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Comments of Silicon Valley Power on the CAISO 2018-2019 Transmission Planning Process Stakeholder Meeting #2 Materials from September 20-21, 2018

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Silicon Valley Power (SVP) is a municipal electric utility owned and operated by the City of Santa Clara. Our customer composition is over 90% industrial and only 6.6% residential. While our future residential consumption is forecast to be generally flat, SVP has recently experienced a strong interest from new, high load factor, data center projects. We expect these new customers to raise SVP's load factor from the current low 80% range to the upper 80% range. Some of these new loads are already on-line and others are in various stages of development. Our experience has been that these data center loads materialize quickly. As such, SVP has an internal capital plan to expand its internal system to connect these new customers. We understand that the PG&E service area in the South Bay is also receiving requests for interconnection of some data centers.

SVP's load forecasts are reviewed by the CEC and are included in the new 2018-2019 TPP series base cases. The impacts on the transmission system in San Francisco Bay Area, and especially the San Jose Division, are beginning to appear in the CAISO's Preliminary Transmission Assessment results. Fortunately, there are few issues in the near-term 2020 case. However, by the mid-term 2023 case, loading issues on the 115 kV circuits south of Newark appear. Additionally, the NRS-SRS 115 kV circuits, which are currently being reconductored, will again become overloaded. Furthermore, we understand that the assessment actually dispatched a major local resource, the ~300 MW NQC Los Esteros Critical Energy Facility (LECEF), off-line during a summer 1-in-10 load condition to reduce other 115 kV transmission contingency loadings. Then by the long-term 2028 case, many of the local 115 kV circuits are seeing overloads in the 30% to 60% range.

Also linked to the load growth in the South Bay, the CAISO long-term Local Capacity Requirement (LCR) studies are showing an ***increase*** in the Greater Bay Area LCR of almost 2,200 MW in the 2028 study compared to the previous 2023 study. The San Jose sub-area shows a 204 MW deficit due to the loading of the same 115 kV circuits south of Newark.[1] This increase in the Greater Bay Area LCR reduces the margin between the Total Generation and the LCR

[1] Note that this 204 MW value is determined by increasing the most effective generation above its rated capacity. This deficit could be much greater if new, potentially Preferred Resources are added at less effective locations.

need to 275 MW, or less than the NQC of the LECEF that is being dispatched off-line in some of the assessment analyses.

While SVP understands that this new projected loading is a significant increase from prior year's assessments, we are concerned that the identified mitigation is simply to "Continue to monitor future load forecast." The South Bay is a highly-developed area within a CAISO high density urban area, where the timeline to expand the electric transmission infrastructure can be very lengthy. Such a wait-and-see approach risks local capacity constraints that could either restrict economic development, reduce system reliability, or both. While it may be premature to approve a specific capacity expansion project without further planning studies, those studies should be initiated in parallel with monitoring the future load forecasts. Once a plan has been developed, critical lead times and decision points can be identified.

In closing, SVP appreciates the inclusion of the higher forecast loads in the 2018-2019 TPP base cases so that these potential transmission capacity limitations can be identified. We encourage all parties to recognize the need for a long-term transmission plan for the South Bay that can accommodate the current and future economic development.

If you have any questions concerning these comments, please contact Jeevan Valath at JValath@SantaClaraCA.gov .