

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

Order Instituting Rulemaking to Develop an
Electricity Integrated Resource Planning
Framework and to Coordinate and Refine
Long-Term Procurement Planning
Requirements.

Rulemaking 16-02-007
(Filed February 11, 2016)

**REPLY COMMENTS OF THE CALIFORNIA WIND ENERGY ASSOCIATION
ON STAFF PROPOSAL ON PROCESS
FOR INTEGRATED RESOURCE PLANNING**

Nancy Rader
Executive Director
California Wind Energy Association
1700 Shattuck Ave., #17
Berkeley, CA 94709
Telephone: 510-845-5077 x1
E-mail: nrader@calwea.org

Dariush Shirmohammadi
Technical Director
California Wind Energy Association
1700 Shattuck Ave., #17
Berkeley, CA 94709
Telephone: (310) 858-1174
E-mail: dariush@gridbright.com

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

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Pursuant to the May 16, 2017, ruling issued by Administrative Law Judge (“ALJ”) Julie Fitch (“Ruling”) and the June 13, 2017, ruling modifying schedule, the California Wind Energy Association (“CalWEA”) submits these reply comments on various parties’ opening comments on the “Proposal for Implementing Integrated Resource Planning at the CPUC: An Energy Division Staff Proposal” (“Staff Proposal”).

We note that, due to time and resource constraints in responding to a large volume of lengthy comments, CalWEA is unable to respond to all parties’ comments, or all portions of parties’ comments. Our lack of response should not be construed as endorsement or disapproval at this time. Our comments focus primarily on the opening comments of Pacific Gas & Electric Company (“PG&E”), Southern California Edison Company (“SCE”), San Diego Gas & Electric Company (“SDG&E”) – (collectively the Investor-Owned Utilities, “IOUs”), and the California Community Choice Association (“CalCCA”). We also reference the comments of the California Independent System Operator (“CAISO”), Calpine Corporation (“Calpine”), California Unions for Reliable Energy (“CURE”), the Center for Energy Efficiency and Renewable Technologies (“CEERT”), The Utility Reform Network (“TURN”), and the Union of Concerned Scientists (“UCS”). We organize our comments around specific points.

I. A Strong Linkage between Planning and Procurement is Essential

In their opening comments, many parties properly recognize the necessity of linking IRP with procurement, and the danger of the IRP process becoming an “empty exercise.”¹ At the same time, others (including some of those who express support for a meaningful IRP) bristle at the notion that the IRP process will “direct procurement.”² Clearly, in developing the IRP process, the Commission must strike an appropriate balance *between* these two poles – steering LSEs to make appropriate resource decisions, and holding them accountable for the indirect costs they impose on other LSEs, as CalWEA proposed in opening comments. The polar alternatives – mandating procurement decisions or disconnecting IRP from procurement – have little constituency. And yet, the aim of the Staff Proposal is unclear. The Staff Proposal at one point suggests that procurement to correct system-wide deficiencies will be mandated, with the burden falling on IOU bundled customers.³ In any case, it is not sufficiently developed to explain how IRP will encourage all LSEs to make appropriate procurement decisions without mandating them.

While we agree with the IOUs that IRP is a planning process and not a procurement proceeding,⁴ it is imperative that IRP serve to guide and inform topic-specific proceedings, such

¹ See, e.g., the comments of PG&E (at p. 8): “If non-IOU providers are not engaged fully in the IRP process or otherwise subject to consistent requirements, the IRP process will very quickly become an empty exercise”; CEERT (at p. 6): “Simply providing ‘information’ that may or may not be integrated into other resource proceedings is not sufficient to ensure the procurement needed to fulfill the plans and thereby comply with the statute”; CURE (at p.2): “Prior to SB 350 ... there was no system plan; system procurement was just the aggregation of individual decisions by individual LSEs. SB 350 fundamentally changed this procurement paradigm”; TURN (at p. 17): “Absent clear guidance, many LSEs may not feel compelled to adjust their procurement to satisfy program goals and instead conclude that there would be no meaningful consequences if plans are deemed deficient.”

² See, e.g., the comments of CalCCA (at p.3): “SB 350 explicitly recognizes the exclusive right of each CCA program to determine its own procurement mix” and “the fundamental purpose underlying CCA programs is to allow local communities to choose their own energy resources”; PG&E (at p. 13): “PG&E is concerned with the proposed use of the IRP process to direct – instead of inform – procurement. For example, ... the possibility that such a plan can “direct Energy Division staff or LSEs to undertake specific policy or procurement-related activities;” and SCE (at p. 55): “SCE recommends keeping the procurement aspect separate from the IRP process (as is the case today).”

³ TURN and PG&E appropriately object to the suggestion in the Staff Proposal that, as PG&E paraphrased it at p.11, “so long as CCA and ESP Plans meet the IRP requirements, IOU bundled customers will be responsible for the costs of any identified system-wide deficiencies – even if the IOUs’ plans also meet IRP requirements.” See also TURN at p.18.

⁴ E.g., SCE states (at p.57), “With regard to resource acquisition, it is impossible for an IRP to predict with accuracy market conditions at the time of resource acquisition. Thus, actual resource acquisition will

as the Resource Adequacy and RPS proceedings. For example, in opening comments, CalWEA recommended that the Commission require all LSEs to pay for all instructed curtailment based on economic conditions, as well as for emergency overgeneration-related curtailments; this need could be acknowledged in the IRP process, but implemented in the RPS process.⁵ Likewise, it is imperative that the IRP process guide procurement decisions towards an overall portfolio that is least-cost overall. To that end, we agree with CURE (at p.2) that “we should expect a tension between the desire of individual LSEs to continue to procure the least expensive renewable resources (currently PV solar) and the needs of the system for ‘a diverse and balanced portfolio of resources’” and we support CURE’s recommendation that “[t]he Staff Proposal should clearly and explicitly explain how the Commission will resolve this tension so that the resources identified in the Reference System Plan are procured and paid for by all customers.”⁶

II. While Parties Agree on the Principle of LSE Cost-Accountability for Needed System Resources, the Potential for Shifting Ongoing Operational Costs Is Being Overlooked, and Specific Cost-Accountability Proposals Are Lacking

Many parties recognize the potential disconnect between planning and procurement⁷ and the need to avoid cost-shifting as the Commission addresses state policy goals, particularly as non-IOU LSEs begin to serve a substantial part of retail electric load.⁸ And yet CalWEA did not

necessarily differ from the IRP portfolio due to market response, differences in costs from those assumed in the IRP, or other reasons.” See also PG&E at p.41, and SDG&E at p.33.

⁵ Similarly, CalWEA recommended that flexible RA needs (and costs) be allocated to each LSE based on its individual contribution to net load ramp; this could be acknowledged in the IRP process, but implemented in the RA process.

⁶ SDG&E likewise states (at p.44) that, while it agrees with Guiding Principle #8 (that there should be no cost shifting between customers of different LSEs), it notes that the Staff Proposal “does not provide specifics regarding how it will ensure cost allocation is fair and equitable.”

⁷ See, e.g., CAISO (at p. 12): “the optimally balanced, reliable and cost-effective portfolio adopted by the Commission may be undone by individual procurements that differ significantly from the adopted plan”; TURN (at p.17): “Absent clear guidance, many LSEs may not feel compelled to adjust their procurement to satisfy program goals and instead conclude that there would be no meaningful consequences if plans are deemed deficient.”

⁸ See, e.g., SCE (at p.7): “It is imperative, however, that the Commission apply state policy goals equally to all LSEs and avoid unlawful cost shifting between customers”; CAISO (at p.15): “any action in this proceeding should be coordinated with the Cost Allocation Mechanism (CAM), the Power Charge Indifference Adjustment (PCIA), and the proposed Order Instituting Rulemaking to Review, Revise, and Consider Alternatives to the Power Charge Indifference Adjustment”; CURE (at p.2): “Additional more

observe any focus on the potential for ongoing operational cost-shifting that may result from LSEs' procurement decisions, in addition to the procurement cost-shifting related to system resources that the Commission might order the IOUs to procure, which was noted by many parties.⁹ Further, to the extent that CalWEA was able to review parties' comments, it appears that CalWEA was the only party to make a detailed proposal to address and correct potential cost-shifting. CalWEA supports TURN's call (at pp. 18-19) for the Commission to further develop mechanisms that could be needed to develop new large-scale system resources that provide benefits to all customers and cannot easily be justified based on the needs of a single LSE, but that proposal relates only to charging LSEs for their fair share of additional procurement, not of ongoing operational costs, and does not address how to determine what the fair share of those costs *are*.

It is essential to address, at the outset, the potential cost-shifting that may occur as a result of each LSE's resource procurement decisions because holding LSEs to account for the operational costs of those decisions will reduce the need for the Commission to direct procurement of a "lumpy" integration resource, such as pumped storage, in the first place. To illustrate, if the Commission adopts procedures that will hold LSEs accountable for the indirect system costs that would result from an imbalanced portfolio, as CalWEA proposed in some detail,¹⁰ LSEs will be less likely to procure imbalanced portfolios in the first place, and there will be less need for potentially costly solutions to correct the system problems that result from an aggregation of imbalanced portfolios. On the other hand, if the Commission adopts no such cost-accountability program, it may well end up encouraging inefficient procurement decisions

expensive procurement may be required. In that case, the Commission "shall ensure ... that there is no cost-shifting among customers of load-serving entities..."

⁹ See, e.g., TURN (at pp. 18-19): "TURN urges the Commission to further develop mechanisms that could be needed *to develop new large-scale system resources* that provide benefits to all customers and cannot easily be justified based on the needs of a single LSE"; SDG&E (at p.44): "The Staff Proposal should be clear that any cost for such *backstop procurement* should be borne by the party that failed to carry out its obligation; CURE (at p.3): "the Commission should clearly state that to the extent that the aggregation of individual LSE plans fails to match the Reference System Plan, the Commission will *direct the IOUs to procure those resources* pursuant to Section 454.51(b), the costs will be "allocated on a fully nonbypassable basis" pursuant to Section 454.51(c)..."; and SCE (at p.60): "If ... the Commission determines that *additional resources are needed* to address a reliability concern or comply with another state goal and orders the large IOUs to procure additional resources ..." Emphases added.

¹⁰ See CalWEA comments at Section III.A.

(a “race to the bottom”) that will fast lead to the need for a system-storage resource. While charging LSEs, at that point, for a portion of the cost of the system resource based on each LSE’s contribution to the need for such resource could spread the ensuing costs fairly, those costs might be avoided altogether if the Commission puts appropriate cost signals in place at the outset.

Some parties refer to the need to spread “equally” or “proportionately” among LSEs the cost of system resources that the Commission may order, or “among all benefitting customers,”¹¹ without expressly recognizing the likely fact that some LSEs will have contributed more, and some less, to the problem that the system resource is procured to address. SDG&E, on the other hand, appropriately notes (at p. 45) that “a simple spreading of deficiencies will punish those LSE[s] who have already made commitments to specific types of resources and may very well encourage parties to avoid filling their entire need out of the concern that they will be allocated more resources later.” CalWEA’s proposal specifically addresses this concern by apportioning the cost of system deficiencies based on cost-causation, ensuring that cost allocation is fair and equitable, as SDG&E advocates. However, contrary to SDG&E’s argument that the proposed section on Common Resource Valuation Method (which asks each LSE to describe how it plans to value resources in its procurement activities¹²) be removed from the IRP Plan, CalWEA proposed that the IRP should produce “incremental cost indicators” for use by all LSEs to guide their accounting as they evaluate resources for procurement.¹³ As discussed below, these indicators should be used in conjunction with an LSE’s development of a baseline IRP that uses the Commission’s assumptions in generating the Reference System Plan – if the plan is not developed using the Commission’s RESOLVE model itself.

¹¹ See, e.g., SCE (at p.60): “procurement costs for [additional resources needed to address a reliability concern or comply with a state goal] should be allocated to all benefitting customers ... to ensure that there is no cost shifting among LSE customers”; PG&E (at p.12): “If deficiencies are identified notwithstanding all LSE plans are compliant with the IRP, then all LSEs should equally bear the cost of remedying those deficiencies. Any other result would be patently unfair and potentially unlawful”; SDG&E (at p. 45): “If an IOU is directed to step in as the regulated entity and procure new resources for the benefit of all customers, the costs and benefit must be shared by all customers through mechanisms like CAM...”; and TURN (at pp. 18-19): “TURN urges the Commission to further develop mechanisms that could be needed to develop new large-scale system resources that provide benefits to all customers ...” and (at p.20), “it is very important that responsibilities for aggregate deficiencies be allocated proportionately among all LSEs.”

¹² See Staff Proposal, Appendix C, at p.8.

¹³ See CalWEA comments at p.32.

CalCCA (at p. 25) argues that “evaluating the costs and benefits of specific IRPs should only be done for the IOUs” and opposes CPUC interference in its procurement decisions,¹⁴ but these principles are not at odds with the Commission correcting for any imposition of indirect costs that CCAs may impose on others, as CalWEA advocates. Indeed, CalCCA (at p.28-29) notes that the Commission should consider methods to reward LSEs “whose portfolio reduces the integration needs of the system portfolio.” Rewarding LSEs that mitigate the need for additional integration resources is simply the inverse of charging LSEs that contribute to the need for additional integration resources.

III. All LSEs Should Develop an IRP Based on the CPUC’s Assumptions, for Comparison with Their Preferred Plans

CalCCA resists the suggestion that the Commission might direct CCAs, along with other LSEs, to develop their IRPs using Commission assumptions.¹⁵ CalWEA nevertheless agrees with UCS (at p.8), which “recommend[s] that all LSEs should be required to use RESOLVE with a standard set of assumptions to see if the GHG Planning Price results in a distinct set of outcomes when different modeling tools are used.” The Staff Paper suggests that LSEs develop at least one portfolio that reflects all of the CPUC’s assumptions and methodologies;¹⁶ this suggestion should be made explicit in the final IRP process, as all LSE plans – particularly those relating to procurement that is not approved by the Commission – should be developed in view of the Commission’s assessment of what a least-total-cost portfolio looks like, considering costs across the entire CAISO footprint, along with an indication of any indirect costs that the LSE should expect ultimately to pay as a result of its decisions, as CalWEA advocated in opening comments.¹⁷ Developing a set of portfolios based on a common set of assumptions and methodologies is essential for creating a baseline against which subsequent procurement choices can be evaluated.

¹⁴ See reference to CalCCA, *supra* note 2.

¹⁵ See, e.g., CalCCA (at p.11): “SB 350 does not provide a basis for requiring that CCA programs develop their IRPs using the Commission’s abatement price. As such, the Commission will have to rely on CCA programs’ voluntary adoption and use of the abatement price.”

¹⁶ Staff Paper at step 3 in Figure 2.1.

¹⁷ CalWEA comments at sections III.A and B.

Meanwhile, SDG&E (at p.33) argues that LSEs “are not likely to be in a position to assess risks presented by other LSEs’ plans before they have had the opportunity to review those plans.” The other IOUs have similar concerns.¹⁸ CalWEA concurs that asking an LSE to evaluate the impacts of its plan on other LSEs is unworkable. Instead, as noted above, the Commission should provide each LSE with tools to guide their own plans towards least-total-cost portfolios that meet state goals.

IV. Binding Legislative Requirements Should be Used to Develop the RSP and in All Primary Model Runs

CalWEA agrees with PG&E (at p.30) that SB 350’s binding RPS target of 50 percent by 2030 should be set as a floor in the RESOLVE model and included in the Reference System Plan (“RSP”). Staff’s proposed approach, which removes the RPS target in favor of an arbitrarily-determined annual GHG target to meet the RPS requirement, is inappropriate because it fails to ensure that the legislative mandate is satisfied. This principle should apply to any binding legislative requirement.¹⁹ CalCCA indicates agreement with this principle as well,²⁰ although it implies that storage targets are binding legislative requirements, whereas PG&E does not, nor does PG&E appear to consider any energy efficiency targets as binding.²¹

While CalWEA supports the inclusion of any targets that the Commission considers to be binding in the RSP, we also agree with PG&E that the IRP process test each mandate for its cost-effectiveness using sensitivity analyses. The results could inform legislative changes to any binding targets, and may inform the Commission’s implementation of any non-binding targets.

¹⁸ See SCE (at p. 51): “it is speculative to project the impact to other customers in the CAISO without understanding the analysis behind the development of each LSE-preferred portfolio;” and PG&E (at p. 45-56): “PG&E does not believe it would be in a position to undertake a meaningful assessment of the potential impact its preferred portfolio may have on other LSEs.”

¹⁹ UCS’s position (at p.10) is puzzling. While stating that the “RPS is a law that requires certain quantities of generation from eligible technologies, and failing to reach these amounts could result in enforcement actions,” UCS goes on to say only that the Commission should conduct “at least one modeling run that assumes compliance” with all state clean energy requirements.

²⁰ CalCCA states (at p.29) that it “is strongly in favor of any steps by the Commission to integrate existing legislatively mandated procurement requirements, such as RPS, Energy Storage, and RA, into the IRP proceeding and potentially integrate these reporting requirements into the Commission’s certification of CCA programs.”

²¹ PG&E (at p.23): “Including EE as a candidate resource would ... allow for setting EE goals through the IRP optimization and better ensure that EE is contributing fully to a least cost plan.”

V. The RSP Should Be Optimized Based on Granular Supply Curves, Treating Supply- and Demand-Side Resources the Same

In opening comments, CalWEA (at pp.13-17) recommended developing a granular supply curve of out-of-state (“OOS”) wind resources to better recognize the various ways that OOS wind resources can contribute to meeting RPS goals. Other parties have similarly called for evaluating all possible candidate resources – both supply- and demand-side – within the RESOLVE model, rather than pre-determining resources as fixed-amount inputs to the model.²² CalWEA strongly agrees with this broader point. As these parties point out, any reference system plan that is based on gross assumptions (even “low/mid/high” ranges) is not likely to be a least-cost plan, and an LSE’s preferred plan will almost certainly deviate from the reference plan.

Therefore, we agree with PG&E that energy efficiency (“EE”), behind-the-meter (“BTM”) solar PV, and electric vehicles (“EVs”) be modeled as candidate resources within RESOLVE with as much granularity as possible. Such analyses will help inform the Commission, other agencies, and the legislature about how much of these resources are cost-effective.^{23, 24} As noted in the previous section, CalWEA also supports evaluating, for informational purposes, the cost-effectiveness of any targets that the Commission considers to be binding.

Similarly, CalWEA agrees with SCE that the RESOLVE model should not treat demand-side resources as load modifiers, which will mask the true value and cost of distributed energy

²² See, e.g., Calpine (at p.12): “ideally, all possible GHG reduction measures should be represented endogenously in RESOLVE”; PG&E (at p.15-16): “PG&E continues to encourage the Commission to consider modeling these resources within the optimization as they are critical elements for achieving the goals of SB350;” SDG&E (at p.22): “EE, for example, is modeled as a series of sensitives at three different levels, but it is possible that none of the levels are optimal and they are not based on the marginal cost of GHG reductions. Plainly, any reference plan based on such a gross cut is not likely to be the least-cost plan and an LSE’s preferred plan will almost certainly deviate from the reference plan.”

²³ For example, PG&E (at p.24) points out that the CEC’s mid-case forecast “projects a doubling of BTM PV over the next ten years (from about 10 TWh to 20 TWh statewide in 2026) and depends on particular assumptions regarding NEM after 2019. These assumptions may or may not reflect policies that would result in optimal levels of BTM PV in California’s electricity portfolio. Treating BTM PV as a candidate resource after 2019 would better enable the IRP process to inform future BTM PV policy.”

²⁴ While PG&E references (at p.18) CARB estimates of the cost of GHG reductions from cap-and-trade, energy efficiency and renewables, we note that these numbers are also not granular.

resources.²⁵ The use of non-transparent load modifiers can be very misleading. Instead, each resource type should be modeled and treated separately with a granular supply curve which can be improved upon in each IRP cycle as better information becomes available.

Where gross assumptions have to be made due to a lack of information, those assumptions should be explicit, reasonable, and not overly aggressive. For example, PG&E notes (at p.25) that the time-of-use adjustment factors in the Staff Proposal reflect a very aggressive scenario that should be corrected, and SCE notes (at p.42) that the proposal's assumptions regarding daytime EV workplace charging are unrealistic, and that long-range battery electric vehicles will favor nighttime charging. Overly aggressive assumptions in these areas will misleadingly underplay the potential for midday resource curtailment. PG&E also argues (at p.26) that total EV load should not be included in baseline consumption as a load modifier, rather some small amount of EV could be included as a load modifier to represent a minimum baseline of customer adoption, but the remainder of EV load should be modeled as a separate and distinct candidate resource. As SCE suggests (at p.44), EV adoption should be broken out into light-duty and heavy-duty segments, as these segments have different impacts on GHG emissions and local air pollutant emissions, as well as different charging profiles, as PG&E notes (at p.27). As SCE notes (at p.43), the IRP process should be iterative, with data collection and analysis improving over time. If assumptions prove to be too conservative, they can be adjusted upwards to reflect real experience and trends.

VI. IRP Should Recognize the Relative Benefits to Disadvantaged Communities, and overall GHGs, from Vehicle Electrification

SCE argues (at p.5) that “transportation electrification has the potential to reduce criteria pollutants and improve air quality, positively impacting disadvantaged communities.” Calpine argues (at p.2) that the IRP process should recognize that the lowest-cost improvements in local air quality may not come from the electricity sector, as conventional generation accounts for a miniscule share of the pollutants most associated with local air quality problems, while

²⁵ SCE (at p.35): “the RESOLVE model treats demand-side resources as load modifiers and therefore, in the 2017- 2018 IRP, the true value of distributed energy resources and their geographic benefits will not be identified, either for their potential benefit to the system or their potential benefit to DACs. It is important to explore and understand the tools that can provide the information necessary to effectively compare the value of all candidate resources, based on societal cost and technology benefits to the system, including geographic benefits, so that optimization of all resources can be realized.”

transportation contributes disproportionately to local air quality problems. CalWEA agrees that the Commission should evaluate how disadvantaged communities stand to benefit from the adoption of electric vehicles and their impact on local air quality, dollar for dollar, relative to reducing gas emissions in the electric sector.

Related, we agree with SCE (at p.5) and PG&E (at p.26-27) that the electric sector should not be penalized, in the IRP analysis, for increased electric-sector GHG emissions when, on an inter-sector basis, net GHG emissions are reduced.

VII. The Planning Reserve Margin Should Be Reformed in a Practical Way

The CAISO argues (at p.9) that the planning reserve margin (“PRM”) not be used to represent system reliability resource need, and that such need instead be determined through rigorous reliability-based production-cost simulations that consider system requirements on a more granular basis. While CalWEA fully agrees with the CAISO that PRM reform is needed as a result of increasing levels of variable renewable energy on the system, its proposed solution of performing production-cost simulations would be untenable due to massive computational requirements, particularly for the first IRP cycle. Moreover, we note that RESOLVE is not intended to deal with reliability issues, which is why reliability requirements are treated as inputs to RESOLVE.²⁶ However, it is still possible to reform the PRM in a simpler way that would still be very meaningful for application in the initial IRP process.

As CalWEA recently noted in the Resource Adequacy (“RA”) proceeding, Energy Division’s work on implementing the Effective Load Carrying Capability (“ELCC”) in that proceeding has shown that the PRM changes significantly from month to month. If the PRM were set accordingly on a monthly basis (as a percentage of the monthly peak load demand), PRM requirements would substantially increase in off-peak months. CalWEA therefore recommends that Energy Division review its work in the RA proceeding (on ELCC issues) for application in RESOLVE’s initial IRP modeling run.

²⁶ Capacity-based reliability requirements, whether in the form of RA (PRM as well as flexible RA) or local capacity, should come from the latest CPUC and/or CAISO studies and be inputted into IRP. The results of IRP should then be screened by the CAISO for reliability issues such as transmission overloads, voltage concerns, or stability issues – none of which are covered in the IRP.

VIII. CAISO Export Levels Should Not Be Set Arbitrarily

Various parties take issue with the staff's assumed net export rate of 5,000 MW, favoring a more conservative 2,000 MW instead.²⁷ However, both values are arbitrary. Instead, as CalWEA recommended in opening comments (at p.10), any limit set for net exergy exports should be established using relatively simple WECC-wide production simulation studies with consideration of all factors that could reasonably impact the export level.²⁸

To elaborate, CalWEA recommends a comprehensive approach to evaluate the extent to which net exports can occur, especially in the March-to-May time period when California may have generation that exceeds demand. The CPUC should obtain the level of exports that was determined to reasonably occur as an output of a relatively recent WECC-wide operational study, without assuming significant institutional changes.²⁹ Since export levels will influence the renewable energy mix, they should be used as an input to RESOLVE.

IX. The RSP Should Be Used in the Transmission Planning Process

The CAISO states (at p.4) that it would be problematic if a Preferred System Plan that is non-binding on individual resource proceedings were to be used in the Transmission Planning Process ("TPP"), should the Reference System Plan have a significantly different supply-side buildout. SDG&E states (at p. 28) that the CAISO should have the freedom to evaluate alternative renewable portfolios provided by stakeholders where the stakeholders are able to demonstrate through analysis that the alternative renewable resource portfolio is likely to produce a significant cost savings for consumers.

²⁷ See, e.g., SCE (at p.26-27): "more in-state resources such as storage are needed with lower export limits. It is more conservative (but may result in higher in-state need) to assume the lower value of export limits"; and CAISO (at p.9): "if regionalization is not an alternative future, then the net export limit should be 2,000 MW."

²⁸ Streamlined WECC-wide production simulation studies can address reasonable commercial operation of the WECC system and show the ability of various balancing authorities to accept imports from other balancing authorities, and are much simpler than the type of production simulation studies needed for reliability assessments.

²⁹ NREL/E3 "Western Interconnection Flexibility Assessment Final Report" (December 2015), at p. xxvi. LTPP staff will need to contact NREL/E3 and request that they calculate the export level, as it is not indicated in the report. Available at:

https://www.ethree.com/documents/WECC_Flexibility_Assessment_Report_2016-01-11.pdf.

CalWEA agrees that the CAISO should evaluate least-cost renewable energy portfolios in its TPP, however, proving significant cost savings would be very difficult and the CAISO would not have any clear direction from the CPUC. Instead, as CalWEA expressed in opening comments (at p.23), the TPP should be based on the Reference System Plan, which would both provide clear direction from the CPUC on what it considers to be the least-cost future and would foster LSE plans that align with the Reference System Plan. While LSEs may be free to fashion their own resource portfolios, the CPUC and the CAISO should not foster suboptimal plans.

X. Land-Use Screens Should be Applied Sparingly

CalWEA strongly supports PG&E's comments (at p. 32) on the use of land-use screens in planning models, which, for base-case scenarios, should screen out only lands legally prohibited from development.³⁰ We agree with PG&E that "existing processes for environmental review and permitting during the procurement and project development stages are the appropriate venues to address land-use impacts, which tend to be highly site-specific." As CalWEA has stated previously in other proceedings, the objective in planning is not to make resource procurement decisions or issue land-use permits for specific projects, but rather to create plausible futures to support least-regrets planning. While the reference case should screen out only legally prohibited lands, subjective criteria could be introduced in one or more sensitivities that could result from different policy choices, land-use decisions, and market conditions.

XI. Brief Points of Agreement with Opening Comments

- CalWEA supports CalCCA's recommendation (at p.7) of an additional guiding principle that "Voluntary efforts of LSEs to exceed applicable environmental standards should not excuse other LSEs from meeting their obligations." At the same time, as CalWEA noted in opening comments (at p. 5), LSEs that exceed RPS or other requirements should be accountable for the total cost of their procurements, including any cost-shifting impacts to other LSEs resulting from such procurement.
- CalWEA supports TURN's call (at p.5) for the Commission to coordinate with the CEC and CARB to develop a common methodology for GHG attribution to guard against the double-counting of resources, particularly imported resources.

³⁰ As CalWEA has stated before, this should include land use restrictions that effectively prohibit wind energy development, such as Solano County's moratorium on wind energy development and San Diego County's 2013 Wind Energy Ordinance which effectively prohibits wind development.

- CalWEA supports Calpine’s recommendation (at p.13) that LSEs be required to identify the existing reliability resources on which they intend to rely over the long-term and explain how they intend to procure such resources or demonstrate that they already have been procured. Absent a demonstration of long-term commitments, the Commission will need to take steps in the RA proceeding, coordinating with the CAISO, to ensure that long-term system and local reliability needs are being addressed, and being addressed at the least-cost, while meeting GHG requirements.
- In opening comments, CalWEA supported using a separate track to evaluate bulk storage and geothermal resources. However, in reviewing the opening comments of the IOUs,³¹ we are persuaded that these resources should be included in the supply curve and optimized in the modeling process, rather than studied as inputs to the model in a separate study. This presumes, however, that RESOLVE is capable of handling these resources in the main IRP run. As noted by PG&E, if the optimum portfolio includes a resource that is too large for any one LSE to procure, at that point a separate track can be set up to address the market or policy barriers that may exist. These may include, as noted above, the lack of established cost recovery mechanisms for shared resources.

Respectfully submitted,

/s/ Nancy Rader
Nancy Rader
Executive Director
California Wind Energy Association
1700 Shattuck Ave., #17
Berkeley CA 94709
Telephone: (510) 845-5077 x1
Email: nrader@calwea.org

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

July 12, 2017

³¹ See PG&E at p.42-43, SCE at p.39, and SDG&E at p.28.

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 “Reply Comments of the California Wind Energy Association on Staff Proposal on Process for Integrated Resource Planning” 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 July 12, 2017, at Berkeley, California.

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