

The Center for Energy Efficiency and Renewable Technologies, Renewable Northwest, and the NW Energy Coalition Comments on the 2018-19 Transmission Planning Process Increased Capabilities for Transfers of Low Carbon Electricity between the Pacific Northwest and California Information Study

The Center for Energy Efficiency and Renewable Technologies (CEERT), Renewable Northwest (RNW), and the NW Energy Coalition (NWECC) appreciate the opportunity to comment on the 2018-19 Transmission Planning Process Increased Capabilities for Transfers of Low Carbon Electricity between the Pacific Northwest and California Information Study. While this is a technical, engineering-based, information-only study, including a reasonable range of policy sensitivities would best identify the range of potential benefits from improved operation and coordination on the DC and AC interties.

The proposed CAISO study is not the first time that expansion of the Pacific Intertie has been studied to increase trading of energy and capacity for the mutual benefit of California and the Pacific Northwest. The intertie is approximately fifty years old and has served this function for its entire lifetime. Assessments have been performed at least three times in the “modern era,” once with the expansion of COI/COB built by the utilities that now form the Balancing Authority of Northern California, again with the expansion of Path 15 following the 2001 energy crisis, and most recently in 2009-2011¹ with the Pacific Northwest (PNW)-California Committee and its Transmission Utilization Group and Brownfield Optimization Group. Interests on both ends of the Intertie have seen the benefits of expanded N-S trading and cooperated to make the infrastructure investment to allow that to happen.

This study is, once again, an important step to increased coordination between the Pacific Northwest and California, an essential component of delivering reliable, clean and affordable energy to both regions. CEERT, RNW, and NWECC view this study as a starting point to identify and guide further efforts to increased regional coordination along the West Coast. Several things are different this time. First, the dramatic change in California diurnal load shape due to the expansion of solar photovoltaics offers increased arbitrage opportunities between the regions. Second, the advent of fifteen minute scheduling and the emergence of the CAISO’s Energy Imbalance Market including at least LADWP and SMUD in the South and PacifiCorp, Portland General Electric, Puget Sound Energy, Idaho Power, Powerex, and soon Seattle City Light, as well as potentially Bonneville Power Administration in the north offers the market infrastructure to increase actual trading volumes between these regions towards the physical transmission limits. With the advent of the proposed EIM Day Ahead Market Enhancements, the opportunity to practice quasi or actual reserve sharing among the various Balancing Authorities is greatly enhanced.

In order to better fulfill the goals of the study, CEERT, RNW, and NWECC offer the following comments:

¹ Pacific Northwest-California: New Transmission Feasibility Assessment, Northwest–California Transmission Steering Committee, April 2011.

- Increased coordination between Los Angeles Department of Water and Power (LADWP) and CAISO is critical to increased coordination between CAISO and the Pacific Northwest.
- In order to displace gas burn in the LA Basin, and thus reduce dependence on Aliso Canyon, local resource adequacy value to the LA Basin must be determined, not simply generic system resource adequacy value.
- The Information Study should rely on the 42 MMT scenario portfolio.
- A sensitivity including likely E-W transmission buildout in the Northwest should be included.
- At minimum, a sensitivity with regional clean energy build out meeting overall Washington and Oregon policy goals, not simply Bonneville Power Administration and other NW hydro supplier needs should be included.

Due to both the physical location of the DC intertie and the topology of the LA Basin, it can be argued that better coordination between CAISO and LADWP is critical in order to best facilitate increased coordination between the CAISO and the Pacific Northwest. In the response letter to Chair Weisenmiller and President Picker, LADWP announced their willingness to engage and inform the Informational Study.² However, the Draft Study Scope is currently focused on limitations between CAISO and BPA and does not address barriers within the LA Basin. Identifying limitations between CAISO and LADWP in itself would likely result in displacement of gas in the LA Basin, along with enabling better coordination of the PDCI.

The Draft Study Scope currently seeks to address assigning resource adequacy value in the frame of system and flexible resource adequacy. While this is important to displace gas burn in the State as a whole, the study's principal objective is to displace gas burn in the LA Basin. The southern terminus of the PDCI is located in the LA Basin load pocket as defined by Kirchoff's Laws as well as the Aliso Canyon gas supply region, not simply the paper boundaries of the LADWP Balancing Authority. The potential expansion of the PDCI and the accompanying AC network to distribute the increased energy flows between the LADWP and CAISO BAs will create a new "virtual" local generator with full deliverability that does not draw on Aliso Canyon within the load pocket. The existence of the EIM with the DAM enhancements offers the contractual opportunity to monetize these benefits.

The Draft Study Scope asks for stakeholder feedback on whether to use the 50% RPS portfolio or the 42 MMT portfolio transmitted from the California Public Utilities Commission Integrated Resource Planning process. The 42 MMT portfolio is most appropriate for this study as it is the likely policy-driven outcome and gives a more accurate portrait of the benefits of coordination with the Pacific Northwest. In a similar vein, while the current LADWP IRP scenario that yields a 60% RPS by 2030 may be the appropriate base case for LADWP, a sensitivity that postulates significant incremental progress towards the announced Los Angeles goal of 100% Renewable Energy should be run as a sensitivity.

² http://docketpublic.energy.ca.gov/PublicDocuments/18-IEPR-06/TN222885_20180305T163725_02232018_Response_Ltr_from_LADWP_re_Participation_in_Sensitivit.pdf

The likely build-out of new transmission from the east in the Pacific Northwest to allow imports of Montana and Wyoming wind across the Cascades to serve PNW load centers along the coast offers the potential ability to create a strong parallel E-W path to the Intertie. Construction of some combination of the Boardman-to-Hemingway, Gateway, MISTI and SWIP North projects, most of which would serve the increased E-W flows for PNW clean energy goals would dramatically increase redispatch options to mitigate loop flows during transmission contingencies and reliably increase Path ratings on the Intertie and the Paths that feed it. A sensitivity of likely transmission build out should be included to fully assess the range of potential transfer capabilities between the Pacific Northwest and California.

In addition to utilizing a portfolio in alignment with California clean energy policy goals, it would be valuable to include a resource portfolio for the Pacific Northwest in alignment with Washington and Oregon's clean energy policy goals. While the study appears singularly focused on the value of the Northwest's hydro system, and in particular the Bonneville Power Administration system, inclusion of expected regional clean energy buildout, especially in the 2028 scenarios, would change 1) the flexibility of the hydro system due to greater non-hydro energy and capacity 2) the timing of hydro availability and 3) utilization within the Northwest's transmission system and flows over the intertie. While there is not a single, up to date, authoritative resource for Washington and Oregon's anticipated aggregate portfolios, it could be valuable to utilize the portfolios developed for other studies on the Pacific Northwest such as utility IRPs and the assessments by the NW Power and Conservation Council.³

Signed,

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³ Two studies, that have built up least-cost clean energy portfolio additions for the NW and found increased exports over the intertie and periods of oversupply and curtailment, include: PGP NW Carbon Study: <http://www.publicgeneratingpool.com/e3-carbon-study/>
NW Planning and Conservation Council's "35% RPS Scenario." See Chapter 15 of the Council's 7th Power Plan at: https://www.nwcouncil.org/media/7149924/7thplanfinal_chap15_resourcestratanalysis.pdf