Stakeholder Comments Template

2018-2019 Transmission Planning Process Study Scope for Capabilities for Transfers of Low Carbon Electricity between the Pacific Northwest and California Informational Study

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Comments:

Aliso Canyon

The study scope is unclear as to the assumptions for gas availability from the Aliso Canyon gas storage facility. The study scope should be augmented with a clear description of how the Aliso Canyon gas storage facility availability is assumed to affect the availability of gas-fired generation. SDG&E notes that these assumptions could affect the availability of dispatchable gas-fired generation as well as non-dispatchable gas-fired generation (e.g., Combined Heat and Power (CHP) facilities) during certain time periods and under certain weather conditions. Clearly listing how much generation capacity will be available or lost due to a complete closure of the Aliso Canyon storage facility in 10 years, will also provide a good idea on the amount of low carbon electricity exchange that might be needed between the Pacific Northwest and California.

Default vs. 42 MMT Scenario

Since California's government is pushing for ever higher GHG reduction goals it is very useful to create a study case using a constraint close to an upper limit for emissions reduction. Accordingly, the 42MMT Scenario and its RPS additions will be the most analytically valuable.

Maximum Simultaneous Imports

Table 3 of the study scope indicates the "San Diego Import" is 2850 MW. if the 2850 MW is still considered a current value, SDG&E is unclear as to the cut-plane for the "San Diego Import," and what the critical contingency condition and limiting element is that establishes this number. The study scope should reference the source for this number. Based on the most recent LCR study, the 2850 MW voltage stability limit (IROL) does not bind the San Diego sub area anymore but a thermal limit around the Suncrest to Sycamore 230 kV lines does. Also, looking at CAISO and SDG&E's operating procedures (GIP2005 and CAISO 7820), the SDG&E import cut-plane is now combined with the CENACE cut-plane in a bigger cut-plane titled the SDG&E/CENACE import cut-plane. SDG&E encourages CAISO planning to review SDG&E's IROL value and cut-planes.

Southern California Import Transmission (SCIT) Nomogram

Table 3 of the study scope specifies that SCIT will be modeled at 17,870 MW. SDG&E understands that the SCIT nomogram is being retired and should no longer be considered a potential limitation on imports into the southern California area.

Production Cost Modeling

Section 4.1 of the study scope indicates that one of the four studies will be based on "Increasing PDCI rating from 3220 MW N-S to a maximum of 3800 MW N-S." This study will "Identify...the impact that this would have on the amount of RMR thermal generation commitment." SDG&E believes the impact on "RMR thermal generation commitment" should be established through the use of comparative production cost modeling cases. Production cost modeling can account for the numerous factors that determine the hours of a year that it is economic to commit thermal generators, including thermal generators that may be subject to an RMR contract. The study scope should be clarified as to how "RMR thermal generation commitment" will be determined.

Resource Adequacy

The study scope at section 4.4 indicates that the study will "Assigning Resource Adequacy (RA) Value to Imports" by "Develop[ing] a bounding case that assumes maximal utilization of existing infrastructure." SDG&E notes that this approach is consistent with the approach SDG&E has long-advocated for establishing Maximum Import Capability (MIC) on existing interties.

MIC on existing interties – which is the measure of RA that can be counted from areas outside the CAISO Balancing Authority – is currently based on historical imports during peak load periods. The RA proposal described in the study scope appears to contemplate a forward-looking study-based approach for determining MIC on the existing intertie. SDG&E supports the forward-looking study-based approach

for establishing MIC and believes it would be informative if the study scope were augmented with language explaining why the CAISO has apparently revised its approach for purposes of the instant study.

Economic Dispatch of Pacific Northwest (PNW) Hydroelectric Resources

Section 4.5 states that "Production cost simulation will be used to identify congestion under different hydro scenarios (base, low, and high) in the long term and quantify the production cost benefits of increasing the transfer capability." It is unclear from this statement what assumptions the will be used to model the extent to which hydroelectric generation capacity in the PNW will be economically dispatched against prevailing Locational Marginal Prices (LMPs).

A key determinant of the magnitude of congestion-related costs absent an upgrade of transfer capability between the PNW and California, is the extent to which the owners of PNW hydro resources are willing to sell hydroelectric energy to California and the extent to which PNW load serving entities are willing to purchase electricity from California. If transactions between the PNW and California were based strictly on economic criteria, SDG&E believes power flows between the PNW and California would be higher than what has been historically observed and there would have been more instances of congestion on those transmission paths.

Accordingly, to establish whether an increase in transfer capability would materially reduce costs for consumers, it is necessary to first establish a baseline assumption as to how PNW entities will respond to price signals absent upgrades of PNW-California transfer capability. The study scope should explain how this issue will be addressed.

North of Encina and Miguel Congestion

Attention should be paid in the study to the congestion around the Miguel Substation and north of Encina Substation. Retiring the Aliso Canyon storage facility may exacerbate south to north flows through the SDG&E system from the Imperial Valley area, where there is an abundance of renewable resources. Evaluation of the congestion in these areas should also be tied to other qualitative benefits related to other benefits related to flowing Low Carbon Electricity between the Pacific Northwest and California.

Minor Upgrade Cost Caps

The study objective (section 2) indicates that "minor upgrades may be considered for approval especially if they are beneficial in baseline studies." SDG&E notes that SDG&E and CAISO submitted as part of the 2017/2018 TPP process a basket of projects (less than \$70M) that can potentially facilitate the transfer of low carbon energy between the PNW and California. It would be nice if the CAISO could establish a firm Cost Cap on upgrades it might consider through this cycle/phase I study.

Interregional Transmission Coordination

As SDG&E noted on the April _, 2018 stakeholder call, the PNW-California study contemplated by the study scope provides an opportunity to engage several, if not all, of the Western Planning Regions

(WPRs) in a joint study of interregional transmission. LADWP is a member of WestConnect and BPA is a member of Columbia Grid. Additionally, entities with ownership or entitlements to existing transfer capability between the PNW and California include SCE (a CAISO member) and PacificCorp (a member of Northern Tier Transmission Group (NTTG)). In SDG&E's opinion, a collaborative study effort among the WPRs would represent a significant step forward in realizing the benefits that FERC envisioned when it enacted FERC order 1000.

Even if the CAISO chooses not to work directly with the WPRs (as the CAISO indicated during the stakeholder call), SDG&E recommends that the CAISO's analysis carefully assess the relative costs and benefits to each WPR of upgrading transfer capability between the PNW and California. SDG&E believes all four WPRs would be directly affected by an increase in transfer capability. This assessment would provide a basis upon which potential project sponsors for any upgrades could approach each of the WPRs with a request for interregional transmission cost allocation pursuant to FERC Order 1000 provisions.