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

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) 2022 PSPS POST-SEASON REPORT

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Dated: March 1, 2023

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Pursuant to the California Public Utilities Commission's Decisions (D.) 21-06-014,

Ordering Paragraph 66, and D.21-06-034, Appendix A, Southern California Edison Company

(SCE) files its 2022 PSPS Post-Season Report (Attachment 1 hereto). SCE also provides the

following link to access and download the 2022 PSPS Post-Season Report and Appendices A

and B thereto: https://on.sce.com/PSPSPostSeasonReporting

A Word version of the 2022 PSPS Post-Season Report and Appendices A and B thereto

will be filed via mixed media with the Commission's Docket Office.

Respectfully submitted,

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March 1, 2023

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Attachment 1 SCE's 2022 PSPS Post-Season Report

Instructions

- 1. Requirements in italics apply to PG&E, SCE and SDG&E only.
- 2. Respond to all applicable questions in the template in a single document.
- 3. Response to each question should be no longer than two pages and as brief as possible.
- 4. Follow the section heading and subheading organization used in the template in your response.
- 5. Submit your response in a Word and a PDF format. Both files should follow the file name convention and syntax below:
 - a. syntax: <Utility Abbreviation>_ POSTSR1_<Submission Date>
 - b. examples:

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PGE_POSTSR1_3-1-2023
PacifiCorp_POSTSR1_3-1-2023
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PGE_POSTSR1_CONF_3-1-2023
PacifiCorp_POSTSR1_CONF_3-1-2023

6. Responses must be filed to the service list of R.18-12-005 no later than March 1, 2023.

Section I. Background: Overarching Regulation

 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.

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

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[Authority: D.21-06-034; Guidelines at p. A15, Section K-3.f]
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3. To the extent a required item of information is also required to be included in the electric investor-owned utility's Wildfire Mitigation Plan, the [prior year] Post-Season Report may refer to the electric investor-owned utility's Wildfire Mitigation Plan rather than repeat the same information; such reference must specify, at minimum, the page and line number(s) for where the required information is contained within the electric investor-owned utility's Wildfire Mitigation Plan. In cases where this reference is to data, a summary table of the data shall be provided in the report.

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

Section II: Amendments to Post-Event Reports

A. Regulatory Requirements

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

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

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

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

B. Direction

- 1. Provide any information missing [including, but not limited to the specific topics listed below] from any Post-Event Report for Public Safety Power Shutoffs (PSPS) in 2022 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]

Response: Subsequent to the filing of SCE's 10-day post-event reports for 2022 PSPS events, SCE conducted additional routine validation and review of PSPS metrics included in its 2022 reports. Through this review, SCE identified the following updates to 2022 PSPS data.

PSPS Event Summary Updates

Table 1: September 9, 2022 Post-event report

PSPS Event Summary										
Total Customers De-energized								Number of Circuits		
PSPS Notifi ed	De- energi zed	Cancel led	MBL Custom ers	Numb er of Count ies	Num ber of Tribe s	Critical Facilities and Infrastuc ture	Transmis sion De- energize d	Distribut ion Circuits in Scope	Distribut ion De- energize d	Dama ge Count
79096 79041	0	79096 79041	0	0	0	0	0	79	0	0

Table 2: October 22, 2022 Post-event report

PSPS Event Summary										
Total Customers De-energized							Nun			
PSPS Notifi ed	De- energi zed	Cancel led	MBL Custom ers	Numb er of Count ies	Num ber of Tribe s	Critical Facilities and Infrastuc ture	Transmis sion De- energize d	Distribut ion Circuits in Scope	Distribut ion De- energize d	Dama ge Count
59447 59467	0	59447 59467	0	0	0	0	0	79 78	0	0

Table 3: November 19, 2022 Post-event report

PSPS Event Summary										
Total Customers De-energized							Nun			
PSPS Notifi ed	De- energiz ed	Cancel led	MBL Custom ers	Numb er of Count ies	Num ber of Tribe s	Critical Facilities and Infrastuc ture	Transmis sion De- energize d	Distribut ion Circuits in Scope	Distribut ion De- energize d	Dama ge Count
16959	5373 5375	16139	177	2	0	122	0	14	4	0

Table 4: November 24, 2022 Post-event report

PSPS Event Summary										
Tota	Total Customers De-energized						Nun			
PSPS Notified	De- energi zed	Cancel led	MBL Custo mers	Numb er of Count ies	Num ber of Tribe s	Critical Facilities and Infrastuc ture	Transmis sion De- energize d	Distribut ion Circuits in Scope	Distribut ion De- energize d	Dama ge Count
50288	10195 10200	40111	383	3 2	0	156	0	33	7	1

Circuits De-Energized

Table 5: July 22, 2022 Post-event report

Circuits De-Energized (cont.)									
County	Circuit Name	Residenti al Customer s De- energized	Commerci al / Industrial customers De- energized	Medical Baseline custome rs De- energize d	AFN other than MBL custome rs De- energize d	Total custome rs De- energize d	GO 95, Tier HFTD Tier(s) 1,2,3	Other Custome rs	
Los Angeles	KINSEY	60	50	0	0 5	110	Non HFRA, T2	0	
Kern	TEJON_	0	3	0	0	3	Non HFRA, T2	0	
Kern/Los Angeles	TEJON_ 6	78	18	4	0 19	96	Non HFRA, T2	0	

Table 6: November 19, 2022 Post-event report

Circuits De-Energized (cont.)								
County	Circuit Name	Resident ial Custome rs De- energize d	Commerc ial / Industrial customer s De- energize d	Medical Baseline custom ers De- energiz ed	AFN other than MBL custom ers De- energiz ed	Total custom ers De- energiz ed	GO 95, Tier HFTD Tier(s) 1,2,3	Other Custom ers
VENTURA	BRENNAN	2203 2444	48	62	241 229	2492	Т3	0
LOS ANGELES	ENERGY_5	262 309	25	21	46 41	333 334	Т3	0
VENTURA	MORGANST EIN	1761 1933	84	86	171 164	2016 2017	Т3	0
VENTURA	RICARDO_2	466 520	12	8	54 52	532	Non HFRA, T3, T2	0

Table 7: November 24, 2022 Post-event report

Circuits Do	e-Energized (cor	nt.)						
County	Circuit Name	Residenti al Custome rs De- energize d	Commerci al / Industrial customer s De- energized	Medical Baseline custome rs De- energize d	AFN other than MBL custome rs De- energize d	Total custome rs De- energize d	GO 95, Tier HFTD Tier(s) 1,2,3	Other Custome rs
VENTUR A	ANTON_5	43	8	2	6 4	51	Т3	0
RIVERSI DE	AVIATOR	1778 1781	49	86	795 785	1827 1830	Non HFRA, T2	0
VENTUR A	BRENNAN	1328 1327	35	23	146 137	1363 1362	Т3	0
VENTUR A	MORGANSTE IN	1683 1681	83	76	154 147	1766 1764	Т3	0
RIVERSI DE	ROS_2	2329 2335	26	85	1158 1146	2355 2361	T2	0
RIVERSI DE	ROTEC_2	1042 1041	15	54	283 279	1057 1056	Non HFRA, T2	0
RIVERSI DE	SONOMA	1739	37	57	922 910	1776	Non HFRA, T2	0

Count and Nature of Complaints Received Updates¹

Table 8: September 9, 2022 Post-event report

Count and Nature of Complaints Received					
Nature of Complaints	Number of Complaints				
PSPS Frequency/Duration Including, but not limited to complaints regarding the frequency and/or duration of PSPS events, including delays in restoring power, scope of PSPS and dynamic of weather conditions.	0				
Safety/Health Concern Including, but not limited to complaints regarding difficulties experienced by AFN/MBL populations, traffic accidents due to non-operating traffic lights, inability to get medical help, well water or access to clean water, inability to keep property cool/warm during outage raising health concern	1				
Communications/Notifications Including, but not limited to complaints regarding lack of notice, excessive notices, confusing notice, false alarm notice, problems with getting up-to-date information, inaccurate information provided, not being able to get information in the prevalent languages and/or information accessibility, complaints about website, Public Safety Partner Portal, REST/DAM sites (as applicable)	1				
Outreach/Assistance Including, but not limited to complaints regarding community resource centers, community crew vehicles, backup power, hotel vouchers, other assistance provided by utility to mitigate impact of PSPS	0				
General PSPS Dissatisfaction/Other Including, but not limited to complaints about being without power during PSPS event and related hardships such as food loss, income loss, inability to work/attend school, plus any PSPS-related complaints that do not fall into any other category.	154-71				
Total	156-73				

¹ Please see Section IV. Question 7 where SCE explains the updates made to the Count and Nature of Complaints Received tables in additional detail.

Table 9: October 22, 2022 Post-event report

Count and Nature of Complaints Received	
Nature of Complaints	Number of Complaints
PSPS Frequency/Duration Including, but not limited to complaints regarding the frequency and/or duration of PSPS events, Including delays in restoring power, scope of PSPS and dynamic of weather conditions.	1
Safety/Health Concern Including, but not limited to complaints regarding difficulties experienced by AFN/MBL populations, traffic accidents due to non-operating traffic lights, inability to get medical help, well water or access to clean water, inability to keep property cool/warm during outage raising health concern	0
Communications/Notifications Including, but not limited to complaints regarding lack of notice, excessive notices, confusing notice, false alarm notice, problems with getting up-to-date information, inaccurate information provided, not being able to get information in the prevalent languages and/or information accessibility, complaints about website, Public Safety Partner Portal, REST/DAM sites (as applicable)	0
Outreach/Assistance Including, but not limited to complaints regarding community resource centers, community crew vehicles, backup power, hotel vouchers, other assistance provided by utility to mitigate impact of PSPS	0
General PSPS Dissatisfaction/Other Including, but not limited to complaints about being without power during PSPS event and related hardships such as food loss, income loss, inability to work/attend school, plus any PSPS-related complaints that do not fall into any other category.	72 16
Total	73 17

Table 10: November 19, 2022 Post-event report

Count and Nature of Complaints Received					
Nature of Complaints	Number of Complaints				
PSPS Frequency/Duration Including, but not limited to complaints regarding the frequency and/or duration of PSPS events, Including delays in restoring power, scope of PSPS and dynamic of weather conditions.	5				
Safety/Health Concern Including, but not limited to complaints regarding difficulties experienced by AFN/MBL populations, traffic accidents due to non-operating traffic lights, inability to get medical help, well water or access to clean water, inability to keep property cool/warm during outage raising health concern	1				
Communications/Notifications Including, but not limited to complaints regarding lack of notice, excessive notices, confusing notice, false alarm notice, problems with getting up-to-date information, inaccurate information provided, not being able to get information in the prevalent languages and/or information accessibility, complaints about website, Public Safety Partner Portal, REST/DAM sites (as applicable)	2				
Outreach/Assistance Including, but not limited to complaints regarding community resource centers, community crew vehicles, backup power, hotel vouchers, other assistance provided by utility to mitigate impact of PSPS	1				
General PSPS Dissatisfaction/Other Including, but not limited to complaints about being without power during PSPS event and related hardships such as food loss, income loss, inability to work/attend school, plus any PSPS-related complaints that do not fall into any other category.	56 30				
Total	65 39				

Table 11: November 24, 2022 Post-event report

Count and Nature of Complaints Received				
Nature of Complaints	Number of Complaints			
PSPS Frequency/Duration Including, but not limited to complaints regarding the frequency and/or duration of PSPS events, Including delays in restoring power, scope of PSPS and dynamic of weather conditions.	10 11			
Safety/Health Concern Including, but not limited to complaints regarding difficulties experienced by AFN/MBL populations, traffic accidents due to non-operating traffic lights, inability to get medical help, well water or access to clean water, inability to keep property cool/warm during outage raising health concern	16 17			
Communications/Notifications Including, but not limited to complaints regarding lack of notice, excessive notices, confusing notice, false alarm notice, problems with getting up-to-date information, inaccurate information provided, not being able to get information in the prevalent languages and/or information accessibility, complaints about website, Public Safety Partner Portal, REST/DAM sites (as applicable)	5			
Outreach/Assistance Including, but not limited to complaints regarding community resource centers, community crew vehicles, backup power, hotel vouchers, other assistance provided by utility to mitigate impact of PSPS	0			
General PSPS Dissatisfaction/Other Including, but not limited to complaints about being without power during PSPS event and related hardships such as food loss, income loss, inability to work/attend school, plus any PSPS-related complaints that do not fall into any other category.	661 477			
Total	692 510			

Count and Type of Claims Received Updates

Table 12: November 19, 2022 Post-event report

Count and Type of Claims Received					
Description of Claims	Number of Claims				
Food loss only	21				
Property Damage	0				
Food loss and property damage	0				
Evacuation Cost	0				
Business Interruption / Economic Loss	0				
Unspecified	0				
Total	21				

Table 13: November 24,2022 Post-event report

Count and Type of Claims Received					
Description of Claims	Number of Claims				
Food loss only	79				
Property Damage	1				
Food loss and property damage	0				
Evacuation Cost	0				
Business Interruption / Economic Loss	0				
Unspecified	0				
Total	8 10				

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: In 2022, SCE activated 11 Community Resource Center (CRC) sites for a total of 14 days and deployed Community Crew Vehicles (CCVs) to 25 sites for a total of 36 days in multiple counties. Only some of the communities that the CRCs and CCVs served were ultimately de-energized. All CRCs and CCVs offer the same resources and services regardless of the energization status of each community served. Each CRC and CCV was operated by staff that could provide customers with event-specific information, information about SCE's resiliency programs and opportunities for customers to update customer contact information and enroll in outage alert notifications. Each CRC and CCV also had available bottled water and light snacks, ice or ice vouchers, access to a restroom, a power source to charge personal mobile or medical devices, and customer resiliency kits that customers may take on the go. These kits have preparedness information, a solar phone battery, and a flashlight or battery-backed LED lightbulb.

Table 14 provides aggregated data on CRCs activated and CCVs deployed to communities in 2022.

Table 14: CRC & CCV Locations in 2022

Туре	County	Deployme nt Start Date	Durat ion (days)	Hours of Operati on	Facility Name	Address	City	Zip Code
CCV	Los Angeles	7/22/202 2	2	6 PM- 10 PM 8 AM- 10PM	Lake Hughes Commu nity Center	17520 Elizabeth Lake Rd.	Lake Hughes	93532

Туре	County	Deployme nt Start Date	Durat ion (days)	Hours of Operati on	Facility Name	Address	City	Zip Code
CCV	Kern	9/9/22	2	8 AM - 10 PM 8 AM - 10 PM	Bear Valley Police Dept.	25101 Bear Valley Rd.	Tehachapi	93561
CCV	Orange	9/9/22	2	8 AM - 10 PM 8 AM - 10 PM	Brea Sports Park	3333 E. Birch St.,	Brea	92821
CCV	Orange	9/9/22	2	8 AM - 10 PM 8 AM - 10 PM	Brush Canyon Park	28282 Brush Canyon Dr.	Yorba Linda	92887
CCV	Orange	9/9/22	2	8 AM - 10 PM 8 AM - 10 PM	Library of the Canyon	7531 E. Santiago Canyon Rd.	Silverado	92676
CCV	Orange	9/9/22	2	8 AM - 10 PM 8 AM - 10 PM	Rancho Santa Margari ta City Hall	22112 El Paseo	Rancho Santa Margarita	92688
CCV	Riverside	9/9/22	2	8 AM - 10 PM 8 AM - 10 PM	Lake Point Park	420 E. Lakeshore Dr.	Lake Elsinore	92530
CRC	Riverside	9/9/22	2	8 AM - 10 PM 8 AM - 10 PM	Idyllwild Commu nity Center	25925 Cedar St.	Idyllwild	92549
CCV	Riverside	9/9/22	2	8 AM - 10 PM 8 AM - 10 PM	Buena Vista Park	2601 Buena Vista Ave.	Corona	92882
CCV	Mono	10/22/20 22	1	8AM - 10PM	Mono County Civic Center	1290 Tavern Road	Mammoth Lakes	93546
CCV	Inyo/ Mono	10/22/20 22	1	8AM - 10PM	Millpon d Recreati on Center	Sawmill Rd	Bishop	93514
CCV	Mono	10/22/20 22	1	8AM - 10PM	Memori al Hall Commu nity Center parking lot	73 North School St.	Bridgeport	93517

Туре	County	Deployme nt Start Date	Durat ion (days)	Hours of Operati on	Facility Name	Address	City	Zip Code
CCV	Mono	10/22/20 22	1	8AM - 10PM	June Lake Commu nity Center Building & Library	90 Granite Ave.	June Lake	93529
CCV	Los Angeles	10/24/20	1	8AM - 10PM	Michael Landon Commu nity Center	24250 Pacific Coast Hwy.	Malibu	90265
CCV	Los Angeles	10/24/20 22	1	8AM - 10PM	Canyon Country Commu nity Center	18410 Sierra Highway	Santa Clarita	91351
CRC	Los Angeles	10/24/20 22	1	8AM - 10PM	Agua Dulce Women' s Club	33201 Agua Dulce Canyon Rd	Agua Dulce	91390
CCV	Orange	10/24/20 22	1	8AM - 10PM	Library of the Canyons	7531 Santiago Cyn Rd.	Silverado	92676
CCV	San Bernardi no	10/24/20 22	1	8AM - 10PM	Cal State Universi ty San Bernard ino	5500 University Parkway	San Bernardino	92407
CRC	San Bernardi no	10/24/20 22	1	8AM - 10PM	Jesse Turner Health and Fitness Commu nity Center	15556 Summit Ave.	Fontana	92336
CCV	San Bernardi no	10/24/20 22	1	8AM - 10PM	San Antonio Park	2393 N Mountain Ave	Upland	91784
CRC	Ventura	10/24/20 22	1	8AM - 10PM	Arroyo Vista Recreati on Center	4550 Tierra Rejada Rd.	Moorpark	93201
CRC	Ventura	10/24/20 22	1	8AM - 10PM	Simi Valley	3900 Avenida Simi	Simi Valley	93063

Туре	County	Deployme nt Start Date	Durat ion (days)	Hours of Operati on	Facility Name	Address	City	Zip Code
					Senior Center			
CRC	Ventura	10/24/20 22	1	8AM - 10PM	Santa Paula Commu nity Center	530 W. Main St.	Santa Paula	93060
CCV	Los Angeles	11/18/20 22	3	6 PM - 10 PM 8 AM - 10 PM 8 AM - 10:30 AM	Chatsw orth Lake Church	23449 Lake Manor Dr	Chatsworth	91311
CCV	Los Angeles	11/18/20 22	2	6 PM - 10 PM 8 AM - 4 PM	Santa Clarita Sports Comple x	20870 Centre Pointe Pkwy	Santa Clarita	91350
CRC	Ventura	11/18/20 22	2	6 PM - 10 PM 8 AM - 10 PM	Arroyo Vista Recreati on Center	4550 Tierra Rejada Rd.	Moorpark	93021
CRC	Ventura	11/18/20 22	2	6 PM - 10 PM 8 AM - 4 PM	Simi Valley Senior Center	3900 Avenida Simi	Simi Valley	93036
CRC	Los Angeles	11/24/22	1	8AM - 6PM	Agua Dulce Women' s Club	33201 Agua Dulce Canyon Rd.	Agua Dulce	91390
CCV	Los Angeles	11/24/22	1	8AM - 6PM	Chatsw orth Lake Church	23449 Lake Manor Dr	Chatsworth	91311
CCV	Los Angeles	11/24/22	1	8AM - 6PM	Canyon Country Commu nity Center	18410 Sierra Hwy	Santa Clarita	91351
CCV	Ventura	11/24/22	1	8AM - 6PM	Ventura County Sheriffs Depart ment	2101 E Olsen Road	Thousand Oaks	91360
CRC	Ventura	11/24/22	1	8AM - 6PM	Arroyo Vista Recreati	4550 Tierra Rejada Rd.	Moorpark	93021

Туре	County	Deployme nt Start Date	Durat ion (days)	Hours of Operati on	Facility Name	Address	City	Zip Code
					on			
					Center			
CCV	Ventura	11/24/22	1	8AM -	Fillmore	533 Santa Clara St.	Fillmore	93015
				6PM	Active			
					Adult			
					Center			
CRC	Ventura	11/24/22	1	8AM -	Simi	3900 Avenida Simi	Simi Valley	93036
				6PM	Valley			
					Senior			
					Center			
CCV	Riverside	11/24/22	1	8AM -	Yarboro	419 N. Poe Street	Lake Elsinore	92503
				10PM	ugh			
					Park			
CCV	Riverside	11/24/22	1	8AM -	Hemet	300 E. Latham Ave.	Hemet	92543
				10PM	Public			
					Library			

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);

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

Response: Subsequent to the filing of SCE's 10-day post-event reports for 2022 PSPS events, SCE conducted additional routine validation and review of PSPS metrics included in its 2022 reports. Through this review, SCE identified the following updates to 2022 PSPS notification data.²

² In 2021 and 2022, missed notification counts reported in the "Notification Failure" table of SCE's post-event reports did not account for PSPS notifications that SCE sent to impacted customers in accordance with the Commission's minimum notification timeline, but that may not have been delivered to some of those customers for reasons such as e-mail bounce-back, text message delivery failure, or a phone number that had been disconnected. SCE confirms delivery of notifications for MBL customers and follows up with those customers as needed to notify them. SCE relies on its customers to provide accurate emergency contact information for their accounts and to update that information whenever it changes. Starting in 2023, SCE will have the capability to track and report as missed PSPS notifications that were confirmed as undelivered.

Positive Notification Table Updates

Table 15: November 19, 2022 Post-event report

Positive Notification								
Category	Total Number of Customers ³	Timing of Attempts	Notification Attempts ⁴	Successful Positive Notification ⁵	Who made the notification			
Medical Baseline	196 647 ⁶	Daily	196 499	196 499 ⁷	SCE			
Self-Certified	28 78	Daily	28 59	28 59 ⁸	SCE			

Table 16: November 24, 2022 Post-event report

Positive Notification								
Category	Total Number of Customers	Timing of Attempts	Notification Attempts	Successful Positive Notification	Who made the notification			
Medical Baseline	580 1514 ⁹	Daily	589 1514	580 1514	SCE			
Self-Certified	82 196	Daily	88 196	82 196	SCE			

b. Explain why notice could not be provided at least two hours prior to a de-energization, if such notice was not provided;

Response: Rapidly changing weather conditions cannot always be forecasted based on information available through weather modeling. As such, it is not always feasible to identify all circuits that may potentially be in scope for de-energization two hours in advance. This information can include wind trends and speeds as identified by weather stations in the area of concern and/or live field observations. As a result, in situations when weather conditions change rapidly, it may be necessary to de-energize customers without prior notifications. SCE provided explanations in its 2022 post-event reports for any

³ The "Total Number of Customers" metric reflects the total number of MBL and Self-Certified customers in scope for the PSPS event. Although SCE attempts to notify all MBL and Self-Certified customers in scope, only customers who are ultimately de-energized "need" positive pre-event PSPS notifications.

⁴ The "Notification Attempts" metric reflects a unique count of MBL and Self-Certified customers – both in scope and de-energized – whom SCE attempted to notify prior to de-energization.

⁵ The "Successful Positive Notification" metric reflects the number of unique MBL and Self-Certified customers – both in scope and de-energized – who were successfully notified of the PSPS event prior to de-energization.

⁶ Due to a circuit to customer mapping error, 10 customers were included in scope and notified erroneously. See SCE's lessons learned in Question 5 in Section IV.

⁷ Due to rapid onset of weather conditions requiring immediate de-energization of two circuits during this event, SCE was unable to positively notify 148 out of 177 de-energized Medical Baseline customers for the November 19, 2022 PSPS event.

⁸ Due to rapid onset of weather conditions requiring immediate de-energization of two circuits during this event, SCE was unable to positively notify 19 of the 59 de-energized Self-Certified customers for the November 19, 2022 PSPS event.

⁹ Due to a circuit to customer mapping error, 10 customers were included in scope and notified erroneously. See SCE's lessons learned section in Question 5 in Section IV.

notifications that could not be provided in accordance with the CPUC's minimum notification timeline or at all prior to de-energization.¹⁰ Please also see response to Question 8 in Section IV.

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: Table 17 provides aggregate data on SCE's restoration times for 2022 PSPS de-energization events.

Table 17: Aggregate Restoration Times for 2022

PSPS Event Name	Date/Time of First Circuit Restoration	Date/Time of Last Circuit Restoration
7/22/2022	7/23/2022 10:35	7/23/2022 15:06
11/19/2022	11/19/2022 16:59	11/20/2022 09:55
11/24/2022	11/24/2022 15:48	11/25/2022 00:23

After a circuit has been de-energized pursuant to SCE's PSPS protocol, PSPS IMT personnel continue monitoring the Period of Concern (POC) and begin developing restoration plan(s) to return the circuit(s) or circuit segments to service as soon as the POC expires, Fire Weather Conditions have subsided, and it is safe to do so. If multiple circuits had to be de-energized, the restoration plans include prioritization for de-energized circuits (prioritization can include first off, first on, need for water resources, critical facilities and infrastructure customers, medical baseline customers, etc.). PSPS IMT personnel monitor all circuits that are de-energized and will watch for winds to decrease below thresholds, which triggers circuit patrols for re-energization. Upon receiving the All-Clear declaration and approval from the PSPS IMT Incident Commander to begin restoration of a circuit, restoration notifications are sent to impacted customers, and circuits or circuit segments under PSPS protocols are patrolled and re-energized. The patrols are intended to ensure there is no damage to SCE facilities before power can be safely restored. In most cases, field crews are standing by for patrol, so that patrols can typically take place within eight hours. However, visual inspections of the power lines usually take place during daylight hours for safety and accuracy. Consequently, patrol and restoration operations may be limited or prolonged during overnight hours including for those circuits that will require a helicopter patrol. SCE strives to restore all power within 24 hours of de-energization when possible. For multi-day events when there is a break in the weather of even a few hours, field crews will attempt to temporarily restore customers, even if this requires a repeat de-energization.

PSPS IMT personnel assess restoration plans during all phases of events to monitor progress and address any delays to re-energization that may occur.

¹⁰ SCE's 2022 Post-event reports are available at on.sce.com/PSPSposteventreports.

Section III: Decision-Specified

A. Education and Outreach

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

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

Response: As was done for 2021 customer research, SCE is filing its 2022 Pre- and Post- wildfire season survey results which also include an assessment of SCE's performance "before, during, and after" wildfires from the Residential and Business customers' perspective.

As in the prior two years, SCE and the other IOUs administered a common (virtually identical) core questionnaire in two phases: SCE's 2022 pre-wildfire season survey with both Residential and Business customers was conducted between June 28 and August 15, and the post-wildfire season survey (including the pre-questions again as well as more detailed PSPS experience-related questions) was conducted from November 21, 2022 to January 2, 2023. The primary objective of the research was to measure the effectiveness of communications and outreach prior to and coincident with when wildfire activity is expected to be greatest. Each IOU added custom questions if desired, developed its own sampling plan / approach, and utilized its own preferred research vendor to implement the surveys – and determined which "prevalent" languages to offer the surveys in.

In 2022, SCE again offered the survey to customers in English and 19 other "prevalent" languages. Large systemwide samples of Residential and Business customers throughout our territory completed the survey. Additionally, supplemental surveys were administered to customers in the high fire-risk areas (HFRA) to allow for greater focus and more detailed analysis there – and for extensive comparisons between HFRA and Non-HFRA customers.

The 2022 survey results are included in Appendix A.

B. Medical Baseline and Access and Functional Needs

- 1. Describe in detail all programs and/or types of assistance, including:
 - a. Free and/or subsidized backup batteries
 - b. Self-Generation Incentive Program Equity Resiliency Budget
 - c. Community Microgrid Incentive Program [sic] ["Microgrid Incentive Program" per D.21-01-018]
 - d. Hotel vouchers
 - e. Transportation to CRCs
 - f. Any other applicable programs or pilots to support resiliency for persons with access and functional needs and vulnerable populations.
- 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.

- 3. Funding source(s) shall specify applicable utility balancing accounts or other accounting mechanisms, and non-utility funding sources, if applicable.
- 4. Identify any communities or areas not served by utility partnerships with CBOs that provide assistance to persons with access and functional needs or vulnerable populations in preparation for or during a public safety partners event;

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

Response: SCE is providing data on each type of assistance provided in 2022 to support resiliency for customers with AFN in table below.

Table 18: Medical Baseline and Access and Functional Needs Programs and/or Types of Assistance

Program/Service	Description of Program/Service	Cost and Cost	Funding
		Description	Source
Critical Care	The CCBB Program provides a free portable back-up	\$9,808,847	SCE did not
Backup Battery	battery to eligible customers enrolled in the Medical		request
Program (CCBB)	Baseline (MBL) Program and reside in a HFRA. The	Program	funding for this
	program supports customers with AFN who are	expenditures in	activity in its
	electricity dependent and rely on electrically	2022 represent	2021 General
	operated medical devices.	the costs	Rate Case
		associated with	(GRC).
		program	Therefore, any
		administration,	incremental
		procurement and	amounts
		deployment of	associated
		free portable	with this
		backup batteries,	activity are
		and creation and	tracked in its
		implementation	Wildfire
		of marketing,	Mitigation Plan
		outreach to	Memorandum
		increase	Account
		awareness of the	(WMPMA) for
		Critical Care	potential
		Battery Backup	future cost
		program and	recovery.
		labor costs. A	
		total of 3,466	
		free portable	
		backup batteries	
		were deployed in	
Douboble Douge	Decidential systems on who live in an area decision to	2022.	CCE 4:4+
Portable Power	Residential customers who live in an area designated	Total Cost:	SCE did not
Station Rebates	as a Tier 2 or Tier 3 high fire risk area can receive up	\$481,505	request
	to five (5) \$150 rebates for purchasing qualified	Total number of	funding for this
	Electric Portable Power Stations (e.g., portable	Portable Power	activity in its 2021 GRC.
	batteries) per residential address. While the CCBB		
	Program is the main backup battery program for	Station Rebates	Therefore, any
	customers with AFN, this offering is also available to		incremental
	all customers enrolled in CARE, FERA and MBL who		amounts
			associated

D	Description of Description	Cost and Cost	Funding
Program/Service	Description of Program/Service	Description	Source
	live in HFRAs, including customers who use accessible technology or participate in the CCBB Program, etc.	(2,152) ¹¹ Program expenditures in 2022 represent the costs associated with site host operations, program administration, incentive expenditure, and implementation of marketing and outreach to increase awareness of SCE Marketplace, and	with this activity are tracked in its WMPMA for potential future cost recovery.
Portable Generator Rebates	SCE's online marketplace offers rebates for portable generators and is available to customers who live in an area designated as Tier 2 or Tier 3 high fire risk areas. Residential customers enrolled in MBL or income qualified programs, such as CARE and FERA, could receive a \$600 rebate. Other residential customers located in an area designated as Tier 2 or Tier 3 high fire risk zones, are eligible to receive a \$200 rebate.	labor costs. Total Costs: \$448,687 Total number of Portable Generator Rebates (993) Program expenditures in 2022 represent the costs associated with site host operations, program administration, incentive expenditure, and implementation of marketing and outreach to increase awareness of SCE Marketplace, and labor costs.	SCE did not request funding for this activity in its 2021 GRC. Therefore, any incremental amounts associated with this activity are tracked in its WMPMA for potential future cost recovery.
Self-Generation Incentive Program (SGIP)	The SGIP is a Statewide program that provides eligible customers with financial incentives for the installation of new qualifying technologies installed to meet all, or a portion of, the electric energy needs of a facility.	Total Costs in 2022: \$69.35 million	Self- Generation Program Incremental

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 $^{^{11}}$ Represents total number of rebates. Customers may be eligible to collect more than one rebate per service account.

Program/Service	Description of Program/Service	Cost and Cost	Funding
	To help address the need for resiliency and better	Description 2022 Incentive	Source Cost
Resiliency Equity Budget	prepare our customers for outages and PSPS, SGIP	costs: \$65.46	Memorandum
Dauget	offers incentives for the installation of self-generating	million.	Account
	energy storage systems designed to offset the		(SGPICMA)
	customer's energy use and work as back-up battery	2022	(= - 7
	to provide power when an outage occurs. The	Administrative	
	incentives for "Resiliency" qualified projects covers	costs: \$3.89	
	close to 100% of residential and roughly 85% of non-	million	
	residential battery cost. The eligibility requirements		
	to qualify for these incentives differ between	2022 Resiliency	
	residential and non-residential customers.	Incentives paid:	
		\$40.84 million which is included	
		in the \$65.46	
		million noted	
		above.	
		Total number of	
		Self-Generation	
		Incentive 902	
		Equity Resiliency	
		projects were	
		completed in	
		2022 and an additional 4	
		projects received	
		initial PBI upfront	
		payments for a	
		total of \$40.84	
		million dollars in	
		incentives. There	
		is an overall	
		budget for the	
		program which is	
		collected and paid from Public	
		Purpose funds.	
		The assigned	
		budget is used to	
		pay Incentive and	
		Administrative	
		costs. The	
		incentive portion	
		is spread across	
		several	
		subcategories or buckets, one	
		being the	
		Resiliency	
		budget. We do	

Program/Service	Description of Program/Service	Cost and Cost	Funding
and gram, service		not track administrative costs at the subcategory level, only at the program level.	Source
Microgrids	The Microgrid Incentive Program has not yet been implemented at this time. A joint utility implementation plan is pending at the CPUC. There is an ongoing joint effort with the Rialto Unified School District (Rialto USD) to facilitate development of a behind-the-meter microgrid project for a school in Fontana as part of SCE's Community Resiliency Pilot. An amended agreement between Rialto USD and the microgrid developer was approved and executed. A construction schedule has been developed with the project completion date expected by June 30, 2023. This date is subject to change due to potential construction delays or other circumstances beyond SCE's control. SCE will continue to provide updates on this project in its Filed Bi-Weekly Updates on PSPS Corrective Action Plan in proceeding R. 18-12-005.	N/A	N/A
211 Partnership (Transportation, hot meal delivery or shelf stable food, and/or shelter)	211 screens PSPS needs via incoming calls (and texts), outbound efforts, and in-person visits to identify needs of households with AFN before, during and after PSPS activations. Needs screening efforts also help in identifying households with AFN who may need assistance preparing for emergencies, Care Coordination. Care Coordination provides households with assistance in emergency safety planning and helps with raising awareness of programs, including utility programs, and connections to local resources. During a PSPS, 211 Care Coordinators will reach out to the individual customer to check whether they require any additional support. SCE offers transportation, shelter, hot meal deliveries, and shelf stable food to customers with AFN through its partnership with 211.	Total Cost: \$973,492 211 conducted 59,785 needs screenings and identified 14,829 SCE customers and households interested in Care Coordination. 211 conducted 7,331 calls and performed Care Coordination. 211 sends outbound text and direct calls to 211 clients in areas potentially affected by PSPS to perform safety and	SCE did not request funding for this activity in its 2021 GRC. Therefore, any incremental amounts associated with this activity are tracked in its Fire Risk Mitigation Memorandum Account for potential future cost recovery

Durante IC and in	Description of Description in	Cost and Cost	Funding
Program/Service	Description of Program/Service	Description	Source
		preparedness checks.	
		In 2022, 211 provided four meal deliveries, two hotel accommodations, and three deliveries of resiliency items that support unique needs of households experiencing a PSPS. 12 211 did not receive any requests for transportation in 2022.	
Food Support	SCE has partnered with Food Banks to provide customers who were deenergized by PSPS.	Total Cost: \$31,840 SCE partners with foodbanks to offer food support to individuals who have been deenergized by PSPS. In 2022, foodbanks distributed 796 food boxes or bags to individuals affected by PSPS.	SCE did not request funding for this activity in its 2021 GRC. Therefore, any incremental amounts associated with this activity are tracked in its Fire Risk Mitigation Memorandum Account for potential future cost recovery
Hotel Discounts	SCE provides additional assistance to customers by encouraging local hotels to provide discounts to customers experiencing PSPS activation. Customers can review a list of participating hotels listed on SCE's website and can interact directly with the hotel to book rooms at a discounted rate.	Total Cost: \$0	N/A

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 $^{^{12}}$ Additional resiliency items included: coolers and ice for medication, and special nutritional formulas.

In accordance with CPUC D.21-06-034 Phase 3 OIR Decision Guidelines, SCE, along with SDG&E, and PG&E, leveraged the Federal Emergency Management Administration's (FEMA) Developing and Maintaining Emergency Operations Plans Comprehensive Preparedness Guide (CPG) 101 6 Step Planning Process to develop each IOU's respective Access and Functional Needs (AFN) Plan for Public Safety Power Shutoff Support (2023 AFN PSPS Plan). Following the FEMA 6 Step Planning Process, SCE collaborated with external stakeholders from the Statewide Joint IOU AFN Advisory Council and identified a gap in providing accessible communications for individuals who are Deaf, Blind, Deaf-Blind, and Hard-of-Hearing. SCE is addressing this gap in 2023 and will work with a third-party vendor to prepare and send PSPS notifications and educational outreach materials in American Sign Language and with English voice and Text (in refresh Braille reader format). In addition, SCE has increased its number of CBO partners that represent AFN communities to be part of SCE's CBO Education and Outreach Effort. The objective of this CBO effort is to educate and create awareness with constituents around Wildfire and Safety Preparedness, before, during, and after a wildfire.

C. Mitigation

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

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

Response: In preparation for the 2022 PSPS season, SCE continued to plan to use backup generation across a variety of use cases. Principal among these were underground load blocks, in which SCE engineered and modified circuitry to interconnect mobile generators to serve areas of very low fire risk, should the upstream feed be interrupted. SCE prepared five circuits with this capability.

SCE also prepared eight resiliency zone customers and two CRCs with backup generation capability in order to supply goods and services to communities during a de-energization. Finally, SCE may deploy temporary mobile generators for critical facilities to assist maintaining electric service for essential life safety and public service emergencies. These case-by-case decisions are made by the IMT in coordination with county emergency management offices, based on the unique circumstances associated with each event.

The table below contains details for SCE's 2022 deployment of backup generation to Resiliency Zone sites.

Table 19: Generators Deployed to Resiliency Zone Sites During October PSPS Event

Event Date	Circuit	Mitigation	Approximate Customer Count
10/22/2022	Strosnider	Resiliency Zone Backup Generator	1 meter - unknown visitors served
10/22/2022	Tioga	Resiliency Zone Backup Generator	1 meter - unknown visitors served

¹³ See SCE's 2023 Access and Functional Needs Plan for Public Safety Power Shutoff Support Pursuant to Commission Decision in Phase Two and Phase Three of R.18-12-005 filed on January 30, 2023, available at https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M501/K654/501654066.PDF.

D. Public Safety Partners

 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.

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

Response: SCE did not receive requests for selective re-energization made by public safety partners during de-energization events in 2022.

E. Transmission

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

Response: SCE did not de-energize transmission lines during 2022 PSPS de-energization events.

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

Response: Whenever bulk transmission lines are in scope for potential de-energization for PSPS, we begin our evaluations in the 4-7 days-prior timeframe. We start by determining the forecasted windspeeds on those transmission lines and compare them with their associated PSPS Thresholds. Next, we take into account the forecasted Fire Potential Index (FPI), as well as circuit health conditions to determine the likelihood of these transmission lines being de-energized for the PSPS event. We then develop various scenarios of these potential de-energized transmission line(s). For example, those transmission lines with the highest forecasted windspeeds and highest forecasted FPI would be grouped into one scenario, while others that traverse a corridor in the same county may be grouped into another scenario. After defining these scenarios, we determine what transmission equipment outages are planned during the PSPS event. We then perform contingency analysis based on forecasted load during the PSPS event with the planned transmission equipment outages, along with the various transmission line de-energization scenarios, in order to determine potential impacts. If potential impacts are found that can be mitigated by rescheduling planned transmission equipment outage(s), then those will be evaluated for reschedule potential. Once rescheduling of planned transmission outages are determined, we then perform contingency analysis again to evaluate any potential unmitigated impacts. The PSPS Operations group then communicates any potential thermal and voltage violations and discusses mitigating action plans with the Grid Control Center (GCC) real-time personnel, as well as with the CAISO. Mitigating actions will then be discussed amongst PSPS Operations, GCC, and CAISO—and implemented prior to the start of the PSPS event, when required.

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

Response: PSPS load flow studies are performed with an off-line and/or real-time study. Typically, PSPS Operations utilizes SCE's State Estimator Real-Time Contingency Analysis (RTCA) tool to perform studies pre- and during-event. The State Estimator RTCA tool is capable of taking a "snapshot" of the grid, and then modified off-line to model planned outages, load and generation adjustments, as well as intertie flow adjustments. Additionally, this tool is used to extract data (using a data historian) to trend all necessary real-time data points including load, MW/MVAR flows, voltages, CB status, etc., in order to accurately simulate scenarios for the PSPS event. Once all necessary modeling and adjustments have

been made, the RTCA function is enabled to perform all contingencies. Once all contingencies have been simulated, all thermal and voltage violations are evaluated. PSPS Operations then summarizes those violations that are not automatically mitigated for (such as from Remedial Action Schemes, etc.), and shares the results with GCC and CAISO, when applicable.

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

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

Response: PSPS Operations will communicate (as far in advance as possible) any potential impacts with neighboring entities identified in the pre-PSPS event timeframe. In the days leading to the PSPS event, PSPS Operations will communicate to SCE's Outage Coordination group (within the GCC) any transmission outages it deems "high likelihood" of de-energizing based on forecasted windspeeds at/near wind speed thresholds of those transmission lines. The Outage Coordination group will in turn submit these potential transmission line outage(s) as PSPS transmission outages to the CAISO and any publicly owned utilities and cooperatives in advance of the PSPS event for their awareness and to plan for mitigating actions, where required. The GCC will also schedule a call with the CAISO and PSPS Operations to ensure all outage submittals have been received and mitigations will be in place prior to the start of the event. SCE is currently in the process of enhancing the communications to any potentially impacted utilities as well as critical facilities interconnected at the transmission level.

Section IV: Safety and Enforcement Division-Specified

Brief response no longer than two pages.

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

Response:

Weather Modeling:

In 2022, SCE focused its weather modeling improvement efforts on expanding its machine learning model forecast locations and by implementing calibrated probabilistic forecasts for wind speed and wind gust via the machine learning models. A total of 500 new machine learning model locations were implemented by the end of 2022, bringing the total number of machine learning forecast locations to 564. These new machine learning model locations were evaluated against SCE's 2-km deterministic weather forecast model used as input into the machine learning forecasts for several high wind case studies to gauge forecast accuracy improvements. On average, the machine learning models were 40% more accurate for sustained winds and 44% more accurate for wind gusts over these cases studies. A summary of the weather model forecast accuracy statistics for each in-house weather modeling system from 1 July to 31 December 2022 are provided in the table below. This period was chosen as it captures all newly implemented machine learning models for 2022.

Table 20:

Forecast System (Day-of forecast)	Sustained Bias (MPH)	Gust Bias (MPH)	Sustained MAE (MPH)	Gust MAE (MPH)
2-km Deterministic	-0.82	-1.87	2.64	3.84
2-km NAM Ensemble	-0.09	-0.73	2.61	3.82
1-km GFS Ensemble	-0.54	0.62	2.52	3.39
1-km EC Ensemble	-0.33	-0.06	2.50	3.24
1-km EC/GFS Ensemble	-0.42	0.27	2.44	3.17
Machine Learning*	-1.21	-1.39	2.13	2.96

Table: Forecast verification statistics for daily day-of forecasts by raw meteorology predictive models spanning 7/1/2023 through 12/31/2023. Bias is defined as Forecasts – Observations. *The machine learning forecasts do not exist at every weather station location and thus comparing the forecast performance between the machine learning and all other models in the above table is not a fair comparison.

In 2023, SCE will continue to focus on developing and continuously improving its machine learning approach. Specifically, SCE will develop new machine learning models at up to 600 new weather station locations. SCE will also be evaluating the impacts of including new input data from its ensemble forecast systems on machine learning forecast accuracy, which will help inform future machine learning forecast improvement efforts. Finally, SCE is working to evaluate a new form of forecasting leveraging Selforganizing Maps, which provides an analog (based on prior known outcomes) approach to creating a weather forecast. This will allow SCE meteorologists to gauge upcoming events against similar events in the past and to include those known outcomes as a possible forecast solution.

Fire Spread Modeling:

Throughout 2022, SCE continued to make important investments in fire spread modeling technology to help identify areas that are at high risk for large wildfires, which can have devastating consequences. Fire spread modeling is currently being used to help assess fire risk/consequence during PSPS events, but it has the potential to be integrated more directly into the PSPS decision-making process in the future.

In 2022, SCE added the Building Loss Factor (used to determine the Buildings Destroyed metric) and the Response Complexity metric. SCE tested and analyzed the computations of these layers. This evaluation identified opportunities to further enhance and optimize performance for use of this consequence data within the decision-making process of PSPS. In addition to these two metrics, SCE's vendor, Technosylva delivered: 1) a custom fuels atlas which details the vegetation in select locations throughout the SCE service area, 2) an Extended Attack Index assessing the probability of an ignition becoming a fire that would extend past initial attack, 3) an updated fuels layer that better accounts for timber models, and 4) the integration of percentiles into FireCast.

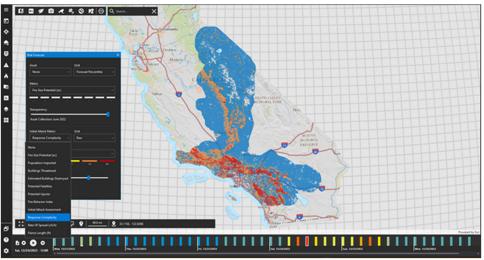


Figure 1 - Image showing the addition of metrics in Wildfire Analyst Enterprise including Response Complexity.

SCE expects that as its fire spread modeling capabilities mature, the results of the modeling will be factored into the PSPS thresholds by 2026. SCE has identified additional functionality needed to meet that goal. This includes improvements to response complexity (which is used as a proxy for suppression effort estimations), modeled fire behavior, crown fire (fire within tree-tops) behavior predictions, and urban conflagration modeling. In addition, SCE's Fire Science team will review the methodology for consequence integration into PSPS decision-making with the vendor and evaluate the enhanced capabilities for use during real-time PSPS events.

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 scope and duration of PSPS is primarily determined based on the weather, fuel and asset considerations reflected in our activation and de-energization thresholds. The risks and benefits are inherent in these thresholds, with challenges around forecasting, FPI calibration, and asset health.

SCE utilizes a PSPS In-Event Risk Comparison Tool (Tool) to provide an event-based quantitative comparison of wildfire and PSPS risk scores to further inform de-energization decision making. All assumptions, references and design of the Tool are documented in SCE's post-event reports, and SCE will continue to look for ways to refine these calculations. The main challenge SCE experienced in 2022 was the timely availability of FireCast model information for circuits that were not originally forecasted in scope for potential de-energization. These circuits were brought into scope based on emergent weather conditions. FireCast modeling inputs are based on information provided as part of SCE's initial PSPS forecast. Therefore, some circuits not originally identified in scope for a PSPS event could not be included in the FireCast Model inputs. SCE continues to refine and update its forecasting models through the addition of new models and machine learning algorithms, which are expected to further improve forecasting for PSPS event scope to address this challenge.

3. Explain your communication to customers about the cost/benefit analysis you perform to determine whether to utilize protective equipment and device settings or PSPS during a weather event.

Response: SCE interprets "protective equipment and device settings" to refer to Fast Curve settings. Although both PSPS and Fast Curve settings are wildfire mitigation tools, they should not be viewed as alternatives per se, and SCE does not choose to use one over the other when responding to fire weather conditions. Rather, PSPS and Fast Curve settings operate independently, with separate implementation criteria and cost/benefit analyses.

Fast Curve is a setting on protective relays that opens circuit breakers ("CBs") at the substation and/or remotely-controlled automatic reclosers ("RARs") to stop the flow of electricity when an electrical fault unexpectedly occurs on a portion of a distribution line. Fast Curve settings act to promptly reduce the amount of energy that runs through the fault location (e.g., lightning strike or car hit pole incident), thus reducing the likelihood of the fault turning into an ignition. Fast Curve is an advanced iteration of protective devices that utilities have used for decades, such as fuses, and are installed throughout utility territories across the country. SCE enables Fast Curve settings during certain fire weather conditions. The criteria for these conditions include Red Flag Warnings (RFW) declared by the National Weather Service and/or a Fire Weather Threat (FWT), Fire Climate Zones (FCZ) Threat (typically when there are dry fuel conditions in certain zones), ¹⁴ Thunderstorm Threats (TT) or other factors declared by SCE's weather services team. These criteria have evolved based on lessons learned from historical conditions (e.g., addition of FCZ, TT). However, during severe fire weather conditions (dry fuels and strong winds), there is a heightened risk of ignitions primarily due to wind-driven foreign objects or airborne vegetation coming into contact with SCE's equipment. In these dangerous conditions, the deployment of Fast Curve settings, even in combination with other grid hardening measures, may not sufficiently mitigate wildfire and public safety risk, and PSPS is necessary as a last resort to prevent ignitions that may lead to significant wildfires.

Enablement of Fast Curve settings increases device sensitivity to faults. Any outages triggered by Fast Curve settings are considered unplanned, as they are triggered by a fault on the system, meaning that SCE cannot predict such outages or warn customers prior to the outage. By contrast, PSPS events are proactive, and are usually preceded by some period of forewarning enabling the IOUs to provide advance notifications to customers and stakeholders, and to mobilize customer support resources. As such, these mitigations are not alternatives to one another and SCE does not consider using one over the other during weather events.

For more information on PSPS and Fast Curve settings, please see SCE's 2022 PSPS post-event reports which include a discussion of wildfire mitigation measures, alternatives considered, and SCE's last resort analysis. SCE's post-event reports are publicly available to customers on SCE's website. ¹⁵ Additionally,

¹⁴ SCE has a seasonal approach based on zone-specific historical occurrence of fuel-driven fires.

¹⁵ SCE's 2022 Post-Event Reports are available at on.sce.com/PSPSposteventreports.

SCE makes available to its customers via its website fact sheets and other educational materials that describe the use of Fast Curve settings and PSPS.¹⁶

4. Explain how you fully incorporated public safety partners in your exercise planning. How many were invited to, and attended each planning meeting? Describe your communication efforts-dates and methods-to solicit participation.

Response: As a part of SCE's pre-season outreach efforts, SCE engaged its public safety partners in multiple forums in 2022. In these forums, SCE promotes and encourages participation in the PSPS readiness activities during our various PSPS working group sessions and workshops with local and tribal governments, and critical infrastructure providers.

Invitations to observe or participate in 2022 PSPS exercises were extended to over 5,000 public safety partner representatives from jurisdictions throughout the service territory including: critical infrastructure, tribal nations, and first responder agencies. SCE solicited their input in exercise design and development, and their feedback was considered and incorporated to the extent feasible within established exercise parameters. Feedback and lessons learned from real world events were also incorporated as applicable.

¹⁶ SCE's Fast Grid Protection Settings fact sheet is available at

https://download.newsroom.edison.com/create_memory_file/?f_id=6324ab2eb3aed325b3014c59&content_verified=True and SCE's PSPS decision-making technical paper, Quantitative and Qualitative Factors for PSPS Decision-Making is available at

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

Response:

Table 21: 2022 Lessons Learned

Lessons Learned/Corrective Actions		
OBSERVATION	CORRECTION ACTION	
Circuit to customer mapping across source system databases continues to be one of the primary challenges resulting in errors and discrepancies in notifications, and overall situational awareness.	SCE has launched an ongoing effort to identify and proactively correct circuit to customer mapping errors to improve notification accuracy.	
Some customers in High Fire Risk Areas are either not enrolled/or opted out or have not provided validated contact information to SCE resulting in missed notification while in a real event.	SCE is in the process of auto-enrolling all customers that live in the High Fire Risk Areas but are not currently enrolled in PSPS alerts and has disabled the customer opt-out feature	
	SCE is in the process of enhanced outreach to these customers to confirm their contact information and enroll them in PSPS notifications.	
Limited manual intervention was required for some in- event notifications, ultimately resulting in missed and delayed notifications	SCE is evaluating the process for sending in-event notifications to reduce end-to-end processing time	

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

Response: SCE utilizes objectives and scenarios in exercises that touch upon whole community concerns. In particular, the exercise scenarios help to ensure that personnel are being tested on a wide range of potential issues and concerns from customers and community members of every type. Furthermore, SCE invited stakeholders from public safety partner agencies to participate in the exercise design, development, and execution. Please also see response to Question 4 above.

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

Response: SCE reported a total of 990 complaints in its 2022 post-event reports. Subsequent to filing the 10-day reports, SCE conducted additional validation of the preliminary complaint data. Through this validation, SCE determined that 347 of the reported complaints did not meet the CPUC definition of PSPS complaints in D.21-06-014 and that SCE inadvertently captured and incorrectly categorized as complaints public service announcements, flex alerts, wind advisories, status on the PSPS events, cities alerting their communities of PSPS, and general comments. Please see Section II above for amended PSPS complaints tables that provide the updated number of complaints received by SCE for each 2022 PSPS event. SCE is enhancing and automating its complaint tracking system to remediate this issue going forward.

The vast majority (89% = 573) of the total complaints (643) received for 2022 PSPS events came through social media channels such as Facebook, Instagram, and Twitter. These complaints tended to come from customers generally dissatisfied with PSPS, such as expressing frustration related to PSPS in general (including timing of the outage over the Thanksgiving holiday), duration, frequency of PSPS events,

restoration time, lack of notifications, food loss, and/or comments regarding dissatisfaction with SCE generally. The remaining complaints were received through SCE's Call Center, Business Customer Division, Consumer Affairs, Local Public Affairs or at an activated CRC or CCV location during a PSPS event. Complaints received through these channels were similar to the complaints received through Social Media, and tended to focus on timing and duration of the event, restoration time, food loss and general dissatisfaction. Where appropriate, SCE worked to resolve customer complaints by providing information such as customer support programs and resources available, and information on SCE's claims process.

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

Response: The PSPS Central Data Platform (CDP) improved the speed and accuracy of sending PSPS notifications to Public Safety Partners (including local and tribal governments) and to customers in 2022 and the number of missed notifications has improved from prior years. For customers de-energized in 2022, the vast majority received at least one notification prior to de-energization.

CDP greatly improved SCE's ability to send notifications to customers in scope prior to the period of concern for PSPS events. However, due to sudden onset of stronger-than-expected winds in the vicinity of circuits that had not been forecast to exceed PSPS criteria, it was not possible to provide advance notice of potential de-energization to some de-energized customers and Public Safety Partners who were not in scope prior to the period of concern. SCE is continuing to expand its machine learning modelling capabilities to further enhance the accuracy of weather forecasts. While machine learning will continue to improve models, weather forecasting will always be subject to uncertainty, especially at a granular circuit or circuit segment level.

SCE was also unable to provide some customers with PSPS notifications due to missing contact information or customers opting out of notifications. However, in December 2022, SCE implemented auto-enrollment of all HFRA customers to emergency notifications that are sent for PSPS events. SCE also implemented a system enhancement that will prevent customers from un-enrolling from emergency notifications. Furthermore, in 2023, SCE will implement auto-enrollment into emergency notifications at account sign-up for all customers with the contact information they provide. This will improve notification performance during all emergency conditions for which SCE sends notifications. SCE is also assessing alternative methods to obtain missing customer contact information via call center scripts, direct mailers, and other sources. While the number of customers who have not provided us contact information for emergencies is small, SCE remains committed to making all reasonable efforts to provide notifications to all customers affected during PSPS events.

In the November 24, 2022 PSPS event, there were some customers that were re-energized before imminent re-energization notification could be sent. Because SCE pre-positioned crews prior to re-energization authorization, these customers were re-energized almost immediately after authorization. SCE is evaluating its process for sending imminent restoration notifications to identify possible opportunities to reduce end-to-end processing time.

In 2023, SCE will continue to explore additional enhancements to CDP to build on the notification progress made in 2022.

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 2022 and what corrective actions are planned?

Response: SCE does not have Public Safety Specialist positions. Instead, a similar function is performed by SCE's Fire Management staff. SCE utilizes specialized Fire Management staff to monitor, respond to, and report on all fires or potential fires that affect or could affect SCE infrastructure. The personnel represent SCE by serving as a Cooperator in the field fire incident management structure. Fire Management staff assist in coordinating SCE's response to fires by providing information to manage the bulk electric system, repairing damage, restoring the electric system, and providing safe access to begin restoration work. These personnel maintain close working relations with fire and emergency management agencies throughout the service area and serve as consultants and subject matter experts on fire risk management. SCE's Fire Management staff are the conduit into the incident command post during active wildfire incidents serving as the on-scene SCE Agency Representative. In this capacity, SCE's Fire Management staff enable two-way flow of information for safe and efficient response and recovery efforts.

In addition to the Fire Management staff described above, when SCE activates an Incident Management Team (IMT) for a PSPS event, a Liaison Officer (LNO) also gets activated. In some PSPS events, an Agency Representative (AREP) will also join SCE's IMT. The primary responsibility of the Liaison Officer is to coordinate and resolve issues between SCE's IMT and local and tribal government officials. Additionally, SCE's Government Relation Managers and Customer Service Account Managers help to respond to local and tribal government concerns. SCE's Business Resiliency personnel also coordinate with County and State Offices of Emergency Management. Local and tribal governments are provided a dedicated phone number and email to contact SCE's Liaison Officer and Business Resiliency staff.

During IMT activations for a PSPS event, SCE's Fire Management staff and other SCE IMT personnel are actively engaged with local and tribal government officials and emergency services officials to coordinate on operational matters.

In 2022, SCE continued to enhance its relationships with the emergency management community. SCE actively engages with and participates in fire community associations and fire safe councils. In 2023, SCE will continue to collaborate and engage with the fire community through active participation in these associations and councils. SCE will also continue to support the local fire community by providing its Electrical Safety for First Responders awareness presentations to fire agency personnel.

SCE regularly meets with local and tribal governments to increase their awareness of PSPS protocols so that they can prepare for potential PSPS events. Additionally, SCE invites local and tribal government officials to participate in PSPS and Full-Scale exercises.

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: Please see response to Question 9.

Appendix A

In-Language Wildfire Mitigation Communications and Outreach Effectiveness Survey 2022 Pre-/Post- Final Report – Business January 31, 2023

and

In-Language Wildfire Mitigation / PSPS Communications and Outreach Effectiveness Survey 2022 Pre-/Post- Final Report – Residential January 31, 2023



In-Language Wildfire Mitigation Communications and Outreach Effectiveness Survey 2022 Pre-/Post- Final Report

Business

January 31, 2023

Background & Objectives

Starting in 2020 the California IOUs began conducting an annual pre-/post-survey to assess the effectiveness of utility communications and outreach for wildfire safety/preparedness and PSPS activities.

- Core questions are administered by all three IOUs via their individual surveys, allowing some comparisons across IOUs, while each IOU may also incorporate custom questions. Most of the pre-questions are repeated in the post- survey along with additional unique post-questions.
- Each IOU determines its own methodology for optimizing the survey implementation and utilized their own preferred research partners.
- SCE administered the wildfire season pre-and post- surveys to the general public (Residential and Business customers) systemwide and in high fire risk areas (HRFAs).

Methodology

Survey invitations were delivered to Residential and Business customers via email (to a self-administered web survey) or phone (to an interviewer-administered telephone survey).

Via email: 70%Via phone: 30%

- All Residential & Business Pre- surveys were completed between June 28 and August 15, 2022
- All Residential & Business Post- surveys were completed between Nov 21, 2022 and Jan 2, 2023

2022	Residential	Systemwide	Resident	ial HFRA		
Interviewing	Pre	Post	Pre	Post		
Number Completed	2,310	2,282	2,425 (1,673+752 from Systemwide)	2303 (1,583+720 from Systemwide)		
Survey Length (min)	14.1	16.9	14.1	17.6		
2022	Business S	systemwide	Business HFRA			
Interviewing	Pre	Post	Pre	Post		
Number Completed	774	596	731 (552+179 from Systemwide)	545 (410+135 from Systemwide)		
Survey Length (min)	9.3	12.9	9.5	12.8		

Methodology (cont.)

- Incentives: All participants were offered entry to a sweepstakes. Prizes for the sweepstakes (each wave) included:
 - Two grand prize winners of \$500 (1 each for RES and BIZ)
 - o Fifty-four (54) other winners of \$100 (38 for RES and 13 for BIZ) enough winners to make the odds of winning about 1:100
- Each IOU selects the "prevalent" languages in which to offer the survey. SCE included 19 languages plus English in 2022.

1.	<u>English</u>	11.	<u>Korean</u>
2.	<u>Arabic</u>	12.	<u>Punjabi</u>
3.	<u>Armenian</u>	13.	<u>Russian</u>
4.	Chinese - Cantonese	14.	<u>Spanish</u>

- <u>Chinese Mandarin</u> 15. <u>Tagalog</u>
- . <u>Farsi</u> 16. <u>Vietnamese</u>
- 7. French 17. Hindi
 - German 18. Hmong
 - <u>Japanese</u> 19. <u>Portuguese</u>
- 10. <u>Khmer</u> 20. <u>Thai</u>

Methodology (cont.)

- Email invitations greeted potential respondents in all 20 languages with a jump link in the email to a web survey in that language.
- The CATI phone center has staff available in all languages, but all are not always available. Upon encountering a language barrier, the interviewer attempts to identify the language and stores the record for re-contact later. If the language cannot be identified, a surname-based, pre-coded flag is used to assign the record for re-contact.
- 8.5% of Systemwide RES and 5.5% of Systemwide BIZ customers completed their surveys in a language other than English.

2022 PRE-

- > **6.2%** of RES Systemwide
 - 6.9% of Phone (n=678)
 - 5.9% of Email (n=1632)
- > 3.3% of RES in HFRA
 - 5.6% of Phone (n=462)
 - 2.4% of Email (n=1211)
- > 8.1% of BIZ Systemwide
 - 5.8% of Phone (n=226)
 - 9.1% of Email (n=548)
- > 3.1% of BIZ in HFRA
 - 0.7% of Phone (n=152)
 - 4.0% of Email (n=400)

2022 POST-

- > 8.5% of RES Systemwide
 - 6.8% of Phone (n=632)
 - 12.9% of Email (n=1650)
- > 3.9% of RES in HFRA
 - 5.9% of Phone (n=410)
 - 3.2% of Email (n=1202)
- > 5.5% of BIZ Systemwide
 - 1.9% of Phone (n=210)
 - 7.5% of Email (n=386)
- > 3.6% of BIZ in HFRA
 - 0.0 of Phone (n=135)
 - 5.3% of Email (n=281)

Methodology (cont.)

Below are the number of <u>Business</u> interviews conducted in each language.

Language of Interview		Systemwide g HFRAs)		ss HFRA g Systemwide)
	2022 Pre	2022 Post	2022 Pre	2022 Post
English	711	564	535	362
Non-English (total)	63	32	17	14
Chinese - Mandarin	11	5	3	
Korean	16	7	8	8
Chinese - Cantonese	4	1		
Spanish	19	10	2	1
Thai	1			1
Japanese	3	1	2	1
Vietnamese	6	4		
Tagalog	1			
Khmer	2			
French		2	2	
Arabic		1		2
Russian				1
Farsi		1		
German, Punjabi, Armenian, Hindi, Hmong, Portuguese				
TOTAL	774	596	552	376

Executive Summary



Need for Wildfire comms in languages other than English

Since 2020, SCE has completed 23,514 "in-language" Wildfire interviews with Residential customers and 6,593 with Business customers. The surveys are offered to customers in 19 "prevalent" languages plus English (25 + English in 2020). Survey invitations are extended by email (with an in-language survey link to an in-language version of the questionnaire for all offered languages) and/or by phone (where all potential respondents with language barriers were either transferred live to a bi-lingual interviewer or were grouped by likely language and recontacted later by a bi-lingual interviewer fluent in that language).

Given these options, just 5.9% of Residential customers and 6.8% of Business customers chose to take the survey in a non-English language (RES: 1,394 of 23,514; BIZ: 446 of 6,586). Spanish accounts for more than half of these inlanguage interviews.

In the 2022 Post- survey, when asked to choose their preferred language for wildfire communications from SCE, <u>9% of Residential customers and 7% of Business customers indicated a preference for a language other than English.</u> All these customers were asked: "How do you feel about receiving wildfire communications from SCE in English only?"

- At least 2/3s of these customers report they can understand English well enough for WF communications
 - Residential: 31% of the 9% who prefer another language report they cannot understand English and need wildfire communications in some other language. That amounts to 2.8% of all Residential customers.
 - Business: 16% of the 7% who prefer another language report they cannot understand English and need wildfire communications in some other language. That equals 1.1% of all Business customers
- Spanish is the required "other" preferred language for 57% each of the Residential and Business customers.
- The remainder those who do not understand English OR Spanish equals 1.2% of all Residential customers and 0.47% of all Business customers.

After three survey years it appears that non-English language dependency for Residential and Business customers is a relatively minor concern across SCE's territory (and even less so in the HFRAs) in reaching customers with wildfire-related communications – and it is especially <u>not</u> critical for WF comms to be offered in such a wide array of "prevalent" languages beyond English and Spanish (and perhaps a few prominent Asian languages).

SUMMARY OF FINDINGS

Changes in PSPS metrics among Business customers territory-wide and in HFRAs between the Pre- and Post-surveys in 2022 are relatively minor – and results are comparable to those found Pre- to Post- in 2021.

Need for Wildfire comms in languages other than English – Post- 2022 (cont.)

- The 2022 Post- survey interviewed 596 Business customers territory-wide and another 410 in HFRAs.
 - 5.5% systemwide and 3.6% in HFRAs completed the surveys in a non-English language.

- Territory-wide

- When asked directly to select their preferred language for wildfire communications, <u>7% indicated a preference for a language other than English</u>. Most of these customers (4%) prefer Spanish. The balance (3%) of all Business customers prefer a language other than English OR Spanish.
- This 7% divide into 5.9% who say they have some understanding of English and 1.1% who say, "I need it in my preferred language I do not understand English." That 1.1% who do not understand English break down to 0.6% who prefer Spanish and 0.46% who prefer a language other than English or Spanish.

- HFRAs

- <u>4% indicated a preference for a language other than English</u> for wildfire communications. Most of these (2%) prefer Spanish, leaving 2% who prefer a language other than English or Spanish.
- This 4% divide into 3.6% who have some understanding of English and 0.4% who say, "I need it in my preferred language I do not understand English." That 0.4% of the HFRA population who do not understand English break down to 0.2% who prefer Spanish and 0.2% who prefer a language other than English or Spanish.

Recall of SCE WF Communications

- The 2022 Post- fire season share of all Business customers who recall SCE WF communications (49%) is unchanged from the Pre- survey and is comparable to Residential Post- recall (48%). As with Residential, recall among Business customers is higher in HFRAs (54%, unchanged) than in non-HFRAs (46%, unchanged).
 - Recall among those who "prefer other languages" for WF communications (regardless of what language they saw the communications in) was also unchanged (56%).
- In 2021, the Post- survey found half of all Business customers (48%) recalled seeing SCE WF communications unchanged from 51% in the Pre- survey. Recall among customers in HFRAs was also unchanged (57% to 57%).

SCE WF Communications Sources

- Emails (52%, unchanged) and letters (46%, <u>down</u>, especially in Non-HFRAs) are the most common sources of WF information from SCE. Other sources include SCE.com (14%, unchanged), SCE advertising on TV, radio, or online (16%, unchanged), <u>texts from SCE</u> (7%, unchanged systemwide but <u>up in HFRAs</u> to 13%), informational videos on TV (7%, unchanged), phone calls from SCE (6%, up systemwide), and Social Media Posts (6%, unchanged).
- Source usefulness for the most common SCE sources ranges from 54% (letters) to 70% (SCE.com).
- Satisfaction with SCE.com, among those who cite it as a source of WF communications (14% of all Businesses), dipped but remains high (at 73%, down from 87%).

Other WF Communications Sources

- At most, about one-fourth of Business customers (27%) cite any of a wide variety of "other" sources of WF comms. Local news reports (26%, down), City/County government (27%, unchanged), and CalFire (20%, unchanged) are the primary sources recalled. No "other" source comes close to the 49% who say they recently saw SCE WF communications.
- Among those few Businesses that prefer to get such communications in a language other than English, these same three leading sources reach 12%, 28% and 12%, respectively plus state government at 19%. SCE's performance at reaching 56% of these Businesses makes SCE a much more common source.
- The most useful "other" information sources are CBOs, CalFire, and local fire departments.

Ratings of SCE's WF Efforts

- Ratings of SCE on WF efforts have been <u>consistent</u> and <u>unchanged</u> Pre- to Post- among Business customers since 2020.
 - Satisfaction with SCE's overall wildfire safety and preparedness efforts at the end of each fire season: 59%,
 56%, and 56% in 2020, 2021, and 2022.
 - Agreement with 9 statements about SCE's WF efforts has also been consistent: little change between Pre- to Post- and agreement ranges from 52% to 70% in 2020, 47% to 66% in 2021, and 47% to 68% in 2022.

Wildfire Preparedness

- Self-reported preparedness levels <u>rose</u> as did reports for several preparedness actions.
 - Net preparedness (completely plus somewhat) <u>rose</u> Systemwide (from 53% to 61%), in HFRAs (from 56% to 66%), and in Non-HFRAs (from 51% to 59%).
 - Five preparedness actions <u>rose</u>: purchased new lanterns or flashlights (23%): acquired back-up generator (17%); removed vegetation (15%); prepared for multiple-day outage (11%); acquired batter storage (9%).
 Visits to SCE.com dropped (from 15% to 9%).
 - Despite all these increased actions, those saying "I have not taken any action" was <u>unchanged</u> (37% to 38%).

PSPS Awareness and Satisfaction

- Awareness of "PSPS" among Business customers has been steady since 2020.
 - PSPS Awareness at the end of 2020 was 72% systemwide and 81% in HFRAs.
 - At the end of 2021, PSPS Awareness was 67% systemwide and 80% in HFRAs.
 - At the end of 2022, it was 70% systemwide and 78% in HFRAs.
- More customers Pre- to Post- in 2022 have a positive opinion of SCE's overall PSPS program: from 50% to 56% systemwide, driven mostly by gains with Non-HFRA customers.
 - Prefer Other Language customers' opinions improved from 66% to 70%, impacted more by HFRA customers.
- Systemwide satisfaction with SCE.com for PSPS information at the end of the fire season each year <u>has inched up</u> from 62% in 2020 to 64% in 2021 to 70% in 2022. Use of SCE.com for this information has been <u>steady</u>: 21% in 2020, 17% in 2021, and 20% in 2022.
- Satisfaction with SCE.com among HFRA customers improved Pre- to Post- in both 2021 and 2022.

PSPS Notifications and Events

- Those who report having received an alert was highest in 2020 (36%), falling to 30% in 2021 and 32% in 2022.
 - As always, fewer Non-HFRA Business customers receive PSPS alerts: 28% among Non-HFRAs vs. 42% among HFRAs in 2022.
- Aside from what appears to be an increase in the use of texts, the alert sources have been consistent.
 - Use of texts for these alerts <u>rose</u> in 2022. The Post- fire season incidence for texts as the Alert source was 49% in 2022, 37% in 2021, and 39% in 2020.
 - Emails from SCE remain the most common alert source: 58% in 2022, 46% in 2021, 55% in 2020.
 - Recorded phone messages from SCE have also been used consistently over the years: 24% in 2022, 28% in 2021, and 25% in 2020.
- As expected, Business customers in HFRAs, compared to those in Non-HFRAs were more likely to say they experienced a PSPS event: 28% in HFRAs and 15% in Non-HFRAs in the Post-survey.
- Most customers checked for updates during PSPS outages (just 17% said they did not check). The use of SCE.com is the most widely used update source, but it <u>dropped</u> in 2022 from 53% to 23% most likely due to the limited number of events in 2022. Those who called the SCE phone center (21%) and checked social media (13%) were <u>unchanged</u>, but the use of local news rose (from 7% to 15%).
- The source usefulness of SCE.com regarding update information in 2022 is 65% which is <u>comparable</u> to the 2021 rating (56%).
- Satisfaction with SCE.com for information provided <u>during</u> events recovered somewhat (68% in 2020; 52% in 2021; 60% in 2022), especially due to an improvement among Non-HFRA customers.
- Power restoration notices are arriving to an <u>increasing share</u> of those who do experience an event. In 2022 this incidence <u>rose</u> to 66% (from 53% in 2021 and 43% in 2020). They are considered useful to 61% systemwide but 80% of HFRA Businesses.
- Satisfaction with SCE.com for information provided <u>after</u> events was <u>unchanged</u> (59%).
- Overall satisfaction with SCE's PSPS communications generally <u>held steady</u> (53% Systemwide and in HFRAs, and 61% in Non-HFRAs).

Executive Summary: Total Sample

- Recall of recent SCE WF communications about 10% higher in HFRAs (mid 50%'s vs mid 40%'s).
- Recognition of the term "Public Safety Power Shutoffs" is also about 10% higher in HFRAs (mid- to high- 70%'s vs low- to mid- 605"s). Recognition in Non-HFRAs <u>rose</u> (to 66%) leading to an increase systemwide.
- Typically, both positive opinions of SCE's PSPS program and preparedness <u>rise</u> between the start and end of the fire season while satisfaction with SCE's WF preparedness efforts remains unchanged.

	System Wide			HFRA				Non-HFRA				
	2021 Pre	2021 Post	2022 Pre	2022 Post	2021 Pre	2021 Post	2022 Pre	2022 Post	2021 Pre	2021 Post	2022 Pre	2022 Post
Recall Wildfire Communications (% Yes)	51%	48%	46%	49%	57%	57%	53%	54%	48%	46%	43%	46%
SCE Sources Considered Useful (Top 2 Box avg.)	60%	65%	58%	58%	58%	59%	56%	61%	62%	67%	60%	57%
Heard of Public Safety Shutoff Program (%Yes)	67%	67%	65%	70%	79%	80%	74%	78%	63%	65%	61%	66%
Preferred Language For Public Safety Information												
English	94%	91%	93%	93%	97%	95%	96%	96%	92%	91%	92%	92%
Spanish	1%	3%	3%	4%	1%	1%	1%	2%	1%	3%	4%	4%
Korean	1%	3%	2%	1%	1%	1%	1%	1%	2%	3%	2%	1%
(Among those who prefer comms in other language) Understand English (% Yes)	89%	78%	85%	84%	67%	87%	94%	91%	91%	78%	83%	81%
Satisfaction with Communication Efforts												
Opinion of SCEs PSPS program (Top 2 Box/Positive)	48%	54%	50%	56%	42%	51%	46%	50%	50%	54%	51%	57%
Satisfaction w/ SCE's WF Preparedness Efforts (Top 2 Box/Satisfied)	56%	56%	53%	56%	52%	54%	53%	51%	57%	57%	54%	58%
Personal Level of Preparedness (Completely/Somewhat)	51%	55%	53%	61%	60%	63%	56%	66%	47%	52%	51%	59%

Executive Summary: Total Sample

• Attitudes toward SCE's WF-related efforts have changed little between the start and end of the fire seasons in both 2021 and 2022.

		System Wide			HFRA				Non-HFRA			
SCE Attributes (Top 2 Box)	2021 Pre	2021 Post	2022 Pre	2022 Post	2021 Pre	2021 Post	2022 Pre	2022 Post	2021 Pre	2021 Post	2022 Pre	2022 Post
Is committed to restoring power to customers affected by wildfires	67%	66%	66%	68%	61%	63%	66%	64%	68%	67%	67%	70%
Is working to keep my community safe	61%	64%	60%	58%	58%	58%	58%	60%	61%	65%	61%	58%
Shows care and concern for customers	57%	59%	55%	58%	51%	53%	52%	55%	57%	60%	57%	60%
Is committed to wildfire safety	60%	60%	60%	61%	59%	58%	60%	59%	60%	61%	61%	63%
Takes proactive measures to protect the electricity grid from wildfires	56%	57%	57%	58%	56%	55%	56%	58%	56%	58%	58%	60%
Makes an effort to communicate with all customers about wildfires	60%	58%	55%	61%	58%	58%	58%	59%	59%	58%	55%	64%
Is proactive in taking steps to address wildfire risks	57%	57%	57%	60%	57%	56%	57%	56%	56%	58%	58%	61%
Is a company I trust to act in the best interest of its customers	52%	56%	52%	52%	47%	48%	46%	48%	53%	57%	54%	54%
Is helping me prepare for wildfire season	46%	47%	45%	47%	43%	45%	44%	43%	46%	47%	46%	49%

Q14. Using a scale where 1 means completely disagree and 5 means completely agree, Please indicate how much you agree or disagree with the following statements about SCE. SCE...

Languages Used / Preferred

Languages Used at Business

- Nearly all Business customers throughout SCE's territory (98%) report using English in their businesses.
- Spanish is also common (28%), followed at a much lower level by Mandarin Chinese (3%).

 Business

Syste	mwide	HF	RA	Non-	n-HFRA		
2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post		
(n=774)	(n=596)	(n=731)	(n=545)	(n=595)	(n=461)		

<u>sed in Business</u>							
English		98%	98%	98%	99%	97%	99%
Spanish	33%	28%	26%	27%	34%	28%	
Chinese Mandarin	5%	3%	3%	1%	5 %	4%	
Chinese Cantonese	2%	1%	1%	-	2%	1%	
Korean	3%	2%	2%	2%	3%	2%	
Tagalog	1%	<1%	1%	<1%	1%	< <mark>1%</mark>	
Vietnamese	2%	2%	1%	<1%	2%	2%	
Arabic	<1%	<1%	<1%	<1%	<1%	<1%	
Japanese	1%	1%	1%	1%	1%	< <mark>1%</mark>	
Farsi	<1%	1%	1%	<1%	<1%	1%	
Armenian	<1%	-	1%	<1%	<1%	-	
French	<1%	1%	1%	<1%	1%	1%	
Russian	<1%	<1%	<1%	<1%	<1%	-	
German	1%	<1%	1%	-	<1%	<1%	
Punjabi	<1%	<1%	<1%	-	-	<1%	
Hindi	1%	<1%	<1%	<1%	∣ 1%	<1%	
Thai	-	<1%	-	<1%	-	-	
Hmong	-	1%	<1%	-	-	1%	
Other	<1%	1%	1%	<1%	<1%	∣ 1%	

Q2. "What languages are often used in your home/business?"

Language Preferred for Public Safety Information

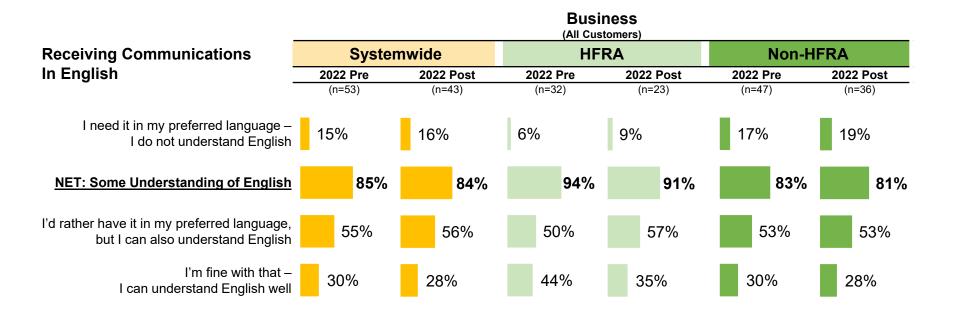
• Despite using some other languages in businesses, when asked for the language preferred for WF communications, the vast majority say English. Just 7% select a language other than English systemwide and 4% in HFRAs.

	Business (All Customers)												
Preferred Language for		Systen	nwide	HFRA				Non-HFRA					
Public Safety Information	2022 F		2022 P		2022 P		2022 Po		2022 P		2022 P		
	(n=77	4)	(n=59	0)	(n=73 ⁻	1)	(n=545))	(n=595	0)	(n=46 ²	1)	
English		93%		93%		96%		96%		92%		92%	
Korean	2%		1%		1%		1%		2%		1%		
Spanish	3%		4%		1%		2%		4%		4%		
Chinese Mandarin	1%		1%		1%		1%		1%		2%		
Japanese	<1%		<1%		<1%		<1%		<1%	-			
Chinese Cantonese	-		-		<1%	•	-		-	-			
Vietnamese	<1%		1%		-		-		<1%		1%		
Other	1%		1%		1%		<1%		1%		1%		

Q3. What is your preferred language for receiving public safety information like this from SCE?

Strength of Language Preference

- Among the 7% systemwide who said they prefer WF communications in some other non-English language, 84% of them report they can at least understand English.
- The balance (16% of the 7%, or 1.1% systemwide) report they do not understand English.



Q4. [PREFER LANGUAGE OTHER THAN ENGLISH] How do you feel about receiving wildfire communications from SCE in English only?

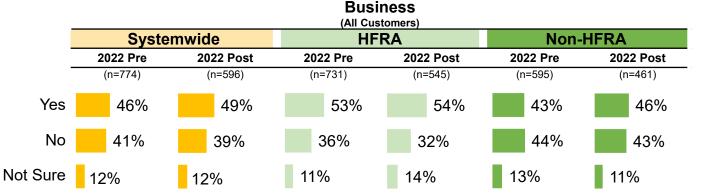
SCE Wildfire Communications

Among All Business Customers

SCE WF Communications Recall – All Customers

- The Post- fire season share of all Business customers who recall SCE WF communications (49%) is not a statistically significant change from the Pre- (46%). There was also no Pre- to Post- change in HFRAs or Non-HFRAs.
- Recall of such communications is 8 pct. pts. higher in HFRAs compared to Non-HFRAs.

Recall Wildfire Communication



Q1. "In the past few months do you recall any communications of any type (i.e., mail, TV, radio, social media, etc.) from SCE about the threat of wildfires and how you can prepare for them?"

Language of SCE WF Comms – All Customers

- Among the 49% systemwide who recall recent SCE WF Comms, 23% recall a version in a language other than English (Spanish mostly).
- These proportions are comparable in HFRAs and non-HFRAs.

Business (All Customers) Language of Wildfire Safety **Systemwide** Non-HFRA **HFRA** Communication 2022 Pre 2022 Pre **2022 Post** 2022 Post 2022 Pre **2022 Post** (n=355) (n=292) (n=292) (n=388) (n=254) (n=213) 97% 97% 98% 99% 97% 97% English 22% 23% 21% 18% 22% 23% NET: Non-English 21% 20% 18% 20% 20% Spanish 19% 2% 1% 1% 1% 3% Chinese Mandarin | 3% <1% <1% 2% Chinese Cantonese | 1% 1% 1% <1% 1% 1% 1% Korean 2% 1% 1% <1% 2% Vietnamese Other 1% 1% <1% 1% 1% 1%

Q5. [RECALL COMMUNICATION] In what language(s) was the wildfire safety and preparedness information that you recall seeing or hearing from SCE?

SCE Sources – All Customers

- Again, among the 49% who recall WF communications from SCE, emails (52%) and letters (46%) continue to be the most common sources in all areas.
 - Other oft-mentioned SCE sources: SCE.com (14%); SCE advertising on TV, radio, or online (16%).

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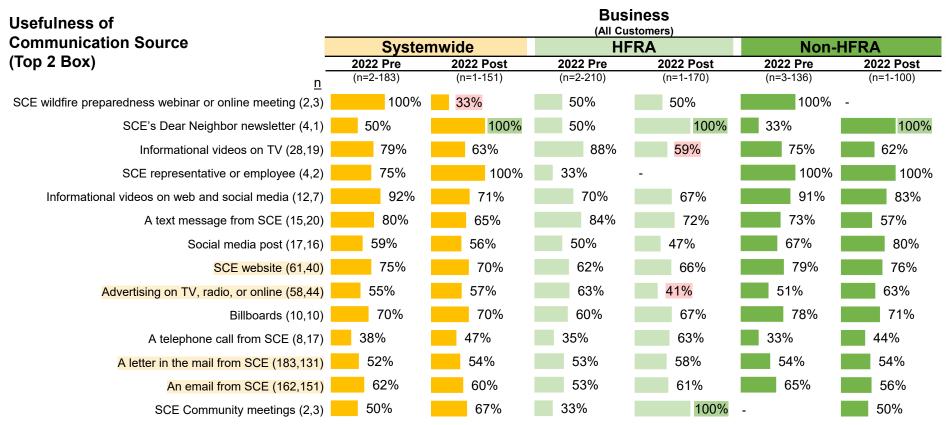
 In HFRAs, those citing texts from SCE rose to 13%, while letters were less often cited (especially in Non-HFRAs).

			(All Cus			
	Syste	mwide	HF	RA	Non-	HFRA
Source of Communication	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post
	(n=358)	(n=292)	(n=388)	(n=292)	(n=257)	(n=213)
An email from SCE	47%	52%	55%	58%	44%	47%
A letter in the mail from SCE	52%	46%	52%	48%	54%	43%
SCE website	17%	14 %	16%	14%	17%	14 %
Advertising on TV, radio, or online	17%	16 %	14%	10%	18%	18 %
A telephone call from SCE	3%	6%	5%	5%	2%	4%
A text message from SCE	4%	7 %	5%	13%	4%	4%
Informational videos on TV	9%	7 %	4%	6%	11 %	1 7%
Social media post	5%	6%	5%	5%	6 %	5 %
Informational videos on web and social media	4%	3%	3%	1%	5 %	4 %
SCE representative or employee	1%	1%	1%	-	1%	1%
Billboards	3%	3%	1%	2%	4%	I 3%
SCE's Dear Neighbor newsletter	1%	1%	1%	1%	1%	1%
SCE wildfire preparedness webinar/online meeting	1%	1%	1%	1%	1%	1%
SCE Community meetings	1%	1%	1%	1%	-	1%
Other	4%	5%	4%	4%	4%	5%
Don't recall	4%	3%	4%	4%	4%	3%

Q6. [BASE: RECALL COMMUNICATION] Where did you see or hear SCE's communications about wildfire season safety and preparedness?

Usefulness of SCE Sources – All Customers

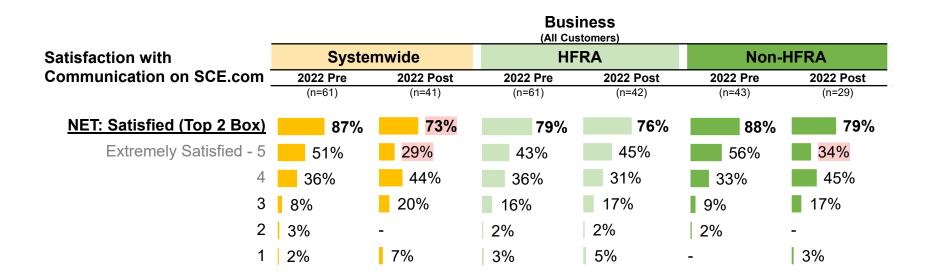
- Source usefulness in 2022 is for the most part consistent with the findings in 2021. (caution: some very small bases)
- Of the most used sources, SCE.com was most often considered useful (70%).
 - The bases size varies widely (from 1 to 183). "Usefulness" is defined as rating top 2 on a 5-point scale.
 - The base includes those who saw/heard the communications from this source in English regardless of their preferred language.



Q9A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful were the wildfire communications that you saw or heard from SCE via...?

Satisfaction with SCE.com – All Customers

- After filtering respondents to those who recalled SCE WF communications from SCE.com, the sample sizes range from 29 to 61.
- Despite the small sample sizes, there was a significant <u>decline</u> in the top box satisfaction rating with SCE.com driven by Non-HFRA businesses.
- While top two box satisfaction dipped, it remains generally high in all areas (76% in HFRAs and 79% in Non-HFRAs).



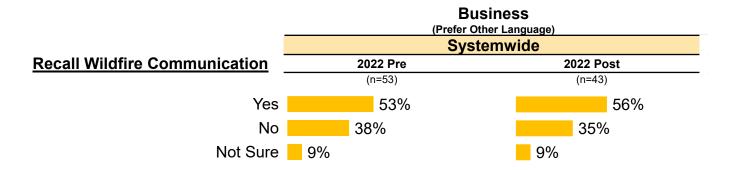
Q8. [RECALLED COMMUNICATION FROM SCE WEBSITE] How satisfied were you with the information provided on the SCE website about preparing for wildfires?

SCE Wildfire Communications

Among Customers Who Prefer Other Languages

SCE WF Communications Recall – Prefer Other

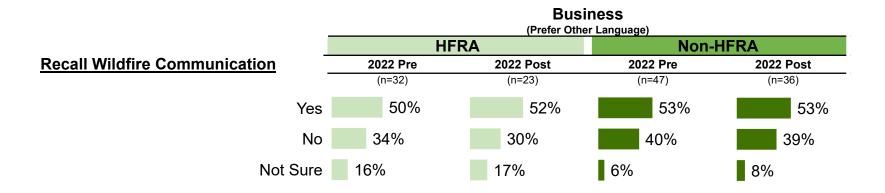
- Recall results here are filtered to the 7% who prefer communications in a language other than English. Among these "prefer other language" Business customers, recall of SCE WF communications is reported by over half (56%) which is unchanged from the Pre- survey.
- This is somewhat higher compared to recall of WF communications among all Business respondents (49%).



Q1. "In the past few months do you recall any communications of any type (i.e., mail, TV, radio, social media, etc.) from SCE about the threat of wildfires and how you can prepare for them?"

SCE WF Communications Recall – Prefer Other

• Recall of SCE WF communications among "Prefer other language" Business customers appears to be consistent in HFRAs and Non-HFRAs (caution: small bases).



Q1. "In the past few months do you recall any communications of any type (i.e., mail, TV, radio, social media, etc.) from SCE about the threat of wildfires and how you can prepare for them?"

^{*} Sample Size < 10

SCE Sources – Prefer Other Languages

- Among Business customers who prefer other languages <u>and</u> recall SCE WF communications, about 75% recall at least one source in their preferred language.
- Sources cited for these in-language communications are spread to letters, emails, informational videos on the internet and TV, and advertising. (Caution: very small bases)

Rusinass

	BUSINESS (Prefer Other Language)									
			emwide							
	In E	nglish	In (Other						
Source of Communication	2022 Pre	2022 Post	2022 Pre	2022 Post						
	(n=28)	(n=24)	(n=28)	(n=24)						
An email from SCE	21%	38%	21%	13%						
A letter in the mail from SCE	46%	29%	29%	25%						
Informational videos on web and social media	7 %	-	7 %	13 %						
Informational videos on TV	4%	13%	11 %	17%						
Advertising on TV, radio, or online	7%	13%	7%	21%						
A telephone call from SCE	11 %	4%	7%	-						
SCE website	-	4%	-	4%						
Social media post	4%	4%	7 %	4%						
A text message from SCE	-	4%	-	-						
SCE representative or employee	-	-	-	-						
SCE wildfire preparedness webinar or online meeting	-	-	-	4%						
SCE Community meetings	-	-	-	-						
SCE's Dear Neighbor newsletter	-	-	-	-						
Billboards	4%	4%	4%	-						
Other	4%	-	7%	-						
None	29%	29%	43%	25%						

Q6. [BASE: RECALL COMMUNICATION] Where did you see or hear SCE's communications about wildfire season safety and preparedness? Q7. Which, if any, of these sources provided information in English and which provided information in your preferred language?

SCE Sources – Prefer Other Languages

• The 24 respondents who both prefer a language other than English <u>and</u> recall SCE WF communications are further divided between HFRA and non-HFRA below. These sample sizes are too small for meaningful analysis.

Ducinos

					i ness er Language)				
		HF	RA	(Fielei Oth	er Language)	Non	Non-HFRA		
	In English		In C	ther	In E	nglish	ln (Other	
Source of Communication	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
	(n=16)	(n=12)	(n=16)	(n=12)	(n=25)	(n=19)	(n=25)	(n=19)	
An email from SCE	62%	58%	1 9%	17 %	20%	32%	1 6%	1 1%	
A letter in the mail from SCE	38%	25%	25 %	17 %	44%	32%	20 %	21 %	
Informational videos on web and social media	-	-	l 6%	8 %	8%	-	8%	1 1%	
Informational videos on TV	-	25%	l 6%	I 8%	4%	 5%	12 %	1 6%	
Advertising on TV, radio, or online	12 %	8 %	l 6%	8 %	 4%	1 1%	8%	21 %	
A telephone call from SCE	12%	-	l 6%	-	8%	5%	8%	-	
SCE website	-	-	I 6%	-	-	 5%	-	I 5%	
Social media post	-	-	-	-	 4%	 5%	8%	5%	
A text message from SCE	6%	-	-	-	-	5%	-	-	
SCE representative or employee	-	-	-	-	-	-	-	-	
SCE wildfire preparedness webinar/online meeting	-	-	-	-	-	-	-	I 5%	
SCE Community meetings	-	-	-	-	-	-	-	-	
SCE's Dear Neighbor newsletter	-	-	-	-	-	-	-	-	
Billboards	6%	-	-	-	4%	5%	4%	-	
Other	-	8%	-	_	4%	-	8 %	-	
None	1 9%	17%	56%	58%	28%	32%	48%	26 %	

Q6. [BASE: RECALL COMMUNICATION] Where did you see or hear SCE's communications about wildfire season safety and preparedness? Q7. Which, if any, of these sources provided information in English and which provided information in your preferred language?

Usefulness of SCE Sources – Prefer Other

Small sample sizes prevent any meaningful analysis.

Business (Prefer Other Language) **Systemwide** Usefulness of Communication Source ... In English In Other (Top 2 Box) 2022 Pre **2022 Post** 2022 Pre **2022 Post** (n=1-12) (n=1-9) (n=1-8) (n=1-6)100% SCE website (0,1) -100% 100% 67% 100% Informational videos on TV (1,3) -67% 100% Advertising on TV, radio, or online (2,3) 50% 100% 50% 100% Social media post (1,1) -100% 100% 100% 67% Informational videos on web and social media (2,0) 62% 100% 100% A letter in the mail from SCE (12,7) 58% 67% 67% An email from SCE (5,9) 40% 78% A telephone call from SCE (2,1) 100% 50% 50% A text message from SCE (0,1) -100% -SCE representative or employee (-) -SCE wildfire preparedness webinar or online meeting (-) -100% SCE Community meetings (-) -SCE's Dear Neighbor newsletter (-) -Billboards (1,1) 100% 100%

Q9A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful were the wildfire communications that you saw or heard from SCE via...?

Q9B2. [BASE: ALL WHO USED THAT SOURCE IN PREFERRED LANGUAGE] How useful were the wildfire communications in LANGUAGE that you saw or heard from SCE via...?

Shading indicates a significant difference at the 90% confidence level from the prior year

Usefulness of SCE Sources – Prefer Other

Small sample sizes prevent any meaningful analysis.

Business

Usefulness of Communication Source ... (Top 2 Box)

(Prefer Other Language)									
HFRA				Non-HFRA					
In Er	nglish	In C	ther	In English		In Other			
2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post		
(n=1-9)	(n=1-7)*	(n=1-3)	(n=1-2)*	(n=1-10)	(n=1-6)*	(n=1-5)	(n=1-4)*		

SCE website (0,1)

Informational videos on TV (1,3)

Advertising on TV, radio, or online (2,3)

Social media post (1,1)

Informational videos on web and social media (2,0)

A letter in the mail from SCE (12,7)

An email from SCE (5,9)

A telephone call from SCE (2,1)

A text message from SCE (0,1)

SCE representative or employee (-)

SCE wildfire preparedness webinar or online meeting

. .

SCE Community meetings (-)

SCE's Dear Neighbor newsletter (-)

Billboards (1,1)

Not Shown Due to Small Sample Size Not Shown Due to Small Sample Size

Q9A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful were the wildfire communications that you saw or heard from SCE via...?

Q9B2. [BASE: ALL WHO USED THAT SOURCE IN PREFERRED LANGUAGE] How useful were the wildfire communications in LANGUAGE that you saw or heard from SCE via...?

* Sample Size < 10

Shading indicates a significant difference at the 90% confidence level from the prior year

Satisfaction with SCE.com – Prefer Other

Small sample sizes prevent any meaningful analysis.

Business

(Prefer Other Language) Satisfaction with **Systemwide HFRA** Non-HFRA **Communication on SCE.com** 2022 Pre **2022 Post** 2022 Pre 2022 Post 2022 Pre **2022 Post** (n=0) (n=2)(n=1) (n=1)(n=0)(n=1)

NET: Satisfied (Top 2 Box)

Extremely Satisfied - 5

4

3

Not Shown Due to Small Sample Size

Q8. [RECALLED COMMUNICATION FROM SCE WEBSITE] How satisfied were you with the information provided on the SCE website about preparing for wildfires?

^{*} Sample Size < 10

Other WF Communications

Among All Business Customers

Other WF Sources – All Customers

- Other (i.e., non-SCE) sources of WF information are cited by about 2/3s of Business customers (100% minus 25% none minus 11% don't recall). In comparison, SCE is cited as a source by 49%.
- Local news (26%), city or county government (27%), CalFire (20%), and the local fire department (16%) are most often cited. As among Residential customers, the frequency of citing local news reports as a WF source is declining throughout the system.

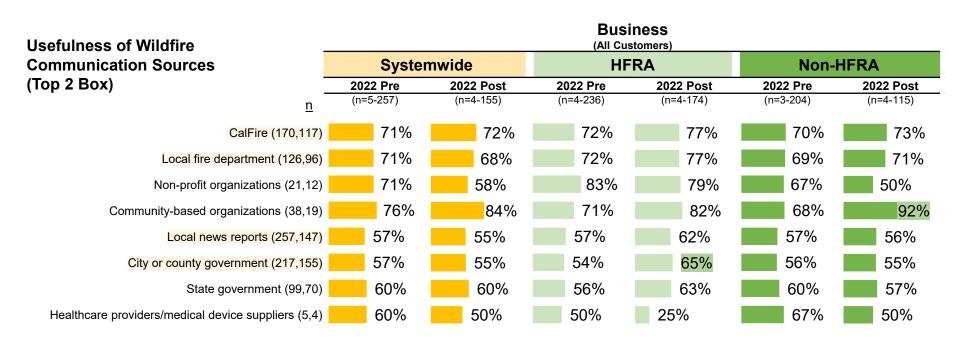
 Business

_	(All Customers)							
Other	Systemwide		HFRA		Non-HFRA			
Communication Sources	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post		
	(n=774)	(n=596)	(n=731)	(n=545)	(n=595)	(n=461)		
Local news reports	34%	26%	30%	24%	35%	26%		
City or county government	28%	27%	33%	32%	26%	23%		
CalFire	22%	20%	27%	27%	19%	16%		
State government	13%	12%	11%	12%	13%	11%		
Local fire department	16%	16%	22%	24%	14%	13%		
Community-based organizations	5%	3%	8%	6%	4%	3%		
Non-profit organizations	3%	2%	2%	3%	3%	1%		
Healthcare/medical device suppliers	1%	1%	1%	1%	1%	1%		
Other	10%	13%	14%	14%	10%	13%		
None of the above	23%	25%	18%	20%	24%	27%		
Don't recall	10%	11%	9%	11%	11%	12%		

Q10. Other than SCE's communications, what other sources have you used to obtain information about wildfire safety and preparedness?

Usefulness of Other WF Sources – All Customers

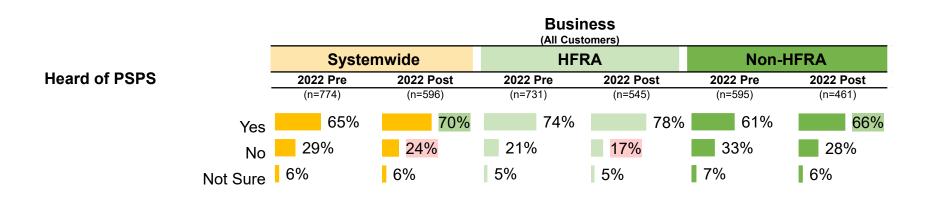
- Two oft-cited non-SCE sources are considered highly useful: CalFire (72%) and the local fire department (68%). SCE.com receives a comparable source usefulness rating (70%) from its users.
- The other two oft-cited sources (local new reports and city/county government at 57% each) are considered useful by about as many Business customers as consider SCE letters, emails and advertising useful (54% to 60%).



Q12A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] On a 1 to 5 scale where 1 is not at all useful and 5 is extremely useful, how useful was the wildfire information from ...?

PSPS Awareness – All Customers

- Recognition of the term "Public Safety Power Shutoff" rose to 70% of all Business customers.
- For reference, recognition of the term among Residential customers systemwide is 67%.
- Recognition of the term is substantially higher in HFRAs (78%), but increased in Non-HFRAs to 66%.



Q16. Public Safety Power Shutoff, or PSPS, is a precautionary safety measure where SCE may proactively turn off power lines when extreme fire danger conditions are forecasted, in order to reduce the risk of wildfires. Before today, had you ever heard of the Public Safety Power Shutoff program?

Shading indicates a significant difference at the 90% confidence level from the prior year

PSPS Sources - All Customers

- SCE is the primary source of PSPS awareness (emails and letters) along with non-SCE TV/radio news reports. SCE texts rose to 22% as a source of PSPS awareness by its increased use in both HFRAs (27%) and Non-HFRAs (18%) while SCE.com maintained (20%).
- In HFRAs, emails from SCE rose and led the way (54%).

Business
(All Customers)

	Systemwide		HFRA		Non-HFRA	
PSPS Source	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post
	(n=501)	(n=415)	(n=543)	(n=426)	(n=361)	(n=304)
An email from SCE	38%	42%	44%	54%	34%	35%
TV or radio news report	43%	41%	38%	32%	45%	41%
A letter in the mail from SCE	39%	37%	41%	45%	35%	35%
Online news report	20%	16 %	15%	15%	20%	15%
A telephone call from SCE	9%	11%	11%	14%	9 %	10%
SCE website	18 %	20%	20%	20%	15 %	19%
A text message from SCE	14 %	22%	16%	27%	12 %	18%
Advertising on TV, radio, or online	12%	12 %	10%	8%	12 %	12 %
Social media post	8%	7 %	9%	7 %	7 %	7 %
Word of mouth (such as friends or family)	8%	8%	11%	10%	8 %	7 %
My power was shut off	8%	9%	15%	14%	6 %	6 %
Local city or county government	6%	5%	8%	7 %	5 %	I 3%
CalFire or local fire department	7 %	7 %	8%	8%	6 %	5 %
SCE representative or employee	3%	3%	2%	3%	I 3%	1 2%
Informational videos on TV	5 %	3%	3%	2%	6 %	1 3%
Community-based organization	 3%	2%	5 %	3%	2%	1%
SCE wildfire preparedness webinar or online meeting	2%	2%	2%	1%	2%	1 2%
Informational videos on web and social media	3%	2%	3%	2%	I 3%	2%
Billboards	2%	2%	1%	1%	2%	1 2%
SCE community meetings	1%	1%	1%	<1%	<1%	1%
Healthcare provider or medical device supplier	<1%	<1%	<1%	<1%	<1%	-
Other	6%	7%	7 %	6%	6 %	9 %
Not sure	4%	2%	6 %	3%	4%	1 2%

Q17. [RECALL PSPS] Where have you heard about Public Safety Power Shutoffs? Shading indicates a significant difference at the 90% confidence level from the prior year

Usefulness of PSPS Sources – All Customers

• The source usefulness of the most often cited PSPS information sources are comparable: 65% for SCE emails, 62% for SCE letters, 65% for TV or radio news reports. The 4th and 5th most often cited sources scored higher for source usefulness: SCE.com (67%) and texts from SCE 75%.

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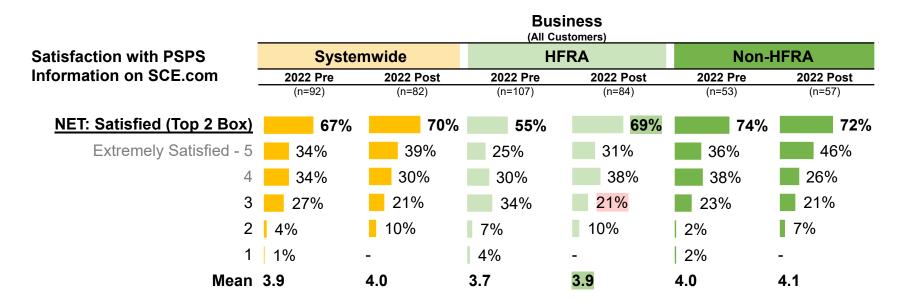
PSPS Communication Source	Business									
			,	stomers)						
Usefulness	Systei	mwide	HF	RA	Non-HFRA					
(Top 2 Box)	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post				
	(n=2-213)	(n=1-172)	(n=1-236)	(n=1-226)	(n=1-161)	(n=4-124)				
Healthcare provider or medical device supplier (2,1)	50%	-	100%	-	-	-				
Community-based organization (15,9)	73%	67%	62%	77%	75%	75%				
SCE community meetings (2,4)	-	75%	33%	50%	-	75%				
CalFire or local fire department (37,28)	78%	86%	71%	84%	86%	94%				
A text message from SCE (68,89)	74%	75%	67%	68%	72%	75%				
Informational videos on TV (23,10)	70%	90%	71%	56%	70%	100%				
Local city or county government (30,22)	63%	68%	65%	74%	53%	70%				
Word of mouth (such as friends or family) (40,33)	52%	58%	60%	62%	54%	52%				
An email from SCE (190,172)	68%	65%	69%	62%	66%	67%				
SCE representative or employee (14,13)	57%	92%	77%	77%	50%	100%				
A telephone call from SCE (44,46)	64%	57%	69%	59%	59%	60%				
A letter in the mail from SCE (190,152)	66%	62%	61%	53%	66%	65%				
SCE website (57,83)	71%	67%	55%	64%	77%	71%				
SCE wildfire preparedness webinar (11,8)	55%	75%	30%	83%	75%	67%				
Billboards (10,7)	60%	71%	40%	75%	67%	60%				
Social media post (41,29)	78%	72%	67%	55%	83%	79%				
Informational videos on web and social media (16,7)	69%	100%	53%	71%	67%	100%				
Online news report (99,66)	63%	62%	51%	68%	63%	64%				
TV or radio news report (213,168)	61%	65%	61%	67%	61%	66%				
Advertising on TV, radio, or online (57,47)	61%	74%	65%	52%	60%	78%				
My power was shut off (-)	-		-		-					

Q19A/B1. [SAW COMMUNICATIONS IN ENGLISH] On a 1 to 5 scale where 1 is not at all useful and 5 is extremely useful, how useful was the PSPS information from ...?

Shading indicates a significant difference at the 90% confidence level from the prior year

Satisfaction w/ SCE.com PSPS Info – All Customers

- Systemwide, 70% of those who used SCE.com for PSPS information report being satisfied with it.
- Satisfaction with SCE.com rose among HFRA Businesses and is now comparable to that among Non-HFRA Businesses.



Q18b. [PSPS SOURCE = SCE Website] How satisfied were you with the Public Safety Power Shutoff information provided on the SCE website?

PSPS Communications

Among Customers Who Prefer Other Languages

PSPS Awareness – Prefer Other Languages

- With so few Business customers (7%) preferring other languages, when their numbers are filtered to those who have heard of PSPS, the sample sizes often prevent meaningful analysis.
- That said, the incidence of PSPS awareness among all Business customers systemwide (70%) is only slightly higher than awareness among those who prefer other languages (65%) after a surge in awareness during this fire season, especially among non-HFRA Businesses.

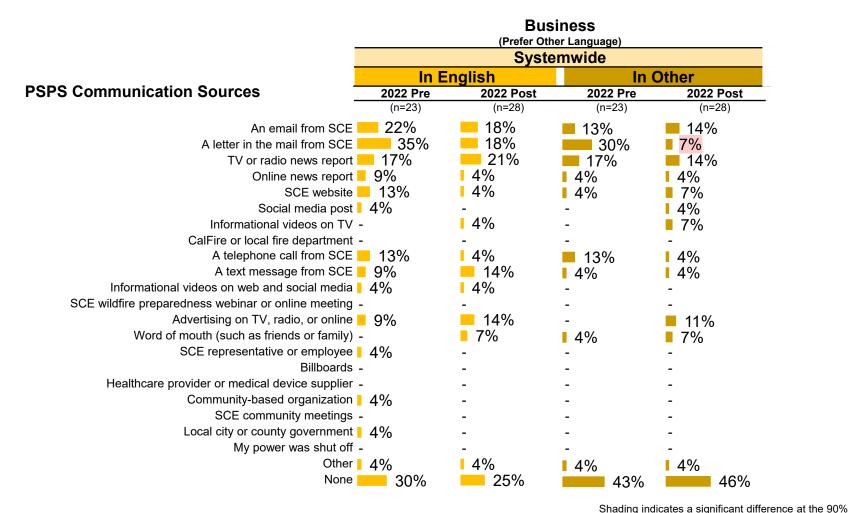
Business (Prefer Other Language) **Systemwide** Non-HFRA **HFRA Heard of PSPS** 2022 Pre 2022 Post 2022 Pre 2022 Post 2022 Pre 2022 Post (n=53)(n=43)(n=32)(n=23)(n=47)(n=36)Yes 43% 65% 66% 61% 40% 61% 23% 25% 25% 30% 38% 40% Unsure 19% 12% 9% 14% 9% 19%

Q16. Public Safety Power Shutoff, or PSPS, is a precautionary safety measure where SCE may proactively turn off power lines when extreme fire danger conditions are forecasted, in order to reduce the risk of wildfires. Before today, had you ever heard of the Public Safety Power Shutoff program?

Shading indicates a significant difference at the 90% confidence level from the prior year

PSPS Sources – Prefer Other Languages

Small sample sizes prevent any meaningful analysis.



confidence level from the prior year

Q17. [RECALL PSPS] Where have you heard about Public Safety Power Shutoffs?

Q18. Which, if any, of these sources provided information in English and which provided information in your preferred language?

PSPS Sources – Prefer Other Languages

Small sample sizes prevent any meaningful analysis.

				Busi	iness			
-		НЕ	FRA	(Prefer Othe	er Language)	Non.	HFRA	
•	In Fn	nglish		Other	In F	nglish		Other
PSPS Communication Sources	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post
_	(n=21)	(n=14)	(n=21)	(n=14)	(n=19)	(n=22)	(n=19)	(n=22)
An email from SCE	48%	43%	14 %	2 1%	21 %	14 %	I 5%	I 5%
A letter in the mail from SCE	33%	29%	14%	■ 14%	37%	18%	26 %	15%
TV or radio news report		21%	I 5%	21 %	21 %	18%	16%	9 %
Online news report		7%	I 5%	■ 7%	11%	1 5%	I 5%	I 5%
SCE website	5%	7%	I 5%	■ 7 %	16%	-	-	I 5%
Social media post	-	, , ,	-	/ 5	-	-	_	I 5%
Informational videos on TV -		-	-	_	_	I 5%	_	■ 9%
CalFire or local fire department -		-	-	_	_	-	_	-
A telephone call from SCE	10%	-	I 5%	■ 7%	11%	I 5%	■ 11%	-
A text message from SCE	5%	29%	-	■ 7 %	11%	14 %	I 5%	_
SCE representative or employee	-	- 20 / 0	_	/ 5	-	1 5%	-	_
SCE wildfire preparedness webinar/online meeting -	• / •	-	-	-	_	-	_	_
Advertising on TV, radio, or online	10%	14 %	-	14 %	I 5%	9 %	_	I 5%
Billboards -		-	_		_	9%	I 5%	■ 9%
Informational videos on web and social media -		-	-	-	I 5%	-	-	-
Healthcare provider or medical device supplier	5%	-	-	-	_	-	_	_
Word of mouth (such as friends or family) -	-	-	-	_	_	-	_	_
Community-based organization -		-	-	-	I 5%	-	_	_
SCE community meetings -		-	-	_	_	-	_	_
Local city or county government -		-	-	_	I 5%	-	_	_
My power was shut off -		-	-	_	_	-	_	_
	5%	1 7%	-	-	I 5%	I 5%	I 5%	I 5%
None	24%	21%	769	% === 50%	32%	23%	47%	50%

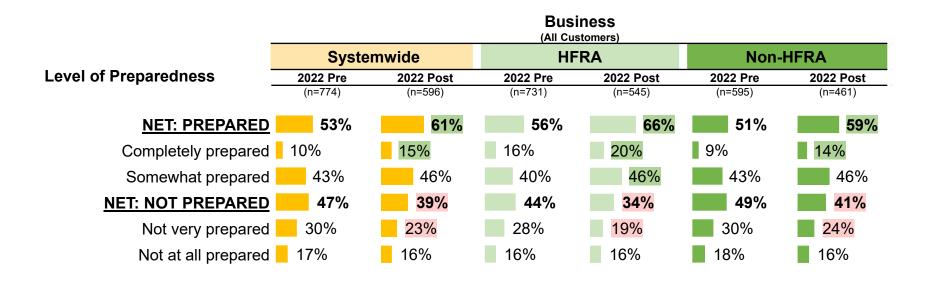
Q17. [RECALL PSPS] Where have you heard about Public Safety Power Shutoffs? Shading indicates a significant difference at the 90% confidence level from the prior year Q18. Which, if any, of these sources provided information in English and which provided information in your preferred language?

PSPS Preparedness / Satisfaction

Among All Business Customers

Preparedness – All Customers

- Those Business customers who say they are prepared (61%) either somewhat (46%) or completely (15%) increased during this fire season
- The improvement was widespread as it took place for HFRA and non-HFRA Businesses.
- The incidence of being prepared among Businesses is comparable to that found among Residential customers (systemwide: 55%).



Q20. A Public Safety Power Shutoff event could last anywhere from 24-48 hours, or longer in some cases. How would you rate your level of preparedness for being without electricity for an extended period?

Preparedness Actions Taken – All Customers

 On this and the next slide is a list of potential preparedness actions. Residential customers increased their activity in nearly every item this fire season, while Businesses focused on five: flashlights, generators, vegetation removal, preparations for multi-day outages, and battery storage.

Business (All Customers) Systemwide Non-HFRA **HFRA Actions Taken 2022 Post** 2022 Pre **2022 Post** 2022 Pre **2022 Post** 2022 Pre (n=774) (n=596) (n=731) (n=545) (n=461) (n=595)19% 23% 26% Purchased new lanterns or flashlights 21% 17% 20% Purchased fire extinguishers NA 22% NA 24% NA 20% Purchased enough water to last for several days without 20% 22% 25% 26% 18% 18% 24% 16% 19% 21% 24% 19% Prepared an emergency kit with food, water or medicine 14% 17% 22% 23% 12% 14% Acquired a back-up generator Purchased enough non-refrigerated food to last for several 15% 16% 19% 19% 14% 14% days without power 15% 15% 23% 22% 12% 11% Signed up for notifications from SCE 11% 15% 20% 24% 8% 10% Removed vegetation from around your home 11% 15% 14% 16% 10% 11% Have a place to go if without power for a prolonged period 13% 9% 17% NA Signed up for emergency alerts from the country/state NA NA 15% 11% 12% 13% 12% 12% Purchased/used a battery powered radio Developed an emergency plan 12% 11% 18% 14% 9% 10% 12% Prepared for multiple-day outage 8% 11% 13% 7% 9% 11% 14% Planned an evacuation route NA NA 6% 10% 15% Allowed access to property for SCE to trim trees 8% 14% Went to SCE website 15% 11% 14% 7%

Q21. What, if any, actions have you taken to prepare for a Public Safety Power Shutoff (PSPS) in 2022?

Preparedness Actions Taken (cont.) – All Customers

- The actions taken were spread across HFRA and Non-HFRA Businesses.
- The systemwide percent who took <u>no action</u> (38%) was unchanged, but this incidence rose among HFRA Businesses (to 34%).

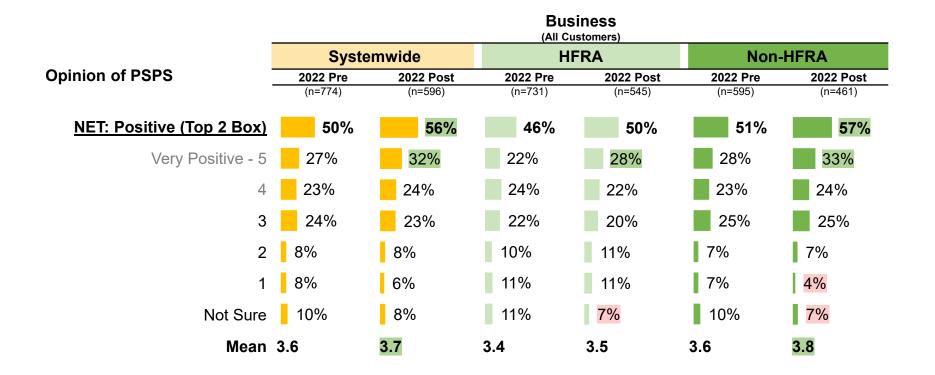
Business (All Customers)

			(All Ct	ustomers)		
	Syste	mwide	HI	FRA	Non-	HFRA
Actions Taken (continued)	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post
	(n=774)	(n=596)	(n=731)	(n=545)	(n=595)	(n=461)
Acquired battery storage technology	5 %	9%	7 %	8 %	I 5%	9 %
Identified my company's energy needs in an emergency	NA	9%	NA	10%	NA	6 %
Signed up for emergency alerts from the Fire Department	NA	8%	NA	10%	NA	1 7%
Identified someone/people in my company to coordinate efforts	NA	7 %	NA	7 %	NA	5 %
Notified others in area about potential power shutoff	5 %	6 %	7 %	10%	4 %	4 %
Performed a safety check on your generator for your home	8%	6 %	11%	11%	8 %	I 5%
Activated your emergency plan	3%	4%	5 %	5 %	I 3%	4 %
Checked the SCE mobile app	5 %	4 %	6 %	6 %	4 %	I 3%
Went SCE's social media	1 3%	2%	2%	3%	1 2%	1%
Followed SCE on Facebook	2%	2%	1%	2%	1 2%	2%
Followed SCE on Twitter	1%	1%	1%	1%	<1%	1%
Signed up for Medical Baseline Program	1%	1%	2%	2%	1%	1%
Visited SCE Community Resource Center	1%	1%	2%	1%	1%	1%
Attended SCE Community meeting	1%	1%	1%	1%	<1%	1%
Attended a community-based organization event	1%	1%	2%	1%	∣ 1%	1%
Received Critical Care Backup Battery from SCE	<1%	1%	<1%	1%	<1%	<1%
Other	6%	19%	9%	18%	7 %	18%
I have not taken any action	37%	38%	29%	34%	39%	40%

Q21. What, if any, actions have you taken to prepare for a Public Safety Power Shutoff (PSPS) in 2020?

Opinion of SCE's PSPS Program – All Customers

- Positive opinions of SCE's PSPS Program increased this fire season (to 56%), especially among Non-HFRA Businesses.
 - The Residential incidence for top two boxes is 54%, also improved this fire season.



Q22. Overall, what is your opinion of SCE's Public Safety Power Shutoff program?

Ratings of SCE Attributes – All Customers

- Ratings of SCE on WF-related attributes rose among Residential customers, especially those in HFRAs, but among Business customers little changed.
- 43% to 70% agree with these statements, whether in HFRAs or not.

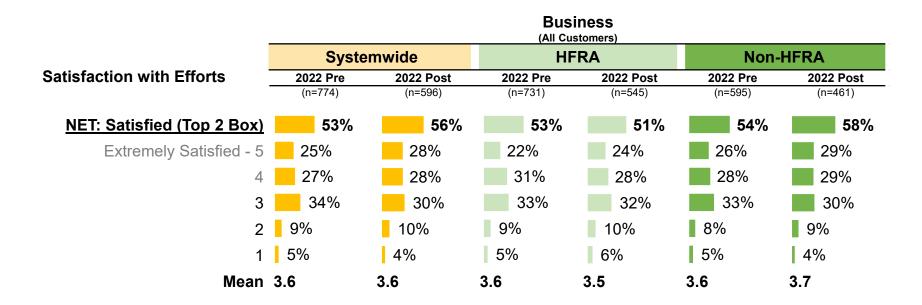
Business (All Customers)

-			(All Custo	omers)			
	Systen	nwide	HFR	RA	Non-HFRA		
% Agree (Top 2 Box)	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
SCE	(n=774)	(n=596)	(n=731)	(n=545)	(n=595)	(n=461)	
Is committed to restoring power to customers affected by wildfires	66%	68%	66%	64%	67%	70%	
Is working to keep my community safe	60%	58%	58%	60%	61%	58%	
Shows care and concern for customers	55%	58%	52%	55%	57%	60%	
Is committed to wildfire safety	60%	61%	60%	59%	61%	63%	
Takes proactive measures to protect the electricity grid from wildfires	57%	58%	56%	58%	58%	60%	
Makes an effort to communicate with all customers about wildfires	55%	61%	58%	59%	55%	64%	
Is proactive in taking steps to address wildfire risks	57%	60%	57%	56%	58%	61%	
Is a company I trust to act in the best interest of its customers	52%	52%	46%	48%	54%	54%	
Is helping me prepare for wildfire season	45%	47%	44%	43%	46%	49%	

Q14. Using a scale where 1 means completely disagree and 5 means completely agree, Please indicate how much you agree or disagree with the following statements about SCE. SCE...

Satisfaction w/ SCE's WF Efforts – All Customers

- Satisfaction with SCE's overall wildfire safety and preparedness efforts is unchanged in both HFRAs and non-HFRAs.
- Satisfaction is slightly higher among non-HFRA Businesses.



Q15. How satisfied are you with SCE's overall wildfire safety and preparedness efforts?

Evacuation Experience – All Customers

• Experience with wildfire evacuations rose to 5% of Businesses in HFRAs this fire season.

Business (All Customers)

Had to Evacuate?

	Systemwide				HFRA				Non-HFRA			
	2022 Pre 2022 Post		ost	2022 Pre 2022 Post		ost	2022 Pre		2022 Post			
	(n=77	(n=774) (n=596)		96)	(n=731)		(n=545)		(n=595)		(n=461)	
Yes	2%		3%		2%		5%		3%		2%	
No		97%		97%		98%		95%		97%		97%
Unsure	1%		1%		-		1%		1%		1%	

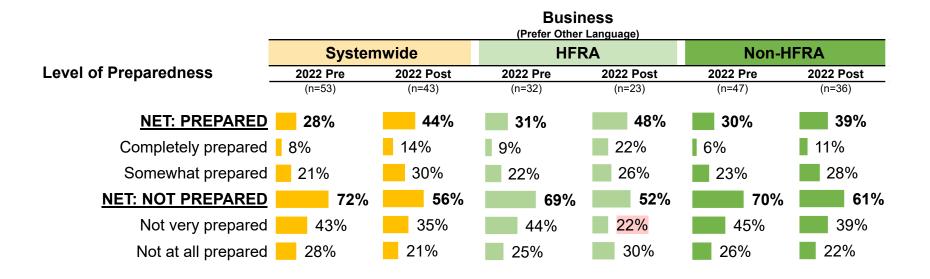
Q23. In the past few months, have you had to evacuate due to wildfires in your area?

PSPS Preparedness / Satisfaction

Among Customers Who Prefer Other Languages

Preparedness – Prefer Other Languages

- With so few Business customers (7%) preferring other languages, the sample sizes prevent meaningful analysis.
- That said, while the incidence of preparedness among all BIZ customers systemwide rose (61%) this fire season, it did not increase significantly among those who prefer other languages despite clear directional improvements.



Q20. A Public Safety Power Shutoff event could last anywhere from 24-48 hours, or longer in some cases. How would you rate your level of preparedness for being without electricity for an extended period?

^{*} Sample Size < 10

Preparedness Actions Taken – Prefer Other

• The small sample sizes limit meaningful analysis. However, there is a significant reduction in those who took no action, especially among Non-HFRA Businesses (see next slide).

Business (Profer Other Language)

_			(Prefer Ot	ther Language)			
	Syste	mwide	Н	IFRA	Non-HFRA		
Actions Taken	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
	(n=53)	(n=43)	(n=32)	(n=23)	(n=47)	(n=36)	
Prepared an emergency kit with food, water or medicine	9%	26%	9%	17%	11%	22%	
Purchased enough water to last for several days without power	9%	19%	25%	17%	6%	14%	
Purchased fire extinguishers	NA	19%	NA	17%	NA	17%	
Purchased new lanterns or flashlights	8%	16%	16%	22%	6%	14%	
Purchased enough non-refrigerated food to last for several days without power	6%	16%	16%	26%	4%	11%	
Signed up for notifications from SCE	8%	14%	22%	13%	6%	11%	
Went to SCE website	6%	7%	16%	9%	6%	3%	
Acquired a back-up generator	4%	7%	6%	13%	2%	3%	
Acquired battery storage technology	8%	7%	3%	4%	6%	6%	
Identified my company's energy needs in an emergency	NA	7%	NA	9%	NA	3%	
Purchased/used a battery powered radio	6%	5%	9%	9%	6%	3%	
Developed an emergency plan	6%	5%	6%	4%	6%	3%	
Notified others in area about potential power shutoff	6%	5%	16%	4%	4%	6%	
Have a place to go if without power for a prolonged period	4%	5%	6%	4%	4%	3%	
Removed vegetation from around your home	9%	5%	19%	9%	6%	-	
Performed a safety check on your generator for your home	NA	5%	NA	4%	NA	3%	
Prepared for multiple-day outage	4%	5%	6%	13%	2%	3%	

Q21. What, if any, actions have you taken to prepare for a Public Safety Power Shutoff (PSPS) in 2020?

Preparedness Actions Taken – Prefer Other

Business (Prefer Other Language)

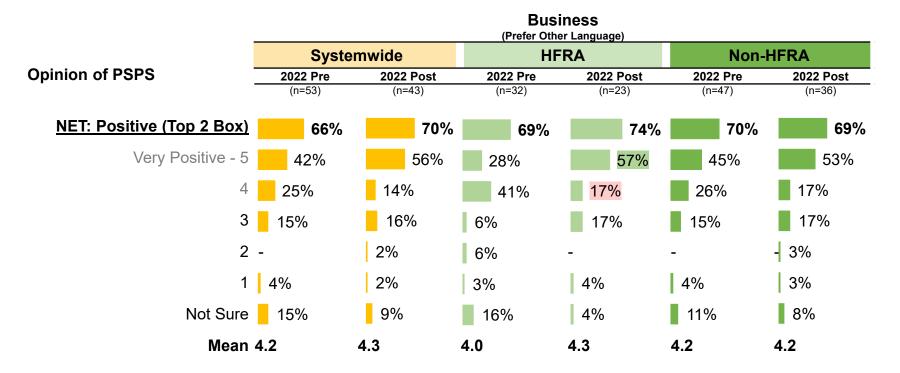
-	Syste	emwide		FRA	Non-HFRA		
Actions Taken	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
	(n=53)	(n=43)	(n=32)	(n=23)	(n=47)	(n=36)	
Signed up for emergency alerts from the Fire Dept	NA	5%	NA	4%	NA	6%	
Planned an evacuation route	NA	5%	NA	4%	NA	3%	
Identified someone in my company to coordinate efforts	NA	5%	NA	-	NA	6%	
Checked the SCE mobile app	6%	2%	9%	4%	6%	3%	
Went SCE's social media	6%	2%	3%	4%	4%	-	
Allowed access to property for SCE to trim trees	4%	2%	6%	-	4%	3%	
Activated your emergency plan	2%	2%	6%	4%	2%	-	
Followed SCE on Twitter	-	2%	3%	-	-	3%	
Received Critical Care Backup Battery from SCE	-	2%	-	-	-	3%	
Signed up for emergency alerts from the country/state	-	2%	-	4%	-	3%	
Followed SCE on Facebook	4%	-	3%	-	4%	-	
Visited SCE Community Resource Center	-	-	3%	-	-	-	
Attended SCE Community meeting	-	-	-	-	-	-	
Attended a community-based organization event	-	-	-	-	-	-	
Signed up for Medical Baseline Program	2%	-	-	-	2%	-	
Other	8%	14%	3%	17%	9%	11%	
I have not taken any action	57%	37%	44%	39%	57%	36%	

Q21. What, if any, actions have you taken to prepare for a Public Safety Power Shutoff (PSPS) in 2020?

^{*} Sample Size < 10

Opinion of SCE's PSPS Program – Prefer Other

- Seven in ten Business customers who prefer other languages have a positive opinion of SCE's PSPS program which is higher than that reported for all Businesses systemwide (56%).
- Very Positive ratings rose among Prefer Other Businesses in HFRAs.



Q22. Overall, what is your opinion of SCE's Public Safety Power Shutoff program?

Ratings of SCE Attributes – Prefer Other Languages

- There were virtually no changes this fire season in the ratings of SCE on these WF-related attributes among Businesses who Prefer Other Languages.
- 57% to 84% agree with these statements, whether in HFRAs or not.

Business (Prefer Other Language)

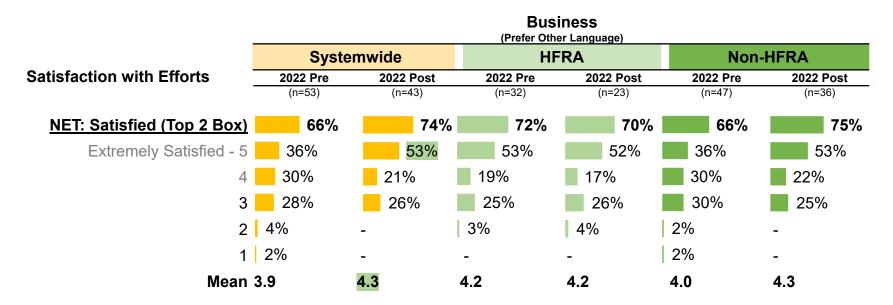
_		(Freier Other Language)								
	Systen	nwide	HF	RA	Non-l	HFRA				
% Agree (Top 2 Box)	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post				
SCE	(n=53)	(n=43)	(n=32)	(n=23)	(n=47)	(n=36)				
Is committed to restoring power to customers affected by wildfires	68%	74%	88%	65%	66%	75%				
Makes an effort to communicate with all customers about wildfires	64%	72%	75%	78%	64%	72%				
Takes proactive measures to protect the electricity grid from wildfires	75%	72%	75%	70%	77%	75%				
Shows care and concern for customers	72%	72%	72%	74%	72%	72%				
Is working to keep my community safe	77%	77%	84%	78%	77%	78%				
Is proactive in taking steps to address wildfire risks	72%	65%	72%	70%	72%	67%				
Is committed to wildfire safety	74%	74%	78%	78%	72%	75%				
Is a company I trust to act in the best interest of its customers	75%	70%	69%	70%	77%	69%				
Is helping me prepare for wildfire season	68%	67%	75%	57%	68%	69%				

Q14. Using a scale where 1 means completely disagree and 5 means completely agree, Please indicate how much you agree or disagree with the following statements about SCE. SCE...

^{*} Sample Size < 10

Satisfaction w/ SCE's WF Efforts – Prefer Other

- Satisfaction with SCE's overall wildfire safety and preparedness efforts is unchanged in both HFRAs and non-HFRAs among those who Prefer Other Languages.
- Satisfaction is comparable in HFRAs and non-HFRAs



Q15. How satisfied are you with SCE's overall wildfire safety and preparedness efforts?

^{*} Sample Size < 10

Evacuation Experience – Prefer Other Languages

• Very few of the Business customers who prefer other languages report having experienced an evacuation.

Business (Prefer Other Language)

Had to Evacuate?

_						refer Office	i Languag	<u> </u>				
	Systemwide				HFRA				Non-HFRA			
_	2022	Pre	2022	Post	2022	Pre	2022	Post	2022	Pre	2022	Post
_	(n={	53)	(n=	43)	(n=	32)	(n=2	23)	(n=	47)	(n=	36)
Yes	4%		2%		3%		4%		4%		3%	
No		96%		93%		97%		96%		96%		92%
Unsure	_		5%		_		_		_		6%	

Q23. In the past few months, have you had to evacuate due to wildfires in your area?

Suggested Improvements to WF Comms

Among All Customers

Suggested Improvements to WF Comms

- Word clouds are a way of summarizing the responses to open-ended questions.
 The size and position of words in the graphic reflect the frequency with which the words were used across the comments.
- Selected verbatims on the next slide provide more concrete suggestions.

Systemwide Business

2022 Pre

2022 Post





Q13. [RECALL COMMUNICATION] In what ways could SCE improve their communications about wildfire preparedness?

Suggested Improvements to WF Comms

Specific Suggestions – 2022 Pre-	Specific Suggestions – 2022 Post
Clearly stating under what circumstances small medical offices will have their power shut off and what, if anything, SCE can do to ensure we are still able to care for patients (generator, etc.), so we can prepare accordingly.	In addition to time and date, list resources and tips in email communication- e.g. refrigerator, water well (without e-, no running water), car garage, etc.
Email or Facebook/Twitter info in late spring of the upcoming fire season and to be prepared.	Again, I think doing notices via email or text. Also, I don't recall ever seeing any event that you guys host for informational purposes for the community.
Addressing the community concern of electrical equipment in the ignition of fires.	Exact hours when power may be shut off and likelihood on a scale
Frequent email reminder during the dry, hot summer months and special alert messages on particularly very windy days.	Better communication. In the last 3 months we have had 2 power outages for unknown reasons and all notifications we received were from Spectrum Business, not SCE.
They could inform us more on how to evacuate our animals such as livestock and horses. Some of us do not have trailers or transportation.	Emails, texts, and phone calls are helpful, but I got way too many the last time with unnecessary updates.
It's not that your communications were insufficient, local agencies just have much more targeted information for each unique site/situation.	Informing business/homeowner of times outage to start/end. Have had shut off prior to any communications.
Communication should be more direct to a specific area or zip code rather than general. This would make the message more effective.	I am disabled - I need help in case of a power shut off/outage. I should be on a list to be notified and provided help.
Shorter emails or flyers/brochures that go straight to the point without much other distracting info. When the email is regarding more than a couple of items/issues, it can get tedious and distracting so I won't read. But if it is short and concise about one thing/issue, I am more likely to take the time to read the email.	The advanced warning process seems to be effective and sufficient. During a power outage there could be more notification of the status of the outage, maybe a countdown clock towards the estimated restoration of electrical power.
Maintain your equipment and power lines, communication is useless, We all live in fire area. We know the threat.	Honestly, text messages would be very efficient, just mailing is not sufficient, and emails don't work as well.
More mailers sent separately from billing statements to customers.	One form of communication is enough. Phone call or email. Both are not needed. We get 4 of each every time there is an alert. 1 is enough.
Regardless of choice of going paperless for the purpose of billing, when it comes to safety communication it should be emailed and paper mail.	SCE should be more specific as to timing. Businesses have computers running and need time to power them down.

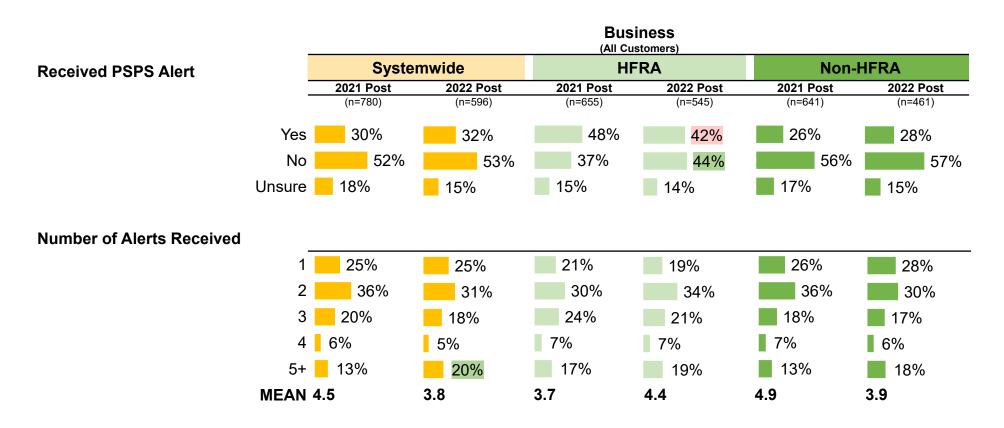
Q13. [RECALL COMMUNICATION] In what ways could SCE improve their communications about wildfire preparedness?

Recent PSPS Notifications

Among All Customers

Received PSPS Alert – All Customers

• With few PSPS Alerts called this year, it is not surprising to see little changed in the incidence of customers saying they had "in the past few months" received a PSPS alert. This incidence declined among Businesses in HFRAs.



QPQ1 - Did you receive any Public Safety Power Shutoff (PSPS) alerts or notifications in the past few months? QPQ2 – [RECEIVED ALERT] How many alerts did you receive?

Language of PSPS Alert – All Customers

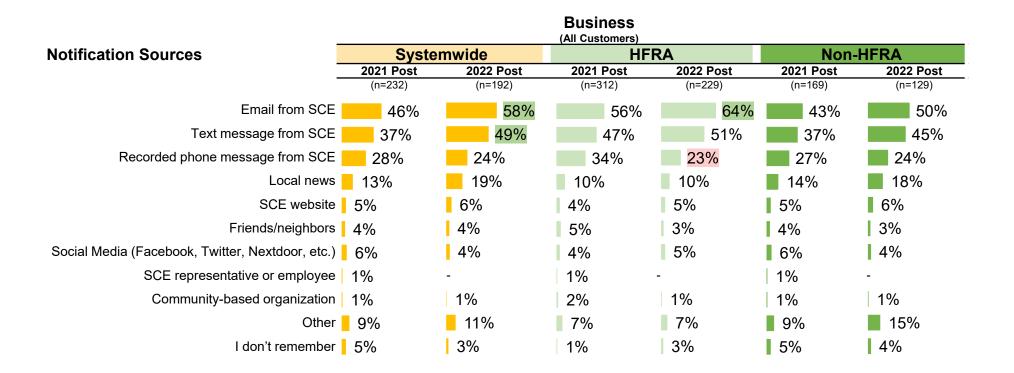
• Business customers report seeing alerts in 8 languages other than English (vs. 16 among Residential customers).

	Business (All Customers)									
Language of PSPS Notification	System	wide		HFR	•	Non-H	IFRA			
	2021 Post 2022 Pos (n=232) (n=192)		2021 Post (n=312)		2022 Post (n=229)	2021 Post (n=169)	2022 Post (n=129)			
English	98%	99	,	100%	100		99%			
Spanish		16%	9%	10070	11%	10%	17%			
Chinese Mandarin	1%	1%	-		1%	1%	1%			
Korean	1%	1%	-		<1%	1%	1%			
Chinese Cantonese	1%	1%	1%		1%	-	1%			
Vietnamese	1%	2%	-		<1%	1%	2%			
Tagalog ·	-	1%	-	-	-	-	1%			
Russian	-	1%	-		<1%	-	1%			
Urdu -	-	1%	-		-	-	1%			

QPQ3 - [RECEIVED ALERT] In what language(s) was/were the Public Safety Power Shutoff notification(s)?

Alert Sources – All Customers

- An email (58%) from SCE is the most frequently mentioned channel for the alerts received, but SCE texts (49%), and recorded phone messages from SCE (24%) are also common. Emails and text messages increased this fire season.
- Non-SCE sources are rarely mentioned other than local news (19%).



QPQ4 – [RECEIVED ALERT] How were you notified about the Public Safety Power Shutoff?



Alert Sources – Prefer Other Languages

Caution: Sample sizes are very small.

Business	
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Not Shown Due to

Small Sample Size

Notification Sources

Email from SCE

Text message from SCE

Local news

Recorded phone message from SCE

SCE representative or employee

SCE website

Social Media

Friends/neighbors

Community-based organization

Other

None

QPQ4 – [RECEIVED ALERT] How were you notified about the Public Safety Power Shutoff?

QPQ5 – [RECEIVED ALERT AND PREFER OTHER LANGUAGE] Which, if any, of these sources provided information in English and which provided information in your preferred language?

* Sample Size < 10

Not Shown Due to

Small Sample Size



Alert Sources – Prefer Other Languages

Caution: Sample sizes are very small.

Business

Usefulness of PSPS Communication Source ... (Top 2 Box)

(Prefer Other Language)												
	HF	RA		Non-HFRA								
In English		In Other		In English		In Other						
2021 Post	2022 Post	2021 Post	2022 Post	2021 Post	2022 Post	2021 Post	2022 Post					
(n=1-4) *	(n=) *	(n=1-4) *	(n=) *	(n=1-7) *	(n=) *	(n=1-7) *	(n=) *					

Email from SCE

Text message from SCE

Not Shown Due to Local news Small Sample Size

Not Shown Due to Small Sample Size

Recorded phone message from SCE

SCE representative or employee

SCE website

Social Media

Friends/neighbors

Community-based organization

Other

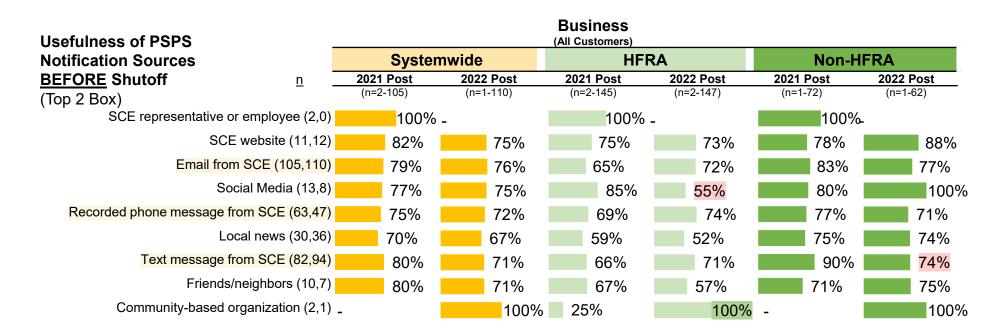
None

QPQ4 – [RECEIVED ALERT] How were you notified about the Public Safety Power Shutoff?

QPQ5 – [RECEIVED ALERT AND PREFER OTHER LANGUAGE] Which, if any, of these sources provided information in English and which provided information in your preferred language?

Usefulness of Alert Sources- All Customers

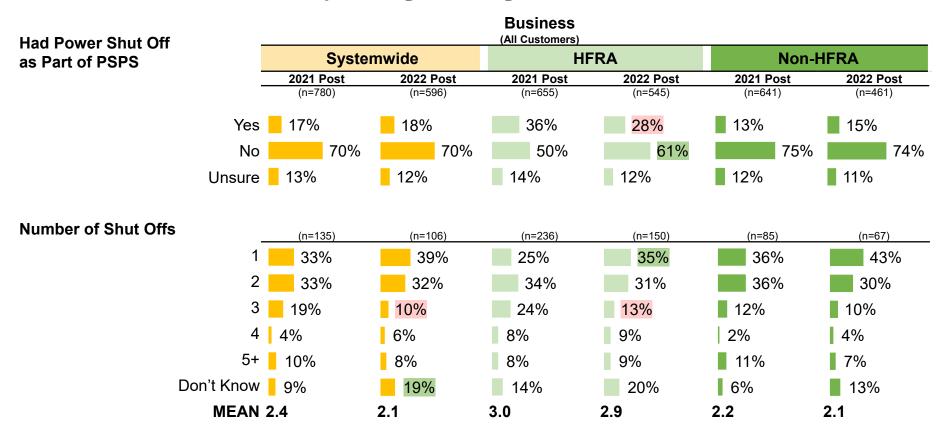
- Caution: Sample sizes are very small.
- Business customers in HFRAs consider just about all the alert channels less useful than do their non-HFRA counterparts, except for texts from SCE which are highly useful to both.



QP6A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful was the information you received from SCE <u>before</u> the Public Safety Power Shutoff via...?

Experienced PSPS Event – All Customers

- Experience with PSPS events is not uncommon in HFRAs, but the incidence declined (to 28%) this fire season. One in 7 Business customers in non-HFRAs (15%) also report having had their power shut off as part of a PSPS (though this is likely overstated).
- Businesses in HFRAs also report a higher average number of PSPS Events (2.9 vs 2.1).

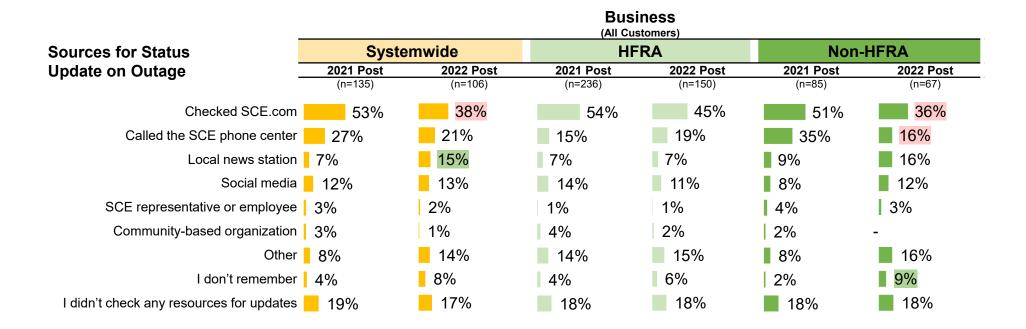


QPQ7. Did you personally have your power shut off at your residence/business by SCE as part of a Public Safety Power Shutoff (PSPS) in 2020--that is, was your power proactively shutoff by SCE due to a high risk of wildfire??

QPQ8. [EXPERIENCED SHUT OFF] How many times was your power shut off due to a PSPS?

Update Sources – All Customers

- Those who experience a PSPS event <u>do</u> seek updates <u>during</u> the events. Only 17% report not doing so.
- The source used most often was SCE.com both for those in (45%) and not in HFRAs (36%). Another 1 in 5 call the SCE phone center.



QPQ9. [EXPERIENCED SHUT OFF] When you experienced a Public Safety Power Shutoff, where did you go to check for updates on the status of your outage?

Usefulness of Update Sources – All Customers

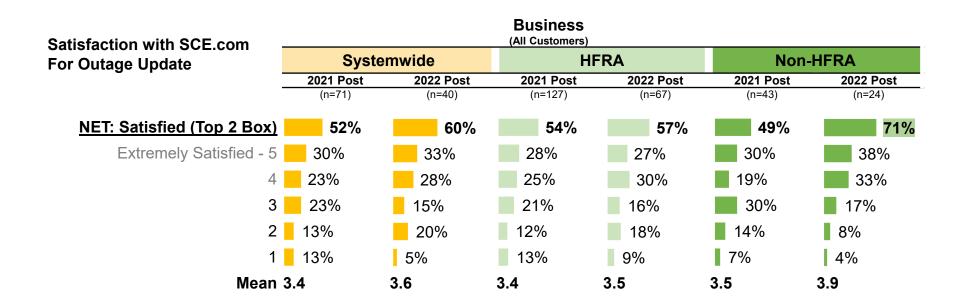
- Caution: Very small sample sizes.
- 65% of those who used SCE.com rate the website as useful (top 2 box).
- Just 40% of those who phoned the SCE Phone Center rated it as useful.

Usefulness of PSPS	Business (All Customers)							
Outage Update Sources	Systemwide		HFRA		Non-HFRA			
DURING Shutoff	2021 Post	2022 Post	2021 Post	2022 Post	2021 Post	2022 Post		
(Top 2 Box)	(n=3-71)	(n=1-40)	(n=3-126)	(n=1-67)	(n=2-43)	(n=1-24)		
SCE representative or employee (3,1)	67%	100%	33%	-	100%	100%		
Social media (15,14)	60%	57%	65%	65%	50%	75%		
Local news station (10,16)	50%	63%	65%	55%	62%	73%		
Checked SCE.com (71,40)	56%	65%	60%	60%	51%	79%		
Called the SCE phone center (35,20)	51%	40%	62%	54%	50%	40%		
Community-based organization (4,1)	100%	100%	70%	. 67%	100%	-		

QPQ11A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful was the information you received from SCE <u>during</u> the Public Safety Power Shutoff via...?

SCE.com Satisfaction <u>During</u> Events – All Customers

• Echoing the usefulness ratings, those who used SCE.com during a PSPS event are mostly satisfied (60%). This is especially true among businesses in Non-HFRAs (71%).

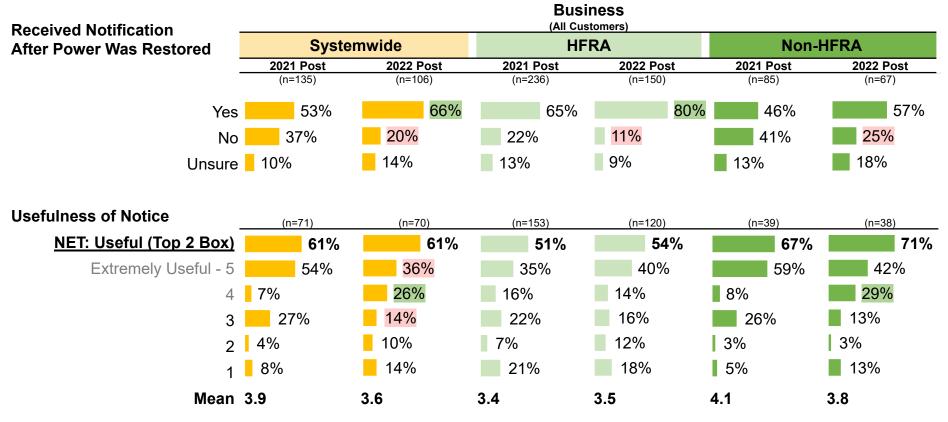


QPQ12. [USED SCE.COM FOR OUTAGE UPDATE] How satisfied were you with the information provided by the website <u>during</u> the Public Safety Power Shutoff?

Shading indicates a significant difference at the 90% confidence level between Pre and Post

Power Restoration Notices – All Customers

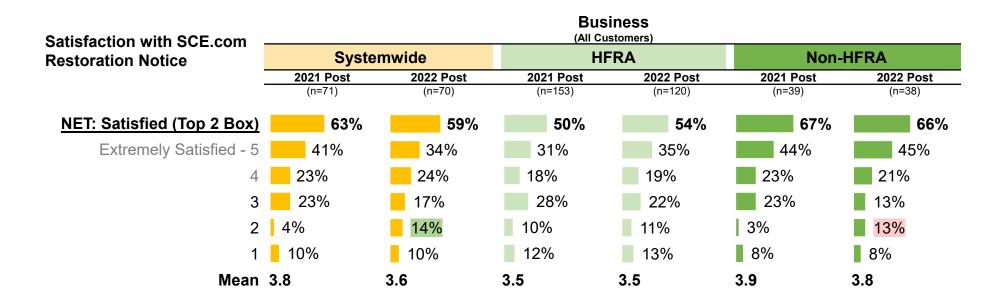
- Systemwide, about two in three (66%) report receiving a restoration notice <u>after</u> their PSPS event. This proportion rose substantially for those in HFRAs (80%).
- Among those who do recall receiving such a notice, the usefulness rating of such a notice was unchanged (61%).



QPQ13. [EXPERIENCED SHUTOFF] Do you recall receiving a notification when your power was fully restored after the PSPS event? QPQ14. [RECEIVED RESTORATION NOTICE] How useful was the information you received from SCE after the Public Safety Power Shutoff ended and your power was restored?

SCE.com Satisfaction <u>After</u> Events – All Customers

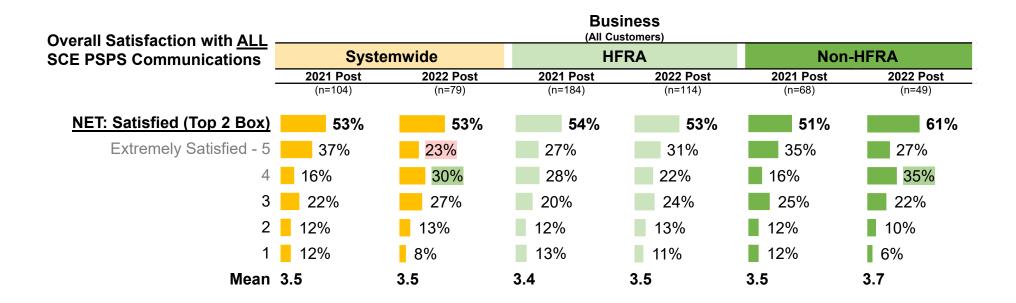
• Satisfaction with the information provided by SCE.com <u>after</u> the PSPS event is unchanged (59%) – and is somewhat higher among non-HFRA customers (66%) compared to the HFRA customers (54%).



QPQ15 - [RECALL RESTORATION NOTICE] How satisfied were you with the information provided by the SCE website after the Public Safety Power Shutoff?

All PSPS Comms Satisfaction – All Customers

- Customers who did check for outage updates from at least one source were asked about their overall satisfaction with SCE's PSPS communications.
- Satisfaction with SCE's PSPS communications is unchanged (53%) and is statistically comparable between HFRAs (53%) and non-HFRAs (61%).



QPQ17. [CHECKED FOR STATUS UPDATES] How satisfied are you OVERALL with <u>all</u> of the Public Safety Power Shutoff communications that you received from SCE?

SCE PSPS Attribute Ratings – All Customers

- All Business customers whether they had experienced an outage / shutoff or not were asked to rate SCE on a list of PSPS-related attributes.
- The ratings improved on several of these attributes, but only among Non-HFRA Businesses.
 - Notification of a shutoff is SCE's highest-rated attribute (60%).
 - The lowest rating is given to: Provides resources near me that I can visit during an outage event (40%).

 Business

			(All Cust	omers)			
PSPS Attributes	Syste	mwide	HFF	RA	Non-HFRA		
	2021 Post	2022 Post	2021 Post	2022 Post	2021 Post	2022 Post	
	(n=780)	(n=596)	(n=655)	(n=545)	(n=641)	(n=461)	
Notifying me when my power might be shut off		60%	55%	55%	53%	62%	
Reducing the risk of wildfires	49%	54%	47%	48%	50%	56%	
Restoring power in a reasonable amount of time	100/	54%	46%	47%	49%	57%	
Keeping me updated about the status of the PSPS shutoff	170/	50%	47%	44%	46%	53%	
Providing an accurate estimate of when the power would be restored	/1 / 0/-	49%	42%	46%	47%	52%	
Notifying me when my power would be restored	/18%	55%	46%	48%	48%	57%	
Reaching out to those with medical or other critical needs	₹U%	42%	35%	34%	40%	43%	
Providing resources near me that I can visit during an outage event	.7 / 7/0	40%	31%	30%	38%	42%	

QPQ18. How would you rate SCE's Public Safety Power Shutoff (PSPS) program on each of the following?

SCE PSPS Improvement Suggestions – All Customers

- All customers whether they had experienced an outage / shutoff or not were asked to provide suggestions regarding SCE's PSPS communications.
- As seen in the word clouds, "more" communications, along with better, advanced, and proactive top the lists. The popularity of text alerts is high.

Business

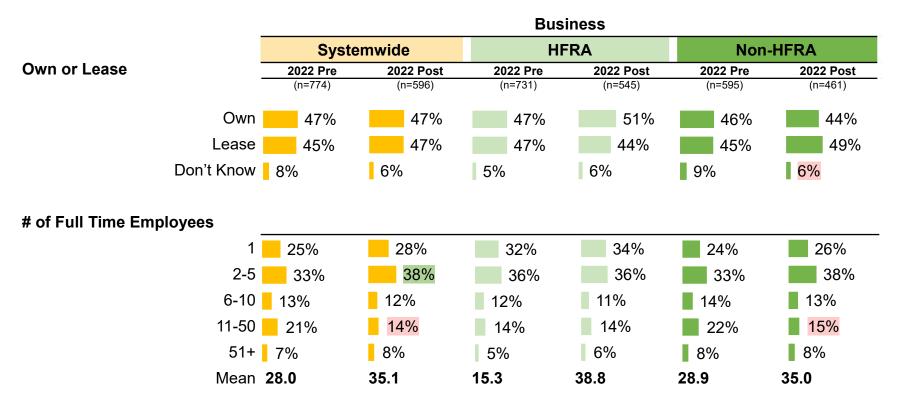
	(All Customers)										
Suggestions to Improve	Sys	stemwide		HFRA	N	on-HFRA					
	2021 Post										
	(n=780)	(n=596	i) (n=655)	(n=545)	(n=641)	(n=461)					
Notification alerts on phone/mobile	12%	15%	14%	19%	11%	15%					
Notification alerts online/email	5%	8%	6%	9%	5 %	9%					
Guide/create awareness/action resources	5%	7%	5 %	7 %	5 %	7 %					
Advance notification (Exact time, date and duration)	7%	7 %	9%	10%	6 %	6 %					
Provide maps/grids of outages	1%	5%	1%	6%	1%	5 %					
Traditional print notification	10%	5%	10%	4%	10%	6%					
More frequent, regular notifications and updates	8%	5%	9%	5%	8 %	5 %					
Social Media updates	1%	3%	2%	2%	1%	3%					
Notification alerts by TV, radio	3%	2%	2%	2%	I 3%	1 3%					
Clear, accurate, quick and concise communication	4%	1%	5%	1%	4 %	<mark>1%</mark>					
Proactive maintenance, monitoring, checks and upgrades	4%	1%	4%	2%	4 %	2%					
Website more user friendly and updated	1%	1%	1%	2%	1%	1%					
Partner with various departments, local community, govt, fire	1%	1%	1%	2%	1%	1%					
Provide incentives to AFN households	2%	1%	3%	1%	l 2%	<mark>1%</mark>					
Other	6%	10%	4%	12%	7 %	10%					
Don't Know / No Opinion	45	5%	45%	42% 38	3%	46% 45%					

QPQ19. In your opinion, what can SCE do to improve their communications regarding Public Safety Power Shutoffs?

Firmographics

Business Characteristics

- The Pre- and Post- surveys have comparable sample compositions with few exceptions.
- Aside from Businesses in HFRAs being somewhat less ethnic, those in HFRAs and non-HFRAs are similar.



QBD1. Do you own or lease the location(s) for which you are responsible for the energy management decisions?

QBD4. How many full-time employees does your company have at the location(s) for which you are responsible for the energy management decisions?

Gross Revenue

ப	us	110	~~	_
\mathbf{r}	115			

	Syste	mwide	Н	FRA	Non-HFRA		
Revenue	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
	(n=774)	(n=596)	(n=731)	(n=545)	(n=595)	(n=461)	
Less than \$100,000	14%	17%	20%	19%	14%	18%	
\$100,000 to less than \$250,000	10%	14%	12%	16%	9%	15%	
\$250,000 to less than \$500,000	9%	11%	10%	9%	8%	11%	
\$500,000 to less than \$1 million	11%	9%	9%	12%	12%	8%	
\$1 million to less than \$2 million	10%	9%	9%	8%	10%	9%	
\$2 million to less than \$5 million	9%	7%	8%	6%	9%	7%	
\$5 million to less than \$10 million	4%	4%	2%	2%	4%	4%	
\$10 million to less than \$100 million	5%	3%	2%	3%	5%	3%	
\$100 million to less than \$1 billion	1%	2%	<1%	<1%	1%	2%	
\$1 billion or more	1%	1%	<1%	1%	1%	1%	
Not applicable, Government agency	2%	1%	1%	1%	3%	1%	
Prefer not to answer	25%	24%	26%	23%	24%	23%	

QBD2 - What is your business's annual gross revenue?

Community Membership

	Business										
	Systen	nwide	HFR	RA	Non-l	IFRA					
Community	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post					
	(n=774)	(n=596)	(n=731)	(n=545)	(n=595)	(n=461)					
Hispanic/Latino/Latina	24%	22%	16%	19%	26%	24%					
Chinese	9%	6%	5%	4%	10%	7%					
Korean	6%	4%	4%	5%	7%	4%					
Vietnamese	4%	5%	3%	3%	5%	5%					
Filipino	5%	3%	3%	3%	6%	3%					
Cambodian	3%	3%	2%	3%	3%	3%					
I do not consider myself a member of any of these communities	69%	72%	80%	76%	65%	69%					

QD5a. Do you consider yourself a member of any of the following communities?

Gender

Business Systemwide HFRA Non-HFRA Gender 2022 Pre 2022 Post 2022 Pre 2022 Post 2022 Pre 2022 Post (n=774) (n=596) (n=731) (n=545) (n=461) (n=595) Male 52% 52% 49% 51% 53% 52% Female 38% 42% 37% 42% 40% 42% Non-binary or Other 1% <1% <1% <1% <1% <1% Prefer not to answer 9% 6% 8% 8% 9% 6%

QBD3. What is your gender?



In-Language Wildfire Mitigation / PSPS Communications and Outreach Effectiveness Survey 2022 Pre-/Post- Final Report

Residential

January 31, 2023

Background & Objectives

Starting in 2020 the California IOUs began conducting an annual pre-/post-survey to assess the effectiveness of utility communications and outreach for wildfire safety/preparedness and PSPS activities.

- Core questions are administered by all three IOUs via their individual surveys, allowing some comparisons across IOUs, while each IOU may also incorporate custom questions. Most of the pre-questions are repeated in the post- survey along with additional unique post-questions.
- Each IOU determines its own methodology for optimizing the survey implementation and utilized their own preferred research partners.
- SCE administered the wildfire season pre-and post- surveys to the general public (Residential and Business customers) systemwide and in high fire risk areas (HRFAs).

Methodology

Survey invitations were delivered to Residential and Business customers via email (to a self-administered web survey) or phone (to an interviewer-administered telephone survey).

Via email: 70%Via phone: 30%

- All Residential & Business Pre- surveys were completed between June 28 and August 15, 2022
- All Residential & Business Post- surveys were completed between Nov 21, 2022, and Jan 2, 2023

2022	Residential	Systemwide	Resident	ial HFRA	
Interviewing	Pre	Post	Pre	Post	
Number Completed	2,310	2,282	2,425 (1,673+752 from Systemwide)	2303 (1,583+720 from Systemwide)	
Survey Length (min)	14.1	16.9	14.1	17.6	
2022	Business S	Systemwide	Business HFRA		
Interviewing	Pre	Post	Pre	Post	
Number Completed	774	596	731 (552+179 from Systemwide)	545 (410+135 from Systemwide)	
Survey Length (min)	9.3	12.9	9.5	12.8	

Methodology (cont.)

- Incentives: All participants were offered entry to a sweepstakes. Prizes for the sweepstakes (each wave) included:
 - o Two grand prize winners of \$500 (1 each for RES and BIZ)
 - o Fifty-four (54) other winners of \$100 (38 for RES and 13 for BIZ) enough winners to make the odds of winning about 1:100
- Each IOU selects the "prevalent" languages in which to offer the survey. SCE included 19 languages plus English in 2022.

1.	<u>English</u>	11. <u>Korean</u>
2.	<u>Arabic</u>	12. <u>Punjabi</u>
3.	<u>Armenian</u>	13. <u>Russian</u>
4.	<u>Chinese - Cantonese</u>	14. <u>Spanish</u>
5.	<u>Chinese - Mandarin</u>	15. <u>Tagalog</u>
6.	<u>Farsi</u>	16. <u>Vietnamese</u>
7.	<u>French</u>	17. <u>Hindi</u>

19. Portuguese Japanese 10. Khmer

German

20. Thai

18. Hmong

Methodology (cont.)

- Email invitations greeted potential respondents in all 20 languages with a jump link in the email to a web survey in that language.
- The CATI phone center has staff available in all languages, but all are not always available. Upon encountering a language barrier, the interviewer attempts to identify the language and stores the record for re-contact later. If the language cannot be identified, a surname-based, pre-coded flag is used to assign the record for re-contact.
- 8.5% of Systemwide RES and 5.5% of Systemwide BIZ customers completed their surveys in a language other than English.

2022 PRE-

- > **6.2%** of RES Systemwide
 - 6.9% of Phone (n=678)
 - 5.9% of Email (n=1632)
- > 3.3% of RES in HFRA
 - 5.6% of Phone (n=462)
 - 2.4% of Email (n=1211)
- > 8.1% of BIZ Systemwide
 - 5.8% of Phone (n=226)
 - 9.1% of Email (n=548)
- > 3.1% of BIZ in HFRA
 - 0.7% of Phone (n=152)
 - 4.0% of Email (n=400)

2022 POST-

- > 8.5% of RES Systemwide
 - 6.8% of Phone (n=632)
 - 12.9% of Email (n=1650)
- > 3.9% of RES in HFRA
 - 5.9% of Phone (n=410)
 - 3.2% of Email (n=1202)
- > 5.5% of BIZ Systemwide
 - 1.9% of Phone (n=210)
 - 7.5% of Email (n=386)
- > 3.6% of BIZ in HFRA
 - 0.0 of Phone (n=135)
 - 5.3% of Email (n=281)

Methodology (cont.)

Below are the number of <u>Residential</u> interviews conducted in each language.

Language of Interview		l Systemwide ng HFRAs)		ntial HFRA ng Systemwide)		
	2022 Pre	2022 Post	2022 Pre	2022 Post		
English	2167	2086	1618	1520		
Non-English (total)	143	196	55	63		
Spanish	75	107	38	41		
Chinese - Mandarin	19	32	5	11		
Korean	8	17	5	4		
Vietnamese	8	11	1			
Chinese - Cantonese	11	9	2	2		
Arabic	4	4		1		
Japanese	8	4		1		
Farsi	1	3	2			
Armenian	1	2		1		
German	1	2	1			
Tagalog	2	2	1			
Khmer		1				
Portuguese		1		1		
Thai	1	1				
Russian	3					
Hindi	1					
French				1		
Portuguese, Khmer, Punjabi, Hmong						
TOTAL	2,310	2,282	1,673	1,583		

Executive Summary



Need for Wildfire comms in languages other than English

Since 2020, SCE has completed 23,514 "in-language" Wildfire interviews with Residential customers and 6,593 with Business customers. The surveys are offered to customers in 19 "prevalent" languages plus English (25 + English in 2020). Survey invitations are extended by email (with an in-language survey link to an in-language version of the questionnaire for all offered languages) and/or by phone (where all potential respondents with language barriers were either transferred live to a bi-lingual interviewer or were grouped by likely language and recontacted later by a bi-lingual interviewer fluent in that language).

Given these options, just 5.9% of Residential customers and 6.8% of Business customers chose to take the survey in a non-English language (RES: 1,394 of 23,514; BIZ: 446 of 6,586). Spanish accounts for more than half of these inlanguage interviews.

In the 2022 Post- survey, when asked to choose their preferred language for wildfire communications from SCE, <u>9% of Residential customers and 7% of Business customers indicated a preference for a language other than English.</u> All these customers were asked: "How do you feel about receiving wildfire communications from SCE in English only?"

- At least 2/3s of these customers report they can understand English well enough for WF communications
 - Residential: 31% of the 9% who prefer another language report they cannot understand English and need wildfire communications in some other language. That amounts to 2.8% of all Residential customers.
 - Business: 16% of the 7% who prefer another language report they cannot understand English and need wildfire communications in some other language. That equals 1.1% of all Business customers
- Spanish is the required "other" preferred language for 57% each of the Residential and Business customers.
- The remainder those who do not understand English OR Spanish equals 1.2% of all Residential customers and 0.47% of all Business customers.

After three survey years it appears that non-English language dependency for Residential and Business customers is a relatively minor concern across SCE's territory (and even less so in the HFRAs) in reaching customers with wildfire-related communications – and it is especially <u>not</u> critical for WF comms to be offered in such a wide array of "prevalent" languages beyond English and Spanish (and perhaps a few prominent Asian languages).

SUMMARY OF FINDINGS

Changes in 2022 Pre- to Post- PSPS survey metrics among Residential customers territory-wide and in HFRAs are substantially <u>higher</u> than between the Pre- and Post- surveys in 2021, especially in HFRAs. These findings suggest the **2022 WF communications** (particularly the increased use of texts and improvements in source usefulness of SCE.com) were more effective and generated a stronger, more supportive response than in **2021**.

Need for Wildfire comms in languages other than English – Post- 2022 (cont.)

- The 2022 Post- survey interviewed 2,282 Residential customers territory-wide and another 1,583 in HFRAs.
 - 8.5% systemwide and 3.9% in HFRAs completed the surveys in a non-English language.

- Territory-wide

- When asked directly to select their preferred language for wildfire communications, <u>9% indicated a preference for a language other than English</u>. Most of these customers (5%) prefer Spanish. The balance (4%) of all Residential customers prefer a language other than English OR Spanish.
- This 9% divide into 6.2% who say they have some understanding of English and 2.8% who say, "I need it in my preferred language I do not understand English." That 2.8% who do not understand English break down to 1.6% who prefer Spanish and 1.2% who prefer a language other than English or Spanish.

- HFRAs

- <u>4% indicated a preference for a language other than English</u> for wildfire communications. Most of these (2%) prefer Spanish, leaving 2% who prefer a language other than English or Spanish.
- This 4% divide into 3% who have some understanding of English and 1% who say, "I need it in my preferred language I do not understand English." That 1% of the HFRA population who do not understand English break down to 0.5% who prefer Spanish and 0.5% who prefer a language other than English or Spanish.

Recall of SCE WF Communications

- The 2022 Post- survey found that nearly half of all Residential customers (48%) recall seeing SCE's recent WF communications unchanged from 46% in the Pre- survey. Recall among customers in HFRAs, however, was up significantly (52% to 56%).
 - The Post- proportion is higher in HFRAs (56% vs. 44% in Non-HFRAs).
 - Among customers who prefer a language other than English recall of WF communications rose between the Pre- and Post- surveys (38% to 47%), ending at the same level as all customers systemwide (48%).
- Recall of SCE's WF communications in 2021 was comparable (48% Pre- and 51% Post-), but there was no lift in recall in HFRAs.

SCE WF Communications Sources

- Emails (49%) and letters (42%) from SCE continue to be the most common sources of WF communications for Residential customers.
- Three SCE WF communications sources (email, text, phone calls) grew in their recall incidence between the Preand Post- surveys, though letters dipped to 42% from 48%.
- Source usefulness is <u>unchanged</u> systemwide and by HFRA/Non-HFRA between the Pre-and Post- surveys: SCE.com (76% useful) leads all other sources, followed closely by SCE texts (73%).
- For the 13% who used it, satisfaction with SCE.com as a source of information about preparing for wildfires remained high at 80% (unchanged).

Other WF Communications Sources

- Among a wide variety of "other" sources of WF comms, the most common are local news reports (36%, unchanged Pre- to Post- 2022, but declining since 44% and 39% in 2020 and 2021 Post-), followed by city/county government (24%, unchanged), CalFire (22%, up from 19%), and local fire department (13%, unchanged). CalFire is deemed the most useful (72% vs. 61% for local news and 58% for city/county government, all unchanged).
- Among Prefer Other Language customers, the incidence for local news is just 17% even when it is in their preferred language. Fewer say communications from city/county government, CalFire, and local fire department reach them (9%, 7%, and 5%, respectively).
- The best "other" sources of WF safety and preparedness information do not match SCE's penetration of 48%.

Ratings of SCE's WF Efforts

- Ratings of SCE on WF matters eroded in 2021, but either <u>held steady or improved</u> in 2022. The changes were largely due to improved opinions among HFRA customers.
 - At the end of 2020, 61% of customers systemwide and 57% of customers in HFRAs were satisfied with SCE's overall wildfire safety and preparedness efforts.
 - By the end of 2022, little has changed overall versus 2020: 55% of customers systemwide and 53% of customers in HFRAs (57% in Non-HFRAs) were satisfied with SCE's overall wildfire safety and preparedness efforts. Prefer Other Language customers are even more positive (79%).
- Systemwide, the level of top two-box agreement with a list of 9 statements used to rate SCE's wildfire safety and preparedness efforts ranges from 47% to 68%. Three of these statements <u>improved</u> systemwide and in HFRAs between the Pre- and Post- this year: *Is committed to restoring power; Takes proactive measures to protect the grid from WF*; and *Is helping me prepare for WF season*. A 4th attribute also improved in HFRAs: *Makes an effort to communicate with all customers about WFs*.
 - Prefer Other Language customers are even more likely to agree (77% to 82% agreement).

Wildfire Preparedness

- Overall, preparedness levels are virtually unchanged between the 2020, 2021, and 2022 surveys ranging between 52% and 57% systemwide. However, indicators suggest 2022 may be on the upswing.
 - In 2022, self-reported preparedness levels <u>increased</u> from Pre- to Post- (52% vs. 55%) along with many of the preparedness actions. This increase was reported in both HFRAs (60% vs. 62%) and Non-HFRAs (48% vs. 53%).
 - Among Prefer Other Language customers, the proportion saying they are similarly prepared is slightly lower (47%, <u>unchanged</u>).
- Between the 2020 Pre- and Post- surveys, customers territory-wide reported a higher incidence on 5 preparedness actions and in HFRAs, the increased activity stretched to 10 actions.
- Between the 2021 Pre- and Post- surveys, there was a much less enthusiastic response: Systemwide, action on two items declined and none increased and in HFRAs, action increased for 5 items but declined for 2.
- This year, systemwide engagement in ten actions <u>increased</u> Pre- to Post- and the incidence of "none" (i.e., those taking no action) declined from 32% to 23%. This decline occurred in HFRAs (from 23% to 14%) and Non-HFRAs (36% to 27%).

Residential

Executive Summary (cont.)

PSPS Awareness and Satisfaction

- Awareness of "PSPS" rose in 2022 (from 64% Pre- to 67% Post-) due to a significant <u>increase in HFRAs</u> (to 80%). There was no change in Non-HFRAs (61%).
 - Though comparable to 2022 results, awareness did not change Pre- to Post- during the 2021 fire season, ending at 68% systemwide, 79% in HFRAs, and 63% in Non-HFRAs.
- More customers in 2022 indicated a positive overall opinion of SCE's PSPS program systemwide (from 49% Pre- to 54% Post-), in HFRAs (from 45% to 51%), and in Non-HFRAs (from 51% to 57%).
 - Prefer Other Language customers have consistently had a much higher opinion of SCE's PSPS program and that is the case again this year where ratings rose from 71% to 79% systemwide.
- Among the 18% who used SCE.com, satisfaction with the PSPS information was unchanged systemwide (63%) and much lower in HFRAs than in Non-HFRAs (56% vs 69%).
 - In 2021, SCE.com satisfaction was comparable (60% systemwide HFRA: 48%, Non-HFRA: 70%).

PSPS Notifications and Events – 2022 Post- versus 2021 Post-

- Fewer <u>HFRA</u> customers received PSPS alerts in 2022 (44%) than in 2021 (47%), but there was no change in this incidence among Non-HFRA customers (21% and 23% in 2021 and 2022).
- Texts <u>rose</u> as the source of the alerts (from 47% in 2021 to 55% in 2022), especially in HFRAs (from 56% to 63%), but also in Non-HFRAs (from 41% to 49%).
- Fewer customers in HFRAs experienced a PSPS event (33% in 2021 vs. 25% in 2022).
- Among those who experienced an event, SCE.com remains the most often-mentioned source for <u>updates</u> (50% in HFRAs and 37% in Non-HFRAs, unchanged from 2021). The usefulness of SCE.com <u>increased</u> from 47% to 59% systemwide, mostly due to an increase among HFRA customers (from 44% to 54%). This rating was unchanged among Non-HFRA customers (73%). Fewer customers used the SCE phone center in 2022 (16% vs. 21% in 2021).
- Satisfaction with SCE.com for information provided <u>during</u> events <u>increased</u> systemwide (from 45% to 58%) mostly due to an <u>increase among HFRA</u> customers (from 39% to 45%), but also a directional improvement for Non-HFRA customers (from 66% to 74%).
- For those who experienced an event, power restoration notices were more often received (<u>up</u> from 67% to 75% in HFRAs and <u>up</u> from 47% to 61% in non-HFRAs) and their usefulness <u>rose</u> (from 47% to 54% in HFRAs).
- Satisfaction with SCE.com for information provided <u>after</u> events also <u>increased</u> (from 42% to 51% in HFRAs).
- Overall satisfaction with SCE's PSPS communications increased (52% to 60% Systemwide and 46% to 52% in HFRAs).

Awareness of PSPS Resources

- Awareness, Familiarity, Interest and Experience with each of 12 PSPS resources were measured.
- Awareness ranged from 10% (Transportation, Hotels, Lodging) to 27% (PSPS Alert Language Preferences). More than half of the Systemwide Residential customers have heard of at least one of these resources (56%, <u>up</u> from 53% in the Pre-).
 - After a successful fire season campaign, awareness was raised for half of the individual programs and was brought to comparable levels in HFRAs and Non-HFRAs.
- Familiarity (percent saying Very or Somewhat Familiar with the resource) was just slightly lower than awareness ranging from 7% (CCVs, hotels, transportation) to 21% (PSPS Alert Language Preferences).
 - More than two in five reported being familiar with at least one of these resources (44%, also <u>up</u> from 41% in the Pre-).
 - As with Awareness, Familiarity gaps were closed this year between HFRAs and Non-HFRAs.
- Interest (percent saying Very or Somewhat Interested in using the resource during a PSPS) was quite high, ranging from 40% (CCVs) to 77% (Address Level Alerts).
 - Nearly everyone (90%) expressed interest in at least one of these resources.
- Experience, however, is quite low, ranging from 1% (Lodging) to 13% (Address Level Alerts). Combining all resources, more than one in five (22%) have experience with at least one.
 - HFRA customers have more often used one of the programs (e.g. Address Level Alerts 18% vs. 10% Non-HFRA).
 - Otherwise, customer experience with these programs is comparable (ranging from 1% to 6%). Experience rose with 4 of these programs in Non-HFRAs.

Residential

Executive Summary: Total Sample

- This analysis provides the Pre- and Post- results for both 2021 and 2022. With large sample sizes, a few percentage point differences are often statistically significant. Users will consider if they are meaningful.
- In 2022, and especially in HFRAs, <u>five key metrics rose</u>: recall of SCE WF communications (+4%), awareness of "PSPS" (+3%), and satisfaction with SCE's WF Communications efforts (all three key metrics).
- The 2022 Pre- to Post- changes improved relative to the Pre- to Post- changes in 2021.

	System Wide					HFRA				Non-HFRA			
	2021 Pre	2021 Post	2022 Pre	2022 Post	2021 Pre	2021 Post	2022 Pre	2022 Post	2021 Pre	2021 Post	2022 Pre	2022 Post	
Recall SCE Wildfire Communications (% Yes)	48%	51%	46%	48%	55%	56%	52%	56%	45%	48%	44%	44%	
SCE Sources Considered Useful (Top 2 Box – avg.)	65%	60%	63%	65%	64%	64%	62%	64%	67%	61%	63%	67%	
Heard of Public Safety Power Shutoffs (%Yes)	67%	68%	64%	67%	78%	79%	77%	80%	62%	63%	59%	61%	
Preferred Language For Public Safety Information													
English	91%	92%	92%	91%	96%	96%	96%	96%	89%	90%	90%	88%	
Spanish	6%	4%	5%	5%	3%	2%	2%	2%	7%	6%	6%	7%	
Other	3%	4%	3%	4%	1%	2%	2%	2%	4%	4%	4%	5%	
(Among those who prefer comms in other language) Understand English (% Yes)	64%	69%	69%	69%	74%	74%	69%	76%	63%	68%	68%	69%	
Satisfaction with Communication Efforts													
Opinion of SCE's PSPS program (Top 2 Box/Positive)	49%	52%	49%	54%	46%	48%	45%	51%	50%	55%	51%	57%	
Satisfaction w/ SCE's WF Preparedness Efforts (Top 2 Box/Satisfied)	57%	54%	54%	55%	53%	51%	51%	53%	58%	58%	56%	57%	
Personal Level of Preparedness (Completely/Somewhat)	54%	54%	52%	55%	59%	63%	60%	62%	51%	51%	48%	53%	

Residential

Executive Summary: Total Sample (cont.)

- In 2022, and again especially in HFRAs, four SCE attributes improved.
- In contrast, attitudes about SCE declined pre- to post- in 2021.

		Systen	n Wide		HFRA				Non-HFRA			
SCE Attributes (Top 2 Box)	2021 Pre	2021 Post	2022 Pre	2022 Post	2021 Pre	2021 Post	2022 Pre	2022 Post	2021 Pre	2021 Post	2022 Pre	2022 Post
Is committed to restoring power to customers affected by wildfires	67%	65%	65%	68%	63%	61%	62%	65%	68%	67%	67%	70%
Is committed to wildfire safety	63%	59%	60%	62%	60%	57%	57%	60%	65%	62%	62%	63%
Is working to keep my community safe	63%	60%	59%	61%	59%	56%	57%	59%	65%	64%	61%	62%
Shows care and concern for customers	61%	57%	57%	57%	54%	52%	51%	52%	63%	60%	60%	60%
Takes proactive measures to protect the electricity grid from wildfires	60%	55%	55%	58%	56%	54%	54%	57%	61%	57%	58%	59%
Is proactive in taking steps to address wildfire risks	59%	56%	55%	57%	56%	53%	54%	55%	60%	57%	57%	59%
Makes an effort to communicate with all customers about wildfires	58%	57%	56%	57%	56%	56%	55%	58%	58%	58%	57%	58%
Is a company I trust to act in the best interest of its customers	57%	53%	53%	53%	50%	47%	46%	47%	60%	57%	57%	58%
Is helping me prepare for wildfire season	48%	46%	44%	47%	45%	43%	42%	45%	49%	48%	46%	49%
AVERAGE	60%	56%	56%	58%	55%	53%	53%	55%	61%	59%	58%	60%

Q14. Using a scale where 1 means completely disagree and 5 means completely agree, Please indicate how much you agree or disagree with the following statements about SCE. SCE...

Stat testing compares Pre to Post. Green is significantly higher. Pink is significantly lower.



Executive Summary: Critical Segments

2021 Pre- & Post- Results

- Recall of WF communications is highest among Seniors and Rural segments (which are also more often HFRAs)
- Preparedness rose among the Rural segment.

				2021	. System W	Vide Resid	ential			
	Non-E	nglish	<u>CARE</u>	/FERA	Disa	bled	<u>Sen</u>	<u>iors</u>	Ru	<u>ral</u>
	Pre (n=205)	Post (n=191)	Pre (n=747)	Post (n=720)	Pre (n=552)	Post (n=556)	Pre (n=730)	Post (n=820)	Pre (n=278)	Post (n=287)
Recall SCE Wildfire Communications (% Yes)	53%	54%	48%	49%	51%	50%	48%	53%	53%	63%
SCE Sources Considered Useful (Top 2 Box – <u>avg.</u>)	86%	77%	75%	73%	65%	65%	65%	56%	66%	60%
Heard of Public Safety Power Shutoffs (%Yes)	60%	57%	58%	58%	70%	70%	76%	76%	77%	83%
Preferred Language For Public Safety Inf	ormation									
English	-	-	81%	84%	93%	93%	95%	95%	94%	96%
Spanish	63%	53%	14%	10%	5%	4%	3%	2%	5%	2%
Other	37%	47%	5%	6%	2%	3%	2%	3%	1%	2%
(Among those who prefer comms in other language) Understand English (% Yes)	64%	69%	62%	64%	50%	67%	55%	76%	59%	55%
Satisfaction										
Opinion of SCE's PSPS program (Top 2 Box/Positive)	75%	79%	59%	62%	50%	54%	54%	53%	50%	52%
Satisfaction w/ SCE's WF Preparedness Efforts (Top 2 Box/Satisfied)	82%	79%	68%	66%	60%	55%	63%	56%	59%	55%
Personal Level of Preparedness (Completely/Somewhat)	46%	46%	51%	49%	53%	56%	61%	63%	63%	71%

Shading indicates a significant difference at the 90% confidence level between Pre and Post



Executive Summary: Critical Segments

2022 Pre- & Post- Results

- Recall of WF communications is highest among Rural customers (55%) though recall is near 50% for all segments.
- Little changed pre- to post- among the Critical Segments. The lone exception is an improvement in preparedness among the Disabled.

2022 Customs Wide Desidential

		2022 System Wide Residential									
	Non-E	nglish	CARE	/FERA	Disa	bled	Sen	<u>iors</u>	Ru	ral	
	Pre (n=174)	Post (n=209)	Pre (n=560)	Post (n=624)	Pre (n=522)	Post (n=544)	Pre (n=772)	Post (n=710)	Pre (n=277)	Post (n=261)	
Recall SCE Wildfire Communications (% Yes)	38%	47%	47%	48%	51%	51%	52%	51%	52%	55%	
SCE Sources Considered Useful (Top 2 Box – <u>avg.</u>)	82%	85%	70%	74%	68%	65%	62%	61%	61%	61%	
Heard of Public Safety Power Shutoffs (%Yes)	50%	56%	57%	62%	64%	71%	76%	79%	75%	79%	
Preferred Language For Public Safety Inf	ormation										
English	-	-	84%	82%	95%	92%	97%	94%	95%	95%	
Spanish	60%	57%	11%	12%	3%	5%	2%	3%	5%	3%	
Other	40%	43%	5%	6%	2%	3%	1%	3%	-	2%	
(Among those who prefer comms in other language) Understand English (% Yes)	69%	69%	60%	65%	65%	71%	61%	60%	67%	54%	
Satisfaction											
Opinion of SCE's PSPS program (Top 2 Box/Positive)	71%	79%	58%	62%	49%	52%	51%	55%	48%	52%	
Satisfaction w/ SCE's WF Preparedness Efforts (Top 2 Box/Satisfied)	76%	79%	62%	64%	55%	53%	56%	56%	52%	54%	
Personal Level of Preparedness (Completely/Somewhat)	41%	47%	51%	48%	50%	57%	59%	63%	63%	62%	

Shading indicates a significant difference at the 90% confidence level between Pre and Post

Executive Summary: Critical Segments (cont.)

2021 Pre- & Post- Results

• Unlike the 2020 Pre- and Post- results where attitudes about SCE improved or were flat, in 2021 such attitudes declined for several segments.

SCE Attributes	Non-English		CARE/FERA		<u>Disabled</u>		<u>Seniors</u>		<u>Rural</u>	
(Top 2 Box)	Pre (n=205)	Post (n=191)	Pre (n=747)	Post (n=720)	Pre (n=552)	Post (n=556)	Pre (n=730)	Post (n=820)	Pre (n=278)	Post (n=287)
Takes proactive measures to protect the electricity grid from wildfires	87%	81%	72%	65%	61%	54%	64%	54%	63%	55%
Is working to keep my community safe	84%	86%	73%	73%	64%	63%	69%	61%	63%	57%
Is a company I trust to act in the best interest of its customers	84%	82%	72%	67%	59%	52%	62%	53%	56%	50%
Shows care and concern for customers	83%	81%	73%	70%	61%	57%	63%	58%	58%	56%
Is committed to wildfire safety	82%	81%	73%	69%	65%	60%	69%	60%	67%	61%
Makes an effort to communicate with all customers about wildfires	81%	81%	66%	63%	59%	57%	62%	56%	59%	57%
Is committed to restoring power to customers affected by wildfires	80%	84%	75%	72%	67%	66%	73%	65%	65%	65%
Is proactive in taking steps to address wildfire risks	80%	80%	68%	64%	61%	56%	64%	57%	63%	58%
Is helping me prepare for wildfire season	80%	76%	62%	58%	49%	45%	50%	46%	51%	46%
AVERAGE	82.3%	81.3%	70.4%	66.8%	60.7%	56.7%	65.0%	56.7%	60.6%	56.1%

Q14. Using a scale where 1 means completely disagree and 5 means completely agree, Please indicate how much you agree or disagree with the following statements about SCE. SCE...

Executive Summary: Critical Segments (cont.)

2022 Pre- & Post- Results

- Unlike 2021, when ratings of SCE slipped pre- to post-, in 2022, ratings of SCE were flat pre- to post-.
- The average rating on nine SCE attributes is highest among Non-English households (78%-79%) followed by those on CAREFERA (65%). Average ratings are well above 50% for all segments.

SCE Attributes	Non-English		CARE/FERA		<u>Disabled</u>		<u>Seniors</u>		<u>Rural</u>	
(Top 2 Box)	Pre (n=174)	Post (n=209)	Pre (n=560)	Post (n=624)	Pre (n=522)	Post (n=544)	Pre (n=772)	Post (n=710)	Pre (n=277)	Post (n=261)
Takes proactive measures to protect the electricity grid from wildfires	80%	79%	63%	66%	56%	55%	56%	59%	54%	60%
Is working to keep my community safe	79%	82%	68%	67%	59%	58%	60%	60%	56%	61%
Is a company I trust to act in the best interest of its customers	80%	79%	65%	65%	52%	49%	51%	51%	44%	47%
Shows care and concern for customers	78%	79%	68%	66%	59%	54%	59%	56%	53%	49%
Is committed to wildfire safety	76%	81%	68%	67%	62%	59%	63%	65%	58%	62%
Makes an effort to communicate with all customers about wildfires	75%	77%	63%	62%	56%	59%	58%	59%	53%	54%
Is committed to restoring power to customers affected by wildfires	76%	82%	68%	72%	62%	67%	63%	70%	58%	65%
Is proactive in taking steps to address wildfire risks	80%	77%	63%	65%	54%	56%	56%	59%	56%	59%
Is helping me prepare for wildfire season	72%	77%	53%	54%	43%	47%	44%	47%	40%	44%
AVERAGE	77.8%	79.3%	64.6%	64.8%	56.1%	55.9%	57.3%	58.5%	52.8%	55.6%

Q14. Using a scale where 1 means completely disagree and 5 means completely agree, Please indicate how much you agree or disagree with the following statements about SCE. SCE...

Languages Used / Preferred



Languages Used at Home

Receptivity to English for WF Communications has increased.

- 93% of Residential households systemwide report using English in their home. More do so in HFRAs (97%).
- This proportion is comparable to that found in 2021.

Residential (All Customers) HFRA

	Systemwide		HF	RA	Non-HFRA		
Languages Used in Home	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
_	(n=2310)	(n=2282)	(n=2425)	(n=2303)	(n=1558)	(n=1562)	
English	95%	93%	97%	97%	93%	91%	
Spanish		16%	10%	11%	17%	20%	
Chinese Mandarin	•	3%	2%	2%	3%	3%	
Chinese Cantonese	1%	1%	1%	1%	1%	1%	
Tagalog	1%	1%	1%	1%	1%	1%	
Vietnamese	1%	1%	<1%	<1%	1%	1%	
Korean	1%	1%	<1%	1%	1%	1%	
Farsi	1%	<1%	<1%	1%	1%	1%	
Arabic	<1%	1%	<1%	1%	<1%	1%	
Japanese	<1%	<1%	<1%	<1%	1%	1%	
French	<1%	1%	<1%	1%	<1%	<1%	
Hmong	<1%	<1%	<1%	< 1%	<1%	<1%	
German	<1%	<1%	<1%	1%	<1%	<1%	
Russian	<1%	<1%	< 1%	< 1%	<1%	<1%	
Armenian	<1%	<1%	< 1%	< 1%	< 1%	< 1%	
Hindi	<1%	<1%	< 1%	< 1%	< 1%	< 1%	
Khmer	<1%	<1%	-	- 1%	<1%	< 1%	
Punjabi	<1%	-	< 1%	< 1%	< 1%	-	
Thai	<1%	<1%	< 1%	< 1%	< 1%	<1%	
Portuguese	<1%	-	-	-	<1%	-	
Other	1%	2%	2%	2%	1%	2%	

Q2. "What languages are often used in your home/business?"

Languages Preferred for Public Safety Information

- When asked for the language preferred for public safety information like WF communications, 9% systemwide select a language other than English.
 - This proportion is smaller in HFRAs (4%).
 - The preference for a language other than English is unchanged from that found in 2021 (8%).

Recidential

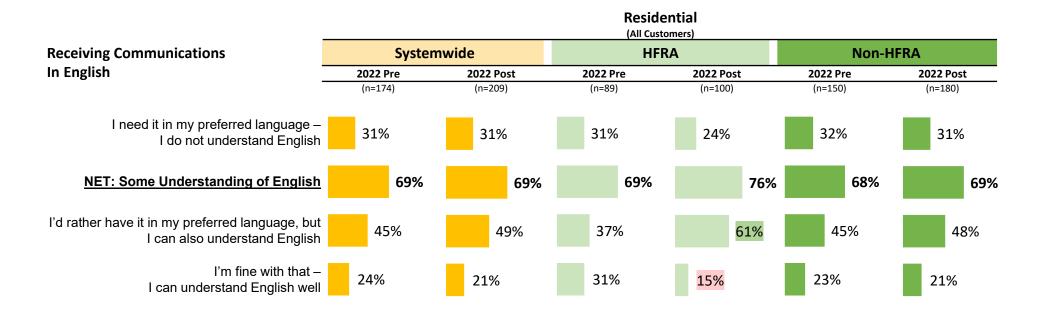
	KESIGENTIAI (All Customers)									
Preferred Language for	Syster	nwide	HFF	RA	Non-HFRA					
Public Safety Information	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post				
	(n=2310)	(n=2282)	(n=2425)	(n=2303)	(n=1558)	(n=1562)				
English	92%	91%	96%	96%	90%	88%				
Spanish	5%	5%	2%	2%	6%	7%				
Chinese Mandarin	1%	2%	1%	1%	1%	2%				
Korean	<1%	1%	<1%	<1%	<1%	1%				
Vietnamese	<1%	<1%	<1%	<1%	<1%	1%				
Chinese Cantonese	<1%	<1%	<1%	<1%	<1%	1%				
Japanese	<1%	<1%	-	<1%	<1%	<1%				
Armenian	<1%	<1%	-	<1%	<1%	-				
Farsi	<1%	<1%	<1%	-	<1%	<1%				
Tagalog	<1%	-	<1%	-	-	-				
Russian	<1%	<1%	<1%	-	<1%	<1%				
Other	1%	<1%	<1%	<1%	1%	<1%				

Q3. What is your preferred language for receiving public safety information like this from SCE?



Strength of Language Preference

- Among the 9% systemwide (4% in HFRAs) who said they prefer WF communications in some other language, 69% report they can at least understand English (76% in HFRAs).
- That leaves 31% of the 9%, or 2.8% of the Gen Pop, who do not understand English. In 2021, this proportion was comparable at 2.5%.



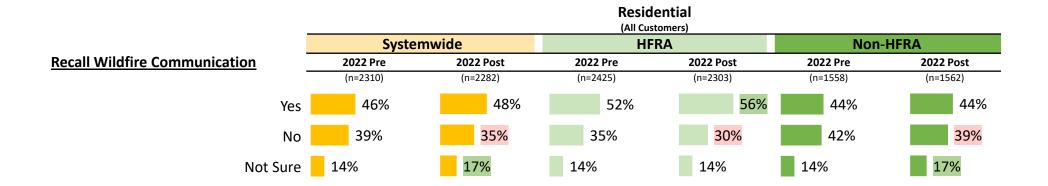
Q4. [PREFER LANGUAGE OTHER THAN ENGLISH] How do you feel about receiving wildfire communications from SCE in English only?

SCE Wildfire Communications

Among All Residential Customers

SCE WF Communications Recall – All Customers

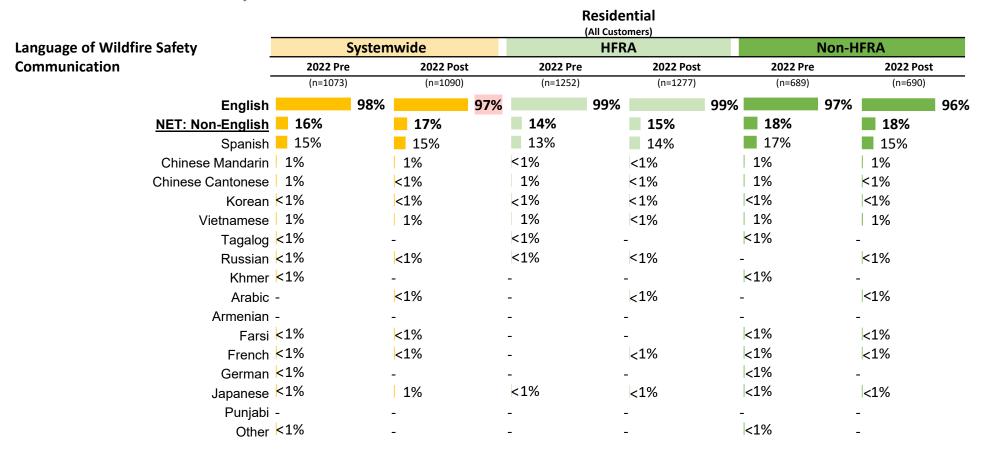
- The share of all Residential customers systemwide who recall SCE WF communications was unchanged pre- to post- in 2022 (46%/48%) but rose in HFRAs (+4%, to 56%).
- Post-survey recall was comparable in 2021 for both systemwide and HFRAs.



Q1. "In the past few months do you recall any communications of any type (i.e., mail, TV, radio, social media, etc.) from SCE about the threat of wildfires and how you can prepare for them?"

Language of SCE WF Comms – All Customers

- Among the 48% systemwide who recall SCE WF comms, 17% recall a version in a language other than English (Spanish, mostly).
- In HFRAs, among the 56% who recall WF Comms 15% recall a non-English version; in non-HFRAs, it is 18% of 44%.



Q5. [RECALL COMMUNICATION] In what language(s) was the wildfire safety and preparedness information that you recall seeing or hearing from SCE?



SCE Sources – All Customers

- Again, among the 48% who recall WF communications from SCE, emails (49%) and letters (42%) are most often cited. Advertising is cited by another 18% and 13% mention SCE.com and texts from SCE.
- Pre- to Post-, emails, texts and phone calls from SCE <u>rose</u> while letters from SCE declined in all areas.

Residential (All Customers) **Systemwide HFRA** Non-HFRA **Source of Communication** 2022 Pre 2022 Post 2022 Pre 2022 Post 2022 Pre 2022 Post (n=1074)(n=1093) (n=1258) (n=1279) (n=692) (n=689) An email from SCE 48% 38% 44% 49% 55% 48% A letter in the mail from SCE 48% 42% 51% 46% 49% 38% 13% SCE website 15% 15% 13% 13% 14% Advertising on TV, radio, or online 16% 20% 18% 15% 19% 9% Informational videos on TV 9% 6% 7% 10% 10% Social media post 6% 5% 7% 6% 6% 6% A text message from SCE 4% 13% 7% 19% 2% 11% Informational videos on web and social media 4% 4% 4% 2% 4% 4% A telephone call from SCE 1% 3% 1% 5% 1% 2% Billboards 3% 2% 3% 3% 2% 3% SCE's Dear Neighbor newsletter 1% 2% 2% 2% 2% 1% SCE representative or employee | 1% 1% 1% 1% 1% 1% SCE wildfire preparedness webinar/online meeting | 1% 1% 1% 1% 1% 1% SCE Community meetings 1% 1% 1% <1% 1% Other 5% 4% 4% 4% 5% 5% Don't recall 5% 5% 6% 5% 5% 5%

Q6. [BASE: RECALL COMMUNICATION] Where did you see or hear SCE's communications about wildfire season safety and preparedness?



Usefulness of SCE Sources – All Customers

- Source usefulness held steady systemwide excepting a few infrequently cited sources. (Caution: some very small bases).
 - Base sizes vary widely (from 3 to 523). "Usefulness" is defined as rating top 2 on a 5-point scale.
 - The base includes those who saw/heard the communications from this source in English regardless of their preferred language.

Usefulness of	Residential (All Customers)								
Communication Source	Syste	mwide		HFRA	Non-	HFRA			
(Top 2 Box)	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post			
<u>n</u>	(n=6-510)	(n=3-523)	(n=7-636)	(n=9-693)	(n=3-333)	(n=1-316)			
SCE Community meetings (6,3)	83%	33%	70%	44%	100%	-			
A telephone call from SCE (14,18)	75%	70%	59%	60%	100%	77%			
SCE website (159,143)	76%	76%	70%	71%	80%	77%			
Informational videos on TV (84,94)	70%	68%	74%	70%	63%	69%			
A text message from SCE (40,139)	78%	73%	74%	76%	71%	71%			
An email from SCE (465,523)	62%	64%	60%	61%	64%	68%			
Advertising on TV, radio, or online (190,182)	61%	60%	60%	61%	62%	64%			
Informational videos on web and social media (34,37)	59%	73%	80%	83%	62%	68%			
A letter in the mail from SCE (510,445)	63%	59%	60%	57%	62%	64%			
SCE representative or employee (7,7)	86%	43%	86%	67%	100%	33%			
Social media post (65,60)	65%	60%	56%	58%	72%	68%			
Billboards (27,33)	70%	48%	61%	58%	74%	50%			
SCE wildfire preparedness webinar or online meeting (8,6)	75%	17%	58%	69%	75%	-			
SCE's Dear Neighbor newsletter (14,18)	79%	61%	67%	62%	80%	71%			
Average Usefulness 6	3%	65%	62%	64%	63%	67%			

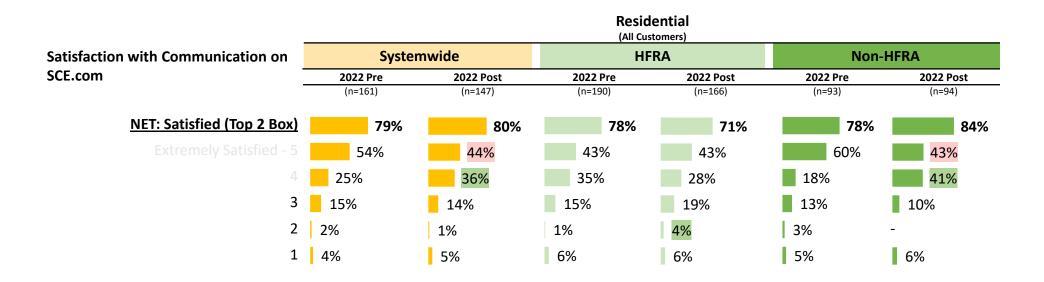
Q9A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful were the wildfire communications that you saw or heard from SCE via...?

Shading indicates a significant difference at the 90% confidence level from the prior year



Satisfaction with SCE.com – All Customers

• Among users of SCE.com Systemwide and in HFRAs, a high level of satisfaction was unchanged pre- to post- in 2022.



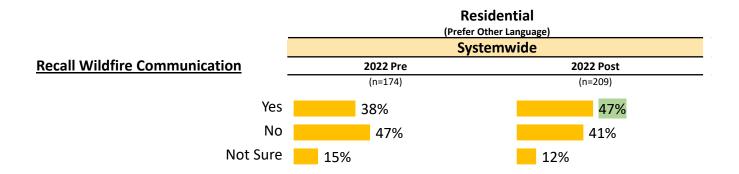
Q8. [RECALLED COMMUNICATION FROM SCE WEBSITE] How satisfied were you with the information provided on the SCE website about preparing for wildfires?

SCE Wildfire Communications

Among Customers Who Prefer Other Languages

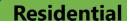
SCE WF Communications Recall – Prefer Other

- About half (47%) of the 9% systemwide who prefer WF comms in a language other than English (the "Prefer Others") recall recent SCE WF comms (regardless of language).
- This incidence rose significantly between the Pre- and Post- surveys this year due to a significant increase among HFRA customers.



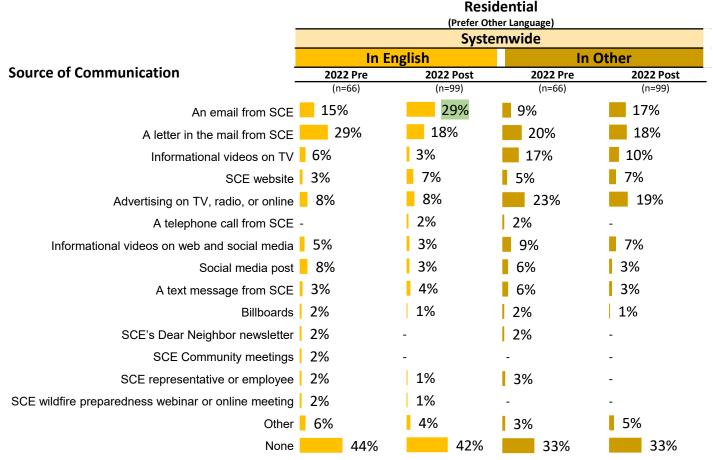
Residential (Prefer Other Language) **HFRA** Non-HFRA **Recall Wildfire Communication** 2022 Pre 2022 Post 2022 Pre 2022 Post (n=89) (n=100) (n=150) (n=180) 60% Yes 39% 37% 44% No 48% 28% 49% 44% Not Sure 12% 14% 11%

Q1. "In the past few months do you recall any communications of any type (i.e., mail, TV, radio, social media, etc.) from SCE about the threat of wildfires and how you can prepare for them?"



SCE Sources – Prefer Other Languages

• The rise in recall of WF comms among the Prefer Others appears to have most often come in the form of emails in English.



Q6. [BASE: RECALL COMMUNICATION] Where did you see or hear SCE's communications about wildfire season safety and preparedness? Q7. Which, if any, of these sources provided information in English and which provided information in your preferred language?



SCE Sources – Prefer Other Languages

- The Prefer Others who recall SCE WF communications are further divided here by HFRA and Non-HFRA.
 - In HFRAs, 67% cite a source in English and 67% cite a source in their preferred language (subtract from 100% those who said "none").
 - In Non-HFRAs, 55% cite a source in English and 66% cite a source in their preferred language.

Pacidontial

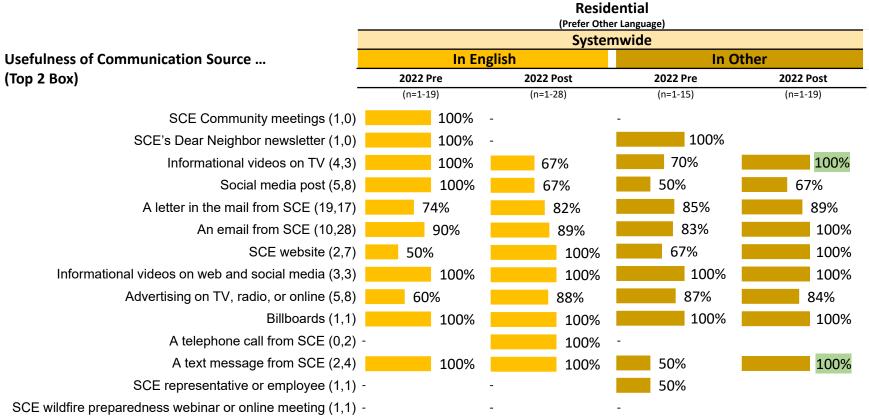
		Residential									
		Н	FRA	(Prefer Oth	ner Language)	Non	-HFRA				
•	In E	nglish		Other	In English			Other			
Source of Communication	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post			
	(n=35)	(n=60)	(n=35)	(n=60)	(n=55)	(n=80)	(n=55)	(n=80)			
An email from SCE	31%	23%	23%	22%	15%	30%	9 %	19%			
A letter in the mail from SCE	17%	30%	20%	20 %	33%	16%	20%	1 6%			
Informational videos on TV	11%	3%	11 %	8%	5%	4%	1 6%	11 %			
SCE website	3%	1 7%	6%	5%	2%	6%	2%	8%			
Advertising on TV, radio, or online	9%	3 %	1 4%	17 %	1 7%	10%	22%	19%			
A telephone call from SCE	3%	1 7%	-	2%	-	-	2%	-			
Informational videos on web and social media	6%	_	-	 3%	4%	4%	11 %	8%			
Social media post	3%	2%	6%	5%	1 7%	3%	5%	3%			
A text message from SCE	11%	12%	17 %	 3%	2%	4%	2%	 4%			
Billboards	-	-	-	-	2%	1%	2%	1%			
SCE's Dear Neighbor newsletter	-	-	-	-	2%	-	2%	-			
SCE Community meetings	6%	-	-	-	-	-	-	-			
SCE representative or employee	6%	-	 3%	-	-	1%	2%	-			
SCE wildfire preparedness webinar/online meeting	3%	-	-	-	-	1%	-	-			
Other	6%	1 7%	3%	5%	5%	1%	4%	4%			
None	37%	33%	40%	33%	44%	45%	35%	34%			

Q6. [BASE: RECALL COMMUNICATION] Where did you see or hear SCE's communications about wildfire season safety and preparedness?

Q7. Which, if any, of these sources provided information in English and which provided information in your preferred language?

Usefulness of SCE Sources – Prefer Other

- The Prefer Others who used these SCE sources rated their usefulness, when it was in English and in their preferred language.
- The sample sizes are quite small (ranging from 1 to 28) which makes assessments unreliable.



Q9A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful were the wildfire communications that you saw or heard from SCE via...?

Q9B2. [BASE: ALL WHO USED THAT SOURCE IN PREFERRED LANGUAGE] How useful were the wildfire communications in LANGUAGE that you saw or heard from SCE via...?

Shading indicates a significant difference at the 90% confidence level from the prior year

Usefulness of SCE Sources – Prefer Other

- The same few respondents from the previous slide are here further divided between those living in HFRAs and Non-HFRAs.
- Small sample sizes, now ranging 1 to 19, make assessments unreliable.

Residential (Prefer Other Language) **HFRA** Non-HFRA **Usefulness of Communication Source ...** In English In Other In English In Other (Top 2 Box) 2022 Post 2022 Pre 2022 Post 2022 Pre 2022 Post 2022 Pre 2022 Post 2022 Pre (n=1-17) (n=1-10) (n=1-8) (n=1-12) (n=1-18) (n=1-23) (n=1-12) (n=1-15) SCE Community meetings (1,) 100% -SCE's Dear Neighbor newsletter (1,) -100% -100% -Informational videos on TV (4,) 100% 50% 50% 100% 67% 88% 100% 100% Social media post (5,) 100% -50% 100% 1009 67% 100% A letter in the mail from SCE (19,) 83% 94% 71% 92% 72% 77% 91% 85% An email from SCE (10,) 80% 88% 93% 88% 92% 91% 80% 100% SCE website (2,) 100% 75% 100% 100% 100%-100% Informational videos on web and social media (3,) 100% -100% 100% 100% 100% 100% Advertising on TV, radio, or online (5,) 100% 50% 80% 50% 88% 92% 90% 87% Billboards (1,) -100% 100% 100% 100% A telephone call from SCE (0,) -100% 75% A text message from SCE (2,) 100% 67% 100% 100% 100% 100% 100% 100% SCE representative or employee (0,) 50% 100% SCE wildfire preparedness webinar or online meeting (0,) -

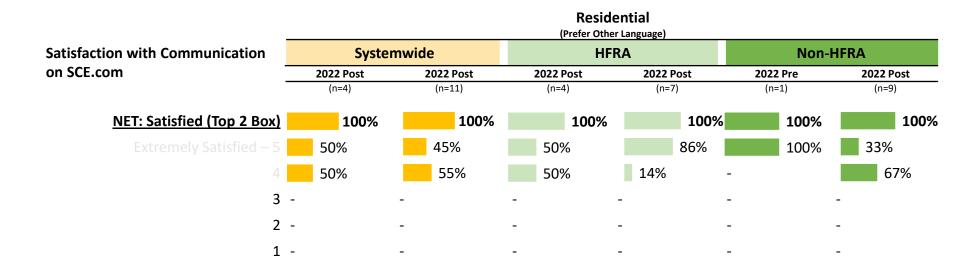
Q9A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful were the wildfire communications that you saw or heard from SCE via...?

Q9B2. [BASE: ALL WHO USED THAT SOURCE IN PREFERRED LANGUAGE] How useful were the wildfire communications in LANGUAGE that you saw or heard from SCE via...?

Shading indicates a significant difference at the 90% confidence level from the prior year

Satisfaction with SCE.com – Prefer Other

• Too few respondents (11) both prefer a language other than English <u>and</u> used SCE.com making ratings of their satisfaction with the site <u>not</u> meaningful.



Q8. [RECALLED COMMUNICATION FROM SCE WEBSITE] How satisfied were you with the information provided on the SCE website about preparing for wildfires?

Other WF Communications Sources

Among All Residential Customers

Other WF Sources – All Customers

- All customers were asked about other WF sources (in the previous section, just those who recalled SCE WF sources were asked about sources).
- Local news reports continue to slide as a source (44% in the post- 2020 survey; 39% in 2022, and 36% in 2023) but remain the most often cited source.
- Other commonly cited sources, *especially in HFRAs*, are city/county government, CalFire, and local FDs.

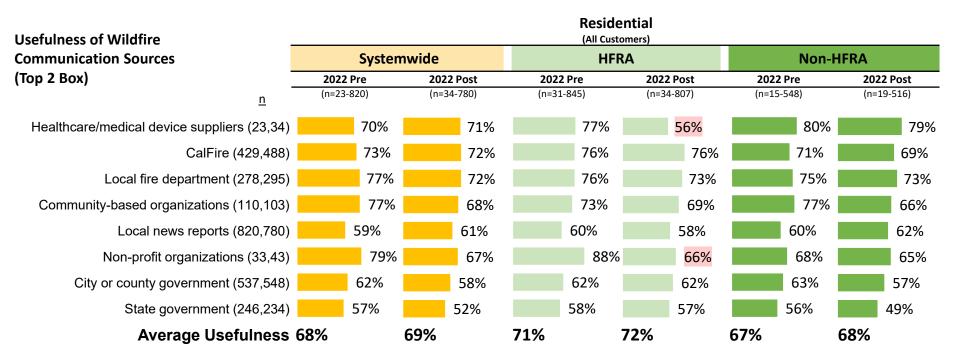
, _	Residential (All Customers)							
Other	Syste	mwide	н	FRA	Non-HFRA			
Communication Sources	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post		
	(n=2310)	(n=2282)	(n=2425)	(n=2303)	(n=1558)	(n=1562)		
Local news reports	37%	36%	35%	36%	37%	35%		
City or county government	24%	24%	30%	30%	21%	21%		
CalFire	19%	22%	25%	29%	16%	19%		
State government	11%	10%	12%	12%	11%	9%		
Local fire department	13%	13%	18%	18%	11%	11%		
Community-based organizations	5%	5%	7%	8%	4%	4%		
Non-profit organizations	2%	2%	2%	3%	2%	2%		
Healthcare/medical device suppliers	1%	2%	1%	2%	1%	1%		
Other	12%	13%	13%	14%	12%	13%		
None of the above	22%	22%	17%	17%	24%	24%		
Don't recall	11%	11%	10%	8%	11%	11%		

Q10. ASKED OF ALL Other than SCE's communications, what other sources have you used to obtain information about wildfire safety and preparedness?

Shading indicates a significant difference at the 90% confidence level from the prior year

Usefulness of Other WF Sources – All Customers

 Among the varying number of customers who say they used these sources usefulness is broadly consistent (52% to 71% systemwide).



Q12A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] On a 1 to 5 scale where 1 is not at all useful and 5 is extremely useful, how useful was the wildfire information from ...?

Other Wildfire Communications Sources

Among Customers Who Prefer Other Languages

Other WF Sources – Prefer Other Languages

- Customers who prefer other languages rarely use any of these other sources, and they are only slightly more likely to use them when those sources are in their preferred language: When the sources are in English, the percent saying "none" is 68% and it is 63% when the sources are in their preferred language.
- By contrast, 47% of Prefer Others recall seeing SCE WF communications.

	Residential (Prefer Other Language)							
		Syster	nwide					
	In En	glish	In Ot	ther				
Other Communication Sources	2022 Pre	2022 Post	2022 Pre	2022 Post				
	(n=174)	(n=209)	(n=174)	(n=209)				
Local news reports	11%	11%	18%	17%				
City or county government	8%	9%	6%	7%				
State government	6%	4%	5%	3%				
CalFire	6%	7%	3%	3%				
Local fire department	6%	5%	6%	4%				
Community-based organizations	1%	2%	2%	3%				
Non-profit organizations	1%	2%	1%	1%				
Healthcare providers/medical device suppliers	1%	2%	2%	1%				
Other	6%	5%	7%	7%				
None of the above	70%	68%	63%	63%				

Q10. Other than SCE's communications, what other sources have you used to obtain information about wildfire safety and preparedness?

Q11. Which, if any, of these sources provided information in English and which provided information in your preferred language?

Other Sources – Prefer Other Languages

- Here, the systemwide respondents on the previous slide (prefer other languages and used one of these sources) are divided among HFRA and non-HFRA residents.
- As reported on the previous slide, these customers tend not to use these other sources – whether they are in English or their preferred language. Even local new reports are rarely used.

Residential (Prefer Other Language)

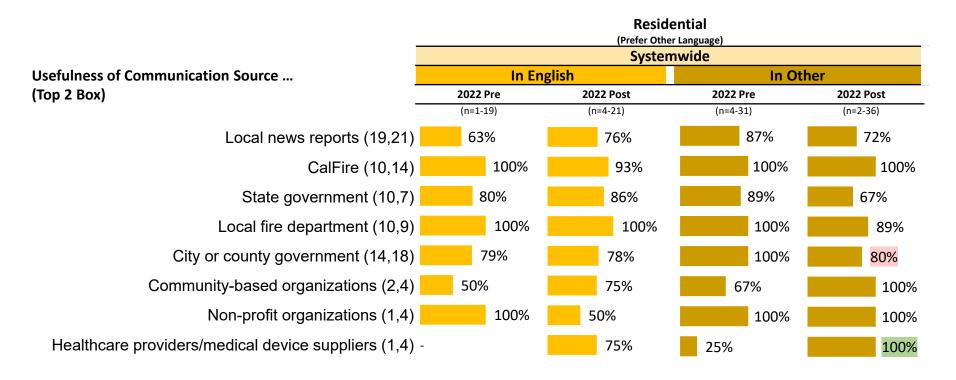
		(Prefer Other Language)								
			HFRA			Non-HFRA				
	In English		ln ln	In Other		nglish	In (Other		
Other Communication Sources	2022 Pre	2022 Po	st 2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post		
	(n=89)	(n=100)) (n=89)	(n=100)	(n=150)	(n=180)	(n=150)	(n=180)		
Local news reports	12%	15 %	17 %	19 %	11%	11%	1 9%	1 6%		
City or county government	9%	1 7%	8%	11 %	8%	10%	1 7%	1 7%		
State government	1%	2%	3%	 3%	1 7%	4%	6%	3%		
CalFire	6%	 5%	6%	6 %	1 7%	7%	4%	 3%		
Local fire department	7%	3%	4%	5 %	5 %	5%	7%	4%		
Community-based organizations	4%	3%	2%	1%	1%	2%	2%	4%		
Non-profit organizations	2%		2%	3%	1%	2%	1%	1%		
Healthcare providers/medical device suppliers	2%		4%	1%	1%	2%	1%	1%		
Other	8%	 5%	12 %	6 %	6 %	6%	6%	1 7%		
None of the above	7	70%	72% 63	% 59%	699	% 6	62%	63%		

Q10. [BASE: RECALL COMMUNICATION] Other than SCE's communications, what other sources have you used to obtain information about wildfire safety and preparedness?

Q11. Which, if any, of these sources provided information in English and which provided information in your preferred language?

Usefulness of Other Sources – Prefer Other

• Sample sizes are quite unreliable, but it appears source usefulness increases only slightly when it is provided in the preferred language.

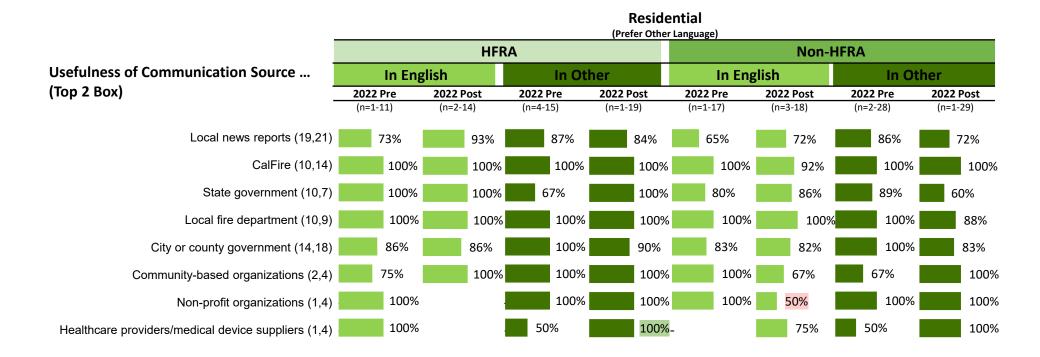


Q12A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] On a 1 to 5 scale where 1 is not at all useful and 5 is extremely useful, how useful was the wildfire information from ...?

Q12B2. And using the same 1 to 5 scale, how useful was the wildfire information in [PREFERRED LANGUAGE] from...?

Usefulness of Other Sources – Prefer Other

 Sample sizes are even less reliable when they are further divided between HFRA and Non-HFRAs.



Q12A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] On a 1 to 5 scale where 1 is not at all useful and 5 is extremely useful, how useful was the wildfire information from ...?

Q12B2. And using the same 1 to 5 scale, how useful was the wildfire information in [PREFERRED LANGUAGE] from...?

PSPS Communications

Among All Residential Customers



61%

8%

PSPS Awareness – All Customers

- Residents of HFRAs are more likely to have heard of "PSPS" and this incidence rose significantly between the pre- and post- surveys this year.
- Year over year awareness is comparable.

Not Sure 7%

Residential (All Customers) **Systemwide HFRA** Non-HFRA Heard of PSPS 2022 Pre 2022 Post 2022 Pre 2022 Post 2022 Pre 2022 Post (n=2310) (n=2282) (n=2425) (n=2302) (n=1558) (n=1562) 64% 67% 77% 80% 59% Yes 30% 26% 18% 34% 31% 17%

4%

7%

Q16. Public Safety Power Shutoff, or PSPS, is a precautionary safety measure where SCE may proactively turn off power lines when extreme fire danger conditions are forecasted, in order to reduce the risk of wildfires. Before today, had you ever heard of the Public Safety Power Shutoff program?

Shading indicates a significant difference at the 90% confidence level from the prior year

7%

3%

Residential

PSPS Sources – All Customers

- Among those who do recall PSPS, SCE sources are primary contributors. Whether in or out of an HFRA, but especially in HFRAs, the top sources are SCE emails (39% up in all areas) and letters (37%), SCE texts (21% also up in all areas) and SCE.com (18%).
- Other leading sources are TV/Radio news (41%), and Online news (14%).

Residential (All Customers)

	Systemwide		Н	RA	Non-HFRA	
PSPS Source	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post
	(n=1475)	(n=1523)	(n=1879)	(n=1843)	(n=917)	(n=949)
TV or radio news report	43%	41%	35%	35%	49%	44%
An email from SCE	31%	39%	41%	47%	24%	35%
A letter in the mail from SCE	37%	37%	42%	41%	33%	32%
Online news report	15%	14%	12%	13%	18%	14%
SCE website	18%	18%	19%	21%	17%	16%
Advertising on TV, radio, or online	9%	11%	8%	9%	11 %	12 %
Social media post	9%	9%	9%	10%	10 %	8 %
A text message from SCE	12%	21%	18%	30%	8 %	14%
Word of mouth	10%	11%	11%	12%	10 %	9%
A telephone call from SCE	5%	7%	9%	12%	2%	4%
My power was shut off	8%	7%	15%	14%	I 3%	3%
Local city or county government	5%	6%	6%	6%	6 %	5 %
CalFire or local fire department	4%	5%	5%	6%	4%	4%
Informational videos on TV	3%	3%	2%	3%	4%	I 3%
Informational videos on web/social media	1%	2%	1%	1%	1%	2%
Community-based organization	2%	2%	3%	3%	1%	2%
SCE representative or employee	2%	1%	2%	1%	2%	1%
Billboards	2%	1%	1%	1%	2%	1%
SCE wildfire preparedness webinar/online meeting	1%	1%	1%	1%	0%	1%
Healthcare provider or medical device supplier	0%	0%	0%	0%	1%	0%
SCE community meetings	1%	0%	1%	1%	1%	0%
Other	8%	7 %	7%	7%	9%	8 %
Not sure	4%	3%	4%	3%	4%	1 3%
O17 [RECALL PSPS] Where have you heard about	t Public Safety Po	ower Shutoffs?				

Q17. [RECALL PSPS] Where have you heard about Public Safety Power Shutoffs?

Usefulness of PSPS Sources – All Customers

 For the widely varying counts of customers citing each source, source usefulness is mostly unchanged pre- to post-. The exception is text messages from SCE which rose 10%.

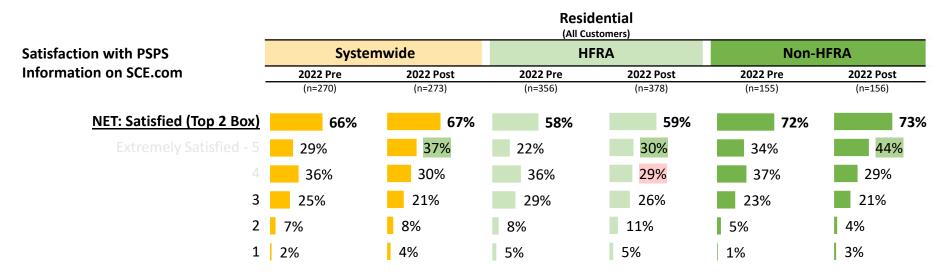
Residential (All Customers) **PSPS Communication Source Usefulness Systemwide HFRA** Non-HFRA (Top 2 Box) 2022 Pre **2022 Post** 2022 Pre 2022 Post 2022 Pre **2022 Post** (n=7-615)(n=6-595)(n=6-787)(n=8-858)(n=4-432)(n=3-384)CalFire or local fire department (62,75) 85% 80% 75% 89% 83% 84% Community-based organization (25.31) 72% 65% 63% 71% 60% 89% A telephone call from SCE (77,99) 58% 68% 64% 68% 68% 61% 70% 68% 57% 74% Local city or county government (81,88) 67% 71% 70% An email from SCE (451,574) 66% 65% 65% 73% 75% SCE representative or employee (27,22) 78% 50% 70% 57% 79% 67% Informational videos on TV (48,43) 67% 72% 70% 66% 67% 77% 79% 74% 81% A text message from SCE (178,312) 69% 71% 75% 63% SCE website (264,270) 64% 60% 56% 69% 69% A letter in the mail from SCE (541,539) 65% 64% 60% 68% 71% 67% Social media post (135,138) 57% 59% 60% 62% 64% 65% Healthcare provider or medical device supplier (7.6) 50% 83% 75% 83% 67% 86% TV or radio news report (615,595) 63% 63% 60% 62% 66% 65% 62% 60% 63% 57% Word of mouth (143,159) 58% 67% 67% 59% 58% 65% Advertising on TV, radio, or online (128,145) 61% 70% Informational videos on web and social media (16,26) 75% 65% 73% 62% 67% 75% 69% Online news report (215,209) 60% 64% 58% 54% 61% Billboards (22,19) 42% 52% 56% 64% 65% 64% SCE wildfire preparedness webinar/online meeting (9,14) 67% 57% 46% 68% 75% 75% SCE community meetings (9,7) 57% 56% 67% 78% 55%

Q19A/B1. [SAW COMMUNICATIONS IN ENGLISH] On a 1 to 5 scale where 1 is not at all useful and 5 is extremely useful, how useful was the PSPS information from ...?

Shading indicates a significant difference at the 90% confidence level from the prior year

Satisfaction w/ SCE.com PSPS Info – All Customers

- "Top Box" Satisfaction with SCE.com as source of PSPS information rose between the pre- and post- surveys this year.
- Satisfaction has been higher among customers in Non-HFRAs for all waves of this study (2020-2022).



Q18b. [PSPS SOURCE = SCE Website] How satisfied were you with the Public Safety Power Shutoff information provided on the SCE website?

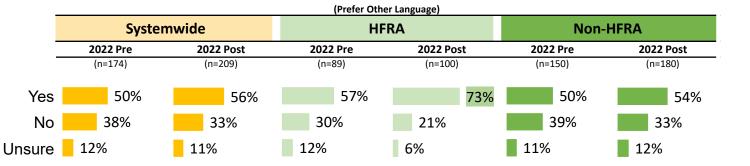
PSPS Communications

Among Customers Who Prefer Other Languages

PSPS Awareness – Prefer Other Languages

- Systemwide among all customers, awareness of PSPS is 67% and higher in HFRAs vs. non-HFRAs (80% vs 61%)
- Among those who prefer communications in other languages, awareness is lower (56%) but the difference between HFRAs and non-HFRAs is comparable (73% vs. 54%).

Heard of PSPS



Residential

Q16. Public Safety Power Shutoff, or PSPS, is a precautionary safety measure where SCE may proactively turn off power lines when extreme fire danger conditions are forecasted, in order to reduce the risk of wildfires. Before today, had you ever heard of the Public Safety Power Shutoff program?

PSPS Sources – Prefer Other Languages

- Systemwide among those who recall PSPS, the main sources are SCE emails (39%), SCE letters (37%), SCE texts (21%), and SCE.com (18%), along with TV/Radio (41%), and Online news (14%).
- Among customers who prefer other languages, awareness of PSPS is lower and is aware, fewer cite sources. Those that do, the most often mentioned sources are emails and letters from SCE (20%/15%) and, increasingly, SCE texts (14%).

 Residential

_		(Prefer Oth	ner Language)	
		Syste	mwide	
	In Eı	nglish	In (Other
PSPS Communication Sources	2022 Pre	2022 Post	2022 Pre	2022 Post
	(n=87)	(n=117)	(n=87)	(n=117)
An email from SCE	13 %	20%	8 %	15 %
A letter in the mail from SCE	15 %	15%	15 %	19%
TV or radio news report	9%	7 %	21%	28%
SCE website		7 %	5 %	7 %
A text message from SCE	6%	14%	6 %	5 %
Online news report	1 2%	2%	5 %	2%
Advertising on TV, radio, or online	1 3%	3 %	11%	11 %
Social media post	6%	3 %	1 2%	2%
CalFire or local fire department	1 3%	1%	1%	1%
A telephone call from SCE	1 2%	1 2%	1%	I 3%
Informational videos on web and social media	1 2%	1%	1%	I 3%
Word of mouth (such as friends or family)	1 2%	-	5 %	2%
Informational videos on TV	 1%	1%	5 %	6 %
SCE representative or employee	-	-	-	-
Billboards	1 2%	1%	-	-
Community-based organization	-	-	-	1%
Local city or county government	1 2%	2%	-	4 %
SCE wildfire preparedness webinar or online meeting	-	-	-	-
Healthcare provider or medical device supplier	-	-	-	-
SCE community meetings	-	-	1%	-
My power was shut off	-	-	-	-
Other	1 3%	1 2%	5 %	I 3%
None	47%	47%	26%	26%
O17 [DECALL DCDC] Where have you heard about Dublic Cafety D	ower Chutoffs?	Shading indicator a	significant difference a	t the 90% confidence lov

Q17. [RECALL PSPS] Where have you heard about Public Safety Power Shutoffs? Shading indicates a significant difference at the 90% confidence level from the prior year Q18. Which, if any, of these sources provided information in English and which provided information in your preferred language?

PSPS Sources – Prefer Other Languages

• Given the small sample sizes, comparisons are unreliable. But differences in the frequency of using English and Non-English PSPS info sources do not appear to be substantial.

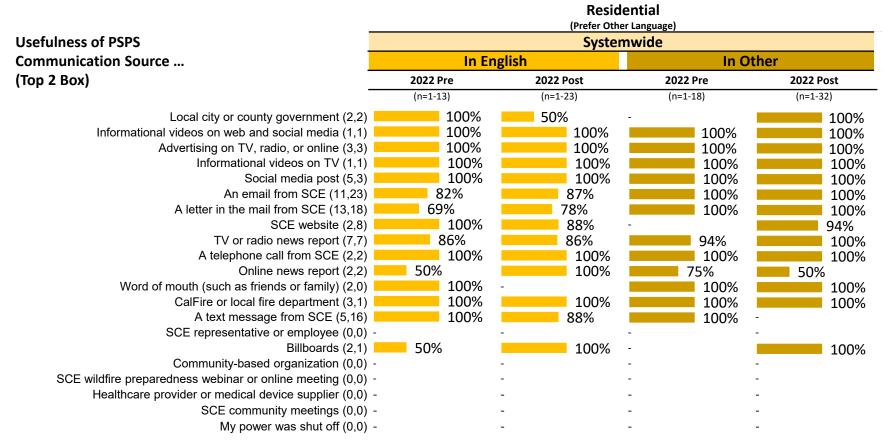
Residential (Prefer Other Language)

				(Fielei Oti	iei Laiiguage)				
		HI	FRA		Non-HFRA				
	In E	nglish	In	Other	In E	nglish	In	Other	
PSPS Communication Sources	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
	(n=51)	(n=73)	(n=51)	(n=73)	(n=75)	(n=98)	(n=75)	(n=98)	
An email from SCE	20%	18 %	1 4%	1 4%	11 %	18 %	■ 7%	15%	
A letter in the mail from SCE	16%	22%	16 %	19 %	17 %	13 %	16 %	17%	
TV or radio news report	12 %	8 %	18 %	18 %	9 %	6 %	20 %	30%	
SCE website	2%	I 5%	I 4%	I 4%	I 5%	1 7%	I 5%	8 %	
A text message from SCE	12 %	22%	I 4%	I 7%	4 %	11%	I 7%	I 5%	
Online news report	2%	1%	■ 8%	I 4%	 3 %	1%	I 4%	1%	
Advertising on TV, radio, or online	6 %	1 7%	■ 8%	11 %	4 %	2%	12 %	10%	
Social media post	8 %	I 3%	-	1%	I 4%	1 4%	I 3%	1 2%	
CalFire or local fire department	4%	-	l 2%	1%	 3%	1%	1%	1%	
A telephone call from SCE	2%	8%	-	I 5%	1 3%	-	1%	I 3%	
Informational videos on web and social media	2%	-	-	1%	1%	1%	1%	I 3%	
Word of mouth (such as friends or family)	2%	1%	I 4%	I 3%	1%	-	I 3%	1 2%	
Informational videos on TV	-	-	I 4%	I 4%	1%	1%	I 5%	■ 7%	
SCE representative or employee	-	-	-	-	-	-	-		
Billboards		1%	-	1%	 3%	1%	-	-	
Community-based organization	-	-	_	1%	-	-	-	∣ 1%	
Local city or county government	4%	1%	_	1%	1%	2%	-	I 4%	
SCE wildfire preparedness webinar/online meeting		-	-	-	-	-	-	-	
Healthcare provider or medical device supplier		-	-	-	-	-	_	-	
SCE community meetings		-	-	-	-	-	∣ 1%		
My power was shut off		-	-	-	-	-	-	-	
Other		I 5%	12 %	I 5%	I 4%	1%	I 4%	I 3%	
None	47%	36%	29%	40%	45%	48%	28%	22%	

Q17. [RECALL PSPS] Where have you heard about Public Safety Power Shutoffs? Shading indicates a significant difference at the 90% confidence level from the prior year Q18. Which, if any, of these sources provided information in English and which provided information in your preferred language?

Usefulness of PSPS Sources – Prefer Other

 Because a small count of respondents who prefer other languages used these sources, comparing usefulness is unreliable.



Q19A/B1. [SAW COMMUNICATIONS IN ENGLISH] On a 1 to 5 scale where 1 is not at all useful and 5 is extremely useful, how useful was the PSPS information from ...?

Q19B2. And, how useful was the information in LANGUAGE from...?

Usefulness of PSPS Sources – Prefer Other

 Further dividing these respondents into HFRA and non-HFRA residents yields no new insights.

Residential (Prefer Other Language)

Usefulness of PSPS		HFR	A	(Figure 1 of the	Non-HFRA			
Communication Source	In Eng	glish	In Ot	her	In En	glish	In Ot	her
(Top 2 Box)	2022 Pre	2021 Pre	2022 Pre	2021 Pre	2022 Pre	2021 Pre	2022 Pre	2022 Pre
	(n=1-10)	(n=1-16)	(n=1-9)	(n=1-13)	(n=1-13)	(n=1-18)	(n=1-15)	(n=1-28)
Local city or county government (2,2)	100%		-	100%	100%	50%	-	100%
Informational videos on web and social media (1,1)	100%		-	100%	-	100%	100%	100%
Advertising on TV, radio, or online (3,3)	100%	100%	100%	100%	100%	100%	100%	100%
Informational videos on TV (1,1)	-	-	50%	100%	100%	100%	100%	100%
Social media post (5,3)	100%	100% -	-	100%	100%	100%	100%	100%
An email from SCE (11,23)	90%	92%	100%	100%	75%	89%	100%	100%
A letter in the mail from SCE (13,18)	75%	94%	100%	100%	69%	69%	100%	100%
SCE website (2,8)	100%	100% -	-	92%	100%	86%	-	96%
TV or radio news report (7,7)	83%	100%	100%	100%	83%	80%	93%	100%
A telephone call from SCE (2,2)	-	100% -	-	100%	100%	-	100%	100%
Online news report (2,2)	100%	100%	100%	100%	50%	100%	67%	50%
Word of mouth (such as friends or family) (2,0)	100%	100%	100%	100%	100%	-	100%	100%
CalFire or local fire department (3,1)	100%	-	100%	100%	100%	100%	100%	100%
A text message from SCE (5,16)	100%	88%	100%	-	100%	82%	100%	-
SCE representative or employee (0,0)	-		-	100%	-	-	-	-
Billboards (2,1)	-	100% -	-	100%	50%	100%	-	100%
Community-based organization (0,0)	-		-	-	-	-	-	-
SCE wildfire preparedness webinar or online meeting (0,0)	-		-	-	-	-	-	-
Healthcare provider or medical device supplier (0,0)	-		-	-	-	-	-	-
SCE community meetings (0,0)	-		-	-	-	-	-	-

Q19A/B1. [SAW COMMUNICATIONS IN ENGLISH] On a 1 to 5 scale where 1 is not at all useful and 5 is extremely useful, how useful was the PSPS information from ...?

Q19B2. And, how useful was the information in LANGUAGE from ...?

PSPS Preparedness / Satisfaction

Among All Residential Customers

Preparedness – All Customers

- Preparedness is virtually unchanged between the 2020, 2021 and 2022 surveys (ranges between 52% and 57% systemwide).
- That said, preparedness is consistently higher in HFRAs (59% to 67%) compared to Non-HFRAs (49% to 55%).

Residential (All Customers) **Systemwide HFRA** Non-HFRA **Level of Preparedness** 2022 Pre 2022 Post 2022 Pre 2022 Post 2022 Pre 2022 Post (n=2310) (n=2282) (n=2425) (n=2302) (n=1558) (n=1562) **NET: PREPARED** 52% 55% 62% 53% 60% 48% 17% 10% Completely prepared 10% 12% 15% 8% 43% Somewhat prepared 42% 43% 45% 46% 40% **NET: NOT PREPARED** 48% 45% 40% 38% 52% 47% 24% 30% Not very prepared 30% 29% 27% 31% 17% Not at all prepared 16% 14% 13% 21% 18%

Q20. A Public Safety Power Shutoff event could last anywhere from 24-48 hours, or longer in some cases. How would you rate your level of preparedness for being without electricity for an extended period?

Preparedness Actions Taken – All Customers

- The incidence of having taken specific preparedness actions rose in all areas and in quite a few actions between the pre- and post- surveys this year.
 - In 2020, there was an increase pre- to post- in 3 actions (emergency kit; sce.com visit, prepared for multi-day outage).
 - In 2021, none of the actions increased pre- to post.
 Residential

(All Customers)

-	(All Customers)						
	Syste	mwide	HF	RA	Non-HFRA		
Actions Taken	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
	(n=2306)	(n=2271)	(n=2420)	(n=2296)	(n=1555)	(n=1553)	
Purchased new lanterns or flashlights	26%	32%	31%	38%	23%	28%	
Purchased enough water to last for several days without power	26%	27%	30%	33%	23%	24%	
Purchased enough non-refrigerated food to last for several days without power	22%	24%	24%	27%	21%	22%	
Prepared an emergency kit with food, water or medicine	24%	24%	26%	26%	23%	22%	
Signed up for notifications from SCE	18%	18%	25%	26%	13%	14%	
Purchased fire extinguishers	NA	17%	NA	23%	NA	15%	
Have a place to go if without power for a prolonged period	14%	17%	16%	21%	13%	14%	
Removed vegetation from around your home	12%	15%	21%	24%	7%	10%	
Purchased/used a battery powered radio	13%	14%	17%	18%	12%	12%	
Signed up for emergency alerts from the country/state	NA	13%	NA	19%	NA	11%	
Acquired a back-up generator	11%	12%	18%	19%	6%	9%	
Developed an emergency plan	10%	10%	13%	12%	9%	9%	
Went to SCE website	12%	9%	14%	11%	11%	8%	
Prepared for multiple-day outage	8%	9%	12%	13%	5%	6%	

Q21. What, if any, actions have you taken to prepare for a Public Safety Power Shutoff (PSPS) in 2022?

Preparedness Actions Taken (cont.) – All Customers

• The incidence of having taken no action dropped across all areas.

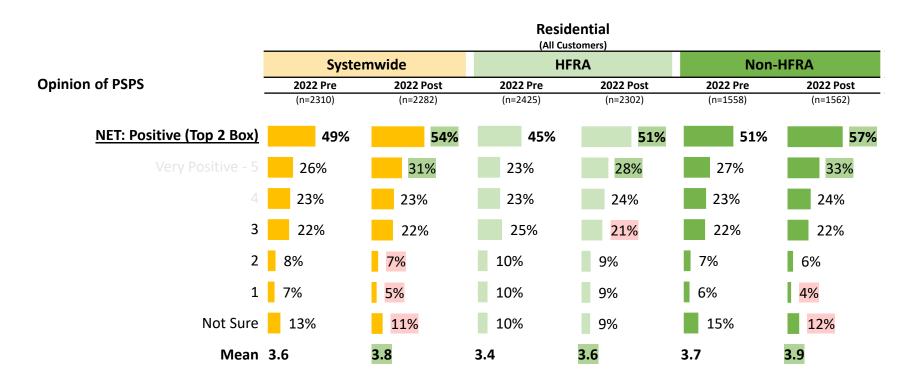
Residential (All Customers)

	Syste	mwide	HI	FRA	Non-	Non-HFRA		
Actions Taken (continued)	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post		
	(n=2306)	(n=1606)	(n=2420)	(n=1842)	(n=1555)	(n=1018)		
Allowed access to property for SCE to trim trees	7%	8%	11%	12%	5%	5 %		
Acquired battery storage technology	<mark> </mark> 6%	8%	7%	10%	4%	7%		
Signed up for emergency alerts from the Fire Department	NA	 7%	NA	10%	NA	5%		
Performed a safety check on your generator for your home	6%	5%	11%	9%	4%	3%		
Checked the SCE mobile app	4%	5%	5%	6%	4%	5%		
Notified others in area about potential power shutoff	4%	5%	6%	7%	3%	3%		
Signed up for Medical Baseline Program	3%	4%	3%	4%	2%	3%		
Went SCE's social media (follow up with Nextdoor/Facebook/Twitter, Other)	2%	2%	2%	2%	2%	2%		
Activated your emergency plan	1%	2%	3%	3%	1%	2%		
Attended a community-based organization event	1%	2%	1%	2%	1%	1%		
Followed SCE on Twitter	1%	1%	1%	1%	1%	1%		
Received Critical Care Backup Battery from SCE	1%	1%	1%	1%	1%	1%		
Followed SCE on Facebook	1%	1%	1%	1%	1%	1%		
Visited SCE Community Resource Center	1%	1%	1%	1%	1%	1%		
Attended SCE Community meeting, wildfire preparedness webinar or online meeting	0%	0%	1%	1%	0%	0%		
Other	9%	11%	10%	10%	9%	12%		
I have not taken any action	32%	23%	23%	14%	36%	27%		

Q21. What, if any, actions have you taken to prepare for a Public Safety Power Shutoff (PSPS) in 2022?

Opinion of SCE's PSPS Program – All Customers

 Positive opinions of SCE's PSPS Program rose pre- to post- in both HFRA and Non-HFRA.



Q22. Overall, what is your opinion of SCE's Public Safety Power Shutoff program?

Ratings of SCE Attributes – All Customers

• In HFRAs, ratings on 4 of 9 SCE PSPS-related attributes rose pre- to post- which elevated HFRA ratings to levels comparable to those provided by Non-HFRA customers.

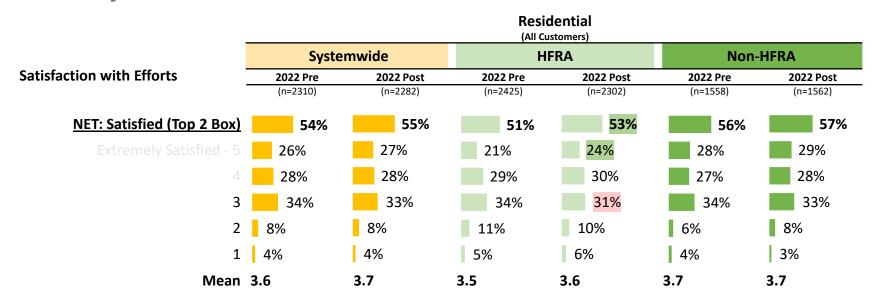
Residential (All Customers) **Systemwide HFRA** Non-HFRA % Agree (Top 2 Box) 2022 Post 2022 Pre 2022 Pre **2022 Post** 2022 Pre **2022 Post** (n=2282) (n=2425) (n=2302) (n=1558) (n=1562) (n=2310)SCE... Is committed to restoring power to 65% 62% 67% 68% 65% 70% customers affected by wildfires Is working to keep my community safe 59% 61% 57% 61% 59% 62% Shows care and concern for 57% 57% 51% 52% 60% 60% customers Is committed to wildfire safety 60% 62% 57% 60% 62% 63% Takes proactive measures to protect 55% 58% 54% 58% 57% 59% the electricity grid from wildfires Makes an effort to communicate with 56% 57% 55% 58% 57% 58% all customers about wildfires Is proactive in taking steps to address 55% 57% 54% 57% 55% 59% wildfire risks Is a company I trust to act in the best 53% 53% 46% 47% 57% 58% interest of its customers Is helping me prepare for wildfire 47% 49% 44% 42% 46% 45% season

Q14. Using a scale where 1 means completely disagree and 5 means completely agree, Please indicate how much you agree or disagree with the following statements about SCE. SCE...

Shading indicates a significant difference at the 90% confidence level from the prior year

Satisfaction w/ SCE's WF Efforts – All Customers

- The proportion of customers systemwide who are satisfied with SCE's WF efforts (55%) is comparable to that reported in the 2021 post- survey (54%).
- This proportion rose among HFRA customers between the 2022 pre- and postsurveys.



Q15. How satisfied are you with SCE's overall wildfire safety and preparedness efforts?

Evacuation Experience – All Customers

• Experience with evacuation due to wildfires was 2% in 2022 which is unchanged compared to 2021.

Residential (All Customers)

 Systemwide
 HFRA
 Non-HFRA

 2022 Pre
 10 (n=2302)
 (n=1558)
 (n=1562)

Yes 2%	2%	3%	3%	1%	1%	
No	98%	98%	97%	96%	98%	98%
Unsure 1%	1%	1%	1%	1%	1%	

Q23. In the past few months, have you had to evacuate due to wildfires in your area?

Had to Evacuate?

PSPS Preparedness / Satisfaction

Among Customers Who Prefer Other Languages

Preparedness – Prefer Other Languages

- Customers who prefer other are less likely to say they are prepared for an extended outage.
 - Systemwide: preparedness among all customers 55% vs 47% among prefer others
 - HFRAs: 62% vs. 51%
 - Non-HFRAs: 53% vs 44%
- Preparedness among the prefer other is somewhat higher for those in HFRAs (51% vs. 44%).
- Preparedness did not change pre- to post-.

Residential (Prefer Other Language) **Systemwide** Non-HFRA **HFRA Level of Preparedness** 2022 Post 2022 Pre 2022 Pre 2022 Post 2022 Pre 2022 Post (n=174) (n=209) (n=100) (n=180) (n=89)(n=150)**NET: PREPARED** 41% 47% 48% 51% 43% 44% 8% Completely prepared 7% 10% 10% 14% Somewhat prepared 34% 37% 38% 37% 35% 36% 59% 49% 56% **NET: NOT PREPARED** 53% 52% 57% 36% Not very prepared 34% 33% 31% 27% 32% Not at all prepared 25% 20% 20% 22% 25% 21%

Q20. A Public Safety Power Shutoff event could last anywhere from 24-48 hours, or longer in some cases. How would you rate your level of preparedness for being without electricity for an extended period?

Preparedness Actions Taken – Prefer Other

 Among those who prefer other languages, preparedness remained unchanged in both HFRAs and non-HFRAs. Fewer non-HFRA customers reported going to the SCE website.

Residential (Prefer Other Language)

_	(Prefer Other Language)								
	Systemwide		ŀ	IFRA	Non-HFRA				
Actions Taken	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post			
	(n=174)	(n=208)	(n=89)	(n=100)	(n=150)	(n=179)			
Purchased new lanterns or flashlights	24%	26%	22%	28%	25%	26%			
Prepared an emergency kit with food, water or medicine	20%	23%	17%	25%	22%	22%			
Purchased enough non-refrigerated food to last for several days without power	16%	14%	12%	15%	17%	13%			
Purchased enough water to last for several days without power	20%	14%	15%	20%	19%	13%			
Signed up for notifications from SCE	7%	8%	7%	10%	7%	7%			
Acquired battery storage technology	5%	8%	6%	10%	4%	7%			
Went to SCE website	16%	8%	13%	8%	15%	6%			
Purchased/used a battery powered radio	10%	7%	9%	10%	9%	7%			
Prepared for multiple-day outage	6%	6%	6%	6%	5%	6%			
Removed vegetation from around your home	3%	6%	6%	9%	4%	5%			
Purchased fire extinguishers	NA	6%	NA	11%	NA	4%			
Developed an emergency plan	8%	5%	3%	9%	9%	4%			
Have a place to go if without power for a prolonged period	6%	5%	7%	3%	5%	6%			
Checked the SCE mobile app	8%	4%	4%	4%	9%	3%			
Activated your emergency plan	1%	4%	3%	2%	1%	5%			

Q21. What, if any, actions have you taken to prepare for a Public Safety Power Shutoff (PSPS) in 2022?

Preparedness Actions Taken (cont.) – Prefer Other

 Among those who prefer other languages, preparedness remained unchanged in both HFRAs and non-HFRAs.

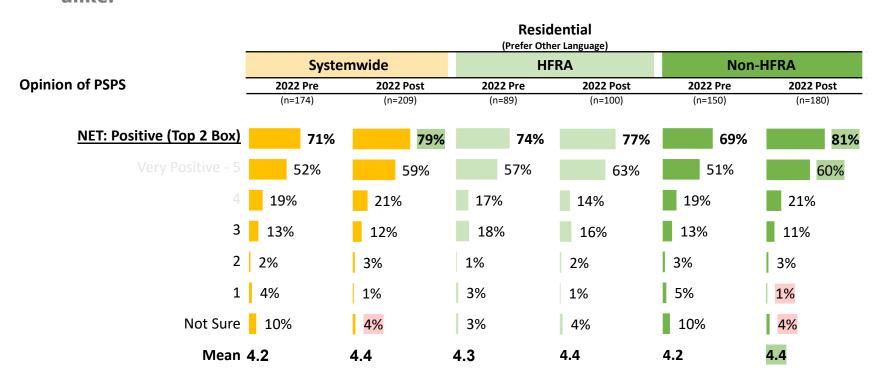
Residential (Prefer Other Language)

	Systemwide			FRA	Non-HFRA		
Actions Taken (continued)	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
	(n=174)	(n=208)	(n=89)	(n=100)	(n=150)	(n=179)	
Allowed access to property for SCE to trim trees	1%	4%	4%	2%	1%	4%	
Acquired a back-up generator	3%	4%	8%	5%	1%	4%	
Went SCE's social media	5%	3%	3%	2%	4%	3%	
Notified others in area about potential power shutoff	3%	3%	1%	4%	3%	3%	
Signed up for emergency alerts from the country/state NA		3%	NA	7%	NA	3%	
Performed a safety check on your generator for your home	3%	3%	4%	1%	2%	3%	
Received Critical Care Backup Battery from SCE	1%	3%	1%	1%	1%	3%	
Followed SCE on Facebook	1%	2%	-	1%	1%	2%	
Signed up for emergency alerts from the Fire Department	NA	2%	NA	2%	NA	2%	
Visited SCE Community Resource Center	2%	1%	2%	1%	1%	1%	
Followed SCE on Twitter	1%	1%	2%	1%	-	1%	
Attended a community-based organization event	1%	1%	-	-	1%	1%	
Attended SCE Community meeting, wildfire preparedness webinar or online meeting	-	1%	-	1%	-	1%	
Signed up for Medical Baseline Program	2%	-	-	1%	2%	-	
Other	12%	12%	13%	13%	11%	11%	
I have not taken any action	36%	32%	29%	24%	37%	35%	

Q21. What, if any, actions have you taken to prepare for a Public Safety Power Shutoff (PSPS) in 2022?

Opinion of SCE's PSPS Program – Prefer Other

- Customers who prefer other languages are much more positive toward SCE's PSPS program compared to systemwide customers (79% rated 9 or 10 vs. 54% systemwide)
- This difference was found in HFRAs (77% vs. 51%) and non-HFRAs (81% vs. 57%) alike.



Q22. Overall, what is your opinion of SCE's Public Safety Power Shutoff program?

Ratings of SCE Attributes – Prefer Other Languages

• In both HFRA and Non-HFRAs, ratings of SCE on PSPS-related attributes among the Prefer Other customers are much higher than among all customers (+14% to +30%). Despite the already high ratings, three attributes improved in HFRAs preto post-.

Residential

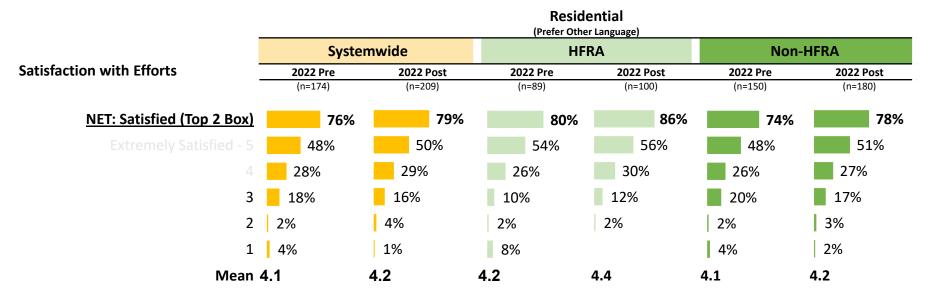
	(Prefer Other Language)							
	Systemwide		HFI	RA	Non-	HFRA		
% Agree (Top 2 Box)	2022 Pre	2022 Pre 2022 Post		2022 Post	2022 Pre	2022 Post		
SCE Is committed to restoring power to customers affected by wildfires	X11%	(n=209) 82%	(n=89) 81%	(n=100) 86%	(n=150) 80%	(n=180) 83%		
Is working to keep my community safe		82%	78%	87%	79%	82%		
Takes proactive measures to protect the electricity grid from wildfires	X11%	79%	84%	83%	79%	79%		
Shows care and concern for customers	78%	79%	84%	81%	76%	79%		
Is a company I trust to act in the best interest of its customers	X11%	79%	78%	82%	79%	79%		
Is committed to wildfire safety	76%	81%	80%	82%	75%	81%		
Is proactive in taking steps to address wildfire risks		77%	82%	79%	78%	78%		
Makes an effort to communicate with all customers about wildfires	/5%	77%	79%	81%	74%	77%		
Is helping me prepare for wildfire season	72%	77%	67%	80%	71%	77%		

Q14. Using a scale where 1 means completely disagree and 5 means completely agree, Please indicate how much you agree or disagree with the following statements about SCE. SCE...

Shading indicates a significant difference at the 90% confidence level from the prior year

Satisfaction w/ SCE's WF Efforts – Prefer Other

- The higher level of agreement with the statements on the previous slide translates to a higher satisfaction with SCE's overall WF safety and preparedness efforts (79%) among those who prefer other languages compared to all Residential customers (54%).
- Satisfaction is high in both HFRAs (86%) and Non-HFRAs (78%).



Q15. How satisfied are you with SCE's overall wildfire safety and preparedness efforts?

Evacuation Experience – Prefer Other Languages

• Evacuation experience among Prefer Other Language customers is comparable to that reported by all customers.

Residential (Prefer Other Language) **Systemwide HFRA** Non-HFRA Had to Evacuate? 2022 Post 2022 Pre 2022 Pre 2022 Post 2022 Pre 2022 Post (n=174) (n=) (n=89) (n=) (n=150) (n=) Yes 3% 2% 2% 2% 2% 3% 95% 98% 97% 95% 96% 95% Unsure 2% 2% 1% 2%

Q23. In the past few months, have you had to evacuate due to wildfires in your area?

PSPS Resource Persuasion MonitorTM

Among All Residential Customers

Resources Monitored

• "Funnel Metrics" were collected on 12 PSPS resources offered by SCE, meaning awareness, familiarity, interest and experience using.

Address Level Alerts:

both accountholders and non-accountholders can sign up for PSPS alerts for any and multiple addresses within SCE service territory

PSPS Alert Language Preferences:

PSPS alerts are available in 23 prevalent languages

Community Resource Centers (CRCs):

SCE has contracted with dozens of sites across high fire risk areas to serve as resource centers during PSPS events to provide customers with basic necessities

Rebates:

SCE offers rebates to customers in high fire risk areas for portable batteries or generators

CRC/CCV Language Preferences:

Translation services are available at CRC and CCV locations in over 120 languages, including American Sign Language

211 Partnership:

SCE partnered with 211 to assist households with disabilities and other access and functional needs with a single source of information and connection to available resources

Critical Care Backup Battery Program:

SCE supplies households located in high fire risk areas, enrolled in Medical Baseline, and enrolled in income-qualified programs, with a free portable battery

Food:

Food support through SCE's partnership with 211

Community Crew Vehicles (CCVs):

SCE sends vehicles to provide basic necessities (like water and light snacks) to customers in more remote areas that cannot be served by Community Resource Centers

Transportation:

Transportation to Community Resource Centers / Community Crew Vehicles, hotels, or other safe locations through SCE's partnership with 211

Hotels:

SCE offers discounted hotel options on its website

Lodging:

Temporary lodging services through SCE's partnership with 211

Illustrative Example of Persuasion MonitorTM Analysis

HPI Persuasion Monitor™

The line of inquiry in this survey is designed to guide SCE regarding changes that are most needed to support greater awareness and utilization of company-provided PSPS resources.

Progress to date is determined by establishing the share (or percent) of all targeted customers measured through each of the linear, sequential stages of persuasion which are commonly referred to as: Awareness, Interest, Desire, and Action (AIDA).

Assume these **illustrative** findings:

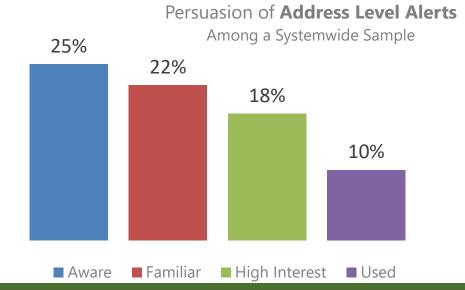
Awareness – 25%

Familiarity – 22%

High Interest – 18%

Used – 10%

All are tabulated using the same base: Systemwide Gen Pop.



Assuming these findings, the trail-off in converting from interest to use suggests there are barriers in this final step. Using this approach, the recommended steps vary depending on where progress stalls. If awareness is low but all other conversions are good, increase awareness. If awareness is good but familiarity is low, change the content of communications to improve program education, etc.

Actual Findings about PSPS Resources from Persuasion MonitorTM

Awareness of PSPS Resources

- Awareness of PSPS resources ranges from 10% to 27%.
- A net of 56% of all systemwide customers are aware of at least one program before learning of it in this survey and is higher in HFRAs (61% vs. 55%).
- Program awareness rose for 5 programs.

Residential (Prefer Other Language) **Systemwide HFRA** Non-HFRA **Program Awareness** 2022 Pre 2022 Post 2022 Pre 2022 Post 2022 Pre 2022 Post (n=2,310)(n=2,282)(n=2.425)(n=2.303)(n=1,558)(n=1.562)60% 61% 51% 55% 56% **NET: ANY PSPS RESOURCE 53%** 36% 31% 25% 24% Address Level Alerts 26% 27% 30% 27% 25% 20% 27% PSPS Alert Language Preferences 22% 24% 20% Community Resource Centers (CRCs) 23% 20% 22% 20% 21% 21% 20% 18% 17% Rebates 18% 17% 22% 15% 16% CRC/CCV Language Preferences 15% 21% 16% 12% 211 Partnership 15% 12% 14% 18% 21% 18% Critical Care Backup Battery Program 11% 11% 8% 12% Food 12% Lodging 10% 10% 8% 12% 12% Transportation 10% 11% 7% 12% Hotels 10% 10% 12% 12% Community Crew Vehicles (CCVs) 10% 11% 9% 12% 10% 11%

QN1: SCE supports a number of resources that are available to the public during a Public Safety Power Shutoff (PSPS). Before today, which of the following resources have you heard of?

Letters indicate a significant difference at the 90% confidence level.

Familiarity with PSPS Resources

- Familiarity with SCE's PSPS resources ranges from 6% to 21%.
- <u>A net</u> of 44% of all systemwide customers are Very or Somewhat Familiar with <u>at</u> least one program. Net Familiarity, too, is higher in HFRAs (48% vs. 43%)
- Familiarity also rose for four programs.

Residential

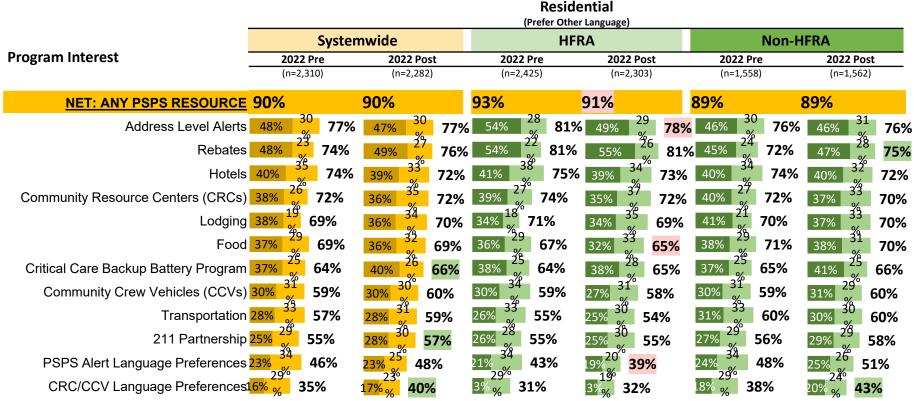
	(Prefer Other Language)								
Program Familiarity	Syst	emwide	Н	IFRA	No	n-HFRA			
(% Very/Somewhat)	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post			
	(n=2,310)	(n=2,282)	(n=2,425)	(n=2,303)	(n=1,558)	(n=1,562)			
NET: ANY PSPS RESOURCE	41%	44%	49%	48%	38%	43%			
Address Level Alerts	22%	20%	31%	25%	19%	18%			
PSPS Alert Language Preferences	17%	21%	19%	23%	16%	21%			
Community Resource Centers (CRCs)	14%	15%	14%	14%	15%	15%			
Rebates	13%	14%	13%	16%	13%	15%			
CRC/CCV Language Preferences	11%	15%	10%	13%	11%	16%			
211 Partnership	9%	10%	12%	8%	8%	11%			
Critical Care Backup Battery Program	9%	12%	8%	15%	10%	11%			
Food	8%	8%	6%	5%	9%	9%			
Lodging	7%	6%	5%	5%	8%	7%			
Transportation	7%	7%	7%	5%	7%	8%			
Hotels	7%	7%	6%	6%	8%	8%			
Community Crew Vehicles (CCVs)	7%	7%	6%	6%	8%	7%			

QN2: For each of the following resources, please tell us if you are Very Familiar, Somewhat Familiar, or Not Very Familiar with that resource?

Letters indicate a significant difference at the 90% confidence level.

Interest in PSPS Resources

- Interest in these programs far outstrips Awareness and Familiarity and demonstrates their relevance to customers. A net of 90% have high interest in at least one.
- The spike in interest, relative to awareness/familiarity, demonstrates the effectiveness of widely communicating the brief descriptions that accompanied the resource list. This nominal level of education nearly quadrupled awareness.



QN3: For each resource, please rate how interested you would be in using it during a Public Safety Power Shutoff? Please use the scale of not interested, somewhat interested, or very interested.

Letters indicate a significant difference at the 90% confidence level.

Have Used PSPS Resources

- Experience with these individual resources is quite small, but 22% have experience with at least one.
- As expected, the **net** experience is much higher in HFRAs (27%) versus Non-HFRAs (20%).

Residential

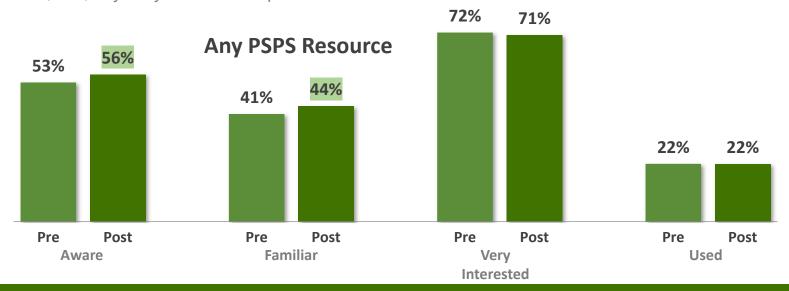
	(Prefer Other Language)						
	Syste	emwide	HE	RA	Nor	-HFRA	
Programs Have Used	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
	(n=2,310)	(n=2,282)	(n=2,425)	(n=2,303)	(n=1,558)	(n=1,562)	
NET: ANY PSPS RESOURCE	22%	22%	30%	27%	19%	20%	
Address Level Alerts	13%	13%	22%	18%	10%	10%	
PSPS Alert Language Preferences	5%	6%	7%	6%	4%	6%	
Rebates	4%	5%	4%	5%	4%	6%	
Community Resource Centers (CRCs)	3%	4%	3%	2%	4%	4%	
211 Partnership	3%	4%	2%	2%	4%	4%	
Food	2%	3%	1%	1%	3%	4%	
Critical Care Backup Battery Program	2%	3%	3%	4%	2%	3%	
CRC/CCV Language Preferences	2%	4%	2%	2%	2%	4%	
Transportation	2%	2%	1%	1%	2%	3%	
Hotels	2%	2%	1%	1%	2%	3%	
Community Crew Vehicles (CCVs)	2%	2%	1%	1%	2%	2%	
Lodging	1%	2%	1%	1%	2%	2%	

QN4: Which, if any, of these resources have you used in the past?

Letters indicate a significant difference at the 90% confidence level.

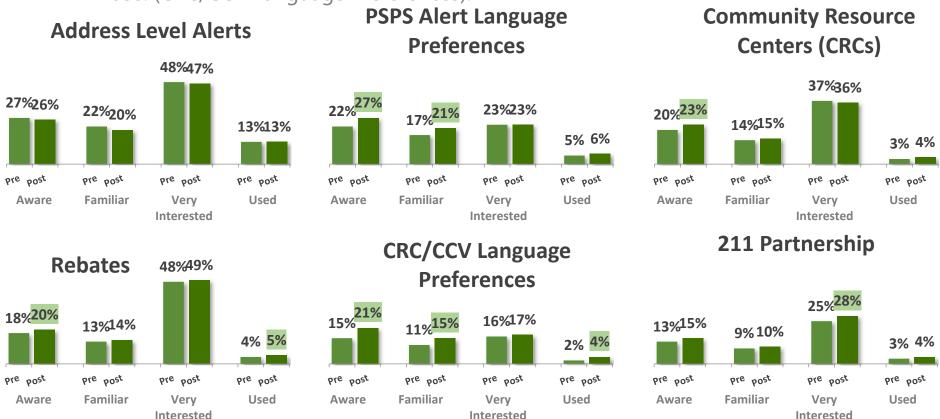
Meta-Persuasion Findings: PSPS Resources

- Just the **net** results are charted below: The percent of **all** customers Systemwide who select at least one resource.
 - Awareness at 56% is substantial.
 - 44% say they are Very or Somewhat Familiar with at least one program. That means nearly everyone who is aware of at least one resource is also familiar with at least one resource. This suggests communications about the details of the programs have been effective: When you reach them, they understand enough about the program to say they are familiar.
 - 71% say they are Very Interested in at least one program. The fact that interest nearly doubles the share who are familiar means the collective slate of programs is highly relevant and that customers would be highly responsive if awareness and familiarity were elevated.
 - Experience with any one program may be low, but across the slate of resources, more than one in five (22%) say they have had experience.



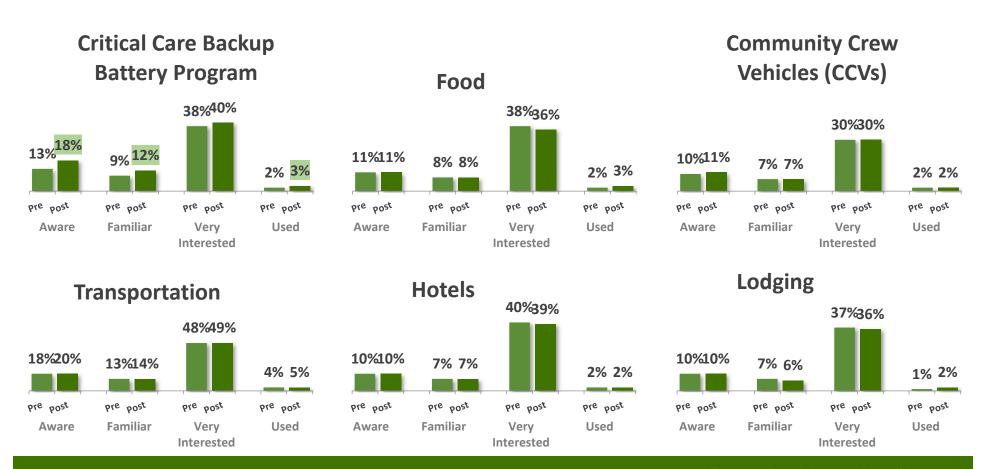
Persuasion Monitor: PSPS Resources

- On this and the next slide, the Persuasion Monitor $^{\text{TM}}$ graphics for each resource are provided separately. These are presented to show . . .
 - The profiles are all nearly identical: Low awareness, good conversion of awareness to familiarity, a surge in interest upon seeing the brief resource description, and very limited experience.
 - Two in-language programs show rises in both awareness and familiarity. One doubled in use. (CRC/CCV Language Preferences).



Persuasion Monitor: PSPS Resources (cont.)

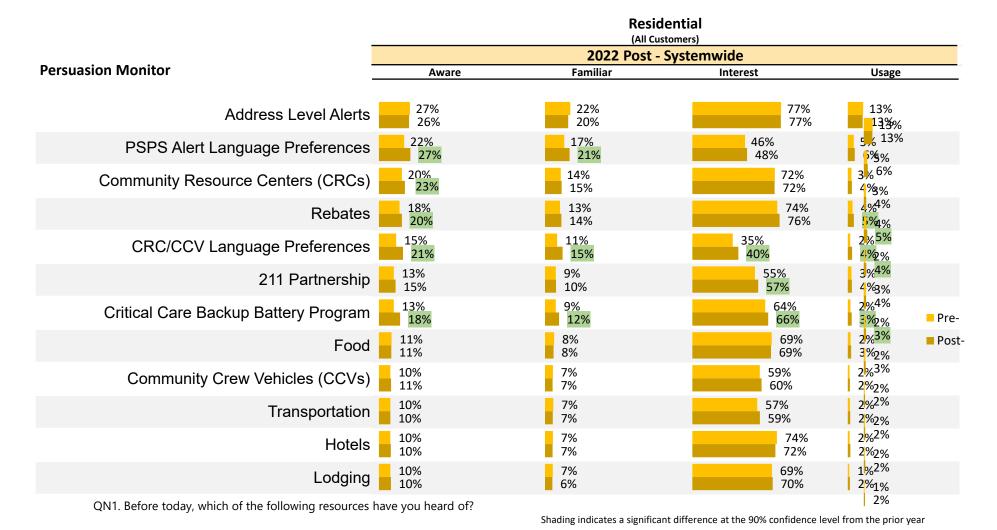
• Because the **net** results are so strong, bundling the resources into a single, branded program containing all these resources would be far more efficient for customers to learn about and select what meets their needs.





PSPS Resource PM – All Customers

 Awareness of five PSPS resources was raised during the 2022 fire season – and use was increased for three.





PSPS Resource Awareness – All Customers

• On this and the next three slides, resource awareness, familiarity, interest and experience are shown for HFRA and Non-HFRA separately. The finding is that, <u>aside from a naturally higher level or awareness</u>, etc. in HFRAs, the persuasion profile is the same.

Residential (All Customers)

	Syste	emwide	Н	FRA	Non	-HFRA
Resources (% Heard of)	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post
	(n=2,310)	(n=2,282)	(n=2,425)	(n=2,303)	(n=1,558)	(n=1,562)
Address Level Alerts: both accountholders and non-accountholders can sign up for PSPS alerts for any and multiple addresses within SCE service territory	27%	26%	36%	31%	25%	24%
PSPS Alert Language Preferences: PSPS alerts are available in 23 prevalent languages	22%	27%	25%	30%	20%	27%
Community Resource Centers (CRCs): SCE has contracted with dozens of sites across high fire risk areas to serve as resource centers during PSPS events to provide customers with basic necessities	20%	23%	20%	20%	22%	24%
Rebates: SCE offers rebates to customers in high fire risk areas for portable batteries or generators	18%	20%	18%	21%	17%	21%
CRC/CCV Language Preferences: Translation services are available at CRC and CCV locations in over 120 languages, including American Sign Language	15%	21%	15%	17%	16%	22%
211 Partnership: SCE partnered with 211 to assist households with disabilities and other access and functional needs with a single source of information and connection to available resources	13%	15%	12%	12%	14%	16%
Critical Care Backup Battery Program: SCE supplies households located in high fire risk areas, enrolled in Medical Baseline, and enrolled in income-qualified programs, with a free portable battery	13%	18%	17%	21%	12%	18%
Food: Food support through SCE's partnership with 211	11%	11%	8%	8%	12%	12%
Community Crew Vehicles (CCVs): SCE sends vehicles to provide basic necessities (like water and light snacks) to customers in more remote areas that cannot be served by Community Resource Centers		11%	10%	9%	11%	12%
Transportation: Transportation to Community Resource Centers / Community Crew Vehicles, hotels, or other safe locations through SCE's partnership with 211	10%	10%	7%	8%	12%	11%
Hotels: SCE offers discounted hotel options on its website	10%	10%	8%	7%	12%	12%
Lodging: Temporary lodging services through SCE's partnership with 211	10%	10%	9%	8%	12%	12%

QN1. Before today, which of the following resources have you heard of?

PSPS Resource Familiarity – All Customers

Residential (All Customers)

Systemwide HFRA Non-HFRA Resources (% Somewhat/Very Familiar) 2022 Pre 2022 Pre 2022 Post 2022 Post 2022 Pre 2022 Post (n=2,310) (n=2,282) (n=2,425) (n=1,558) (n=2,303)(n=1,562)Address Level Alerts: 22% 20% 31% 25% 19% 18% both accountholders and non-accountholders can sign up for PSPS alerts for any and multiple addresses within SCE service territory **PSPS Alert Language Preferences**: 21% 21% 19% 23% 16% PSPS alerts are available in 23 prevalent languages Community Resource Centers (CRCs): 15% 14% 14% 15% 15% 14% SCE has contracted with dozens of sites across high fire risk areas to serve as resource centers during PSPS events to provide customers with basic necessities 14% 16% 15% 13% 13% 13% SCE offers rebates to customers in high fire risk areas for portable batteries or generators **CRC/CCV Language Preferences:** 16% 11% 10% 13% 11% Translation services are available at CRC and CCV locations in over 120 languages, including American Sign Language 211 Partnership: 10% 8% 10% 11% 8% SCE partnered with 211 to assist households with disabilities and other access and functional needs with a single source of information and connection to available resources Critical Care Backup Battery Program: 11% 12% 15% 12% 8% SCE supplies households located in high fire risk areas, enrolled in Medical Baseline, and enrolled in income-qualified programs, with a free portable battery 9% 8% 6% 5% 9% Food support through SCE's partnership with 211 Community Crew Vehicles (CCVs): 6% 7% SCE sends vehicles to provide basic necessities (like water and light snacks) to customers in more remote areas that cannot be served by Community Resource Centers Transportation: 7% 5% 8% 5% Transportation to Community Resource Centers / Community Crew Vehicles, hotels, or other

7%

6%

6%

6%

QN2. [IF AWARE] How familiar are you with the following resources?

Temporary lodging services through SCE's partnership with 211

safe locations through SCE's partnership with 211

SCE offers discounted hotel options on its website

Lodging:

Shading indicates a significant difference at the 90% confidence level from the prior year

6%

5%

8%

7%

PSPS Resource Interest – All Customers

Residential

(All Customers) **Systemwide HFRA Non-HFRA** Resources (% Very/Somewhat Interested) 2022 Pre 2022 Pre 2022 Post 2022 Post 2022 Pre 2022 Post (n=2,310) (n=2,282) (n=2,425) (n=2,303) (n=1,558) (n=1,562) Address Level Alerts: 77% 77% 81% 78% 76% 76% both accountholders and non-accountholders can sign up for PSPS alerts for any and multiple addresses within SCE service territory **PSPS Alert Language Preferences:** 48% 39% 51% 46% 43% 48% PSPS alerts are available in 23 prevalent languages Community Resource Centers (CRCs): 72% 72% 74% 72% 72% 70% SCE has contracted with dozens of sites across high fire risk areas to serve as resource centers during PSPS events to provide customers with basic necessities Rebates: 76% 81% 81% 75% 74% 72% SCE offers rebates to customers in high fire risk areas for portable batteries or generators **CRC/CCV Language Preferences:** 40% 31% 32% 43% 35% 38% Translation services are available at CRC and CCV locations in over 120 languages, including American Sign Language 211 Partnership: 55% 58% 55% 55% 56% SCE partnered with 211 to assist households with disabilities and other access and functional needs with a single source of information and connection to available resources Critical Care Backup Battery Program: 65% 64% 66% 64% 65% 66% SCE supplies households located in high fire risk areas, enrolled in Medical Baseline, and enrolled in income-qualified programs, with a free portable battery Food: 69% 69% 67% 65% 71% 70% Food support through SCE's partnership with 211 Community Crew Vehicles (CCVs): 60% 58% 59% 59% 59% 60% SCE sends vehicles to provide basic necessities (like water and light snacks) to customers in more remote areas that cannot be served by Community Resource Centers Transportation: 57% 59% 55% 54% 60% 60% Transportation to Community Resource Centers / Community Crew Vehicles, hotels, or other safe locations through SCE's partnership with 211 Hotels: 74% 72% 75% 73% 74% 72% SCE offers discounted hotel options on its website Lodging: 69% 70% 71% 69% 70% 70% Temporary lodging services through SCE's partnership with 211

QN3. For each resource, please rate how interested you would be in using it during a Public Safety Power Shutoff?

PSPS Resource Current Use – All Customers

Residential

(All Customers)

	Systemwide		,	FRA	Non-HFRA		
Resources (% Very/Somewhat Interested)	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
Address Level Alerts: both accountholders and non-accountholders can sign up for PSPS alerts for any and multiple addresses within SCE service territory	(n=2,310)	(n=2,282) 13%	(n=2,425) 22%	(n=2,303) 18%	(n=1,558) 10%	(n=1,562) 10%	
PSPS Alert Language Preferences: PSPS alerts are available in 23 prevalent languages	5%	6%	7%	6%	4%	6%	
Community Resource Centers (CRCs): SCE has contracted with dozens of sites across high fire risk areas to serve as resource centers during PSPS events to provide customers with basic necessities	3%	4%	3%	2%	4%	4%	
Rebates: SCE offers rebates to customers in high fire risk areas for portable batteries or generators	4%	5%	4%	5%	4%	6%	
CRC/CCV Language Preferences: Translation services are available at CRC and CCV locations in over 120 languages, including American Sign Language	2%	4%	2%	2%	2%	4%	
211 Partnership: SCE partnered with 211 to assist households with disabilities and other access and functional needs with a single source of information and connection to available resources	3%	4%	2%	2%	4%	4%	
Critical Care Backup Battery Program: SCE supplies households located in high fire risk areas, enrolled in Medical Baseline, and enrolled in income-qualified programs, with a free portable battery	2%	3%	3%	4%	2%	3%	
Food : Food support through SCE's partnership with 211	2%	3%	1%	1%	3%	4%	
Community Crew Vehicles (CCVs): SCE sends vehicles to provide basic necessities (like water and light snacks) to customers in more remote areas that cannot be served by Community Resource Centers	2%	2%	1%	1%	2%	2%	
Transportation: Transportation to Community Resource Centers / Community Crew Vehicles, hotels, or other safe locations through SCE's partnership with 211	2%	2%	1%	1%	2%	3%	
Hotels: SCE offers discounted hotel options on its website	2%	2%	1%	1%	2%	3%	
Lodging: Temporary lodging services through SCE's partnership with 211	1%	2%	1%	1%	2%	2%	

QN4. Which, if any, of these resources have you used in the past?

Suggested Improvements to WF Comms

Among All Customers

Suggested Improvements to WF Comms

- Word clouds are a way of summarizing the responses to open-ended questions.
 The size and position of words in the graphic reflect the frequency with which the words were used across the hundreds of comments from the 2022 Pre- and Post- surveys.
- Among customers both in and out of the HFRAs, the sentiment is clear: more communications via email to increase knowledge and awareness throughout the community.

Systemwide Residential 2022 Survey

<u>Pre</u> <u>Post</u>





Q13. [RECALL COMMUNICATION] In what ways could SCE improve their communications about wildfire preparedness?

Suggested Improvements to WF Comms

Some illustrative comments – full verbatims available upon request.

Systemwide Residential - 2022 Pre-

Both mail pamphlets and e-mails are very helpful. Emails would probably be more efficient, maybe remainders through emails about fire preparedness say at the beginning and middle of fire season would be good. I do remember getting information about fire preparedness from SCE, but I've subsequently forgotten what the specific contents of it was. Also, I didn't realize that the SCE website have info but fire preparedness until I read it as an option in this survey. Maybe a monetary investment we have in our refrigerator is quite substantial. short email reminder where people can look for info in case, we lose our copies.

Any way feasible and cost effective for SCE that does not affect the customer in higher costs!!!

Email is great for me, but multi-uses of social media are good too, plus mailers.

Getting people to read is the issue! Seems today's people like video content.

Have a wildfire alert text /E-mail alarm activation that can be downloaded free app Communicate by having representatives available at local town meetings.

It would be nice to communicate with community by text message. Everyone most likely have a cell phone for notifications. If you add this feature in your webpage for cell phone number to be added to account.

Coordinate communications with state and local agencies to give real time hazard information about overhead power lines. Give information to agencies about the critical condition of power lines affected by fire.

It's fine. Just keep it transparent. There was much confusion and too many unknowns a couple of years ago during the "mass" PSPS events.

I know all about wildfires and don't need any further information from you. Save your money and lower rates instead. Need to shift to nuclear power and underground cables.

Content is rhetorical, so I usually skim through ~ for wildfires we need specifics.... People that are new to the area it may help to give information but living in a fire area it's hands on, turning power off keeps us from vital information power cuts.

Systemwide Residential - 2022 Post

Make sure the website is up to date on the power outages and when power is expected to return. I believe the website needs to run faster and the data needs to be clear to the customers affected. Last time there was a power outage in my community, it was off for at least 10 hours. I can understand our safety, but the

Mail when information is pertinent, I received 3 letters of preventative maintenance outages and there never was an outage. Felt more like a threat than prevention.

Be more exact about what power outages are planned. Outages are very disruptive to my family.

Emails and text messages. Social media

Fire season is year round reminder monthly or bi monthly.

I feel like there tend to be alerts in the middle of a fire, but rarely right when the fire starts and never when it is put out.

Give small, actionable advice regarding house protection from wildfires, like keeping your yard from getting overgrown. If there are companies/SCE employees that can come out to your house and make suggestions, that would also be great.

Put the Information on social media//send out more information about the wildfires and stuff like that. Have a fire awareness week.

Send SMS and email prior to a potential fire event and prior to any preventative

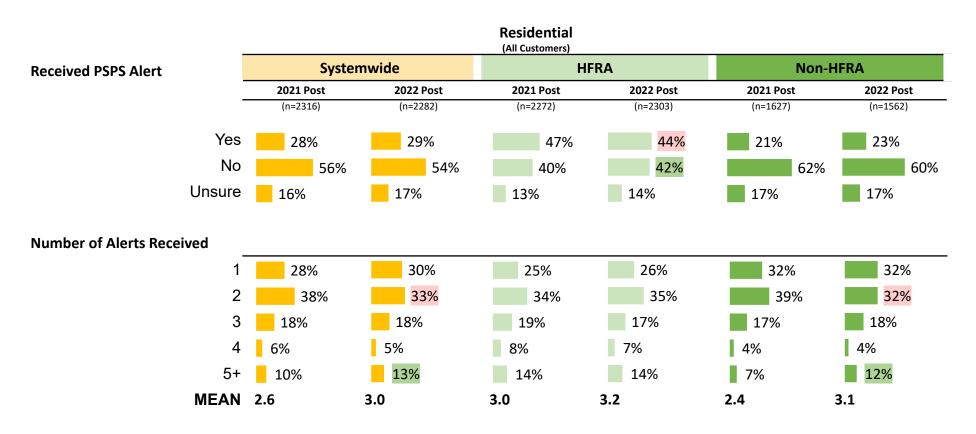
Q13. [RECALL COMMUNICATION] In what ways could SCE improve their communications about wildfire preparedness?

Recent PSPS Notifications

Among All Customers

Received PSPS Alert – All Customers

- As in years past, nearly half of HFRA customers in 2021 report having received a recent alert (44%). On average, they report having received 3.2 recent alerts.
- The incidence of any alert is much higher for HFRA customers (44% vs. 23%) but the average number of such alerts is nearly the same (3.2 vs. 3.1).



QPQ1 - Did you receive any Public Safety Power Shutoff (PSPS) alerts or notifications in the past few months? QPQ2 – [RECEIVED ALERT] How many alerts did you receive?



Language of PSPS Alert – All Customers

• As reported by survey respondents, SCE delivered alerts in at least 16 non-English languages in 2022.

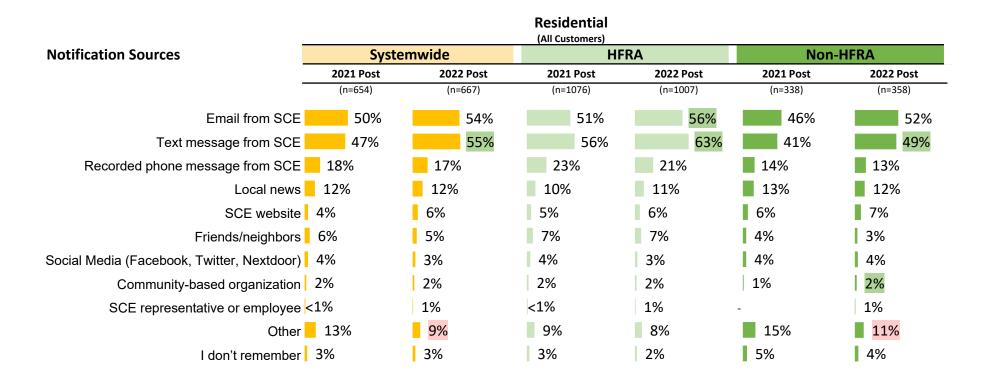
			Residential						
	(All Customers)								
Language of PSPS Notification	Systemwide		H	FRA	Non-HFRA				
	2021 Post	2022 Post	2021 Post	2022 Post	2021 Post	2022 Post			
	(n=654)	(n=667)	(n=1076)	(n=1007)	(n=338)	(n=358)			
English	98%	6 98%	1009	% 99%	96%	97%			
Spanish	11 %	9%	10%	8%	14 %	10 %			
Chinese Cantonese	1%	1%	<1%	1%	1%	1%			
Chinese Mandarin	1%	<1%	<1%	1%	1%	<1%			
Korean	<1%	<1%	<1%	<1%	<1%	-			
Vietnamese	1%	1%	<1%	1%	1%	1%			
Tagalog	-	<1%	<1%	<1%	-	-			
Russian	-	<1%	-	<1%	-	-			
Arabic	<1%	<1%	<1%	<1%	-	1%			
Armenian	-	<1%	<1%	<1%	-	-			
Farsi	-	<1%	-	<1%	-	-			
French	<1%	<1%	-	<1%	<1%	-			
German	<1%	<1%	-	<1%	<1%	-			
Japanese	-	<1%	-	<1%	-	<1%			
Khmer	-	<1%	-	<1%	-	<1%			
Punjabi	-	<1%	-	<1%	-	-			
Urdu	<1%	1%	<1%	<1%	-	<1%			
Hindi	-	-	<1%	<1%	-	-			
Hmong	-	-	<1%	-	-	-			
Portuguese	-	-	<1%	-	-	-			
Thai	-	-	-	<1%	-	-			

QPQ3 - [RECEIVED ALERT] In what language(s) was/were the Public Safety Power Shutoff notification(s)?



Alert Sources – All Customers

- Systemwide, SCE texts (55%) overtook SCE emails (54%) as the most frequently mentioned channel for the alerts received. Also cited are recorded phone messages from SCE (17%), and SCE.com (6%).
- Non-SCE sources other than local news (12%) are rarely mentioned.

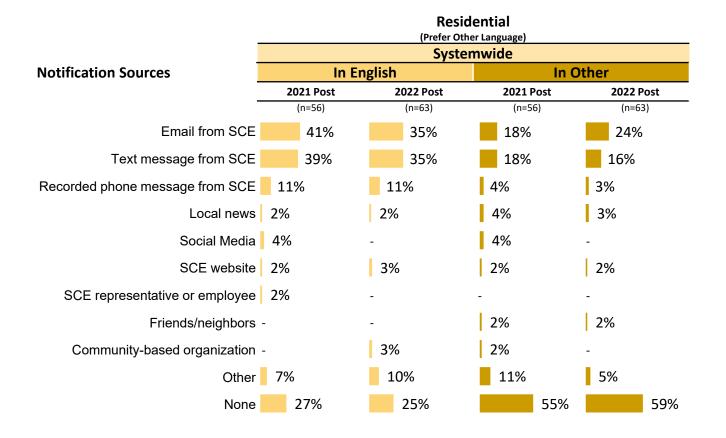


QPQ4 – [RECEIVED ALERT] How were you notified about the Public Safety Power Shutoff?



Alert Sources – Prefer Other Languages

- Systemwide, 59% of customers who prefer other languages say they received no alerts in a language other than English.
- They most often report getting English emails and texts from SCE.



QPQ4 – [RECEIVED ALERT] How were you notified about the Public Safety Power Shutoff?

QPQ5 – [RECEIVED ALERT AND PREFER OTHER LANGUAGE] Which, if any, of these sources provided information in English and which provided information in your preferred language?



Alert Sources – Prefer Other Languages

- The high proportion of customers who prefer other languages and report not having received their alert in their language of preference occurs in both HFRAs (53%) and non-HFRAs (59%).
- Emails and Texts in English are also most common in HFRAs and non-HFRAs alike.

Residential (Prefer Other Language) HFRA Non - HFRA

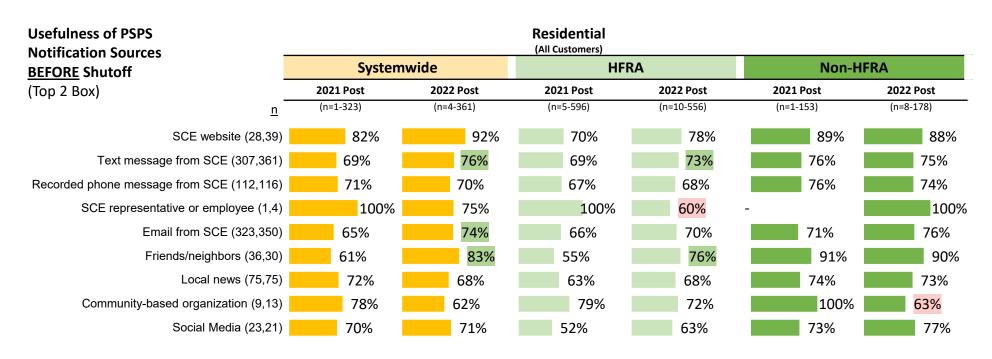
		HFI	RA	(Non - HFRA			
	In English		In Other		In Er	In English		Other
Notification Sources	2021 Post	2022 Post	2021 Post	2022 Post	2021 Post	2022 Post	2021 Post	2022 Post
	(n=40)	(n=51)	(n=40)	(n=51)	(n=43)	(n=46)	(n=43)	(n=46)
Email from SCE	43%	35%	25%	16%	37%	33%	16%	24%
Text message from SCE	48%	47%	28%	18%	35%	33%	16%	15%
Recorded phone message from SCE	23%	14%	8%	6%	9%	7%	5%	4%
Local news	5%	-	2%	4%	2%	2%	5%	2%
Social Media	5%	2%	2%	-	5%	-	5%	-
SCE website	8%	4%	2%	2%	2%	2%	2%	2%
SCE representative or employee	5%	6%	2%	6%	-	-	-	-
Friends/neighbors	5%	2%	2%	6%	-	-	2%	-
Community-based organization	2%	6%	-	6%	-	2%	2%	-
Other	5%	8%	-	8%	7%	11%	14%	4%
None	20%	20%	6	0% 53	33%	24%	519	% 59

QPQ4 – [RECEIVED ALERT] How were you notified about the Public Safety Power Shutoff?

QPQ5 – [RECEIVED ALERT AND PREFER OTHER LANGUAGE] Which, if any, of these sources provided information in English and which provided information in your preferred language?

Usefulness of Alert Sources – All Customers

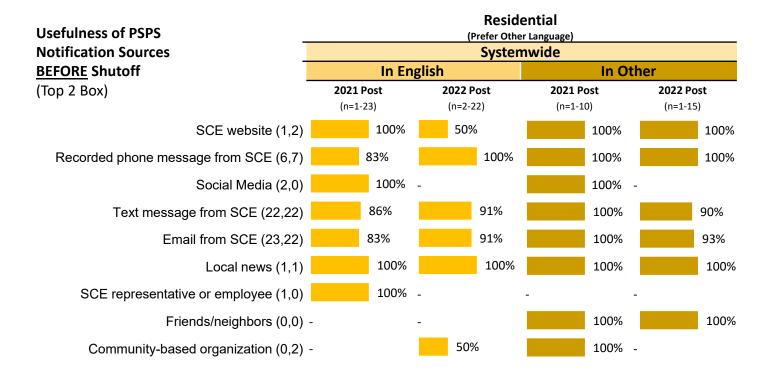
- Customers in HFRAs consider just about all the alert channels less useful than do their non-HFRA counterparts.
- In HFRAs, texts from SCE are both common (63%) and rated high in source usefulness (73%).



QP6A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful was the information you received from SCE <u>before</u> the Public Safety Power Shutoff via...?

Usefulness of Alert Sources – Prefer Other Languages

• The sample sizes for those who prefer other languages <u>and</u> received an alert <u>and</u> used the specific channels are not sufficient for meaningful analysis.



QP6A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful was the information you received from SCE <u>before</u> the Public Safety Power Shutoff via...?

QP6B2. And, how useful was the information in [PREFERRED LANGUAGE] that you received from SCE before the Public Safety Power Shutoff via...?

Usefulness of Alert Sources — Prefer Other Languages

• This table further divides the respondents from the previous slide into those living in HFRAs and non-HFRAs creating bases that are too small to analyze.

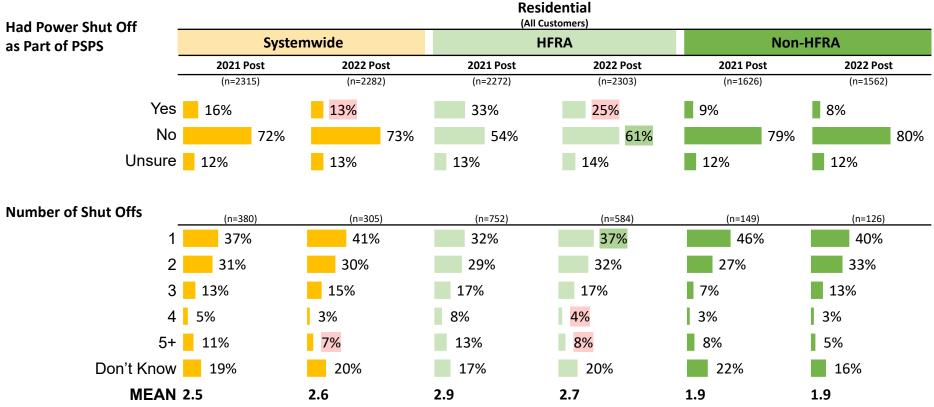
Residential (Prefer Other Language) Usefulness of PSPS **HFRA** Non - HFRA **Notification Sources** In English In Other In Other In English **BEFORE Shutoff** 2021 Post 2021 Post 2022 Post 2021 Post 2021 Post 2022 Post 2022 Post 2022 Post (n=1-24) (n=1-11) (n=1-9) (n=1-16) (n=1-15) (n=1-19) (n=1-7) (n=1-11) (Top 2 Box) SCE website (1,2) 33% 100% 100% 100% 100%-100% 100% 100% Recorded phone message from SCE (6,7) 67% 100% 100% 100% 100% 100% 100% Social Media (2,0) 100% 100% 100% -100%-100% -Text message from SCE (22,22) 92% 79% 100% 87% 100% 87% 100% 86% Email from SCE (23,22) 76% 89% 100% 88% 93% 88% 100% 100% Local news (1,1) 100% 100% -100% 100% 100% 100% 100% SCE representative or employee (1,0) 67% 100% 100% 67% -Friends/neighbors (0,0) 100% 100% 100% 100%-100% -Community-based organization (0,2) 67% 100% 67% -100% 100% -

QP6A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful was the information you received from SCE <u>before</u> the Public Safety Power Shutoff via...?

QP6B2. And, how useful was the information in [PREFERRED LANGUAGE] that you received from SCE before the Public Safety Power Shutoff via...?

Experienced PSPS Event – All Customers

- One in four (25%) HFRA customers and one in twelve (8%) non-HFRA customers report having had their power shut off in 2022. That's slightly less often for HFRA customers (33% in 2021) and no change for non-HFRA customers (9% in 2021).
- Customers in HFRAs who did experience a PSPS event report they went through an average of 2.7.

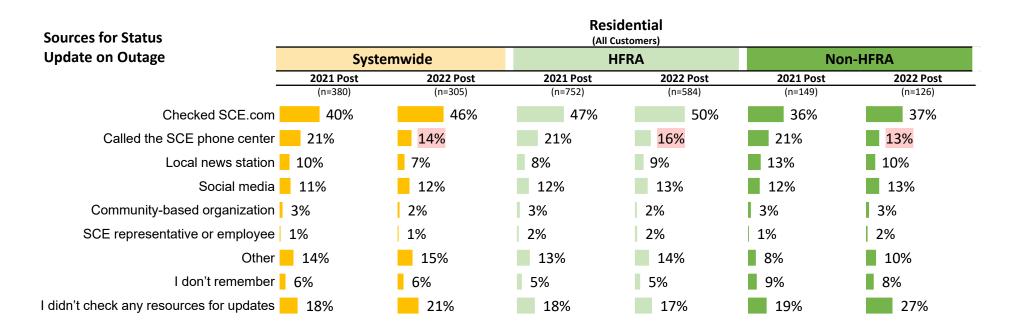


QPQ7. Did you personally have your power shut off at your residence/business by SCE as part of a Public Safety Power Shutoff (PSPS) in 2021--that is, was your power proactively shutoff by SCE due to a high risk of wildfire??

QPQ8. [EXPERIENCED SHUT OFF] How many times was your power shut off due to a PSPS?

Update Sources— All Customers

- Among those who did experience an outage, only about one in five (21%) did not check with at least one of these sources to get updates on the status of their outage. This is about the same incidence as was found in 2021 (18%).
- The update source used most often continues to be SCE.com for both those in and not in HFRAs. Customers in HFRAs report a reduced reliance on SCE's CCC.

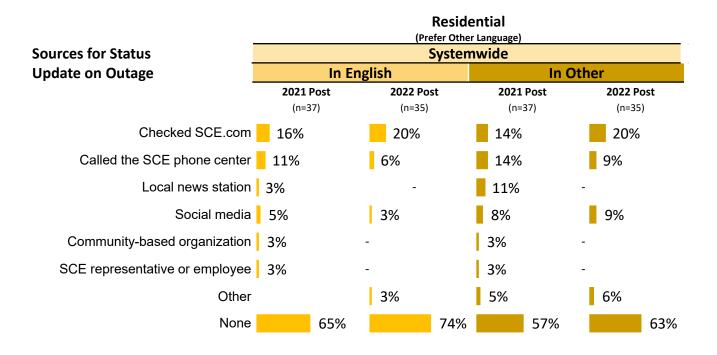


QPQ9. [EXPERIENCED SHUT OFF] When you experienced a Public Safety Power Shutoff, where did you go to check for updates on the status of your outage?



Update Sources – Prefer Other Languages

- Customers who prefer other languages are <u>much less likely</u> to check for updates (74% vs. 21% systemwide claim they checked "no" sources).
- The sources that were checked appear to be equally likely to have provided updates in the customer's preferred language as to have them in English.

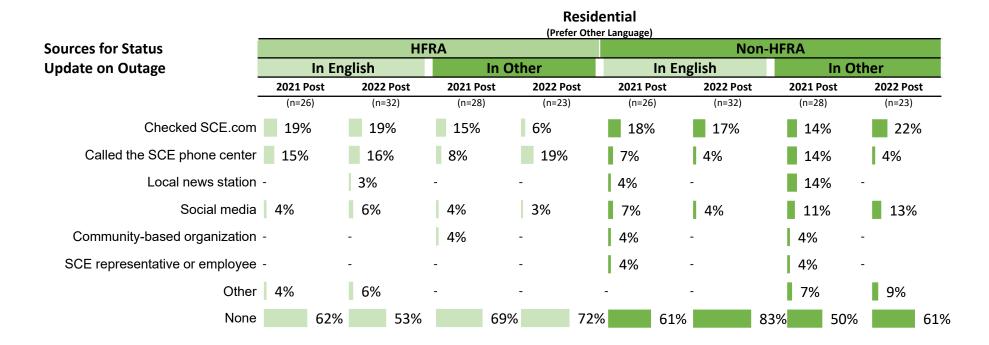


QPQ10 – [EXPERIENCED SHUT OFF AND PREFER OTHER LANGUAGE] Which, if any, of these sources provided information in English and which provided information in your preferred language?



Update Sources – Prefer Other Languages

 Sample sizes are small but the finding that customer who prefer other languages are less likely to check for status updates appears to be confirmed in HFRAs and non-HFRAs

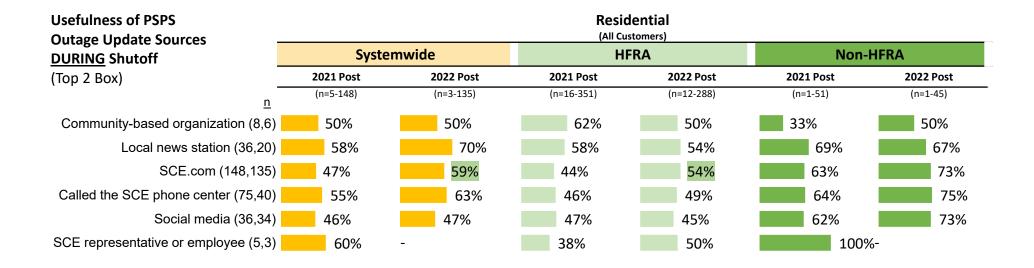


QPQ10 – [EXPERIENCED SHUT OFF AND PREFER OTHER LANGUAGE] Which, if any, of these sources provided information in English and which provided information in your preferred language?



Usefulness of Update Sources – All Customers

- SCE.com is the most used source for updates and its source usefulness is among the highest rated sources (59%).
- SCE's phone center is the second most used source, and its source usefulness is comparable to sce.com (63%).



QPQ11A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful was the information you received from SCE <u>during</u> the Public Safety Power Shutoff via...?



Usefulness of Update Sources — Prefer Other Languages

• There are too few customers who prefer other languages and actually check for updates during outages to rate the usefulness of the different sources used.

Usefulness of PSPS Outage Update Sources DURING Shutoff (Top 2 Box)

Residential

Community-based organization (1,0)

Local news station (1,0)

Not Shown Due to Small Sample Size

Checked SCE.com (6,7)

Called the SCE phone center (4,2)

Social media (2,1)

SCE representative or employee (1,0)

QPQ11A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful was the information you received from SCE <u>during</u> the Public Safety Power Shutoff via...?

QPQ11B2. And, useful was information you received in [Preferred Language] from SCE during the Public Safety Power Shutoff via ...?

Usefulness of Update Sources — Prefer Other Languages

• Data on this slide is based on dividing the few respondents on the previous page between those in and not in HFRAs.

Usefulness of PSPS Outage Update Sources DURING Shutoff

Shutoff via...?

(Top 2 Box)

Residential

(Prefer Other Language)										
	HFRA				Non-HFRA					
In Er	In English In Other		In English		In Other					
2021 Post	2022 Post	2021 Post	2022 Post	2021 Post	2022 Post	2021 Post	2022 Post			
(n=1-5)	(n=1-6)	(n=1-4)	(n=1-6)	(n=1-5)	(n=1-4)	(n=1-4)	(n=1-5)			

Community-based organization (1,)

Local news station (6,)

Not Shown Due to Small Sample Size

Checked SCE.com (9,)

Called the SCE phone center (5,)

Social media (4,)

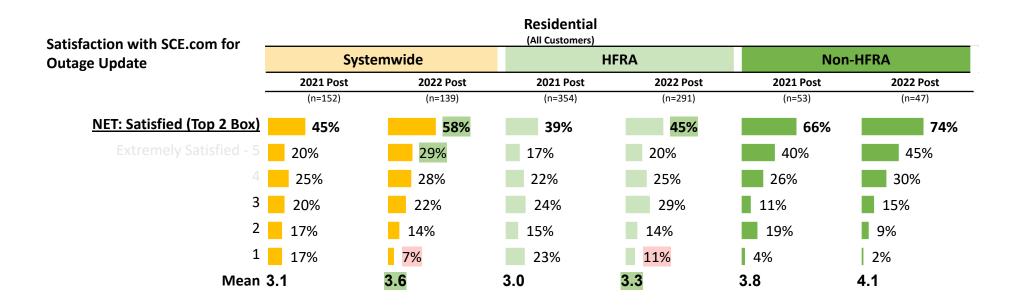
SCE representative or employee (2,)

QPQ11A/B1. [BASE: ALL WHO USED THAT SOURCE IN ENGLISH] How useful was the information you received from SCE during the Public Safety Power

QPQ11B2. And, useful was information you received in [Preferred Language] from SCE during the Public Safety Power Shutoff via ...?

SCE.com Satisfaction During Events – All Customers

 Satisfaction with SCE.com for outage information <u>during</u> an outage improved. Satisfaction is higher among non-HFRA customers but improved among HFRA customers.

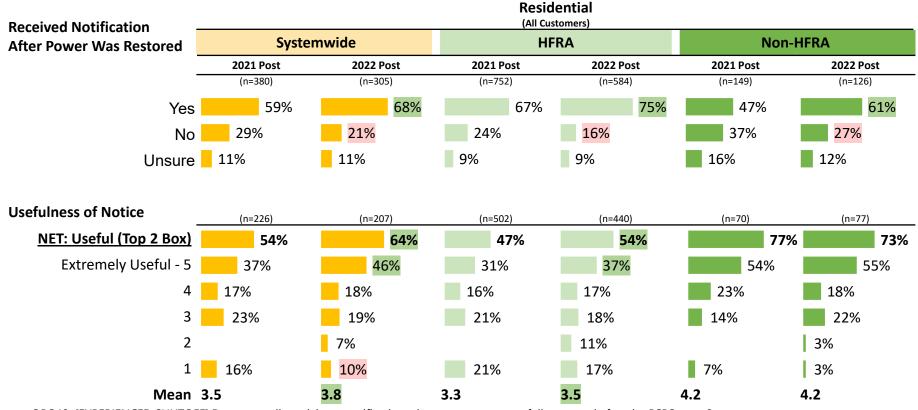


QPQ12. [USED SCE.COM FOR OUTAGE UPDATE] How satisfied were you with the information provided by the website during the Public Safety Power Shutoff?

Shading indicates a significant difference at the 90% confidence level between Pre and Post

Power Restoration Notices – All Customers

- SCE is steadily improving in providing customers notices of power restoration. This post- survey metric has increased from 50% in 2020 to 59% in 2021, to 68% in this year's study.
- The usefulness of such notifications has remained high for those who receive them (Mean ratings: 4.0 in 2020; 3.5 in 2021; 3.8 in 2022).

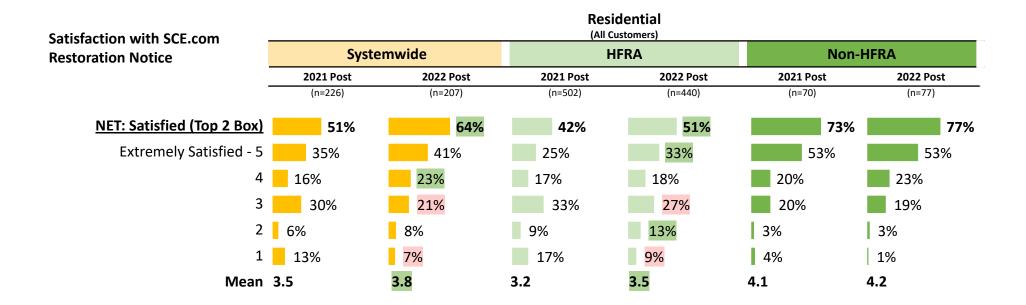


QPQ13. [EXPERIENCED SHUTOFF] Do you recall receiving a notification when your power was fully restored after the PSPS event?

QPQ14. [RECEIVED RESTORATION NOTICE] How useful was the information you received from SCE after the Public Safety Power Shutoff ended and your power was restored?

SCE.com Satisfaction <u>After</u> Events – All Customers

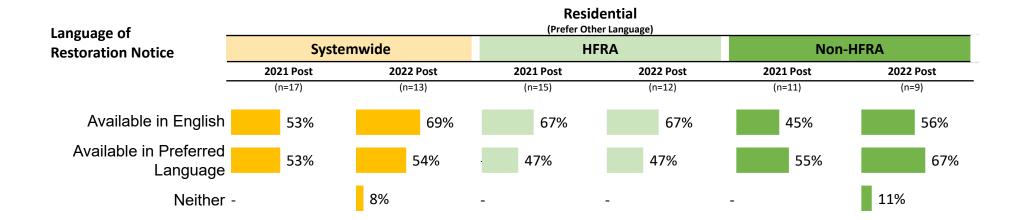
• Satisfaction with post-event communications echo the relative usefulness ratings of such communications. (Mean satisfaction: 4.0 in 2020; 3.5 in 2021; 3.8 in 2022).



QPQ15 - [RECALL RESTORATION NOTICE] How satisfied were you with the information provided by the SCE website after the Public Safety Power Shutoff?

Language of Restoration Notice – All Customers

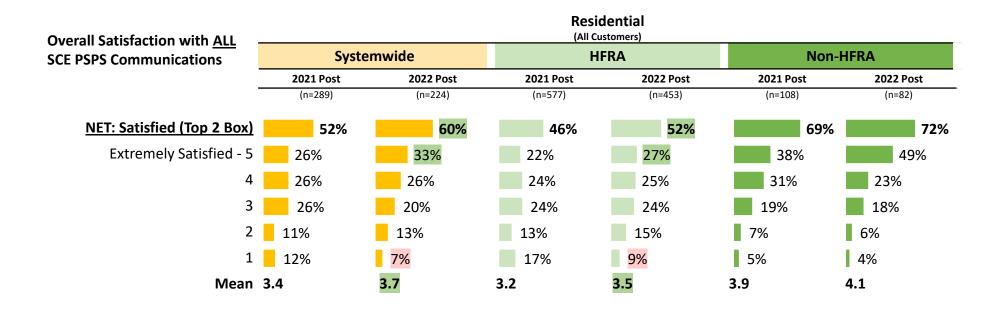
• Very few respondents both recall a restoration notice <u>after</u> a PSPS event <u>and</u> prefer such notices in other languages.



QPQ16 – [RECALL RESTORATION NOTICE AND PREFER OTHER LANGUAGE] Was the information that you received after the Public Safety Power Shutoff available in English available in your preferred language?

All PSPS Comms Satisfaction – All Customers

- Customers who did check for outage updates from at least one source were asked about their overall satisfaction with SCE's PSPS communications.
- As with many of the post- metrics in this survey, HFRA attitudes improved, drawing closer to those consistently held by Non-HFRA customers.

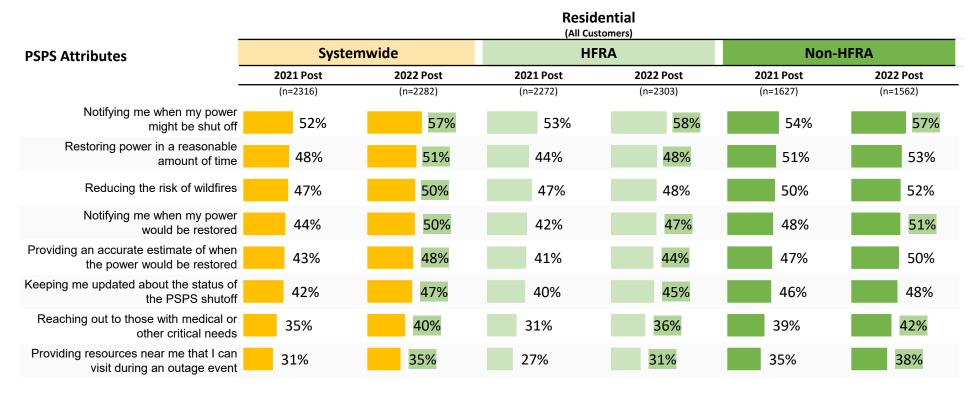


QPQ17. [CHECKED FOR STATUS UPDATES] How satisfied are you OVERALL with <u>all</u> of the Public Safety Power Shutoff communications that you received from SCE?



SCE PSPS Attribute Ratings – All Customers

- All customers whether they had experienced an outage / shutoff or not were asked to rate SCE on a list of PSPS-related attributes.
- Ratings improved pre- to post- across all these statements mostly due to improved ratings from HFRA customers. In 2021, these ratings dropped pre- to post- across all statements.



QPQ18. How would you rate SCE's Public Safety Power Shutoff (PSPS) program on each of the following?

SCE PSPS Improvement Suggestions — All Customers

- All customers whether they had experienced an outage / shutoff or not were asked to provide suggestions regarding SCE's PSPS communications.
- Despite the consistent improvements in SCE's use of text messages, fully 19% of these respondents ask for even more phone/mobile notifications.
- Less than 1% ask for notifications/alerts in different languages.

Residential (All Customers)

2021 Post (n=2316) 13%	2022 Post (n=2282)	2021 Post (n=2272)	2022 Post	2021 Post	2022 Post
		(n=2272)			2022 FUSI
13%			(n=2303)	(n=1627)	(n=1562)
	19%	13%	18%	13%	18%
5%	2%	5%	2%	5 %	2%
7%	8%	8%	11%	7%	6%
7%	10%	6%	7%	7%	11%
1%	2%	4%	2%	4%	1%
3%	7%	4%	7%	3%	8%
9%	5%	8%	5%	8%	5%
.%	3%	2%	2%	2%	3%
11%	4%	11%	3%	11%	5%
%	1%	1%	1%	1%	1%
%	5%	1%	6%	1%	5%
%	1%	1%	1%	1%	1%
%	2%	1%	2%	1%	3%
%	<1%	1%	<1%	1%	<1%
%	1%	1%	1%	1%	1%
%	<1%	1%	<1%	1%	<1%
5%	12%	5%	12%	5 %	13%
43%	38%	42%	38%	43%	39%
113	7% 7% % 9% 11% 6 6 6 6 6 7 8 43%	7% 10% % 2% % 7% 9% 5% % 3% 11% 4% % 1% % 1% % 1% % 1% % 1% % 1% % 12% 43% 38%	7% 10% 6% % 2% 4% % 7% 4% 9% 5% 8% % 3% 2% 11% 4% 11% % 1% 1% % 1% 1% % 1% 1% % 1% 1% % 1% 1% % 1% 1% % 12% 5% 43% 38% 42%	7% 10% 6% 7% % 2% 4% 2% % 7% 4% 7% 9% 5% 8% 5% % 3% 2% 2% 11% 4% 11% 3% % 1% 1% 1% % 1% 1% 2% % 1% 1% 2% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 12% 5% 12%	7% 10% 6% 7% 7% % 2% 4% 2% 4% % 7% 3% 3% 3% 9% 5% 8% 8% % 3% 2% 2% 2% 11% 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1% % 1% 1% 1%

QPQ19. In your opinion, what can SCE do to improve their communications regarding Public Safety Power Shutoffs?

Demographics

Household Characteristics

- Systemwide, the 2021 and 2022 Pre-survey sample profiles are quite similar.
- HFRA and Non-HFRA customers do have slightly different demographic profiles.
- HFRAs:
 - Slightly fewer household members and slightly less likely to have children at home
 - More homeowners (+20 pct. pts.)
 - More often rural (+18 pct. pts.)
 - Older and more often white (+13 pct. pts.)
 - Higher income (34% earning \$100k or more vs. 27% of those in non-HFRAs)

Household Characteristics

- In terms of number in the household, the presence of a 65+ household member and children in the household, HFRA and Non-HFRA are comparable.
- The 2022 Pre- to Post- survey sample compositions are comparable.

	Residential					
	Systemwide		HFRA		Non-HFRA	
Household Characteristics	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post
	(n=2310)	(n=2282)	(n=2425)	(n=2302)	(n=1558)	(n=1562)
Number in Household (Mean)	2.8	2.8	2.8	2.8	2.9	2.8
65+ in Household (%Yes)	15%	16%	19%	17%	14%	15%
Children in Household (%Yes)	35%	36%	31%	34%	38%	39%

D1. Including you, how many people live in your household?

D3. Is anyone in your household 65 or older?

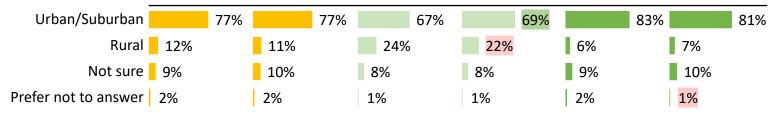
D4. Do you have children in your household under the age of 18?

Household Characteristics

- Home ownership is much more common in HFRAs
- HFRA customers are more often located in Rural areas
- The 2022 Pre- to Post- survey sample compositions are comparable.

Residential **Systemwide HFRA** Non-HFRA **Ownership** 2022 Pre 2022 Post 2022 Post 2022 Pre 2022 Pre 2022 Post (n=2310) (n=2282) (n=2425) (n=2302) (n=1558) (n=1562) Own 64% 62% 77% 76% 57% 56% 32% 19% Rent 20% 38% 32% 38% Other 1% 1% 1% 1% 1% 1% Prefer not to answer 4% 4% 4% 5% 3% 4%

Area of Residence



D11. Which of the following best describes your housing situation? D6. Which of the following best describes the area in which you live?

Age & Ethnicity

- HFRA customers are older and more often white.
- The 2022 Pre- to Post- survey sample compositions are comparable.

Desidential

_	Residential							
	Systemwide		HFRA		Non-HFRA			
Age	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post		
	(n=2310)	(n=2282)	(n=2425)	(n=2302)	(n=1558)	(n=1562)		
18-24	2%	2%	1%	1%	 3%	2%		
25-34	11%	12%	7%	8%	13 %	14%		
35-44	14%	16%	12%	13%	15 %	18%		
45-54	15%	15%	15%	16%	16%	16%		
55-64	21%	20%	23%	21%	20%	20%		
65-74	22%	21%	25%	24%	19%	19%		
75 or older	11%	10%	13%	12%	11 %	9%		
Prefer not to answer	3%	3%	3%	3%	 3%	2%		
Ethnicity								
Hispanic Origin	24%	27%	19%	20%	28%	30%		
Caucasian or White	60%	60%	69%	67%	56%	57%		
Asian	12%	13%	7%	9%	14%	14%		
African-American or Black	5 %	6%	4%	5%	6%	6 %		
American Indian, Eskimo or Alaska native	2%	2%	2%	2%	2%	2%		
Hawaiian or Pacific Islander	1%	1%	1%	1%	1%	1%		
Some other ethnicity	9%	9%	8%	7%	10%	11%		
Prefer not to say	15%	14%	13%	14%	15%	13%		

D2. What is your age?

D9. Are you, yourself, of Hispanic origin or descent (that is, Mexican, Puerto Rican, Cuban, Central American, South American, or some other Spanish background)?

D10. Are you...?

Income

- HFRA customers more often have higher household incomes.
- The 2022 Pre- to Post- survey sample compositions are comparable.

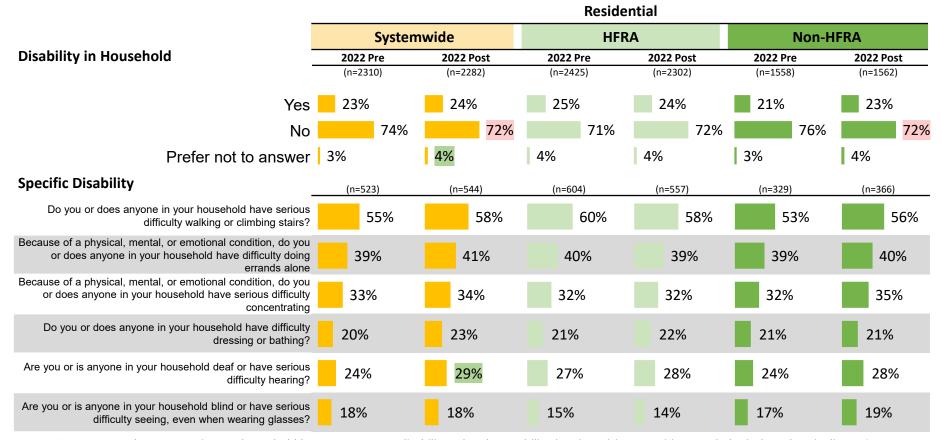
Residential

	Systemwide		HFRA		Non-HFRA		
Income	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post	
	(n=2310)	(n=2282)	(n=2425)	(n=2302)	(n=1558)	(n=1562)	
			_	_	_	_	
Less than \$50,000	27%	28%	20%	22%	31%	30%	
\$50,000 to less than \$100,000	23%	24%	23%	23%	23%	25%	
	_		=	23/0	=	_	
\$100,000 to less than \$150,000	15%	14%	16%	16%	15%	13%	
\$150,000 or more	14%	14%	18%	17%	12%	14%	
ψ 100,000 of filete	14/0	<u> </u>	10/0	1770	12/0	1470	
Prefer not to answer or not sure	21%	20%	23%	22%	20%	18%	

D7. What is your annual household income before taxes?

Disabilities

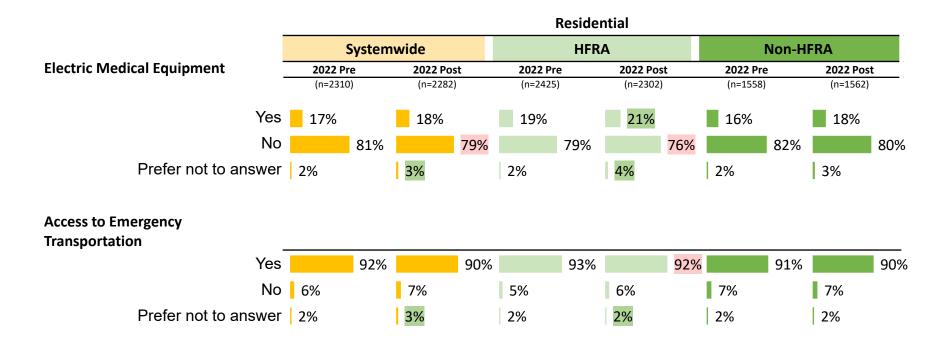
- Nearly one in four customers say there is someone in their household with a disability.
- The 2022 Pre- to Post- survey sample compositions are comparable.



D14. Do you or does anyone in your household have a permanent disability, related to mobility, hearing, vision, cognitive, psychological, or chronic disease? D15. [IF YES] Please answer yes or no regarding the specific type of disability for you or anyone in your household.

Medical Equipment / Emergency Transportation

- 18% of households report they have electrical equipment that is needed for medical reasons. This incidence is slightly higher in HFRAs.
- The 2022 Pre- to Post- survey sample compositions are comparable.



QD12. Do you, or does anyone in your household, rely on electricity for medical needs or medical equipment?

QD13. Do you have access to transportation in case of an emergency?

Marital Status & Education

- Aligning with their higher incidence of higher income households, HFRA customers more often achieved Masters or Doctorate degrees.
- The 2022 Pre- to Post- survey sample compositions are comparable.

_	Residential							
	Systemwide		HFRA		Non-HFRA			
Education	2022 Pre	2022 Post	2022 Pre	2022 Post	2022 Pre	2022 Post		
	(n=2310)	(n=2282)	(n=2425)	(n=2302)	(n=1558)	(n=1562)		
Some high school or less	4%	5%	3%	2%	5%	5%		
High school graduate	11%	11%	9%	9%	12%	12%		
Trade or technical school graduate	28%	28%	27%	27%	27%	29%		
Undergraduate college degree	19%	18%	18%	19%	20%	18%		
Some graduate study	4%	5%	5%	4%	4%	4%		
Masters or doctorate degree	28%	28%	33%	32%	26%	26%		
Prefer not to answer	6%	6%	6%	6%	6%	5%		

D8. What is the highest level of education you have had the opportunity to complete?

Appendix B
SCE_POSTSR2A_3-1-2023.gdb.zip; SCE_POSTSR2B_3-1-23.xlsx;
SCE_POSTSR3_3-1-23.xlsx; SCE_POSTSR4_3-1-2023.xlsx

This Appendix (along with a Word version of the Post-Season Report and Appendix A) will be filed via mixed media with the Commission's Docket Office and can be accessed at: https://on.sce.com/PSPSPostSeasonReporting