PACIFIC GAS AND ELECTRIC COMPANY
CPUC
Monthly EPSS Outage Report

Original Request Date: October 25, 2021
Response Date: October 17, 2022

Ongoing Transparency and Accountability Reporting
Beginning November 8, 2021, PG&E must provide monthly reports to the Director of the Commission's Safety Enforcement Division and serve them on the service lists for the Wildfire Mitigation Plan (R.18-10-007) and PG&E Safety Culture (I.15-08-019) proceedings. The reports shall include at a minimum the information listed below and the cadence and content of the reports may be augmented at any time at the discretion of the Safety Enforcement Division.

For every Fast Trip outage on a circuit:

- Total scope of customers impacted, include specifics for
  - Number of medical baseline customers impacted
  - Number of customers who rely on electricity to maintain necessary life functions impacted
  - Number of well water customers impacted
  - Number of schools impacted
  - Number of hospitals impacted
- Duration
- Cause of outage, if known
- Efforts undertaken to clear lines and restore power within 60 minutes
- The total number of times that a circuit has experienced a Fast Trip event
- Trends of scope and duration of outages on repeatedly impacted circuits

PG&E Response

Attached is PG&E's Enhanced Powerline Safety Settings (EPSS) Outages Monthly Report.[1]
The Monthly Report includes:

- Total number of times a circuit has experienced an EPSS event (see tab "YTD EPSS Outages_Circuit")
- Trends of scope and duration of outages on repeatedly impacted circuits (see tab "YTD EPSS Outage_CESO" and Tab "YTD EPSS Outages_CAIDI")

- **Energy Safety Reporting:** PG&E has begun submitting a monthly report to the Office of Energy Infrastructure Safety (Energy Safety) beginning with the submission of our Revision Notice Response to RN-PG&E-22-12 on July 11 and monthly thereafter through 2022. The first monthly report was included as Attachment 2022-07-11_PGE_22-12_RNR_R2_Atch05.[2] For both monthly submittals, PG&E is now including information requested by the CPUC's Safety Enforcement Division (SED) in addition to the information requested by Energy Safety.

[1] Note: the data will be undergoing quality review and could be subject to change, which will be reflected in subsequent monthly reports.
[2] Since submission to Energy Safety on July 11, 2022, certain tabs have been revised for clarity and their format may not align between the two versions of the report. Both submittals will have the same formatting in future months.

The data requested by Energy Safety can be found in the locations detailed below.

	Description	Location in Attachment and Notes
a	Circuit Protection Zones (CPZ) where EPSS is deployed (with ID)	Tab “CPZs”
b	The number of times EPSS resulted in a trip on each CPZ	Tab “YTD 010122_073122” in Column D (CPZ)
c	The number of customers that experienced an outage for each event	Tab “YTD 010122_073122” in Column L (CESO)
d	The restoration time for each outage	Tab “YTD 010122_073122” in Column I (Restoration Time)
e	The cause of the fault for each outage	Tab “YTD 010122_073122” in Column E (Cause)
f	The number of ignitions that occurred on lines enabled with EPSS	Tab “EPSS Ignition Data”
g	The number of ignitions that resulted in a wildfire greater in size than 10 acres	Tab “EPSS Ignition Data”[3]
h	The amount of time it took for PG&E to identify (and suppress if applicable) the ignition	Tab “EPSS Ignition Data” For each ignition associated with an EPSS zone in HFTD, PG&E will report the response time to the associated outage or call to respond by an external party and the time frame that additional de-energization actions were taken if the source of ignition was not already de-energized by equipment automatically de-energizing the line. Suppression of fires is the responsibility of the applicable Agency Having Jurisdiction.
i	Any changes made to EPSS over the month and explanation of why those changes were made	In response to observed evolution of wildfire risk throughout California and our service area, on June 6, 2022, our Wildfire Risk Governance Steering Committee approved EPSS enablement criteria changes that default to EPSS enablement unless specific disable criteria are met in R1 Fire Potential Index (FPI) and damp or calm conditions. EPSS can only be disabled when the FPI is R1 (low) and WS <19mph or RH>75% or DFM>9%. Furthermore, PG&E updated its EPSS forecasting methodology to a multi-model method that captures multiple weather model runs over multiple days to account for inherent variability in weather modeling.
j	Estimated ignition reductions resulting from EPSS including methodology for arriving at this estimate	The CPUC-reportable ignition reduction as a result of EPSS year to date in 2022 is provided in Table RN-PG&E-22-12-02 above. To determine EPSS ignition reductions, PG&E calculates ignition reduction from EPSS based on the following:

[3] PG&E interprets 7(g) to reference EPSS ignitions referenced in 7(f).

	Description	Location in Attachment and Notes
		CPUC Reportable Facility Ignitions (RFI) on primary conductor in HFTD areas on an EPSS enabled zone as compared to the annual average of ignitions during the 2018-20 time period.

- **Number of well water customers impacted**:
  We understand the Commission seeks insight as to the impact EPSS outages have on customers who rely on electricity to power a residential water well and thus, supply their homes or businesses with potable water. PG&E shares the Commission's interest in understanding which homes and businesses rely on well water; however, this data is not readily available nor housed within PG&E's customer databases, with the exception of customers who have applied for generator rebates based on the High Fire-Threat District (HFTD)/well water eligibility requirement. For the report submitted on February 15, 2022, the number of customers who received a generator rebate by documenting their reliance on well water is now included.

- **Efforts undertaken to clear lines and restore power within 60 minutes:** We would like to clarify that PG&E had targeted responding to, as opposed to restoring, outages in HFTDs during the 2021 wildfire season within 60 minutes, in order to identify and mitigate public safety hazards potentially associatedwith the outage and allow for quicker notification and more efficient resource allocation from public agencies (e.g., local police and fire, CAL FIRE).

  Starting in August 2021, PG&E began to modify our response approach to outages identified in the HFTD. These outages have been dispatched and managed in an urgent fashion, just like responses to other potential emergency situations. The aspirational goal is to do so within 60 minutes or less during fire season. We have modified our systems, processes,response resources, and reporting to monitor performance and work to continuously improve.

  Since August 2021, PG&E has:

  - Modified our outage system so outages occurring in the HFTD are identified and visible.
  - Adjusted our dispatch procedures to manage outages occurring in the HFTD as an emergency response.
  - Started to identify, train, and equip other workgroups that can assist in timely response to these types of outages in more remote areas.
    - Examples include our Power Generation employees, Safety and Infrastructure Protection Team (SIPT) crews and Field Communication technicians.
  - Secured and pre-staged helicopter resources on standby to support timely patrolling in remote areas.
  - Begun tracking and reporting on HFTD outage performance so that continuous improvement efforts may be applied in pursuit of our aspirational goal.

Please note that the monthly data in this report are current as of the time of submittal but are subject to change based on the discovery of new information or further analysis.