



**Pacific Gas and
Electric Company™**

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December 11, 2020

VIA E-MAIL
Caroline.Thomasjacobs@cpuc.ca.gov

Caroline Thomas Jacobs,
Director
Wildfire Safety Division
California Public Utilities
Commission 505 Van Ness
Avenue
San Francisco, CA 94102

Subject: Pacific Gas and Electric Company's Letter Re: Second Change Order Report

Dear Ms. Jacobs,

Pursuant to Resolution WSD-002, Ordering Paragraph 10, Pacific Gas and Electric Company (PG&E) submits this second Change Order Report to the Wildfire Safety Division (WSD) to seek a modification to an initiative set forth in our 2020 Wildfire Mitigation Plan (WMP).

BACKGROUND

Resolution WSD-002 directed electrical corporations to submit two Change Order Reports, the first report to be submitted three months after the ratification of Resolution WSD-002 and the second report to be submitted six months after ratification of Resolution WSD-002. The Change Order is intended to describe changes to our WMP programs and initiatives as new information becomes available and to make adjustments based on this information. As stated, the goal of the Change Order process is to make changes to our WMP as they pertain to "WMP approval criteria (i.e., completeness, technical feasibility, effectiveness, and resource use

efficiency).”¹ PG&E’s second Change Order Report is limited to a change in deployment timing for a single initiative due to a technical feasibility issue, as detailed below.

PROPOSED CHANGE

I. Proposed Change

In Section 5.3.2, Situational Awareness and Forecasting, of PG&E’s 2020 WMP, we proposed various initiatives intended to reduce ignition probability and wildfire consequence. One such initiative, described on page 5-91 of the WMP, is the SmartMeter™ Partial Voltage Detection. This capability, which is already available on 4.5 million single phase SmartMeters, is planned to be extended to Three-Phase meters and 4-Wire distribution systems. New firmware deployed on these meters will send real-time alarms to the Distribution Management System under partial voltage conditions (when voltage is in the range of 25-75 percent of nominal voltage). This enhanced situational awareness can help detect and locate downed distribution lines more quickly to enable faster response. Faster response may not only reduce the amount of time a line is down but may also allow first responders to more quickly extinguish wire down-related ignitions, if they occur.

PG&E planned to deploy Partial Voltage Detection to an additional 365,000 Three-Phase SmartMeters™ covering up to 25,597 Line-miles of Tier 2 and Tier 3 HFTD areas with 4-Wire Distribution before the next annual update (February 2021). During the initial deployment of this capability in November a technical issue was discovered that requires resolution before implementation can move forward. As a result the original deployment schedule, by February 2021, may no longer be achievable, necessitating the filing of this Change Order Report.

a. Budget Impact

In Attachment 1, Table 22 of the WMP, PG&E estimated the 2020 forecast for the SmartMeter™ Partial Voltage Detection (formerly known as Enhanced Wires Down Detection) to be approximately \$930K. In comparison to this estimated \$930K forecast for this initiative, as of November 30, 2020, \$1.15 million have been spent towards Partial Voltage Detection firmware deployments to Three-Phase meters and 4-Wire distribution systems in 2020.. In October, PG&E made an internal capital budget forecast increase to recognize these increased project costs. While the budget forecast has been increased, as of the date of this report, there has been no formal redeployment of funds to or from the SmartMeter™ Partial Voltage Detection initiative. There is often no targeted one-to-one reallocation of budgets across initiatives, instead, unspent budgets in one or several initiatives are offset by one or several budget overruns in other initiatives, like this Partial Voltage Detection effort in 2020.

¹ Resolution WSD-002, p. 32.

b. Change Description

PG&E proposes a change in the deployment timing of the Partial Voltage Detection initiative due to a technical, product issue that is impacting the reliability of billing reads on SmartMeters where this firmware has been deployed. This issue was discovered during initial deployment of Partial Voltage Detection firmware to 1,000 in-service meters. 30% of those meters (300 out of 1,000) exhibited the propensity to not provide billing reads for some period of time before the issue resolved on its own. About 3% of the meters (30 of 1,000) exhibit the problem at any one point in time. This issue did not present itself during extensive testing of firmware in PG&E's test environments. Further, large-scale deployment of the firmware in its current state may impact PG&E's ability to provide timely billing information to impacted customers.

Due to the recent identification of this issue, at this point, PG&E cannot provide a revised schedule for the completion of the Partial Voltage Firmware Deployment until the product issue is fully assessed and a technological solution is determined. PG&E remains committed to deploying the solution to all 365K Three-Phase Smart Meters in Tier 2 and Tier 3 HFTD areas and anticipates that the deployment will be completed by the start of the 2021 Wildfire Season. PG&E plans to utilize the 2021 WMP filing to provide a revised schedule for the Partial Voltage Detection Implementation on Three-Phase meters.

II. Justification for the Proposed Change

Currently, it is technically infeasible to implement the Partial Voltage Detection capability on Three-Phase SmartMeters due to this technical issue impacting the reliability of billing reads that was discovered during initial deployment to customer meters. Delaying the firmware deployment until the root cause is determined and resolved will allow for Partial Voltage Detection capability on Three-Phase SmartMeters without impacting the timeliness of customer billing reads.

III. Changes in Expected Outcomes from Proposed Change

PG&E planned to deploy to an additional 365,000 Three-Phase SmartMeters™ covering up to 25,597 Line-miles of Tier 2 and Tier 3 HFTD areas with 4-Wire Distribution before the 2021 WMP Annual Update. With the delay in the Partial Voltage Detection firmware deployment as described above, there will be an associated delay in the ability to detect and locate downed distribution lines more quickly to enable faster response to wire down situations or potential wire down-related ignitions, if they occur. However, PG&E anticipates that the delay will have minimal impact to the overall wildfire risk mitigation objectives because we still expect to have the capability in place before the 2021 Wildfire Season.

Caroline Thomas Jacobs, Director
December 11, 2020
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If you have any questions, or require any additional information, please contact me at Matthew.Pender@pge.com.

Sincerely,



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