie the Proposed PSP as well as the new resources in the Proposed PSP – is achieved and maintained.²³ These resources include existing and new biomass, geothermal, and land-based and offshore wind. (We discuss in the next subsection different means of accomplishing this goal.) We note that the risk-reduction benefits of resource diversity *per se* have not been fully considered or factored into the Proposed PSP, although diversity was a consideration in the MTR decision,²⁴ and so the PSP represents the *minimum* amount of resource diversity that may be warranted. Lower quantities of BTM solar than assumed in the PSP will also drive greater resource diversity, as discussed in response to Question 3.

The sooner the Commission enforces a resource-diversity requirement, the greater the ability LSEs will have to shape their future portfolios accordingly. Conversely, the longer the Commission waits to enforce resource diversity, and a fair sharing of integration resources more generally, the harder it will become to course-correct.²⁵ In general, meeting the formidable

²³ As the Ruling notes at p. 35, all resources in the PSP that were added to the sum of the LSEs’ individual IRPs and the Commission’s MTR requirements based on RESOLVE modeling in 2030 and 2032 (including solar and battery resources) will need to be allocated to LSEs.

²⁴ D. 21-06-035 at p. 25 and Finding of Fact 13.

²⁵ In CalWEA’s June 15, 2020, comments in this proceeding, we urged the Commission to adjust the proposed IRP schedule in both the Planning and Procurement Tracks to create the staff-resource

challenge of achieving the state’s GHG goals will, in CalWEA’s view, require the Commission to act with a heavier hand.

Given the wide range of costs of the various diverse resources in the PSP, particularly the initial offshore wind projects, each LSE should be responsible for procuring a share of each type of resource rather than allowing each LSE to pick and choose among the menu of diverse resources.²⁶ Given the relatively small size of many LSEs, and the relatively small amounts of certain resources in the PSP, this will be a challenge, but not one that small size should excuse. As the Commission stated in its MTR decision, “Procurement of diverse resources is an important skill and obligation for all LSEs if we are to achieve the state’s long-term reliability and environmental goals.”²⁷ As that decision indicated, small (and even larger) LSEs could undertake joint procurement or other purchase and/or sale configurations as necessary to meet their obligations. The “mutual benefit procurement” concept outlined by Commission staff²⁸ should also be considered, particularly for procuring resources that constitute a small portion of total added resources and have long lead-times such as offshore wind.

2. The Commission should allocate requirements for the additional diverse resources in the Proposed PSP among the LSEs in consideration of each LSE’s existing resource mix to encourage existing portfolio diversity to be maintained while ensuring development of the additional diverse resources in the Proposed PSP.

In the lead-up to the Commission’s MTR decision, CalWEA and other parties advocated that the Commission adopt an attribute-based mandate aimed at evening net-peak hours.²⁹ Since the Commission instead adopted what are essentially technology mandates in the MTR, we are now on that path. CalWEA supports this path assuming the Commission expands it to include

bandwidth to address these issues. Among other things, we urged (in section III) the accelerated adoption of a 38 MMT PSP in the Planning Track based on the Commission’s own planning, rather than the aggregation of individual LSE plans.

²⁶ The Commission could consider combining the geothermal and biomass requirements if it deems the costs and reliability benefits of these resources to be comparable, although the ancillary public benefits differ.

²⁷ D. 21-06-035 at p. 38

²⁸ Ruling at p. 31 referencing Section 7.2.2 of the November 2020 Procurement Framework Staff Proposal. (“Under this option, all LSEs would be required to pay for and then each LSE would receive a portion of the RA benefit and a portion of the procurement costs. The benefits and costs would be provided over time as the resource operates, and the mutual benefit procurement would be authorized several years in advance.”)

²⁹ See CalWEA’s April 9, 2021, Reply Comments on the MTR Proposed Decision at pp. 2-3.

each additional type of resource in the PSP that was selected by the RESOLVE model not due to its direct costs, but its system reliability and system integration values – i.e., each utility-scale resource other than battery storage and solar. In addition, the limited amounts of offshore wind that were included in the Proposed PSP mid-decade were apparently included for their longer-term strategic planning value, as recognized by the three CCAs who included these resources in their individual plans. The Commission should include these resources in the requirement applied to all LSEs for the reasons discussed in response to Question 12.

While ensuring the development of the additional diverse resources included in the Proposed PSP, the Commission should also encourage LSEs to maintain the existing diverse resources that are assumed in the RESOLVE model and therefore underlie the Proposed PSP. This can be done by considering each LSE’s current resource mix when allocating additional needed resources, i.e., allocating on a “causation” basis, with a lower share of the needed additional resources allocated to LSEs that have relatively diverse existing portfolios and vice versa.³⁰ This could be done at once along with the allocation of storage requirements, since, as the Commission has previously noted, diverse resources will reduce the need for “integration resources” such as batteries and, thus, themselves constitute integration resources.³¹

The Commission declined to adopt a comprehensive and specific causation-based allocation methodology in its MTR decision despite acknowledging that causation-based allocation is required by law^{32,33} and despite the proposed allocation methodology advanced by

³⁰ As noted in footnote 2 *supra*, the Commission’s VAMO process for RPS energy resources under R.17-06-026 may affect these portfolios and should be considered in this process.

³¹ See D.19-04-040 (Issued May 1, 2019) at p. 136 (“We also note that Senate Bill (SB) 350 specifically gave the Commission the authority to require CCAs to procure, via long-term contracts, renewable integration resources. [Footnote omitted.] At this moment in time, every resource that requires procuring or retaining, including the renewables themselves, is being used for renewable integration, since renewables are becoming the dominant resources in the electric system. While it may be the case that every single individual generation plant on the system currently is not needed for renewable integration, it is still the case that every type of resource on the system is being utilized for this purpose...”)

³² AB 1584 (2019) required the Commission to develop and use methodologies for allocating electrical system integration resource procurement needs to each load-serving entity based on the contribution of that entity’s load and resource portfolio to the electrical system conditions that created the need for the procurement. See Public Utilities Code Sec. 397.

³³ D. 21-06-035 at p. 52. CalWEA found the Commission’s stated rationale for failing to implement this law to be unpersuasive.

CalWEA.³⁴ The methodology that CalWEA proposed could be modified to simultaneously allocate storage requirements and resource-diversity requirements.³⁵

Alternatively, however, if the Commission is not prepared to further explore or adopt such a seemingly complex causation-based methodology at this time, it could allocate diverse resource needs with some consideration for the diversity of each LSE's base of existing and contracted resources. For example, using load-share as the preliminary basis for allocation, LSEs with lower levels of diverse (i.e., non-solar and non-battery) resources could have their share multiplied by a factor greater than 1.0, while LSEs with higher levels of diverse resources could have their share multiplied by a factor less than 1.0.

3. Resource-specific diversity requirements for new resources should be applied to interim years, with some flexibility, and on a long-term basis. Non-complying LSEs should face penalties and/or backstop procurement requirements with cost allocation arrangements.

For the reasons discussed above, the Commission should impose resource-specific diversity requirements on each LSE in consideration of their existing portfolio diversity to ensure that the resource diversity reflected in the Proposed PSP is realized. These requirements should reflect some or all the interim years reflected in Table 2 of the Ruling, particularly for resources that can be procured in small increments by LSEs (either individually or jointly) and particularly with regard to offshore wind resources. As with its MTR decision, the Commission should contemplate the possibility that the IOUs may need to conduct backstop procurement if individual LSEs fail to meet milestone requirements or should implement the mutual benefit procurement concept.³⁶

Regarding offshore wind resources, as discussed above in response to Question 12, initial mid-decade offshore wind projects will improve the likelihood that the 1.7 GW included in the Proposed PSP for 2032 will occur along with the subsequent installations reflected in the SB 100 Report. Moreover, they will greatly increase the chances that these installations will be

³⁴ See Attachment to CalWEA's April 9, 2021, Reply Comments on Mid-Term Reliability Analysis and Proposed Procurement Requirements. https://www.calwea.org/sites/default/files/public_filings/CALWEA%20Reply%20Comments%20on%20Mid-Term%20Reliability%204_9_21.pdf

³⁵ This would entail fixing the level of storage in the RESOLVE optimization so that the added block of variable resources would force changes in diverse resources.

³⁶ D. 21-06-035 at pp. 30, 37-38.

supported by California and U.S. industrial infrastructure and supply chains. These initial projects will, however, come with a price tag substantially higher than the prices assumed for offshore wind projects at scale (which themselves will have a price tag higher than solar-battery projects, and thus will also depend on a procurement requirement applied to all LSEs). Therefore, the state, and the Commission, cannot rely on the voluntary efforts of a few LSEs to support these mid-decade projects.

Instead, the obligation to secure 120 MW of offshore wind by 2026, and 195 MW by 2028, should be spread among all LSEs. Given the timeline for mid-decade offshore wind projects, the limited number of such projects, and the lead-time required, adopting the mutual benefit procurement concept at the outset would be particularly well suited for this procurement.

As with the Commission's mandated procurement of long-duration storage and geothermal resources,³⁷ the considerable uncertainties and challenges associated with potential mid-decade offshore wind projects will justify some leeway in the obligation, and the limited number of procurement options may justify open-book contracts (cost-plus procurement). The emphasis should be on procuring the output of any project that can demonstrate an ability to support the development of a California and/or U.S. supply chain and workforce and pass critical milestones such as permitting. These procurement efforts should be coordinated with the BOEM - California Offshore Wind Task Force.

Question 14. If you believe the Commission should take more of a programmatic approach to GHG-beneficial procurement, explain the process you recommend and your rationale.

Please see our response to Question 13.

Question 15. Comment on whether and how much procurement required in D.21-06-035 should be accelerated to 2023 and/or suggest additional actions to facilitate additional resources in response to the Governor's Proclamation from July 30, 2021.

Please see response to Question 21 and Appendix 2. Reforming the CAISO's deliverability methodology would greatly facilitate the ability of resources to gain access to the grid and thus participate in the market to fulfill resource needs.

Question 16. Comment on the CEC's MTR reliability analysis, the determinations regarding the need for fossil-fueled generation resources, and the actions, if any, that the Commission should take as a result.

³⁷ *Id.* at p. 36.

No comment at this time.

Question 17. Comment on the definition of eligible renewable hydrogen proposed in this ruling.

We encourage the Commission to define eligible renewable hydrogen as “hydrogen produced via electrolysis using 100 percent renewable electricity.” Many renewable energy companies engaged in California, including land-based and offshore wind energy developers, are very interested in pairing with green hydrogen production, and the sector is capable of responding to the state’s green hydrogen production goals if given adequately focused policy stimuli.

Question 18. Comment on the percentage of renewable hydrogen facilities that should be required, if any, and the timing of the transition from a blend to full renewable hydrogen combustion, including the option for inclusion of fuel cells. Discuss the feasibility and cost of achieving a 100 percent renewable hydrogen blend by 2036 in your comments.

CalWEA supports the variation discussed in the Ruling, i.e., to require 50 percent of the fossil-fueled facilities to utilize at least 30 percent renewable hydrogen when the contract term begins, 60 percent renewable hydrogen by 2031, and transition to 100 percent renewable hydrogen by no later than 2036. More broadly, we urge the Commission to coordinate its PSP goals with other state policy tools for green hydrogen, including the CEC’s Green Hydrogen Roadmap³⁸ and EPIC Roadmap.³⁹ We note that many offshore wind developers are exploring the production of green hydrogen in conjunction with their projects, which would be supported by the actions discussed in our responses to Questions 12 and 13. It is likely that some of these co-production offshore wind projects would produce a combination of electricity for the grid, hydrogen for electricity production, and/or liquid hydrogen for transportation and industrial uses. This is especially true on the North Coast, where the Humboldt offshore wind auction area will lack any transmission capability to export the new wind power onto the grid for at least a decade. State policies must match this blended market reality.

³⁸ California Energy Commission, Roadmap for the Deployment and Buildout of Renewable Hydrogen Production Plants in California, June 2020, <https://cafc.org/sites/default/files/Roadmap-for-Deployment-and-Buildout-of-RH2-UCI-CEC-June-2020.pdf>

³⁹ California Energy Commission, The Role of Green Hydrogen in a Decarbonized California - A Roadmap and Strategic Plan, July 2021, https://efiling.energy.ca.gov/getdocument.aspx?tn=239068&usg=AOvVaw3FOr_45Tb7zihwCsNDxRh8

Question 19. Comment on proposed measures regarding NO_x emissions from facilities using renewable hydrogen.

No comment at this time.

Question 20. Comment on whether the Commission should take any initial actions on geographically targeted procurement, particularly with respect to Aliso Canyon, or more broadly, and respond to the factors discussed in Section 12 of this ruling.

Relieving transmission congestion in the Los Angeles (L.A.) Basin will help to alleviate dependency on Aliso Canyon and bring numerous additional benefits. In previous comments in this proceeding, CalWEA has encouraged the Commission to request that the CAISO study two policy-driven sensitivities for a 38-MMT target to determine the transmission upgrades that are common to both scenarios and would facilitate the retirement of gas plants in disadvantaged communities in the L.A. Basin.⁴⁰ Specifically, the CAISO should study an offshore network that connects the Basin to one or more Central Coast substations (Diablo Canyon and/or an expanded Morro Bay) via HVDC subsea cables. Offshore wind projects located off the Central Coast could connect via a shared gen-tie line corridor⁴¹ to the Central Coast substation(s) where the subsea cable from the L.A. Basin would connect.

Such a plan would alleviate North-South (Path 26) congestion, enable significant resource development in the Central Valley where many queued resources are concentrated due to lower development costs compared with in-basin resources, facilitate offshore wind development (among other options for doing so described below), and deliver local air quality benefits. A subsea cable would also avoid wildfire-related transmission risks and the complications of overland siting and permitting .

Question 21. Comment on whether and how the Commission should act to preserve transmission deliverability rights in the central coast area that could be utilized for offshore wind or other resources.

The Ruling states that the SB 100 Report shows that offshore wind is likely to be needed in California's 100 percent clean energy portfolio by 2045, and the Proposed PSP includes 120 MW of offshore wind by 2026 and 1.7 GW by 2032.⁴² The Ruling suggests two discrete actions

⁴⁰ See, e.g., CalWEA's November 10, 2020, comments in this proceeding.

⁴¹ CAISO does not allow more than 1.1 GW on one gen-tie line.

⁴² Ruling at pp. 45-46 and Table 2.

that the Commission could take to encourage additional focus on offshore wind development, and invites comment on additional actions the Commission should take specifically to facilitate offshore wind development. The two proposed actions are: (1) addressing and preserving the transmission deliverability rights associated with the retiring Diablo Canyon Nuclear Power Plant (“DCNPP”) and retired gas-fired generation at Morro Bay, and (2) including some amount of offshore wind in the reliability and policy-driven base case for the CAISO to analyze as part of the 2022-2023 TPP.

1. Transmission deliverability rights associated with the retiring DCNPP and retired gas-fired generation at Morro Bay.

As CalWEA has noted in previous comments,⁴³ the transmission infrastructure supporting the retiring Diablo Canyon nuclear power plant, particularly the 230 kV and 500 kV systems, as well as PG&E’s rights to transmission deliverability capacity from the Diablo Canyon generation site, are rare assets that would be extremely difficult to reproduce today anywhere along the California coastline. The Commission must ensure that these assets are put to their most productive and valuable use. It is hard to imagine a more strategic use than for the interconnection and delivery of the proximate offshore wind resources. The wind resources off the Central Coast are the subject of intense consideration by California, the federal government, and the offshore wind industry, given the high resource quality and relative proximity to load centers compared with other offshore wind resource areas.⁴⁴

Transmission Planning Deliverability (“TPD”) capacity rights are FERC-jurisdictional under its Open Access Transmission Tariff and therefore are not subject to CPUC direction. The Commission could, however, request that PG&E inform the Commission of its plans for the interconnection rights associated with DCNPP. More importantly, the Commission can improve the likelihood that offshore wind projects will acquire a portion of any available TPD capacity rights at the Central Coast by taking the following actions, in addition to adopting the Proposed PSP.

⁴³ See CalWEA’s June 15, 2021, comments in this proceeding.

⁴⁴ See, e.g., National Renewable Energy Laboratory, *Potential Offshore Wind Energy Areas in California: An Assessment of Locations, Technology, and Costs* (December 2016; NREL/TP-5000-67414). <https://www.nrel.gov/docs/fy17osti/67414.pdf>

First, the Commission should request that the CAISO seek to acquire the necessary TPD capacity for the 1.7 GW⁴⁵ of offshore wind in its PSP from PG&E and its retiring DCNPP.⁴⁶ The payment offered by CAISO (via the Transmission Access Charge) would be based on the embedded cost of transmission infrastructure built to support DNCPP, and the proceeds should benefit PG&E ratepayers.⁴⁷

Second, assuming CAISO acquires the TPD capacity rights, those rights will become part of the network and immediately available for subscription to developers in the area.⁴⁸ Therefore, third, it is essential that this be timed such that (a) the leases for offshore wind development have been issued by the federal BOEM, expected in 2022-23, so that developers are in a position to file and secure an interconnection agreement under the CAISO's tariff, and (b) developers have secured power purchase agreements (PPAs), because CAISO assigns TPD rights on a priority basis and gives developers holding PPAs the highest priority. Thus, the Commission must also ensure that Central Coast offshore wind projects have obtained PPAs by the time that DCNPP TPD capacity rights become available. While this will not ensure that all offshore wind projects obtain TPD capacity, it will give them a strong opportunity.⁴⁹

2. Request that CAISO study transmission availability for offshore wind and other resources under a reformed deliverability methodology.

In the Commission's Resource Adequacy (RA) proceedings (R.19-11-009 and R.20-11-003) and in the SB 100 process,⁵⁰ CalWEA has highlighted the need to promote reforms to the CAISO's deliverability assessment methodology in conjunction with planned structural reforms to the Commission's Resource Adequacy program. By making much more efficient use of

⁴⁵ The TPD capacity necessary for 1.7 GW of OSW would be its Net Qualifying Capacity, expected to be approximately 0.9 GW. The rights would not become available until DCNPP retires.

⁴⁶ Our understanding is that the owner of the retired Morro Bay gas plant has already transferred a portion or all of its deliverability rights to a new storage facility and the remaining rights have been relinquished to CAISO to be re-allocated through its GIDAP process.

⁴⁷ The payment could be made by reducing the TAC for PG&E's customers.

⁴⁸ There is also considerable demand for TPD rights from solar/storage projects in the Central Coast.

⁴⁹ The Commission could attempt to discourage LSEs from signing contracts with solar-battery developers seeking to interconnect at the Central Coast, to ensure that sufficient capacity is awarded to OSW projects, which are inherently limited to that area. Alternatively, the CAISO could secure additional, or all, TPD capacity from PG&E/DCNPP.

⁵⁰ See, e.g., CalWEA's Comments on July 22, 2021, Workshop on Next Steps to Plan for Senate Bill 100 Resource Build - Transmission (Energy Commission *Docket 21-SIT-01*).

<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SIT-01>

existing transmission assets, deliverability methodology reform would deliver substantial ratepayer benefits, as the additional TPD capacity would immediately become available at no cost.

CalWEA believes that these reforms will open the grid to at least 3 GW of renewable and storage resources, including offshore wind at the Central Coast, even without relying on deliverability capacity transfer from the retiring DCNPP. In its 2022-23 TPP, the CAISO should separately plan for this 3 GW of Central Coast offshore wind – the most likely near-term scenario for offshore wind development – in addition to planning for a larger potential build-out of offshore wind resources at the Central and North Coasts.

CalWEA’s testimony from R.20-11-003, attached to these comments as Appendix 2, explains the deliverability reform issue in detail. We strongly encourage the Commission to engage with the CAISO regarding this issue.

Question 22. Comment on the amount of offshore wind, if any, that should be included in the 2022-2023 TPP base case. Comment on how the results of the 2021-2022 TPP offshore wind sensitivity case should influence this issue.

As discussed above in response to Questions 12 and 13, CalWEA strongly encourages the Commission to adopt the 38 MMT PSP, which includes 120 MW of offshore wind in 2026 and 1.7 GW in 2032, such that the CAISO will plan for at least that amount of capacity as part of the reliability and policy-driven base case for the 2022-2023 TPP. In addition, the Commission should request CAISO to explore the other, more expeditious and potentially lower-cost means of providing TPD capacity to Central Coast offshore wind projects (see response to Question 21) and study the ability to increase TPD capacity as part of a least-regrets transmission plan for the Los Angeles Basin (see response to Question 20). As discussed below, the Commission should request that CAISO also study 3 GW of offshore wind at the Central Coast.

CalWEA is not optimistic that the results of the 2021-2022 TPP offshore wind sensitivity case will be actionable because, as explained in our filing on that topic, too much capacity was included at the Central Coast and too little was included at the North Coast.⁵¹ The offshore wind component of the studied portfolio should be more reflective of what is more clearly possible to achieve by 2032 but expanded to study the transmission upgrades that would be necessary (if

⁵¹ See CalWEA’s November 10, 2020, comments at pp. 4-5 in this proceeding.

any, given the other options described above) to accommodate the full potential of 3 GW of offshore wind off Morro Bay.

At present, the BOEM has authorized potential offshore wind development within 399 square miles off Morro Bay, which would accommodate up to 3 GW of offshore wind development. While the U.S. Navy has acceded to this development, it has not yet acceded to offshore wind development off the coast at Diablo Canyon due to its military operations there and, in fact, has historically expressed very strong reservations about the impact that such development would have on its military operations.⁵²

Given the very real possibility that additional offshore wind development beyond 3 GW off the coast at Morro Bay will not occur during the CAISO's current planning horizon, CAISO should study the transmission upgrades that would be necessary to accommodate the offshore wind development that is possible within the BOEM's Morro Bay call area. In addition, the grid at the Central Coast is very strong, given the facilities that were built to ensure deliveries from the retiring DCNPP, whereas the grid at the North Coast (and Northern California more generally) is weak and will require very substantial upgrades requiring at least a decade to plan and build. These considerations warrant a specific transmission planning focus on the upgrades required to accommodate 3 GW of offshore wind off Morro Bay (as the third best solution relative to other options described above).

Finally, as CalWEA has advocated in the SB 100 process, we also encourage the CAISO to study an offshore transmission network extending to the Bay Area and Northern California as part of a full assessment for achieving the 10 GW of offshore wind included in the SB 100 Report, in conjunction with other needed resources.⁵³ Addressing L.A. Basin and Greater Bay Area local reliability constraints along with providing grid access to offshore wind resources is likely to produce overall efficiencies and reduce total costs. In addition, offshore networks will bring considerable risk-reduction benefits from the increasing risk of major wildfires and would avoid the difficult task of obtaining siting approvals with a large number of land owners along a statewide, land-based path.

⁵² See, e.g., "Outreach on Additional Considerations for Offshore Wind Energy off the Central Coast of California." ("The [Carbajal] group did not re-examine areas within the Diablo Canyon Call Area at this time due to DoD's significant mission activities in the area.") https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/UPDATED-NOA-Outreach-on-Additional-Considerations_0.pdf

⁵³ See note 50 *supra*.

Question 23. Comment on whether and how the Commission should act to support the development of OOS renewables/wind and the transmission to deliver it. Be as concrete and specific as possible in your recommendations.

As recognized in the state’s RETI 2.0 report,⁵⁴ and advocated by CalWEA earlier in this proceeding,⁵⁵ the Commission and the CAISO should consider, as part of its planning for out-of-state renewables, the growing availability of firm transmission service in the WECC region as coal plants retire and the increasing ability to dynamically schedule WECC resources into CAISO.

Question 24. Comment on specific actions the Commission can take to ensure retention of existing resources needed both for reliability and/or GHG emissions purposes.

Please see CalWEA’s response to Question 13 regarding the need to credit the existing diverse resources in existing LSE portfolios as new resource needs are allocated.

Question 25. For any of the potential procurement requirements discussed in this ruling, allocation of need to LSEs is a required step. Comment on how the methodologies should account for in-CAISO POU load and what steps the Commission should take to ensure those POUs bear their share of responsibility for reliability and GHG impacts.

We note that CAISO allocates flexible capacity costs (i.e., integration resources) based on causation at the level of “local regulatory authorities,” i.e., the Commission and the various publicly owned utilities (POUs) that are CAISO members. While the Commission has so far opted not to use the same or a similar causation-based methodology to allocate responsibility for flexible capacity costs down to the level of individual LSEs (using peak load ratio share instead), the POUs are allocated their fair share of flexible capacity costs using the causation approach. However, a similar causation-based methodology should be applied at the individual-LSE level as we advocated for all integration / diverse resources in our response to Question 13.

III. CONCLUSION

CalWEA appreciates this opportunity to comment on the Proposed PSP and looks forward to continued participation on these issues that are critically important to achieving the state’s SB 100 goals.

⁵⁴ *RETI 2.0 Final Plenary Report* at p. 61. Available at <http://www.energy.ca.gov/reti/>.

⁵⁵ R. 16-02-007, CalWEA Comments on Staff Proposal on Process for Integrated Resource Planning, at pp. 33-34 (June 28, 2017).

Respectfully submitted,

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***On behalf of the California Wind Energy
Association***

September 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 Preferred System Plan” 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 September 27, 2021, at Berkeley, California.

/s/ Nancy Rader

Nancy Rader
Executive Director
California Wind Energy Association