

**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.

R.18-12-005  
(Filed December 13, 2018)

**SAN DIEGO GAS & ELECTRIC COMPANY (U 902-E)  
2021 PUBLIC SAFETY POWER SHUTOFF POST-SEASON REPORT**

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March 1, 2022

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In compliance with California Public Utilities Commission Public Safety Power Shutoff (PSPS) Order Instituting Rulemaking Phase 3 Decision (D.) 21-06-034 and PSPS Order Instituting Investigation D.21-06-014, San Diego Gas & Electric Company (SDG&E) hereby submits this Post-season Report (Attachment A hereto) regarding the Public Safety Power Shutoff (PSPS) events that occurred in SDG&E's service territory between January 1, 2021 and December 31, 2021. This report follows the template provided by the Commission's Safety and Enforcement Division (SED).

SDG&E hereby provides the following link to access and download the attachments (geodatabase files and Excel workbooks) to its 2021 PSPS Post-season Report:

<https://www.sdge.com/wildfire-safety/pssp-more-info>.

Respectfully submitted,

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# **Attachment A**

**San Diego Gas & Electric Company  
2021 Public Safety Power Shutoff Post-Season Report**

**SDG&E 2021 Public Safety Power Shutoff Post-Season Report**

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**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.
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.
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.

**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.
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.

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### 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.**

November 24-26, 2021 PSPS Event – Section 3.3

Table 3: Circuits De-energized (provided in Appendix 5) – the “All Clear Date/Time” for device 358-585R was incorrectly stated and should be corrected from 11/26/21 at 10:42 to 11/25/21 at 13:49.

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

SDG&E did not de-energize customers during the January 14-16, 2021 PSPS event and therefore did not activate any Community Resource Centers (CRCs). However, please refer to Table 15 in SDG&E’s November 24-26 PSPS post-event report<sup>1</sup> for details on the CRCs activated during this event.

3. **Notification: Provide aggregate data that may not have been available at the time the utility filed the 10-day post-event report:**
  - a. **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);**
  - b. **Explain why notice could not be provided at least two hours prior to a de-energization, if such notice was not provided.**

Please refer to Table 6 in in SDG&E’s November 24-26 PSPS post-event report for public safety partners contacted prior to de-energization and High Fire Threat District classification.

For SDG&E’s November 24-26 PSPS event, SDG&E was unable to provide advance notification at least two hours prior to de-energization to 47 of the 5,858 customers de-energized. 38 customers were not contacted due to no contact information available in SDG&E’s customer database and 9 were not contacted due to a system error identified after the event.

SDG&E did not de-energize customers during the January 14-16, 2021 PSPS event.

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<sup>1</sup> <https://www.sdge.com/sites/default/files/2021-12/R1812005%20SDGE%20PSPS%20Post-Event%20Report%20Nov.%2024-26.pdf>

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

SDG&E audited the restoration data provided in its November 24-26, 2021 PSPS post-event report and did not identify any data that was not available at the time the post-event report was filed. SDG&E did not de-energize customers during the January 14-16, 2021 PSPS event and therefore did not need to restore power.

Regarding a detailed description of the steps used to restore power, please refer to Section 8 of SDG&E's November 24-26 PSPS post-event report.

### **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.**

SDG&E conducted its 2021 Wildfire Communications Post-Campaign Research (fielding was from Nov. 29 – Dec. 8, 2021 and offered in English and Spanish), which measured safety awareness and behavior, awareness of campaign topics and messaging recall, and any notable changes in safety-related behavior. More than two thirds of respondents said that SDG&E keeps their customers informed on what to do during high fire-risk events (PSPS) and 62% said that SDG&E helps customers prepare for emergencies. When asked what they have done to prepare for emergencies, 87% of respondents said that they had updated their contact information with SDG&E. Total advertisement awareness has increased, at least directionally, for all SDG&E safety communications.

Spanish-speaking respondents viewed SDG&E much more favorably overall both in general and with regard to performance on all safety measures. In addition to an 84% overall favorability rating among Spanish-speaking respondents, 90% said SDG&E takes precautions during wildfire related events or high fire risk weather conditions, 87% indicated SDG&E is concerned about customer safety, 82% said that the Company keeps their customers informed on what to do during high fire risk events 4% indicated SDG&E helps customers prepare for emergencies.

Additionally, the company conducted a PSPS Pre-Incident and Post-Incident Surveys in the fall and winter. The Pre-incident survey was fielded in the prevalent languages spoken in the region. The Post-Incident survey garnered a much smaller pool of affected customers that did not warrant the survey being offered in all prevalent languages. Additionally, the high cost of conducting surveys in all prevalent languages with such limited respondent pools would not yield statistically significant results and would not be cost effective. A more reasonable solution was to offer the survey in English and Spanish, the two most prevalent languages spoken in the

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border region. Please refer to “Appendix 1 – Education and Outreach Survey Results” for additional information.

SDG&E conducted a Post-Incident Survey (fielding from Dec. 21, 2021 through Jan. 10, 2022 and offered in English and Spanish) to obtain insights on the effectiveness of notification strategies (phone, text and emails) utilized before and during Public Safety Power Shutoffs (PSPS) to keep communities safe against wildfires from the customers’ perspective. An overall Post-Incidents Survey was not conducted in 2021 due to the alignment with timing of this only Post-Incident PSPS Survey, which supplanted the typical two-survey approach for 2021. Since the only incident resulting in a PSPS in 2021 occurred over the Thanksgiving holiday, results may have been skewed or affected accordingly.

Results of the Post-Incident Survey indicate 49% of notified and 38% of re-energized (impacted) respondents had a “Very or Somewhat Positive” perception of SDG&E’s handling of the PSPS. Sentiment was slightly less positive among respondents who self-identified as having a chronic condition, with 32% indicating a similar positive perception of SDG&E’s handling of the PSPS incident. Additionally, 68% of notified respondents and 59% of re-energized respondents indicated that they were satisfied with the notifications they received. A substantial majority said that notifications were easy to understand, helpful, timely and informative. Per survey results, SDG&E is improving the overall customer experience during a PSPS, as more than a third of Notified-Only and a quarter of Re-energized respondents indicated SDG&E’s handling has improved in comparison to their experience with previous PSPS events.

As outlined in the R.18-12-005 De-energization Phase 3 decision, utilities must report on the awareness and potential satisfaction of customers with AFN in relation to PSPS. Results of the Post-Incident survey indicated that among customer respondents with AFN: An average of 60% were aware that their utility may de-energize their system as a wildfire mitigation measure; an average of 57% were aware of the support and resources available to them during de-energization; 95% confirmed they received notifications of a possible de-energization event; 78% of those who rely on electric equipment to maintain necessary life functions were able to utilize such equipment, or were otherwise able to maintain necessary life functions, for the duration of any de-energization event; and 81% who sought support for a PSPS-related issue reported they were “Satisfied or Very Satisfied” with SDG&E’s performance.



**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**
  - b. Self-Generation Incentive Program Equity Resiliency Budget**
  - c. Community Microgrid Incentive Program [sic] [“Microgrid Incentive Program” per D.21-01-018]**
  - d. Hotel vouchers**
  - e. Accessible Transportation to CRCs**
  - f. Any other applicable programs or pilots to support resiliency for persons with access and functional needs and vulnerable populations.**

The Generator Grant Program (GGP)

The GGP offers portable battery units with solar charging capacity to customers, leveraging cleaner, renewable generator options to give vulnerable customers a means to keep small devices and appliances charged and powered during PSPS events. The program focuses on customers residing in the HFTD who have experienced one or more PSPS de-energizations and are enrolled in our Medical Baseline Program or flagged in our customer database as having a self-reported disability. Since the program began in 2019, there have been 3,795 batteries delivered to customers. For customers who participated in the 2021 program, 48% were able to use the battery during a PSPS event, 94% of customers state that they now feel “very” or “extremely” prepared for a future PSPS event, and 98% of customers were “very” or “extremely” satisfied with the overall program.

For 2022 and beyond, the program will continue to prioritize MBL and Life Support customers in the HFTD with a high likelihood of PSPS and expand to include a broader audience of AFN customers in the following categories: Individuals with disabilities, temperature-sensitive and AFN self-identified.

SDG&E plans to continue partnerships with Indian Health Councils to support the direct distribution of batteries to tribal communities in 2022.

The program will also continue to deploy “emergency” backup battery deliveries to individuals with AFN who need them during PSPS events and continue targeted outreach, including tribal communities.

The Generator Assistance Program (GAP)

The GAP offers a \$300 rebate to customers who meet the basic eligibility criteria of residing in an HFTD zone and having experienced one or more PSPS outage(s). CARE customers meeting these criteria receive an enhanced rebate of \$450. This enhanced rebate is equivalent to a 70– 90% discount on the average portable generator models for lower-income customers. A \$50 rebate on qualifying portable power stations was introduced into the program in 2021 to include cleaner, renewable backup power options for customers. Since the program began in 2020, 2,040 rebates have been redeemed by eligible customers. For customers who participated in the 2021 program, 88% were “satisfied” to “very satisfied” with the rebate request process.

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The 2022 program will continue to evaluate the rebate process to maximize customer options and ensure program quality assurance, identify additional battery and power station options for the program, and pursue additional outreach channels.

### **Microgrid Incentive Program (MIP)**

The MIP is a \$200 million program, with additional matching funds for certain islanding related distribution upgrades, to fund clean energy community microgrids targeting disadvantaged and vulnerable populations impacted by grid outages. Please refer to the Joint IOU Proposed MIP Implementation Plan filed with the CPUC on December 3, 2021 for further details.<sup>2</sup> A proposed decision on the implementation plan is expected summer 2022.

### **Hotel Stays**

SDG&E leverages its partnership with the Salvation Army to provide no-cost hotel stays to individuals with AFN during PSPS. Hotel stays are arranged via Salvation Army and 211. Hotels are selected based on accessibility and proximity to customers' home or other requested location.

### **Accessible Transportation**

SDG&E has a strong partnership with Facilitating Access to Coordinated Transportation (FACT), a local paratransit partner which provides accessible transportation to individuals with AFN across the entire HFTD during PSPS. Individuals can utilize this for transportation to CRCs, hotels or other safe locations. FACT is available 7 days a week from 5:30am-11pm during PSPS.

### **Other Applicable Programs**

#### **211**

211 serves as resource hub to connect AFN individuals with services directly provided by partners contracted with SDG&E, as well as more than 1,000 regional CBOs who provide services. 211 provides several unique advantages in that it is available statewide 24/7 and connects individuals with local partners who have "on the ground experience" across the disability and broader AFN community. Additionally, 211 has the ability to conduct Needs Assessments through its trained social workers and escalate needs accordingly to higher tiers of support. In advance of PSPS, 211 will focus on outreach to at-risk customers, including those living in each IOU's high-fire-risk areas who are eligible for income-qualified assistance programs and rely on life-sustaining medical equipment. The focus during these periods will be to evaluate these customers' resiliency plans, connect them with existing programs that can help them prepare for outages and to assist them in completing applications for these programs including exploring Care Coordination screening outreach efforts conducted by 211.

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<sup>2</sup> <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M428/K469/428469637.PDF>

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Food Support

SDG&E has strengthened the pipeline of local food resources for seniors, individuals, and families with AFN by partnering with the San Diego Food Bank, Feeding America, Meals on Wheels and other local food partners to support vulnerable, rural, and tribal communities year-round and during PSPS activations. Food support is available at many locations, including on tribal lands through the whole community approach. New this year, the San Diego Food Bank added additional mobile food pantries to the suite of food support offerings and signed-on to partner to support communities impacted by PSPS. The San Diego Food Bank and Feeding America have mobile food pantries to support impacted communities post PSPS both with a rural and tribal focus. Additionally, in 2021 SDG&E added warm food at Community Resource Centers as needed and to significantly impacted areas during 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 impacts of public safety partners events on persons with access and functional needs and vulnerable populations.**

**Table 1: 2021 Program Costs**

<b>Program</b>	<b>Total Cost</b>	<b>Funding Source</b>
Generator Grant Program	\$7,842,308.06	WMP
Generator Rebate Program	\$464,140.98	WMP
Hotel Stays	\$1,680	Salvation Army, WMP
Accessible Transportation	\$2,457.46	WMP
211 San Diego & Orange County	\$511,818	WMP
Food Support	\$15,707 CRCs & Impacted Communities \$305,000 Shareholder Funding for Community Partners (Meals on Wheels, Jacobs Cushman SD Food Bank, Feeding SD, Neighborhood House Association)	WMP Funded: ~\$15,707 Shareholder Funded: \$305,000

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

For the programs listed above as WMP funded, the applicable balancing account is WMPMA – Electric.

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- 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.**

All communities in SDG&E's service territory are served by utility partnerships that provide assistance for persons with access and functional needs or vulnerable populations in preparation for or during a public safety partners event.

### 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.**

During the November 24-26, 2021 PSPS event, SDG&E provided backup power in the form of 11 generators and two mobile batteries across four circuits that were in scope for the de-energization event.

- Circuit 221 - deployed three 275 kW generators to the Butterfield Ranch microgrid that ran from 11/25/21 at 04:27 to 11/26/21 at 13:09; had one 1 MW generator on standby at Downtown Julian; 67 customers have participated in backup resiliency programs
- Circuit 79 - deployed three 275 kW generators to the Shelter Valley microgrid that ran from 11/25/21 at 01:07 to 11/26/21 at 14:05; had one 15 kW/500 kWh mobile battery on standby for electric vehicle charging at the Descanso CRC; had one 25 kW generator on standby at the Heavenly Oaks Mobile Park; 110 customers have participated in backup resiliency programs
- Circuit 448 - had two 275 kW generators and one 362 kW/1499 kWh mobile battery on standby at the Cameron Corners microgrid; 141 customers have participated in backup resiliency programs
- Circuit 157 - had one 25 kW generator on standby at the Barret Mobile Park; 97 customers have participated in backup resiliency programs

SDG&E did not de-energize customers during the January 14-16, 2021 PSPS event.

### D. Public Safety Partners

- 1. 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.**

There were no requests made by public safety partners during a de-energization event in 2021.

### E. Transmission

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

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During the 2021 PSPS events there were no transmission lines de-energized so there was no impact.

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

Currently SDG&E prepares for Transmission impacts by studying the impact of all de-energization of forecasted impacted lines 72 hours in advance. In addition, there are specific lines that are studied and documented that have no impact on the Bulk Electric System (BES). All transmission lines with forecasted impacts are patrolled, cleared of close vegetation, checked for compliance issues, and assessed for structural usage/ pole loading.

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

Studies can be broken down into two areas for transmission: Bulk Electric System (BES) reliability and transmission line integrity. BES Reliability studies make sure that if forecasted potential de-energized lines are de-energized, there are no issues for the other transmission lines on the system. Transmission line integrity studies determine the health of components of the transmission line to decide what wind speeds or loading is acceptable for that line to safely handle such that a proactive de-energization can be accomplished.

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

SDG&E works with neighboring publicly owned utilities ahead of the event to coordinate which lines have the potential to be de-energized. During 2021 SDG&E coordinated with Southern California Edison (SCE) when they forecasted multiple lines, that could impact SDG&E, to be de-energized. This information is then used to determine if the neighboring utility will have an impact on SDG&E's Bulk Electric System (BES) reliability. Ultimately no action was needed as there were no reliability impacts.

## **Section IV – Safety and Enforcement Division-Specified**

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

SDG&E's meteorology and fire science predictive models performed very well in 2021. The team focuses on continuously enhancing model capabilities and in 2021 that included an update to the weather component of the Fire Potential Index to slightly decrease the overall impact of weather in the final rating of the FPI during hot and dry days with light winds. Additionally, SDG&E expanded an operational AI-based wind gust forecasting system consisting of 190 models to successfully support PSPS operations.

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Next year, SDG&E will improve performance by continuing to evolve the capability of its weather network by strategically adding Air Quality Index sensors to better serve the safety concerns of our employees and communities. Additionally, SDG&E will be upgrading its High-Performance Computing Clusters (HPCCs) to enable the capability to run higher resolution forecast models at a high frequency, improving the overall accuracy and precision of its weather and fire potential forecasting products.

### **2. What were the challenges in quantifying risks and benefits in terms of determining the scope (size and duration) of the PSPS you conducted?**

When quantifying the size or duration of a PSPS event and the associated risks and benefits, accurate and precise weather forecast information is essential to success. The development of this highly accurate and granular weather information and automating the integration of this information into real-time risk modeling is challenging. To address this challenge, SDG&E has developed and automated an AI based weather forecasting system that predicts the intensity of Santa Ana Winds at all 220 weather stations owned and operated by SDG&E. Significant challenges with the creation of the weather forecasts is the high variability in weather conditions across the terrain and the dynamic nature of weather events. These weather complexities usually lead to evolving and changing forecasts as we approach and move through an event, which becomes challenging when establishing size and duration of a potential PSPS up to 72 hours prior to an event. Additionally, these evolving and changing forecasts can introduce uncertainty into risk modeling output as risks and benefits are being assessed prior to an event.

Over the past year SDG&E has been working on developing more granular models to estimate probability of failure and probability of ignition at the asset and ignition source level, this real time risk assessment model is called Wildfire Next Generation System – Operations model and is utilized to evaluate and compare wildfire and PSPS risks at the asset and segment level. To determine whether the benefit of de-energization (PSPS) outweighed the potential public safety risks, SDG&E modeled the opposing scenarios in accordance with the risk quantification framework reported in the 2021 RAMP filing, which uses a multi-attribute value function (MAVF) to quantify risk. Based on probabilistic modeling and a set of assumptions, SDG&E identified wind speeds for which de-energization would likely produce a favorable outcome to customers and the public.

The assumptions used in the models are undergoing careful consideration, research, and review. SDG&E is revisiting the PSPS methodology and significant changes may be expected. Currently, SDG&E is considering the following opportunities to improve its PSPS model:

- Define appropriate attributes, weights, and scales for the MAVF framework
- Improve PSPS duration estimation
  - Currently, SDG&E assumes a 32h event based on historical PSPS event durations.
  - SDG&E plans to define duration as a function of location, weather forecast, customer characteristics, etc.



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- Recalculate consequence of PSPS events.
  - Currently constant values for SAIDI, SAIFI and financial impacts are assumed in the model.
  - SDG&E plans to perform detail studies on these variables and will propose new assumptions.
- Continue to work with Technosylva to better understand the impact of potential ignitions (fire size, direction, and rate of spread)
- Leverage external partnerships to build expertise around ingress and egress challenges.
- Migrate models to cloud environments to produce timely, location specific, and accurate predictions at the segment or circuit level

Through experience, SDG&E learned that it is not appropriate to use a prescriptive technique to determine when to use PSPS as wildfire conditions are dynamic and not every situation is the same. SDG&E will continue to improve its risk modeling to help inform PSPS-decision making.

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

SDG&E's Emergency Management department coordinates safe and effective emergency preparedness for the Company, customers, and emergency response personnel. SDG&E maintains an active Emergency Operations Center (EOC) roster with 465 current responders. EOC responders receive based National Incident Management System (NIMS) and Standardized Emergency Management System (SEMS) training, annual EOC training, and participate in preparedness exercises. In 2021 the Emergency Management Department developed a new Training and Exercises Division to help develop and implement internal and external training and exercises and maintain EOC responder readiness. Team resiliency is further enhanced by our development of a virtual Emergency Operations Center (EOC). To respond appropriately to any incident while adhering to the COVID-19 conditions, SDG&E's Emergency Operations Center (EOC) developed a new response approach in 2020 consisting of tiered staffing plans, with a largely virtual response. Over 450 EOC responders were trained in 9 sessions on the use and functionality of the virtual EOC environment. Currently, SDG&E's Emergency Operations Center maintains the capability to respond in-person (primary and alternate locations) as well as via a virtual EOC.

### **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.**

The Liaison Officer is part of the Command and General Staff of the EOC. The main function of the Liaison Officer is to oversee EOC External Affairs staff, manage external affairs activities, act as a liaison between agency representatives, local municipalities, elected officials, and tribes providing accurate, timely and consistent information, and is the coordination point for external partners.

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In addition to the Liaison Officer, SDG&E has added a position to the EOC specifically to oversee the AFN support functions. The main function of the AFN Liaison Officer is to oversee EOC AFN staff, manage the AFN support model program by coordinating with partnering Community Based Organizations and providing accurate, timely and consistent information to magnify SDG&E messages to the partner constituencies.

These definitions are included in the Company Emergency and Disaster Preparedness Plan. Please refer to “Appendix 2 – Liaison Positions Checklists” for additional information.

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

**Table 2: 2021 Lessons Learned from De-energization Exercises**

<b>De-energization Exercise</b>	<b>Action Items</b>	<b>Implementation</b>	<b>Consequences</b>
PSPS TTX	Increased education for public safety partners to ensure system access for situational awareness	Complete, and continued	A series of public safety partner webinars for the public safety partner portal were held on Sept. 2 <sup>nd</sup> . Access management and education to partners continues.
	ENS customer notification capabilities need to be increased	Complete	System upgrades were successfully completed to allow for increased messaging loads.
PSPS Functional	Produce exercise scenarios and content suitable for freshman EOC responders	Complete	Diversified training methodologies and delivery modalities to meet various levels of knowledge
	Refresher training or guidance should be given on back-up communication platforms to primary EOC positions	Complete	Contingency EOC communication plans including account access to backup platforms have been provided to critical EOC positions. Future functional PSPS exercises to include the loss of the primary communication platform as a future inject.



## SDG&E 2021 Public Safety Power Shutoff Post-Season Report

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

SDG&E conducts multiple annual PSPS simulation exercises, both a table-top and functional. These exercises validate current systems and processes used in the preparation, decision making, and conduct of both de-energization and restoration of service. Appropriate external entities are invited to participate in at least one exercise. SDG&E invited over 217 external participants from 95 public safety partner organizations to our PSPS Table-Top Exercise on June 28<sup>th</sup>. Attendance at our PSPS Table-Top exercise included representatives from local jurisdictions, police and fire agencies, tribal representatives, non-profit organizations and telecommunications companies. Additionally, SDG&E worked closely with community partners who support individuals with Access and Functional Needs in advance of the season to plan efforts, collaborated closely throughout PSPS with frequent updates and two-way feedback, and conducted After Action Reviews with these partners following PSPS to identify opportunities for enhancement.

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

Complaints received generally reflected dissatisfaction with PSPS, which is to be expected as PSPS events do impact comfort and convenience, especially as the only PSPS event in 2021 that generated complaints occurred during the Thanksgiving holiday. Of the complaints received, a majority related to dissatisfaction of a PSPS related to reason that can be addressed through more targeted public education and awareness. A lesson learned for 2022 is to better inform customers, through advance public education of the dynamic conditions of PSPS, factors considered when initiating a PSPS and safe conditions allowing for safe operations must be present before re-energization can occur.

### **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?**

SDG&E's notification procedures are robust for impacted customers, but in certain cases commercial customers may rely on their relationship and communication from their assigned account executive to provide timely information about imminent de-energization. SDG&E continues to evaluate its notifications to ensure customers receive timely and accurate PSPS notifications. In addition, for customers without any contact information on file, SDG&E makes every effort to reach out via mail and request these customers provide contact information to receive notifications going forward.

Regarding public safety partners, including local and tribal governments, notifications were provided per prescribed timelines. Throughout the year, SDG&E will continue to regularly update our comprehensive public safety partner notification database and survey stakeholders to ensure contacts are up-to-date and accurate.

During SDG&E's November 24-26, 2021, PSPS event, feedback was received from customers that notification calls are being flagged as spam calls. Based on this feedback,

## **SDG&E 2021 Public Safety Power Shutoff Post-Season Report**

SDG&E is working with the telecommunication providers to ensure SDG&E's notification phone number is no longer flagged as spam.

### **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?**

SDG&E has not been made aware of any conflicts with local governments Office of Emergency Services in 2021. SDG&E works closely with our local government partners by providing three 24/7 contacts directly into the EOC should any potential conflicts arise. Additionally, local governments are given an opportunity to provide feedback in a post event survey distributed the day after the EOC demobilizes. This survey gauges their level of engagement, level of satisfaction, any complaints, and a comments section. Should any areas of improvement be determined, SDG&E Emergency Management staff would work with the local government to address the issues.

### **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?**

SDG&E equivalent of a Public Safety Specialist is the EOC Liaison Officer. The EOC Liaison Officer is responsible for overseeing the external affairs team and conducting appropriate notifications. Additionally, the Liaison Officer provides staff to jurisdictional partners EOCs upon request to provide situational awareness and provides a primary point of contact for all incoming agency representatives assigned to the EOC.

**Appendix 1 - 2**

## **Appendix 1**

### **Education and Outreach Survey Results**

# SDG&E Wildfire Communications Research – 2021 Pre and Post-Wave

Research Results | December 2021

Prepared for:



Prepared by:



# Background + Purpose

- SDG&E has launched multiple campaigns regarding powerline and wildfire safety. Topics include:
  - Use of Drones
  - Vegetation Management
  - PSPS Notifications
  - Generator Safety
  - **Downed Power Lines**
  - **Homeowner Safety**
  - **24/7 Safety Crew**
  - **Documentary Creative/Media**
- Quantitative research was conducted earlier in 2021 to measure Pre-Campaign awareness, and recently a Post-Campaign wave was completed.
  - This report includes assessment of new ads for this year as well as comparable questions in both this wave and the 2021 Pre-Campaign.
- The primary objectives of this research are to measure:
  - Safety awareness and behavior
  - Awareness of the campaign topics/messages
  - Message recall
  - **Ad attribute performance**
  - **Change in stated safety behavior**

## Overview of Methodology

- **Online survey**
  - Average length of 19 minutes
  - Total completes (n=350)
  - High Fire Threat District (n=167)
  - Non-High Fire Threat District (n=183)
- **Incentive – Drawing for one of five \$100 Amazon gift cards**
- **SDG&E identified as sponsor of research**
- **Field period 11/29 – 12/8, 2021**

## Sample + Screening

- **SDG&E provided customer file**
  - Sample identified High Fire Threat and Non-High Fire Threat Districts
- **Respondents were screened to ensure:**
  - Current SDG&E electric customer
  - Age 18+
  - Influencer/Decision maker for household energy decisions
  - Passes industry security screen
  - Computer/mobile device is capable of playing video files





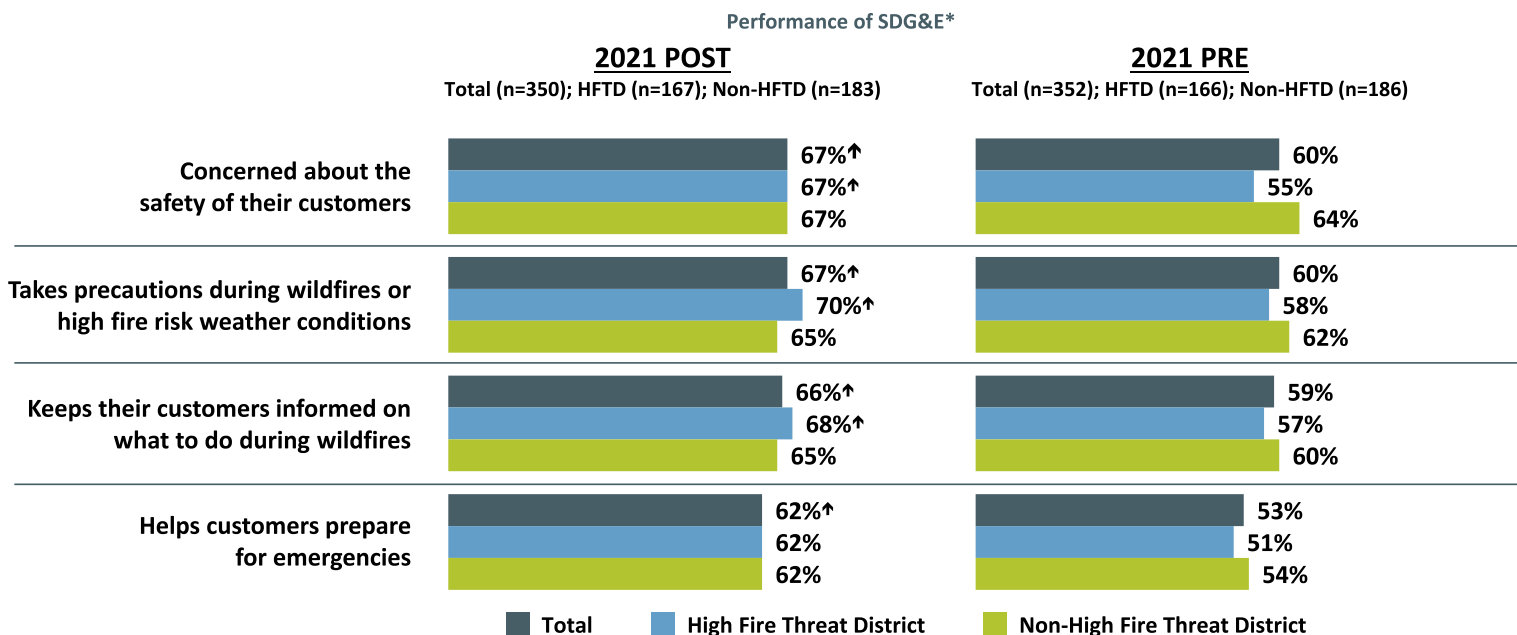
01

Overview

## Performance Ratings

Respondents are significantly more likely to say that SDG&E performs well on all customer safety measures this wave compared to the previous.

- Significant increases are seen among HFTD customers for almost all statements.



Q2.a-d "How well does SDG&E perform on each of the following?"

Base: Total Respondents.  
 \* Top-3-Box on 10-point scale where 10 = Performs Extremely Well and 1 = Does Not Perform Well At All.  
 ↑ Significantly higher than previous wave at the 95% confidence level.

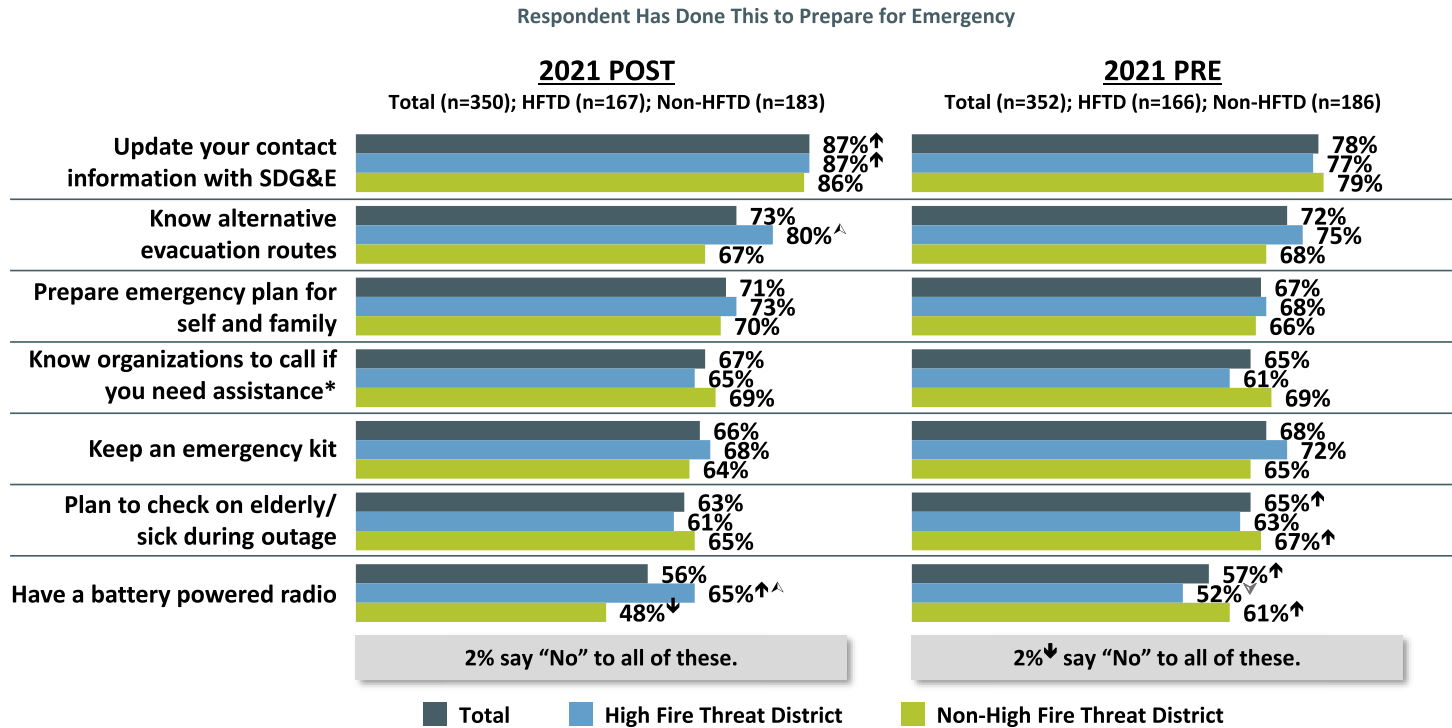




## Emergency Preparedness

Customers are more likely to have updated their contact information with SDG&E compared to last wave, largely driven by those in a HFTD territory.

- HFTD customers are more likely to know alternative evacuation routes and have a battery powered radio, compared to those in a Non-HFTD area.



Q3.a-f "Which of the following steps have you taken to prepare for an emergency?"

Q.3.a-f  
T.10

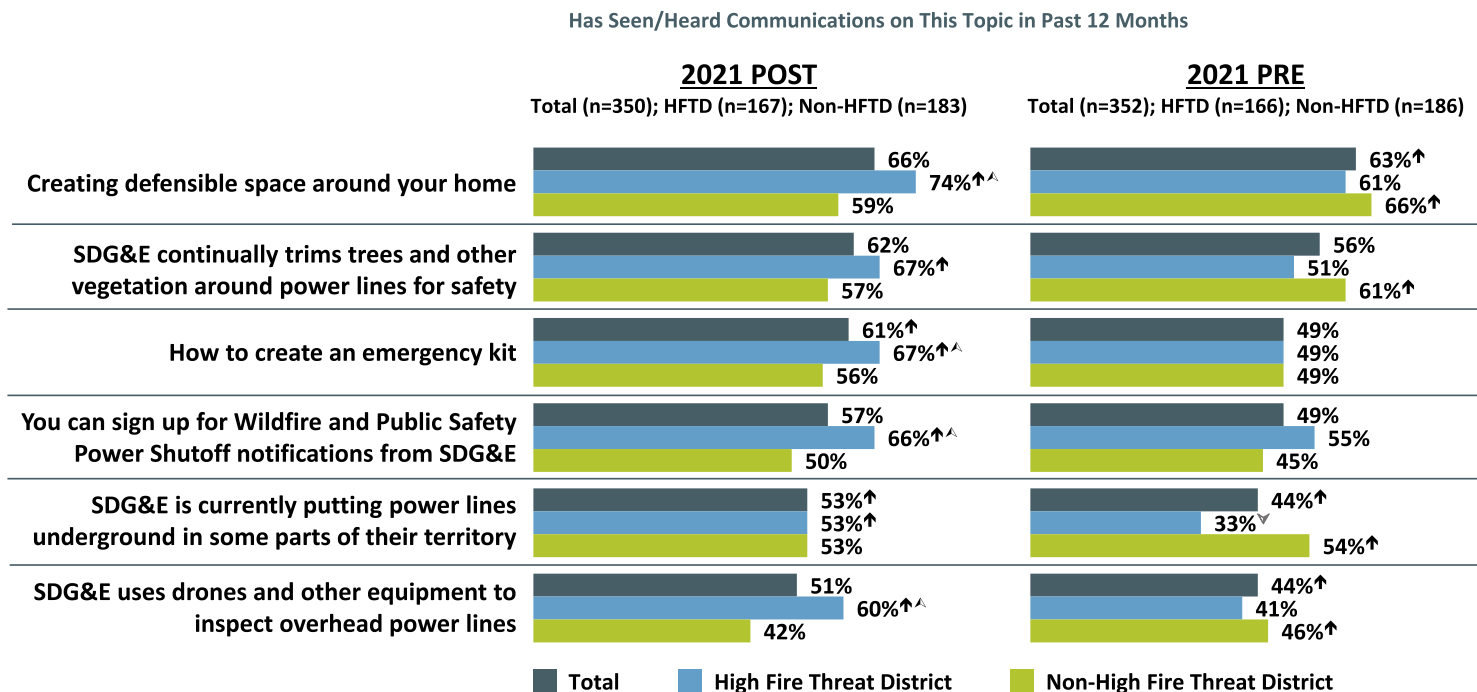
Base: Total Respondents. \* Added in PRE 2021.  
<sup>↑</sup><sub>↓</sub> Significantly higher/lower than previous wave at the 95% confidence level.

<sup>^</sup> <sub>∇</sub> Significantly higher/lower than Non-HFTD at the 95% confidence level.

## Communications Topic Awareness

Total awareness has increased, at least directionally, for all SDG&E safety communications topics this wave.

- Putting power lines underground continues to increase; awareness of communications on creating an emergency kit is also significantly higher this wave.
- HFTD customers have significantly higher awareness of all six leading topics this wave compared to last, and higher awareness than Non-HFTD on four of the six topics.



Q4.a-m "Have you personally seen, read or heard any communications about the following topics in the past 12 months?"

Base: Total Respondents.

▲ Significantly higher than previous wave at the 95% confidence level.

▲▼ Significantly higher/lower than Non-HFTD at the 95% confidence level.

T.11

# Public Safety Power Shutoff (PSPS) After Incident

Topline Summary | January 2022

Prepared for:



Prepared by:



## Background + Objective

- During extreme weather conditions and only when absolutely necessary, San Diego Gas and Electric (SDG&E) may need to turn off power in order to keep communities safe against wildfires
  - This is referred to as Public Safety Power Shutoff (PSPS)
- The PSPS process includes several customer notification steps prior to and after power is shut off
  - Phone calls, text messages and emails can be used
- SDG&E would like to understand how effective the PSPS and notification process is from the customers' perspective
- They completed their first round of after-incident research in 2019 and recently completed their second wave in 2021

## Methodological Overview

- Online surveys employed
  - The 2019 survey employed telephone and online surveys
- A total of 367 residential and small business customers surveyed
  - 302 were notified of potential PSPS but power was not shut off
  - 65 were notified, power was shut off and re-energized
    - There are fewer surveys this wave compared to last because there were fewer PSPS incidents
- Field period 12/21/21 – 1/10/22
- Incentive – Online survey respondents entered into drawing for ten \$100 Amazon gift cards
  - Later during fielding, respondents in the Re-energized segment were each offered a \$20 gift card to help boost participation

## Sample + Screening

- SDG&E provided sample of customers (residential and small business) who were sent PSPS notifications
  - Customers in the sample were identified as “Notified Only” or “Re-energized” (power was actually shut off)
- Respondents screened to ensure:
  - Current SDG&E customer
  - Age 18+
- Participants did not have to recall the notification to qualify



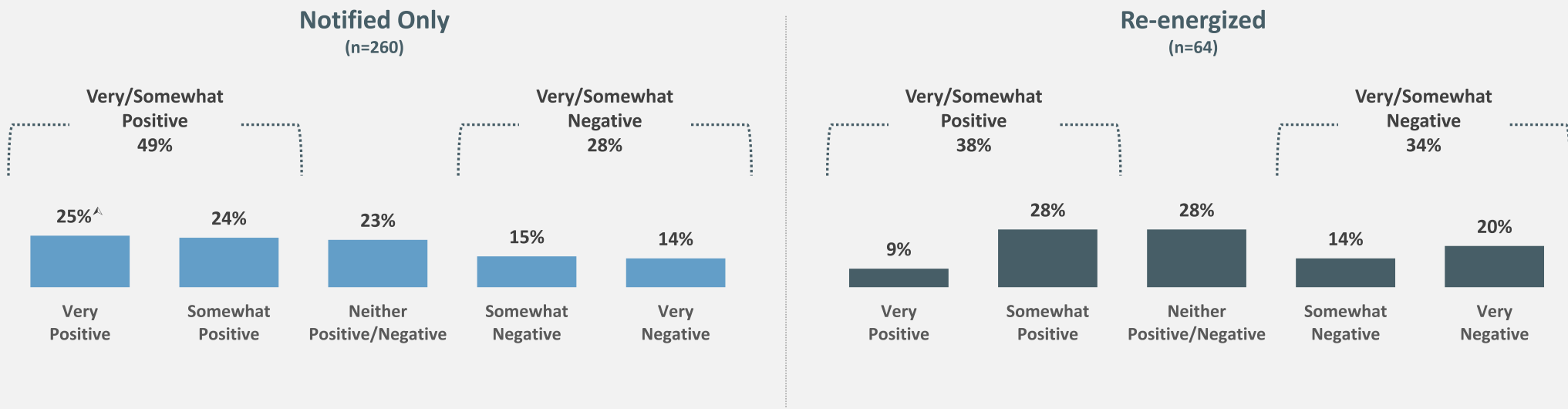
# Overview of Results

## SDG&E's Handling of Recent PSPS

### Half of the Notified Only group feel positive about SDG&E's handling of the recent PSPS

- The positive rating drops to 38% in the Re-energized segment with far fewer indicating "Very Positive"

### Perception of SDG&E Handling PSPS\*



Q4.1 How would you rate SDG&E's handling of the most recent Public Safety Power Shutoff?

Base: Experienced Recent PSPS. \* Question added in 2021.  
<sup>^</sup> Significantly higher than Re-energized at the 95% confidence level.

T.7.1

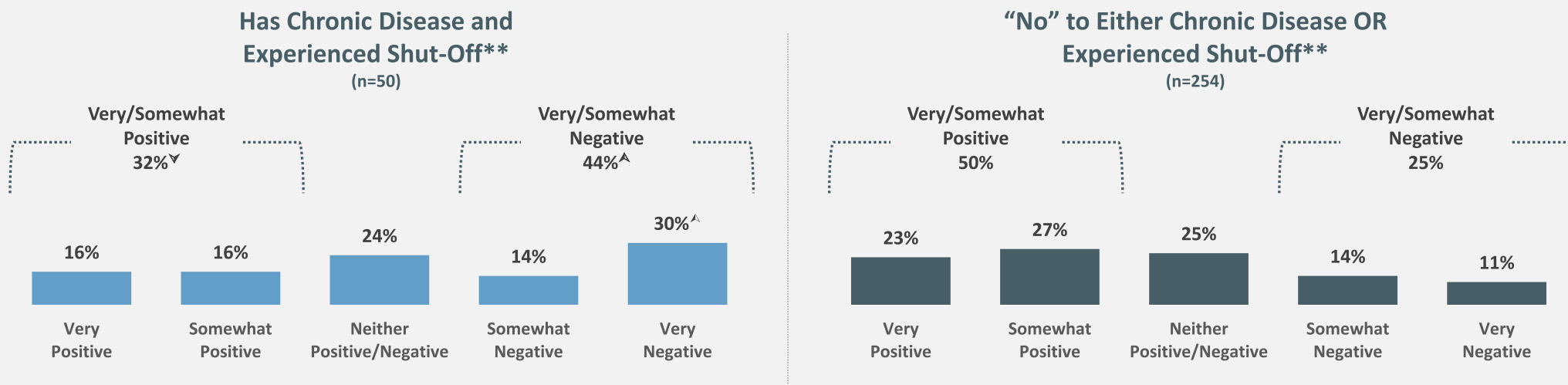


## SDG&E’s Handling of Recent PSPS – Customers with AFN and Impacted by PSPS

Households with a chronic disease and experienced a shut-off are more negative towards SDG&E’s handling of the PSPS than are their counterparts

- Regardless of whether they experienced a shut-off or not, households with a chronic disease are more negative towards the utility’s handling of the PSPS than are those without a chronic disease (34% vs. 52% Top-2-Box – data not shown)

### Perception of SDG&E Handling PSPS\*



Q4.1 How would you rate SDG&E’s handling of the most recent Public Safety Power Shutoff?

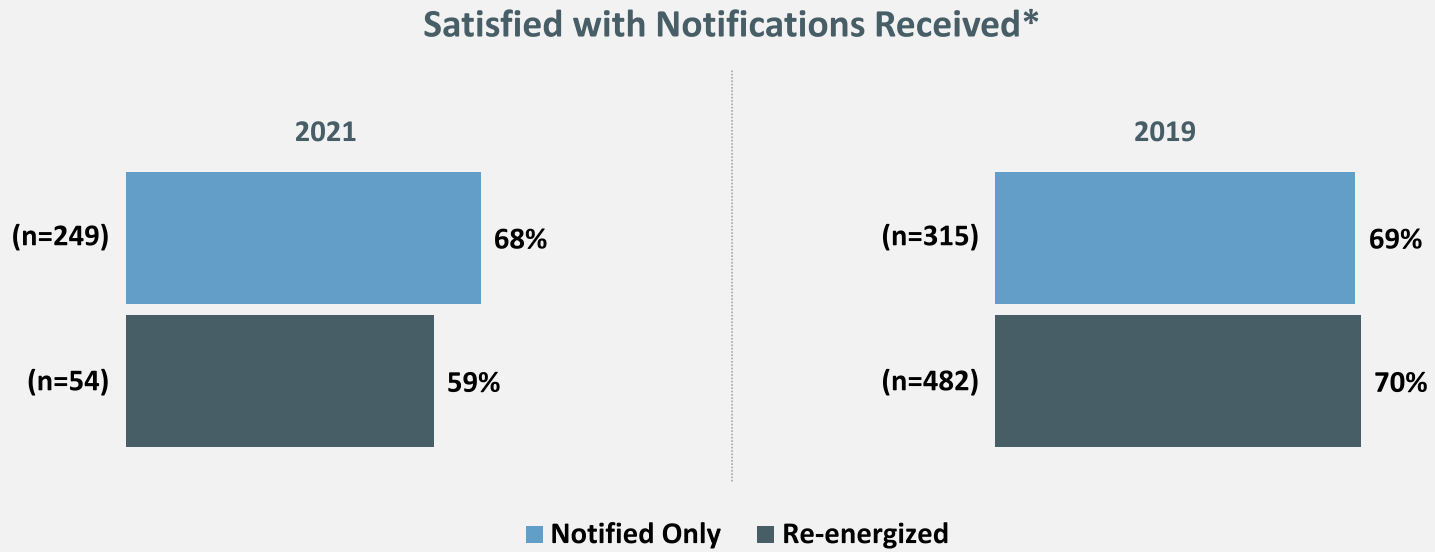
Base: Experienced Recent PSPS. \* Question added in 2021. \*\* Excludes Small Business Customers.  
<sup>^</sup><sup>∇</sup> Significantly higher/lower than “No” to either sub-group at the 95% confidence level.



## Notification Satisfaction

The majority of participants are satisfied with the notification process

- However, Notified Only are directionally more satisfied than their counterparts this wave



Q9 Thinking about the recent outage notification(s), how satisfied are you **OVERALL** with the Public Safety Power Shutoff notifications or messages that you received from SDG&E?

Base: Recall Notification.

\* Top-3-Box on a 7-point scale.



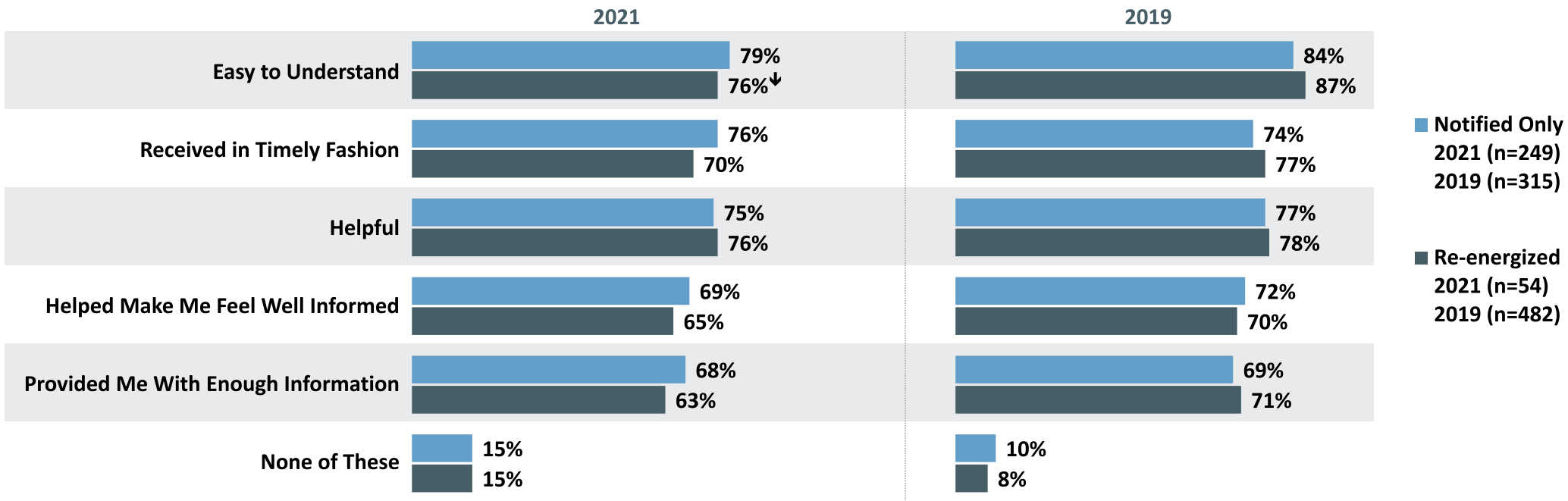


## Notification Performance

A solid majority agree the messages have positive attributes with Easy to Understand, Received in Timely Fashion and Helpful topping the list

- There is a decline in ratings for Easy to Understand among the Re-energized participants compared to last wave

### Agree the Message/Information was...\*



Q15 How much you agree or disagree with each of the following statements regarding the notification(s) you received from SDG&E?

Base: Recall Notification. \* Top-3-Box on a 7-point scale.  
 ↓ Significantly lower than 2019 at the 95% confidence level.

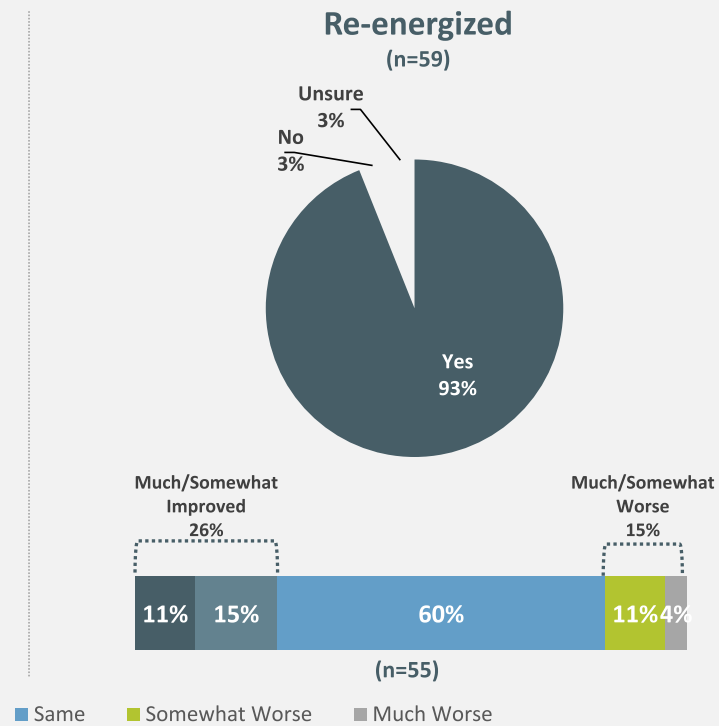
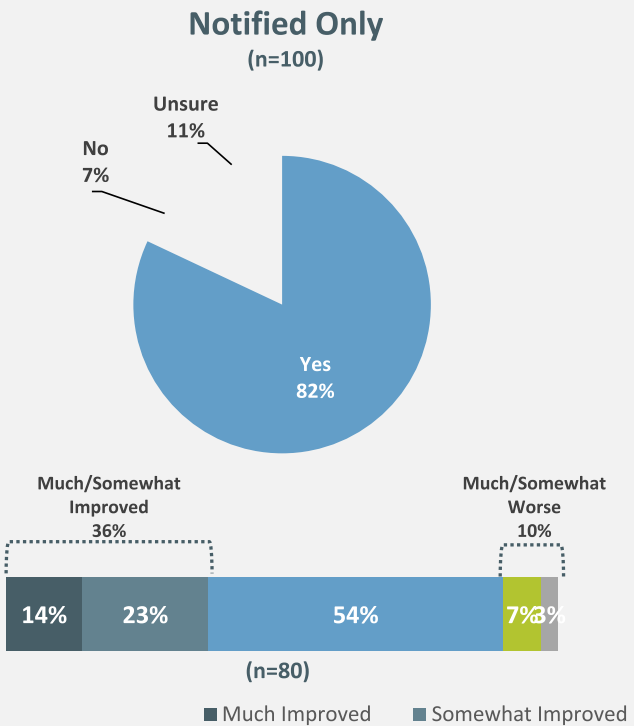
## Recent PSPS Compared to Previous

The vast majority of respondents have experienced a previous PSPS event

- While most feel the experience was about the same, more than a third of Notified Only and a quarter of Re-energized indicate SDG&E's handling has improved this time

Experienced a Previous PSPS\*

Recent PSPS Compared to Previous\*



■ Much Improved ■ Somewhat Improved ■ Same ■ Somewhat Worse ■ Much Worse

Q17.1 Have you experienced a Public Safety Power Shutoff (PSPS) prior to this most recent occurrence?  
 Q17.2 Compared to previous shutoffs, would you say that SDG&E's handling of the most recent Public Safety Power Shutoff was...?  
 Base: Had a Recent PSPS; Experienced Previous Outage. \* Questions added in 2021.

## **Appendix 2**

### **Liaison Positions Checklists**

## POSITION CHECKLIST



### POSITION SUMMARY

The Liaison Officer oversees the external affairs team and conducts appropriate notifications. Additionally, the Liaison Officer provides staff to jurisdictional partners EOCs upon request to provide situational awareness and provides a primary point of contact for all incoming agency representatives assigned to the EOC.

### OVERALL RESPONSIBILITIES

Responsibilities
<ul style="list-style-type: none"><li>• Oversee all liaison activities; coordinate outside agency representatives assigned to the EOC, and handle requests from other EOCs for agency representatives. Work with and provide support to EOC Section Chiefs to determine their needs for agency representatives, and resources to meet their operational requirements.</li></ul>
<ul style="list-style-type: none"><li>• Support the Officer-in-Charge (OIC) to address emergency response activities and develop external outreach strategy.</li></ul>
<ul style="list-style-type: none"><li>• Provide management and oversight of EOC External Affairs responders.</li></ul>
<ul style="list-style-type: none"><li>• Establish and maintain a central location for incoming agency representatives. Ensure function specific guidelines, situation reports, and a copy of the EOC Action Plan is provided to agency representatives upon check-in.</li></ul>
<ul style="list-style-type: none"><li>• Define priorities for the Liaison Group.</li></ul>
<ul style="list-style-type: none"><li>• Ensure appropriate notifications are made to partner agencies (federal, state, local, and tribal entities).</li></ul>

### DUTIES TO COMPLETE EACH OPERATIONAL PERIOD

#### Upon Arrival

- Sign-in to the EOC
- Check-in with the OIC
- Get transfer brief from previous shift's Liaison Officer
- Log-into Noggin & MS Teams

### **In the first 4 hours**

- Identify critical External Affairs issues in working with other Section Chiefs
- Define priorities for External Affairs Representatives
- Document actions in the Group Report
- Ensure appropriate notifications are made
- Secure approved talking points for external audiences (non-media)

### **Preparation for Mid-Shift Section Chief Brief**

- Compile information from external agencies and jurisdictions involved in the Incident
- Prepare to brief on present Liaison status and any other external agency/jurisdiction related information:
  - Regulatory issues (notifications, concerns)
  - Governmental issues (communications, concerns)

### **6-10 hours in to duty period (Prepare for next Ops Period)**

- Continue to communicate and track rep's action plan progress
- Ensure team is identifying action items, posting to Noggin logs and boards
- Relay requests for assistance to/from other sections and provide pertinent information to appropriate Section Chiefs

### **Preparation for shift transition**

- Transfer Briefing elements can include:
  - Incident History;
  - Priorities & objectives for next op period;
  - Plan for next op period EOC Action Plan (IAP);
  - Responder deliverables and schedule;
  - Any 'watch outs'

### **Demobilization Phase**

- Deactivate your assigned position and close out logs when authorized by the OIC
- Complete all required forms, reports, and other documentation. All forms should be submitted through your supervisor to the Planning Section, as appropriate, prior to your departure
- Be prepared to provide input to the After Action/Corrective Action report
- If another person is relieving you, ensure they are thoroughly briefed before you leave your workstation
- Release Agency Representatives that are no longer required in the EOC when authorized by the OIC

## POSITION CHECKLIST



### POSITION SUMMARY

The AFN Liaison Officer is responsible for identifying and communicating to those customers that may have needs relating to accessing resources or assistance with daily functional needs during an emergency.

The AFN Liaison Officer is also responsible for overseeing the AFN support network and working with the Community-based Organizations (CBOs) to address gaps and unmet needs.

### OVERALL RESPONSIBILITIES

Responsibilities
• Determine the type of support needed (i.e., CRC, Medical baseline, cool zones, etc.).
• Identify critical and sensitive customers that are impacted by an incident.
• Ensure that critical/sensitive customers receive special messaging about how to manage the impacts due to the incident.
• Ensure contact with the customers is confirmed by Customer Service Field if a door knock is required.
• Collaborate with CBOs to address any unmet needs or gaps.
• Ensure appropriate notifications are made to CBO partner agencies.

### DUTIES TO COMPLETE EACH OPERATIONAL PERIOD

#### Upon Arrival

- Sign-in to the EOC
- Check-in with the OIC
- Get transfer brief from previous shift's AFN Liaison Officer
- Log-into Noggin & MS Teams

#### In the first 4 hours

- Identify critical issues in working with CBO partners
- Document actions in the Group Report
- Ensure appropriate notifications are made

- Secure approved talking points for external audiences (non-media)

### **Preparation for Mid-Shift Section Chief Brief**

- Compile information from CBO partner agencies involved in the Incident
- Prepare to brief on present AFN Liaison status

### **6-10 hours in to duty period (Prepare for next Ops Period)**

- Continue to communicate and track plan progress
- Ensure team is identifying action items, posting to Noggin logs and boards
- Relay requests for assistance to/from other sections and provide pertinent information to appropriate Section Chiefs

### **Preparation for shift transition**

- Transfer Briefing elements can include:
  - Incident History;
  - Priorities & objectives for next op period;
  - Plan for next op period EOC Action Plan (IAP);
  - Responder deliverables and schedule;
  - Any 'watch outs'

### **Demobilization Phase**

- Deactivate your assigned position and close out logs when authorized by the OIC
- Complete all required forms, reports, and other documentation. All forms should be submitted through your supervisor to the Planning Section, as appropriate, prior to your departure
- Be prepared to provide input to the After Action/Corrective Action report
- If another person is relieving you, ensure they are thoroughly briefed before you leave your workstation
- Release AFN support agencies that are no longer required in the EOC when authorized by the OIC

**Attachments 1 - 4**



**Attachment 1**

**POSTSR 2A: Geospatial PSPS Data by Census Tract  
(Zipped Geodatabase File)**

**Attachment 2**

**POSTSR 2A: Non-Spatial PSPS Data by Census Tract  
(Excel File)**

**Attachment 3**

**POSTSR 3: Education and Outreach Costs  
(Excel File)**

**Attachment 4**

**POSTSR 4: Complaint Tracking Data  
(Excel File)**