



Subject: Comments of Falcon Energy Storage Holdings, LLC in Response to CAISO's Generator Interconnection Transmission Upgrades Information Call held on 4/15/21

Falcon Energy Storage Holdings, LLC (a joint effort of Capital Dynamics and Tenaska to develop a 2 GW standalone energy storage project portfolio in CAISO) appreciates the effort undertaken by CAISO and PG&E to mitigate delays to new generation projects caused by the 500kV breaker upgrades at Tesla and Midway. In addition to the Tesla and Midway efforts, Falcon requests CAISO and PG&E prioritize additional substations for near-term upgrades to maintain reliability in the Bay Area.

There are a number of TPP and maintenance related upgrades required due to short circuit mitigation on the PG&E system, specifically:

- a. Metcalf 115kV
- b. Ames 115kV
- c. Palo Alto 115kV
- d. Monta Vista 115kV

Some of these are identified as CANUs and PNUs to QC12 projects. Many of these upgrades are not currently scheduled to be completed until Q4 2027. We encourage PG&E to look at uprating these breakers, similar to what's being done at Tesla and Midway and evaluate accelerating the upgrade schedules for these substations. If that analysis has already been done, please share it with CAISO and its stakeholders.

The scheduling of these TPP and maintenance upgrades has an equal, if not more significant, impact as the Tesla and Midway upgrades on when generation projects can come online. Falcon has observed that CAISO and PG&E appear solely focused on the Tesla and Midway upgrades and are not addressing the other substations in the Greater Bay Area. Prioritizing one upgrade over another upgrade may result in one generation project coming online but delaying another generation project, causing differential impacts to market participants. Because the Midway breaker issues were not identified as a substation of concern until QC13 and the other noted GBA substations were identified in previous cluster studies, addressing the Midway breaker issues first appears to give preferential treatment to projects in QC13, to the detriment of those in QC12. We request that PG&E schedule upgrades in a manner that avoids this outcome.

Proper staging of breaker upgrades is an especially important consideration for the Greater Bay Area, as 100% of the standalone energy storage projects in the GBA in QC13 have withdrawn. Not one is left. This means that projects in QC12 and previous clusters are the only remaining projects that can address the growing Local Capacity Requirements deficiencies in the GBA. In addition, only these standalone energy storage projects in the GBA, like Falcon's, can alleviate the LCR deficiencies without carbon or criteria pollutant emissions. Therefore, it is critical that CAISO and PG&E prioritize conducting the GBA upgrades expeditiously and in the proper sequence if California is to meet its climate change and clean energy objectives.