CAISO 2017/18 TPP Study Plan: Stakeholder Comments

Submitted by	Company	Date Submitted
Sandeep Arora (<u>sarora@lspower.com</u>) (925) 201 5252	LS Power Development, LLC	3/14/17

LS Power appreciates the opportunity to provide comments on the CAISO 2017/18 Draft Study Plan.

LS Power is hereby submitting an economic study request to CAISO for the 2017/18 Transmission Plan. The request is to study congestion, with consideration for scheduling constraints, on CAISO's interface with the Pacific Northwest, namely the California Oregon Intertie (COI) and Pacific AC Intertie (PACI), and evaluate the economic benefits of the transmission solution proposed below.

CAISO's Transmission planning staff studied congestion on the COI path in the 2016/17 TPP and in several previous cycles. CAISO staff modelled certain enhancements in the 2016/17 cycle as an attempt to correctly quantify COI congestion that was not fully captured in previous studies. In line with LS Power's comments filed for the 2016/17 Draft Transmission Plan¹, while this attempt showed improved results it still falls short of identifying the congestion routinely reported by CAISO's DMM reports. Therefore, to remedy this deficiency we recommend that CAISO improve the study model to quantify the actual "scheduling" congestion on CAISO's PACI interface, a component that has not been included in prior cycles. We understand that performing this analysis may require CAISO to enhance the tools that it currently uses, such as ABB Grid View, and/or to explore using additional tools for the TPP, such as PSO².

LS Power hereby submits the Southwest Intertie Project - North ("SWIP North") as an economic project and requests CAISO to study this in the 2017/18 planning cycle. SWIP North is comprised of a 500 kV transmission line from Midpoint substation to Robinson Summit substation. Additional details of SWIP North are included in the submission of SWIP North as an Interregional Transmission Project in March 2016 under the 2016/17 TPP, and those details have not changed since such submission. After SWIP North is built, LS Power's affiliate will attain approximately 1000

¹ See LS Power Draft 2016/17 Transmission Plan comments at: <u>http://www.caiso.com/Documents/LSPowerComments_Draft2016-17TransmissionPlan.pdf</u>

² CAISO staff and its Consultants used PSO to perform economic studies for SB 350 work

MW of new³ transmission capacity that will become available on the existing 500 kV transmission line that connects Robinson Summit to Harry Allen substation ("ON Line"), as per the Transmission Use and Capacity Exchange Agreement ("TUA") between LS Power's affiliate, Great Basin Transmission, and NV Energy, which is further described below. LS Power hereby proposes this new additional ~1000 MW capacity to be dedicated for CAISO use if CAISO selects SWIP North to be constructed. In addition, the new 500 kV line from Harry Allen to Eldorado was approved by CAISO to be in-service by 2020. Upon completion of Harry Allen Eldorado project, Harry Allen will be a CAISO delivery point. Hence, if SWIP North was selected by CAISO, CAISO could have access to a complete 500 kV path from Midpoint to Eldorado, approximately 575 miles.

Pursuant to the TUA with NV Energy, once SWIP North is built there would be an exchange of capacity between Great Basin and NV Energy. Upon completion of SWIP North, NV Energy would get a share of the capacity between Midpoint and Robinson Summit and Great Basin would get a share of capacity between Robinson Summit and Harry Allen, without either party having to pay any amount to the other. As a result of this capacity exchange, each party would have bidirectional transmission capacity on the entire path from Midpoint to Harry Allen, estimated at approximately 1000 MW each (subject to the terms of the TUA). Therefore, LS Power's economic study request is that CAISO study the benefits of approximately 1000 MW of bidirectional transmission capacity between Midpoint and Harry Allen, which would be available to the CAISO market upon completion of construction of SWIP North.

In addition to the economic benefits that CAISO calculates from Energy Savings and Congestion reduction, CAISO should also estimate Capacity Benefits from SWIP North. Adding SWIP North relieves certain reliability and economic constraints related to imports across COI. This translates into incremental import capability into CAISO. This increase in incremental import capability should be accounted for estimate of the Capacity Benefits of SWIP North.

SWIP North also offers policy benefits by allowing out of state renewables to help meet the new California RPS targets: 40% in 2024, 45% in 2027 and 50% in 2030. SWIP North will allow geographical diversity to incremental RPS build out which will help reduce locational aspects of congestion caused by over generation. This will benefit CAISO ratepayers with or without expansion of CAISO's borders as this new line will provide a transmission path for out of state renewables to be either directly connected to or Pseudo Tied to the CAISO Balancing Authority Area.

We stand committed to assist CAISO in completing this analysis, as requested. LS Power thanks CAISO staff for the opportunity to provide these comments.

³ The Midpoint to Robinson Summit 500 kV line is currently limited to ~975 MW of transmission capacity, which is mostly subscribed. Building SWIP North will increase transmission capacity of this line by ~1000 MW, which will be available to LS Power's affiliate and can be dedicated for CAISO use.