## Trans Bay Cable LLC ANNUAL REPORT ON COMPLIANCE FOR 2020

## for Submittal to:

## CALIFORNIA PUBLIC UTILITIES COMMISSION

505 Van Ness Avenue San Francisco, California 94102



P.O. Box 666 Pittsburg, California 94565

**March 2021** 

**Instructions:**<sup>1</sup> The Annual Report on Compliance submitted by each EC shall include a written narrative including:

- a. An assessment of whether the EC met the risk reduction intent by implementing all of their approved WMP initiatives, i.e., the degree to which initiative activities have reduced ignition probabilities;
  - If the EC fails to achieve the intended risk reduction, EC shall provide a detailed explanation of why and a reference to where associated corrective actions are incorporated into their most recently submitted WMP.
- b. A full and complete listing of all change orders and any other operational changes, such as initiative location changes, made to WMP initiatives, with an explanation of why the changes were necessary, and an assessment of whether the changes achieved the same risk reduction intent;
- c. Descriptions of all planned WMP initiative spend vs actual WMP initiative spend and an explanation of any differentials between the planned and actual spends;
- d. A description of whether the implementation of WMP initiatives changed the threshold(s) for triggering a PSPS event and/or reduced the frequency, scale, scope and duration of PSPS events;
- e. A summary of all defects identified by the WSD within the annual compliance period, the corrective actions taken and the completion and/or estimated completion date

Trans Bay Cable LLC (U934-E) (Trans Bay) is a transmission-only utility with no retail/end-use customers. Trans Bay is the owner and operator of a 53-mile, approximately 400 MW, high voltage, direct-current (HVDC) submarine transmission cable buried at various depths beneath the San Francisco Bay Waters<sup>2</sup> (Bay Waters), with AC/DC converter stations (or substations) at each end (the TBC System). The TBC System's eastern converter station is located in Pittsburg, CA which is adjacent to an area designated as a Tier 2 (Elevated) Fire-Threat Area based on the California Public Utilities Commission's (CPUC or Commission) Fire-Threat Map. All other transmission elements are located fully outside and not adjacent to any Fire-Threat Area. Specifically, the transmission system is comprised of the Pittsburg converter station, 230kV High Voltage AC Underground Cable, 200kV High Voltage DC Underground Cable – Pittsburg Location, +/-200kV High Voltage DC Submarine Cable, +/-200kV High Voltage DC Underground Cable – San Francisco Location, Potrero converter station, and 115kV High Voltage AC Underground Cable. The TBC System is connected to Pacific Gas & Electric (PG&E) substations in both San Francisco and Pittsburg, CA via underground AC cables. All aboveground transmission infrastructure is fully contained within the walls of the systems converter stations.

<sup>&</sup>lt;sup>1</sup> Text in blue italics are instructions from the Wildfire Safety Division – Compliance Operational Protocols as issued by the WSD on February 16, 2021.

<sup>&</sup>lt;sup>2</sup> San Francisco Bay Waters is defined as the continuous waterway that includes the San Francisco Bay, San Pablo Bay, Carquinez Strait, Suisan Bay and Sacramento River delta.



Due to the limited scale and scope of TBC's operations, the substantial hardening of TBC's transmission infrastructure to wildfire risks due to being underground or submerged and having no transmission infrastructure in wildlands or in a wildland urban interface (WUI), TBC does not maintain a program specifically geared towards wildfire mitigation. As such, TBC does not typically have expenditures explicitly designated for wildfire mitigation initiatives, but rather expenditures in connection with overall fire prevention plan which have the added effect of mitigating wildfire risk. Considering this fact, TBC identifies spend on operational initiatives which may not have been driven by fire risk mitigation, but nonetheless have the benefit of incorporating fire mitigation elements as described in its 2020 WMP.

- a. TBC has implemented approved WMP initiatives from its 2020 WMP and is scheduled to begin seismic upgrades to its transformers in April 2021. Trans Bay was scheduled to commence the seismic upgrades to the main transformers in March 2020 when the COVID-19 pandemic began. As the completion of the initiative would have necessitated an extended outage, Trans Bay elected to move completion of the seismic upgrades to 2021 so that the transmission system would remain available to continue transmitting power into San Francisco during the uncertainty caused by the pandemic. In 2020, TBC implemented the following mitigation initiatives that were approved in TBC's 2020 WMP:
  - Risk Assessment and Mapping: TBC completed a third-party wildfire risk assessment of its Pittsburg Converter station in Q4 of 2020. TBC has already undertaken efforts to review and incorporate pertinent recommendations in its plans for enhancing fire safety control measures in the near, mid-term and long term. TBC has already completed one of the initiatives which was the purchase of foam trailers discussed below.
  - Situational Awareness and Forecasting: Installation of a cable monitoring to track
    various cable conditions in real time and Installation of transformer monitoring to
    aid real-time monitoring of transformer health. TBC expects increased situational
    awareness and forecasting resultant from these system upgrades will further
    reduce ignition probabilities and will improve response times in the event there is
    an ignition.
  - Grid Operations: TBC purchased two class B foam fighting trailers to ensure adequate and ready suppression resources are available on site to address a fire instigated by a failed transformer. TBC anticipates that the additional suppression capacity of the foam trailers will be effective in minimizing damage/fire spread caused by transformer failure instigated ignitions and maximizing efficacy of response efforts.
- **b.** TBC did not have any applicable change orders to its 2020 WMP.
- c. As noted above, due to the limited scale and scope of TBC's operations, the substantial hardening of TBC's transmission infrastructure to wildfire risks due to being underground or submerged and having no transmission infrastructure in wildlands or in a wildland urban interface (WUI), TBC does not maintain a program specifically geared towards



wildfire mitigation. As a result, TBC did not identify specific wildfire mitigation initiatives in its 2020 WMP, but did reference operational initiatives which had the added effect of potentially mitigating wildfire risk. Considering this fact, TBC identifies spend on operational initiatives which may not have been driven by fire risk mitigation, but nonetheless have the benefit of incorporating fire mitigation elements as described in its 2020 WMP. Table 1 below summarizes TBC's 2020 planned initiative spend vs. actual initiative spend. The actual 2020 spend is slightly lower than planned spend primarily because certain implemented fire mitigation measures in 2020 were completed under the planned cost.

Table 1 – Summary of WMP Expenditures by Category (Spend in thousand \$)

WMP Category	2020 WMP Planned	2020 Actual	Difference
Risk and Mapping	200	200	0
Situational Awareness	2,800	2,800	0
Grid Design and System Hardening	8,100	8,100	0
Asset Management and Inspections	0	0	0
Vegetation Management	0	0	0
Grid Operations	222	200	22
Data Governance	0	0	0
Resource Allocation	0	0	0
Emergency Planning	0	0	0
Stakeholder Cooperation and Community Engagement	0	0	0
Total	11,322	11,300	22

**d.** TBC has not issued a PSPS to date. Given that TBC is a transmission-only utility that has no distribution system, no distribution or retail customers, and is already substantially hardened against wildfires, TBC reasonably anticipates it will seldom, if ever, need to issue a PSPS. Trans Bay's service territory is fully encompassed by PG&E service territory. As a result, Trans Bay expects that PG&E doctrine regarding PSPS that impacts the PG&E Pittsburg Substation would be the prevailing driver of any PSPS impacts on Trans Bay service territory. Any PSPS issued by PG&E that impacted the Pittsburg Substation to the extent that Trans Bay's interconnection would be de-energized would take Trans Bay's transmission system offline. Therefore, TBC's WMP initiatives are focused on wildfire



- hardening and reduction of utility-caused ignitions at TBC facilities rather than PSPS mitigation.
- **e.** The WSD reviewed and approved TBC's 2020 WMP without conditions (Full Approval) and did not identify any deficiencies or defects relevant to TBC's WMP. As a result, TBC has not undertaken any corrective actions to resolve any defects.