

## CAISO 2015/16 TPP: Draft Study Plan: Stakeholder Comments

Submitted by	Company	Date Submitted
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LS Power appreciates the opportunity to provide comments on the CAISO 2015/16 Draft Study Plan. LS Power has comments on these three areas:

### **(1) Economic Study Request:**

LS Power is hereby submitting an economic study request for CAISO for the 2015/16 Transmission Plan. The request is to study congestion on CAISO's intertie interface with the Pacific Northwest and evaluate the economic, reliability, and incremental Energy Imbalance Market (EIM) benefits of the transmission solution proposed below.

CAISO's 2014/15 Transmission planning studies for the Bulk System showed reliability concerns due to Category B and Category C contingencies on major 500 kV lines in the Pacific AC Intertie (PACI) transmission interface in Northern California. These issues are partly driven by CAISO's inability to trip CDWR generation and load beginning Jan 1, 2015 (CDWR has stopped participating in this RAS as of Dec 31, 2014). Further, the economic studies done under CAISO's 2014/15 Transmission Planning Process showed congestion on the California Oregon Intertie (COI) interface, although not significant. CAISO Management did not recommend a transmission upgrade in the 2014/15 Draft Transmission Plan to address this issue, and instead relied on use of Operating Nomograms (which limit flows on COI). LS Power encourages CAISO to take a closer look at this recommendation and address these reliability and congestion issues in the 2015/16 Transmission Planning process. We note that the amount of congestion shown in the CAISO studies is very small as compared to the congestion seen on this path in last few years, based on real time data from CAISO's OASIS and Market Update reports<sup>1</sup>. CAISO's 2014/15 TPP Economic study projected congestion of only \$3000 for 2019 and no congestion in 2024 for COI. In contrast, congestion witnessed on CAISO's interties with Pacific Northwest (NOB and PACI) was \$144 mm in 2012 and \$63 mm in 2013, based on CAISO's DMM Annual Market update report for 2013. We understand that some of these differences can be attributed to scheduled outages in the area for 2012 and 2013, but even if this was discounted, remaining differences between studied congestion and actual congestion still appear to be significant. We recommend that CAISO investigate the discrepancies and complete additional modelling, as needed, to benchmark "projected" vs "actual" congestion. The studies should be conducted to accurately quantify congestion in future years and the need for a transmission solution to address reliability and congestion issues should

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<sup>1</sup> See CAISO Department of Market Monitoring (DMM) 2013 Annual Report, page 178, Section 8.2 at: <http://www.caiso.com/Documents/2013AnnualReport-MarketIssue-Performance.pdf>

then be considered.

LS Power requests CAISO to study the Southwest Intertie Project - North ("SWIP North") as a long term transmission solution for this area. SWIP North is comprised of a 500 kV transmission line from Midpoint substation to Robinson Summit substation. LS Power's affiliate owns available transmission capacity on a 500 kV transmission line that connects Robinson Summit to Harry Allen ("ON Line"), which could be dedicated to CAISO. In addition, a new 500 kV line between Harry Allen & Eldorado substations was recently approved by CAISO Board and is to be built by 2020. Hence, if SWIP North were to be built, CAISO could have access to complete path from Midpoint to Eldorado. This will be a major parallel path to several CAISO interties including PACI intertie, interties with the Southwest, and CAISO's internal WECC path - Path 26. SWIP North is expected to reduce congestion on all major CAISO intertie paths, and in particular PACI, NOB and Path 26.

An additional benefit that SWIP North project potentially brings is that it is expected to improve the Energy Imbalance Market (EIM) benefits to all EIM participants. SWIP North will provide improved access to the systems of NV Energy, PacifiCorp, Bonneville Power Administration and Idaho Power. SWIP North will potentially increase transmission capacity available for EIM between PacifiCorp West, PacifiCorp East, CAISO, and NV Energy. This increase in transmission capacity available for EIM should translate into increased EIM benefits to CAISO and the neighboring BAAs participating in the EIM. We encourage CAISO to evaluate the potential of increased EIM benefits from SWIP North, in addition to performing the economic analysis as part of 2015/16 Transmission Planning process.

**(2) Diablo Offline sensitivity study:**

LS Power recommends that CAISO add a sensitivity study to its study plan with Diablo Canyon Nuclear Generation ("Diablo") offline for Year 2025 study case. CAISO notes in the Draft Study Plan that it intends dispatching Diablo online for all scenarios, despite the looming uncertainty over renewal of its license. We believe that adding this sensitivity should provide valuable insights into the state of the grid if a major base load unit such as Diablo isn't available. This study should inform stakeholders and policy makers on what steps may need to be taken if Diablo Canyon were to become unavailable. If Diablo does become inoperable in future, it is likely that the measures required to ensure reliability of the system with this unit offline, will involve building long lead time solutions (such as new transmission upgrades and/or new generation procurement through the LTPP process). We therefore believe that the recommended sensitivity study should be done under this year's planning process.

**(3) Mid-term Flexible Capacity study:**

As per the Draft Study Plan, CAISO proposes to perform a Mid-term Local Capacity study for Year 2020. This study should inform the stakeholders and the policy makers about the local capacity needs in the mid-term. We agree that this should be a valuable study and concur with the CAISO that this should be conducted. In addition, we believe CAISO should also perform a mid-term flexible capacity study. As is evident, going forward the flexible capacity needs for the grid will be critical due to renewable integration and looming Once Through Cooling (OTC) retirements. Currently, CAISO performs a near term Flexible Capacity study and a 10-year out Flexible Capacity study. The near term study is unable to capture the impacts of OTC retirements on flexible capacity needs and the

10-year out study done by CAISO under the LTPP process is projecting significant over-generation and curtailments. We believe currently there is a gap in the process which is that no mid-term (Year 2020) Flexible Capacity study is being done. This study should provide an insight into any reliability issues posed due to the increased needs for flexible capacity in the mid-term and the study should help policy makers make appropriate decisions, as necessary.

LS Power thanks CAISO staff for the opportunity to provide these comments.