PG&E acknowledges the tremendous effort by the CAISO staff to develop the Draft Transmission Plan for the 2020-21 Transmission Planning Process and appreciates the opportunity to engage. PG&E acknowledges the CAISO’s approval of three reliability-driven projects and the concurrence of one load interconnection project. PG&E looks forward to continued coordination with the CAISO on future Wildfire Impact Assessment studies. Please see more detailed comments below.

**PG&E North Bulk System Reliability Assessment**

In the Draft Transmission Plan, the CAISO recommended to install a new RAS to bypass series capacitor(s) on the Round Mountain-Table Mountain #1 or #2 500 kV Lines to mitigate the overload caused by an outage on one of the two lines. PG&E is supportive of developing a mitigation to the identified potential issues. As the recommended RAS would have impacts on COI operating limits and potentially COI path rating, PG&E will continue working with the CAISO to coordinate with neighboring systems who are COI rights owners and follow appropriate WECC processes to complete the necessary review of the RAS before its implementation.

**PG&E asks the CAISO to modify the representation of benefit to cost ratios in economic transmission projects that include LCR reduction.**

In the CAISO’s process for evaluating Economic Transmission Projects that include LCR reductions, the CAISO has relied on three scenarios to determine whether the transmission project should be compared against the price spread between System and Local RA, the CPM soft offer cap, or compare against an existing Reliability Must Run contract. Typically, the CAISO picks the scenario it believes fits the circumstances of the project and only provides an economic assessment of that scenario. PG&E asks the CAISO to instead provide the results from all three scenarios in the review of each economic project, with the CAISO specifying which scenario it believes applies. This way, stakeholders can provide information and feedback to the CAISO as to the appropriateness of that particular scenario the CAISO selected, and the CAISO will not need to conduct additional analysis during the final approval phase of the process.
Wheeler Ridge Project

In general, PG&E supports the CAISO’s recommendation for the Wheeler Ridge Junction Station project to remain on hold pending procurement of battery storage on the 115 kV system and until the evaluation of the 230 kV options are completed. In regard to the battery storage component of the recommendation, PG&E requests the CAISO share additional details on various aspects of the proposal. First, PG&E would like to better understand how the CAISO envisions the battery will be operated. For instance, will it only serve a reliability function or under certain conditions would it also serve a market function? If it did serve a market function, under what conditions would the battery operate?

Also, to ensure least cost for customers, PG&E would also like to better understand the complete economic evaluation for this alternative as well as how the CAISO envisions the procurement process for the storage will take place. PG&E looks forward to working with the CAISO on understanding these components as this project proceeds.

North of Mesa Project

In general, PG&E supports the CAISO’s recommendation for the North of Mesa project to remain on hold pending procurement of battery storage at Mesa 115 kV substation. Similar, to the Wheeler Ridge Project, PG&E looks forward to working with the CAISO on the various questions regarding economic evaluation, implementation, and storage procurement process.

PG&E also has some technical comments on the North of Mesa Project. PG&E suggests updating the description of the alternative 3 related to the RAS to “Utilize upgraded or centralized UVLSs/RASs in the affected area” from “Utilize existing Mesa, Divide and Santa Maria UVLS for peak load conditions.” PG&E also notes that the cost of the UVLS/RAS upgrades could be potentially significant depending on the detailed scope identified later during detailed scoping and implementation of the CAISO recommendation. Also, PG&E requests the CAISO to clarify whether the RAS work in the scope of alternative 3 also depends on the procurement of the energy storage at Mesa.

Policy Driven RAS projects

The CAISO proposed the Fulton RAS project and the Humboldt-Trinity RAS upgrade project to mitigate the local deliverability issues in the policy-driven assessment. After a preliminary review of the proposed RAS scope, PG&E notes that both proposed RAS’ could be very costly and could have a long implementation timeline. The reasons for the high cost and long duration include, but are not limited to: the various design requirements to ensure both RAS meet NERC and WECC requirements, the space limitation at the various impacted substations control buildings which may need expansion; communication requirements for these RAS which may lead to significant transmission line work as well as terrain/area construction challenges. Due to the cost concerns to address the identified limitations, PG&E would like to continue working with the CAISO to develop different and potentially more economical alternatives.