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July 19, 2024

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 potential de-energization on July 5, 2024. 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. Martin

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 Potential Public Safety Power Shutoff (PSPS) Report to the CPUC July 5 – 6, 2024 De-energization

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PG&E Public Safety Power Shutoff (PSPS) Report to the CPUC Potential July 5 – 6, 2024 De-energization

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

Response:

High winds can cause tree branches and debris to contact energized electric lines, 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 Public Safety Power Shutoff (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 June 29, 2024, while activated for the July 2 - 3, 2024 PSPS, PG&E's Meteorology Team identified potential fire weather in forecast models and notified the acting Emergency Operations Center (EOC) Commander. On July 2, we drafted the first version of PSPS scope and began notifying Public Safety Partners. On July 4, we further refined the PSPS scope based on updated meteorological forecasts, notified Public Safety Partners and customers in the potentially impacted areas, readied the grid, and prepared Community Resource Centers (CRCs) and other customer support resources.

PG&E opened three CRCs within the impacted counties which hosted 60 visits on the day of July 5, 2024. Additionally, we partnered with local organizations to provide more than seven hotel stays and offered food support for more than 130 customers.

We closely monitored weather conditions across ten Time Places (TPs), as shown in Figure 1 below, but ultimately PG&E decided not to move forward with de-energizing customers, due to favorable weather conditions.

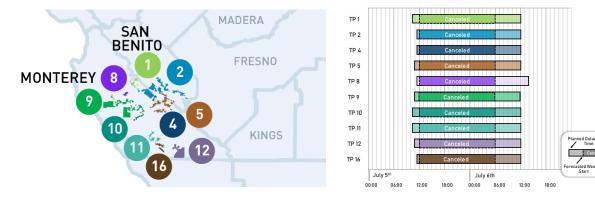


Figure 1: PSPS Timeline

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 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 number of customers, Medical Baseline (MBL) program customers, counties and tribes notified and cancelled. Since PG&E did not de-energize customers, de-energization and damage/hazard counts are not applicable.

Total Customers ¹			MBL Customers	Counties	Tribes	Circuits			Domogo /	Critical
Notified	De- energized	Cancelled	De- energized	De- energized	De- energized	De-energized Circuits in Any Circuits		Distribution	Count	Facilities and
6,441	0	6,441	0	0	0	0	19	0	0	0

Table 1: Customers Notified and De-energized

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

Response:

PG&E did not de-energize customers, therefore, Section 1.3 is not applicable.

¹ The "Total Number of Customers," based on SPIDs, does not include streetlights.

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:

No customers were de-energized between July 5 - 6, 2024. See Appendix A for a list of factors that were considered in the decision to not de-energize each of the circuits in scope for the potential July 5 - 6, 2024 PSPS.

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 criteria and threshold evaluation process that was ultimately used in the decision to not de-energize customers during the potential July 5 - 6, 2024 PSPS.

PSPS Preparation and Scoping Process

At a high-level, Figure 2 shows the process used to prepare for a potential PSPS. PG&E utilized and referenced the following protocols and tools during the potential July 5-6, 2024 PSPS to analyze the latest forecasted weather parameters versus actual weather. Appendix A includes anticipated parameters based on the latest forecast used to develop the planned de-energization scope versus actual weather parameters for each circuit.



Figure 2: PG&E's High-level PSPS Process Steps

PG&E considers executing a potential 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 models, high-resolution internal and external weather forecasting models and data from federal agencies that include the following:

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

External forecast information from the National Weather Service (NWS) (e.g., Red Flag Warnings), the North and South Ops Predictive Services branches of the Northern California and Southern California Geographic Coordination Centers (North GACC) (e.g., High Risk Wind Trigger), 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.

Tools and Technology

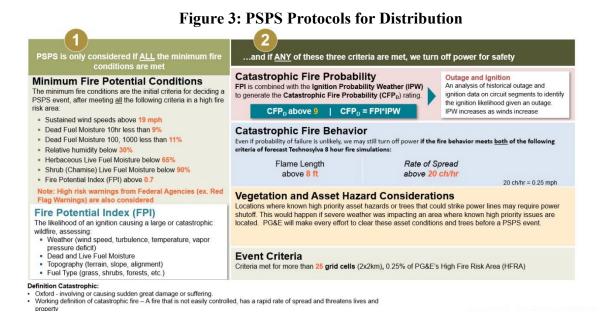
PG&E partners with Technosylva, an external expert in the wildfire modeling field to test and deploy cloud-based wildfire spread model capabilities. This helps us better understand where we may need to turn off power for safety.

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. We evaluate within a small geographic area (four square kilometers) and if any of the measures are forecasted to be met, we scope the circuit segments within that region for deenergization. There is no single criterion or threshold that will require turning off power to a distribution circuit. For event-specific thresholds, see Appendix A. Our process is outlined in Figure 3 below.



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 is evaluated if the following mFPC noted in Step 1 of Figure 3 above are true in portions of the territory.

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 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.

Areas outside the HFRA may need to be brought into PSPS scope in extenuating circumstances, this is decided by the Meteorologist-in-charge serving as the Subject Matter Expert. Some examples may be due to extreme winds that may allow fire in low fuel areas to propagate, when the weather leading to the PSPS event is highly atypical and therefore fires outside of the HFRA could spread to the HFRA, or if the meteorologist has a reason to believe something has changed since the HFRA was last updated (e.g. a once irrigated and maintained agriculture plot is left unirrigated and unmaintained).

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. We evaluate all of the factors below together, rather than isolating any specific

factor to assess fire risk against the potential harms of de-energization. For event-specific factors, see Appendix A.

- <u>Catastrophic Fire Probability</u>: 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 Fire Potential Index Model (FPI) and the Ignition Probability Weather Model (IPW). 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.
- <u>Tree Considerations</u>: Our PSPS protocols utilize a machine learning model to integrate the potential for trees or branches 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. See Figure 4 below explaining IPW modeling and Figure 5 below explaining PG&E's IPW combined with FPI to form PG&E's PSPS protocol, Catastrophic Fire Probability Distribution. 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.

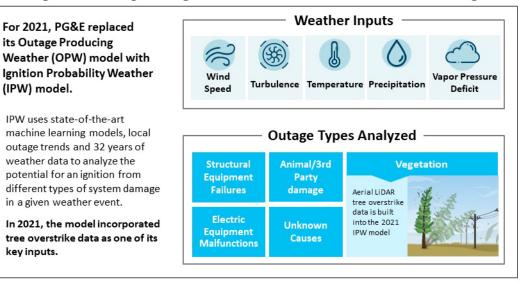


Figure 4: Incorporating Tree Strike Potential into PSPS Modeling

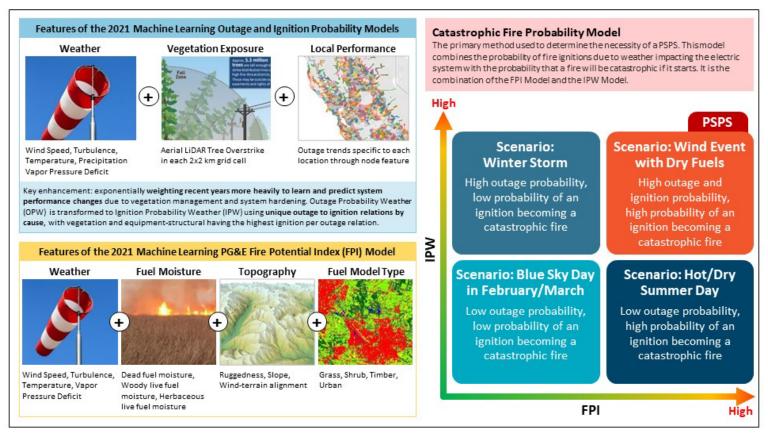


Figure 5: PG&E IPW Model and CFP_D Framework

- <u>Catastrophic Fire Behavior (CFB)</u>: We also consider environmental conditions of significant wildfires, like dead and dying trees or drought conditions when determining whether 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.
 - <u>Fireline Intensity</u>: The U.S. Forest Service Rocky Mountain Research Station did a study of fire line 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 fire line (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 fire line intensity to evaluate the potential need to turn off power.
- <u>Vegetation and Electric Asset Criteria Considerations</u>: 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.

PSPS Protocols for Transmission

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 factor or threshold that will require turning off power to a transmission line.

Step 1: Minimum Fire Potential Conditions

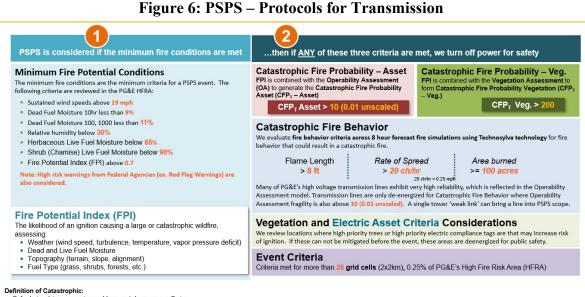
When determining whether to turn off power for safety on transmission lines, we review the same minimum fire potential conditions as with distribution circuits. If these conditions are met, we will then look at the below criteria to determine whether a transmission line must be turned off.

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.

- <u>Catastrophic Fire Probability Asset (CFP_T Asset)</u>: 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.
- <u>Catastrophic Fire Probability Vegetation (CFP_T Veg)</u>: 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.
- <u>CFB</u>: 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.
- <u>Vegetation and Electric Asset Criteria Considerations</u>: We review locations from recent inspections where high-priority trees or electric compliance issues are present that may increase the risk of ignition.

Figure 6 provides a quantitative summary of our PSPS Protocols for Transmission.



Oxford - involving or causing sudden great damage or suffering.
 Working definition of catastrophic fire – A fire that is not easily controlled, has a rapid rate of spread and threatens lives and property

Step 3: Determining the Outage Area

Transmission lines meeting the criteria above 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.

After Determining the Outage Area for Distribution and Transmission

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 is 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 and use external tools and analysis to determine whether to initiate PSPS de-energization.

Decision-Making and Analysis to Validate if PSPS is Necessary

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.

During a PSPS, 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 whether to execute a PSPS.

The following sources and tools are considered before initiating a PSPS 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
- Field observer information
- 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 deenergization, 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 to begin preparations. 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 meteorologists then incorporate 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.

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:

The quantitative factors that were used in the decision-making process to not de-energize customers for safety is provided in Appendix A. Below, we outline a detailed description of the qualitative factors that were provided by our Meteorologists when determining whether or not to de-energize customers.

PG&E Meteorology Team Review

On Tuesday, July 2, 2024, some weather forecast models began to show the potential for enhanced ocean winds in the Salinas Valley, developing on Friday, July 5, 2024. PG&E's Meteorology team, Emergency Preparedness and Response team, and EOC Commander met to discuss the potential PSPS. Based on the emerging risk of a PSPS, PG&E entered EOC readiness posture on June 29, at 13:00 PDT and activated the EOC on June 29, at 18:00 PDT.

In the days leading up to the potential PSPS, PG&E's Meteorology team continued to monitor and adjust scope to account for the changing forecast models and agency forecasts. Meteorology submitted a new scope on July 4, 2024, that included some reductions from original scope based on decreasing model forecasts.

The weather was monitored closely throughout the day on July 5, 2024, however conditions did not reach levels that warranted de-energization, either because winds were not strong enough, relative humidity wasn't dry enough, or both. As a result, the PSPS was cancelled at 19:02 PDT.

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 a potential PSPS. Longer range weather forecast model data are used to determine the location and timing of a potential PSPS. Typically, these weather forecasts are less certain the farther the observed date. 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 further out in time, which resembles an expanding cone. Thus, there is an inherent tradeoff between the further out the forecasts are for a PSPS 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 a potential PSPS, 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 potential PSPS. This dictates changes in event scope and decisions to de-energize or cancel areas.

Section 2.4 - An explanation of how the utility determined that the benefit of deenergization outweighed potential public safety risks, and analysis of the risks of deenergization 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 did not de-energize customers, therefore, Section 2.4 is not applicable.

Section 2.5 - Explanation of alternatives considered and evaluation of each alternative.

(D.19-05-042 Appendix A, page A22.)

Response:

PG&E did not de-energize customers, therefore, Section 2.5 is not applicable.

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:

PG&E did not de-energize customers, therefore, Section 3.1 is not applicable.

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:

PG&E did not de-energize customers, therefore, Section 3.2 is not applicable.

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-High Fire Threat District
- Total customers de-energized
- Residential customers de-energized
- Commercial/Industrial Customers de-energized
- Medical Baseline (MBL) customers de-energized
- AFN other than MBL customers de-energized
- Other Customers
- Distribution or transmission classification

Response:

PG&E did not de-energize customers, therefore, Section 3.3 is not applicable.

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:

PG&E did not de-energize customers, therefore, Section 4.1 is not applicable.

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 High Fire-Threat District (HFTD) or non-HFTD, Type of damage/hazard of damage. (*SED Additional Information.*)

Response:

PG&E did not de-energize customers, therefore, Section 4.2 is not applicable.

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:

PG&E did not de-energize customers, therefore, Section 4.3 is not applicable.

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

Additional Information.)

Response:

PG&E did not de-energize customers, therefore, Section 4.4 is not applicable.

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 EOC activation, PG&E made significant efforts to notify Tribal/Local Governments, Public Safety Partners, Community Based Organizations (CBOs) (including paratransit agencies) and impacted customers in accordance with the CPUC PSPS Phase 1 Guidelines.²

PG&E followed the Notification Plan discussed in our <u>2024 Pre-Season Report</u>, <u>Appendix C</u>: <u>Notification Plan</u>, pp. 70-79. In addition to the processes noted in the plan, PG&E completed the following:

- Worked closely with telecommunications service providers leading up to potential deenergization to effectively coordinate, share information, and manage the potential 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 PSPS information and answered specific, individual questions. These partners could reach the CIL 24/7 during EOC activation by e-mail or phone. In addition, PG&E proactively reached out to eight telecommunications service providers³ via email or phone as weather changes or new information regarding the PSPS became available.
- In accordance with the Phase 3 PSPS Guidelines⁴, PG&E provided proactive 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 a PSPS. All notifications to paratransit agencies included a link to the PSPS emergency website PSPS updates page, pge.com/pspsupdates and a section called "Additional Resources" with a link to a map showing areas potentially affected by the shutoff. This site also directs users to other webpages, including the CRC page, which provides information about CRC's locations, hours, and services available (see Section 9). The PSPS emergency website PSPS updates page also features two prominent buttons at the top of the page, providing customers the ability 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.
- Every PSPS notification directs recipients to <u>pge.com/pspsupdates</u>, which includes a link to CRC information. This website prominently highlights the dedicated CRC page, which includes CRC locations, hours of operation, services available at each site,

² D.19-05-042.

³ American Tower Corporation, AT&T, CA CLEC LLC, Charter Communication Holding Company LLC, Crown Castle International, Frontier Communications Corporation DIP, T-Mobile USA Inc., Verizon Wireless

⁴ D.21-06-034.

information regarding how to find local CRCs and via the PSPS outage map and where to access electricity during the hours when CRCs are closed.

PG&E considers multi-family building account holders/building managers in the Access and Functional Needs (AFN) community as part of our All Customers (including MBL program customers and Self-Identified Vulnerable [SIV]⁵ 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 <u>PG&E's AFN</u> <u>Quarterly Progress Report</u> of activities between January 1, 2024, and March 31, 2024.

Table 2 provides a description of the notifications PG&E sent to Tribal/Local Governments Public Safety Partners, and all customers in accordance with the minimum timelines set forth by the CPUC PSPS Phase 1 Guidelines.⁶

Type of Notification	Recipients	Description
PRIORITY NOTIFICATION: 48-72 hours in advance of anticipated de- energization	Public Safety Partners and CBOs	 Following PG&E's activation of its EOC, the following notifications were completed: PG&E submitted a PSPS Notification Form to Cal OES and sent an e-mail to the CPUC notifying them that PG&E's EOC had been activated and that PG&E was monitoring for potential PSPS. PG&E sent notifications to other Public Safety Partners via call, text and e-mail; these notifications included the following information: Estimated window of the de-energization time When weather is anticipated to pass. Estimated Time of Restoration (ETOR). Links to the PSPS Portal where event-specific maps and information are available. Local PG&E representatives called potentially impacted County OES and select Tribes to inform them that PG&E was monitoring an increased potential of PSPS.
WATCH NOTIFICATION: 24-48 hours in advance of anticipated de- energization	Public Safety Partners, CBOs, and All Customers (including MBL program	 During this time, the following was completed: PG&E submitted a PSPS Notification Form to Cal OES. PG&E sent notifications to other Public Safety Partners, and all customers via call, text message and

Table 2: Notification Descriptions

⁵ Self-Identified Vulnerable (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 MBL 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.

Type of Notification	Recipients	Description
	customers and	e-mail; these notifications included the
	SIV customers)	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.
		• For Customers only: Potentially impacted
		addresses, links to PSPS Updates webpage with
		CRC information, and resources for AFN
		customers, including but not limited to
		information on the MBL program, language
		support, and the Portable Battery Program.
		• PG&E sent notifications 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 sent 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 PSPS 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. Public Safety
		Partner notifications were provided in English.
WARNING	Public Safety	During this time, the following was completed:
NOTIFICATION:	Partners, CBOs,	PG&E submitted a PSPS Notification Form to Cal
1-4 hours in	and All	OES and sent an e-mail to the CPUC notifying them
advance of	Customers	that PG&E has made the decision not to de-energize.
anticipated de-	(including MBL	• PG&E sent notifications to other Public Safety
energization, if	program	Partners, and customers; these notifications included
possible	customers, SIV	the same key PSPS timing information and resource
	customers)	links as the "Watch Notification."
		• PG&E sent notifications to MBL program customers,
		including tenants of master metered accounts, and SIV
		customers every hour until the customer confirmed
		receipt of the notification.
		Customer notifications were provided in English, with information on how to receive PSPS information in
		translated languages. Customers with their language
		preference selected in their PG&E accounts received in-
L		preference selected in them i Odel accounts received in-

Type of Notification	Recipients	Description
		language (translated) notifications. Public Safety Partner notifications were provided in English.
CANCELLATION	Public Safety	When it was determined that de-energization was not
NOTIFICATION:	Partners, CBOs,	needed for safety, the following was completed:
Within 2-hours of	All Customers	• PG&E submitted a PSPS Notification Form to Cal
decision to cancel	(including MBL	OES and sent an e-mail to the CPUC.
	program customers, SIV customers)	 PG&E sent notifications to other Public Safety Partners, customers and MBL program customers, including tenants of master metered accounts, and SIV customers; these notifications included confirmation that they would no longer be de-energized, along with PG&E information resource links. Customer notifications were provided in English, with information on how to receive PSPS 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.

In addition to providing notifications provided to Tribal/Local Governments, Public Safety Partners, CBOs (including paratransit agencies) and impacted customers, PG&E alerted the public in advance of de-energization, via media and PG&E's website.

Media Engagement

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

- Issued five local news releases containing information and updated details about the PSPS and wind events.
- No news releases were conducted with California news outlets and reporters. However, the Integrated Multicultural Communications team reached out to 98 multi-cultural news outlets.
- Coordinated directly with 32 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 16 languages, including languages spoken by communities that occupy significant roles in California's agricultural economy (e.g., Mixteco).
- Participated in one in-language media interview (Spanish) to provide situational updates and preparedness messages for the PSPS.

PG&E Website

During this PSPS, PG&E placed an Informational Alert on the <u>pge.com</u> home page that drove traffic to PG&E's PSPS site, and implemented tools to drive traffic to and maintain stability of the PSPS emergency website/PSPS updates page<u>pgealerts.alerts.pge.com/updates</u>. The

emergency website saw a total of 154,846 visits and 346,132 page views from the time the potential PSPS began to the time it was cancelled. Visits to the emergency website peaked on Friday, July 5, 2024, with approximately 78,400 visits and 180,200 page views.

We remain committed to the continuous improvement of our websites to better meet the diverse needs of our customers. As we launch new features and functionality to <u>pge.com</u> and to <u>pgealerts.alerts.pge.com/</u>, we ensure compliance with updated 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.

The following content was available on PG&E's PSPS updates pages or on links from those pages:⁷

- Direct, simplified PSPS information available in 16 languages, with clear updates about the planned scope of the PSPS, including location (e.g., list of impacted Tribes, cities, and counties), duration of the PSPS, including estimated times of deenergization and re-energization at the individual address level, and overall, for the PSPS.
- PDFs of potentially impacted areas, shape and KMZ files for Public Safety Partners to use with their own mapping applications, and city/county lists with shutoff and restoration summaries.
- CRC details made available as soon as sites were confirmed, including locations listed by county, resources available at each center, type of CRC (e.g., indoor, outdoor), COVID-19 policies, and operating hours. CRC locations were also indicated on the PSPS impact map.
- Links to additional resources including 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.
- Webpage, available in 15 non-English languages, that describes our language support services for customers during a PSPS at <u>pge.com/pspslanguagehelp.</u>
- Survey to provide input about the website and PSPS communications.
- Address look-up tool that the public can use to identify specific potential PSPS impacts.
- Address-level alerts, available in 15 non-English languages, that allow non-PG&Eaccount holders to receive notifications via a phone call or SMS text for any address where they do not receive a bill (e.g., workplace, child's school, renters, mobile home parks, etc.). This is also a valuable communication tool for renters and tenants of master metered accounts, such as mobile home parks. See pgealerts.alerts.pge.com/outages/psps-address-alert and Figure 7 below.

⁷ Beginning around 7:20 PM on July 5, 2024, the webpage pge.com/psps was unavailable. This webpage includes general PSPS information. Event-specific information was updated and current during the EOC activation.

Figure 7: PG&E PSPS Address Alert Sign-Up Webpage Get Public Safety Power Shutoff (PSPS) alerts Get a phone call or SMS text in the event a power shutoff is needed to prevent a wildfire. For my account ~ For another address (e.g., your work, your child's school, a relative's home) ~ Service Address Report in or call 1:800-743-5002. Can't find your address-? Report it or call 1:800-743-5002. Q Can't find your address alerts, call 1:800-896-9654 using the phone number you enrolled. To unsubscribe from sMS text address alerts, text UNENROLL to 97633.

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 3 describes notifications and the time the notification was sent in accordance with the minimum timelines set forth by the CPUC PSPS Phase 1 Guidelines,⁸ to Tribal/Local Governments, Public Safety Partners, CBOs and all customers.

Note that PG&E did not de-energize customers, therefore initiation and restoration notification information is not applicable.

Event Order	Minimum Timeline ⁹	Notification Sent to	Approximate Time Sent (PDT)	Message	Notes	Who Made the Notification
	72-48 hours	Tribal/Local Governments and CCAs*	7/3/2024 08:36 AM	Priority		PG&E
Dre De		Public Safety Partners**	7/3/2024 8:17 AM	Priority		PG&E
Pre-De- energization (Prior)	48-24 hours	Tribal/Local Governments and CCAs*	7/3/2024 06:24 PM	Watch		PG&E
		Public Safety Partners**	7/3/2024 5:50 PM	Watch		PG&E
		All Customers***	7/3/2024 5:49 PM	Watch		PG&E

Table 3: Customer Notifica	tion Timeline Summary
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⁸ D.19-05-042.

	Event Order	Minimum Timeline ⁹	Notification Sent to	Approximate Time Sent (PDT)	Message	Notes	Who Made the Notification
		12-24	Tribal/Local Governments and CCAs*	7/4/2024 1:10 PM	Watch		PG&E
		hours ¹⁰	Public Safety Partners**	7/4/2024 1:37 PM	Watch		PG&E
			All Customers***	7/4/2024 1:35 PM	Watch		PG&E
		4-1	Tribal/Local Governments and CCAs*	7/5/2024 8:16 AM	Warning		PG&E
		4-1 hours	Public Safety Partners**	7/5/2024 08:16 AM	Warning		PG&E
			All Customers***	7/5/2024 8:23 AM	Warning		PG&E
C		Within 2- hours of decision to cancel	Tribal/Local Governments and CCAs*	7/4/2024 12:45 PM	Cancel	Only Tribal/Local Governments and CCAs removed from scope received the cancel notification	PG&E
	Cancellation		Tribal/Local Governments and CCAs*	7/5/2024 8:40 PM	Cancel	Only Tribal/Local Governments and CCAs removed from scope received the cancel notification	PG&E
			Public Safety Partners**	7/4/2024 12:47 PM	Cancel	Only Public Safety Partners removed from scope received the cancel notification. The decision	PG&E

¹⁰ 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 ⁹	Notification Sent to	Approximate Time Sent (PDT)	Message	Notes	Who Made the Notification
					to descope these customers was 7/4/2024 at 11:40 AM.	
		All Customers***	7/4/2024 12:47 PM	Cancel	Only Customers removed from scope received the cancel notification. The decision to descope these customers was made 7/4/2024 at 11:40 AM.	PG&E
		Public Safety Partners**	7/5/2024 7:28 PM	Cancel	Only Public Safety Partners removed from scope received the cancel notification. The decision to descope these customers was made 7/5/2024 at 7:02 PM.	PG&E
	All Customers*	All Customers***	7/5/2024 7:28 PM	Cancel	Only Customers removed from scope received the cancel notification. The decision to descope these	PG&E

Event Order	Minimum Timeline ⁹	Notification Sent to	Approximate Time Sent (PDT)	Message	Notes	Who Made the Notification
					customers	
					was made	
					7/5/2024 at	
					7:02 PM.	

*A subset of Public Safety Partners, including Tribes, cities, counties, and CBOs.

**A subset of Public Safety Partners, including water, wastewater, and communication service providers.

***All Customers, including MBL program customers and SIV customers.

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 access and functional needs 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 are 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 4 includes metrics associated with PG&E notifications provided to customers where positive or affirmative notifications were attempted. 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.

Designation	Total Number of customers ¹²		Timing of Attempts (PDT) ¹⁴	Who made the Notification Attempt	Successful Positive Notification ¹⁵
	233	233 Watch Notifications	07/03/ 2024 6:05 PM	PG&E	204 Watch Notifications

Table 4: Notifications to Customers where Positive or Affirmative Notification was Attempted¹¹

¹¹ 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.

¹² 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.

¹³ Count of Warning Notifications includes doorbell rings and Live Agent phone calls.

¹⁴ Initial start time notification was sent.

¹⁵ 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.

Designation	Total Number of customers ¹²	Notification Attempts Made ¹³	Timing of Attempts (PDT) ¹⁴	Who made the Notification Attempt	Successful Positive Notification ¹⁵
MBL ¹⁶		60 Warning Notifications	07/04/ 2024 9:29AM		24 Warning Notifications
MDL		293 Overall Notifications	07/03/ 2024 6:05 PM		228 Overall Notifications
	1	1 Watch Notifications	07/03/2024 6:21 PM		0 Watch Notifications
MBL behind a master meter ¹⁷		1 Warning Notifications	07/05/2024 8:55AM	PG&E	0 Warning Notifications
		2 Overall Notifications	07/03/2024 6:21 PM		0 Overall Notifications
	87	86 Watch Notifications	07/03/2024 5:52 PM		78 Watch Notifications
SIV		38 Warning Notifications	07/04/2024 10:04 AM	PG&E	29 Warning Notifications
		124 Overall Notifications	07/03/2024 5:52 PM		107 Overall Notifications

For this potential PSPS, MBL program customers and SIV customers received automated calls, texts, and emails at the same intervals as general customer notifications. PG&E provided unique PSPS Watch and PSPS Warning Notifications to MBL program customers¹⁸ 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 provide confirmation to PG&E following the check-in, the PG&E representative left a door hanger providing additional PSPS notification and information to indicate PG&E had visited. In each case, the additional door hanger notification was considered successful¹⁹.

¹⁶ Residential tenants of master-metered customers can also qualify for MBL quantities. The MBL category for the purposes of Table 4 does not include MBL program customers who are master meter tenants.

¹⁷ 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.

¹⁸ Including MBL program customers who are master-metered tenants (e.g., renters or tenants in mobile home park).

¹⁹ 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 also made Live Agent phone calls, as needed, in parallel with the automated notifications and doorbell rings, as an additional attempt to reach the customer prior to de-energization.

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 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.

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 " $PGE_2024_PSPS_Notification Scripts_20240705.pdf$ "²⁰ for a copy of the notification templates and methods of notifications that PG&E sent during the potential July 5 – 6, 2024 PSPS. Additional information on the timing of notifications sent during this potential PSPS can be found in Table 3.

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 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 PSPS information in translated languages. For more information on notifications provided to customers in the customer-set language preferences, see Table 9.

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 1²¹, 2019 PSPS OII²², and additional notification guidelines in Phase 3,²³ 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

 $^{^{20}}$ ASL notifications were not provided during the July 5 – 6, 2024 PSPS as this enhancement was not scheduled to be activated prior to the July 5 – 6, 2024 PSPS.

²¹ D.19-05-042.

²² D.21-06-014.

²³ D.21-06-034.

customers are removed from scope due to rapidly changing forecasted or observed weather conditions.

Note that PG&E did not de-energize customers, therefore, cancellation notifications are the only applicable notice type to be reported in Table 5.

I able 5: Notification Failure Causes			
Notifications	Notification Failure	Number of Entities or	Explanation of
Sent to	Description	Customer Account	Failure
Public Safety Partners excluding Critical Facilities and Infrastructure ²⁴	Entities who did not receive 48-to 72-hour priority notification	None de-energized.	No failures.
	Entities who did not receive 1–4-hour imminent notification	None de-energized.	No failures.
	Entities who did not receive any notifications before de- energization	None de-energized.	No failures.
	Entities who were not notified immediately before re-energization	None de-energized.	No failures.
	Entities who did not receive cancellation notification within two hours of the decision to cancel	0	No failures.
Critical Facilities and Infrastructure ²⁵	Facilities who did not receive 48-to 72-hour priority notification	None de-energized.	No failures.
	Facilities who did not receive 1–4-hour imminent notification	None de-energized.	No failures.
	Facilities who did not receive any notifications before de- energization	None de-energized.	No failures.
	Facilities who were not notified immediately before de-energization initiation	None de-energized.	No failures.
	Facilities who were not notified immediately before re-energization	None de-energized.	No failures.
	Facilities who were not notified when re-energization is complete	None de-energized.	No failures.

Table 5: Notification Failure Causes

 ²⁴ Only includes Tribes, cities, counties, and CCAs.
 ²⁵ Includes Public Safety Partners who are critical facilities and infrastructure customers.

Notifications Sent to	Notification Failure Description	Number of Entities or Customer Account	Explanation of Failure
	Facilities who did not receive cancellation notification within two hours of the decision to cancel	0	No failures.
All other affected customers	Customers who did not receive 24–48-hour priority notifications	None de-energized.	No failures.
	Customers who did not receive 1–4-hour imminent notifications	None de-energized.	No failures.
	Customers who did not receive any notifications before de-energization	None de-energized.	No failures.
	Customers who were not notified at de-energization initiation	None de-energized.	No failures.
	Customers who were not notified immediately before re-energization	None de-energized.	No failures.
	Customers who were not notified when re-energization is complete	None de-energized.	No failures.
	Customers who did not receive cancellation notification within two hours of the decision to cancel	0	No failures.

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

Response:

PG&E had a 100% success rate for cancellation notifications for the potential July 5 - 6, 2024 PSPS, as listed in Table 5, therefore no corrective actions were identified.

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:

PG&E has not identified any false communications for the potential July 5-6, 2024 deenergization as PSPS was cancelled.

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 deenergization, 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 General Order 95, Rule 21.2-D. (Resolution ESRB-8, page 5, SED Additional Information.)

Response:

Please see Appendix B 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, and whether the areas affected by the de-energization are classified as Zone 1, Tier 2, or Tier 3.

As stated in our <u>2023 Wildfire Safety Power Outage Decision Making Guide</u>, we use a HFRA classification which PG&E utilizes in addition to HFTD to determine PSPS scope. In Appendix B, we begin by identifying HFTD area assigned to Public Safety Partners. Any area outside of HFTD is reclassified 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 in the potentially impacted scope 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 Emergency Operations Center 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 the CPUC via email to virtually embed in the EOC for the duration of the activation on June 29, 2024 at 18:59 PDT.

PG&E also provides communication service providers a dedicated PG&E contact in the EOC known as the CIL, who shares PSPS updates and answers specific questions. They can reach the CIL 24/7 during a PSPS by e-mail or phone at PG&E's Business Customer Service Center.

As a part of our PSPS Pre-Season outreach,²⁶ PG&E provides water infrastructure and communication service providers in PG&E's electrical service area with information on how to request representation at PG&E EOC's. Alternatively, some partners may also request PG&E representation at their jurisdiction's activated Operations Emergency Center (OEC).²⁷

²⁶ See <u>2024 PSPS Pre-Season Report</u>, pp 70-71.

²⁷ D.19-05-042.

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 a potential PSPS, 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 Table 2. In addition, when PDF maps and GIS data were updated on the PSPS Portal due to scope changes, Portal users were notified via e-mail at the times outlined below in Table 6.

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.

Table 0. 1 51 5 1 oftar Time & Date for Map Sharing		
Time PDF and GIS Maps Shared (PDT)		
07:56		
17:15		
11:56		
07:35		

Table 6: PSPS Portal Time & Date for Map Sharing

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 state (CPUC, Cal OES, CAL FIRE) and local (i.e., counties, cities, Tribes) Public Safety Partners:

• Submitted the PSPS Notification Form to Cal OES twice a day (07:00 PDT and 15:00 PDT), and if there was a significant change to scope, in addition to submitting notification forms 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). See Table 7 below.

Table 7. 1515 Notifications Submitted to Car OES		
Date	Time	
07/03/2024	09:11 ²⁸	
07/03/2024	14:58	
07/04/2024	06:59	
07/04/2024	10:37	
07/04/2024	14:45	
07/04/2024	18:23	

²⁸ Notification was sent to the CPUC from PG&E but were not delivered due to incorrect email address.

07/05/2024	06:48
07/05/2024	15:13
07/05/2024	19:22

• Sent e-mails to the CPUC at least once for each of the five potential PSPS stages listed above. See Table 8 below.

Date	Time	
07/03/2024	08:01 PDT ²⁹	
07/04/2024	12:27 PDT	
07/05/2024	08:35 PDT	
07/05/202	19:29 PDT	

Table 8: PSPS Notifications Submitted to Cal CPUC

- 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 PSPS information and answer questions. A deck with key PSPS information was provided to participants each day.
- Hosted the daily Systemwide Cooperators Call, where all Public Safety Partners in the service area were invited to join for situational awareness.
- Hosted Operational Areas Cooperators Communication Calls to provide situational awareness updates and answer questions.³⁰
- Conducted ongoing coordination with Tribal and local County OES contacts through dedicated Agency Representatives. This includes but is not limited to providing the latest PSPS information, coordinating 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 during EOC activation.
- Sent automated and live call notifications to agency partners before and during EOC activation.
- 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. 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 EOC activation successful but with minor improvements needed. This is based on the number and various types of outreach conducted (listed above) and the success rate of automated agency notifications. PG&E did not receive any feedback from Public Safety Partners through the post-PSPS survey.

²⁹ Notification was sent to the CPUC from PG&E but were not delivered due to incorrect email address.

³⁰ May vary in cadence & type based on County OES.

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,³¹ 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 CRC during the potential PSPS. PG&E provided proactive notifications³² to 134 paratransit agencies for the potential July 5 – 6, 2024 PSPS. All notifications included a link to the PSPS emergency website event updates page, pge.com/pspsupdates and a section called "Additional Resources" with a link to a map showing areas potentially affected by a shutoff. For more information on ADA compliant CRC locations, see Section 9.

Community Engagement

We engaged with over 510 "information-based" CBOs during the EOC activation, 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 the 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 potential PSPS and an overview of the services available to customers. We hosted additional daily coordination calls with the CBO resource partners supporting the potential PSPS 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.

Programs/Support for AFN Customers

PG&E provided a variety of resources to AFN customers before and during this PSPS. These resources include:

• <u>Disability Disaster Access and Resource Program (DDAR)</u>:³³ We continued our collaboration with the California Foundation for Independent Living Centers (CFILC) to Independent Living Center implement the DDAR Program for the potential PSPS. Through DDAR, we have supported AFN customers with the delivery of backup portable

³¹ D.21-06-034.

³² For this potential de-energization, paratransit agencies received the Watch, Warning, and Cancellation Notification. A list of zip codes was provided.

³³ For more information on the types of aid ILCs provided and how the delivery of aid was coordinated among DDAR, ILCs and the customers, refer to PG&E's 2024 AFN Plan.

batteries (since July 2020) to qualifying customers who need power during a PSPS. Through DDAR, PG&E provided the following resources for the July 5 - 6, 2024 PSPS.

- Eight local (ILCs) provided aid to 33 customers who rely on power for medical or independent living needs. PG&E is evaluating intervenor comments regarding how the ILCs aided customers reliant on power and will update the 2024 AFN Plan accordingly.
- 79 batteries were previously distributed in affected counties, and one battery was delivered during the activation to potentially impacted customers. PG&E is evaluating intervenor comments regarding engagement with customers and battery delivery requests through DDAR and will update the 2024 AFN Plan accordingly.
- <u>Portable Battery Program (PBP):</u>³⁴ Our PBP provides free portable battery systems for customers who live in Tiers 2 and 3 High Fire-Threat Districts (HFTDs) and are enrolled in the MBL Program. For this potential PSPS, 20 customers in scope were supported by batteries received through the PBP (delivered in 2020, 2021, 2022, 2023, and year to date 2024). Since July 2020, a total of approximately 23,600 battery units have been delivered through the PBP across the entire PG&E service area.
- <u>Food Bank Partnerships</u>: We continued to fund local food banks to provide food replacement to families during the potential PSPS and three days following service restoration. Additionally, we partnered with three local food banks³⁵ that serve three of the four impacted counties to provide boxes of food replacement for families. We provided fact sheets with details about food bank partnerships at PSPS CRCs.
- <u>Meals on Wheels Partnerships</u>: We continued our partnership with Meals on Wheels to provide additional support and services to customers in need during PSPS outages. For this potential PSPS, we partnered with one Meals on Wheels Organizations³⁶ that would be able to provide services to customers in scope for the de-energization in one county.
- <u>211 Referral Services</u>: 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 outages. For this potential PSPS, PG&E worked with 211 to assist 100 customers with resources.³⁷
- <u>Accessible Transportation Partnerships:</u> We are partnered with Accessible Transportation organizations to provide customers with transportation to and from PG&E's CRCs. For this potential PSPS, we successfully partnered with one organization³⁸ to provide assistance in one county.

³⁴ For more information about the PBP Program, refer to PG&E's 2024 AFN Plan.

³⁵ The list of local food banks PG&E partnered for this PSPS includes; Central California Food Bank, Community Food Bank of San Benito, and Food Bank for Monterey County.

³⁶ The list of Meals on Wheels Organizations that PG&E partnered with for this PSPS includes Meals on Wheels Monterey Peninsula.

³⁷ Additional information on 211s is not available within the PSPS Post-Event Report timeline. More information will be available in the 2024 AFN Plan.

³⁸ The list of Accessible Transportation Organizations PG&E partnered with for this PSPS includes Fresno Economic Opportunities Commission

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 PSPS information in 15 non-English languages, unless customers had their language preference set. See language preference for this PSPS in Table 9 below.

Language	Total Notifications ³⁹	Percent
English	148,476	99.1%
Spanish	1,354	0.9%
Total	149,830	100%

Table 9: Customer Notifications Based on Language Preference

Customers with limited English proficiency have access to translation phone numbers on our PSPS website, highlighting that translation services are available in over 240 languages. Table 10 includes call center-related metrics associated with this potential PSPS.

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
6,066	21	2	355	240

Table 10: Call Center Support Services⁴⁰

PG&E continued support and engagement with multi-cultural media organizations and inlanguage CBOs to maximize the reach of in-language communications to the public. Prior to potential de-energization, we reached out to three multicultural media organizations and 12 CBOs providing language outreach. These organizations covered the translated languages above and languages spoken by communities that occupy significant roles in California's agricultural economy (e.g., Nahuatl). Additionally, 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 ASL, for their use and distribution. We also shared our new PSPS Language Resources page (www.pge.com/pspslanguagehelp available in 15 non-English languages) with organizations to share with their constituents. Highlights from our coordination with multicultural media organizations and CBOs during this potential PSPS include a Crossings TV (a statewide media outlet) story regarding the potential de-energization.⁴¹ See Figure 8 below.

³⁹ Total notifications do not include doorbell rings and Live Agent phone calls.

⁴⁰ Metrics are provided from July 5, 2024, through July 6, 2024.

⁴¹ Crossings TV (a statewide media outlet)

Figure 8: Potential PSPS Event in Kern and Santa Barbara Counties on Crossings TV



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. For questions related to backup power, customers can email <u>TempGenPSPSSupport@pge.com</u>.

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

Response:

PG&E did not de-energize customers, therefore, Section 6.6a is not applicable.

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:

PG&E did not de-energize customers, therefore, Section 6.6b is not applicable.

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

Response:

PG&E did not de-energize customers, therefore, Section 6.6c is not applicable.

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

Response:

PG&E did not de-energize customers, therefore, Section 6.6d is not applicable.

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

Response:

PG&E did not de-energize customers, therefore, Section 6.6d is not applicable.

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

Response:

PG&E did not de-energize customers, therefore, Section 6.6f is not applicable.

Section 7 - Complaints & Claims

Section 7.1 - The number and nature of complaints received as the result of the deenergization 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:

Table 11 provides the number and nature of complaints received from customers and Public Safety Partners, submitted to both the CPUC and PG&E, for the potential July 5 - 6, 2024 PSPS. Any complaints received after this report's submission will be included in the 2024 PSPS Post-Season Report. No claims were received for the July 5 - 6, 2024 PSPS.

Table 11 Number and Nature of Complaints due to the Potential July 5 – 6,	2024 PSPS ⁴²
	Number of

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).	9
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.	5
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.	11
General PSPS Dissatisfaction/Other Including, but not limited to complaints about being without power during PSPS 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.	10
Outreach/Assistance Including, but not limited to complaints regarding Community Resource Centers, community crew vehicles, backup power, hotel vouchers, other assistance provided by utility to mitigate impact of PSPS.	1

⁴² PG&E reports PSPS complaints based on the CPUC-issued PSPS Post-Event Report template. Further complaints details will be provided in the 2024 PSPS Post-Season Report.

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:

PG&E did not de-energize customers, therefore, Section 8.1 is not applicable.

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:

PG&E did not de-energize customers, therefore, Section 8.2 is not applicable.

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 did not de-energize customers, therefore, Section 8.3 is not applicable.

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 the potential July 5-6, 2024 PSPS, PG&E opened three CRCs. The sites were visited by 60 people. A full list of CRC locations, assistance available, operating days and hours, and attendance is reported in Appendix C. Due to low customer impact, Fresno County agreed that CRCs were not needed in their community. San Benito County declined CRC support, and one site in San Luis Obispo County was descoped prior to all counties being descoped.

CRCs are typically open from 08:00 to 22:00 PDT during the time the power is shut off until customers are restored. Visitors were provided with PSPS information by dedicated staff, ADA-compliant restrooms, physically distanced tables and chairs, power strips to meet basic charging needs for personal medical devices and other electronics, snacks, bottled water, Wi-Fi, and cellular service access. 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.

During this potential PSPS, visitors requested and received:

- 94 snacks
- 73 bottled waters
- 59 device chargers
- 13 bagged ice

55 visitors did not remain on site and were provided "Grab and Go" bags.

Additional information about our CRC operations, including coordination with Tribal and local governments, CRC types and resources, and more is available in the <u>2024 PSPS Pre-Season</u> <u>Report CRC Plan (Appendix A), pp. 51-61.</u>

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

Response:

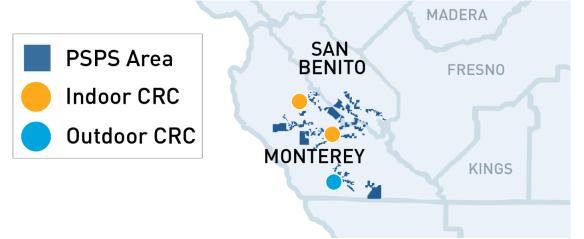
Operating hours for the CRCs were adjusted to 09:00 PDT in anticipation of a 10:30 PDT deenergization. The decision to cancel the PSPS was made after the CRCs became operational. Therefore, CRCs were opened despite counties being removed from scope.

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

Response:

Figure 9 shows a map of the CRC locations. Based on the CRC survey conducted for this PSPS, most respondents traveled less than five miles to their nearest CRC location. Note that PG&E did not de-energize customers. The map shows the initial PSPS scope prior to cancellation. Additional CRC location information can be found at <u>PG&E Emergency Site – View Outage</u> <u>Map</u>. Customers can find specific information about CRC locations using the 'Address Search' or 'City/County Search' functions.

Figure 9: Location of Community Resource Centers Readied During the Potential July 5–6, 2024 PSPS



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:

PG&E did not de-energize customers, therefore, Section 10.1 is not applicable.

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. As prescribed in ESRB-8, the decision to de-energize electric facilities for public safety is based on the best judgment of the IOU and is dependent on many factors including and not limited to fuel moisture; aerial and ground firefighting capabilities; active fires that indicate fire conditions; situational awareness provided by agencies; the National Weather Service and the United States Forest Service; and local meteorological conditions of humidity and winds.⁴³ Although PG&E did not de-energize any customers for the potential July 5 – 6, 2024, PSPS, PG&E believes our thresholds were accurate and correctly applied to the potential scope. See Appendix A for detailed information on our PSPS criteria and thresholds.

PG&E begins its threshold evaluation with a robust historical analysis that is described in detail below. This established the guidance values to be applied for PSPS, which has been optimized to capture data from past catastrophic fires to mitigate customer impacts. To do so, Meteorologists use internal and external tools and subject matter expertise to decide.

Typically, before de-energization, the PSPS customer risk is also evaluated against the wildfire risk on a per circuit basis to further evaluate the adequateness of the PSPS. And, during the PSPS, the advanced weather modeling systems from our network of more than 1,300 weather stations is able to forecast and track weather conditions in real time. Finally, data and post-PSPS 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 dates
- PSPS guidance values testing
- A robust guidance sensitivity and calibration analysis

Historical Analysis: CFP_DQuantification

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.

⁴³ Resolution ESRB-8, p. 8-9.

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:

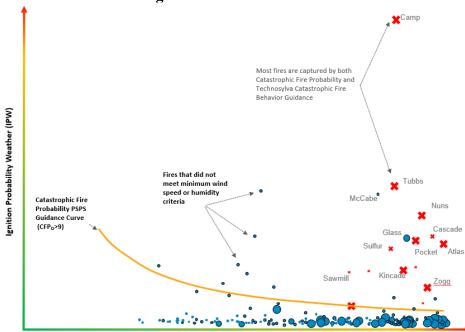
- The potential size, scope, and frequency of PSPS events
- Potential customer impacts
- The days PSPS events would have occurred
- Whether utility infrastructure would have qualified for de-energization

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 10 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 " \times " symbols in Figure 10 below represent fires that were captured by the both the CFP_D and Technosylva CFB. The blue dots under the line represent fires below the CFP_D guidance. Blue dots " \bigcirc " above the line represent events that did not meet the mFPC criteria.



Fire Potential Index (FPI)

Figure 10: 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 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"⁴⁴ 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 "BlueSky" 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. RFWs 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

⁴⁴ Blue Sky Day is defined as "The same as a non-weather impact day (no or very limited impacts due to weather)"

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. 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 staff during and after every PSPS EOC activation to identify best practices and opportunities for improvement. PG&E did not identify any lessons learned for the potential July 5 - 6, 2024 PSPS.

Section 12 – Other Relevant Information

PG&E did not de-energize customers, therefore, Section 12 is not applicable.

APPENDIX

PACIFIC GAS AND ELECTRIC COMPANY APPENDIX A SECTION 2 – 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 July 5 – 6, 2024 PSPS

* 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 OES 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.

											For	ecast										Δσ	encv							Obs	erved					
Circuit Name	Time Place D	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		dfm_ 100 hr	dfm_ 1000 hr	lfm_ herb	lfm_ woody	lfm_ chamise _new	sum_ tree ovr	prob_ ignition	cfpd	HWW			GACC_ High Risk	Observ edws _mp h		Observed temp_f	Observed RH_%	Observed ws_mph_ AC	l Observe d	Obser	Observed RH % A C			PSPS Potential Risk Consequence ¹	
JOLON 1102	TP11	24	32	43	113	12.4	107.7	6602.8	7.2	90.7	.973	.022	.046	.065	34	71	84	474.1	.000722 4	5.9	No	No	No	No	20	29	111	7	12	15	87	19	Yes	No	N/A	N/A
KING CITY 1102	TP04	22	26	37	108	11.6	147.8	43230	9.8	75.5	0.88	0.026	0.055	0.073	36	78	83	-99	0.00063 47	2.4	No	No	No	No	14	24	98	23	2	3	58	79	Yes	No	N/A	N/A
KING CITY 1103	TP10	22	26	37	110	12.5	85.5	9144.5	8.9	79.9	0.986	0.023	0.047	0.067	41	67	83	1839.9	0.00054	4.3	No	No	No	No	18	24	110	9	2	4	89	18	Yes	No	N/A	N/A
KING CITY 1106	TP05	22	25	36	111	12.9	177.3	43824	9.7	83.9	.876	.023	.059	.077	32	78	82	-99	.000611	2.5	No	No	No	No	16	24	105	11	4	7	89	17	Yes	No	N/A	N/A
LOS COCHES 1101	TP08	24	28	40	104	12.4	75.9	6067.7	11.6	64.8	0.948	0.028	0.051	0.068	44	77	87	1310.7	0.00063	2.3	No	No	No	No	24	31	89	38	4	5	54	96	Yes	No	N/A	N/A
LOS OSITOS 2101	TP02	26	30	43	110	12.2	139.8	38884	7.2	80.3	0.965	0.021	0.043	0.063	35	75	84	-99	0.00143 9	6.4	No	No	No	No	24	31	105	7	4	7	72	35	Yes	No	N/A	N/A
LOS OSITOS 2102	TP10	23	28	40	107	12	124.6	32559	10.6	69.4	.946	.031	.058	.075	38	75	84	75.6	.000893 4	3.6	No	No	No	No	24	31	110	9	2	3	65	56	Yes	No	N/A	N/A
LOS OSITOS 2103	TP09	24	29	41	110	13.9	123.9	31425	7.7	61.6	.972	.022	.047	.068	37	67	84	1807.	.001240 7	5	No	No	No	No	24	31	111	4	5	7	87	16	Yes	No	N/A	N/A
OILFIELDS 1102	TP12	20	24	35	113	12.5	155.7	35789	7.1	90.6	0.915	0.027	0.06	0.077	34	77	82	-99	0.00036	2.8	No	No	No	No	22	29	108	10	2	4	65	52	Yes	No	N/A	N/A
OILFIELDS 1103	TP12	25	32	39	114	12.4	155.3	31177	6.4	91.9	0.952	0.023	0.049	0.066	35	74	82	4752.3	0.00050 88	3.4	No	No	No	No	22	31	113	4	12	15	87	19	Yes	No	N/A	N/A
PANOCHE 1103	TP15	21	28	35	113	12.2	137	35081	6.4	88.8	0.955	0.017	0.036	0.052	30	76	73	1265.0	0.00036 64	2.9	No	No	No	No	14	20	111	4	10	14	93	11	Yes	No	N/A	N/A
SAN ARDO 1101	TP07	21	25	35	113	12	141.1	27391	7.8	88.4	0.901	0.032	0.07	0.086	34	78	82	-99	0.00037	2	No	No	No	No	10	18	105	12	4	5	60	65	Yes	No	N/A	N/A
SAN ARDO 1102	TP06	23	25	35	113	12.8	169.5	39933	7	88.4	0.972	0.021	0.043	0.062	33	78	82	-99	0.00047	3.3	No	No	No	No	15	23	106	11	5	8	89	17	Yes	No	N/A	N/A
SAN MIGUEL 1104	TP14	20	26	35	114	10.5	109.3	15748	6.3	92.5	0.87	0.023	0.048	0.068	35	79	83	881	0.00058	1.9	No	No	No	No	18	27	111	7	6	7	71	47	Yes	No	N/A	N/A
SAN MIGUEL 1105	TP12	20	26	33	114	11.3	124.6	9072.6	6.2	93.3	0.803	0.027	0.064	0.078	34	79	82	-99	0.00046	1.9	No	No	No	No	18	27	110	9	6	7	71	49	Yes	No	N/A	N/A
SAN MIGUEL 1106	TP12	26	34	41	114	11.3	134.1	22190	6.2	91.9	.937	.023	.049	.067	32	76	82	719.4	.00053	3.4	No	No	No	No	20	31	110	4	6	7	71	47	Yes	No	N/A	N/A
SOLEDAD 2101	TP01	26	30	44	106	11.9	158.3	33916	10.2	57.1	.879	.025	.051	.07	38	72	84	240.8	.001152 8	4.3	No	No	No	No	24	34	111	6	5	5	88	23	Yes	No	N/A	N/A

¹ PG&E did not de-energize customers, therefore, this field is not applicable.

SOLEDAD 2102	TP08	23	27	38	101 13	3.3	70.7	8923.8	12.2 52.5	.962	.029	.05	.067	44	75	87	869.3	.000435	2.4	No	No	No	No	24	34	93	28	4	5	57	93	Yes	No	N/A	N/A
SOLEDAD 2014	TP01	22	25	40	100 1	1.4	147.1	11003	16.4 55.2	0.876	0.042	0.079	0.093	37	76	85	12.6	0.00064 17	2.6	No	No	No	No	24	34	93	26	4	5	57	92	Yes	No	N/A	N/A

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 July 5 – 6, 2024 PSPS Event

Forecast / Agency / Observed	Value	Name	Unit	Value Provided	Description
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. Please note, N/A as PG&E did not de-energize customers during the July $5-6$ Weather Event.
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. Please note, N/A as PG&E did not de-energize customers during the July $5-6$ Weather Event.
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. Please note, N/A as PG&E did not de-energize customers during the July $5-6$ Weather Event.
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. Please note, N/A as PG&E did not de-energize customers during the July 5 – 6 Weather Event.
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.
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 /					
Agency / Observed	Value	Name	Unit	Value Provided	Description
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.
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 CFP _D 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 CFP_D 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 (CFP _D)	Scaled Probability	max	The product of probability of catastrophic fire (Prob_Cat) and IPW - probability of ignition (prob_ignition). This product is called the (CFP _D) Catastrophic Fire Probability distribution model. Scaled by 1000 to covert to an integer value.
Observed	Observed ws_mph	Observed Sustained Wind Speed during Event	mph	max	The maximum sustained wind speed recorded by weather stations mapped to each circuit from planned de-energization time to anticipated all-clear time.

PACIFIC GAS AND ELECTRIC COMPANY APPENDIX B SECTION 6 – PUBLIC SAFETY PARTNERS CONTACTED

Appendix B: PUBLIC SAFETY PARTNERS CONTACTED

Table B-1. Public Safety Partners Contacted

Organization/Jurisdiction	Title	HFTD or HFRA Tier	Date/Time Contacted
Fresno County	County Administration	HFRA, Tier 1	07/03/2024 08:36 PDT
Fresno County	Board Chair	HFRA, Tier 1	07/03/2024 08:36 PDT
Fresno County	Chair of the Board	HFRA, Tier 1	07/03/2024 08:30 PDT
Fresno County	City Clerk	HFRA, Tier 1	07/03/2024 08:36 PDT
Fresno County	City Manager	HFRA, Tier 1	07/03/2024 08:36 PDT
Fresno County	Council Member	HFRA, Tier 1	07/03/2024 08:36 PDT
Fresno County	County Administrative Officer	HFRA, Tier 1	07/03/2024 08:36 PDT
Fresno County	County Executive Officer	HFRA, Tier 1	07/03/2024 08:30 PDT
Fresno County	Emergency	HFRA, Tier 1	07/03/2024 08:36 PDT
Fresno County	Emergency Management Specialist	HFRA, Tier 1	07/03/2024 08:30 PDT
Fresno County	Facility Services	HFRA, Tier 1	07/03/2024 08:36 PDT
Fresno County	Lieutenant	HFRA, Tier 1	07/03/2024 08:30 PDT
Fresno County	МНОАС	HFRA, Tier 1	07/03/2024 08:30 PDT
Fresno County	Mayor	HFRA, Tier 1	07/03/2024 08:36 PDT
Fresno County	Mayor Pro Team	HFRA, Tier 1	07/03/2024 08:36 PDT
Fresno County	OES Director of Emergency Services	HFRA, Tier 1	07/03/2024 08:30 PDT
Fresno County	Sheriff	HFRA, Tier 1	07/03/2024 08:36 PDT
Fresno County	Staff Analyst	HFRA, Tier 1	07/03/2024 08:30 PDT
Monterey County	City Administration	HFRA, Tier 2	07/03/2024 08:30 PDT
Monterey County	Board Chair	HFRA, Tier 2	07/03/2024 08:30 PDT
Monterey County	Board Member	HFRA, Tier 2	07/03/2024 08:36 PDT
Monterey County	County Supervisor - District 2	HFRA, Tier 2	07/03/2024 08:30 PDT
Monterey County	Duty Officer	HFRA, Tier 2	07/03/2024 08:36 PDT
Monterey County	Emergency Services Coordinator	HFRA, Tier 2	07/03/2024 08:30 PDT
Monterey County	Emergency Services Planner	HFRA, Tier 2	07/03/2024 08:30 PDT

Monterey County	Fire Chief	HFRA, Tier 2	07/03/2024 08:36 PDT			
Monterey County	General	HFRA, Tier 2	07/03/2024 08:36 PDT			
Monterey County	МНОАС	HFRA, Tier 2	07/03/2024 08:36 PDT			
Monterey County	OES Director	HFRA, Tier 2	07/03/2024 08:30 PDT			
Monterey County	On Call contact	HFRA, Tier 2	07/03/2024 08:36 PDT			
Monterey County	Sheriff	HFRA, Tier 2	07/03/2024 08:30 PDT			
Monterey County	Sheriff/Coroner	HFRA, Tier 2	07/03/2024 08:36 PDT			
Monterey County	Supervisor	HFRA, Tier 2	07/03/2024 08:36 PDT			
Monterey County	Unit Chief	HFRA, Tier 2	07/03/2024 08:36 PDT			
Monterey County CCA	General	HFRA, Tier 2	07/03/2024 08:30 PDT			
Monterey County Communication Facility	American Tower Corporation	Tier 2	07/03/2024 08:28 PDT			
Monterey County Communication Facility	AT&T (New Cingular Wireless)	Tier 2	07/03/2024 08:19 PDT			
Monterey County Communication Facility	AT&T Mobility LLC	Tier 2	07/03/2024 08:19 PDT			
Monterey County Communication Facility	AT&T Services Inc	HFRA, Tier 2	07/03/2024 08:19 PDT			
Monterey County Communication Facility	Charter Communications Holding Company LLC	HFRA, Tier 2	07/03/2024 08:28 PDT			
Monterey County Communication Facility	Cingular Wireless Services, Inc	HFRA	07/03/2024 08:19 PDT			
Monterey County Communication Facility	Crown Castle International	Tier 2	07/03/2024 08:28 PDT			
Monterey County Communication Facility	Dept of The Army	Tier 2	07/03/2024 08:28 PDT			
Monterey County Communication Facility	Frontier Communications Corporation Dip	HFRA, Tier 2	07/03/2024 08:28 PDT			
Monterey County Communication Facility	Sprint Corporation	HFRA, Tier 2	07/03/2024 08:19 PDT			
Monterey County Communication Facility	Sprint Nextel Corporation	HFRA, Tier 2	07/03/2024 08:28 PDT			
Monterey County Communication Facility	T Mobile West A Delaware Corp	HFRA	07/03/2024 08:28 PDT			
Monterey County Communication Facility	T-Mobile West LLC	HFRA	07/03/2024 08:28 PDT			
Monterey County Communication Facility	Verizon	HFRA, Tier 2	07/03/2024 08:19 PDT			
Monterey County Emergency Services Facility	California Department of Forestry	Tier 2	07/03/2024 08:28 PDT			

Monterey County Emergency Services Facility	South Monterey County FPD	Tier 2	07/03/2024 08:28 PDT
Monterey County Other Facility	Crown Castle USA Inc	HFRA, Tier 2	07/03/2024 08:28 PDT
Monterey County Other Facility	Department of The Army	HFRA, Tier 2	07/03/2024 08:28 PDT
Monterey County Other Facility	Dept of The Army	HFRA, Tier 2	07/03/2024 08:28 PDT
MONTEREY County Water And Waste Water Facility	California Department of Forestry	HFRA	07/03/2024 08:28 PDT
MONTEREY County Water And Waste Water Facility	Dept of The Army	Tier 2	07/03/2024 08:28 PDT
MONTEREY County Water And Waste Water Facility	San Lucas Wastewater Treatment Facility	HFRA	07/03/2024 08:19 PDT
Monterey County King City	Council Member	HFRA, Tier 2	07/03/2024 08:36 PDT
Monterey County King City	Councilmember	HFRA, Tier 2	07/03/2024 08:30 PDT
Monterey County King City	Dispatch	HFRA, Tier 2	07/03/2024 08:36 PDT
Monterey County King City	Fire Chief	HFRA, Tier 2	07/03/2024 08:30 PDT
Monterey County King City	Fire Department Admin. Assist.	HFRA, Tier 2	07/03/2024 08:30 PDT
Monterey County King City	Mayor	HFRA, Tier 2	07/03/2024 08:36 PDT
Monterey County King City	Mayor Pro Team	HFRA, Tier 2	07/03/2024 08:30 PDT
Monterey County Monterey	EMS	Tier 2	07/03/2024 08:30 PDT
Monterey County Monterey	Chief Of Police	Tier 2	07/03/2024 08:36 PDT
Monterey County Monterey	City Manager	Tier 2	07/03/2024 08:36 PDT
Monterey County Monterey	Council Member	Tier 2	07/03/2024 08:30 PDT
Monterey County Monterey	Division Chief	Tier 2	07/03/2024 08:30 PDT
Monterey County Monterey	Emergency	Tier 2	07/03/2024 08:36 PDT
Monterey County Monterey	Fire Chief	Tier 2	07/03/2024 08:30 PDT

Monterey County Monterey	General	Tier 2	07/03/2024 08:36 PDT
Monterey County Monterey	Mayor	Tier 2	07/03/2024 08:36 PDT
Monterey County Monterey	Vice Mayor	Tier 2	07/03/2024 08:30 PDT
Monterey County Soledad	Cal Fire Chief	Tier 2	07/03/2024 08:30 PDT
Monterey County Soledad	Chief	Tier 2	07/03/2024 08:30 PDT
Monterey County Soledad	Council Member	Tier 2	07/03/2024 08:30 PDT
Monterey County Soledad	Councilmember	Tier 2	07/03/2024 08:30 PDT
Monterey County Soledad	General	Tier 2	07/03/2024 08:36 PDT
Monterey County Soledad	Interim City Manager/City Clerk	Tier 2	07/03/2024 08:36 PDT
Monterey County Soledad	Mayor	Tier 2	07/03/2024 08:36 PDT
Monterey County Soledad	Mayor Pro Team	Tier 2	07/03/2024 08:36 PDT
Monterey County Soledad	Mayor Pro Tempore	Tier 2	07/03/2024 08:30 PDT
Monterey County Soledad	Non-Emergency	Tier 2	07/03/2024 08:36 PDT
Monterey County Soledad	Public Works Director	Tier 2	07/03/2024 08:30 PDT
San Benito County	County Administrative Officer	HFRA, Tier 2	07/03/2024 08:36 PDT
San Benito County	Emergency Manager	HFRA, Tier 2	07/03/2024 08:30 PDT
San Benito County	Emergency Services Specialist	HFRA, Tier 2	07/03/2024 08:30 PDT
San Benito County	Non-Emergency	HFRA, Tier 2	07/03/2024 08:36 PDT
San Benito County	Sheriff	HFRA, Tier 2	07/03/2024 08:36 PDT
San Benito County	Staff Analyst	HFRA, Tier 2	07/03/2024 08:30 PDT
San Benito County	Supervisor	HFRA, Tier 2	07/03/2024 08:30 PDT
San Benito County CCA	General	HFRA, Tier 2	07/03/2024 08:30 PDT
San Benito County Communication Facility	AT&T Services Inc	HFRA, Tier 2	07/03/2024 08:19 PDT
San Benito County Communication Facility	Pinnacles Tel Co	HFRA, Tier 2	07/03/2024 08:28 PDT
San Benito County Communication Facility	T-Mobile West Corporation	HFRA, Tier 2	07/03/2024 08:19 PDT
San Luis Obispo County	Duty Chief	HFRA, Tier 2	07/03/2024 08:36 PDT
San Luis Obispo County	Duty Officer	HFRA, Tier 2	07/03/2024 08:36 PDT

San Luis Obispo County	EMS Director	HFRA, Tier 2	07/03/2024 08:36 PDT
San Luis Obispo County	Emergency Services Manager	HFRA, Tier 2	07/03/2024 08:30 PDT
San Luis Obispo County	Fire Chief	HFRA, Tier 2	07/03/2024 08:30 PDT
San Luis Obispo County	General	HFRA, Tier 2	07/03/2024 08:36 PDT
San Luis Obispo County	OES Duty Officer	HFRA, Tier 2	07/03/2024 08:30 PDT
San Luis Obispo County	Watch Commander	HFRA, Tier 2	07/03/2024 08:36 PDT
San Luis Obispo County CCA	General	HFRA, Tier 2	07/03/2024 08:30 PDT
San Luis Obispo County Communication Facility	AT&T Mobility LLC	Tier 2	07/03/2024 08:19 PDT
San Luis Obispo County Communication Facility	AT&T Services Inc	Tier 2	07/03/2024 08:19 PDT
San Luis Obispo County Communication Facility	AT&T Wireless Service LLC	HFRA, Tier 2	07/03/2024 08:19 PDT
San Luis Obispo County Communication Facility	Charter Communications Holding Company LLC	Tier 2	07/03/2024 08:28 PDT
San Luis Obispo County Communication Facility	Frontier Communications Corporation Dip	Tier 2	07/03/2024 08:28 PDT
San Luis Obispo County Communication Facility	T-Mobile West LLC	Tier 2	07/03/2024 08:28 PDT
San Luis Obispo County Communication Facility	Verizon	HFRA, Tier 2	07/03/2024 08:28 PDT
San Luis Obispo County Other Facility	California National Guard	HFRA, Tier 2	07/03/2024 08:28 PDT
San Luis Obispo County Other Facility	Crown Castle USA Inc	HFRA, Tier 2	07/03/2024 08:28 PDT
San Luis Obispo County Water And Waste Water Facility	County Of San Luis Obispo	Tier 2	07/03/2024 08:19 PDT

PACIFIC GAS AND ELECTRIC COMPANY

APPENDIX C

SECTION 9 – COMMUNITY RESOURCE CENTER LOCATIONS

Appendix C: LIST OF PG&E COMMUNITY RESOURCE CENTERS

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

The table below provided details of the three CRCs that PG&E mobilized during the July 5 – 6, 2024 potential PSPS, including specific locations, dates and times opened and closed, total attendance for each location, and amenities provided.

#	County	Site Name	Address	Operating Hours (PDT)	Hours (PDT) Total Indo		Amenities Provided				
#	County	Site Maine	Auuress	Day 1	Visitors	Outdoor	Amenities Provided				
				7/5/2024							
1	Monterey	Salinas Valley Fairgrounds	625 Division St.	09:00 - 22:00	46	Indoor	Wi-Fi, ADA Restrooms, Bottled Water, Device Charging, Snacks, Cooling, Seating, Ice				
2	Monterey	Soledad Community Center	560 Walker Drive	09:00 - 22:00	6	Indoor	Wi-Fi, ADA Restrooms, Bottled Water, Device Charging, Snacks, Cooling, Seating, Ice				
3	Monterey	San Antonio Union School	67550 Lockwood Jolon Road	09:00 - 22:00	8	Outdoor*	Wi-Fi, ADA Restrooms, Bottled Water, Device Charging, Snacks, Cooling, Seating, Ice				
*Co	*Cooling and ice are not usual amenities at outdoor sites but due to extreme heat was provided.										

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 potential July 5 - 6, 2024 PSPS 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 19th day of July 2024.

manhchuiten

MARK QUINLAN SENIOR VICE PRESIDENT WILDFIRE, EMERGENCY & OPERATIONS