

**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 RULING SEEKING COMMENT ON GREENHOUSE GAS EMISSIONS
ACCOUNTING METHODS AND ADDRESSING UPDATED GREENHOUSE GAS
BENCHMARKS**

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***

April 30, 2018

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I. INTRODUCTION AND SUMMARY

Pursuant to the April 3, 2018, Ruling of Administrative Law Judge Julie Fitch Seeking Comment on Greenhouse Gas Emissions Accounting Methods and Addressing Updated Greenhouse Gas Benchmarks (“Ruling”), the California Wind Energy Association (“CalWEA”) submits these reply comments to parties’ April 20, 2018, opening comments regarding the clean net short (“CNS”) accounting methodology included in the Ruling for use in accounting for the greenhouse gas (“GHG”) emissions associated with the electricity resource portfolios included in their proposed integrated resource plans to be filed in August 2018.

In summary: First, these comments recommend that three refinements be made to the CNS accounting methodology: (1) to discourage resource shuffling, the methodology should count purchases from large, out-of-state hydropower resources toward system power, rather than toward the portfolios of the purchasing load-serving entities (“LSEs”); (2) the profile used for purchases of large, out-of-state hydropower should be informed by the terms of the actual contracts for such resources, which the Commission should obtain from all LSEs holding such contracts; and (3) the Commission should count Product Content Category (“PCC”) 0 products as eligible GHG-free resources. Second, the treatment of storage deserves further discussion and refinement in the next Integrated Resource Planning (“IRP”) cycle. And, finally, CalWEA responds to some of the objections that were raised about the CNS methodology in opening comments.

I. REFINEMENTS OF THE GHG ACCOUNTING METHODOLOGY THAT SHOULD BE ACCOMPLISHED IN THE INITIAL IRP CYCLE

A. The Commission Should Count Purchases of Legacy Out-Of-State Large Hydropower Toward System Power, Rather Than Toward LSE Portfolios, To Discourage Resource Shuffling

In its opening comments, TURN argues (at p.1-2) that new procurement from out-of-state legacy resources – including existing hydroelectric, solar, wind and nuclear generation -- that does not change the total production from the resource should be subject to additional scrutiny because these transactions may merely result in resource shuffling and could even result in dispatching additional fossil units. TURN proposes that the “the model’s instructions should specify how to count such purchases and Energy Division will need to audit model results carefully as to the use of such resources.”

As TURN indicated and discussed below, the Commission has already agreed that reducing GHG emissions on paper only is inconsistent with the purpose of the IRP process. CalWEA agrees that procuring out-of-state legacy hydro resources is unlikely to make any positive difference in overall GHG emissions and may have negative GHG impacts. These resources, the large majority of which are owned and operated by the federal government or local public utilities in the Northwest, are highly likely to continue operating on economic grounds regardless of sales to California. Existing legacy out-of-state wind and solar resources face very different circumstances. Therefore, while all existing out-of-state resources deserve some scrutiny to guard against resource shuffling, the Commission should act now to discourage the practice of purchasing large hydropower to “green” power portfolios as it adopts the GHG accounting methodology, rather than leaving the issue to an ambiguous Energy Division audit as TURN suggests.

Specifically, the Commission should make clear, ideally for this initial IRP cycle, that an LSE will not obtain GHG-free credit for purchases of out-of-state large hydropower under the GHG accounting methodology unless the LSE can demonstrate that the resource would not otherwise continue to operate. (This should include procurement of hydro-dominated electricity from Asset Controlling Supplier systems if Powerex’s proposal is accepted.) CalWEA notes that the Commission declined, in its February 8, 2018, IRP decision, to adopt the solution initially proposed by TURN to prohibit any contracting with out-of-state zero-GHG emitting resources,

such as nuclear or hydro, stating that this would be heavy-handed. As TURN pointed out in its opening comments on the CNS methodology, however, the Commission did “put LSEs on notice” in that decision that it will be “paying attention to these sorts of contracts and arrangements in individual plans” and emphasized that the “purpose of this IRP process is to develop new resources that result in actual GHG reductions associated with serving California electric load, not just contracts that result in fewer GHG emissions on paper only.”¹ The Commission should now provide a clear incentive to discourage such contracting by not crediting contracting-LSEs for purchases of legacy out-of-state hydro resources as GHG-free unless the LSE can demonstrate that the purchase significantly increases the likelihood that the resource will continue to operate.

Instead, those resources should be treated under the methodology in the same way as dispatchable GHG-emitting resources are treated – namely, they would be included as part of the system power mix to be allocated as part of the “net short” of each LSE. To accomplish this, the Commission should exclude these imported resources from conceptual step 2.a in the CNS methodology described on p. A-3 of the Ruling.

B. The Commission Should Direct All LSEs with Recently Executed Contracts for Zero-GHG Imports to Provide Import Profile Data

CalWEA agrees with TURN’s opening comments, at p.3, that using a default average generation profile for all hydroelectric resources may inaccurately represent the actual delivery profiles of hydroelectric imports, which may represent a portion of total generation from a given resource or set of resources that does not match their overall production. Therefore, the Commission should direct all LSEs with recently executed contracts for zero-GHG imports to provide the Commission with import profile data. The results of such a survey of contracts should inform the profile used for hydro imports and resulting GHG impacts.

C. The Commission Should Count PCC 0 as Eligible GHG-free Resources

The Joint Utilities propose (at p. 5) to expand the definition of eligible resources to include those that do not qualify under the Renewables Portfolio Standard program as “Bucket

¹ D.18-02-018, p. 159.

1” solely because of their early contract execution date, i.e., grandfathered PCC 0 resources. CalWEA agrees that this proposed change is reasonable.

II. REFINEMENTS THAT SHOULD BE ADDRESSED IN THE SECOND IRP CYCLE

ORA states, at p. 3-4 of its opening comments, that, by including storage in the Clean Net Short, the CNS methodology assigns the system average emissions intensity to storage charging and discharging. ORA urges the Commission to be careful not to inadvertently incentivize storage that increases GHG emissions. CalWEA agrees that the treatment of storage deserves further discussion and refinement in the next IRP cycle. The CNS instructions for using the LSE GHG calculator (p. A-4) state that “user-specified [storage] capacity [will be used] to scale the RESOLVE month-hour shape that is provided in the Storage Dispatch worksheet.” However, the way in which the storage system is operated will affect that shape, and, in turn, the system mix from which the storage is being charged and ultimately the resources that it will displace. The operational profile, and the round-trip efficiency of the technology type, are the important factors that should be refined in the methodology (rather than where the storage is located, as suggested by ORA).

III. RESPONSES TO OBJECTIONS TO THE CNS METHODOLOGY

In their opening comments, most parties supported the general approach of the CNS methodology – i.e., netting load and generation on an hourly basis and counting only direct deliveries.² A few parties, however, continue to call for annual netting and the counting of PCC 2 and 3 resources (i.e., RECs bundled with system energy and unbundled RECs). We respond to some of the arguments of these parties against the CNS approach.

Protect Our Communities Foundation (“POC”) at p. 3-4 states that the CNS methodology “is disproportionately unfair to new and forming CCA’s as, by design, they really [sic] more heavily on flexible RPS compliance options in the first few years and are thus more likely to have bucket 2 and 3 resources.” CalWEA notes, first, that the CNS methodology looks at projected load through 2030, so covers far more than the first few years of CCA operations.

² These parties included the Joint Utilities, TURN, CEJA/Sierra Club/Earth Justice, NRDC, CESA, CEERT, GPI, and Clean Coalition.

Second, the objective of GHG accounting is to accurately account for GHG emissions, and – per the discussion in Section I, above – incentivize all LSEs to assemble portfolios that have a meaningful impact on GHGs.

The California Municipal Utilities Association (“CMUA”), POC, and the California Community Choice Association (“CalCCA”) argue (at pages 5, 3 and 3 respectively) that the CNS planning methodology should – or “must” -- be aligned with RPS counting rules, which allow for PCC 2 and 3 products. These parties do not point to any statute that so requires, however. While CalWEA is one of the earliest champions of the use of RECs to provide flexible compliance options for the RPS, RECs do not represent actual delivered energy and therefore are not appropriate for use in GHG accounting. Further, RPS compliance does not occur on an annual basis.

The Alliance for Retail Energy Markets (“AReM”) states, at p. 5, that the Commission’s GHG accounting methodology should count PCC 2 products because the ARB’s Cap-and-Trade program accounts for such resources as GHG-free by employing an “RPS Adjustment.” While it is accurate to say that the ARB applies an RPS Adjustment as a method of reducing compliance obligations under Cap-and-Trade, the ARB has stated that the adjustment is “not a recognition of avoided emissions.”³ In fact, the ARB has identified instances where the same electricity was claimed as a zero-emission import and as an RPS Adjustment, resulting in double counting of zero-emission power.⁴

CMUA argues, at p. 2, that the CNS methodology inappropriately “encourages *individual* LSEs to balance their load and generation completely separate and independent of needs and conditions on the interconnected grid.” (Emphasis in original.) Similarly, CalCCA argues hypothetically that an LSE procuring more wind energy than required in order to address the state’s growing evening ramp requirements will not get credit for the action.⁵ While CalWEA is sympathetic to these arguments, since the purpose of IRP is to plan for the system holistically, the reality is that the Commission has not yet put in place sufficient mechanisms to ensure that

³ See “RPS Adjustment: Past and Future,” ARB staff presentation, December 14, 2015. Available at: <https://www.arb.ca.gov/cc/capandtrade/meetings/20151214/rps350.pdf>.

⁴ *Ibid.*

⁵ The reality, however, is that CCAs have, to date, purchased more than twice as much solar capacity, which contributes to evening ramp, as non-solar resources. See <https://cal-cca.org/member-impact/> accessed on 4-27-18).

procurement by individual LSEs will add up to an overall portfolio that is optimal systemwide. Even before the acceleration of CCA formation, LSEs focused on minimizing the direct cost of their RPS procurements with little regard to the indirect associated costs that would fall on their own ratepayers as well as those of other LSEs as a result of centralized grid operations. To address this situation, the Commission has not yet, for example, allocated flexible ramping costs to each LSE based on its causation of those costs (rather, it allocates costs on a load-share basis). Similarly, the Commission did not adopt, in its IRP decision, the principle that the costs of any system integration resources that it may order to be procured will be allocated to LSEs based on causation, nor has the Commission considered whether RPS contract terms for all LSEs should address curtailment issues to ensure that curtailment costs are fully accounted for.⁶

CMUA also argues, at p. 4-5, that the CNS methodology will discourage curtailment, which it points out is at odds with the Commission's finding that curtailment is a viable and likely economic strategy to manage variability of resources. While this may be true, it is also true that curtailed resources provide no GHG benefits and will, at some point, create a justification for costly storage resources.

CalCCA also claims that the Commission has not addressed the net effect, under the example it uses, of providing surplus solar generation during the day while drawing from gas-fired generation at night. CalCCA posits that, on a MWh basis, "the effect is likely to be a wash as reduced natural gas generation during the day would likely equal, or perhaps exceed increased natural gas generation at night." Even if this particular example were to result in a "wash," if such practices are widespread, it would ultimately lead to renewable energy curtailments and/or the need for costly storage resources, an outcome that the CNS methodology would discourage. Moreover, this example does not address the net impact of PCC 2 and 3 purchases or purchases of existing out-of-state hydropower.

CalCCA similarly argues that, under the CNS Proposal, no LSE could claim to be 100% GHG-free unless it was able to exactly match its load with its zero-GHG generation for all 8,760 hours of the year. What is truly important, however, is that the state demonstrate that its economy is actually being served by GHG-free resources, not achieving that goal based on paper

⁶ CalWEA addressed these issues at length in its [June 28, 2017, Comments](#) on Staff Proposal on Process for Integrated Resource Planning and elsewhere.

accounting. As TURN stated, at p. 1, the delivery-based CNS methodology better approximates the “real-world GHG impacts” of procurement by each LSE compared to an annual reconciliation of total retail sales.

Lastly, CalCCA asserts, at p. 7-8, that the CNS proposal may “run afoul of the Commerce Clause “to the extent it treats RECs with the exact same attributes under state law differently based on the location of their generation” or discriminates against resources located outside of California. This assertion does not accurately describe the CNS proposal, under which all PCC-1 bundled products (energy directly delivered to California from inside or outside of the state) count as GHG-free, and all PCC-3 products are disallowed regardless of location. PCC-2 products are enabled under the RPS purely as a compliance flexibility option; it is not a tool for accurately accounting for GHG emissions. Because these products do not directly deliver renewable energy, they can, as described above, result in double counting of zero-emission power.

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

April 30, 2018

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 Ruling Seeking Comment on Greenhouse Gas Emissions Accounting Methods and Addressing Updated Greenhouse Gas Benchmarks” 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 April 30, 2018, at Berkeley, California.

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