#### PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Safety and Enforcement Division

Resolution SED-12 November 7, 2024

#### **RESOLUTION**

#### RESOLUTION SED-12 APPROVING ADMINISTRATIVE CONSENT ORDER AND AGREEMENT OF THE SAFETY AND ENFORCEMENT DIVISION AND PACIFIC GAS AND ELECTRIC COMPANY REGARDING THE 2021 PUBLIC SAFETY POWER SHUTOFFS PURSUANT TO RESOLUTION M-4846

#### **SUMMARY**

In this Resolution, the California Public Utilities Commission (Commission) approves an Administrative Consent Order and Agreement (ACO) between the Commission's Safety and Enforcement Division (SED) and Pacific Gas and Electric Company (PG&E) to resolve all issues involving the 2021 Public Safety Power Shutoffs (PSPS), resulting in financial penalties totaling \$1,753,100. This Resolution includes an analysis of the Penalty Assessment Methodology.

#### **BACKGROUND AND DISCUSSION**

Utilities have the authority to shut off the electric power to protect public safety under California law. Utilities do this during severe wildfire threat conditions as a preventative measure of last resort through PSPS events. Such power cuts reduce the risk of an IOUs' infrastructure to cause or contribute to a wildfire. However, a PSPS can leave communities and essential facilities without power, which brings its own risks and hardships, particularly for vulnerable communities and individuals. From 2018 through 2021, CPUC issued four sets of guidelines; Resolution ESRB-8, Decision (D.) 19-05-042, D.20-05-051, D.21-06-014, D.21-06-034, and the Post-Event Report Template. directing the IOUs to follow these guidelines in PSPS execution.

In 2021, PG&E initiated five separate PSPS events and submitted five post event reports to the CPUC. Stakeholders provided comments on these post event reports. SED performed reviews on the submitted reports, including consideration of stakeholder comments, to evaluate PG&E's compliance with the reporting requirements under Resolution ESRB-8, D.19-05-942, D.20-05-051, D.21-06-014, D.21-06-034, and the Post-Event Report Template.

Resolution M-4846, issued in November 2020, adopted the Commission Enforcement and Penalty Policy (Enforcement Policy) and authorized Commission staff to negotiate and propose an Administrative Consent Order to resolve an enforcement matter, subject to review and consideration by the Commission.<sup>1</sup> SED and PG&E executed the attached ACO,<sup>2</sup> pursuant to and consistent with the Enforcement Policy, which resolves all issues related to SED's compliance assessment of the 2021 PSPS Events and any enforcement action SED might have brought related to or arising from the 2021 PSPS Events. In accordance with the Enforcement Policy, the proposed settlement between SED and PG&E (collectively, Parties) is memorialized in the attached Administrative Consent Order (ACO) and Agreement. The ACO includes information consistent with the requirements of Section III.A.7 of the Enforcement Policy.

The Enforcement Policy provides that "the following general considerations should be evaluated as part of any proposed settlement to be submitted for Commission review: (1) Equitable factors; (2) Mitigating circumstances; (3) Evidentiary issues; and (4) Other weaknesses in the enforcement action[.]"<sup>3</sup> The Parties explicitly considered these factors in their confidential settlement communications under Rule 12.6 of the Commission's Rules of Practice and Procedure. SED acknowledges PG&E's cooperation with SED on the negotiation of the Administrative Consent Order and Agreement, and SED explicitly considered a range of evidentiary and other matters that would bear upon its pursuit of enforcement actions seeking penalties or citations on disputed issues of fact and law. When taken as a whole, the Parties agree that the ACO amounts are within the range of reasonable outcomes had the matters proceeded to formal litigation.

The Penalty Assessment Methodology sets forth five factors that staff and the Commission must consider in determining the amount of a penalty for each violation: "[s]everity or gravity of the offense, conduct of the regulated entity, financial resources of the regulated entity, including the size of the business, totality of the circumstances in furtherance of the public interest, and the role of precedent."<sup>4</sup> These factors are addressed here.

# A. Severity or Gravity of the Offenses

The Commission has stated that the severity of the offense includes several considerations, including economic harm, physical harm, and harm to the regulatory process.

# 1. Physical and Economic Harm

The Commission has described the physical and economic harm criteria as follows:

Economic harm reflects the amount of expense which was imposed upon the victims. In comparison, violations that cause actual physical harm to people or property are generally considered the most severe, followed by violations that threaten such harm.<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> Resolution M-4846, Findings and Conclusions #8; Enforcement Policy, p. 11.

 $<sup>\</sup>frac{2}{2}$  The ACO is attached as Attachment A.

<sup>&</sup>lt;sup>3</sup> Enforcement Policy, p. 15.

<sup>&</sup>lt;sup>4</sup> Enforcement Policy, pp. 16-21.

<sup>&</sup>lt;sup>5</sup> Enforcement Policy, p. 16.

PG&E's violations occurred over the course of five separate PSPS events, January 19-21, 2021, August 17-19, September 20-21, October 11-12, and October 14-16, 2021. Each of the five events resulted in a de-energization. Of the six required notifications during a PSPS event, PG&E failed to send 146,110 notifications over the course of the five PSPS events. This includes 37,156 advanced notifications and 108,954 notifications at de-energization or re-energization. There is no evidence that there was any physical or economic harm as a result of the violations reflected in these violations. However, notification failures do have the potential to cause physical or economic harm.

PG&E also failed to notify 58 Medical Baseline (MBL) customers during the September 20-21 event. The outage to 58 MBL customers lasted less than one hour. There is no evidence that there was any physical or economic harm as a result of the violations reflected in this action. However, SED considers this to be a severe violation due to the potential for harm to MBL customers who may rely on electricity for medical equipment.

PG&E also failed to include the post-event report as an attachment for the August 17-19, September 20-21 events, and to provide a link to the post-event reports on PG&E's website for the October 11-12 and October 14-16 events. There is no evidence that there was any economic or physical harm as a result of the violations reflected in these violations.

# 2. Harm to the Regulatory Process

As part of the severity of the offense factor, the Commission has described the harm to the regulatory process criterion as follows:

"Every public utility shall obey and comply with every order, decision, direction, or rule made or prescribed by the Commission in the matters specified in this part, or any other matter in any way relating to or affecting its business as a public utility, and shall do everything necessary or proper to secure compliance therewith by all of its officers, agents, and employees." (Public Utilities Code § 702).

Such compliance is essential to the proper functioning of the regulatory process. For this reason, disregarding a statutory or Commission directive, regardless of the effects on the public, will be accorded a high level of severity.<sup>6</sup>

PG&E complied with SED during the investigation of PG&E's 2021 PSPS Events and in the negotiation and presentation of the ACO. There were no allegations of Rule 1.1 violations and no allegations of other ethical violations, or any deliberate misconduct associated with the PG&E's 2021 PSPS Events. Accordingly, this was not a significant factor in determining the basis for the penalty imposed pursuant to the ACO.

<sup>&</sup>lt;sup>6</sup> Enforcement Policy, p. 17.

# **B.** The Conduct of the Utility

In evaluating the conduct of the utility, the Commission has described the following considerations in evaluating the utility's conduct: (1) actions taken to prevent a violation; (2) actions taken to detect a violation; (3) actions taken to disclose and rectify a violation; (4) actions taken to conceal, hide or cover up a violation; and (5) prior history of violations.<sup>7</sup>

PG&E attributed the missed notifications mostly to not wanting to disturb customers during "courtesy" hours, late-changing weather impacts, and other system limitations. It was forthcoming in providing SED with information regarding the notification failures in both the Post Event Report and its response to SED's Notice of Violation (NOV). In response to SED's NOV, PG&E responded with more information and context of their violation. PG&E was forthcoming during the discovery process and negotiated in good faith.

# C. Financial Resources of the Utility

The Commission has described this criterion as follows:

Effective deterrence also requires that staff recognize the financial resources of the regulated entity in setting a penalty that balances the need for deterrence with the constitutional limitations on excessive penalties. . . . If appropriate, penalty levels will be adjusted to achieve the objective of deterrence, without becoming excessive, based on each regulated entity's financial resources.<sup>8</sup>

PG&E is one of the largest electric utilities in the State of California in terms of customers and revenue. This amount is enough to emphasize the importance of the notification requirements relative to its size.

# **D.** Totality of Circumstances in Furtherance of Public Interest

The Commission has described this criterion as follows:

Setting a penalty at a level that effectively deters further unlawful conduct by the regulated entity and others requires that staff specifically tailor the package of sanctions, including any penalty, to the unique facts of the case. Staff will review facts that tend to mitigate the degree of wrongdoing as well as any facts that exacerbate the wrongdoing. In all cases, the harm will be evaluated from the perspective of the public interest.

An economic benefit amount shall be estimated for every violation. Economic benefit includes any savings or monetary gain derived from the act or omission that constitutes the violation.<sup>2</sup>

<sup>&</sup>lt;sup>7</sup> Enforcement Policy, p. 17.

<sup>&</sup>lt;sup>8</sup> Enforcement Policy, p. 19.

<sup>&</sup>lt;sup>2</sup> Enforcement Policy, p. 19.

In SED's estimation, PG&E derived relatively minimal "economic benefit" in the form of cost savings or monetary gain as a result of the act or omission that constituted the violation. The package of sanctions, including remedial actions and a monetary penalty, were tailored to the unique facts of this case.

The totality of the circumstances in furtherance of public interest supports approval of the ACO. First, it provides a significant resolution of the issues identified here. Pursuant to the ACO, PG&E agrees to pay \$1,753,100 in penalties.

Second, with an appropriate resolution having been reached, it is in the public interest to resolve this proceeding now. The ACO obviates the need for SED to initiate an enforcement proceeding and for the Commission to adjudicate the disputed facts, alleged violations, and appropriate penalty. Approval of the ACO promotes administrative efficiency so that the Commission and parties are not required to expend substantial time and resources on continued litigation for a matter that has been satisfactorily resolved.

# E. Consistency with Precedent

The Commission has described the role of precedent as follows:

Penalties are assessed in a wide range of cases. The penalties assessed in cases are not usually directly comparable. Nevertheless, when a case involves reasonably comparable factual circumstances to another case where penalties were assessed, the similarities and differences between the two cases should be considered in setting the penalty amount.

The ACO is reasonable when compared to the outcome of other settlements and outcomes in Commission proceedings. The following are examples of approved settlements and enforcement decisions involving electric utilities and PSPS events.

# 1. 2021 SDG&E PSPS Event Administrative Consent Order (Resolution SED-9)

In 2021, San Diego Gas and Electric (SDG&E) initiated two PSPS events. During the two events, SDG&E failed to provide notifications to 6,983 customers. SED and SDG&E settled on an ACO agreeing that SDG&E violated the PSPS notification requirements under Commission Decision (D.) 19-05-042 and assessed a fine of \$70,830. Commission approved the settlement in Resolution SED-9.

# 2. 2021 PacifiCorp PSPS Event Administrative Consent Order (Resolution SED-10)

In 2021, PacifiCorp initiated one PSPS event. During this event, PacifiCorp failed to notify 1,753 customers. SED and SDG&E settled on an ACO agreeing that PacifiCorp violated the PSPS notification requirements under D.19-05-042 and assessed a fine of \$18,030. Commission approved the settlement in Resolution SED-10.

# 3. 2020 SDG&E PSPS Event Administrative Enforcement Order (Resolution M-4863)

In 2020, SDG&E initiated five PSPS events. During one event on September 8-9, 49 customers never received notifications during de-energization or re-energization. SED issued an Administrative Enforcement Order (AEO) alleging SDG&E violated the PSPS notification requirements under Commission decision D.19-05-042 and assessed a fine of \$24,000. SED also imposed eight corrective actions to ensure future compliance with the Commission's PSPS rules. SDG&E accepted the Administrative Enforcement Order (AEO) and the AEO was approved by the Commission in Resolution M-4863.

#### 4. 2020 PacifiCorp PSPS Event Administrative Enforcement Order (Resolution M-4862)

In 2020, PacifiCorp initiated two PSPS events. While SED did find PacifiCorp violated some PSPS guidelines, they opted not to assess a penalty because they successfully notified customers as required by the Commission's decisions. SED opted to impose eight corrective actions on PacifiCorp to ensure future compliance with the Commission's PSPS rules. PacifiCorp accepted the Administrative Enforcement Order (AEO), and the AEO was approved by the Commission in Resolution M-4862.

# 5. 2020 Pacific Gas and Electric PSPS Event Administrative Enforcement Order (Resolution ALJ-445)

In 2020, Pacific Gas and Electric (PG&E) initiated seven PSPS events. SED found that PG&E failed to provide any customer notifications during de-energization. SED issued an Administrative Enforcement Order alleging PG&E violated the PSPS notification requirements under Commission decision D.19-05-042 and assessed a fine of \$12,000,000. SED also included six corrective actions to ensure future compliance with the Commission's PSPS rules. PG&E challenged the Administrative Enforcement Order. SED and PG&E settled the matter with an \$8 million fine. The amount was split up between a \$500,000 penalty to the General Fund and \$7,500,000 for the Independent Safety Monitor between 2023 and 2026. PG&E also had to comply with the eight corrective actions. The Commission approved the settlement in Resolution ALJ-445.

### 6. 2020 Southern California Edison PSPS Event Administrative Enforcement Order (Resolution ALJ-440)

In 2020, Southern California Edison (SCE) initiated sixteen PSPS events. SED found that 25,573 customers failed to get notifications spread out over the course of the sixteen events. SED issued an Administrative Enforcement Order alleging SCE violated the PSPS notification requirements under Commission decision D.19-05-042 and assessed a fine of \$10,000,000. SED also included fourteen corrective actions to ensure future compliance with the Commission's PSPS rules. SCE challenged the Administrative Enforcement Order. SED and SCE settled the dispute with a \$7 million fine. The amount was split up between a \$500,000 shareholder-funder fine to the General Fund, a \$500,000 shareholder-funded payment to SCE's Energy Assistance Fund, and \$6 million permanent disallowance of PSPSP program-related costs that are eligible for tracking in the Wildfire Mitigation Plan Memorandum Account. SCE also had to comply with the fourteen corrective actions. The Commission approved the settlement in Resolution ALJ-440.

# **COMMENTS ON DRAFT RESOLUTION**

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived or reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today. Comments were provided on October 24, 2024 by The Public Advocates Office of the California Public Utilities Commission and the Center for Accessible Technology. No changes were made in response to comments.

### FINDINGS AND CONCLUSIONS

- 1. Resolution M-4846 authorized Commission staff to negotiate and propose an Administrative Consent Order to resolve an enforcement matter, subject to review and consideration by the Commission.
- 2. SED and PG&E have engaged in settlement negotiations and, consistent with Resolution M-4846 and the Enforcement Policy, have memorialized their proposed settlement in the attached Administrative Consent Order and Agreement.
- 3. SED and PG&E have agreed that the attached Administrative Consent Order and Agreement resolves all issues related to SED's investigations of and any enforcement action SED might have brought related to or arising from PG&E's 2021 PSPS events.
- 4. The agreed-upon fines and remedial actions appropriately resolve all issues related to SED's investigations and any enforcement action SED may have brought, are reasonable in light of the circumstances, consistent with the law, and in the public interest.
- 5. Based on the analysis under the Penalty Assessment Methodology, the agreed-upon fines, safety measures and disallowances are reasonable in light of the circumstances.

### THEREFORE, IT IS ORDERED that:

- 1. The Administrative Consent Order and Agreement between SED and PG&E relating to PG&E's 2021 PSPS Events is adopted.
- 2. PG&E shall pay a monetary penalty of \$1,753,100 within thirty (30) days after the date that this Resolution is final and no longer subject to appeal. Payment must be with a certified check made or wire transfer payable to the *California Public Utilities Commission* to:

California Public Utilities Commission Attn: Fiscal Office 505 Van Ness Avenue San Francisco, CA 94102-3298

3. PG&E shall state on the face of the check or on the wire transfer: "For deposit to the General Fund per Resolution SED-12."

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on November 7, 2024 the following Commissioners voting favorably thereon:

#### /s/ RACHEL PETERSON

Rachel Peterson Executive Director

ALICE REYNOLDS President DARCIE L. HOUCK JOHN REYNOLDS KAREN DOUGLAS MATTHEW BAKER Commissioners

# ATTACHMENT A

**Administrative Consent Order** 

### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the matter of:

Pacific Gas and Electric Company 2021 Public Safety Power Shutoff Events

# [PROPOSED] ADMINISTRATIVE CONSENT ORDER AND AGREEMENT

Issued pursuant to Commission Resolution M-4846 (adopting Commission Enforcement Policy)

# [PROPOSED] ADMINISTRATIVE CONSENT ORDER AND AGREEMENT

Dated: September 30, 2024

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#### [PROPOSED] ADMINISTRATIVE CONSENT ORDER AND AGREEMENT

This Administrative Consent Order and Agreement (hereinafter "ACO" or "Agreement")

is entered into and agreed to by and between the Safety and Enforcement Division ("SED") of

the California Public Utilities Commission ("CPUC" or "Commission") and Pacific Gas and

Electric Company (PG&E) (collectively, "Parties") pursuant to Resolution M-4846, Resolution

Adopting Commission Enforcement Policy, dated November 5, 2020.

#### WHEREAS:

- The Commission has authorized SED "to investigate, negotiate, and draft proposed Administrative Consent Orders, subject to review and consideration by the Commission" via resolution;<sup>1</sup>
- The Commission's Enforcement Policy requires that a "negotiated proposed settlement . . . be memorialized in a proposed Administrative Consent Order," which requires certain items as set forth in Section 2, below;<sup>2</sup>
- Consistent with Resolution M-4846, this ACO is a product of direct negotiations between the Parties to resolve and dispose of all claims, allegations, liabilities, and defenses related to PG&E's 2021 Public Safety Power Shutoff (PSPS) events.
- This ACO is entered into as a compromise of disputed claims and defenses in order to minimize the time, expense, and uncertainty of an evidentiary hearing, any further enforcement proceedings, and/or any subsequent appeals, and with the Parties having taken into account the possibility that each of the Parties may or may not prevail on any given issue, and to expedite timely action on initiatives that benefit California consumers;
- The Parties agree to the following terms and conditions as a complete and final resolution of all enforcement actions which have been brought by SED related to or arising from PG&E's compliance with its 2021 PSPS events, and all of PG&E's defenses thereto, based on the information known to the Parties, and without trial and adjudication of any issue of law or fact.

NOW, THEREFORE it is agreed that this ACO is made and entered into.

<sup>&</sup>lt;sup>1</sup> Resolution M-4846 at 15 (Findings and Conclusions No. 8).

<sup>&</sup>lt;sup>2</sup> Resolution M-4846, Enforcement Policy at 10.

#### I. <u>PARTIES</u>

The parties to this ACO are SED and PG&E.

SED is a division of the Commission charged with enforcing compliance with the Public Utilities Code and other relevant utility laws and the Commission's rules, regulations, orders, and decisions. SED is also responsible for investigations of utility incidents, including PSPS, and assisting the Commission in promoting public safety.

PG&E is a public utility, as defined by the California Public Utilities Code. PG&E provides electric and gas service to approximately 16 million customers in Northern and Central California.

#### II. <u>ELEMENTS REQUIRED BY SECTION III.A.7 OF THE COMMISSION'S</u> ENFORCEMENT POLICY FOR ADMINISTRATIVE CONSENT ORDERS

Except as explicitly stated herein, the Parties expressly agree and acknowledge that neither this ACO nor any act performed hereunder is, or may be deemed, an admission or evidence of the validity or invalidity of any allegations of SED, nor is the Agreement or any act performed hereunder to be construed as an admission or evidence of any wrongdoing, fault, omission, negligence, imprudence, or liability on the part of PG&E. This is a negotiated settlement of disputed matters.

# A. The law or Commission order, resolution, decision, or rule violated by the regulated entity and the facts that form the basis for each violation

Appendix I to this ACO contains the Notice of Violation (NOV) issued by SED on PG&E, on April 7, 2023. The NOV includes a discussion of the Commission orders and decisions that PG&E allegedly violated, and the facts that form the basis for each alleged violation. PG&E submitted a response to the NOV (PG&E's NOV Response), contained in

Appendix II to this ACO, on May 12, 2023, which includes more information from PG&E's

2021 PSPS events.

SED dismisses the following six violations alleged in the NOV after evaluating the PSPS

guidelines in light of PG&E's NOV response and settlement discussions.

- 1. Violation B.1 For the October 11-12 event, SED dismisses the NOV violation of the Commission's requirement that "[t]he IOU shall also notify the Director of SED of full restoration within 12 hours from the time the last service is restored." (ESRB-8 at 6).
- 2. Violation C.1 For the October 11-12 and 14-16 events, SED dismisses the NOV violation of the Commission's requirement that ""[i]n addition to submitting a report to the Director of the Commission's Safety and Enforcement Division within 10 business days of power restoration, electric investor-owned utilities must serve their de-energization report on the service lists of this proceeding and Rulemaking 18-10-007 or their successor proceedings. Service should include a link to the report on the utility's website and contact information to submit comments to the Director of the Safety and Enforcement Division." (D.19-05-042 at A22-A23).
- 3. Violation H.1 For the October 11-12 event, SED dismisses the NOV violation that requires the IOU to explain why no notification attempts were made to Medical Base Line (MBL) customers. This violation was instead included in violation E.1. (D.19-05-042 at A22-A23).
- 4. For all of PG&E's PSPS events in 2021, SED dismissed NOV violation I.1 that requires the IOU to report to SED that it met minimum notification timelines. (D.21-06-014 at 286).
- 5. For all of PG&E's PSPS events in 2021, SED dismissed NOV violation K.1 that requires PG&E to report in its 10-day post-event report, "description of the de-energization threshold analyses, as part of lessons learned reporting, 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 at 305 & 306).
- 6. For all of PG&E's PSPS events in 2021, SED dismissed NOV violation M.1 that requires ""[e]ach electric investor-owned utility must make every attempt to provide notification of the cancellation of a de-energization event, or removal from scope, by notifying all affected entities, including public safety partners, within two hours of the decision to cancel." (D.21-06-034 at A11).

This ACO addresses and resolves PG&E's remaining alleged violations as set forth in the

NOV. For purposes of settlement of this ACO only,

- PG&E admits to Violations A.1, E.5, F.1, G.1. J.1, and J.2 and their associated penalties, where applicable;
- PG&E does not dispute Violations D.1 and L.1, which have no corresponding penalties; and
- In connection with Violations E.1-E.4, PG&E admits that it did not complete, or timely complete, the 146,110 advanced, de-energization, before reenergization, or re-energization complete notifications for which SED has issued a penalty, nor did it notify or attempt to notify 58 MBL customers during the September 20-21 PSPS event.

#### B. Information related to the potential for additional or ongoing violations

The Parties intend this Agreement to be a complete and final resolution of all

enforcement actions which have been brought by SED related to PG&E's 2021 PSPS events,

based on the information known by the Parties.

#### C. An agreement by the regulated entity to correct each violation

PG&E asserts that it has addressed any alleged violations and, as further discussed in

PG&E's NOV Response, is implementing processes and systems to ensure compliance with the

PSPS requirements going forward.

#### D. An agreement by the regulated entity to pay any penalty by a date specified

PG&E agrees to pay a monetary penalty of \$1,753,100.00 to the California State General

Fund within thirty (30) days after the date of Commission Approval (as defined in Section IV.E.

below).

#### III. <u>ADDITIONAL TERMS</u>

#### A. Confidentiality and Public Disclosure Obligations

The Parties agree to continue to abide by the confidentiality provisions and protections of Rule 12.6 of the Commission's Rules of Practice and Procedure, which governs the discussions, admissions, concessions, and offers to settle that preceded execution of this ACO and Agreement and that were exchanged in all efforts to support its approval. Those prior negotiations and communications shall remain confidential indefinitely, and the Parties shall not disclose them outside the negotiations without the consent of both Parties. The Parties agree to coordinate as to the timing and content of mutual and/or individual public communications. Notwithstanding the foregoing, PG&E may make any disclosures it deems legally necessary, in its sole discretion, in order to satisfy its obligations under securities laws.

#### **B.** Future Proceedings

The Parties agree to avoid and abstain from making any collateral attacks on this ACO or taking positions in other venues that would undermine the effect or intent of the ACO.

Nothing in this ACO constitutes a waiver by SED of its legal obligations, authority, or discretion to investigate and enforce applicable safety requirements and standards (including, without limitation, provisions of GO 95 and GO 165) as to other conduct by PG&E unrelated to this ACO or the 2021 PSPS events that SED may identify as the basis for any alleged violation(s). SED shall retain such authority regardless of any factual or legal similarities that other PG&E conduct, and any alleged violation(s), may have to PG&E's conduct/alleged violations related to the 2021 PSPS events. Accordingly, any such similarities shall not preclude SED from using other conduct and alleged violation(s) as a basis for seeking future penalties.

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#### C. Regulatory Approval Process

Pursuant to Resolution M-4846, this ACO shall be submitted for public notice and comment. Upon approval or ratification of this ACO, the final resolution will "validate[] the order, which becomes an act of the Commission itself."<sup>3</sup>

By signing this ACO, the Parties acknowledge that they pledge support for Commission Approval and subsequent implementation of all the provisions of this ACO. The Parties shall use their best efforts to obtain Commission Approval of this ACO without modification, and agree to use best efforts to actively oppose any modification thereto. Should any Alternate Draft Resolution seek a modification to this ACO, and should either of the Parties be unwilling to accept such modification, that Party shall so notify the other Party within five business days of issuance of the Alternate Draft Resolution. The Parties shall thereafter promptly discuss the modification and negotiate in good faith to achieve a resolution acceptable to the Parties and shall promptly seek approval of the resolution so achieved. Failure to resolve such modification to the satisfaction of either of the Parties, or to obtain approval of such resolution promptly thereafter, shall entitle any Party to terminate this Agreement through prompt notice to the other Party. (*See also* Section IV.D. below.)

If Commission Approval is not obtained, the Parties reserve all rights to take any position whatsoever regarding any fact or matter of law at issue in any future enforcement action or proceeding related to the 2021 PSPS events.

 $<sup>\</sup>frac{3}{2}$  Resolution M-4846 at 8.

#### D. Admissibility

If this ACO is not adopted by the Commission, its terms are inadmissible for any evidentiary purpose unless their admission is agreed to by the Parties.

#### E. Due Process

PG&E's waiver of its due process rights for the Commission to hear and adjudicate the alleged violations set forth in Appendix I to this ACO is conditioned on a final Commission resolution or order approving this ACO without modification, or with modifications agreeable to each of the Parties.

#### IV. GENERAL PROVISIONS

#### A. Full Resolution

Upon Commission Approval, this ACO fully and finally resolves any and all enforcement actions, claims, and disputes between SED and PG&E related to the 2021 PSPS events, and provides for consideration in full settlement and discharge of all disputes, rights, enforcement actions, notices of violations, citations, claims, and causes of action which have, or might have been, brought by SED related to the 2021 PSPS events based on the information known, or that could have been known, to SED at the time that SED executes this ACO.

#### B. Non-Precedent

This ACO is not intended by the Parties to be precedent for any other proceeding, whether pending or instituted in the future. The Parties have assented to the terms of this ACO only for the purpose of arriving at the settlement embodied in this ACO. Each of the Parties expressly reserves its right to advocate, in other current and future proceedings, or in the event that the ACO is not adopted by the Commission, positions, principles, assumptions, arguments and methodologies which may be different than those underlying this ACO. The Parties agree

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and intend that, consistent with Rule 12.5 of the Commission's Rules of Practice and Procedure, a final Commission resolution approving this ACO should not be construed as a precedent or statement of policy of any kind for or against either Party in any current or future proceeding with respect to any issue addressed in this ACO, including but not limited to PG&E's admission of certain violations related to the 2021 PSPS events.

#### C. General Considerations for Settlement

Section III.B of the Commission's Enforcement Policy states that "the following general considerations should be evaluated as part of any proposed settlement to be submitted for Commission review: 1. Equitable Factors; 2. Mitigating circumstances; 3. Evidentiary issues; and 4. Other weaknesses in the enforcement action[.]"<sup>4</sup> The Parties explicitly considered these factors in their confidential settlement communications. Without waiving the protections of Rule 12.6 of the Commission's Rules of Practice and Procedure, the Parties represent that they took these factors into account, and each Party considered the risks and weaknesses of their positions. When taken as a whole, the Parties agree that the ACO amounts set forth in Section II are within the range of reasonable outcomes had this matter proceeded to formal litigation.

#### **D.** Incorporation of Complete ACO

The Parties have bargained in good faith to reach the ACO terms set forth herein, including in the Appendix. The Parties intend the ACO to be interpreted as a unified, integrated order and agreement, so that, consistent with Section III.C. above, if the Commission rejects or modifies any portion of this ACO or modifies the obligations placed upon PG&E or SED from those that the ACO would impose, each of the Parties shall have a right to withdraw. This ACO

<sup>&</sup>lt;sup>4</sup> Resolution M-4846, Enforcement Policy at 15 (Section III.B.).

is to be treated as a complete package and not as a collection of separate agreements on discrete issues. To accommodate the interests related to diverse issues, the Parties acknowledge that changes, concessions, or compromises by a Party in one section of this ACO resulted in changes, concessions, or compromises by the other Party in other sections. Consequently, consistent with Section III.C. above, the Parties agree to actively oppose any modification of this ACO, whether proposed by any Party or non-Party to the ACO or proposed by an Alternate Draft Resolution, unless both Parties jointly agree to support such modification.

#### E. Commission Approval

"Commission Approval" means a resolution or decision of the Commission that is (a) final and no longer subject to appeal, which approves this ACO in full; and (b) does not contain conditions or modifications unacceptable to either of the Parties.

#### F. Governing Law

This ACO shall be interpreted, governed, and construed under the laws of the State of California, including Commission decisions, orders and rulings, as if executed and to be performed wholly within the State of California.

#### G. Other

- 1. The representatives of the Parties signing this ACO are fully authorized to enter into this Agreement.
- 2. The Parties agree that no provision of this ACO shall be construed against either of the Parties because a particular party or its counsel drafted the provision.
- 3. This ACO constitutes the entire agreement between the Parties and, supersedes all prior or contemporaneous agreements, negotiations, representations, warranties, and understandings of the Parties with respect to the subject matter set forth herein.
- 4. The rights conferred and obligations imposed on either of the Parties by this ACO shall inure to the benefit of or be binding on that Party's

successors in interest or assignees as if such successor or assignee was itself a party to this ACO.

- 5. Should any dispute arise between the Parties regarding the manner in which this ACO or any term shall be implemented, the Parties agree, prior to initiation of any other remedy, to work in good faith to resolve such differences in a manner consistent with both the express language and the intent of the Parties in entering into this ACO.
- 6. The Parties are prohibited from unilaterally filing a petition for modification or application for rehearing of the Commission resolution or decision approving this ACO with modification.
- 7. This ACO may be executed in counterparts.
- 8. Nothing in this ACO relieves PG&E from any safety responsibilities imposed on it by law or Commission rules, orders, or decisions.
- 9. The provisions of Paragraph III.C. shall impose obligations on the Parties immediately upon the execution of this ACO.

#### V. DISCUSSION OF PENALTY ASSESSMENT METHODOLOGY FACTORS

The Penalty Assessment Methodology appended to the Commission's Enforcement Policy sets forth five factors that staff and the Commission must consider in determining the amount of a penalty for each violation: (1) severity or gravity of the offense; (2) conduct of the regulated entity; (3) financial resources of the regulated entity; (4) totality of the circumstances in furtherance of the public interest; and (5) the role of precedent.<sup>5</sup> This ACO was the result of arms-length negotiation between SED and PG&E, which was guided by the factors set forth in the Penalty Assessment Methodology. As discussed below, consideration of those factors supports a Commission finding that the ACO is reasonable and in the public interest. The attached NOV, Appendix I to this ACO, provides facts which provide a record basis for the

<sup>&</sup>lt;sup>5</sup> Resolution M-4846 (Nov. 5, 2020), Enforcement Policy, Appendix I; *see* D.22-04-058 at 3–4 (affirming that consideration of the Penalty Assessment Methodology provides a basis for the Commission to determine that a negotiated settlement under the Commission's Enforcement Policy is reasonable and in the public interest).

Commission's determination. PG&E's NOV Response at Appendix II provides additional details, which also provides a record basis for the Commission's determination and support the reasonableness of the ACO. As listed in Section II.A above, six NOV violations were dismissed as a result of more information provided by PG&E in its NOV response (Appendix II) and in settlement discussions.

Severity or Gravity of the Offense. The Commission has stated that the severity or gravity of the offense includes several considerations, including economic harm, physical harm, and harm to the regulatory process. Violations that caused actual physical harm to people or property are considered particularly severe.<sup>6</sup>

PG&E's violations occurred over the course of five separate PSPS events, January 19-21, 2021, August 17-19, 2021, September 20-21, 2021, October 11-12, 2021, and October 14-16, 2021. All five events resulted in a de-energization. The parties agree that PG&E will pay fines relating to the following violations:

- Failure to complete, or timely complete, 146,110 PSPS notifications during the five 2021 PSPS events, including 37,156 advance notifications and 108,954 notifications at de-energization or re-energization resulting in a fine amount of \$1,461,100;
- Failure to notify or attempt to notify 58 MBL customers during the September 20-21 event, resulting in a fine amount of \$290,000; and
- Failure to include the post-event report as an attachment for the August 17-19, 2021, September 20-21, 2021 events, and to provide a link to the post-event reports on PG&E's website for the October 11-12, 2021, and October 14-16, 2021 events resulting in a fine amount of \$2,000.

<sup>&</sup>lt;sup>6</sup> D.20-05-019 at 20; Enforcement Policy at 16.

There is no evidence that any physical or economic harm occurred from these violations; however, due to the potential for harm to MBL customers who may rely on electricity for medical equipment, and the emphasis the Commission has placed on notification requirements, these violations resulted in financial penalties totaling \$1,753,100.

PG&E had several other reporting and notification violations as summarized in the NOV. These violations did not result in any physical or economic harm and had little potential of resulting in physical or economic harm. As such, these violations resulted in no penalty.

<u>The Conduct of the Utility.</u> In evaluating the conduct of the utility, the Commission considers the utility's conduct in preventing the violation, detecting the violation, and disclosing and rectifying the violation.<sup>7</sup>

PG&E was forthcoming in providing SED with information regarding the notification failures in both the Post-Event Reports and PG&E's NOV Response. PG&E attributed the missed, or untimely, notifications to various factors including, but not limited to, a good faith intent not to disturb customers during "curfew/courtesy" hours late in the evening, late-changing weather impacts, and other system limitations. In addition, PG&E noted that the outage affecting the 58 MBL customers who did not receive notifications lasted less than an hour. PG&E was also forthcoming during discovery and negotiated in good faith during the ACO process. PG&E voluntarily updated SED's missed notification calculations to be consistent with its NOV response and this resulted in a slightly larger financial penalty. The issues regarding PG&E's missed, or untimely notifications, have been resolved.

<sup>&</sup>lt;sup>2</sup> Enforcement Policy at 17.

As a result of the information PG&E presented in its post-event reports, NOV response,

and settlement discussions, SED dismissed six violations from the NOV.

Financial Resources of the Utility. The Commission has described this criterion as

# follows:

Effective deterrence also requires that staff recognize the financial resources of the regulated entity in setting a penalty that balances the need for deterrence with the constitutional limitations on excessive penalties . . . . If appropriate, penalty levels will be adjusted to achieve the objective of deterrence, without becoming excessive, based on each regulated entity's financial resources.<sup>§</sup>

PG&E is one of the largest electric utilities in the State of California in terms of

customers and revenue. This amount is enough to emphasize the importance of the notification

requirements relative to its size.

# Totality of Circumstances in Furtherance of Public Interest. The Commission has

described this criterion as follows:

Setting a penalty at a level that effectively deters further unlawful conduct by the regulated entity and others requires that staff specifically tailor the package of sanctions, including any penalty, to the unique facts of the case. Staff will review facts that tend to mitigate the degree of wrongdoing as well as any facts that exacerbate the wrongdoing. In all cases, the harm will be evaluated from the perspective of the public interest.

An economic benefit amount shall be estimated for every violation. Economic benefit includes any savings or monetary gain derived from the act or omission that constitutes the violation.<sup>2</sup>

<sup>&</sup>lt;sup>8</sup> Enforcement Policy at 19.

<sup>&</sup>lt;sup>2</sup> Enforcement Policy at 19.

The Commission must evaluate penalties in the totality of the circumstances, with an emphasis on protecting the public interest. The ACO Amounts described above were tailored to the unique facts of the case and are reasonable. PG&E was fined for PSPS violations in 2019 and 2020 for \$106,000,000<sup>10</sup> and \$8,000,000.<sup>11</sup> PG&E's 2019 finable violations included broader failures to follow the PSPS guidelines across three PSPS events, including failure to notify over 1,100 MBL customers. The violations in 2019 far exceeded the violations contained in this ACO. PG&E's 2020 finable violations included a failure to notify customers prior to deenergization, at re-energization, and at the completion of re-energization for all seven of its PSPS events during that year.

With an appropriate resolution having been reached, it is in the public interest to resolve this proceeding now. The ACO obviates the need for SED to initiate an enforcement proceeding and for the Commission to adjudicate the disputed facts, alleged violations, and appropriate penalty. Approval of the ACO promotes administrative efficiency so that the Commission and parties are not required to spend substantial time and resources on continued litigation for a matter that has been satisfactory resolved.

The Role of Precedent. The Commission has described this criterion as follows:

Penalties are assessed in a wide range of cases. The penalties assessed in cases are not usually directly comparable. Nevertheless, when a case involves reasonably comparable factual circumstances to another case where

<sup>&</sup>lt;sup>10</sup> The \$106 million penalty was offset by \$86 million in bill credits provided to customers by PG&E, resulting in a net penalty of \$20 million. Decision (D.) 21-09-026, *Decision on Alleged Violations of Pacific Gas and Electric Company with Respect to its Implementation of the Fall 2019 Public Safety Power Shutoff Events* (Decision), September 29, 2021 at 2; issued in Rulemaking (R.) 18-12-005.

<sup>&</sup>lt;sup>11</sup> Resolution ALJ-445, issued October 16, 2023.

penalties were assessed, the similarities and differences between the two cases should be considered in setting the penalty amount.<sup>12</sup>

While not binding precedent, prior settlements are useful for comparison, with the

acknowledgement that settlements involve compromise positions. SED considered the following

settlements in evaluating this incident and the ACO:

- In 2021, San Diego Gas and Electric (SDG&E) initiated two PSPS events. During the two events, SDG&E failed to provide notifications to 6,983 customers. SED and SDG&E settled on an ACO agreeing that SDG&E violated the PSPS notification requirements under Commission Decision (D.) 19-05-042 and assessed a fine of \$70,830. Commission approved the settlement in Resolution SED-9.
- In 2021, PacifiCorp initiated one PSPS event. During this event, PacifiCorp failed to notify 1,753 customers. SED and SDG&E settled on an ACO agreeing that PacifiCorp violated the PSPS notification requirements under D.19-05-042 and assessed a fine of \$18,030. Commission approved the settlement in Resolution SED-10.
- In 2020, SDG&E initiated five PSPS events. During one event on September 8-9, 49 customers never received notifications during deenergization or re-energization. SED issued an AEO alleging SDG&E violated the PSPS notification requirements under D.19-05-042 and assessed a fine of \$24,000. SED also imposed eight corrective actions to ensure future compliance with the Commission's PSPS rules. SDG&E accepted the AEO and the Commission approved the settlement in Resolution M-4863.
- In 2020, PacifiCorp initiated two PSPS events. While SED did find PacifiCorp violated some PSPS guidelines, they opted not to assess a penalty because PacifiCorp successfully notified customers at deenergization and re-energization as required by the Commission's decisions. SED opted to impose eight corrective actions on PacifiCorp to ensure future compliance with the Commission's PSPS rules. The Commission approved the settlement in Resolution M-4862.
- In 2020, Pacific Gas and Electric (PG&E) initiated seven PSPS events. SED found that PG&E failed to provide any customer notifications during de-energization. SED issued an AEO alleging PG&E violated the PSPS

<sup>12</sup> Enforcement Policy at 21.

notification requirements under Commission decision D.19-05-042 and assessed a fine of \$12,000,000. SED also included six corrective actions to ensure future compliance with the Commission's PSPS rules. PG&E challenged the AEO. SED and PG&E settled the matter with an \$8 million fine. The amount was split up between a \$500,000 penalty to the General Fund and \$7,500,000 for the Independent Safety Monitor between 2023 and 2026. PG&E also had to comply with the six corrective actions. The Commission approved the settlement in Resolution ALJ-445.

 In 2020, Southern California Edison (SCE) initiated sixteen PSPS events. SED found that 25,573 customers failed to get notifications spread out over the course of the sixteen events. SED issued an AEO alleging SCE violated the PSPS notification requirements under Commission decision D.19-05-042 and assessed a fine of \$10,000,000. SED also included fourteen corrective actions to ensure future compliance with the Commission's PSPS rules. SCE challenged the AEO. SED and SCE settled the dispute with a \$7 million fine. The amount was split up between a \$500,000 shareholder-funder fine to the General Fund, a \$500,000 shareholder-funded payment to SCE's Energy Assistance Fund, and \$6 million permanent disallowance of PSPS program-related costs that are eligible for tracking in the Wildfire Mitigation Plan Memorandum Account. SCE also had to comply with the fourteen corrective actions. The Commission approved the settlement in Resolution ALJ-440.

The prior settlements reflect outcomes that included a mix of penalties, shareholder

funding of programs, and/or remedial action plans. The Parties believe that the ACO results in a

reasonable outcome considering these precedents and the criteria discussed in this section.

The Parties mutually believe that, based on the terms and conditions stated above, this

ACO is reasonable, consistent with the law, and in the public interest.

#### IT IS HEREBY AGREED.

[Signatures immediately follow this page]

# DATED: \_\_\_\_09,30, 2024

Pacific Gas and Electric Company

alen By: Merele

Meredith Allen Vice President, Regulatory Affairs Pacific Gas and Electric Company

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DATED: \_\_\_\_\_, 2024

Safety and Enforcement Division California Public Utilities Commission



Digitally signed by Leslie L Palmer Date: 2024.09.24 15:38:23 -07'00'

Leslie L. Palmer Director, Safety and Enforcement Division California Public Utilities Commission

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# **APPENDIX I**

# SAFETY AND ENFORCEMENT DIVISION NOTICE OF VIOLATION

PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



April 7, 2023

Meredith E. Allen Senior Director, Regulatory Relations Pacific Gas and Electric Company (PG&E) P.O. Box 770000 San Francisco, CA 94177

# SUBJECT: Notice of Violation – Pacific Gas & Electric 2021 Public Safety Power Shutoff Events

Ms. Allen:

On behalf of the Wildfire Safety and Enforcement Branch (WSEB) within Safety and Enforcement Division (SED) of the California Public Utilities Commission (CPUC or Commission), Cindy Chen of my staff conducted compliance assessment of PG&E's 2021 Public Safety Power Shutoff (PSPS) post event reports. In 2021, PG&E initiated a total of five PSPS events and submitted five post event reports to CPUC. Stakeholders provided comments on these post event reports. On March 1, 2022, PG&E filed 2021 PSPS Post-Season Report which included additional information to the post event reports previously submitted. SED performed reviews on the submitted reports, including consideration of stakeholder comments, to evaluate PG&E's compliance with the reporting requirements under Resolution ESRB-8, D.19-05-042 and D.20-05-051, D.21-06-014 and D.21-06-034.<sup>1</sup>

Our assessment revealed PG&E did not comply with certain provisions of Commission Resolution ESRB-8, D.19-05-042, D.21-06-014 and D.21-06-034.

A. Resolution ESRB-8 states in part "[t]he report should include 'The local communities' representatives the IOU contacted prior to de-energization, the date 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

<sup>&</sup>lt;sup>1</sup> PG&E's last PSPS event in 2021 was October 14 – 16, before the effective date of October 18, 2021 when the Administrative Law Judge issued the email ruling of Template for PSPS Post-Event & Lessons Learned Reports. Hence SED did not perform the review for PG&E's compliance with the Template.

General Order 95, Rule 21.2-D" (ESRB-8 at 5).

- A.1 PG&E reported the public safety partners contacted prior to deenergization, and the date and time these stakeholders were contacted. Among the five events in 2021, PG&E did not report the classified HFTD Tier classification for some affected areas, instead reporting N/A for the following four events:
  - August 17 August 19
  - September 20 September 21
  - October 11 October 12
  - October 14 October 16

However, PG&E did not explain why those affected areas did not have a HFTD classification or why those areas were non-HFTD.

- B. **Resolution ESRB-8** states in part "[t]he IOU shall notify the Director of SED, as soon as practicable, once it decides to de-energize its facilities. If the notification was not prior to the de-energization event, the IOU shall explain why a pre-event notification was not possible. The notification shall include the area affected, an estimate of the number of customers affected, and an estimated restoration time. The IOU shall also notify the Director of SED of full restoration within 12 hours from the time the last service is restored" (ESRB-8 at 6.)
  - B.1. For the October 11 October 12 event, on October 12, 9:58 PM, PG&E notified CPUC of the full power restoration. SED noted there were two circuits, TEJON 1102 and TEJON 1103, that were restored at 01:45 AM, October 13, and 10:50 PM, October 12. The restoration time for both circuits were after 9:58 PM, October 12, when PG&E notified CPUC stating it has successfully restored power in all areas. PG&E did not report the accurate restoration information to CPUC.
- C. D.19-05-042 Appendix A states in part "[i]n addition to submitting a report to the Director of the Commission's Safety and Enforcement Division within 10 business days of power restoration, electric investor-owned utilities must serve their de-energization report on the service lists of this proceeding and Rulemaking 18-10-007 or their successor proceedings. Service should include a link to the report on the utility's website and contact information to submit comments to the Director of the Safety and Enforcement Division" (D.19-05-042 at A22).
  - C.1. For the following two events, PG&E's service email did not include a link to the report on PG&E's website.

Meredith E. Allen Pacific Gas and Electric Company (PG&E) April 7, 2023 Page 3

- October 11 October 12
- October 14 October 16
- D. **D.19-05-042 Appendix A** states in part "[i]n addition to the reporting requirements in Resolution ESRB-8, the electric investor-owned utilities must provide the following information: 1) Decision criteria leading to de-energization, including an evaluation of alternatives to de-energization that were considered and mitigation measures used to decrease the risk of utility-caused wildfire in the de-energized area" (D.19-05-042 at A22-A23.)
  - D.1. For the January 19 January 21 event, PG&E explained several fire probability models, provided the actual readings of parameters such as maximum wind speed and FPI ratings; however, PG&E did not provide the criteria/threshold for the parameters that led to the decision to shut off power.
- E. **D.19-05-042** states in part "the electric investor-owned utilities must provide notice when a decision to de-energize is made, at the beginning of a de-energization event, when re-energization begins and when re-energization is complete. The electric investor-owned utilities should, whenever possible, adhere to the following minimum notification timeline" (D.19-05-042 at A8).
  - 48-72 hours in advance of anticipated de-energization: notification of public safety partners/priority notification entities
  - 24-48 hours in advance of anticipated de-energization: notification of all other affected customers/populations
  - 1-4 hours in advance of anticipated de-energization, if possible: notification of all affected customers/populations (D.19-05-042 at A8).
  - E.1. PG&E did not meet the 48-72 hours, 24-48 hours or 1-4 hours advance notifications to some public safety partners, critical facilities or other customers in the following events:
    - January 19 January 21
    - September 20 September 21
    - October 11 October 12
    - October 14 October 16

Event	Notification Failure	Entity/Customer Accounts	PG&E's Explanation
Jan. 19 - 21	1 – 4 hours	5,099	PG&E sent out four to 12 hours in advance of the power being shut off.
	48 – 72 hours	50	35: change in weather patterns. 15: 23 minutes outage when an unplanned upstream SCADA sectionalizing device had to be used.
	24 – 48 hours	741	<ul> <li>6: did not have valid contact info.</li> <li>735: 23 minute outage when an unplanned upstream SCADA sectionalizing device had to be used.</li> </ul>
Sep. 20 - 21	1 – 4 hours	2,371	<ul> <li>1,615: PG&amp;E does not send automated notifications to customers between the hours of</li> <li>9:00 PM and 08:00 AM.</li> <li>750: 23 minutes outage when an unplanned upstream SCADA sectionalizing device had to be used.</li> <li>6: did not have valid contact info.</li> </ul>
	No advance notification at all	756	<ul> <li>750: 23 minute outage when an unplanned upstream SCADA sectionalizing device had to be used.</li> <li>6: did not have valid contact info.</li> </ul>
Oct. 11 - 12	48 – 72 hours	173	<ul> <li>165: weather change, were not</li> <li>in scope originally.</li> <li>8: an unplanned upstream</li> <li>sectionalizing device had to be</li> <li>used to meet the planned</li> <li>de-energization time.</li> </ul>
	24 – 48 hours	3,086	69: no valid contact info.

# Table 1

Meredith E. Allen Pacific Gas and Electric Company (PG&E) April 7, 2023 Page 5

Event	Notification Failure	Entity/Customer Accounts	PG&E's Explanation
			<ul> <li>2,451: changing weather, not in scope originally.</li> <li>555: use of an unplanned upstream SCADA sectionalizing device.</li> <li>11: data quality issues.</li> </ul>
	1 – 4 hours	22,816	<ul> <li>21,833: PG&amp;E does not send notifications between 9:00 PM and 08:00 AM.</li> <li>874: use of an unplanned upstream SCADA sectionalizing device.</li> <li>69: no valid contact info.</li> <li>37: reclassify to non-PSPS outage.</li> <li>3: under investigation.</li> </ul>
	No advance notification at all	655	<ul> <li>20: De-energized due to use of an unplanned upstream device.</li> <li>69: no valid contact info.</li> <li>555: use of an unplanned upstream SCADA sectionalizing device.</li> <li>11: data quality issues.</li> </ul>
	24 – 48 hours	1	no valid contact info.
Oct. 14 - 16	1 – 4 hours	666	<ul><li>665: PG&amp;E does not send</li><li>notifications between 9:00 PM</li><li>and 08:00 AM.</li><li>1: no valid contact info.</li></ul>
	No advance notification at all	1	no valid contact info.

E.2. When de-energization is initiated, PG&E failed to notify some affected customers for the following events:

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# Table 2

Event	Customer Accounts	PG&E's Explanation	
Jan. 19 – 21	5,099	<ul><li>PG&amp;E sent out 4 to 12 hours in advance of the power being</li><li>shut off and stated these serve as PG&amp;E's De-Energization</li><li>Initiated notifications</li></ul>	
Sep. 20 - 21	2,853 2,112: PG&E does not send automated notifications to customers between the hours of 9:00 PM and 08:00 AM. 735: 23 minute outage when an unplanned upstream SCADA sectionalizing device had to be used. 6: no valid contact information on file.		
Oct. 11 - 12	20,470: PG&E does not send notifications between 9:00 P and 08:00 AM. 36: reclassify to non-PSPS outage. Due to the reclassification, the customers were flagged to no longer receive PSPS-related notifications. 905: use of an unplanned upstream device. 69: no valid contact information on file.		
Oct. 14 - 16	628	<ul><li>627: PG&amp;E does not send notifications between 9:00 PM and 08:00 AM.</li><li>1: no valid contact information on file.</li></ul>	
Total	30,060		

E.3. Immediately before re-energization begins, PG&E failed to send notification of some affected customers for the following events:

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Event	Customer Accounts	PG&E's Explanation
Sep. 20 – 21	801	<ul> <li>56: automated notifications were not turned on in time to notify these customers immediately before re-energization due to a delay in PG&amp;E's communications process.</li> <li>735: 23 minute outage when an unplanned upstream SCADA sectionalizing device had to be used.</li> <li>4: reclassified to a non-PSPS outage. Due to the reclassification, the customers were flagged to no longer receive PSPS-related notifications.</li> </ul>

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Event	Customer Accounts	PG&E's Explanation
		6: no valid contact information.
		<ul> <li>290: PG&amp;E does not send notifications between</li> <li>9:00 PM and 08:00 AM.</li> <li>289: automated notifications were not able to be sent due to incomplete information (e.g., data entry</li> </ul>
Oct. 11 – 12	3,777	errors in the field). 1,808: Due to the concurrent wind event some outages were initially thought to be wind related.
		361: Some were restored earlier than anticipated.
		125: issue with automated notification system.
		69: no valid contact information.
		60: data quality issues.
		775: under investigation.
		1: no valid contact information.
		33: due to data quality issues causing notifications
Oct. 14 –		to be assigned to the wrong PSPS event.
16	35	1: PG&E implemented ad-hoc Weather "All-
10		Clear" Notifications via phone calls for this event.
		One customer was not notified due to not having a
		phone number.
Total	4,613	

E.4. When re-energization is complete, PG&E failed to send notification of some affected customers for the following events:

# Table 4

Event	<b>Customer Accounts</b>	PG&E's Explanation
Sep. 20 – 21	1,128	<ul> <li>61: automated notifications were not turned on in time to notify these customers immediately before re-energization due to a delay in PG&amp;E's communications process.</li> <li>280: PG&amp;E's field crew did not properly complete fields in PG&amp;E's Outage Dispatch Tool.</li> <li>735: 23 minute outage when an unplanned upstream SCADA sectionalizing device had to be used.</li> <li>39: reclassified to a non-PSPS outage.</li> <li>6: no valid contact info.</li> </ul>

Meredith E. Allen Pacific Gas and Electric Company (PG&E) April 7, 2023 Page 8

Event	<b>Customer Accounts</b>	PG&E's Explanation
		3: not picked up by the system.
		4: customer status change.
Oct. 11 – 12	2,648	<ul> <li>768: Due to the concurrent wind event some outages were initially thought to be wind related.</li> <li>1,700: PG&amp;E does not send the notifications between 9:00 PM and 08:00 AM.</li> <li>8: patrols would not begin until the October 14 event was completed.</li> <li>69: no valid contact information.</li> <li>60: data quality issues.</li> <li>43: under investigation.</li> </ul>
Oct. 14 – 16	2	<ol> <li>no valid contact information.</li> <li>PG&amp;E implemented ad-hoc Weather "All- Clear" Notifications via phone calls for this event. One customer was not notified due to not having a phone number.</li> </ol>
Total	3,778	

- E.5. For the August 17-19 event, PG&E acknowledged due to data limitations at that time, PG&E was unable to provide a full breakdown of the notification failures. During this event, PG&E deenergized 48,155 customers.
- F. **D.19-05-042** states in part "the electric investor-owned utilities must provide the following information: 2) ... the methods of notifications and who made the notifications (the utility or local public safety partners)" (19-05-042 at A22-A23).
  - F.1. PG&E did not provide the information of "who made the notifications."
- G. **D.19-05-042** states in part "the electric investor-owned utilities must provide the following information: 4) A description and evaluation of engagement with local and state public safety partners in providing advanced education and outreach and notification during the de-energization event (D.19-05-042 at A22-A23).
  - G.1 For the January 19 January 21 event, PG&E did not provide the evaluation of such engagement. PG&E only stated "[f]ollowing the submission of this PSPS De-Energization Report, PG&E will provide the report to Public Safety Partners for review and feedback."
- H. **D.19-05-042** states in part "the electric investor-owned utilities must provide the

following information: 5) For those customers where positive or affirmative notification was attempted, an 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 at A22-A23).

- H.1. For the following two events, PG&E did not explain why no notification attempts were made to the below Medical Base Line (MBL) customers.
  - September 20 September 21 event: Total impacted MBL customers: 234 Total attempted notifications: 176 Total notifications not attempted: 58

There were 58 MBL customers without notification attempts made and PG&E did not provide an explanation.

2) October 11 - October 12 event: Total de-energized MBL customers: 1,738 Total attempted notifications: 1,684 Total notifications not attempted: 54

There were 54 MBL customers without notification attempts made and PG&E did not provide an explanation.

- I. D.21-06-014 states in part "PG&E, SCE, and SDG&E must each provide information on the following notice topics, at a minimum, in the 10-day post-event reports: (1) ....; (2) whether public safety partners/priority notification entities received notice 48-72 hours in advance of anticipated de-energization; (3) whether all other affected customers/populations received notice 24-48 hours in advance of anticipated de-energization; (4) whether all affected customers/populations received notice 1-4 hours in advance of anticipated de-energization; (5) whether all affected customers/populations received notice when the de-energization was initiated; (6) whether all affected customers/populations received notice immediately before re-energization begins; and (7) whether all affected customers/populations received notice when re-energization was complete (D.21-06-014 at 286.)
  - I.1. PG&E did not meet these minimum notification timelines. See details under Section E.

Meredith E. Allen Pacific Gas and Electric Company (PG&E) April 7, 2023 Page 10

- J. D.21-06-014 states in part "Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company must serve, on the same day as filed with the Commission, the 10-day post-event reports as follows: (1) serve the report, as an attachment, via email on the service lists of Rulemaking (R.) 18-12-005 and R.18-10-007 (or the successor proceedings) and all lead affected local and county public safety partners; (2) when serving the 10day post-event report, include in the email a link to the report on utility's website; (3) when serving the report, include in the email instructions for how the public may submit comments (both formal and informal) to the Commission on the report" (D.21-06-014 at 303).
  - J.1. PG&E's service did not include the report as an attachment for the events below:
    - August 17 August 19
    - September 20 September 21
  - J.2. PG&E did not provide a link to the report on the utility's website for the events below:
    - October 11 October 12
    - October 14 October 16
- K. D.21-06-014 states in part "Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company must include, in the 10-day post-event report, a description of the de-energization threshold analyses, as part of lessons learned reporting, 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 at 305 & 306).
  - K.1. Although PG&E reported the threshold validation and the application of threshold in PSPS decision, PG&E did not report whether the thresholds were adequate after such examination.
- L. **D.21-06-034** states in part "[p]rior to a PSPS event, immediately after the utility decides on which CRC locations to open during the PSPS event, the utility must provide notice to customers of the locations of the CRCs, the services available at each CRC, the hours of operation of each CRC, and where to access electricity during the hours the CRC is closed" (D.21-06-034 at A2).
  - L.1. PG&E's customer notification scripts only states "For more information, including medical device charging resources, food replacement and other support, visit pge.com/pspsupdates or call 1-800-743-5002." PG&E did not

report whether the link includes the locations of the CRCs, the services available at each CRC, the hours of operation of each CRC, and where to access electricity during the hours the CRC is closed.

- M. **D.21-06-034** states in part "[e]ach electric investor-owned utility must make every attempt to provide notification of the cancellation of a de-energization event, or removal from scope, by notifying all affected entities, including public safety partners, within two hours of the decision to cancel" (D.21-06-034 at A11).
  - M.1. PG&E did not provide notification of the cancellation of a de-energization event, or removal from scope, by notifying all affected entities, including public safety partners, within two hours of the decision to cancel. See details in Table 5 below:

Event	Recipients	Accounts	PG&E's Explanation	
Aug. 17 - 19	Customers	unavailable	Due to issues with the new process PG&E was employing to send notifications.	
Sep. 20 - 21	Customers	4,510 Due to issues with the process PG&E v employing to send cancellation notifications.		
	Public Safety partners	2	While PG&E did not send automated notifications to two tribes, Agency Representatives were in constant coordination with these tribes on event status.	
Oct. 11 - 12	Critical Facilities	32	Due to time required to build out cancellation notification files after the decision had been made to remove the customers from scope, as well as customers being removed from scope during between 9:00 PM and 08:00 AM, at which point PG&E waits until the next morning to initiate the cancellation notifications.	
	Customers	1,105	Time required to build out cancellation notification files after the decision had been made to remove the customers from scope, as well as customers being removed from scope during between 9:00 PM and 08:00 AM.	

Table 5

Meredith E. Allen Pacific Gas and Electric Company (PG&E) April 7, 2023 Page 12

Event	Recipients	Accounts	PG&E's Explanation	
Oct. 14 - 16	Public Safety partners	12	While PG&E did not send automated notifications to eleven counties and one city within two hours of the decision to remove the jurisdiction from scope, Agency Representatives were in constant coordination with these agencies on event status.	
	Critical Facilities	209	Due to time required to build out cancellation notification files after the decision had been made to remove the customers from scope.	
	Customers 6,377		Due to the time required to build out cancellation notification files.	

Please advise me no later than May 7, 2023, of corrective measures taken by PG&E to remedy and prevent the future recurrence of the identified violations, or provide additional data that refutes the violations detailed in this Notice of Violation. Based on your response, this Notice of Violation may lead to an enforcement action. If you have any questions, you can contact Cindy Chen at (415) 660-8312 or email Cindy.Chen@CPUC.CA.gov.

Sincerely,

*Ronald DeMayo* Ronald DeMayo

Program and Project Supervisor Public Safety Power Shutoff Section Wildfire Safety and Enforcement Branch Safety and Enforcement Division California Public Utilities Commission

Lee Palmer, Director, Safety and Enforcement Division, CPUC Cc: Anthony Noll, Program Manager, WSEB, SED, CPUC Cindy Chen, Senior Public Utilities Regulatory Analyst, WSEB, SED, CPUC

# **APPENDIX II**

# PACIFIC GAS AND ELECTRIC RESPONSE TO NOTICE OF VIOLATION



Mark Quinlan Senior Vice President Wildfire & Emergency Operations 300 Lakeside Drive Oakland, CA 94612-3534

415.243.6392 Mark.Quinlan@pge.com

May 12, 2023

Ronald DeMayo Program and Project Supervisor Public Safety Power Shutoff Section Wildfire Safety and Enforcement Branch Safety and Enforcement Division California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA, 94102

# Re: Notice of Violation - 2021 Public Safety Power Shutoff Events

Dear Mr. DeMayo,

Pacific Gas and Electric Company (PG&E) submits the following in response to the Notice of Violation (NOV) regarding 2021 Public Safety Power Shutoff Events, issued on April 7, 2023, by the California Public Utilities Commission's Safety and Enforcement Division.

PG&E finds some of the violations to be duplicative to each other and/or duplicative to correction actions outlined in the proposed 2022 Administrative Enforcement Order regarding the 2020 Public Safety Power Shutoff Events. As outlined further in the response, PG&E has already identified improvements in these instances and does not believe the items noted in the NOV merit financial penalties or an additional enforcement action.

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

Sincerely,

markquilen

Mark Quinlan Senior Vice President Wildfire & Emergency Operations

cc: Leslie Palmer, CPUC Anthony Noll, CPUC Cindy Chen, CPUC Meredith Allen, PG&E Susie Martinez, PG&E

#### Pacific Gas and Electric Company Corrective Measures for Notice of Violation – 2021 Public Safety Power Shutoff Events Submitted May 12, 2023

On April 7, 2023, the California Public Utilities Commission's (CPUC) Safety and Enforcement Division (SED) issued a Notice of Violation (NOV) to Pacific Gas and Electric Company (PG&E). The NOV alleges 13 violations from SED's review of PG&E's five 2021 Public Safety Power Shutoffs (PSPS) Post-Event Reports.

SED found that PG&E failed to comply with certain PSPS guidelines pertaining to notifications, decision criteria and thresholds, filing processes and engagement evaluation in Resolution (R.) ESRB-8, Decision (D.) 19-05-042 and D.20-05-051. PG&E is submitting the following response, and includes if appropriate, corrective actions that were taken or actions that we will take to align with the CPUC's reporting requirements for PSPS events moving forward.

### Section A

PG&E reported the public safety partners contacted prior to de-energization, and the date and time these stakeholders were contacted. Among the five events in 2021, PG&E did not report the classified HFTD Tier classification for some affected areas, instead reporting N/A for the following four events:

- August 17 August 19
- September 20 September 21
- October 11 October 12
- October 14 October 16

# However, PG&E did not explain why those affected areas did not have a HFTD classification or why those areas were non-HFTD.

PG&E acknowledges there were instances where High Fire Threat Districts (HFTD) Tier classifications were not identified for all Public Safety Partners contacted prior to de-energization, based on reporting direction in the Post-Event Report Template<sup>1</sup> and Resolution ESRB-8<sup>2</sup>. The vast majority of these instances were appropriately designated as N/A as they were not within an HFTD and therefore should not be considered violations, as explained below.

After reviewing all Public Safety Partners contacted, within Appendix E of our 2021 Post-Season Reports, "N/A" was listed as the HFTD due to those affected areas being in a High Fire Risk Area (HFRA), which PG&E utilizes in addition to HFTD to determine PSPS scope<sup>3</sup>. Circuit configurations from PSPS scoping can result in an impact to customers outside of a HFTD, but within HFRA. In addition to HFRA, a small portion of these instances were found to be potential errors related to missing latitudes/longitudes or manual data entry errors.

PG&E is conducting a thorough review of our data automation to confirm each jurisdiction will have the correct Tier classification in future Post-Event Reports.

PG&E recommends that the Post-Event Reporting Template be modified to request HFTD, HFRA or other for the 2023 season to ensure the Commission receives the information on the classification. PG&E will also provide a reason in future Post-Event Reports if a jurisdiction does not have a HFTD Tier classification listed such as HFRA designation.

<sup>&</sup>lt;sup>1</sup><u>https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/safety-and-enforcement-division/templates-psps-post--and-pre-event-reports/template-psps-post-event-reports-as-of-oct-2021.docx</u>

<sup>&</sup>lt;sup>2</sup> https://docs.cpuc.ca.gov/publisheddocs/published/g000/m218/k186/218186823.pdf

<sup>&</sup>lt;sup>3</sup> <u>https://www.pge.com/pge\_global/common/pdfs/outages/public-safety-power-shutoff/safety-outage-decision-making-guide.pdf</u>

Section B

For the October 11 – October 12 event, on October 12, 9:58 PM, PG&E notified CPUC of the full power restoration. SED noted there were two circuits, TEJON 1102 and TEJON 1103, that were restored at 01:45 AM, October 13, and 10:50 PM, October 12. The restoration time for both circuits were after 9:58 PM, October 12, when PG&E notified CPUC stating it has successfully restored power in all areas. PG&E did not report the accurate restoration information to CPUC.

PG&E disagrees with this violation. In some circumstances, customer outages are appropriately reclassified from PSPS outages to "fire" or "unplanned outages." This can occur when a public agency, like the Department of Forestry and Fire Protection (Cal Fire), requests customers remain de-energized because of a concurrent fire in the area. In addition, customers may experience extended outages when extensive weather-related equipment damages require PG&E to safely complete repairs prior to restoring power.

In the October 11 - 12 event, PG&E reclassified the customers served by TEJON 1102 to unplanned outages. This is because weather-related equipment damages required repairs prior to restoring power, as noted in Table C-1 of the Report. TEJON 1103, as noted in Table B-1 of the Report, was restored at 10:50 a.m., not p.m., on October 12. Thus, while PG&E accurately reported the restoration times in the Tables B-1, this was incorrectly noted by SED in this finding.

PG&E notes that there was a similar finding in SED's 2022 proposed Administrative Enforcement Order to PG&E for its 2020 PSPS events<sup>4</sup> ("2022 AEO") for which no financial penalties were proposed. We are addressing these findings by adjusting our post-event reporting of PSPS restoration notifications in accordance with the report template that was issued by SED in October 2021 and to clearly identify when customers have been reclassified to "fire" or "unplanned outages."

#### Section C

For the following two events, PG&E's service email did not include a link to the report on PG&E's website.

- October 11 October 12
- October 14 October 16

PG&E finds this violation duplicative of Section J. See <u>Section J</u> response below.

#### Section D

# For the January 19 – January 21 event, PG&E explained several fire probability models, provided the actual readings of parameters such as maximum wind speed and FPI ratings; however, PG&E did not provide the criteria/threshold for the parameters that led to the decision to shut off power.

PG&E disagrees with this violation. D.19-05-042<sup>5</sup> does not include the need to provide thresholds for the parameters that led to the decision to shut off power in the PSPS Post-Event Report. Including this explanation only became a reporting requirement after the new Post-Event Report template was issued in October 2021. Therefore, the reporting of additional PSPS threshold information was not included in the January 19 – 21 Post-

<sup>&</sup>lt;sup>4</sup> <u>https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/safety-and-enforcement-division/acos-and-aeos/pge-administrative-enforcement-order---2020.pdf</u>

<sup>&</sup>lt;sup>5</sup> https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M296/K598/296598822.PDF

Event Report<sup>6</sup>. While there was a similar finding in SED's 2022 AEO, pp. 3-4<sup>7</sup> for which no penalties were proposed, following SED's issuance of the proposed 2021 Post-Event Report template, we have since addressed these findings by including a more granular explanation of PSPS criteria/threshold for the parameters that led to the decision to shut off power.

## Section E

E.1 PG&E did not meet the 48-72 hours, 24-48 hours or 1-4 hours advance notifications to some public safety partners, critical facilities or other customers in the following events (Table 1)

- January 19 January 21
- September 20 September 21
- October 11 October 12
- October 14 October 16

E.2. When de-energization is initiated, PG&E failed to notify some affected customers for the following events (Table 2)

E.3. Immediately before re-energization begins, PG&E failed to send notification of some affected customers for the following events (Table 3)

E.4. When re-energization is complete, PG&E failed to send notification of some affected customers for the following events (Table 4)

E.5. For the August 17-19 event, PG&E acknowledged due to data limitations at that time, PG&E was unable to provide a full breakdown of the notification failures. During this event, PG&E de-energized 48,155 customers

PG&E finds violations E.1 through E.4 duplicative of Section I. See <u>Section I</u> response below.

In response to E.5, PG&E disagrees with this violation. PG&E provided the number of failed notifications and the reasonings, in Section 5.5, pp. 41-42, of the Post-Event Report<sup>8</sup>, per the requirement. Following issuance of the final report template in October 2021, PG&E began providing additional information as outlined in Table 8 of PG&E's Post-Event Reports. Additionally, PG&E provided the August 17 – 19 notification breakdown in a reply to Cal Advocates' comments<sup>9</sup> on PG&E's 2021 PSPS Post-Event Reports.

## Section F

## **PG&E** did not provide the information of "who made the notifications."

PG&E disagrees with this violation. In the January 19 - 21 Post-Event Report<sup>10</sup>, since PG&E explained its notification process, it was implied that the notifications listed were made by PG&E. PG&E's Post-Event Reports only report on PG&E's actions. PG&E encourages public safety partners and community-based organizations to utilize their communication channels to notify their network regarding a PSPS. However, PG&E is unable to

<sup>&</sup>lt;sup>6</sup><u>https://www.pge.com/pge\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/PSPS-Report-Letter-01.19.21.pdf</u>

<sup>&</sup>lt;sup>7</sup> https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/safety-and-enforcement-division/acos-and-aeos/pge-administrativeenforcement-order---2020.pdf

<sup>&</sup>lt;sup>8</sup> <u>https://www.pge.com/pge\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/PSPS-Report-Letter-08.17.21.pdf</u>

<sup>&</sup>lt;sup>9</sup> https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M465/K578/465578379.PDF

<sup>&</sup>lt;sup>10</sup> <u>https://www.pge.com/pge\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/PSPS-Report-Letter-01.19.21.pdf</u>

track and report on notifications made by these entities, as their notification systems and/or platforms and timing are outside of PG&E's control and purview.

While there was a similar finding in SED's 2022 AEO, pg.  $5^{11}$  for which no penalties were proposed, to address these findings we began to align with the proposed 2021 Post-Event Report template (final template issued in October 2021), by specifically identifying "PG&E" as the entity that made notifications to customers, including those enrolled in the Medical Baseline Program, as of the August 17 - 19 event (Section 5, Table 5)<sup>12</sup>. This section also outlines the extensive outreach that PG&E conducts with Medical Baseline (MBL) customers to confirm they have received notice of a potential PSPS event.

#### Section G

# For the January 19 – January 21 event, PG&E did not provide the evaluation of such engagement. PG&E only stated "[f]ollowing the submission of this PSPS De-Energization Report, PG&E will provide the report to Public Safety Partners for review and feedback."

There was a similar finding in SED's 2022 AEO, pg.  $5^{13}$  for which no penalties were proposed. While PG&E disagrees with this violation, we acknowledge that our reporting could have been clearer in describing the evaluation of our engagement with public safety partners. In the January 19 – 21 Post-Event Report<sup>14</sup>, Section 8, PG&E explains the extensive, multi-layered outreach completed to local and state public safety partners. Additionally, beginning in 2020, PG&E sent PSPS post-event surveys to external partners, in addition to Agency Representatives, to collect feedback. The results from our outreach efforts showed no complaints on our engagement were received for the January 19-21 event. Based on this, we evaluated our engagement with public safety partners to be adequate. As a process improvement to address this finding, we will include in our post-event reporting a clearer description of the evaluation of our engagement with public safety partners.

#### Section H

For the following two events, PG&E did not explain why no notification attempts were made to the below Medical Base Line (MBL) customers.

1) September 20 – September 21 event: Total impacted MBL customers: 234 Total attempted notifications: 176 Total notifications not attempted: 58

There were 58 MBL customers without notification attempts made and PG&E did not provide an explanation.

2) October 11 - October 12 event: Total de-energized MBL customers: 1,738 Total attempted notifications: 1,684 Total notifications not attempted: 54

<sup>&</sup>lt;sup>11</sup> <u>https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/safety-and-enforcement-division/acos-and-aeos/pge-administrative-enforcement-order---2020.pdf</u>

<sup>&</sup>lt;sup>12</sup> https://www.pge.com/pge\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/PSPS-Report-Letter-08.17.21.pdf

<sup>&</sup>lt;sup>13</sup> <u>https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/safety-and-enforcement-division/acos-and-aeos/pge-administrative-enforcement-order--2020.pdf</u>

<sup>&</sup>lt;sup>14</sup> <u>https://www.pge.com/pge\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/PSPS-Report-Letter-01.19.21.pdf</u>

# There were 54 MBL customers without notification attempts made and PG&E did not provide an explanation.

This finding was similar to a finding in SED's 2022 AEO, p. 5<sup>15</sup> for which no penalties were proposed. PG&E disagrees with this violation as PG&E reported the explanations for why no notification attempts were made to certain MBL customers referenced in the Sept. 20 - Sept. 21 and October 11 - October 12 post-event reports. PG&E provided the notification failure causes in the Post-Event Reports, including for MBL customers. In the September 20 – 21, 2021 PSPS Post-Event Report, pg.  $53^{16}$ , Table 8 notes that there was a subset of 735 customers that did not receive notifications. These customers, 58 of which were MBL customers, were not initially anticipated to be impacted by PSPS, but were de-energized for a short period of time because an additional Supervisory Control and Data Acquisition (SCADA) sectionalizing device was required for PSPS execution. The outage for the 735 customers was less than one hour, as the customers were restored as soon as the planned devices could be isolated. PG&E has since developed a process to quickly identify and notify customers impacted by the operation of an unplanned SCADA device ahead of de-energization, where possible. Similar to the September 20 - 21 PSPS outage, Table 8 in the October 11 - 12, 2021 PSPS Post-Event Report, pg. 58<sup>17</sup>, notes that a subset of 555 customers did not receive notifications due to an unanticipated weather change which required an unplanned SCADA device to be used for faster de-energization. Of the 555 customers, approximately 54 were MBL customers. Note that the outage for the 555 customers was less than one hour as the customers were restored as soon as the planned device could be isolated. As mentioned above, PG&E has since developed an improved process for notifications when changes require an unplanned device to be used.

While PG&E provided an explanation of the reasons why these missed notifications occurred, we acknowledge the linkage between the MBL missed customer notifications reported in Section 5.3 and the explanations of missed customer notifications in Section 5.5 was not clear. As a process improvement, PG&E will report this linkage more clearly in future reports.

### **Section I PG&E** did not meet these minimum notification timelines. See details under Section E.

This alleged violation is duplicative of Section E.1 through E.4. PG&E agrees with some of the notification violations, as more thoroughly described and explained in <u>Appendix A</u>, and disagrees with other violations. Similar to the findings in Section E.1 and E.2 referenced above, in 2022, a penalty was proposed by SED in a proposed Administrative Enforcement Order for failing to notify customers at the time of de-energization and at the time of re-energization during the 2020 PSPS events.<sup>18</sup> As discussed in our Request for Hearing to SED's proposed AEO<sup>19</sup> and in <u>Appendix A</u> herein, while we did not notify customers at the moment we began to shutoff power, our notification decisions were made out of consideration for our customers based on our good faith intent not to disturb customers during "curfew/courtesy" hours and by providing "Warning" notifications at 24 hours before de-energization and between one and twelve hours before shutoff. These advanced notifications were likely as effective as, if not more than, notification files, including telecommunications capacity, the latter notifications would likely not arrive until well after de-energization had occurred, particularly for larger PSPS

<sup>&</sup>lt;sup>15</sup> <u>https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/safety-and-enforcement-division/acos-and-aeos/pge-administrative-enforcement-order--2020.pdf</u>

<sup>&</sup>lt;sup>16</sup> <u>https://www.pge.com/pge\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/PSPS-Report-Letter-09.20.21.pdf</u>

<sup>&</sup>lt;sup>17</sup> <u>https://www.pge.com/pge\_global/common/pdfs/safety/emergency-preparedness/natural-disaster/wildfires/PSPS-Report-Letter-10.11.21.pdf</u>

<sup>&</sup>lt;sup>18</sup> June 15, 2022, Proposed Administrative Enforcement Order to PG&E for 2020 PSPS Events at pp. 6, 7. The Commission's proposed financial penalties (\$12M) were solely based on the violations associated with PG&E's failure to notify customers at the time of deenergization and at the time of re-energization.

<sup>&</sup>lt;sup>19</sup> PG&E's Request for Hearing to SED's 2022 Propose Administrative Order

events. In addition to our Warning notifications, we posted customer outage maps on our PSPS website where customers can input their specific address to see whether it would be impacted by the forecast PSPS event. By sending the Warnings, we had already informed most customers when de-energization would occur.

We have shown great progress and thoughtful, dedicated efforts to serving our customers in the 2021 PSPS events, while understanding that we will continue to make improvements in supporting our customers through PSPS events. We believe our customers were not harmed by the lack of notifications at the moment of deenergization. Our decision to not notify our customers at the moment of de-energization was made out of consideration for our customers as they had received "Warning" notifications. However, we acknowledge that notifying customers when de-energization is initiated is a compliance requirement. Based on our corrective actions resulting from the 2022 AEO, we are currently implementing an automated notification at de-energization (including during courtesy hours) for future PSPS events. The proposed 2022 PSPS AEO was issued well after the 2021 PSPS season, precluding us from addressing these concerns during the 2021 PSPS season.

As to the findings referenced in E.1, E.3 and E.4, PG&E notes that there were similar findings in the 2022 AEO, pg. 4<sup>20</sup> and no financial penalties were proposed. As part of continuous improvement to address these findings, PG&E has completed, or is in the process of completing, the following mitigations to minimize notification delays or failures:

- 1. Conducting ongoing customer outreach for updated contact information.
- 2. Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").
- 3. Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
- 4. Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages.
- 5. Creating backup notification files, in case of technology or system issues.
- 6. Training EOC team members on process improvements.
- 7. Updating internal processes for timelier and more accurate agency and customer notifications.
- 8. Adjusting when internal systems are turned on.
- 9. Coordinating with customers to ensure access to devices during events.

## Section J

J.1. PG&E's service did not include the report as an attachment for the events below:

- August 17 August 19
- September 20 September 21

## J.2. PG&E did not provide a link to the report on the utility's website for the events below:

- October 11 October 12
- October 14 October 16

PG&E agrees with this violation and finds it duplicative of Section C. We have since adjusted our internal processes and systems to help ensure filing requirements are met more consistently. We also updated our internal job aids to outline and validate the filing process more clearly. In addition, we have noted to include the report as an attachment and a link to the Post-Event Report in the service email.

#### Section K

Although PG&E reported the threshold validation and the application of threshold in PSPS decision, PG&E did not report whether the thresholds were adequate after such examination.

<sup>&</sup>lt;sup>20</sup> https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/safety-and-enforcement-division/acos-and-aeos/pge-administrativeenforcement-order---2020.pdf

PG&E disagrees with this violation. As explained in our Post-Event Reports, PG&E only implements PSPS as a measure of last resort to prevent wildfires during significant wind events. In our Post-Event Reports, PG&E outlined in Section 11.1 how PSPS thresholds are examined for criteria adequacy and validated against internal and external data sources. This section also described the analysis PG&E performed using extensive sensitivity and back-cast analysis to ensure PSPS is being used as a measure of last resort. PG&E utilized and referenced the "Detailed Event Dashboard" during the back-cast to confirm thresholds were adequate for PSPS. As noted in Section 11.1 of the Post-Event Reports, Meteorologists evaluated historical PSPS events hour-by-hour to verify the locations and times that are being flagged as meeting PSPS guidance.

### Section L

PG&E's customer notification scripts only states "For more information, including medical device charging resources, food replacement and other support, visit pge.com/pspsupdates or call 1-800-743-5002."

# PG&E did not report whether the link includes the locations of the CRCs, the services available at each CRC, the hours of operation of each CRC, and where to access electricity during the hours the CRC is closed.

PG&E disagrees with this violation. PG&E notified customers of CRC information including locations, services available and hours of operation by posting on our public facing website, which customers are directed to in each notification. During PSPS outages, due to the detailed volume of CRC information, PG&E notifies and directs agencies, customers and the general public to pge.com/pspsupdates through automated notifications, news releases, social media, community based-organizations, and other avenues. PG&E also directs visitors from the pge.com homepage to pge.com/pspsupdates.

On pge.com/pspsupdates, PG&E prominently highlights the dedicated Community Resource Center (CRC) page. The CRC page includes:

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

PG&E proactively coordinates with customers for input regarding PSPS notifications. Based on feedback received, customers generally had low awareness of the terms "Community Resource Centers" and "CRC." This is why PG&E highlights resources provided at CRCs, such as charging stations, as information that is available at pge.com/pspsupdates. We have also incorporated feedback from customers, particularly the Access and Functional Needs population, that PG&E limits the amount of information in automated notifications to maximize effectiveness. We will continue to engage our customers when refining our notifications.

#### Section M

# PG&E did not provide notification of the cancellation of a de-energization event, or removal from scope, by notifying all affected entities, including public safety partners, within two hours of the decision to cancel. See details in Table 5 below:

PG&E disagrees with this violation as this requirement was newly issued in June of 2021, which did not allow sufficient implementation time to address new requirements before 2021 PSPS events. In addition, the new requirement does not impose a rigid obligation, but states that the utilities should "make every attempt." When this notification requirement was issued in June 2021 (D.21-06-034), we experienced challenges meeting this

requirement as various internal processes and systems needed to be adjusted for the 2021 season. In accordance with the language of this notification requirement under D.21-06-034, PG&E "make[s] every attempt" to provide cancellation notifications within two hours of the decision to cancel. In Section 5 of the 2021 PSPS Post-Event Reports, we reported instances where PG&E failed to meet this notification requirement due to various factors listed in <u>Appendix A</u>. As part of continuous improvement, PG&E has completed or is in the process of completing the following:

- Further automating the process to develop, quality check and distribute notifications.
- Analyzing notification production and distribution times to identify potential efficiencies.
- Sending agency and customer automated notifications throughout the night, if needed.
- Sending agency and customer notifications concurrently to minimize distribution times further.
- Having the ability to pinpoint root causes of notification delays or failures to adjust processes more quickly.
- Supplementing automated notifications with ongoing Agency Representative outreach and providing maps and reports via the PSPS Portal. Note the Situation Report includes delta pages which highlight counties and tribes that have been removed from scope.

#### **Conclusion**

PG&E is committed to improving PSPS reporting. Upon receipt of the AEO issued in 2022, PG&E incorporated, or had already begun incorporating, improvements to address the feedback. The AEO was not issued until well after the 2021 PSPS season, which is the subject of the NOV. This NOV contains similar feedback to the 2022 AEO<sup>21</sup>. Based on this review, we do not believe the items noted in the NOV merit financial penalties or an additional enforcement action.

<sup>&</sup>lt;sup>21</sup> <u>https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/safety-and-enforcement-division/acos-and-aeos/pge-administrative-enforcement-order---2020.pdf</u>

**APPENDIX** 

### Appendix A

Table 1 includes the 2021 notifications that PG&E acknowledges did not meet timing requirements and Table 2 includes those that PG&E does not agree were in violation. This can be due to conditions, such as sudden changes to weather patterns.

We have also noted the mitigations that we have completed, or are in the process of completing, to better meet these requirements in the future.

Note the number included in the "Number of Entities or Customer Account" column reflects grand totals. The number(s) in the "Explanation" column is a subset of the total related to the explanation and mitigation.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
	Public Safety	Entities who did not receive 1–4- hour imminent notification.	3	We aim to send automated notifications via calls, texts and emails ahead of de-energization. While PG&E did not send automated notifications to three cities, Agency Representatives were in constant coordination with these cities on event status. Note these entities had minimal customer impacts.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
1/19/21 PSPS Event	Partners excluding Critical Facilities and Infrastructure <sup>23</sup>	Entities who were not notified immediately before re- energization	3	We aim to send automated notifications via calls, texts and emails once patrols begins and ahead of re-energization. While PG&E did not send automated notifications to three cities, Agency Representatives were in constant coordination with these cities on event status. Note these entities had minimal customer impacts.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
		Entities who did not receive cancellation notification	N/A	We were not required to provide entities with a cancellation notification within two hours of the	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.

#### Table 1

<sup>&</sup>lt;sup>22</sup> Number of Entities or Customer Accounts for Critical Facilities and Infrastructure Customers and All Other Affected Customers does not take into consideration live agent calls and/or emails sent manually by PG&E for this PSPS event. For example, telecommunication service providers may have received an email or phone call from the CIL during the event. <sup>23</sup> Only includes cities, counties, tribes, and community choice aggregators.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
		within two hours of the decision to cancel		decision to cancel prior to the adoption of D.21-06-034 <sup>24</sup> .	
		Facilities who did not receive 1–4-hour imminent notifications.	161	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. We began sending Warning Notifications to these 135 critical facilities and infrastructure customers on 1/18/2021 at 16:31 PDT.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").
	Critical Facilities and	Facilities who did not receive any notifications before de- energization.	0	N/A	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
	Infrastructure <sup>25</sup>	Facilities who were not notified at de- energization initiation.	162	162 critical facility and infrastructure customers were de- energized between the hours of 23:00 PDT and 08:00 PDT. At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. The final notification these critical facility and infrastructure customers received is the Warning Notification. we began sending Warning Notifications to these 162 critical facilities and	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").

<sup>&</sup>lt;sup>24</sup> PG&E has adjusted processes since the filing of the 2021 Post-Event Reports to meet the following requirement: "each electric investor-owned utility must make every attempt to provide notification of the cancellation of a de-energization event, or removal from scope, by notifying all affected entities, including public safety partners, within two hours of the decision to cancel" (D.21-06-034).

<sup>&</sup>lt;sup>25</sup> Includes public safety partners who are critical facilities and infrastructure customers.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
		Facilities who were not notified immediately before re- energization.	2	infrastructure customers on 1/18/2021 at 16:31 PDT. For 2 critical facilities and infrastructure customers, our field crew did not properly complete fields in PG&E's Outage Dispatch Tool. Specific fields in our Outage Dispatch Tool must be complete in order for our notification system to select the customers to receive automatic notifications. Due to the incomplete fields, customers were not flagged in our notification system to receive a notification immediately before re-energization.	Mitigation #6: Training EOC team members on process improvements.
		Facilities who were not notified when re-energization is complete.	61	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. Three critical facility and infrastructure customers were restored during these hours. We send notifications via phone, text, and email using an automated process. Our notification system runs every 15 minutes to provide Restoration Notifications to customers with outages restored in the most recent 15 minutes. For 58 critical facility and infrastructure customers, the value of the restore time entered in our notification system was outside the 15 minute window; our notification system would run based on the time operator entered the value, preventing the restore message from being sent out.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
		Facilities who did not receive cancellation notification within two hours of the decision to cancel	N/A	We were not required to provide entities with a cancellation notification within two hours of the decision to cancel prior to the adoption of D.21-06-034. <sup>26</sup>	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
		Customers who did not receive 1–4-hour imminent notifications.	4,910	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. We began sending Warning Notifications to these 4,087 customers on 1/18/2021 at 16:31 PDT.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").
	All other affected customers	Customers who were not notified at de- energization initiation.	4,937	4,917 customers were de-energized between the hours of 23:00 PDT and 08:00 PDT. At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. The final notification these customers received was the Warning Notification. We began sending Warning Notifications to these 4,917 customers on 1/18/2021 at 16:31 PDT.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").
		Customers who were not notified immediately before re- energization.	350	For 328 customers, our field crew did not properly complete fields in our Outage Dispatch Tool. Specific fields in PG&E's Outage Dispatch Tool must be complete in order for our notification system to select the customers to receive automatic	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #7: Updating internal processes for more

<sup>&</sup>lt;sup>26</sup> PG&E has adjusted processes since the filing of the 2021 Post-Event Reports to meet the following requirement: "each electric investor-owned utility must make every attempt to provide notification of the cancellation of a de-energization event, or removal from scope, by notifying all affected entities, including public safety partners, within two hours of the decision to cancel" (D.21-06-034).

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				notifications. Due to the incomplete fields, customers were not flagged our notification system to receive a notification when immediately before re-energization. At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. Two customers were restored during these hours.	timely and accurate agency and customer notifications.
		Customers who were not notified when re-energization is complete.	1,874	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. 272 customers were restored during these hours. We send notifications via phone, text, and email using an automated process. Our notification system runs every 15 minutes to provide Restoration Notifications to customers with outages restored in the most recent 15 minutes. For 1,525 customers, the value of the restore time entered in our notification system was outside the 15 minute window our notification system would run based on the time operator entered the value, preventing the restore message from being sent out. 57 customers were not notified due to an issue with our automated notification system	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
		Customers who did not receive cancellation notification	N/A	We were not required to provide customers with a cancellation notification within two hours of the	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
		within two hours of the decision to cancel		decision to cancel prior to the adoption of D.21-06-034. <sup>27</sup>	
8/17/21 PSPS Event		Entities who did not receive 1–4- hour imminent notification.	1	We aim to send automated notifications via calls, texts and emails ahead of de-energization. While we did not send automated notifications to one city, Agency Representatives were in constant coordination with this city on event status.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
	Public Safety	Entities who did not receive any notifications before de- energization	1	We aim to send automated notifications via calls, texts and emails ahead of de-energization. While we did not send automated notifications to one city, Agency Representatives were in constant coordination with this city on event status.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
	Partners excluding Critical Facilities and Infrastructure <sup>28</sup>	Entities who were not notified immediately before re- energization	1	We aim to send automated notifications via calls, texts and emails once patrols begin and ahead of re- energization. While we did not send automated notifications to one city, Agency Representatives were in constant coordination with this city on event status.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
		Entities who did not receive cancellation notification within two hours of the decision to cancel	11	We aim to send automated notifications via calls, texts and emails once a jurisdiction has been removed from scope. While we did not send automated notifications to seven counties, two cities and two tribes, Agency Representatives were in constant coordination with these agencies on event status.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
	Critical Facilities and	Facilities who did not receive 48–72-hour	305	44 critical facility and infrastructure customers were notified 47.5-47.9 hours in	Mitigation #2: Sending automated notifications day and

<sup>&</sup>lt;sup>27</sup> PG&E has adjusted processes since the filing of the 2021 Post-Event Reports to meet the following requirement: "each electric investor-owned utility must make every attempt to provide notification of the cancellation of a de-energization event, or removal from scope, by notifying all affected entities, including public safety partners, within two hours of the decision to cancel" (D.21-06-034).

<sup>&</sup>lt;sup>28</sup> Only includes cities, counties, tribes, and community choice aggregators.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
	Infrastructure <sup>29</sup>	advance notification.		advance of de-energization.	night, as needed (i.e., removal of "courtesy hours").
		Facilities who did not receive 1–4-hour imminent notifications.	171	<ul> <li>27 customers were scheduled to be de-energized for PSPS but experienced a non-PSPS outage 4-5 hours before their planned de- energization time.</li> <li>3 critical facility and infrastructure customers experienced a delayed outage due to a locked gate preventing access to the planned device. These customers received a Warn Notification 7-8 hours before de-energization.</li> <li>2 critical facility and infrastructure customers experienced a delay in de- energization due to switching. These customers received a Warn Notification 7-8 hours before de- energization.</li> </ul>	Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages. Mitigation #9: Coordinating with customers to ensure access to devices during events.
		Facilities who were not notified at de- energization initiation.	836	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. One critical facility and infrastructure was de- energized during these hours and did not receive the Power-Off Notification. A failure in our message broadcast system for notifications sent out 8/18/2021 at 20:53 PDT resulted in 327 critical facility and infrastructure customers not receiving the Power-Off Notification. There was not sufficient time to re-send these failed notifications before 21:00 PDT. 463 critical facility and infrastructure	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.

<sup>29</sup> Includes public safety partners who are critical facilities and infrastructure customers.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				customers did not receive the Power- Off Notification due to insufficient time to generate notification files before 21:00 PDT.	
				39 critical facility and infrastructure customers were sent the Power-Off Notification on 8/17/2021 at 20:53 PDT, but their de-energization time was significantly delayed, and the notification was sent more than 1 hour before de-energization.	
		Facilities who were not notified immediately before re- energization.	223	<ul> <li>196 critical facility and infrastructure customers did not receive notification immediately before re-energization due to an error in our automated notification system.</li> <li>For 21 critical facilities and infrastructure customers, our field crew did not properly complete fields in PG&amp;E's Outage Dispatch Tool. Specific fields in PG&amp;E's Outage Dispatch Tool must be complete in order for PG&amp;E's notification system to select the customers to receive automatic notifications. Due to the incomplete fields, customers were not flagged in our notification system to receive a notification immediately before re-energization.</li> </ul>	Mitigation #6: Training EOC team members on process improvements. Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
		Facilities who were not notified when re- energization is complete.	387	58 critical facility and infrastructure customers did not receive notification immediately before re- energization due to an error in PG&E's automated notification system. At the time of the PSPS, PG&E do not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. Six critical	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #6: Training EOC team members on process improvements. Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				facility and infrastructure customers were restored during these hours.	
				For one critical facility and infrastructure customer, automated notifications were not turned on in time to notify these customers immediately before re-energization due to a delay in PG&E's communications process.	
				We send notifications via phone, text, and email using an automated process. Our notification system runs every 15 minutes to provide Restoration Notifications to customers with outages restored in the most recent 15 minutes. For 313 critical facility and infrastructure customers, the value of the restore time entered in our notification system was outside the 15- minute window our notification system would run based on the time operator entered the value, preventing the restore message from being sent out. For 3 critical facility and infrastructure customers that were not notified when	
				re-energization was complete, the cause is under investigation.	
		Facilities who did not receive cancellation notification within two hours of the decision to cancel	380	This was due to the time required to build out cancellation notification files after the decision had been made to remove the customers from scope. We are reviewing the issues with our processes and is continuing to work on improving our ability to send cancellation notices within two hours of the decision to cancel the de-energization event or removal from scope.	Mitigation #5: Creating backup notification files, in case of technology or system issues.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
	All other affected customers	Customers who did not receive 24–48- hour advance notifications.	20,049	For 10,876 customers, this was due to the change in weather patterns. At the time advanced notifications were sent, these customers were not in scope. 8,335 customers received the Watch Notification 21-24 hours in advance. 500 customers were scheduled to be de-energized for PSPS, but experienced a non-PSPS outage 4-5 hours before their planned de- energization time. These customers received a Watch Notification 28 hours before their planned de- energization time. 104 customers experienced a 48- minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned de-energization time. 122 customers did not have valid contact information on file during the event. 35 customers were not notified due to data quality issues causing them to not be included in the correct database to receive notifications. 24 customers experienced an unplanned outage due to a locked gate preventing access to the planned device. 5 customers experienced a delayed outage due to a locked gate preventing access to the planned device. 5 customers experienced a delayed outage due to a locked gate preventing access to the planned device. These customers received a Watch Notification 49 and 10 hours before de- energization.	<ul> <li>Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages.</li> <li>Mitigation #6: Training EOC team members on process improvements.</li> <li>Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.</li> <li>Mitigation #9: Coordinating with customers to ensure access to devices during events.</li> </ul>

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				<ul> <li>13 customers experienced a 16- minute unplanned outage due to switching.</li> <li>35 customers experienced a delay in de-energization due to switching. They received a Watch Notification</li> <li>49 and 13 hours before de- energization.</li> </ul>	
		Customers who did not receive 1–4-hour imminent notifications.	5,235	<ul> <li>57 customers were de-energized on 8/18/2021 between the hours of 08:00 PDT and 09:00 PDT. At the time of the PSPS, PG&amp;E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. The final notification these customers received is the Warning Notification. We began sending Warning Notifications to these 58 customers on 8/17/2021 at 15:46 PDT.</li> <li>513 customers were scheduled to be de-energized for PSPS but experienced a non-PSPS outage 4-5 hours before their planned de- energization time. These customers received a Warn Notification 2-3 hours after their actual de- energization time.</li> <li>24 customers experienced an unplanned outage due to a locked gate preventing access to the planned device.</li> <li>5 customers experienced a delayed outage due to a locked gate preventing access to the planned device. These customers received a Warn Notification 7-8 hours before de-energization.</li> <li>13 customers experienced a 16-</li> </ul>	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages. Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications. Mitigation #9: Coordinating with customers to ensure access to devices during events.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				<ul> <li>minute unplanned outage due to switching.</li> <li>35 customers experienced a delay in de-energization due to switching. These customers received a Warn Notification 7-8 hours before de-energization.</li> <li>38 customers were not notified due to data quality issues causing them to not be included in the correct database to receive notifications.</li> </ul>	
		Customers who did not receive any notifications before de- energization.	260	35 customers were not notified due to data quality issues causing them to not be included in the correct database to receive notifications.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
		Customers who were not notified at de- energization initiation.	40,081	A failure in our message broadcast system for notifications sent out 8/18/2021 at 20:53 PDT resulted in 17,637 customers not receiving the Power-Off Notification. There was not sufficient time to re-send these failed notifications before 21:00 PDT. 21,454 customers did not receive the Power-Off Notification due to insufficient time to generate notification files before 21:00 PDT. 513 customers were scheduled to be de-energized for PSPS but experienced a non-PSPS outage 4-5 hours before their planned de- energization time. These customers received a Power Off Notification 7- 8 hours after their actual de- energization time. 176 customers were sent the Power- Off Notification on 8/17/2021 at 20:53 PDT, but their de-energization time was significantly delayed and the notification was sent more than 1	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages. Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications. Mitigation #9: Coordinating with customers to ensure access to devices during events.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				<ul> <li>hour before de-energization.</li> <li>24 customers experienced an unplanned outage due to a locked gate preventing access to the planned device.</li> <li>37 customers were not notified due to data quality issues causing them to not be included in the correct database to receive notifications.</li> <li>13 customers experienced a 16- minute unplanned outage due to switching.</li> </ul>	
		Customers who were not notified immediately before re- energization.	9,022	For 1,473 customers, our field crew did not properly complete fields in PG&E's Outage Dispatch Tool. Specific fields in PG&E's Outage Dispatch Tool must be complete in order for our notification system to select the customers to receive automatic notifications. Due to the incomplete fields, customers were not flagged in our notification system to receive a notification when re-energization was complete. 7,089 customers did not receive notification immediately before re- energization due to an error in our automated notification system. Master meter tenant customers do not receive notification system. 60 master meter tenant customers did not receive a notification immediately before re-energization. 166 customers were not notified due to data quality issues	Mitigation #6: Training EOC team members on process improvements. Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				causing them to not be included in the correct database to receive notifications.	
				6 customers were re-energized outside of the window our automated notification system was turned on.	
				3 customers that were not notified immediately before re- energization are under investigation.	
		Customers who were not notified when re- energization is complete.	17,565	At the time of the PSPS, we did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. 341 customers were restored during these hours. We send notifications via phone, text, and email using an automated process. our notification system runs every 15 minutes to provide Restoration Notifications to customers with outages restored in the most recent 15 minutes. For 12,921 customers, the value of the restore time entered in our notification system was outside the 15 minute window our notification system would run based on the time operator entered the value, preventing the restore message from being sent out. 3,607 customers did not receive notification system Master meter tenant customers do not receive notifications through our automated notification	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications. Mitigation #8: Adjusting when internal systems are turned on.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				system. 60 master meter tenant customers did not receive a notification immediately before re-energization.	
				166 customers were not notified due to data quality issues causing them to not be included in the correct database to receive notifications.	
				24 customers were re-energized outside of the window our automated notification system was turned on.	
				221 customers that were not notified when re-energization was complete are under investigation.	
		Customers who did not receive cancellation notification within two hours of the decision to cancel.	17,476	This was due to the time required to build out cancellation notification files after the decision had been made to remove the customers from scope. We are reviewing the issues with our processes and is continuing to work on improving our ability to send cancellation notices within two hours of the decision to cancel the de-energization event or removal from scope.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
9/20/21 PSPS Event	Critical Facilities and Infrastructure <sup>30</sup>	Facilities who did not receive 1–4-hour imminent notifications.	86	For 71 critical facilities and infrastructure customers, de- energization occurred between the hours of approximately 06:00 and 07:30 PDT. At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. PG&E	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").

<sup>30</sup> Includes public safety partners who are critical facilities and infrastructure customers

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				began sending Warning Notifications to these critical facilities and infrastructure customers at 9/19/2021 20:34 PDT.	
		Facilities who were not notified at de- energization initiation.	115	For 100 critical facilities and infrastructure customers, de- energization occurred between the hours of approximately 22:30 and 07:30 PDT. At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. PG&E did not send these critical facilities and infrastructure customers a Power Off Notification. The final notification these critical facilities and infrastructure customers received is the Warning Notification. PG&E began sending Warning Notifications to these critical facilities and infrastructure customers at 9/19/2021 20:34 PDT.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").
		Facilities who were not notified immediately before re- energization.	36	PG&E sends notifications via phone, text, and email using an automated process. For 21 critical facilities and infrastructure customers, automated notifications were not turned on in time to notify these customers immediately before re-energization due to a delay in PG&E's communications process.	Mitigation #8: Adjusting when internal systems are turned on.
		Facilities who were not notified when re-energization is complete.	43	PG&E sends notifications via phone, text, and email using an automated process. For four critical facilities and infrastructure customers, automated notifications were not turned on in time to notify these customers immediately before re-energization due to a delay in PG&E's communications process.	Mitigation #6: Training EOC team members on process improvements. Mitigation #8: Adjusting when internal systems are turned on.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				For 24 critical facilities and infrastructure customers, PG&E's field crew did not properly complete fields in PG&E's Outage Dispatch Tool. Specific fields in PGE's Outage Dispatch Tool must be complete in order for PG&E's notification system to select the customers to receive automatic notifications. Due to the incomplete fields, customers were not flagged in PG&E's notification system to receive a notification when re- energization was complete.	
		Customers who did not receive 1–4-hour imminent notifications.	2,285	For 1,544 customers, de- energizations started between the hours of approximately 01:00 and 07:30 PDT. At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. PG&E began sending Warning Notifications to these customers at 9/19/2021 20:34 PDT.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").
	All other affected customers	Customers who were not notified at de- energization initiation.	2,853	For 2,112 customers, de- energization occurred between the hours of approximately 22:30 and 07:30 PDT. At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. PG&E did not send these customers a Power Off Notification. The final notification these customers received is the Warning Notification. PG&E began sending Warning Notifications to these customers at 9/19/2021 20:34 PDT.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
		Customers who were not notified immediately before re- energization.	801	PG&E sends notifications via phone, text, and email using an automated process. For 56 customers, automated notifications were not turned on in time to notify these customers immediately before re-energization due to a delay in PG&E's communications process. Four customers were de-energized for PSPS, but after being de- energized for PSPS, an incident that would have caused a non-PSPS outage (i.e., a car hit a pole which led to a non-PSPS outage) occurred. The outage reason for these customers were reclassified in PG&E's system to a non-PSPS outage, and due to the reclassification, the customers were flagged to no longer receive PSPS- related notifications.	Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages. Mitigation #6: Training EOC team members on process improvements. Mitigation #8: Adjusting when internal systems are turned on.
		Customers who were not notified when re- energization is complete.	1,128	For 280 customers, PG&E's field crew did not properly complete fields in PG&E's Outage Dispatch Tool. Specific fields in PGE's Outage Dispatch Tool must be complete in order for PG&E's notification system to select the customers to receive automatic notifications. Due to the incomplete fields, customers were not flagged in PG&E's notification system to receive a notification system to receive a notification when re- energization was complete. PG&E sends notifications via phone, text, and email using an automated process. For 61 customers, automated notifications were not turned on in time to notify these customers immediately before re-energization due to a delay in PG&E's communications process.	Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages. Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications. Mitigation #8: Adjusting when internal systems are turned on.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				<ul> <li>39 customers who were de- energized for PSPS experienced an incident on the lines that serve them that caused a non-PSPS outage (i.e., a car hit a pole which led to a non- PSPS outage). The outage reasons for these customers were reclassified in PG&amp;E's system to a non-PSPS outage, and due to the reclassification, the customers were flagged to no longer receive PSPS- related notifications. These customers would have received a separate non-PSPS-related notification regarding restoration after the non-PSPS outage.</li> <li>PG&amp;E sends notifications via phone, text, and email using an automated process. PG&amp;E's notification system runs every 15 minutes to provide Restoration Notifications to customers with outages restored in the most recent 15 minutes. For three customers, the operator restored the outage at 16:30 and entered a timestamp of 16:10. PG&amp;E's notification system ran the Restoration Notification system ran the Restoration Notification system ran again at 16:30 to notify customers with outages restored between 16:15 and 16:30, these three customers were not picked up by the system due to 16:10 timestamp.</li> <li>For four customers, the customer's status changed in PG&amp;E's Distribution Management System</li> </ul>	
				were restored between 16:00 and 16:15. When the notification system ran again at 16:30 to notify customers with outages restored between 16:15 and 16:30, these three customers were not picked up by the system due to 16:10 timestamp. For four customers, the customer's status changed in PG&E's	

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				status was due to the customer stopping service.	
10/11/2	Public Safety Partners excluding	Entities who were not notified immediately before re- energization	1	PG&E aims to send automated notifications via calls, texts and emails once patrols begins and ahead of re-energization. While PG&E did not send automated notifications to one county, Agency Representatives were in constant coordination with this county on event status.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
	Critical Facilities and Infrastructure	Entities who did not receive cancellation notification within two hours of the decision to cancel	2	PG&E aims to send automated notifications via calls, texts and emails once a jurisdiction has been removed from scope. While PG&E did not send automated notifications to two tribes, Agency Representatives were in constant coordination with these tribes on event status.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
1 PSPS Event	Critical Facilities and Infrastructure <sup>31</sup>	Facilities who did not receive 1–4-hour imminent notifications. <sup>32</sup>	628	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. PG&E began sending Warning Notifications to 605 critical facilities and infrastructure customers at 10/10/2021 17:35 PDT. One critical facilities and infrastructure customer on a circuit slated for a PSPS outage experienced an outage not related to PSPS prior to the de-energization start time. The outage reason for this customer was reclassified in PG&E's system to a non-PSPS	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages.

<sup>31</sup> Includes public safety partners who are critical facilities and infrastructure customers.
 <sup>32</sup> Includes only public safety partners who are critical facilities and infrastructure customers that are required to receive notifications 48-72 hour advanced notification.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				outage, and due to the reclassification, the critical facilities and infrastructure customer was flagged to no longer receive PSPS- related notifications.	
		Facilities who were not notified at de- energization initiation.	586	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. 563 critical facilities and infrastructure customers did not receive notifications at de-energization initiation due to de-energization occurring between the hours of 21:00 and 08:00 PDT. One critical facilities and infrastructure customer on a circuit slated for a PSPS outage experienced an outage not related to PSPS prior to the de-energization start time. The outage reason for this customer was reclassified in PG&E's system to a non-PSPS outage, and due to the reclassification, the critical facilities and infrastructure customer was flagged to no longer receive PSPS- related notifications.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages.
		Facilities who were not notified immediately before re- energization.	74	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. 23 critical facilities and infrastructure customers did not receive notifications immediately before re- energization due to re-energization occurring between 21:00 and 08:00 PDT.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages. Mitigation #7: Updating internal processes for more

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				<ul> <li>PG&amp;E sends notifications via phone, text, and email using an automated process. For four critical facilities and infrastructure customers, automated notifications were not able to be sent due to incomplete information (e.g., data entry errors in the field).</li> <li>Four critical facilities and infrastructure customers were not notified as they were restored earlier than anticipated.</li> <li>One critical facilities and infrastructure customer was not notified due to an issue with PG&amp;E's automated notification system.</li> <li>The reason(s) for the 16 remaining critical facilities and infrastructure customers not notified immediately before re-energization is currently under investigation.</li> </ul>	timely and accurate agency and customer notifications.
		Facilities who were not notified when re-energization is complete.	57	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. 13 critical facilities and infrastructure customers did not receive notifications when re-energization was complete due to re-energization occurring between 21:00 and 08:00 PDT. Additionally, seven critical facility and infrastructure customers were located on the Calpine 1144 circuit which was not restored within the timeline of the 10/11 event. At the weather "All Clear," PG&E requested that Calpine begin patrols	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				of the line, and PG&E was informed that patrols would not begin until the 10/14 PSPS event was completed.	
		Facilities who did not receive cancellation notification within two hours of the decision to cancel	32	This was due to the time required to build out cancellation notification files after the decision had been made to remove the customers from scope, as well as customers being removed from scope during between 21:00 and 08:00 PDT at which point PG&E waits until the next morning to initiate the cancellation notifications. PG&E is reviewing the issues with our processes and is continuing to work on improving our ability to send cancellation notices within two hours of the decision to cancel the de- energization event or removal from scope.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
		Customers who did not receive 24–48-hour advance notifications.	3,086	11 customers were not notified due to data quality issues causing them to not be included in the correct database to receive notifications.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
	All other affected customers	Customers who did not receive 1–4-hour imminent notifications.	22,188	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. PG&E began sending Warning Notifications to these 21,228 customers at 10/10/2021 17:35 PDT. Warning Notifications were negatively impacted by outages that caused 852 customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages. Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				device had to be used to meet the planned de-energization time. 69 customers did not have valid	
				contact information on file during the event.	
				36 customers on circuits slated for PSPS outages experienced an outage not related to PSPS prior to the de- energization start time. The outage reason for these customers were reclassified in PG&E's system to a non-PSPS outage, and due to the reclassification, the critical	
		Customers who did not receive any notifications before de- energization.	635	11 customers were not notified due to data quality issues causing them to not be included in the correct database to receive notifications.	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
		Customers who were not notified at de- energization initiation.	21,480	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. 20,470 customers did not receive notifications at de-energization initiation due to de-energization occurring between 21:00 and 08:00 PDT. 36 customers on circuits slated for PSPS outages experienced an outage not related to PSPS prior to the de- energization start time. The outage reason for these customers were reclassified in PG&E's system to a non-PSPS outage, and due to the reclassification, the critical facilities and infrastructure customers were flagged to no longer receive PSPS- related notifications.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
		Customers who were not notified immediately before re- energization.	3,777	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. 290 customers did not receive notifications immediately before re-energization due to re-energization occurring between 21:00 and 08:00 PDT. PG&E sends notifications via phone, text, and email using an automated process. For 289 customers, automated notifications were not able to be sent due to incomplete information (e.g., data entry errors in the field). 361 customers were not notified as they were restored earlier than anticipated. 125 customers were not notified due to an issue with PG&E's automated notification system. 60 customers were not notified due to data quality issues causing them to not be included in the correct databases to receive notifications. The reason(s) for the remaining 775 customers not notified immediately before re-energization.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages. Mitigation #6: Training EOC team members on process improvements. Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications. Mitigation #8: Adjusting when internal systems are turned on.
		Customers who were not notified when re-energization is complete.	2,648	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. 1,700 customers did not receive notification that re- energization was complete due to re-	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
				<ul> <li>energization occurring between 21:00 and 08:00 PDT.</li> <li>Eight customers were located on the Calpine 1144 circuit, which was not restored within the timeline of the 10/11 event. At the weather "All Clear", PG&amp;E requested that Calpine begin patrols of the line, and PG&amp;E was informed that patrols would not begin until the 10/14 PSPS event was completed.</li> <li>60 customers were not notified due to data quality issues causing them to not be included in the correct databases to receive notifications.</li> <li>The reason(s) for the remaining 43 customers not notified when re- energization is complete is currently under investigation.</li> </ul>	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
		Customers who did not receive cancellation notification within two hours of the decision to cancellation	1,105	This was due to the time required to build out cancellation notification files after the decision had been made to remove the customers from scope, as well as customers being removed from scope during between 21:00 and 08:00 PDT at which point PG&E waits until the next morning to initiate the cancellation notifications. PG&E is reviewing the issues with our processes and is continuing to work on improving our ability to send cancellation notices within two hours of the decision to cancel the de- energization event or removal from scope.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours"). Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
10/14/2 1 PSPS Event	Public Safety Partners excluding Critical Facilities and	Entities who did not receive cancellation notification within two	11 counties and 1 city	PG&E aims to send automated notifications via calls, texts, and e- mails once a jurisdiction has been removed from scope. At the time of the PSPS, we did not send	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
	Infrastructure <sup>33</sup>	hours of the decision to cancel		automated notifications to eleven counties and one city within two hours of the decision to remove the jurisdiction from scope, Agency Representatives were in constant coordination with these agencies on event status.	
	Critical Facilities and Infrastructure	Facilities who did not receive 1–4-hour imminent notifications <sup>34</sup>	38	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. PG&E began sending Warning Notifications prior to 21:00 to these 38 critical facilities and infrastructure customers at 10/13/21 19:12 PDT.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").
		Facilities who were not notified at de- energization initiation	38	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. PG&E began sending Warning Notifications prior to 21:00 to these 38 critical facilities and infrastructure customers at 10/13/21 19:12 PDT.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").
		Facilities who did not receive cancellation notification within two hours of the decision to cancel	209	This was due to the time required to build out cancellation notification files after the decision had been made to remove the customers from scope. PG&E is reviewing the issues with our processes and is continuing to work on improving our ability to send cancellation notices within two hours of the decision to cancel the de-energization event or removal from scope.	Mitigation #5: Creating backup notification files, in case of technology or system issues.

<sup>33</sup> Only includes cities, counties, tribes, and community choice aggregators.
 <sup>34</sup> Includes only public safety partners who are critical facilities and infrastructure customers that are required to receive notifications 48-72 hour advanced notification.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>22</sup>	Explanation	Mitigation
	All other affected customers	Customers who did not receive 1–4-hour imminent notifications	628	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. PG&E began sending Warning Notifications prior to 21:00 to these 627 customers at 10/13/21 19:12 PDT.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").
		Customers who were not notified at de- energization initiation	628	At the time of the PSPS, PG&E did not send automated notifications to customers between the hours of 21:00 and 08:00 PDT as a courtesy to prevent waking customers in the middle of the night. PG&E began sending Warning Notifications prior to 21:00 to these 627 customers at 10/13/21 19:12 PDT.	Mitigation #2: Sending automated notifications day and night, as needed (i.e., removal of "courtesy hours").
		Customers who were not notified immediately before re- energization.	35	<ul> <li>33 customers were not notified immediately before re-energization due to data quality issues causing their notifications to be assigned to the wrong re.</li> <li>PG&amp;E implemented ad-hoc Weather "All-Clear" Notifications via phone calls for this event. One customer was not notified due to not having a phone number.</li> </ul>	Mitigation #7: Updating internal processes for more timely and accurate agency and customer notifications.
		Customers who did not receive cancellation notification within two hours of the decision to cancel	6,377	This was due to the time required to build out cancellation notification files after the decision had been made to remove the customers from scope. PG&E is reviewing the issues with our processes and is continuing to work on improving our ability to send cancellation notices within two hours of the decision to cancel the de-energization event or removal from scope.	Mitigation #4: Updating internal systems to separate data when there are concurrent PSPS events or non-PSPS outages.

	<u>Table 2</u>						
PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation		
	Public Safety Partners excluding Critical	Entities who did not receive 48- to 72-hour advance notification.	1	This was due to the change in weather patterns. At the time advanced notifications were sent, two cities were not in scope.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).		
	Facilities and Infrastructure <sup>36</sup>	Entities who did not receive any notifications before de- energization	0	N/A	N/A		
1/19/21 PSPS	Critical Facilities and Infrastructure <sup>37</sup>	Facilities who did not receive 48–72-hour advance notification.	12	For 12 critical facilities and infrastructure customers, this was due to the change in weather patterns. At the time advanced notifications were sent, these critical facilities and infrastructure customers were not in scope.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).		
Event		Facilities who did not receive 1–4-hour imminent notifications.	161	For 26 critical facilities and infrastructure customers, the outage start time was delayed due to change in weather patterns. We sent these customers Warning Notifications on 1/18/2021 at 16:31 PDT.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).		
	All other affected customers	Customers who did not receive 24–48-hour advance notifications.	441	<ul> <li>20 customers did not have valid contact information on file during the event.</li> <li>421 customers received the Watch Notification 23-24 hours in advance of de-energization.</li> </ul>	. Mitigation #1: Conducting ongoing customer outreach for updated contact information.		
		Customers who did not receive 1–4-hour	4,910	20 customers did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information.		

Table 2

<sup>35</sup> Number of Entities or Customer Accounts for Critical Facilities and Infrastructure Customers and All Other Affected Customers does not take into consideration live agent calls and/or emails sent manually by PG&E for this PSPS event. For example, telecommunication service providers may have received an email or phone call from the CIL during the event. <sup>36</sup> Only includes cities, counties, tribes, and community choice aggregators. <sup>37</sup> Includes public safety partners who are critical facilities and infrastructure customers.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
		imminent notifications.		For 803 customers, the outage start time was delayed due to change in weather patterns. We sent these customers Warning Notifications on 1/18/2021 at 16:31 PDT.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Customers who did not receive any notifications before de- energization.	20	20 customers did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information.
		Customers who were not notified at de- energization initiation.	4,937	20 customers did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information.
		Customers who were not notified immediately before re- energization.	350	20 customers did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information.
		Customers who were not notified when re-energization is complete.	1,874	20 customers did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information.
8/17/21 PSPS	Public Safety Partners excluding Critical Facilities and Infrastructure <sup>38</sup>	Entities who did not receive 48-to 72-hour advance notification.	3	This was due to the change in weather patterns. At the time advanced notifications were sent, one county and two tribes were not in scope.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
Event	Critical Facilities and Infrastructure <sup>39</sup>	Facilities who did not receive 48–72-hour advance notification.	305	For 256 critical facilities and infrastructure customers, this was due to the change in weather patterns. At the time advanced notifications were sent, these	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify

 <sup>&</sup>lt;sup>38</sup> Only includes cities, counties, tribes, and community choice aggregators.
 <sup>39</sup> Includes public safety partners who are critical facilities and infrastructure customers.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
				<ul> <li>critical facilities and infrastructure customers were not in scope.</li> <li>3 critical facility and infrastructure customers did not have valid contact information on file during the event.</li> <li>2 critical facility and infrastructure customers experienced a 48-minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned de-energization time.</li> </ul>	customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Facilities who did not receive 1–4-hour imminent notifications.	171	For 117 critical facility and infrastructure customers, the outage start time was delayed due to changes in weather patterns. These customers received the Warn Notification 4-6 hours in advance. For 16 critical facility and infrastructure customers, the outage start time was significantly delayed due to change in weather patterns. These customers received a Warn Notification 19-46 hours in advance. 3 critical facility and infrastructure customers did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Facilities who did not receive any notifications before de- energization.	6	<ul> <li>3 critical facility and infrastructure customers experienced a 48-minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned de-energization time.</li> <li>3 critical facility and infrastructure customers did not have valid contact information on file during the event.</li> </ul>	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
		Facilities who were not notified at de- energization initiation.	836	<ul> <li>3 critical facility and infrastructure customers did not have valid contact information on file during the event.</li> <li>3 critical facility and infrastructure customers experienced a 48-minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned de-energization time.</li> </ul>	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Facilities who were not notified immediately before re- energization.	223	<ul> <li>3 critical facility and infrastructure customers experienced a 48-minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned de-energization time. These customers were re-energized before our automated notifications were enabled.</li> <li>3 critical facility and infrastructure customers did not have valid contact information on file during the event.</li> </ul>	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Facilities who were not notified when re- energization is complete.	387	<ul> <li>3 critical facility and infrastructure customers experienced a 48-minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned de-energization time. These customers were re- energized before our automated notifications were enabled.</li> <li>3 critical facility and infrastructure customers did not have valid contact information on file during the event.</li> </ul>	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
	All other affected customers	Customers who did not receive 24–48- hour advance	20,049	For 10,876 customers, this was due to the change in weather patterns. At the time advanced	Mitigation #1: Conducting ongoing customer outreach for updated contact information.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
		notifications.		notifications were sent, these customers were not in scope. 104 customers experienced a 48- minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned de-energization time. 122 customers did not have valid contact information on file during the event.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Customers who did not receive 1– 4-hour imminent notifications.	5,235	For 3,697 customers, the outage start time was delayed due to change in weather patterns. These customers received the Warn Notification 4-5 hours in advance. For 627 customers, the outage start time was significantly delayed due to change in weather patterns. These customers received a Warn Notification 24- 46 hours in advance. 104 customers experienced a 48- minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned de- energization time. 122 customers did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Customers who did not receive any notifications before de- energization.	260	<ul> <li>121 customers did not have valid contact information on file during the event.</li> <li>104 customers experienced a 48-minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned deenergization time.</li> </ul>	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
		Customers who were not notified at de- energization initiation.	40,081	<ul> <li>104 customers experienced a 48- minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned de- energization time.</li> <li>123 customers did not have valid contact information on file during the event.</li> </ul>	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Customers who were not notified immediately before re- energization.	9,022	<ul> <li>121 customers did not have valid contact information on file during the event.</li> <li>104 customers experienced a 48-minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned deenergization time. These customers were re-energized before our automated notification system was turned on.</li> </ul>	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Customers who were not notified when re- energization is complete.	17,565	<ul> <li>121 customers did not have valid contact information on file during the event.</li> <li>104 customers experienced a 48-minute unplanned outage when a device was found to be inoperable, and an alternate device had to be used to meet the planned de-energization time. These customers were re-energized before our automated notification system was turned on.</li> </ul>	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
9/20/21 PSPS Event	Public Safety Partners excluding Critical Facilities and	Entities who did not receive 48- to 72-hour advance notification.	8	This was due to the change in weather patterns. At the time advanced notifications were sent, four cities and four counties were not in scope.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
	racinues anu	Entities who did not receive 1–4-	0	N/A	N/A

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
	Critical Facilities and Infrastructure <sup>41</sup>	hour imminent notification. Facilities who did not receive 48–72-hour advance notification.	42	For 27 critical facilities and infrastructure customers, this was due to the change in weather patterns. At the time advanced notifications were sent, these critical facilities and infrastructure customers were not in scope. Furthermore, the notifications were negatively impacted by a 23-minute outage that caused 15 critical facilities and infrastructure customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Facilities who did not receive 1–4-hour imminent notifications.	86	be used to meet the planned de- energization time. Follow up actions are included in the lessons learned section. Furthermore, the notifications were negatively impacted by a 23-minute outage that caused 15 critical facilities and infrastructure customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de- energization time. Follow up actions are included in the lessons learned section. The notifications were negatively	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		did not receive any notifications before de- energization.	15	impacted by a 23-minute outage that caused 15 critical facilities and infrastructure customers who were not in scope for the PSPS event to be de-energized when an unplanned	processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).

 <sup>&</sup>lt;sup>40</sup> Only includes cities, counties, tribes, and community choice aggregators
 <sup>41</sup> Includes public safety partners who are critical facilities and infrastructure customers

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
				upstream SCADA sectionalizing device had to be used to meet the planned de-energization time. Follow up actions are included in the lessons learned section.	
		Facilities who were not notified at de- energization initiation.	115	Furthermore, the notifications were negatively impacted by a 23-minute outage that caused 15 critical facilities and infrastructure customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de- energization time. Follow up actions are included in the lessons learned section.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Facilities who were not notified immediately before re- energization.	36	Furthermore, the notifications were negatively impacted by a 23-minute outage that caused 15 critical facilities and infrastructure customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de- energization time. Follow up actions are included in the lessons learned section.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Facilities who were not notified when re-energization is complete.	43	Furthermore, the notifications were negatively impacted by a 23-minute outage that caused 15 customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de-energization time. Follow up actions are included in the lessons learned section.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
	All other affected customers	Customers who did not receive 24–48-hour advance notifications.	741	Six customers did not have valid contact information on file during the event. Furthermore, the notifications were negatively impacted by a 23-minute outage that caused 735 customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de-energization time. Follow up actions are included in the lessons learned section.	<ul> <li>Mitigation #1: Conducting ongoing customer outreach for updated contact information.</li> <li>Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).</li> </ul>
		Customers who did not receive 1–4-hour imminent notifications.	2,285	Six customers did not have valid contact information on file during the event. Furthermore, the notifications were negatively impacted by a 23-minute outage that caused 735 customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de-energization time. Follow up actions are included in the lessons learned section.	. Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Customers who did not receive any notifications before de- energization.	741	Six customers did not have valid contact information on file during the event. Furthermore, the notifications were negatively impacted by a 23-minute outage that caused 735 customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de-energization time. Follow up actions are included in the lessons learned section.	<ul> <li>Mitigation #1: Conducting ongoing customer outreach for updated contact information.</li> <li>Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).</li> </ul>

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
		Customers who were not notified at de- energization initiation.	2,853	Six customers did not have valid contact information on file during the event. Furthermore, the notifications were negatively impacted by a 23-minute outage that caused 735 customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de-energization time. Follow up actions are included in the lessons learned section.	<ul> <li>Mitigation #1: Conducting ongoing customer outreach for updated contact information.</li> <li>Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).3</li> </ul>
		Customers who were not notified immediately before re- energization.	801	Four customers were de-energized for PSPS, but after being de- energized for PSPS, an incident that would have caused a non-PSPS outage (i.e., a car hit a pole which led to a non-PSPS outage) occurred. The outage reason for these customers were reclassified in PG&E's system to a non-PSPS outage, and due to the reclassification, the customers were flagged to no longer receive PSPS- related notifications. Six customers did not have valid contact information on file during the event. Furthermore, the notifications were negatively impacted by a 23-minute outage that caused 735 customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de-energization time. Follow up actions are included in the lessons learned section.	. Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Customers who were not notified when	1,128	Six customers did not have valid contact information on file during the event.	. Mitigation #1: Conducting ongoing customer outreach for updated contact information.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
		re-energization is complete.		Furthermore, the notifications were negatively impacted by a 23-minute outage that caused 735 customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de-energization time. Follow up actions related to this are included in the lessons learned section.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
	Public Safety Partners	Entities who did not receive 48- to 72-hour advance notification.	17	This was due to the change in weather patterns. At the time advanced notifications were sent, 8 counties, 6 cities and 3 tribes were not in scope.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
	excluding Critical Facilities and Infrastructure <sup>42</sup>	Entities who did not receive 1–4- hour imminent notification.	0	N/A	N/A
10/11/2 1 PSPS Event		Entities who did not receive any notifications before de- energization	0	N/A	N/A
	Critical Facilities and Infrastructure <sup>43</sup>	Facilities who did not receive 48–72-hour advance notification. <sup>44</sup>	156	For 148 critical facilities and infrastructure customers, this was due to the change in weather conditions. At the time Advanced Notifications were sent, these critical facilities and infrastructure customers were not in scope. Advanced Notifications were negatively impacted by outages that caused eight critical facilities and infrastructure customers who were not in scope for the PSPS event to be	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).

<sup>&</sup>lt;sup>42</sup> Only includes cities, counties, tribes, and community choice aggregators.
<sup>43</sup> Includes public safety partners who are critical facilities and infrastructure customers.
<sup>44</sup> Includes only public safety partners who are critical facilities and infrastructure customers that are required to receive notifications 48-72 hour advanced notification.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
				de-energized (seven of which had outages less than one hour) when an unplanned upstream sectionalizing device had to be used to meet the planned de-energization time.	
		Facilities who did not receive 1–4-hour imminent notifications.	628	Notifications were negatively impacted by outages that caused 22 critical facilities and infrastructure customers who were not in scope for the PSPS event to be de-energized (seven of which had outages less than one hour) when an unplanned upstream sectionalizing device had to be used to meet the planned de- energization time.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Facilities who did not receive any notifications before de- energization.	20	20 critical facilities and infrastructure customers did not receive any notifications prior to de-energization because they were de-energized due to use of an unplanned upstream device.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Facilities who were not notified at de- energization initiation.	586	Notifications were negatively impacted by outages that caused 22 critical facilities and infrastructure customers who were not in scope for the PSPS event to be de-energized (seven of which had outages less than one hour) when an unplanned upstream sectionalizing device had to be used to meet the planned de- energization time.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Facilities who were not notified immediately before re- energization.	74	Due to the concurrent wind event some outages were initially thought to be wind related and as such 26 critical facilities did not receive PSPS notifications prior to re-energization.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Facilities who were not notified when re-energization is complete.	57	Due to the concurrent wind event some outages were initially thought to be wind related and as such 37 critical facilities and infrastructure customers did not receive PSPS	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
				notifications when re-energization was completed.	(e.g., sectionalizing devices or unexpected weather changes).
				69 customers did not have valid contact information on file during the event.	. Mitigation #1: Conducting ongoing customer outreach for updated contact information.
	All other affected customers	Customers who did not receive 24–48-hour advance notifications.	3,086	Due to changing weather conditions 2,451 customers were not in scope during the 24–48-hour window in advance of anticipated de- energization. Watch Notifications were negatively impacted by outages that caused 555 customers who were not in scope for the PSPS event to be de-energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de- energization time.	Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Customers who did not receive 1–4-hour imminent notifications.	22,188	Warning Notifications were negatively impacted by outages that caused 852 customers who were not in scope for the PSPS event to be de- energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de-energization time. 69 customers did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Customers who did not receive any notifications before de- energization.	635	69 customers did not have valid contact information on file during the event. The remaining 555 customers did not receive any notifications prior to de- energization because they were de- energized due to use of an unplanned upstream device.	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
		Customers who were not notified at de- energization initiation.	21,480	Power Off Notifications were negatively impacted by outages that caused 905 customers who were not in scope for the PSPS event to be de- energized when an unplanned upstream SCADA sectionalizing device had to be used to meet the planned de-energization time. 69 customers did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Customers who were not notified immediately before re- energization.	3,777	Due to the concurrent wind event some outages were initially thought to be wind related and as such 1,808 customers did not receive PSPS notifications prior to re-energization. 69 customers did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
		Customers who were not notified when re-energization is complete.	2,648	Due to the concurrent wind event some outages were initially thought to be wind related and as such 768 customers did not receive PSPS notifications prior to re-energization. 69 customers did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information. Mitigation #3: Refining processes to identify and notify customers based on unexpected scope changes (e.g., sectionalizing devices or unexpected weather changes).
10/14/2 1 PSPS	Public Safety Partners excluding Critical	Entities who did not receive 48- to 72-hour advance notification	0	N/A	N/A
Event	Facilities and Infrastructure <sup>45</sup>	Entities who did not receive 1–4- hour imminent notification.	0	N/A	N/A

<sup>45</sup> Only includes cities, counties, Tribes, and community choice aggregators.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
		Entities who did not receive any notifications before de- energization	0	N/A	N/A
		Entities who were not notified immediately before re- energization	0	N/A	N/A
		Facilities who did not receive 48–72-hour advance notification <sup>47</sup>	0	N/A	N/A
	Critical Facilities and	Facilities who did not receive any notifications before de- energization	0	N/A	N/A
	Infrastructure <sup>46</sup>	Facilities who were not notified immediately before re- energization	0	N/A	N/A
		Facilities who were not notified when re-energization is complete	0	N/A	N/A
	All other affected customers	Customers who did not receive 24–48-hour advance notifications	1	One customer did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information.

<sup>&</sup>lt;sup>46</sup> Includes Public Safety Partners who are critical facilities and infrastructure customers.

<sup>&</sup>lt;sup>47</sup> Includes only public safety partners who are critical facilities and infrastructure customers that are required to receive notifications 48-72 hour advanced notification.

PSPS Event	Notifications Sent to	Notification Failure Description	Number of Entities or Customer Accounts <sup>35</sup>	Explanation	Mitigation
		Customers who did not receive 1–4-hour imminent notifications	628	One customer did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information.
		Customers who did not receive any notifications before de- energization	1	One customer did not have valid contact information on file during the event.	Mitigation #1: Conducting ongoing customer outreach for updated contact information.
		Customers who were not notified at de- energization initiation	628	One customer did not have valid contact information on file during the event.	Conducting ongoing customer outreach for updated contact information.
		Customers who were not notified immediately before re- energization.	35	One customer did not have valid contact information on file during the event. PG&E implemented ad-hoc Weather "All-Clear" Notifications via phone calls for this event. One customer was not notified due to not having a phone number.	Mitigation #1: Conducting ongoing customer outreach for updated contact information.
		Customers who were not notified when re-energization is complete.	2	One customer did not have valid contact information on file during the event. PG&E implemented ad-hoc Restoration Notifications via phone calls for this event. One customer was not notified due to not having a phone number.	Mitigation #1: Conducting ongoing customer outreach for updated contact information.