

LS Power Comments to CAISO for

Draft Study Scope - Increased Capabilities for Transfers of Low Carbon Electricity between the Pacific Northwest and California Informational Study

Submitted by	Company	Date Submitted
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LS Power commends CAISO staff for its development of the Draft Study Scope dated April 12, 2018 for the Increased Capabilities for Transfers of Low Carbon Electricity between the Pacific Northwest and California Informational Study (“Study”) to help guide the Objectives, Assumptions and Methodology for the Study. LS Power submits herein a general comment and a few specific comments for CAISO consideration as it finalizes the scope of the Study.

General Comment:

As LS Power has previously stated in its comments to CAISO staff and Letter to CAISO Board¹, one area where improvements should be made in 2018/19 Transmission Planning Process (TPP) is to implement modelling enhancements to properly capture intertie congestion, particularly along the California Oregon Intertie (COI). This is even more relevant in the context of this study and we recommend that CAISO staff take this as a high priority task under the 2018/19 Transmission Plan. As reported by CAISO Department of Market Monitoring (DMM), PACI interface has seen congestion costs between \$50 to \$147 mm every year since 2011². Not capturing this in planning studies results in substantial cost to ratepayers. This new Study cannot provide accurate results without properly capturing the economic congestion that takes place on the PACI/NOB interfaces in the base model for the Study. This will allow the Study to provide a comprehensive evaluation that collectively addresses all issues at this interface including the inherent need to alleviate the documented congestion.

Further, as CAISO performs this study it should take a holistic approach in reviewing options for improving transfer capability between the Pacific Northwest & California. While some options may offer short term limited benefits and others may offer long term reliability, economic and policy benefits, all

¹ http://www.caiso.com/Documents/PublicCommentLetter_LSPower_EconomicStudies_TPP-Mar16_2018.pdf

² As per 2013 & 2016 CAISO DMM Annual Reports on Market Issues & Performance, Section 8, Table 8.1, PACI & NOB congestion combined was approximately \$75mm in 2016, \$50 mm in 2015, \$147mm in 2014, \$62mm in 2013, \$144mm in 2012, \$74mm in 2011.

<http://www.caiso.com/Documents/2016AnnualReportonMarketIssuesandPerformance.pdf>

<http://www.caiso.com/Documents/2013AnnualReport-MarketIssue-Performance.pdf>

of this should be considered as CAISO concludes its recommendations on the study. Greenfield projects such as the Southwest Intertie Project - North (SWIP-North), which LS Power has submitted for economic evaluation in the past TPP cycles and 2018/19 TPP should be considered as a solution for improving the transfer capability. SWIP-North reduces COI & Path 26 flows by ~300 MW or more, based on the WECC Path Rating study work conducted by LS Power. Further, based on CAISO's analysis done under the Transmission Planning Process, CAISO found that SWIP-North reduces congestion hours on COI by 39%. In addition, this project offers a 1000 MW new transmission capacity path between Idaho Power/PacifiCorp and CAISO, which should allow additional available generation capacity in the Pacific Northwest to transact with California and vice versa.

Other Comments:

(1) CAISO should include one additional stakeholder review before initiating the Study

LS Power appreciates CAISO staff seeking stakeholder input on the draft Study scope document that outlines the potential scope at a high level. However, we recommend that an additional opportunity be provided to stakeholders for inputs before CAISO begins the Study work.

Per CAISO's proposed schedule, a Final scope document will be released on May 1, 2018, and then draft CAISO studies will be made available in November 2018 for stakeholder review. We recommend that an additional stakeholder input opportunity be provided after CAISO further develops its thinking on the study approach. While the Scoping document is helpful in laying out the Objectives and Assumptions of this Study, it is missing some key details on the Study Methodology. We appreciate that CAISO and the Study Team may need additional time to further develop these details on the Study Methodology, and therefore it is in the best interest of CAISO and all stakeholders to review and comment on the detailed Study Methodology prior to embarking on the actual Study work. We recommend that once the detailed Study Methodology is drafted, that updated document should be posted by CAISO and another round of stakeholder review be conducted.

A few areas where more details should be provided are listed below.

Section 4.1 of the Scoping document:

- a) Which alternatives to increase transfer capacity on COI and PDCI will be analyzed and how?
- b) How will upgrades to the existing system be compared with new transmission alternatives?
- c) How will AC vs DC alternatives be compared?
- d) As alternatives are analyzed, how will reliability and economic benefits quantified? How will the Day Ahead Scheduling congestion be incorporated into the analysis? Will any potential future policy benefits of alternatives also be captured?
- e) Use of study tools: Can Gridview/Plexos be used for capturing scheduling congestion, or will any other tools need to be used such as Power System Optimizer (PSO)? Our understanding is that Gridview/Plexos do not have the capability to model contract paths, hence cannot capture scheduling constraints.

Section 4.5 of the document:

f) CAISO proposes to use Production cost simulation to “determine how much excess hydro resources are available in the PNW to either provide energy to California or be used as resource shaping”. It is unclear if CAISO will attempt to address the Day Ahead scheduling congestion that has been reported to be between \$50mm to \$147mm every year since 2011 for PACI & NOB interfaces. Absent capturing this congestion, the study will likely show similar results as shown under economic studies done for the last several Transmission Planning cycles, undermining the key objective of the Study to improve transfer capability.

g) The CPUC/CEC letter³ to CAISO asks CAISO to “*Explore the costs and benefits of potential increases to AC and DC inertia capacity with the Pacific Northwest, considering a range of options as well as assessing downstream impacts to transmission within California*”. How will the downstream impacts to transmission within California be assessed? If the Existing Transfer Capability for COI is increased by 300 MW, will Path 26 (500 kV transmission path connecting Northern to Southern California) also need to be increased by at least 300 MW so benefits of COI increase can be achieved in Southern California to facilitate Aliso Canyon retirement? If this were to be the case, does it make sense to build a new transmission project that parallels both COI and Path 26 and provides more benefits including inherent policy and reliability benefits?

We recommend that CAISO provide additional details and seek stakeholder input through either another release of this Scoping document or issue a Study Plan that clearly demonstrates in more detail the Study will be performed. We further recommend that, when available, CAISO post any power flow basecases and production cost simulation models that will be used for this Study in the same manner that it posts models for the TPP Reliability analysis.

(2) Renewable Generation Assumption for the Study

In response to CAISO’s request for feedback under Section 3.6.1 of the Scoping document, we recommend the use of the 42 MT case for this Study. This is the case CAISO will be using for Policy study for 2018/19 TPP and given that this Study is aimed at achieving economic and policy benefits, the 42 MT case is appropriate. Further, we recommend that as CAISO develops transmission upgrade recommendations through this Study, it not only captures the economic benefits but also the potential for incremental policy benefits that such transmission upgrades can provide.

(3) Conditional credibility treatment of common corridor outages

In the Scoping document CAISO mentions that it may reconsider current treatment of the contingency of two of the COI lines as an Extreme Contingency, similar to how CAISO Operations has begun viewing this under certain conditions. LS Power recommends that this conditional credibility criterion should not

³ <http://www.caiso.com/Documents/CPUCandCECLettertoISO-Feb152018.pdf>

be used for planning purposes. In light of changes made recently to the NERC SOL methodology, while it may be reasonable to use this criterion for the Operating horizon, it would not be prudent to use this for planning purposes simply because it is impossible to predict or even reasonably project whether the underlying conditions behind treating these outages as P6 vs P7 will actually materialize.

LS Power thanks CAISO for the opportunity to provide these comments and looks forward to working with CAISO staff as it conducts economic studies and this informational Study to improve transfers between the Pacific Northwest and California.