

**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) Rulemaking 16-02-007
Procurement Planning Requirements) (Filed February 11, 2016)

**REPLY COMMENTS OF THE PUBLIC GENERATING POOL
ON IRP STAKEHOLDER COMMENTS**

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September 26, 2018

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In accordance with the May 14, 2018 *Amended Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge*, the Public Generating Pool (“PGP”) respectfully submits the following responsive comments to the September 12, 2018 stakeholder comments on Load Serving Entities’ (“LSE”) Integrated Resource Plans (“IRP”), submitted in the California Public Utilities Commission (“Commission”) Rulemaking (R.16-02-007).

PGP is a not-for-profit corporation composed of ten consumer-owned electric utilitiesⁱ, nine in Washington and one in Oregon, that work together on issues of common interest. All ten members own or purchase around 6,000 MW of non-federal generating resources, over 4,565 MW of which is renewable hydro generation and 96% of which is carbon free. Three of the PGP member utilities operate their own Balancing Authority Areas (BAA), while the remaining member utilities reside in the Bonneville Power Administration (BPA) BAA.

I. THE MAJORITY OF PACIFIC NORTHWEST HYDRO IS REGISTERED WITH CARB AS ASSET CONTROLLING SUPPLY

The Utility Reform Network (“TURN”), American Wind Energy Association California Caucus (“ACC”), Green Power Institute and others identify concerns about out-of-state hydro that are inaccurate and misleading. These groups expressed concerns that out-of-state hydro has a strong potential to result in “contract” or “resource” shuffling or “leakage”. However, the risk to California LSEs of procuring PNW hydro that is “backfilled” with market purchases sourced from dispatchable fossil fuel resources to serve their local demand is minimal as the Northwest is generally surplus and the majority of PNW hydro is Asset Controlling Supply (ACS).

The Northwest has annual surplus of hydro generation. Northwest utilities apply conservative planning rules and the region is surplus even in low water years. The Northwest region has between 4,000– 11,000 aMW of surplus energy depending on the water yearⁱⁱ. This surplus was the reason the interties were created, to provide portions of this surplus to California.

In addition, the majority of PNW hydropower systems have been approved and registered by the California Air Resources Board (CARB) as ACS, which ensures that emissions associated with local generation and purchases of electricity imported into their systems are tracked and accounted. As PGP stated in its initial comments submitted on September 12, 2018, there is approximately 46,000 MW of existing carbon-free hydroelectric generating capability in the PNW and Canada. The Bonneville Power Administration (BPA), Powerex and Tacoma Power are all registered as ACS. This means that more than 75%, approximately 35,000 MW, of the hydro capacity in the PNW is registered as ACS.

Utility	Hydro Capacity (MW)
Bonneville Power Administration (ACS)	~22,450
BC Hydro (ACS)	~11,850
Consumer-Owned Utilities (some ACS)	~6,200
Investor-Owned Utilities	~5,500
TOTAL	46,000

Source: PNUCC Northwest Regional Load Forecast and BC Hydro Fact Sheetⁱⁱⁱ

As Powerex stated in their September 12th comments, ACS suppliers are required to report on emissions associated with local generation and purchases of electricity imported into their systems. ACS suppliers must then remit carbon allowances for power delivered from their systems to California at their specific ACS rate, which is calculated annually under CARB’s ACS rules and procedures and independently verified.

There are also non-ACS PNW hydro suppliers that voluntarily limit their sales of clean, specified energy to other regions, including California, to energy quantities that are in excess of their own local demand needs. Consequently, the exposure that California LSEs have in procuring PNW hydro that is “backfilled” with dispatchable fossil fuel resources to serve demand in their local areas is minimal and will continue to decrease as Oregon and Washington pursue legislation that impose greater GHG emissions reductions, incenting PNW GHG-free resources to be dedicated first to meet regional load.

II. CLIMATE CHANGE DOES NOT INCREASE FREQUENCY OF DROUGHTS

Contrary to claims made by ACC, Defenders of Wildlife and The Nature Conservancy, and contrary to climate protections for California and the southwest US, there is no evidence, based on recent water year records, nor in ongoing climate studies, of increased precipitation droughts in the Northwest^{iv}. In fact, climate change analysis indicates the annual volume of water in the PNW is likely to *increase*, although annual snow packs are very likely to decrease.

This is very likely to affect the timing and shape of the run-off. BPA's study on future regional hydroclimate in the PNW indicates while uncertainty is greater in comparison to future temperature trends, precipitation is likely to increase in the PNW as air temperatures rise an additional 1 to 4 degrees Fahrenheit by the 2030s (2020-2049)^v.

III. THERE ARE MANY OPPORTUNITIES FOR CCAS TO PROCURE IMPORT CAPABILITY

CALWEA stated in their comments that all of the firm transmission capacity rights for the 4,800 MW of capacity on the California-Oregon Intertie (COI) is held by California municipal and investor-owned utilities and that the CCAs will not be able to secure firm transmission rights for their imported hydropower short of upgrading the COI.

CALWEA's claims are incorrect for several reasons. First of all, CAISO allocates available import capability to LSEs, referred to as Maximum Import Capability (MIC), on a yearly basis, through a 13-step process set forth in the CAISO tariff^{vi}, to support resource adequacy imports. All LSEs within the CAISO BAA are eligible to receive import capability as part of this annual process, including CCAs. The import capability allocations change year to year based on requests for import capability and other factors and CCAs are receiving allocations of import capability through this process.

CCAs can also procure import allocation capability from other LSEs^{vii}. CAISO allows entities to procure/transfer import capability bilaterally, which provides additional opportunity for CCAs to secure import capability.

Lastly, CAISO has started a new stakeholder initiative called “Resource Adequacy Enhancements^{viii}” that includes a review of the MIC calculation and allocation, which can provide additional opportunity for CCAs to acquire import capability.

IV. OUT-OF-STATE HYDRO REDUCES COST TO CALIFORNIA RATE PAYERS

Hydropower is the only currently available, zero-carbon generating resource that can dependably and cost-effectively provide the fast ramping capability needed to support the integration of an expanding wind and solar generating fleet. It is important to ensure that hydroelectric resources are part of the planned reliable operation of the system.

Every electric power system must, for reliability purposes, maintain certain types of dynamic, real-time generation characteristics to quickly respond to contingency events. Large hydropower is the premier generating resource for providing the variety of generating characteristics necessary to maintain a reliable system. Hydropower can provide all of the various reserves necessary to respond to system contingencies, such as the sudden loss of a large generating resource.

Currently, the majority of California’s System and Flexible Resource Adequacy needs are met with fossil-fueled thermal generation inside California. Northwest carbon-free hydro resources can not only provide low-cost carbon-free energy but can also play a key role in maintaining Resource Adequacy within California by meeting a portion of the high value flexible capacity needs of the system. Expanding the use of the flexibility of the out-of-state hydro system has been demonstrated to reduce GHG emissions in California by reducing California renewable curtailment and reducing dispatch of California fossil-fueled resources^{ix}.

V. GHG ACCOUNTING IN THE IRP SHOULD BE ALIGNED WITH CARB

The Commission can avoid the issues surrounding GHG accounting for out-of-state resources by simply adopting CARB's GHG accounting methodology for its IRP GHG accounting. CARB is responsible for developing and maintaining an inventory of GHG emissions and implements and oversees a third-party verification program to support mandatory GHG reporting. All GHG reports subject to the Cap-and-Trade Program are independently verified by CARB-accredited verification bodies and verifiers. The Commission can rely on the work already done by CARB to address GHG accounting for out-of-state resources in its IRP process.

Adoption of CARB's GHG accounting methodology in the IRP process also bridges the gap between the planning and procurement of resources and actual dispatch of energy through the CAISO energy markets. Otherwise, having different GHG accounting methodologies in the IRP than in the CAISO energy markets leads to market distortions and perverse incentives that result in inefficient resource procurement and energy market outcomes. Alignment of GHG accounting in the IRP and CAISO energy markets is essential in ensuring that California can actually realize its GHG emissions reductions goal.

VI. CONCLUSION

PGP appreciates the Commission's consideration of these reply comments in their review of the California Load Serving Entity Integrated Resource Plans and looks forward to further engagement with the Commission on these issues.

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Respectfully submitted,

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ⁱ PGP members: Benton PUD, Chelan County PUD, Clark Public Utilities, Cowlitz County PUD, Eugene Water & Electric Board, Grant County PUD, Klickitat County PUD, Lewis County PUD, Snohomish County PUD, Tacoma Power

ⁱⁱ See page 33, 69, and 85 in BPA's [White Book](#) that shows regional surplus/deficit by water year. This analysis is based on existing resources and does not include new resources not yet permitted to be added in the 2020-30 time period.

ⁱⁱⁱ [PNUCC 2017 Loads and Resource Study](#), Table 10 Northwest Utility Generating Resources and [BC Hydro Quick Facts](#)

^{iv} 2011 – 2018 had 4 years within the top 20 wettest years of the historical record:

https://www.nwrfc.noaa.gov/water_supply/ws_ranking.cgi?id=TDAO3

^v See BPA's Hydroclimate Projections and Analysis [Report](#) of June 2018

^{vi} See Section 40.4.6.2 of CAISO's [Tariff](#)

^{vii} See [2018 Bilateral Transfers of Import Capability](#)

^{viii} See CAISO [Market Notice](#), pp. 14-15 in CAISO's [2019 Policy Initiatives Catalog](#), and slide 7 in CAISO's [2019 Policy Initiatives Roadmap](#)

^{ix} CAISO has estimated that the EIM has reduced GHG emissions by 140,486 metric tons in 2016.

https://www.caiso.com/Documents/ISO-EIMBenefitsReportQ1_2017.pdf and Northwest Hydro and California, Summer 2017 [Presentation](#).