LS Power appreciates the opportunity to provide comments on the CAISO 2020/21 Draft Study Plan. Our comments are limited to Economic & Policy Studies for 2020/21 TPP.

**Economic Study Request & Economic Project Submission**

LS Power is hereby submitting an economic study request to CAISO for the 2020/21 Transmission Plan. The request is to study congestion at CAISO’s intertie interfaces with the Pacific Northwest, namely the California Oregon Intertie (COI), Pacific AC Intertie (PACI) and Nevada-Oregon Border (NOB). In addition to this request, LS Power is also hereby submitting its Southwest Intertie Project North (SWIP-North) as an Economic project, to be modelled as a 1000 MW path of new transmission capacity between Idaho Power (Midpoint) and CAISO (Harry Allen\(^1\)), free of any wheeling charges. As a parallel path to existing major CAISO interties; COI, PACI, and NOB, SWIP-North provides an alternate path for economic energy from the Pacific Northwest into California, in addition to providing policy benefits for reducing GHG emissions and accessing out-of-state renewables.

LS Power’s recommended approach for this Economic Study Request:

1. CAISO’s congestion analysis for PACI, NOB, COI paths needs to also quantify financial congestion on these paths in addition to physical congestion that it has been quantifying over the last few planning cycles.
2. CAISO should investigate whether its Production cost simulation tool is suitable for capturing financial congestion. CAISO should investigate improving its existing tool or should make use of a different tool so it can correctly capture financial congestion.
3. For the SWIP-North economic study, CAISO should calculate all benefits of a 1000 MW transmission capacity from Midpoint to Harry Allen, free of any wheeling charges and in addition to production cost benefits should also quantify (a) GHG reduction benefits (b) Renewable curtailment reduction leading to capital cost savings. CAISO export limit is a very important assumption in quantifying these benefits. CAISO should not limit exports to 2000 MW as in previous cycles, rather should use consider higher limits such as 5000 MW to 7000 MW as utilized in Extended Day Ahead Market Feasibility Assessments Study.
4. For the SWIP-North economic study CAISO’s model should assume that the existing transmission path from Robinson Summit to Harry Allen (“ON Line”) is limited to 1000 MW without SWIP-North & is increased to 2000 MW with SWIP-North. As described below, SWIP-North will not only create

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\(^1\) CAISO’s Harry Allen to Eldorado 500 kV Transmission line is under construction and scheduled to go in service in 2020.
a new 2000 MW path from Midpoint to Robinson Summit but a few terminal upgrades associated with the entire build out of SWIP will also increase transmission capacity of ON Line from 1000 to 2000 MW. A total of 1000 MW of transmission capacity from Midpoint to Harry Allen is offered for CAISO use as part of this economic study request. This will effectively move CAISO’s BAA boundary station to Midpoint.

(5) There are several large solar, wind & bulk storage projects in the Idaho Power interconnection queue at/near Midpoint. A new transmission line such as SWIP-North can provide these projects direct access to CAISO market, by virtue of a Pseudo Tie Agreement with CAISO. We recommend CAISO perform economic study for this sensitivity scenario as well by assuming 1000 MW Pseudo Tie projects at Midpoint being delivered to CAISO through SWIP-North

SWIP-North Project
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 2018 under the 2018/19 TPP. After SWIP-North is built, LS Power’s affiliate will attain approximately 1000 MW of new 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”) among LS Power affiliates and NV Energy, which is further described below. LS Power hereby proposes this new additional ~1000 MW capacity to be dedicated for CAISO use. 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 the Harry Allen to Eldorado project, Harry Allen will be a CAISO delivery point. Hence, if SWIP-North was selected by CAISO, CAISO will 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 LS Power affiliates and NV Energy. Upon completion of SWIP-North, NV Energy would get a share of the capacity between Midpoint and Robinson Summit and LS Power affiliate Great Basin Transmission 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, LS Power’s affiliate would have bidirectional transmission capacity on the entire path from Midpoint to Harry Allen, estimated at approximately 1000 MW. 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.

LS Power thanks CAISO for the opportunity to provide these comments and looks forward to working with CAISO staff for 2020-21 TPP.

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2 The Robinson Summit to Harry Allen 500 kV line is currently limited to ~975 MW of transmission capacity. 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.