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 RULING SEEKING COMMENTS ON PORTFOLIOS TO BE USED IN THE 2021-22 TRANSMISSION PLANNING PROCESS

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On behalf of the California Wind Energy Association

November 10, 2020

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I. INTRODUCTION AND SUMMARY

Pursuant to the Administrative Law Judge's Ruling Seeking Comments on Portfolios to Be Used in the 2021-22 Transmission Planning Process ("Ruling") issued on October 20, 2020, the California Wind Energy Association ("CalWEA") submits these opening comments.

In summary, we are disappointed in CPUC Staff's recommendations attached to the Ruling to create resource portfolios that will serve as the basis for the CAISO's transmission planning process ("TPP"). At a time when the Commission should be aggressively planning to meet California's ambitious greenhouse gas ("GHG") reduction goals, this draft plan would continue the "analysis paralysis" that has characterized the Integrated Resource Planning ("IRP") process to date and would fail to enable the infrastructure that will likely be necessary to ensure that the state's goals are achieved cost-effectively while ensuring system reliability. While the words "holistic" and "least-regrets" appear in the Ruling's attachments, those words are not given any real meaning in the proposed methodology.

In recent comments, the CAISO stated that its production cost modeling analysis shows that load-serving entities ("LSEs") will need to procure resources in excess of the Commission's 46 million metric ton ("MMT") Reference System Plan ("RSP") and its 38 MMT portfolio to maintain reliability as early as 2026.[1] Given that transmission upgrades may well be needed to cost-effectively maintain reliability, and given the lead-time required to build transmission, it is

[1] Comments of the CAISO (on individual integrated resource plan filings) at p. 2-3 (October 23, 2020).

imperative that the Commission direct the CAISO to use multiple 38-MMT resource portfolios to conduct least-regrets transmission planning. By definition, least-regrets transmission upgrades will pave the way for a variety of resource futures, thus promoting competition among a wider array of resources while creating the conditions necessary to enable the retirement of natural-gas power plants. A least-regrets transmission plan will create options for the Commission's adopted 38-MMT "preferred" resource portfolio, which can comfortably follow the transmittal of multiple 38-MMT portfolios to the CAISO.

Regrettably as well, the Staff plan would foster a future that is more likely to be costly, unreliable, and overly reliant on solar and battery storage technologies, which the CAISO has repeatedly cautioned against.

To remedy these problems, the Commission should substantially revise the proposed IRP-TPP process for the 2021-22 TPP cycle as follows:

- Use the two 38-MMT portfolios, revised to reflect reasonable commercial realities related to offshore and out-of-state wind energy resources, to conduct least-regrets transmission planning;
- Prioritize gas-plant retirements in disadvantaged communities ("DACs"); and
- Create a more straightforward and objective busbar mapping process that is centered around commercial activity and projects in advanced stages of development, as reflected in the CAISO and other interconnection queues.

We believe that a more ambitious and transparent process of this type is likely to lead to transmission upgrades between the Los Angeles ("LA") Basin and the Central Valley to address North-South (Path 26) congestion, facilitate gas-plant retirements in the LA Basin with more assured and long-term benefits to DACs, and enable significant resource development in the Central Valley, where many queued resources are concentrated due to lower development costs compared with in-basin resources. The Commission should request that the CAISO consider a transmission solution that it has already studied that would connect the Diablo Canyon substation to LA coastal-area gas plants via subsea cable, which would also provide access to offshore wind resources at the Central Coast and bring several additional advantages compared to an overland transmission solution.

II. COMMENTS

A. To Achieve the State's GHG Goals Reliably and Cost-Effectively, 2021-22 Transmission Planning Must Be Based on Reasonable 38 MMT Portfolios

1. The 2021-22 TPP Cycle Should Be Based on 38-MMT Portfolios

Whether or not the Commission adopts a 38-MMT target and portfolio as its Preferred Resource Plan in the 2019-20 IRP cycle, it must send multiple 38-MMT portfolios, including a more resource-diverse portfolio, to the CAISO as the basis for its 2021-22 transmission planning process if the state is to make any meaningful progress towards a 38-MMT goal – whether that goal is achieved in 2030 or a few years sooner or later, given the length of time required to plan and build transmission. Failing to make such progress in the next TPP cycle will commit the state to higher costs, lower reliability, delayed achievement of a 38 MMT target – or all three, because transmission is the key to resource diversity and resource diversity is the key to reliability. As stated recently by the CAISO:

> As a policy matter, the Commission should seek to "pull in" a greater diversity of resources from later years to mitigate the risks of over-reliance on one or two resource types and to appropriately plan for more complex resource build-outs earlier.[2]

While the Ruling refers to least-regrets transmission planning,[3] it fails to conduct such planning by stating that "[a]ny transmission solutions that are not needed in the [46 MMT] baseline scenario are not recommended for approval as part of the comprehensive Transmission Plan in the current cycle."[4] The 46 MMT scenario will not likely require any transmission upgrades; therefore, using it as the basis for the TPP process (particularly in combination with the proposed busbar methodology) would be pointless. Instead, the Commission should request that the CAISO study the two policy-driven sensitivities included in the Ruling's Attachment B (with modifications noted below), which reflect a 38-MMT target, to determine the transmission upgrades that are common to both scenarios – i.e., least-regrets solutions that will strengthen the backbone of the transmission grid, thereby creating more commercial opportunities for renewable and resource adequacy ("RA") resources. In addition to providing access to a more

[2] *Id.* at p. 6.

[3] See, e.g., Ruling Attachment B, pp. B-8 and B-10.

[4] Ruling Attachment A, p. A-4.

diverse set of resources, least-regrets transmission upgrades can also simultaneously relieve transmission constraints to enable gas-plant retirements in disadvantaged communities, provide access to lower-cost resources outside of transmission-constrained areas, and enable diverse resources to deliver to load centers across the state. In so doing, least-regrets transmission planning will promote competition, ensure grid reliability, reduce rate impacts, and deliver air quality benefits to disadvantaged communities. With expedited transmission siting, these benefits could potentially be realized in the 2026-31 timeframe.

2. Two Revisions Should Be Made to the 38-MMT Scenarios Relating to Offshore and Out-of-State Wind Energy

Two revisions are needed to the two proposed 38-MMT portfolios relating to offshore and out-of-state wind energy to make the portfolios reflective of reasonable commercial possibilities and realities, further ensuring that the transmission upgrades common to both portfolios will indeed be least-regrets.

First, Sensitivity #2 requires revisions to make the offshore wind component of the portfolio more reflective of what is more clearly possible to achieve by 2031. Though it may be possible to achieve 6.7 GW of offshore wind development by 2031, it would be more reasonable to plan for about 4 GW of development by 2031 given present siting-related uncertainties. That 4 GW should be placed at the Central Coast, with CAISO determining how that capacity would best be spread between the Diablo Canyon and Morro Bay substations. Humboldt, given its more remote location and lack of onshore grid infrastructure, is more appropriately studied, as planned, in the proposed "outlook" assessment that focuses on a longer timeframe to accommodate up to 21.1 GW.[5] Studying just 1.6 GW, as included in Sensitivity #2, would not capture economies of scale which are essential in order to achieve reasonable costs for this resource area.

Second, for both 38-MMT portfolios, the Commission should recognize that the 3 GW of out-of-state wind included in these portfolios can be delivered to CAISO on existing transmission infrastructure as a result of new WECC infrastructure and retiring coal units across the West. As recognized in the state's RETI 2.0 report,[6] and advocated by CalWEA earlier in

[5] Ruling at Attachment B, p. B-10.

[6] *RETI 2.0 Final Plenary Report* at p. 61. Available at http://www.energy.ca.gov/reti/.

this proceeding, the IRP process should recognize the growing availability of firm transmission service in the WECC region as coal plants retire and the increasing ability to dynamically schedule Western resources into CAISO.[7] Recent filings in the IRP proceeding confirm the fact that at least 4,000 MW of New Mexico wind will be serving California load-serving entities before 2025, delivered on existing transmission capacity,[8] and note that dynamically scheduled and pseudo-tied out-of-state wind resources can fulfill LSEs' RA obligations.[9] The Commission's 38-MMT portfolios should reflect these facts.

B. The Busbar Mapping Methodology Must Be Revised to Enable Gas-Plant Retirements in Disadvantaged Communities, and to Enable Comprehensive, Least-Cost Transmission Solutions

Staff's proposed busbar mapping methodology virtually precludes the possibility that the transmission planning process will identify needed transmission upgrades, entirely undercutting the very purpose of the TPP and preventing progress on the system upgrades that will be necessary to efficiently retire and replace natural-gas generation in disadvantaged communities with clean and diverse resources. Staff's proposed methodology errs in at least two ways:

a) **The battery storage mapping methodology seeks to locate batteries in DACs *disconnected from any gas-plant retirements.***[10] Without prioritizing the retirement of gas plants in disadvantaged communities, emissions associated with the growing electric loads necessary to achieve lower-GHG targets will ultimately and necessarily rise during constrained periods when gas plants must operate, contradicting legislative direction to prioritize air quality issues affecting disadvantaged

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

[8] Comments of Pattern Energy Group, LP, on the Individual Integrated Resource Plans Filed on or Before September 1, 2020, at p. 3 (October 23, 2020).

[9] Southwestern Power Group II, LLC and Pattern Energy Group LP Joint Comments in Response to Submitted LSE Plans, at pp. 4 (October 23, 2020). Obtaining RA credit also requires Maximum Import Capacity (MIC) rights, as noted in this filing.

[10] Ruling Attachment C, p. C-14 - C-15. The methodology seeks to lower emissions apart from any plan to retire gas plants, and to bring economic activity to DACs. As noted above, this will lead to greater emissions especially during constrained periods. And the economic benefits to DACs associated with utility-scale battery storage are limited, given limited associated jobs and tax base that is not specifically tied to DACs.

communities in the IRP process.[11] Environmental justice advocates have previously explained that prioritizing the LA Basin and the Greater Fresno LCR areas for gas-plant retirements will best ensure achievement of this legislative goal.[12]

b) The proposed thermal retirement methodology *specifically seeks to avoid transmission upgrades*.[13] In previous comments, CalWEA showed that piecemeal partial-battery solutions will be less economic than comprehensive transmission solutions that (i) enable gas-plant retirements in constrained areas and (ii) provide access to lower-cost RA resources outside of constrained areas.[14] Such comprehensive transmission solutions can also provide greater access to diverse renewable and storage resources, and can relieve battery-charging constraints that will enable local batteries to be part of the solution for additional gas-plant retirements.[15]

In addition, the Staff's proposed methodology introduces opportunities for arbitrary or subjective bus-mapping decisions that may not reflect commercial realities. The interconnection queues of CAISO and other transmission owners covered by the IRP (which includes on the order of 100 GW of proposed projects[16]) is sufficiently rich that the Commission need not substitute its own judgements regarding resource locations, apart from offshore wind.[17] The Commission can achieve its objectives of co-locating storage for economic reasons, benefitting

[11] Public Utilities Code 454.52(a)(1)(I).

[12] Comments of California Environmental Justice Alliance, Sierra Club, Natural Resources Defense Council, and Union of Concerned Scientists on the Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes, at p. 8 (June 15, 2020).

[13] Ruling Attachment C, p. C-32. ("CPUC staff will assemble a list that does not create additional transmission needs [by either] … replacing the capacity with generation and/or battery storage resources; and/or … [r]estoring the thermal generation units in areas with identified transmission needs in reverse order of the list developed in steps 1 and 2.")

[14] CalWEA Reply Comments on Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes and Comments on Ruling Seeking Comments on Proposed Proceeding Schedule, at Section III (July 6, 2020).

[15] *Id.* at p. 7.

[16] The CAISO queue alone included, as of 11/9/2020, 86 GW of resources.

[17] Offshore wind development is dependent on scale economies, which necessitate CPUC planning and procurement decisions before substantial commercial commitments can be made in the generator-interconnections process. Moreover, the Commission has identified the obvious Central Coast busbars.

DACs and retiring gas plants – in a simpler, more objective, and more efficient and effective way by relying largely on information from the interconnection queues. In section III, below, we propose such a methodology in which thermal generation retirements are located in disadvantaged communities, and focus on the progress of projects in interconnection queues. Advancement in the queue requires the expenditure of millions of dollars by interconnection customers, which constitutes the most objective and strongest possible indication of commercial viability; these investments inherently reflect the value of storage co-location and due diligence regarding the ability to obtain project siting approvals that are prerequisites to investors making substantial financial deposits to remain in the queue. Further, focusing on the projects in the interconnection queues will favor the development of real projects that can address LSEs' needs to procure renewable and RA resources.

We believe that the straightforward, objective, and reality-based busbar mapping process that we present in Section III, below, is likely to enable gas-plant retirements in the Los Angeles Basin,[18] with associated benefits to DACs and significant resource development in the Central Valley, where many queued resources are concentrated due to lower development costs compared with in-basin resources. Solving for these resource requirements will likely require transmission upgrades between the LA Basin and the Central Valley to address North-South (Path 26) congestion, which would also enable resources in the southern part of the state to serve load centers north of Path-26. One possible transmission solution would resolve North-South congestion while also relieving the Los Angeles local reliability area transmission constraint: connecting the Diablo Canyon substation to LA coastal-area gas plants via subsea cable. This solution has the significant advantage of accessing offshore wind resources at the Central Coast along with several additional advantages compared to an overland transmission solution. These advantages include reducing wildfire-related risks and insurance costs, reducing siting conflicts through multiple communities and utilizing existing transmission infrastructure currently used by coastal gas plants. It is also important to note that, by resolving the North-South constraint, all resources in Southern California, including Salton Sea geothermal resources, could more readily reach load centers in the North.

[18] Notably, whether these 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, these steps are necessary to make that future possible.

While we would expect the CAISO to consider a subsea cable solution in its normal course, the many additional associated policy advantages warrant the Commission specifically requesting that the CAISO study a subsea cable solution among other possible TPP solutions.

III. RESPONSES TO QUESTIONS POSED IN THE RULING

Section 2.1 of the Ruling invites the Parties to respond to the specific questions. These questions are reproduced below with responses that echo and further elaborate on our overview comments above.

Q1. Please comment on Attachment A, the Framework for TPP Portfolio Selection, and recommend any changes that should be made; explain your rationale.

Section B of the Guiding Principles assumes that the TPP will be based entirely on the base case scenario, and that "if the TPP determines that new transmission needs are approved as a result of the resources mapped in the base case portfolio, the CPUC will be expected to take procurement action to encourage development of resources in that area."[19] The Commission should recognize, however, that (as we recommend in these comments and is suggested in Section C of the Guiding Principles) the TPP should be based on a number of scenarios in order to identify "least regrets" transmission upgrades, the very purpose of which is to allow the identified upgrades to serve more than one possible development pattern that will not require procurement action on the part of the CPUC unless it subsequently determines a resource preference. Provision (a) under item 3 (Regulatory Certainty) should therefore contain an additional sentence along the following lines:

> If the TPP determines that new transmission needs are approved as a result of the resources mapped in more than one portfolio to produce least-regrets upgrades that will accommodate multiple development patterns, CPUC procurement actions may not be required.

As importantly, to enable least-regrets transmission solutions, the Commission should make the following changes in the following bullet appearing under "Policy-Driven Study" in Section III on TPP Use Cases:[20]

[19] Ruling Attachment A, p. A-2 and A-3.

[20] *Id.* at A-4.

Any transmission solutions that are needed in the baseline scenario ~~and at least a significant percentage~~ or two or more of the stress scenarios are recommended for approval as part of the comprehensive Transmission Plan in the current cycle.

Q2. Do you recommend any changes to the proposed Base Case portfolio in Attachment B? If so, provide justification for your recommended changes.

As we discussed in section II.A.2, above, the Commission should recognize that the 1,163 MW of out-of-state wind in the base case portfolio (as well as the 3 GW in the 38 MMT portfolios) can be delivered to CAISO on existing transmission infrastructure, and thus does not require new transmission to reach the CAISO system.

Q3. Do you recommend any changes to the proposed Policy-Driven Sensitivity portfolios in Attachment B? If so, provide justification for your recommended changes.

Yes. As discussed in section II.A.1, above, it is crucially important that the "objective and rationale" for the two 38-MMT portfolios be restated. The purpose of the two 38-MMT portfolios should not be merely to "better understand what the transmission implications would be under a 38 MMT resource planning future" but to make progress toward that future by conducting least-regrets planning based on two or more plausible resource planning futures.

In addition, Policy-Driven Sensitivity #2 should be revised to include a more plausible scenario for offshore wind development by 2031: approximately 4 GW at the Central Coast. The objective should be to develop, through least-regrets transmission planning, transmission upgrades that allow for this planning future as well as the one reflected in Policy Driven Sensitivity #1 (and any other future that could be accommodated by the identified upgrades). The study of North Coast offshore wind resources should be addressed in the longer-term "outlook" assessment.[21]

Q4. Do you agree with the Resource-to-Busbar Mapping Methodology guiding principles in Attachment C? If not, explain why. Are there other principles that should be added?

[21] Ruling Attachment B, p. B-10.

Q5. Commission staff has proposed various improvements to the March 30, 2020 version of the Methodology (in Attachment C), and alongside these, has raised "alternative options" for consideration. Should any of the alternative options replace the proposed approach, or do you have other options that should be used instead? If so, clearly specify which topic(s) you are referring to and explain your reasoning.

Q6. Do you recommend any further changes to the non-battery mapping steps in Attachment C? What changes and why?

Q7. Do you recommend any further changes to the battery mapping steps in Attachment C? What changes and why?

Q8. Do you recommend any changes to the Busbar Mapping Criteria & Implementation section of Attachment C? What changes and why?

We address questions 4-8 here.

a. Fundamental problems with the proposed busbar mapping approach

As noted in section II.B above, the proposed methodology is fraught with arbitrary and subjective decision-making, and will not reflect commercial realities. In particular, the elaborate approach to locating battery storage is not primarily based on queued resources, which are replete with co-located solar (and, to a lesser extent wind[22]) and storage resources. Instead, it will locate resources where no indication of commercial interest may exist based on battery "opportunities" in LCR areas, local air quality, and characterization of DACs.[23] Critically, the methodology does not begin, as it should, with retiring gas plants within DACs and replacing those gas plants with the most efficient clean resources whether or not they are inside or outside of the LCR area. Instead, the proposed methodology seeks to avoid transmission upgrades which it determines a priori to be "unnecessary."[24]

[22] The proposed method of co-locating batteries with solar, and not wind, resources is justified on the basis that the federal investment tax credit is limited to co-locating with solar. However, this assumption would not be necessary if the methodology were primarily based on queued resources which does, indeed, reflect the fact that it is mostly solar resources that are co-located with batteries, but such a methodology would also not arbitrarily exclude the limited number of projects where batteries are co-located with wind resources.

[23] Ruling Attachment C, p. C-15.

[24] *Ibid.*

Therefore, the claim that the proposed busbar methodology for battery resources is "holistic"[25] is false, because it fails to simultaneously evaluate gas-plant retirements, commercially indicated renewable and storage locations, and transmission upgrades. Partial-battery solutions to gas-plant retirements are unlikely to scale up to full-scale solutions at a proportionate cost. Comprehensive solutions will be far more cost-effective by making system-RA resources (including a greater diversity of long-duration storage resources that are not feasible in the LA Basin) available to meet local capacity needs while also providing the transmission infrastructure needed for charging local storage additions that will inevitably be required to address the lumpiness of the transmission solution and to enable further LCRA gas-plant retirements.[26] In other words, a hybrid solution consisting of strategically locating storage resources plus transmission development is likely to be more efficient than either solution individually.

With regard to any CPUC screens for land-use viability for renewable resources, these are inappropriately extra-jurisdictional decisions that would serve to replace decisions by jurisdictional siting agencies. Relying on queued data and, in particular, emphasizing projects that are further along in the interconnection process, will reflect due-diligence reviews that have assessed the likelihood of the ability to obtain necessary environmental permits.

b. A more straightforward approach to busbar mapping

The busbar methodology should be revised as follows.

1. Prioritize thermal generation retirements within DACs.

The methodology should prioritize retirements in DACs. This will place the focus on the LA Basin and Fresno LCRs.[27] Then screen for plant age as contemplated in step #1 and eliminate step #3 that seeks to avoid transmission upgrades.

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[25] *Ibid.*

[26] For more discussion of this point, see CalWEA's July 6, 2020, comments (note 14 *supra*). In addition, the CAISO has recently found significant battery-charging limitations in the LA Basin, where four-hour batteries were found to be capable of meeting just 740 MW of the local reliability need on a one-for-one basis. See CAISO presentation, *2020-2021 Transmission Planning Process Stakeholder Meeting* at PDF-page 146 (September 23-24, 2020).

[27] Note 12 *supra.*

2. Base busbar mapping for RPS resources on queued resources

As discussed above, busbar mapping for RPS resources in a particular CREZ should be based on queued resources, with greater weight placed on projects further along in the generator-interconnection process. RPS projects with Phase 1 (System Impact Studies) postings should receive 1x weight; projects with Phase 2 (Facility Studies) postings should receive 2x weight; and projects with generator interconnection agreements (GIAs) should get 3x weight. Table 1 below provides an example of the application of this methodology.

While our busbar mapping approach does not directly take into account LSEs' resource plans, it will necessarily reflect those plans since the security that LSEs' power purchase agreements provide to proposed projects will foster the advancement of resources in the interconnection process, and our methodology favors more advanced projects. In addition, LSEs will select from queued resources, particularly those in more advanced stages of development.

Table 1: Example of Weighting Queued Projects Among the Busses within a CREZ

IRP Solar Portfolio of 2,000 MW in a Sample CREZ

Bus in CREZ with Queued Solar Generation	Queued Solar MW with no IFS posting	Weight	Queued Solar MW with Phase 1 (SIS) IFS Posting	Weight	Queued Solar MW with Phase 2 (FaS) IFS Posting	Weight	Queued Solar MW Who Executed GIA	Weight	Total Allocation Factor	Relative Allocation Factor	Mapped MW to Bus
1	1000	0	500	1	200	2	100	3	1200	0.16	329
2	500	0	200	1	200	2	300	3	1500	0.21	411
3	1000	0	1000	1	100	2	0	3	1200	0.16	329
4	100	0	500	1	100	2	400	3	1900	0.26	521
5	1000	0	1500	1	0	2	0	3	1500	0.21	411
Sum									7300		2000

3. Base busbar mapping for storage resources on queued resources

Similar to busbar mapping for RPS resources, busbar mapping for system-wide storage resources should be based on the queued co-located resources with Full Capacity Deliverability Status (FCDS), with greater weight placed on projects further along in the generator-interconnection process. Co-located storage projects with Phase 1 (System Information Studies) postings should receive 1x weight; projects with Phase 2 (Interconnection Facility Studies) postings should receive 2x weight; and projects with generator interconnection agreements (GIAs) should get 3x weight. Table 2 below provides an example of this.

Table 2: Example of Weighting System-wide Queued Storage Projects

IRP Storage Portfolio system-wide: 10,000 MW

Bus in System with Queued Co-Located Project	Queued FCDS Co-located Storage MW with no IFS posting	Weight	Queued FCDS Co-located Storage MW with Phase 1 (SIS) IFS Posting	Weight	Queued FCDS Co-located Storage MW with Phase 2 (FaS) IFS Posting	Weight	Queued FCDS Co-located Storage MW Who Executed GIA	Weight	Total Allocation Factor	Relative Allocation Factor	Mapped MW to Bus
1	1000	0	500	1	200	2	100	3	1200	0.16	1644
2	500	0	200	1	200	2	300	3	1500	0.21	2055
3	1000	0	1000	1	100	2	0	3	1200	0.16	1644
4	500	0	500	1	100	2	400	3	1900	0.26	2603
5	1000	0	1500	1	0	2	0	3	1500	0.21	2055
6	500	0	250	1	100	2	50	3	600	0.08	822
7	250	0	100	1	100	2	150	3	750	0.10	1027
8	500	0	500	1	50	2	0	3	600	0.08	822
9	250	0	250	1	50	2	200	3	950	0.13	1301
10	500	0	750	1	0	2	0	3	750	0.10	1027
Sum									10950		10000

Conducting the busbar mapping process in this way will result in a portfolio that is based on commercial realities, that will efficiently plan for gas-plant retirements in disadvantaged communities, and will identify transmission upgrades that are least-cost when all elements are holistically considered at once.

Respectfully submitted,

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On behalf of the California Wind Energy Association

November 10, 2020

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 Ruling Seeking Comments on Portfolios to Be Used in 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 November 10, 2020, at Berkeley, California.

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