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)

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E) 2021 PUBLIC SAFETY POWER SHUTOFF POST SEASON REPORT

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Dated: March 1, 2022

Attorney for PACIFIC GAS AND ELECTRIC COMPANY

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In accordance with filing requirements in Decision (D.) 21-06-034, Pacific Gas and

Electric Company ("PG&E") respectfully submits its 2021 Public Safety Power Shutoff

("PSPS") Post Season Report. This Report is attached hereto as Attachment A.

Attachments to POSTSR 2 – Geospatial and Excel files of PSPS data by Census Tract

(PGE POSTSR2A 3-1-2022 gdb.zip and PGE POSTSR2B 3-1-2022.xlsx); POSTSR 3 -

Excel file to document costs associated with Education & Outreach Costs (PGE_POSTSR3_3-1-

2022.xlsx); and POSTSR 4 - Excel file to document PSPS complaints (PGE_POSTSR4_3-1-

2022.xlsx) will be filed via archival grade DVDs with the Commission's Docket Office.

Respectfully Submitted,

KENNETH LEE

By: <u>/s/ Kenneth Lee</u> KENNETH LEE

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Attorney for PACIFIC GAS AND ELECTRIC COMPANY

Dated: March 1, 2022

ATTACHMENT A

Pacific Gas and Electric Company 2021 PSPS Post Season Report

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PG&E 2021 Post Season Report - POSTSR 1 (Narrative) to the CPUC

The Safety and Enforcement Division within the CPUC established the Post Season Report template to enable the investor-owned utilities (IOUs) to report out on additional information regarding their respective 2021 PSPS events. The Post Season Report is for the IOUs to report on any supplemental information which may not have been included in their previously submitted 10 Day Post-Event reports¹ for their 2021 PSPS events. This Post Season Report follows the template structure provided by the CPUC on December 22, 2021 and addresses supplemental information regarding all of PG&E's 2021 PSPS events, including January 19, 2021; August 17, 2021; September 20, 2021; October 11, 2021; and October 14, 2021 PSPS events.

Section I – Background: Overarching Regulation

Section I.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]

Section I.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]

Section I.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]

¹ The post-event PSPS reports are a requirement per previous Commission decisions, including Resolution ESRB-8, D.19-05-042 (Phase 1), D.20-05-051 (Phase 2), D.21-06-034 (Phase 3), and D. 21-06-014 (PSPS OII).

Section II – Amendments to Post-Event Reports

A Regulatory Requirements

Section II.A.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]

Section II.A.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

Section II.B.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]

Section II.B.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.

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

Response:

We provided all available information pertaining to CRCs for each event in each of our 10-day post-event reports. Figure 1 is an overview of the resources available at the four different Community Resource Center (CRC) types PG&E made available for the 2021 PSPS events. Tables 1-5 include the aggregate data of the CRCs PG&E provided for each of the 2021 PSPS events.

Standard operating hours at all CRCs: 8 a.m 10 p.m.		CRC		CRC CRC
Details/Resources	Indoor	Tent	Micro	Mobile
CRC Overview	Indoor site (i.e., Community Center)	Soft-sided tent at outdoor site	Open air tents at outdoor site	Sprinter van and tents at outdoor site
COVID-19 Health and Safety Measures	×	×	×	×
ADA-Accessible Restroom and Hand-Washing Station	×	×	×	×
Heating and Cooling	×	×		
Device Charging*	×	×	×	×*
Wi-Fi Service	×	×	×	×
Bottled Water	×	×	×	×
Non-Perishable Snacks	×	×	×	×
"Grab and go" resource offerings**	×	×	×	
Tables and Chairs	×	×	×	×
Bagged Ice	×	×		
Blankets (quantities limited)	×	×	×	×
Security Personnel	×	×	×	×
Cellular Coverage	×	×	×	×
Customer Service Staff	×	×	×	×
Privacy Screens	×			
Wind/Weather-Resistant	×	Limited		
*Medical device charging will be prioritized in times of high-deman	d **Grab and go bag contains dev	vice charger, water, snacks, and info	card.	

Figure 1: CRC Types and Resources

					Ор	erating H	ours					
#	County	Site Name	Address	Day 1 1/19/21	Day 2 1/20/21	Day 3 1/21/21	Day 4 1/22/21	Day 5 1/23/21	Total Visitors	Site Type	Event Supported ²	Amenities Provided
1	Calaveras	HITE	58 Jones St Murphys 95247			8:00AM - 9:30PM			0	Indoor	Outage Event CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging, Cooling/Heating, Ice
2	Calaveras	1	2286 Cedar Ln Arnold 95223			8:00AM - 9:30PM		8:00AM - 6:00PM	174	Micro	Outage Event CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging
3		Auberry Librory	33049 Auberry Rd Auberry 93602		8:00AM - 6:30PM				104	Indoor	PSPS CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging, Cooling/Heating, Ice
4		Bear Mountain Library	30733 E Kings Canyon Rd Dunlap Area 93675	8:00AM - 9:30PM	8:00AM - 6:30PM				116	Indoor	PSPS CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging, Cooling/Heating, Ice
5	Madera	North Fork Elementary School	33087 Rd 228 North Fork 93643			8:00AM - 9:30PM	8:00AM - 5:00PM		133	Indoor	CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging, Cooling/Heating, Ice
6	Madera	High	50200 High School Rd Oakhurst 93644	8:00AM - 9:30PM		8:00AM - 9:30PM	8:00AM - 9:30PM	8:00AM - 5:00PM	618	Indoor	PSPS CRC + Outage Event CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging, Cooling/Heating, Ice
7	Mariposa		5246 Spriggs Ln Mariposa 95338		12:00PM - 9:30PM	8:00AM - 9:30PM	8:00AM - 5:00PM		47	Micro	Outage Event CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging
8	Mariposa		5089 Cole Rd Bootjack 95338		8:00AM - 9:30PM			8:00AM - 5:00PM	126	Indoor	PSPS CRC + Outage Event CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging, Cooling/Heating, Ice
9	San Luis Obispo	Beach Community		8:00AM - 9:30PM	8:00AM - 12:45PM				207	Micro	PSPS CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging
10	San Mateo	High	360 Butano Cutoff Pescadero 94060		5:00PM - 9:30PM	8:00AM - 9:30PM	8:00AM - 5:00PM		259	Micro	Outage Event CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging
11	San Mateo	Fire	8945 La Honda Rd La Honda 94062			8:00AM - 9:30PM	8:00AM - 5:00PM		84	Indoor	Outage Event CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging, Cooling/Heating, Ice
12	Santa	Christian	1550 S College Dr Santa Maria 93454	8:00AM - 9:30PM	8:00AM - 12:30PM				8	Micro	PSPS CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging
13	Santa Cruz	Technology	100 Enterprise Way Scotts Valley 95066		5:00PM - 9:30PM			8:00AM - 5:00PM	309	Micro	Outage Event CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging
14	Tuolumne		24630 CA-108 Mi-Wuk Village 95346			8:00AM - 9:30PM	8:00AM - 6:15PM		14	Indoor	Outage Event CRC	Wi-Fi, Restrooms, Blankets, Water and Snacks, Device Charging, Medical Device Charging, Cooling/Heating, Ice

² As noted in our January 19, 2021 post-event report: During this event, which included the extended power outage through January 23, 2021, PG&E established 14 Community Resource Centers (CRCs) in nine counties. Seven of the 14 CRCs were opened to support this PSPS Event, and PG&E kept three of those PSPS CRCs open past the end of the PSPS event to support customers with extended outages. After the widespread damage was realized across our service area, PG&E deployed seven additional CRCs to support customers experiencing extended outages.

				Opera	ting Hours	(PDT)			
#	County	Site Name	Address	Day 1	Day 2	Day 3	Total Visitors	Site Type	Amenities Provided
				17-Aug	18-Aug	19-Aug			
1	Butte	Berry Creek Elementary	286 Rockerfeller Rd, Berry Creek, CA 95916	17:00- 22:00	08:00- 22:00	08:00- 13:00	3	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
2	Butte	Magalia Pines Baptist Church	14098 Skyway Rd, Magalia, CA 95954	17:00- 22:00	08:00- 22:00	08:00- 13:00	216	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
3	Butte	Southside Oroville Community Center	2959 Lower Wyandotte Rd, Oroville, CA 95966	17:00- 22:00	08:00- 22:00	08:00- 13:00	13	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
4	Butte	Paradise Parks and Recreation Center (aka Terry Ashe Center)	6626 Skyway, Paradise, CA 95969	17:00- 22:00	08:00- 22:00	08:00- 13:00	50	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
5	Colusa	Stonyford Community Center/Hall	229 Market St, Stonyford, CA 95979	17:00- 22:00	08:00- 22:00	08:00- 13:00	203	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
6	Contra Costa	St. Bonaventure Catholic Church	5562 Clayton Rd, Concord, CA 94521	17:00- 22:00	08:00- 13:00	N/A	3	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
7	Glenn	Elk Creek Junior Senior High School	3430 Co Rd 309, Elk Creek, CA 95939	17:00- 22:00	08:00- 22:00	08:00- 13:00	108	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
8	Lake	Clearlake Senior Community Center	3245 Bowers Ave, Clearlake, CA 95422	17:00- 22:00	08:00- 22:00	08:00- 13:00	84	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
9	Lake	Live Oaks Senior Center	12502 Foot hill Blvd, Clearlake Oaks, CA 95423	17:00- 22:00	08:00- 15:00	N/A	14	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
10	Lake	Mountain Lion's Club (also known as Little Red Schoolhouse)	15780 Bottlerock Rd, Cobb, CA 95426	17:00- 22:00	08:00- 22:00	08:00- 13:00	149	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
11	Lake	Scotts Valley Band of Pomo Indians Red Hills Property	7130 Red Hills Rd, Kelseyville, CA 95451	19:00- 22:00	08:00- 22:00	08:00- 13:00	18	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
12	Mendocino	Keith's Market IGA	76201 Covelo Rd, Covelo, CA 95428	17:00- 22:00	08:00- 13:00	N/A	32	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
13	Mendocino	Harwood Hall	44400 Willis Ave, Laytonville, CA 95454	17:00- 22:00	08:00- 13:00	N/A	35	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
14	Mendocino	Ukiah Empty Lot	1775 N State St, Ukiah, CA 95482	19:00- 22:00	08:00- 13:00	N/A	27	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging

				Opera	ting Hours	(PDT)			
#	County	Site Name	Address	Day 1	Day 2	Day 3	Total Visitors	Site Type	Amenities Provided
				17-Aug	18-Aug	19-Aug			
15	Napa	Pacific Union College	35 La Jota Dr, Angwin, CA 94508	17:00- 22:00	08:00- 22:00	N/A	236	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
16	Napa	Highlands Christian Fellowship	970 Petrified Forest Rd, Calistoga, CA 94515	17:00- 22:00	08:00- 22:00	N/A	492	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
17	Napa	Crosswalk Community Church	2590 1st St, Napa, CA 94558	17:00- 22:00	08:00- 22:00	N/A	8	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
18	Napa	Saint Helena Catholic School	1255 Oak Ave, St. Helena, CA 94574	17:00- 22:00	08:00- 22:00	N/A	28	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
19	Plumas	Quincy Elks Lodge 1884	2004 E Main St, Quincy, CA 95971	17:00- 22:00	08:00- 22:00	08:00- 13:00	82	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
20	Shasta	Anderson (Frontier) Senior Center	2081 Frontier Trail, Anderson, CA 96007	17:00- 22:00	08:00- 22:00	08:00- 13:00	122	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
21	Shasta	Happy Valley Community Center	5400 Happy Valley Rd, Anderson, CA 96007	17:00- 22:00	08:00- 22:00	08:00- 13:00	128	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
22	Shasta	Lakehead Lions Hall	20814 Mammoth Dr, Lakehead, CA 96051	17:00- 22:00	08:00- 22:00	08:00- 13:00	6	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
23	Shasta	Mercy Oaks	100 Mercy Oaks Dr, Redding, CA 96003	17:00- 22:00	08:00- 22:00	08:00- 13:00	61	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
24	Shasta	Hill Country Health and Wellness Center	29632 CA-299, Round Mountain, CA 96084	17:00- 22:00	08:00- 22:00	08:00- 13:00	355	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
25	Sierra	Lower Alleghany Volunteer Fire Dept	514 Miners St, Alleghany, CA 95910	17:00- 22:00	08:00- 13:00	N/A	15	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
26	Sierra	Downieville Community Hall	327 Main St, Downieville, CA 95936	17:00- 22:00	08:00- 13:00	N/A	24	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
27	Solano	Solano Community College - Vacaville	2001 N Village Pkwy, Vacaville, CA 95688	17:00- 22:00	08:00- 22:00	08:00- 13:00	42	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
28	Sonoma	Cloverdale Citrus Fairgrounds	1 Citrus Fair Dr, Cloverdale, CA 95425	17:00- 22:00	08:00- 22:00	N/A	8	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice

				Opera	ting Hours	(PDT)			
#	County	Site Name	Address	Day 1	Day 2	Day 3	Total Visitors	Site Type	Amenities Provided
				17-Aug	18-Aug	19-Aug			
29	Sonoma	Presbyterian Church of the Roses	2500 Patio Ct., Santa Rosa, CA 95409	19:00- 22:00	08:00- 22:00	N/A	10	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
30	Sonoma	First Congregational Church of Sonoma	252 W Spain St, Sonoma, CA 95476	19:00- 22:00	08:00- 22:00	N/A	65	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
31	Tehama	Noland Park	19001 Bowman Rd, Cottonwood, CA 96022	17:00- 22:00	08:00- 22:00	08:00- 13:00	214	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
32	Tehama	Rancho Tehema Association	17605 Park Terrace Rd, Rancho Tehama, CA 96021	17:00- 22:00	08:00- 22:00	08:00- 13:00	472	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
33	Yolo	United States Postal Service	7575 CA-16, Guinda, CA 95637	17:00- 22:00	08:00- 22:00	N/A	40	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
34	Yuba	Alcouffe Center	9185 Marysville Rd, Oregon House, CA 95962	17:00- 22:00	08:00- 13:00	N/A	13	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice

				Operatii (Pl	ng Hours DT)	T ()		
#	County	Site Name	Address	Day 1	Day 2	Total Visitors	Site Type	Amenities Provided
				20-Sep	21-Sep			
1	Colusa	Stonyford	Stonyford Community Center/Hall, 229 Market St, Stonyford, CA 95979	8:00- 12:54	N/A	9	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
2	Glenn	Elk Creek	Elk Creek Junior Senior High School, 3430 Co Rd 309, Elk Creek, CA 95939	8:00- 12:54	N/A	2	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
3	Kern	Lebec	El Tejon Unified School District, 4337 Lebec Rd, Lebec, CA 93243	N/A	8:00- 18:00	34	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
4	Napa	Napa	Highways 128/121 and Steele Canyon, 6003 Monticello Rd, Napa, CA 94558	8:00- 11:30	N/A	11	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
5	Napa	Angwin	Pacific Union College, 35 La Jota Dr, Angwin, CA 94508	8:00- 11:30	N/A	20	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
6	Shasta	Anderson	Happy Valley Community Center, 5400 Happy Valley Rd, Anderson, CA 96007	8:00- 13:01	N/A	0	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
7	Shasta	Redding	Mercy Oaks, 100 Mercy Oaks Dr, Redding, CA 96003	8:00- 13:01	N/A	0	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
8	Solano	Fairfield	S&S Supply, 2700 Maxwell Way, Fairfield, CA 94534	8:00- 11:30	N/A	8	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
9	Tehama	Rancho Tehama	Rancho Tehama Association, 17605 Park Terrace Rd, Rancho Tehama, CA 96022	8:00- 20:00	N/A	181	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging

Table 3: September 20 Event CRCs Provided by PG&E

Table 4: October 11 Event CRCs Provided by PG&E

					ng Hours DT)			
#	County	Site Name	Address	Day 1	Day 2	Total Visitors	Site Type	Amenities Provided
				11-Oct	12-Oct	VISICOI S		
1	Butte	Cohasset Elementary School	9932 Cohasset Rd, Cohasset (Chico), CA 95973	08:00 - 22:00	08:00 - 16:30	88	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
2	Butte	Paradise Parks and Recreation Center (aka Terry Ashe Center)	6626 Skyway, Paradise, CA 95969	08:00 - 22:00	08:00 - 16:30	32	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
3	Colusa	Stonyford Community Center/Hall	229 Market St, Stonyford, CA 95979	08:00 - 22:00	08:00 - 19:00	164	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
4	Contra Costa	St. Bonaventure Catholic Church	5562 Clayton Rd, Concord, CA 94521	08:00 - 22:00	08:00 - 19:00	17	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
5	Fresno	SaveCo Wholesale Parking Area	25 W Polk Street, Coalinga, CA 93210	08:00 - 22:00	08:00 - 20:30	691	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
6	Glenn	Elk Creek Junior Senior High School	3430 Co Rd 309, Elk Creek, CA 95939	08:00 - 22:00	08:00 - 19:00	110	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
7	Kern	Lebec Post Office	2132 Lebec Road, Lebec, CA 93243	08:00 - 22:00	08:00 - 22:00	768	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
8	Lake	Live Oaks Senior Center	12502 Foot hill Blvd, Clearlake Oaks, CA 95423	08:00 - 22:00	08:00 - 19:00	147	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
9	Lake	Mountain Lion's Club (also known as Little Red Schoolhouse)	15780 Bottlerock Rd, Cobb, CA 95426	08:00 - 22:00	08:00 - 19:00	27	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
10	Lake	Twin Pine Casino and Hotel	22223 CA- 29, Middletown, CA 95461	08:00 - 22:00	08:00 - 19:00	114	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
11	Lake	Hidden Valley Lake Association Mailboxes on Hidden Valley Rd	18090 Hidden Valley Rd, Hidden Valley Lake, CA 95467	08:00 - 22:00	08:00 - 19:00	700	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
12	Monterey	Salinas Valley Fairgrounds	625 Division St., King City, CA 93930	08:00 - 22:00	08:00 - 20:30	10	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
13	Monterey	Lockwood Post Office	68025 Jolon Rd, Lockwood, CA 93932	08:00 - 22:00	08:00 - 20:30	824	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
14	Napa	Highways 128/121 and Steele Canyon	6003 Monticello Rd, Napa, CA 94558	08:00 - 18:00	08:00 - 20:00	41	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
15	Napa	Pacific Union College	35 La Jota Dr, Angwin, CA 94508	08:00 - 22:00	08:00 - 20:00	64	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
16	Plumas	Quincy Elks Lodge 1884	2004 E Main St, Quincy, CA 95971	08:00 - 22:00	08:00 - 16:30	10	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
17	Shasta	Happy Valley Community Center	5400 Happy Valley Rd, Anderson, CA 96007	08:00 - 22:00	08:00 - 14:00	23	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
18	Shasta	Anderson (Frontier) Senior Center	2081 Frontier Trail, Anderson, CA 96007	08:00 - 22:00	08:00 - 14:00	37	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice

					ng Hours DT)			
#	County	Site Name	Address	Day 1	Day 2	Total Visitors	Site Type	Amenities Provided
				11-Oct	12-Oct			
19	Shasta	Hill Country Health and Wellness Center	29632 CA-299, Round Mountain, CA 96084	08:00 - 22:00	08:00 - 10:00	54	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
20	Solano	Solano Community College - Vacaville	2001 N Village Pkwy, Vacaville, CA 95688	08:00 - 22:00	08:00 - 19:00	44	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
21	Tehama	Rancho Tehama Association	17605 Park Terrace Road, Corning, CA 96021	08:00 - 22:00	08:00 - 17:00	616	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
22	Tehama	Noland Park	19001 Bowman Rd, Cottonwood, CA 96022	08:00 - 22:00	08:00 - 17:00	15	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
23	Yolo	United States Postal Service	7575 CA-16, Guinda, CA 95637	08:00 - 22:00	08:00 - 20:00	54	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
24	Yolo	PG&E Gas Safety Academy	1 PG&E Way, Winters, CA 95694	08:00 - 22:00	08:00 - 20:00	884	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging

				Oper	ating Hours (PDT)			
#	County	Site Name	Address	Day 1	Day 2	Day 3	Total Visitors	Site Type	Amenities Provided
				14-Oct	15-Oct	16-Oct	V ISICOLS		
1	Butte	Paradise Parks and Recreation Center (aka Terry Ashe Center)	6626 Skyway, Paradise, CA 95969	08:00 - 09:30	N/A	N/A	38	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
2	Butte	Southside Oroville Community Center	2959 Lower Wyandotte Rd, Oroville, CA 95966	08:00 - 09:30	N/A	N/A	0	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
3	Colusa	Stonyford Community Center/Hall	229 Market St, Stonyford, CA 95979	08:00 - 12:00	N/A	N/A	5	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
4	Glenn	Elk Creek Junior Senior High School	3430 Co Rd 309, Elk Creek, CA 95939	08:00 - 10:30	N/A	N/A	2	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
5	Kern	Lebec Post Office	2132 Lebec Road, Lebec, CA 93243	08:00 - 22:00	08:00 - 22:00	08:00 18:30	273	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
6	Napa	Highways 128/121 and Steele Canyon	6003 Monticello Rd, Napa, CA 94558	08:00 - 09:30	N/A	N/A	0	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
7	Shasta	Hill Country Health and Wellness Center	29632 CA-299, Round Mountain, CA 96084	08:00 - 10:30	N/A	N/A	20	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
8	Solano	Solano Community College - Vacaville	2001 N Village Pkwy, Vacaville, CA 95688	08:00 - 09:30	N/A	N/A	0	Indoor	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging, Cooling & Heating, Ice
9	Solano	Green Valley Golf Course	35 Country Club Road, Fairfield, CA 94534	08:00 - 09:30	N/A	N/A	0	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
10	Tehama	Rancho Tehama Association	17605 Park Terrace Road, Corning, CA 96021	08:00 - 10:30	N/A	N/A	9	Micro	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging
11	Yolo	United States Postal Service	7575 CA-16, Guinda, CA 95637	08:00 - 09:30	N/A	N/A	0	Mobile	Wi-Fi, Restrooms, Water and Snacks, Blankets, Device Charging, Medical Device Charging

Table 5: October 14 Event CRCs Provided by PG&E

Section II.B.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);

Response:

We provided all available information pertaining to whom we contacted in the community prior to deenergization and whether the affected areas are classified as High Fire Threat District Zone 1, Tier 2, or Tier 3 (as defined in General Order 95, Rule 21.2-D22) in each of our 10-day post-event reports.

b. 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]

Response:

We provided all explanations as to why notice could not be provided at least two hours prior to a deenergization in each of our 10-day post-event reports for the August 17, 2021; September 20, 2021; October 11, 2021; and October 14, 2021 PSPS events.

Explanation of De-energization with no notice at least two hours prior to the de-energization event³ This is a situation where a customer received a notification prior to the de-energization event, but the notification was not sent at least two hours prior to the de-energization event. For the January 19, 2021 PSPS event, this situation did not occur.

³ When accounting for the number of customers with no notice at least two hours prior to the de-energization event, PG&E does not include customers who did not receive any notifications before de-energization. For a count of and explanation of customers who did not receive any notifications before their de-energization start date/time for the January 19, 2021 PSPS Event, see "*Explanation in Case of False-Negative Communications (No Advanced Notice Prior to De-energization)*" in Section 6 – Customer Notifications in our January 19, 2021 10-day post-event report.

Section II.B.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.

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

Response:

We provided all required and available information pertaining to detailed description of the steps we used to restore power in each of our 10-day post-event reports.

For more information on restoration process please refer to Section 8.2.3 in PG&Es 2021 Revised WMP pages 958-961.

The tables below provide aggregate data from our 10-day post-event reports for the January 19, 2021; August 17, 2021; September 20, 2021; October 11, 2021; and October 14, 2021 events.

Table 6 shows the number of sets of weather "all-clears" issued, number of personnel, helicopters, and miles of distribution circuits patrolled for each 2021 PSPS event.

Table 6: Number of personnel, helicopters, and patrolled miles of distribution circuits de-energized

Event	Number of Sets of Weather "All-clears" Issued	Number of Personnel	Helicopters	Patrolled miles of Distribution Circuits De-energized
01/19/2021	2	160	11	420 miles
08/17/2021	10	1,940	30	3,600 miles
09/20/2021	7	550	9	260 miles
10/11/2021	15	1,200	35	2,500 miles
10/14/2021	2	50	1	60 miles

Tables 7 – 11 below note the weather "all clear" times that we issued for our 2021 PSPS Events. PG&E issued weather "all clears" by Fire Index Area (FIA) for the January 19, 2021 PSPS event, and utilized our refined All-Clear Zone methodology for the remaining 2021 PSPS events.

Table 7: January 19 Event Weather All-Clear Times

Impacted FIAs	Weather All-Clear Date and Time
FIAs 420, 430	1/19/2021 14:03 PST
FIAs 427, 450, 428, 440, 445, 448, 508, 510, 585, 512	1/20/2021 04:22 PST

Table 8: August 17 Event Weather All-Clear Times

All-Clear Zones	Weather All-Clear Date and Time
154C, 154E, 180C, 180D, 180H, 180I, 249, 255, 280C, 285, 290	8/18/2021 07:58 PDT
170, 175A, 175B, 175C, 175D, 177D, 180J, 241B, 241C, 244B, 245C, 280B	8/18/2021 09:29 PDT
117C, 241A	8/18/2021 10:20 PDT
154D, 248B, 248C	8/18/2021 11:38 PDT
175E, 175F	8/18/2021 12:39 PDT
177B	8/18/2021 14:45 PDT
177A, 244A, 245A, 246A, 246C, 247A	8/18/2021 15:24 PDT
245B, 247B	8/18/2021 16:41 PDT
246B, 246E, 246F, 246G	8/18/2021 17:08 PDT
244C, 246D, 247C, 248A, 280G, 282A	8/19/2021 05:17 PDT

Table 9: September 20 Event Weather All-Clear Times

All-Clear Zones	Weather All-Clear Date and Time
175D, 177C, 177D, 180D	9/20/2021 12:25 PDT
170, 245A, 246A	9/20/2021 13:05 PDT
177B	9/20/2021 13:52 PDT
245B, 246B	9/20/2021 14:34 PDT
175F, 177A	9/20/2021 16:11 PDT
448A	9/21/2021 11:13 PDT
448B, 651	9/21/2021 14:36 PDT

Table 10: October 11 Weather All-Clear Times

All-Clear Zones	Weather All-Clear Date and Time
241A, 245C, 246C	10/11/2021 16:29 PDT
246F, 246E, 247A, 247B, 244C, 248C, 245A, 246A, 170	10/11/2021 17:45 PDT
177D, 180H	10/11/2021 18:51 PDT
246D, 246B, 245B, 175C, 180D	10/11/2021 19:43 PDT
247C	10/12/2021 00:13 PDT
280A, 280B, 280C, 582	10/12/2021 04:13 PDT
445, 448A	10/12/2021 05:38 PDT
285, 248A, 280G, 282B, 154D, 175B, 175F, 570, 525, 565, 580	10/12/2021 07:22 PDT
508, 575, 497, 651, 448B	10/12/2021 08:53 PDT
585	10/12/2021 09:24 PDT
512, 495, 175D	10/12/2021 10:23 PDT
490	10/12/2021 11:19 PDT
175E	10/12/2021 12:02 PDT
177C, 177B, 177A	10/12/2021 12:20 PDT
540, 530J, 530C, 530B, 530A	10/12/2021 12:53 PDT

Table 11: October 14 Weather All-Clear Times

All-Clear Zones	Weather All-Clear Date and Time
445, 448A in their entirety. In addition, 448B and 651 were approved with the exception of areas on Tejon 1102 downstream of recloser 3760 and Fuse 14928.	10/15/2021 12:00 PDT
Remainder of 448B and 651 - areas on Tejon 1102 downstream of recloser 3760 and Fuse 14928.	10/16/2021 15:14 PDT

Tables 12 – 14 below list circuits that PG&E was unable to restore within 24 hours of the Weather All-Clear for the January 19, 2021; August 17, 2021; and October 11, 2021 PSPS events, respectively. All circuits for the September 20, 2021 and October 14, 2021 PSPS events were restored within 24 hours of the weather "All-Clear".

Table 12: January 19 Event Circuits PG&E was Unable to Restore within 24 Hours of the Weather All-Clear

Circuit Name	Primary Reason the Utility was Unable to Restore the Circuit Within 24 Hours
MARIPOSA 2101	Restoration delayed due to significant repairs and correction of damage on assets to be restored.
MARIPOSA 2102	Restoration delayed due to significant repairs and correction of damage on assets to be restored.
OAKHURST 1103	Restoration delayed due to significant repairs and correction of damage on assets to be restored.
SAN JOAQUIN #3 1101	Restoration delayed due to significant repairs and correction of damage on assets to be restored.
SAN JOAQUIN #3 1103	Restoration delayed due to significant repairs and correction of damage on assets to be restored.

Table 13: August 17 Event Circuits PG&E was Unable to Restore within 24 Hours of the Weather All-Clear

Circuit Name	Primary Reason the Utility was Unable to Restore the Circuit Within 24 Hours	
REDBUD 1101	Unable to gain access due to the Cache fire.	
HIGHLANDS 1102	Unable to gain access due to the Cache fire.	
HIGHLANDS 1103	Unable to gain access due to the Cache fire.	
BUCKS CREEK 1103	Unable to energize the non-PG&E owned portions of the line prior to customer providing positive confirmation that the lines were safe to restore, for customer-owner primary lines. One PG&E customer (powerhouse facility) also required a delayed re-energization, pending completion of inspections required in the facility.	
MC ARTHUR 1101 Unable to energize the non-PG&E owned portions of the line prior to customer pro- positive confirmation that the lines were safe to restore, for customer-owner prima		
STILLWATER 1102	Unable to complete air patrol due to visibility resulting in switching to ground patrol.	

Table 14: October 11 Event Circuits PG&E was Unable to Restore within 24 hours of the Weather All-Clear

Circuit Name	Primary Reason the Utility was Unable to Restore the Circuit Within 24 Hours
	PG&E was not able to restore lines as the Calpine 1144 line is not owned by PG&E. At the
Calpine 1144	weather "All Clear", PG&E requested that Calpine begin patrols of the line, and PG&E was
	informed that patrols would not begin until the 10/14 PSPS event was completed.
	PG&E was not able to restore lines as the Calpine 1146 line is not owned by PG&E. At the
Calpine 1146	weather "All Clear", PG&E requested that Calpine begin patrols of the line, and PG&E was
_	informed that patrols would not begin until the 10/14 PSPS event was completed.

Section III – Decision Specified

<u>A Education and Outreach</u> [Authority: D.21-06-034, Guidelines at p. A7, Section E-1] Section III.A.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. Response:

In 2021, PG&E conducted three waves of surveys: a "baseline" (prior to most outreach) in May/June; a "Pre-Season" survey in August/September at the beginning of peak fire season; and Post-Season survey in December/January conducted after the threat of most Public Safety Power Shutoffs was ended. Please refer to Appendix A: PG&E 2021 Wildfire Preparedness and PSPS Outreach Evaluation Results for results of these education and outreach surveys.

<u>B Medical Baseline and Access and Functional Needs [Authority: D.21-06-034, Guidelines at p. A16, Sections K-3.d]</u>

Section III.B.1 – Describe in detail all programs and/or types of assistance, including: Response:

We describe programs and/or types of assistance in our Revised 2021 WMP. We provide the applicable sections and page numbers for each program and/or type of assistance below. For programs and/or types of assistance that were modified during 2021, additional details are provided below.

a. Free and/or subsidized backup batteries

i. Disability Disaster Access and Resources (DDAR) Program

We describe in detail the DDAR Program in PG&E's Revised 2021 WMP, section 8.2.1, page 944.

ii. Portable Battery Program (PBP)

We describe in detail PBP in PG&E's Revised 2021 WMP, section 8.2.1, page 945 to page 946.

iii. Generator and Battery Rebate Program

We included the Generator Program in PG&E's Revised 2021 WMP, section 8.2.1, page 947. The Program was initially focused on customers with well-pumps, but we expanded the program in 2021 to enhance the assistance provided to MBL and AFN customers.

In October 2020, we launched the Generator Rebate Program which provides a \$300 rebate to rural customers who rely on well-water powered by electricity living in Tiers 2 or 3 HFTD, with an additional \$200 for low-income residential customers on our CARE or FERA programs.

In June 2021, we updated the program to the "Generator and Battery Rebate Program," and expanded it to include more eligible customers, increased the rebate structure, and added more products to the qualified products list. To qualify, customers must be located in Tier 2 or 3 high-fire threat areas as determined by the CPUC on the High Fire-Threat District map and must meet one of the following criteria: 1) rely on well water pumping for premise water needs, 2) enrolled in the Medical Baseline program, or 3) are a small/micro non-critical care essential business (i.e., grocery store, convenience store, veterinarian service, dental office, urgent care/clinic, food bank, etc.).

The expanded rebate structure includes 3 tiers. Level 1: \$300 rebate for products \$0-\$500, Level 2: \$500 rebate for products \$501-\$1,000, Level 3 \$1,000 rebate for products over \$1,000. The rebate is capped at the product pricing so customers cannot receive a higher rebate than what they paid. Residential customers on PG&E's CARE/FERA program that are eligible for the program will also receive a \$200 additional rebate at each level, so long as the rebate does not exceed the price of the product.

Lastly, the program added portable batteries to the Qualified Products List, in addition to the portable generators.

b. Self-Generation Incentive Program Equity Resiliency Budget

We describe in detail the Self-Generation Incentive Program (SGIP) in PG&E's Revised 2021 WMP, section 8.2.1, Page 946 to page 947.

c. Community Microgrid Incentive Program [sic] ["Microgrid Incentive Program" per D.21-01-018]

In Track 2 of the Microgrids and Resiliency OIR⁴, the CPUC directed SCE, SDG&E, and PG&E to develop a new Microgrid Incentive Program (MIP) to primarily benefit disadvantaged and vulnerable communities. The objective of the program is to fund clean community microgrids that support the critical needs of disadvantaged and vulnerable populations most likely to be impacted by outages.

During 2021, PG&E worked collaboratively with the other investor-owned utilities and external stakeholders to define this program to support resilience for our customers. Seven stakeholder workshops were held in 2021 to inform development of the program. The Utilities submitted the Implementation Plan for the Microgrid Incentive Program to the CPUC on December 3, 2021.

d. Hotel vouchers

i. Disability Disaster Access and Resources (DDAR) Program

DDAR provides lodging to qualifying customers. PG&E describes in detail the DDAR Program in PG&E's Revised 2021 WMP, section 8.2.1, page 944.

ii. 211 Referral Services

PG&E's agreement with the California Network of 211s connects customers with AFN to critical resources, including hotel accommodations. More information on PG&E's partnership with 211 are provided below.

e. Transportation to CRCs

i. Disability Disaster Access and Resources (DDAR) Program

DDAR provides transportation to qualifying customers. PG&E describes in detail the DDAR Program in PG&E's 2021 WMP, section 8.2.1, page 944.

iii. 211 Referral Services

PG&E's agreement with the California Network of 211s connects customers with AFN to critical resources, including transportation. More information on PG&E's partnership with 211 is provided below.

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

i. Medical Baseline (MBL) Program

We describe in detail the MBL Program in PG&E's 2021 WMP, section 8.4.1, page 1024.

ii. Energy Savings Assistance (ESA) Program

We describe in detail the ESA Program in PG&E's 2021 WMP, section 8.4.1, page 1024.

⁴ D.21-01-018

iii. California Alternative Rates for Energy Program (CARE) / Family Electric Rate Assistance Program (FERA)

The California Alternate Rates for Energy Program (CARE) and Family Electric Rate Assistance Program (FERA) are PG&E discount programs that help eligible customers afford their energy bills. Over 1.6 million customers are receiving bill discounts through these two programs. Training for CARE outreach contractors were bi-annual in 2021 for new contractors and as a refresher for existing contractors. The training highlights emergency preparedness programs, as well as a PSPS overview, to be used in holistic customer education about relevant PG&E programs during CARE/FERA enrollment.

iv. Community Resource Centers (CRCs)

We describe in detail our CRCs in PG&E's Revised 2021 WMP, section 8.4.1, page 940.

v. Community Microgrid Enablement Program (CMEP)

Following the CPUC's approval with modifications of CMEP in Resolution E-5127 on March 18, 2021, PG&E launched the CMEP in April 2021.

PG&E's CMEP provides incremental technical and financial support to communities seeking resilience for critical facilities and vulnerable customer groups. The program helps communities plan and implement a resilience solution so that they can power critical resources when the utility grid is shut down due to extreme weather or PSPS events. The support includes technical expertise and cost offsets to pay for the cost of distribution system upgrades to enable the safe islanding of a microgrid.

The program consists of four elements:

- 1. Enhanced Utility Technical Support Serves to facilitate the development of a multi-customer microgrid from initial concept exploration, through solution assessment, to solution execution.
- Enhanced Self-Service Information and Project Tools PG&E's Community Resilience Guide <u>here</u> provides updated financial, technical, and interconnection resources for community resilience projects.
- Community Microgrid Enablement Tariff PG&E submitted a pro forma tariff as part of our CMEP Advice Letter 5918-E to govern the eligibility, engineering studies, development, and island and transitional operation of community microgrids.
- 4. **Cost Offsets** PG&E will offset the cost of that equipment necessary to enable the safe islanding of a community microgrid, up to \$3 million per project.

vi. Backup Power Education through Online Marketplace and Safety Action Center We describe in detail Backup Power Education through Online Marketplace and Safety Action Center in PG&E's Revised WMP, section 8.2.1, page 947.

vii. Electric Vehicle (EV) Charging Network Support and Resiliency

We describe in detail EV Charging Network Support and Resiliency in PG&E's Revised 2021 WMP, section 8.2.1, page 948.

viii.Food Replacement Resources

Includes Food Bank Partnerships and Grants, Meals on Wheels Partnerships, and Grocery Delivery Services which we describe in detail in PG&E's Revised 2021 WMP, section 8.4.1, page 1023.

ix. Haven of Hope on Wheels

We have a partnership with Haven of Hope on Wheels in Butte County. Haven of Hope on Wheels provides portable laundry and shower services. They were deployed to provide services for PG&E's October 14, 2021 PSPS event until they received a cancellation notification due to removal of Butte County from scope.

x. 211 Referral Services

Through our charitable grant program, we continue to provide grants to 211 so that 211 service providers can refer individuals to social services available in their community. PG&E signed an agreement in August 2021 with the CA Network of 211 to provide customers with Access and Functional Needs (AFN) with a single source of information and connection to available resources in their communities. This agreement provides PSPS education, outreach, and emergency planning in advance of PSPS—connecting those with AFN to critical resources like transportation, food, batteries, and other social services during PSPS.

Section III.B.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. Response:

Partnerships/Programs /Services	Costs (\$)	Funding Sources(s)	Note(s)	
Disability Disaster Access and Resources (DDAR) Program	4,987,191	Wildfire Mitigation Plan Memorandum Account (WMPMA)	Portable backup batteries, hotel stays, food stipends, accessible transportation, and fuel gift cards are all funded through the DDAR program, including the administration and promotion of the program	
Portable Battery Program (PBP)	13,340,669	WMPMA	Described in Section III.B.1 above	
Generator and Battery Rebate Program	1,091,777	WMPMA	Described in Section III.B.1 above	
Community Resource Centers (CRCs)	16,300,000	Wildfire Mitigation Balancing Account (WMBA)	Hardening sites, back-end staffing costs (retainers, program management fees, training), logistics retainers, IT costs, and project management costs, contracted costs to stand up the sites during events	
Food Replacement Resources	372,300	WMBA	Food Banks, Meals on Wheels, Grocery Delivery (Food for Thought), Lost Sierra Project, Grocery gift cards (COPE Family Center), Open Heart Kitchen	
Haven of Hope on Wheels	700	WMBA	Portable laundry/shower service	
2-1-1 Referral Services	1,311,252	WMBA	Referral service to social services, transportation, food delivery, emergency preparedness	
Multicultural Media Partnerships & In- Language CBOs	400,000	WMBA	Multi-Cultural Media, in- language CBOs (5 - not billed for any outreach in 2021 - up front payment in 2020) + CA Council for the Blind (\$3500)	

Table 15: Costs & Funding Sources for Partnerships

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

See Table 15 in Section III.B.2.

Section III.B.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 power shutoff event; Response:

PG&E has support for individuals with access and functional needs and vulnerable populations throughout our entire service area through our agreements with the California Foundation for Independent Living Centers (CFILC) and the California Network of 211s.

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

Section III.C.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:

The August 17, 2021 PSPS event was the only PSPS event in 2021 that utilized temporary microgrids. In this event we safely provided power to portions of four de-energized communities where we pre-installed equipment to safely island and energize temporary microgrids. The objective of temporary microgrids is to enable some community resources to continue serving the surrounding population during PSPS events where it is safe to do so by using pre-installed interconnection hubs to safely and rapidly interconnect temporary generation. Table 16 lists the circuits and number of customers supported by temporary microgrids operated during the PSPS event.

PSPS Event Start Date	Circuit	Temporary Microgrid	Generation Deployed	Customers Energized
08/17/2021	Volta 1102	Shingletown (Shasta County)	1.5 MW	83
08/17/2021	Paradise 1105	Magalia (Butte County)	1.5 MW	34
08/17/2021	Calistoga 1101	Calistoga (Napa County)	5.99 MW ⁵	315
08/17/2021	Calistoga 1102	Calistoga (Napa County)	5.99 IVI W ³	1,241
08/17/2021	Silverado 2104	Angwin (Napa County)	0.5 MW	48

Table 16: Mitigation provided through microgrids in 2021 PSPS Events

While temporary microgrids do not often directly support large numbers of customers, the community resources served by the temporary microgrids include critical services such as fire stations, local water and waste companies, markets, post offices, and medical facilities. On average, customers served by the temporary microgrids experience de-energization periods of under 30 minutes for the switch-over from grid to microgrid and "go-back" from microgrid to the grid.

Throughout 2021, we also utilized our rental fleet of temporary generators to mitigate the impacts of PSPS on our customers. This fleet was used to support 13 stand-alone facilities serving public safety.

Table 17 lists critical facility and infrastructure customers that received backup generation in the August 17, 2021, September 20, 2021, October 11, 2021, and October 14, 2021 PSPS Events. PG&E did not deploy backup generation for the January 19, 2021 PSPS Event.

⁵ The Calistoga (Napa County) microgrid provided a combined 5.99 MW of power to the Calistoga 1101 and Calistoga 1102 circuits. This number differs from what was previously reported in the August 17, 2021 Post Event Report (5.13 MW). This microgrid was the first to utilize a new technology of Tier 4 generator engines and experienced communication errors between engines. The generators supporting the microgrid were ran successfully in test mode, but four generators failed when the actual microgrid load was applied during the PSPS event. As a result, two additional 1 MW generators were deployed to support the microgrid.

Event Start Date	Circuit	County	Site Name	Deployed Generation (KW)	Duration of Operation (hrs.)	Reason Deployed
08/17/21	Volta 1102	Tehema	Water District	200	56	High risk to the environment
09/20/21	Tejon 1102	Kern	Water District	36	28	High risk to the environment
09/20/21	Cortina 1101	Colusa	Tribal Health	20	44	Risk to Public Safety
10/11/21	Middletown 1102	Lake	Water District	400	60	High risk to the environment
10/11/21	Middletown 1102	Lake	Water District	200	58	High risk to the environment
10/11/21	Highlands 1103	Lake	Water District	200	60	High risk to the environment
10/11/21	Middletown 1102	Lake	Elementary School	125	59	Risk to Public Safety
10/11/21	Tejon 1102	Kern	Water District	200	45	High risk to the environment
10/11/21	Tejon 1102	Kern	Water District	50	44	High risk to the environment
10/14/21	Corning 1102	Tehama	Communications	150	4	Risk to Public Safety
10/14/21	Elk Creek 1101	Glenn	Community Center	56	22	Risk to Public Safety
10/14/21	Tejon 1102	Kern	Water District	200	25	High risk to the environment
10/14/21	Tejon 1102	Kern	Water District	50	44	High risk to the environment

 Table 17: Critical Facility and Infrastructure Customers Energized with Backup Generation

D. Public Safety Partners [Authority: D.21-06-034, Guidelines at p. A16, Section K-3.c.] Section III.D.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. Response:

There were no selective re-energization requests made by Public Safety Partners during our 2021 PSPS Events.

E. Transmission [Authority: D.21-06-034, Guidelines at pp. A15-A16, Section K-3.b.] Section III.E.1 - Description of the impact of de-energization on transmission. Response:

PG&E did not de-energize transmission circuits during the January 19, September 20, and October 14, 2021 PSPS events.

During the August 17, 2021 PSPS Event, three transmission circuits were de-energized, causing impacts to one transmission-level entity and one substation.

- The transmission-level entity did not experience an incremental impact as the entity's distribution services were already de-energized through the distribution scope and the entity already had backup generation in place to allow them to remain energized through the duration of the event.
- The substation was de-energized due to a directly impacted transmission line. The impact on the substation was partially mitigated by the Calistoga Distribution Microgrid.

During the October 11, 2021 PSPS Event, three transmission circuits were de-energized. The deenergization did not impact any transmission-level entities.

Section III.E.2 - Evaluation of how to mitigate and prepare for those impacts in future potential deenergization events. Response:

As discussed in Section III.E.1 above, the single transmission-level entity did not experience an incremental impact as the entity's distribution services were already de-energized through the distribution scope and already had backup generation in place to remain energized through the duration of the event. De-energization of the transmission line did not have an additional impact to the transmission-level entity, and therefore, no additional mitigation was necessary. For more information on PG&E's transmission-level mitigations, please refer to the Revised 2021 WMP Section 8, pages 920 to 925.

In September 2021, PG&E operationalized our current transmission scoping protocols, which would have fully mitigated the impact that the single substation experienced during the August 17, 2021 PSPS event. An enhancement for 2021 transmission vegetation PSPS criteria is that the risk is dynamic to the fire danger of each tree in each weather event through its combination with the Fire Potential Index model. Under these enhanced transmission scoping protocols, the substation would not have been de-energized.

Section III.E.3 - Identify and describe all studies that are part of such analysis and evaluation. Response:

Please refer to the Revised 2021 WMP Section 8.2.2, Page 950 to 955 for PG&E's PSPS Protocols including the studies that are part our analysis and evaluation.

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

PG&E conducted outreach to publicly owned utilities (POUs) in advance of wildfire season to inform them of PSPS scoping model adjustments, as well as updated information related to tree overstrike data, and historical number of actual and estimated events. In addition, new requirements were communicated regarding verification of POU ability to safely return to service after a PSPS event.

PG&E also held a series of Wildfire Safety Regional Webinars with focus on individual counties throughout 2021 to provide members of the public with information on PSPS and Community Wildfire Safety Program (CWSP) activities. Topics included CWSP progress in 2021, system hardening efforts, enhanced vegetation management work, PSPS notification timelines and criteria, and PSPS customer support resources. Webinar presentations and recordings were made publicly available on PG&E's CWSP website.

Table 18 is a summary of the various outreach and coordination efforts with publicly owned utilities.

Customer or POU	Summary of Outreach and Engagement	Date of Completion
Northern California Power Agency (NCPA) and Plumas Sierra Rural Electric Cooperative (PSREC)	PG&E hosted a call to discuss system hardening and resiliency projects to reduce the scope and impact of PSPS events in the area.	January 12, 2021
NCPA and the City of Lompoc	PG&E hosted a call to discuss system hardening and resiliency projects to reduce the scope and impact of PSPS events in the area.	October 13, 2021
City of Healdsburg	PG&E met to discuss PSPS mitigation topics including 1) the installation of Supervisory Control and Data Acquisition (SCADA) switching equipment in 2022, which would provide PG&E with remote operational capability for sectionalization in order to reduce the number of affected customers during a PSPS, and 2) manual operation of the non-SCADA switch prior to SCADA installation.	June 7, 2021
NCPA, the City of Healdsburg, and PSREC	PG&E held a call to discuss SCADA, PSPS Portal access, and system hardening and resiliency projects to reduce the scope and impact of PSPS events in the area.	April 1, 2021
NCPA, PSREC, the City of Healdsburg, and the City of Ukiah	PG&E hosted a PSPS Tabletop Exercise for the Northern Region	July 14, 2021
NCPA, PSREC, the City of Healdsburg, and the City of Ukiah	PG&E hosted two PSPS Full Scale Exercise Observer Briefings	July 22, 2021 and July 23, 2021
All POUs	PG&E held weekly online PSPS Portal Trainings that included POUs to provide familiarization with PSPS Portal functionality, review the registration process, and discuss the resources and information available during PSPS events.	August 2021 – October 2021

Table 18: Outreach and Engagement with POUs

Customer or POU	Summary of Outreach and Engagement	Date of Completion
Wholesale and municipal customers	PG&E hosted an interactive PSPS Readiness Webinar. Topics included updates on PSPS and CWSP progress in 2021, enhanced tree strike models, PSPS notification timelines and criteria, and an overview of PG&E's Grid Control Center (GCC) and other PSPS support resources.	August 20, 2021
All POUs	PG&E hosted a PSPS Public Safety Partner Webinar to discuss wildfire prevention efforts, customer support resources before, during, and after PSPS events, and improved wildfire safety technology and tools.	August 24, 2021
NCPA and the City of Ukiah	PG&E hosted a PSPS Full Scale Exercise. PG&E's Emergency Operations Center (EOC) and Grid Control Center (GCC) contacted the City of Ukiah via phone and e-mail to confirm their acknowledgement of exercise activities and to gain real-time input from the POU for insertion into the exercise.	August 26, 2021 and August 27, 2021
NCPA	PG&E hosted a Concept and Objectives Meeting to collaborate in the planning and execution of PG&E's PSPS Full Scale Exercise scheduled for 2022.	December 16, 2021

We did not de-energize any POUs or cooperative transmission entities during the 2021 PSPS events.

For more information on our efforts to work with publicly owned utilities and cooperatives to evaluate the impacts of de-energization on transmission, please review PG&E's Revised 2021 WMP section 8.2.2, pages 950 to 955 and Section 8.2.4, page 971.

F. Tree Overstrike [Resolution M-4856, Guidelines at pp. 14-15,]

Section III.F.1 - In addition, within its ongoing PSPS post-season reporting framework, PG&E must include data showing its best estimate of how the inclusion of tree overstrike, distinct from other factors in its PSPS modeling, impacted PG&E's PSPS decision-making. PG&E's report should estimate the changed frequency, duration, scope, and scale of PSPS events, including the additional number of customers, customer hours, and circuits that were de-energized as a result of the inclusion of tree overstrike criteria. The report should address the wildfire season overall, and each PSPS event to the extent possible. Response:

On April 20, 2021, we presented to the CPUC our interim methodology for incorporating tree overstrike during the "tree overstrike workshop"⁶. The interim methodology for incorporating tree overstrike in our PSPS protocols was in direct response to the Federal Court Judge Alsup's proposed conditions. An excerpt of the proposed conditions are as follows:

In determining which distribution lines in Tier 2 or Tier 3 to de-energize during a PSPS, PG&E must take into account all information in its possession and in the possession of its contractors and subcontractors concerning the extent to which trees and/or limbs are at risk of falling on those lines in a windstorm. In determining which distribution lines to de-energize during a PSPS event, PG&E will implement this condition by July 1, 2021, by considering the existence of all outstanding vegetation management work tagged "Priority 1" or "Priority 2" within PG&E's service territory that is subject to potential de-energizations. PG&E shall also consider the approximate number of trees tall enough to fall on the line irrespective of the health of the tree and irrespective of whether the tree stands outside or inside prescribed clearances. The latter may be done by simply rating the total approximate number of such tall trees along a line as "None," "Few," "Average" or "Many," and by treating the "Many" category as posing a greater risk than the "Average" category and the "Average" category as posing a greater risk than the "Few" category and so on.

In our May 2021 submission of tree overstrike data to the CPUC⁷, we described how we would be utilizing our 2020 PSPS Protocols to meet the recommendation from Judge Alsup. This included using the top 30% of overstrike risk as a temporary bridge until the 2021 PSPS protocols were approved. As described above and noted when we first provided this data, we continued to refine our approach for 2021 PSPS decision making. One of the refinements is that 2021 PSPS Protocols no longer used a strict guideline for tree overstrike and instead incorporated tree overstrike as a continuous feature (0 to 100%) as part of the machine learning model that correlates overstrike to ignition potential.

The 2021 Ignition Probability Weather (IPW) model is a state-of-the-art analysis that is a significant refinement of our PSPS decision-making process. The model also weights recent years more heavily, allowing the model to learn of both positive (e.g., hardening and EVM) and negative relationships to weather and outages in local areas over time. The IPW model outputs the probability of six outage classes for each 2 x 2 km grid cell based on weather variables, tree overstrike per 2 x 2 km grid cell from aerial Light Detection and Ranging (LiDAR), and a local "node" categorical variable. The model was tested by first training on every hour and grid cell from 2008-2019 and evaluating performance against 2020. Once performance was quantified, 2020 was incorporated into model training for operational use through 2021.

In August 2021, we successfully operationalized the 2021 PSPS Protocol, which incorporated tree overstrike risk directly into the Ignition Probability Weather Model (IPW), rather than having it be a standalone protocol. Because of this, we are unable to separate out data to show how the inclusion of tree

⁶ PG&E Tree Overstrike Workshop: Implementation of PG&E Probation Conditions 11 and 12

⁷ Letter to President Batjer and Commissioners. 20 May 2021. Re: Tree Overstrike Workshop Follow-Up

overstrike, distinct from other factors in its PSPS modeling, impacted PG&E's PSPS decision-making. Tree overstrike is only one feature in the IPW model, and the IPW itself is combined with the Fire Potential Index (FPI) model to form PG&E's Catastrophic Fire Probability Distribution (CFP_D) and therefore, it is not feasible to quantify the effect that overstrike alone has on the changed frequency, duration, scope, and scale of PSPS events. IPW is a machine-learning decision-tree based model where the tree overstrike is one of several features that is modeled non-linearly and interreacts with the other features. See Figure 2 below explaining PG&E's IPW modeling and Figure 3 explaining IPW combined with FPI to form PG&E's 2021 PSPS protocol, Catastrophic Fire Probability Distribution.

As a result of the new 2021 PSPS protocols, PG&E conducted a historical analysis of PSPS events based on the last four years of hourly climatological weather data comparing 2020 protocols, 70th percentile tree overstrike and the new 2021 protocols (expected and actuals). See Figure 4.

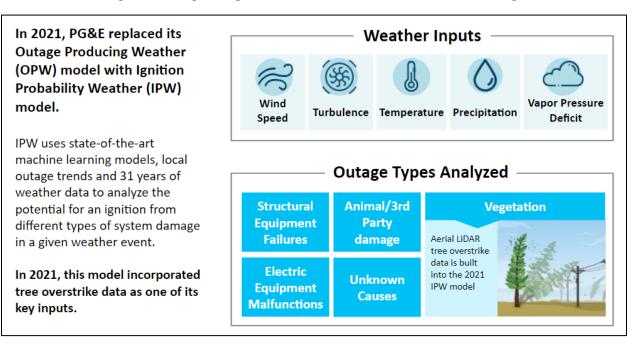


Figure 2: Incorporating Tree Strike Potential into PSPS Event Modeling

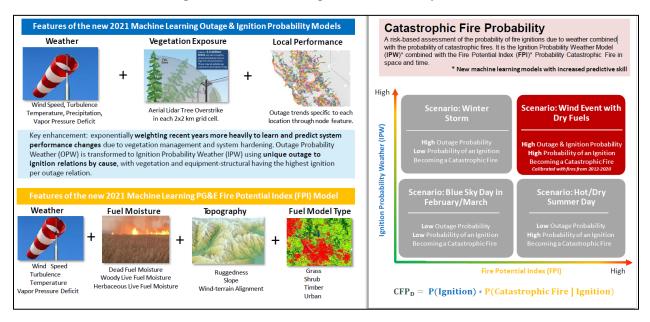


Figure 3: PG&E Catastrophic Fire Probability Model

Figure 4: Historical Analysis of PSPS Outages Based on 2021 Protocols

The chart below uses the last four years of hourly climatological weather data to show the number of potential PSPS outages with the new 2021 models and guidance, as well as 2021 actuals.

			HISTORICAL ANALYSIS			HISTORICAL ANALYSIS		ACTUALS
	Reduced risk of catastrophic wildfires based on improved	Potential Customer Impacts	2020 PROTOCOLS	70 th PERCENTILE OVERSTRIKE	2021 PROTOCOLS	2021 PSPS OUTAGES		
	machine learning models	Event Frequency	~4.5 events per year	~6.5 events per year	~4.75 events per year	4 events		
	Slight increase in outage count across lookback	Average Outage Duration (includes restoration time)	~ 35 hours	~35 hours	~35 hours	28 hours		
	Fewer customer impacts compared to 70 th percentile overstrike data presented	Average Outage Customer Count	~ 110K customers**	~125K customers**	~80K customers**	~19K customers		
	during 4/20 CPUC workshop	Largest Outage Customer Count	~510K customers**	~550k customers**	~410K Customers**	~48K customers		
**Averages were calculated using transmission and distribution impacts from all outage included in the 4-year historical baseline and the same number of outages using the new criteria. All data is for planning purposes.					0			

Section III.F.2 - Pacific Gas and Electric Company (PG&E) must include within its ongoing public safety power shutoff (PSPS) post-season reporting framework, information describing any material adjustments to, or canceled use of, PG&E's reliance on tree overstrike criteria in its PSPS decision-making. Response:

As discussed above, tree overstrike data is incorporated directly into our IPW machine learning and overall Catastrophic Probability Model. No changes to this methodology have been made since the Revised 2021 WMP submission.

Section III.F.3 - Pacific Gas and Electric Company (PG&E) must include within its ongoing public safety power shutoff (PSPS) post-season reporting framework, its best estimate of PG&E's tracking and reporting of incremental costs it incurs related to:

a. Incorporation of tree overstrike criteria into PG&E's PSPS decision-making (for example, gathering information, modeling using tree overstrike, and time associated therewith); and,

b. Implementation of tree overstrike criteria into PG&E's PSPS related de-energization activities (for example, any incremental notices, community resource centers, batteries and other costs associated with implementing PSPS).

Response:

As mentioned above in Section III.F.1, PG&E incorporated tree overstrike risk directly into our Ignition Probability Weather model, instead of tree overstrike being factored as a standalone criterion in our PSPS Decision Making Process. Because of this, we are unable to separate out incremental costs incurred related to the incorporation of tree overstrike criteria into our PSPS decision making and de-energization activities. However, we have performed an overall PSPS cost comparison⁸ between 2020 and 2021. In 2020, our estimated average cost of a PSPS event was \$12,677,000⁹. In 2021, our estimated average cost of a PSPS event was \$5,113,250¹⁰.

In August 2021, PG&E conducted direct outreach to customers and agencies to inform them of PG&E's inclusion of tree overstrike for PSPS. The estimated incremental costs associated with communication and outreach efforts related to tree overstrike were approximately \$617,200.

⁸ PSPS costs are tracked for each event via orders related to PSPS activities such as Distribution Field Activities, Vegetation Management, Community Resource Centers, Customer Care Support, Aviation Support, Information Technology Field Support, Mutual Aid, Temporary Generation, Fleet Support, and EOC Administration Orders.

⁹ Average cost of 9/7/20, 9/27/20, 10/14/20, 10/21/20, 10/25/20, and 12/2/20 PSPS events.

¹⁰ Average cost of 8/17/21, 9/20/21, 10/11/21, and 10/14/21 PSPS events, where we operationalized our 2021 PSPS Protocols. Excludes 1/19/21 PSPS event, where we operationalized our 2020 PSPS Protocols. The difference in costs cannot be attributed to one factor, rather the 2021 costs were associated with mitigations, improved modeling and protocols, and favorable weather.

Section IV – Safety and Enforcement Division Specified

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

We deployed new machine learning models to predict the probability of outages and ignitions and probability of catastrophic fires in 2021. Through standard train-split testing on historical data, these models improved the predictive skill over previous model versions. These models were utilized in all 2021 PSPS events aside from the January event. No catastrophic fires occurred during any of the 2021 PSPS events, while damages and hazards were found during post-PSPS patrols and inspections. Fire simulations conducted by Technosylva from damage locations found during the 2021 PSPS events indicate that we may have avoided >700,000 acres burned. The simulations show that more than 86,000 buildings and 92,000 population could have been impacted by these fires. Note that these fires are 24-hour simulations and do not include suppression.

An additional positive development in 2021 was the utilization of cloud computing in Amazon Web Services (AWS). The high-resolution weather models and sub-models (dead and live fuel moisture) require significant computing resources. Each day, multiple terabytes of weather, fuels and PSPS model data are processed through AWS. Our PSPS models were fully deployed and accessed through AWS during each PSPS event. We believe we have built a great foundation in the AWS cloud to further develop and ingest higher resolution models, ensemble prediction and additional sub-models, which we anticipate will significantly increase the size of data processed in the future.

An area we've identified for improvement is the further adoption of ensemble prediction. Our PSPS models and sub-models are driven by a high-resolution deterministic weather model that is updated 4 times per day. During events, the outputs from the deterministic model can change slightly run-to-run and locations near our trigger values for PSPS may come in (above guidance) and out of scope (below guidance) from a modeling perspective. These changes can be challenging due to the time-requirements and operational considerations to inform counties, agencies, stakeholders, and staff accordingly for a potential PSPS event.

In 2022 we are evaluating the use of ensemble mean output from our high-resolution weather model ensemble to drive our PSPS models and sub-models. This may provide more accurate output and have less variability in the forecast. Following the final submission and filing of the 2022 WMP, please refer to the PSPS and numerical weather prediction sections of our 2022 WMP for more detail.

Section IV.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:

The PG&E Risk-Benefit tool addresses PSPS-OII Decision D.21-06-14, which requires California IOUs to evaluate and compare the 1) public risks associated with de-energization and the 2) consequence of a catastrophic wildfire during a potential PSPS event. The intent of the tool is to inform the decision-making process using a quantitative approach that evaluates the de-energization and catastrophic wildfire risks. If the risk associated with a catastrophic wildfire is greater than the risk of calling a PSPS event (ratio > 1), the analysis indicates potential de-energization benefit outweighs the risk of a catastrophic wildfire event.

$\frac{PSPS Potential Benefit (wildfire risk)}{PSPS Potential Risk} > 1$	Indicates potential PSPS benefit outweighs risk
PSPS Potential Benefit (wildfire risk) PSPS Potential Risk < 1	Indicates potential risk may outweigh potential benefit

While there were some initial challenges in operationalizing PG&Es Risk-Benefit tool, we resolved these through our continued implementation and improvement of the tool and process throughout each PSPS event in the 2021 season. We were able to validate the decisions to de-energize for all four 2021 PSPS events in which the tool was applied, which includes August 17, 2021; September 20, 2021; October 11, 2021; and October 14, 2021 PSPS events. As this requirement was not in place for the January 19, 2021 PSPS event, the tool was not deployed at that time.

The aforementioned challenges included – 1) aligning with the other IOUs on applying the Multi Value Attribute Function (MAVF) framework and on the assumptions related to the risk-attributes used to quantify the risk; 2) the development of a wildfire consequence model for each impacted circuit that accounted for the most recent meteorology weather data; 3) and the streamlining of the tool and processes to generate results rapidly, which was required to meet the short timelines of the Officer-In-Charge (OIC) Decision-Making process. These initial challenges were not straightforward and required the collaboration amongst the IOUs, spanned numerous subject matter experts, and required executive leadership input and approval.

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

We have developed and implemented a Multi-Year Training and Exercise Plan (MYTEP) to aid in building a resilient emergency management team. The MYTEP is the roadmap for implementing PG&E's training and exercise standards. This multi-year strategy and planning cycle identifies key training priorities, and pursues a coordinated emergency management training strategy across all lines of business to achieve the following:

- develop corporate capabilities through a progressive building-block approach to both training and exercises;
- identify specific areas for improvement through real-world incidents and exercises, afteraction reports, and internal/external feedback; and
- identify training and exercise requirements to strengthen PG&E's response and recovery capabilities.

Training and exercises play a crucial role in our Emergency Preparedness and Response (EP&R) Team's strategy, providing us with a means of attaining, practicing, validating, and improving capabilities. The MYTEP is designed to consolidate and de-conflict training and exercises relevant for all emergency personnel within PG&E. This approach will support PG&E in building a resilient emergency management team through maximizing opportunities to coordinate, collaborate, and improve our emergency personnel's effectiveness in responding to, recovering from, and mitigating identified threats.

General All-Hazard training, as well as PSPS-specific training, are both a part of our MYTEP, with the PSPS-specific training building upon the All-Hazard training program with additional PSPS-specific content. Below we describe in more detail the components of our All-Hazard and our PSPS training programs.

EOC Training Program

All emergency personnel have been and will continue to be provided with enhanced training and resources to align with National Incident Management System (NIMS) training requirements and California's Standardized Emergency Management System (SEMS). We utilize the Incident Command System (ICS), which is a component of NIMS, as part of our emergency response to incidents, including PSPS events. The EP&R team within PG&E has developed an ICS training curriculum that builds on a foundation of pre-requisite courses and supports all Emergency Operation Center (EOC) activation activities. The training curriculum is a four-phased approach to training and includes ICS training, EOC orientation, and position-specific courses for emergency personnel.

PG&E EP&R Training Phases I-IV¹¹

- Phase I: ICS Baseline Courses
 - Phase I of the training curriculum includes the foundational courses for SEMS and NIMS required of all EOC personnel and pre-requisites to any advanced training.
- Phase II: California Specialized Training Institute (CSTI) EOC Baseline Course
 - Phase II training curriculum are recommended additions per the State's (CSTI) request that all EOC staff take CSTI EOC baseline courses.
- Phase III: Advanced ICS for Select Personnel
 - Phase III of the training curriculum will provide intermediate training (ICS-300) to all EOC supervisory positions and advanced training (ICS-400) for all Command and General staff.
- Phase IV: Position-Specific Training
 - Phase IV of the training curriculum focuses on training for specific EOC roles.

PSPS Training Program

The intent of this program is to provide PSPS-specific content to individuals working in the EOC during a PSPS activation. This program builds on the ICS training curriculum, and provides additional knowledge & skills specifically related to responding to a PSPS event. The PSPS Training Program includes:

- An introductory PSPS course for all EOC personnel
- Section specific courses tailored for PSPS activations
- Role specific courses for positions with PSPS responsibilities, which also includes skill checks which build competency & confidence
- General Audience trainings related to PSPS specific topics for EOC personnel

¹¹See PG&E's 2020 "Annual Report on Compliance with General Order 166", Standard 3 filed with the commission in compliance with General Order 166, Standard 3.

Section IV.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:

Throughout 2021, our EOC was activated in a virtual posture due to COVID-19 health and safety considerations, as well as local health guidelines. At the start of each PSPS EOC activation, state, local and tribal agencies were invited to virtually embed with PG&E's EOC. While embedded, external partners had access to briefings and direct contact with PG&E EOC team members to ask questions.

We also offered county and tribal governments a PG&E Agency Representative to embed in their local EOC, dependent on COVID-19 health and safety considerations. In 2021, PG&E did not receive any requests from Public Safety Partners for PG&E Agency Representatives to embed in their local EOCs.

The above policies are noted in page 25 of PG&E's Public Safety Power Shutoff Policies and Procedures for Emergency Managers, which can be found <u>here</u>.

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

We held a week-long Full-Scale Exercise (FSE) on May 24 – May 28, 2021 and a shorter two-day Functional Exercise (FE) on August 26 – August 27, 2021, during which we simulated a PSPS event with the objective to test our PSPS processes and tools, and to train our emergency response team members responsible for responding to a real world PSPS event. While many processes and tools of the exercises went well, there were issues with the format chosen to simulate the event – for example, the chosen format did not enable us to incorporate a full night shift, impacting the deliverables needed to be created in advance of the day shift portions of the exercise. The delayed deliverables caused delayed meetings and put a noticeable time constraint on the multiple teams who had critical role and functions within the exercise. As we plan future exercises in 2022 and beyond, we are evaluating options on how address the lessons learned from not having a night shift incorporated in the exercise. These options include having the day shift produce the materials needed or having a full night shift participate in the exercises.

Another area for improvement across both the FSE and the FE was the "All-Clear" process during the restoration phase of the PSPS event. This new process was developed during the 2021 off-season, and there were noticeable areas for improvement, specifically around communication and training. Following the May FSE, we developed more refined training and procedures which we shared with our operations teams involved in the "All-Clear" process during a PSPS event activation. Following additional practice during the August FE, we identified additional opportunities for improvement, some of which include refining the information needed at the "All-Clear" meetings and expediting the delivery of the restoration playbook to Operations. Following the May FSE and the August FE, additional training and process during a PSPS event activation, resulting in a more cohesive and standardized implementation of the process during actual 2021 PSPS events.

Across both the FSE and the FE, additional lessons learned with regards to our external engagement included developing clear exercise materials to make the exercises more understandable for external partners, confirming that all data is checked for timeliness and accuracy and aligns across the various external platforms, and developing simpler procedures to review logistical information for the Systemwide Cooperators calls. Improvements in these areas enabled our external partners to have a more effective engagement with us during actual 2021 PSPS events.

In addition to testing our processes, the FSE and FE are also an opportunity to test the tools that support various processes and deliverables throughout a PSPS event activation. One of the improvement areas identified during the exercises was related to further automating our scoping processes and the creation of key deliverables which support our internal and external information sharing efforts. We leveraged multiple internal teams, including our Technology, PSPS Program and External Engagement teams, to prioritize key opportunities for automation ahead of the 2021 PSPS season. Some of the technical improvements we have made to support a more efficient PSPS execution included automating the creation and upload of various externally facing reports, building out dashboards to generate data necessary for scoping process, automating the creation of the PSPS season to better support PSPS event activations. Based on feedback from our Public Safety Partners and our internal after-action reports, both external and internal teams observed noticeable improvements to our scoping process and deliverables to support our external and internal information sharing.

The May FSE specifically highlighted two training shortfalls in our CRC support. The first improvement area was a gap in the Temporary Generation (Temp Gen) EOC branch's understanding of CRCs and the role this branch plays in supporting CRC operations. To address the gap, a Temp Gen specific training focused on CRCs was held in June 2021, which included the following topics (not an exhaustive list) –

CRC types and resources, the role of temporary generation in supporting CRCs, and CRC activation processes. As a follow-up to the training, we developed and shared a resource document with all Temp Gen EOC staff and saved it in an easily accessible location for future reference. The second CRC improvement area was confirming that EOC teams who support CRCs follow the documented standardized processes for setting up and operating CRCs. Following the FSE, we reviewed and revised the existing CRC activation process documentation, where needed, to provide additional clarity to supporting EOC personnel. During the pre-season readiness training held in August 2021, we reshared the updated procedure documents with all teams who support CRCs during PSPS activations.

The August 26 – August 27, 2021 FE had five major objectives: Planning, Operational Coordination and Communication, Public Information and Warning, Situational Awareness, and Critical Resources.

There were several identified opportunities for improvement, some of which include lack of clarity of role-specific tasks, lack of clarity around the internal communication and information sharing, and adherence to ICS principles. Detailed task-specific job aids and role-specific training was rolled out across several PSPS-specific roles to ensure all staff clearly understood their responsibilities and tasks inevent. Additional training was also rolled out to specific EOC staff (Situation Unit, Finance and Admin Section Chiefs) to ensure ICS principles were being followed. Further role-specific training is planned to be rolled out in 2022 as part of Phase 4 of the MYTEP training strategy. To address the internal communication sharing, our team has been reviewing necessary in-event documentation for situational awareness across all types of hazards, and is currently updating the EOC Documentation standard which will provide clarity around best practices for communication and what information to be shared and in what format across each type of hazard.

Overall, exercises continue to be a valuable means of exercising PSPS processes for the company and our partners. As further improvements are made to the PSPS Program, EOC and PSPS Training Programs will follow suit. The PSPS Exercises highlighted that additional and refresher training was needed to allow EOC personnel to be more confident and competent in performing their responsibilities. Throughout the PSPS season we took action to address training needs and provide robust EOC and PSPS Training Programs. In collaboration with training professionals, formal training programs were developed and delivered to target audiences in the form of structured curriculum paths with activities and exercises, knowledge and skills checks, and performance support tools to support the training inside and outside of the learning environment. Participants' knowledge and skills were assessed to ensure competence. The impacts from the improved training were noticed through participant and supervisor feedback and in the performance during real PSPS events.

In addition to areas for improvement, we would like to note that there were also successes in our 2021 exercises, including successfully incorporating external stakeholders as players and observers, successful teamwork across all sections in coordinating and executing key steps in the PSPS process, and simulating agency and customer notifications in accordance with the required cadence for a PSPS event.

Section IV.6 - Discuss how you fully implemented the whole community approach into your deenergization exercises. Response:

Our PSPS exercises were conducted enterprise-wide, within specific lines of business, and in selected regions to meet preparedness goals and address gaps in response capabilities. We invited external partners to observe, provided information, and gave presentations during workshops, seminars, and discussion-based exercises. External participants are encouraged to submit feedback after each exercise. In some instances, external partners were invited to participate as players and in 2022 will be invited to be part of the planning team to allow for integrated exercise participation. See Tables 19 and 20 for a list of each of the 2021 PSPS exercises and levels of participation by external partners.

PSPS Exercise Series External Participation

Several state, local, and community partners observed the PSPS Exercise Series. Table 19 identifies the external observers and their respective exercise participation. Table 20 identifies the external players and their respective exercise participation. " \checkmark " indicates entity participated, "I" indicates entity was invited (participation not confirmed).

External Observer	Tabletop Exercise TTX #1	Full Scale Exercise FSE	Tabletop Exercise TTX #2	Functional Exercise FE
State Agency Partners				
California Governor's Office of Emergency Services (CalOES)	√	√	✓	✓
California Department of Forestry and Fire Protection (CAL FIRE)		✓	Ι	Ι
California Public Utility Commission (CPUC)	✓	✓	✓	✓
Local Agency Partners				
Bay Area Rapid Transit (BART)	Ι	Ι		
PCSO			✓	Ι
City of Lompoc	√	Ι		
City of Oakland	√	✓		
City of Berkeley	√	Ι		
City of Dublin	Ι	Ι		
City of Livermore	Ι	Ι		
City of Pleasanton	Ι	Ι		
Lawrence Berkeley National Lab	Ι	Ι		
City of Morro Bay		Ι		
Pleasanton Fire		Ι		
City of Paso Robles		Ι		
City of Richmond	✓	✓		
City of Chico			Ι	Ι

 Table 19: External Organizations Participated in the PSPS Exercise Series as Observers

External Observer	Tabletop Exercise	Full Scale Exercise	Tabletop Exercise	Functional Exercise
	TTX #1	FSE	TTX #2	FE
City of Santa Rosa			Ι	√
City of Healdsburg			✓	Ι
City of Ukiah			Ι	✓
Town of Paradise			Ι	Ι
Telecommunication Companies				
AT&T	✓	✓	✓	✓
Verizon			Ι	
Comcast	✓	Ι	Ι	✓
Frontier	✓	✓	✓	Ι
Sierra Telephone	✓	Ι		
Charter Communications			Ι	
Wave Broadband			✓	Ι
Mediacom			Ι	
Utility Partners				
Association of California Water Agencies (AWCA)			Ι	
Bella Vista Water District			✓	
East Bay Community Energy	Ι			
Filsinger Energy	✓	✓	✓	✓
Sonoma Clean Power			✓	✓
MCE Community Choice Energy			Ι	
Pioneer Community Energy	Ι			
Solano Irrigation District			✓	✓
Marin Clean Energy			✓	✓
Cal Water	Ι	Ι	✓	Ι
Northern California Power Agency (NCPA)			✓	Ι
City of Healdsburg			✓	✓
Oncor			✓	
Peninsula Clean Energy	Ι	Ι		
PSREC			✓	Ι
LA County	Ι	Ι		
3CE	Ι	Ι		
Pacific Corp		Ι		
Riverside County		Ι		
SDGE	✓	✓		
SoCal Gas	✓	Ι		
East Bay Municipal Utility District		Ι		

External Observer	Tabletop Exercise TTX #1	Full Scale Exercise FSE	Tabletop Exercise TTX #2	Functional Exercise FE
Community Based Organizations				
CFILC				Ι
Food Bank	√			
Adventist Health			✓	Ι
Action Center				✓
Tribal Partners				
Buena Vista Rancheria	Ι		✓	Ι
Graton Rancheria	Ι		Ι	Ι
Ноора	Ι		Ι	Ι
Round Valley Reservation			✓	Ι

External Players	Tabletop Exercise	Full Scale Exercise	Tabletop Exercise	Functional Exercise
	TTX #1	FSE*	TTX #2	FE
State Agency Partners				
California Governor's Office of Emergency Services (CalOES)	~	~		~
California Department of Forestry and Fire Protection (CAL FIRE)	√	√		
California Public Utility Commission (CPUC)				√
Local Agency Partners				
Bay Area Rapid Transit (BART)	√	✓		
Alameda County Sherriff	✓			
City of Santa Rosa			Ι	
City of Healdsburg			✓	
Telecommunication Companies				
AT&T	√	✓	✓	Ι
Comcast	Ι	Ι		
Wave Broadband			Ι	Ι
Utility Partners				
East Bay Municipal Utilities District	✓	Ι		
MCE Community Choice Energy				Ι
Pioneer Community Energy			✓	✓
Northern California Power Agency			✓	Ι
PSREC			Ι	
Glen Colusa Irrigation District			✓	✓
City of Ukiah			Ι	✓
City of Healdsburg			✓	
Cal Water	Ι		Ι	Ι
3CE	✓			
Community Based Organizations				
Silicon Valley Independent Living Center	√			
Center for Independence of Individuals with Disabilities	~			
Independent Living Center	✓			
CFILC	✓			
Community Resources for Independent Living (CRIL)	✓			
Disability Services and Legal Center	✓			
Disability Resources Agency for Independent Living (DRAIL)	~			

Table 20: External Organizations Participated in the PSPS Exercise Series as Players

External Players	Tabletop Exercise TTX #1	Full Scale Exercise FSE*	Tabletop Exercise TTX #2	Functional Exercise FE
Food Bank		FSL	117 #2	I
Meals on Wheels – Diablo Region	✓			
Action Center				✓
FREED				✓
Tribal Partners				
Enterprise Rancheria				Ι
Contina Rancheria				Ι
Shingle Springs Rancheria				Ι
Blue Lake Rancheria				Ι
Hoopa Tribe				Ι
Karuk Tribe				Ι
Yurok Tribe				Ι
Big Valley Rancheria				✓
Middletown Rancheria				✓
Scotts Valley Tribe				Ι
Cahto Tribe				Ι
Hopland Rancheria				Ι
Redwood Valley Rancheria				Ι
Round Valley Rancheria				Ι
United Auburn Indian Community				✓
Redding Rancheria				Ι
Pit River Rancheria				Ι
Dry Creek Rancheria				Ι
Graton Rancheria				✓
Yocha Dehe Wintum Nation				✓

In addition, representatives from many of the simulated impacted counties were invited and/or participated in an exercise in which their jurisdictions were included. Table 21 identifies the counties and their respective exercise participation. " \checkmark " indicates entity participated, "I" indicates entity was invited (participation not confirmed).

External Participant	Tabletop Exercise TTX #1	Full Scale Exercise FSE	Tabletop Exercise TTX #2	Functional Exercise FE
Tulare County	I I X #1	I I		FE
Alameda County	 ✓	I		
San Luis Obispo County	· · · · · · · · · · · · · · · · · · ·	1 ✓		
Fresno County	I	I		
Kern County	 ✓	1 ✓		
Santa Cruz County	I	I		
Mariposa County	 ✓	1 ✓		
Fresno County	I	I		
Madera County	I	I		
Calaveras County	I	I		
San Benito County	1	I		
San Mateo County	✓	1 ✓		
-				
Alameda County	I	I		
Santa Clara County	I	I ✓		
Tuolumne County				
Contra Costa County	I	Ι		
Butte County			✓	I
Colusa County			Ι	Ι
El Dorado County			I	Ι
Glenn County			Ι	Ι
Humboldt County			Ι	Ι
Lake County			\checkmark	Ι
Lassen County			Ι	Ι
Marin County			Ι	Ι
Mendocino County			Ι	Ι
Napa County			Ι	Ι
Placer County			Ι	Ι
Plumas County			Ι	Ι
Sacramento County			Ι	Ι
Shasta County			Ι	Ι

 Table 21: Representatives from Impacted Counties Observed the PSPS FSE Series

External Participant	Tabletop Exercise TTX #1	Full Scale Exercise FSE	Tabletop Exercise TTX #2	Functional Exercise FE
Sierra County			Ι	Ι
Siskiyou County			Ι	Ι
Solano County			Ι	Ι
Sonoma County			Ι	Ι
Sutter County			Ι	Ι
Tehama County			Ι	Ι
Trinity County			Ι	Ι
Yolo County			✓	Ι
Yuba County			Ι	Ι

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

For PG&E's 2021 PSPS events, we received 1,083 complaints¹² and have included details of these complaints in POSTSR4.

Nineteen complaints received were from agency partners through post-PSPS event surveys and real-time feedback to Agency Representatives. Most of these complaints (as documented in POSTSR4) conveyed feedback regarding timing of event notifications and information updates, concerns regarding Community Resource Center coordination and confusion regarding the PSPS criteria. We continue to review the feedback received and are making improvements including, but not limited to:

- Further automating the agency notification process to send notifications more quickly
- Agency Representatives conducting phone calls to minimally impacted counties to minimize the number of notifications they receive
- Uploading event-specific information at the pre-determined times

We aim to lower complaint rates year over year by mitigating PSPS impacts in general, collaborating more effectively with public agencies, and having additional dialogue with communities.

¹² Includes any "expression of grief, pain, or dissatisfaction."

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

Throughout our 2021 PSPS events, we made significant efforts to improve notifications to Public Safety Partners, Local/Tribal Governments, and impacted customers in accordance with the minimum timelines set forth by the CPUC PSPS Phase 1 Guidelines (D.19-05-042), weather and other factors permitting.

We notified over 97 percent of affected customers prior to de-energization, despite in-event weather shifts that caused PSPS footprint changes in each event. These notifications included improved content that was tested for usability and accessibility. Furthermore, we notified over 98 percent of impacted MBL customers through automated notifications and in person door visits, where needed.

Further, we provided proactive notifications and impacted zip code information to paratransit agencies that serve known transit- or paratransit-dependent persons that may need access to a Community Resource Center during PSPS events¹³. All notifications to paratransit agencies include a link to the PSPS emergency website event updates page, www.pge.com/pspsupdates and a section called "Additional Resources" with a link to a map showing areas potentially affected by a shutoff. Additionally, PG&E Agency Representatives were in coordination throughout the PSPS events with impacted jurisdictions to provide event updates. This coordination was well received in 2021, and many partners felt that "the [PG&E] government representatives are very communicative and proactive" and that they "received notification and updates in a timely manner."¹⁴

In 2022, we will improve data collection on customer contact information including master-meter customers and other non-account holders (e.g., renters), customer language preferences, and allow opportunities for customers to self-identify as vulnerable without impinging on data privacy laws. In 2022, six additional categories for which vulnerable customers can self-identify will be added and we will be executing a dedicated outreach campaign to promote self-identification in the newly added categories.

In 2022, we will refine our communications and notifications to make them as clear and accessible as possible for customers and community members (e.g., Estimated Time of Restoration (ETOR) accuracy).

Regarding agency notifications, we will continue to improve notification accuracy and timing and plan to refine the notification process based on agency feedback. This includes having Agency Representatives conduct live calls to inform agencies of minimal customer impacts (i.e., counties with less than 50 impacts) in lieu of notifications. We are also working to further automate notifications for agencies outside of this threshold to send notifications more quickly.

For more information on PG&E's notification failures and explanations of what caused the failures for PG&E's 2021 PSPS Events, see Section 5.5 in PG&E's 2021 post-event reports for each PSPS event. For more information on how we will correct these notification failures, see Section 5.6 in PG&E's 2021 post-event reports for each PSPS event.

¹³ D.21-06-034

¹⁴ October 2021 Post-PSPS survey

Section IV.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:

During PSPS EOC activations, PG&E Agency Representatives, typically a Public Safety Specialist or Tribal Liaison, serve as the county/tribe's single point-of-contact. We also provide the county/tribe with the on-call Liaison Branch Director's contact information for urgent matters. Local Government Affairs Representative act as the Agency Representatives for city staff. By designating and identifying the single points-of-contact, it minimizes the potential duplications of communications to agencies.

Our Liaison Branch Director hosts twice-daily briefings with all Agency Representatives to discuss the latest event-specific information and updates. The meetings include reviewing event scope, weather updates, customer and external partner resources, notifications, and news releases. Agency Representatives also have an opportunity to raise agency questions or concerns.

One of the lessons learned during the 2021 PSPS outages is to review and update communication sequencing. For example, providing event-specific information to state and local/tribal agencies concurrently, rather than sequentially. To improve event communications to our partners, we implemented real-time adjustments so that Agency Representatives could share information with local agencies concurrently.

Section IV.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:

During a PSPS EOC activation, Agency Representatives report to a Group Supervisor who is overseen by the Liaison Branch Director. Agency Representatives are encouraged to escalate issues that are not able to be solved locally to the Group Supervisor. If appropriate, Group Supervisors inform the Liaison Branch Director of issues to be raised to the Liaison Officer and broader EOC Team. Agency Representatives also join twice-daily calls hosted by the Liaison Branch Director and are provided the opportunity to flag local updates or issues.

Local input is often raised by Agency Representatives to the EOC Team for utilization. For example, feedback from agencies on potential Community Resource Center locations are provided to the EOC to adjust and implement center locations. In addition, local feedback on reports or draft news releases are raised to the EOC Team to update in real-time.

APPENDIX

Appendix A: PG&E 2021 Wildfire Preparedness and PSPS Outreach Evaluation Results

Purpose: Conduct pre-surveys and post-surveys of the general public to evaluate the effectiveness of channels of communications used to assess customer awareness/preparedness for PSPS and wildfire seasons. In 2021, PG&E conducted three waves of this survey: a "baseline" (prior to most outreach) in May/June; and "Pre-Season" survey in August/September at the beginning of peak fire season; and Post-Season survey in December/January conducted after the threat of most Public Safety Power Shutoffs was ended.

For the baseline survey, a total of 1,995 interviews were conducted with residential customers from May 20 to June 13, 2021. For the pre-season survey, a total of 2,140 interviews were conducted with residential customers from August 25 to September 19, 2021. For the post-season survey, a total of 2,695 interviews were conducted from December 9, 2021 to January 13, 2022. The final sample was weighted by age and geography to be representative of PG&E's residential customer base.

The interviews were conducted both online and by telephone. For the baseline survey, the online version was offered in English, Spanish, and Chinese. The phone version also accommodated these three languages. For the pre-season and post-season surveys, the online version was offered in sixteen (16) prevalent languages¹⁵ (see full description below). The phone version also accommodated these languages when non-English speakers were encountered, and the language could be identified. The survey questions were developed jointly with the electric IOUs in 2020. Minor modifications were made in 2021 to accommodate new requirements around Access and Functional Needs (AFN) populations.

Key Findings:

- Awareness of PSPS remains high—78% to 80% in all three waves, and consistent with prior waves.
- A majority of customers recalled receiving PG&E's wildfire safety communications in 2021— 59% in the August pre-season wave and 55% in the December post-season wave.
 - Significantly more Spanish speakers in the post-season wave (52%) recalled the outreach than in either prior wave—23% in the baseline and 28% in the pre-season wave.
- The most recalled PG&E communication channels were email from PG&E, direct mail from PG&E, and TV/Radio/Online advertising.
 - Other communication channels included the PG&E website, text messages from PG&E, informational videos, phone calls from PG&E, and social media.
 - Facebook was by far the most recalled social media channel (64% in December), followed by Nextdoor (26%) and Twitter (17%).
- Respondents said the most useful channels for information about wildfire safety preparation were: Telephone calls from PG&E, text messages, the PG&E website, emails, mass media advertising, informational videos, emails, direct mail and social media.
 - All but one channel—social media—was rated as useful by a majority of recallers.
- 64% in the post-season wave said they were prepared for a PSPS lasting 2-4 days, unchanged from both the baseline (65%) and the pre-season wave (66%).
 - o 70% of Recallers said they felt prepared compared to 56% of Non-Recallers.
 - 80% of customers in High Fire Threat Districts felt prepared versus 61% not in High Fire Threat Districts.

¹⁵ D.21-06-034

- 72% in both the pre-season and post-season waves were satisfied with information about wildfire safety preparedness on PG&E's website.
 - However, significantly fewer in the post-season survey (54%) said they were satisfied with the information on PG&E's website concerning PSPS.
- In all three 2021 waves, a majority of customers agreed that PG&E...
 - Is committed to restoring power to customers affected by wildfires
 - Makes an effort to communicate with customers about wildfires
- PG&E scored higher in the post-season than in the pre-season wave on:
 - Is committed to wildfire safety
 - Is working to keep my community safe
 - Shows care and concern for customers
- PG&E scored lowest on:
 - Takes proactive measures to protect the electric grid from wildfires
 - Is helping me prepare for wildfire season
 - Is a company I trust to act in the best interests of its customers
- 45% in the post-season wave were satisfied with PG&E's wildfire safety efforts—consistent with both the baseline (48%) and the pre-season wave (42%).
- 48% in the post-season wave were satisfied with "PG&E's PSPS program"—consistent with the baseline and pre-season waves (both at 45%).
- The most frequently used resources were: "Multiple Address Alerts During PSPS" (36%), "Language Preferences on Alerts/Notifications" (32%), Call-2-1-1 (32%) and PG&E's Medical Baseline Program (27%).
- Customers expressed the most interest in: the Generator Rebate Program (41%), Call 2-1-1 (41%), the Portable Battery Program (39%), and Multiple Address Alerts during PSPS (39%).
- 22% of customers said their power was shutoff one or more times for a PSPS in 2021.
 - However, when matched with those who we know were de-energized, only 63 survey respondents (2%) were actually impacted by PSPS in 2021.

GENERAL POPULATION SURVEY PRE/POST WAVE COMPARISONS	Baseline May	Pre- Season Aug	Post- Season Dec ¹⁶
Recall of communications from PG&E in past few months about the threat of wildfires and how to prepare for them	53%	59%	55%
Where saw/heard PG&E communications about wildfire season safety and Preparedness (Aided)			
Email from PG&E	59%	59%	57%
• Letter in the mail from PG&E	25%	39%	40%
Advertising on TV, radio or online	39%	34%	36%
• Text message from PG&E	16%	19%	27%
• PG&E website	23%	20%	27%
Social media post	14%	16%	14%
• Telephone call from PG&E	6%	10%	10%
Informational videos on TV	14%	14%	10%
Most useful channels (Top-2-Box Percent)			
Telephone call from PG&E	72%	56%	75%
• Text message from PG&E	70%	65%	65%
• PG&E website	70%	70%	63%
Advertising on TV, radio or online	60%	53%	61%
Information videos on TV	56%	58%	60%
• Email from PG&E	55%	55%	56%
• Letter in the mail from PG&E	56%	53%	56%
Social media post	55%	52%	49%
Satisfaction with information about wildfire safety preparedness on PG&E's website (Top-2-Box %)	75%	72%	72%
Agreement with Statements (Top-2-Box %) - Recalled Communications			
• Is committed to restoring power to customers affected by wildfires	56%	56%	61%
Makes an effort to communicate will all customers about wildfires	56%	53%	53%
Is committed to wildfire safety	52%	46%	50%
• Is working to keep my community safe	52%	47%	49%
Shows care and concern for customers	46%	43%	46%
• Is proactive in taking steps to address wildfire risks	50%	41%	45%

¹⁶ Green shaded cells = significantly higher than previous wave at 95% level of confidence; red shaded cells = significantly lower than previous wave at 95% level of confidence

GENERAL POPULATION SURVEY PRE/POST WAVE COMPARISONS	Baseline May	Pre- Season Aug	Post- Season Dec ¹⁶
• Takes proactive measures to protect the electric grid from wildfires	48%	41%	45%
Is helping me prepare for wildfire season	44%	39%	39%
• Is a company I trust to act in the best interests of its customers	43%	38%	38%
Satisfaction with PG&E's overall wildfire safety and preparedness efforts (Top-2-Box %) - Total Respondents	48%	42%	45%
Awareness of PSPS (Top-2-Box %)	78%	79%	80%
Prepared for a PSPS event lasting 24-48 hours (Top-2-Box %)	65%	65%	64%
Overall opinion of PG&E's PSPS program	45%	45%	48%

Awareness/Use/Interest in Resources (Added to 2021 Pre-Season Wave)	Baseline May	Pre- Season Aug	Post- Season Dec ¹⁷
Awareness (Base = Total Population)			
Language Preference on Alerts and Notifications		36%	42%
County Food Bank Program		37%	38%
PG&E's Medical Baseline Program			34%
Community Resource Centers		34%	32%
• Call 2-1-1		29%	31%
Multiple Address Alerts During a PSPS		35%	26%
Generator Rebate Program		14%	17%
Accessible Transportation for People with Disabilities		19%	15%
Hotel Accommodations for People with Disabilities		14%	14%
Portable Battery Program		13%	13%
• Disability Disaster Access & Resources (DDAR) program		14%	12%
Used Resources (Base = Aware of Resource)			
Multiple Address Alerts During a PSPS		43%	36%
Language Preference on Alerts and Notifications		31%	32%
• Call 2-1-1		29%	32%
PG&E's Medical Baseline Program			27%
County Food Bank Program		19%	20%
Portable Battery Program		16%	19%
Accessible Transportation for People with Disabilities		13%	17%
Community Resource Centers		19%	15%

¹⁷ Green shaded cells = significantly higher than previous wave at 95% level of confidence; red shaded cells = significantly lower than previous wave at 95% level of confidence

Awareness/Use/Interest in Resources (Added to 2021 Pre-Season Wave)	Baseline May	Pre- Season Aug	Post- Season Dec ¹⁷
Disability Disaster Access & Resources (DDAR) program		15%	14%
Generator Rebate Program		11%	13%
Hotel Accommodations for People with Disabilities		10%	13%
Interest in Resources (Base = Total Population)			
Generator Rebate Program		42%	41%
• Call 2-1-1		39%	41%
Portable Battery Program		38%	39%
Multiple Address Alerts During a PSPS		45%	38%
Community Resource Centers		32%	33%
PG&E's Medical Baseline Program			33%
Hotel Accommodations for People with Disabilities		25%	29%
Disability Disaster Access & Resources (DDAR) program		24%	28%
County Food Bank Program		23%	27%
Language Preference on Alerts and Notifications		28%	26%
Accessible Transportation for People with Disabilities		23%	26%

Key Findings on Languages:

- Respondents were asked to select the language preferred for receiving wildfire communications:
 - 6% said they preferred a language other than English.
- Despite being offered in 16 non-English languages, only 13% in the Pre-season survey and 8% in the Post-season survey elected to complete the survey in a language other than English. Of those, the overwhelming majority were in Spanish:

Languages in which the survey was completed							
	PRE		POST				
	Count	Percent	Count	Percent			
English	1,870	87%	2,471	92%			
Spanish	119	6%	94	3%			
Vietnamese	39	2%	40	1%			
Chinese	84	4%	36	1%			
Korean	16	1%	27	1%			
Japanese	6	<1%	24	1%			
Russian	3	<1%	3	<1%			
Punjabi	1	<1%	0	0%			
Arabic	1	<1%	0	0%			
Farsi	0	0%	0	0%			
Hmong	0	0%	0	0%			
Hindi	0	0%	0	0%			
Khmer	0	0%	0	0%			
Portuguese	0	0%	0	0%			
Tagalog	0	0%	0	0%			
Thai	0	0%	0	0%			
Total	2,140	100%	2,695	100%			

• Among those who said they <u>prefer</u> to receive public safety information in a language other than English 44% in the Pre-season wave and 37% in the Post-season wave said they needed it in their preferred language. This translates to about 4% of the total population.

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How do you feel about receiving wildfire communications from PG&E in English only?	PRE - SEPT	POST - DEC	Total <u>Population</u>
I need it in my preferred language – I do not understand English	44%	37%	└────॑> 4%
I'd rather have it in my preferred language, but I can also understand English	50%	38%	
I'm fine with that – I can understand English well	6%	25%	
Base: English is not preferred language	264	169	