

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

Order Instituting Rulemaking to Examine Electric
Utility De-Energization of Power Lines in Dangerous
Conditions.

Rulemaking 18-12-005
(Filed December 13, 2018)

**PACIFICORP'S (U 901 E) 2021 POST SEASON
PUBLIC SAFETY POWER SHUT-OFF REPORT**

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Attachment 1:

PacifiCorp_POSTSR1_3-1-2022 (Narrative Report)

Section I. Background: Overarching Regulation

1. Each electric investor-owned utility must file a comprehensive [prior year] Post-Season Report, no later than March 1 of each year, in R.18-12-005 or its successor proceeding. The report must follow a template provided by SED no later than 60 days after SED posts a [prior year] Post-Season Report template on the Commission's website. Parties may file comments on these reports within 20 days after they are filed, and reply comments within 10 days after the final date to file comments.

[Authority: Decision (D.) 21-06-034; Guidelines at p. A15, Section K-3]

2. The [prior year] Post-Season Report must include, but will not be limited to:
 - f. Annual report, as applicable, required by Ordering Paragraph 66 of D.21-06-014. [Authority: D.21-06-034; Guidelines at p. A15, Section K-3.f]
3. To the extent a required item of information is also required to be included in the electric investor-owned utility's Wildfire Mitigation Plan, the [prior year] Post-Season Report may refer to the electric investor-owned utility's Wildfire Mitigation Plan rather than repeat the same information; such reference must specify, at minimum, the page and line number(s) for where the required information is contained within the electric investor-owned utility's Wildfire Mitigation Plan. In cases where this reference is to data, a summary table of the data shall be provided in the report.

[Authority: D.21-06-034; Guidelines at p. A17, Section K-3]

Section II: Amendments to Post-Event Reports

A. Regulatory Requirements

1. *Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company must provide aggregate data, as identified above [D.21-06-014, Ordering Paragraph (OP) 65], in an annual report, including aggregate data that may not have been available at the time the utility filed the 10-day post-event report and must contact the Commission's Safety and Enforcement Division if the utility requires additional guidance to ensure adequate reporting on the requirement to provide information on affected customers in the 10-day post-event reports.*

[Authority: D.21-06-014; OPs 65 and 66]

2. *Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) must address, among other things, each element of Resolution ESRB-8 reporting requirements, as clarified herein, in the 10-day post-event reports, including the below [OP 65] and, if no information is available, PG&E, SCE, and SDG&E must respond to these Resolution ESRB-8 reporting requirements by indicating the reason this information is not available.*

[Authority: D.21-06-014; OPs 65 and 66]

B. Direction

1. *Provide any information missing [including, but not limited to the specific topics listed below] from any Post-Event Report for Public Safety Power Shutoffs (PSPS) in 2021 by:*

- a. *Identify the date name of the PSPS.*
- b. *Identify the Section of the Post-Event Report template for which the missing information will be added.*
- c. *Provide the missing information under that heading.*

[Authority: D.21-06-014; OPs 65 and 66]

2. *Community Resource Centers:*

Provide aggregate data, including aggregate data that may not have been available at the time the utility filed the 10-day post-event report:

- d. *Address and describe each Community Resource Center during a de-energization event.*

[Authority: D.21-06-014, OPs 65 and 66]

3. *Notification:*

Provide aggregate data that may not have been available at the time the utility filed the 10-day post-event report:

- e. *Identify who the utility contacted in the community prior to de-energization and whether the affected areas are classified as High Fire Threat District Tier 1, Tier 2, or Tier 3 (as defined in General Order 95, Rule 21.2-D22);*
- f. *Explain why notice could not be provided at least two hours prior to a de-energization, if such notice was not provided;*

[Authority: D.21-06-014, OPs 65 and 66]

4. *Restoration:*

Provide aggregate data, as identified in OP 65, in an annual report, including aggregate data that may not have been available at the time the utility filed the 10-day post-event report:

- g. *Provide a detailed description of the steps the utility used to restore power.*

[Authority: D.21-06-014, OPs 65 and 66]

Response: PacifiCorp does not provide responses to Section II, as it is not applicable to the Company.

Section III: Decision-Specified

A. Education and Outreach

1. Include the results of the most recent education and outreach surveys not yet previously reported on, as an attachment to the Post-Season Report. See D.21-06-034, Sections E-1.1. – E.1.4. for specific requirements on the surveys.

[Authority: D.21-06-034, Guidelines at p. A7, Section E-1]

Response: See *POSTSR 1 - Attachment A – 2021 Survey Results* for the detailed results of PacifiCorp’s most recent survey conducted in accordance with Sections E-1.1 – E.1.4 of D.21-06-034. The 579 surveys which took place in November and December 2021 were targeted to reach the Company’s residential, business and critical customers.

B. Medical Baseline and Access and Functional Needs

1. Describe in detail all programs and/or types of assistance, including:

a. Free and/or subsidized backup batteries:

Response: PacifiCorp offers delivered free-to-the-customer portable batteries to eligible medical baseline customers and prioritizes those located within the PDZ zones. The program includes the procurement of contracted services to provide the portable battery, up front technical evaluation of the customer’s unique needs to specify the correct device, and education and technical support to the customer once installed. Each customer receives individual education upon installation and ongoing remote technical support as needed. Batteries were successfully delivered to all registered medical baseline customers in PSPS zones by December 2021. Phase 2 of the program began in January 2022 and will expand to remaining areas within the service territory. The goal is to deliver an additional 50 batteries by the end of 2022.

b. Self-Generation Incentive Program Equity Resiliency Budget:

Response: PacifiCorp offers a generator rebate for residential customers residing in a high fire threat district. All customers are eligible for a \$200 rebate for the purchase of one generator or portable battery. California Alternate Rates for Energy (income eligible) and medical baseline customers are eligible for a \$400 rebate. Both tenants and property owners may receive the rebate.

c. Community Microgrid Incentive Program [sic] [“Microgrid Incentive Program” per D.21-01-018]:

Response: Not applicable to PacifiCorp as the Company does not meet the standard of large electrical corporation per Senate Bill 1339.

d. Hotel Vouchers:

Response: Not currently offered.

e. Transportation to CRCs:

Response: Not currently offered.

f. Any other applicable programs or pilots to support resiliency for persons with access and functional needs and vulnerable populations.

Response: PacifiCorp’s Community Resiliency Programs¹ offer grants to communities seeking to enhance emergency preparedness with renewable generators and energy storage and to provide additional support to emergency responders during a PSPS event. An assessment of available funding is ongoing to determine the timeline for a reopening in 2022. The following programs are offered:

¹ <https://www.pacificpower.net/community/community-resiliency.html>

- Grants allow for the procurement of portable renewable generators to community emergency managers and first responders. The primary use of the generators is to provide the ability for at-risk community members to shelter in place during a resiliency event. Organizations interested in receiving funding need to develop and provide a deployment plan for the generators that receive funding.
 - Technical assistance grants provide communities a comprehensive technical study of the potential costs, benefits, and requirements to add energy storage to critical facilities.
 - Grants for the installation of energy storage are available for communities seeking to improve resiliency during an emergency. A project host must be one of the following types of facility: police stations; fire stations; emergency response providers as defined in D.19 05 042; emergency operations centers; 911 call centers, also referred to as Public Safety Answering Points; medical facilities including hospitals, skilled nursing facilities, nursing homes, blood banks, health care facilities, dialysis centers and hospice facilities; public and private gas, water, wastewater or flood control facilities; jails and prisons; locations designated by the utility to provide assistance during a PSPS event; cooling centers designated by state or local governments; and, homeless shelters supported by federal, state, or local governments; grocery stores, corner stores, markets and supermarkets that have average annual gross receipts of \$15 million or less as calculated at a single location, over the last three tax years; independent living centers; and, food banks. The goal is to improve access to services for AFN customers during a PSPS.
2. Identify and describe the costs and associated funding source(s) for all partnerships, each unique program and form of assistance (e.g., backup batteries as distinct from hotel vouchers), and any other efforts aimed at mitigating the impact of public safety partners events on persons with access and functional needs and vulnerable populations.

Response: The table below lists the costs associated with programs described in B.1.a. and B.1.b. above. Due to the timing of the program implementation, a majority of the spend was not incurred until 2022 and is therefore not reflected below.

<i>Program</i>	<i>2021 Spend</i>	<i>Customers Reached</i>	<i>Form of Assistance</i>
<i>Free Portable Battery Program</i>	<i>\$632</i>	<i>41 customers reached; 28 customers identified as program eligible.</i>	<i>34 Batteries and education delivered to 28 customers as of December 31, 2021</i>
<i>Generator Rebate Program²</i>	<i>-</i>	<i>0 rebate applications received</i>	<i>Rebate website launched December 5, 2021</i>

² <https://www.pacificpower.net/outages-safety/storm-emergency-preparedness/backup-generators.html>

To minimize the impact of PSPS on medical baseline customers, PacifiCorp implemented a program to provide back-up batteries - at no cost - to customers who depend on medical equipment powered by electricity; third-party vendor Richard Heath and Associates, Inc. (RHA) was hired by PacifiCorp to manage and implement the program. These contracted services include providing a battery to the customer and providing education and training to the customer for longer term operation of the batteries which are wholly owned and operated by the customer; educational information includes detail as to how long their devices take to charge, the type of device provided, how to use the backup battery in the event of an outage and how to keep the backup battery fully charged. On October 4, 2021, RHA began initial outreach to registered medical baseline customers to determine customer eligibility which includes a thorough evaluation of the medical device(s) used to better understand the customer back-up power needs. Through this process RHA will evaluate the type of medical device(s) in use, the number of medical devices in use, the energy input type for the medical device(s) and the daily run time for device(s) used. Batteries were successfully delivered to qualifying registered medical baseline customers within PSPS areas by December 31, 2021. On January 5, 2022, the program was expanded to include remaining areas of PacifiCorp's California service territory; the next phase of the program launched with the goal to deliver batteries to 50 customers by May 31, 2022.

PacifiCorp implemented a generator rebate program for California customers to further mitigate the impact of PSPS events. Under this new program, customers that reside in Tier 2 or Tier 3 high fire threat areas who purchase a qualified generator and/or portable power station will be eligible to receive a rebate of up to \$200. Customers registered in either the CARE or Medical Baseline programs will be eligible for an additional \$200 in rebates, or a total of \$400, where rebates cannot exceed the total purchase price of the qualified product. Rebate applications were available to customers beginning December 5, 2021.

3. *Funding source(s) shall specify applicable utility balancing accounts or other accounting mechanisms, and non-utility funding sources, if applicable.*

Response: The costs associated with the free portable battery program and generator rebate program are being tracked in the Company's Fire Risk Mitigation Memorandum Account.

4. Identify any communities or areas not served by utility partnerships with CBOs that provide assistance to persons with access and functional needs or vulnerable populations in preparation for or during a public safety partners event.

Response: There were no communities within the affected areas which were not served by utility and CBO partnerships.

[Authority: D.21-06-034, Guidelines at p. A16, Sections K-3.d]

C. Mitigation

1. For each proactive de-energization event that occurred during the prior calendar year:
 - a. *Circuit-by-circuit analysis of mitigation provided from backup power and microgrid pilots.*

Response: There was no backup power or microgrid mitigations actions executed during the PSPS event.

[Authority: D.21-06-034, Guidelines at p. A15, Section K-3.a.i.]

D. Public Safety Partners

2. Identification of all requests for selective re-energization made by public safety partners during a de-energization event, whether each such request was granted or denied, and the reason for granting or denying each such request.

Response: PacifiCorp did not receive any requests for selective re-energization from public safety partners during the single PSPS event of 2021.

[Authority: D.21-06-034, Guidelines at p. A16, Section K-3.c.]

E. Transmission

1. Description of the impact of de-energization on transmission.

Response: PacifiCorp does not de-energize any bulk electric system (BES) elements due to a PSPS event.

2. Evaluation of how to mitigate and prepare for those impacts in future potential de-energization events.

Response: PacifiCorp Grid Operations runs a robust Real-time Contingency Analysis (RTCA) program that evaluates over 1800 possible contingencies every five to ten minutes which will keep the system operators aware of any issues that could come up in the event of the loss of a transmission line. We also utilize a state estimator in which we can manually run possible contingencies to make sure we are aware of any possible system issues in the event of a PSPS event where we may be required to remove a BES line from service.

3. Identify and describe all studies that are part of such analysis and evaluation.

Response: Studies were conducted to evaluate loss of BPA transmission sources in Modoc County, CA.

4. Identify all efforts to work with publicly owned utilities and cooperatives to evaluate the impacts of de-energization on transmission.

Response: Coordination meetings were conducted with Bonneville Power Administration, Modoc County and Surprise Valley Electric to discuss potential loss of BPA transmission sources

[Authority: D.21-06-034, Guidelines at pp. A15-A16, Section K-3.b.]

Section IV: Safety and Enforcement Division-Specified

Brief response no longer than two pages.

1. Discuss how your meteorology and fire science predictive models performed over the year. What changes will you make to improve performance?

Response: PacifiCorp made substantial investments in meteorology and fire science technologies in 2021 including high-performance computing, numerical weather prediction, and wildfire consequence modeling. These technologies were slowly implemented throughout the year, however much of the work was still in development during the 2021 fire season. See details below.

- a. **Numerical Weather Prediction:** PacifiCorp implemented a custom-built, 2km, 96-hour Weather Research & Forecast (WRF) model which runs twice-daily on its own high-performance clusters. Prior to the implementation of WRF, PacifiCorp relied on NOAA's High Resolution Rapid Refresh (HRRR) model which has a coarser resolution (3km) and a shorter forecast horizon (48 hours) when compared to WRF. PacifiCorp's WRF configuration was carefully selected only after a detailed analysis of various model configuration results and historical wind observations. PacifiCorp's operational WRF has already demonstrated skill at forecasting localized high-impact wind events across its service territory. However, the final configuration was not implemented until later in the year and a temporary WRF configuration was in place during fire season. Looking ahead, PacifiCorp is currently building a 2km, hourly, 30-year WRF reanalysis of weather and fuels conditions across its service territory. This data will be correlated with distribution & transmission impacts and wildfire occurrence then paired with PacifiCorp's WRF and LRAM models to create a sophisticated impacts-based forecast system.
- b. **Localized Risk Assessment Model (LRAM):** Part of our ongoing risk modeling efforts is understanding the system impacts of extreme weather events. Specifically, the company has begun a preliminary analysis of correlating outage events with wind gust percentiles. The core of the model is based on fragility functions which attempt to describe the average damage as a function of some hazard. The concept of fragility functions originated in earthquake damage estimation (damage in dollars vs. earthquake magnitude), but for our purposes we are seeking to understand the expected number of outages on a circuit as a function of hourly wind gust percentile. We have found this modeling approach useful as it allows us to narrow in on the locations where we expect elevated outage activity. In 2021, PacifiCorp implemented an operational LRAM Outage Model based on the aforementioned work and early results are encouraging. The LRAM Outage Model has demonstrated success in both small wind events where we expect one or two outages and larger events where entire operating areas are impacted with dozens of outages. The primary limitation of the 2021 LRAM Outage Model however is that it relies on NOAA's HRRR model. As mentioned earlier, the HRRR is only available at 3km resolution across a 48-hour forecast horizon. Further, there is a limited history of HRRR forecasts from which to build the model climatology. In 2022, we will incorporate PacifiCorp's operational WRF output (2km, 96-hour forecasts) and 30-year historical weather reanalysis dataset into the LRAM Outage Model, which includes many more weather variables and additionally environmental ones such as vegetation density, tree canopy cover, slope, and others. This combined with the real time consequence tools provided by

Technosylva will allow us to quantify and analyze risk at an extremely granular level both spatially and temporally.

- c. **Technosylva's Wildfire Analyst-Enterprise:** PacifiCorp implemented a pilot of Technosylva's Wildfire Analyst-Enterprise for the period July 1 through December 31 which included its Northern California districts. A 2021 post-season evaluation of model performance is ongoing, however early results are encouraging. WFA-E has demonstrated success in both identifying high fire risk situations and modeling actual wildfires.
2. What were the challenges in quantifying risks and benefits in terms of determining the scope (size and duration) of the PSPS you conducted?

Response: At the time of the Dunsmuir PSPS, the PacifiCorp WRF model and Wildfire Analyst-Enterprise pilot were still in development, so PacifiCorp relied heavily on its own subject matter experts and publicly available information from the GACC to assess local fire risk.

3. How did you build a resilient emergency management team? Discuss in terms of personnel staffing, training, exercising, and changes to business practices.

Response: PacifiCorp has added staff to the Emergency Management and Meteorology departments which allow for increased capability. Additionally, this also allows for increased training of employees who are part of the incident response team. PacifiCorp maintains a robust exercise program which continues to evolve to provide tests for known and emerging risks. PacifiCorp is currently changing some practices such as a refined Emergency Coordination Center structure framework that will allow operational departments to focus on the tactical aspect of the response while having support provided by the ECC staff. These changes will streamline the company's ability to respond efficiently while enhancing the ability for outreach, liaison, and customer support during incidents.

4. Explain your policies (provide a copy of written policies) regarding public safety partner (PSP) liaisons in your emergency operations center (EOC) and utility liaisons to state, local, and tribal government EOCs.

Response: PacifiCorp has worked closely with our public safety partners and has developed county by county plans for the response to PSPS actions. PacifiCorp has also conducted this outreach to ensure the ability to respond to any risk is appropriately designed to support our customers through our public safety partners. With the expansion of the Emergency Management Staff, PacifiCorp is better able to embed utility representatives within partner EOCs. Included is our Siskiyou County plan for engagement during PSPS actions.

See POSTSR 1 - Attachment B, PacifiCorp's PSPS Execution Playbook 2021.

5. Recap the lessons learned from all of your de-energization exercises, the resulting action items, their implementation, and observed consequences.

Response: Lessons learned are captured in PacifiCorp's Improvement Plan based on findings from each exercise. Many of our lessons learned revolve around communications to the community and AFN outreach. Through these lessons learned PacifiCorp has enhanced the

capabilities of key members to increase the outreach to all customers with significant focus on the AFN population.

Date	Location of Exercise	Observation	Action Item/Recommendation	Responsible Person
5/25/2021	<i>Siskiyou County</i>	<i>AFN outreach remains a topic for improvement, the county and Pacific Power continue to strive to conduct outreach to the entire AFN population.</i>	<i>Coordinate AFN population outreach</i>	<i>Customer Service</i>
5/25/2021	<i>Siskiyou County</i>	<i>Ensuring Joint Information System has timely and accurate information for distribution is a key concern</i>	<i>Continue planning JIS procedures</i>	<i>Public Information Officer</i>
5/25/2021	<i>Siskiyou County</i>	<i>Communications capability for direct customer outreach prior to event has limited bandwidth and channels need confirmed</i>	<i>Communications companies in coordination with the county will advise on any solutions</i>	<i>Siskiyou County</i>
5/27/2021	<i>Del Norte County</i>	<i>Frustrated that a community must be considered Tier 3 to receive full planning and exercise support, and not in agreement for factors contributing to Tier 2</i>	<i>Re-evaluate factors for determining PSPS community preparedness – specifically Tier 3 determination for planning and exercise</i>	<i>PacifiCorp Emergency Management</i>
5/27/2021	<i>Del Norte County</i>	<i>Direct communication between PacifiCorp and Del Norte citizens on PSPS criteria could be improved</i>	<i>Provide more outreach directly to citizens about PacifiCorp decision making and state regulations that affect PSPS in our community</i>	<i>Public Information Officer</i>
5/27/2021	<i>Del Norte County</i>	<i>Other communities along 199 that would feel to be at similar risk for PSPS protocol are not designated for de-energization. How this can be better understood and communicated would be helpful.</i>	<i>Outreach to these areas or a standard response that County OES or other staff can provide to citizens when asked the question</i>	<i>Public Information Officer</i>

6. Discuss how you fully implemented the whole community approach into your de-energization exercises.

Response: PacifiCorp includes representatives from all facets of the community in exercises, these include but are not limited to emergency services agencies, community-based

organizations, faith-based organizations, public health agencies, hospitals, AFN representatives, tribal organizations, critical infrastructure, and community leaders.

7. Discuss the complaints you received (as documented in POSTSR4) and any lessons learned and implementation of changed business practices.

Response: No complaints were received, and none are documented in POSTSR4.

8. How did your PSPS notifications, to both customers and public safety partners/local governments, perform over the year? What changes will you make to improve performance?

Response: For the de-energization event on August 17, 2021, the rapidly changing weather and environmental conditions did not allow for all planned notifications to be conducted as planned. For example, the risk event was initially forecasted on August 16, 2021, not allowing for a 48-hour notification given that the forecast event occurred during the afternoon of August 17, 2021. Additionally, the rapidly changing conditions during the afternoon of August 17, 2021, required the acceleration of the de-energization, originally planned to begin around 5:00 PM, to be moved to 3:30 PM, eliminating the possibility for a 1-hour or 2-hour notification. Therefore, this event included four major notifications: (1) De-energization warning 24 hours in advance, (2) De-energization beginning with approximately 0-1 hour notice, (3) restoration beginning, and (4) event completion. The table below summarizes PacifiCorp's planned notifications per requirements in D.19-05-042 and whether or not these notifications were implemented according to plan.

PacifiCorp's outbound calling and notification system is managed by an external contractor. PacifiCorp is currently working with this contractor to perform a more detailed root cause of failure analysis to understand why the restoration notifications were not properly pushed to customers. While this effort is on-going, PacifiCorp is also actively taking the following additional steps to prevent similar deviations and errors from occurring in the future:

- a. Upon activation of the EOC, PacifiCorp intends to notify the contractor that manages the external notification system and place emergency technical support on call to support notification requirements and trouble shoot any errors in real time throughout the duration of the event.
 - b. PacifiCorp intends to increase education for call center personnel to recognize these types of errors and establish processes to make corrections in more timely manner.
 - c. PacifiCorp intends to implement new steps the PPS protocols than include quicker verification of notifications after each type of notification is completed.
9. How did your Public Safety Specialists and Public Affairs Representatives deconflict and synchronize operational direction given to local governments' Office of Emergency Services? What lessons did they learn in 2021 and what corrective actions are planned?

Response: PacifiCorp does not have Public Safety Specialists on Staff, however these roles and responsibilities are completed through a partnership between our emergency management and regional business manager staff. During any PPS event the PacifiCorp Emergency Coordination Center is activated to support the response and deconflict any messaging or direction during the

lead up to, execution of and recovery from the event. During our PSPS event in 2021 this process proved effective.

10. What process did your Public Safety Specialists follow to provide situational awareness and ground truth to your EOC? How did the EOC incorporate their input?

Response: PacifiCorp does not have Public Safety Specialists on Staff, however these roles and responsibilities are completed through a partnership between our emergency management and operations staff. These personnel regularly report near real time observations to the ECC for dissemination to management for situational awareness and decision-making data.

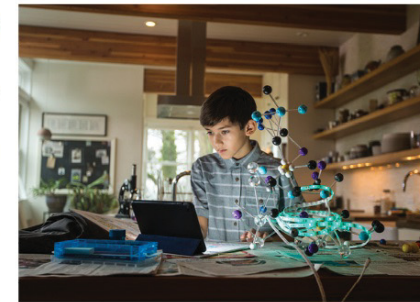
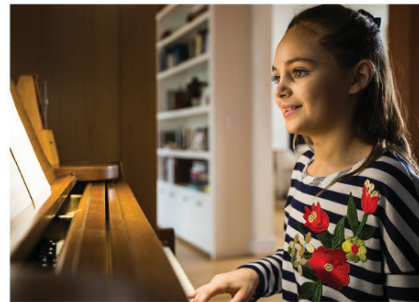
Attachment 1A:

Wildfire Messaging Awareness Presentation

(December 2021)

Wildfire Messaging Awareness

December 2021



Prepared by

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MDC Research



Objectives & Methodology

The **overall objective** of this research was to measure the public's awareness of messaging related to wildfire preparedness and safety.

Specific research objectives include:

- Measure awareness of Pacific Power messages related to wildfire preparedness
- Identify recall of specific message topics
- Identify recall of message channels
- Measure recall and understanding of Public Safety Power Shutoff or PSPS
- Evaluate sources customers are most likely to turn to for information about PSPS
- Evaluate PSPS experience
- Explore actions taken by customers to prepare for wildfire season
- Measure awareness of Pacific Power's efforts to reduce the risk of wildfires
- Evaluate PSPS notifications perception

Target Audience

- Pacific Power residential and business customers in California
- Pacific Power critical customers

Methodology

- This study was conducted using a mix of online and phone surveys
- Surveys available to customers in English and Spanish
- A total of 579 surveys, including 24 from critical customers, were completed between November 15 and December 5, 2021
 - Phone: 74 completed surveys
 - Web: 505 completed surveys

Key Findings



61% are aware of wildfire safety communications, which is in line with the prior wave. Pacific Power remains the primary sources for wildfire preparedness information, and **personal preparedness** and **vegetation management** remain the most common messages recalled. Communication Recallers are more likely to be age 65 and older than Non-Recallers.

TV News, social networking, and email are the most commonly recalled channels for wildfire preparedness communications.

The Pacific Power website remains rated as the most useful and has now been cited as the clearest source of wildfire information.

73% have taken action to prevent wildfires or to prepare their home or business for the event of a wildfire, consistent with previous waves of the study. **Trimming vegetation around properties** remains the most common actions taken. Recallers remain more likely than Non-Recallers to say they have taken actions (78% vs 64%).

61% are aware of Pacific Power's efforts to prune vegetation around power lines in higher-risk areas, slightly up from August 2021 (56%). Recallers remain more likely than Non-Recallers to be aware of Pacific Power's efforts to reduce the risk of wildfire.

64% recall seeing, hearing or reading the phrase **"Public Safety Power Shutoff or PSPS,"** which is up slightly from August 2021 (60%). **TV News** remains the main source of PSPS communication. **Recallers** are significantly more likely than Non-Recallers to mention TV News (**45%** vs 33%), Pacific Power Website (**23%** vs 12%) and Other Website (**21%** vs 12%).

78% understand the following statement about PSPS: "for areas at a higher risk of fast-spreading catastrophic wildfires, the utility will proactively shut off power during extreme and dangerous weather."

16% experienced PSPS event this year. On average, customers have received **0.7 PSPS notifications** and experienced **0.2 PSPS events.** **The majority** agree that **notifications should be sent if there is any possibility of a PSPS.**

Among those who experienced PSPS, over three quarters (81%) say they received adequate notification and information to prepare for an event; timely and better communication are the main suggestions for improvement, followed by more channels of communication.

Satisfaction with outreach and engagement remains mostly consistent with previous results, with all outreach and engagement methods demonstrating slight increases in customer satisfaction.

Among those who experienced PSPS, over three quarters (81%) say they received adequate notification and information to prepare for an event; timely and better communication are the main suggestions for improvement, followed by more channels of communication

One quarter know **whether their address is in PSPS area,** consistent with August 2021. Nearly one in five are aware of a map on Pacific Power's website; awareness remains higher among Recallers than Non-Recallers (24% vs 11%).

Of those relying on electricity for medical needs nearly one quarter (26%) are aware Pacific Power provides additional notices; Non-Recallers are significantly less likely to be aware of this (16% vs 29%).

Out of all respondents, 7 (1%) say it would be helpful for them or anybody else in their household to receive communication in another language, and Spanish would be preferred by 4 of them.



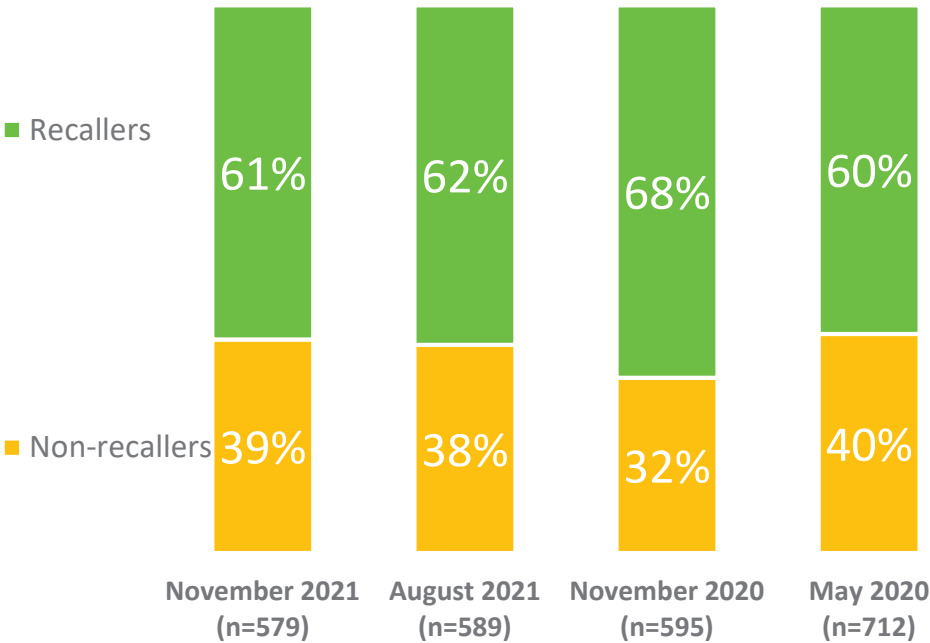
Recommendations

- Continue educating customers about Pacific Power’s efforts to reduce the risk of wildfire. The increase in awareness compared to August 2021 suggests that messaging has been effective or more frequent during the peak of the fire season.
- Carefully evaluate the strategy used to reach critical customers, as their awareness about wildfire communication remains significantly lower than among general audience.
- Continue utilizing TV news, social networking, and email to communicate with customers about wildfire preparedness and safety.
- Continue providing messaging around actions to prevent or prepare for a wildfire, especially regarding the importance of having an emergency kit and preparing a readiness plan, as customers remain considerably less likely to have taken these actions.
- Continue leveraging TV news and social networks to educate consumers about PSPS events.
 - Continue providing timely and accurate notifications prior to a PSPS event, as well as increasing awareness among those relying on electricity for medical needs about Pacific Power additional communications.
 - Most customers would prefer to be notified if there is any possibility of a PSPS event. There appears to be little concern with “crying wolf” and customers do not feel they are receiving too many notifications. Receiving notifications through multiple communication channels, e.g., text alerts, emails, mail, would be appreciated.
- Evaluate strategy used to inform customers of a PSPS map on the Pacific Power website and how they can update their contact information with Pacific Power to receive notifications. Currently three quarters are unaware whether their address is in a PSPS area and eight in ten are unaware there is a PSPS map on the Pacific Power website.

Wildfire Safety Communications Awareness

- Just over three in five say they have seen or heard communications about wildfire safety in the past year, in line with August 2021 (61% vs 62%)
- Communication **Recallers** are significantly more likely than non-recallers to be age **65 and older** while **non-recallers are significantly more likely to be 18-54 years of age**

Communication Awareness



	Recallers (n=352)	Non-Recallers (n=227)
Gender	Male – 43% Female – 53%	Male – 35% Female – 57%
Age	18-54 – 16% 55-64 – 22% 65+ – 58%	18-54 – 29% 55-64 – 22% 65+ – 43%
Median Income	\$55K	\$51K
Home Ownership	Rent – 20% Own – 75%	Rent – 20% Own – 73%
Primary Language is not English	31%	31%
Responded they Rely on Electricity for Medical Needs	26%	28%

Communication Recall (among those aware of communications)

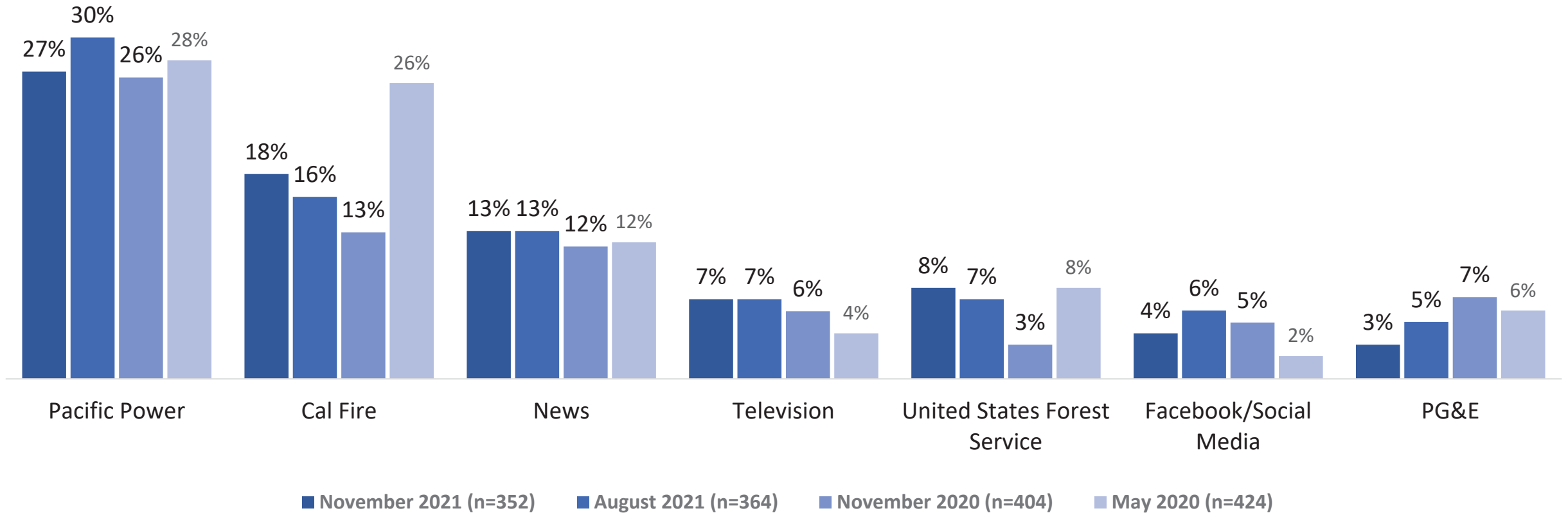


Sources of Wildfire Preparedness Communications

- Pacific Power remains the most mentioned source of wildfire preparedness communication (27%), statistically consistent with August 2021 (30%)

Wildfire Preparedness Communications Sources

(among those who recall communication)



Wildfire Preparedness Communications Messages

- Of those who recall communications, over two thirds recall messages about personal preparedness (68%), consistent with results from August 2021 (66%)
- Vegetation management remains second most commonly recalled, mentioned by just over half of customers

Communications Messages Recalled

(among those who recall communication)

		Aug 2021 (n=364)	Nov 2020 (n=404)	May 2020 (n=424)
Personal Preparedness	68%	66%	67%	68%
Vegetation Management	53%	51%	49%	62%
Public Safety Power Shutoff – De-Energization of Power, Maps	39%	42%	42%	31%
Local Emergency Services – Resources	37%	40%	43%	41%
Local Emergency Services – Support Tools	32%	32%	32%	37%
Community Resource Centers available for information and support	27%	27%	25%	23%
Notifications & Updating Customer Information	25%	27%	34%	28%
Pacific Power's Wildfire Mitigation Plan	25%	23%	24%	29%
Medical Needs – Plan for any medical needs	24%	23%	25%	21%
CPUC designation of high wildfire threat areas	20%	22%	30%	30%
Weather Stations	16%	20%	21%	16%
System Hardening	9%	7%	4%	5%

Information Channels for Wildfire Communications

- TV news and Social Networking are tied for the leading sources of communication (38%), followed by email (36%) and a website other than Pacific Power (24%)
- Customers whose primary language is other than English are more likely than those with English as a primary language to mention Radio (21% vs 12%)
- Those 65 years of age or older are more likely to mention newspaper than those 45-64 years of age and customers 18-45 years of age (26% vs 12% & 26% vs 7%, respectively)

Information Channels for Wildfire Preparedness Communications

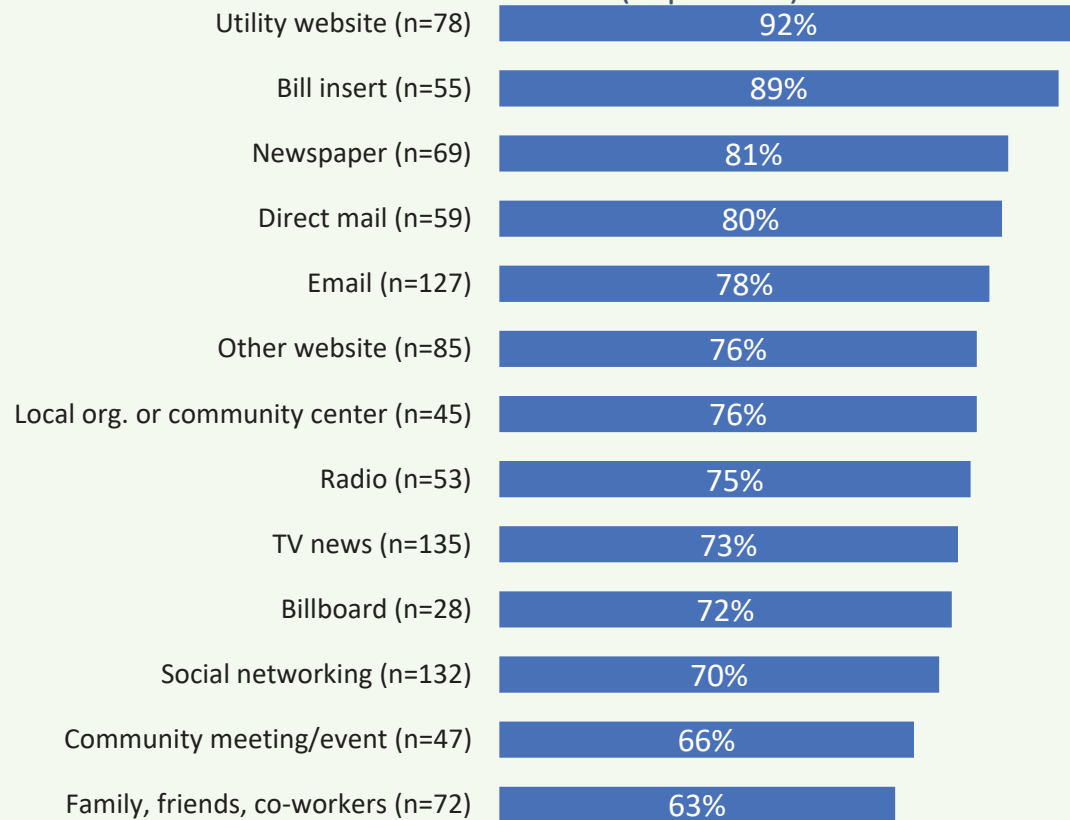
(among those who recall communication)

		Aug 2020 (n=364)	Nov 2020 (n=404)	May 2020 (n=424)
TV News	38%	41%	39%	43%
Social networking	38%	37%	36%	30%
Email	36%	35%	40%	33%
Other website	24%	26%	25%	24%
Pacific Power website	22%	21%	25%	27%
Family, friends, co-workers	20%	18%	26%	27%
Newspaper	20%	18%	24%	32%
Direct mail	17%	17%	17%	25%
Bill insert	16%	16%	21%	20%
Radio	15%	14%	17%	19%
Local organization or community center	13%	12%	13%	16%
Community meeting or event	13%	9%	7%	12%
Billboard	5%	4%	4%	5%

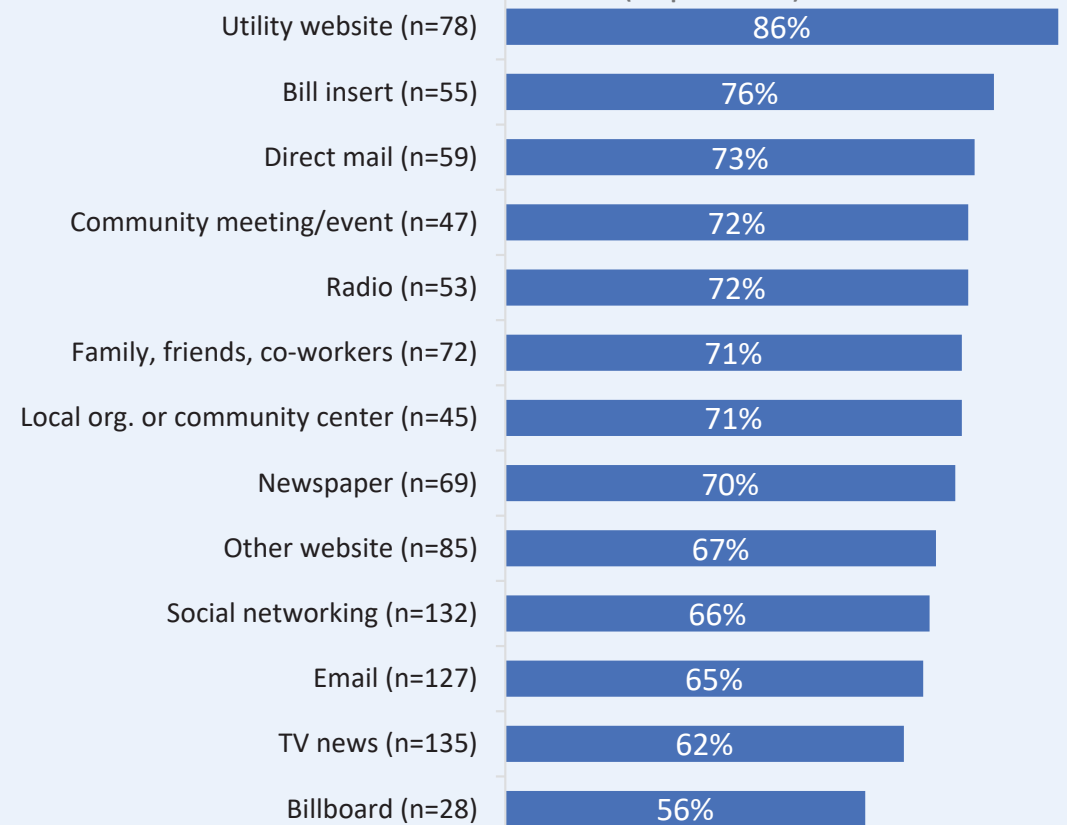
Information Usefulness and Clarity

- The Pacific Power website was rated the highest in terms of clarity (92%), followed by bill insert (89%) and newspaper (81%)
- With respect to usefulness, customers rated the Pacific Power website the highest (86%) followed by Bill Insert (76%) and direct mail (73%)

Clarity (Top-2-Box)



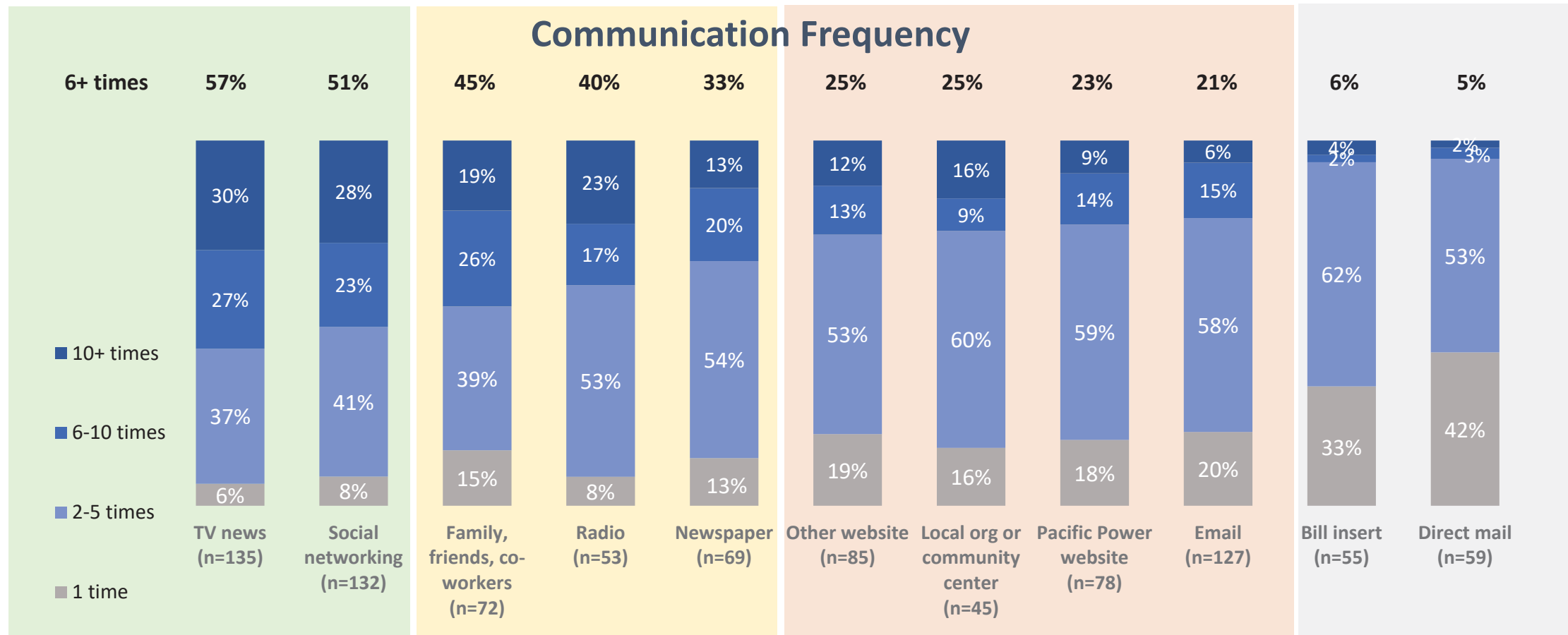
Usefulness (Top-2-Box)





Communication Frequency

- Respondents say they most frequently see messages about wildfire preparedness on TV news and social networks; friends and family radio, and newspapers make up the next tier of communication frequency



Wildfire Preparedness Actions Taken



Wildfire Preparedness

- Just under three quarters say they have taken actions to prevent or prepare their home or business in the event of a wildfire; **Recallers** are significantly more likely than Non-Recallers to say they have taken actions (**78%** vs 64%)
- Customers were significantly less likely to cite preparation of an emergency readiness plan and contact information in comparison with August 2021 (**7%** vs 15%)
- **Recallers** are significantly more likely than Non-Recallers to say they have prepared emergency kit (**18%** vs 5%)

Took Actions to Prevent or Prepare for a wildfire

November 2021
(n=579)



August 2021 (n=589)	73%
November 2020 (n=595)	75%
May 2020 (n=712)	71%

Actions Taken

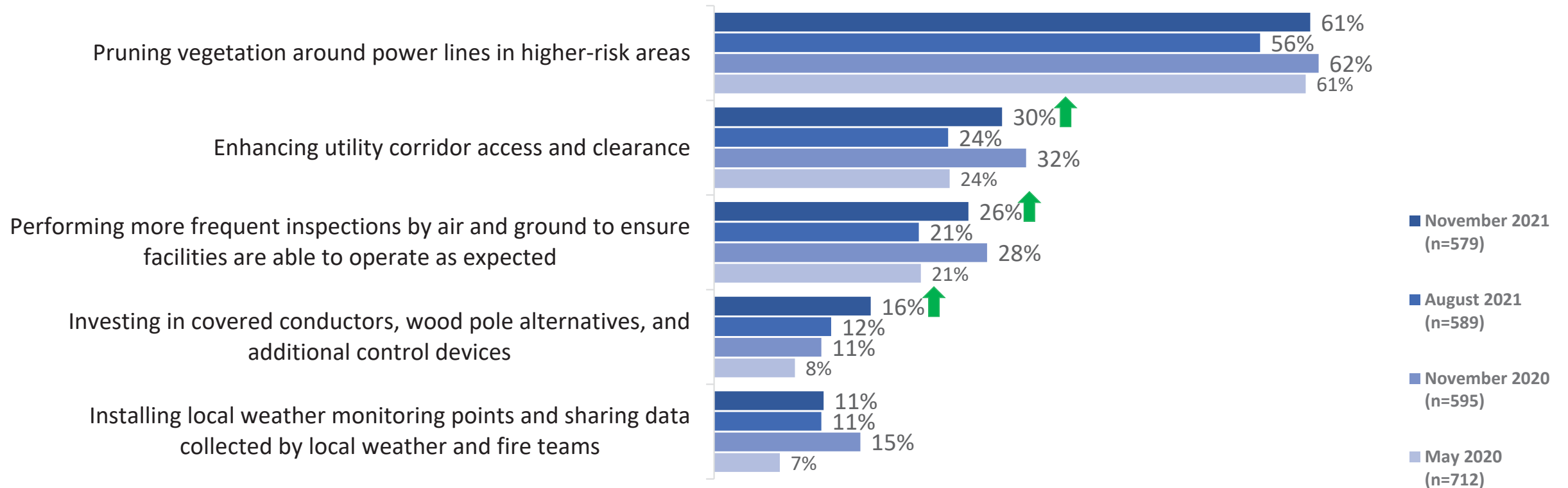
(among those taking action)

	Nov 2021 (n=420)	Aug 2021 (n=431)	Total Nov 2020 (n=444)	May 2020 (n=505)
Trimmed vegetation around home or property	75%	75%	82%	88%
Created defensible space	18%	17%	--	--
Prepared an emergency readiness plan and contact information	7% ↓	15%	6%	5%
Prepared an emergency kit	13%	14%	16%	10%
Watering/installed watering systems	8%	11%	8%	7%

Awareness of Pacific Power's Efforts

- Pacific Power pruning vegetation around power lines in higher-risk areas remains the most recalled effort (61%), bringing this back in line with 2020 observations.
- Awareness has increased significantly for Pacific Power's efforts such as enhancing utility corridor access and clearance (30% vs 24%), performing more frequent inspections by air and ground (26% vs 21%), and Investing in covered conductors, wood pole alternatives, and additional control devices (16% vs 12%)
- **Recallers** remain significantly more likely than Non-Recallers to be aware of all of Pacific Power's efforts to reduce the risk of wildfire

Awareness of Pacific Power's Efforts to Reduce Wildfire Risk



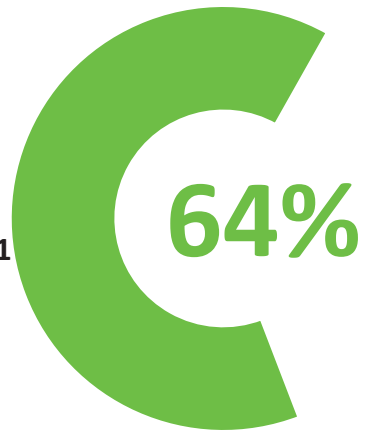


Awareness of Public Safety Power Shutoff

PSPS Awareness

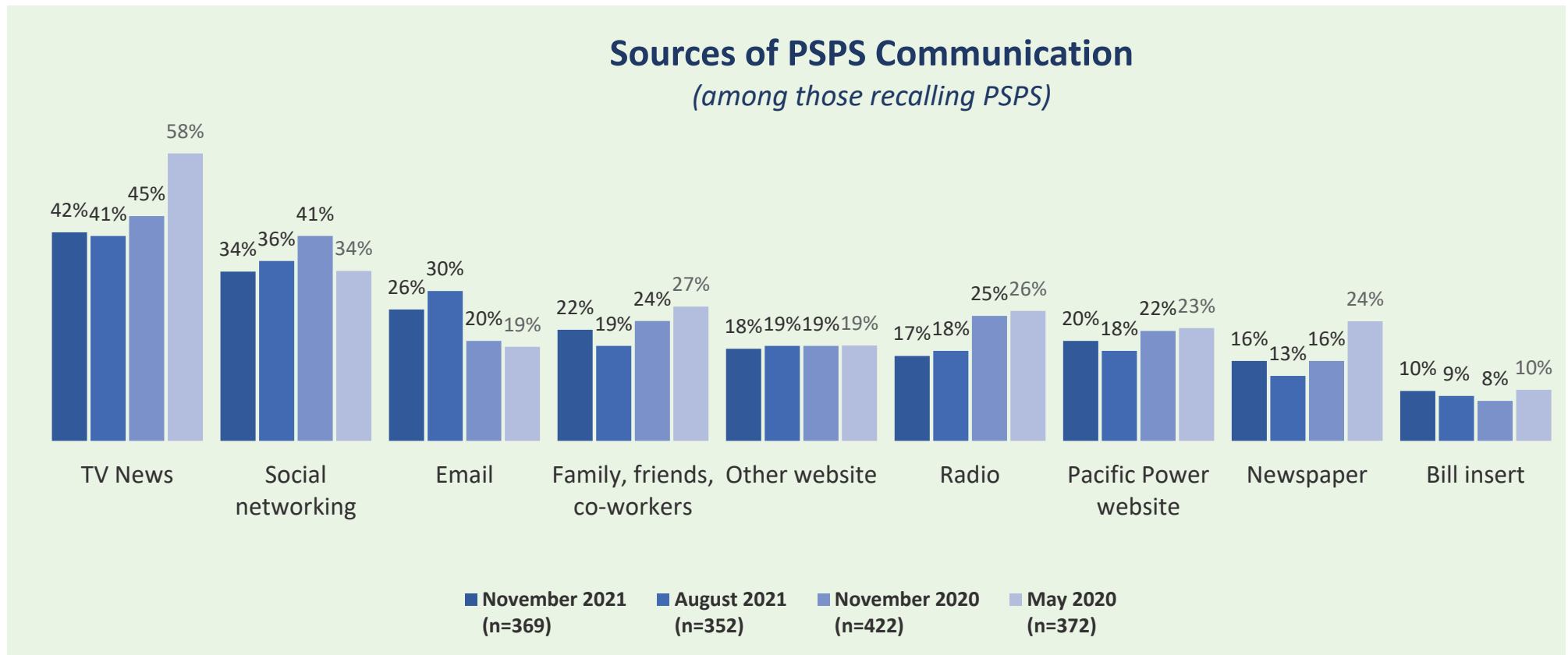
- Two thirds recall seeing, hearing or reading the phrase "Public Safety Power Shutoff or PSPS," which is slightly increased from August 2021 (64% vs 60%); **Recallers** are significantly more likely than Non-Recallers to be aware of PSPS (**75%** vs 47%)
- TV News remains the main source of PSPS communication; **Recallers** are significantly more likely than Non-Recallers to mention TV News (**45%** vs 33%), Pacific Power website (**23%** vs 12%) and other websites (**21%** vs 12%)

PSPS Recall



Sources of PSPS Communication

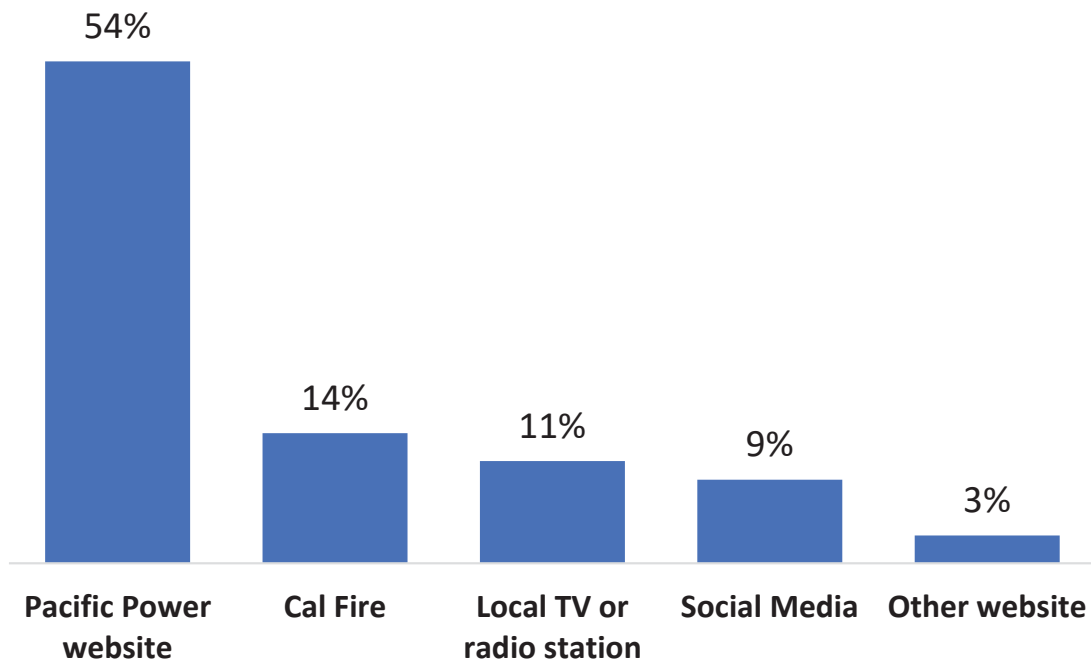
(among those recalling PSPS)



PSPS Awareness & Understanding

- The Pacific Power website remains the main source customers turn to for PSPS information (54%)
- Consistent with previous waves, of those aware, nearly four in five understand that a PSPS means “for areas at a higher risk of fast-spreading catastrophic wildfires, the utility will proactively shut off power during extreme and dangerous weather” (78%); Recallers are significantly more likely than Non-Recallers to select the following statement: “Before considering a Public Safety Power Shutoff the utility assesses several factors” (67% vs 49%)

Top 5 Sources of PSPS Information



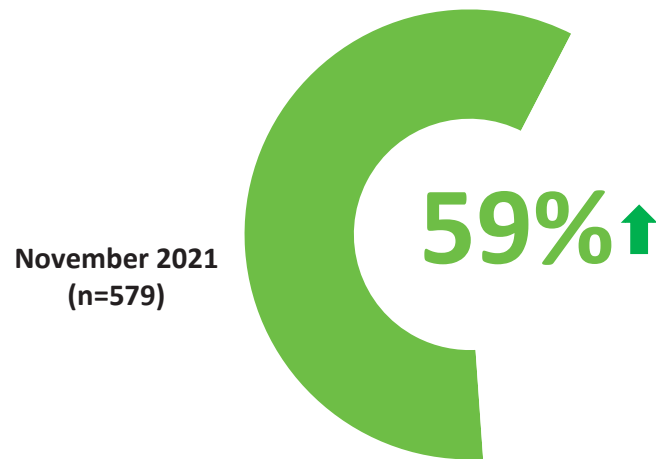
PSPS Understanding

	Nov 2021 (n=369)	Aug 2021 (n=352)	Nov 2020 (n=422)	May 2020 (n=372)
For areas at a higher risk of fast-spreading catastrophic wildfires, the utility will proactively shut off power during extreme and dangerous weather.	78%	81%	86%	81%
Before considering a Public Safety Power Shutoff the utility assesses several factors: dry trees and other fuel, winds, extremely low humidity, weather conditions, population density, real-time on-the-ground observations and input from local public safety and health agencies.	62%	66%	61%	60%
A Public Safety Power Shutoff is a last resort by the utility in an effort to prevent a fast-moving, hard to fight wildfire to help ensure customer and community safety.	48%	51%	43%	44%
The likelihood of a Public Safety Power Shutoff is reduced when the utility takes steps to harden the electric grid.	35%	41%	32%	32%

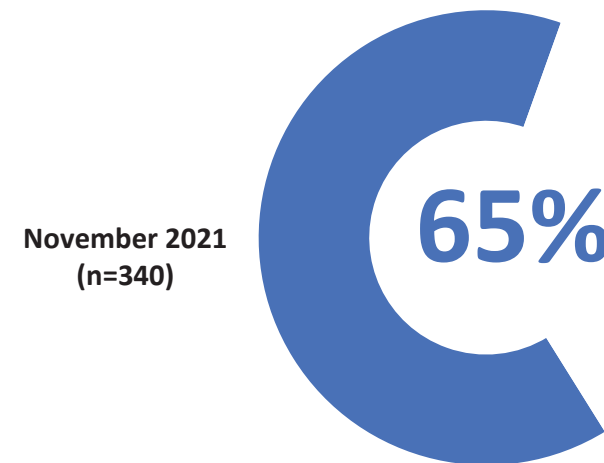
Contact Information for PSPS

- Nearly three out of five customers are aware they can update their contact information with Pacific Power, significantly more than in August 2021 (59% vs 51%); awareness among **Recallers** remains significantly higher than among Non-Recallers (64% vs 50%)
- Just under two thirds (65%) of those aware they can update their information have done so, consistent with previous findings

Awareness of Ability to Update Contact Information for PSPS



Have Updated Contact Information *(among those aware they can update contact info)*



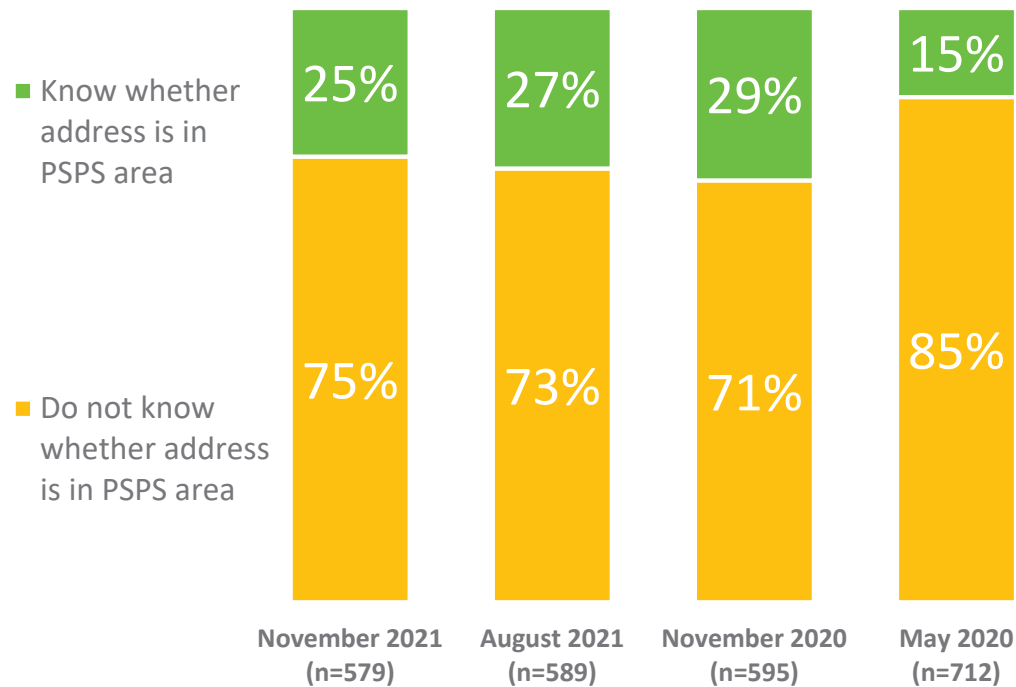
August 2021 (n=589)	51%
November 2020 (n=595)	63%
May 2020 (n=712)	51%

August 2021 (n=301)	64%
November 2020 (n=374)	60%
May 2020 (n=360)	64%

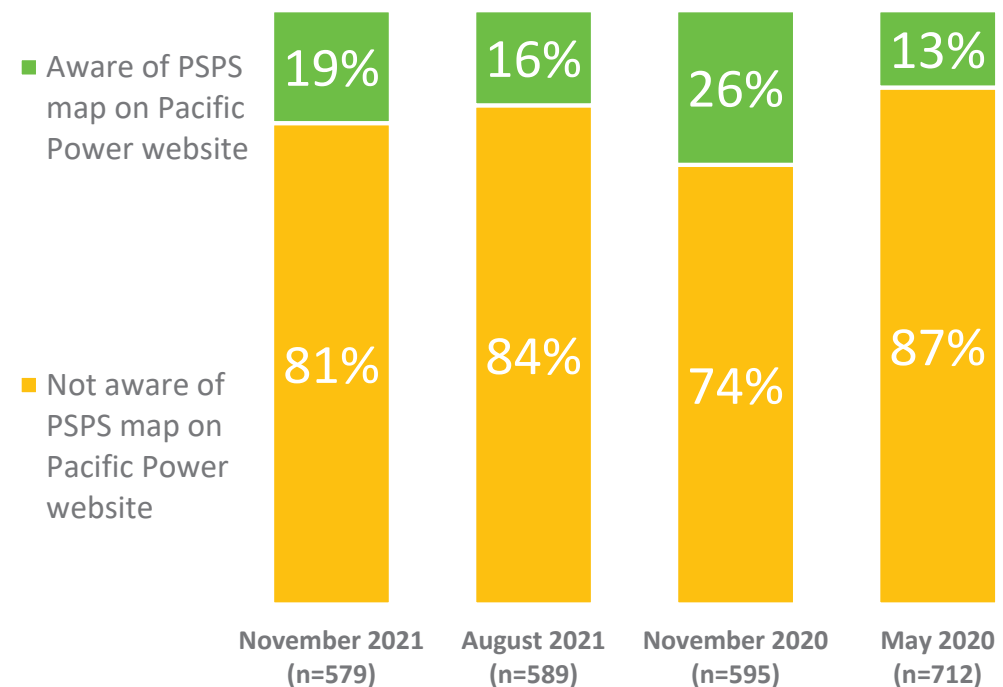
Awareness of PSPS Location Status

- One quarter know whether their address is in a PSPS area (25%), in line with August 2021 findings; awareness remains significantly higher among **Recallers** than Non-Recallers (**33%** vs 13)
- Nearly one in five are aware of a map on Pacific Power’s website; awareness remains higher among **Recallers** than Non-Recallers (**24%** vs 11%)

Awareness of Address in PSPS Area



Awareness of PSPS Map on Pacific Power website



Medical Needs and Language Preferences

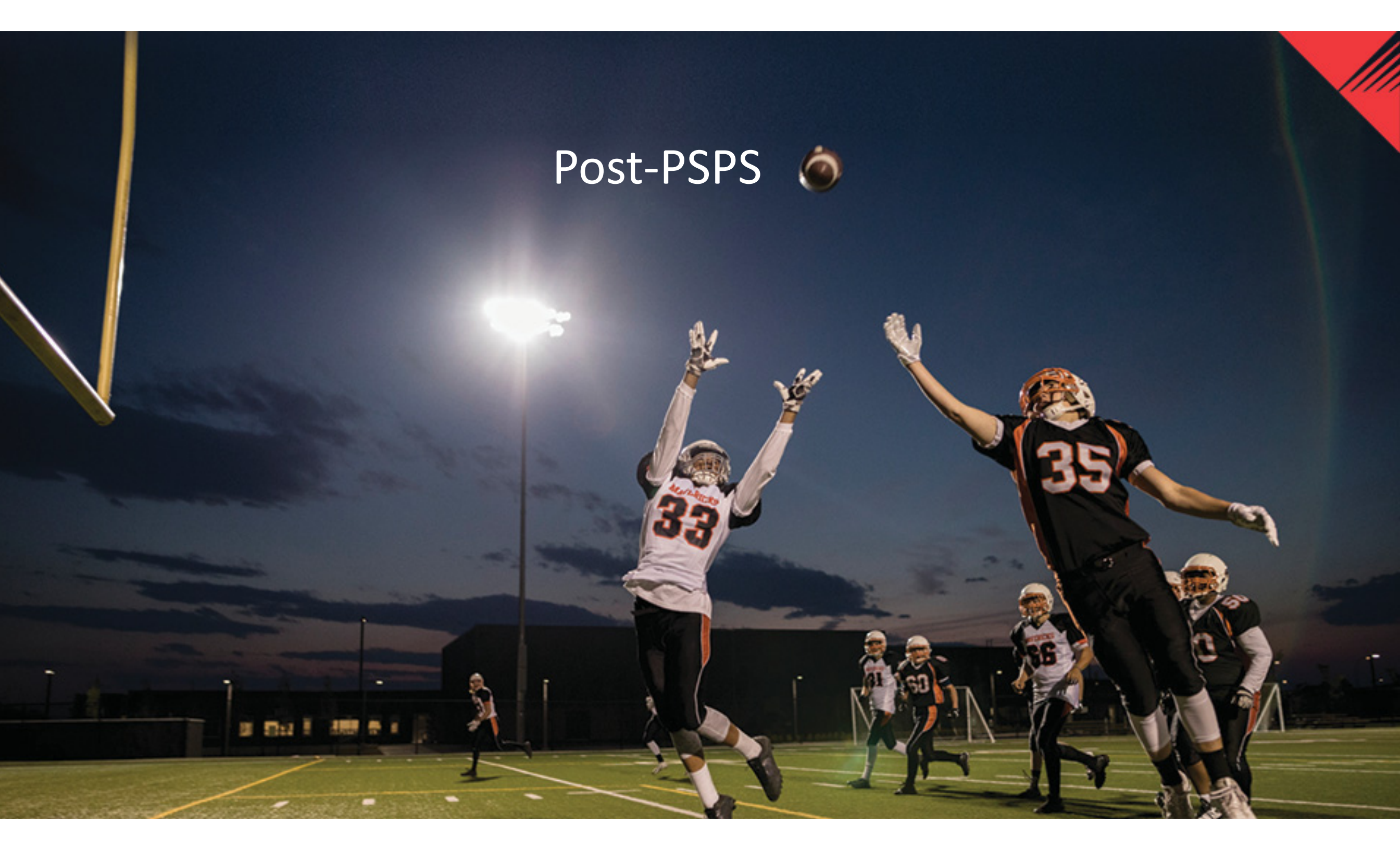
Over one quarter (27%) responded that they rely on electricity for medical needs, consistent with the previous wave; Critical customers are significantly more likely to rely on electricity for medical needs (57% vs 24%)

Of those relying on electricity for medical needs nearly one quarter (26%) are aware Pacific Power provides additional notices; Non-Recallers are significantly less likely to be aware of this (16% vs 29%)

English is not a primary language for nearly a third of customers (31%), but is still preferred for communications for the vast majority (99%)

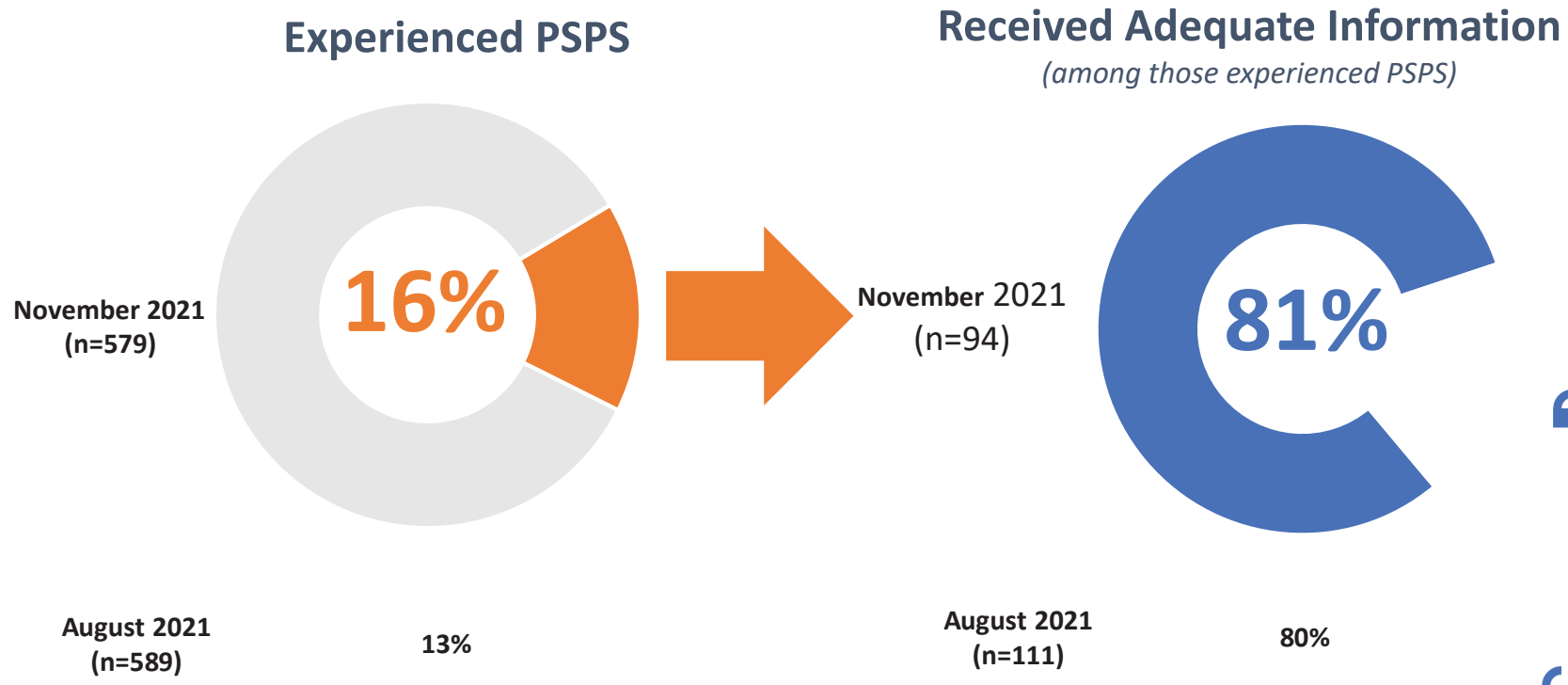
- Out of all respondents, 7 (1%) say it would be helpful for them or anybody else in their household to receive communication in another language, and Spanish would be preferred by 4 of them, including 1 Critical customer
- Besides English, Spanish is mentioned as the preferred language to receive communication by 1% of all respondents.

Post-PSPS



PSPS Experience

- A PSPS event was experienced by 16% of all respondents, in line with August 2021 (13%)
- Among those who experienced PSPS, over three quarters (81%) say they received adequate notification and information to prepare for an event; timely and better communication are the main suggestions for improvement, followed by more channels of communication



Recommendations for Improvement (n=20; Received inadequate notification and information)	
Timing/more time to prepare	35%
Better communication	25%
More channels of communication (text alerts, emails, mail)	20%

“ I heard about the temporary power outage from my neighbor. I am signed up with Pacific Power to receive emails and mobile phone notifications and, for the most part, that works well for unexpected power outages. I did not receive notification that there would be a planned outage. ”

“ Warning came by email so you have to have your phone on you, I’m working on the ranch all day and don’t carry my phone on me because I’ve broken them while working. I do have my phone in the truck and check it a couple times a day. ”

QPS1. Did you experience a Public Safety Power Shutoff (PSPS) this year? (n=579; Total)
 QPS1A. Did you receive adequate notification and information to prepare for the Public Safety Power Shutoff? (n=94; Experienced PSPS)
 QPS1B. What could have been improved? (n=20; Receive inadequate notification and information)

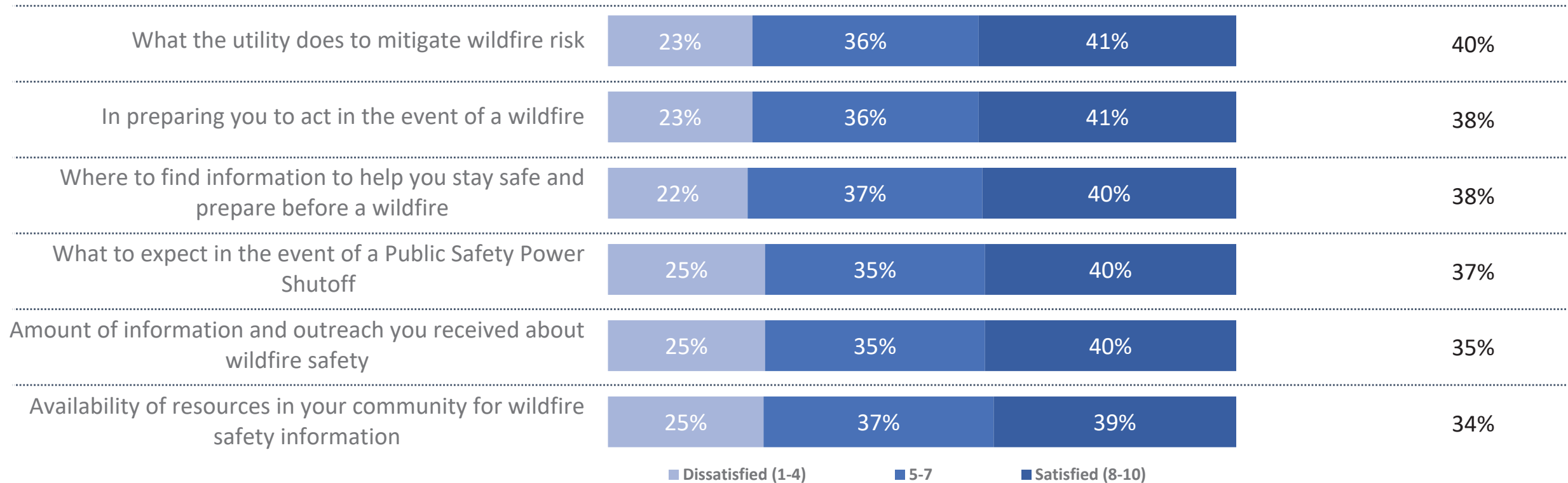
Outreach and Engagement Satisfaction

- Over one third are satisfied with outreach and engagement they receive giving 8, 9, 10 ratings; **Recallers** remain significantly more likely than Non-Recallers to be **satisfied** across all items
- Critical customers demonstrated significantly greater satisfaction vs random customers with “what the utility does to mitigate wildfire risk” (54% vs 38%) and “availability of resources in your community for wildfire safety information” (54% vs 38%)

Outreach and Engagement Satisfaction

Top-3-Box

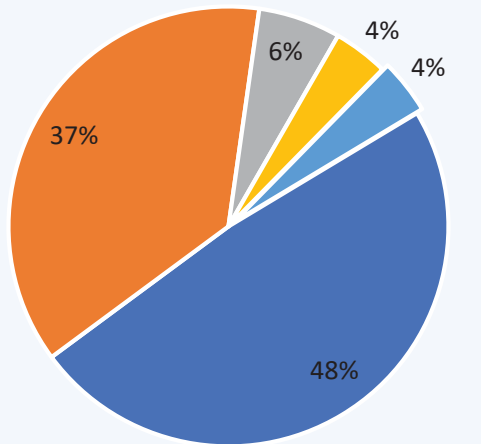
August 2021
(n=589)



PSPS Experience and Notifications

- On average, customers have received 0.7 PSPS notifications and experienced 0.2 power shutoffs
- Over half (54%) say that notifications should be sent if there is any possibility of a PSPS
- 41% of those who have received more notifications than PSPS events said that “false alarms” didn’t affect them

PSPS Notifications



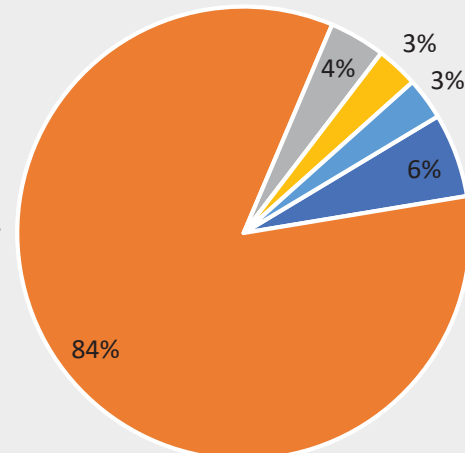
November 2021
(n=579)

■ Don't know ■ None ■ One ■ Two ■ Three+

Average Number of Notifications

November 2021 (n=579)	0.7
August 2021 (n=589)	0.6

Public Safety Power Shutoffs



November 2021
(n=579)

■ Don't know ■ None ■ One ■ Two ■ Three+

Average Number of Power Shutoffs

November 2021 (n=579)	0.2
August 2021 (n=589)	0.3

PSPS Notifications Perception

Notifications should be sent if there is any possibility of a PSPS

Nov 2021
(n=579)

54%

Notifications should only be sent if there is a high likelihood of a PSPS

31%

Notifications should only be sent if a PSPS is certain to occur

15%

“False Alarms” Impact

“Let me know dangerous conditions were likely”

“Not much, just a little anxiety”

Critical Customers Summary





Key Metrics

	Random Customers (n=1,114)	Critical Customers (n=54)
Aware of Wildfire Safety Communications	62%	37%
Aware of Communications from Pacific Power (among those aware)	28%	50%
Took Action to Prevent or Prepare for a Wildfire	73%	69%
Recall PSPS	62%	48%
Would Turn to Pacific Power Website for PSPS Info	51%	42%
Aware of Ability to Update Contact Info for PSPS	55%	56%
Know if Address is in PSPS Area	26%	26%
Satisfied with Availability of Resources in Community for Wildfire Safety Info	38%	54%
Aware of Additional PSPS Notices for Those with Medical Need (among those with medical need)	20%	39%

Comparisons involving Critical Customers are based on Aug + Nov data due to small sample size

Bold denotes statistically significant difference between Random and Critical customers



Demographic Profiles

	Random Customers (n=1,114)	Critical Customers (n=54)
Gender	Male – 40% Female – 54%	Male – 39% Female – 57%
Age	18-54 – 20% 55-64 – 22% 65+ – 52%	18-54 – 39% 55-64 – 19% 65+ – 39%
Median Income	\$53K	\$27K
Home Ownership	Rent – 18% Own – 77%	Rent – 46% Own – 54%
Primary Language is not English	32%	22%
Responded they Rely on Electricity for Medical Needs	24%	57%

Comparisons involving Critical Customers are based on Aug + Nov data due to small sample size

Bold denotes statistically significant difference between Random and Critical customers



CBO Interviews

CBO Interviews

Three in-depth interviews were conducted with community-based organizations (CBOs) in the Pacific Power territory.

- Interviews lasted 30 minutes and were conducted using Microsoft Teams
- Participants were paid \$100 as a “thank you” for their time and feedback
- All interviews were recorded
- Interviews were scheduled using a “warm handoff” from Pacific Power



CBO Interviews

Current Communications

- Most CBOs are generally not receiving specific communications or information from Pacific Power; fire safe councils tend to be more engaged with Pacific Power than more broadly focused community organizations when it comes to communications about wildfire safety and PSPS
- Broad-based CBOs often do receive communications and resources from Pacific Power related to CARE and providing low-income residents with support for paying their electric bills
- Most communications and resources received about wildfires (from any organization, including government or fire agencies) were focused on evacuation preparedness (e.g., where to go), personal preparedness (e.g., brush clearing), but less about how to prepare for an outage due to PSPS
- Fire safe councils report better levels of communication and preparation for power outages than broad CBOs, although it was recommended to improve communication about educational events to increase community participation
- The most common methods CBOs currently use to communicate with the community are social media, in-person visits or meetings, and through handing out flyers when clients visit the office or when employees visit people in the community

Spreading the Word

- CBOs are willing to help spread the word about wildfire preparedness, safety, and PSPS events, if provided the necessary resources
 - Direct communications by Pacific Power are commonly recommended, including mailings, emails, or social media engagement; during outage or fire events, automated phone messages or text messages are advised
 - Partnering with local school districts is another opportunity for Pacific Power to increase the reach of communications in the community
 - CBOs are willing and ready to help by distributing materials (in the course of their day-to-day operations), posting to social media, or making outreach to those most vulnerable; social media postings by Pacific Power that they can link to are particularly helpful
 - CBOs generally do not have resources available for outreach/canvassing, or to produce/print content for distribution; shipping pre-printed content would greatly help their ability to provide information to the community
 - Most serve communities particularly vulnerable to PSPS events (such as elderly or those with medical conditions), and they are willing to help share information and resources during typical interactions with the community
- English and Spanish are the primary languages required
 - English is most common, but there are Spanish-speaking members of each community (although less so with Tribal communities)
 - Other languages (such as Hmong, Lao, and Chinese) are in the community, but in very small numbers, and are not regularly served by CBOs

CBO Interviews

Useful Information/Resources

- The most effective ways Pacific Power can support CBOs in preparing the community include:
 - Sharing/creating content that can be shared on social media, either by linking to Pacific Power or for CBOs to post (multiple CBOs report robust local communities on Facebook)
 - Providing pre-printed materials that can be easily handed out when interacting with members of the community (such as during food delivery)
 - Sharing accurate information about PSPS events, and providing timely updates as circumstances change (delayed or inaccurate information is a perceived pain point)
 - Providing information for those with medical needs to ensure they are able to adequately prepare for a PSPS event or evacuation
 - Providing educational resources about how to prepare for a fire/outage, including evacuation plans (how to evacuate and where to go), and prepping a “go” bag
 - Providing helpful items, such as water, food, flashlights, blankets, medical/sanitary supplies, phone chargers, etc. that CBOs can help distribute in the event of an evacuation
- CBOs indicate they can proactively reach out to the community using social media or in limited cases their email list, but it will be necessary to provide resources, including funding or staffing for mailings or in-person outreach (beyond their typical interactions)

PSPS Events

- One of the primary pain points around PPS events is the constantly changing nature of the situation
 - CBOs perceive inconsistent or inaccurate information about PPS events, as there are warnings but no events, etc.
 - Provide early notice if possible—CBOs report learning about an event at the same time as customer notifications go out, leaving them limited time/ability to help spread the word
 - CBOs state that they would prefer to receive as much communication as possible during the fire season, and if there is any possibility of an event; during the off-season, communication frequency should be monthly or quarterly
 - Fire safe councils tend to be more understanding of the dynamic nature of PPS events, but emphasize proactive communications when the risk exists
- Specific information about how to prepare for an outage/PSPS event is most useful/relevant to receive from Pacific Power
 - General fire safety information is least impactful, as other agencies are already providing information about brush clearing and steps to mitigate fire risk
 - Information most useful in advance of a PPS event includes evacuation plans and the content required for a “go” bag
 - Special attention should be paid to those with medical needs and limited transportation options; they are most at risk during a PPS event
- In the event of an evacuation, CBOs stress the need for food, water, blankets, and chargers that can be distributed at a shelter



Demographic Profiles

Respondent Profiles

Gender	Total (n=579)	Recallers (n=352)	Non-Recallers (n=227)
Male	40%	53%	35%
Female	54%	43%	57%
Age			
18 to 24	<1%	<1%	<1%
25 to 34	4%	2%	6%
35 to 44	7%	5%	9%
45 to 54	10%	8%	13%
55 to 64	22%	22%	22%
65 or over	52%	58%	43%
Prefer not to say	5%	5%	6%

Renter/Homeowner	Total (n=579)	Recallers (n=352)	Non-Recallers (n=227)
Own	74%	75%	73%
Rent	20%	20%	20%
Other	1%	1%	<1%
Prefer not to say	5%	4%	6%
Household Income			
Less than \$20,000	13%	11%	16%
\$20,000 to \$39,999	16%	17%	15%
\$40,000 to \$59,999	13%	13%	14%
\$60,000 to \$89,999	13%	14%	13%
\$90,000 to \$129,999	13%	13%	11%
\$130,000 to \$199,999	4%	5%	3%
\$200,000 or more	3%	3%	4%
Prefer not to say	24%	24%	24%

33

Q17
Q18
Q19
Q20

What is your gender? (n=579; Total)
What is your age category? (n=579; Total)
Do you own or rent your home? (n=579; Total)
Which of the following best describes your annual household income? (n=579; Total)

POWERING YOUR GREATNESS

Bold denotes statistically significant difference between Recallers and Non-Recallers

Attachment 1B:

PacifiCorp Public Safety Power Shutoff Plan

(May 1, 2021 Version)



Rocky Mountain Power | Pacific Power

Public Safety Power Shutoff

Public Safety Power Shutoff

Document Owner: The emergency management team is responsible for maintaining this document. This includes scheduling annual reviews and exercises, updating content based on annual reviews and exercises, and redistributing new version to document stakeholders.

The plan will be reviewed and exercised annually. The scale of the exercise will be determined by the President and CEO in coordination with emergency management personnel and key leadership.

Version Control

Author: Jeff Bolton

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Origination Date: 5/10/2019

Last Revision: 5/1/2021

Next Revision: 2022

Exercise

Last Exercise Date: June 4, 2020

Last Exercise Type: Tabletop

Next Exercise Date: May 25, 2021

Next Exercise Type: Tabletop

Public Safety Power Shutoff

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1 PLAN OVERVIEW

1.1 PURPOSE

This is intended to provide the **minimum** guidelines for a planned de-energization (public safety power shutoff) of energized facilities when extreme weather or other conditions pose an imminent safety threat to persons and/or property. **Additional guidelines may be required as part of a specific state event mitigation plan (i.e., wildfire).** A planned de-energization is a last resort measure to reduce public safety risk.

1.2 BACKGROUND

Nothing in this policy supersedes the general authority of the company to de-energize a power line during an emergency, and a reactive decision (i.e., to protect fire response personnel or to protect company assets from fire damage) might be made without complying with the notification and outreach sections of this plan. This plan primarily allows for a proactive decision to be made, to implement a planned public safety power shutoff event. While unavoidably disrupting electrical service, a planned public safety power shutoff event may be warranted to reduce any risk of energized facilities being involved in a public safety incident under extreme conditions (i.e., weather, flooding, etc.).

1.3 ACTIVATION CRITERIA

This plan can be activated for any public safety incident which could be mitigated by de-energization of specific energized facilities.

2 SITUATION OVERVIEW

The company utilizes weather forecast and other situational awareness information to identify when a potential public safety power shutoff event may be warranted. Based on the best available weather forecast and other relevant situational awareness information, senior management has the ability to initiate a public safety power shutoff event.

After notification or receipt of pertinent situational awareness information which requires de-energization of company infrastructure, the System Operations Grid Shift Supervisor will begin the notification process and obtain basic information as outlined in policy PCC-201.

Upon agreement by executive management (VP of System Operations and VP of Transmission and Distribution Operations) to proceed with a Public Safety Power Shutoff; the VP of Transmission and Distribution Operations will active the Emergency Operations Center. The Emergency Operations Center Staff will then prepare a Public Safety Power Shutoff Plan (Appendix A), which at a **minimum** shall include:

- Information provided by the Grid Shift Supervisor
- Date and time that the de-energization event will start;

Public Safety Power Shutoff

- Estimated duration of the event;
- Date and time that affected customers will be notified under a proposed customer notification plan;
- Critical customers and facilities on the circuit such as hospitals, emergency centers, water/water treatment plants that will be impacted;
- With respect to each circuit or portion of a circuit planned for de-energization, a description of the circumstances that give rise to the need to de-energize with specific focus on how it creates an “imminent and significant risk to persons and/or property”;
- A description of measures considered as an alternative to de-energization and why such measures alone are insufficient;
- A description of the public safety benefit the company hopes to achieve by de-energizing the applicable electrical facilities;
- A description of proposed efforts to mitigate the adverse impacts on customers and communities impacted by de-energization; and
- The proposed date and time for notifying the appropriate commission staff.
- **Additional information may be required as part of a specific state event mitigation plan.**

Once the Public Safety Power Shutoff Plan is ready for distribution, the Emergency Operations Center will activate a conference bridge and invite the following company participants or their designated representative:

- Vice President of Transmission and Distribution Operations
- Vice President of System Operations
- Vice President of Customer Service
- Vice President of Corporate Communications
- Director of Renewable Generation (when applicable)
- Director of Wires Operations (for the impacted area)
- Director of Grid Operations
- Director of Emergency Management
- Manager of Grid Operations
- Manager of Region System Operations (PCC or SCC)
- Emergency Manager (PP or RMP)
- Manager of Meteorology
- Director of Commercial Accounts and Community Relations (for impacted area)
- Regional Business Manager (for impacted area)

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- State Regulatory Affairs Manager.

The Public Safety Power Shutoff Plan may be modified based on the discussion during the call.

2.1 PUBLIC SAFETY POWER SHUTOFF WEATHER MONITORING AND REVIEW

Prior to the activation of the Public Safety Power Shutoff, all current weather conditions and/or relevant situational awareness information should be reviewed and monitored by the Emergency Manager or designee to confirm the circumstances requiring the Public Safety Power Shutoff are still valid.

2.2 CIRCUIT SITUATIONAL MONITORING

Prior to the activation of the Public Safety Power Shutoff, the Incident Commander should dispatch circuit crews to the impacted areas to complete a weather and/or situational assessment and a patrol of the targeted circuits using the 069 Procedure – Condition Codes (link below). Feedback will be provided to the Emergency Operations Center via the Observation Do-Form.

http://idoc.pacificorp.us/policies_and_procedures/eamp/transmission/fpp.html

3 PRE-EVENT NOTIFICATION TO AFFECTED CUSTOMERS AND OTHER STAKEHOLDERS:

Third party information (i.e. weather forecast, etc.) and local input are utilized by the company to monitor situations that could require the need to de-energize facilities in an identified area. **Additional data inputs may be required as outlined in a state specific event mitigation plan.**

Upon notification of any situation (i.e. extreme weather, flooding, etc.) which may require a Public Safety Power Shutoff; emergency management will notify the applicable personnel via email that an advisory or watch is in place. If the situation rises to the warning alert level; emergency management will setup a conference call with the VP of Transmission and Distribution Operations and the VP of System Operations to determine the need to open the EOC. If the EOC is opened; a Public Safety Power Shutoff Plan will be developed and once adopted the external notification processes will begin.

Alert Level	Description
Alert Level 2 – De-energization Warning	Public safety circumstances are such that a de-energization event will occur
Alert Level 1- De-energization Watch (Internal or External)	Public safety circumstances are such that enhanced situational monitoring is required and a de-energization event is possible to occur. If conditions warrant notification outside of the company the watch will be labeled an External Watch.

After adoption of a Public Safety Power Shutoff Plan, but before the de-energization event is initiated, the company will make reasonable attempts to notify affected customers and other stakeholders of the planned event. As situations can be dynamic the timeframes outlined are subject to change and may be adjusted in each specific plan. If an individual(s) responsible for

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notifications did not participate in the initial call, the EOC will ensure the plan is immediately delivered to each individual (or delegate). **Additional notification obligations may be required as outlined in a state specific event mitigation plan.**

3.1 DE-ENERGIZATION WATCH

3.1.1 Internal Watch

Identified thresholds are either forecasted to be exceeded or nearly exceeded, but the risk profile is such that does not warrant an immediate EOC activation or public sector notification

3.1.2 External Watch

Identified thresholds are either forecasted to be exceeded or nearly exceeded, but the risk profile is such that does not warrant a complete EOC activation and requires public sector emergency management notification and coordination. This level of watch is dynamic and has the potential to upgrade quickly to a warning.

During an External Watch notification to the potentially affected emergency management agencies will be conducted as planned with a de-energization warning

3.2 DE-ENERGIZATION WARNING

Identified thresholds are forecasted to be exceeded and the risk profile is such that warrants a complete EOC activation, public sector emergency management agency coordination and public notification

4 DE-ENERGIZATION:

System Operations (Grid or Region) will develop the switching plan(s) for the Public Safety Power Shutoff execution after adoption of the plan. A final review of the switching plans will be completed prior to execution. After the designated System Operations lead receives instruction from the Emergency Operations Center to execute de-energization; the appropriate operator(s) will begin switching activities with field personnel.

5 RESTORATION:

The Emergency Operations Center will notify the designated System Operations lead that the conditions necessitating the planned Public Safety Power Shutoff have subsided and prepare to initiate restoration of the affected facilities once directed to restore.

Before re-energizing any facilities (line, substation, etc.), the Emergency Operation Center will direct a full line patrol and substation inspection to be completed. As part of the patrol and inspection, field personnel must document all damage to PacifiCorp's facilities in the de-energized areas.

After receiving confirmation that a line patrol-facility inspection and/or any requisite repairs are complete, the responsible grid and/or region operator shall restore the applicable lines(s) or

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portion(s) of a line (distribution and/or transmission), facilities (i.e. substations), and log the date and time each facilities (line, portion of line, substation, etc.).

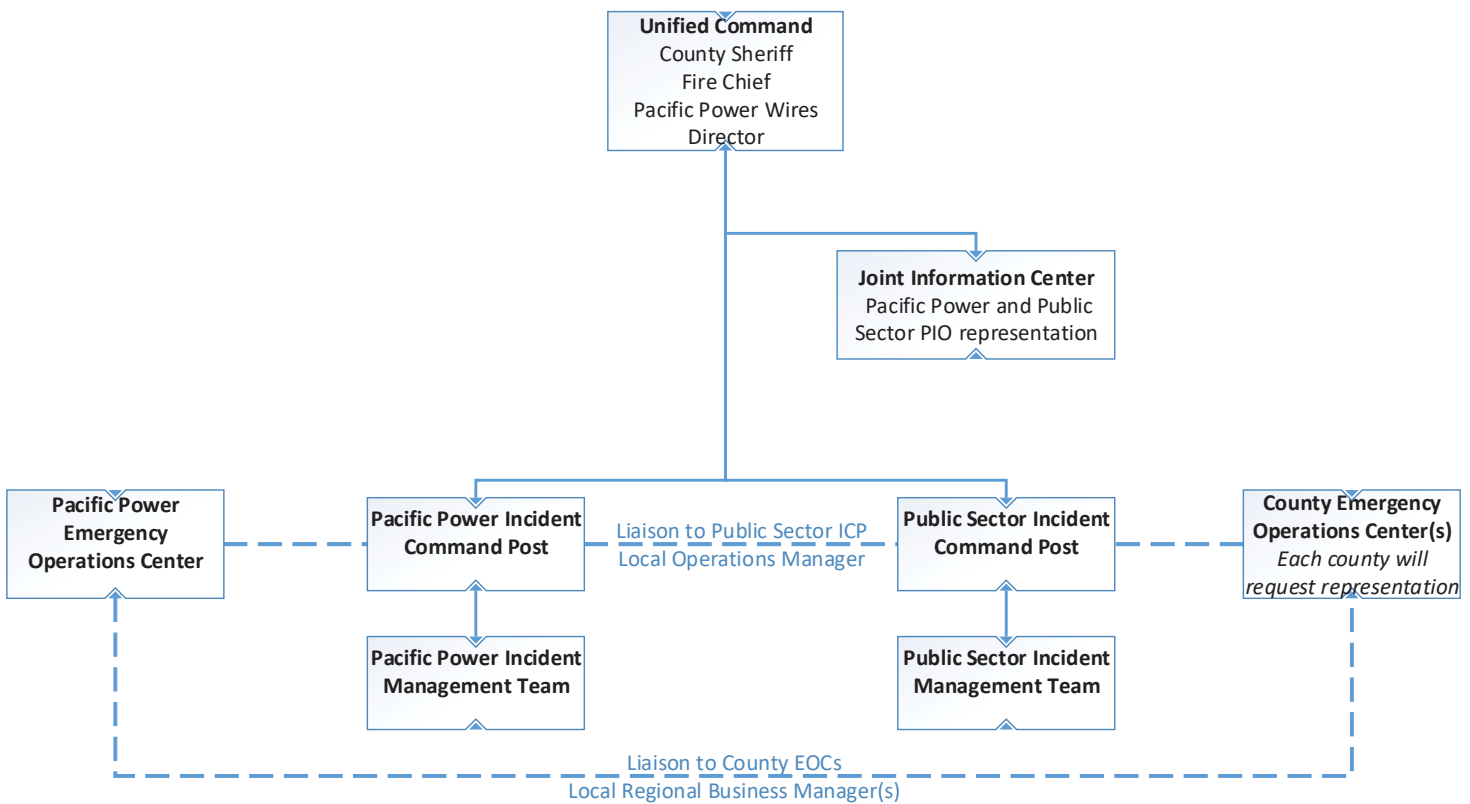
6 ROLES AND RESPONSIBILITIES

Roles, responsibilities and protocols are defined in the PacifiCorp Emergency Response Plan which follows FEMA’s guidelines for managing any event or incident. The information and responsibilities included in this document are meant as a supplement to the all-hazards structure.

6.1 ORGANIZATION

6.1.1 On-scene

Due to the nature of the company’s incident leadership with the public sector resources the following will be the baseline, subject to change based on county and local preference, response structure for this specific event:



6.2 POSITIONAL RESPONSIBILITIES

The tables below identify additional, required activities, specific to a Public Safety Power Shutoff event and should be completed, in addition to tasks already outlined in the Emergency Operations Center portion of the PacifiCorp Emergency Response Plan.

6.2.1 Transmission and Distribution Operations

Timeframe	Action	Responsible Person-Department
7-4 days	<ul style="list-style-type: none"> Participate in initial decision-making call 	<ul style="list-style-type: none"> VP, T&D Operations

72-48 hours	<ul style="list-style-type: none"> • Activate Emergency Operations Center (EOC) for support operations • Assume command of situation until termination • Provide operational support to field resources through normal EOC staffing, roles and responsibilities within the scope of the established PacifiCorp Emergency Management Structure. • Secure necessary field resources to support effort • Provide resources as requested • Manage assets within and outside affected area 	<ul style="list-style-type: none"> • VP, T&D Operations • VP, T&D Operations • VP, T&D Operations • Affected Wires Director • Supporting Wires Director • Affected Wires Director
24 hours	<ul style="list-style-type: none"> • Secure necessary field resources to support effort • Provide resources as requested • Manage assets within and outside affected area • Field engineering review to support switching plan 	<ul style="list-style-type: none"> • Affected Wires Director • Supporting Wires Director • Affected Wires Director • Field Engineering Manager
12 hours	<ul style="list-style-type: none"> • Ensure region staffing levels are adequate for actions 	<ul style="list-style-type: none"> • Area/District Manager
2 hours	<ul style="list-style-type: none"> • Manage deployment of resources 	<ul style="list-style-type: none"> • Area / District Manager
1 hour	<ul style="list-style-type: none"> • Deploy field personnel to switching locations 	<ul style="list-style-type: none"> • Area / District Manager
De-energization	<ul style="list-style-type: none"> • Coordinate response throughout process • Complete de-energization switching 	<ul style="list-style-type: none"> • VP, T&D Operations • District Manager
Restoration	<ul style="list-style-type: none"> • Monitor local assets during event • Patrol lines prior to restoration • Complete restoration switching 	<ul style="list-style-type: none"> • District Manager • District Manager • District Manager

6.3 SYSTEM OPERATIONS

Timeframe	Action	Responsible Person-Department
7-4 days	<ul style="list-style-type: none"> • Receive notification • Obtain data outlined in PCC-201 <ul style="list-style-type: none"> ○ Identify district ○ Identify impacted distribution lines-facilities ○ Identify impacted sub-transmission lines-facilities ○ Create impacted critical customer list ○ Create impacted customer list ○ Identify BES impacted transmission lines-facilities • Notify emergency management • Notify grid operations director 	<ul style="list-style-type: none"> • Grid Supervisor • Grid Supervisor <ul style="list-style-type: none"> ○ Region Operations ○ Region Operations ○ Region Operations ○ Region Operations ○ Region Operations ○ Region Operations ○ Grid Operations • Grid Supervisor • Grid Supervisor

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	<ul style="list-style-type: none"> • Participate in initial decision-making call 	<ul style="list-style-type: none"> • VP, System Operations
96 hours	<ul style="list-style-type: none"> • Create switching orders • Create switching orders 	<ul style="list-style-type: none"> • Region Operators • Grid Operators
72-48 hours	<ul style="list-style-type: none"> • Receive notification of event • Notify reliability coordinator (if required) 	<ul style="list-style-type: none"> • Grid Supervisor • Grid Supervisor
24 hours	<ul style="list-style-type: none"> • Review and finalize switching orders • Review and finalize switching orders • Notify reliability coordinator (if required) 	<ul style="list-style-type: none"> • Region Operators • Grid Operators • Grid Supervisor
12 hours	<ul style="list-style-type: none"> • Ensure region staffing levels are adequate for actions • Ensure grid staffing levels are adequate for actions 	<ul style="list-style-type: none"> • Region Operations Manager • Grid Operations Manager
2 hours	<ul style="list-style-type: none"> • Implement switching orders based on priority communicated by EOC • Monitor system prior to and during event 	<ul style="list-style-type: none"> • Region Operations Manager • • Region Operations Manager
1 hour	<ul style="list-style-type: none"> • Dispatch field personnel to switching locations • Dispatch field personnel to switching locations 	<ul style="list-style-type: none"> • Region Operators • Grid Operators
De-energization	<ul style="list-style-type: none"> • Implement switching orders based on priority communicated by EOC • Monitor system stability • Monitor coordinated response • Provide guidance for any situation not directly covered by this plan • Provide guidance to operators as needed 	<ul style="list-style-type: none"> • System Operations Lead • VP, System Operations • System Operations Lead • System Operations Lead • System Operations Lead
Restoration	<ul style="list-style-type: none"> • Execute restoration switching and energization based on EOC notification to restore. 	<ul style="list-style-type: none"> • System Operations Lead

6.4 CUSTOMER SERVICE

Timeframe	Action	Responsible Person-Department
7-4 days	<ul style="list-style-type: none"> • Receive notification of potential de-energization 	<ul style="list-style-type: none"> • Customer Service
72-48 hours	<ul style="list-style-type: none"> • 48 hour notice to customers (including critical priority customers) • Emergency response site goes live 	<ul style="list-style-type: none"> • Customer Service • Customer Service
24 hours	<ul style="list-style-type: none"> • 24 hour notice to customers (including critical priority customers) • Activate emergency response site • Post notification on website, social media and emergency response site 	<ul style="list-style-type: none"> • Customer Service • Customer Service • Customer Service
12 hours	<ul style="list-style-type: none"> • 12 hour notice to customers (including critical priority customers) 	<ul style="list-style-type: none"> • Customer Service
2 hours	<ul style="list-style-type: none"> • 2 hour notice to customers (including critical priority customers) 	<ul style="list-style-type: none"> • Customer Service
De-energization	<ul style="list-style-type: none"> • Customer situational update 	<ul style="list-style-type: none"> • Customer Service
Restoration	<ul style="list-style-type: none"> • Update customers on ETR 	<ul style="list-style-type: none"> • Customer Service

6.5 CORPORATE COMMUNICATIONS

Timeframe	Action	Responsible Person- Department
72-48 hours	<ul style="list-style-type: none"> Notification posted on website, Social Media and emergency response site Issue a press statement/release 	<ul style="list-style-type: none"> PIO PIO
24 hours	<ul style="list-style-type: none"> Notification posted on website, Social Media and emergency response site Issue a press statement/release 	<ul style="list-style-type: none"> PIO PIO
12 hours	<ul style="list-style-type: none"> Notification posted on website, Social Media and emergency response site Issue a press statement/release 	<ul style="list-style-type: none"> PIO PIO
2 hours	<ul style="list-style-type: none"> Notification posted on website, Social Media Issue a media advisory Provide Public Information Officer for coordination with County Emergency Management 	<ul style="list-style-type: none"> PIO PIO PIO
1 hour	<ul style="list-style-type: none"> Notification posted on website, Social Media and emergency response site Issue a press statement/release 	<ul style="list-style-type: none"> PIO PIO
De-energization	<ul style="list-style-type: none"> Notification posted on website, Social Media and emergency response site Issue a press statement/release Mobilize local resources for a live stream on Facebook 	<ul style="list-style-type: none"> PIO PIO PIO
Restoration	<ul style="list-style-type: none"> Notification posted on website, Social Media and emergency response site Issue a press statement/release updating ETR 	<ul style="list-style-type: none"> PIO PIO

6.6 GENERATION

Timeframe	Action	Responsible Person-Department
7-4 days	<ul style="list-style-type: none"> • Identify effects on generation capability • Prepare affected plant personnel for de-energization (if applicable) • Develop restoration plan (if needed) 	<ul style="list-style-type: none"> • Generation • Generation • Generation
12 hours	<ul style="list-style-type: none"> • Create generation mitigation plan 	<ul style="list-style-type: none"> • Generation
De-energization	<ul style="list-style-type: none"> • Mitigate generation as directed 	<ul style="list-style-type: none"> • Generation
Restoration	<ul style="list-style-type: none"> • Return generation to normal status 	<ul style="list-style-type: none"> • Generation

6.7 EMERGENCY MANAGEMENT

Timeframe	Action	Responsible Person-Department
7-4 days	<ul style="list-style-type: none"> Notify appropriate county, state appropriate tribal emergency management agencies 	<ul style="list-style-type: none"> Emergency Management
72-48 hours	<ul style="list-style-type: none"> Activate Emergency Operations Center (EOC) for support operations Update appropriate county, state appropriate tribal emergency management agencies (include variable messaging signs through DOT) Coordinate response throughout process Monitor weather forecasts 	<ul style="list-style-type: none"> Emergency Management Emergency Manger Emergency Manger Emergency Manger
24 hours	<ul style="list-style-type: none"> Update appropriate county emergency management agencies 	<ul style="list-style-type: none"> Emergency Manger
12 hours	<ul style="list-style-type: none"> Update appropriate county emergency management agencies Continuously monitor weather forecast/conditions 	<ul style="list-style-type: none"> Emergency Manger Emergency Manger
1 hour	<ul style="list-style-type: none"> Final Emergency Management Agency update 	<ul style="list-style-type: none"> Emergency Management
De-energization	<ul style="list-style-type: none"> Monitor county emergency management agencies needs Continuously coordinate with county emergency management agencies Monitor weather conditions for restoration decision 	<ul style="list-style-type: none"> Emergency Management Emergency Management Emergency Manger
Restoration	<ul style="list-style-type: none"> Update county emergency management agencies regarding ETR 	<ul style="list-style-type: none"> Emergency Management

6.8 REGIONAL BUSINESS MANAGER

Timeframe	Action	Responsible Person-Department
7-4 days	<ul style="list-style-type: none"> Notify Industrial Accounts 	<ul style="list-style-type: none"> Regional Business Manager
72-48 hours	<ul style="list-style-type: none"> Coordinate with Industrial Accounts Coordinate with affected local and city government agencies 	<ul style="list-style-type: none"> Regional Business Manager Regional Business Manager
24 hours	<ul style="list-style-type: none"> Coordinate with identified local customers Coordinate with affected local and city government agencies 	<ul style="list-style-type: none"> Regional Business Manager Regional Business Manager
12 hours	<ul style="list-style-type: none"> Coordinate with identified local customers Coordinate with affected local and city government agencies 	<ul style="list-style-type: none"> Regional Business Manager Regional Business Manager
2 hours	<ul style="list-style-type: none"> Coordinate with identified local customers Coordinate with affected local and city government agencies 	<ul style="list-style-type: none"> Regional Business Manager Regional Business Manager
1 hour	<ul style="list-style-type: none"> Coordinate with identified local customers Coordinate with affected local and city government agencies 	<ul style="list-style-type: none"> Regional Business Manager Regional Business Manager
De-energization	<ul style="list-style-type: none"> Coordinate with identified local customers Coordinate with affected local and city government agencies 	<ul style="list-style-type: none"> Regional Business Manager Regional Business Manager
Restoration	<ul style="list-style-type: none"> Update local customers regarding ETR Coordinate with local operations 	<ul style="list-style-type: none"> Regional Business Manager Regional Business Manager

6.9 REGULATORY

Timeframe	Action	Responsible Person-Department
7-4 days	<ul style="list-style-type: none"> Communicate with appropriate state regulatory agencies as required 	<ul style="list-style-type: none"> Regulatory
72-1 hours	<ul style="list-style-type: none"> Communicate with appropriate state regulatory agencies as required 	<ul style="list-style-type: none"> Regulatory
1 hour	<ul style="list-style-type: none"> Notify appropriate state regulatory agencies of imminent PSPS 	<ul style="list-style-type: none"> Regulatory
De-energization	<ul style="list-style-type: none"> Update state regulatory agencies of ongoing situation 	<ul style="list-style-type: none"> Regulatory
Restoration	<ul style="list-style-type: none"> Update state regulatory agencies regarding ETR 	<ul style="list-style-type: none"> Regulatory

6.10 EXECUTIVE POLICY GROUP

Timeframe	Action	Responsible Person-Department
7-4 days	<ul style="list-style-type: none"> Assume role as Executive Policy Group Director Direct mandatory manager call for local employees impacted 	<ul style="list-style-type: none"> CEO EPG Director
72-0 hours	<ul style="list-style-type: none"> Continue to monitor situation and provide guidance as needed 	<ul style="list-style-type: none"> EPG Director
De-energization	<ul style="list-style-type: none"> Provide strategic guidance for any situation not covered within this plan 	<ul style="list-style-type: none"> EPG Director

6.11 CUSTOMER RESOURCE CENTER PROCEDURES

Customer Resource Centers are a key part of the response during a PSPS event which creates a prolonged outage. Currently we use a vendor (Fire DAWG) to establish and operate any CRC which we establish. The description of the process is as follows:

Timing	Action	POC
-48 Hours	Decide likelihood of CRC need Possible thresholds: <ul style="list-style-type: none"> Outage Overnight Outage > 8 hours Customer impacts require extra support Other incidents 	IC
-44 hours	Contact Fire DAWG of the potential for a CRC activation to allow them to begin acquiring resources <ul style="list-style-type: none"> Available 24/7 	EM
-44 hours	Coordinate with the county for status of identified CRC location	EM
-30 Hours	Survey CRC location to confirm viability <ul style="list-style-type: none"> Generation connection Ensure enough generation capacity is requested for the site Not in use for other purposes Any other concerns 	RBM
-26 Hours	Initiate movement of Fire DAWG resources	EM
-4 Hours	Dispatch RBM to CRC for company representation and to receive resources	EM
-2 hours	Ensure activation of CRC	RBM
Event	CRC Operational	
Post Event	Decision to De-mobilize CRC	IC

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Post Event	Coordinate administrative and financial obligations to Fire DAWG	EM
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7 PSPS WATCH (INTERNAL OR EXTERNAL) EXECUTION

Objectives
<ul style="list-style-type: none"> • Ensure life-safety • Ensure employee welfare • Complete appropriate de-energization procedures • Continuous coordination and communication with affected customers

Actions	Responsible
7-4 days prior	
Receive forecast notification and notify appropriate personnel	Enterprise Operations Center
Initiate initial decision-making call	Emergency Management
Initiate and coordinate decision making conference call	Emergency Management
Notify appropriate county emergency management agencies, as appropriate	Emergency Management
<i>For California: Notify the CalOES Strategic Warning Center via online survey:</i> https://calema.maps.arcgis.com/apps/dashboards/b8be2c531f0344d38a394fba4352955f and follow up with a call 916-845-8911	Emergency Management
72 hours prior	
Activate Emergency Operations Center (EOC) for support operations. <i>Note: Consider additional staff for weather monitoring, switching plan development, and engineering support</i>	VP T&D Operations
Populate PSPS Template and provides to Incident Commander and/or EOC Director	Emergency Management
Update appropriate county emergency management agencies	Emergency Management
Coordinate response throughout process	Emergency Management
Monitor weather forecasts	Emergency Management
Assume strategic leadership role of situation until termination	VP, T&D Operations
Provide operational support to field resources through normal EOC procedures, staffing, roles and responsibilities within the scope of the established PacifiCorp Incident Management Structure.	VP, T&D Operations
Secure necessary field resources to support effort	Affected Wires Director
Provide resources as requested	Supporting Wires Director

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Contact emergency logistical support (i.e. Community support centers) vendor for deployment details and timing	Emergency Management
Notify state regulatory authority	Regulation
Manage assets within and outside affected area	Affected Wires Director
48 hours prior	
Assess current weather and ground truth situation and analyze if remaining in a watch or moving to a De-energization Warning is appropriate. <ul style="list-style-type: none"> <i>If De-energization Warning actions are decided move to appropriate time period in De-energization Execution Checklist</i> 	VP, T&D Operations
Initiate appropriate customer, community-based organization, media and business outreach	External Communications, Regional Business Manager, Regulation and Customer Service
Initiate appropriate Emergency Management Agency outreach	Emergency Management
Notify Reliability Coordinator	Grid Operations
<i>For California: Notify the CalOES Strategic Warning Center via online survey:</i> https://calema.maps.arcgis.com/apps/dashboards/b8be2c531f0344d38a394fba4352955f and follow up with a call 916-845-8911	Emergency Management
24 Hours prior	
Assess current weather and ground truth situation and analyze if remaining in a watch or moving to a De-energization Warning is appropriate. <ul style="list-style-type: none"> <i>If De-energization Warning actions are decided move to appropriate time period in De-energization Execution Checklist</i> 	VP, T&D Operations
Initiate resource gathering for de-energization and restoration tasks	T&D Operations Director
Continue customer, community based organization, media and business outreach	External Communications, Regional Business Manager, Regulation, Customer Service
Update Emergency Management Agencies	Emergency Management
Finalize emergency logistical support dispatch, if requested	Emergency Management
Create appropriate emergency switching orders	Region System Operations

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Pre-position resources to appropriate circuits for potential de-energization and restoration	T&D Operations Manager
12 Hours Prior	
Assess current weather and ground truth situation and analyze if remaining in a watch or moving to a De-energization Warning is appropriate. <i>If De-energization Warning actions are decided move to appropriate time period in De-energization Execution Checklist</i>	VP, T&D Operations
Ensure staffing levels are appropriate for actions	Region System Operations Manager, T&D Operations Manager, Grid Operations Manager
Assign resources to appropriate circuits for potential de-energization and restoration	T&D Operations Manager
Continue outreach via media, social media and direct customer contact	External Communications, Regional Business Manager, Regulation, Customer Service
Continuously update Emergency Management Agencies	Emergency Management
Final balancing authority notification	Grid Operations
2 Hours Prior	
Final assessment of current weather and ground truth situation and analyze if remaining in a watch or moving to a De-energization Warning is appropriate. <i>If De-energization Warning actions are decided move to appropriate time period in De-energization Execution Checklist</i>	VP, T&D Operations
Continuing direct customer notification	Customer Service
Any medical customers that couldn't be reached is turned over to emergency services.	Emergency Management and Regional Business Manager
Initiation of real time social media updates	External Communications
Updated media release prior to weather arrival	External Communications
Employee all call for affected area	T&D Operations Manager(s)
1 Hour Prior	

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Assess current weather and ground truth situation and analyze if remaining in a watch or moving to a De-energization Warning is appropriate. <i>If De-energization Warning actions are decided move to appropriate time period in De-energization Execution Checklist</i>	VP, T&D Operations
Dispatch crews to switching areas	Region System Operations
Emergency Management Agency update	Emergency Management
<i>For California: Notify the CalOES Strategic Warning Center via online survey: https://calema.maps.arcgis.com/apps/dashboards/b8be2c531f0344d38a394fba4352955f and follow up with a call 916-845-8911</i>	Emergency Management
Weather arrival	
Monitor current situation regarding conditions on the ground and any observed damage	VP, T&D Operations
Initiate de-energization actions in reaction to any developing incident or at Incident Commander's request	Region System Operations
<i>For California: Notify the CalOES Strategic Warning Center via online survey: https://calema.maps.arcgis.com/apps/dashboards/b8be2c531f0344d38a394fba4352955f and follow up with a call 916-845-8911</i>	Emergency Management

8 DE-ENERGIZATION EXECUTION

Objectives
<ul style="list-style-type: none"> • Ensure life-safety • Ensure employee welfare • Complete appropriate de-energization procedures • Continuous coordination and communication with affected customers

Actions	Responsible
7-4 days prior	
Receive forecast notification and notify appropriate personnel	Enterprise Operations Center
Initiate initial decision-making call	Emergency Management
Initiate and coordinate decision making conference call	Emergency Management
Notify appropriate county emergency management agencies	Emergency Management
<i>For California: Notify the CalOES Strategic Warning Center via online survey: https://calema.maps.arcgis.com/apps/dashboards/b8be2c531f0344d38a394fba4352955f and follow up with a call 916-845-8911</i>	Emergency Management
72 hours prior	
Activate Emergency Operations Center (EOC) for support operations. <i>Note: Consider additional staff for weather monitoring, switching plan development, and engineering support</i>	VP T&D Operations
Populate PSPS Template and provides to Incident Commander and/or EAC Director	Emergency Management
Update appropriate county emergency management agencies	Emergency Management
Coordinate response throughout process	Emergency Management
Monitor weather forecasts	Emergency Management
Assume operational leadership role of situation until termination	VP, T&D Operations
Provide operational support to field resources through normal EOC procedures, staffing, roles and responsibilities within the scope of the established PacifiCorp Incident Management Structure.	VP, T&D Operations
Secure necessary field resources to support effort	Affected Wires Director
Provide resources as requested	Supporting Wires Director

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Contact emergency logistical support (i.e. Community support centers) vendor for deployment details and timing	Emergency Management
Notify state regulatory authority	Regulation
Manage assets within and outside affected area	Affected Wires Director
48 hours prior	
Initiate appropriate customer, community-based organization, media and business outreach	External Communications, Regional Business Manager, Regulation and Customer Service
Initiate appropriate Emergency Management Agency outreach	Emergency Management
Notify Reliability Coordinator	Grid Operations
<i>For California: Notify the CalOES Strategic Warning Center via online survey: https://calema.maps.arcgis.com/apps/dashboards/b8be2c531f0344d38a394fba4352955f and follow up with a call 916-845-8911</i>	Emergency Management
24 Hours prior	
Initiate resource gathering for de-energization and restoration tasks	T&D Operations Director
Continue customer, community-based organization, media and business outreach	External Communications, Regional Business Manager, Regulation, Customer Service
Update Emergency Management Agencies	Emergency Management
Finalize emergency logistical support dispatch	Emergency Management
Create appropriate emergency switching orders	Region System Operations
Pre-position resources to appropriate circuits for de-energization and restoration	T&D Operations Manager
12 Hours Prior	

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Ensure staffing levels are appropriate for actions	Region System Operations Manager, T&D Operations Manager, Grid Operations Manager
Assign resources to appropriate circuits for de-energization and restoration	T&D Operations Manager
Continue outreach via media, social media and direct customer contact	External Communications, Regional Business Manager, Regulation, Customer Service
Continuously update Emergency Management Agencies	Emergency Management
Final balancing authority notification	Grid Operations
2 Hours Prior	
Final De-energization decision	VP T&D Operations
Final direct customer notification	Customer Service
Any medical customers that couldn't be reached is turned over to emergency services.	Emergency Management and Regional Business Manager
Initiation of real time social media updates	External Communications
Final media release prior to event	External Communications
Employee all call for affected area	T&D Operations Manager(s)
1 Hour Prior	

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Dispatch crews to switching areas	Region System Operations
Final Emergency Management Agency update	Emergency Management
<i>For California: Notify the CalOES Strategic Warning Center via online survey: https://calema.maps.arcgis.com/apps/dashboards/b8be2c531f0344d38a394fba4352955f and follow up with a call 916-845-8911</i>	Emergency Management
De-energization	
Initiate switching	Region System Operations, Field Crews
Monitor situation forecasts and begin restoration planning	EOC
<i>For California: Notify the CalOES Strategic Warning Center via online survey: https://calema.maps.arcgis.com/apps/dashboards/b8be2c531f0344d38a394fba4352955f and follow up with a call 916-845-8911</i>	Emergency Management

9 RESTORATION EXECUTION

Objectives
<ul style="list-style-type: none"> • Ensure life-safety • Ensure employee welfare • Restore power

Actions	Responsible
Confirm reason for de-energization has passed	EOC
Identify order of restoration	EOC
Coordinate district patrol and restoration with field crews	T&D Operations Manager
Notify Emergency Management Agencies of restoration initiation	Emergency Management
Terminate de-energization response	VP T&D Operations
Notify customers of cancellation via all communications methods	External Communications, Regional Business Manager, Regulation, Customer Service
Patrol and restore in accordance with identified plan	Region System Operations, Operations Manager Field Crews
Notify balancing authority of restoration	Grid Operations
<i>For California: Notify the CalOES Strategic Warning Center via online survey: https://calema.maps.arcgis.com/apps/dashboards/b8be2c531f0344d38a394fba4352955f and follow up with a call 916-845-8911</i>	Emergency Management

APPENDIX A: DE-ENERGIZATION INFORMATION TEMPLATE

Notes/Comments:	
Grid Operator provides to EM on initial call	
District(s)	
Substation(s)	
Circuit ID(s), including, if applicable, a specific description of any portion of a circuit which will be de-energized while other portions of the circuit remain energized	
Number of customers that will be impacted on each circuit	
EOC Decision Notes	
Date and time de-energization event will start	
Estimated duration of the event	
Date and time that affected customers will be notified under proposed notification plan	
Critical customers and facilities on the circuit such as hospitals, emergency centers, water/water treatment plants that will be impacted	
With respect to each circuit or portion of a circuit planned for de-energization, a description of the applicable extreme fire weather conditions	
With respect to each circuit of portion of a circuit planned for de-energization, a description of the circumstances that give rise to the need to de-energize, such as “imminent and significant risk that strong winds will topple PacifiCorp power lines onto tinder dry vegetation or will cause major vegetation related impacts on PacifiCorp facilities”	
A description of measures considered as an alternative to de-energization and why such measures alone are insufficient	
A description of the public safety benefits the company hopes to achieve by de-energizing the applicable circuit(s)	
A description of proposed efforts to mitigate the adverse impacts on customers and communities impacted by de-energization	
The proposed date and time for notifying the appropriate PUC	

APPENDIX B: NOTIFICATION MATRIX

PRE-EVENT

Event Description: _____
Date and time of proposed event: _____

	Responsible Person	De-Energization Notified		Restoration Notified		Notes
		Date	Time	Date	Time	
a. Customer Notification	Customer Contact Center					
b. Emergency Responders	Emergency Manager or Local RBM					
c. Local Government	Local RBM or Emergency Manager					
d. Communications Providers	Emergency Manager or Local RBM					
e. Critical Facilities	Emergency Manager or Local RBM					
f. Regulatory Notifications	Regulation					

POST EVENT

All notifications from pre-event will be accomplished advising customers of event conclusion. In addition, state specific notifications will take place in accordance with that state’s specific requirements.

APPENDIX C: REFERENCE

- Operating Procedure No. PCC-200