Susan C. Martinez
Director of Liaison, Regulatory
Operations and Engagement
300 Lakeside Drive
Oakland, CA 94612

October 5, 2023 **VIA ELECTRONIC MAIL**

Leslie Palmer
Director, Safety and Enforcement Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Dear Mr. Palmer:

As required by Resolution ESRB-8 and in accordance with Ordering Paragraph 1 of California Public Utilities Commission (CPUC) Decision (D.) 19-05-042, Pacific Gas and Electric Company (PG&E) respectfully submits a compliance report for the proactive de-energization event that was initiated on September 20, 2023 and fully restored for those who could receive power on September 21, 2023. This report has been verified by a PG&E officer in accordance with Rule 1.11 of the Commission's Rules of Practice and Procedure.

If you have any questions, please do not hesitate to call.

Sincerely,

Susan C. Martinez
Director of Liaison, Regulatory Operations and Engagement

Enclosures

cc: Anthony Noll, SED
ESRB_ComplianceFilings@cpuc.ca.gov
EnergyDivisionCentralFiles@cpuc.ca.gov

Pacific Gas and Electric Company
Public Safety Power Shutoff (PSPS) Report to the CPUC
September 20 – September 21, 2023 De-energization Event

Contents

PG&E Public Safety Power Shutoff (PSPS) Report to the CPUC
September 20 – September 21, 2023 De-energization Event

Section 1 – Summary and Overview

Section 1.1 - Brief description of the PSPS event starting from the time when the utility's Emergency Operation Center is activated until service to all customers has been restored.

(D.21-06-014, page 286, SED Additional Information.)

Response:

This report covers the initiation of PSPS protocols that occurred in PG&E's service area for the September 20 – September 21, 2023 PSPS Event. High winds can cause tree branches and debris to contact energized electric lines, and potentially damage our equipment and cause a wildfire. As a result, we may need to turn off power during severe weather to help prevent wildfires. This is called a PSPS. PG&E will not take any chances with customer safety. For the safety of our customers and communities, PSPS continues to be a necessary tool as a last resort. We know that turning off the power disrupts lives, and do not take this decision lightly.

On September 16, 2023, PG&E's Meteorology Team identified a potential fire weather event in weather forecast models and notified the acting Emergency Operations Center (EOC) Commander. On September 18, 2023, we activated our EOC for a potential PSPS event and began notifying state and local Public Safety Partners. On Saturday, September 16 an initial scope was drafted for the potential event, and on Sunday, September 17, Monday, September 18 and Tuesday, September 19 we further refined the PSPS scope based on updated meteorological forecasts. Additionally, we began notifying customers in the areas anticipated to be impacted, readied the grid to mitigate the effects of the PSPS event on our customers, engaged with Community Based Organizations (CBOs) to transmit event-specific information, and prepared to open Community Resource Centers (CRCs). We closely monitored weather conditions across 15 Time Places (TPs) but only de-energized three for the duration of the event, which is illustrated Figure 1.

On September 20, 2023 at 23:19 PDT, PG&E began de-energizing its assets and customers to mitigate catastrophic wildfire risk across the northern Sacramento Valley. For additional factors considered in the decision to shut off power, including relative humidity, see Appendix A.

By September 21, 2023 at 13:03 PDT, the Weather "All-Clear" was given for all circuits in all clear zones, once winds subsided. During this PSPS, we ultimately de-energized 1,171 customers[1] in three counties.[2]

During this PSPS, PG&E mitigated impacts through the use of sectionalizing devices, which prevented approximately 6,299 customers from being de-energized. For customers who required de-energization, PG&E sent notifications to the customers in scope and contacted more than 185

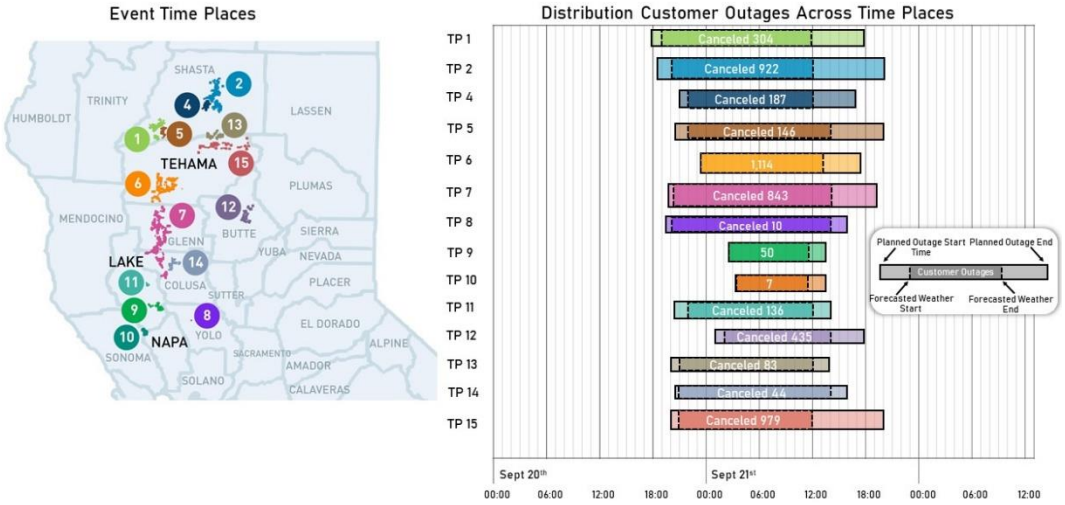
[1] Customers refers to active service points (meters).
[2] The information, times, and figures referenced in this report are based on the best available information available at the time of this report's submission. The information, times, and figures herein are subject to revision based on further analysis and validation.

community representatives and emergency managers to ensure that communities could prepare before the PSPS.

For this PSPS, PG&E opened one indoor and seven outdoor CRCs. These CRCs were operated within the impacted counties, which hosted approximately 746 visitors over the two-day span. To support Access and Functional Needs (AFN) customers, PG&E provided 17 individuals with hotel stays, worked with organizations, such as 211, to assist customers with resources and partnered with four local food banks in three counties.

Once the wind event had passed and it was safe to patrol and restore power, PG&E deployed approximately 186 personnel and 19 helicopters to patrol roughly 147 miles of distribution circuits and impacted assets. During this effort, we identified one incident of damage resulting from high winds experienced in the de-energized areas. We re-energized customers as fast and safely as possible. Within 24 hours of the wind event, 100% of customers' power had been restored. The average restoration time for this event was 2.7 hours.

Figure 1: Event Timelines[3]



[3] TP 3 is not included in Figure 1 as it was removed from scope before general customer notifications were sent.

Section 1.2 - A table including the maximum numbers of customers notified and actually de-energized; number of counties de-energized; number of Tribes de-energized; number of Medical Baseline (MBL) customers de- energized; number of transmission and distribution circuits de- energized; damage/hazard count; number of critical facilities and infrastructure de-energized. Hazards are conditions discovered during restoration patrolling or operations that might have caused damages or posed an electrical arcing or ignition risk had PSPS not been executed *(D.21-06-034, Appendix A, page A15, SED Additional Information.)*

Response:
Table 1 identifies the maximum number of customers notified and de-energized; number of Medical Baseline (MBL) customers de-energized; number of counties de-energized; number of Tribes de-energized; number of transmission and distribution circuits de-energized; damage/hazard count; and number of critical facilities and infrastructure de-energized.

Table 1: Customers Notified and De-energized

Total Customers			MBL Customers	Number of Counties	Number of Tribes	Number of Circuits			Damage / Hazard Count	Critical Facilities and Infrastructure De-energized
Notified	De-energized	Cancelled	De-energized	De-energized	De-energized	Transmission De-energized	Unique Distribution Circuits in Any Version of Scope	Distribution Circuits De-energized		
5,355	1,171[4]	4,187	127	3	0	0	30	6	1 damage 0 hazards	41

Section 1.3 - A PDF map depicting the de-energized area(s) *(SED Additional Information.)*

Response:
During the September 20-21, 2023 PSPS Event, we de-energized 1,171 customers in three TPs. The final de-energization footprint is shown below in Figure 2.

Figure 2: Map Depicting De-Energized Areas for the September 20-21 PSPS

[4] Of the 1,171 customers de-energized, three did not receive notifications as their contact information was not available. Further explanation is provided in Section 5.5.

Section 2 – Decision Making Process

Section 2.1 - A table showing all factors considered in the decision to shut off power for each circuit de-energized, including sustained and gust wind speeds, temperature, humidity, and moisture in the vicinity of the de-energized circuits *(Resolution ESRB-8, page 3, SED Additional Information.)*

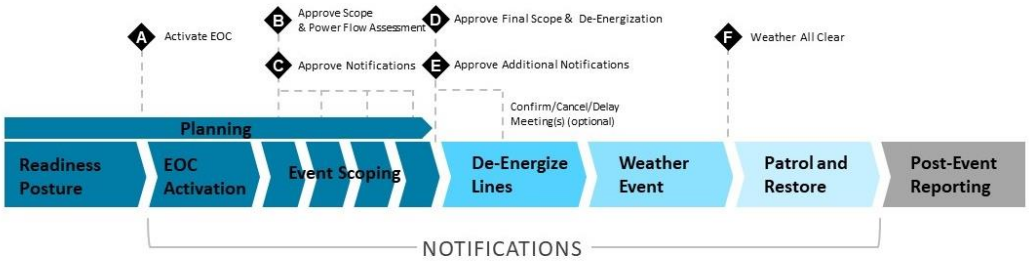
Response:
Please see Appendix A for a table of factors considered in the decision to shut off power for each circuit de-energized, including sustained and gust wind speeds, temperature, humidity, and moisture in the vicinity of the de-energized circuits.

Section 2.2 - Decision criteria and detailed thresholds leading to de-energization including the latest forecasted weather parameters versus actual weather. Also include a PSPS decision-making diagram(s)/flowchart(s) or equivalent along with narrative description *(D.19-05-042, Appendix A, page A22, D.21-06-014, page 284, SED Additional Information.)*

Response:
This section provides an overview of the decision criteria and threshold evaluation process for determining when and where to de-energize per PG&E PSPS protocols, as implemented for the September 20–21, 2023 PSPS Event.

PSPS Preparation and Scoping Process
Figure 3 shows, at a high-level, the process we use to prepare for and conduct a PSPS. Appendix A includes anticipated parameters based on the latest meteorology forecasts used to develop the planned de-energization scope versus actual weather parameters for each circuit.

Figure 3: PG&E's High-level PSPS Process Steps



PG&E considers executing a PSPS when strong gusty winds, critically low humidity levels, and low fuel moisture levels pose an unacceptable risk of causing fast-spreading, catastrophic wildfires. Assessment begins several days before the weather event is forecasted to take place.

We identify the weather conditions that could create high fire potential by using a combination of high outage and ignition potential, high-resolution internal and external weather forecasting models and data from federal agencies that include the following:

- Ignition Probability Weather (IPW) - Determines the historical potential for ignitions from each analyzed weather event.
- Fire Potential Index (FPI) - Assists with fire model development and calibration.
- Technosylva - Provides fire spread modeling via data inputs.
- PSPS models - Provides guidance for operation decision-making.

Through partnerships with external experts, we developed our machine learning models using historic datasets and advanced forecast models that provide a better understanding of historical weather events and improve our weather forecasting. These models use the following:

- Precise location data points across our service area to conduct hourly weather analyses using high-resolution, historical data.
- Over 100 trillion data points of historical weather and fuel.
- Hourly weather data such as temperature, relative humidity, wind speed, precipitation, pressure, and dead and live fuel moisture.
- Data storage and processing via the PG&E-Amazon Web Services Cloud.

Our thresholds and guidance for identifying critical fire risk and outage/ignition potential are determined by analyzing and rigorously testing our current PSPS protocols and criteria through three decades of historical weather data in and around California. This process allows us to determine and test if historical fires from utility equipment may have been mitigated through PSPS while simultaneously understanding the scope and scale of PSPS events and customer impacts from PSPS.

External forecast information from the National Weather Service (NWS) (e.g., Red Flag Warnings) and other forecast agencies are examined carefully. Furthermore, we coordinate with these agencies during high-risk periods via daily conference calls to ultimately decide whether to de-energize portions of the grid for public safety. The main drivers considered for PSPS under the PSPS Protocols are described in the sections that follow.

Tools and Technology

PG&E has developed tools and models to better understand the impact of potential fire ignitions on communities. PG&E partners with Technosylva, an external expert in the wildfire modeling field to test and deploy cloud-based wildfire spread model capabilities. This helps us better understand where we might need to turn off power.

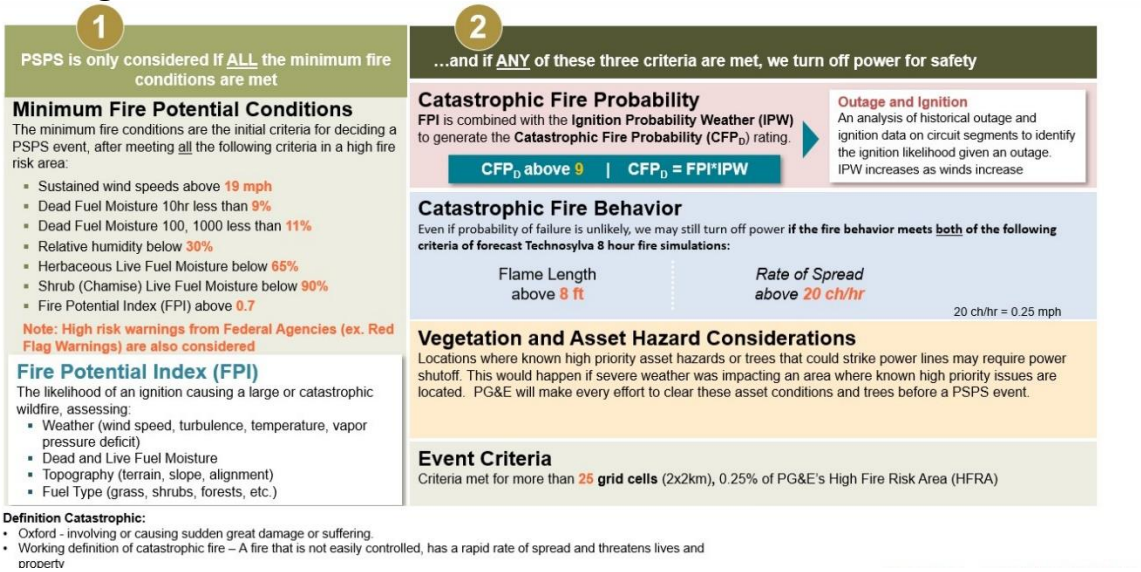
Each day, PG&E delivers our wildfire conditions datasets to Technosylva, who then perform over 100 million fire spread simulations. These are done every three hours, for the upcoming five days. These simulations provide fire spread scenarios that help to identify circuits that may be at risk during dry, windy weather.

Decision Criteria and Thresholds for PSPS Protocols: Distribution

When determining whether to turn off power for safety, we start with the distribution system. These powerlines are closer to communities and are generally more susceptible to dry,

windy weather threats. The values presented here were developed using 10 years of PG&E's high-resolution climate data to help understand wildfire risk and the potential customer impacts of PSPS. Each of the three measures is evaluated within a small geographic area (four square kilometers) and if any of the measures are forecasted to be met, circuit segments within that area are scoped for de-energization. With powerlines traveling long distances, customers outside the affected area may also be impacted. This process is outlined in Figure 4.

Figure 4: Decision Criteria and Thresholds for PSPS Protocols: Distribution



Step 1: Minimum Fire Potential Conditions

The first step to determine the scope of a PSPS is evaluating the Minimum Fire Potential Conditions (mFPC). This ensures that PSPS is only executed during wind events when atmospheric conditions and fuels are dry. A PSPS event is evaluated if the following mFPC are true in the High Fire Risk Areas (HFRA)[5]:

- Sustained wind speeds above 19 mph
- Dead fuel moisture 10-hr less than 9%[6]
- Dead fuel moisture 100-hr, 1000-hr less than 11%[7]
- Relative humidity below 30%
- Herbaceous live fuel moisture below 65%
- Shrub (Chamise) Live Fuel Moisture below 90%
- FPI (the probability of large or catastrophic fires given an ignition) above 0.7

These values were established from an examination of historical fire occurrence in the PG&E service area, PSPS sensitivity studies using historical data viewed through the lens of both

[5] 2023 Wildfire Mitigation Plan (WMP), pp. 895-897.
[6] 10-hr. Dead Fuel Moisture represents the modeled moisture content in dead fuels in the 0.25 to 1-inch diameter class and the layer of the forest floor about one inch below the surface.
[7] 100-hr. Dead Fuel Moisture represents the modeled moisture content of dead fuels in the 1-to-3-inch diameter class. It can also be used as a very rough estimate of the average moisture content of the forest floor from 0.75 inches to 4 inches below the surface.

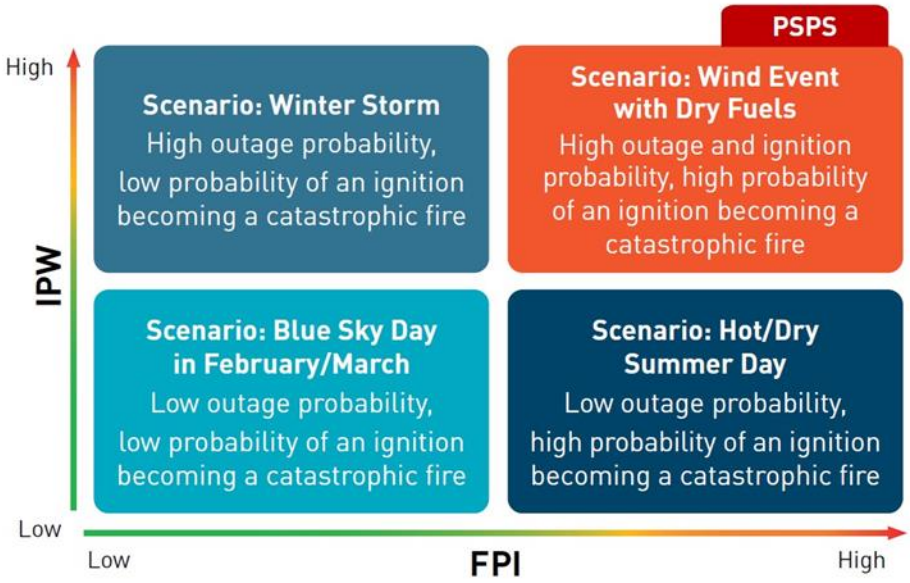
customer impacts and wildfire risk mitigated, as well as information published by federal agencies regarding fire behavior and criteria used to issue warnings to the public.

Step 2: In-Depth Review of Fire Risk

If all minimum fire conditions are met, we conduct an in-depth review of fire risk using three separate measures. If the criteria for any of these measures are met, we may need to turn off power for safety.

- Catastrophic Fire Probability (CFP): This model combines the probability of fire ignitions due to weather impacting the electric system with the probability that a fire will be catastrophic if it starts. It is the combination of the FPI Model and the IPW Model. The CFP_D model accounts for changes over time based on actual performance data. Thus, the model will address positive and negative trends in grid performance and reliability year-over-year, incorporating grid improvements such as system hardening, and enhanced vegetation management based on their performance at mitigating outages over time.
    - IPW Model: A machine learning model that uses 10 years of weather data to correlate approximately 500,000 outages occurring on PG&E's distribution grid. The model analyzes the potential for several types of power outages in a given weather event, as well as the potential for that outage to be the source of an ignition. IPW learns from and accounts for changes on the grid from year-to-year.
    - FPI Model: This model outputs the probability that a fire will become large or catastrophic and is used as a daily and hourly tool to drive operational decisions to reduce the risk of utility caused fires. It was enhanced in 2021 with additional data and improved analytic capabilities.
- Tree Considerations: Our PSPS protocols utilize a machine learning model to integrate the potential for trees to strike the lines into our IPW Model. This helps our meteorology teams more accurately analyze risk posed by trees and how that translates to increased ignition probability. The graph featured in Figure 5 below, shows how PG&E ranks scenarios based on the IPW risk and the FPI value. Scenarios with a high risk of an IPW and a high FPI value will always warrant a PSPS. However, power may be turned off in other scenarios to avoid catastrophic wildfires.

Figure 5: Catastrophic Fire Probability Model



- Catastrophic Fire Behavior (CFB): We also consider environmental conditions of significant wildfires, like dead and dying trees or drought conditions when determining to de-energize customers. This allows us to capture potential ignition events that are rarer and more difficult to forecast, such as animal contact and external debris impacting electrical lines. These locations are only considered once the mFPC are met. This is based on fire spread simulations using dynamic weather and fuel data for the event.
    - Fireline Intensity: The U.S. Forest Service Rocky Mountain Research Station did a study of fireline intensity which is determined by the size and components of flames. It is measured as the rate of heat energy released (Btu) per unit length of the fireline (ft) per unit(s). It is also calculated by estimating the flame length, which is the distance measured from the average flame tip to the middle of the base of the fire. We use probable fireline intensity to evaluate the potential need to turn off power.
- Vegetation and Electric Asset Criteria Considerations: We review locations from recent inspections where high-priority trees or electric maintenance status may increase the risk of ignition. If an area is forecast to experience minimum fire conditions and there are known issues with equipment or vegetation that have not yet been addressed, we may need to turn off power.

Decision Criteria for PSPS Transmission Protocols

In addition to analyzing distribution circuits that may need to be de-energized for safety, we also review the transmission lines and structures in areas experiencing dry, windy weather conditions. Transmission lines are like the freeways of the electric system, carrying high voltage energy across long distances. Similar to our distribution protocols, there is no single criterion or threshold that will require turning off power to a transmission line.

Step 1: mFPC
When determining whether to turn off power for safety on transmission lines, we review the same mFPC as with distribution circuits.

If these conditions are met, we will then look at the below criteria to determine whether a transmission line must be turned off.

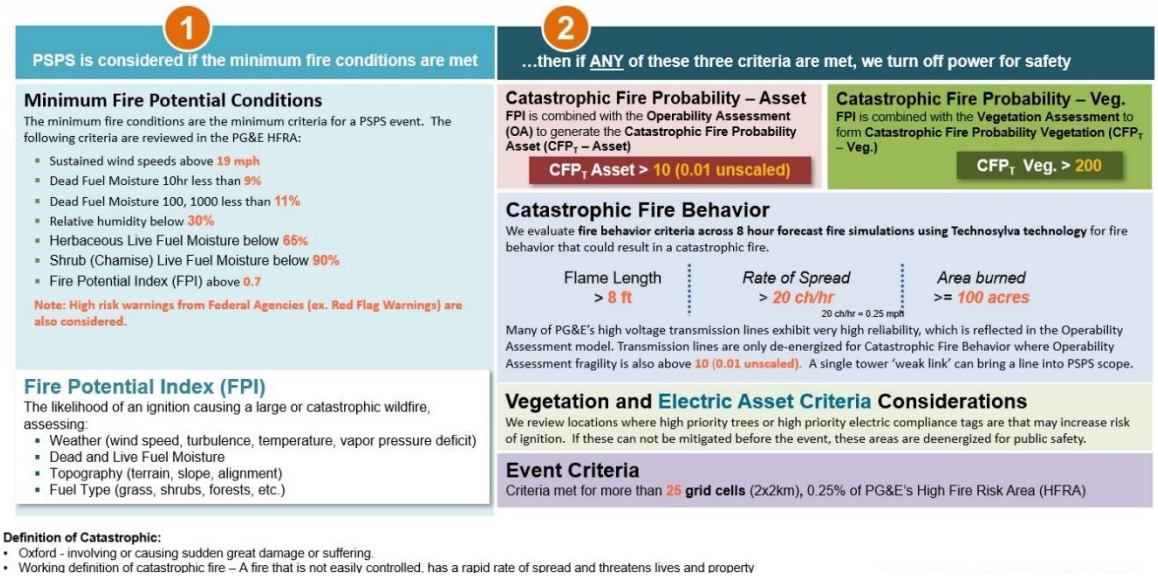
Step 2: In-Depth Review of Fire Risk
Once PG&E identifies the initial scope, we work with the California Independent Service Operator (CAISO) to ensure the initial scope is appropriate. This includes analyzing whether it will compromise the power supply to other jurisdictions, utilities or facilities connected to our system. This important step can last several hours, which is why the potential scope of a PSPS may change as we get closer to the forecasted weather event.

- Catastrophic Fire Probability – Asset (CFP_T – Asset): We use machine learning to assess the likelihood of equipment failure during a given weather event, and the subsequent risk of catastrophic wildfires if a failure occurs. This model uses a combination of the Operability Assessment (OA) and FPI Models, both in time and space, at every transmission structure to form the Transmission Catastrophic Fire Probability model for asset failures. The OA Model combines historical wind speeds for each structure, historical outage activity, Bayesian updating, and the condition of assets based on inspection programs to help understand the wind-related failure probability of each structure. The OA Model can be driven with forecast wind speeds to output the probability of failure at the structure level.
- Catastrophic Fire Probability – Vegetation (CFP_T – Veg): The transmission-specific vegetation risk model was derived by a collaborative effort between PG&E vegetation management and external contractors such as NV5 and Formation Environmental. This model leverages aerial LiDAR data to map the location and attributes of trees near transmission lines. The transmission vegetation risk model is based on several factors such as overstrike, the amount of unobstructed fall paths to a wire, the slope between tree and conductor, and tree exposure. The transmission vegetation risk model is combined with the FPI Model in space and time to form CFP_T – Veg.
- CFB: We may de-energize customers where the consequence of a potential wildfire ignition would be extreme, even if the probability of a power line or equipment failure is low.
- Vegetation and Electric Asset Criteria Considerations: We review locations from recent inspections where high-priority trees or electric compliance issues are present that may increase the risk of ignition.

In addition to the meteorological models, we also evaluate the impacts of de-energization against the risk of wildfire should de-energization not occur, as outlined in Section 2.4. This information is reviewed at key decision points in the PSPS process and supports the ultimate decision to de-energize our customers and our communities.

Figure 6 below provides a quantitative summary of the decision criteria for our PSPS Protocols for Transmission.

Figure 6: Decision Citeria for PSPS Transmission Protocols



Step 3: Determining the Outage Area

Transmission lines meeting the criteria above then pass to the next stage of review. We conduct a Power Flow Analysis on the in-scope transmission lines (if applicable) to analyze any potential downstream impacts of load shedding. Once PG&E identifies the initial scope, we work with the CAISO to ensure system setups to support the line outages are appropriate. This includes analyzing whether it will compromise the power supply to other jurisdictions, utilities or facilities connected to our system.

<u>After Determining the Outage Area for Distribution and Transmission</u>

After determining the outage area both for Distribution and Transmission, PG&E reviews the forecasted customer impacts of each circuit against the forecasted wildfire risk of each circuit. If there's reasonable risk for ignition on the distribution circuits or transmission lines during the forecasted weather event, it is included in the PSPS scope. We then share this analysis internally during key decision-making points to inform PSPS decision making and further risk modeling.

Starting 12 hours before the forecasted PSPS de-energization time, we transition from evaluating forecast data to observing the weather in real-time. Based on real-time observations and analysis, we continually evaluate all the outage areas identified in the previous steps to determine whether to initiate PSPS de-energization. PG&E also uses external tools and analysis to provide input to the decision to de-energize, as described in the next sections.

<u>Decision-Making and Analysis to Validate if PSPS is Necessary</u>

During high-risk periods, PG&E Meteorologists participate in daily interagency conference calls that commonly include multiple NWS local offices, the NWS western region headquarters, and representatives from the Geographic Area Coordination Center (GACC), also known as Predictive Services. This call is hosted by the Northern California and/or Southern California GACC offices.

During these calls, the external agencies present their expert assessment on the upcoming periods and locations of risk, wind speeds and fuel moisture levels, and any other relevant factors to consider. PG&E appreciates these conference calls and the opportunity to coordinate with external and independent forecast agencies on upcoming risk periods.

During PSPS events, PG&E's Lead Meteorologist for the event, called the Meteorologist-in-Charge (MIC), summarizes these forecasts and discussions for the PG&E Officer-in-Charge (OIC), who ultimately makes the decision to execute a PSPS event. If external agencies are not in agreement with PG&E's analysis and do not see an upcoming event as high risk for large fires, the OIC may use this intelligence to decide if a PSPS event is warranted.

The following sources and tools are considered before initiating a PSPS event by the MIC:

- Fire Weather Watches and Red Flag Warning (NWS - Federal)
- Significant fire potential for wind (GACC - Federal)
- Storm Prediction Center (part of NOAA - Federal)
- Daily interagency conference call with agencies during high-risk periods
- Live weather data from weather stations
- Location of existing fires
- External weather model data

Based on the above analyses, we can determine how many customers may be subject to de-energization, and further investigate mitigation options, such as, advanced switching solutions, sectionalization, the use of islanding, alternative grid solutions, and temporary generation to support customers who could lose upstream power sources but are in areas that may be safe to keep energized.

We monitor and forecast weather over a multi-day horizon, so we can anticipate when a PSPS may be needed and activate our EOC as far in advance as possible. Our internal weather model and external modeling are updated multiple times per day. PG&E's meteorology team constantly evaluates both internal and external weather models for changes in weather event timing, strength, and potential locations impacted; our meteorology then incorporates these changes into a new weather scope generally once per day.

Weather shifts may force changes to PSPS scope and impacts at any point in time during PSPS planning and execution; this may allow us to avoid de-energization in some areas if fire-critical conditions lessen but can also cause some areas and customers to move into de-energization scope late in the process if forecasted fire-critical weather footprints change or increase. Possible changes in PSPS scope and impact are driven by the inherent uncertainty in weather forecast models.

PG&E utilized and referenced these protocols and tools during the September 20-21, 2023, PSPS Event to determine the latest forecasted weather parameters versus actual weather. Additional information is included in Appendix A.

Section 2.3 - A thorough and detailed description of the quantitative and qualitative factors it considered in calling, sustaining, or curtailing each de-energization event including any fire risk or PSPS risk modeling results and information regarding why the de-energization event was a last resort, and a specification of the factors that led to the conclusion of the de-energization event. *(D.20-05-051, Appendix A, page 9, SED Additional Information.)*

Response:
A thorough and detailed description of the quantitative and qualitative factors considered in calling, sustaining or curtailing the September 20-23, 2023 PSPS event is provided in Appendix A. Factors for each distribution circuit and transmission line de-energized are detailed in the final scope of this PSPS event, the quantitative PSPS model values and weather station observations. Below is a detailed description that was recorded by our Meteorologists analyzing the event.

September 20 – 21, 2023 PSPS Event
On Friday, September 15, 2023, some weather forecast models began to show the potential for a dry, northerly wind event, developing midweek, around September 20 or 21, 2023, however, it was uncertain the level of intensity or location of the event.

On Saturday, September 16, 2023, models began to converge, and confidence grew enough to prompt PG&E's Meteorology to begin initial discussions with leadership and develop a draft of the first PSPS scope that afternoon. This scope reflected the risk of dry winds mostly along the northern and western sides of the Sacramento Valley.

On Sunday, September 17, 2023, PG&E's Meteorology team, Emergency Planning and Response team, and EOC Commander met to discuss any evolution in weather models and monitor any changes. Based on the emerging risk of a PSPS, we entered into EOC readiness posture on September 17, 2023, at 09:00 PDT and then activated the EOC on September 18, 2023, at 06:00 PDT.

The weather forecast and PSPS models were closely monitored leading up to the event and the scope of the event was adjusted on the evening of Sunday, September 17, Monday September 18, and Tuesday, September 19, 2023.

On the morning of Monday, September 18, 2023, North Ops predictive services issued a forecast that mentioned, "Confidence increasing on possible gusty-dry northerly to northeast wind event during the Wednesday through Thursday time frame,"[8] however, they did not issue a high risk forecast for any Predictive Service Areas during that period. On Tuesday, September 19, 2023, North Ops issued a forecast update indicating high risk for wind on September 20 and 21 for PSA NC04 and NC05 (Northwestern Mtn and Sac Valley/Foothills) and on September 21 for NC02 (Mid Coast to Mendocino). The North Ops forecast, issued the morning of September 20, 2023, continued to show high risk due to wind for the same PSAs and dates as the prior morning.

The local National Weather Service offices first issued Fire Weather Watches on Tuesday, September 19, 2023. Sacramento issued a Fire Weather Watch from Wednesday, September 20, 2023, at 23:00 PDT to Thursday, September 21, 2023 at 18:00 PDT. The Bay Area and Eureka

[8] North Ops 7-day Significant Fire Potential Outlook

NWS offices issued their Fire Weather Watches for Wednesday, September 20, 2023, at 23:00 PDT to Thursday, September 21, 2023, at 11:00 PDT.

On Wednesday, September 20, 2023, the National Weather Service offices upgraded their Fire Weather Watches to Red Flag Warnings. The Red Flag Warning from all three offices was valid from 23:00 PDT on September 20, 2023, to 17:00 PDT on September 21, 2023.

In the evening of September 20, 2023, our Meteorology team continued to monitor forecasted and real-time weather conditions between the decision to de-energize and the planned de-energization start time. Dry, northerly winds began to develop, and real-time conditions began trending towards PG&E's PSPS Models guidance as detailed in Section 2 for some TPs. Overnight, our Meteorology team recommended the de-energization of TPs 6, 9 and 10 while the remaining TPs were recommended to delay as relative humidity values and/or wind speeds were failing to reach mFPC.

On the morning of September 21, 2023, we concluded that conditions in TPs 1, 2, 4, 5, 7, 8, 11, 12, 13, 14 and 15[9] were not going to meet the criteria for de-energization. Meteorology made a recommendation to cancel these TPs at an 11:00 cancellation meeting, which was approved by the EOC Commander. As the afternoon progressed, real-time and forecasted conditions began to improve in the de-energized TPs. Meteorology recommended the in-scope TPs be put into an all-clear status, indicating that the areas were no longer experiencing dangerous fire weather conditions and that restoration efforts could begin.

PSPS Scope Adjustments Based on High Resolution PSPS Models Guidance

The tools and models outlined in Section 2.2 are part of the decision criteria that PG&E's Meteorologists consider for the scope of PSPS. Longer range weather forecast model data are used to determine the location and timing of a PSPS event. Typically, these weather forecasts are less certain the farther the observed date is. This is akin to the well-known hurricane "cone of uncertainty" in which the potential track of a hurricane is represented by an area that expands farther out in time, which resembles an expanding cone. Thus, there is an inherent tradeoff between the further out the forecasts are for a PSPS event and the uncertainty in the PSPS scope and waiting until forecasts become more certain. This ultimately leads to changes in PSPS scope as weather forecast models are updated and the scope is refined.

During PSPS events, PG&E's Meteorologists track weather forecasts over time and compare weather forecast models against one another to gauge the level of uncertainty in the forecast. Forecasts of PSPS are routinely updated ahead of the PSPS.

As the event unfolds in real-time, PG&E's Meteorologists transition to real-time observations of weather stations, satellite data, pressure gradients, and live feeds from Alert Wildfire Camera. These observations help to evaluate if the event is unfolding as expected. In many instances, models trend stronger or weaker with each model iteration leading up to a PSPS. This dictates changes in event scope and decisions to de-energize or cancel areas.

[9] TP 3 is not included as it was removed from scope before general customer notifications were sent.

Figure 7: PSPS Scope Changes as Weather Forecasts Change

Each color indicates the geographic location of a different TP for this PSPS event.

Scope as of 09/18/2023 09:45 PDT

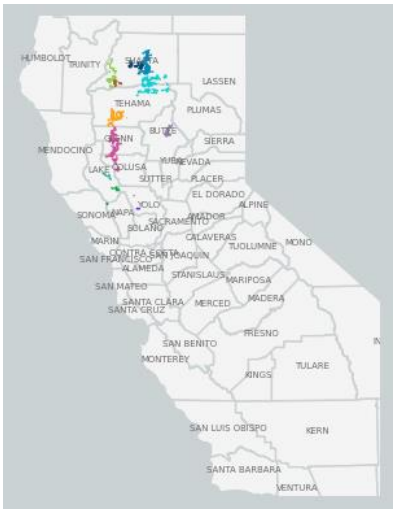
Forecasted Event Data:

Fire Weather Timing:

- Start: 09/20 20:00
- End: 09/21 14:00

~ 10,153 Customers

12 TPs
8 Counties
30 Distribution Circuits
3 Transmission Lines



Scope as of 09/19/2023 10:55 PDT

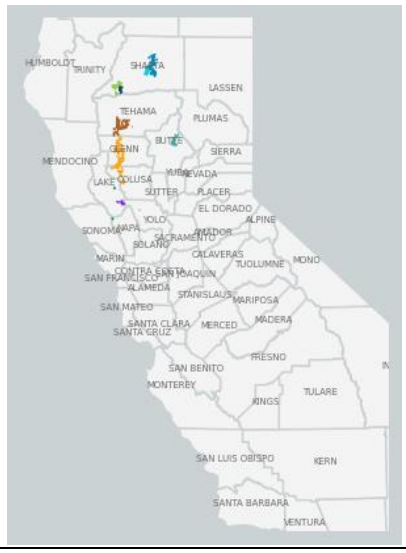
Forecasted Event Data:

Fire Weather Timing:

- Start: 09/20 20:00
- End: 09/22 12:00

~ 4,146 Customers

12 TPs
8 Counties
20 Distribution Circuits
3 Transmission Lines



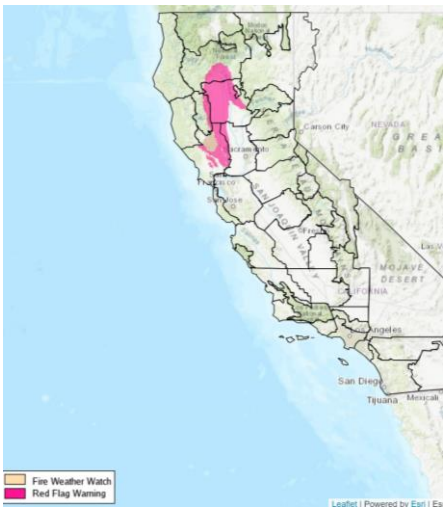
Scope as of 09/20/2023 06:20 PDT

Forecasted Event Data:
Fire Weather Timing:

- Start: 09/20 02:00
- End: 09/21 20:00

~ 5,261 Customers

15 TPs
8 Counties
24 Distribution Circuits
3 Transmission Lines



Scope as of 09/21/2023 09:00 PDT

Forecasted Event Data:
Fire Weather Timing:

- Start: 09/20 19:00
- End: 09/21 14:00

~ 3,577 Customers

8 TPs
8 Counties
24 Distribution Circuits
3 Transmission Lines

Scope as of 09/21/2023 15:00 PDT

Forecasted Event Data:
Fire Weather Timing:

- Start: 09/20 20:00
- End: 09/21 14:00

~ 1,172 Customers

3 TPs
3 Counties
6 Distribution Circuits
0 Transmission Lines

External PSPS Decision Inputs

Meteorological analysis establish that high winds combined with low relative humidity and dry fuel conditions in California create significant fire threat and exacerbate fire spread. The NWS issues a Red Flag Warning to indicate critical fire weather conditions under which any fire that develops will likely spread rapidly. CAL FIRE indicates that the types of weather patterns that cause a watch or warning include low relative humidity, strong winds, dry fuels, the possibility of dry lightning strikes, or any combination of the above.[10] As noted previously, PG&E's PSPS events consistently occur during periods and in areas where federal, state, and local authorities have identified as having extreme fire risk including the presence of strong winds.

We compare PG&E's fire risk forecasts against those of external agencies to validate there is shared recognition of high fire risk across the California meteorology community. On September 20, 2023, our analysis of fire risk justifying a PSPS event was validated by numerous sources and warnings:

- North Ops Predictive Services issued their 7-day Significant Fire Potential Outlook, showing High Risk due to wind for three Predictive Service Area, which covered the Sacramento Valley and adjacent terrain.
- Red Flag Warnings from the NWS were issued from three local NWS offices: Sacramento, Eureka, San Francisco Bay Area.
- The NWS summary of weather conditions and hazards supported severe fire weather risk as shown Figure 8 below.

Figure 8: NWS Summary, Weather Conditions and Hazards Supporting Conclusion of Severe Fire Weather Risk on September 20, 2023

NATIONAL WEATHER SERVICE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

CA Hazards Summary

Last Update Wed Sep 20 9:16am (Refreshes every 5 minutes) (Help+)

This is an experimental display of our hazard products. This page may change without notice.

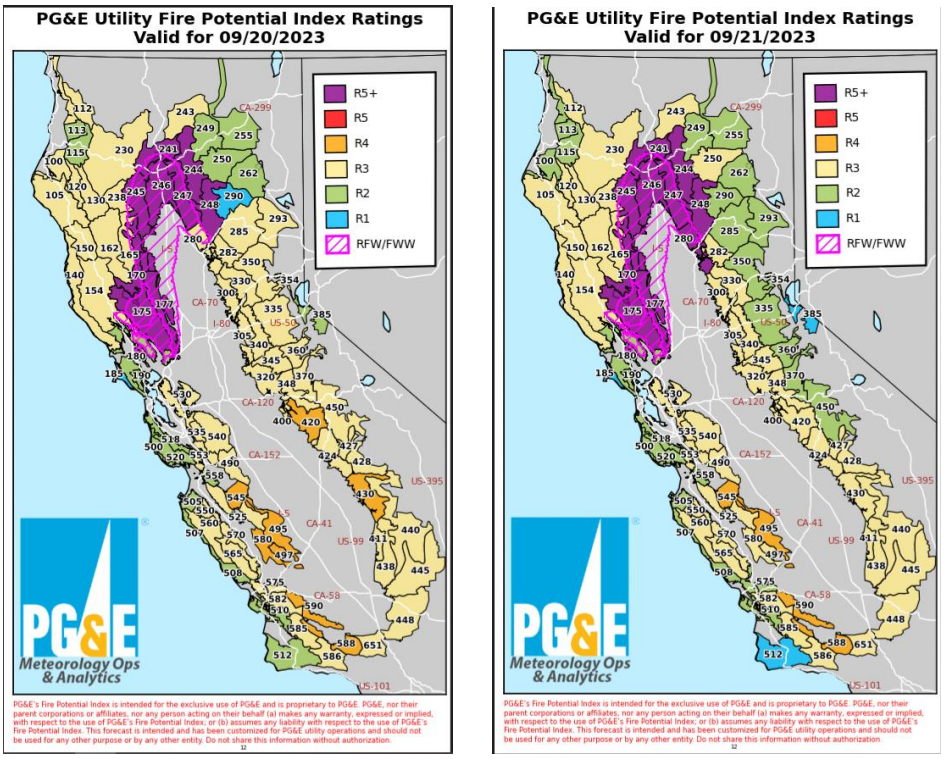
Some begin and end times might be incorrect. This is a known issue and being worked on.

California	Begins	Ends	Last Updated
Wind Advisory (HNX) +	Thu Sep 21 2:00pm	Thu Sep 21 11:00pm	2hrs 25mins ago
High Surf Advisory (LOX) +	Now	Wed Sep 20 11:00am	7hrs ago
Freeze Watch (MFR) +	Thu Sep 21 2:00am	Thu Sep 21 9:00am	17mins ago
Fire Weather Watch (STO) +	Wed Sep 20 11:00pm	Thu Sep 21 6:00pm	6hrs ago
Fire Weather Watch (MTR) +	Wed Sep 20 11:00pm	Thu Sep 21 11:00am	5hrs ago
Fire Weather Watch (EKA) +	Wed Sep 20 11:00pm	Thu Sep 21 11:00am	5hrs ago
Air Quality Alert (PSR) +		Thu Sep 21 12:00am	23hrs ago

We also review forecasted wind speeds in the potential PSPS-impacted counties to evaluate the need for a PSPS. Figure 9 below also shows the Utility Fire FPI Ratings for Fire Index Areas (FIAs) in PG&E's service area for September 20 and 21, 2023. We determine the scope for PSPS events within those FIAs with fire risk rating R5-Plus from PG&E's FPI model.

[10] CAL FIRE "Commonly Used Terminology," pg. 2.

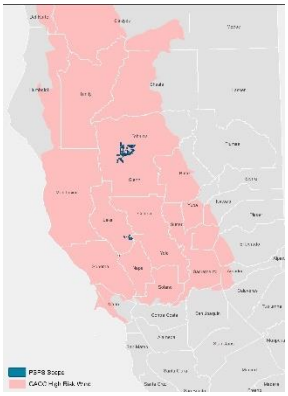
Figure 9: PG&E Utility FPI Ratings for September 20, 2023 and September 21, 2023



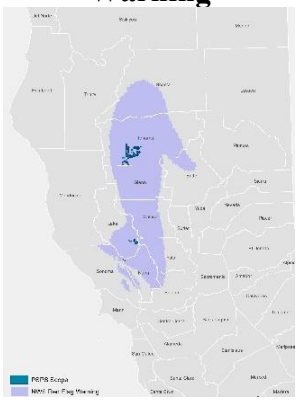
In Figure 10, the event scope can be compared with other agencies to vet the fire weather risk. Notably, through PG&E's focused de-energization approach and its mitigation efforts, only 1,171 customers were de-energized despite approximately 1.1 million customers under GACC's High Risk weather forecast, 132,490 customers under NWS's Red Flag Warning and 99,860 customers under NOAA's Fire Weather Outlook.

Figure 10: Comparison of Federal Agency Severe Fire Weather Warning Footprints to Final PSPS Scope

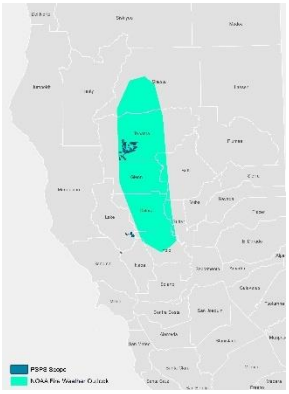
GACC High Risk Wind



NWS Red Flag Warning



NOAA Fire Weather Outlook



Section 2.4 - An explanation of how the utility determined that the benefit of de-energization outweighed potential public safety risks, and analysis of the risks of de-energization against not de-energizing. The utility must identify and quantify customer, resident, and the general public risks and harms from de-energization and clearly explain risk models, risk assessment processes, and provide further documentation on how the power disruptions to customers, residents, and the general public is weighed against the benefits of a proactive de-energization *(D.19-05- 042, Appendix A, page A24, D.21-06-014, page 284, SED Additional Information.)*

Response:
PG&E's PSPS Risk-Benefit Tool addresses the CPUC's requirements presented in the 2019 PSPS Order Instituting Investigation (OII)[11], which requires California investor-owned utilities (IOUs) to quantify the risk and benefits associated with initiating or not initiating a PSPS event for our customers, residents and the general public.[12] PG&E ran the PSPS Risk-Benefit Tool to analyze the risk of de-energization during the September 20 – 21, 2023 PSPS Event and the results determined the benefit of a PSPS outweighed the risk. For further details on the analysis, see Figure 13 below.

PG&E incorporated the aforementioned risk-benefit analysis into our PSPS execution process to help inform our PSPS decision-making process. Our risk-benefit tool aligns with the California IOUs and the current industry-standard Multi-Attribute Value Function (MAVF) framework, as defined through the Safety Modeling Assessment Proceeding (SMAP), which specifies how various consequences are factored into a risk calculation. Utilizing this framework, we incorporate event forecast information into our PSPS Risk-Benefit Tool, which is further described under the "Risk Assessment" section below.

The output of the tool is a ratio that compares the calculated PSPS potential benefit from initiating a de-energization event (i.e., mitigation of catastrophic wildfire consequence) to the risks associated with PSPS event (i.e., impact to customers resulting from a PSPS outage). Key inputs in the risk-benefit analysis include results from Technosylva wildfire simulations specific to the distribution circuit and transmission lines in scope for a potential de-energization, the number of customers anticipated to be de-energized, and the forecasted number of customer minutes across each identified circuit in scope for a potential de-energization.

After the potential de-energization scope is determined, including the identification of potentially impacted circuits for the potential PSPS event in question, this scope and the Technosylva wildfire simulation outputs are used as inputs into the Risk-Benefit tool. This tool quantifies the potential public safety risk and wildfire risk resulting from the forecasted impacts of the pending weather that may lead to a potential PSPS. The Wildfire Risk Score is based on an 8-hour simulation from Technosylva that can, at times, understate the risk significantly. To account for this, the MIC may still recommend to de-energize circuits where the Risk-Benefit tool shows higher PSPS risk than Wildfire risk.

[11] Decision (D.) 21-06-014.
[12] This tool was developed in collaboration with PG&E's Risk Management and Safety team and Joint IOU PSPS Working Group ahead of the 2021 PSPS season, with alignment on the industry-standard methodology described in PG&E's Risk Assessment and Mitigation Phase (RAMP) and General Rate Case workpapers. Please see PG&E response to CPUC Energy Division Data Request GRC-2023-Ph1-DR_ED_001_Q01Supp01.

Risk Assessment

As stated, PG&E's PSPS Risk-Benefit Tool utilizes the state-wide standard MAVF framework that captures the safety, reliability, and financial impact of identified potential risk events, as outlined in our Enterprise Risk Register[13]. The tool's calculations use a non-linear scaling of consequences, reflecting our focus on low-frequency/high-consequence risk events without neglecting high-probability/low-consequence risk events. The PSPS Risk-Benefit Tool's MAVF scores are used to compare the potential de-energization risk from a forecasted PSPS against the potential risk of catastrophic wildfires that may occur if circuits remain energized. This analysis is specific to the potentially impacted circuits being considered for PSPS de-energization.

The following inputs are factored in MAVF risk scores for PSPS events and wildfires, which are weighed against one another:

- Technosylva Wildfire Simulation Data: Fire simulation, like the maps shown in Figure 12 below, forecasts the consequences of a potential wildfire's impact on customers, wildlife, and infrastructures on each circuit for every three hours. These values are based on Technosylva's proprietary and sophisticated wildfire modeling, using real-time weather models, state-of-the-art fuel, and 8-hour fire spread modeling.
- Forecasted Circuits: The final list of the distribution circuits and transmission lines identified to be in-scope for a potential PSPS.
- Customer Minutes: Forecasted outage duration the customers will face by the potential PSPS.
- Customers Impacted: Forecasted number of customers anticipated to be impacted by the potential PSPS.
- Customer Category and Critical Customer Adjustment Factor: The type of customer (e.g., MBL program, etc.) is incorporated into the analysis through the use of a "critical customer adjustment factor," which is applied to the customer outage duration to reflect a higher risk score for customers who are at a greater adverse risk of a potential de-energization event.

Once the above data is made available and incorporated into the tool, the modeling considerations described as follows are used to estimate the consequence of the: (1) potential wildfire risk and (2) PSPS risk at a circuit level. Throughout the tool, a variety of modeling considerations are made to facilitate calculations which are included in Table 2 and summarized in Figure 11 below.

[13] Full details of the MAVF methodology are provided through the Risk Assessment and Modeling Phase (RAMP) Report RAMP Report, pp. 3-3 to 3-15 and General Rate Case (GRC) workpapers in response to Energy Division GRC-2023-PhI_DR_ED_001_Q01Supp01.

Table 2: PSPS Risk-Benefit Consequence Modeling Considerations

Consequence Type	Wildfire Consequence Considerations	PSPS Consequence Considerations
Safety	Calculated based on maximum population impacts derived from Technosylva wildfire simulation models and a fatality ratio based on National Fire Protection Association (NFPA) data.	Calculated from an estimate of Equivalent Fatalities (EF) per Million Customer Minutes Interrupted (MMCI). The EF/MMCI ratio is estimated from previous PG&E PSPS events and other large external outage events[14].
Reliability	N/A[15]	Calculated directly from the potential number of customers impacted and outage duration based on customer minutes interrupted.
Financial	Calculated based on maximum building impacts derived from Technosylva wildfire simulation models and a cost per structure burned previously evaluated in 2020 RAMP Report[16].	Calculated based on two financial estimates 1) distribution of a lump sum cost of execution across all relevant circuits and 2) an estimated proxy cost per customer in scope per PSPS event[17].

Potential Wildfire Risk

Wildfire consequence impacts are calculated based on the outputs of the Technosylva simulations. Variables include 1) population (e.g., customers, residents and general public) impacted by wildfire and 2) structure impacted by wildfire used to calculate natural unit values for two consequence components:

- Wildfire Safety Consequence: Equivalent Fatalities (EF)
- Wildfire Financial Consequence: Financial Cost of Wildfire (in dollars)

Potential PSPS Risk

PSPS consequence impacts are based on the following values: duration of de-energization by circuit, and number of customers impacted by de-energization on each circuit. These input values are used to calculate natural unit values for three consequence components:

- PSPS Safety Consequence: EF as an output of Customer Minutes Interrupted

[14] Previous PG&E PSPS events include 2019-2021 events, and other large external outage events include the 2003 Northeast Blackout in New York City, 2011 Southwest Blackout in San Diego, 2012 Derecho Windstorms, 2012 Superstorm Sandy, 2017 Hurricane Irma, 2021 Blackout event.

[15] PG&E does not include a reliability component in the Wildfire Consequence calculation due to no pre-planned estimation of reliability due to Wildfire impacts. Additionally, based on the assessments conducted in RAMP and GRC, reliability has a relatively small contribution to the overall MAVF risk score, and as such, is not including the impacts of reliability in this tool.

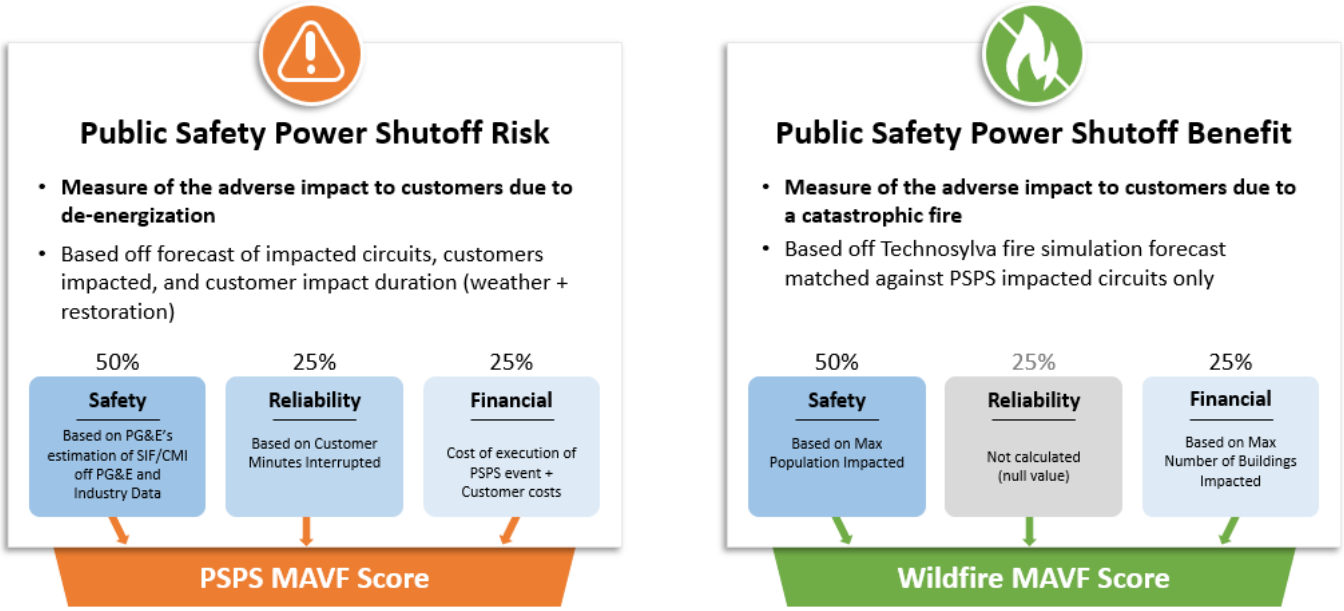
[16] See A.20-06-012.

[17] The assumptions used in these calculations, including the proxy cost per customer per PSPS event, are subject to be updated and are not intended to prejudge or create precedent with regard to the development of more precise values of resiliency or cost of PSPS metrics being considered in other ongoing proceedings at the California Public Utilities Commission, such as the Risk-Based Decision-Making Rulemaking [R.20.07.013] and the Microgrid and Resiliency Strategies.

- PSPS Electric Reliability Consequence: Customer Minutes Interrupted × Critical Customer Adjustment Factor
- PSPS Financial Consequence: Financial Cost of PSPS event (in dollars) × Critical Customer Adjustment Factor

Once the consequence values (safety, reliability, financial) are estimated, they are converted into MAVF risk scores. Once the Risk-Benefit tool calculates the impacts between the PSPS event and a wildfire, it is summarized by indicating if the adverse impact from a PSPS event outweighs the risk of a wildfire.

Figure 11: Visual Representation of PSPS Risk-Benefit Tool



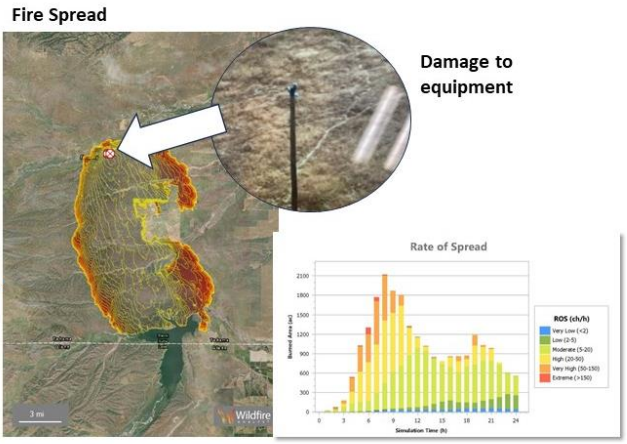
September 20 – 21, 2023 PSPS Event

For the September 20-21 PSPS Event, PG&E ran the PSPS Risk Model using the latest scope prior to the first potential de-energization, shown below in Figure 13, which supported initiating a PSPS based on the forecasted impact information and indicated that 23 of 24 distribution circuits and three transmission lines in the latest scope surpassed the analysis threshold of 1 to support a PSPS. One Distribution circuit (Round Mountain 1101) had no fire impact (population or building consequence) simulated by the Technosylva consequence model and therefore no defined wildfire risk score. It is also noted that no customers are impacted by the de-energization of this distribution circuit. In support of PG&E's Risk Model analysis, during patrol and inspections conducted following the weather all clear, PG&E found 1 incident of wind-related damage which is further detailed in Figure 12, Table 3 and Section 4. As reflected in Figure 12 and Table 3, based on the location of the discovered damage, the Technosylva fire spread model identified the public safety impacts to property and lives had there been a fire. Note the PSPS Risk Model calculations are based on forecasted conditions.

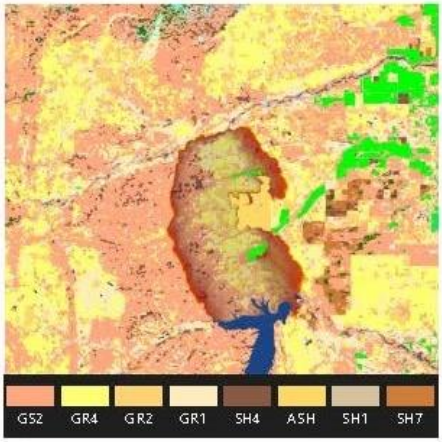
Figure 12: Fire Simulation Maps

In September, we enacted a PSPS as severe weather was forecasted in our service territory. Following the PSPS, a damage was found during patrols.

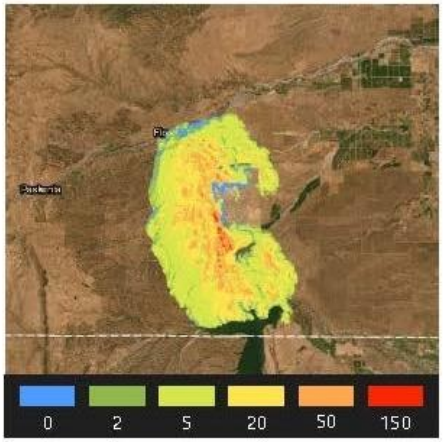
Fire Spread Simulations
Shows us what a wildfire started from this damage might have looked like, had a PSPS not been in place.



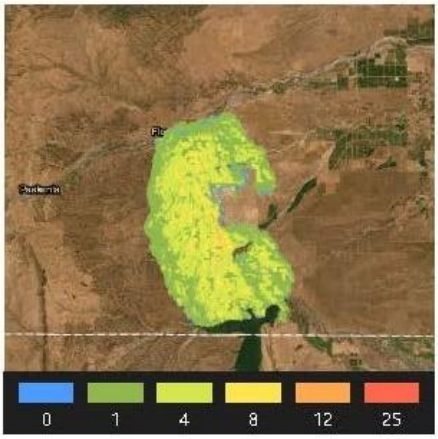
Surface Fuels



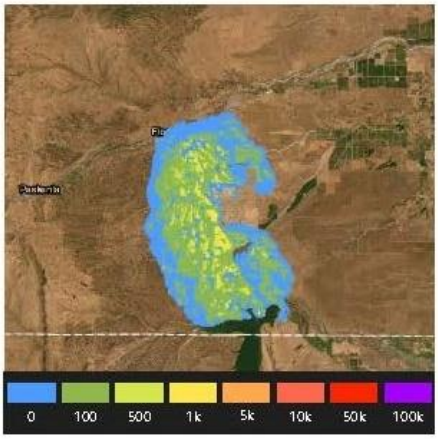
Rate of Spread (ch/h)



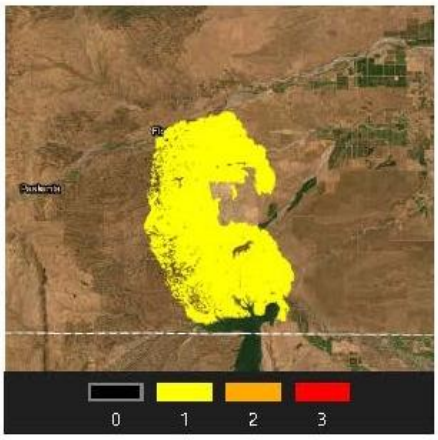
Flame Length (ft)



Fireline Intensity (btu/ft/s)



Crown Type



Firepaths

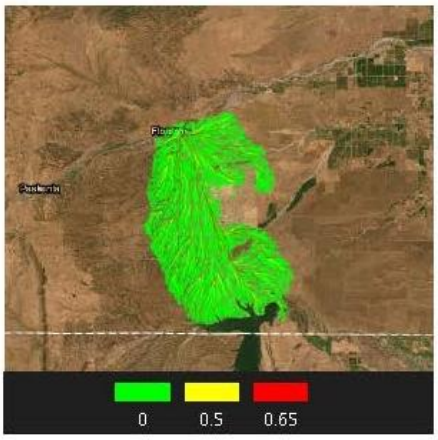
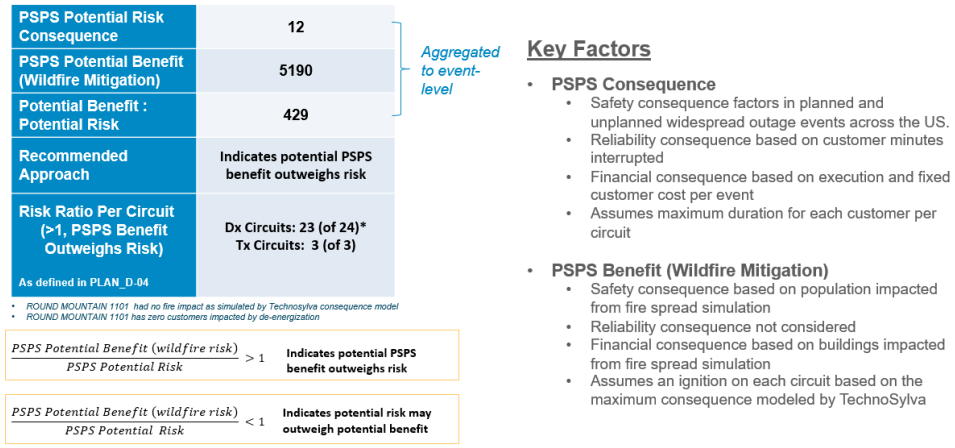


Table 3: Impact Analysis during September 20 – 21, 2023 PSPS Event

Impact Analysis	
Size (ac)	23,554.2
Initial Attack Assessment	1-Low
No. of Buildings	152
Total Population	46
No. Places	7

Figure 13: PSPS Potential Benefit Versus PSPS Potential Risk Consequence



Section 2.5 - Explanation of alternatives considered and evaluation of each alternative.
(D.19-05-042 Appendix A, page A22.)

Response:
After reviewing the meteorological information that indicated a potential for catastrophic wildfire and the impacts on customers through de-energization, we considered whether alternatives to de-energizing, such as additional vegetation management and disabling automatic reclosers, could adequately reduce the risk of catastrophic wildfire thus lowering the need for de-energization. We determined these measures alone did not reduce the risk of catastrophic wildfire in areas within the PSPS scope sufficiently to protect public safety.

Leading up to the September 20 – 21, 2023 PSPS Event, PG&E readied de-energization mitigations, reviewed alternatives to de-energization and took the following steps:

- Our Operations team reviewed asset and vegetation tags that included incremental customers into PSPS scope and worked to correct these tags.
- We conducted hazard tree mitigation efforts on circuits potentially in PSPS scope in the days leading up to the event. Tree-trimming near a utility line can keep limbs and trunks from nearby trees from falling into a line, but it does not mitigate against broken limbs from distant trees outside the vegetation management perimeter that could blow into a line or break utility equipment.
- Pre-patrols of potentially impacted transmission facilities were also ongoing in the days leading up to the time of anticipated de-energization. While pre-patrols can help identify and correct asset tags on impacted transmission lines, even transmission lines in fully healthy condition may still pose a wildfire risk. Thus, pre-patrol of potentially impacted transmission facilities was not considered a sufficient alternative to PSPS.
- We enabled Enhanced Powerline Safety Setting (EPSS) and disabled automatic reclosing in Tier 2/Tier 3 High Fire Threat District (HFTD) areas. This reduces the ignition risk from attempts to re-energize circuits via automatic reclosing.
- To minimize PSPS public safety impacts, we employed a granular scoping process. This allows us to de-energize smaller segments of the grid within the close confines of the

fire-critical weather footprint, rather than de-energizing larger amounts of customers in more populated areas.

- To reduce PSPS public safety impacts, we reviewed the total count of impacted customers and impact of potential de-energization to our MBL program customers and critical facilities; we factored the back-up generation capabilities of critical facilities and infrastructure that pose societal impact risks if de-energized.
- We reviewed opportunities for islanding, sectionalization, temporary generation, backup-generation, and alternate grid solutions to reduce and mitigate the number of customers de-energized. Due to the outage locations for this PSPS, there were no opportunities for islanding.
- To relieve PSPS public safety impacts, we provide local CRCs to support customers in impacted communities.
- We support vulnerable customers through California Foundation for Independent Living Centers (CFILC) and CBO resource partners that offered various services to customers impacted by this PSPS. Further information is detailed in Section 6.5.
- We utilize Priority Notifications and established information sharing processes to notify impacted customers of the expected de-energization.
- We increased our restoration efforts with the use of resources, such as helicopters to conduct line safety patrols after the Weather "All-Clear," and accessibility equipment for patrols, repairs, and restoring service safely.

Section 3 – De-energized Time, Place, Duration and Customers

Section 3.1 - The summary of time, place and duration of the event, broken down by phase if applicable. *(Resolution ESRB-8 page 3, SED Additional Information.)*

Response:
The PSPS event occurred over the timeframe of September 20 – 21, 2023 in 3 TPs located in three counties. Affected counties include Lake, Napa, and Tehama. PG&E began de-energizing customers on September 20, 2023 at 23:19 PDT and restored the final customer on September 21, 2023 at 17:05 PDT. For additional information regarding the time, place, and duration of the PSPS, please see Figure 1 above and Appendix B.

Section 3.2 - A zipped geodatabase file that includes PSPS event polygons of de-energized areas. The file should include items that are required in Section 3.3. *(SED Additional Information.)*

Response:
A zipped geodatabase file that includes PSPS event polygons of final de-energized areas combined with the event data can be found in the attachment
"PGE_PSPS_EVENT_10052023_CONF.gdb.zip."

Section 3.3 - A list of circuits de-energized, with the following information for each circuit. This information should be provided in both a PDF and excel spreadsheet. *(Resolution ESRB-8, page 3, SED Additional Information.)*

- County
- De-energization date/time
- Restoration date/time
- "All Clear" declaration date/time
- General Order (GO) 95, Rule 21.2-D Zone 1, Tier 2, or Tier 3 classification or non-HFTD
- Total customers de-energized
- Residential customers de-energized
- Commercial/Industrial Customers de-energized
- MBL customers de-energized
- AFN other than MBL customers de-energized
- Other Customers
- Distribution or transmission classification

Response:
A list of circuits de-energized, including the information listed above, can be found in Appendix B.

A total of 1,171 customers were de-energized during the PSPS event. Of the circuits de-energized, all 6 were distribution.[18] There were 1,017 residential customers, including 127 MBL program customers, 444 AFN. Customers other than MBL included 138 commercial/industrial,

[18] MBL program and AFN customers are included within the count of residential customers affected.

and 16 customers in the "Other[19]" category. There were no transmission lines de-energized for this event.

[19] 'Other' includes customers that do not fall under the residential or commercial/industrial categories such as governmental agencies, traffic lights, agricultural facilities, and prisons.

Section 4 – Damages and Hazards to Overhead Facilities

Section 4.1 – Description of all found wind-related damages or hazards to the utility's overhead facilities in the areas where power is shut off. *(Resolution ESRB-8, page 3, SED Additional Information.)*

Response:
On September 20, 2023, weather stations near the PSPS areas recorded wind gusts as high as 40 miles per hour. These are shown in Table 20 and Figure 23 below in Section 12.

During patrols of the de-energized circuits prior to restoring power, PG&E found 1 incident of wind-related damage and no hazards.[20] Damages are conditions that occurred during the PSPS event, likely wind-related, necessitating repair or replacement of PG&E's asset, such as a wire down or a fallen pole. Hazards are conditions that might have caused damages or posed an electrical arcing or ignition risk had PSPS not been executed, such as a tree limb found suspended in electrical wires. The damage and hazard locations are pictured in Figure 14 below and mapped in Figure 15 below. This is further detailed in Figure 12 of our wildfire simulation analysis based on the damage identified.

Figure 14: Vegetation-Damage in Tehama County – Broken tie wire

[20] All reported PSPS-related damages and hazards are conditions that might have caused an electrical arcing or ignition risk. PG&E defines PSPS damages as issues requiring repair/replacement, and hazards as issues requiring mitigation that does not involve repair/replacement.

Section 4.2 - A table showing circuit name and structure identifier (if applicable) for each damage or hazard, County that each damage or hazard is located in, whether the damage or hazard is in a HFTD or non-HFTD, Type of damage/hazard of damage. *(SED Additional Information.)*

Response:
A table of damages and hazards within the de-energized areas can be found in Appendix C.

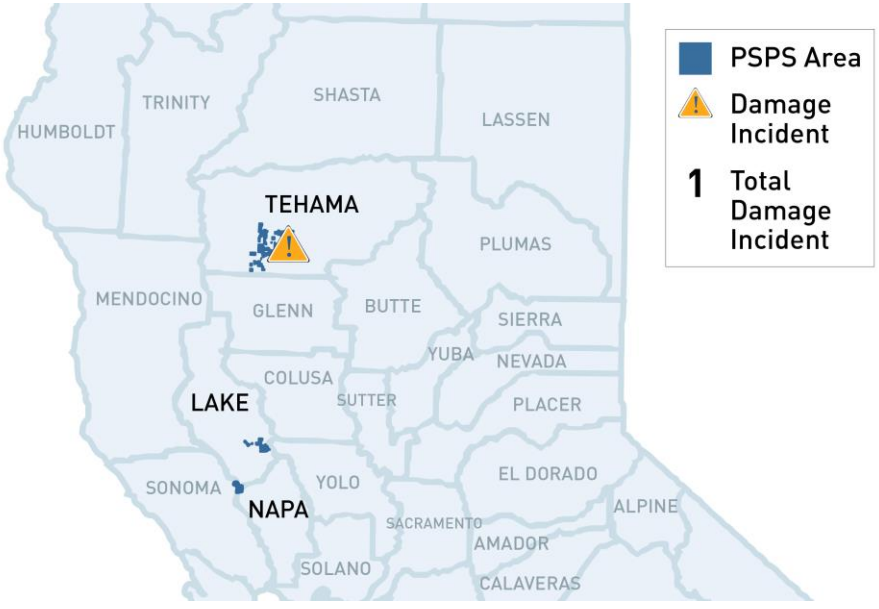
Section 4.3 - A zipped geodatabase file that includes the PSPS event damage and hazard points. The file should include items that are required in Section 4.2. *(SED Additional Information.)*

Response:
A zipped geodatabase file that includes the PSPS event damage points can be found in attachment, "*PGE_PSPS_EVENT_DAMAGES_HAZARDS_10052023_CONF.gdb.zip"*. Please note no hazard points are included as none were identified for this PSPS.

Section 4.4 - A PDF map identifying the location of each damage or hazard. *(SED Additional Information.)*

Response:
Please see Figure 15 below for a map identifying the location of the damage. Please note no hazard points are included as none were identified for this PSPS.

Figure 15: Map of Damage/Hazard Incidents in PSPS Footprint During September 20-21, 2023 PSPS Event



Section 5 – Notifications

Section 5.1 - A description of the notice to public safety partners, local/tribal governments, paratransit agencies that may serve all the known transit- or paratransit-dependent persons that may need access to a community resource center, multi-family building account holders/building managers in the AFN community, and all customers, including the means by which utilities provide notice to customers of the locations/hours/services available for CRCs, and where to access electricity during the hours the CRC is closed. *(Resolution ESRB-8, page 3. D21-06-034, Appendix A, page A2, A9-A10, SED Additional Information.)*

Response:
Throughout the PSPS event, PG&E made significant efforts to notify Public Safety Partners, Tribal/Local Governments, CBOs (including paratransit agencies) and impacted customers in accordance with the CPUC PSPS Phase 1 Guidelines.[21]

PG&E followed the Notification Plan discussed in our 2023 Pre-Season Report. This information can be found in PG&E's 2023 Pre-Season Report, Appendix C: Notification Plan, pp. 50-60.

In addition to the processes noted in the plan, PG&E completed the following:

- PG&E worked closely with telecommunications service providers throughout the event to effectively coordinate, share information, and manage the PSPS. PG&E also provided telecommunications service providers with a dedicated PG&E contact in the EOC known as the Critical Infrastructure Lead (CIL), who shared up-to-date event information and answered specific, individual questions. These partners could reach the CIL 24/7 during the event by e-mail or phone. In addition, PG&E proactively reached out to eight telecommunications service providers[22] via email or phone as weather changed or new information regarding the PSPS became available.
- In accordance with the Phase 3 PSPS Guidelines[23], PG&E provided proactive call, text and email notifications and impacted zip code information to paratransit agencies that served known transit- or paratransit-dependent persons that may have needed access to a CRC during the PSPS. All notifications to paratransit agencies included a link to the PSPS emergency website event updates page, pge.com/pspsupdates. This site also directs users to other webpages, such as the CRC page, which includes CRC information such as locations, hours, and services available for CRCs (see Section 9). The PSPS emergency website event updates page also includes two prominent buttons at the top of the page, allowing customers to look up an address to determine if it could be impacted, as well as to the map showing areas potentially affected by the shutoff.
- PG&E considers multi-family building account holders/building managers in the AFN community as part of our All Customers (including MBL program customers

[21] D.19-05-042.
[22] American Tower Corporation, AT&T, Ducor, Frontier, Happy Valley Telephone Co/TDS telecom, Lumen, T-Mobile, Verizon.
[23] D.21-06-034.

and Self-Identified Vulnerable [SIV][24] customers) recipient group. For information on PG&E's outreach and community engagement with master-metered owners, property managers, and building account holders, refer to PG&E's AFN Quarterly Progress Report for activities between April 1, 2023, and June 30, 2023.

Table 4 below provides a description of the notifications PG&E sent to Public Safety Partners, Tribal/Local Governments and all customers in accordance with the minimum timelines set forth by the CPUC PSPS Phase 1 Guidelines[25].

Table 4: Notification Descriptions

Type of Notification	Recipients	Description
PRIORITY NOTIFICATION: 48-72 hours in advance of anticipated de-energization	Public Safety Partners, CBOs[26], and transmission level customers	On September 17, 2023, PG&E's Meteorology Team noted a potential PSPS and updated the weather forecast on pge.com/weather to "elevated" in certain parts of the service area. At this time, local PG&E representatives called each County Office of Emergency Services (OES) in PG&E's electrical service area and select Tribes and cities to inform them that PG&E is monitoring an increased potential of PSPS outages. Following PG&E's activation of its EOC, the following was completed: • PG&E submitted a PSPS State Notification Form to Cal OES and sent an e-mail to the CPUC notifying them that PG&E's EOC has been activated and that PG&E is monitoring for potential PSPS outages. • PG&E sent notifications to other Public Safety Partners[27] via call, text, and e-mail; these notifications included the following information: o Estimated window of the de-energization time. o When weather is anticipated to pass. o Estimated Time of Restoration (ETOR).

[24] SIV is inclusive of customers who have indicated they are "dependent on electricity for durable medical equipment or assistive technology" as well as customers that are not enrolled or qualify for the MBL program and "certify that they have a serious illness or condition that could become life threatening if service is disconnected." In accordance with D.21-06-034, PG&E includes customers who have indicated they are "dependent on electricity for durable medical equipment or assistive technology" in an effort to identify customers "above and beyond those in the medical baseline population" to include persons reliant on electricity to maintain necessary life functions including for durable medical equipment and assistive technology. This designation remains on their account indefinitely.

[25] D.19-05-042.

[26] Phase 3 D.21-06-034, Appendix A, page A9, Section G. MBL and AFN Communities, No. 4, Each electric investor-owned utility must provide proactive notification and impacted zip code information to paratransit agencies that may serve all the known transit- or paratransit-dependent persons that may need access to a community resource center during a proactive de-energization event.

[27] Other Public Safety Partners refers to first/emergency responders at the local, state, and federal level, water, wastewater, and communication service providers, affected CCAs, publicly-owned utilities/electrical cooperatives, the CPUC, the California Governor's Office of Emergency Services, and the California Department of Forestry and Fire Protection.

Type of Notification	Recipients	Description
		○ For Public Safety Partners only: Links to the PSPS Portal where event-specific maps and information are available.
WATCH NOTIFICATION: 24-48 hours in advance of anticipated de-energization	Public Safety Partners, CBOs, All Customers (including MBL program customers and SIV customers)[28], and transmission level customers	During this time, the following was completed: • PG&E submitted a PSPS State Notification Form to Cal OES and sent an e-mail to the CPUC notifying them of a scope change. • PG&E sent notifications to other Public Safety Partners, CBOs, transmission level customers and all customers via call, text message and e-mail; these notifications included the following information: ○ Estimated window of the de-energization time. ○ When the adverse weather is anticipated to pass. ○ ETOR. ○ For Public Safety Partners only: Links to the PSPS Portal where event-specific maps and information are available. ○ For customers only: Potentially impacted addresses, links to PSPS Updates webpage with Community Resource Center information, and resources for customers with AFNs, including but not limited to information on the MBL program, Meals on Wheels, language support, and the Portable Battery Program (PBP). ○ For transmission-level customers only: Transmission Substation Name and Line name serving substation. • PG&E sent notifications via call, text, and e-mail to MBL program customers, including tenants of master metered accounts, and SIV customers every hour until the customer confirmed receipt of the notification. • PG&E also attempted to send Cancellation Notifications to Public Safety Partners and customers within two hours of being removed from scope; this was to inform them that power would not be shut off. Customer notifications were provided in English, with information on how to receive event information in 15

[28] Due to rapidly changing weather conditions, additional customers brought into scope after initial scope was finalized did not receive 24-48 hour notifications. These customers received all other required notifications prior to de-energization.

Type of Notification	Recipients	Description
		non-English languages, referred to herein as "translated languages"[29]. Customers with their language preference selected in their PG&E accounts received in-language (translated) notifications. Public Safety Partner notifications were provided in English.
WARNING NOTIFICATION: 1-4 hours in advance of anticipated de-energization, if possible	Public Safety Partners, CBOs, All Customers (including MBL program customers, SIV customers), and transmission level customers	When forecasted weather conditions showed that a safety shutoff was approved to move forward, and power would be de-energized in approximately 1-4 hours, the following was completed: • PG&E submitted a PSPS State Notification Form to Cal OES and sent an e-mail to the CPUC notifying them that PG&E has made the decision to de-energize. • PG&E sent notifications via call, text, and e-mail to other Public Safety Partners, CBOs, transmission level customers and customers; these notifications included the same the following information: o Estimated window of the de-energization time. o When the adverse weather is anticipated to pass. o ETOR. o For Public Safety Partners only: Links to the PSPS Portal where event-specific maps and information are available. o For Customers only: Potentially impacted addresses, links to PSPS Updates webpage with Community Resource Center information, and resources for customers with AFNs, including but not limited to information on the MBL program, Meals on Wheels, language support, and the PBP. o For transmission-level customers only: Transmission Substation Name and Line name serving substation. • PG&E sent notifications via call, text, and e-mail to MBL program customers, including tenants of master metered accounts, and SIV customers every hour until the customer confirmed receipt of the notification.

[29] Translated languages refers to Spanish, Chinese (Mandarin and Cantonese), Vietnamese, Tagalog, Korean, Russian, Arabic, Punjabi, Farsi, Japanese, Khmer, Hmong, Thai, Hindi, and Portuguese. A language is prevalent if it is spoken by 1,000 or more persons in the utility's territory or if it's spoken by five percent or more of the population within a "public safety answering point" in the utility territory (D.20-03-004). Details on the community outreach efforts for PSPS and wildfire-related outreach including efforts to reach all languages prevalent in PG&E's service area can be found in PG&E's Notification Plan, include in our 2023 PSPS Pre-Season Report.

Type of Notification	Recipients	Description
		• PG&E also attempted to send Cancellation Notifications to Public Safety Partners and customers within two hours of being removed from scope; this was to inform them that power would not be shut off. Customer notifications were provided in English, with information on how to get event information in translated languages. Customers with their language preference selected in their PG&E accounts received in-language (translated) notifications. Public Safety Partner notifications were provided in English.
POWER OFF NOTIFICATION: When de-energization is initiated[30]	Public Safety Partners and All Customers (including MBL program customers and SIV customers)	When shut off was initiated, the following was completed: • PG&E submitted a PSPS State Notification Form to Cal OES and sent an e-mail to the CPUC to notify them that de-energization has been initiated. • Agency Representatives of PG&E conducted a live call and/or sent an e-mail, as appropriate, to County OES that were within the potential PSPS scope area and select Tribes and cities to inform them that customers within their jurisdiction were beginning to be de-energized. • PG&E sent notification to other Public Safety Partners and customers via call, text, and e-mail, which included: o Impacted addresses (for customers only). o De-energization time. o When the adverse weather is anticipated to pass. o For Customers Only: Links to the PSPS Updates webpage with Community Resource Center information, and resources for customers with AFNs, including but not limited to information on the MBL program, Meals on Wheels, language support, and the PBP. Customer notifications were provided in English, with information on how to receive event information in translated languages. Customers with their language preference selected in their PG&E accounts received in-language (translated) notifications. Public Safety Partner notifications were provided in English.
WEATHER "ALL-CLEAR"/ETOR UPDATE	Public Safety Partners and All Customers	After the weather passed and the area is deemed safe to begin patrols and restoration, PG&E completed the following:

[30] Transmission level customers did not receive Power Off notifications as they were removed from scope.

Type of Notification	Recipients	Description

NOTIFICATION: Immediately before re-energization begins[31]	(including MBL program customers and SIV customers),	• Submitted a PSPS State Notification Form to Cal OES and sent an e-mail to the CPUC notifying them that PG&E is initiating re-energization patrols.
		• Sent notifications to other Public Safety Partners and customers via call, text, and e-mail; these notifications included the ETOR.
		• Sent "event update" notifications via call, text, and e-mail to customers if their ETOR changed; two ways that an ETOR may change include:
		  ○ New field or meteorology conditions.
		  ○ Damage was found during patrols and repair is needed.
		Customer notifications were provided in English, with information on how to receive event information in translated languages. Customers with their language preference selected in their PG&E accounts received in-language (translated) notifications. Public Safety Partner notifications were provided in English.

RESTORATION NOTIFICATION: When re-energization is complete[32]	Public Safety Partners, CBOs and All Customers (including MBL program customers and SIV customers),	Once customers, including MBL program customers and SIV customers, were restored, they received notifications via call, text, and e-mail. This was done using an automated process that issued customer notifications every 15 minutes upon restoration of service. Customer notifications were provided in English, with information on how to receive event information in translated languages. Customers with their language preference selected in their PG&E accounts received in-language (translated) notifications. Once all customers were restored, PG&E submitted the final PSPS State Notification Form to Cal OES, sent an e-mail to the CPUC confirming restoration of PSPS outages and reclassification of customers if applicable, and sent a notification to Public Safety Partners via call, text, and e-mail. Public Safety Partner notifications were provided in English.

[31] Transmission level customers did not receive All Clear notifications as they were removed from scope.
[32] Transmission level customers did not receive Restoration notifications as they were removed from scope.

Section 5.2 – Notification timeline including prior to de-energization, initiation, restoration, and cancellation, if applicable. The timeline should include the required minimum timeline and approximate time notifications were sent. *(D.19-05-042, Appendix A, page A8-A9, D.21-06-034, page A11)*

Response:
Table 5 below describes notifications PG&E sent for this PSPS event, including approximate times of notifications in accordance with the minimum timelines set forth by the CPUC PSPS Phase 1 Guidelines[33], to Tribal/Local Governments, Public Safety Partners, and all customers prior to de-energization, initiation, restoration, and cancellations[34]. Tribal/Local Governments and Public Safety Partners are notified of scope changes and cancellations via the PSPS Portal. See Table 10 for information on when the PSPS Portal updates occurred.

Table 5: Customer Notification Timeline Summary Prior to De-energization for September 20-21, 2023 PSPS Event

Event Order	Minimum Timeline[35]	Notification Sent to:	Approximate Time Sent (PDT)	Message	Notes	Who made the Notification
Prior to De-energization	72-48 hours	Tribal/Local Governments and Community Choice Aggregators (CCAs)*	09/18/2023 10:21	Priority		PG&E
		Public Safety Partners**	09/18/2023 10:07	Priority		PG&E
	48-24 hours	Tribal/Local Governments and CCAs*	09/19/2023 11:32	Watch		PG&E
		Public Safety Partners**	09/19/2023 11:28	Watch		PG&E
		All Customers***	09/19/2023 11:44	Watch		PG&E

[33] D.19-05-042.
[34] D.21-06-034.
[35] D.19-05-042, Appendix A, Timing of Notification.

Event Order	Minimum Timeline[35]	Notification Sent to:	Approximate Time Sent (PDT)	Message	Notes	Who made the Notification
	24-12 hours[36]	Tribal/Local Governments and CCAs*	09/20/2023 06:42	Watch		PG&E
		Tribal/Local Governments and CCAs*	09/20/2023 23:32	Delay		PG&E
		Tribal/Local Governments and CCAs*	09/21/2023 05:44	Delay		PG&E
		Public Safety Partners**	09/20/2023 06:51	Watch		PG&E
		All Customers***	09/20/2023 07:00	Watch		PG&E
	4-1 hours	Tribal/Local Governments and CCAs*	09/20/2023 15:33	Warning		PG&E
		Tribal/Local Governments and CCAs*	09/20/2023 16:16	Warning		PG&E
		Tribal/Local Governments and CCAs*	09/20/2023 17:17	Warning		PG&E
		Tribal/Local Governments and CCAs*	09/20/2023 18:11	Warning		PG&E
		Tribal/Local Governments and CCAs*	09/20/2023 21:18	Warning		PG&E
		Public Safety Partners**	09/20/2023 15:28	Warning		PG&E

[36] While not a CPUC requirement, PG&E provides an additional 24-12 hour notification to Tribal/Local Governments, Public Safety Partners and Customers.

Event Order	Minimum Timeline[35]	Notification Sent to:	Approximate Time Sent (PDT)	Message	Notes	Who made the Notification
		Public Safety Partners**	09/20/2023 16:12	Warning		PG&E
		Public Safety Partners**	09/20/2023 17:20	Warning		PG&E
		Public Safety Partners**	09/20/2023 18:21	Warning		PG&E
		Public Safety Partners**	09/20/2023 21:19	Warning		PG&E
		All Customers***	09/20/2023 15:26	Warning		PG&E
		All Customers***	09/20/2023 16:12	Warning		PG&E
		All Customers***	09/20/2023 17:19	Warning		PG&E
		All Customers***	09/20/2023 18:20	Warning		PG&E
		All Customers***	09/20/2023 21:20	Warning		PG&E
	When De-energization is initiated (Power Off)	Public Safety Partners**	09/20/2023 23:46	Power Off		PG&E
		Public Safety Partners**	09/21/2023 0:00	Power Off		PG&E
		Public Safety Partners**	09/21/2023 02:45	Power Off		PG&E
		Public Safety Partners**	09/21/2023 03:45	Power Off		PG&E
		Public Safety Partners**	09/21/2023 07:16	Power Off		PG&E

Event Order	Minimum Timeline[35]	Notification Sent to:	Approximate Time Sent (PDT)	Message	Notes	Who made the Notification
		All Customers***	09/20/2023 23:46	Power Off		PG&E
		All Customers***	09/21/2023 0:00	Power Off		PG&E
		All Customers***	09/21/2023 02:45	Power Off		PG&E
		All Customers***	09/21/2023 03:45	Power Off		PG&E
		All Customers***	09/21/2023 07:16	Power Off		PG&E
	Immediately before re-energization (All-Clear/ETOR)	Tribal/Local Governments and CCAs*	09/21/2023 15:01	Inspecting/ Weather All - Clear		PG&E
		Public Safety Partners**	09/21/2023 12:18	Inspecting/ Weather All - Clear	First All Clear Notification Sent	PG&E
		Public Safety Partners**	09/21/2023 13:48	Inspecting/ Weather All - Clear	Last All Clear Notification Sent	PG&E
		All Customers***	09/21/2023 12:18	Inspecting/ Weather All - Clear	First All Clear Notification Sent	PG&E
		All Customers***	09/21/2023 13:48	Inspecting/ Weather All - Clear	Last All Clear Notification Sent	PG&E
		Public Safety Partners**	09/21/2023 08:14	ETOR Update	First ETOR Update Notification Sent	PG&E

Event Order	Minimum Timeline[35]	Notification Sent to:	Approximate Time Sent (PDT)	Message	Notes	Who made the Notification
		Public Safety Partners**	09/21/2023 17:20	ETOR Update	Last ETOR Update Notification Sent	PG&E
		All Customers***	09/21/2023 08:14	ETOR Update	First ETOR Update Notification Sent	PG&E
		All Customers***	09/21/2023 17:20	ETOR Update	Last ETOR Update Notification Sent	PG&E
Restoration (After)	After re-energization was completed (Restoration)	Tribal/Local Governments and CCAs*	09/21/2023 17:50	Restore		PG&E
		Public Safety Partners**	09/21/2023 13:47	Restore	First initial Restoration Notification Sent	PG&E
		Public Safety Partners**	09/21/2023 17:25	Restore	Last initial Restoration Notification Sent	PG&E
		All Customers***	09/21/2023 13:47	Restore	First initial Restoration Notification Sent	PG&E
		All Customers***	09/21/2023 17:25	Restore	Last initial Restoration Notification Sent	PG&E
Cancellation	Cancellation within 2-hours of	Tribal/Local Governments and CCAs*	09/21/2023 11:57	Cancel		PG&E

Event Order	Minimum Timeline[35]	Notification Sent to:	Approximate Time Sent (PDT)	Message	Notes	Who made the Notification
	decision to cancel****	Public Safety Partners*	09/19/2023 10:33	Cancel	Only Public Safety Partners removed from scope received the cancel notification. The decision to descope these customers was 09/19/2023 10:19.	PG&E
		Public Safety Partners*	09/21/2023 11:49	Cancel	Only Public Safety Partners removed from scope received the cancel notification. The decision to descope these customers was 09/21/2023 11:17.	PG&E
		All Customers***	09/19/2023 10:33	Cancel	Only Customers removed from scope received the cancel notification. The decision to descope these	PG&E

Event Order	Minimum Timeline[35]	Notification Sent to:	Approximate Time Sent (PDT)	Message	Notes	Who made the Notification
					customers was 09/19/2023 10:19.	
		All Customers***	09/21/2023 11:49	Cancel	Only Customers removed from scope received the cancel notification. The decision to descope these customers was 09/21/2023 11:17.	PG&E

*A subset of Public Safety Partners, including Tribes, cities, counties, and CCAs.
**A subset of Public Safety Partners, including water, wastewater, and communication service providers.
***All Customers, including MBL program customers and SIV customers.
**** For Cancellation sent 2 hours after the decision to cancel, see Table 9.

Section 5.3 - For those customers where positive or affirmative notification was attempted, use the following template to report the accounting of the customers (which tariff and/or AFN population designation), the number of notification attempts made, the timing of attempts, who made the notification attempt (utility or public safety partner) and the number of customers for whom positive notification was achieved. *(D.19-05-042, Appendix A, page A23, SED Additional Information.*) **"Notification attempts made" and "Successful positive notification" must include the unique number of customer counts. When the actual notification attempts made is less than the number of customers that need positive notifications, the utilities must explain the reason. In addition, the utilities must explain the reason of any unsuccessful positive notifications.** *(SED Additional Information.)*

Response:
Table 6 includes metrics associated with PG&E notifications provided to customers where positive or affirmative notification was attempted. PG&E is unable to track and report on notifications made by Public Safety Partners, as notification systems and/or platforms used by Public Safety Partners are out of PG&E's purview; PG&E encourages Public Safety Partners to include PSPS messages on all of their platforms. PG&E describes its engagement with Public Safety Partners in Section 6.

PG&E interprets the number of customers that need positive or affirmative notification as customers the company seeks confirmation from, namely MBL program customers and SIV customers.

Table 6: Notifications to Customers where Positive or Affirmative Notification was Attempted[37]

Designation	Total Number of customers[38]	Notification Attempts Made	Timing of Attempts[39]	Who made the Notification Attempt	Successful Positive Notification[40]
MBL[41]	430	430 Watch Notifications	09/19/2023 11:29:09 AM	PG&E	413 Watch Notifications
		430 Warning Notifications	09/20/2023 08:35:00 AM		346 Warning Notifications

[37] Counts of "Notification Attempts Made" will not reflect the actual total of customers notified as both MBL and SIV customers can appear in both subset groups.
[38] Total number of customers notified where notification was attempted. Count includes customers that may have been removed from scope or received Cancellation Notifications prior to de-energization, but still received Watch and/or Warning notifications.
[39] Initial start time notification was sent.
[40] PG&E considers successful positive notifications as those in which the notification was successfully delivered to the customer (i.e., no bounce back) and the customer acknowledges receipt of the notification.
[41] Residential tenants of master-metered customers can also qualify for MBL quantities. The MBL category for the purposes of Table 6 does not include MBL program customers who are master meter tenants. The MBL category for the purposes of Table 6 does not include MBL program customers who are master meter tenants.
[42] Count of Warning Notifications includes doorbell rings and Live Agent phone calls.

Designation	Total Number of customers[38]	Notification Attempts Made	Timing of Attempts[39]	Who made the Notification Attempt	Successful Positive Notification[40]
		860 Overall Notifications	09/19/2023 11:29:09 AM		759 Overall Notifications
MBL behind a master meter[43]	0	0 Watch Notifications	N/A	PG&E	0 Watch Notifications
		0 Warning Notifications	N/A		0 Warning Notifications
		0 Overall Notifications	N/A		0 Overall Notifications
SIV	135	135 Watch Notifications	09/19/2023 11:45:04 AM	PG&E	124 Watch Notifications
		135 Warning Notifications	09/20/2023 08:16:00 AM		85 Warning Notifications
		270 Overall Notifications	09/19/2023 11:45:04 AM		209 Overall Notifications

During this PSPS event, MBL program customers and SIV customers received automated calls, texts, and emails at the same intervals as the general customer notifications. PG&E provided unique PSPS Watch and PSPS Warning Notifications to MBL program customers[44] and SIV customers. These customer groups also received additional calls and texts at hourly intervals until the customer confirmed receipt of the automated notifications by either answering the phone, responding to the text, or opening the email. If confirmation was not received, a PG&E representative visited the customer's home to check on the customer (referred to as the "doorbell ring" process) while hourly notification retries continued. If the customer did not answer the check-in, the representative left a door hanger at the home to indicate PG&E had visited. In each case, the notification was considered successful[45]. At times, PG&E also made Live Agent phone calls in parallel to the automated notifications and doorbell rings, as an additional attempt to reach the customer prior to and/or after de-energization.

[43] PG&E has additional processes in place to ensure MBL customers are notified. Master meter tenants are contacted directly to be considered a positive notification. Contacting the property or building manager does not count as a positive notification.
[44] Including MBL program customers who are master-metered tenants (e.g., renters or tenants in mobile home park).
[45] For MBL program customers and SIV customers, the in-person door ring visit where a door hanger is left, but no contact made with the customer is considered "successful contact," but not confirmed as "received." If the representative makes contact with the customer, then it is considered "received."

PG&E shared the lists of the MBL program customers and SIV customers who had not confirmed receipt of their notifications with appropriate county and Tribal emergency managers twice daily via the PSPS Portal. PG&E proactively notified agencies that the data was available on the PSPS Portal and encouraged them to inform these customers of the resources available to them.

PG&E did not receive positive notification from MBL and/or SIV customers as they were unresponsive to the automated notifications, "doorbell ring" process or hourly notification retries. A door hanger was left at these customers' homes to indicate PG&E had visited. Table 7 and Table 8 include metrics associated with the notifications to de-energized MBL program customers.

Table 7: Outcomes of Notifications to De-energized MBL Program Customers

Count	Type of Notifications to De-energized MBL Customers (based on Service Point ID [SPID])	Description
127	**Total De-energized MBL Program Customers**	The number of customers de-energized who participate in PG&E's MBL Program
127	**Total Notifications Attempted / Sent**	The total sum of automated notifications **attempted** via call, text, and e-mail, in-person doorbell ring visit attempts and/or Live Agent phone calls.
0	*Total Notifications Not Attempted / Sent*	*Total MBL program customers de-energized that PG&E did not attempt to notify.*
127	**Total Notifications Delivered**	The total sum of automated notifications sent via call, text, and e-mail, in-person doorbell ring visit attempts and/or Live Agent phone calls **that were executed** (i.e., active phone number, deliverable e-mail address, and/or accessible to deliver in-person doorbell ring).
0	*Total Notifications Not Delivered*	*Total MBL program customers de-energized whose notification was not delivered.*
126	**Total Notifications Received**	Customers who **acknowledged their notification** by taking one of the following actions: answered an automated or Live Agent phone call, responded to a text message, opened an e-mail, or greeted an in-person doorbell ring (excludes voicemails left, text message delivered only and not confirmed, door hanger left).
1	*Total Notifications Not Received*	*Total MBL program customers de-energized who did not confirm receipt / acknowledge their automated notifications, Live Agent phone calls or in-person doorbell ring. Customers who did not answer a doorbell ring were left a door hanger.*

Table 8: Count and Type of Additional Notifications to De-energized MBL Program Customers

Count	Type of Additional Notifications to Impacted MBL Customers (based on SPID)	Description
39	Total In-Person Visits / Doorbell Rings	Doorbell ring attempts to impacted MBL program customers where PG&E made contact with the customer (either in person or via phone call in advance of visit) or left a door hanger.[46]
36	Live Agent Phone Calls	Call attempts made by Live Agent representatives to MBL program customers that had not yet confirmed receipt of their automated notification or answered the door during PG&E's in-person visit.

Section 5.4 - A copy or scripts of all notifications with a list of all languages that each type of notification was provided in, the timing of notifications, the methods of notifications and who made the notifications (the utility or local public safety partners). *(D.19-05-042, Appendix A, page A23, SED Additional Information.)*

Response:
Please reference "PGE_PSPS_Event_Notifications_20231005.pdf" for notifications templates PG&E sent during the event via call, email, and text message.

PG&E provides Tribal, city, county, CCAs, Public Safety Partner, transmission-level customers, and municipal utility notifications in English only.

All other customer notifications are delivered in-language (translated) if a customer's language preference is on file. If there is no language preference on file, the notification is delivered in English, with information on how to get event information in translated languages. Although PG&E offers notifications in 15 non-English languages (Spanish, Chinese [Mandarin and Cantonese], Vietnamese, Korean, Tagalog, Russian, Portuguese, Arabic, Farsi, Punjabi, Japanese, Khmer, Hmong, Thai and Hindi), only five non-English languages (Spanish, Mandarin, Cantonese, Hmong and Vietnamese) were requested for this PSPS event. For more information on notifications provided to customers in the customer-set language preferences, see Table 11. The timing of notifications sent during this event can be found in Table 5.

[46] Customers may have confirmed receipt of their notifications in multiple channels (e.g., automated notification and/or doorbell ring); therefore, the counts of total attempted and successful notifications are not mutually exclusive.

Section 5.5 - If the utility fails to provide notifications according to the minimum timelines set forth in D.19-05-042 and D.21-06-034, using the following template to report a breakdown of the notification failure and an explanation of what caused the failure. *(D.21-06-014 page 286, SED Additional Information.)*

Response:
PG&E makes a substantial effort to provide notifications whenever possible in accordance with the PSPS Phase 1[47], 2019 PSPS OII[48], and additional notification guidelines in Phase 3[49], weather and other factors permitting.

In accordance with Phase 3, we make every attempt to provide cancellation notifications within two hours of the decision to cancel those customers. These notifications are distributed when customers are removed from scope due to rapidly changing forecasted or observed weather conditions.

During this event, three customers were unable to receive a call, text, or email notification as no valid contact information was provided by the customer to PG&E. None of these customers were Medical Baseline. These customers are not included in Table 9 below. Following the event, PG&E will send these three customers postcards and encourage them to update their contact information for future notifications.

As reflected in Table 9A-9E below, PG&E provides a detailed breakdown and analysis of the notification timing and an explanation of what caused the notification delays for this event.

Table 9: Notification Failure Causes

Notifications Sent to:	Notification Type	Notification Delays	Timing of Notifications	Explanation of Delay	Notification Failures	Explanation of Failure
Public Safety Partners excluding Critical Facilities and Infrastructure[50]	**Entities who did not receive 48-to 72-hour priority notification**	0	No notification delays	No notification delays	0	No notification failures
	Entities who did not receive 24-48-hour notification	0	No notification delays	No notification delays	0	No notification failures
	Entities who did not receive 1–4-hour	0	No notification delays	No notification delays	0	No notification failures

[47] D.19-05-042.
[48] D.21-06-014.
[49] D.21-06-034.
[50] Only includes Tribes, cities, counties, CBOs and CCAs.

Notifications Sent to:	Notification Type	Notification Delays	Timing of Notifications	Explanation of Delay	Notification Failures	Explanation of Failure
	imminent notification					
	Entities who did not receive notifications at de-energization initiation	0	No notification delays	No notification delays	0	No notification failures
	Entities who were not notified immediately before re-energization	0	No notification delays	No notification delays	0	No notification failures
	Entities who did not receive notification when re-energization was complete	0	No notification delays	No notification delays	0	No notification failures
	Entities who did not receive cancellation notification within two hours of the decision to cancel	0	No notification delays	No notification delays	0	No notification failures
Critical Facilities and Infrastructure[51]	**Facilities who did not receive 48-to 72-hour priority notification**	0	No notification delays	No notification delays	0	No notification failures
	Facilities who did not receive 24-48-hour notification	0	No notification delays	No notification delays	0	No notification failures

[51] Includes Public Safety Partners who are critical facilities and infrastructure customers.

Notifications Sent to:	Notification Type	Notification Delays	Timing of Notifications	Explanation of Delay	Notification Failures	Explanation of Failure
	Facilities who did not receive 1–4-hour imminent notification	0	No notification delays	No notification delays	0	No notification failures
	Facilities who were not notified at de-energization initiation	0	No notification delays	No notification delays	11	See Table 9A for explanation
	Facilities who were not notified immediately before re-energization	0	No notification delays	No notification delays	0	No notification failures
	Facilities who were not notified when re-energization was complete	0	No notification delays	No notification delays	0	No notification failures
	Facilities who did not receive cancellation notification within two hours of the decision to cancel	0	No notification delays	No notification delays	0	No notification failures
All other affected customers	**Customers who did not receive 24–48-hour watch notifications**	0	No notification delays	No notification delays	0	No notification failures
	Customers who did not receive 1–4-hour	0	No notification delays	No notification delays	0	No notification failures

Notifications Sent to:	Notification Type	Notification Delays	Timing of Notifications	Explanation of Delay	Notification Failures	Explanation of Failure
	imminent notifications					
	Customers who were not notified at de-energization initiation	41	See Table 9B for timing	See Table 9B for explanation	290	See Table 9C for explanation
	Customers who were not notified immediately before re-energization	0	No notification delays	No notification delays	5	See Table 9D for explanation
	Customers who were not notified when re-energization was complete	0	No notification delays	No notification delays	4	See Table 9E for explanation
	Customers who did not receive cancellation notification within two hours of the decision to cancel	0	No notification delays	No notification delays	0	No notification failures

Table 9A: Explanation of Failed Power Off Notifications to Critical Facilities and Infrastructure

Facility Count	Explanation for Failure
11	During this PSPS event, for notification purposes, a manual process inadvertently categorized these facilities outage type as "planned" rather than a "public safety" outage. As a result, these facilities did not receive a Power Off notification prior to receiving All-Clear and Restoration notifications. We have identified this issue as a human error and noted as a Lessons Learned item in Section 11.2. However, these facilities did receive all other advanced notifications prior to de-energization (Priority, Watch and Warning).

Table 9B: Explanation of Delayed Power Off Notifications to All Other Affected Customers

Customer Count	Time Notifications Sent	Explanation for Delay
41	7-8 hours after actual outage start time	During this PSPS event, a manual process inadvertently categorized these customers' outage type as "planned" rather than a "public safety" outage. Once the outage categorization error was corrected, these customers received a delayed Power Off notification. This issue impacted one MBL customer.

Table 9C: Explanation of Failed Power Off Notifications to All Other Affected Customers

Customer Count	Explanation for Failure
286	During this PSPS event, a manual process inadvertently categorized these customer outage type as "planned" rather than a "public safety" outage. As a result, these customers did not receive a Power Off notification prior to receiving All-Clear and Restoration notifications. We have identified this issue as a human error and noted as a Lessons Learned item in Section 11.2. This count includes 20 MBL customers. However, these customers did receive all other advanced notifications prior to de-energization (Watch and Warning). Additionally, 15 out of the 20 MBL customers included in this count received live calls prior to re-energization.
3	These customers did not receive any automated notifications triggered through PG&E's internal outage platform as they are not listed as active customers. However, these customers were categorized as impacted and were de-energized. The root cause of why these customers were listed as "not active" is still being investigated. We will report our findings in the 2023 PSPS Post-Season Report. This issue did not impact any MBL customers.
1	This customer did not receive any automated notifications triggered through PG&E's internal outage platform. The cause is still under investigation. We will report our findings in the 2023 PSPS Post-Season Report. This issue did not impact any MBL customers.

Table 9D: Explanation of Failed All-Clear Notifications to All Other Affected Customers

Customer Count	Explanation for Failure
3	These customers did not receive any automated notifications triggered through PG&E's internal outage platform as they are not listed as active customers. However, these customers were categorized as impacted and were de-energized. The root cause of why these customers were listed as "not active" is still being investigated. We will report our findings in the 2023 PSPS Post-Season Report. This issue did not impact any MBL customers.
1	This customer did not receive any automated notifications triggered through PG&E's internal outage platform. The cause is still under investigation. We will report our findings in the 2023 PSPS Post-Season Report.

Customer Count	Explanation for Failure
	This issue did not impact any MBL customers.
1	Automated All-Clear Notifications are triggered through PG&E's internal outage platform by changing an outage's cause from "Public Safety" to "Public Safety Patrolling." This change was not performed for one of the outages in this PSPS event, which means the customers on that outage did not receive an All-Clear notification. This customer was the sole customer on that outage. This issue did not impact any MBL customers.

Table 9E: Explanation of Failed Restoration Notifications to All Other Affected Customers

Customer Count	Explanation for Failure
3	These customers did not receive any automated notifications triggered through PG&E's internal outage platform as they are not listed as active customers. However, these customers were categorized as impacted and were de-energized. The root cause of why these customers were listed as "not active" is still being investigated. We will report our findings in the 2023 PSPS Post-Season Report. This issue did not impact any MBL customers.
1	This customer did not receive any automated notifications triggered through PG&E's internal outage platform. The cause is still under investigation. We will report our findings in the 2023 PSPS Post-Season Report. This issue did not impact any MBL customers.

Section 5.6 - Explain how the utility will correct the notification failures. *(D.21-06-014, page 286.)*

Response:
We have reviewed the notifications for this PSPS, as listed in Table 9, and have identified or are in the process of identifying corrective actions. Please note Public Safety Partners, excluding critical facilities and infrastructure, received all required notification from PG&E within the required timeline, as noted in Table 9. Below are the corresponding actions.

Outages Incorrectly Labeled
A manual process inadvertently categorized some outages as "planned" rather than a "public safety" outage. We have identified the issue as a human error and are working with the responsible personnel to ensure correct outage categorization are implemented so that customers receive timely Power Off notifications.

Customers Not Detected in Internal Outage Platform
We are still working with internal teams to understand the root cause of why customers, listed as "not active," did not receive automated notifications triggered through our internal outage platform. We are working to correct this for future events.

Incorrect Outage Cause

One outage's cause was not updated to "Public Safety Patrolling" impacting the All-Clear notification. We are still working with internal teams to understand the root cause and will update associated processes as needed.

Section 5.7 - Enumerate and explain the cause of any false communications citing the sources of changing data. *(D.20-05-051, Appendix A, page 4.)*

Response:

No instances of false communication were identified for the September 20 – 21, 2023 PSPS Event.

Section 6 – Local and State Public Safety Partner Engagement

Section 6.1 - List the organization names of public safety partners including, but not limited to, local governments, Tribal representatives, first responders and emergency management, and critical facilities and infrastructure the utility contacted prior to de-energization, the date and time on which they were contacted, and whether the areas affected by the de-energization are classified as Zone 1, Tier 2, or Tier 3 as per the definition in CPUC GO 95, Rule 21.2-D. *(Resolution ESRB-8, page 5, SED Additional Information.)*

Response:
Please see Appendix E for a list of Public Safety Partners including Tribal representatives, local governments, first responders and emergency management, and critical facilities notified with the date and time of the initial notification.

As stated in our 2022 Safety Outage Decision Making Guide, we use a HFRA classification which PG&E utilizes in addition to HFTD to determine PSPS scope. In Appendix E, we begin by identifying HFTD area assigned to Public Safety Partners. Any area outside of HFTD is re-classified as HFRA. PG&E's circuits can run miles long and span across multiple jurisdictions. Some Public Safety Partners outside of HFRA and HFTD were also de-energized in order to de-energize areas within HFRA and HFTD for safety.

Section 6.2 - List the names of all entities invited to the utility's EOC for a PSPS event, the method used to make this invitation, and whether a different form of communication was preferred by any entity invited to the utility's emergency operation center. *(D.21-06-014, page 289.)*

Response:
PG&E invited, via email, the following entities to virtually embed themselves into PG&E's EOC:

- Federally Recognized Tribes: Grindstone Rancheria and Pit River Tribes
- State Agencies: Cal OES and CPUC
- Counties: Butte, Colusa, Glenn, Lake, Napa, Shasta, Tehama, and Yolo

Filsinger Energy Partners, Inc., a county monitor, embedded one consultant into PG&E's EOC from September 19 – 21, 2023. Other entities preferred to work with their PG&E point of contact directly.

In September 2022, PG&E sent a letter to water infrastructure and communication service providers within PG&E's electrical service area with information on how to request representation during a PSPS at the PG&E EOC in Vacaville or remotely. Alternatively, some partners may also request PG&E representation at their jurisdiction's activated Operations Emergency Center (OEC)[52]. The letter also invited water infrastructure and communication service providers to Daily Systemwide Cooperator Calls that are held at noon daily for each

[52] D.19-05-042.

PSPS event to provide situational awareness updates directly from the leadership within PG&E's EOC. Updates shared at any location or during the Daily Systemwide Cooperator Calls[53] were the same as those shared during the daily operational briefing to ensure all partners receive consistent information. PG&E sent the letter to the following water infrastructure and communication service providers:

Water Infrastructure Providers: Alleghany Water District, Amador Water Agency, American Water Works Company Inc., American Water Works Service Company Inc., Army Corp Of Engineers, Aromas Water District, Bear Valley Water District, Bodega Bay Public Utility District, Calaveras County Water District, California American Water, California Department of Corrections, California Department of Forestry, California Department of Water Resources, California Water Service Company, Cambria Community Services District, Central Coast Water Authority, Central Contra Costa Sanitary District, Central Marin Sanitation Agency, Chicken Ranch Rancheria, City and County of San Francisco, City of Oakland Public Works, Contra Costa Water District, CPPA CCWD Water Treatment, Cuyama Community Service District, Delta Diablo, Department Of The Army, Downieville Public Utilities District, Dublin San Ramon Services District, East Bay Municipal Utility District, EL Dorado Irrigation District, Fall River Mills Community Service District, First Mace Meadow Water Association Inc., Haskell Creek Tract Association, Laguna County Sanitation District, Lake Don Pedro Community Service District, Lebec County Water District, Leland Meadows Water, Marin Municipal Water District, Mi Wuk Village Mut Water Co, Mineral Mountain Estates, Mission Hills Community Services District, Modesto Irrigation District, Murphy's Sanitary Distribution, Napa Sanitation District, Nipomo Community Services District, Novato Sanitary District, Oakdale Irrigation District, Oaks Mobile Home Homeowners Association, Pacific Gas and Electric Company, Placer County Water Agency, Port of Redwood City, River Pines Public Utility District, San Andreas Land Disposal System, San Jose Water Company, San Lorenzo Valley Water District, San Luis Obispo County, San Rafael Sanitation District, Sausalito Marin City Sanitary District, Scotts Valley Water District, Sewer Agency of Southern Marin, Sonoma County Water Agency, Soquel Creek Water District, Stockton East Water District, Tiburon Sanitary District, Tuolumne Utilities District, Valley Springs Public Utility District, Vandenberg Village Community Services District, Washington County Water District, Yocha Dehe Wintun Nation, Yosemite Springs Park Utility Company Inc., Zone 7 Alameda County Flood Control District.

Communication Service Providers: Altice/SuddenLink, American Tower, AT&T Corporation, Calaveras Telephone Co., Calneva Broadband, Charter Communications, Comcast, Consolidated Communications, ExteNet, Frontier Communications, Mediacom California LLC, Northland Cable Television Inc., Ponderosa Telephone Co, Qwest/CenturyLink/Lumen, SBA Towers, Sebastian Corp, Sierra Telephone, TDS Telecom, T-Mobile, US Cellular, Verizon, Volcano Communications, Wave Broadband.

PG&E provides communication service providers a dedicated PG&E contact in the EOC known as the CIL, who shares up-to-date event information and answer specific, individual questions.

[53] The Daily Systemwide Cooperator Calls are open to Tribal and local elected officials, staff and emergency managers, telecommunication providers, water agencies, emergency hospitals, publicly owned utilities, CCAs, transportation authorities, and CBOs within PG&E's electrical service area.

They can reach the CIL 24/7 during an event by e-mail or phone at PG&E's Business Customer Service Center.

Section 6.3 - A statement verifying the availability to public safety partners of accurate and timely geospatial information, and real time updates to the GIS shapefiles in preparation for an imminent PSPS event and during a PSPS event. *(D.21-06-014, page 289.)*

Response:
In preparation for the September 20 – 21, 2023 PSPS Event, PG&E sent automated notifications with links to the PSPS Portal, which provides PDF maps and GIS data to Public Safety Partners at the times outlined in Section 5. PDF maps and GIS data were updated on the PSPS Portal when scope changed; users were notified of these updates via e-mail. For this event, PG&E provided updated PDF maps and GIS layers to Public Safety Partners at times outlined below in Table 10.

Table 10: PSPS Portal Time & Date for Map Sharing

Date	Time PDF Maps Shared	Time GIS Layers Shared
09/18/2023	9:55 AM PDT	9:55 AM PDT
09/19/2023	10:55 AM PDT	10:55 AM PDT
9/20/2023	6:20 AM PDT	6:20 AM PDT
9/21/2023	11:35 AM PDT	11:35 AM PDT

After the EOC was activated, PDF maps and GIS data on the PSPS Portal were determined accurate and updated in a timely manner following changes to geographic scope or customer impacts.

Section 6.4 - A description and evaluation of engagement with local and state public safety partners in providing advanced outreach and notification during the PSPS event. *(D.19-05-042, Appendix, page A23.)*

Response:
Below is a description of the engagement with local (i.e., Tribes, cities, counties) and state (CPUC, Cal OES, CAL FIRE) Public Safety Partners:

- Submitted the PSPS State Notification Form to Cal OES twice a day (07:00 PDT and 15:00 PDT), if there was a significant change to scope and at least once for each of the five PSPS stages: Activating PSPS Protocols/Potential to De-energize (Stage 1), Decision to De-energize (Stage 2), De-energization Initiated (Stage 3), Initiating Re-energization Patrols (Stage 4) and All PSPS Lines Re-energized (Stage 5).
    - 9/18/2023 at 07:03 PDT
    - 9/18/2023 at 14:45 PDT
    - 9/19/2023 at 06:42 PDT
    - 9/19/2023 at 10:06 PDT
    - 9/19/2023 at 14:45 PDT
    - 9/20/2023 at 06:55 PDT
    - 9/20/2023 at 10:02 PDT
    - 9/20/2023 at 14:50 PDT
    - 9/21/2023 at 00:07 PDT

    - 9/21/2023 at 06:58 PDT
    - 9/21/2023 at 11:36 PDT
    - 9/21/2023 at 12:30 PDT
    - 9/21/2023 at 15:00 PDT
    - 9/21/2023 at 17:46 PDT
- Sent e-mails to the CPUC at least once for each of the five PSPS stages listed above; this includes:
    - 09/18/2023 at 06:55 PDT
    - 09/20/2023 at 10:53 PDT
    - 09/20/2023 at 23:15 PDT
    - 09/21/2023 at 11:51 PDT
    - 09/21/2023 at 17:54 PDT
- Hosted daily State Executive Briefings with Cal OES, CPUC, CAL FIRE, Governor's Office, U.S. Forest Service, Department of Interior, and other state agencies to provide the latest event information and answer questions. A deck with key event information was provided to participants ahead of the call.
- Hosted the daily Systemwide Cooperators Call, where all Public Safety Partners in the service area were invited to join for situational awareness.
- Hosted Tribal Cooperators Calls with potentially impacted Tribes to provide the latest event information and answer questions.
- Hosted Operational Areas Cooperators Communication Calls to provide situational awareness updates and answer questions.[54]
- Conducted ongoing coordination with Tribal and local County OES contacts through dedicated Agency Representatives. This includes but is not limited to providing the latest event information, coordinating on CRC locations, and resolving local issues in real-time.
- Provided links to the PSPS Portal that included planning and event-specific maps, situation reports, critical facility lists, and MBL program customer lists at each notification and when scope changed. Note that the Situation Report was provided twice a day and at scope changes prior to de-energization and hourly once restoration began.
- Sent automated and live call notifications to agency partners before, during and after de-energization.
- Offered local and state agencies to be embedded in PG&E's EOC, as well as offered PG&E Agency Representatives to be embedded virtually in local EOCs. Due to COVID-19, in-person EOC support was dependent on health and safety considerations.
- A dedicated State Operations Center Agency Representative provided ongoing support to Cal OES to ensure all questions were addressed.

PG&E considers the advanced outreach and notification to local and state Public Safety Partners during this PSPS event successful but with minor improvements needed. This is based on the number and various types of outreach conducted (see list above), the feedback received from Public Safety Partners through the post-event survey and the success rate of automated agency notifications. Of the responses given, PG&E received the following positive comments from in-scope Public Safety Partners regarding PSPS outreach:

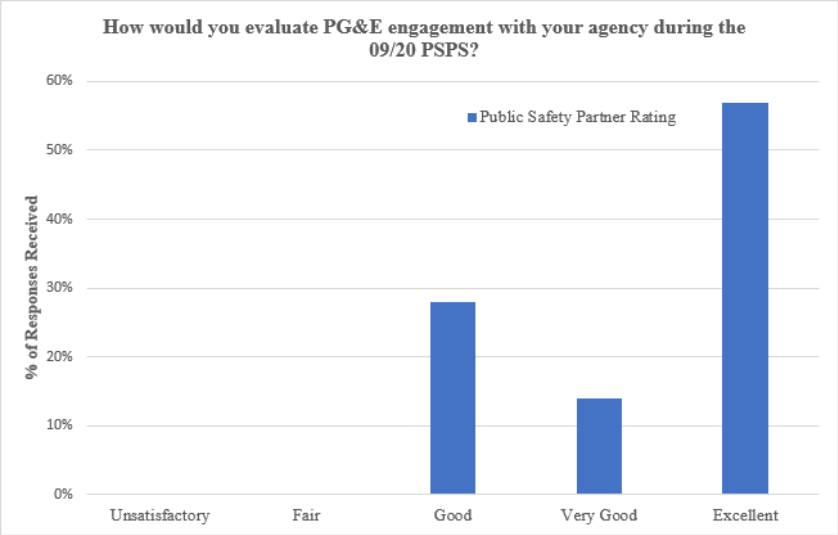
[54] May vary in cadence & type based on County OES.

"All contacts with PG&E reps were helpful and courteous and we appreciate the partnership."

"The updated [PSPS] Portal interface and the regularly scheduled information communication updates are great for tracking the potential of the PSPS…and for planning our response."

During this PSPS event, we sent 100% of our automated notifications to Tribal and local governments within the required timeframes. Figure 16 below shows the post-event survey results when Public Safety Partners were asked to "evaluate PG&E engagement with your agency during the outage."

Figure 16: Evaluation of Public Safety Partner Engagement



Summary Data	
Rating	**% Total Public Safety Partner Responses**
Excellent	57%
Very Good	14%
Good	28%
Fair	0%
Unsatisfactory	0%

Section 6.5 - Specific engagement with local communities regarding the notification and support provided to the AFN community. *(D.20-05-051, Appendix A, page 8, SED Additional Information)*

Response:
To ensure PG&E provides adequate support to AFN communities, we engage with local communities through paratransit agencies, media partnerships, and CBOs to share coordination efforts, notifications plans, CRC information, event-specific information, and more. See below for details on this engagement.

Engagement with Paratransit Agencies
In accordance with the Phase 3 Guidelines[55], PG&E provided proactive notifications and impacted zip code information to paratransit agencies that may serve all the known transit- or paratransit-dependent persons that may need access to a CRCs during this event. For this PSPS

[55] D.21-06-034.

event, PG&E provided proactive notifications[56] to 132 paratransit agencies. All notifications included a link to the PSPS emergency website event updates page, pge.com/pspsupdates with two prominent buttons at the top. These buttons gave customers the option of searching other addresses that could be impacted as well as a link to a map showing areas potentially affected by a shutoff. For more information on ADA compliant CRC locations, see Section 9.

Media Engagement

To alert the public in advance of the PSPS event, we used both media and online efforts. From the time PG&E publicly announced the potential PSPS event until customers were restored, PG&E engaged with customers and the public through the media as described below.

- Issued nine local news releases and Current's Blog updates combined, containing information and updated details about the PSPS and wind events.
- Identified approximately 50 unique print, online, and broadcast stories.
- Provided regular, ongoing news releases to more than 139 California news outlets and reporters, as well as several syndicated national outlets. Also, our Integrated Multicultural Communications team reached out to more than 80 multi-cultural news outlets.
- Coordinated directly with 24 multicultural media organizations with coverage in the impacted areas to issue event updates on their in-language platforms (e.g., radio, TV, social media) in over 12 languages, including languages spoken by communities that occupy significant roles in California's agricultural economy (e.g., Mixteco).
- Handled approximately 14 media inquiries, either from media outlets that contacted PG&E's 24-hour media line or direct calls to field media representatives, and participated in three media interviews to provide situational updates and preparedness messages for the PSPS event.

Other Channels of Communication and Additional Community Engagement

We engaged with over 309 "information-based" CBOs during the event, sharing courtesy notification updates, fact sheets, and other relevant information that they could share with their constituents to expand our reach of communications, including infographic videos with relevant PSPS updates in 16 languages and American Sign Language (ASL) that the organizations could use to educate their consumers.

CBO resource partners were invited to once-daily cooperator calls for Public Safety Partners, which was hosted by members from PG&E's EOC who provided a situational update about the latest scope of the event and an overview of the services available to customers. We hosted additional daily coordination calls with the CBO resource partners supporting the event to provide an open forum to answer questions, offer suggestions regarding how they can best support their consumers, and facilitate more localized coordination among the partners. We also provided an ASL Interpreter during this call to support our CBO Resource Partners during this PSPS.

Event Support for Customers with AFNs

PG&E provided a variety of resources to customers with AFNs before and during this event. These resources include:

[56] For this PSPS event, paratransit agencies received Priority, Watch, Warning, Cancellation, and Restoration notifications. A list of zip codes was provided two times.

- Disability Disaster Access and Resource Program[57]: We continued our collaboration with the CFILC to implement the Disability Disaster Access and Resources (DDAR) Program during the event. Through this program, two local Independent Living Center (ILCs) provided aid to impacted seniors and/or people with disabilities who rely on power for medical or independent living needs in three counties during this event. Through DDAR, we have supported AFN customers with delivery of approximately 4,500 backup portable batteries (since July 2020) to qualifying customers who need power during a PSPS. During this event, 1,078 batteries that were previously distributed, providing support to impacted customers. In addition, the DDAR program also provided 27 individuals with hotel stays, along with 18 food vouchers. Some of these resources provided through DDAR were an outcome of MBL customer-related escalations called in to PG&E during the event. DDAR alerted their constituents about the available resources. During this event, DDAR engaged directly with approximately 210 PG&E customers related to the PSPS event.
- Portable Battery Program[58]: Our PBP provides free portable battery systems for customers who have experienced at least five EPSS in 2022 or at least one PSPS in 2021 and are either MBL or SIV (prior eligibility included living in Tiers 2 and 3 HFTDs and enrolled in the MBL Program.) During this event, 55 impacted customers were supported by batteries received through the PBP (delivered in 2020-2023 YTD). Since July 2020, a total of approximately 19,550 battery units have been delivered through the PBP across the entire PG&E service area.
- Food Bank Partnerships: We continued to fund local food banks to provide food replacement to families during the event and three days following service restoration. For this event, we partnered with four local food banks[59] that serve three of the three impacted counties to provide boxes[60] of food replacement for families. We provided fact sheets with details about food bank partnerships at PSPS CRCs.
- Meals on Wheels Partnerships: We continued our partnership with Meals on Wheels to provide additional support and services to customers in need during PSPS events. For this event, we partnered with nine Meals on Wheels Organizations[61] that would be able to provide services to customers in scope for the de-energization in eight counties[62].
- 211 Referral Services: PG&E has a long-standing relationship with 211 through our charitable grant program. As of August 13, 2021, PG&E has a partnership with the California network of 211s to connect customers with resources before, during, and after PSPS events. For this event, PG&E worked with 211 to assist customers with resources.
- Accessible Transportation Partnerships: We are partnered with Accessible Transportation organizations to provide customers with transportation to and from PG&E's CRCs. For this PSPS, we partnered with one organization[63] to provide assistance in Shasta County.

[57] For more information about the DDAR Program, refer to PG&E's 2023 AFN Plan for PSPS Support.
[58] For more information about the PBP Program, refer to PG&E's 2023 AFN Plan for PSPS Support.
[59] Redwood Empire Food Bank, Clear Lake Gleaners Food Bank, Community Action of Napa Valley Food Bank, and Community Action Agency of Butte County.
[60] No food boxes were provided during September 20-24, 2023.
[61] Passages, Chico Meals on Wheels, Lakeport Senior Center, Middletown Senior Center, Clearlake Senior Center, Liveoak Senior Center, Community Action Agency of Napa Valley, Dignity Health Connected Living, Tehama County Community Action Agency.
[62] Counties receiving Warning Notification.
[63] Dignity Health Connected Living.

Communications to Customers with Limited English Proficiency

PG&E provided translated customer support through its customer notifications, website, call center, social media and engagement with CBOs, and multicultural media partnerships. Notifications were provided to customers in English, with information on how to get event information in five non-English languages. Customers with their language preference set received in-language (translated) notifications. The notifications were provided to customers in the customer-set language preferences shown below in Table 11.

Table 11: Customer Notifications Based on Language Preference

Language	Total Notifications[64]	Percent
English	453,678	99.375%
Spanish	2,516	0.551%
Chinese Mandarin	168	0.037%
Chinese Cantonese	79	0.017%
Vietnamese	54	0.012%
Russian	36	0.008%
Total	**456,531**	**100%**

Customers with limited English proficiency have access to translation phone numbers on our PSPS website, highlighting that translation services are available in over 200 languages. Table 12 below includes call center-related metrics associated with this PSPS event.

Table 12: Call Center Support Services[65]

Total Calls Handled	PSPS Calls Handled	Average Response Time for PSPS-related Calls (seconds)	Number of calls handled by Call Center Translation Services	Number of languages Supported by Call Center Translation Services
96,995	638	11	1,495	250+

PG&E continued support and engagement with multi-cultural media organizations and in-language CBOs to maximize the reach of in-language communications to the public during the event. Before the PSPS event, we reached out to 39 multicultural media organizations. These organizations covered the translated languages above and languages spoken by communities that occupy significant roles in California's agricultural economy (e.g., Nahuatl). Throughout the event, we shared information and updates on PSPS with these media outlets, including news releases and social media infographics in English, as well as in translated languages and American Sign Language (ASL), for their use and distribution. We also shared a new 211 infographic in 16 languages with organizations to share with their constituents. Highlights from our coordination with multicultural media organizations and CBOs during this event include:

- KUVS-Univision in Sacramento produced a news segment on this event based on the information PG&E provided. See Figure 17 below.

[64] Total notifications do not include doorbell rings and Live Agent phone calls.
[65] Metrics are provided from September 18-21, 2023.

Figure 17: KUVS-Univision news segment on this PSPS event

PG&E Website

During this PSPS, PG&E placed an alert in the "Current Alerts" box on the pge.com home page that drove traffic to PG&E's PSPS event site, and implemented tools to drive traffic to, and maintain stability of, the PSPS emergency website event updates page, pge.com/pspsupdates. PG&E also placed a link to the PSPS emergency website on the pge.com/psps program page and ensured that the online site search also sent PSPS keywords to that page. During this event, visits to the emergency website peaked on Thursday, September 21 with approximately 31,499 visits and 56,425 page views. The emergency website saw a total of 106,596 visits and 190,645 page views from the time the event began to the time all customers had been restored to power.

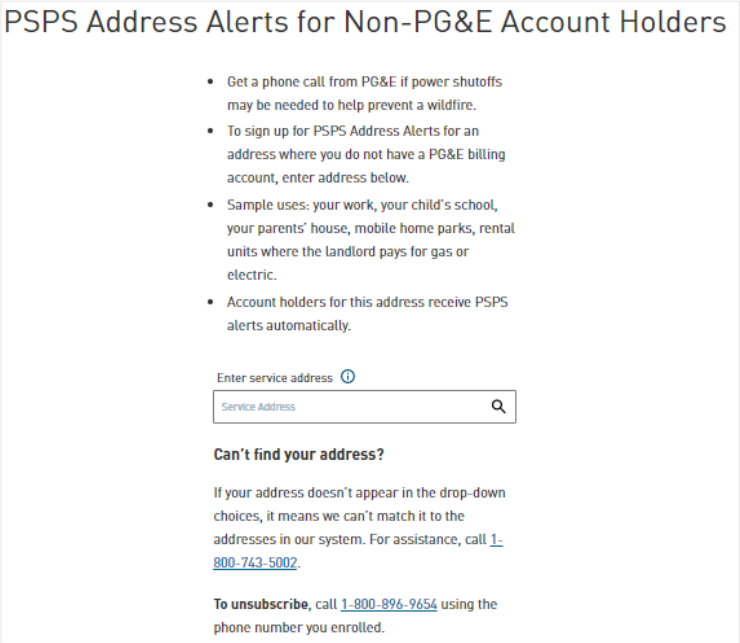
We remain committed to the continuous improvement of our websites to better meet the diverse needs of its customers. As we launch new features and functionality to pge.com and to the emergency web site, pgealerts.alerts.pge.com/, we test to help ensure compliance with WCAG 2.0 AA or WCAG 2.1AA standards. We also seek to improve the customer experience with user testing for key components. Where possible, we remediate accessibility issues that customers or stakeholders have brought to our attention.

There are three ways online for customers to see what CRCs are available during an event: as icons on the map, as a list on the pge.com/crc page and on the address search results page. During this event, only two of the three methods were working as designed. While the map and list versions were displayed correctly, customers looking for the closest CRC to them on the address search results page did not receive results. The coordinates for the CRC locations are manually entered and were not entered in the proper format for the distance to be calculated correctly. The team that enters the coordinates has updated its standards to ensure the proper format for coordinates is used and the functionality is checked. We have included this error as a Lessons Learned from the event in Section 11.2.

The following content was available on PG&E's PSPS event updates pages or on links from those pages:

- Straightforward, simplified event information available in 16 languages, with clear updates about the planned scope of the event, including location (e.g., list of impacted Tribes, cities, and counties), duration of the event, including estimated times of de-energization and re-energization at the individual address level, and overall, for the event.
- Address Look-Up tool that a customer and the public could use to identify specific PSPS impacts.
- PG&E's Public Safety Partners could download PDFs of impacted areas, shape and KMZ files for use with their own mapping applications, and city/county lists with shutoff and restoration summaries.
- Details of CRCs made available as soon as sites were confirmed (up to two days before de-energization for some locations), including locations listed by county, resources available at each center, type of CRC (e.g., indoor, outdoor), COVID-19 policies, and operating dates and hours. CRC locations were also indicated on the PSPS impact map.
- Links to additional resources for customers, including links to PG&E's Electric Vehicle (EV) charging location map, videos in ASL, locations of ILCs, resources for customers with accessibility, financial, language, and aging needs, backup power safety tips, MBL program information, and more.
- PG&E is partnering with WeaveGrid for an electric vehicle resiliency pilot. The pilot will be leveraging proactive communication and managed charging of electric vehicles. PG&E provided customer information to WeaveGrid during the Watch Notifications.
- Webpage available in 16 languages that describes our language support services for customers during PSPS events at pge.com/pspslanguagehelp.
- Survey to provide input about the website and event communications.
- Address-level alerts that allow non-PG&E-account holders to receive notifications via a phone call or SMS text for any address where they do not receive a bill, such as their workplace or child's school. This is also a valuable communication tool for renters and tenants of master metered accounts, such as mobile home parks. See pge.com/addressalerts and Figure 18. Address Alerts are available in 16 languages.

Figure 18: PG&E PSPS Address Alert Sign-Up Webpage



This year, PSPS-related improvements to pge.com include:

- Reducing the reading level for content on our PSPS resources webpage to better serve individuals with AFNs. The page is available in 15 non-English languages.
- Updates to our User Interface (UI) for a consistent experience across webpages.
- Backend automation of files used during PSPS events to improve speed and reduce the possibility of human error.

PG&E's website offers PSPS preparedness information in 15 non-English languages covering topics including the MBL program application and fact sheets on PSPS, Community Wildfire Safety Program, MBL program, and more. PG&E's emergency website with PSPS event update information was fully translated in the same 15 languages. See Table 13 below for information on PG&E's web traffic, Table 14 for the number of unique visitors to the translated versions of PGE's Website (pge.com) for this event, and Table 15 for the number of unique visitors to the translated versions of PG&E's Emergency Website (pgealerts.alerts.pge.com).

Table 13: PG&E Website Traffic for the September 20-21, 2023 PSPS Event[66]

Web Page	Unique Visitors	Visits	Page Views
PG&E's Website (pge.com)	622,304	775,672	1,250,450
PG&E's Emergency Website (pgealerts.alerts.pge.com) [67, 68]	70,340	106,596	190,645

[66] Website traffic from September 18-21, 2023.
[67] The PSPS Event Updates page is at the following link: pgealerts.alerts.pge.com/updates. PG&E also uses the following shortened URL for the same site: www.pge.com/pspsupdates.
[68] The emergency website metrics are a subset of the pge.com/ website traffic reported.

Table 14: Unique Visitors to the Translated Versions of PG&E's Home Page for the September 20-21, 2023 PSPS Event [69,70]

Language	Unique Visitors	Percent
English	412,401	99.99%
Spanish	66	0.02%
Russian	3	0.00%
Vietnamese	2	0.00%
Farsi	1	0.00%
Thai	1	0.00%
Portuguese	0	0.00%
Punjabi	0	0.00%
Korean	0	0.00%
Hindi	0	0.00%
Tagalog	0	0.00%
Japanese	0	0.00%
Hmong	0	0.00%
Khmer	0	0.00%
Arabic	0	0.00%
Chinese	0	0.00%
Grand Total[71]	**412,418**	**100%**

Table 15: Unique Visitors to the Translated Versions of PG&E's Emergency Website for the September 20-21, 2023 PSPS Event[72]

Language	Unique Visitors	Percent
English	69,292	99.31%
Spanish	279	0.40%
Arabic	21	0.03%
Chinese	21	0.03%
Punjabi	20	0.03%
Portuguese	17	0.02%
Vietnamese	17	0.02%
Thai	16	0.02%
Korean	16	0.02%
Hindi	15	0.02%
Tagalog	15	0.02%
Japanese	15	0.02%
Hmong	15	0.02%
Khmer	14	0.02%
Farsi	14	0.02%
Russian	14	0.02%
Grand Total[73]	**69,775**	**100%**

[69] Not all webpages within PG&E's Website are offered in the translated languages listed. If the language is not included in the selector on the webpage, the visitor can call 1-833-208-4167 for assistance in 250+ other languages.
[70] Unique visitors from September 18-21, 2023.
[71] There is some overlap in unique visitors by language because some visitors viewed webpages in different languages.
[72] Unique visitors from September 18-21, 2023.
[73] There is some overlap in unique visitors by language because some visitors viewed webpages in different languages.

Section 6.6 - Provide the following information on backup power (including mobile backup power) with the name and email address of a utility contact for customers for each of the following topics: *(D.21-06-014, page 300.)*

Response:
The information requested is included in Sections 6.6a – 6.6f. Any questions related to this information may be directed to TempGenPSPSSupport@pge.com.

Section 6.6a. Description of the backup generators available for critical facility and infrastructure customers before and during the PSPS.

Response:
Table 16 lists the generators available for critical facility and infrastructure customers before and during the PSPS.

Table 16: Generators Available for Critical Facilities and Infrastructure Customers

Generator Type	Number of Units	Individual Size (MW)	Run Time (Hrs.)[74]	Description
Diesel Generator	1	0.032	3	1 unit on reserve in Sacramento.
Diesel Generator	4	0.65	28.5	4 units on reserve in San Leandro.
Diesel Generator	1	0.070	31.2	1 unit on reserve in Sacramento
Diesel Generator	9	0.100	31.9	1 unit pre-staged at ICU Hospital; 8 units on reserve in Sacramento
Diesel Generator	1	0.125	36	1 unit on reserve in San Leandro.
Diesel Generator	8	0.200	29	8 units on reserve in San Leandro.
Diesel Generator	5	1.0	21	3 units pre-staged at ICU Hospital; 2 units on reserve in Sacramento.
Diesel Generator	7	1.50	14	7 units on reserve in Benecia.
Diesel Generator	12	2.0	11.6	3 units on reservation in Sacramento; 9 units on reservation in San Leandro

[74] Estimated based on a 75% load. Barring mechanical failure and refueling the temporary generators have the ability to operate continuously throughout a typical PSPS event.

Section 6.6b. The capacity and estimated maximum duration of operation of the backup generators available for critical facility and infrastructure customers before and during the PSPS.

Response:
Table 16 lists the power capacity and maximum duration of operation of the generators available for critical facility and infrastructure customers before and during the PSPS.

Section 6.6c. The total number of backup generators provided to critical facility and infrastructure customer's site immediately before and during the PSPS.

Response:
During and immediately before the PSPS event, no backup generators were activated to energize the critical facility and infrastructure customers that did not have an existing mitigation in place.

Section 6.6d. How the utility deployed this backup generation to the critical facility and infrastructure customer's site.

Response:
No temporary generation deployments were necessary for the September 20 – 21, 2023 PSPS Event.
As a general policy, PG&E does not offer backup generation to individual facilities. However, PG&E's policy allows for granting exceptions for critical facilities when a prolonged outage could have a significant adverse impact to public health or safety.

Deployment of temporary generation is contingent upon the following circumstances: expected duration to perform permanent repairs is significantly longer than the expected duration to install backup generation, the expected customer outage is 50,000 or more customer minutes, and the outage affects a distribution circuit serving multiple customers without a functional back-tie[75].

PG&E has pre-arranged commitments with critical facility and infrastructure customers to provide temporary generation in case of a PSPS event and evaluated requests received during the event according to the prioritization described in in Section 6.6e below.

Section 6.6e. An explanation of how the utility prioritized how to distribute available backup generation.

Response:
No temporary generation deployments were necessary for the September 20 – 21, 2023 PSPS Event.

PG&E prioritizes the deployment of available generation by first meeting existing commitments to individual facilities in the following order.

[75] 50,000 customer minutes is approximately equivalent to 100 customers for about 8 hours.

- Intensive care unit (ICU) hospitals, pre-identified by PG&E in partnership with the California Hospital Association (CHA) and Hospital Council of Northern and Central California (HC).
- Additional facilities prepared to support public safety such as, but not limited to: First/emergency responders at the Tribal, local, state, and federal level, water, wastewater, and communication service providers, affected CCAs, publicly-owned utilities/electrical cooperatives, the CPUC, the California Governor's Office of Emergency Services and the California Department of Forestry and Fire Protection[76].

Deployment of available generation is then followed by AFN customers and customers with specific needs in the following order:

- Life support, MBL, and temperature sensitive.
- Large customers, economic damage customers, and danger to health and safety customers.

Deployment of available generation is then followed by other customers based on maximizing relief by calculating the number of customers multiplied by expected duration.

Section 6.6f. Identify the critical facility and infrastructure customers that received backup generation.

Response:
No temporary generation deployments were necessary for stand-alone facilities or indoor CRC's.

[76] The term "emergency response providers" includes federal, state, and local governmental and non-governmental public safety, fire, law enforcement, emergency response, emergency medical services providers (including hospital emergency facilities), and related personnel, agencies, and authorities.

Section 7 – Complaints and Claims

Section 7.1 - The number and nature of complaints received as the result of the de-energization event and claims that are filed against the utility because of de-energization. The utility must completely report all the informal and formal complaints, meaning any expression of grief, pain, or dissatisfaction, from various sources, filed either with CPUC or received by the utility as a result of the PSPS event. *(Resolution ESRB-8, page 5, D.21-06-014, page 304.)*

Response:
Complaints received due to the September 20 – 21, 2023 PSPS Event are provided in Table 17 below. There were no claims filed against PG&E for the September 20 – 21, 2023 PSPS Event as of September 27, 2023.

Complaints
Table 17 provides the number and nature of complaints received from customers, Public Safety Partners and the CPUC, submitted to both the CPUC and PG&E, for the September 20 – 21, 2023 PSPS Event. PG&E received several complaints from Public Safety Partners regarding notifications sent after standard business hours. Per CPUC regulations, PG&E will continue to send notifications to Public Safety Partners outside of courtesy hours (9:00pm – 8:00am).

Table 17: Number and Nature of Complaints due to the September 20-21, 2023 PSPS Event

Nature of Complaints	Number of Complaints
Communications/Notifications Including, but not limited to complaints regarding lack of notice, excessive notices, confusing notice, false alarm notice, problems with getting up-to-date information, inaccurate information provided, not being able to get information in the prevalent languages and/or information accessibility, complaints about website, Public Safety Partner Portal, Representational State Transfer (REST)/Digital Asset Manager (DAM) sites (as applicable).	14
PSPS Frequency/Duration Including, but not limited to complaints regarding the frequency and/or duration of PSPS events, including delays in restoring power, scope of PSPS and dynamic of weather conditions.	8
Safety/Health Concern Including, but not limited to complaints regarding difficulties experienced by AFN/MBL populations, traffic accidents due to non-operating traffic lights, inability to get medical help, well water or access to clean water, inability to keep property cool/warm during outage raising health concern.	1
General PSPS Dissatisfaction/Other Including, but not limited to complaints about being without power during PSPS event and related hardships such as food loss, income loss, inability to work/attend school, plus any PSPS-related complaints that do not fall into any other category.	18
Outreach/Assistance	3

Including, but not limited to complaints regarding CRCs, community crew vehicles, backup power, hotel vouchers, other assistance provided by utility to mitigate impact of PSPS.	

Section 8 – Power Restoration

Section 8.1 - A detailed explanation of the steps the utility took to restore power. *(Resolution ESRB-8 page 5)*

Response:
The first step that is taken to restore power during a PSPS is referred to as a Weather "All Clear." This happens when the PG&E Incident Command and Meteorology teams monitor real-time and forecast weather conditions based on weather models, weather station data, and field observations. A Weather "All-Clear" is based on pre-defined, geographic areas and mapping of each weather station in each zone to that area. This is known as the All-Clear Zone methodology, which is based on past PSPS outages.

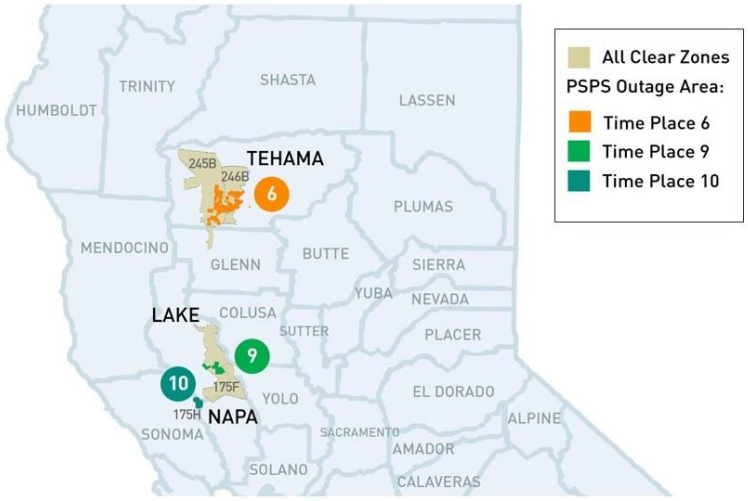
All-Clear Zones align with known meteorological phenomena, such as mountain tops and wind gaps which may experience longer periods of extreme weather. This allows for further granularity in calling Weather "All-Clears" and helps areas less prone to wind gusts or adverse conditions be cleared faster, compared to issuing Weather "All-Clear" by FIAs. PG&E monitors the conditions in each of these All-Clear Zones. Once they fall below our mFPC, the PG&E Meteorologists will recommend areas for restoration.

Once Weather "All-Clears" are issued, the next step is for restoration crews to patrol electrical facilities to identify and repair or clear any damage or hazard before re-energizing. Using the Incident Command System (ICS) as a base response framework, each circuit is assigned a taskforce consisting of supervisors, crews, trouble men, and inspectors. This structure allows PG&E to patrol and perform step restoration in alignment with the centralized control centers. As patrol completion is verified, the final step is to restore power to customers.

For the September 20 – 21, 2023 PSPS Event, PG&E issued two Weather "All-Clears" and deployed approximately 186 personnel and 19 helicopters to patrol the lines in advance of restoration. Patrols were conducted on approximately 147 miles of distribution circuits. Power was restored to customers as patrol completion verified the safe condition of each line.

Figure 19 shows the All-Clear Zones and the areas de-energized during the September 20 – 21, 2023 PSPS Event.

Figure 19: Map of All-Clear Zones and TPs De-energized for the September 20 – 21, 2023 PSPS



Section 8.2 – The timeline for power restoration, broken down by phase if applicable. *(D.19-05-042, Appendix A, page A24, SED Additional Information.)*

Response:
The first phase toward power restoration is when PG&E issues Weather "All-Clears" for All-Clear Zones. Once these are issued, the next phase is PG&E to patrol and perform step restoration.

The Weather "All-Clear" dates and times issued for All-Clear Zones for the September 20-21, 2023 PSPS Event are noted in Table 18. The last customer restored for this event was at 17:05 PDT on September 21, 2023. For date and time of full restoration by circuit, please refer to Appendix B.

Table 18: Weather All-Clear Times

All-Clear Zones	Weather All-Clear Date and Time
175F, 175H	09/21/23 11:43
245B, 246B	09/21/23 13:03

Section 8.3 - For any circuits that require more than 24 hours to restore, the utility shall explain why it was unable to restore each circuit within this timeframe. *(D.20-05-051, Appendix A, page 6.)*

Response:
PG&E was able to restore all impacted circuits within 24 hours of their Weather All-Clear time.

Section 9 – Community Resource Centers

Section 9.1 - The address of each location during a de-energization event, the location (in a building, a trailer, etc.), the assistance available at each location, the days and hours that it was open, and attendance (i.e., number of visitors) *(Resolution ESRB-8, page 5, SED Additional Information.)*

Response:
During this event, PG&E opened one indoor and seven outdoor CRCs which were visited by 746 people. The full list of CRC locations, including addresses, assistance available at each location, operating days and hours, and attendance is reported in Appendix G.

Every PSPS notification directs recipients to pge.com/pspsupdates, which includes a link to CRC information. This website prominently highlights the dedicated CRC page, which includes:

- Open CRC locations and addresses
- Days and hours of operation
- Services available at each site
- A note that the PSPS outage map can be used to find local CRC locations and identify where to access electricity during the hours CRCs are closed.

CRCs are typically open from 08:00 PDT to 22:00 PDT during the time the power is shut off until customers are restored. Visitors were provided ADA-compliant restrooms, power strips to meet basic charging needs for personal medical devices and other electronics, snacks, bottled water, Wi-Fi, cellular service access, and PSPS event information via dedicated staff. For visitors who did not wish to remain on site, "Grab and Go" bags with a PSPS information card, water, non-perishable snacks, a mobile battery charger, and a blanket were available. Bagged ice and privacy screens were also available at indoor locations.

Additional information about our CRC operations, including coordination with Tribal and local governments, CRC types and resources, COVID-19 and other safety considerations, and more is available in the CRC Plan located in Appendix A of PG&E's 2023 Pre-Season Report.

In anticipation of de-energizations beginning in the evening of September 20, 2023, PG&E opened seven CRCs at 17:00 PDT that day: Colusa/Stonyford Community Hall; Glenn/Elk Creek Junior Senior High School; Lake/Live Oaks Senior Center; Shasta/Hill Country Health and Wellness Center; Tehama/Rancho Tehama Association; Tehama/Flournoy Elementary School; and Tehama/Lassen Mineral Lodge. Butte/Concow Elementary School was not opened until September 21, 2023 at 8:00 PDT due to de-energizations occurring in the early morning hours of that day. All eight CRCs were operational for normal business hours beginning the following day.

Napa and Yolo locations declined to have CRCs set up in their counties due to low customer impact.

Section 9.2 - Any deviations and explanations from the CRC requirement including operation hours, ADA accessibility, and equipment. *(SED Additional Information.)*

Response:

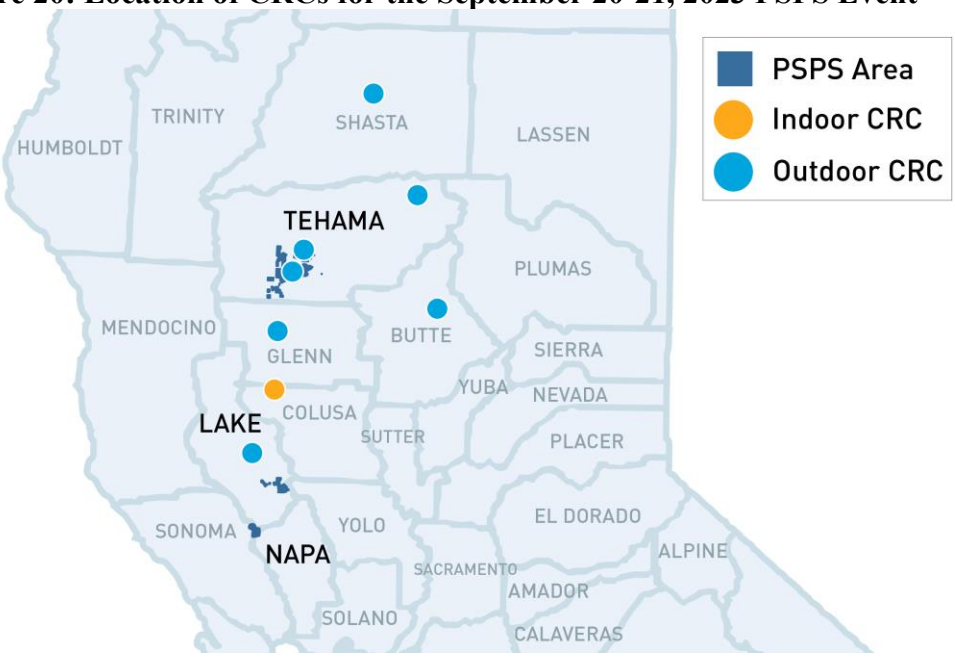
On September 21, 2023 at 13:00 PDT, PG&E worked with each respective county OES to demobilize the following sites based on counties removed from scope: Butte/Concow Elementary School; Colusa/ Stonyford Community Hall; Glenn/Elk Creek Junior Senior High School; Lake/Live Oaks Senior Center; Shasta/ Hill Country Health and Wellness Center; and Tehama/Lassen Mineral Lodge.

On September 21, 2023 at 17:30 PDT, PG&E worked with each respective county OES to demobilize the following sites based on counties being restored: Tehama/Rancho Tehama Association; and Tehama/Flournoy Elementary School.

Section 9.3 - A map identifying the location of each CRC and the de-energized areas. *(SED Additional Information.)*

Response:
See Figure 20 below for a map identifying the location of each CRC and the de-energized areas.

Figure 20: Location of CRCs for the September 20-21, 2023 PSPS Event



Section 10 – Mitigations to Reduce Impact

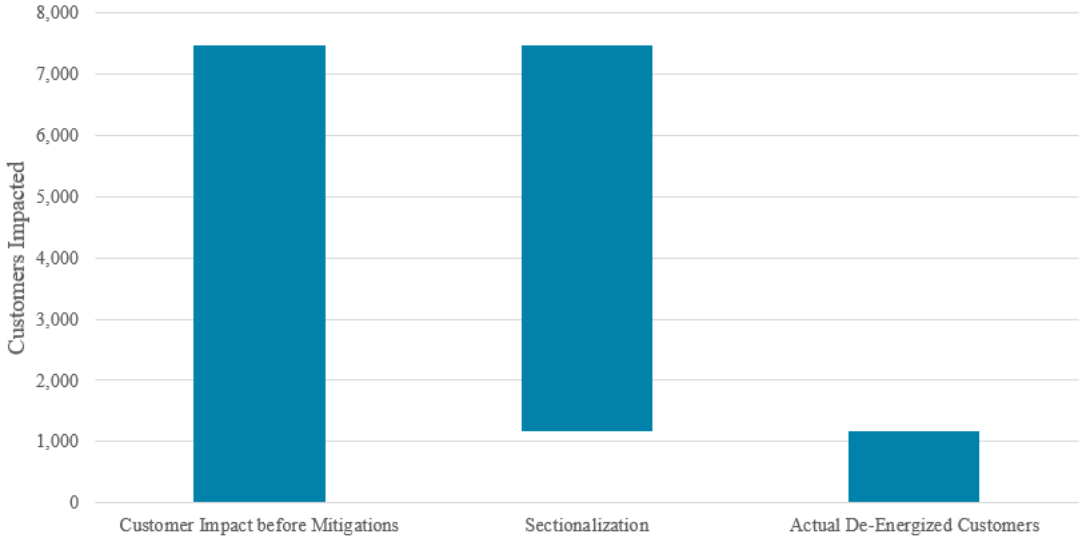
Section 10.1 - Mitigation actions and impacts (both waterfall graph and map) including: sectionalization devices, temporary generation, microgrids, permanent backup generation, transmission switching, covered conductor, and any other grid hardening that mitigated the impact of the event. *(D.21-06-014, page 285, SED Additional Information.)*

Response:

Mitigations to Reduce Impact

PG&E employed sectionalization to avoid de-energizing approximately 6,299 customers. Figure 21 below depicts the impact the mitigation measure had on the total number of customers.

Figure 21: Reduction in Number of Impacted Customers Driven by Mitigation Efforts



Community Microgrids

A community microgrid is a group of customers and Distributed Energy Resources (DERs) within clearly defined electrical boundaries with the ability to disconnect from and reconnect to the grid. These microgrids are typically designed to serve the portions of communities that include community resources, like hospitals, police and fire stations, and gas stations and markets. PG&E continues to own and operate the distribution system within the microgrid. More information about PG&E's microgrid solutions or how to begin developing a community microgrid can be found at www.pge.com/cmep. No community microgrids were utilized during the September 20 – 21, 2023 PSPS Event.

Transmission Line Segmentation

Transmission lines are segmented using switches enabled with Supervisory Control and Data Acquisition (SCADA), when possible, if only a portion of a line is required to be de-energized due to PSPS. Leaving segments of transmission lines energized allows PG&E to still reduce fire risk where needed and provide service to stations fed off the non-impacted segments during the PSPS. Transmission line segmentation was not used during this event.

Distribution Switching

Depending on fire risk patterns, distribution switch locations and switching plans maintain service to customers on lines that fall outside the high-risk area but are served by lines that pass through the fire risk area. Depending on event scope, we may be able to use back-tie switching to bypass the distribution circuits that pass through the de-energization area to keep customers energized from a different set of lines. During this event, distribution switching was not used as a mitigation as no opportunities were identified.

Sectionalization

PG&E has installed new sectionalization devices near the borders of the CPUC-designated Tier 2 and 3 High Fire-Threat Districts to reduce the number of customers affected by PSPS events. PG&E used sectionalization devices on 4 circuits which reduced the customer impact by approximately 6,299 customers for this event. No newly installed “greenfield” devices were in scope for this event.

Islanding

In some cases, PG&E can leverage islanding capabilities to keep some customers islanded apart from the rest of PG&E’s transmission system and energized by generation located within the island. During this event no transmission islanding was used.

Temporary Microgrids

PG&E temporary distribution microgrids were not in scope for this event. The objective of temporary microgrids is to enable some community resources to continue serving the surrounding population during PSPS events where it is safe to do so, using pre-installed interconnection hubs to safely and rapidly interconnect temporary generation.

While temporary microgrids do not often support large numbers of customers, the community resources served by the temporary microgrids include fire stations, local water and waste companies, markets, post offices, and medical facilities. On average, customers served by the temporary microgrids experience de-energization periods of under 45 minutes for the switch-over from grid to microgrid and go-back from microgrid to the grid.

Twelve temporary microgrid sites are currently ready for immediate operation in PG&E’s service area and others are in development.

Backup Power Support

For this PSPS event, PG&E did not deploy temporary generation as there weren’t any identified opportunities to serve our customers within the de-energization scope.

Covered Conductor

The effects of grid-hardening and covered conductors are accounted for in our IPW model, which predicts the probability of utility-caused ignitions. Overhead system hardening is expected to reduce the probability of outages and ignitions in recently hardened sections. The IPW model more heavily weighs ignition and outage rates in recent years which will result in areas with fewer ignitions (e.g., areas that may have been recently hardened, being less likely to be de-energized for PSPS as there is a lower chance of ignition based on historical ignitions and outages).

Section 11 – Lessons Learned from this Event

Section 11.1 - Threshold analysis and the results of the utility's examination of whether its thresholds are adequate and correctly applied in the de-energized areas. *(D.21-06-014, page 305-306.)*

Response:
This section addresses our examination of the adequacy of our PSPS protocols and guidance thresholds. PG&E believes our thresholds were accurate, adequate and correctly applied to the de-energized areas for the September 20 – 21, 2023 PSPS Event. See Appendix A for additional circuit and meteorological information.

PG&E began its threshold evaluation with a robust historical analysis that is described below. This established the guidance values are properly applied for PSPS events and optimized to capture data from past catastrophic fires to mitigate future fire potential and minimize customer impacts in the future. To do so, meteorologists use internal and external tools to evaluate the weather and determine if the PSPS is reasonable.

Before de-energization, PSPS customer risk is evaluated against wildfire risk by circuit. During the PSPS, the advanced weather modeling systems from our network of over 1,500 weather stations can forecast and track weather conditions in real time. Data and post-event analysis results are collected and provided as part of the PSPS Post-Event Report.

Establishing Threshold through Historical Analysis
Our PSPS guidance was established by calibrating a granular, historical dataset. We built our verification dataset by creating, or "backcasting," the PSPS guidance through our historical dataset. We extracted values for all recent fires that have occurred in PG&E's service area from 2012 to 2020. We aimed to capture as many historical fires as possible that were caused by PG&E equipment during high wind events (e.g., Camp, Nuns, Kincade, Zogg) while limiting the number of historical PSPS events to minimize customer impacts. Our analysis included:

- Hourly review of past incidents
- Verification of hypothetical PSPS event dates
- PSPS guidance values testing
- A robust guidance sensitivity and calibration analysis

Historical Analysis: CFP_D Quantification
Based on this analysis, PG&E uses a CFP_D value of nine as the quantitative threshold guidance value to consider for PSPS on PG&E's distribution system.

To establish the CFP_D threshold of nine, we performed multiple sensitivity studies in "backcast" mode for calibration and validation. This involved running 68 different versions of the combined distribution PSPS guidance through hourly historical data throughout multiple years to calibrate PSPS guidance. This included simulating and learning from more than 2,500 virtual PSPS events. Through this "lookback" analysis, we evaluated:

- The potential size, scope, and frequency of PSPS events
- Potential customer impacts
- The days PSPS events would have occurred

- Whether utility infrastructure would have qualified for de-energization

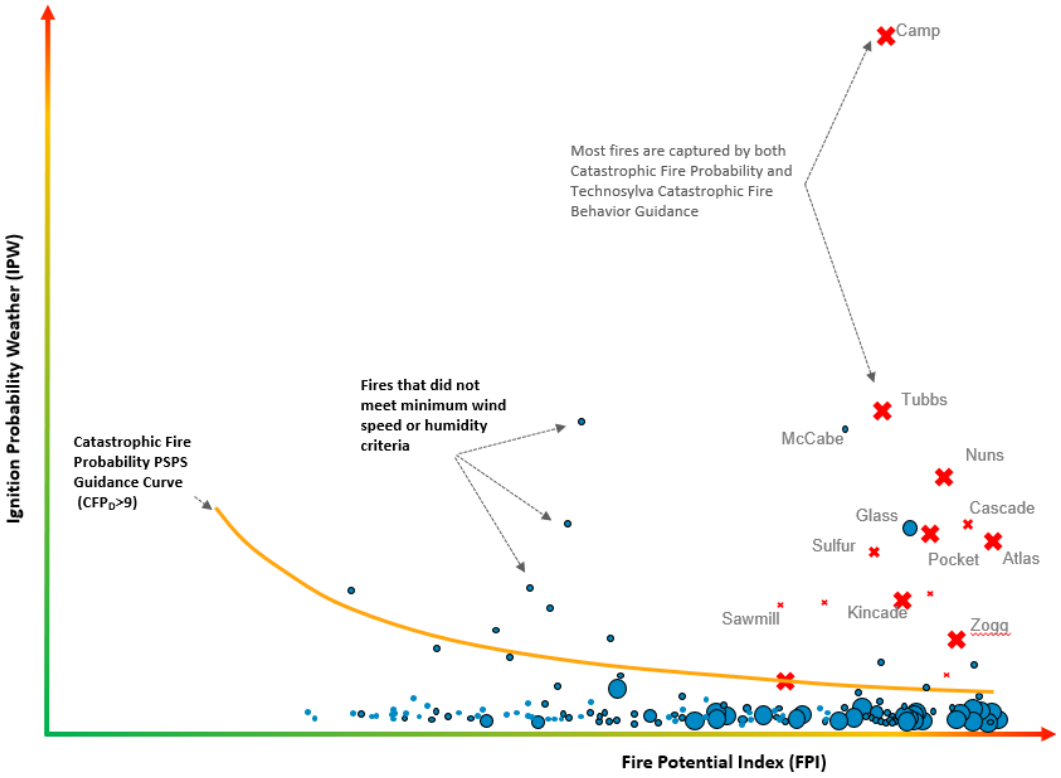
The mFPC and CFP_D guidance that is determined from Technosylva was also evaluated using this process.

The CFP_D guidance value of nine is shown in Figure 22 below with respect to recent large fires since 2012.

Any fires above nine that met the basic mFPC indicate PSPS would have been executed, had these models and guidance been in use during these historic events. The results show that deployment of this model could have prevented wildfires, such as Camp, Tubbs, Nuns, Atlas, Kincade and Zogg fires, if implemented in 2012. Please note that the inclusion of a fire in this analysis does not indicate that PG&E is directly responsible for or caused a fire. Instead, the fires are included for the purpose of analyzing the impact of PG&E's current PSPS Protocols.

The red "✖" symbols in Figure 22 below represent fires that were captured by both the CFP_D and Technosylva CFB. The blue dots under the line represent fires below the CFP_D guidance. Blue dots "●" above the line represent events that did not meet the mFPC criteria.

Figure 22: CFP_D Guidance



This analysis was a critical step to ensure the most catastrophic historical incidents are identified by PSPS guidance while considering the significant impacts to customers from PSPS events across multiple dimensions (e.g., duration and frequency). This ensures that future PSPS events will capture conditions similarly during the most catastrophic fires while also balancing impacts to customers.

Historical Analysis: Execution

To execute the analysis at this scale, we utilized cloud computing resources to run PSPS model guidance for every hour at every 2 x 2 km grid cell across the historical data set to determine the number of times and locations PSPS guidance is exceeded. Each location exceeding guidance is then grouped into events to determine the location and size of each PSPS event given the weather and fuels present at that time under the parameters of the study version. This allows us to determine if synoptic-driven events (e.g., Diablo wind events) are being identified, and if historical fires attributable to PG&E equipment may have been mitigated.

Verification of PSPS Protocols

In addition to these sensitivity studies, PG&E performed extensive verification of the PSPS protocols using several internal and external datasets. The goal of these analyses was to first determine if certain weather events are being captured (e.g., Diablo and offshore wind events), and second, to determine if lines that have been implicated in historic catastrophic fires would have been identified by the guidance.

The following internal datasets were used in the analysis:

- Climatology of Diablo wind events
- Hourly high-resolution wind maps from the climatology data set
- Distribution and transmission outage history
- The weather signal database
- Exploratory and dynamic dashboards created with internal and external data

The following external datasets were used in the analysis:

- National Center for Environmental Prediction (NCEP) North American Regional Reanalysis Archive (NARR) synoptic weather maps
- Historical fire occurrence data compiled by federal agencies
- RFWs from the NWS
- High risk of potential large fires due to wind from the GACC

The paragraphs below explain how we leveraged external and internal data to verify our PSPS protocols guidance thresholds.

NARR Archive

PG&E acquired the NARR archive data, which dates to 1995 and made over two million maps that can be utilized to study past events. These maps are also useful to study the past conditions leading up to the event, such as the extent of precipitation events and heat waves. When the PSPS models are run through the climatology, each event identified is compared against the NARR archive by a Meteorologist to determine the large-scale atmospheric features present for each event.

Climatology of Diablo Wind Events

PG&E also leverages the latest academic research on Diablo wind events that use surface-based observations to create a climatology of Diablo wind events. We adapted the criteria and processed it hour-by-hour through the 31-year weather climatology to determine the frequency,

magnitude, and timing of Diablo winds. The output of this analysis was a 31-year calendar of Diablo wind events experienced in the PG&E service area. As it relates to PSPS directly, the strongest Diablo wind events were evaluated to verify if PSPS guidance also selects these days for potential PSPS events. Using the days identified by PSPS guidance and the Diablo event list, a high-level comparison was completed to evaluate overlap of the events.

Any events that did not meet PSPS guidance were evaluated further using additional data sources described in this section. For example, the NARR archive proved useful, as antecedent conditions such as rainfall before an event and the magnitude of the event could be evaluated.

PG&E's Weather Signal Database

PG&E's Meteorology team built, and continues to maintain, a 'weather signal' database that identifies each day from January 1, 1995, to present that experienced any weather-related outages on the distribution system. It also lists the main weather driver (e.g., heat, low-elevation snow, northeast wind, winter storm, etc.) for these outages. If distribution outage activity is not driven by weather, the day is classified as a "Blue Sky"[77] day. This dataset combines weather and distribution outage activity that allows rapid filtering of events based on the main weather drivers. To validate PSPS guidance, we used a combination of "Northeast" wind days and "Blue-Sky" days.

The PSPS guidance was validated against all Northeast wind days in the database. This is similar, but complimentary to the Diablo event analysis as it also accounts for outage activity observed on those days. Events were also compared against "Blue Sky" days to ensure that PSPS would not be recommended for a high percentage of non-weather-impact days where little to no outage activity was observed.

Red Flag Warnings from the NWS

PG&E also validated PSPS guidance against RFWs from the NWS. Red Flag Warnings (RFW) mean warm temperatures, very low humidity, and stronger winds are expected to combine to produce an increased risk of fire danger. These RFWs were collected for the past six years (2015 – 2020) in shapefile format and used to evaluate the timing and spatial extent of historical RFWs against PSPS guidance. It should be noted that each NWS office in the PG&E service area has different RFW criteria, making direct and quantifiable comparison challenging. However, this dataset is used to evaluate whether RFWs were issued when PSPS guidance was met. Based on historical PSPS analysis, RFWs are expected to occur more frequently and cover a broader area than the area covered by PSPS events.

High Risk of Potential Large Fires due to Wind from the GACC

PG&E also validated PSPS guidance against historical "High Risk" days from the GACC. The GACCs issue High Risk Day alerts when fuel and weather conditions are predicted that historically have resulted in a significantly higher than normal chance for a new large fire or for significant growth on existing fires. Examples of critical weather conditions are high winds, low humidity, an unstable atmosphere, and very hot weather. Similar to the RFW analysis, this dataset was used to evaluate if High Risk days were issued when PSPS guidance was high.

[77] Blue Sky Day is defined as "The same as a non-weather impact day (no or very limited impacts due to weather)".

Similar to RFWs, based on historical PSPS analysis, High Risk Days are expected to occur more frequently and cover a broader area than PSPS.

Hourly High-Resolution Wind Maps from PG&E Climatology Data Set

PG&E created hourly maps from high-resolution climatology and a web-based application to display any hour across 30 years. For each event that meets PSPS guidance in the climatology, these maps were evaluated by a Meteorologist to better understand the nature of the event, wind speeds, antecedent conditions, and the spatial extent of strong winds. It's important to note forecast wind speeds are available in the same exact format, allowing Operational Meteorologists to put forecast events in perspective with historical events using the same model.

Detailed Event Dashboards

To evaluate the thresholds, Meteorologists and data scientists utilized the data sources described above to evaluate historical PSPS events hour-by-hour to verify the locations and times that are being flagged as meeting PSPS guidance. These dashboards determine if historical fire events would have been flagged by PSPS guidance. Meteorologists evaluated these data sources hourly to verify model performance of the IPW model and suitability for operations. The PSPS guidance can be evaluated spatially using the dashboard map integration, while the size and timing of the event can be evaluated using the timeseries integration.

Section 11.2 - Any lessons learned that will lead to future improvement for the utility. *(SED Additional Information.)*

Response:

PG&E collects lessons learned input from personnel during and after every PSPS event to identify best practices and biggest opportunities for improvement. The insights described in Table 19 below have been contributed by individual EOC members and cover the September 20 – 21, 2023 PSPS event.

Table 19: Lessons Learned from the September 20 -21, 2023 PSPS Event

Issue	Discussion	Resolution
CRC	There are three ways online for customers to see what CRCs are available within a 50-mile radius during an event: as icons on the map, as a list on the pge.com/crc page and the address search results page. During this event, only two of the three methods were working as designed. While the map and list versions were displayed correctly, customers looking for the closest CRC to them on the address search results page did not receive results. The coordinates for the CRC locations are manually entered and were not entered in the proper format	The team responsible for populating coordinates has updated its internal process standards to ensure the proper format for coordinates is used and the functionality is checked.

	for the distance to be calculated correctly.	
Customer Notifications	Due to a manual error, explained in Section 5.5, some customers and facilities did not receive a Power Off notification.	We have identified the issue as a human error and are working with the responsible personnel to address and ensure customers receive timely Power Off notifications. Additionally, we have updated the automation logic in our internal outage management platform to be able to promptly send Power Off notifications to all affected customers in the case that an outage categorization error is identified.

Section 12 – Other Relevant Information

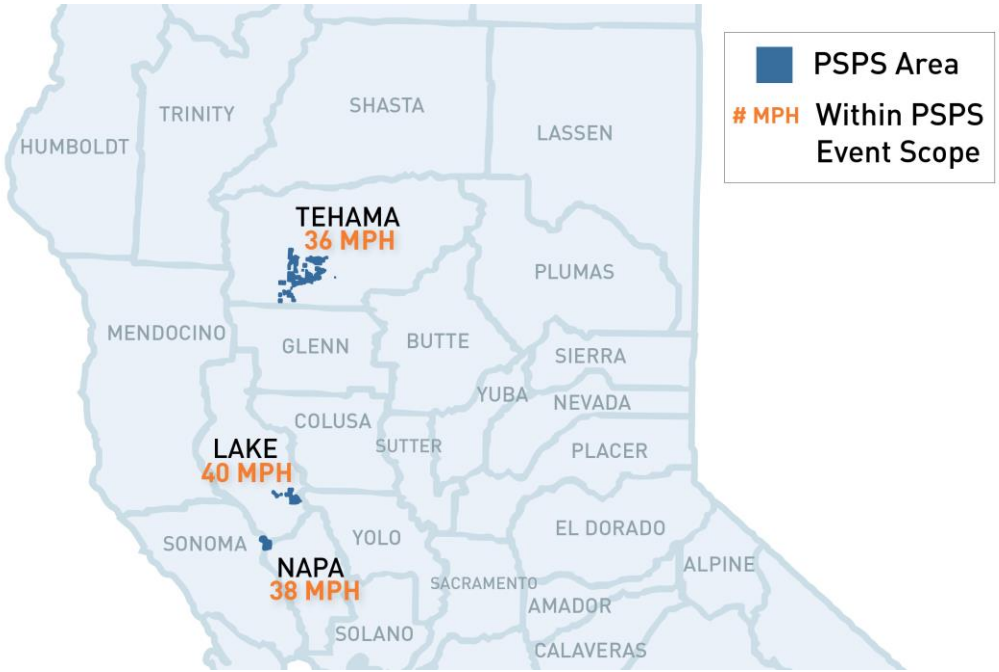
Maximum Wind Gusts

Table 20 and Figure 23 below show the maximum wind gust speeds recorded by weather stations in each county within PSPS scope.

Table 20: Maximum Wind Gusts Recorded September 20, 2023 in Impacted Counties

County	Maximum Wind Gust (mph)	Station ID	Station Name
Lake	40	PG358	Knoxville
Napa	38	PG126	Mt St Helena East
Tehama	36	TCKC1	Thomes Creek

Figure 23: Maximum Wind Gusts Recorded September 20-21, 2023 in Impacted Counties



APPENDIX

PACIFIC GAS AND ELECTRIC COMPANY

APPENDIX A

DECISION MAKING PROCESS

Appendix A: DECISION MAKING PROCESS

Table A-1.1: Factors Considered in the Decision to Shut Off Power for Each Distribution Circuit De-energized During the September 20-21, 2023 PSPS Event

** Please see Table A-1.2 for the description of each column header, as well as the unit and value provided.*

*** Note: PSPS decision making on Distribution does not occur at a per-circuit level, and instead occurs at the level of our 2 x 2 km weather and fuels model grid. These outputs are used in a GIS system to visualize the areas of concern by area, which meteorologists and Distribution Assets Health Specialists review to scope the event. The data provided here is representative of our high-resolution weather model data, which is driven by the Weather Research and Forecasting model. It is not inclusive of other model information reviewed by meteorologists that include external, public global and high-resolution weather models. This temporal and areal review of the risk, the operational timeline required to create the scope as well as any areas that were added based on subject matter expertise of meteorologists may lead to some circuits being de-energized that do not strictly exceed PSPS guidance.*

Circuit Name	Time Place	Forecast																		Agency Observed				Observed											
		ws mph	ws_ mph 50m	wg_ ec mph	temp 2m f	flame_ length ft_ 2hr	rate_ of_ spread _chhr _2hr	area_ acres 8hr	rh 2m	vpd2m _mb	prob _cat	dfm 10hr	dfm_ 100 hr	dfm_ 1000 hr	lfm herb	lfm woody	lfm_ chamise _new	sum tree ovr	prob ignition	cfpd	HWW	HWA	RFW	GACC_ High Risk	Observed ws mph	Observed wg mph	Observed temp f	Observed RH %	Observed ws mph AC	Observed wg_ mph_ AC	Observed temp_ f_ AC	Observed RH_ %_ AC	open psps tags	Tx impacts _yes _no	PSPS Potential Risk Consequence	PSPS Potential Benefit
CALISTOGA 1101	TP 10	18	27	38	72	11.5	30	633.4	31.4	17.8	0.416	0.074	0.092	0.086	49	65	70	3919.8	0.0007679	2.7	No	No	Yes	Yes	44	52	73	22	15	20	73	22	Yes	No	0.12439	17.4
CORNING 1101	TP 6	19	25	38	94	7.8	70.1	9937.6	8.4	43.8	0.747	0.049	0.084	0.085	30	70	61	6259.9	0.0007813	4.2	No	No	Yes	Yes	23	33	80	19	21	29	77	20	No	No	1.85800	104.2
CORNING 1102	TP 6	22	27	40	93	10.1	94.1	16340	8.5	43.1	0.879	0.047	0.075	0.077	32	62	60	1979	0.0006879	4.4	No	No	Yes	Yes	25	36	80	17	17	29	77	19	No	No	0.67377	87.6
CORNING REMOTE 0001	TP 6	18	25	40	93	6.9	63.4	6213.6	8.6	41.5	0.703	0.049	0.081	0.084	34	68	61	14.3	0.0006317	3.9	No	No	Yes	Yes	22	32	80	19	16	29	77	19	Yes	No	0.67377	87.6
CORNING REMOTE 0002	TP 6	18	25	38	93	5.7	38.7	3172.8	8.5	42	0.527	0.049	0.083	0.084	37	69	61	408.6	0.0006062	3.1	No	No	Yes	Yes	22	32	80	19	16	29	77	20	No	No	0.67377	87.6
HIGHLANDS 1103	TP 9	18	29	41	86	11.4	61.6	4003	18.5	31.8	0.648	0.062	0.086	0.082	37	60	65	1149.6	0.0009585	4.4	No	No	Yes	Yes	23	40	77	17	7	13	78	17	Yes	No	0.17049	35.6

Table A-1.2: Description, Units, and Value provided for Factors Considered in the Decision to Shut Off Power for Each Distribution Circuit De-energized During the September 20 – 21, 2023 PSPS Event

Forecast / Agency / Observed	Value	Name	Unit	Value Provided	Description
Forecast	**ws_mph**	Sustained wind speeds	mph	max	Sustained windspeed in miles per hour at 10 meters above ground level.
Forecast	**ws_mph_50m**	Sustained wind speeds at 50 m	mph	max	Sustained windspeed in miles per hour at 50 meters above ground level.
Forecast	**wg_ec_mph**	Forecasted Peak Wind Gust	mph	max	Wind gust in miles per hour at 10 meters above ground level.
Forecast	**temp_2m_f**	Temperature	degrees F	max	Temperature in Fahrenheit at 2 meters above ground level.
Forecast	**flame_length_ft_2hr**	Flame length	ft	max	Flame length in feet on fire front for first 2 hours of fire spread simulation from Technosylva.
Forecast	**rate_of_spread_chhr_2hr**	Rate of spread	chains/hr	max	Rate of fire spread in chains per hour for first 2 hours of fire spread simulation from Technosylva.
Forecast	**area_acres_8hr**	Acres burned	acres	max	Acres burned in the 8-hour fire spread simulation from Technosylva.
Forecast	**rh_2m**	Relative Humidity	%	min	Relative Humidity in percent at 2 meters above ground level.
Forecast	**vpd2m_mb**	Vapor Pressure Deficit	mb	max	Vapor Pressure Deficit in millibar at 2m above surface.
Forecast	**prob_cat**	Fire Potential Index (FPI)	probability outputs	max	Fire Potential Index (FPI) Model Output - Probability of a catastrophic fire if an ignition were to occur. FPI component of the CFPD model.
Forecast	**dfm_10hr**	Dead Fuel Moisture Content 10 hrs	fuel moisture fraction	min	Dead Fuel Moisture in 10-hour fuel moisture class. Can be scaled to percentage by multiplying by 100.
Forecast	**dfm_100hr**	Dead Fuel Moisture Content 100 hrs	fuel moisture fraction	min	Dead Fuel Moisture in 100-hour moisture class. Can be scaled to percentage by multiplying by 100.
Forecast	**dfm_1000hr**	Dead Fuel Moisture Content 1000 hrs	fuel moisture fraction	min	Dead Fuel Moisture in 1000-hour moisture class. Can be scaled to percentage by multiplying by 100.
Forecast	**lfm_herb**	Live Fuel Moisture Content-herbacous	%	min	Live Fuel Moisture Percentage of herbaceous plant species. (% of species that is comprised of water)
Forecast	**lfm_woody**	Live Fuel Moisture Content-woody	%	min	Live Fuel Moisture Percentage of woody plant species. (% of species that is comprised of water)
Forecast	**lfm_chamise_new**	Live Fuel Moisture Content-shrub	%	min	Live Fuel Moisture Percentage of Chamise (shrub) plant species. (% of species that is comprised of water)
Forecast	**sum_tree_ovr**	Tree Overstike	ft	max	Sum of tree overstrike in a 2 x 2 km grid cell area in ft.
Forecast	**prob_ignition**	Ignition Probability Weather (IPW) Model Output	Probability	max	Ignition Probability Weather (IPW) Model Output - Probability of Ignition based on the probability of outages by cause. Ignition component of the CFPD model. **Ignition Probability Weather Model** - A model that provides estimates of the probability of an ignition given an outage on an hourly basis

Forecast	**cfpd**	Catastrophic Fire Probability (CFPD)	Scaled Probability	max	The product of probability of catastrophic fire (Prob_Cat) and IPW - probability of ignition (prob_ignition). This product is called the (CFPD) Catastrophic Fire Probability distribution model. Scaled by 1000 to covert to an integer value.
Agency	**HWW**	High Wind Warning	N/A	Yes/No during event	High Wind Warning from the Federal National Weather Service.
Agency	**HWA**	High Wind Advisory	N/A	Yes/No during event	High Wind Advisory from the Federal National Weather Service.
Agency	**RFW**	Red Flag Warning	N/A	Yes/No during event	Red Flag Warning from the Federal National Weather Service.
Agency	**GACC_HighRisk**	GACC High Risk	N/A	Yes/No during event	High Risk issued by the Federal North or South Operations Predictive Services.
Observed	**Observed wg_mph**	Observed Peak Wind Gust during Event	mph	max	The maximum wind gust recorded by weather stations mapped to each circuit from planned de-energization time to anticipated all-clear time.
Observed	**Observed temp_f**	Observed Temperature during Event	degrees F	max	The maximum temperature recorded by weather stations mapped to each circuit from planned de-energization time to anticipated all-clear time.
Observed	**Observed RH_%**	Observed Relative Humidity During Event	%	min	Minimum relative humidity recorded by all weather stations mapped to each circuit from planned de-energization time to anticipated all-clear time.
Observed	**Observed ws_mph_AC**	Observed Sustained Wind Speed at All Clear	mph	max	The maximum sustained wind speed recorded by weather stations mapped to each circuit at the all-clear time.
Observed	**Observed wg_mph_AC**	Observed Peak Wind Gust at All Clear	mph	max	The maximum wind gust recorded by weather stations mapped to each circuit at the all-clear time.
Observed	**Observed temp_f_AC**	Observed Temperature at All Clear	degrees F	max	The maximum temperature recorded by weather stations mapped to each circuit at the all-clear time.
Observed	**Observed RH_%_AC**	Observed Relative Humidity at All Clear	%	min	Minimum relative humidity recorded by all weather stations mapped to each circuit at the all-clear time.
Observed	**open_psps_tags**	Open PSPS Qualified Tags	N/A	Yes/No During Event	PSPS-Qualified Tags include P1 (tree represents an immediate risk) and P2 (tree is damaged or diseased and could fall into nearby power lines) tree tags and Electric Corrective tags (Priority A - emergency, B - urgent, and E/F - risk-based)
Observed	**Tx_impacts_yes_no**	Impacted by Transmission	N/A	Yes/No During Event	Distribution lines that would have been de-energized due to de-energization of upstream transmission lines, regardless of whether those distribution lines would have also been de- energized due to direct distribution PSPS.
Observed	**PSPS Potential Risk Consequence**	PSPS Potential Risk Consequence	MAVF Score	Yes	Measure of the adverse impact to customers due to de-energization.
Observed	**PSPS Potential Benefit**	PSPS Potential Benefit	MAVF Score	Yes	Measure of the adverse impact to customers due to a catastrophic fire.

PACIFIC GAS AND ELECTRIC COMPANY

APPENDIX B

DE-ENERGIZED TIME, PLACE, DURATION AND CUSTOMERS

Appendix B: DE-ENERGIZED TIME, PLACE, DURATION, AND CUSTOMERS

Circuits labeled as "non-HFTD" are located outside of the CPUC High Fire-Threat District (HFTD). These circuits or portions of circuits are impacted for one of two reasons: (1) indirect impacts from transmission lines being de-energized or (2) the non-HFTD portion of the circuit are conductive to the HFTD at some point in the path to service.
Circuits with an asterisk (*) were sectionalized during the event to further reduce customer impact. The de-energization date and time represents the time the first customer was de-energized on the circuit and the restoration time represents the date and time of the last customer restored on a circuit by circuit.

Table B-1. Circuits De-Energized During the September 20-21, 2023 PSPS Event

Distribution / Transmission	Circuit Name	De-Energization Date and Time	All-Clear Date and Time	Restoration Date and Time	County	HFTD Tier(s)	Total Customers	Residential Customers	Commercial / Industrial Customers	Medical Baseline Customers	AFN other than MBL Customers	Other Customers
Distribution	CALISTOGA 1101	9/21/2023 3:25	9/21/2023 11:43	9/21/2023 13:30	NAPA	Tier 3	7	0	6	0	0	1
Distribution	CORNING 1101	9/20/2023 23:19	9/21/2023 13:03	9/21/2023 15:46	TEHAMA	Partially Outside HFTD, Tier 2	825	752	70	105	362	3
Distribution	CORNING 1102	9/20/2023 23:20	9/21/2023 13:03	9/21/2023 17:05	TEHAMA	Partially Outside HFTD, Tier 2	287	228	51	19	72	8
Distribution	CORNING REMOTE 0001 0001	9/20/2023 23:35	9/21/2023 13:03	9/21/2023 13:57	TEHAMA	Tier 2	1	1	0	0	0	0
Distribution	CORNING REMOTE 0002 0002	9/20/2023 23:22	9/21/2023 13:03	9/21/2023 14:15	TEHAMA	Tier 2	1	1	0	0	0	0
Distribution	HIGHLANDS 1103	9/21/2023 2:36	9/21/2023 11:43	9/21/2023 14:03	LAKE	Partially Outside HFTD, Tier 2	50	35	11	3	10	4
Total							**1171**	**1017**	**138**	**127**	**444**	**16**

PACIFIC GAS AND ELECTRIC COMPANY

APPENDIX C

DAMAGE AND HAZARDS TO OVERHEAD FACILITIES

Appendix C: DAMAGE & HAZARDS TO OVERHEAD FACILITIES

Table C-1. DAMAGES & HAZARDS FOUND WITHIN THE DE-ENERGIZED AREAS

Circuit Name	County	Structure Identifier	Tier 2/3 or Non-HFTD	Damage / Hazard	Type of Damage/Hazard	Description of Damage
Corning 1102	Tehama	101521971	Non-HFTD	Damage	Wind related	Broken tie wire

PACIFIC GAS AND ELECTRIC COMPANY

APPENDIX D

CUSTOMER NOTIFICATION SCRIPTS

Note: Appendix D is provided as a separate file; please see PGE_PSPS_Event_Notifications_20231005.pdf

PACIFIC GAS AND ELECTRIC COMPANY

APPENDIX E

PUBLIC SAFETY PARTNERS CONTACTED

Appendix E: PUBLIC SAFETY PARTNERS CONTACTED

Table E-1. Public Safety Partners Contacted

Organization/Jurisdiction	Title	HFTD Tier	Date/Time Contacted
BUTTE County Communication Facility	AT&T MOBILITY	Tier 3	09/18/2023 10:07 PDT
BUTTE County Communication Facility	AT&T SERVICES INC	Tier 3	09/18/2023 10:07 PDT
BUTTE County Emergency Services Facility	COUNTY OF BUTTE	Tier 3	09/18/2023 10:07 PDT
BUTTE County Other Facility	CALIFORNIA DEPARTMENT OF FORESTRY	Tier 3	09/18/2023 10:07 PDT
Butte County	County Administrative Officer	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Assistant OES Director	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Board Chair	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Chief	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Chief Administrative Officer	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	County Clerk-Recorder	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Director	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Division Chief	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:12 PDT
Butte County	General	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	General CAL FIRE	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	General Services Director	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Lieutenant	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	OES Director	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Probation Officer	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Public Health Director	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Senior Contracts/Procurement Agent and EOC Logistics Chief	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Sergeant	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County	Supervisor	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Butte County Tribal	Casino Director of Security	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
Butte County Tribal	Chairman	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
Butte County Tribal	Chairwoman	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
Butte County Tribal	Land Manager	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
Butte County Tribal	Tribal Administration	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT

Organization/Jurisdiction	Title	HFTD Tier	Date/Time Contacted
Butte County Tribal	Tribal Administrator	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
Butte County Tribal	Tribal Chairman	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
Butte County Tribal	Vice Chairwoman	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
COLUSA County Communication Facility	AT&T	Tier 2	09/18/2023 10:07 PDT
COLUSA County Communication Facility	AT&T MOBILITY LLC	Tier 2	09/18/2023 10:07 PDT
COLUSA County Communication Facility	AT&T SERVICES INC	Tier 2	09/18/2023 10:07 PDT
COLUSA County Communication Facility	FRONTIER COMMUNICATIONS CORPORATION DIP	Tier 2	09/18/2023 10:07 PDT
COLUSA County Communication Facility	GTE MOBILNET OF CALIFORNIA LP	Tier 2	09/20/2023 07:01 PDT
COLUSA County Emergency Services Facility	CALIFORNIA DEPARTMENT OF FORESTRY	N/A **	09/18/2023 10:07 PDT
COLUSA County Emergency Services Facility	COUNTY OF COLUSA	N/A **	09/18/2023 10:07 PDT
COLUSA County Energy Sector Facility	CITY OF SANTA CLARA	N/A **	09/18/2023 10:07 PDT
COLUSA County Water and Waste Water Facility	CALIFORNIA DEPARTMENT OF FORESTRY	N/A **	09/18/2023 10:07 PDT
COLUSA County Water and Waste Water Facility	COUNTY OF COLUSA	Tier 2	09/18/2023 10:07 PDT
Colusa County	Board Chair	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Colusa County	County Clerk/Recorder	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Colusa County	County Supervisor	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Colusa County	Deputy Chief	Tier 2, Tier 3, HFRA	09/18/2023 10:12 PDT
Colusa County	Director	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Colusa County	Division Chief	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Colusa County	Emergency Service Technician	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Colusa County	MHOAC	Tier 2, Tier 3, HFRA	09/18/2023 10:12 PDT
Colusa County	Sheriff	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Colusa County	Supervisor	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Colusa County	Vice Chair	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
GLENN County Communication Facility	AMERICAN TOWER CORPORATION	Tier 2	09/18/2023 10:07 PDT
GLENN County Communication Facility	AT&T SERVICES INC	Tier 2	09/18/2023 10:07 PDT
GLENN County Communication Facility	VERIZON	Tier 2	09/18/2023 10:07 PDT
GLENN County Emergency Services Facility	COUNTY OF GLENN	Tier 2	09/18/2023 10:07 PDT
GLENN County Emergency Services Facility	ELK CREEK FIRE DISTRICT	Tier 2	09/18/2023 10:08 PDT
GLENN County Water and Waste Water Facility	ELK CREEK COMMUNITY SERVICE	Tier 2	09/18/2023 10:07 PDT
Glenn County	CAO	Tier 2, HFRA	09/18/2023 10:11 PDT
Glenn County	County Administrative Officer	Tier 2, HFRA	09/18/2023 10:11 PDT

Organization/Jurisdiction	Title	HFTD Tier	Date/Time Contacted
Glenn County	Deputy Director OES	Tier 2, HFRA	09/18/2023 10:11 PDT
Glenn County	Director of Public Works Agency	Tier 2, HFRA	09/18/2023 10:11 PDT
Glenn County	Fire Chief	Tier 2, HFRA	09/18/2023 10:11 PDT
Glenn County	General	Tier 2, HFRA	09/18/2023 10:11 PDT
Glenn County	Sheriff	Tier 2, HFRA	09/18/2023 10:11 PDT
Glenn County Tribal	Chairman	Tier 2, HFRA *	09/18/2023 08:35 PDT
Glenn County Tribal	Interim Tribal Secretary	Tier 2, HFRA *	09/18/2023 10:11 PDT
Glenn County Tribal	Tribal Administrator	Tier 2, HFRA *	09/18/2023 10:11 PDT
LAKE County Communication Facility	AT&T SERVICES INC	Tier 3	09/18/2023 10:07 PDT
LAKE County Communication Facility	VERIZON WIRELESS	N/A **	09/18/2023 10:07 PDT
Lake County	County Administrative Officer	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	Administrator	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	Battalion Chief	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	Board Chair	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	Chair of the Board	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	City Manager	Tier 2, Tier 3, HFRA	09/18/2023 10:12 PDT
Lake County	Council Member	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	County Administrative Officer	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	County Supervisor, District 4	Tier 2, Tier 3, HFRA	09/18/2023 10:12 PDT
Lake County	Dispatch	Tier 2, Tier 3, HFRA	09/18/2023 10:12 PDT
Lake County	District 3 County Supervisor	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	District 5 Supervisor	Tier 2, Tier 3, HFRA	09/18/2023 10:12 PDT
Lake County	District Fire Management Officer	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	Fire Chief	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	General	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	Health Services Director	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	Lieutenant	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	Mayor	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County	Sheriff	Tier 2, Tier 3, HFRA	09/18/2023 10:11 PDT
Lake County Tribal	Chairman	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
Lake County Tribal	Cultural Resources	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
Lake County Tribal	Environmental Director	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
Lake County Tribal	Tribal Administrator	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
Lake County Tribal	Vice Chairperson	Tier 2, Tier 3, HFRA *	09/18/2023 10:11 PDT
NAPA County Communication Facility	AT&T MOBILITY LLC	Tier 3	09/18/2023 10:07 PDT
NAPA County Communication Facility	T-MOBILE WEST CORPORATION	Tier 3	09/18/2023 10:07 PDT
Napa County CCA	General	N/A **	09/18/2023 10:11 PDT
SHASTA County Communication Facility	AT&T MOBILITY LLC	Tier 3	09/18/2023 10:07 PDT
SHASTA County Communication Facility	AT&T SERVICES INC	Tier 3	09/18/2023 10:07 PDT

Organization/Jurisdiction	Title	HFTD Tier	Date/Time Contacted
SHASTA County Communication Facility	FRONTIER COMMUNICATIONS CORPORATION DIP	Tier 3	09/18/2023 10:07 PDT
SHASTA County Communication Facility	GTE MOBILNET OF CALIFORNIA LP	Tier 3	09/18/2023 10:07 PDT
SHASTA County Communication Facility	HAPPY VALLEY TELEPHONE CO	Tier 2	09/18/2023 10:07 PDT
SHASTA County Communication Facility	SPRINT CORPORATION	Tier 2	09/18/2023 10:07 PDT
SHASTA County Communication Facility	T-MOBILE WEST CORPORATION	Tier 2	09/18/2023 10:07 PDT
SHASTA County Communication Facility	VERIZON	Tier 2	09/18/2023 10:07 PDT
SHASTA County Communication Facility	WILLIAMS COMMUNICATION LLC	Tier 2	09/18/2023 10:07 PDT
SHASTA County Emergency Services Facility	CALIFORNIA DEPARTMENT OF FORESTRY	Tier 3	09/18/2023 10:07 PDT
SHASTA County Emergency Services Facility	COUNTY OF SHASTA	Tier 2	09/18/2023 10:07 PDT
SHASTA County Emergency Services Facility	SHINGLETOWN VOLUNTEER FIRE DEPARTMENT	Tier 3	09/18/2023 10:07 PDT
SHASTA County Government - Jail Facility	CALIFORNIA DEPARTMENT OF CORRECTIONS	Tier 2	09/18/2023 10:07 PDT
SHASTA County Major Transportation Facility	CALIFORNIA HIGHWAY PATROL	Tier 2	09/18/2023 10:07 PDT
SHASTA County Other Facility	CALIFORNIA DEPARTMENT OF FORESTRY	Tier 3	09/18/2023 10:07 PDT
SHASTA County Other Facility	FRONTIER COMMUNICATIONS CORPORATION DIP	Tier 3	09/18/2023 10:07 PDT
SHASTA County Water and Waste Water Facility	U S BUREAU OF RECLAMATION	Tier 3	09/18/2023 10:07 PDT
Shasta County	Chief	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Shasta County	Emergency Command Center	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:12 PDT
Shasta County	Fire Chief	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Shasta County	General	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Shasta County	Lieutenant	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Shasta County	RDMHS	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Shasta County	Sergeant	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Shasta County	Sheriff-Coroner	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Shasta County	Supervisor	Tier 2, Tier 3, Zone 1, HFRA	09/18/2023 10:11 PDT
Shasta County Anderson	Chief Treatment Plant Operator	Tier 2, HFRA	09/18/2023 10:11 PDT
Shasta County Anderson	City Manager	Tier 2, HFRA	09/18/2023 10:11 PDT

Organization/Jurisdiction	Title	HFTD Tier	Date/Time Contacted
Shasta County Anderson	Deputy Public Works Director	Tier 2, HFRA	09/18/2023 10:11 PDT
Shasta County Anderson	Fire Chief	Tier 2, HFRA	09/18/2023 10:11 PDT
Shasta County Anderson	Police Chief	Tier 2, HFRA	09/18/2023 10:11 PDT
Shasta County Anderson	Public Works Superintendent	Tier 2, HFRA	09/18/2023 10:11 PDT
Shasta County Tribal	Tribal Chairwoman	Tier 2, HFRA *	09/18/2023 10:11 PDT
Shasta County Tribal	Administrative Assistant	Tier 2, HFRA *	09/18/2023 10:11 PDT
Shasta County Tribal	Chairman	Tier 2, HFRA *	09/18/2023 10:11 PDT
Shasta County Tribal	Interim Tribal Administrator	Tier 2, HFRA *	09/18/2023 10:12 PDT
Shasta County Tribal	Maintenance Supervisor	Tier 2, HFRA *	09/18/2023 10:11 PDT
Shasta County Tribal	OES Director	Tier 2, HFRA *	09/18/2023 08:40 PDT
Shasta County Tribal	Senior Director	Tier 2, HFRA *	09/18/2023 10:11 PDT
Shasta County Tribal	Tribal Leader	Tier 2, HFRA *	09/18/2023 10:11 PDT
TEHAMA County Communication Facility	AT&T MOBILITY	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Communication Facility	AT&T MOBILITY LLC	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Communication Facility	AT&T SERVICES INC	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Communication Facility	DUCOR TELEPHONE CO	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Communication Facility	DUCOR TELEPHONE CO	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Communication Facility	FRONTIER COMMUNICATIONS CORPORATION DIP	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Communication Facility	GTE MOBILNET OF CALIFORNIA LP	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Communication Facility	T-MOBILE WEST LLC	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Emergency Services Facility	CALIFORNIA DEPARTMENT OF FORESTRY	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Emergency Services Facility	COUNTY OF TEHAMA	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Government - Jail Facility	CALIFORNIA DEPARTMENT OF CORRECTIONS	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Other Facility	BURNS, SHERRI	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Other Facility	CALIFORNIA DEPARTMENT OF FORESTRY	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Other Facility	CALIFORNIA DEPT OF FORESTRY - CALFIRE	Tier 2	09/18/2023 10:07 PDT
TEHAMA County Other Facility	DUCOR TELEPHONE CO	Tier 2	09/18/2023 10:07 PDT
Tehama County	Chief Administrator	Tier 2, HFRA	09/18/2023 10:11 PDT
Tehama County	Communications Supervisor	Tier 2, HFRA	09/18/2023 10:11 PDT
Tehama County	County Clerk / Recorder	Tier 2, HFRA	09/18/2023 10:11 PDT
Tehama County	OES Deputy Director	Tier 2, HFRA	09/18/2023 10:11 PDT
Tehama County	Sheriff	Tier 2, HFRA	09/18/2023 10:11 PDT
Tehama County Corning	City Clerk	N/A **	09/18/2023 10:11 PDT

Organization/Jurisdiction	Title	HFTD Tier	Date/Time Contacted
Tehama County Corning	City Manager	N/A **	09/18/2023 10:11 PDT
Tehama County Corning	Police Chief	N/A **	09/18/2023 10:11 PDT
Tehama County Red Bluff	Chief of Police	Tier 2, HFRA	09/18/2023 10:11 PDT
Tehama County Red Bluff	City Manager	Tier 2, HFRA	09/18/2023 10:11 PDT
YOLO County Communication Facility	AT&T MOBILITY LLC	Tier 2	09/18/2023 10:07 PDT
YOLO County Communication Facility	GTE MOBILNET OF CALIFORNIA LP	Tier 2	09/18/2023 10:07 PDT
YOLO County Communication Facility	SPRINT CORPORATION	Tier 2	09/18/2023 10:07 PDT
Yolo County CCA	General	N/A **	09/18/2023 10:11 PDT

* Impacted federally and non-federally recognized Tribes' HFRA/HFTD classifications reflect county designations.

** Some Public Safety Partners are outside of HFTD/HFRA boundaries but were also de-energized for safety. We mark these as N/A in Appendix E as they do not have classifications assigned.

PACIFIC GAS AND ELECTRIC COMPANY

APPENDIX F

ALL-CLEAR ZONE MAP

Appendix F: ALL-CLEAR ZONE MAP

Figure F-1. All-Clear Zone Map

PACIFIC GAS AND ELECTRIC COMPANY

APPENDIX G

COMMUNITY RESOURCE CENTER LOCATIONS

Appendix G: LIST OF PG&E COMMUNITY RESOURCE CENTERS

Table G-1. Community Resource Centers Provided by PG&E

The table below provides details of the eight CRCs that PG&E mobilized during the September 20-21, 2023 PSPS event, including specific locations, dates and times opened and closed, total attendance for each location, and amenities provided.

#	County	Site Name	Address	Operating Hours (PDT)		Total Visitors	Indoor / Outdoor	Amenities Provided
				Day 1 9/20	Day 2 9/21			
1	Butte	Concow Elementary School	11679 Nelson Bar Rd	N/A	0800-1300	0	Outdoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
2	Colusa	Stonyford Community Hall	229 Market St	1700-2000	0800-1300	58	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
3	Glenn	Elk Creek Junior Senior High School	3430 Co Rd 309	1700-2000	0800-1300	43	Outdoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
4	Lake	Live Oaks Senior Center	12502 Foothill Blvd	1700-2000	0800-1300	81	Outdoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
5	Shasta	Hill Country Health and Wellness Center	29632 CA-299	1700-2000	0800-1300	82	Outdoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
6	Tehama	Rancho Tehama Association	17605 Park Terrace Road	1700-2000	0800-1730	70	Outdoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
7	Tehama	Flournoy Elementary School	15850 Paskenta Rd	1700-2000	0800-1730	61	Outdoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
8	Tehama	Lassen Mineral Lodge	18961 Husky Way	1700-2000	0800-1300	351	Outdoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging

VERIFICATION

I, undersigned, say:

I am an officer of PACIFIC GAS AND ELECTRIC COMPANY, a corporation, and am authorized to make this verification for that reason.

I have read the foregoing "PG&E Public Safety Power Shutoff Report to the CPUC" for the September 20-21, 2023, and I am informed and believe the matters stated therein to be true.

I declare under penalty of perjury that the foregoing is true and correct.

Executed at Oakland, California this 5th day of October 2023.

MARK QUINLAN
SENIOR VICE PRESIDENT
WILDFIRE & EMERGENCY OPERATIONS