

<b>DOCKETED</b>	
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<b>Project Title:</b>	2022 Energy Code Update CEQA Documentation
<b>TN #:</b>	238757
<b>Document Title:</b>	Holland & Knight LLP Comments - Holland & Knight References (9 of 11)
<b>Description:</b>	N/A
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<b>Organization:</b>	Holland & Knight LLP
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*Comment Received From: Holland & Knight LLP  
Submitted On: 7/8/2021  
Docket Number: 21-BSTD-02*

## **Holland & Knight References (9 of 11)**

The attached document is the ninth of 11 separate uploads that contain the references cited in Holland & Knight's DEIR Comment Letter.

*Additional submitted attachment is included below.*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Angels Camp	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:48 AM*
Antioch	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:09 AM*
Antioch	Police Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:52 AM*
Arcata	City Administration	City Manager; Designated POC	Tier 2/3	Oct 8 2019 1:47:35 PM*
Arcata	Fire Department	General (24-hour)	Tier 2/3	Oct 8 2019 1:47:45 PM*
Arvin	Fire Department	Arvin Fire (24-hour)	Tier 2/3	Oct 8 2019 12:29:49 PM*
Arvin	City Administration	City Manager	Tier 2/3	Oct 8 2019 12:28:44 PM*
Arvin	Police Department	Emergency (24-hour)	Tier 2/3	Oct 8 2019 12:28:50 PM*
Atherton	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:06 AM*
Atherton	Police Department	Dispatch (24-hour)	Tier 2/3	Oct 7 2019 11:16:49 AM
Atherton	City Administration	Fire Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Atherton	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Atherton	City Administration	Police Chief; Designated POC	Tier 2/3	Oct 7 2019 11:14:08 AM*
Atherton	City Administration	Public Works Director	Tier 2/3	Oct 7 2019 11:14:55 AM
Atherton	Fire Department	Sergeant	Tier 2/3	Oct 6 2019 08:38:00 PM*
Auburn	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:07 AM*
Auburn	City Administration	Fire Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Auburn	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 7 2019 11:14:08 AM*
Auburn	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Auburn	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Bakersfield	City Administration	City Hall	Tier 2/3	Oct 8 2019 12:28:35 PM*
Bakersfield	Fire Department	General (24-hour)	Tier 2/3	Oct 8 2019 12:29:51 PM*
Bakersfield	Police Department	General (24-hour)	Tier 2/3	Oct 6 2019 9:45:00 PM
Berkeley	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:07 AM*
Berkeley	Fire Department	Fire Chief (24-hour); Designated POC	Tier 2/3	Oct 7 2019 11:14:06 AM*
Berkeley	Fire Department	Fire Chief (24-hour); Designated POC	Tier 2/3	Oct 10 2019 3:48:06 PM

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Berkeley	Fire Department	Fire Chief; Designated POC	Tier 2/3	Oct 7 2019 11:14:07 AM*
Berkeley	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Berkeley	City Administration	Mayor	Tier 2/3	Oct 10 2019 3:48:10 PM
Berkeley	Police Department	Police Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:38 AM*
Biggs	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:05 AM*
Biggs	Police Department	Dispatch (24-hour)	Tier 2/3	Oct 7 2019 11:14:05 AM*
Biggs	CAL FIRE	General CAL FIRE (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM
Blue Lake	City Administration	City Manager; Designated POC	Tier 2/3	Oct 8 2019 1:46:57 PM*
Blue Lake	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 8 2019 1:47:01 PM*
Blue Lake	City Administration	Mayor	Tier 2/3	Oct 8 2019 1:47:01 PM*
Blue Lake	City Administration	Public Works Director	Tier 2/3	Oct 8 2019 1:46:55 PM*
Butte County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:16:14 PM*
Butte County	County Administration	Chief Administrative Officer; Designated POC	Tier 2/3	Oct 6 2019 11:15:09 PM*
Butte County	Combined Fire-Police	Dispatch Supervisor	Tier 2/3	Oct 6 2019 9:03:00 PM
Butte County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 9:12:00 PM
Butte County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 9:26:00 PM
Butte County	County Administration	District Attorney	Tier 2/3	Oct 6 2019 11:14:58 PM*
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:15:29 PM*
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:15:34 PM*
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:15:42 PM*
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:16:27 PM*
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:16:17 PM*
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:15:53 PM*
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:14:35 PM*
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:16:10 PM*
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:16:13 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:16:35 PM*
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:16:04 PM*
Butte County	County Administration	General	Tier 2/3	Oct 6 2019 11:16:08 PM*
Butte County	DESS	General	Tier 2/3	Oct 6 2019 11:16:13 PM*
Butte County	EMS	General	Tier 2/3	Oct 6 2019 11:15:20 PM*
Butte County	OES	General	Tier 2/3	Oct 6 2019 11:15:24 PM*
Butte County	Sheriff's Department	General	Tier 2/3	Oct 6 2019 11:16:13 PM*
Butte County	CAL FIRE	General CAL FIRE (24-hour)	Tier 2/3	Oct 6 2019 9:34:00 PM*
Butte County	County OES	OES Director	Tier 2/3	Oct 8 2019 06:37 AM
Butte County	Office of Emergency Services	OES Director	Tier 2/3	Oct 6 2019 11:15:39 PM*
Butte County	Police Department	Public Safety Dispatcher	Tier 2/3	Oct 6 2019 8:45:00 PM
Butte County	Combined Fire-Police	Sergeant On Duty	Tier 2/3	Oct 6 2019 9:20:00 PM
Butte County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:16:07 PM*
Butte County	Berry Creek Rancheria	Chairman	Tier 2/3	Oct 6 2019 11:16:06 PM*
Butte County	Mechoopda Indian Tribe	Chairman	Tier 2/3	Oct 6 2019 11:15:39 PM*
Butte County	Middletown Rancheria	Chairman	Tier 2/3	Oct 6 2019 11:15:39 PM*
Butte County	Mooretown Rancheria	Chairman	Tier 2/3	Oct 6 2019 11:15:38 PM*
Butte County	North Fork Rancheria	Chairman	Tier 2/3	Oct 6 2019 11:15:23 PM*
Butte County	Coastal Band of the Chumash Nation	Chairperson	Tier 2/3	Oct 6 2019 11:16:11 PM*
Butte County	Mechoopda Indian Tribe	Councilmember	Tier 2/3	Oct 6 2019 11:16:24 PM*
Butte County	Mooretown Rancheria	Fire Chief	Tier 2/3	Oct 6 2019 11:15:38 PM*
Butte County	Enterprise Rancheria of Maidu Indians	Tribal Administration	Tier 2/3	Oct 6 2019 11:16:19 PM*
Butte County	Mechoopda Indian Tribe	Vice Chairwoman	Tier 2/3	Oct 6 2019 11:16:24 PM*
Calaveras County	Combined Fire-Police	Captain	Tier 2/3	Oct 6 2019 9:59:00 PM
Calaveras County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:37 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Calaveras County	County Administration	County Executive Officer	Tier 2/3	Oct 6 2019 11:16:17 PM*
Calaveras County	Fire Department	Fire Captain	Tier 2/3	Oct 6 2019 9:50:00 PM
Calaveras County	Fire Department	Fire Chief	Tier 2/3	Oct 6 2019 11:14:34 PM*
Calaveras County	Band of Mi-Wuk Indians	General	Tier 2/3	Oct 7 2019 5:47:00PM
Calaveras County	CAL FIRE/Sherriff	Local Cal Fire (24-hour)	Tier 2/3	Oct 6 2019 9:41:00 PM*
Calaveras County	Sheriff's Office	Non-Emergency (24-hour)	Tier 2/3	Oct 6 2019 11:15:31 PM*
Calaveras County	County OES	OES Director	Tier 2/3	Oct 6 2019 07:10:00 AM
Calaveras County	Office of Emergency Services	OES Director (24-hour), Designated POC	Tier 2/3	Oct 6 2019 11:15:55 PM*
Calistoga	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:07 AM*
Calistoga	Fire Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:06 AM*
Calistoga	Police Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:06 AM*
Calistoga	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Capitola	City Administration	City Hall	Tier 2/3	Oct 7 2019 11:15:03 AM*
Capitola	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:18 AM*
Capitola	Fire Department	Fire Prevention (24-hour)	Tier 2/3	Oct 7 2019 11:15:56 AM*
Capitola	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:53 AM*
Capitola	Police Department	Police Captain	Tier 2/3	Oct 7 2019 11:14:11 AM*
Capitola	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:11 AM*
Chico	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:15:26 AM*
Chico	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:08 AM*
Chico	Fire Department	General	Tier 2/3	Oct 7 2019 11:14:08 AM*
Chico	Police Department	General	Tier 2/3	Oct 7 2019 11:53:14 AM*
Chico	Police Department	General	Tier 2/3	Oct 7 2019 11:16:45 AM*
Chico	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Chico	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:08 AM*
Clearlake	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:30 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Clearlake	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:23 AM*
Clearlake	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:08 AM*
Clearlake	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:55 AM*
Cloverdale	City Administration	Assistant City Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:33 AM*
Cloverdale	City Administration	City Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:34 AM*
Cloverdale	City Administration	Director of Public Works (24-hour)	Tier 2/3	Oct 7 2019 11:14:35 AM*
Cloverdale	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Cloverdale	Police Department	Lieutenant (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Cloverdale	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:09 AM*
Cloverdale	Police Department	Police Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Colfax	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:08 AM*
Colfax	Fire Department	General	Tier 2/3	Oct 7 2019 11:16:07 AM*
Colfax	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:09 AM*
Colfax	Sheriff's Office	Substation (24-hour)	Tier 2/3	Oct 7 2019 11:16:14 AM*
Colusa County	Colusa Rancheria (Cahil Dehe Wintun)	Chairman	Zone 1	Oct 6 2019 11:16:07 PM*
Colusa County	Cortina Rancheria	Chairperson	Zone 1	Oct 6 2019 11:16:35 PM*
Colusa County	City Administration	City Hall	Zone 1	Oct 6 2019 11:16:07 PM*
Colusa County	City Administration	City Hall	Zone 1	Oct 6 2019 11:15:44 PM*
Colusa County	Combined Fire-Police	Dispatcher	Zone 1	Oct 6 2019 10:08:00 PM
Colusa County	Fire Department	General	Zone 1	Oct 6 2019 11:15:51 PM*
Colusa County	OES	General	Zone 1	Oct 6 2019 11:16:20 PM*
Colusa County	Police Department	General	Zone 1	Oct 6 2019 11:16:08 PM*
Colusa County	Fire Department	General (24-hour)	Zone 1	Oct 6 2019 11:15:09 PM*
Colusa County	Police Department	General (24-hour)	Zone 1	Oct 6 2019 11:15:53 PM*
Concord	City Administration	City Manager	Zone 1	Oct 7 2019 11:14:05 AM*
Concord	Fire Department	Emergency (24-hour)	Zone 1	Oct 7 2019 11:15:33 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

<b>City/County</b>	<b>Agency</b>	<b>Title</b>	<b>Classification (Tier 2/3, Zone 1)</b>	<b>Date/Time</b>
Concord	Police Department	Police Chief	Zone 1	Oct 7 2019 11:14:06 AM*
Contra Costa County	Fire Department	Battalion Chief	Tier 2/3	Oct 6 2019 11:15:43 PM*
Contra Costa County	County Administration	CEO	Tier 2/3	Oct 6 2019 11:16:08 PM*
Contra Costa County	County Administration	Chair of the Board (24-hour)	Tier 2/3	Oct 6 2019 11:15:58 PM*
Contra Costa County	Xolon Salinan Tribe	Chairperson	Tier 2/3	Oct 8 2019 7:16:47 PM*
Contra Costa County	County Administration	Chief of Staff	Tier 2/3	Oct 6 2019 11:15:07 PM*
Contra Costa County	County Administration	Chief Operating Officer	Tier 2/3	Oct 6 2019 11:16:15 PM*
Contra Costa County	Combined Fire-Police	Control	Tier 2/3	Oct 6 2019 9:33:00 PM
Contra Costa County	Police Department	control	Tier 2/3	Oct 6 2019 9:41:00 PM
Contra Costa County	County Administration	County Administrator (24-hour)	Tier 2/3	Oct 6 2019 11:15:46 PM*
Contra Costa County	County Administration	Director of Public Affairs	Tier 2/3	Oct 6 2019 11:15:41 PM*
Contra Costa County	Police Department	Dispatch	Tier 2/3	Oct 6 2019 8:42:00 PM
Contra Costa County	Police Department	Dispatch	Tier 2/3	Oct 6 2019 8:48:00 PM
Contra Costa County	Police Department	Dispatch	Tier 2/3	Oct 6 2019 8:54:00 PM
Contra Costa County	Police Department	Dispatch	Tier 2/3	Oct 6 2019 9:10:00 AM
Contra Costa County	Combined Fire-Police	Dispatch	Tier 2/3	Oct 6 2019 9:44:00 PM
Contra Costa County	Police Department	Dispatch	Tier 2/3	Oct 6 2019 9:57:00 PM
Contra Costa County	N/A	Dispatch	Tier 2/3	Oct 6 2019 10:10:00 PM
Contra Costa County	Police Department	Dispatch	Tier 2/3	Oct 6 2019 11:01:00 AM
Contra Costa County	OES	Emergency Services Manager (24-hour)	Tier 2/3	Oct 6 2019 11:19:59 PM*
Contra Costa County	OES	Emergency Services Manager (24-hour)	Tier 2/3	Oct 10 2019 3:48:11 PM
Contra Costa County	Fire Department	Fire Chief	Tier 2/3	Oct 6 2019 11:15:15 PM*
Contra Costa County	Office of Emergency Services	OES Director	Tier 2/3	Oct 6 2019 11:15:56 PM*
Contra Costa County	Office of Emergency Services	OES Warning System	Tier 2/3	Oct 6 2019 11:16:17 PM*
Contra Costa County	Police Department	Sargent	Tier 2/3	Oct 6 2019 9:24:00 PM



**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Contra Costa County	Police Department	Sargent	Tier 2/3	Oct 6 2019 10:47:00 PM
Contra Costa County	Fire Department	Sargent	Tier 2/3	Oct 6 2019 10:56:00 PM
Contra Costa County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:55:22 PM*
Corning	City Administration	City Manager; Designated POC	Zone 1	Oct 7 2019 11:15:01 AM*
Cotati	City Administration	City Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:13 AM*
Cotati	City Administration	Director of Public Works (24-hour)	Tier 2/3	Oct 7 2019 11:15:03 AM*
Cotati	Police Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:15:47 AM
Cotati	City Administration	Police Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:11 AM*
Cupertino	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:10 AM*
Cupertino	Fire Department	Deputy Chief; Designated POC (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Cupertino	Office of Emergency Services	Emergency Coordinator; Designated POC	Tier 2/3	Oct 7 2019 11:14:08 AM*
Cupertino	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Davis	Fire Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:15:41 AM*
Davis	Police Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:15:44 AM*
Dixon	City Administration	City Hall	Zone 1	Oct 7 2019 11:15:31 AM
Dixon	Fire Department	General (24-hour)	Zone 1	Oct 7 2019 11:16:38 AM
Dixon	Police Department	Non-Emergency (24-hour)	Zone 1	Oct 7 2019 11:15:36 AM
El Cerrito	City Administration	City Hall	Tier 2/3	Oct 7 2019 11:14:10 AM*
El Cerrito	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:12 AM*
El Cerrito	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:13 AM*
El Cerrito	Police Department	Police Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:12 AM*
El Dorado County	Fire Department	Captain - Service Dispatch	Tier 2/3	Oct 6 2019 8:51:00 PM
El Dorado County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:16:03 PM*
El Dorado County	County Administration	Chief Administrative Officer	Tier 2/3	Oct 6 2019 11:55:22 PM*
El Dorado County	Combined Fire-Police	dispatcher	Tier 2/3	Oct 6 2019 8:46:00 PM

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
El Dorado County	Fire Department	Fire Captain	Tier 2/3	Oct 6 2019 8:57:00 PM
El Dorado County	Fire Department	Fire Chief	Tier 2/3	Oct 6 2019 11:15:50 PM*
El Dorado County	County Administration	Health and Human Services	Tier 2/3	Oct 6 2019 11:15:49 PM*
El Dorado County	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 6 2019 11:15:14 PM*
El Dorado County	County OES	OES Director	Tier 2/3	Oct 8 2019 5:25:00 PM
El Dorado County	Office of Emergency Services	OES General	Tier 2/3	Oct 6 2019 9:37:11 PM*
El Dorado County	Police Department	Officer supervising dispatch	Tier 2/3	Oct 6 2019 8:38:00 PM
El Dorado County	Police Department	On Duty Public Officer	Tier 2/3	Oct 6 2019 8:31:00 PM
El Dorado County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:15:16 PM*
Eureka	City Administration	City Manager; Designated POC	Tier 2/3	Oct 8 2019 1:47:50 PM*
Eureka	City Administration	Mayor	Tier 2/3	Oct 8 2019 1:47:48 PM*
Eureka	Police Department	Police Chief	Tier 2/3	Oct 8 2019 1:46:53 PM*
Fairfield	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:07 AM*
Fairfield	Police Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:36 AM*
Fairfield	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:32 AM*
Fairfield	Fire Department	General	Tier 2/3	Oct 7 2019 11:16:48 AM*
Fairfield	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:08 AM*
Fairfield	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:33 AM*
Ferndale	City Administration	City Manager	Tier 2/3	Oct 8 2019 1:47:37 PM*
Ferndale	City Administration	Fire Chief (24-hour)	Tier 2/3	Oct 8 2019 1:46:55 PM*
Ferndale	City Administration	Police Chief	Tier 2/3	Oct 8 2019 1:47:20 PM*
Fort Bragg	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:04 AM*
Fort Bragg	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:04 AM*
Fort Bragg	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:04 AM*
Fort Bragg	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:05 AM*
Fortuna	City Administration	City Hall	Tier 2/3	Oct 8 2019 1:46:58 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Fortuna	Fire Department	Fire Chief (24-hour); Designated POC	Tier 2/3	Oct 8 2019 1:47:02 PM*
Fortuna	Fire Department	General	Tier 2/3	Oct 8 2019 1:51:14 PM*
Fremont	City Administration	City Manager	Zone 1	Oct 10 2019 3:48:15 PM
Fremont	City Administration	City Manager	Zone 1	Oct 7 2019 11:14:38 AM*
Fremont	City Administration	City Manager	Zone 1	Oct 7 2019 11:14:09 AM*
Fremont	City Administration	Mayor	Zone 1	Oct 7 2019 11:14:08 AM*
Fremont	Police Department	Non-Emergency	Zone 1	Oct 7 2019 11:14:07 AM*
Fremont	Police Department	Non-Emergency	Zone 1	Oct 10 2019 3:48:32 PM
Fremont	Police Department	Police Chief (24-hour)	Zone 1	Oct 7 2019 11:14:09 AM*
Fresno County	OES	Alternate OES Lieutenant (24-hour)	Tier 2/3	Oct 6 2019 11:15:21 PM*
Fresno County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:16:12 PM*
Fresno County	Haslett Basin Traditional Committee	Chairman	Tier 2/3	Oct 6 2019 11:16:13 PM*
Fresno County	Big Sandy Rancheria	Chairperson	Tier 2/3	Oct 6 2019 9:37:45 PM*
Fresno County	Big Sandy Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:16:01 PM*
Fresno County	Dumna Wo-Wah Tribal Government	Chairperson	Tier 2/3	Oct 6 2019 11:16:23 PM*
Fresno County	Nor-Rel-Muk Nation	Chairperson	Tier 2/3	Oct 6 2019 11:55:22 PM*
Fresno County	Table Mountain Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:16:16 PM*
Fresno County	Tejon Indian Tribe	Chairperson	Tier 2/3	Oct 6 2019 11:16:26 PM*
Fresno County	Cold Springs Rancheria of Mono Indians	Chairwoman	Tier 2/3	Oct 6 2019 11:16:11 PM*
Fresno County	Cold Springs Rancheria of Mono Indians	Chairwoman	Tier 2/3	Oct 6 2019 9:37:17 PM
Fresno County	Chaushila Yokuts	Chairman	Tier 2/3	Oct 6 2019 11:15:58 PM*
Fresno County	Fire Department	Comm. Officer for Fresno Kings and OES region 5	Tier 2/3	Oct 6 2019 10:43:00 PM
Fresno County	County Administration	County Executive Officer	Tier 2/3	Oct 6 2019 11:16:19 PM*
Fresno County	Table Mountain Rancheria	Cultural Resources Director	Tier 2/3	Oct 6 2019 9:37:11 PM

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Fresno County	Sierra Mono Museum	Director	Tier 2/3	Oct 6 2019 11:16:01 PM*
Fresno County	Police Department	Dispatch	Tier 2/3	Oct 6 2019 10:17:00 PM
Fresno County	Police Department	Dispatch Supervisor	Tier 2/3	Oct 6 2019 9:12:00 PM
Fresno County	Police Department	dispatcher	Tier 2/3	Oct 6 2019 10:09:00 PM
Fresno County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 10:23:00 PM
Fresno County	Fire Department	Emergency (24-hour)	Tier 2/3	Oct 6 2019 11:15:42 PM
Fresno County	Sheriff's Department	Emergency (24-hour)	Tier 2/3	Oct 6 2019 10:00:00 PM*
Fresno County	Police Department	emergency communications supervisor	Tier 2/3	Oct 6 2019 9:51:00 PM
Fresno County	Honey Lake Maidu	General	Tier 2/3	Oct 6 2019 11:16:04 PM*
Fresno County	The Mono Nation	General	Tier 2/3	Oct 6 2019 11:18:53 PM*
Fresno County	Police Department	Lead dispatcher	Tier 2/3	Oct 6 2019 9:29:00 PM
Fresno County	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 6 2019 11:15:30 PM*
Fresno County	OES	OES Lieutenant (24-hour)	Tier 2/3	Oct 6 2019 11:15:57 PM*
Fresno County	Sheriff's Department	Patrol Captain (24-hour)	Tier 2/3	Oct 6 2019 11:15:22 PM*
Fresno County	Police Department	Patrol watch commander Patrol.	Tier 2/3	Oct 6 2019 9:39:00 PM
Fresno County	Dunlap Band of Mono Indians Historical Preservation Society	President	Tier 2/3	Oct 6 2019 11:16:40 PM*
Fresno County	Police Department	Public Safety Dispatcher	Tier 2/3	Oct 6 2019 10:30:00 PM
Fresno County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:15:54 PM*
Fresno County	Table Mountain Rancheria	Tribal Administrator	Tier 2/3	Oct 6 2019 11:16:16 PM*
Fresno County	American Indian Council of Mariposa County (Southern Sierra Miwuk Nation)	Tribal Chair	Tier 2/3	Oct 6 2019 11:15:59 PM*
Fresno County	Dunlap Band of Mono Indians	Tribal Secretary	Tier 2/3	Oct 6 2019 11:16:18 PM
Fresno County	Kings River Choinumni Farm Tribe	Vice Chair	Tier 2/3	Oct 6 2019 11:24:43 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Gilroy	City Administration	City Administrator	Tier 2/3	Oct 7 2019 11:14:10 AM*
Gilroy	Fire Department	Fire Chief; Designated POC (24-hour)	Tier 2/3	Oct 7 2019 11:15:55 AM*
Gilroy	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:15:57 AM*
Glenn County	Grindstone Rancheria	Chairman	Zone 1	Oct 6 2019 11:16:05 PM*
Glenn County	Paskenta Rancheria	Chairman	Zone 1	Oct 6 2019 11:15:53 PM*
Glenn County	Guidiville Rancheria	Chairperson	Zone 1	Oct 6 2019 11:16:41 PM*
Glenn County	Picayune Rancheria	Chairperson	Zone 1	Oct 6 2019 11:15:57 PM*
Glenn County	Office of Emergency Services	Deputy Director OES	Zone 1	Oct 6 2019 11:15:36 PM*
Glenn County	N/A	Dispatch Supervisor	Zone 1	Oct 6 2019 8:43:00 PM
Glenn County	Orland Fire Department	General (24-hour)	Zone 1	Oct 6 2019 11:14:42 PM*
Glenn County	CAL FIRE	Local Cal Fire	Zone 1	Oct 6 2019 11:15:58 PM*
Glenn County	County Administration	Planning Director; Designated POC	Zone 1	Oct 6 2019 9:37:11 PM*
Glenn County	Combined Fire-Police	SGT	Zone 1	Oct 6 2019 8:37:00 PM
Glenn County	Sheriff's Department	Sheriff	Zone 1	Oct 6 2019 11:15:22 PM*
Glenn County	Grindstone Rancheria	TA	Zone 1	Oct 6 2019 11:55:22 PM*
Grass Valley	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:08 AM*
Grass Valley	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:07 AM*
Grass Valley	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:06 AM*
Grass Valley	Office of Emergency Services	General	Tier 2/3	Oct 7 2019 11:14:06 AM*
Grass Valley	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Grass Valley	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:06 AM*
Grass Valley	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:06 AM*
Gridley	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:07 AM*
Gridley	Police Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:15:42 AM
Gridley	CAL FIRE	General CAL FIRE (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Half Moon Bay	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:15:16 AM*
Half Moon Bay	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:05 AM*
Half Moon Bay	City Administration	Management Analyst; Designated POC	Tier 2/3	Oct 7 2019 11:14:06 AM*
Half Moon Bay	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:06 AM*
Half Moon Bay	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:16:01 AM*
Hayward	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:11 AM*
Hayward	Fire Department	Deputy Fire Chief; Designated POC	Tier 2/3	Oct 7 2019 11:14:08 AM*
Hayward	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:14 AM*
Hayward	Fire Department	Fire Coordinator (24-hour); Designated POC	Tier 2/3	Oct 7 2019 11:14:09 AM*
Healdsburg	City Administration	Asst. City Manager	Tier 2/3	Oct 7 2019 11:14:17 AM*
Healdsburg	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:17 AM*
Healdsburg	City Administration	Community Outreach	Tier 2/3	Oct 7 2019 11:14:14 AM*
Healdsburg	City Administration	Community Services	Tier 2/3	Oct 7 2019 11:14:15 AM*
Healdsburg	Dispatch Healdsburg	Dispatch (24-hour)	Tier 2/3	Oct 7 2019 11:14:18 AM*
Healdsburg	City Administration	Electric Superintendent (24- hour)	Tier 2/3	Oct 7 2019 11:14:10 AM*
Healdsburg	OES	Emergency Coordinator	Tier 2/3	Oct 7 2019 11:14:16 AM*
Healdsburg	City Administration	Finance Director	Tier 2/3	Oct 7 2019 11:14:17 AM*
Healdsburg	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:12 AM*
Healdsburg	Fire Department	Fire Marshall	Tier 2/3	Oct 7 2019 11:14:20 AM*
Healdsburg	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:10 AM*
Healdsburg	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:10 AM*
Healdsburg	Police Department	Police Lieutenant	Tier 2/3	Oct 7 2019 11:14:12 AM*
Healdsburg	Police Department	Police Sergeant	Tier 2/3	Oct 7 2019 11:14:20 AM*
Healdsburg	City Administration	Public Works Director	Tier 2/3	Oct 7 2019 11:14:13 AM*
Healdsburg	City Administration	Public Works Superintendent	Tier 2/3	Oct 7 2019 11:14:11 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Healdsburg	City Administration	Recreation Manager	Tier 2/3	Oct 7 2019 11:14:11 AM*
Healdsburg	City Utility Department	Utility Director (24-hour)	Tier 2/3	Oct 7 2019 11:14:14 AM*
Healdsburg	City Administration	Water/Wastewater Superintendent	Tier 2/3	Oct 7 2019 11:14:16 AM*
Humboldt County	Hoopa Valley Tribe	Assistant Chief	Tier 2/3	Oct 6 2019 11:15:09 PM*
Humboldt County	Hoopa Valley Tribe	Assistant Chief (24-hour)	Tier 2/3	Oct 6 2019 11:15:22 PM*
Humboldt County	Combined Fire-Police	B.C.	Tier 2/3	Oct 6 2019 9:22:00 PM
Humboldt County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:05 PM*
Humboldt County	Bear River Band of Rohnerville Rancheria	Chairman	Tier 2/3	Oct 6 2019 11:15:20 PM*
Humboldt County	Hoopa Valley Tribe	Chairman	Tier 2/3	Oct 6 2019 11:15:22 PM*
Humboldt County	Karuk Tribe	Chairman	Tier 2/3	Oct 6 2019 11:15:55 PM*
Humboldt County	Wiyot Tribe	Chairman	Tier 2/3	Oct 6 2019 11:15:50 PM*
Humboldt County	Yurok Tribe	Chairman	Tier 2/3	Oct 6 2019 11:15:37 PM*
Humboldt County	Hopland Reservation	Chairperson	Tier 2/3	Oct 6 2019 11:15:52 PM*
Humboldt County	Big Lagoon Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:16:18 PM*
Humboldt County	Blue Lake Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:15:39 PM*
Humboldt County	Cher-Ae Heights Indian Community of the Trinidad Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:15:20 PM*
Humboldt County	Resighini Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:16:19 PM*
Humboldt County	Wailaki Tribe	Chairperson	Tier 2/3	Oct 6 2019 11:16:35 PM*
Humboldt County	Hoopa Valley Tribe	Chief of Operations (24-hour)	Tier 2/3	Oct 6 2019 11:15:41 PM*
Humboldt County	County Administration	County Executive Officer	Tier 2/3	Oct 6 2019 11:15:46 PM*
Humboldt County	County Administration	County Health and human Services	Tier 2/3	Oct 6 2019 11:16:15 PM*
Humboldt County	County Administration	Director of Power Resources	Tier 2/3	Oct 6 2019 11:15:49 PM*
Humboldt County	Fire Department	Dispatch	Tier 2/3	Oct 6 2019 10:20:00 PM
Humboldt County	Fire Department	Duty Dispatcher	Tier 2/3	Oct 6 2019 9:38:00 PM

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Humboldt County	Fire Department	Duty Officer	Tier 2/3	Oct 6 2019 10:10:00 PM
Humboldt County	Cher-Ae Heights Indian Community of the Trinidad Rancheria	Environmental Coordinator	Tier 2/3	Oct 6 2019 9:42:47 PM*
Humboldt County	County Administration	Environmental Health	Tier 2/3	Oct 6 2019 11:16:14 PM*
Humboldt County	Blue Lake Rancheria	Fire Chief	Tier 2/3	Oct 6 2019 11:15:20 PM*
Humboldt County	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 6 2019 11:15:57 PM*
Humboldt County	Yocha Dehe Wintun Nation	Fire Chief (24-hour)	Tier 2/3	Oct 6 2019 11:15:27 PM*
Humboldt County	Fire Department	Fire Safe Council	Tier 2/3	Oct 6 2019 11:16:16 PM*
Humboldt County	DHHS	General	Tier 2/3	Oct 6 2019 11:16:31 PM*
Humboldt County	DHHS	General	Tier 2/3	Oct 6 2019 11:16:18 PM*
Humboldt County	OES	General	Tier 2/3	Oct 6 2019 11:16:14 PM*
Humboldt County	Public Health	General	Tier 2/3	Oct 6 2019 11:16:30 PM*
Humboldt County	Public Health	General	Tier 2/3	Oct 6 2019 11:16:14 PM*
Humboldt County	County Administration	General	Tier 2/3	Oct 6 2019 11:16:33 PM*
Humboldt County	Cher-Ae Heights Indian Community of the Trinidad Rancheria	Historic Preservation Officer	Tier 2/3	Oct 6 2019 9:42:42 PM*
Humboldt County	Karuk Tribe	Historic Preservation Officer	Tier 2/3	Oct 6 2019 11:15:55 PM*
Humboldt County	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 6 2019 11:15:58 PM*
Humboldt County	Office of Emergency Services	OES Director (24-hour)	Tier 2/3	Oct 6 2019 11:15:42 PM*
Humboldt County	Blue Lake Rancheria	On Duty Supervisor	Tier 2/3	Oct 6 2019 11:15:53 PM*
Humboldt County	Blue Lake Rancheria	Police Chief	Tier 2/3	Oct 6 2019 11:15:15 PM*
Humboldt County	Combined Fire-Police	Sgt	Tier 2/3	Oct 6 2019 9:30:00 PM
Humboldt County	Police Department	Sgt	Tier 2/3	Oct 6 2019 9:45:00 PM
Humboldt County	Police Department	Sgt	Tier 2/3	Oct 6 2019 9:51:00 PM
Humboldt County	Police Department	Sgt	Tier 2/3	Oct 6 2019 9:56:00 PM



**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Humboldt County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:14:26 PM*
Humboldt County	State Government	State Assemblymember	Tier 2/3	Oct 6 2019 11:15:51 PM*
Humboldt County	State Government	State Senator	Tier 2/3	Oct 6 2019 11:55:22 PM*
Humboldt County	Fire Department	Telegraph Ridge Fire Protection	Tier 2/3	Oct 6 2019 11:16:16 PM*
Humboldt County	Wiyot Tribe	Tribal Administration	Tier 2/3	Oct 6 2019 11:15:50 PM*
Humboldt County	Yurok Tribe	Vice Chairman	Tier 2/3	Oct 6 2019 11:15:37 PM*
Humboldt County	Blue Lake Rancheria	Vice Chairperson	Tier 2/3	Oct 7 2019 12:42:09 AM
Jackson	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:48 AM*
Jackson	Fire Department	Fire Chief (24-hour), Designated POC	Tier 2/3	Oct 7 2019 11:14:09 AM*
Jackson	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:20 AM*
Jackson	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:49 AM*
Jackson	City Administration	Public Works Foreman	Tier 2/3	Oct 7 2019 11:14:19 AM*
Kern County	Fire Department	Asst Center Mgr	Tier 2/3	Oct 6 2019 10:55:00 PM
Kern County	Traditional Choinumni Tribe (East of Kings River)	Chairman	Tier 2/3	Oct 6 2019 11:15:48 PM*
Kern County	Tubatulabal Tribe	Chairman	Tier 2/3	Oct 6 2019 11:55:22 PM*
Kern County	Tule River Indian Tribe	Chairman	Tier 2/3	Oct 6 2019 11:14:44 PM*
Kern County	Kawaiisu Tribe	Chairperson	Tier 2/3	Oct 6 2019 11:16:01 PM*
Kern County	Kern Valley Indian Council	Chairperson	Tier 2/3	Oct 6 2019 11:55:22 PM*
Kern County	Wukchumni Tribal Council	Chairperson	Tier 2/3	Oct 6 2019 11:19:35 PM*
Kern County	Police Department	Dispatch; Base Precinct Watch Commander	Tier 2/3	Oct 6 2019 9:15:00 PM
Kern County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 11:10:00 PM
Kern County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 8:50:00 PM
Kern County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 10:20:00 PM
Kern County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 8:22:00 PM
Kern County	Police Department	Duty Officer	Tier 2/3	Oct 6 2019 10:45:00 PM

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Kern County	Fire Department	Duty Officer (24-hour)	Tier 2/3	Oct 6 2019 11:00:00 PM*
Kern County	OES	Emergency (24-hour)	Tier 2/3	Oct 6 2019 11:15:56 PM*
Kern County	Sheriff's Office	Emergency (24-hour)	Tier 2/3	Oct 6 2019 11:14:44 PM*
Kern County	OEM	Emergency Supervisor (24-hour)	Tier 2/3	Oct 6 2019 11:14:46 PM*
Kern County	Police Department	Fire Dept Dispatch	Tier 2/3	Oct 6 2019 9:45:00 PM
Kern County	Sheriff's Office	General (24-hour)	Tier 2/3	Oct 6 2019 11:15:21 PM*
Kern County	Kern Valley Indian Council	Historic Preservation Officer	Tier 2/3	Oct 6 2019 11:16:20 PM*
Kern County	Tejon Indian Tribe	Historic Preservation Officer	Tier 2/3	Oct 6 2019 11:16:26 PM*
Kern County	OEM	Manager	Tier 2/3	Oct 6 2019 11:15:57 PM*
Kern County	Police Department	Operator	Tier 2/3	Oct 6 2019 9:30:00 PM
Kern County	Police Department	Police Technician	Tier 2/3	Oct 6 2019 10:15:00 PM
Kern County	Police Department	Public Safety Dispatch Supervisor	Tier 2/3	Oct 6 2019 9:00:00 PM
Kern County	Police Department	Supervisor Communications Center	Tier 2/3	Oct 6 2019 10:10:00 PM
Lafayette	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:07 AM*
Lafayette	Fire Department	Fire Chief; Designated POC	Tier 2/3	Oct 7 2019 11:14:10 AM*
Lafayette	Fire Department	Fire Chief; Designated POC	Tier 2/3	Oct 10 2019 3:48:06 PM
Lafayette	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Lake County	County Administration	Administrator	Tier 2/3	Oct 6 2019 11:15:50 PM*
Lake County	Fire Department	CAL FIRE (24-hour)	Tier 2/3	Oct 6 2019 11:15:43 PM*
Lake County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:51 PM*
Lake County	Elem Indian Colony	Chairman	Tier 2/3	Oct 6 2019 11:15:37 PM*
Lake County	Wilton Rancheria	Chairman	Tier 2/3	Oct 6 2019 11:16:05 PM*
Lake County	Robinson Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:15:46 PM*
Lake County	County Administration	County Administrative Officer	Tier 2/3	Oct 6 2019 11:15:27 PM*
Lake County	Elem Indian Colony	Cultural Resources	Tier 2/3	Oct 7 2019 2:19:10 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Lake County	Big Valley Band of Pomo Indians	Deputy Tribal Administrator (24-hour)	Tier 2/3	Oct 6 2019 11:15:58 PM*
Lake County	Police Department	Dispatch	Tier 2/3	Oct 6 2019 8:50:00 PM
Lake County	Sheriff's Office	Dispatch (24-hour)	Tier 2/3	Oct 6 2019 11:16:11 PM*
Lake County	OES	Duty Supervisor	Tier 2/3	Oct 6 2019 9:00:00 PM*
Lake County	Scotts Valley Band of Pomo Indians	EMS Administrator (24-hour)	Tier 2/3	Oct 6 2019 11:15:03 PM*
Lake County	Elem Indian Colony	Env Director	Tier 2/3	Oct 6 2019 9:37:13 PM*
Lake County	Big Valley Band of Pomo Indians	Executive Assistant (24-hour)	Tier 2/3	Oct 6 2019 11:14:28 PM*
Lake County	Scotts Valley Band of Pomo Indians	Finance Officer (24-hour)	Tier 2/3	Oct 6 2019 11:16:19 PM*
Lake County	Sheriff's Department	Lieutenant	Tier 2/3	Oct 6 2019 11:15:57 PM*
Lake County	Scotts Valley Band of Pomo Indians	PIO (24-hour)	Tier 2/3	Oct 6 2019 11:16:16 PM*
Lake County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:16:26 PM*
Lake County	Winnemem Wintu Tribe	Spiritual Leader	Tier 2/3	Oct 6 2019 11:55:22 PM*
Lake County	Elem Indian Colony	TA	Tier 2/3	Oct 6 2019 9:37:18 PM*
Lake County	Upperville Pomo	Tribal Administrator	Tier 2/3	Oct 6 2019 11:14:42 PM*
Lake County	Big Valley Band of Pomo Indians	Tribal Administrator (24-hour)	Tier 2/3	Oct 6 2019 11:16:04 PM*
Lake County	Sherwood Valley Band of Pomo Indians	Tribal Administrator (24-hour)	Tier 2/3	Oct 6 2019 11:15:19 PM*
Lake County	Potter Valley Tribe	Tribal Chairman	Tier 2/3	Oct 6 2019 11:15:16 PM*
Lake County	Big Valley Band of Pomo Indians	Tribal Chairman (24-hour)	Tier 2/3	Oct 6 2019 11:15:29 PM*
Lake County	Potter Valley Tribe	Tribal Treasurer	Tier 2/3	Oct 6 2019 11:14:59 PM*
Lake County	Sheriff's Department	Under Sheriff	Tier 2/3	Oct 6 2019 11:16:38 PM*
Lake County	Robinson Rancheria	Vice Chairperson	Tier 2/3	Oct 6 2019 11:15:46 PM*
Lake County	Middletown Rancheria	Vice Chairwoman	Tier 2/3	Oct 6 2019 11:15:39 PM*
Lakeport	City Administration	City Manager; Designated POC (24-hour)	Tier 2/3	Oct 7 2019 11:15:10 AM*
Lakeport	City Administration	Community Development (24-hour)	Tier 2/3	Oct 7 2019 11:14:11 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Lakeport	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:15:15 AM*
Lakeport	Police Department	Police Chief (24-hour)	Tier 2/3	Oct 7 2019 11:15:11 AM*
Lakeport	Police Department	Police Lieutenant (24-hour)	Tier 2/3	Oct 10 2019 3:48:07 PM
Lakeport	City Administration	Public Works (24-hour)	Tier 2/3	Oct 7 2019 11:14:22 AM*
Lassen County	Susanville Indian Rancheria	Administrator (24-hour)	Tier 2/3	Oct 6 2019 11:15:20 PM*
Lassen County	County Administration	CAO	Tier 2/3	Oct 6 2019 11:16:20 PM*
Lassen County	Alturas Rancheria of Pit River	Chairperson	Tier 2/3	Oct 6 2019 11:55:22 PM*
Lassen County	Indian Canyon Mutsun Band of Costanoan	Chairperson	Tier 2/3	Oct 6 2019 11:16:11 PM
Lassen County	Pit River Tribes	Chairperson	Tier 2/3	Oct 6 2019 11:16:31 PM*
Lassen County	Susanville Indian Rancheria	Chairwoman (24-hour)	Tier 2/3	Oct 6 2019 11:15:04 PM*
Lassen County	Susanville Indian Rancheria	Emergency Services Specialist (24-hour)	Tier 2/3	Oct 6 2019 11:16:17 PM*
Lassen County	OES	General	Tier 2/3	Oct 6 2019 11:15:40 PM*
Lassen County	Pit River Tribes	General	Tier 2/3	Oct 6 2019 11:16:11 PM*
Lassen County	Supervisor	General (24hour)	Tier 2/3	Oct 6 2019 8:35:00 PM*
Lassen County	Fire Department	Supervisor	Tier 2/3	Oct 6 2019 8:42:00 PM*
Lincoln	Police Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:16:03 AM*
Lincoln	City Administration	Interim City manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:08 AM*
Livermore	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:05 AM*
Livermore	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:06 AM*
Livermore	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:36 AM*
Livermore	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:35 AM*
Loomis	City Administration	Fire Chief	Tier 2/3	Oct 7 2019 11:14:08 AM*
Loomis	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Loomis	Sheriff's Office	Substation (24-hour)	Tier 2/3	Oct 7 2019 11:15:36 AM*
Loomis	City Administration	Town Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:07 AM*
Los Altos	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:08 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Los Altos	Police Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:17:06 AM*
Los Altos Hills	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:08 AM*
Los Altos Hills	Police Department	Emergency (24-hour)	Tier 2/3	Oct 6 2019 09:05:00 PM*
Los Altos Hills	City Administration	EMS Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:10 AM*
Los Altos Hills	City Administration	Public Works Director; Designated POC	Tier 2/3	Oct 7 2019 11:14:08 AM*
Los Gatos	City Administration	Assistant Town Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:08 AM*
Los Gatos	City Administration	Community Outreach	Tier 2/3	Oct 7 2019 11:14:09 AM*
Los Gatos	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:35 AM*
Los Gatos	City Administration	Town Manager	Tier 2/3	Oct 7 2019 11:14:55 AM*
Madera County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:42 PM*
Madera County	Pinoleville Reservation	Chairperson	Tier 2/3	Oct 6 2019 11:16:35 PM*
Madera County	Fire Department	Command Center	Tier 2/3	Oct 6 2019 10:20:00 PM*
Madera County	County Administration	County Executive Officer	Tier 2/3	Oct 6 2019 11:14:55 PM*
Madera County	Fire Department	Duty Chief, Designated POC (24-hour)	Tier 2/3	Oct 6 2019 11:15:11 PM*
Madera County	Tuolumne Band of Me-Wuk Indians	Executive Director	Tier 2/3	Oct 6 2019 11:15:27 PM*
Madera County	Fire Department	Fire Chief	Tier 2/3	Oct 6 2019 11:14:50 PM*
Madera County	The Mono Nation	General	Tier 2/3	Oct 6 2019 11:18:53 PM*
Madera County	OES	OES Director	Tier 2/3	Oct 6 2019 9:05:00 PM*
Madera County	Office of Emergency Services	OES Director	Tier 2/3	Oct 6 2019 11:15:42 PM*
Madera County	Combined Fire-Police	Supervisor	Tier 2/3	Oct 6 2019 8:49:00 AM
Madera County	Police Department	Supervisor	Tier 2/3	Oct 6 2019 8:57:00 AM
Madera County	North Fork Rancheria	Vice Chairman	Tier 2/3	Oct 6 2019 11:15:15 PM*
Maricopa	City Administration	City Hall	Tier 2/3	Oct 8 2019 12:28:31 PM*
Maricopa	Fire Department	Station 22	Tier 2/3	Oct 8 2019 12:33:19 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Maricopa	Sheriff's Office	Taft Substation (24-hour)	Tier 2/3	Oct 8 2019 12:30:24 PM*
Marin County	Fire Department	Battalion Chief	Zone 1	Oct 6 2019 9:35:00 AM
Marin County	County Administration	Chair of the Board	Zone 1	Oct 6 2019 11:16:04 PM*
Marin County	OES	Communications Center (24-hour)	Zone 1	Oct 6 2019 09:15:00 PM*
Marin County	County Administration	County Administrator	Zone 1	Oct 6 2019 11:15:55 PM*
Marin County	Police Department	Dispatcher	Zone 1	Oct 6 2019 9:20:00 AM
Marin County	OES	Duty Officer (24-hour)	Zone 1	Oct 6 2019 11:15:04 PM*
Marin County	Sheriff's Office	General (24-hour)	Zone 1	Oct 6 2019 11:15:26 PM*
Marin County	Fire Department	Non-Emergency (24-hour)	Zone 1	Oct 6 2019 11:15:43 PM*
Marin County	OES	OES Coordinator	Zone 1	Oct 6 2019 11:15:35 PM*
Marin County	Office of Emergency Services	OES Director	Zone 1	Oct 6 2019 11:15:17 PM*
Marin County	County Administration	President of the Board	Zone 1	Oct 6 2019 11:15:32 PM*
Marin County	Public Health	Public Health Officer	Zone 1	Oct 6 2019 11:14:34 PM*
Marin County	Police Department	Supervisor	Zone 1	Oct 6 2019 9:15:00 AM
Marin County	Fire Department	Supervisor	Zone 1	Oct 6 2019 9:15:00 AM
Marin County	Police Department	Supervisor	Zone 1	Oct 6 2019 9:24:00 AM
Marin County	Police Department	Supervisor	Zone 1	Oct 6 2019 9:29:00 AM
Marin County	Fire Department	Woodacre Firehouse (24-hour)	Zone 1	Oct 6 2019 11:15:26 PM*
Mariposa County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:36 PM*
Mariposa County	County Fire Department	Chief (24-hour)	Tier 2/3	Oct 6 2019 11:16:29 PM*
Mariposa County	County Administration	County Administrative Officer (24-hour)	Tier 2/3	Oct 6 2019 11:15:37 PM*
Mariposa County	Public Works	Director	Tier 2/3	Oct 6 2019 11:15:27 PM*
Mariposa County	Health and Human Services (HHSA)	Director (24-hour)	Tier 2/3	Oct 6 2019 11:14:52 PM*
Mariposa County	Fire Department	Duty Chief, Designated POC (24- hour)	Tier 2/3	Oct 6 2019 11:15:11 PM*
Mariposa County	Fire Department	Emergency Command Center (24-hour)	Tier 2/3	Oct 6 2019 11:14:51 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Mariposa County	OES	Emergency Services Coordinator (24-hour)	Tier 2/3	Oct 6 2019 11:16:18 PM*
Mariposa County	Sheriff's Office	Special Operations (24-hour)	Tier 2/3	Oct 6 2019 11:16:05 PM*
Mariposa County	Fire Department	Supervisor	Tier 2/3	Oct 6 2019 9:48:00 AM
Mariposa County	N/A	Supervisor	Tier 2/3	Oct 6 2019 9:53:00 AM
Mariposa County	Office of Emergency Services	Supervisor/Dispatch	Tier 2/3	Oct 6 2019 10:29:00 PM*
Martinez	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:07 AM*
Martinez	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Martinez	Police Department	Police Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:06 AM*
Marysville	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:38 AM*
Marysville	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:46 AM*
Marysville	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:36 AM*
McFarland	City Administration	City Hall	Tier 2/3	Oct 8 2019 12:28:34 PM*
McFarland	Police Department	Emergency (24-hour)	Tier 2/3	Oct 8 2019 12:28:32 PM*
McFarland	Fire Department	Station 33 (24-hour)	Tier 2/3	Oct 8 2019 12:32:08 PM*
Mendocino County	Shebelna Band of Mendocino Coast Pomo Indians	Chairperson	Tier 2/3	Oct 7 2019 5:25:00 PM
Mendocino County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:14:34 PM*
Mendocino County	County Administration	County Executive Officer	Tier 2/3	Oct 6 2019 11:16:00 PM*
Mendocino County	Police Department	Dispatch SUPV	Tier 2/3	Oct 6 2019 8:50:00 PM
Mendocino County	Police Department	Dispatch SUPV	Tier 2/3	Oct 6 2019 8:50:00 PM
Mendocino County	Police Department	Dispatch SUPV	Tier 2/3	Oct 6 2019 8:55:00 PM
Mendocino County	Fire Department	Dispatch SUPV	Tier 2/3	Oct 6 2019 10:00:00 PM
Mendocino County	Combined Fire-Police	Dispatcher	Tier 2/3	Oct 6 2019 9:00:00 PM
Mendocino County	Fire Department	Dispatcher On-Call	Tier 2/3	Oct 6 2019 9:55:00 PM
Mendocino County	Fire Department	Fire Chief	Tier 2/3	Oct 6 2019 11:15:27 PM*
Mendocino County	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 6 2019 11:14:49 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Mendocino County	Sheriff's Department	Sheriff; Designated POC (24-hour)	Tier 2/3	Oct 6 2019 11:14:57 PM*
Mendocino County	Police Department	Undersheriff; Designated POC (24-hour)	Tier 2/3	Oct 6 2019 11:15:52 PM*
Mendocino County	County Administration	Account Executive	Tier 2/3	Oct 6 2019 11:15:06 PM*
Mendocino County	County Administration	CEO	Tier 2/3	Oct 6 2019 11:15:41 PM*
Mendocino County	Coyote Valley Band of Pomo Indians	Chairman	Tier 2/3	Oct 6 2019 11:16:04 PM*
Mendocino County	Lower Lake Rancheria	Chairman	Tier 2/3	Oct 6 2019 11:15:55 PM*
Mendocino County	Manchester-Point Arena Rancheria	Chairman	Tier 2/3	Oct 6 2019 11:16:05 PM*
Mendocino County	Coyote Valley Band of Pomo Indians	Chairperson	Tier 2/3	Oct 6 2019 9:37:22 PM*
Mendocino County	Laytonville Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:16:31 PM*
Mendocino County	Redding Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:16:12 PM*
Mendocino County	Shebelna Band of Mendocino Coast Pomo Indians	Chairperson	Tier 2/3	Oct 6 2019 11:15:56 PM*
Mendocino County	Strawberry Valley Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:55:22 PM*
Mendocino County	Shingle Springs Rancheria	Chairwoman	Tier 2/3	Oct 6 2019 11:16:09 PM*
Mendocino County	Round Valley Reservation	Chief of Police	Tier 2/3	Oct 6 2019 11:15:08 PM*
Mendocino County	County Administration	Director of Customer Care	Tier 2/3	Oct 6 2019 11:16:04 PM*
Mendocino County	Resighini Rancheria	Environmental Director	Tier 2/3	Oct 6 2019 11:16:19 PM*
Mendocino County	Hopland Reservation	General	Tier 2/3	Oct 6 2019 11:15:52 PM*
Mendocino County	Noyo River Indian Community	General	Tier 2/3	Oct 6 2019 11:55:22 PM*
Mendocino County	Laytonville Rancheria	Housing Director	Tier 2/3	Oct 6 2019 11:16:31 PM*
Mendocino County	Sherwood Valley Band of Pomo Indians	Maintenance Supervisor (24-hour)	Tier 2/3	Oct 6 2019 11:15:51 PM*
Mendocino County	Manchester-Point Arena Rancheria	Tribal Administration	Tier 2/3	Oct 6 2019 11:16:27 PM*
Mendocino County	Coyote Valley Band of Pomo Indians	Tribal Administrator	Tier 2/3	Oct 6 2019 11:14:55 PM*
Mendocino County	Round Valley Reservation	Tribal Business Administrator	Tier 2/3	Oct 6 2019 11:15:22 PM*



**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Mendocino County	Sherwood Valley Band of Pomo Indians	Tribal Chairperson	Tier 2/3	Oct 6 2019 11:15:51 PM*
Mendocino County	Round Valley Reservation	Tribal President	Tier 2/3	Oct 6 2019 11:15:08 PM*
Menlo Park	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:16:14 AM*
Menlo Park	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 6 2019 9:45:00 PM
Menlo Park	City Administration	Public Works Director; Designated POC	Tier 2/3	Oct 7 2019 11:14:08 AM*
Merced County	County Administration	Chair of the Board	Zone 1	Oct 6 2019 11:15:50 PM*
Merced County	County Administration	County Executive Officer	Zone 1	Oct 6 2019 11:55:22 PM*
Merced County	OES	Deputy Director of Administration	Zone 1	Oct 6 2019 11:14:34 PM*
Merced County	City Administration	Designated POC	Zone 1	Oct 6 2019 11:15:09 PM*
Merced County	Police Department	Dispatcher	Zone 1	Oct 6 2019 9:10:00 PM
Merced County	Police Department	Dispatcher	Zone 1	Oct 6 2019 9:15:00 PM
Merced County	Combined Fire-Police	Dispatcher	Zone 1	Oct 6 2019 9:25:00 PM
Merced County	Combined Fire-Police	Dispatcher	Zone 1	Oct 6 2019 9:30:00 PM
Merced County	Police Department	Dispatcher	Zone 1	Oct 6 2019 9:36:00 PM
Merced County	Police Department	Dispatcher	Zone 1	Oct 6 2019 10:05:00 PM
Merced County	CAL FIRE	Duty Chief; Designated POC (24-hour)	Zone 1	Oct 6 2019 11:15:11 PM*
Merced County	OES	OES Director (24-hour)	Zone 1	Oct 6 2019 11:15:59 PM*
Merced County	Sheriff's Department	Sheriff	Zone 1	Oct 6 2019 11:15:39 PM*
Mill Creek	City Administration	City Manager	Zone 1	Oct 7 2019 11:14:08 AM*
Mill Creek	City Administration	Mayor	Zone 1	Oct 7 2019 11:15:38 AM*
Mill Creek	Police Department	Police Chief	Zone 1	Oct 7 2019 11:14:09 AM*
Mill Valley	City of Mill Valley	Building Maintenance Supervisor	Zone 1	Oct 8 2019 1:46:53 PM*
Mill Valley	City Administration	City Manager	Zone 1	Oct 8 2019 1:46:53 PM*
Mill Valley	Fire Department	Fire Chief	Zone 1	Oct 8 2019 1:47:01 PM*
Mill Valley	Police Department	Police Chief (24-hour)	Zone 1	Oct 8 2019 1:47:10 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

<b>City/County</b>	<b>Agency</b>	<b>Title</b>	<b>Classification (Tier 2/3, Zone 1)</b>	<b>Date/Time</b>
Milpitas	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:15:54 AM*
Milpitas	Fire Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:15:21 AM*
Milpitas	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:37 AM*
Milpitas	City Administration	Public Works Director; Designated POC	Tier 2/3	Oct 7 2019 11:14:55 AM*
Modesto	City Administration	City manager	Tier 2/3	Oct 7 2019 11:14:09 AM*
Modesto	Fire Department	Fire Chief; Designated POC (24-hour)	Tier 2/3	Oct 7 2019 11:14:06 AM*
Modesto	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:15:43 AM*
Monterey County	Salinan Tribe of Monterey, San Luis Obispo and San Benito Counties	Chairperson	Tier 2/3	Oct 6 2019 11:16:04 PM
Monterey County	County Administration	County Administrative Officer (24-hour)	Tier 2/3	Oct 6 2019 10:21:46 PM*
Monterey County	Combined Fire- Police	Dispatch SUPV	Tier 2/3	Oct 6 2019 8:40:00 PM
Monterey County	California Office of Emergency Services	Emergency Services Coordinator	Tier 2/3	Oct 6 2019 11:16:20 PM*
Monterey County	Fire Department	Fire Chief	Tier 2/3	Oct 6 2019 11:14:41 PM*
Monterey County	Office of Emergency Services	OES Director (24- hour)	Tier 2/3	Oct 6 2019 11:14:52 PM*
Monterey County	Sheriff's Department	Sheriff (24-hour)	Tier 2/3	Oct 6 2019 11:15:48 PM*
Monterey County	County Administration	Supervisor - District 1	Tier 2/3	Oct 6 2019 11:15:41 PM*
Monterey County	County Administration	Supervisor - District 2	Tier 2/3	Oct 6 2019 11:15:44 PM*
Monterey County	County Administration	Supervisor - District 4	Tier 2/3	Oct 6 2019 11:15:33 PM*
Monterey County	County Administration	Supervisor - District 5	Tier 2/3	Oct 6 2019 11:16:01 PM*
Moraga	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:14 AM*
Moraga	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:06 AM*
Moraga	Office of Emergency Services	OES Director	Tier 2/3	Oct 7 2019 11:14:07 AM*
Morgan Hill	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:13 AM*
Morgan Hill	Fire Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

<b>City/County</b>	<b>Agency</b>	<b>Title</b>	<b>Classification (Tier 2/3, Zone 1)</b>	<b>Date/Time</b>
Morgan Hill	Fire Department	Fire Chief; Designated POC	Tier 2/3	Oct 7 2019 11:14:09 AM*
Morgan Hill	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:09 AM*
Morgan Hill	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Morgan Hill	City Administration	Public Services Director; Designated POC	Tier 2/3	Oct 7 2019 11:14:52 AM*
Napa County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:41 PM*
Napa County	County Administration	County Executive Officer	Tier 2/3	Oct 6 2019 11:16:12 PM*
Napa County	Combined Fire-Police	Dispatch Supervisor	Tier 2/3	Oct 6 2019 10:07:00 PM
Napa County	Information Technology	Info Systems Specialist	Tier 2/3	Oct 6 2019 9:37:34 PM*
Napa County	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 6 2019 11:15:43 PM*
Napa County	Fire Department	Non-Emergency (24-hour)	Tier 2/3	Oct 6 2019 11:14:45 PM*
Napa County	Office of Emergency Services	OES Coordinator	Tier 2/3	Oct 6 2019 11:16:26 PM*
Napa County	County Administration	Risk and Emergency Services Manager	Tier 2/3	Oct 6 2019 11:15:37 PM*
Napa County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:15:47 PM*
Napa, City of	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:07 AM*
Napa, City of	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Napa, City of	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:08 AM*
Napa, City of	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:58 AM*
Napa, City of	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:09 AM*
Nevada County	Fire Department	Cal Fire	Tier 2/3	Oct 6 2019 9:48:00 PM
Nevada County	Police Department	Dispatch	Tier 2/3	Oct 6 2019 8:50:00 PM
Nevada County	Fire Department	Division Chief (24-hour)	Tier 2/3	Oct 6 2019 11:15:15 PM*
Nevada County	Fire Department	General	Tier 2/3	Oct 6 2019 11:15:39 PM*
Nevada County	OES	General	Tier 2/3	Oct 6 2019 11:15:27 PM*
Nevada County	County OES	General	Tier 2/3	Oct 8 2019 06:46 AM
Nevada County	Sheriff's Office	General (24-hour)	Tier 2/3	Oct 6 2019 11:15:40 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Nevada County	OES	OES Director; Designated POC	Tier 2/3	Oct 6 2019 11:15:55 PM*
Nevada County	OES	OES Manager	Tier 2/3	Oct 6 2019 11:15:47 PM*
Nevada County	Police Department	Police Chief	Tier 2/3	Oct 6 2019 11:16:03 PM*
Newman	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:58 AM*
Newman	Fire Department	Fire Chief; Designated POC (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Newman	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:57 AM*
Newman	Fire Department	On Call Officer (24- hour)	Tier 2/3	Oct 7 2019 11:15:58 AM*
Newman	Public Works Department	Public Works Director (24-hour)	Tier 2/3	Oct 7 2019 11:14:06 AM*
Newman	Public Works Department	Public Works Superintendent (24- hour)	Tier 2/3	Oct 7 2019 11:14:06 AM*
Newman	Wastewater Department	Wastewater Superintendent (24- hour)	Tier 2/3	Oct 7 2019 11:14:05 AM*
Oakdale	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:06 AM*
Oakdale	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:26 AM*
Oakdale	Police Department	Police Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Oakdale	City Administration	Public Works Director; Designated POC	Tier 2/3	Oct 7 2019 11:14:57 AM*
Oakland	City Administration	Assistant City Administrator (24- hour)	Tier 2/3	Oct 10 2019 3:48:06 PM
Oakland	City Administration	City Administrator	Tier 2/3	Oct 7 2019 11:14:08 AM*
Oakland	Fire Department	Fire Prevention (24- hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Oakland	Fire Department	Fire Prevention (24- hour)	Tier 2/3	Oct 10 2019 3:48:06 PM
Oakland	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:05 AM*
Oakland	Police Department	Non-Emergency	Tier 2/3	Oct 7 2019 11:14:06 AM*
Oakland	Police Department	Non-Emergency	Tier 2/3	Oct 10 2019 3:48:06 PM
Oakland	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:05 AM*
Orinda	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:05 AM*
Orinda	Water District	General Manager (24- hour)	Tier 2/3	Oct 10 2019 3:48:06 PM

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Orinda	Water District	General Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:05 AM*
Orinda	Office of Emergency Services	OES Director	Tier 2/3	Oct 7 2019 11:14:12 AM*
Orinda	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Orland	City Administration	City Manager; Designated POC (24- hour)	Zone 1	Oct 7 2019 11:14:07 AM*
Orland	Fire Department	Fire Chief (24-hour)	Zone 1	Oct 7 2019 11:14:06 AM*
Orland	City Administration	General	Zone 1	Oct 7 2019 11:14:07 AM*
Orland	Fire Department	General	Zone 1	Oct 7 2019 11:14:06 AM*
Orland	Police Department	Police Chief (24-hour)	Zone 1	Oct 7 2019 11:14:08 AM*
Oroville	City Administration	City Administrator	Tier 2/3	Oct 7 2019 11:14:09 AM*
Oroville	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:07 AM*
Oroville	Fire Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Oroville	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:10 AM*
Pacifica	Fire Department	Battalion Chief	Tier 2/3	Oct 9 2019 1:51:38 PM*
Pacifica	Fire Department	Battalion Chief	Tier 2/3	Oct 9 2019 1:52:40 PM*
Pacifica	Fire Department	Battalion Chief	Tier 2/3	Oct 9 2019 1:52:31 PM*
Pacifica	Fire Department	Battalion Chief	Tier 2/3	Oct 9 2019 1:52:22 PM*
Pacifica	City Administration	City Manager	Tier 2/3	Oct 9 2019 1:52:24 PM*
Pacifica	Fire Department	Deputy Fire Chief (24- hour)	Tier 2/3	Oct 9 2019 1:52:42 PM*
Pacifica	Fire Department	Deputy Fire Chief (24- hour)	Tier 2/3	Oct 9 2019 1:52:42 PM*
Pacifica	Fire Department	Deputy Fire Chief; Designated POC (24- hour)	Tier 2/3	Oct 9 2019 1:51:40 PM*
Pacifica	City Administration	Mayor	Tier 2/3	Oct 9 2019 1:52:11 PM*
Pacifica	Fire Department	Non-Emergency (24- hour)	Tier 2/3	Oct 9 2019 1:52:13 PM*
Pacifica	Police Department	Non-Emergency (24- hour)	Tier 2/3	Oct 9 2019 1:53:02 PM
Palo Alto	Fire Department	Deputy Fire Chief; Designated POC	Tier 2/3	Oct 7 2019 11:14:09 AM*
Palo Alto	Fire Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Palo Alto	Police Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Palo Alto	OES	Emergency Services Specialist	Tier 2/3	Oct 7 2019 11:14:09 AM*
Palo Alto	OES	OES Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Palo Alto	City Administration	Public Works Director	Tier 2/3	Oct 7 2019 11:14:08 AM*
Palo Alto	City Administration	Public Works Director (24-hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Paradise	City Administration	General	Tier 2/3	Oct 7 2019 11:14:10 AM*
Paradise	City Administration	General	Tier 2/3	Oct 7 2019 11:14:08 AM*
Paradise	Police Department	General	Tier 2/3	Oct 7 2019 11:14:07 AM*
Paradise	CAL FIRE	General CAL FIRE (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Paradise	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:09 AM*
Paradise	City Administration	Public Works Manager	Tier 2/3	Oct 7 2019 11:14:08 AM*
Paradise	City Administration	Town Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:08 AM*
Patterson	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:09 AM*
Patterson	Fire Department	Fire Chief; Designated POC (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Patterson	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Petaluma	Fire Department	Assistant Fire Chief	Tier 2/3	Oct 7 2019 11:14:11 AM*
Petaluma	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:16:14 AM*
Petaluma	Fire Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:15:02 AM*
Petaluma	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:09 AM*
Petaluma	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:08 AM*
Petaluma	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:09 AM*
Pinole	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:14 AM*
Pinole	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:11 AM*
Pinole	Police Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:13 AM*
Pinole	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:10 AM*
Pittsburg	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:16:02 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

<b>City/County</b>	<b>Agency</b>	<b>Title</b>	<b>Classification (Tier 2/3, Zone 1)</b>	<b>Date/Time</b>
Pittsburg	Fire Department	Fire Chief; Designated POC	Tier 2/3	Oct 7 2019 11:14:07 AM*
Placer County	CALFIRE/PCF	Assistant Chief	Tier 2/3	Oct 6 2019 11:16:10 PM*
Placer County	DPW	Assistant Director	Tier 2/3	Oct 6 2019 11:16:01 PM*
Placer County	CALFIRE/ECC	Battalion Chief	Tier 2/3	Oct 6 2019 11:16:13 PM*
Placer County	CALFIRE/PCF	Battalion Chief	Tier 2/3	Oct 6 2019 11:55:22 PM*
Placer County	CALFIRE/PCF	Battalion Chief	Tier 2/3	Oct 6 2019 11:16:35 PM*
Placer County	CALFIRE/PCF	Battalion Chief	Tier 2/3	Oct 6 2019 11:55:22 PM*
Placer County	CALFIRE/PCF	Battalion Chief	Tier 2/3	Oct 6 2019 11:16:00 PM*
Placer County	CALFIRE/PCF	Battalion Chief	Tier 2/3	Oct 6 2019 11:16:02 PM*
Placer County	FAC	Building Maintenance Superintendent	Tier 2/3	Oct 6 2019 11:16:02 PM*
Placer County	CAL FIRE	Chief	Tier 2/3	Oct 6 2019 11:14:36 PM*
Placer County	IT	CIO	Tier 2/3	Oct 6 2019 11:16:01 PM*
Placer County	United Auburn Indian Community	Councilmember	Tier 2/3	Oct 6 2019 11:15:46 PM*
Placer County	County Administration	County Executive Officer	Tier 2/3	Oct 6 2019 11:15:58 PM*
Placer County	CAL FIRE	Deputy Chief	Tier 2/3	Oct 6 2019 11:16:09 PM*
Placer County	DPW	Deputy Director	Tier 2/3	Oct 6 2019 11:16:20 PM*
Placer County	FAC	Deputy Director	Tier 2/3	Oct 6 2019 11:16:19 PM*
Placer County	PIO	Deputy Director	Tier 2/3	Oct 6 2019 11:16:11 PM*
Placer County	PIO	Director	Tier 2/3	Oct 6 2019 11:15:59 PM*
Placer County	Combined Fire-Police	Dispatch	Tier 2/3	Oct 6 2019 8:59:00 PM
Placer County	Combined Fire-Police	Dispatch Supervisor	Tier 2/3	Oct 6 2019 9:28:00 PM
Placer County	Police Department	dispatcher	Tier 2/3	Oct 6 2019 9:22:00 PM
Placer County	OES	Em Services Coord	Tier 2/3	Oct 6 2019 11:15:07 PM*
Placer County	OES	Em Services Specialist	Tier 2/3	Oct 6 2019 11:16:05 PM*
Placer County	CAL FIRE	Emergency Command Center (24-hour)	Tier 2/3	Oct 6 2019 11:15:46 PM*
Placer County	DPW	Envir. Utilities Manager	Tier 2/3	Oct 6 2019 11:15:55 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Placer County	OES	General	Tier 2/3	Oct 6 2019 11:16:11 PM*
Placer County	PH	Health Officer	Tier 2/3	Oct 6 2019 11:16:06 PM*
Placer County	IT	IT Manager	Tier 2/3	Oct 6 2019 11:15:49 PM*
Placer County	IT	IT Manager	Tier 2/3	Oct 6 2019 11:15:51 PM*
Placer County	IT	IT Supervisor	Tier 2/3	Oct 6 2019 11:15:33 PM*
Placer County	IT	IT Supervisor	Tier 2/3	Oct 6 2019 11:15:11 PM*
Placer County	Sheriff	Lieutenant - PCSO	Tier 2/3	Oct 6 2019 11:15:43 PM*
Placer County	Sheriff	Lieutenant - PCSO	Tier 2/3	Oct 6 2019 11:16:24 PM*
Placer County	Sheriff	Lieutenant - PCSO	Tier 2/3	Oct 6 2019 11:16:13 PM*
Placer County	Sheriff	Lieutenant - PCSO	Tier 2/3	Oct 6 2019 11:15:46 PM*
Placer County	Sheriff	Lieutenant - PCSO	Tier 2/3	Oct 6 2019 11:14:57 PM*
Placer County	IT	Main Telecom Number	Tier 2/3	Oct 6 2019 11:14:37 PM*
Placer County	County Administration	Marketing and Government Affairs Manager	Tier 2/3	Oct 6 2019 11:16:10 PM*
Placer County	OES	OES Asst Director; Designated POC (24- hour)	Tier 2/3	Oct 6 2019 11:16:06 PM*
Placer County	OES	Placer County	Tier 2/3	Oct 6 2019 11:15:10 PM*
Placer County	FAC	Placer Facilities Mgt Emergency Line	Tier 2/3	Oct 6 2019 11:16:23 PM*
Placer County	PH	Program Manager	Tier 2/3	Oct 6 2019 11:16:03 PM*
Placer County	DPW	Roads Manager	Tier 2/3	Oct 6 2019 11:15:47 PM*
Placer County	Sheriff	Sergeant - PCSO	Tier 2/3	Oct 6 2019 11:15:05 PM*
Placer County	Sheriff	Sergeant - PCSO	Tier 2/3	Oct 6 2019 11:16:17 PM*
Placer County	Sheriff	Sergeant - PCSO	Tier 2/3	Oct 6 2019 11:16:29 PM*
Placer County	Sheriff	Sergeant - PCSO	Tier 2/3	Oct 6 2019 11:16:09 PM*
Placer County	Sheriff	Sheriff Dispatch (24- hour)	Tier 2/3	Oct 6 2019 10:00:00 PM*
Placer County	Combined Fire- Police	Supervisor on duty	Tier 2/3	Oct 6 2019 9:39:00 PM
Placerville	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:15:02 AM*



**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Placerville	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:15:10 AM*
Placerville	Office of Emergency Services	OES Director	Tier 2/3	Oct 7 2019 11:15:33 AM*
Placerville	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:26 AM*
Placerville	Fire Department	Station 19 (24-hour)	Tier 2/3	Oct 7 2019 11:34:14 AM*
Pleasant Hill	City Administration	City Manager	Zone 1	Oct 7 2019 11:14:06 AM*
Pleasant Hill	Police Department	Emergency (24-hour)	Zone 1	Oct 7 2019 11:14:22 AM*
Pleasanton	City Administration	Assistant City Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:10 AM*
Pleasanton	City Administration	City Clerk (24-hour)	Tier 2/3	Oct 7 2019 11:15:31 AM*
Pleasanton	City Administration	City Clerk (24-hour)	Tier 2/3	Oct 10 2019 3:48:21 PM
Pleasanton	City Administration	City Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:14 AM*
Pleasanton	City Administration	City Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:12 AM*
Pleasanton	City Administration	City Traffic Engineer (24-hour)	Tier 2/3	Oct 7 2019 11:14:17 AM*
Pleasanton	City Administration	Director of Engineering (24-hour)	Tier 2/3	Oct 7 2019 11:14:18 AM*
Pleasanton	Fire Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:20 AM*
Pleasanton	Police Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:05 AM*
Pleasanton	City Administration	Emergency Preparedness Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:19 AM*
Pleasanton	Fire Department	Fire Chief; Designated POC	Tier 2/3	Oct 10 2019 3:48:06 PM
Pleasanton	Fire Department	Fire Chief; Designated POC	Tier 2/3	Oct 7 2019 11:14:21 AM*
Pleasanton	Fire Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Pleasanton	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:09 AM*
Pleasanton	Fire Department	Non- Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:19 AM*
Pleasanton	Police Department	Police Chief	Tier 2/3	Oct 10 2019 3:49:00 PM
Pleasanton	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:10 AM*
Pleasanton	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:10 AM*
Pleasanton	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:38 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Pleasanton	City Administration	Public Information Officer (24-hour)	Tier 2/3	Oct 7 2019 11:14:13 AM*
Plumas County	County Administration	CAO; Designated POC	Tier 2/3	Oct 6 2019 11:15:44 PM*
Plumas County	Greenville Rancheria	Chairman	Tier 2/3	Oct 6 2019 11:16:05 PM*
Plumas County	OES Director	Deputy Director (24-hour)	Tier 2/3	Oct 6 2019 11:15:22 PM*
Plumas County	Social Services	Director (24-hour)	Tier 2/3	Oct 6 2019 11:15:14 PM*
Plumas County	Sheriff's Office	Dispatch	Tier 2/3	Oct 6 2019 8:42:00 PM*
Plumas County	Plumas Public Health	General	Tier 2/3	Oct 6 2019 11:16:18 PM*
Plumas County	OES	Main Office	Tier 2/3	Oct 6 2019 11:15:55 PM*
Plumas County	Public Health	MHOAC (24-hour)	Tier 2/3	Oct 6 2019 11:15:30 PM*
Plumas County	Sheriff	OES Director (24-hour)	Tier 2/3	Oct 6 2019 9:37:19 PM*
Plumas County	County Administration	Public Works Director	Tier 2/3	Oct 6 2019 9:37:12 PM*
Plumas County	OES	Special Ops Sgt. (24-hour)	Tier 2/3	Oct 6 2019 11:15:09 PM*
Plumas County	Fire Department	USFS PNF Dispatch (24-hour)	Tier 2/3	Oct 6 2019 8:49:00 PM*
Plumas County	Greenville Rancheria	Vice Chairperson	Tier 2/3	Oct 6 2019 11:16:05 PM*
Plymouth	City Administration	City Manager (24-hour), Designated POC	Tier 2/3	Oct 7 2019 11:14:27 AM*
Plymouth	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:49 AM*
Portola Valley	Fire Department	Emergency (24-hour)	Tier 2/3	Oct 6 2019 10:22:00 PM*
Portola Valley	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:06 AM*
Portola Valley	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:08 AM*
Portola Valley	City Administration	Public Works Director; Designated POC	Tier 2/3	Oct 7 2019 11:14:07 AM*
Portola Valley	City Administration	Town Manager	Tier 2/3	Oct 7 2019 11:14:07 AM*
Red Bluff	City Administration	City Manager; Designated POC	Zone 1	Oct 7 2019 11:15:01 AM*
Red Bluff	Fire Department	Fire Chief	Zone 1	Oct 7 2019 11:14:40 AM*
Red Bluff	City Administration	Mayor	Zone 1	Oct 7 2019 11:15:00 AM*
Redding	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:10 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Redding	Redding Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:09 AM*
Redding	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Redding	Redding Police Department	Police Captain	Tier 2/3	Oct 7 2019 11:14:07 AM*
Redding	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:15:13 AM*
Redwood City	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:05 AM*
Redwood City	Fire Department	Deputy Fire Chief; Designated POC	Tier 2/3	Oct 7 2019 11:14:06 AM*
Redwood City	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Redwood City	Fire Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Redwood City	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Richmond	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:06 AM*
Richmond	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:11 AM*
Richmond	Fire Department	Fire Chief (24-hour); Designated POC	Tier 2/3	Oct 7 2019 11:14:15 AM*
Richmond	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Richmond	OES	OES Director (24-hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Rio Dell	City Administration	City Manager; Designated POC	Tier 2/3	Oct 8 2019 1:46:53 PM*
Rio Dell	Police Department	Dispatch (24-hour)	Tier 2/3	Oct 8 2019 1:47:15 PM*
Rio Dell	Fire Department	General (24-hour)	Tier 2/3	Oct 8 2019 1:48:59 PM*
Riverbank	City Administration	City Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:05 AM*
Riverbank	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:26 AM*
Riverbank	West Stanislaus Fire District	Fire Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Riverbank	Police Department	Police Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:06 AM*
Riverbank	City Administration	Public Works Director; Designated POC	Tier 2/3	Oct 7 2019 11:14:56 AM*
Rocklin	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:08 AM*
Rohnert Park	City Administration	Asst City Manager	Tier 2/3	Oct 7 2019 11:14:11 AM*
Rohnert Park	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:09 AM*
Rohnert Park	City Administration	Deputy Chief	Tier 2/3	Oct 7 2019 11:14:11 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Rohnert Park	City Administration	Deputy Chief	Tier 2/3	Oct 7 2019 11:14:09 AM*
Rohnert Park	Police Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:43 AM*
Rohnert Park	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:12 AM*
Roseville	City Administration	City Manager; Designated POC (24-hour)	Tier 2/3	Oct 7 2019 11:14:06 AM*
Roseville	Police Department	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:15:38 AM
Roseville	Fire Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:30 AM
Saint Helena	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:16 AM*
Saint Helena	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:09 AM*
Saint Helena	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:16:10 AM*
Saint Helena	Police Department	Police Chief (24-hour)	Tier 2/3	Oct 7 2019 11:16:18 AM*
San Benito County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 9:37:10 PM
San Benito County	Fire Department	Com Operations	Tier 2/3	Oct 6 2019 8:45:00 PM
San Benito County	County Administration	County Administrative Officer	Tier 2/3	Oct 6 2019 11:15:46 PM*
San Benito County	Fire Department	Division Chief	Tier 2/3	Oct 6 2019 11:16:27 PM*
San Benito County	Fire Department	Fire Chief	Tier 2/3	Oct 6 2019 11:15:02 PM*
San Benito County	Fire Department	General (24-hour)	Tier 2/3	Oct 6 2019 11:55:22 PM
San Benito County	OES	General (24-hour)	Tier 2/3	Oct 6 2019 9:37:15 PM
San Benito County	Office of Emergency Services	Interim OES Director	Tier 2/3	Oct 6 2019 11:14:58 PM*
San Benito County	Sheriff's Office	Non-Emergency (24-hour)	Tier 2/3	Oct 6 2019 11:14:23 PM
San Benito County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:14:23 PM*
San Benito County	City Administration	Supervisor	Tier 2/3	Oct 6 2019 11:16:34 PM*
San Benito County	City Administration	Supervisor	Tier 2/3	Oct 6 2019 11:15:38 PM*
San Joaquin County	County Administration	Chair of the Board	N/A	Oct 6 2019 11:16:01 PM*
San Joaquin County	County Administration	County Administrator	N/A	Oct 6 2019 11:15:44 PM*
San Joaquin County	Police Department	Dispatch	N/A	Oct 6 2019 9:09:00 PM

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
San Joaquin County	Fire Department	Dispatch Supervisor	N/A	Oct 6 2019 9:25:00 PM
San Joaquin County	Police Department	Dispatcher	N/A	Oct 6 2019 8:54:00 PM
San Joaquin County	Fire Department	Lead AMR Dispatcher	N/A	Oct 6 2019 9:36:00 PM
San Joaquin County	Office of Emergency Services	OES Director (24-hour), Designated POC	N/A	Oct 6 2019 11:15:37 PM*
San Joaquin County	Police Department	Sargent	N/A	Oct 6 2019 9:03:00 PM
San Joaquin County	Sheriff's Department	Sheriff	N/A	Oct 6 2019 11:15:47 PM*
San Joaquin County	Police Department	Telecommunications Supervisor	N/A	Oct 6 2019 9:15:00 PM
San Jose	City Administration	Deputy Director Account Management and Marketing	Zone 1	Oct 8 2019 7:16:46 PM*
San Jose	City Administration	General	Zone 1	Oct 8 2019 7:16:46 PM*
San Jose	OEM	OEM Deputy Director (24-hour)	Tier 2/3	Oct 7 2019 11:14:06 AM*
San Leandro	City Administration	Director of Maintenance & Operations	Tier 2/3	Oct 7 2019 11:15:37 AM*
San Leandro	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 7 2019 11:16:01 AM*
San Mateo City	Office of Emergency Services	Assistant II	Tier 2/3	Oct 7 2019 11:14:08 AM*
San Mateo City	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:05 AM*
San Mateo City	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
San Mateo City	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:08 AM*
San Mateo County	Police Department	Corporal	Tier 2/3	Oct 6 2019 9:18:00 PM
San Mateo County	Police Department	Corporal	Tier 2/3	Oct 6 2019 8:20:00 PM
San Mateo County	County Administration	Director of Customer Care	Tier 2/3	Oct 6 2019 11:15:47 PM*
San Mateo County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 8:45:00 PM
San Mateo County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 9:00:00 PM
San Mateo County	County Administration	District Coordinator	Tier 2/3	Oct 6 2019 11:15:18 PM*
San Mateo County	County Administration	District Coordinator	Tier 2/3	Oct 6 2019 11:16:22 PM*
San Mateo County	County Administration	District Coordinator	Tier 2/3	Oct 6 2019 11:16:09 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
San Mateo County	Office of Emergency Services	Emergency Coordinator	Tier 2/3	Oct 6 2019 11:15:22 PM*
San Mateo County	County Administration	Key Accounts Executive	Tier 2/3	Oct 6 2019 11:15:51 PM*
San Mateo County	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 6 2019 11:15:24 PM*
San Mateo County	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 6 2019 11:15:31 PM*
San Mateo County	Office of Emergency Services	OES Supervisor (24-hour); Designated POC	Tier 2/3	Oct 6 2019 11:16:06 PM*
San Mateo County	Police Department	Officer	Tier 2/3	Oct 6 2019 9:18:00 - 9:30:00PM
San Mateo County	County Administration	President of the Board	Tier 2/3	Oct 6 2019 11:15:48 PM*
San Mateo County	Police Department	Sergeant	Tier 2/3	Oct 6 2019 8:55:00 PM
San Mateo County	Police Department	Sergeant	Tier 2/3	Oct 6 2019 9:10:00 PM
San Mateo County	Police Department	Sergeant	Tier 2/3	Oct 6 2019 9:30:00 PM
San Mateo County	Police Department	Sergeant	Tier 2/3	Oct 6 2019 9:37:00 PM
San Mateo County	Police Department	Sergeant	Tier 2/3	Oct 6 2019 10:00:00 PM
San Mateo County	Police Department	Sergeant	Tier 2/3	Oct 6 2019 10:10:00 PM
San Mateo County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:15:55 PM*
San Pablo	City Administration	Assistant City Manager	Tier 2/3	Oct 7 2019 11:14:06 AM*
San Pablo	Police Department	Captain	Tier 2/3	Oct 7 2019 11:14:05 AM*
San Pablo	Fire Department	General	Tier 2/3	Oct 7 2019 11:14:30 AM*
San Pablo	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:15:30 AM*
San Pablo	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:05 AM*
San Pablo	Police Department	Police Captain	Tier 2/3	Oct 7 2019 11:15:48 AM*
San Pablo	Police Department	Police Lieutenant (24-hour); Designated POC	Tier 2/3	Oct 7 2019 11:14:05 AM*
San Ramon	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:16 AM*
San Ramon	Fire Department	Deputy Fire Chief	Tier 2/3	Oct 7 2019 11:14:11 AM*
San Ramon	Fire Department	Deputy Fire Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

<b>City/County</b>	<b>Agency</b>	<b>Title</b>	<b>Classification (Tier 2/3, Zone 1)</b>	<b>Date/Time</b>
San Ramon	County Administration	Emergency Planning Coordinator	Tier 2/3	Oct 7 2019 11:14:08 AM*
San Ramon	City Administration	Emergency Preparedness (24-hour)	Tier 2/3	Oct 7 2019 11:14:23 AM*
San Ramon	City Administration	Engineering Specialist	Tier 2/3	Oct 7 2019 11:14:11 AM*
San Ramon	City Administration	Fire Chief	Tier 2/3	Oct 7 2019 11:14:06 AM*
San Ramon	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:20 AM*
Santa Barbara County	Fire Department	Batt. Chief	Tier 2/3	Oct 6 2019 9:15:00 PM
Santa Barbara County	County Administration	Chair of the Board, District 1	Tier 2/3	Oct 6 2019 11:16:07 PM*
Santa Barbara County	Combined Fire-Police	Communications Operator	Tier 2/3	Oct 6 2019 8:48:00 PM
Santa Barbara County	County Administration	County Executive Officer	Tier 2/3	Oct 6 2019 11:15:24 PM*
Santa Barbara County	County Administration	Director of Public Services and Office of Emergency Services	Tier 2/3	Oct 6 2019 11:15:30 PM*
Santa Barbara County	Combined Fire-Police	Dispatcher	Tier 2/3	Oct 6 2019 8:41:00 PM
Santa Barbara County	Fire Department	Fire Chief	Tier 2/3	Oct 6 2019 11:16:18 PM*
Santa Barbara County	Office of Emergency Services	Main Office	Tier 2/3	Oct 6 2019 11:16:01 PM*
Santa Barbara County	Office of Emergency Services	OEM Duty Officer (24-hour)	Tier 2/3	Oct 6 2019 11:16:37 PM*
Santa Barbara County	Combined Fire-Police	Public Safety Dispatcher	Tier 2/3	Oct 6 2019 8:54:00 PM
Santa Barbara County	Police Department	Public Safety Dispatcher	Tier 2/3	Oct 6 2019 9:01:00 PM
Santa Barbara County	Combined Fire-Police	Senior Airman	Tier 2/3	Oct 6 2019 9:06:00 PM
Santa Barbara County	Combined Fire-Police	Sergeant	Tier 2/3	Oct 6 2019 8:31:00 PM
Santa Barbara County	Sheriff's Office	Sheriff	Tier 2/3	Oct 6 2019 11:15:19 PM*
Santa Barbara County	County Administration	Supervisor -- District 2	Tier 2/3	Oct 6 2019 9:37:14 PM
Santa Barbara County	County Administration	Supervisor - District 3	Tier 2/3	Oct 6 2019 11:16:40 PM*
Santa Barbara County	County Administration	Supervisor - District 4	Tier 2/3	Oct 6 2019 11:15:51 PM*
Santa Barbara County	County Administration	Supervisor - District 5	Tier 2/3	Oct 6 2019 11:15:36 PM*
Santa Clara County	County Administration	Account Services and Community Relations Director	Tier 2/3	Oct 6 2019 11:15:22 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Santa Clara County	Fire Department	Captain	Tier 2/3	Oct 6 2019 10:50:00 PM
Santa Clara County	City Manager's Office	Chief of Staff (24-hour)	Tier 2/3	Oct 6 2019 11:15:50 PM*
Santa Clara County	City Manager's Office	Chief of Staff (24-hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Santa Clara County	City Administration	City Manager	Tier 2/3	Oct 6 2019 11:15:00 PM*
Santa Clara County	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:09 AM*
Santa Clara County	County Administration	Communications Manager	Tier 2/3	Oct 6 2019 11:15:39 PM*
Santa Clara County	City Manager's Office	Communications Officer (24-hour)	Tier 2/3	Oct 6 2019 11:15:42 PM*
Santa Clara County	City Manager's Office	Communications Officer (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Santa Clara County	City Manager's Office	Deputy City Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Santa Clara County	City Manager's Office	Deputy City Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Santa Clara County	City Manager's Office	Deputy City Manager (24-hour)	Tier 2/3	Oct 6 2019 11:15:45 PM*
Santa Clara County	City Manager's Office	Deputy City Manager (24-hour)	Tier 2/3	Oct 6 2019 11:15:59 PM*
Santa Clara County	Community Clean Energy	Director Clean Energy (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Santa Clara County	Combined Fire-Police	Dispatch Supervisor	Tier 2/3	Oct 6 2019 9:45:00 PM
Santa Clara County	Police Department	Dispatch Supervisor	Tier 2/3	Oct 6 2019 10:20:00 PM
Santa Clara County	Combined Fire-Police	Dispatch Supervisor	Tier 2/3	Oct 6 2019 10:40:00 PM
Santa Clara County	Combined Fire-Police	Dispatch Supervisor	Tier 2/3	Oct 6 2019 9:50:00 PM
Santa Clara County	Fire Department	Dispatch Supervisor	Tier 2/3	Oct 6 2019 10:30:00 PM
Santa Clara County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 9:10:00 PM
Santa Clara County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 9:35:00 PM
Santa Clara County	Police Department	Dispatcher	Tier 2/3	Oct 6 2019 9:25:00 PM
Santa Clara County	Combined Fire-Police	Dispatcher	Tier 2/3	Oct 6 2019 9:30:00 PM
Santa Clara County	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 6 2019 11:15:45 PM*
Santa Clara County	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Santa Clara County	Police Department	Lead Dispatch	Tier 2/3	Oct 6 2019 10:00:00 PM
Santa Clara County	Police Department	Lead Dispatcher	Tier 2/3	Oct 6 2019 8:40:00 PM



**Table 1-1. Local Community Representatives Contacted  
(Continued)**

<b>City/County</b>	<b>Agency</b>	<b>Title</b>	<b>Classification (Tier 2/3, Zone 1)</b>	<b>Date/Time</b>
Santa Clara County	City Utilities	Manager (24-hour)	Tier 2/3	Oct 6 2019 11:14:58 PM*
Santa Clara County	City Utilities	Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Santa Clara County	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:08 AM*
Santa Clara County	Office of Emergency Services	OES Director; Designated POC	Tier 2/3	Oct 7 2019 11:14:09 AM*
Santa Clara County	Office of Emergency Services	OES Director; Designated POC	Tier 2/3	Oct 6 2019 11:15:38 PM*
Santa Clara County	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:08 AM*
Santa Clara County	Police Department	Police Chief	Tier 2/3	Oct 6 2019 11:55:22 PM*
Santa Clara County	Public Works Department	Public Works Deputy Director (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Santa Clara County	Public Works Department	Public Works Director (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Santa Clara County	Public Works Department	Public Works Director (24-hour)	Tier 2/3	Oct 6 2019 11:16:44 PM*
Santa Clara County	Combined Fire-Police	Sergeant	Tier 2/3	Oct 6 2019 9:00:00 PM
Santa Clara County	Police Department	Sergeant	Tier 2/3	Oct 6 2019 10:05:00 PM
Santa Clara County	City Utilities	UTL Director (24-hour)	Tier 2/3	Oct 6 2019 11:14:48 PM*
Santa Clara County	Muwekma Ohlone Indian Tribe	Vice Chairperson	Tier 2/3	Oct 8 2019 10:40 AM
Santa Cruz City	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:16 AM*
Santa Cruz City	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:11 AM*
Santa Cruz City	Fire Department	General	Tier 2/3	Oct 7 2019 11:17:47 AM*
Santa Cruz City	City of Santa Cruz	Lieutenant	Tier 2/3	Oct 7 2019 11:14:09 AM*
Santa Cruz City	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:12 AM*
Santa Cruz City	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:15:37 AM*
Santa Cruz City	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:17 AM*
Santa Cruz County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:16:17 PM*
Santa Cruz County	County Administration	County Executive Officer	Tier 2/3	Oct 6 2019 11:15:51 PM*
Santa Cruz County	County Administration	Director of Communications and Energy Programs	Tier 2/3	Oct 6 2019 11:15:55 PM*
Santa Cruz County	County Administration	Financial Analyst I	Tier 2/3	Oct 6 2019 11:15:56 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Santa Cruz County	Fire Department	Fire Chief	Tier 2/3	Oct 6 2019 11:14:50 PM*
Santa Cruz County	Fire Department	General	Tier 2/3	Oct 6 2019 11:15:53 PM*
Santa Cruz County	OES	Main Office	Tier 2/3	Oct 6 2019 11:15:11 PM*
Santa Cruz County	Sheriff's Office	Non-Emergency (24-hour)	Tier 2/3	Oct 6 2019 11:15:56 PM*
Santa Cruz County	OES	OES Director	Tier 2/3	Oct 6 2019 11:16:15 PM*
Santa Cruz County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:15:30 PM*
Santa Maria	City Administration	City Manager	Tier 2/3	Oct 10 2019 3:48:06 PM
Santa Maria	City Administration	Councilmember	Tier 2/3	Oct 10 2019 3:48:07 PM
Santa Maria	City Administration	Councilmember	Tier 2/3	Oct 10 2019 3:48:07 PM
Santa Maria	City Administration	Councilmember	Tier 2/3	Oct 10 2019 3:48:09 PM
Santa Maria	City Administration	Councilmember	Tier 2/3	Oct 10 2019 3:48:07 PM
Santa Maria	Police Department	Dispatch (24-hour)	Tier 2/3	Oct 10 2019 4:26:46 PM
Santa Maria	Fire Command	Duty Battalion Chief (24-hour)	Tier 2/3	Oct 10 2019 3:48:08 PM
Santa Maria	Emergency Notification	Emergency Dispatch (24-hour)	Tier 2/3	Oct 10 2019 3:48:08 PM
Santa Maria	City Emergency Services	Emergency Services Specialist	Tier 2/3	Oct 10 2019 3:48:07 PM
Santa Maria	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 10 2019 3:48:46 PM
Santa Maria	Fire Department	General (24-hour)	Tier 2/3	Oct 10 2019 3:48:09 PM
Santa Maria	City Administration	Mayor	Tier 2/3	Oct 10 2019 3:48:52 PM
Santa Maria	City Administration	PIO	Tier 2/3	Oct 10 2019 3:48:06 PM
Santa Maria	Police Department	Police Chief	Tier 2/3	Oct 10 2019 3:48:08 PM
Santa Maria	Police Command	Watch Commander (24-hour)	Tier 2/3	Oct 10 2019 3:48:08 PM
Santa Rosa	City Administration	Admin Sergeant	Tier 2/3	Oct 7 2019 11:14:08 AM*
Santa Rosa	Fire Department	Assistant Fire Marshal	Tier 2/3	Oct 7 2019 11:14:11 AM*
Santa Rosa	City Administration	Battalion Chief	Tier 2/3	Oct 7 2019 11:14:11 AM*
Santa Rosa	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:11 AM*
Santa Rosa	City Administration	Deputy Fire Chief	Tier 2/3	Oct 7 2019 11:14:08 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Santa Rosa	City Administration	Emergency Preparedness Coordinator (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Santa Rosa	Fire Department	Fire	Tier 2/3	Oct 7 2019 11:14:11 AM*
Santa Rosa	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:12 AM*
Santa Rosa	City Administration	Lieutenant	Tier 2/3	Oct 7 2019 11:14:08 AM*
Santa Rosa	City Administration	Lieutenant	Tier 2/3	Oct 7 2019 11:14:10 AM*
Santa Rosa	City Administration	Planning and Economic Development Director	Tier 2/3	Oct 7 2019 11:14:10 AM*
Santa Rosa	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:09 AM*
Santa Rosa	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:11 AM*
Santa Rosa	City Administration	Public Information Officer	Tier 2/3	Oct 7 2019 11:14:10 AM*
Saratoga	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:09 AM*
Saratoga	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:09 AM*
Saratoga	City Administration	Deputy City Manager; Designated POC (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Saratoga	Sheriff's Office	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Saratoga	BART	Emergency Preparedness Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Saratoga	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Saratoga	City Administration	Public Works	Tier 2/3	Oct 7 2019 11:14:08 AM*
Sausalito	Community Development Department	Building Director	Zone 1	Oct 8 2019 1:46:56 PM*
Sausalito	City Administration	City Manager	Zone 1	Oct 8 2019 1:46:56 PM*
Sausalito	Community Services Department	CSD Director	Zone 1	Oct 8 2019 1:46:56 PM*
Sausalito	Public Works Department	DPW Director	Zone 1	Oct 8 2019 1:47:34 PM*
Sausalito	OES	Emergency Manager	Zone 1	Oct 8 2019 1:51:27 PM*
Sausalito	Fire Department	Fire Chief	Zone 1	Oct 8 2019 1:46:56 PM*
Sausalito	Fire Protection District	Fire Chief	Zone 1	Oct 8 2019 1:47:04 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

<b>City/County</b>	<b>Agency</b>	<b>Title</b>	<b>Classification (Tier 2/3, Zone 1)</b>	<b>Date/Time</b>
Sausalito	City Administration	Mayor	Zone 1	Oct 8 2019 1:48:51 PM*
Sausalito	Office of Emergency Services	OES Director	Zone 1	Oct 8 2019 1:46:59 PM*
Sausalito	Police Department	Police Chief	Zone 1	Oct 8 2019 1:47:25 PM*
Scotts Valley	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:16:11 AM*
Scotts Valley	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:17 AM*
Scotts Valley	Fire Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:49 AM*
Scotts Valley	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:18 AM*
Shafter	City Administration	City Hall	Tier 2/3	Oct 8 2019 12:28:27 PM*
Shafter	Police Department	Emergency (24-hour)	Tier 2/3	Oct 8 2019 12:28:27 PM*
Shafter	Fire Department	Station 32 (24-hour)	Tier 2/3	Oct 8 2019 12:29:58 PM*
Shasta County	Sheriff's Office	Captain	Tier 2/3	Oct 6 2019 11:14:40 PM*
Shasta County	County Administration	CEO; Designated POC	Tier 2/3	Oct 6 2019 11:24:31 PM*
Shasta County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:56 PM*
Shasta County	Tsungwe Council	Chairman	Tier 2/3	Oct 6 2019 11:16:33 PM*
Shasta County	Wintu Tribe of Northern California	Chairman	Tier 2/3	Oct 6 2019 11:55:22 PM*
Shasta County	Wuksachi Indian Tribe	Chairman	Tier 2/3	Oct 6 2019 11:15:43 PM*
Shasta County	Redwood Valley Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:16:39 PM*
Shasta County	Office of Assemblyman	District Director	Tier 2/3	Oct 6 2019 11:15:03 PM*
Shasta County	Cal Fire	ECC	Tier 2/3	Oct 6 2019 11:15:34 PM*
Shasta County	Burney Fire	Fire Chief	Tier 2/3	Oct 6 2019 11:15:17 PM*
Shasta County	American Medical Response	General	Tier 2/3	Oct 6 2019 11:15:40 PM*
Shasta County	SHASCOM	General	Tier 2/3	Oct 6 2019 11:20:01 PM*
Shasta County	SHASCOM	General	Tier 2/3	Oct 6 2019 11:15:40 PM*
Shasta County	Shasta Co. HHSA	General	Tier 2/3	Oct 6 2019 11:16:34 PM*
Shasta County	Shasta County Public Health	General	Tier 2/3	Oct 6 2019 11:16:20 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Shasta County	Shasta County Public Health	General	Tier 2/3	Oct 6 2019 11:16:31 PM*
Shasta County	Shasta County Public Health	General	Tier 2/3	Oct 6 2019 11:15:57 PM*
Shasta County	Shasta County Public Health	General	Tier 2/3	Oct 6 2019 11:16:15 PM*
Shasta County	Shasta County Public Works	General	Tier 2/3	Oct 6 2019 11:15:53 PM*
Shasta County	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 6 2019 11:15:37 PM*
Shasta County	Office of Emergency Services	OES Director	Tier 2/3	Oct 6 2019 11:15:47 PM*
Shasta County	County OES	OES Director	Tier 2/3	Oct 8 2019 06:47 AM
Shasta County	Redding Rancheria	Safety Manager	Tier 2/3	Oct 6 2019 11:16:18 PM*
Shasta County	Sheriff's Office	Sergeant	Tier 2/3	Oct 6 2019 11:15:58 PM*
Shasta County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:16:02 PM*
Shasta County	Combined Fire-Police	Supervisor	Tier 2/3	Oct 6 2019 9:15:00 PM
Shasta County	Sheriff's Office	Undersheriff	Tier 2/3	Oct 6 2019 11:15:12 PM*
Shasta Lake	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:46 AM*
Shasta Lake	City Administration	Fire Chief	Tier 2/3	Oct 7 2019 11:14:53 AM*
Shasta Lake	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:12 AM*
Sierra County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:54 PM*
Sierra County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:34 PM*
Sierra County	Sheriff's Office	Emergency (24-hour)	Tier 2/3	Oct 6 2019 9:45:00 PM*
Sierra County	Fire Department	Emergency Fire Number (24-hour)	Tier 2/3	Oct 6 2019 11:15:38 PM*
Sierra County	OES	General	Tier 2/3	Oct 6 2019 11:15:39 PM*
Sierra County	OES	OES Coordinator; Designated POC	Tier 2/3	Oct 6 2019 11:15:25 PM*
Sierra County	Sheriff's Department	Sheriff (24-hour)	Tier 2/3	Oct 6 2019 9:37:34 PM*
Siskiyou County	Fire Department	CAL FIRE (24-hour)	Tier 2/3	Oct 8 2019 1:46:55 PM*
Siskiyou County	County Administration	County Executive Officer; Designated POC	Tier 2/3	Oct 8 2019 1:46:55 PM*
Siskiyou County	OES	General	Tier 2/3	Oct 8 2019 1:46:57 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Solano County	County Board of Supervisors	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:31 PM*
Solano County	County Administration	County Administrator	Tier 2/3	Oct 6 2019 11:15:28 PM*
Solano County	CHP Golden Gate Division Dispatch	Emergency (24-hour)	Tier 2/3	Oct 6 2019 11:15:23 PM*
Solano County	Fire Area Coordinator	Fire Chief	Tier 2/3	Oct 6 2019 11:14:35 PM*
Solano County	Combined Fire-Police	Manager	Tier 2/3	Oct 6 2019 9:05:00 PM
Solano County	OES	Non-Emergency	Tier 2/3	Oct 6 2019 11:14:53 PM*
Solano County	OEM	OES Manager	Tier 2/3	Oct 6 2019 11:15:51 PM*
Solano County	Combined Fire-Police	Officer	Tier 2/3	Oct 6 2019 8:45:00 PM
Solano County	Combined Fire-Police	Officer	Tier 2/3	Oct 6 2019 9:20:00 PM
Solano County	Combined Fire-Police	Officer	Tier 2/3	Oct 6 2019 9:25:00 PM
Solano County	Combined Fire-Police	Officer	Tier 2/3	Oct 6 2019 9:30:00 PM
Solano County	Fire Department	Sergeant	Tier 2/3	Oct 6 2019 8:55:00 PM
Solano County	Combined Fire-Police	Sergeant	Tier 2/3	Oct 6 2019 9:00:00 PM
Solano County	Combined Fire-Police	Sergeant	Tier 2/3	Oct 6 2019 9:10:00 PM
Solano County	Combined Fire-Police	Sergeant	Tier 2/3	Oct 6 2019 9:35:00 PM
Solano County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:15:11 PM*
Sonoma	City Administration	Assistant City Manager	Tier 2/3	Oct 7 2019 11:14:19 AM*
Sonoma	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:24 AM*
Sonoma	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:08 AM*
Sonoma	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:11 AM*
Sonoma	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:14 AM*
Sonoma	City Administration	Public Works Director/City Engineer	Tier 2/3	Oct 7 2019 11:14:19 AM*
Sonoma County	Dry Creek Rancheria Band of Pomo Indians	CEO (24-hour)	Tier 2/3	Oct 6 2019 11:16:16 PM*
Sonoma County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:11 PM*
Sonoma County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 9:37:12 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

<b>City/County</b>	<b>Agency</b>	<b>Title</b>	<b>Classification (Tier 2/3, Zone 1)</b>	<b>Date/Time</b>
Sonoma County	Stewarts Point Rancheria (Kashaya Pomo)	Chairman	Tier 2/3	Oct 6 2019 11:15:55 PM*
Sonoma County	Dry Creek Rancheria Band of Pomo Indians	Chairman of the Board (24-hour)	Tier 2/3	Oct 6 2019 11:15:01 PM*
Sonoma County	Cloverdale Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:19:55 PM*
Sonoma County	Fort Independence Reservation	Chairperson	Tier 2/3	Oct 6 2019 11:15:35 PM*
Sonoma County	Mishewal-Wappo of Alexander Valley	Chairperson	Tier 2/3	Oct 6 2019 11:15:05 PM*
Sonoma County	Lytton Rancheria	Chairwoman	Tier 2/3	Oct 6 2019 11:14:52 PM*
Sonoma County	County Administration	Communications & Engagement Coordinator	Tier 2/3	Oct 6 2019 11:15:51 PM*
Sonoma County	County Administration	Communications & Engagement Coordinator (24-hour)	Tier 2/3	Oct 6 2019 11:15:48 PM*
Sonoma County	County Administration	Community & Government Affairs Manager	Tier 2/3	Oct 6 2019 11:15:19 PM*
Sonoma County	Department of Health Services	Costal Valleys EMS (24-hour)	Tier 2/3	Oct 6 2019 11:19:03 PM*
Sonoma County	County Administration	County Executive Officer	Tier 2/3	Oct 6 2019 11:16:15 PM*
Sonoma County	Department of Emergency Management	Deputy Director (24-hour)	Tier 2/3	Oct 6 2019 11:15:44 PM*
Sonoma County	Office of Emergency Services	Emergency Coordinator	Tier 2/3	Oct 6 2019 11:23:36 PM*
Sonoma County	Office of Emergency Services	Emergency Coordinator (24-hour)	Tier 2/3	Oct 6 2019 11:15:15 PM*
Sonoma County	Office of Emergency Services	Emergency Manager (24-hour)	Tier 2/3	Oct 6 2019 11:15:28 PM*
Sonoma County	Office of Emergency Services	Emergency Manager (24-hour)	Tier 2/3	Oct 6 2019 11:55:22 PM*
Sonoma County	REDCOM	EMS Dispatch (24-hour)	Tier 2/3	Oct 6 2019 11:15:39 PM*
Sonoma County	Dry Creek Rancheria Band of Pomo Indians	Fire Chief (24-hour)	Tier 2/3	Oct 6 2019 11:16:04 PM*
Sonoma County	Fire Department	Fire Marshall	Tier 2/3	Oct 6 2019 11:16:33 PM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

<b>City/County</b>	<b>Agency</b>	<b>Title</b>	<b>Classification (Tier 2/3, Zone 1)</b>	<b>Date/Time</b>
Sonoma County	Cloverdale Rancheria of Pomo Indians	General	Tier 2/3	Oct 6 2019 11:16:03 PM*
Sonoma County	Kashia Band of Pomo Indians of the Stewarts Point Rancheria	General	Tier 2/3	Oct 6 2019 11:14:55 PM*
Sonoma County	Kashia Band of Pomo Indians of the Stewarts Point Rancheria	General	Tier 2/3	Oct 6 2019 11:15:13 PM*
Sonoma County	Kashia Band of Pomo Indians of the Stewarts Point Rancheria	General	Tier 2/3	Oct 6 2019 11:16:00 PM*
Sonoma County	Sonoma Water	General (24-hour)	Tier 2/3	Oct 6 2019 11:15:27 PM*
Sonoma County	Sonoma Water	General (24-hour)	Tier 2/3	Oct 6 2019 11:15:54 PM*
Sonoma County	Federated Indians of Graton Rancheria	Grants Administrator (24-hour)	Tier 2/3	Oct 6 2019 11:15:38 PM*
Sonoma County	Department of Health Services	Public Health Officer (24-hour)	Tier 2/3	Oct 6 2019 11:16:11 PM*
Sonoma County	Dry Creek Rancheria Band of Pomo Indians	Security Director (24-hour)	Tier 2/3	Oct 6 2019 11:15:58 PM*
Sonoma County	Sheriff's Office	Sheriff Dispatch (24-hour)	Tier 2/3	Oct 6 2019 11:15:09 PM*
Sonoma County	Sheriff's Dept	Sheriff's Liaison (24-hour)	Tier 2/3	Oct 6 2019 11:14:50 PM*
Sonoma County	Federated Indians of Graton Rancheria	TANF Director (24-hour)	Tier 2/3	Oct 6 2019 11:16:06 PM*
Sonoma County	Stewarts Point Rancheria (Kashaya Pomo)	Tribal Administrator	Tier 2/3	Oct 6 2019 11:15:55 PM*
Sonoma County	Federated Indians of Graton Rancheria	Tribal Preservation Officer (24-hour)	Tier 2/3	Oct 6 2019 11:16:11 PM*
Sonoma County	Cloverdale Rancheria of Pomo Indians	Tribal Secretary	Tier 2/3	Oct 6 2019 11:16:11 PM*
Sonoma County	Cloverdale Rancheria of Pomo Indians	Tribal Treasurer (24-hour)	Tier 2/3	Oct 6 2019 11:15:48 PM*
Sonora	City Administration	City Administrator	Tier 2/3	Oct 7 2019 11:14:10 AM*
Sonora	Fire Department	Fire Chief; Designated POC	Tier 2/3	Oct 7 2019 11:14:42 AM*
Sonora	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:11 AM*



**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Sonora	Police Department	Police Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Stanislaus County	Fire Department	County Fire Warden	Tier 2/3	Oct 6 2019 11:15:40 PM*
Stanislaus County	OES	Emergency (24-hour); Designated POC	Tier 2/3	Oct 6 2019 11:15:55 PM*
Stanislaus County	Mountain Valley EMS Agency	EMS Duty Officer (24-hour)	Tier 2/3	Oct 6 2019 11:15:24 PM*
Stanislaus County	CAL FIRE	Local Cal Fire (24-hour)	Tier 2/3	Oct 6 2019 11:15:31 PM*
Stanislaus County	Public Health Officer	Public Health Duty Officer (24-hour)	Tier 2/3	Oct 6 2019 11:18:43 PM*
Stanislaus County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:15:19 PM*
Stockton	Fire Department	Battalion Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Stockton	City Administration	Community Relations Officer	Tier 2/3	Oct 7 2019 11:14:08 AM*
Stockton	Police Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Suisun City	City Administration	General	Tier 2/3	Oct 7 2019 11:19:07 AM*
Suisun City	Fire Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:47 AM*
Suisun City	Police Department	Non-Emergency	Tier 2/3	Oct 7 2019 11:15:57 AM*
Sunnyvale	City Administration	City Engineer	Tier 2/3	Oct 7 2019 11:14:08 AM*
Sunnyvale	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:09 AM*
Sunnyvale	Public Safety	Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:09 AM*
Sunnyvale	Fire Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Sunnyvale	City Administration	Public Information Officer (24-hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Sunnyvale	City Administration	Public Works Director	Tier 2/3	Oct 7 2019 11:14:10 AM*
Sutter Creek	City Administration	City Manager, Designated POC	Tier 2/3	Oct 7 2019 11:14:06 AM*
Sutter Creek	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Sutter Creek	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:27 AM*
Sutter Creek	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:25 AM*
Taft	City Administration	City Hall	Tier 2/3	Oct 8 2019 12:28:59 PM*
Taft	Fire Department	Station 21 (24-hour)	Tier 2/3	Oct 8 2019 12:28:57 PM*
Tehachapi	City Administration	City Administrator	Tier 2/3	Oct 9 2019 11:01:52 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Tehachapi	Police Department	General	Tier 2/3	Oct 9 2019 11:00:19 AM*
Tehachapi	Fire Department	Station 12 (24-hour)	Tier 2/3	Oct 9 2019 11:01:35 AM*
Tehama City	City Administration	City Administrator; Designated POC	Zone 1	Oct 8 2019 1:47:19 PM*
Tehama County	Fire Department	CAL FIRE (24-hour)	Zone 1	Oct 6 2019 11:14:11 PM*
Tehama County	County Administration	CAO; Designated POC	Zone 1	Oct 6 2019 11:15:58 PM*
Tehama County	Sheriff's Department	Communications Supervisor	Zone 1	Oct 6 2019 11:16:12 PM*
Tehama County	Sheriff's Office	Sheriff (24-hour)	Zone 1	Oct 6 2019 11:15:42 PM*
Tracy	Fire Department	Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Tracy	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:08 AM*
Tracy	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:07 AM*
Trinidad	Fire Department	General	Tier 2/3	Oct 8 2019 1:53:23 PM*
Trinidad	City Manager	General; Designated POC	Tier 2/3	Oct 8 2019 1:46:52 PM*
Trinidad	Sheriff's Office	Non-Emergency Dispatch (24-hour)	Tier 2/3	Oct 8 2019 1:47:37 PM*
Trinity	Fire Department	CAL FIRE (24-hour)	Zone 1	Oct 8 2019 1:47:15 PM*
Trinity	Sheriff's Office	Dispatch (24-hour)	Zone 1	Oct 8 2019 1:47:08 PM*
Trinity	OES	Emergency (24-hour)	Zone 1	Oct 7 2019 8:30:00 PM
Trinity County	County Administration	CAO; Designated POC	Tier 2/3	Oct 6 2019 11:16:06 PM*
Trinity County	Santa Rosa Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:15:56 PM*
Trinity County	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 6 2019 11:14:50 PM*
Trinity County	Office of Emergency Services	OES Director (24-hour)	Tier 2/3	Oct 6 2019 11:15:44 PM*
Tuolumne County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:16:01 PM*
Tuolumne County	Chicken Ranch Rancheria	Chairperson	Tier 2/3	Oct 6 2019 9:37:31 PM*
Tuolumne County	Chicken Ranch Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:15:36 PM*
Tuolumne County	Tuolumne Rancheria	Chairperson	Tier 2/3	Oct 6 2019 11:55:23 PM*
Tuolumne County	County OES	County OES Coordinator	Tier 2/3	Oct 8 2019 06:36 AM

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Tuolumne County	OES	County OES Coordinator; Designated POC	Tier 2/3	Oct 6 2019 11:16:04 PM*
Tuolumne County	Fire Department	Fire Chief	Tier 2/3	Oct 6 2019 11:15:44 PM*
Tuolumne County	Fire Department	General	Tier 2/3	Oct 6 2019 11:14:39 PM*
Tuolumne County	Tuolumne Rancheria	Housing Director	Tier 2/3	Oct 6 2019 11:16:10 PM*
Tuolumne County	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 6 2019 11:16:13 PM*
Tuolumne County	OES	Main Office	Tier 2/3	Oct 6 2019 11:16:50 PM*
Tuolumne County	Sheriff's Department	Sheriff	Tier 2/3	Oct 6 2019 11:16:03 PM*
Tuolumne County	Tuolumne Band of Me-Wuk Indians	Tribal Emergency Manager	Tier 2/3	Oct 6 2019 11:15:43 PM*
Tuolumne County	Tuolumne Band of Me-Wuk Indians	Tribal Fire Chief	Tier 2/3	Oct 6 2019 11:15:35 PM*
Tuolumne County	Tuolumne Band of Me-Wuk Indians	Tribal Security Chief	Tier 2/3	Oct 6 2019 11:15:43 PM*
Tuolumne County	Tuolumne Rancheria	Vice Chairperson	Tier 2/3	Oct 6 2019 11:16:10 PM*
Ukiah	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:08 AM*
Ukiah	City Administration	Community Service Director (24-hour)	Tier 2/3	Oct 7 2019 11:14:08 AM*
Ukiah	City Administration	Electric Utility Director; Designated POC	Tier 2/3	Oct 7 2019 11:14:07 AM*
Ukiah	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Ukiah	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:08 AM*
Ukiah	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:06 AM*
Union City	City Administration	City Hall	Tier 2/3	Oct 7 2019 11:16:14 AM*
Union City	City Administration	City Hall	Tier 2/3	Oct 7 2019 11:14:06 AM*
Union City	Police Department	Non-Emergency	Tier 2/3	Oct 7 2019 11:15:53 AM*
Vacaville	Police Department	Emergency (24-hour)	Zone 1	Oct 7 2019 11:16:58 AM*
Vacaville	City Administration	General	Zone 1	Oct 7 2019 11:15:50 AM*
Vacaville	Fire Department	General (24-hour)	Zone 1	Oct 7 2019 11:14:26 AM*
Vallejo	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:17 AM*
Vallejo	Fire Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:15 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Vallejo	Police Department	Non-Emergency	Tier 2/3	Oct 7 2019 11:14:33 AM*
Walnut Creek	City Administration	City Manager	Zone 1	Oct 7 2019 11:14:11 AM*
Walnut Creek	City Administration	City Manager	Zone 1	Oct 7 2019 11:15:28 AM*
Walnut Creek	Police Department	Police Chief (24-hour)	Zone 1	Oct 7 2019 11:14:16 AM*
Wasco	City Administration	City Hall	Tier 2/3	Oct 8 2019 12:28:31 PM*
Wasco	Public Works	Public Works Director	Tier 2/3	Oct 8 2019 12:28:30 PM*
Wasco	Fire Department	Station 31 (24-hour)	Tier 2/3	Oct 8 2019 12:29:17 PM*
Wasco	Sheriff's Office	Substation (24-hour)	Tier 2/3	Oct 8 2019 12:28:50 PM*
Watsonville	Fire Department	Administrative Analyst (24-hour)	Tier 2/3	Oct 7 2019 11:14:14 AM*
Watsonville	Fire Department	Administrative Analyst (24-hour)	Tier 2/3	Oct 10 2019 3:48:07 PM
Watsonville	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:17 AM*
Watsonville	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 7 2019 11:14:11 AM*
Watsonville	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 10 2019 3:48:06 PM
Watsonville	Fire Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:15:21 AM*
Watsonville	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:15:43 AM*
Wheatland	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:38 AM*
Wheatland	Police Department	Dispatch (24-hour)	Tier 2/3	Oct 7 2019 11:14:52 AM*
Wheatland	Fire Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:14:37 AM*
Willits	City Administration	Assistant PIO	Tier 2/3	Oct 7 2019 11:14:06 AM*
Willits	City Administration	Brooktrail Town Manager	Tier 2/3	Oct 7 2019 11:14:07 AM*
Willits	Fire Department	Brooktrail Fire Chief	Tier 2/3	Oct 7 2019 11:14:09 AM*
Willits	City Administration	City Manager; Designated POC	Tier 2/3	Oct 7 2019 11:14:06 AM*
Willits	City Administration	Deputy City Manager	Tier 2/3	Oct 7 2019 11:14:16 AM*
Willits	Fire Department	Little Lake Fire	Tier 2/3	Oct 7 2019 11:14:07 AM*
Willits	Fire Department	Little Lake Fire	Tier 2/3	Oct 7 2019 11:14:07 AM*
Willits	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:18 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

City/County	Agency	Title	Classification (Tier 2/3, Zone 1)	Date/Time
Willits	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:19 AM*
Willits	City Administration	Public Works Superintendent	Tier 2/3	Oct 7 2019 11:14:17 AM*
Willits	Emergency Services	Search and Rescue	Tier 2/3	Oct 7 2019 11:14:15 AM*
Willits	City Administration	Utilities Superintendent	Tier 2/3	Oct 7 2019 11:14:18 AM*
Willows	City Administration	City Manager; Designated POC)	Zone 1	Oct 7 2019 11:14:06 AM*
Willows	Fire Department	Non-Emergency	Zone 1	Oct 7 2019 11:14:31 AM*
Willows	Sheriff's Office	Non-Emergency (24-hour)	Zone 1	Oct 7 2019 11:15:13 AM*
Windsor	City Administration	Analyst Manager	Tier 2/3	Oct 7 2019 11:14:09 AM*
Windsor	Fire Department	Battalion Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Windsor	City Administration	City Manager	Tier 2/3	Oct 7 2019 11:14:12 AM*
Windsor	Public Works Department	Deputy Director of Operations	Tier 2/3	Oct 7 2019 11:14:12 AM*
Windsor	Fire Department	Deputy Fire Chief	Tier 2/3	Oct 7 2019 11:14:07 AM*
Windsor	Public Works Department	Director & Town Engineer	Tier 2/3	Oct 7 2019 11:14:14 AM*
Windsor	Fire Department	Fire Chief	Tier 2/3	Oct 7 2019 11:14:08 AM*
Windsor	Fire Department	Fire Prevention	Tier 2/3	Oct 7 2019 11:14:08 AM*
Windsor	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:07 AM*
Windsor	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:55 AM*
Windsor	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:09 AM*
Winters	City Administration	City Manager (24-hour)	Tier 2/3	Oct 7 2019 11:14:44 AM*
Winters	Fire Department	Fire Chief (24-hour)	Tier 2/3	Oct 7 2019 11:15:05 AM*
Winters	City Administration	General	Tier 2/3	Oct 7 2019 11:15:03 AM*
Winters	Fire Department	General (24-hour)	Tier 2/3	Oct 7 2019 11:15:29 AM*
Winters	Police Department	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:16:07 AM*
Winters	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:14:57 AM*
Woodland	City Administration	General	Tier 2/3	Oct 7 2019 11:15:07 AM*
Woodland	Fire Department	General	Tier 2/3	Oct 7 2019 11:15:55 AM*

**Table 1-1. Local Community Representatives Contacted  
(Continued)**

<b>City/County</b>	<b>Agency</b>	<b>Title</b>	<b>Classification (Tier 2/3, Zone 1)</b>	<b>Date/Time</b>
Woodside	Sheriff's Office	Non-Emergency (24-hour)	Tier 2/3	Oct 7 2019 11:14:06 AM*
Woodside	Police Department	Police Chief	Tier 2/3	Oct 10 2019 3:48:07 PM
Woodside	Police Department	Police Chief	Tier 2/3	Oct 7 2019 11:15:59 AM*
Yolo County	Yocha Dehe Wintun Nation	Battalion Chief (24-hour)	Tier 2/3	Oct 6 2019 11:15:00 PM*
Yolo County	County Administration	Director Customer Care and Marketing	Tier 2/3	Oct 6 2019 11:15:54 PM*
Yolo County	OES	Dispatch (24-hour)	Tier 2/3	Oct 6 2019 11:16:29 PM*
Yolo County	Yocha Dehe Wintun Nation	Dispatch (24-hour)	Tier 2/3	Oct 6 2019 11:15:51 PM*
Yolo County	Fire Department	Non-Emergency (24-hour)	Tier 2/3	Oct 6 2019 11:16:08 PM*
Yolo County	Sheriff's Office	Non-Emergency (24-hour)	Tier 2/3	Oct 6 2019 11:15:26 PM*
Yolo County	Yocha Dehe Wintun Nation	VP of Security (24-hour)	Tier 2/3	Oct 6 2019 11:16:40 PM*
Yountville	Fire Department	Dispatch Supervisor	Tier 2/3	Oct 6 2019 09:10:00 PM*
Yountville	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 7 2019 11:14:07 AM*
Yountville	City Administration	Mayor	Tier 2/3	Oct 7 2019 11:14:06 AM*
Yountville	City Administration	Public Works Director (24-hour)	Tier 2/3	Oct 7 2019 11:14:04 AM*
Yountville	City Administration	Town Manager	Tier 2/3	Oct 7 2019 11:14:05 AM*
Yountville	CAL FIRE	Yountville Battalion Chief	Tier 2/3	Oct 7 2019 11:14:06 AM*
Yuba County	County Administration	Chair of the Board	Tier 2/3	Oct 6 2019 11:15:45 PM*
Yuba County	County Administration	County Executive Officer	Tier 2/3	Oct 6 2019 11:15:36 PM*
Yuba County	County Administration	Director	Tier 2/3	Oct 6 2019 11:16:09 PM*
Yuba County	Office of Emergency Services	Emergency Manager (24-hour); Designated POC	Tier 2/3	Oct 6 2019 11:15:46 PM*
Yuba County	OES	General	Tier 2/3	Oct 6 2019 11:16:06 PM*
Yuba County	County Administration	Health Administrator	Tier 2/3	Oct 6 2019 11:16:21 PM*
Yuba County	CAL FIRE	Local Cal Fire	Tier 2/3	Oct 6 2019 11:14:36 PM*

**PACIFIC GAS AND ELECTRIC COMPANY**

**APPENDIX G**

**SECTION 13 – COMMUNITY ASSISTANCE LOCATIONS**

**Table 1-1. Community Resource Centers Provided by PG&E  
Between October 9-12, 2019 for the PSPS Event**

County	Location Type	Address	Total # Visitors <sup>(1)</sup>	Date / Time First Opened <sup>(2)</sup>	Date / Time Closed
Alameda	Merritt College Parking Lot B	Leona Street Oakland, CA 94508	94	10/9/2019 08:00	10/11/2019 15:00
Amador	Mace Meadows Golf Course Parking Lot	26570 Fairway Drive Pioneer, CA 95666	116	10/9/2019 08:00	10/12/2019 18:00
Butte	Strip Mall Parking Lot	14144 Lakeridge Court Magalia, CA 95954	292	10/9/2019 08:00	10/11/2019 18:00
Butte	Bird Street School Parking Lot	1421 Bird Street Oroville, CA 95965	84	10/9/2019 08:00	10/11/2019 18:00
Calaveras	Meadowmont Shopping Center Parking Lot	2182 HWY 4 Arnold, CA 95223	293	10/9/2019 08:00	10/12/2019 18:00
Colusa, Glenn	Local Parking Lot	839 Newville Road Orland, CA 95963	6	10/9/2019 08:00	10/10/2019 20:00
Contra Costa	Local Parking Lot	2600 Camino Ramon San Ramon, CA 94583	44	10/9/2019 08:00	10/11/2019 15:00
El Dorado	Rolling Hills Christian Church	800 White Rock Road El Dorado Hills, CA 95762	94	10/9/2019 08:00	10/11/2019 18:00
El Dorado	El Dorado Fairgrounds	100 Placerville Drive Placerville, CA 95667	288	10/9/2019 08:00	10/11/2019 18:00
Humboldt	Redwood Acres Fairgrounds	3750 Harris Street Eureka, CA 95503	30	10/10/2019 08:00	10/10/2019 18:00
Kern	Buck Owens Crystal Palace Parking Lot	2800 Buck Owens Blvd. Bakersfield, CA 93308	5	10/10/2019 08:00	10/11/2019 18:00

<sup>(1)</sup> Excludes media.

<sup>(2)</sup> The dates and times available listed in the table identify the CRC opening date and time and closing date and time. Each CRC was opening each day between 08:00 and 18:00, unless noted otherwise.



**Table 1-1. Community Resource Centers Provided by PG&E  
Between October 9-12, 2019 for the PSPS Event  
(Continued)**

<b>County</b>	<b>Location Type</b>	<b>Address</b>	<b>Total # Visitors<sup>(1)</sup></b>	<b>Date / Time First Opened<sup>(2)</sup></b>	<b>Date / Time Closed</b>
Kern	Community Center Parking Lot	500 Cascade Place Taft, CA 93268	0	10/10/2019 08:00	10/10/2019 12:00
Lake	Clearlake Senior Center (Indoor)	3245 Bowers Avenue Clearlake, CA 95422	431	10/9/2019 08:00	10/11/2019 18:00
Marin	Local Parking Lot	150 Donohue St.,  Sausalito, CA 94965	221	10/10/2019 08:00	10/11/2019 15:00
Mariposa	Coulterville Fire Dept Parking Lot	10293 Ferry Road Coulterville, CA 95311	10	10/9/2019 08:00	10/11/2019 15:00
Mendocino	Local Parking Lot	1775 N. State Street Ukiah, CA 95482	54	10/9/2019 08:00	10/11/2019 17:30
Napa	Calistoga Fairgrounds	1601 North Oak Street Calistoga, CA 94515	161	10/9/2019 08:00	10/11/2019 18:00
(Serving) Napa	Six Flags Discovery Kingdom Parking Lot	1001 Fairgrounds Drive Vallejo, CA 94589	8	10/9/2019 08:00	10/11/2019 16:45
Nevada	Sierra College Grass Valley	250 Sierra College Drive Grass Valley, CA 95945	880	10/9/2019 08:00	10/12/2019 18:00
Placer	Gold Country Fairgrounds	209 Fairgate Road Auburn, CA 95603	416	10/9/2019 08:00	10/11/2019 18:00
Plumas	Local Parking Lot	2140 Main Street La Porte, CA 95981	1	10/9/2019 08:00	10/10/2019 18:00
San Mateo	Pasta Moon Restaurant Parking Lot	845 Main Street Half Moon Bay, CA 94019	333	10/9/2019 08:00	10/11/2019 18:00
Santa Clara	Avaya Stadium Parking Lot	1123 Coleman Avenue San Jose, CA 95110	35	10/9/2019 08:00	10/11/2019 14:00
Santa Cruz	Twin Lakes Church Parking Lot	2701 Cabrillo College Drive Aptos, CA 95003	179	10/9/2019 08:00	10/11/2019 18:00

**Table 1-1. Community Resource Centers Provided by PG&E  
Between October 9-12, 2019 for the PSPS Event  
(Continued)**

<b>County</b>	<b>Location Type</b>	<b>Address</b>	<b>Total # Visitors<sup>(1)</sup></b>	<b>Date / Time First Opened(2 )</b>	<b>Date / Time Closed</b>
Shasta, Tehama	Shasta College Parking Lot	11555 Old Oregon Trail Redding, CA 96003	121	10/9/2019 08:00	10/11/2019 18:00
Sierra	Loganville Campground Parking lot	HWY 49 Sierra City, CA 96125	0	10/9/2019 08:00	10/10/2019 18:00
Solano	Mission Church Parking Lot	6391 Leisure Town Road Vacaville, CA 95687	81	10/9/2019 08:00	10/11/2019 18:00
Sonoma	Santa Rosa Veterans Memorial Building Parking Lot	1351 Maple Ave Santa Rosa, CA 95404	426	10/9/2019 8:00	10/11/2019 18:00
Sonoma	Hanna Boys Center (Indoor)	17000 Arnold Drive Sonoma, CA 95476	215	10/10/2019 08:00	10/11/2019 18:00
Stanislaus	Westley Hotel Parking Lot	8615 CA-33 Westley, CA 95387	14	10/9/2019 08:00	10/10/2019 15:00
Tuolumne	Mother Lode Fairgrounds	220 Southgate Drive Sonora, CA 95370	205	10/9/2019 08:00	10/11/2019 18:00
Yolo	Local Parking Lot	E. Edwards St. & Railroad Ave. Winters, CA 95694	21	10/9/2019 08:00	10/11/2019 10:00
Yuba	Alcouffe Community Center (Indoor)	9185 Marysville Road Oregon House, CA 95962	227	10/9/2019 08:00	10/12/2019 18:00

**Table 1-2. Community Resource Centers Provided Not Sponsored by PG&E  
Between October 9-12, 2019 for the PSPS Event**

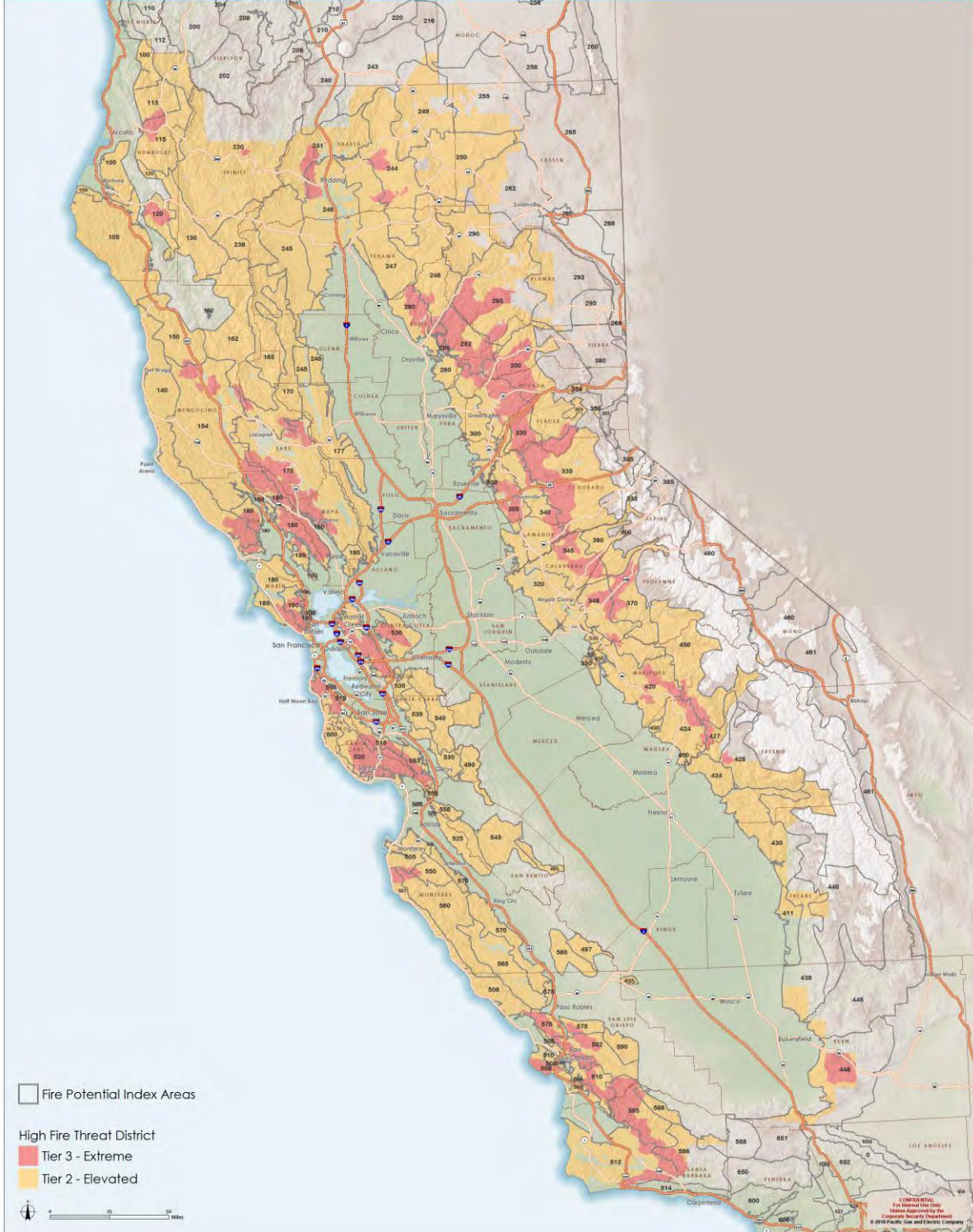
<b>County</b>	<b>Location Type</b>	<b>Address</b>	<b>Dates and Times Available</b>	<b>Resources Available</b>
Santa Clara	Camden Community Center	3369 Union Ave San Jose, CA	10/09/19 08:00-20:00	Information, device charging, water, light snacks, Spanish & Vietnamese interpretation.
Santa Clara	Mayfair Community Center	2039 Kammerer Ave San Jose, CA	10/09/19 08:00-20:00	Information, device charging, water, light snacks, Spanish & Vietnamese interpretation.
Santa Clara	Southside Community Center	5585 Cottle Road San Jose, CA	10/09/19 08:00 - 20:00	Information, device charging, water, light snacks, Spanish & Vietnamese interpretation.
Alameda	Hayward City Hall Rotunda	777 B Street Hayward, CA	10/10/19 10:00 - 18:00 * Available until no longer needed	Cooling, device charging
Contra Costa	County Employment & Human Services Department	4545 Delta Fair Blvd Antioch, CA	10/09/19 08:00 - 17:00 * Available until no longer needed	Device charging
Contra Costa	County Employment & Human Services Department	151 Linus Pauling Hercules, CA	10/09/19 08:00-17:00 * Available until no longer needed	Device charging
Contra Costa	County Employment & Human Services Department	400 Ellinwood Way Pleasant Hill, CA	10/09/19 08:00-17:00 * Available until no longer needed	Device charging
Contra Costa	County Employment & Human Services Department	1305 Macdonald Richmond, CA	10/09/19 08:00-17:00 * Available until no longer needed	Device charging
Marin	County Sheriff's Office	850 Drake Ave Marin City, CA	10/09/19 12:00-20:00 * Available until no longer needed	Device charging
Sonoma	Petaluma Community Center	320 N. McDowell Petaluma, CA	10/09-10/19 08:00-20:00	Device charging
Sonoma	Petaluma Fairgrounds	175 Fairgrounds Dr Petaluma, CA	10/09-10/19 09:00-17:00	Device charging

**PACIFIC GAS AND ELECTRIC COMPANY**

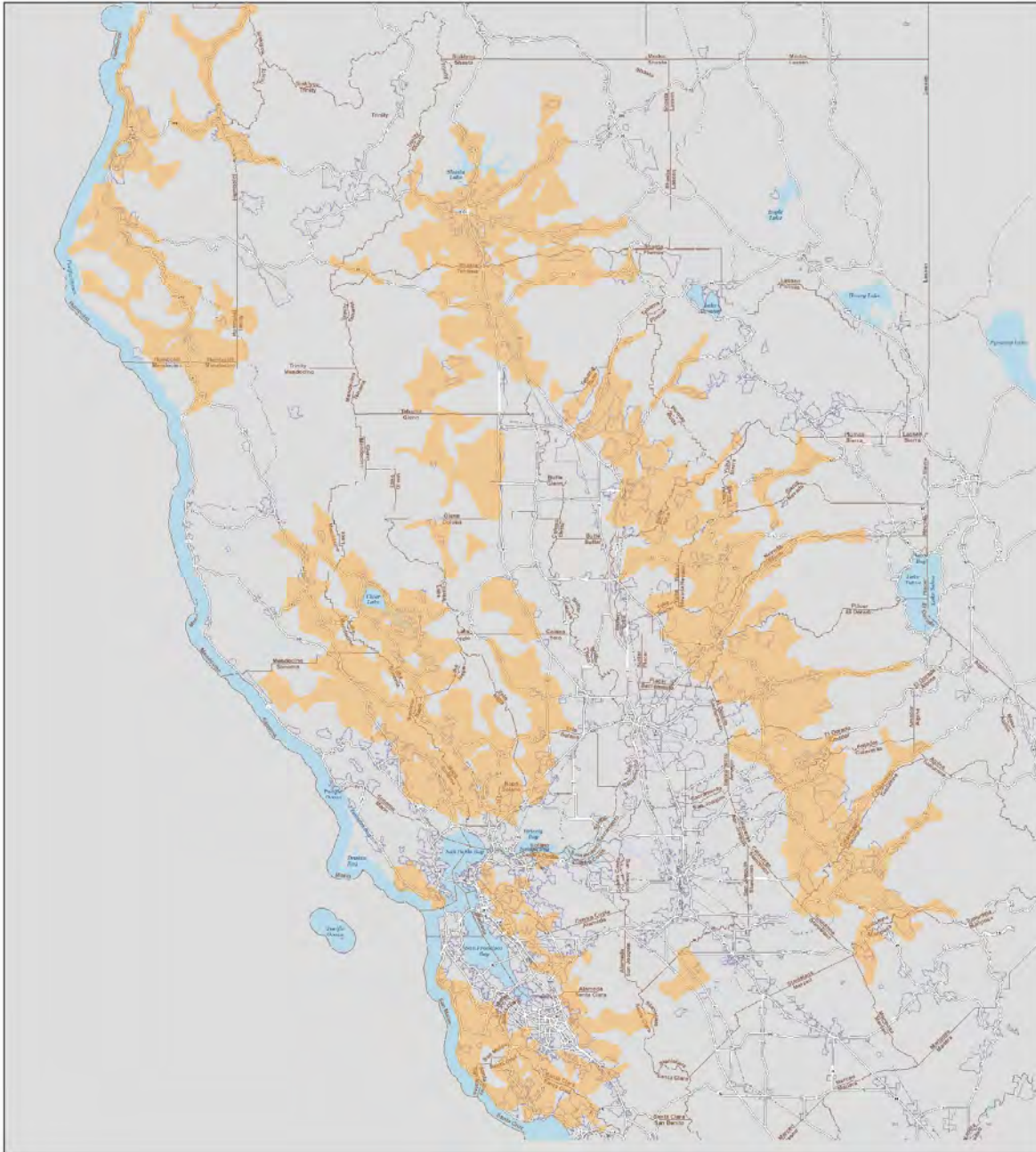
**APPENDIX H**

**FIRE INDEX AREA MAP AND EVENT LOCATION MAPS**

# High Fire Threat Districts and Fire Potential Index Areas



# Northern California De-Energization Scope



PSPS\_10-09-19\_D-02\_BaseLine\_PUBLIC

- Affected Areas
- County Boundary
- Highway
- Major Road
- Minor Road
- Railroad
- Community

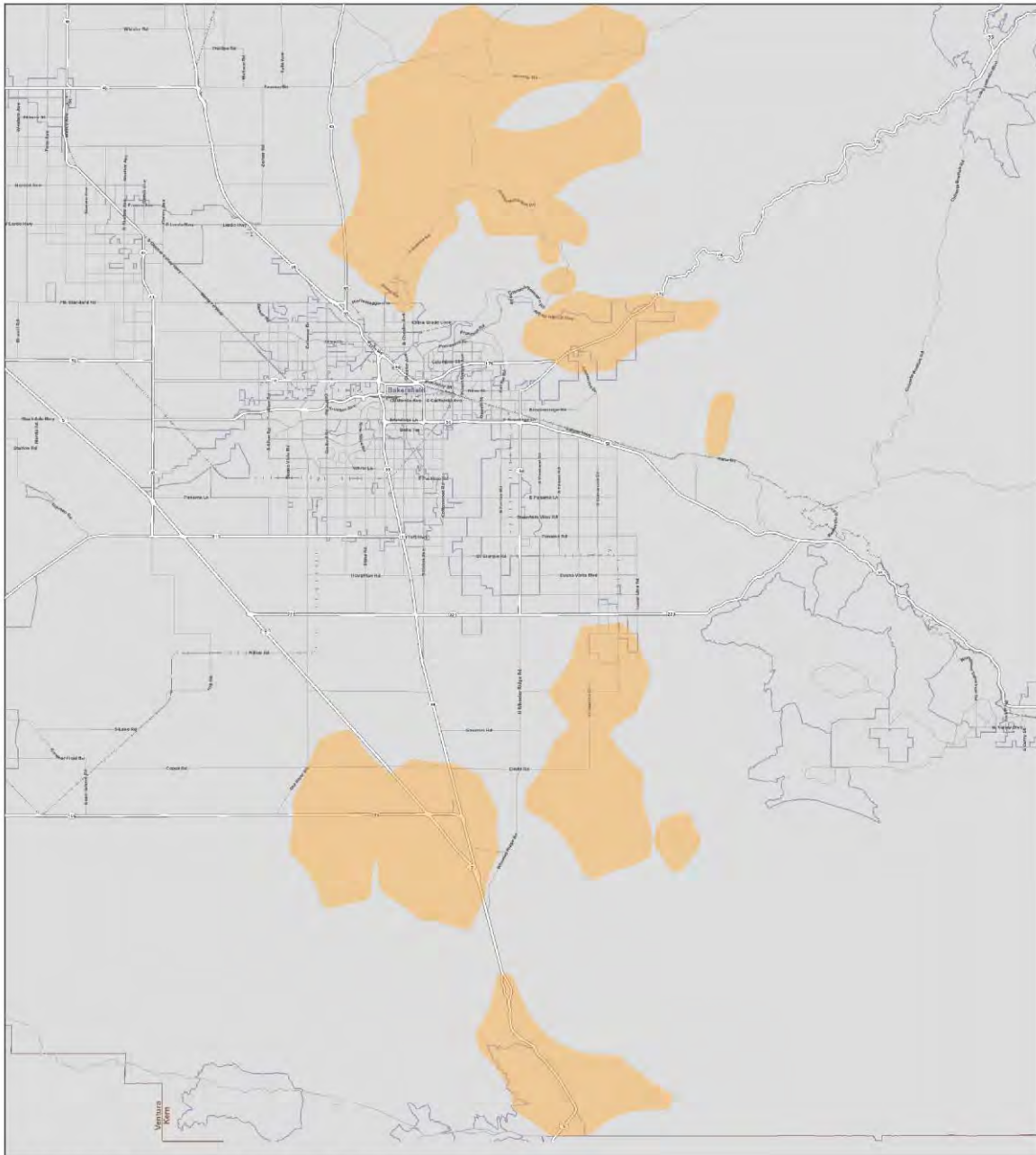


Last Updated  
October 08, 2019  
11:30 AM



The information in this map is intended only to provide customers with a general estimate regarding potential locations that may be impacted by a PSPS event should one become necessary. Conditions affecting a possible PSPS event can change quickly and the actual impact of a future PSPS event is uncertain.

## Kern County De-Energization Scope



**PSPS\_10-10-19\_B-07.1\_T\_24hrs\_PUBLIC**

- |   |  |            |
|---|--|------------|
| <span style="display: inline-block; width: 15px; height: 10px; background-color: orange; border: 1px solid black;"></span> Affected Areas | <span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black;"></span> Community | Highway    |
| <span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black;"></span> County Boundary                          |  | Major Road |
|   |  | Minor Road |
|   |  | Railroad   |



**Last Updated**  
**October 12, 2019**  
**09:01 AM**



**The information in this map is intended only to provide customers with a general estimate regarding potential locations that may be impacted by a PSPS event should one become necessary. Conditions affecting a possible PSPS event can change quickly and the actual impact of a future PSPS event is uncertain.**

**VERIFICATION**

I, undersigned, say:

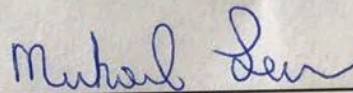
I am an officer of PACIFIC GAS AND ELECTRIC COMPANY, a corporation, and am authorized to make this verification for that reason.

I have read the foregoing "Amended PG&E Public Safety Power Shutoff Report to the CPUC" and I am informed and believe the matter stated therein are true.

I declare under penalty of perjury that the foregoing is true and correct

Executed at San Francisco, California this 8th day of November,

2019.



**MICHAEL LEWIS**

Senior Vice President, Electric Operations  
PACIFIC GAS AND ELECTRIC COMPANY





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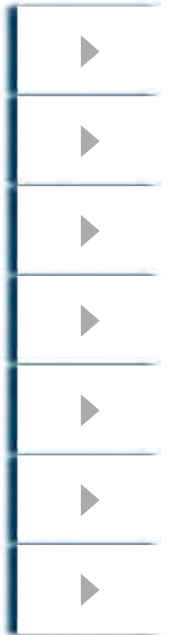
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# Frequently Asked Questions about Utility Public Safety Power Shut-off (PSPS) Events

## 1. I am dependent on electricity for a medical device. Where can I find more information on planning for a power shut-off?

If you rely on electric or battery-dependent assistive technologies and medical devices, including breathing machines, power wheelchairs or scooters, and home oxygen or dialysis equipment, make sure that you have planned for an extended power outage. More information on planning can be found through the [Pacific ADA Center](#).

## **2. Can I use my solar panels to provide backup power in the event of a power shut-off?**

Maybe. During a power shut-off, most solar systems will automatically power down. This behavior prevents any flow of power into your utility's de-energized electric grid and is essential to ensure the safety of repair crews and first responders. However, while many solar systems are designed to operate only while the grid is operating normally, some systems have the ability to "island" during outage conditions and provide power to some or all of the appliances in your home.

Please check with your solar provider and/or your licensed contractor to determine the capabilities of your specific system.

## **3. Can I modify my solar system to provide backup power? How much will that cost?**

Yes. The options available to you will depend on the specifics of your solar system. Many solar systems can be retrofitted to provide backup power either by replacing the inverter with a specifically designed model or by adding backup battery storage (discussed in the FAQs below).

Some inverters are designed to provide limited backup power during grid outages, even if no battery is installed. However, these technologies have limitations. First, they only provide power while your solar system is generating power. No power is available at night, for instance, and you might lose power when a cloud shades your solar panels. For this reason, this technology is not suitable for powering some medical devices. Second, inverters that provide backup power typically can't provide enough power to meet all your typical home needs. Instead, they can be used to run specific appliances, like your refrigerator, or provide a place to charge your phone.

The cost of replacing an inverter varies. Replacement inverters typically cost around \$1,000 to \$2,500 depending on the size of your solar system. Inverters with advanced capabilities such as those described above might cost more than a regular inverter.

Contact your solar provider and/or licensed contractor for more information. Also contact your utility to ensure that you meet all safety and interconnection requirements.

## **4. Can a battery be used to provide backup power? How much will that cost?**

Yes. Most battery storage systems are capable of providing backup power. The length of time that you can power your appliances will depend on the size and rating of the battery and on the amount of power your appliances draw. Contact your battery installer or manufacturer to make sure you know the limits of your system and can appropriately prioritize your energy usage.

The cost of a battery ranges from \$5,000 to over \$7,000. With installation, you can probably expect to spend from \$7,000 to over \$20,000 for the whole battery system, depending on the size and type of batteries.

Incentives may also be available through the [Self-Generation Incentive Program](#) to help decrease the cost of the system. For information on how to apply for incentives in your area, please contact the Program Administrator for your utility:

- [Pacific Gas and Electric Company](#) (for PG&E electric customers and PG&E gas customers of public electric utilities in Northern California)
- [Southern California Edison](#) (for SCE customers)
- [Southern California Gas Company](#) (for SoCalGas customers that take electric service from a non-SCE entity in Southern California)
- [Center for Sustainable Energy](#) (for San Diego Gas & Electric customers)

Contact your battery provider and/or licensed contractor for more information. Also contact your utility to ensure that you meet all safety and interconnection requirements.

## **5. Can a generator be used to provide backup power? How much will that cost?**

Yes. Generators can provide backup power at a cost of \$500 to over \$10,000, depending on the size. They can also be noisy and pose safety hazards, including fire and carbon monoxide poisoning. It's important to understand how to safely operate your generator before an emergency occurs. This means performing regular safety checks and ensuring you have enough fuel to last through the power shut-off. If you don't understand how to use your generator, you risk damaging your property, endangering your life, and endangering the lives of repair crews and first responders working in your community.

Generators may be subject to state and local air quality regulations. To find the air quality regulator serving your area and obtain more information, please visit the [California Air Resources Board's website](#). There may also be community ordinances where you live that restrict or limit noise from generators. Further, your city or county building department should inspect any changes to your home's wiring.

If your generator is connected directly to your home's wiring system, you are also responsible for making sure power does not flow into your utility's de-energized electric grid. Contact a licensed contractor for more information. Also contact your utility to ensure that you meet all safety and interconnection requirements.

## **6. If my home energy system is capable of providing backup power, what appliances will work and for how long?**

A single-battery system can typically power your priority appliances (e.g., refrigerator, lighting, and a few other outlets) for 24 to 48 hours during a power shut-off. A larger, multi-battery system can provide full backup power for 24 to 48 hours during a power shut-off.

If you have a solar plus battery storage system and the sun is shining, the amount of time you have backup power is extended.

A generator can provide backup power for as long as fuel is available.

## **7. Do I need to contact my electric utility in order to use backup power?**

Yes. You must contact your utility if you intend to use backup power that is connected directly to your home's wiring system. For more information, please contact your utility:

- [Pacific Gas and Electric Company](#)

- [Southern California Edison](#)
- [San Diego Gas & Electric](#)
- [PacifiCorp/Pacific Power](#)
- [Bear Valley Electric Service](#)
- [Liberty Utilities](#)

## **8. Can I use my electric vehicle's battery to power my home in the event of a power shut-off?**

Probably not. The current technology on most electric vehicles (EVs) is not capable of transferring power from the vehicle to a building. Most EVs currently on the road are only able to receive power from an EV charger and do not have “bidirectional capabilities.” However, a number of EV manufacturers have plans to release bidirectional-capable models in the near future.

Another barrier that prevents using an EV as a backup power source is the risk of voiding the manufacturer's warranty if the battery is used for any function other than powering the vehicle. Please contact your manufacturer for more information on battery warranty requirements.

## **9. How do I charge my electric vehicle during a power shut-off?**

Plans should be made to fully charge your electric vehicle (EV) as soon as you receive notice that a power shut-off is planned in your area.

During a power shut-off, you should use a public charging station location tool, such as [PlugShare](#), to find chargers located in unaffected areas. If you have backup power, you may be able to continue charging your EV (see the above FAQs). Please contact your home energy provider and/or licensed contractor to see if your system can be used during a power shut-off.

Finally, the utilities open Community Resource Centers in impacted areas to support customers affected by power shut-offs. The Community Resource Centers provide access electricity to charge electric devices, sometimes including EVs. Please contact your utility prior to a power shut-off for more information on Community Resource Centers.

## **10. Is there anything else I should do to prepare my electric vehicle for a power shut-off?**

If you have an electric garage door that you are unable to operate manually, move your EV outside of your garage before the power shut-off.

There may be issues with keeping your EV plugged in during a power shutoff, so it's best to unplug your EV for the duration of the event.

If you are unable to charge your EV during a power shut-off, practice smart driving behavior to conserve your vehicle's power. Avoid accelerating quickly and braking abruptly, keep your tires properly inflated, lower the vehicle's heater or air conditioner, and turn the vehicle off when not in use.

## **11. Is there anything else I should know to prepare for a power shut-off?**

Your water and gas should stay on during a power shut-off. However, if your water requires an electric pump, such as in a high-rise building or for well systems, then it will also be turned off.

If you have electric appliances like hot water heaters and electric stoves, you should be prepared to not be able to use these appliances for the duration of the power shut-off.

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CALIFORNIA

Power shut-offs could prevent wildfires, but at what cost to the elderly and disabled?

Last year, Southern California Edison and PG&E announced that they would cut power more often to prevent wildfires.

(Don Kelsen / Los Angeles Times)

By TARYN LUNA | STAFF WRITER

AUG. 18, 2019 5 AM PT

SACRAMENTO —

Cecilia Santillano faced a difficult decision last year before the power went out in her Simi Valley neighborhood: Ignore her monthly bills and buy a generator, or hope the batteries on her husband's ventilators would outlast the next outage.

"If I didn't have the generator and there was no power and no sign of it getting turned on, George could start passing away," said Santillano, whose husband suffers from a rare autoimmune disease and is bound to a wheelchair. "They are expensive and I didn't want to buy it, but I'd rather be safe."

The power outage Santillano endured wasn't related to preventing wildfires — she said it was caused by Southern California Edison maintenance. But outages like hers could become more commonplace and

prolonged as California utility companies expand their use of intentional electricity shut-offs to prevent power lines from sparking wildfires.

Local leaders and public health workers fear that hundreds of thousands of vulnerable Californians, such as Santillano, could find themselves in increasingly dire situations. They also acknowledge there are wrenching trade-offs.

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“This is a really tough situation,” said Karen Relucio, a public health officer in Napa County. “If they don’t shut off the power, you may have a county that catches on fire. But if they do shut off the power, you may have someone who dies because their respirator shuts off.”

Officials say the utilities have so far failed to properly warn people with accessibility issues or who depend on life-sustaining medical equipment and refrigerated medications, nor have they given public safety officials and local health services agencies enough notice prior to “public safety power shut-offs” over the last year.

Gov. Gavin Newsom vented his frustration with Pacific Gas & Electric’s handling of a shut-off in June, saying there “was no coordination and collaboration with the state.”

“They were in the office, quite literally, the next day and we had a very honest conversation about expectations,” Newsom said. “We are working to make sure this is done appropriately.”

State Sen. Mike McGuire (D-Healdsburg) called PG&E’s handling of an outage in Northern California in October “a hot mess.” The San Francisco company asked the Lake County Sheriff to sign a last-minute non-disclosure agreement in order to gain access to the company’s list of electricity dependent customers, caused a school to close that didn’t end up losing power and generally failed to communicate their plans, he said.

“PG&E was not at all prepared and they were completely disorganized,” said McGuire. “I believe they put lives at risk and we were lucky that we did not see any injuries related to those early planned power outages.”



Sumeet Singh, vice president of PG&E's Community Wildfire Safety Program, admitted the early failures during a recent legislative hearing.

"We own it. I own it," Singh told McGuire and other state senators. "I'm making a commitment that we're going to do everything we can to ensure we're satisfying the needs and the interests in regards to the information that our team really should be providing to you."

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Intentional power outages, especially those lasting a day or more, pose serious risks to some residents, particularly the elderly or those with medical issues. Respirators and other electronic medical devices can go dark. With air conditioning out, the chance of heat stroke increases. People lose food in their refrigerators, putting them at risk of accidental food poisoning.

Impaired cellular networks, traffic signals and other infrastructure problems also heighten public safety risks.

A study of a citywide New York blackout in 2003 found that total mortality increased 28 percent during the two-day event. Power outages and the exacerbation of existing medical issues were the most common causes of death related to Hurricane Irma in 2017, according to the Centers for Disease Control and Prevention.

Yet California has been plagued by repeated deadly fires in recent years, and many lawmakers view power shut-offs as a critical tool of last resort to prevent them. While officials urge the utilities to carefully scrutinize the need for shut-offs, failing to cut power in high-risk scenarios has the potential to be catastrophic.

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PG&E prepared to shut off power to Butte County before the Camp fire ignited in November, but decided not to at the last minute. A transmission line sparked the blaze, the deadliest in state history, and PG&E said it would not have been included in the shut-off anyway.

During the intentional outage that affected Lake County last year, PG&E found 18 instances of wind-related damage to its equipment before the company restored power.

Conversations about turning off power to prevent wildfire began more than a decade ago. San Diego Gas & Electric asked state regulators for permission to shut off power after Santa Ana winds knocked down the company's power lines and sparked the Witch fire in 2007, which burned nearly 200,000 acres and killed two people.

Newsom and others agree that intentional outages could be reasonable in extreme circumstances when strong winds, hot temperatures and dry vegetation create conditions that have led to some of California's most destructive wildfires. But concerns about how the shut-offs would be carried out grew last year when Southern California Edison and PG&E announced plans to develop their own outage policies and cut power more often.

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McGuire is pushing legislation that would make advanced notifications mandatory to police, fire and sheriff departments, health care facilities and telecommunication providers if their facilities will be impacted by an outage. Action is expected on his bill before the Legislature adjourns for the year next month.

Recently revised state guidelines say all customers should receive a minimum of a 24- to 48-hour notice before an outage, but state regulators acknowledge that advanced warning might not always be possible during rapid weather changes. The state has expected utilities to take extra effort to reach customers with medical and accessibility issues and ensure they have a backup plan if the outage lasts for long periods.

The utilities have been meeting with local communities around the state and some officials say PG&E's communication has improved since last year. Edison has not proactively cut power this year and kept parts of Los Angeles and San Bernardino counties under outage warnings for nearly a month from June to July. Some critics fear Edison customers may begin to ignore the repeated warnings and find themselves unprepared when the utility triggers an outage.

Edison spokesman Brian Leventhal said the warnings are important to ensure people prepare for potential outages and the company is "continuing to fine-tune the process."

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The California Conference of Local Health Officers, a group of 61 county health officers formed in the 1970s to advise the state on public health issues, voted to send a letter to the California Public Utilities Commission raising concerns about power shut-off practices.

"My biggest concern is that we have the potential to do more harm than good," said Andy Miller, the public health officer for Butte County. "We'd like an evaluation of that harm before we just kind of boldly go forward."

In order to identify and warn vulnerable residents before an outage, utilities have so far relied on lists of participants in their Medical Baseline Programs, which allow people to receive discounted monthly rates if they use electricity to power life-sustaining medical equipment or motorized wheelchairs, or if they suffer from other qualifying medical issues.

Relucio said PG&E attempted to provide advanced notice to fewer than 150 Napa County residents in its Medical Baseline Program who lived within areas that lost power during outages in October and November.

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Earlier this year, Relucio and her colleagues conducted their own tally of residents whose health depends on electrical equipment or who rely on refrigerated medications. The county, tapping into federal, state and local databases, discovered that PG&E's internal list likely only covered about 10 percent of the residents who could have been at risk, Relucio said.

Elizaveta Malashenko, head of Safety and Enforcement Policy at the CPUC, agreed that the utilities rely on a "highly incomplete" accounting of residents who depend on electricity for medical issues.

She told state legislators last week that the medical baseline programs were not designed for emergency response. Residents of some mobile home parks or properties where building managers receive one electricity bill for the entire community can't register for the programs at all.

"We had people coming to us at the fire station to get their device charged," said Calistoga Mayor Chris Canning of the first outage in October.

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PG&E Electric, Edison and SDG&E collectively serve 343,000 "medical baseline" customers, the companies said. Public health officials say the nearly 600,000 residents who receive in-home support services from the state, which provides care to elderly, blind, or disabled people who cannot fully care for themselves, should also be considered vulnerable populations that need extra help before outages.

After losing confidence in PG&E last year, Napa County worked off its own more extensive list before a shut-off in June and mapped the addresses of people using at-home medical equipment within the area that would lose power, Relucio said.

But at least one resident, a man using a device to keep his heart functioning, nearly fell through the cracks. Relucio said he only appeared on a federal list, but no phone number was listed. The county sent a sheriff's deputy to his house to locate him.

A bill introduced by state Sen. Bill Dodd (D-Napa) would require investor-owned utilities to develop protocols to mitigate public safety impacts on medical baseline customers. It would also help some qualifying customers in high fire risk areas seek back-up generators. State regulators in June expanded the definition of at-risk communities that utilities should identify with local and state agencies to include people with developmental or physical disabilities, chronic conditions, non-English speakers, older adults and others.

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The newly enacted state budget provides \$75 million to statewide and local agencies for shut-off preparedness. Some say the money isn't enough to cover the financial strain from the outages.

Roughly 6,200 residents receive some form of in-home support services in Sonoma County. Reaching out to all those people on short notice before a shut-off would be a tall order, said Paul Dunaway, director of the adult and aging division of the county's Department of Health Services.

Dunaway said some residents cannot sustain hot and cold temperatures for prolonged periods, but might not receive any county services. Others have more basic concerns.

"We have a lot of people on food stamps or CalFresh and if they only get food resources in the beginning of the month and their food spoils, then they have to wait a significant amount of time before they are eligible for more food," he said.

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Danielle Anderson, executive director of an Independent Living Resources Center that serves people with



has set aside \$5,000 to help buy generators for people in need.

“There are a lot of individuals in our areas who do not have family support, they live on their own and barely make it. They can’t afford a generator,” Anderson said. “I hate to be the one to speak the truth that nobody wants to hear, but there are going to be deaths if this is not done the right way.”

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# PG&E Shutoffs: What to Know About Power Outages in the Bay Area

By [Lisa Pickoff-White](#), [Raquel Maria Dillon](#), [Lakshmi Sarah](#), [Kelly O'Mara](#) Sep 8, 2020

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## Go to:

- [How do I prepare my home for a PG&E shutoff?](#)
- [Real-time PG&E power outage map \(opens new page\)](#)
- [Why are these outages happening?](#)

During a wildfire, there are a few reasons your power might go out, including [public safety power shutoffs \(PSPS\)](#) determined by your utility company, outages ordered by the power grid operator and unplanned outages.

## How Will I Know About a Public Safety Power Shutoff in My Area?

To be notified of a public safety power shutoff in your area, [update your contact information](#) with PG&E. You can also call them at 1-866-743-6589 to update your contact information and to receive notifications. You can [sign up to be notified by ZIP code](#) or [check their website](#) for the most recent information.

Utilities are supposed to notify emergency responders of a potential power shutoff 48 to 72 hours in advance and notify regular customers somewhere between 24 to 48 hours beforehand. There should also be follow-up messages a few hours before a shutoff begins and again during the shutoff.

### Fire Evacuation: What Actually Happens? And How Can You Plan?

If there is a power shutoff, here's what you need to know:

## How Can I Prepare For a Power Shutoff?

### What to Pack in Your Emergency Bag – With COVID-19 in Mind

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multiple days for the utility to do safety checks and get the power turned back on. In some cases, it might be best to stay with family or friends during the outage.

Things to do in advance of a power shutoff, **according to PG&E:**

- Create an emergency kit with enough water and nonperishable food to last up to a week. (**Here's what we suggest goes in an emergency bag** in case of a fire — with COVID-19 in mind.)
- Charge your cellphone and any necessary devices. Have additional batteries for any medical devices that require electricity. If you don't have a landline or your landline won't work without power, then have backup batteries for any cellphones as well.
- Have a list of emergency contacts prepared.
- If you plan to use a generator, check it beforehand to ensure it is ready to go and **will operate safely**.
- Have flashlights and extra batteries on hand. (Try to avoid using candles.)
- Have extra cash on hand and a full tank of gas. ATMs and gas stations may not work during a power outage.
- Make sure you know how to manually open any door that requires electricity, such as garage doors or building doors that require key cards.

If you rely on power for medical needs, you may need to talk to your doctor in advance about how to prepare with medications or mobility needs. If possible, you may want to stay with a family member or friend who has power. You can register for **PG&E's medical baseline program** if you have a life-assisting medical device, which will qualify you for lower rates and provide you with additional advance notification.

## **What Should I Do During a Power Shutoff?**

Once the power is off, keep in mind that emergency responders may be dealing with their own backup power needs and any emergency medical situations that comes up. Do not call 911 unless it's an emergency. Additionally, infrastructure such as traffic lights, may be impacted — so proceed with caution. San Jose has asked residents to avoid driving if the power is shut off and to stop at dark signals.

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- You may also want to check to see if there are **cooling centers** in your area.
- Check for PG&E **community resource centers** in your area for additional support.

As always, you should also consider checking on neighbors, especially those who may need assistance.

### **What to Pack in Your Emergency Bag – With COVID-19 in Mind**

Power will be restored after the dangerous conditions have passed and once safety checks have been done for all the lines in that area. If there are a large number of people who have had their power shut off, then it may take multiple days before PG&E gets the power turned back on for everyone.

If you experience a loss due to extended power outages — such as the food in your fridge going bad — you can **file a claim** with the utility.

## **Why Are These PG&E Public Safety Power Shutoffs Happening?**

**California's 2020 wildfire season** was the state's biggest on record, with **more than 4 million acres burned**.

The previous record was set in just two years ago and included the deadliest wildfire in state history — the Camp Fire — which swept through the community of Paradise and killed 85 people.

That fire was started by PG&E power lines amid strong winds and tinder-dry conditions. To guard against new wildfires and new liability, in 2019 the utility began preemptive power shutoffs when conditions are exceptionally dangerous.

The California Public Utility Commission **approved rules for how the state's major utilities**

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"PG&E's had three years, and they've been working fairly diligently, to put in durable, resilient transmission and distribution lines, and they have not completed that task," she said.

## How Are Shutoffs Different From Rolling Blackouts?

Sometimes Californians also lose power because of strains on the system. The [California Independent System Operator](#) (ISO) manages the delicate balance of power supply and demand on the state's electrical grid and can order utilities to cut power to customers as it did

"It's one big interconnected system," said John Phipps, an operations director with California ISO. "Energy being generated at one plant can feed homes completely on the other end of the state."

For example, Phipps said, "if Diablo Canyon had problems in Northern California, that could impact San Diego."

*This story has been updated. Check the [PG&E resource page](#) for the latest updates.*

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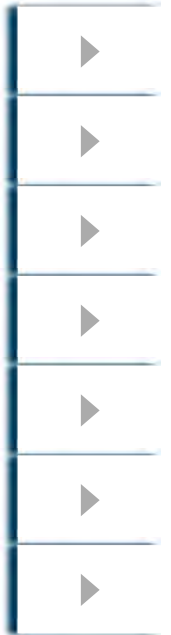
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## Public Safety Power Shutoff (PSPS) / De-Energization

### What is PSPS? History and Background

Over the last decade, California has experienced increased, intense, and record-breaking wildfires in Northern and Southern California. These fires have resulted in devastating loss of life and billions of dollars in damage to property and infrastructure. Electric utility infrastructure has historically been responsible for less than ten percent of reported wildfires; however, fires attributed to power lines comprise roughly half of the most destructive fires in California history. With the continuing threat of wildfire, utilities may proactively cut power to electrical lines that may fail in certain weather conditions to reduce the likelihood that their infrastructure could cause or contribute to a wildfire. This effort to reduce the risk of fires caused by electric infrastructure by temporarily turning off power to specific areas is called a Public Safety Power Shutoff (PSPS). However, a PSPS can leave communities and essential facilities without power, which brings its own risks and hardships, particularly for vulnerable communities and individuals. From 2013 to the end of 2019, California experienced

over 57,000 wildfires (averaging 8,000 per year) and the three large energy companies conducted 33 PSPS de-energizations.

In 2012, the CPUC ruled that California Public Utilities Code Sections 451 and 399.2(a) give electric utilities authority to shut off electric power in order to protect public safety. This allows the energy companies (SDG&E, PG&E, SCE, Liberty, Bear Valley and PacifiCorp) to shut off power for the prevention of fires where strong winds, heat events, and related conditions are present.

In 2017, fires raged in Santa Rosa, Los Angeles, and Ventura making it one of the most devastating wildfire seasons in California's history. In response to the 2017 wildfires and Senate Bill (SB) 901, the Commission revised earlier guidelines on the de-energization of powerlines.

The CPUC adopted the most current set of PSPS guidelines on June 5, 2020.

In 2020, the electric companies' PSPS plans include provisions for COVID-19 measures. Click [here](#) for the utilities' 2020 Planning for Public Safety Power Shutoffs (PSPS).

Access to information about consumer disaster relief protections for customers of affected areas during any declared state of emergency, including wildfires, is available on this CPUC [News Blog](#).

## Evolution of Public Safety Power Shutoffs in California

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The CPUC continues to take action to mitigate the impacts of PSPS events:

- On June 11, 2020, the CPUC [adopted short-term Actions to Accelerate Microgrid Deployment and other resiliency solutions in Decision 20-06-017](#).
- On May 28, 2020, the Commission adopted updated and additional PSPS guidelines to mitigate wildfire risk and the impact on customers when a utility considers implementing a PSPS. These guidelines were approved in [Decision 20-05-051](#), which contains Appendix A, which is Phase 2 of [Rulemaking 18-12-005](#). The CPUC opened this rulemaking to examine de-energization of power lines (PSPS).
- On May 28, 2020, the CPUC [enhances community engagement and collaboration for utility PSPS events](#). (Fact sheet [here](#), updated October 2020.)

The current PSPS guidelines ([D.20-05-051](#)) direct the electric utilities to more actively and holistically take into account the needs and input of the Access and Functional Needs (AFN) community, including vulnerable populations and current and potentially eligible medical baseline customers.

[Government Code 8593.3](#) defines "access and functional needs population" as individuals who have the following conditions: Developmental or intellectual disabilities, physical disabilities, chronic conditions, injuries, limited English proficiency or who are non-English speaking, older adults, children, people living in institutionalized settings, those who are low income, homeless, transportation disadvantaged, including those who are dependent on public transit, those who are pregnant. The CPUC and the Governor's Office of Emergency Services have adopted this definition as well.

Click [here](#) for a list of AFN actions the guidelines direct the electric utilities to take during a PSPS event.

Phase 2 guidelines are a recent CPUC action directing the electric companies before, during and after a PSPS event. These current guidelines ensure the IOUs enhance consistent, customer-friendly communications before and during PSPS events, minimize the impact on customers when energy utility companies implement PSPS events, and increase accountability with impacted regional Working Groups and reports.

The current Phase 2 guidelines are preceded by and build upon past CPUC actions, described below.

- On April 30, 2020, the CPUC Safety and Enforcement Division (SED) completed a [Public Report on the Late 2019 Public Safety Power Shutoff Events](#) (attachments: [Part 1](#), [Part 2](#)) that assessed the performance of PG&E, SCE and SDG&E during the late Fall 2019 PSPS events. (SED served its Report in June 2020 to the I.19-11-013 service list, and the Report was incorporated into the record of R.18-12-005 in September 2020.)

The late 2019 PSPS Events by the three utility companies caused customer confusion, anger, and resulted in some customers, including medical baseline customers, not being notified of the PSPS. These PSPS events spurred many CPUC actions.

On Oct. 18, 2019, the CPUC held an Emergency Meeting to hear from top Pacific Gas and Electric Company (PG&E) executives to publicly address the mistakes and operational gaps identified in the utility's October 2019 PSPS events and to provide lessons learned to ensure they are not repeated.

More information about the meeting and CPUC actions in response to all three companies' Late Fall 2019 PSPS Events is available on the "[October 2019 PSPS Events](#)" webpage.

- Phase 1 guidelines were approved on May 30, 2019, in a decision in the R.18-12-005 proceeding, to prepare for the 2019 fire season.
- The CPUC opened a new Rulemaking (R.18-12-005) on December 13, 2018 to examine the utilities' PSPS processes and practices in response to Senate Bill 901.
- [Resolution ESRB-8](#) was adopted on July 12, 2018 to strengthen customer notification requirements before de-energization events and required utilities to submit a report within 10 days after each de-energization event.
- On April 19, 2012, the CPUC provided its first PSPS guidance to utilities in [Decision 12-04-024](#), in response to SDG&E's [Application 08-12-021](#) requesting specific authority to shut off power as a fire-prevention measure against severe Santa Ana winds and a review of SDG&E's proactive de-energization measures.

## Utility Company PSPS Post Event Reports

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The reports in this section are submitted by the utility companies in accordance with Resolution ESRB-8, Ordering Paragraph 1 of California Public Utilities Commission (CPUC) Decision (D.) 19-05-042 (Phase 1), and Ordering Paragraph 1 of Decision (D.) 20-05-051 (Phase 2).

Reports are listed by the date of the PSPS event or anticipated PSPS event, not the date the report was submitted.

- [CPUC PSPS Rollup: Oct. 2013 Through Dec. 31, 2020](#)

### 2021 Utility Company PSPS Post Event Reports

#### PG&E

- [Jan. 19, 2021: PSPS Post Event Report](#)

#### SCE



- [Apr. 12-13, 2021: PSPS Post Event Report](#)
- [Jan. 12-21, 2021: PSPS Post Event Report](#)
  - [Amended Jan. 12-21, 2021: PSPS Post Event Report](#)

## **SDG&E**

- [Jan. 14-16, 2021: PSPS Post Event Report](#)

## **[2020 Utility Company PSPS Post Event Reports](#)**

## **[2019 Utility Company PSPS Post Event Reports](#)**

## **[2018 Utility Company PSPS Post Event Reports](#)**

## **[2017 Utility Company PSPS Post Event Reports](#)**

# **Potential Impacts on Telephone Service during De-Energization**

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End users of communication services will receive differing levels of service when their provider loses power. Communications service providers are required under [Decision 10-01-026](#) to implement programs to educate their customers on the different types of back up power supplies and how to obtain them.

## **Will my telephone work in a de-energization event? It depends.**

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- Wireline customers who subscribe to POTS (plain old telephone service) voice service using copper lines generally have service during a power outage. This is because the central office that serves the residence as backup power, which provides the electricity necessary to operate a wired telephone during a power outage.
  - The CPUC does not have rules mandating backup power for this service, however most central offices do have and maintain backup power.
  - Cordless phones require the end user to maintain the batteries in those devices, so that the home portion of the telephone service can operate in a power outage.
- For VoIP customers, service during a power outage depends on the underlying facility used by the provider. Some VoIP providers will maintain line power (some variants of DSL) during an outage, and others rely on network power which may or may not be present.
- Cable subscribers with voice service may or may not have service in a power outage.
  - The CPUC does not have rules mandating backup power for this type of service.
- Wireless (cellular) customers may or may not have voice service in a power outage, depending on the backup power installed at cell sites.
  - The CPUC does not have rules mandating backup power for this type of service.
- It is the responsibility of the customer to obtain the required backup power in the residence to have working telephone service during an outage event. This might include batteries for cordless phones, routers, WIFI, fiber termination devices, and other customer premises equipment.

## Does a communication provider have to provide service? Some do.

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- A service provider that is designated a Carrier of Last Resort (COLR) must offer basic service to all residential customers in its territory under Decision [12-12-038](#). This includes AT&T, Consolidated, Frontier, and 13 small rural carriers. View a [list of all the COLRs](#) and a [map of their service territories](#).
  - One required element of basic service is for COLRs to provide free access to 9-1-1.
  - The CPUC does not have rules for service providers to keep telephone service operational during a planned power outage.
- If you have a complaint about your telephone service, first call your service provider. If they don't fix it, then please call the CPUC's [Consumer Affairs Branch](#) at (800) 649-7570 to submit an informal complaint.

The CPUC's [General Order 168 Rule 3](#) requires communication providers who offer end-user access to the public switched telephone network to provide access to 9-1-1 emergency services to all residential customers and wireless devices. Rule 3 does not require carriers to provide access to 9-1-1 during a power outage or de-energization event.

CPUC [Resolution ESRB-8](#) requires electric utilities to make all practical attempts to notify and coordinate with all potentially affected communications service providers before and after a de-energization event.

- Jul. 16, 2020: [CPUC Requires Wireless Companies to Better Serve Customers in Emergencies \(CPUC Press Release\)](#)

## More Information

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For additional information, including utility company Progress Reports, go to the company website.

## Contact

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Contact the CPUC's Public Advisor's Office at [public.advisor@cpuc.ca.gov](mailto:public.advisor@cpuc.ca.gov) or U.S. mail at CPUC, Public Advisor's Office, 505 Van Ness Ave., San Francisco, CA 94102 if you have questions or would like to comment.



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[Visit the Consumer Information Website](#)

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## Meetings on PSPS Issues

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Please visit our [events calendar](#) for upcoming meetings.

- Apr. 20, 2021: CPUC Tree Overstrike Workshop on PG&E's Proposed Implementation of Proposed Probation Conditions in its PSPS Program
  - Media Advisory
  - Agenda
  - Presentation
- Mar. 29, 2021: Joint IOU 2020 PSPS Workshop
  - Media Advisory
  - Agenda
  - PacifiCorp Presentation
  - PG&E Presentation
  - SDG&E Presentation
- Mar. 26, 2021: Meeting on Wildfire Risk Analysis Results
  - Media Advisory
  - Agenda
  - Technosylva Presentation
- Mar. 1, 2021: SCE 2020 PSPS Corrective Action Plan Meeting
  - Media Advisory
  - Agenda
  - SCE Presentation
  - Webcast Recording
- Jan. 26, 2021: SCE Meeting on Execution of 2020 PSPS Events
  - Media Advisory
  - SCE Presentation
  - Agenda
  - Webcast Recording
  - Jan. 19, 2021: Public Meeting
  - Jan. 19, 2021: President Batjer's Letter to SCE
  - Jan. 22, 2021: SCE's Reply Letter
  - Feb. 12, 2021: SCE's Correction Action Plan
- Aug. 13, 2020: PG&E PSPS Public Briefing
- Aug. 11, 2020: SCE PSPS Public Briefing
- Aug. 10, 2020: SDG&E PSPS Public Briefing

## PSPS News & Updates

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- Jun. 28, 2021: CPUC Executive Director letter to PG&E on Tree Overstrike
- Jun. 24, 2021: CPUC Issues Additional Guidelines and Rules in Continual Improvements to Utility Execution of Public Safety Power Shutoffs
- Feb. 12, 2021: SCE's Correction Action Plan
- Feb. 19, 2021: CPUC Proposes Additional Guidelines for Utilities To Minimize the Impact of Public Safety Power Shutoffs
- Jan. 22, 2021: SCE Reply Letter to President Batjer
- Jan. 19, 2021: CPUC To Hold Meeting on Jan. 26 To Hear From SCE About Execution of Recent PSPS Events
- Jan. 19, 2021: CPUC President Marybel Batjer letter to SCE re: 2020 PSPS Events
- Jan. 14, 2021: CPUC Adopts Strategies To Help Facilitate Commercialization of Microgrids Statewide
- Sept. 8, 2020: PG&E Response Letter Appendix - Community Resource Centers and Supplemental Information

- [Sept. 8, 2020: PG&E Response Letter](#)
- [Sept. 8, 2020: SCE Response Letter](#)
- [Sept. 8, 2020: SDG&E Response Letter](#)
- [Aug. 27, 2020: President Batjer Follow-Up Letter to PG&E, SCE, and SDG&E on Utility PSPS Public Briefings](#)
- [Apr. 30, 2020: SED served a copy of its Public Report on the Late 2019 PSPS Events to the service list of I.19-11-013](#)
- [Nov. 1, 2019: Consumer Protections and Resources for Wildfire Victims](#)

## Utility Company PSPS Programs

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As a result of Resolution ESRB-8, the electric utilities developed de-energization programs, referred to as "Public Safety Power Shutoff" (PSPS) as a preventative measure of last resort if the utility reasonably believes that there is an imminent and significant risk that strong winds may topple power lines or cause major vegetation-related issues leading to increased risk of fire. The programs outline criteria the utility analyzes when considering shutting off power to one of more electric distribution or transmission lines, and protocols for when and how customers are notified. Information about the utilities' PSPS programs can be found in the links below.

Under each utility PSPS program link below, click to read the utility's Progress Report describing its implementation of the PSPS Guidelines that were adopted in Decision (D.) 19-05-042, Appendix A.

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### Pacific Gas and Electric Company (PG&E)

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- [PG&E PSPS Programs](#)

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### Southern California Edison (SCE)

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- [SCE PSPS Programs](#)

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### San Diego Gas & Electric (SDG&E)

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- [SDG&E PSPS Programs](#)

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### PacifiCorp

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- [PacifiCorp PSPS Programs](#)

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### Liberty Utilities (CalPeco Electric) (Liberty)

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- [Liberty PSPS Programs](#)
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- [BVES PSPS Programs](#)

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## PSPS Resources

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- [The Power of Being Prepared](#)
- [State of California Wildfire Response Resources](#)
- [CAL FIRE - Ready for Wildfire](#)
- [Cal OES - Governor's Office of Emergency Services](#)
- [Info on the Self-Generation Incentive Program](#)
- [PSPS Frequently Asked Questions](#)

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# PUBLIC REPORT ON THE LATE 2019 PUBLIC SAFETY POWER SHUTOFF EVENTS



Safety and Enforcement Division

APRIL 30, 2020

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*This is a report prepared by Commission staff in response to the Commission's Order Instituting Investigation 19-11-013 (2019 Cal.PUC LEXIS 752).*

*This report is intended to be advisory in nature, subject to modification, and not intended to serve as an adjudicatory-staff investigatory pre-enforcement report. This report is also not intended to provide an evidentiary record basis to support or countermand any Commission action in this or any related proceeding, including but not limited to the review and revision of PSPS Guidelines which will happen pursuant to a public process.*

## I. Executive Summary

On November 13, 2019, the California Public Utilities Commission (CPUC, or Commission) instituted an investigation to determine if California's electric investor-owned utilities (IOU or utility) prioritized safety and complied with the regulations and requirements established by the CPUC with respect to their Public Safety Power Shutoff (PSPS or de-energization) events in late 2019. The named Respondents in the OII included Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company, (SDG&E), Liberty Utilities/CalPeco Electric (Liberty), Bear Valley Electric Service, a division of Golden State Water Company (Bear Valley), and Pacific Power, a division of PacifiCorp (PacifiCorp).

This staff report (Report), produced by the Safety and Enforcement Division (SED or staff) of the Commission, focuses on PSPS events conducted by PG&E, SCE, and SDG&E; the other Respondents did not conduct PSPS events in 2019.<sup>1</sup> SED reviewed five PG&E events, six SCE events, and two SDG&E events that occurred in late 2019. Table 1 summarizes the post-event reports that are within the scope of this Report.

SED's Report describes the manner and extent to which each electric IOU implemented the PSPS Guidelines (Guideline(s)) attached as Appendix A to Decision (D.) 19-05-042 (Decision). It provides an initial assessment of electric IOU performance regarding the issues presented in the preliminary scoping memo, including the effectiveness of notifications and communications, effectiveness of efforts to minimize the impact of PSPS events, effectiveness of actions taken to ensure public safety, whether electric IOU delays in implementing any of the Guideline requirements presented challenges, and whether a lack of preparation or coordination interfered with an electric IOU's ability to properly conduct PSPS during the late 2019 PSPS events.<sup>2</sup>

It is important to note that this Report does not present findings of non-compliance with any statute, Commission order, or regulation; it is not a pre-enforcement document. If SED were asked to undertake a compliance investigation, more extensive information collection and verification would be required. The concerns identified in this initial assessment and SED's proposed recommendations for future PSPS Guidelines and reporting are presented in Section I.B below.

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<sup>1</sup> I.19-11-013, Joint Response of Bear Valley, Liberty, and PacifiCorp to the OII, December 13, 2019, p.2

<sup>2</sup> SED did not have enough information to properly address Issues 5 and 6 in the preliminary scoping memo.



**Table 1-** Events reviewed by SED staff.

IOU	Event Start Date in 2019 (MM/DD)	Event End Date in 2019 (MM/DD)	Number of Counties Affected	Number of Customer Accounts Affected
PG&E	10/5	10/6	3	11,609
PG&E	10/9	10/12	35	735,440
PG&E	10/23	10/25	17	178,800
PG&E <sup>1</sup>	10/26	10/29	30	967,700
PG&E <sup>2</sup>	11/20	11/21	15	49,000
SCE <sup>1</sup>	10/2	10/12	5	23,824
SCE <sup>1</sup>	10/12	10/21	4	444
SCE <sup>1</sup>	10/21	10/26	6	31,386
SCE <sup>1</sup>	10/27	11/4	10	126364
SCE <sup>2</sup>	11/15	11/17	3	49
SCE <sup>2</sup>	11/23	11/26	5	1,192
SDG&E <sup>2</sup>	10/10	10/11	1	395
SDG&E <sup>1</sup>	10/20	11/1	1	27,703

Note 1 - PSPS event dates revised based on IOU post-event reports.

Note 2 - Added events to include all PSPS events for October 2019 and November 2019.

The PSPS events in Table 1 differ in some respects from the list in the OII.<sup>3</sup> Because the OII was issued on November 13, 2019, SED staff included a review of PSPS events that occurred later in November to ensure that this Report is comprehensive.

#### A. Background

The Commission issued an Order Instituting Investigation on the Late 2019 Public Safety Power Shutoff Events (I.) 19-11-013 (OII) on November 13, 2019. The OII directed SED to “assess the electric utilities’ implementation of the Public Safety Power Shutoff (PSPS) Guidelines during the late 2019 PPS events and to identify areas where the PSPS Guidelines and/or utility actions must be improved.”<sup>4</sup> The Commission directed that SED’s assessment should be contained in a consultant’s report, to be provided to the assigned Commissioner and the assigned Administrative Law Judge (ALJ).<sup>5</sup>

Because of resource and timing issues related to execution of a contract to address the issues presented in I.19-11-013 and the need for expediency to complete this assessment in advance of the 2020 fire season, this Report was prepared by SED staff rather than a consultant. The Report focuses on the issues presented in the OII’s preliminary scoping memo, with the exception of issues 5 and 6, which SED did not have sufficient information to properly address.

<sup>3</sup> OII, p.4

<sup>4</sup> I.19-11-013, November 13, 2019, Ordering Paragraph (OP) 4, p.12

<sup>5</sup> I.19-11-013, November 13, 2019, Ordering Paragraph (OP) 4, p.12

## B. Overview of Areas of Improvement and Recommendations

### i. Challenges During the Late 2019 PSPS Events

SED's review of late 2019 PSPS events found that the challenges faced by each electric IOU included:

#### All Electric IOUs

1. Ineffective coordination with public safety partners.
2. Inadequate consideration of people/communities with access and functional needs (AFN communities).
3. Lack of comprehensive consideration of public safety risks caused by de-energization.

#### Pacific Gas & Electric

1. Communication network outages and lack of coordination of appropriate backup power.
2. Inadequate notification efforts pursuant to the Guideline requirements.
3. Inadequate outreach and education to identify additional resources available to the public.
4. Lack of outreach regarding Community Resource Centers (CRC), quantities of CRCs, and resources provided at each CRC.
5. Critical facilities and infrastructure providers experienced outages without an alternative source of power.
6. Delays in coordinating with entities to identify locations of critical facilities and infrastructure.
7. Difficulty providing Geographic Information System (GIS) shapefiles depicting PSPS information.

#### Southern California Edison

1. Excessive or burdensome notifications provided to public safety partners.
2. Illegible maps depicting PSPS event boundaries provided to the public.<sup>6</sup>
3. Lack of outreach regarding CRCs, quantities of CRCs, and resources provided at each CRC.
4. Critical facilities and infrastructure providers experienced outages without an alternative source of power.
5. Lack of communication of PSPS information in languages other than English.
6. Difficulty providing GIS shapefiles depicting PSPS information.

#### San Diego Gas & Electric

1. Excessive or burdensome notifications provided to the affected customers.

### ii. Recommendations

SED proposes the following two sets of recommendations for the Commission's consideration. If the Commission would like to explore these recommendations further, that could be done in a public

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<sup>6</sup> This issue was later corrected beginning with SCE's November 15 event.

forum. The first set is recommendations for future Guidelines, and the second set is recommendations for content and data to be submitted as part of the SED proposed PSPS Annual Report:

Staff recommendations for future Guidelines:

1. Within the Guidelines, provide clarifications to address appropriate public safety partner identification.
2. Within the Guidelines, provide clarification regarding comprehensive consideration of lessons learned.
3. Within the Guidelines, clarify required timing versus recommended timing of notifications.
4. Require IOU notification of cancellation of a PSPS event.
5. Require IOU priority notification to transmission-level customers.
6. Require IOU EOC staff to have emergency management experience or receive emergency management training.
7. Require IOU coordination with local and tribal governments to proactively identify and share and receive lists of medical baseline customers, including persons reliant on electricity-dependent life-sustaining equipment, and persons who may qualify for low-income assistance programs. The lists should be maintained and annually updated.
8. Require partnerships with CBOs to improve outreach and assistance for AFN communities.
9. Require coordination with public safety partners, including first/emergency responders, local jurisdictions, e.g., counties, cities and tribes, and critical facilities and infrastructure providers, to comprehensively identify critical facilities and infrastructure.
10. Require coordination with local jurisdictions and CBOs to implement CRCs and mobile assistance vehicles.
11. Require reporting of project status updates targeted at improving situational awareness (weather stations, high-resolution cameras, etc.) in proximity to electric facilities in High Fire Threat Districts (HFTD).
12. Require all non-event specific Guideline requirements to be addressed in an annual report served on service lists for PSPS-related proceedings and the Director of SED. This new annual report would be in addition to the 10-day after-event report already required by Commission rules.
13. Explore allowing public safety partners to opt out of notifications.

Recommendations for submission of content and data in post-event reporting to the CPUC:

1. Establish metrics for notification to AFN communities and require reporting that compares IOU notification to those metrics.
2. Report additional information on effectiveness of Customer Resource Center/Assistance locations.
3. Include maps depicting actual PSPS event impacts. Report the number of customers notified in comparison to the number of customers actually de-energized.
4. Report on PSPS-related electric infrastructure projects, such as, system hardening and sectionalization, completed before the PSPS events in question, and the resulting impacts, if any, on the size and scope of each PSPS event.

**iii. Procedural Options for Further Consideration**

There may be value in examining some of the issues raised in this Report in a broader and public context, and not limited to the late 2019 PSPS events. Other open proceedings addressing issues related to proactive de-energization may be an appropriate vehicle to consider one or more issues raised in this report. Those include:

Disaster Relief Program Rulemaking	R.18-03-011
De-energization Rulemaking	R.18-12-005
Wildfire Mitigation Plan Rulemaking	R.18-10-007
Microgrid Rulemaking	R.19-09-009
Self-Generation Incentive Program	R.12-11-005
Climate Change Adaptation Rulemaking	R.18-04-019

**C. Analysis Approach and Scope of Review**

To execute the Commission’s directive to assess the nature and extent of electric IOU implementation of the PSPS Guidelines, SED staff reviewed the Guidelines in effect in 2019, as well as similar Commission guidance provided in earlier decisions, specifically, Resolution ESRB-8 and D.12-04-024.<sup>7</sup> The additive nature of these Guidelines and the earlier Commission requirements, coupled with formatting and structural differences among the various guidance documents, made it difficult to assemble cohesive requirements with which to assess electric IOU implementation of the Guidelines.<sup>8</sup>

In general, staff determined that the Guidelines can be bifurcated into two distinct types of requirements: (1) Event-Specific requirements and (2) Non-Event-Specific requirements.

Event-Specific requirements include elements that must be done or reported on an event-by-event basis (e.g., sending notifications, identifying number and types of affected customers, reporting lessons learned, etc.).

Non-Event-Specific requirements are one-time or programmatic/systemic efforts (e.g. statewide public education campaign, identification of customer groups, development of scripts and templates, etc.). As explained above, this report only focuses on PG&E, SCE, and SDG&E because those companies executed PSPS events in late 2019, which is the time frame covered by this report.

SED used several sources of information to evaluate the utilities’ performance regarding PSPS, as described below.

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<sup>7</sup> The PSPS Guidelines, are Attachment A to D.19-05-042.

<sup>8</sup> Issue 1 in the preliminary scoping memo specifically indicates that electric IOUs are to be evaluated on the extent to which they implemented PSPS Guideline **requirements**. In general, staff identified those requirements where PSPS Guideline language indicated electric utilities “shall” or “must” perform a given action.

**Post-Event Reports:** To evaluate the extent of electric IOU implementation of Event-Specific requirements, SED staff utilized the post-event reports submitted to the Director of SED. Please see Table 1 for a list of events for which SED reviewed post-event reports.

**Progress Reports:** To evaluate the extent of electric IOU implementation of Non-Event-Specific requirements, staff utilized IOU Progress Reports submitted pursuant to ordering paragraph (OP) 3 of D.19-05-042.<sup>9</sup>

**Data Requests:** Staff issued two data requests<sup>10</sup> to the respondent IOUs to fill gaps and obtain the needed information that could not be identified in the Post-event reports and Progress Reports.

**Party and Stakeholder Comments on the OII:** In response to the issuance of the OII, parties provided comments detailing their experiences during the 2019 PSPS events. SED staff reviewed those responses to compare on-the-ground experiences against the IOUs' reports and to gather insight into the effectiveness of communications and notification during the events. In this context, staff defines effectiveness as success in producing a desired or intended result, and so stakeholder and party comments noting unsuccessful or undesirable results provide helpful context. Where relevant, the stakeholder and party comments are cited.

**Party and Stakeholder Comments on the Order Instituting Rulemaking to Examine Electric Utility De-Energization of Power Lines in Dangerous Conditions, R.18-12-005 (OIR):** Staff also relied on comments filed in the broader PSPS rulemaking that relate to the scope of events addressed in this report.

In the interest of brevity, the Report discusses areas in which an electric IOU did not meet the expectations set out in the Guidelines. The Report does not discuss electric IOU performance where staff found that the IOU had met the requirements in the Guidelines.

#### D. Potential Further Assessment and Analysis

As discussed in a previous section, because of resource and timing issues and the need to complete this phase of the investigation in advance of the 2020 wildfire and PSPS season, this Report was prepared by SED staff, relying on the documentation listed above.

However, in the absence of the need for expediency, staff notes that a third-party consultant could assist the Commission in better quantifying the effectiveness of the utilities' performance in preparing for and conducting PSPS events.

For example, a consultant could research, develop, and incorporate probabilistic wildfire spread and consequence modeling into an analysis of each PSPS event. Such an analysis would inform the Commission about the likelihood of a wildfire igniting and the direction and scope of its spread if the PSPS event had not been conducted. A separate consultant engagement could develop a tool to perform an assessment of the public safety risks and economic impacts resulting from each PSPS event.

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<sup>9</sup> OP 3 of D.19-05-042 mandated the filing of two progress reports. For the purposes of this report, Staff assigned more weight to the first progress report, as it was filed on September 4, 2019, approximately one month prior to the PSPS events under investigation, whereas the second progress report was filed on March 4, 2020.

<sup>10</sup> Data Request SED-001 (dated March 12, 2020) and Data Request SED-002 (dated March 27, 2020) are provided as Attachment D.

Both analyses would potentially be germane to questions of prudent management and cost recovery, and identification of any other issues need to be considered before engaging a consultant to perform additional analyses.

## II. Non-Event Specific Guideline Requirements and Utility Preparation

This section assesses each electric IOU's implementation of the Commission's non-event-specific requirements as set out in the Guidelines. This assessment focuses on areas of concern to SED.

### A. Identification of Customer Groups, Critical Facilities and Infrastructure, and Establishment of Points of Contact

The Guidelines provide the following definition for public safety partners:

*"The term 'public safety partners' refers to first/emergency responders at the local, state and federal level, water, wastewater and communication service providers, affected community choice aggregators and publicly-owned utilities/electrical cooperatives, the Commission, the California Governor's Office of Emergency Services and the California Department of Forestry and Fire Protection. Public safety partners will receive priority notification of a de-energization event."<sup>11</sup>*

#### Pacific Gas & Electric

In its response to SED's first data request, PG&E stated that it was in regular contact with its public safety partners leading up to, during, and immediately following the late 2019 PSPS events discussed in this report.<sup>12</sup> PG&E noted that it engaged with telecommunications providers to provide feedback after the late 2019 PSPS events on January 31, 2020, and February 27, 2020.<sup>13</sup> However, according to comments filed by California Cable & Telecommunications Association (CCTA), some of its members were not notified in a similar manner as other public safety partners.<sup>14</sup>

In an attempt to verify that PG&E identified CCTA members as public safety partners, SED requested a list of all affected public safety partners contacted regarding feedback for de-energization events, but PG&E did not provide a list identifying specific communications service providers.<sup>15</sup> Also, in response to SED's first data request, PG&E provided a list of its "public safety answer points" in which the cable companies were not listed.<sup>16</sup> It is unclear whether PG&E considered CCTA members as public safety partners.

#### Southern California Edison

In a response to SED's first data request, SCE acknowledged that communications service providers and water treatment facilities are public safety partners and explained their outreach efforts to those entities. "SCE has hosted resiliency workshops specifically for water agencies to discuss best practices and resources available to assist these agencies with resiliency planning, has participated in

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<sup>11</sup> D.19-05-042 in R.18-12-005, Appendix A, p. A4

<sup>12</sup> PG&E Response to SED-001, Question 2, dated March 24, 2020

<sup>13</sup> *Id.*

<sup>14</sup> R.18-12-005, CCTA Comments on PG&E's Post-PSPS Event Report for October 9-12, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.2

<sup>15</sup> PG&E Response to SED-001, Question 2, dated March 24, 2020

<sup>16</sup> *Id.*, Question 26, dated March 24, 2020

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events hosted by various water agencies and associations, and hosts tours of SCE's Emergency Operations Center."<sup>17</sup> In this same data request response, SCE stated, "SCE has also worked closely with telecommunications customers to improve communication methods during PSPS events, such as ensuring they are subscribed to SCE's Representational State Transfer service."<sup>18</sup>

Although SCE performed outreach to these two sectors of its public safety partners, it is unclear whether this outreach was successful. In their response to SED's first data request, SCE provided a list of all the public safety partners that they had contacted after each PSPS event to gain feedback on how the event was handled. "SCE account managers from its Business Customer Division also contacted public safety partners individually after the 2019 PSPS events, via phone and in-person meetings, to understand the impacts of events on the public safety partners and to take feedback on how to improve the PSPS process."<sup>19</sup> SCE did not include water service providers or communications service providers in their data request response regarding the public safety partners contacted for feedback.

When SED asked SCE, in its second data request, for results on feedback, SCE responded that "[w]here appropriate, SCE incorporated the feedback from its public safety partners and critical infrastructure providers into its PSPS protocols, but does not have detailed records that describe the specific feedback received."<sup>20</sup> Although SCE has provided evidence that the company recognizes water and communications service providers as public safety partners, it does not appear that such entities were engaged in the same manner as the other identified public safety partners when asking for feedback on events.

Although SCE identified the City of Riverside (Riverside) as a public safety partner, Riverside stated that SCE provided generic notifications to its representatives during the late 2019 PSPS events:

*"These notifications merited greater detail; specific, focused coordination, and pre-planning should have occurred in advance. In particular, SCE's generic recommendation for 'an outage plan and an emergency kit' does not suffice for the water accounts located in San Bernardino. Again, these water accounts represent approximately 60 percent of Riverside Public Utilities' water supply and power 4[sic] regional water treatment plants that are necessary to meet State and Federal drinking water standards."*<sup>21</sup>

In response to SCE's November 23 PSPS event, CCTA stated:

*"While Appendix B of SCE's Report provides copies of 'Public Safety Partner Notifications' where an entity could ostensibly determine whether it is receiving Public Safety Partner notifications,[ftn omitted] the notifications in Appendix B are specific to local officials and 'for official use by local government officials'[ftn omitted] and, therefore, not useful in determining whether all communications providers within SCE's PSPS areas are receiving the required priority notification."*<sup>22</sup>

It is unclear if SCE considered CCTA members as public safety partners.

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<sup>17</sup> SCE Response to SED-001, Question 2, dated March 25, 2020

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

<sup>20</sup> SCE Response to SED-002, Question 11, dated April 7, 2020

<sup>21</sup> I.19-11-013, Response of Riverside to the OII, dated January 10, 2020, p.5

<sup>22</sup> R.18-12-005, CCTA Comments on SCE's Post-PSPS Event Reports for October 2-12, 2019 and November 23-26, 2019, Attachment dated December 26, 2019, pp.2-3

**i. Critical Facilities and Infrastructure Providers**

- a. Coordinate with First/Emergency Responders and Local Governments to Identify Critical Facilities and Infrastructure

The Guidelines require that electric investor-owned utilities:

*“...must, in addition to developing their own list of critical facilities and critical infrastructure based on the adopted definition, work in coordination with first/emergency responders and local governments to identify critical facilities within the electric investor-owned utilities’ service territories.”<sup>23</sup>*

Pacific Gas & Electric

PG&E stated in its September 2019 Progress Report on Implementation of De-Energization Guidelines that the company coordinated with local governments to identify critical facilities and infrastructure; however, PG&E did not discuss whether it coordinated with first/emergency responders to identify critical facilities & infrastructure.<sup>24</sup>

In PG&E’s response to SED’s second data request regarding this requirement, it stated that the “outreach included direct coordination with first/emergency responders through county emergency managers via email and phone calls to gather their suggestions regarding which facilities they believe PG&E should consider classifying as critical and be included in PG&E’s critical facilities and infrastructure list.”<sup>25</sup>

PG&E should have documented in its Progress Report that it coordinated with both first/emergency responders and local governments to identify critical facilities within its service territory.

Although PG&E stated that it coordinated with local governments and first/emergency responders about critical facilities and infrastructure providers, affected entities experienced the following issues:

- For PG&E’s October 9 PSPS event, San Jose reported discrepancies between San Jose’s and PG&E’s lists of critical facilities. San Jose stated that PG&E’s list of critical facilities did not include a school and medical facility that was on San Jose’s list of critical facilities.<sup>26</sup>
- AT&T identified an issue for the October 9 PSPS event in which direct contact with a PG&E Critical Infrastructure Liaison was not established until October 10, 2019.<sup>27</sup> Prior to establishing this contact, the communication protocol between parties impaired the ability to coordinate appropriately in response to the evolving conditions.

Southern California Edison

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<sup>23</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A11

<sup>24</sup> PG&E’s Progress Report on Implementation of De-Energization Guidelines, dated September 4, 2019.

<sup>25</sup> PG&E Response to SED-002, Question 1, dated April 7, 2020

<sup>26</sup> R.18-12-005, City of San Jose’s Comments on PG&E’s Post-PSPS Event Report for October 9-12, 2019, dated November 19, 2019, filed January 7, 2020, p.8

<sup>27</sup> R.18-12-005, Comments of AT&T on Amended PG&E Report for October 9-12 PPS, dated November 19, 2019, filed January 7, 2020, p.10



## Public Report on the Late 2019 Public Safety Power Shutoff Events

In September 2019, SCE acknowledged, in its September 2019 Progress Report, the requirement to work with public safety partners to identify critical facilities and infrastructure: “SCE has been actively engaging our Public Safety Partners to not only identify those critical facilities and infrastructure that may be impacted by a PSPS event as outlined in the Commission guidance, but also those facilities that our Public Safety Partners feel are important but are not currently categorized as ‘critical facilities’ within Rulemaking R.18-12-005. Once completed, SCE will add these additional facilities to the current protocols for regularly identifying and updating primary, secondary and tertiary contacts.”<sup>28</sup>

However, as described above in Riverside’s response to the OII, SCE did not coordinate power outages with Riverside’s critical water facilities. even though they are a “local government.”<sup>29</sup>

The Center for Accessible Technology (CforAT) also highlighted that for the October 2 PSPS event, SCE reported that it unknowingly de-energized a hospital in Ventura County and was not aware until it was notified by emergency management personnel.<sup>30</sup>

SCE needs to provide information on their discussions with its public safety partners and document the results of these discussions concerning critical facilities and infrastructure operators in their jurisdictions.

### b. Identify 24-hour Point of Contact (POC) and Secondary POC

The Guidelines state that electric investor-owned utilities:

*“...must identify 24-hour points of contact and, at a minimum, secondary points of contact. The electric investor-owned utilities must work together with operators of critical facilities and critical infrastructure to identify preferred points of contact (the billing contact may not be the appropriate de-energization contact) and preferred methods of communication.”<sup>31</sup>*

### Southern California Edison

In SCE’s March 2020 Progress Report, SCE discussed in more detail how they are identifying their critical infrastructure customers:

*“SCE developed a standard process to identify Critical Infrastructure providers by referencing the North American Industry Classification System codes for businesses... As of February 10, 2020, a total of 15,345 service accounts have been identified as Critical Infrastructure providers SCE considers the following customer categories as C[ftn omitted], Government Facilities, Healthcare and Public Health Sector, Hospitals, Energy Sector, Inter-connected Publicly Owned Utilities, Water and Wastewater System Sector, Communication Sector, Chemical Sector and Transportation Sector... SCE has identified that*

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<sup>28</sup> SCE’s Progress Report on the Implementation of De-energization Guidelines set forth in Appendix “A” of D.19-05-042, dated September 4, 2019, p.17

<sup>29</sup> I.19-11-013, Response of Riverside to the OII, dated January 10, 2020, p.5

<sup>30</sup> R.18-12-005, CforAT Comments on SCE Post-PSPS Event Reports for September 16, 2019; October 2, 2019; October 21, 2019; October 27, 2019; and November 23, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.3

<sup>31</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A11

*approximately 80% of the Critical Infrastructure service accounts fall into the assigned category. Of these assigned customers, currently 99% of the service accounts have two or more methods of contact.”<sup>32</sup>*

Although SCE has made a good effort in identifying all their critical infrastructure customers, they need to verify that this method of identifying all the customers in this category is 100% accurate.

SCE also stated in its March 2020 Progress Report that “SCE has primary, secondary, and tertiary contacts on record for PSPS notifications for its CCAs.”<sup>33</sup> In this same report, SCE also stated that:

*“SCE account managers assigned to its water and telecommunication providers have actively worked to keep their customer contact information updated. For small customers without an assigned account manager, SCE Hydraulic Services Team conducted and completed an outreach to update primary, secondary and tertiary contacts, where possible. Venues for this outreach include leveraging SCE’s Annual Water Conference, associations, vendor fairs, and industry specific PowerTalks workshops.”<sup>34</sup>*

Since SCE does not have account managers assigned to smaller customers, having primary, secondary, and tertiary contacts need to be verified for this customer group.

#### San Diego Gas & Electric

In SDG&E’s September 2019 Progress Report on Implementation of De-Energization Guidelines, SDG&E does not indicate whether primary and secondary POCs were established for all critical facilities. SDG&E only indicates that POCs were established for "public safety partners," but that does not cover the suite of facilities/sectors defined as "critical facilities."

In its data request response for this requirement, SDG&E stated that “prior to the start of the 2019 wildfire season, SDG&E reached out to all identified critical facilities and infrastructure businesses in good faith to establish 24-hour primary and secondary points of contact with a focus on those in Tier 2 and Tier 3 of the high fire threat district (HFTD). There were, however, instances when SDG&E employees reached the critical facility/infrastructure customers, but they were unable to obtain the required information.”<sup>35</sup>

SDG&E should make repeated efforts to attain the required information from operators of critical facilities and critical infrastructure--at a minimum, primary and secondary points of contacts. SDG&E should have documented in its Progress Report whether or not it obtained primary, secondary, or even tertiary points of contacts and identified preferred methods of communication.

#### **ii. Medical Baseline Customers and People/Communities with Access and Functional Needs**

##### **a. Update Contact Information for Medical Baseline Customers**

The Guidelines state that electric investor-owned utilities:

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<sup>32</sup> SCE’s Second Progress Report on the Implementation of De-energization Guidelines set forth in Appendix “A” of D.19-05-042, dated March 4, 2020, p.24

<sup>33</sup> *Id.*, p.22

<sup>34</sup> *Id.*, p.23

<sup>35</sup> SDG&E Response to SED-002, Question 1, dated April 7, 2020

*“...must update contact information for medical baseline customers and provide an opportunity for such customers to select alternative means of contact beyond their preferred means of contact from the utility for billing and other information.”<sup>36</sup>*

Pacific Gas & Electric

In PG&E’s September 2019 Progress Report, PG&E does not mention that they provided medical baseline customers an opportunity to select alternative means of contact beyond preferred means for utility billing. In its response to SED’s second data request for this requirement, PG&E stated that “[i]n the Medical Baseline Program application, customers are provided the option to list additional contacts, including phone and email options. PG&E has made significant efforts to educate customers, including Medical Baseline customers, on how to update their contact information.”<sup>37</sup>

PG&E should have documented in its Progress Report that it provided an opportunity for medical baseline customers to select alternative means of contact. In addition, it should elaborate on the options provided and the steps taken to communicate with medical baseline customers to update and how to update their contact information.

**iii. All Other Customers**

- a. Work with Local Jurisdictions to Identify and Communicate with All People within a De-energized Area, Including Visitors

The Guidelines state that electric investor-owned utilities:

*“...must work with local jurisdictions to leverage all means of identifying and communicating with all people within a de-energized area, including people who may be visiting the area or not directly listed on utility accounts.”<sup>38</sup>*

Pacific Gas & Electric

In PG&E’s September 2019 Progress Report, PG&E did not mention that they worked with local jurisdictions to leverage all means of identifying and communicating with all people within a de-energized area, including visitors. In its response to SED’s second data request for this requirement, PG&E stated that it:

*“...conducted or participated in more than 1,000 meetings and events with various local and tribal government agencies, as well as stakeholders across its service area, including at least one meeting with every county government. One of the areas of focus for these meetings was to discuss ways to improve communication and information sharing with stakeholders in advance of and during a PSPS event. PG&E provided event-specific information to state and local emergency responders through a variety of channels as early in the process as possible. This included public alert systems, highway signs, Nixle and public radio broadcasts.”<sup>39</sup>*

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<sup>36</sup> D.19-05-042, Appendix A, p.A13-14

<sup>37</sup> PG&E Response to SED-002, Question 2, dated April 7, 2020

<sup>38</sup> D.19-05-042, Appendix A, p.A14

<sup>39</sup> PG&E Response to SED-002, Question 3, dated April 7, 2020

PG&E should have documented in its Progress Report that it worked with local jurisdictions to leverage all means of identifying and communicating with all people within a de-energized area, including people who may be visiting the area or not directly listed on their accounts. Additionally, PG&E should elaborate on the recommendations made as result of these meetings and what actions PG&E took to incorporate these recommendations.

### San Diego Gas & Electric

In its September 2019, Progress Report, SDG&E indicated that it was working with local jurisdictions to further develop notification and communication efforts for de-energization events. In its response to SED's first data request, SDG&E described its self-registration portal for SDG&E's Emergency Notification Systems.<sup>40</sup> While this tool may prove useful, visitors may not know of the existence of this notification system and therefore additional outreach to raise awareness prior to each event may be necessary for the opt-in notification system to be effective.

In addition, SDG&E responded to SED's second data request, regarding leveraging all means of communicating with all people in a de-energized area, as follows:

*"SDG&E established a system with the County of San Diego Office of Emergency Services (County OES) to leverage the following systems to share SDG&E's PSPS notification messaging:*

- *Partner Relay – County OES working group of Community Based Organizations (CBOs) that take messages and translate them into their languages and cultures and distribute the translated messaging to their networks*
- *Access and Functional Needs (AFN) Working Group – County OES working group of CBOs that serve the AFN populations, SDG&E PSPS Notification messages are forwarded to the working group members for distribution to their constituent groups*
- *Messages and CRC locations are included in the SD County Emergency phone app*
- *Social media posts are retweeted/reposted to amplify the messages"<sup>41</sup>*

SDG&E should have documented in its Progress Report the details of all efforts coordinated and implemented with communicating PSPS information to all people within a de-energized area.

## B. Notifications, Coordination, Outreach and Education

### i. **Develop Notification and Communication Protocols and Systems**

#### a. Reach Customers No Matter Where the Customer is Located

The Guidelines require the following of electric investor-owned utilities:

*"Customers should understand the purpose of proactive de-energization, the electric investor-owned utilities' process for initiating it, how to manage safely through a de-energization event, and the impacts if deployed. To accomplish this, the electric investor-owned utilities must: ...develop notification and communication protocols and systems that reach customers no matter where the customer is located and deliver messaging in an understandable manner."*

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<sup>40</sup> SDG&E Response to SED-002, Question 11, dated April 7, 2020

<sup>41</sup> SDG&E Response to SED-002, Question 10, dated April 7, 2020

San Diego Gas & Electric

As described in the previous section, SDG&E has put forth a strong effort in leveraging relationships and using social media to reach all populations in their territory. However, SDG&E did not state in its response anything about working with city officials or county officials that are not associated with the emergency operation offices. There are other local offices that could help the company identify all customers within its service territory who need to be notified of a PSPS event. SDG&E should expand its investigation for identifying hard to reach customers to all the local government agencies and tribal community representatives to help them complete their notification database.

**ii. Develop Notification Strategies**

a. Consideration of Geographic and Cultural Demographics

The Guidelines state that electric investor-owned utilities:

*“...must develop notification strategies for all customer groups affected by de-energization, and the electric investor-owned utilities must partner with local and state public safety partners, whenever possible, to develop notification strategies. ...Communication methods must consider the geographic and cultural demographics of affected areas, e.g. some rural areas lack access to broadband services.”<sup>42</sup>*

Pacific Gas & Electric

In PG&E’s September 2019 Progress Report, PG&E does not mention consideration of geographic and cultural demographics of affected areas in development of communication methods. In the data request response for this requirement, PG&E stated that it:

*“...prioritizes outreach to customers in High Fire Threat Districts (HFTDs), and uses local community based organizations (CBOs) as well as California Alternate Rates for Energy (CARE) / Family Electric Rate Assistance (FERA) program outreach partners as an opportunity to augment standard PSPS outreach for customers that participate and/or qualify for CARE/FERA programs and fall within these low-income demographics. PG&E also makes certain communications available in multiple languages, and coordinates with multi-cultural news organizations to provide in-event translations to customers.”<sup>43</sup>*

PG&E should have documented in its Progress Report whether consideration of geographic and cultural demographics of affected areas were made in the development of communication methods. They should elaborate on specific steps taken to address concerns affected by both geographic and cultural diversity. For example, PG&E states that it makes certain that communications are available in multiple languages, but it is unclear how PG&E determined the prevailing languages in the affected area, including whether it coordinated with local governments to determine the most prevalent languages. Adding greater context to PG&E’s activities related to this requirement would provide the Commission clarity on the steps taken by PG&E to meet this requirement.

Southern California Edison

To measure the effectiveness of their notification strategy, SCE provided SED, in a data request response, the following information:

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<sup>42</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A18-19

<sup>43</sup> PG&E Response to SED-002, Question 7, dated April 7, 2020

*“SCE conducted post-wildfire season surveys with both residential and business customers from December 2019 – March 2020, which included demographics questions about customers with disabilities and medical equipment needs.”<sup>44</sup>*

SCE added the following to SED in a data request response:

*“SCE’s Residential survey addressed awareness of SCE’s PSPS communication, with roughly half of respondents in the four sample sub-groups saying they were aware of SCE’s PSPS-related communications. In addition, the survey asked respondents to assess the effectiveness of SCE’s PSPS-related communications in terms of SCE ‘communicating their efforts using advanced technology to mitigate the risk of wildfires’ (with 63%-67% scoring them as ‘Very’/‘Somewhat’ effective) and ‘helping you and your family create a safety preparedness plan’ (with 47%-58% scoring them as ‘Very’/‘Somewhat’ effective).”<sup>45</sup>*

SCE also shared that they asked their customers about the frequency of the alerts they received. Here is their response to SED’s data request:

*“Additionally, survey respondents who were either notified and de-energized OR notified only, were asked their opinion of the number of PSPS alerts/notifications. Of those that were notified and deenergized, 28% thought the communications were ‘too many’ and 64% thought they were ‘about right.’ Of those customers that were notified only, 15% thought the communications were ‘too many’ and 80% thought they were ‘about right.’ SCE also asked respondents about their satisfaction with the information in the alerts, with 60% of those that were de-energized saying they were ‘Very’/‘Somewhat’ satisfied and 73% of those that were notified only saying they were ‘Very’/‘Somewhat’ satisfied. In addition, 75% of de-energized respondents found the alerts to be helpful and clear/easy to understand while 84% of those that were notified found them helpful and 80% found them clear/easy to understand.”<sup>46</sup>*

SCE did not provide detailed information on how they considered the geographic and cultural demographics of affected areas in their surveys. Additionally, there are no details on how customers in rural areas, who may lack access to broadband or wireless connectivity, responded to the surveys. More information is needed on the distribution of the surveys and the results of the surveys to fully measure the effectiveness of SCE’s 2019 notification strategy.

#### San Diego Gas & Electric

In its second data request, SED asked how SDG&E considers geographic and cultural demographics in its communication methods and which factors it considers.<sup>47</sup> SED also asked how these factors were measured and evaluated.<sup>48</sup> SDG&E’s response to this question was:

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<sup>44</sup> SCE Response to SED-002, Question 10, dated April 7, 2020

<sup>45</sup> SCE Response to SED-002, Question 11, dated April 7, 2020

<sup>46</sup> *Id.*, Question 11

<sup>47</sup> Data Request SED-002-SDG&E, Question 14, dated March 27, 2020

<sup>48</sup> *Id.*, Question 14

*“SDG&E’s public education campaign measures include evaluating publication viewership and CBOs provide information to SDG&E on the populations they reach. SDG&E can also view the consumer traffic that request PSPS notifications in various languages.”<sup>49</sup>*

Although this information would provide some helpful data to evaluate the success of their notification strategy for these hard to reach populations, it can be incomplete or misleading. SDG&E should consider conducting customer surveys, in multiple languages, to get a better idea of the effectiveness of their notification strategies with consideration to the geographic and cultural demographics of affected areas.

b. Consideration of Restrictions on Communication Channels Due to De-energization

The Guidelines require that electric investor-owned utilities:

*“...develop a strategy for how communication will occur with affected customers once de-energization has begun and during re-energization, recognizing that communication channels may be restricted due to the loss of power. The electric investor-owned utilities should develop this strategy in coordination with public safety partners.”<sup>50</sup>*

Pacific Gas & Electric

In PG&E’s September 2019 Progress Report, PG&E does not discuss a strategy for how communication will occur with affected customers once de-energization has begun and during re-energization. In its response to SED’s second data request for this requirement PG&E stated that they:

*“...recognize that communication channels may be restricted due to power loss during a PSPS event, PG&E developed a multi-pronged communication strategy for notifying potentially affected customers by utilizing multiple channels of communication.”<sup>51</sup>*

This included notifying individuals through automated phone calls, text messages, and emails. PG&E also encouraged individuals to obtain event information from other communication channels such as:

- PG&E’s website
- Call center support
- Media engagement
- Coordination with Public Safety Partners and Community Based Organizations

PG&E should have documented in its Progress Report all the steps it took to develop a strategy pursuant to this requirement, taking into consideration communication channels may be restricted due to the loss of power. PG&E should also discuss the coordination effort with public safety partners, their participation in the development of this strategy, and public safety partners’ roles in communication during de-energization.

PG&E’s response leaves unclear whether PG&E has examined all possible restrictions to communication during de-energization. For example, PG&E points to phone calls, text messages, emails, PG&E’s website, call center, and media engagement as sources of communication during de-

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<sup>49</sup> SDG&E Response to SED-002, Questions 14, dated April 7, 2020

<sup>50</sup> D.19-05-042 in R.18-12-005, Appendix A, p. A19

<sup>51</sup> PG&E Response to SED-002, Question 8, dated April 7, 2020

energization. Yet if the affected area is in the foothills or mountainous areas with limited cell phone reception, then all of those sources of communication could potentially be unavailable to a household. If a de-energization event is prolonged because of weather conditions, those affected individuals would not be able to access updated information. Although PG&E mentions coordination with public safety partners and Community Based Organizations (CBO) as communication channels, PG&E's steps and the responsibilities it assumes during a de-energization event are unclear.

#### San Diego Gas & Electric

In SDG&E's September 2019, Progress Report,<sup>52</sup> SDG&E does not explicitly discuss a strategy for how communication will occur with affected customers once de-energization has begun and during re-energization. In response to SED's second data request, SDG&E provided information regarding how it considered potential restrictions on communication channels due to de-energization.<sup>53</sup> The various channels SDG&E listed that apply once de-energization begins include:

- Broadcast (radio and TV)
- Social Media
- Website (sdge.com)
- PSPS notifications via SDG&E's Enterprise Notifications System (email, text and voice messaging)<sup>54</sup>

SDG&E should include in its reporting, a clear strategy for how communication will occur when de-energization begins and during re-energization.

#### **iii. Provide Operational Coordination with Public Safety Partners Upon Request**

The Guidelines state that:

*"Coordination in preparation for de-energization is a shared responsibility between the electric investor-owned utilities, public safety partners, and local governments; however, the electric utilities are ultimately responsible and accountable for the safe deployment of de-energization."*<sup>55</sup>

The Guidelines also require:

*"In addition, the utilities must provide, if requested, operational coordination with public safety partners to ensure such partners have not only the information but also the coordination with the utilities necessary to prepare for de-energization."*<sup>56</sup>

#### Southern California Edison

In response to SED's second data request, SCE stated that:

*"SCE conducted after-action reviews with impacted emergency management agencies, who are Public Safety Partners, to solicit feedback on its PSPS implementation, including SCE's notification and outreach*

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<sup>52</sup> SDG&E Company's Progress Report on Implementation of De-Energization Guidelines, dated September 4, 2019

<sup>53</sup> SDG&E's Response to SED-002, Question 15, dated April 7, 2020

<sup>54</sup> *Id.*, Question 15

<sup>55</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A2

<sup>56</sup> *Id.*, p.A15



*efforts. Although these meetings were held on an ad hoc basis in 2019, SCE intends to conduct them in a more structured way in 2020. In addition to the after-action review meetings, SCE held routine calls with county emergency management agencies to coordinate planning and response efforts, including how we notify and engage customer groups.”<sup>57</sup>*

Documentation of the feedback received in these meetings needs to be shared with the other IOUs and the CPUC. Expansion of operational coordination would help develop more effective PSPS programs.

Based on the Joint Local Government’s<sup>58</sup> experience with the late 2019 PSPS events, SCE may have missed opportunities to coordinate with some local government entities:

*“Going into 2019, SCE appeared to have a better understanding of the government- and critical facility-side impacts and logistical issues created by de-energization, but the utility did not engage in any operational planning with its local public safety partners or critical facilities. This failure to coordinate did not, surprisingly, cripple SCE’s lines of communication with local governments...”<sup>59</sup>*

**iv. Work with Public Safety Partners in Advance of Fire Season to Develop Preliminary Plans for Emergency Situations**

The Guidelines require that electric investor-owned utilities:

*“...must work with public safety partners in advance of the wildfire season to develop preliminary plans for addressing emergency situations that may arise during de-energization, such as a non-utility caused wildfire that occurs in a de-energized area that necessitates the use of water for firefighting purposes. Although not a request to delay de-energization, such a situation could result in the public safety being better served by utility lines being re-energized.”<sup>60</sup>*

Southern California Edison

During the PSPS event that took place October 21-26, SCE realized it needed to do a better job of coordinating with firefighting departments and agencies before de-energization events are activated:

*“SCE received a request from the San Bernardino County Fire Department for re-energization of the Calstate and Club Oaks Circuits in San Bernardino County, which were de-energized at 5:33 a.m. that morning due to fire activity in the area to power additional water pumps to assist firefighting efforts. SCE, working with field crews, meteorologists, and the Incident Commander, determined that public safety concerns still existed due to sustained winds around 43 mph, wind gusts up to 58 mph, and high fire potential index in the area. Based on these real-time observations, it was determined that re-energization of the Calstate and Club Oaks Circuits posed a public safety risk, and the circuits were left de-energized.”<sup>61</sup>*

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<sup>57</sup> SCE Response to SED-002, Question 10, dated April 7, 2020

<sup>58</sup> Counties of Kern, Marin, Mendocino, Napa, Nevada, San Luis Obispo, Santa Barbara, and Sonoma, and the City of Santa Rosa.

<sup>59</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.2

<sup>60</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A12

<sup>61</sup> SCE Post-Event Report October 21-26, p.17

*“SCE’s Fire Management Officer confirmed that alternate water sources were available at the time of the request, which fire personnel utilized for their firefighting efforts. SCE remained in direct contact with firefighting authorities throughout the fire to respond quickly to any additional emergent needs. Situations such as the one described above reinforce the necessity for SCE to continue coordination efforts with Public Safety Partners ahead of a PSPS event.”<sup>62</sup>*

When SCE received this request, the utility realized that it needed to be aware of which water facilities might be needed to provide water for firefighting effort. SCE needs to coordinate more closely with local fire departments and CAL FIRE before activating a PSPS within its service territory because of the direct impacts on firefighting efforts if a fire is ignited.

#### San Diego Gas & Electric

Based on its response to SED’s second data request, SDG&E has not demonstrated sufficient effort to work with public safety partners for developing preliminary plans for addressing emergency situations that may arise during de-energization.<sup>63</sup> SDG&E explained that it participates in the San Diego Operation Area’s regional emergency planning process which covers all-hazard or complex incidents.<sup>64</sup> It did not address other public safety partners other than San Diego. In addition, SDG&E explained that its:

*“...emergency planning is also all-hazard and includes planning for an incident within an incident. SDG&E most widely considers a wildfire scenario concurrent with a PSPS but due to the fact that its plans are all-hazard, they would be appropriate for any emergency situation that may arise.”<sup>65</sup>*

SDG&E provided copies of its Company Emergency Response Plan and Concept of Operations -- Wildfire. The Company Emergency Response Plan is updated annually, with a major revision every 3 to 5 years. The response provided is unclear if and to what level the public safety partners have participated in SDG&E’s emergency planning process. Without additional information, it is hard to assess if SDG&E’s current effort can replace the required wildfire preliminary planning with public safety partners in advance of the wildfire season. However, additional expansion of this effort to include all public safety partners may help to address emergency situations unknown to SDG&E.

#### **v. Proactively Partner with Critical Facility and Infrastructure for Backup Generation Assessment: Need for Providing Generators for Facilities or Infrastructure Not Well Prepared for De-energization**

The Guidelines require that electric investor-owned utilities:

*“...pursuant to Resolution ESRB-8 and in advance of the wildfire season, must proactively partner with critical facility and critical infrastructure representatives to assess the ability of each critical facility to maintain operations during de-energization events of varying lengths. The electric investor-owned utilities must help critical facility and critical infrastructure representatives assess the need for backup*

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<sup>62</sup> SCE Post-Event Report October 21-26, p.17

<sup>63</sup> SDG&E Response to SED-002, Question 17, dated April 7, 2020

<sup>64</sup> *Id.*, Question 17

<sup>65</sup> *Id.*, Question 17

*generation and determine whether additional equipment is needed, including providing generators to facilities or infrastructure that are not well prepared for a power shut off.”<sup>66</sup>*

Pacific Gas & Electric

PG&E reported in its September 2019 Progress Report that it:

*“...initiated an outreach campaign to cities and counties to confirm and verify critical facilities and infrastructure within their jurisdiction. The campaign also requested each jurisdiction identify additional facilities and infrastructure they deem to be critical and believe ought to be included in PG&E’s critical facilities and infrastructure list. To date, PG&E has received input from over 70 cities and counties and has reviewed and updated records with a critical facility identifier based on feedback received.”<sup>67</sup>*

Although PG&E initiated outreach, the following comments highlight the need for improved coordination and planning efforts regarding backup power for facilities or infrastructure that are not well-prepared for de-energization.

The Joint Local Governments reported that “PG&E failed to help critical facilities assess the need for backup generation and determine whether additional equipment was needed.”<sup>68</sup> The Joint Local Governments referenced hospitals, water facilities and correctional facilities. As the events progressed through October, the Joint Local Governments noticed an improvement during the October 26 PSPS Event where PG&E provided backup generation for Marin and Napa counties.<sup>69</sup>

In another instance, the City and County of San Francisco (San Francisco), noted that the Castlewood Reservoir and the Pleasanton Well in Contra Costa County did not have backup power but were impacted by PG&E’s October 26 PSPS event. As a result of the event, San Francisco lost tens of thousands of gallons of water.<sup>70</sup> If proper coordination had been performed between PG&E and San Francisco, the critical water facilities should have had a contingency plan in the event of power loss.

Southern California Edison

SCE has explained their approach to helping critical facility and critical infrastructure owners with backup generation as follows:

*“SCE takes a two-step approach to determining when to provide backup power to local counties and cities. First, SCE seeks to educate local governments, first responders, and essential service providers on the importance of developing a resiliency plan that addresses backup power needs for their facilities which provide critical life and safety functions. Second, if essential service providers are unable to sustain critical life/safety operations during an extended power outage, SCE’s Incident Commander will consider and prioritize requests to provide temporary mobile backup generation.”<sup>71</sup>*

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<sup>66</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A12

<sup>67</sup> PG&E Company Progress Report on Implementation of De-Energization Guidelines, dated September 4, 2019, p.9

<sup>68</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.27

<sup>69</sup> R.18-12-005, Joint Local Governments’ Comments on PG&E Post-PSPS Event Report for October 26 and 29, 2019, filed January 3, 2020, Attachment dated December 13, 2019, p.3

<sup>70</sup> I.19-11-013, Response of the City and County of San Francisco, dated January 10, 2020, p.2-3

<sup>71</sup> SCE Response to SED-001, Question 43

## Public Report on the Late 2019 Public Safety Power Shutoff Events

More information is needed about SCE's mobile backup generator program, such as the number of mobile backup generators available and how SCE determined which facilities received them for each PSPS event. This information should be provided in each of its post-event reports.

The Acton Town Council (Acton) provided some insight into its experience during the late 2019 PSPS events:

*"Many rural residents of Acton and other communities in North Los Angeles County lost power for more than 24 hours several times during the October PSPS events, so they had no land lines or cable service or satellite dish service, and hence no internet. And, because the back-up batteries which serve the local cell phone towers are depleted in as little as 12 hours after power is cut off, these rural residents lost all contact with the outside world during several of SCE's PSPS events in October."*<sup>72</sup>

In an emergency event, such as a wildfire igniting during a PSPS event, backup power is vital when communicating a notice of evacuation. SCE should properly assess the needs of its affected communities to identify specific locations where it can provide backup power.

### San Diego Gas & Electric

In response to SED's second data request, SDG&E provided the following information regarding its actions to access critical facilities' ability to operate and their need for additional equipment:

*"SDG&E took actions to understand critical facilities' ability to operate during an emergency with direct conversations, and information about back-up generation provided in both the email and direct mail piece to newly identified critical customers. In some instances, additional equipment and processes were discussed to help strengthen a customer's resiliency and reliability for any emergency."*<sup>73</sup>

Although SDG&E provided an overall description of its efforts, it did not specify what actions took place and the level of detail included in the email and direct mail piece. In addition, SDG&E only notes that it "incorporates workshops, presentations, and direct meetings to address and assess backup generation needs for critical facilities."<sup>74</sup> SDG&E did not provide any additional details that would identify the effectiveness of the assessments for backup generation. Further, SDG&E did not state in its Progress Reports or data request responses whether it will provide any generators to facilities or infrastructure that are not well prepared for de-energization after undertaking the assessment. Therefore, SED is concerned that SDG&E has not met the expectation of the Guideline regarding assessing the critical facilities' need for backup generation.

#### **vi. Conduct Communication Exercises Prior to Wildfire Season**

The Guidelines state:

*"To ensure accuracy of contacts, the electric investor-owned utilities are required to update lists [Public Safety Partners points of contact] annually at least two months in advance of the start of the wildfire*

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<sup>72</sup> I.19-11-013, Acton Response to OII of Power Shutoff Events, dated January 10, 2020, p.10

<sup>73</sup> SDG&E Response to SED-002, Question 6, dated April 7, 2020

<sup>74</sup> SDG&E's Progress Report on Implementation of De-energization Guidelines, September 4, 2019, p.8

*season and conduct communication exercises prior to wildfire season to confirm their ability to rapidly disseminate information.”<sup>75</sup>*

Pacific Gas & Electric

In PG&E’s September 2019 Progress Report, PG&E does not discuss that they have conducted communication exercises prior to wildfire season to confirm their ability to rapidly disseminate information. In response to SED’s second data request, PG&E stated that its March 2020 Progress Report (section 4.1.6 Notification System Test) summarizes the notification testing that took place in 2019.<sup>76</sup> “Additionally, PG&E used a messaging platform capable of pushing as many as 900,000 phone, text, and email communications, or 2.7 million communications in total, per hour, to customers.”<sup>77</sup> PG&E noted in its March 2020 Progress Report that it conducted notification testing in the Fall of 2019 and prior to the PSPS events, also noting improvements made in May 2019.<sup>78</sup> PG&E should have documented, in its September 2019 Progress Report, that it conducted communication exercises prior to wildfire season to confirm its ability to rapidly disseminate information.

C. Information Sharing

i. **Dedicated PSPS Webpage**

The Guidelines require that:

*“The electric investor-owned utilities must provide up-to-date information, including a depiction of the boundary of the de-energization event, on their websites’ homepage and a dedicated Public Safety Power Shut-off webpage regarding the de-energization event.”<sup>79</sup>*

The three utilities met the basic requirement of creating a dedicated PSPS webpage. However, Section III of this report describes the shortcomings of some of the webpages. At least two issues that occurred include inundated webpages due to overwhelming web traffic and accessibility concerns for people/communities with access and functional needs.

ii. **Sharing Geographic Information System (GIS) data with Public Safety Partners**

The Guidelines require that:

*“For the 2019 wildfire season, the electric investor-owned utilities must, at the time of first notification preceding a de-energization event, make available a Geographic Information System shapefile via a secure data transfer.”<sup>80</sup>*

As part of the required GIS data, electric IOUs “must also show affected circuits and any other information that is requested by public safety partners and can reasonably be provided by the utility.”<sup>81</sup>

Pacific Gas and Electric

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<sup>75</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A11

<sup>76</sup> PG&E Response to SED-002, Question 9, dated April 7, 2020

<sup>77</sup> *Id.*, Question 9

<sup>78</sup> PG&E Progress Report, dated March 4, 2020, p.23

<sup>79</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A18

<sup>80</sup> *Id.*, p.16-17

<sup>81</sup> *Id.*, p.A17

## Public Report on the Late 2019 Public Safety Power Shutoff Events

PG&E utilized its secure portal to provide GIS data to public safety partners. However, PG&E admitted in its March 2020 Progress Report that it has not yet provided access for its critical facilities and infrastructure customers to their secure data transfer portal yet:

*“Based on feedback received from Public Safety Partners, PG&E is reevaluating its secure information sharing portal processes and protocols. Example changes that are being considered include broadening the access to other public safety partners, such as telecommunications providers and/or water agencies, and updating the portal to be more intuitive for users.”<sup>82</sup>*

PG&E needs to provide access to their information sharing portal or make GIS data available to their critical facilities and infrastructure customers prior to the start of the 2020 wildfire season.

Regarding PG&E’s October 9 PSPS event, San Jose stated the following about PG&E’s maps:

*“Overly-broad polygon maps, inaccuracies in the address lookup app, and denial of circuit maps to City staff contribute to the problem.”<sup>83</sup>*

The maps made available may not have depicted circuit information for every event. PG&E has the circuit information available and should be able to overlay circuit information on PSPS maps and provide them to its public safety partners. PG&E must make circuit information available when requested by public safety partners.

### **iii. Thresholds that Define Strong Wind Events and “Extreme Fire Hazards”**

The Guidelines require that electric investor-owned utilities:

*“...must clearly articulate thresholds for strong wind events as well as the conditions that define ‘an extreme fire hazard’ (humidity, fuel dryness, temperature) that the electric investor-owned utility evaluates in considering whether to de-energize.”<sup>84</sup>*

#### Southern California Edison

SCE looks at two threshold parameters for each circuit in their system when evaluating whether a circuit should be de-energized: forecasted wind speeds, including wind gust speeds, and SCE’s unique Fire Potential Index (FPI). SCE defines its FPI as follows:

*“The FPI is an internal tool used to define, estimate and articulate wildfire potential based on actual weather and fuel conditions. Weather inputs include not only wind, but the dryness of the air near the ground and how receptive existing fuels are to fire with specific inputs involving the moisture content of the vegetation.”<sup>85</sup>*

Following is a typical statement SCE provided in its post-event reports:

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<sup>82</sup> PG&E Progress Report, dated March 4, 2020, p. 24

<sup>83</sup> R.18-12-005, City of San Jose’s Comments on PG&E’s Post-PSPS Event Report for October 9-12, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.2

<sup>84</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A14

<sup>85</sup> SCE Progress Report, dated September 4, 2019, p.13.

*“SCE meteorologists forecasted FPI and wind speed conditions to exceed PSPS criteria beginning on Tuesday, October 15, with both gusty winds and low relative humidity. Wind speeds were forecasted to reach up to 50 mph with gusts up to 70 mph, and SCE’s FPI was forecast to exceed individual circuit thresholds.”<sup>86</sup>*

SCE also states, for example, that “SCE meteorologists are continuously monitoring for elevated fire conditions and will alert the Business Resiliency Duty Manager when they identify weather and fuel conditions that are forecast to exceed wind and Fire Potential Index (FPI) thresholds for each circuit.”<sup>87</sup>

Although SCE provided the anticipated wind speed information for de-energized circuits, it did not provide the specific FPI numbers for each de-energized circuit in its post-event reports. Additionally, SCE did not provide thresholds for wind speed or wind speed ranges for each circuit. These two threshold parameters for each circuit that are used for SCE’s PSPS criteria, and the actual numbers recorded at the time of de-energization, need to be included in its post-event reports.

### III. Utility Event-Specific Implementation

This section assesses each electric IOU’s implementation of event-specific requirements set out in the Guidelines. This assessment focuses on areas of concern to SED.

#### A. Coordination with Emergency Operations Centers and Incident Command Systems

##### i. Embedded Utility Liaison Officer at Local Emergency Operations Centers (EOC)

The Guidelines require electric investor-owned utilities:

*“... to embed a liaison officer at a local county EOC upon request of the local jurisdiction.”<sup>88</sup>*

The IOU liaison’s role is further described in the Decision requiring the liaison to be *“empowered to provide rapid and accurate information from the utilities.”<sup>89</sup>*

#### Pacific Gas & Electric

PG&E embedded a liaison officer at local EOCs as requested,<sup>90</sup> however, despite efforts made by the IOU’s liaison, the information conveyed to the local jurisdictions was not adequate and for one event, the sharing of information was limited.

For PG&E’s October 9 PSPS event, the Joint Local Governments reported the following regarding PG&E’s presence at local county EOCs:

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<sup>86</sup> SCE PSPS Post-event Reporting in Compliance with Resolution ESRB-8 and D.19-05-042 October 12 to October 21, 2019, dated November 1, 2019, p.12

<sup>87</sup> SCE Progress Report, dated Sept 4, 2019, p.12

<sup>88</sup> D.19-05-042 in R.18-12-005, Appendix A, p. A21

<sup>89</sup> *Id.*, p.A21

<sup>90</sup> PG&E Response to SED-001, Question 4, dated March 24, 2020

## Public Report on the Late 2019 Public Safety Power Shutoff Events

*“...the liaisons are only as effective as PG&E’s responsiveness to local concerns, and there were instances where the liaisons’ best efforts did not produce information from PG&E’s EOC that was more accurate, more helpful, or more timely.”<sup>91</sup>*

For the October 9 PSPS event, the Joint Local Governments also noted that:

*“Napa, Sonoma, and Santa Rosa’s points of contact have been present in their EOCs and have been incredibly helpful; Marin County’s point of contact, by contrast, has been unavailable, unresponsive, and/or uninformed, likely because that person is covering multiple counties and is unable to obtain correct and up-to-date information.”<sup>92</sup>*

*“Napa, Sonoma, and Santa Rosa have nothing but praise for their PG&E liaisons, who went above and beyond the call of duty to attempt to get the information or action that the local governments needed. But the liaisons are only as effective as PG&E’s responsiveness to local concerns, and there were instances where the liaisons’ best efforts did not product information from PG&E’s EOC that was more accurate, more helpful, or more timely.”<sup>93</sup>*

The California State Association of Counties<sup>94</sup> (CSAC) provided the following comment about the November 20 PSPS event:

*“CSAC supports the Joint Local Governments’ Response to PG&E’s After-Action Report for the November 20, 2019 PSPS Event wherein they state: ‘[i]ndividual local governments are constantly left out of communications, left without outage map or impacted customer information, and left with single points of contact who are unable to extract the necessary information from PG&E’s EOC.’”<sup>95</sup>*

### Southern California Edison

In SCE’s September 2019 Progress Report,<sup>96</sup> it did not clearly state that a liaison from their company would be placed in a local EOC if requested. SCE also did not provide any information on whether a liaison had been requested or provided in any of their post-event reports. However, in a response to SED’s Data Request 001, SCE provided the following information:

*“On October 11, 2019, SCE did receive a request to provide a liaison officer to the Los Angeles County EOC primarily as a result of multiple fires (there were PSPS circuits being monitored at the time). SCE fulfilled this request and sent a liaison officer to the Los Angeles County EOC.”<sup>97</sup>*

In this same data request response, SCE provided the following additional information regarding providing a liaison to the local EOCs: “During PSPS events SCE maintains regular communication with

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<sup>91</sup> R.18-12-005, Joint Local Governments’ Comments on PG&E Post-PSPS Event Report for October 9, 2019, filed January 3, 2020, Attachment dated November 19, 2019, p.6

<sup>92</sup> *Id.*, p.2

<sup>93</sup> *Id.*, p.6

<sup>94</sup> CSAC is a lobbying, advocacy and service organization which represents all 58 counties of the State of California.

<sup>95</sup> I.19-11-013, Response of CSAC to OII, dated January 10, 2020, p.4-5

<sup>96</sup> SCE’s Progress Report on the Implementation of De-energization Guidelines set forth in Appendix “A” of Decision 19-05-042, dated September 4, 2019

<sup>97</sup> SCE Response to SED-001, Question 4, dated March 24, 2020



emergency officials and local government officials through the Business Resiliency Duty Manager and Liaison Officer positions on its Incident Management Team.”<sup>98</sup>

**ii. Invitation of Water and Communications Infrastructure Providers to IOU’s EOC**

The Guidelines require that:

*“...electric investor-owned utilities must invite representatives from the California Office of Emergency Services, water infrastructure providers, and communication service providers. In the alternative, the utilities may develop a mutually agreeable communications structure with water infrastructure providers and communication service providers in lieu of holding seats in its emergency operations center.”<sup>99</sup>*

Pacific Gas & Electric

For PG&E’s post-event reporting in October and November, PG&E did not discuss if it had invited representatives from water and communications infrastructure to their EOC. Nor did PG&E discuss any mutually agreed upon communication structure with the representatives from water and communications infrastructure providers. In the data request response for this requirement, PG&E stated that it:

*“...directly engaged with water agencies and telecommunications in the lead-up to the Fall 2019 PSPS events. That engagement was well underway by the time that PG&E’s EOC activated for the September 2019 event, and PG&E did not extend a formal invitation to all water agencies and telecommunications service providers in writing. PG&E plans to engage in outreach to critical facility customers during the of Spring 2020. As currently planned, those efforts can include sharing the option for water agencies and telecommunications provider representatives to have a seat at PG&E’s headquarters in the EOC’s Joint Information Center (JIC) and/or confirming mutually agreeable alternative arrangements for communication.”<sup>100</sup>*

PG&E should take the necessary steps prior to the 2020 wildfire season to identify all water and communications service providers that could be impacted by de-energization and either invite them to PG&E’s EOC or alternatively establish a mutually agreed communication structure.

Southern California Edison

In SCE’s September 2019 Progress Report, it makes the following statement:

*“SCE also makes every effort to provide space in its Emergency Operations Center for representatives from the Cal OES, Public Safety Partners, and water and communications infrastructure providers when requested.”<sup>101</sup>*

SCE did not state in its PSPS post-event reports that it had invited representatives from the California Office of Emergency Services (Cal OES), water infrastructure providers, or communications service providers to their EOC. SED was able to obtain information from SCE on this guideline requirement

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<sup>98</sup> *Id.*, Question 4

<sup>99</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A21

<sup>100</sup> PG&E Response to SED-001, Question 7, dated March 24, 2020

<sup>101</sup> SCE Progress Report on Implementation of De-energization Guidelines, dated September 4, 2019, p.6

through the data request process and received the following information from SCE in their response to Data Request 001. SCE states in its response that:

*“SCE maintains an open invitation for CalOES to send a representative to SCE’s EOC when activated for PSPS. SCE has communicated this open invitation to CalOES on several occasions, including verbally during State Executive Briefings (conducted daily during PSPS activations), verbally during the weekly Cal OES / Cal Fire / CPUC Weekly meeting with Utilities to discuss PSPS / PSPS Ops Group Meeting, and informally in numerous conversations between SCE’s Director of Business Resiliency and CalOES and conversations between SCE’s Business Resiliency Duty Managers and CalOES. These conversations have occurred through conference calls and in person conversations. SCE does not have written documentation of these invitations. CalOES sent a representative to the SCE EOC during Event 1 (October 2, 2019) and Event 10 (October 27, 2019).”<sup>102</sup>*

Additionally, SCE did not clearly state in its post-event reports that it had invited representatives from the water infrastructure providers and communications service providers customer groups. In response to SED Data Request 001, SCE states:

*“SCE has not formally invited any water infrastructure or communications service providers to its EOC during PSPS events. Rather, SCE has conducted workshops with these entities informing them of PSPS processes, procedures, guidelines, and two-way communications before, during and after events. This communications structure consists of communication through PSPS notifications, SCE account managers, and County EOCs. SCE has not received any complaints or requests to change this structure from water infrastructure or communications service providers. During the larger PSPS events in 2019, SCE also coordinated with the California Utilities Emergency Association (CUEA) to conduct daily operational briefings with critical infrastructure providers. SCE will continue to evaluate request for representation in the EOC on a case-by-case basis.”<sup>103</sup>*

## B. Notification Efforts

The Guidelines require, pursuant to Resolution ESRB-8, electric IOU notification efforts before, during and after a PSPS event to the Director of SED, public safety partners, and all other customers. The Guidelines also require specific notification content and timelines. This section lists each requirement and describes concerns about each electric IOU’s implementation of the requirement.

SED organizes the many notification Guidelines into seven areas, and some of these areas contain several sub-guidelines. For example, SED-specific notifications is an umbrella Guideline that has five specific actions that an electric IOU must take to fully implement SED-specific notification requirements.

SED found it difficult to assess implementation of many of the Guideline requirements. The post-event reports did not consistently present information clearly, and each electric IOU presented the information in a unique manner. Adding to the difficulty of the assessment was the organization of the notification information; some of the information appeared to be an unorganized mass of data presented in Excel format.

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<sup>102</sup> SCE Response to SED-001, Question 6, dated March 25, 2020

<sup>103</sup> SCE Response to SED-001, Question 7, dated March 25, 2020

**i. Safety and Enforcement Division Director Notification**

Resolution ESRB-8 includes five requirements for the electric IOUs to notify the Director of SED prior to, during, and after each PSPS event. Every effort must be made by the electric investor-owned utilities to provide notice of potential de-energization as early as the electric investor-owned utilities reasonably believe de-energization is likely.

a. SED Director Notified Prior to Shutoff

Resolution ESRB-8 states that:

*“The IOU shall notify the Director of SED, as soon as practicable, once it decides to de-energize its facilities. If the notification was not prior to the de-energization event, the IOU shall explain why a pre-event notification was not possible.”<sup>104</sup>*

The IOUs notified the Director of SED prior to de-energization, except for SCE during its October 27 PSPS event. Although SED was not notified for SCE’s October 27 PSPS event, SCE provided an explanation in its post-event report stating that failure to notify was caused by “sudden appearance of extreme winds around particular circuits.”<sup>105</sup>

b. Notification to SED Director Included Area Affected (or Director is Embedded at EOC)

The notification to the SED Director prior to de-energization must include the area affected by the PSPS event.<sup>106</sup> If the SED Director is embedded at the electric IOU’s EOC, it is assumed that the Director would have this information. However, some of the electric IOU reports did not clearly state whether the Director of SED was embedded at its EOC. In addition, some PSPS post-event reports did not report this information.

Pacific Gas & Electric

During the October 5 PSPS Event, PG&E notified the CPUC/SED Director via email and phone upon activation of its EOC on October 4, 2019, at 1200 hours.<sup>107</sup> PG&E’s post-event report gives no further information about what the notification contained. In contrast, PG&E reported that during its October 9 PSPS event, the CPUC embedded at the EOC with Cal OES and CAL FIRE though PG&E provided no date.<sup>108</sup>

Southern California Edison

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<sup>104</sup> Resolution ESRB-8, dated July 12, 2018, p.6

<sup>105</sup> SCE PSPS Post-Event Report Regarding Pro-active De-energization Event October 27 to November 4, 2019, dated November 19, 2019, p.17

<sup>106</sup> Resolution ESRB-8, dated July 12, 2018, p.6

<sup>107</sup> Corrected Amended PG&E PSSP Report to the CPUC October 5-6, 2019 De-energization Event, dated November 13, 2019, p.12

<sup>108</sup> Amended PG&E PSSP Report to the CPUC October 9-12, 2019 De-energization Event, November 19, 2019 p.18

In SCE's post-event reports for its October 27<sup>109</sup> and November 23<sup>110</sup> PSPS events, SCE did not provide notification content that was sent to the SED Director upon activation of its EOC. However, SCE did notify the CPUC since it was listed in Appendix D of the November 23 post-event report.<sup>111</sup>

c. Notification to SED Director Included Customer Impact Estimate

The notification to the SED Director prior to de-energization must include an estimate of the number of customers that may be impacted by a PSPS event.<sup>112</sup>

Pacific Gas & Electric

PG&E did not provide an estimate of total customers impacted to the SED Director for the October 5 PSPS event.

Southern California Edison

Based on the information in the post-event reports, SCE did not provide this information to SED's Director for all six events. SED notes that SCE's Executive Summary section in its post-event reports contained extensive information about an event, but it was difficult to follow the timeline of events and notifications. For example, SCE stated that it deployed two representatives to the State Operations Center but gave no date, as well as other examples of notification times listed with no corresponding date.<sup>113</sup> SED attempted to find dates with times of notification in Appendix C<sup>114</sup> of SCE's post-event report, but it contained script templates with no means to determine times or dates, or whether SCE notified SED or any other customers.

d. Notification to SED Director Included Estimated Restoration Time

The notification to the SED Director prior to de-energization must include when an electric IOU estimates it will restore power.<sup>115</sup>

Pacific Gas & Electric

PG&E did not clearly provide this information in its post-event report for the October 5 PSPS event.

Southern California Edison

SCE did not clearly provide this information in its post-event reports for all six of its PSPS events.

e. SED Director Notified of Full Restoration Within 12-hours from Last Service Restored

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<sup>109</sup> SCE October 27 Post-Event Report, p.1

<sup>110</sup> SCE November 23 Post-Event Report, p.12

<sup>111</sup> SCE November 23 Post-Event Report, p.41

<sup>112</sup> Resolution ESRB-8, dated July 12, 2018, p.6

<sup>113</sup> SCE October 27 Post Event Report, p.4

<sup>114</sup> SCE October 27 Post Event Report, Appendix C

<sup>115</sup> Resolution ESRB-8, dated July 12, 2018, p.6

Resolution ESRB-8 requires that “[t]he IOU shall also notify the Director of SED of full restoration within 12 hours from the time the last service is restored.”<sup>116</sup>

Pacific Gas & Electric

SED could not verify that PG&E provided full restoration notification to the SED Director for its October 5 PSPS event.

Southern California Edison

SED could not verify that SCE provided restoration notification to the SED Director for the following three PSPS events:

- October 2-12, 2019
- October 12-21, 2019
- November 23-26, 2019

**ii. Advanced Notification Provided to California Independent System Operator (CAISO)**

If an electric IOU decides to de-energize a transmission line for a PSPS event, it is required to notify the California Independent System Operator.<sup>117</sup>

Pacific Gas & Electric

In its post-event reports, PG&E states that it “coordinates with CAISO” when considering to de-energize.<sup>118</sup> In a response to SED’s first data request, PG&E reports that its protocols call for a “Transmission Total Impact Study” and coordination with the CAISO for potentially impacted transmission lines.<sup>119</sup> It is unclear whether CAISO notification occurred prior to de-energization since SED could not verify that PG&E actually notified CAISO based on the PG&E post-event reports reviewed.

During the October 9 PSPS event, PG&E notified transmission customers on October 7, with a notice to additional customers after conducting its transmission study. PG&E sent a shut-off notice on October 8; however, SED did not find information in the PG&E post-event report to verify that PG&E communicated with CAISO for this event, even though transmission lines were de-energized.

Southern California Edison

SCE failed to notify CAISO during the October 27 PSPS event. In Appendix D of SCE’s post-event report, “Date of Initial Notifications to Public Safety/Local Government/Partners and Critical Infrastructure Providers,”<sup>120</sup> CAISO was not listed nor was it mentioned in the post-event report. SCE noted seven transmission lines as under consideration for de-energization, and ultimately three lines were de-energized.<sup>121</sup>

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<sup>116</sup> *Id.*, p.6

<sup>117</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A46

<sup>118</sup> PG&E October 9 Post-Event Report (Amended), P. 7; October 27-Nov 1, 2019 Report, p.9

<sup>119</sup> PG&E Response to SED-001, Question 37, dated March 24, 2020

<sup>120</sup> SCE October 27 Post Event Report, Appendix D

<sup>121</sup> SCE October 27 Post Event Report, p.1

San Diego Gas & Electric

SDG&E did not provide notification to CAISO for its October 20 PSPS event. However, in its October 20 post-event report, SDG&E lists actions it takes to restore power, including “Full patrol of the de-energized distribution circuit or transmission tie-line to inspect for damages;...”<sup>122</sup> In addition, SDG&E’s Appendix 3 contains emails that stated, “[w]e are currently starting to patrol transmission circuit 625 for potential re-energization...”<sup>123</sup> SDG&E sent this email to public safety partners on Friday, October 25, 2019, which implies that transmission lines were de-energized. However, SDG&E did not provide a copy of a notification sent to CAISO. SED did not find emails regarding transmission line inspections in SDG&E’s October 10 post-event report.

**iii. Content of Notifications to Public Safety Partners**

The Guidelines state:

*“The electric investor-owned utilities must convey to public safety partners at the time of first notification preceding a de-energization event information regarding the upcoming de-energization, including estimated start time of the event, estimated duration of the event, and estimated time to full restoration.” “...The electric investor owned utilities must provide the number of medical baseline customers in the impacted area to first/emergency responders and/or local jurisdictions.”<sup>124</sup>*

The following discusses each electric IOU’s compliance with each of the four Public Safety Partner notification content requirements.

SED notes that “public safety partners” is a broad term that the Commission defined in Appendix A of the Decision.<sup>125</sup> In their PSPS post-event reports, the three IOUs presented lists of public safety partners in different ways. For example, in one of its post-event reports, SCE listed public safety and local government partners together on lists in an Appendix D, titled “Date of Initial Notifications to Public Safety/Local Government/ Partners and Critical Infrastructure Providers.”<sup>126</sup> PG&E’s Appendix D, Section 7, listed 34 pages of “Local Community Representatives Contacted,” which included public safety partners by County and City.<sup>127</sup> SDG&E combined public safety partners and Community Partners when describing notifications but did not define each group.<sup>128</sup>

**a. Public Safety Partners’ Notifications Included Estimated Start Time**

At the time of first notification preceding a de-energization event, the electric IOUs must include an estimated start time of the event.<sup>129</sup>

Pacific Gas & Electric

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<sup>122</sup> SDG&E October 20 Post-Event Report, p. 39.

<sup>123</sup> SDG&E October 20 Post-Event Report, Appendix 3.

<sup>124</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A16

<sup>125</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A4

<sup>126</sup> See Appendix D in SCE October 27-November 4, 2019 Post Event Report

<sup>127</sup> See Appendix D in PG&E November 20-21, 2019 Report.

<sup>128</sup> SDG&E October 10 Post-Event Report, p.12

<sup>129</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A16

## Public Report on the Late 2019 Public Safety Power Shutoff Events

PG&E did not provide public safety partners an estimated start time of the event in its first notifications for its October 9 and October 26 PSPS events.

The scripts in Appendix E, Table 1-2, of its post-event report for October 9 provides email, voice, and text notification of potential PSPS events. In the text notification, the PG&E script provides an estimated start date but not an estimated start time.<sup>130</sup>

The scripts in Appendix D, Table 1-2, of its post-vent report for October 26 also provides an estimated start date but not an estimated start time. The voice and email messages refer the public safety partner to PG&E's website for more information.<sup>131</sup>

### Southern California Edison

SCE's Appendix B<sup>132</sup> of its October 2 post-event report contains templates of scripts that state that SCE is "exploring options" for a potential PSPS and "monitoring weather conditions" and gives an "as early as [DATE]" in the Sample Script but SED could not verify that SCE included an estimated PSPS start time. A similar script was used in all events and SED did not find that SCE provided an estimated start time of any event.

### San Diego Gas & Electric

SDG&E did not provide public safety partners with an estimated start time in its initial notifications. The notification email stated "This is an important safety message from SDG&E. Forecasted weather conditions could affect the power lines that serve local communities. In response, SDG&E may activate its Emergency Operations Center to monitor adverse weather conditions throughout the duration of the event. These conditions may require us to turn off the power for public safety."<sup>133</sup> SED did not find that SDG&E provided an estimated start time of any event.

#### b. Public Safety Partners' Notifications Included Estimated Duration of Event

At the time of first notification preceding a de-energization event, the electric IOUs must include an estimate of how long the PSPS event could last.<sup>134</sup> None of the electric IOUs provided such notifications.

#### c. Public Safety Partners' Notifications Included Estimated Time to Full Restoration

At the time of first notification preceding a de-energization event, the electric IOUs must include an estimate regarding when the electric IOU would have its system fully restored.<sup>135</sup> None of the electric IOUs provided such estimates.

#### d. First/Emergency Responder and/or Local Jurisdiction Notifications Included Number of Medical Baseline Customers

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<sup>130</sup> PG&E October 9 Post-Event Report, Appendix E, Table 1-2

<sup>131</sup> PG&E October 26 Post-Event Report, Appendix D, Table 1-2

<sup>132</sup> SCE October 2 Post-Event Report, Appendix B, Public Safety Partner Notifications

<sup>133</sup> SDG&E October 10 Post-Event Report, Appendix 2

<sup>134</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A16

<sup>135</sup> *Id.*, p.A16

The Guidelines require electric IOUs to provide the number of medical baseline customers in the impacted area to first/emergency responders and/or local jurisdictions.<sup>136</sup> None of the IOUs provided this information.

**iv. Content of Notifications to All Other Customers**

The Guidelines state:

*“The electric investor-owned utilities must partner with local public safety partners to communicate with all other customers that a de-energization event is possible, the estimated start date and time of the de-energization event, the estimated length of the de-energization event, which may be communicated as a range, and the estimated time to power restoration, which again, may be communicated as a range.”<sup>137</sup>*

The content of this notification is divided into three separate pieces of information: estimated event start-time, estimated duration of the event, and estimated time to power restoration.

The content of notifications varied among the utilities. However, none of the three electric IOUs demonstrated that it provided estimated duration of event and estimated time to power restoration in its notifications.

**a. All Other Customers Notification Included Estimated Start Time**

**Pacific Gas & Electric**

PG&E did not provide an estimated event start time to All Other Customers for any of its five PSPS events.

PG&E’s October 9 post-event report contains template scripts for First Notification and Second Notification that includes language “Gusty winds and dry conditions, combined with a heightened fire risk, are forecasted in the next 36 to 48 hours and may impact electric service.”<sup>138</sup> SED does not consider this to be notification of an estimated start time for a PSPS event.

PG&E’s October 23 post-event report indicates that, 2,100 total customers were not notified at all, including 22 medical baseline customers.<sup>139</sup> PG&E reasons included: no customer information on file, and; customer’s service point identification ID # (SPID) not mapped to local transformer.

In its October 26 post-event report, PG&E presented Customer Notification data in a confusing format. It contained too many time periods in one table with various notifications and the labeling of some time periods was missing. SED could not determine the location of customers who received the notification.<sup>140</sup> PG&E’s format prevented SED from assessing PG&E’s performance in this regard.

**Southern California Edison**

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<sup>136</sup> *Id.*, p.A16

<sup>137</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A17

<sup>138</sup> Table 1-2, Appendix E, Section 6 – Customer Notifications, PG&E Oct 9-12 Report.

<sup>139</sup> PG&E October 23 Post-Event Report, p.17

<sup>140</sup> PG&E October 26 Post-Event Report, Appendix D, Section 6.



SCE provided estimates of the PSPS start times for its October 2, October 12, and October 21 PSPS events as identified via script templates in Appendix C of its post-event reports for each respective event. SCE's notifications in its November 15 post-event report did not provide an estimated start time.

San Diego Gas & Electric

SDG&E's post-event report for October 20, 2019, consolidated three de-energization events. SED could not match the events and the notification times for each event and therefore could not assess SDG&E performance regarding this requirement.

b. All Other Customers Notification Included Estimated Duration of Event

None of the IOUs provided an estimated duration in its notifications to all other customers.

c. All Other Customers Notification Included Estimated Time to Full Restoration

None of the IOUs provided an estimated time to full restoration in its notifications to all other customers.

**v. Notification Timelines**

The Guidelines state:

*"The electric investor owned utilities should, whenever possible, adhere to the following minimum notification timeline:*

- *48-72 hours in advance of anticipated deenergization: notification of public safety partners [Consistent with Resolution ESRB-8, the electric investor- owned- utilities must provide notice to the Commission's Director of the Safety and Enforcement Division.] priority notification entities*
- *24-48 hours in advance of anticipated deenergization: notification of all other affected customers/populations*
- *1-4 hours in advance of anticipated deenergization, if possible: notification of all affected customers/populations[The Commission appreciates that it may not be possible at this juncture to know exactly when a de-energization will occur and to provide this level of advanced notification. However, the electric investor-owned utilities should strive to communicate that de-energization is imminent.]"<sup>141</sup>*

a. Public Safety Partners Notified in Advance of De-energization

Additionally, the Guidelines require:

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<sup>141</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A8

*“At a minimum, notification to public safety partners must occur when a utility activates its Emergency Operations Center in anticipation of a de-energization event or whenever a utility determines that de-energization is likely to occur, whichever happens first.”<sup>142</sup>*

The Guidelines state that an electric IOU should, whenever possible, notify public safety partners 48-72 hours in advance of anticipated de-energization. However, at a minimum, an electric IOU must notify when a utility activates its Emergency Operations Center (EOC) or whenever a utility determines that de-energization is likely to occur, whichever happens first.

#### Pacific Gas & Electric

PG&E met the recommended timeline for notification for one of its five events, the November 20 PSPS Event.

However, for the October 9 PSPS event, CCTA members, Comcast and Charter stated that they were not notified at the onset of PG&E’s EOC opening.<sup>143</sup>

Verizon Wireless (Verizon) noted that for the October 9 PSPS Event:

*“Moreover, Verizon did not always receive notice within the required timeframe of 48 hours or 72 hours per the Commission’s decision. In some cases, due to additions on the list, Verizon received only 8 hours’ notice for certain sites or did not receive notices for some sites at all.”<sup>144</sup>*

Also, for PG&E’s October 9 PSPS event, the Northern California Power Agency (NCPA) stated:

*“However, during the PSPS events of October 9 and 10, PG&E did not provide any direct notification to NCPA through the Grid Control Center. Instead, NCPA learned that PG&E planned to de-energize 12 to 20 transmission-level customers during a Cal OES update call.”<sup>145</sup>*

For PG&E’s October 26 PSPS Event, the NCPA noted that:

- The City of Ukiah (POU) received notice of de-energization on October 24. However, subsequent discussions lead Ukiah to believe that the two transmission lines serving Ukiah would not be de-energized until that afternoon of October 25, at 1700 hours, when Ukiah’s police department received a call from PG&E that the transmission line would be de-energized at 1400 hours on October 26. It seems that because of the changing content of notifications, Ukiah stated that it did not receive advance notification.<sup>146</sup>

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<sup>142</sup> *Id.*, p. A8.

<sup>143</sup> R.18-12-005, CCTA Comments on PG&E’s Post-PSPS Event Report for October 9-12, 2019, dated November 19, 2019, filed January 7, 2020, p.2-4

<sup>144</sup> R.18-12-005, Cellco Partnership d/b/a Verizon Wireless (U 3001 C) Comments on PG&E Post-PSPS Event Report for October 9-10, 2019, filed January 7, 2020, letter dated November 12, 2019, p.2

<sup>145</sup> R.18-12-005, NCPA Comments on PG&E Post-PSPS Event Report for October 9 to October 12, 2019, filed December 31, 2019, letter dated November 19, 2019, p.4

<sup>146</sup> R.18-12-005, NCPA Comments on PG&E Post-PSPS Event Report for October 26 to November 1, 2019, filed December 31, 2019, letter dated December 13, 2019, p.5

## Public Report on the Late 2019 Public Safety Power Shutoff Events

- The City of Healdsburg (POU) was not included in the first notification or the subsequent notification on October 25 at 1230 hours.<sup>147</sup>

Regarding PG&E events in general, the California Large Energy Consumers Association (CLECA) stated that:

*“PG&E gave members lists of their accounts that would be impacted by a PSPS event; several of these lists were wrong and failed to include the actual transmission-level accounts that were shut-off, some of which accounts were shut off with no notice.”<sup>148</sup>*

Although PG&E is not required to notify public safety partners 48-72 hours in advance, PG&E must at a minimum notify its public safety partners at the onset of opening its EOC in anticipation of a potential PSPS event. As described above, PG&E was unable to do this in several instances.

### Southern California Edison

SCE’s October 21 post-event report does not contain verifiable information on when it first notified public safety partners. SCE states that “[a]dvanced notification of this Public Safety Power Shutoff event was communicated to all affected counties, CalOES, and the CPUC approximately 72 hours before any forecasted weather was scheduled to impact the SCE service territory.”<sup>149</sup> However, there is no script or description of this notification in the post-event report. SED could not determine when SCE expect the forecasted weather event to impact its territory.

In its October 27 post-event report, SCE states it always wishes to notify public safety partners 72 hours in advance but SCE was not able to notify some customers and local public officials in advance because of “the exigency of pro-active de-energization resulting from the sudden appearance of extreme winds around particular circuits.”<sup>150</sup> Therefore, SCE did not meet the recommended notification timeframe.

SCE explains in its November 15 post-event report, that “[d]ue to this uncertainty in the timing of the incoming weather, advanced notification of this PSPS event was communicated to all affected counties, CalOES, and the CPUC approximately 24 hours before the forecasted weather was scheduled to impact the SCE service territory, rather than 48-72 hours prior.”<sup>151</sup>

SCE had similar issues during the November 23 PSPS Event. SCE stated that “[a]dvanced notification of this Public Safety Power Shutoff event was communicated to all affected counties, CalOES, and the CPUC approximately 48 hours before any forecasted weather was scheduled to impact the SCE service territory.”<sup>152</sup> SCE did not provide any other documentation of this notification.

The Joint Local Governments explained:

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<sup>147</sup> *Id.*, p.4

<sup>148</sup> I.19-11-013, Response by the CLECA to the OII, dated January 10, 2020, p.4

<sup>149</sup> SCE October 21 Post-Event Report, p. 14.

<sup>150</sup> SCE October 27 Post-Event Report, p. 17

<sup>151</sup> SCE November 15 Post-Event Report, p. 11

<sup>152</sup> SCE November 23 Post-Event Report, p.13

## Public Report on the Late 2019 Public Safety Power Shutoff Events

*“SCE also had issues with its order of notifications throughout 2019. On a number of occasions, SCE sent notifications to elected officials, state agencies, and the public, before or at the same time as it notified local public safety partners.”<sup>153</sup>*

### b. Adjacent Local Jurisdictions Notified 48-72 hours in Advance of De-energization

The Guidelines state:

*“Consistent with the principles of the State Emergency Management System, whenever possible, priority notification should occur to the following entities, at a minimum: public safety partners, as defined herein, and adjacent local jurisdictions that may lose power as a result of de-energization.”<sup>154</sup>*

None of the IOUs’ PSPS Reports included discussion of “Adjacent Local Jurisdictions” or notification scripts to the adjacent jurisdictions.

### c. All Other Affected Customers Notified 24-48 hours in Advance of De-energization

#### Southern California Edison

SCE did not provide notification 24-48 hours in advance of de-energization for three of its six events.

As stated in its October 27 post-event report, SCE was not able to notify some customers and local public officials in advance because of “the exigency of pro-active de-energization resulting from the sudden appearance of extreme winds around particular circuits.”<sup>155</sup>

For the November 15 PSPS Event, SCE “identified” 31,975 customers. It is unclear whether they were notified in advance.<sup>156</sup> SCE referenced difficulties with weather models.

For the November 23 PSPS Event, SCE stated:

*“Once the circuit was identified as under consideration for PSPS, initial notifications were sent to potentially affected customers at 6:45 p.m., and pro-active de-energization of 36 customers on the circuit occurred at 7:23 p.m. This rapid change in the weather forecast and real-world conditions occurred quickly, preventing more advanced notice from going out to these potentially affected customers.”<sup>157</sup>*

### d. All Affected Customers Notified 1-4 hours in Advance of De-energization

Each IOU met this notification timeline for one of its PSPS events.

#### Pacific Gas & Electric

The Guidelines recommend a notification of a PSPS event 1-4 hours before the shut-down, however, PG&E stated that in order to avoid violating the Telephone Consumer Protection Act’s (TCPA) curfew hours, in some instances, it notified customers more than 4 hours in advance.

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<sup>153</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.21

<sup>154</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A7

<sup>155</sup> SCE October 27 Post-Event Report p.17

<sup>156</sup> SCE November 15 Post-Event Report, p.17

<sup>157</sup> SCE November 23 Post-Event Report, p.6

PG&E notified customers 1-4 hours in advance during the October 5 PSPS Event.

During the October 23 PSPS Event, PG&E stated that the PSPS event started at 0100 hours but PG&E did not want to violate curfew for medical baseline customers except on a case by case basis.<sup>158</sup> PG&E did not explain the exception for notifying medical baseline customers during curfew hours other than “suddenly changing conditions.”

PG&E’s October 26 PSPS Event included more than eight “Time Periods”<sup>159</sup> that PG&E designated as de-energization phases. SED could not verify notification timing because PG&E included one table of notifications for more than eight Time Periods during this event. In the table, the final advance notification was a 12-hour notification, followed by a shut-off notification that told customers that power would be shut off soon or was already shut off. The presentation of the notifications made it difficult for SED to identify notification within the 1-4 hour timeframe.<sup>160</sup>

The November 20 PSPS Event included 10 Time Periods and had similar data presentation issues that prevented SED from verifying that notifications were conducted within the one to four-hour window.<sup>161</sup>

#### Southern California Edison

SCE was able to provide notification to customers 1-4 hours in advance during its October 12 PSPS Event. SCE did not notify customers in the same timeframe for its other five events because of “weather issues.”

For the October 27 PSPS Event, SCE had notification difficulties with “rapidly changing weather conditions.”<sup>162</sup>

During the November 13 PSPS Event, SCE stated that weather changes prevented it from providing customers advance notice.<sup>163</sup>

During the November 23 PSPS Event, 1,192 customers were de-energized without notice and 36 customers were proactively de-energized with less than 45 minutes of notice because of changing weather conditions.<sup>164</sup>

#### San Diego Gas & Electric

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<sup>158</sup> “Curfew hours are between 2100 and 0800, whereby TCPA (under the rules of the Federal Communications Commission (FCC)), requires no automated calls or texts be made to customers during this window for telemarketing and advertisements. While PSPS notices do not fall under this prohibition, PG&E aims to align with these guidelines. However, PG&E will consider notifications during curfew hours on a case by case basis (e.g., calls to medical baseline customers during curfew hours due to suddenly changing conditions).” PG&E Oct 23-25, 2019 Event, p.16, fn 9

<sup>159</sup> PG&E October 26 Report, p.1. “Within these offshore wind events, PG&E planned de-energization times specific to different geographic areas based on their unique weather timing to minimize outage durations. These unique de-energization phases are referred to as Time Periods...”

<sup>160</sup> PG&E October 26 Post-Event Report, Appendix D

<sup>161</sup> PG&E November 20 Post-Event Report, Appendix C

<sup>162</sup> SCE October 27 Post-Event Report, p.4

<sup>163</sup> SCE November 23 Post-Event Report, p.6

<sup>164</sup> SCE November 23 Post-Event Report, p.6

## Public Report on the Late 2019 Public Safety Power Shutoff Events

SDG&E did not notify customers 1-4 hours in advance during its October 10 PSPS Event. SDG&E stated, “This notification was not made in order to prevent waking up customers in the middle of the night. These customers were notified of the potential of PSPS on the evening on October 10, 2019.”<sup>165</sup>

For the October 20 PSPS Event, SDG&E notified customers of an expected overnight PSPS the afternoon/evening before, more than 4 hours before the event, out of concern for waking customers up.<sup>166</sup>

### e. All Affected Customers Notified When De-energization is Initiated

The Guidelines require that electric IOUs “must provide notice...at the beginning of a de-energization event.”<sup>167</sup>

#### Pacific Gas & Electric

Based on its post-event reports, PG&E met this requirement for three of five of its PSPS events. The comments below provide more details into PG&E’s inability to notify at the beginning of a de-energization event:

For the October 9 PSPS Event, AT&T claims to have received notification hours after the de-energization occurred.<sup>168</sup>

The Joint Local Governments on the October 23 PSPS Event:

*“Santa Rosa was de-energized approximately 60 minutes before PG&E told the city to expect to lose power, and provided no warning.”*<sup>169</sup>

#### Southern California Edison

Based on SCE’s post-event reports, SCE met this requirement for three of its six events. The comments below indicate problems with SCE’s ability to notify at the beginning of other de-energization events:

For the October 12 PSPS Event, the Acton Town Council (Acton) reported an instance when SCE de-energized the Shovel circuit on October 20 at 1021 hours and sent notice at 1113 hours.<sup>170</sup>

For the October 21 PSPS Event, Acton reported an instance when SCE de-energized the Shovel circuit on October 24 at 0907 hours and SCE sent an “activation shut down notice” at 0945 hours.<sup>171</sup>

Acton further describes additional instances of delayed notification in its Response to this OII.<sup>172</sup>

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<sup>165</sup> SDG&E October 10 Post-Event Report, p. 8.

<sup>166</sup> SDG&E October 20 Post-Event Report, p.29-30.

<sup>167</sup> D.19-05-042 in R.18-12-005, Appendix A, p. A8

<sup>168</sup> R.18-12-005, AT&T Comments on PG&E’s Amended Post-PSPS Event Report for October 9 to October 12, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.10

<sup>169</sup> R.18-12-005, Joint Local Government’s Comments on PG&E Post-PSPS Event Report for October 23, 2019, filed January 3, 2020, Attachment dated December 3, 2019, p.2

<sup>170</sup> I.19-11-013, Acton Town Council Response to OII of Power Shutoff Events, dated January 10, 2020, p.3

<sup>171</sup> *Id.*, p.3

<sup>172</sup> *Id.*, p.3-4

San Diego Gas & Electric

SDG&E did not meet this requirement to notify customers when de-energization is initiated for both its events.

In the October 10 post-event report, SDG&E includes a message it sent at 5:15 pm to more than 17,000 customers warning that power may be shut off overnight. This was followed by a message an hour later (6:30 pm) to approximately 440 customers that the power was shut off.<sup>173</sup> However, only 395 customers were de-energized during this Event. SDG&E's notifications do not meet the requirement of notification upon initiation of de-energization.

Similar to the above event, SDG&E's October 20 post-event report contains scripts warning customers of an overnight shutoff and follows with the notification that the power is shut off. This event contained notifications from several events that SDG&E consolidated into one table, which confused the ordering of notifications and made it difficult for SED to verify if customers impacted by all events received at least these two notices.<sup>174</sup>

f. All Affected Customers Notified Immediately Before Re-energization Begins

The Guidelines require electric IOUs to provide notice when re-energization begins.<sup>175</sup>

It appears that the IOUs had trouble meeting this requirement for their events.

Pacific Gas & Electric

For the October 9 PSPS Event, AT&T stated that it received notification hours after power was restored.<sup>176</sup>

In response to the October 23 PSPS Event, California Community Choice Association (CalCCA) reports that Marin Clean Energy received numerous reports of customers being notified that their power would be restored 24 to 48 hours after power had in fact been restored.<sup>177</sup>

For the October 26 PSPS Event, AT&T noted that the issues regarding untimely notification upon re-energization remain from the October 9-12 PSPS Event. AT&T mentioned that "PG&E provided one power restoral notice per day, in a single email summarizing all restorals for the day."<sup>178</sup> The Guidelines clearly require a notification at the onset of re-energization and not a consolidated notification for all re-energizations implemented by the end of the day.

g. All Affected Customers Notified When Restoration is Complete

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<sup>173</sup> SDG&E October 10 Post-Event Report, Appendix 1, pp. A1-5, A1-6

<sup>174</sup> SDG&E October 20 Post-Event Report, Appendix 1, p.48

<sup>175</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A8

<sup>176</sup> R.18-12-005, AT&T Comments on PG&E's Amended Post-PSPS Event Report for October 9 to October 12, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.10

<sup>177</sup> R.18-12-005, CalCCA's Submission of Comments on IOU Post-Event Reports, Appendix A, filed January 7, 2020, Attachment dated December 3, 2019, p.12

<sup>178</sup> R.18-12-005, AT&T Comments on PG&E's Post-PSPS Event Report for October 26 to November 1, 2019, filed January 7, 2020, attachment dated December 13, 2019, p.11

The Guidelines require electric IOUs to provide notice when re-energization is complete.<sup>179</sup>

Pacific Gas & Electric

PG&E did not provide any “Restoration Complete” data in its October 23 post-event report, and therefore, it is unclear if PG&E met this requirement for this event.

Southern California Edison

In SCE’s October 2 post-event report, SED found no information regarding notification of customers when power was restored.

In its October 12 post-event report, SCE stated that it notified all customers when power was restored, but Appendix B did not contain documentation of such notifications.<sup>180</sup>

Similarly, SCE did not provide documentation of notification of restoration following the October 27 PSPS Event, the November 15 PSPS Event, or the November 23 PSPS Event.

Based on the above, it is unclear if SCE met this requirement.

San Diego Gas & Electric

Three separate weather events occurred during SDG&E’s October 20 PSPS Event. After the first weather event, which lasted from October 20 to 22, SDG&E did not send a “power is restored” notification. Because the three weather events were consolidated into tables, SED could not verify whether SDG&E sent such notification to customers following the next two weather events.<sup>181</sup> It is unclear whether SDG&E met this requirement.

h. Explanation if 2-hour Prior Notice Not Provided

Resolution ESRB-8 requires an electric IOU to include in its post-event report:

*“If an IOU is not able to provide customers with notice at least 2 hours prior to the de-energization event, the IOU shall provide an explanation in its report.”<sup>182</sup>*

Pacific Gas & Electric

PG&E failed to give some customers a two-hour notice for all five of its PSPS events.

October 5 PSPS Event: PG&E failed to notify 1,400 customers to meet the 2-hour requirement and explained the failure was due to an absence of customer information on file, or that the customer’s service point identification (SPID) number was not mapped to the local transformer. PG&E stated that it is “taking action to ensure that customers update their contact information and to resolve SPIDs not mapped to transformers.” PG&E did not explain the barriers, what process it would utilize to alleviate these barriers, or a timeline to correct these issues.<sup>183</sup>

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<sup>179</sup> D.19-05-042 in R.18-12-005, Appendix A, p. A8.

<sup>180</sup> SCE October 12 Post-Event Report, p. 10

<sup>181</sup> SDG&E October 20 Report, Appendix 1, p.46-47

<sup>182</sup> Resolution ESRB-8, p.5

<sup>183</sup> PG&E October 5 Post-Event Report, p.10-11



## Public Report on the Late 2019 Public Safety Power Shutoff Events

October 9 PSPS Event: PG&E did not notify 23,000 customers of which 600 were medical baseline. Reasons included no contact information on file; circuit configurations not related to notification information; and manual steps used to translate high-risk areas into assets and correlate to customers.<sup>184</sup>

October 23 PSPS Event: PG&E did not provide notice to 2,100 customers, of which, 22 were medical baseline customers. PG&E explained it had no customer information on file; and that the customers' service point identification (SPID) number was not mapped to local transformer.<sup>185</sup>

October 26 PSPS Event: Approximately 22,000 customers out of the total 967,700 customers de-energized did not receive advanced notification and experienced an outage longer than one hour. Approximately 400 were medical baseline customers.

PG&E's reasons for no notification include:

- No customer contact information on file;
- Locations with customer's SPID number was not mapped to the local transformer;
- Abnormal switching configurations whereby customers could be operationally tied to one circuit that was impacted by the PSPS event, but their notifications were sent based on the normal circuit configurations which were not impacted; and,
- Challenges related to the process of taking the areas identified as high-risk by meteorology, translating the areas into assets on the electric grid, and correlating to impacted customer which currently requires manual steps.

Additionally, PG&E provided the following explanation for its October 26 PSPS Event:

*"Some PG&E customers experience short outages associated with switching operations required to implement PSPS. Implementation or restoration of a PSPS event may be due to work procedure errors, switching customers to a microgrid or operational limitations of switching devices. These operations are executed to maintain service to customers and therefore reduce overall customer impact. Because these customers are not expected to experience the PSPS outage, they may not receive advanced PSPS notifications. During this event, approximately 11,300 customers, including approximately 400 medical baseline customers, experienced outages of one hour or less and were not notified as a part of the PSPS advanced notifications."*<sup>186</sup>

November 20 PSPS Event: 800 customers not notified. Approximately 500 customers had no customer contact information on file and PG&E had challenges related to translating the meteorology polygons into assets on the electric grid and correlating those assets to impacted customers which currently requires manual steps.<sup>187</sup>

### Southern California Edison

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<sup>184</sup> PG&E October 9 Post-Event Report, p.16

<sup>185</sup> PG&E October 23 Post-Event Report, p.17

<sup>186</sup> PG&E October 26 Post-Event Report, p.14

<sup>187</sup> PG&E November 20 Post-Event Report, p.18

SCE met this requirement to notify customers at least 2 hours in advance for one of its six events, the October 12 PSPS Event. SCE explained that most of the failures to notify customers were because of an “unexpected change in the weather.”

October 2 PSPS Event: 2,167 customers out for two hours because a palm frond caused an outage. In addition, a failed jumper loop caused an outage for 15,000 customers for 36 hours.<sup>188</sup> SCE was not able to notify these customers two hours in advance.

October 21 PSPS Event: Seven or eight circuits de-energized for other reasons than the PSPS event with no notification of the 865 customers.<sup>189</sup> SCE gave no explanation for the outage and not providing the notification.

October 27 PSPS Event: 16,000 customers were not notified. SCE cites a:

*“Santa Ana wind event, sudden extreme wind conditions developed in local areas (as reported by real-time weather data and/or field observations) as the explanation. This dynamic wind event necessitated immediate pro-active de-energization of some circuits before their forecasted period of concern. In these instances, de-energization protocols and all notifications were initiated simultaneously, and as a result, some customers did not receive at least 2 hours’ notice before de-energization.”<sup>190</sup>*

November 15 PSPS Event: 49 customers were not notified due to wind conditions. SCE explains that:

*“SCE Happy Camp Road weather station near the Anton Circuit recorded sustained wind speeds of 24 mph and gusts of 38 mph, which was within two mph of the thresholds for that circuit. Based on the real-time weather data, which indicated upward trending wind speeds and rapidly changing weather conditions, the PSPS IMT Incident Commander (IC) initiated de-energization protocols, and 49 customers on a portion of the Anton Circuit in Ventura County were pro-actively de-energized at 5:18 a.m.”<sup>191</sup>*

November 23 PSPS Event: 36 customers were given less than one-hours’ notice. SCE explained that those customers on the Energy circuit experienced de-energization because of change in the weather forecast and real-world conditions occurred quickly, preventing more advanced notice.<sup>192</sup>

#### San Diego Gas & Electric

SDG&E did not meet this requirement for one of its two PSPS events.

October 20 PSPS event: Between October 22-24, 2019, 495 customers were not notified (40 medical baseline, five PSPS Critical Facilities); during the October 28 – November 1, 2019, 1,412 customers were not notified (57 medical baseline, 54 PSPS Critical Facilities).<sup>193</sup>

#### **vi. Notification Languages**

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<sup>188</sup> SCE October 2 Post-Event Report, p.1,3

<sup>189</sup> SCE October 21 Post-Event Report, p.1

<sup>190</sup> SCE October 27 Post-Event Report, Chart on p.12

<sup>191</sup> SCE November 15 Post-Event Report, p.1,6

<sup>192</sup> SCE November 23 Post-Event Report, p.6

<sup>193</sup> SDG&E October 20 Post-Event Report, p.30

The Guidelines state:

*“The electric investor owned- utilities must coordinate with California Governor’s Office of Emergency Services and the California Department of Forestry and Fire Protection to engage in a statewide public education and outreach campaign. The campaign must effectively communicate in English, Spanish, Chinese (including Cantonese, Mandarin and other Chinese languages), Tagalog and Vietnamese as well as Korean and Russian where those languages are prevalent within the utilities’ service territories.”<sup>194</sup>*

#### Southern California Edison

SCE did not provide information in the required eight languages for the first event. For SCE’s October 10 PSPS event, it provided information in English and Spanish only.

For the remaining events, SCE did not provide information in Russian and did not explain why it did not.<sup>195</sup>

### C. Information Sharing

#### i. Consistent Information

The Guidelines require that electric IOUs:

*“... work together to share information and advice in order to create effective and safe de-energization programs at each utility and to ensure that utilities are sharing consistent information with public safety partners.”<sup>196</sup>*

#### Pacific Gas & Electric

For PG&E’s October 9 PSPS event, PG&E held operational briefings to provide status updates to state and local officials. However, CalCCA noted that some CCAs “were provided with information on these calls, while others were not.”<sup>197</sup>

For PG&E’s October 9 PSPS event, Verizon discussed cellular site lists provided by PG&E:

*“Sometimes the list of sites in the emailed notices differed from what the PG&E account representative conveyed to Verizon.”<sup>198</sup>*

The California State Association of Counties notes that for the late 2019 PSPS events, the information communicated by PG&E to the counties was inconsistent:

*“In some counties, the local PG&E representative did not have much information or would not have the information needed and in others, the PG&E representative provided real-time updates.”<sup>199</sup>*

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<sup>194</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A3

<sup>195</sup> SCE October 12 Post-Event Report, p.9-10

<sup>196</sup> D.19-05-042 in R.18-12-005, Appendix A, p. A3

<sup>197</sup> R.18-12-005, CalCCA Submission of Comments on IOU Post-Event Reports, Appendix B, filed January 7, 2020, Attachment dated November 19, 2019, p.3

<sup>198</sup> R.18-12-005, Cellco Partnership d/b/a Verizon Wireless (U 3001 C) Comments on PG&E Post-PSPS Event Report for October 9-10, 2019, filed January 7, 2020, Attachment A, dated November 12, 2019, p.2

<sup>199</sup> I.19-11-013, Response of California State Association of Counties to OII, January 10, 2020, p.3

## Public Report on the Late 2019 Public Safety Power Shutoff Events

In the above instances, PG&E did not ensure the sharing of accurate, consistent information with public safety partners. PG&E should continue improving its PSPS event communications.

### Southern California Edison

While the impact of SCE's discrepancies was not widespread, SCE still has room to improve in sharing consistent information with its public safety partners.

The Joint Local Governments noted that:

*"Santa Barbara County regularly received reports for other counties, or reports that included Santa Barbara and other counties, which required follow-up to the EOC duty officer and created confusion."*<sup>200</sup>

#### ii. **Nondisclosure Agreement (NDA) and Other Restrictions for Sharing Information**

The Guidelines require that electric investor-owned utilities:

*"... electric investor-owned utilities, emergency responders, and local governments...to be seamlessly integrated when communicating de-energization notifications."*<sup>201</sup>

On October 8, the Commission provided further clarification by sending a letter authorizing PG&E, SCE, and SDG&E to provide, upon request, medical baseline information to county and tribal government emergency response personnel.<sup>202</sup>

On October 23, the Commission sent a second letter authorizing PG&E, SCE, and SDG&E to share with county or tribal governments, upon the county or tribal government's request, the addresses within their jurisdiction that are or will be impacted by current and future PSPS events.<sup>203</sup>

### Pacific Gas & Electric

For PG&E's October PSPS events, the IOU established barriers that prevented the free flow of critical information required for quick response to evolving conditions during PSPS events. PG&E required non-disclosure agreements (NDAs) to be executed prior to sharing customer identifying and critical facility/infrastructure information, as noted in the following parties' comments:

The Joint Local Governments on PG&E's October 9 PSPS event:

*"...the Joint Local Governments are frustrated to see that PG&E persists in making NDAs a cornerstone of its information-sharing requirements for public safety partners."*<sup>204</sup>

The City of San Jose on PG&E's October 9 PSPS event:

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<sup>200</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.21

<sup>201</sup> D.19-05-042, Appendix A, p. A2

<sup>202</sup> Resolution L-598, dated December 9, 2019, p.1

<sup>203</sup> Resolution L-598, dated December 9, 2019, p.1

<sup>204</sup> R.18-12-005, Joint Local Government's Comments on PG&E Post-PSPS Event Report for October 9, 2019, filed January 3, 2020, dated November 19, 2019, p.5

## Public Report on the Late 2019 Public Safety Power Shutoff Events

*“...government entities should not be negotiating obscurely drafted non-disclosure agreements (NDAs) with PG&E to access secure data transfer portals or customer information needed for public safety and local responses efforts.”<sup>205</sup>*

The Rural County Representatives of California (“RCRC”) on PG&E’s October 9 and October 23 PSPS events:

*“Eliminate cumbersome restrictions that inhibit the provision of emergency services by allowing information about medical baseline customers, AFN populations and critical facilities to be shared between utilities and local agencies while maintaining the confidentiality of sensitive information.”<sup>206</sup>*

The Joint Local Governments on PG&E’s October 23 PSPS event:

*“In addition to the fact that certain of PG&E’s local government liaisons had not been informed of the Commission’s October 8, 2019 directive and were still demanding nondisclosure agreements, the Commission did not order PG&E to provide only information for medical baseline customer that had not confirmed receipt of the PSPS notification...”<sup>207</sup>*

CalCCA on the October 23 and October 26 PSPS events:

*“PG&E kept that list confidential and was responsible for contacting those individuals. It wasn’t until the morning of the Shut-Off that they released the information to our fire department to contact the remaining baseline customers.”<sup>208</sup>*

The City of San Jose on PG&E’s October 26 PSPS event:

*“While the Commission put forth a draft ratification of its October 8 and 23 letters to the Investor Owned Utilities (IOUs) authorized release of medical baseline customer information and specific addresses of affected customers to counties and tribal governments, this is of little use to cities like San José.”<sup>209</sup>*

Without the Commission resolution, “PG&E’s public safety partners would have been forced to manage the late 2019 PPS events without important information.”<sup>210</sup> During emergency events, such as those conducted by utilities during PPS, local jurisdictions were called upon to quickly locate and make contact with AFN communities that the IOU could not contact. Local jurisdictions should not have to argue over the confidentiality of customer location information in order to serve their constituents. The Commission resolution corrected the confusion and will likely improve efforts leading up to the 2020 fire season.

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<sup>205</sup> R.18-12-005, City of San Jose’s Comments on PG&E’s Post-PSPS Event Report for October 9-12, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.9

<sup>206</sup> R.18-12-005, Rural County Representatives of California Comments on PG&E’s Post-PSPS Event Reports for October 10, 2019, October 25, 2019 and November 8, 2019, Attachment dated January 6, 2020, p.4

<sup>207</sup> R.18-12-005, Joint Local Government’s Comments on PG&E Post-PSPS Event Report for October 23, 2019, filed January 3, 2020, Attachment dated December 3, 2019, p.3

<sup>208</sup> R.18-12-005, CalCCA Comments on PG&E Post-PSPS Event Report for October 23 – November 1 Consolidated Events, filed January 7, 2020, dated December 3, 2019, p.16

<sup>209</sup> R.18-12-005, City of San Jose’s Comments on PG&E’s Post-PSPS Event Report for October 26 & 29, 2019, filed January 7, 2020, Attachment dated December 3, 2019, p.6

<sup>210</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.13

Southern California Edison

SCE did not discuss the use of NDAs in its September 2019 Progress Report titled “Progress Report on the Implementation of De-energization Guidelines.” Nor did SCE discuss its use of NDAs in its post-event reports for information sharing purposes with public safety partners. However, SCE provided SED with information regarding NDAs in a data request response on this topic:

*“SCE requires a non-disclosure agreement to provide all medical baseline customer information with public safety partners and any outside entities when the information request occurs outside of PSPS events. This includes providing any Personal Identifiable Information (PII). The only medical baseline customer information not subject to NDA before disclosure to public safety partners is aggregated information such as totals of medical baseline customers, which does not include PII.”<sup>211</sup>*

Although NDAs were not a pre-requisite to share information, the Joint Local Governments noted that:

*“In Santa Barbara’s experience, SCE’s duty officers were regularly impeded by SCE’s internal communication and information-sharing problems, despite the officers’ clear desire to help.”<sup>212</sup>*

It seems internal protocols within SCE were in place that, while inadvertent, restricted sharing of confidential information even though executed NDAs were not required.

The Clean Power Alliance (CPA) also noted that for the November 15-17 PSPS event:

*“As a Load Serving Entity (‘LSE’) with the privilege to access confidential customer account information, CPA requests that account information associated with PSPS-affected accounts be shared in advance, during the event in real time, and after the event with CPA and other CCAs in the future... During the November 15 to 17 PSPS event, CPA received public notices from SCE.”*

When asked for a list of public safety partners contacted for feedback regarding the November 15 PSPS event, SCE provided a list<sup>213</sup> which did not include CPA even though they CPA is an entity whose customers were potentially impacted by the de-energization. This is another example of how SCE may have had internal confusion regarding the sharing of confidential information. SCE should improve its sharing of confidential information with public safety partners.

**iii. GIS Shapefiles of PSPS Boundaries Provided to Public Safety Partners**

The Guidelines require that electric investor-owned utilities:

*“... at the time of first notification preceding a de-energization event, make available a Geographic Information System shapefile via a secure data transfer process depicting the most accurate and specific information possible regarding the boundaries of the area subject to de-energization to all public safety partners whose jurisdictions or service areas will be impacted by the de-energization event, including adjacent jurisdictions or service areas that could lose power as a result of de-energization in a high fire threat district.”<sup>214</sup>*

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<sup>211</sup> SCE Response to SED-001, Question 35

<sup>212</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.35

<sup>213</sup> SCE Response to SED-001, Question 2

<sup>214</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A16-17

Pacific Gas & Electric

In previous post-event reports for October, PG&E had mentioned the GIS shapefiles were made available to public safety partners. In addition, real time information and up to date information was available on their website. However, in the post-event reporting for the de-energization event from November 20-21, PG&E did not mention either the availability of the GIS shapefiles to public safety partners or real time information and up-to-date information on PG&E's website.

In the data request response to this requirement, PG&E stated:

*"Public safety partners had access to the GIS Shapefiles through the Secure Data Portal. Access to the Secure Data Portal was provided upon review and approval of a request for access. The PSPS event maps were manually uploaded to the PG&E's Secure Data Portal as they were generated. Public safety partners were alerted to new information on the Secure Data Portal during conference calls and were also encouraged to monitor the Secure Data Portal for new and updated information."*<sup>215</sup>

Even though PG&E's statement suggests that it has they have provided the necessary information to public safety partners. In the following instances, PG&E did not make GIS data available to a public safety partner:

- For the October 9 PSPS event, AT&T noted that it did not receive a GIS shapefile of the potentially affected areas with PG&E's initial notification in the morning of October 7.<sup>216</sup> However, PG&E did provide the maps on the afternoon of October 7.<sup>217</sup>
- For the October 9 PSPS event, San Jose noted that the Secure Data Portal only provided information related to Bakersfield. However, this issue was corrected in a subsequent event.<sup>218</sup>
- For the October 26 PSPS event, AT&T received encrypted emails that impeded its access to "essential" information. It is unclear what type of content was included in these encrypted emails, but it seems this method of secure data transfer was not effective in providing information identified as confidential to PG&E.<sup>219</sup>
- For the November 20 PSPS event, CCTA claims that its members were not provided credentials to log into PG&E's Secure Data Portal. As public safety partners, CCTA highlights its request made to PG&E on its July 8, 2019 letter requesting login credentials for its secure web portal.<sup>220</sup>

PG&E should ensure public safety partners have proper access to GIS shapefiles and should continue to document in the de-energization reports the status of the availability of the GIS shapefiles to public safety partners. In addition, PG&E should report if the available information was updated in real-time.

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<sup>215</sup> PG&E Response to SED-001, Question 9, PG&E SED-001, Question 11, March 24, 2020

<sup>216</sup> R.18-12-005, Comments of AT&T on Amended PG&E Report for October 9-12 PSPS, dated November 19, 2019, filed January 7, 2020, p.9

<sup>217</sup> *Id.*, p.9

<sup>218</sup> R.18-12-005, City of San Jose's Comments on PG&E's Post-PSPS Event Report for October 9-12, 2019, dated November 19, 2019, filed January 7, 2020, p.9

<sup>219</sup> R.18-12-005, AT&T Comments on PG&E's Post-PSPS Event Report for October 26 to November 1, 2019, filed January 7, 2020, attachment dated December 13, 2019, p.10

<sup>220</sup> R.18-12-005, CCTA Comments on PG&E's Post-PSPS Event Report for October 9-12, 2019, filed January 7, 2020, attachment dated December 24, 2019, p.6

Southern California Edison

During the 2019 wildfire season, in SCE’s event notification scripts for county officials that identified cities that would be affected by a PSPS event, SCE provided the following information, “For your reference, PDF and GIS circuit maps may be found at [www.sce.com/maps](http://www.sce.com/maps).”<sup>221</sup>

SCE experienced difficulties with its website during the first PSPS event of the 2019 wildfire season, October 2-12: “Starting October 8th due to the PSPS event, traffic on SCE.com spiked from 1 million-page views to 1.7 million, then spiked again to 2.5 million on Wednesday, October 9.”<sup>222</sup> The traffic impact to SCE’s website made it difficult for public safety partners to access GIS shapefiles from their public website. Additionally, many public safety partners in SCE’s territory did not receive the information that the GIS shapefiles were also available through SCE’s GIS Representational State Transfer (REST) server. For these two reasons, many of SCE’s public safety partners were unable to access the GIS shapefiles.

For the October 2 and November 23 PSPS events, CCTA consistently urged SCE to provide GIS files instead of referring to maps on SCE’s website.<sup>223 224</sup>

For the October 2 PSPS event, CCTA also requested that SCE “promptly provide login credentials for its secure web portal to all cable companies within its respective service territory.”<sup>225</sup>

These data points support the statement above that SCE did not provide GIS files to many public safety partners, including CCTA members. SCE should provide or make available GIS shapefiles to public safety partners depicting the most accurate PSPS boundary known to the utility.

**iv. Work Towards Providing Real-time Data to Public Safety Partners**

The Guidelines require that electric investor-owned utilities:

*“Going forward, the electric investor-owned utilities must work to provide a secure data transfer of the de-energization boundary in Geographic Information System Representational State Transfer Service format... and must also show affected circuits and any other information that is requested by public safety partners and can reasonably be provided by the utility. The utilities must work towards being able to provide real-time data to public safety partners.”<sup>226</sup>*

Southern California Edison

In SCE’s “Lessons Learned” section of its October 12-21 post event report, SCE makes the following statement:

*“It appears that many Public Safety Partners do not have access to SCE’s publicly facing GIS Representational State Transfer (REST) server, which provides information that will help them plan or*

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<sup>221</sup> SCE October 2 Post-Event Report, p.49-54

<sup>222</sup> SCE October 2 Post-Event Report, p.19

<sup>223</sup> R.18-12-005, CCTA Comments on SCE’s Post-PSPS Event Reports for October 2-12, 2019 and November 23-26, 2019, attachment dated November 19, 2019, p.3

<sup>224</sup> *Id.*, attachment dated December 26, 2019, p.3-4

<sup>225</sup> *Id.*, attachment dated November 19, 2019, p.4

<sup>226</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A17



*maintain situational awareness during PSPS events. While SCE has made this GIS service available and the State and County Emergency Management officials are using it, other 'Public Safety Partners' such as telecommunications and water agencies are not."*<sup>227</sup>

In this same report SCE explains that:

*"SCE holds calls every other week with county emergency management partners where we discuss available tools and technology, such as the GIS REST Service. And SCE has created an email address and fact sheet specific to the GIS REST Service, which provides basic information on how to sign up and access the data."*<sup>228</sup>

SCE also admits that it can "engage the telecommunications and water agency providers through groups like the California Utilities Emergency Management Association to increase engagement and awareness of resources."<sup>229</sup> SCE acknowledges that it needs to increase its outreach efforts to educate all of its public safety partners about the GIS REST service.

The Joint Local Governments generally noted:

*"SCE had difficulty providing accurate information to its local public safety partners about the facts on the ground, including which circuits were actually going to be de-energized...During one event, SCE failed to notify Santa Barbara County that wind-related damage had shut off a large portion of a circuit in the outage footprint because the power loss on the circuit was not due to the PSPS and so was not deemed relevant to the event coordination."*<sup>230</sup>

SCE should continue improving its effort in working toward providing real-time data to public safety partners.

**v. Up-to-Date Information Provided on Public Website and PSPS Webpage Depicting Event Boundary**

The Guidelines require that electric investor-owned utilities:

*"...must provide up-to-date information, including a depiction of the boundary of the de-energization event, on their websites' homepage and a dedicated Public Safety Power Shut-off webpage regarding the de-energization event."*<sup>231</sup>

Pacific Gas & Electric

PG&E made PSPS information available on its public website; however, deficiencies in content, accessibility and web traffic issues did not allow it to be used for its intended purposes.

In Center for Accessible Technology's (CforAT) comments regarding the October 5 and October 9 PSPS events, CforAT found that the website was not up-to-date, accessible and in-language for AFN communities:

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<sup>227</sup> SCE October 2 Post-Event Report, p.14

<sup>228</sup> SCE October 12 Post-Event Report, p.14

<sup>229</sup> SCE October 12 Post-Event Report, p.15

<sup>230</sup> I.19-11-013, Response of the Joint Local Governments to the OII, January 10, 2020, p.20

<sup>231</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A18

*“PG&E has also failed to make its website accessible to people who use screen readers or people who do not speak English as their primary language.”<sup>232</sup>*

CforAT also noted that the website information was “not being updated for several hours after local news reported something different.”<sup>233</sup>

NCPA noted that for the October 9 PSPS event, PG&E’s website “caused confusion due to misleading and/or information provided or no (lack of) information provided.”<sup>234</sup> NCPA stated: “PG&E listed outages in Members’ Communities even though they had power.”<sup>235</sup>

Due to the website crashing during the October 9 PSPS event, CCTA reported that this “required Comcast to obtain its outage information from local television news programs at the same time as the public.”<sup>236</sup>

During the late 2019 PSPS events, PG&E’s PSPS website challenges highlight the need to have up-to-date information, accessibility to people/communities with access and functional needs, and web traffic capacity.

#### Southern California Edison

As stated earlier in this report, SCE experienced web traffic impacts during their first PSPS event of the 2019 wildfire season. SCE stated in their October 2 post-event report that “traffic on SCE.com spiked from 1 million-page views to 1.7 million, then spiked again to 2.5 million on Wednesday, October 9.”<sup>237</sup> This resulted in a slowing down of webpage loading times. SCE stated in their “Lessons Learned” section in this same post-event report:

*“We began monitoring site traffic during five-minute increments and noticed the site’s response time slowed down, from three to five second page loads to page loads of over 30 seconds. To mitigate the issue and ensure customers could access the most critical PSPS updates, we moved a subset of our PSPS information to an alternate site and redirected customers to it while we increased our bandwidth and fixed the issues on SCE.com.”<sup>238</sup>*

SCE determined the problem was due to “a network tunnel capacity constraint. The tunnel allows us to pass information securely from our SCE.com site to our customers. This issue on the tunnel required an upgrade to increase capacity demands, triggered by the PSPS event.”<sup>239</sup> To help alleviate the traffic problem for future PSPS events, SCE plans to accomplish this:

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<sup>232</sup> R.18-12-005, CforAT Comments on PG&E Post-PSPS Event Reports for September 23 and 25, 2019; October 5 and 9, 2019; October 26 and 29, 2019; and November 20, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.1

<sup>233</sup> *Id.*, p.2

<sup>234</sup> R.18-12-005, NCPA Comments on PG&E Post-PSPS Event Report for October 9 to October 12, 2019, filed December 31, 2019, letter dated November 19, 2019, p.3

<sup>235</sup> *Id.*, p.3

<sup>236</sup> R.18-12-005, CCTA Comments on PG&E’s Post-PSPS Event Report for October 9-12, 2019, dated November 19, 2019, filed January 7, 2020, p.3

<sup>237</sup> SCE October 2 Post-Event Report, p.19

<sup>238</sup> SCE October 2 Post-Event Report, p.19

<sup>239</sup> SCE October 2 Post-Event Report, p.19

*“...by migrating SCE.com to the cloud, we are now able to shutdown non-PSPS transactional services, such as turn-on/turn-off services and bill payment, when required to make additional capacity available for PSPS information accessibility. This will ensure our customers are able to access outage information without interruption.”<sup>240</sup>*

Aside from the web traffic issues described above, CforAT’s comments regarding the October 2 and October 21 PSPS events found that the website was inaccessible to people/communities with access and functional needs and was not in-language for certain non-English speakers.

For the October 2 PSPS event, an alternate website was being utilized as SCE attempted to fix the main website. SCE made it clear that the alternate website did not incorporate accessibility features:

*“[T]he alternate site was provided in English-only and did not include all of the outage-related educational and emergency preparedness content.”<sup>241</sup>*

CforAT noted that:

*“SCE says nothing about whether its alternate website has any of these accessibility features...lack of accessibility is especially troubling in times of an emergency like a de-energization event.”<sup>242</sup>*

For the October 2 PSPS event, CCTA also noted that “the October 9 switch from the SCE website ([www.sce.com](http://www.sce.com)) to the backup site ([www.scemaintenance.com](http://www.scemaintenance.com)) prevented them from obtaining updated SCE Outage maps.”<sup>243</sup>

For the October 21 PSPS event, CforAT stated the following:

*“CforAT monitored SCE’s website leading up to and during the de-energization event and identified substantial problems, particularly with the accessibility of information for customers who use screen readers. In particular, SCE failed to provide accessible information on the locations where power was shut off...On October 23, the website provided information about outage locations using maps in pdf format, with unreadable street names and borders. There was no information available on a screen reader, and no zoom function or adjustment in contrast was available.”<sup>244</sup>*

*“Additionally, the website had menu options for languages other than English, but selecting those options led to pages where all information was in English only.”<sup>245</sup>*

People with access and functional needs may require the use of screen readers or substantive in-language information. It is clear that SCE did not make the main or alternate websites

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<sup>240</sup> SCE October 2 Post-Event Report, p.19

<sup>241</sup> SCE October 2 Post-Event Report, p.19

<sup>242</sup> R.18-12-005, CforAT Comments on SCE Post-PSPS Event Reports for September 16, 2019; October 2, 2019; October 21, 2019; October 27, 2019; and November 23, 2019, CforAT Comments on SCE Post-PSPS Event Report for October 2, 2019, dated November 19, 2019, p.2

<sup>243</sup> R.18-12-005, CCTA Comments on SCE’s Post-PSPS Event Reports for October 2-12, 2019 and November 23-26, 2019, attachment dated November 19, 2019, p.3

<sup>244</sup> R.18-12-005, CforAT Comments on SCE Post-PSPS Event Reports for September 16, 2019; October 2, 2019; October 21, 2019; October 27, 2019; and November 23, 2019, CforAT Comments on SCE Post-PSPS Event Report for October 21, 2019, dated December 3, 2019, p.3

<sup>245</sup> *Id.*, p.4

comprehensively accessible. SCE should improve for the upcoming 2020 fire season and should report on the effectiveness of countermeasures implemented to address the website shortcomings.

#### D. Post-Event Required Reporting

##### i. Report Submitted to Lead Local/County Public Safety Agency

The Guidelines require that electric IOUs:

*“...must send a copy of the report to the lead local/county public safety agency for the de-energization event.”<sup>246</sup>*

##### Pacific Gas & Electric

In its post-event reports, PG&E did not discuss whether the post-event reports would be distributed to the lead local/county public safety agency for the de-energization event. However, in its response to a subsequent data request, PG&E stated, “every county and federally recognized tribal government was provided with a copy of the 10-day report for each PSPS event that impacted them in 2019 and the report was provided to city governments who provided PG&E with a dedicated lead within their agency.”<sup>247</sup> PG&E should document such distribution in its post-event reports.

##### Southern California Edison

In its post-event reports, SCE did not discuss whether the post-event reports would be distributed to the lead local/county public safety agency for the de-energization event. However, in its response to a subsequent data request, SCE stated, “After each PSPS event, SCE engages county Emergency Management entities impacted during PSPS events, provides them a copy of the Post-Event report, and encourages them to provide feedback after the post-event reporting has been served on all applicable service lists.”<sup>248</sup> SCE should document such distribution in its post-event reports.

##### ii. Report Submitted to Director of SED and Service Lists

The Guidelines require the following of electric IOUs:

*“In addition to submitting a report to the Director of the Commission’s Safety and Enforcement Division within 10 business days of power restoration, electric investor-owned utilities must serve their de-energization report on the service lists of this proceeding [R.18-12-005] and Rulemaking 18-10-007 or their successor proceedings.”<sup>249</sup>*

##### Pacific Gas & Electric

For PG&E’s de-energization event during October 26-29, 2019, PG&E power was restored on October 29, 2019. However, the report was not provided to the service list until November 18, 2019 (14 working days). The report was four days late. For PG&E’s de-energization event during November 20-21, 2019, PG&E power was restored November 21, 2019. However, the report was not provided to the service list until December 9, 2019 (12 working days). The report was two days late.

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<sup>246</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A22

<sup>247</sup> PG&E Response to SED-001, Question 3, dated March 24, 2020

<sup>248</sup> SCE Response to SED-001, Question 3, dated March 25, 2020

<sup>249</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A22

### iii. Decision Criteria Leading to De-energization

The Guidelines require that electric IOUs “must provide the decision criteria leading to de-energization.”<sup>250</sup>

#### Southern California Edison

In its post-event reports, SCE did not discuss the decision criteria leading to de-energization of each event. However, in response to a subsequent data request, SCE stated:

*“SCE’s decision whether to de-energize is dynamic and made by considering many factors. Some factors SCE considers in deciding when to de-energize for public safety reasons are:*

- *Red Flag*
- *Meteorologists*
- *Fire Potential Index*
- *Winds*
- *Public Authorities*
- *Impacts*
- *Operational Situation*”<sup>251</sup>

In its post-event reports for October 26, 2019 and November 4, 2019, SCE did not discuss that it considered moisture in the vicinity of the de-energized circuits as one of the factors to de-energize. However, in response to a subsequent data request, SCE stated:

*“SCE does not use fuel moisture content as an isolated criterion for de-energization; rather it is part of a holistic approach to assess fire potential (FPI) within a given area. Thus, it is the FPI value at the circuit level that is used as a criterion for de-energization at that location. Besides wind, the FPI considers dead fuel moisture, live fuel moisture, and the state of green-up of the annual grasses as part of its calculation.”*<sup>252</sup>

SCE should document in the report all the factors considered in the decision to shut off power, including moisture in the vicinity of the de-energized circuits. In addition, SCE should document in the report all the decision criteria leading to de-energization.

### iv. Evaluation of Alternatives Considered

The Guidelines require that electric investor-owned utilities must include in their reports:

*“...an evaluation of alternatives to de-energization that were considered and mitigation measures used to decrease the risk of utility-caused wildfire in the de-energized area.”*<sup>253</sup>

#### Southern California Edison

In its post-event reports for October 26, 2019 and November 4, 2019, SCE did not discuss any evaluation of alternatives to de-energization. In response to SED’s first data request, SCE does list some

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<sup>250</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A22

<sup>251</sup> SCE Response to SED-001, Question 16, dated March 25, 2020

<sup>252</sup> SCE Response to SED-001, Question 23, dated March 24, 2020

<sup>253</sup> D.19-05-042 in R.18-12-005, Appendix A, p.A22-23

alternatives to de-energization.<sup>254</sup> However, in its response to the data request, SCE lists risk mitigating and operational maintenance activities as part of the alternatives evaluated to de-energization. It is unclear if SCE fully understands the difference between ongoing risk mitigation activities and evaluation of alternatives to de-energization. SCE should document in the report the evaluation of alternatives to de-energization.

#### San Diego Gas & Electric

In its post-event reports for October 10, 2019 and October 20, 2019, SDG&E did not include an evaluation of alternatives to de-energization considered. In its response to SED's first data request, SDG&E provided a brief summary of SDG&E's fire hardening programs and portable backup generators to reduce the impact of a PSPS event.<sup>255</sup> SDG&E should document in the report the evaluation of alternatives to de-energization.

#### **v. Explanation of How IOUs Determined that the Benefit of De-energization Outweighed Potential Public Safety Risks**

The Guidelines require that electric investor-owned utilities:

*"...must provide an explanation of how the utility determined that the benefit of de-energization outweighed potential public safety risks."<sup>256</sup>*

The narrative below describes the inadequacies of each IOU; however, the general concept may be better discussed in a forum in which all parties can contribute, such as R.18-12-005.

#### Pacific Gas & Electric

In its post-event reports, PG&E did not provide an in-depth discussion of how PG&E determined that the benefit of de-energization outweighed potential public safety risks. PG&E provided general information with minimal quantitative supporting data or rationale. In the data request response about this requirement, PG&E did not provide a direct response to this inquiry and instead directed SED to PG&E's "Public Safety Power Shutoff Annex,"<sup>257</sup> which is an annex to PG&E's Company Emergency Response Plan.

PG&E needs to coordinate with its impacted stakeholders and public safety partners to identify essential services and assess the potential public safety risks posed by de-energization. PG&E should document in the report efforts made to identify essential services and the public safety risks considered to determine the benefit of de-energization outweighing the potential public safety risks. The parties below identified the same issue regarding a lack of public safety risks considered and discussed in PG&E's post-event reports.

Regarding PG&E's post-event report for its October 9 PPS event, the Joint Local Governments commented:

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<sup>254</sup> SCE Response to SED-001, Question 17, dated March 24, 2020

<sup>255</sup> SDG&E Response to SED-001, dated March 24, 2020, p.28

<sup>256</sup> D.19-05-042 in R.18-12-005, Appendix A, p. A24

<sup>257</sup> PG&E Response to SED-001, Questions 16 and 20, dated March 24, 2020

*“Is any consideration given to the types of critical facilities or the geographic concentration of medical baseline customers? Both PG&E and local emergency manager have to understand which facilities will lose power and whether there are densely populated clusters of vulnerable customers or if those individuals are spread out in remote areas—the necessary information, planning, and response will be different depending on those facts.”<sup>258</sup>*

Regarding PG&E’s post-event reports for its October 9 and October 26 PSPS events, AT&T stated:

*“PG&E does discuss the potential harms the shutoff was intended to prevent, but it does not contain an adequate analysis of the harms the shutoff would create—or any explicit attempt to weigh those harms.”<sup>259</sup>*

*“PG&E does not articulate in its post-event report the specific ‘public safety impact[s]’ of de-energizing that were considered, or how the risks created by energized lines and the ‘impacts’ of de-energization were balanced.”<sup>260</sup>*

Regarding PG&E’s post-event reports for its October 9 and October 26 events, CforAT repeatedly stated:

*“PG&E offers no explanation of how this incredible number of customers ‘was considered’ in their decision, and certainly makes no effort to set out risks of harm to these customers from an extended power outage.”<sup>261 262</sup>*

Regarding PG&E’s post-event reports for its October 23 and October 26 events, CalCCA’s consolidated comments included this statement:

*“In the both Reports, PG&E states that ‘in light of the meteorological information indicating the potential for catastrophic wildfire and the customer impacts from mitigating that risk through de-energization.’ PG&E does not define or explain what it considers ‘customer impacts.’ Nowhere in the discussions of the Events does PG&E define or quantify the impacts to the customers and communities from de-energization.”<sup>263</sup>*

Regarding PG&E’s post-event report for its October 26 event, SBUA recommended:

*“...PG&E to carefully and transparently analyze the actual economic, health and societal impact of its PSPS-initiation decision to assure that the cost is truly warranted and then implement permanent*

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<sup>258</sup> R.18-12-005, Joint Local Governments’ Comments on PG&E Post-PSPS Event Report for October 9, 2019, filed January 3, 2020, Attachment dated November 19, 2019, p.4

<sup>259</sup> R.18-12-005, AT&T Comments on PG&E’s Amended Post-PSPS Event Report for October 9 to October 12, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.2

<sup>260</sup> R.18-12-005, AT&T Comments on PG&E’s Post-PSPS Event Report for October 26 to November 1, 2019, filed January 7, 2020, Attachment dated December 13, 2019, p.2

<sup>261</sup> R.18-12-005, CforAT Comments on PG&E Post-PSPS Event Reports for September 23 and 25, 2019; October 5 and 9, 2019; October 26 and 29, 2019; and November 20, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.3

<sup>262</sup> *Id.*, Attachment dated December 13, 2019, p.3

<sup>263</sup> R.18-12-005, CalCCA Submission of Comments on IOU Post-Event Reports, CalCCA Comments on PG&E Post-PSPS Event Report for October 23-November 1 Consolidated Events, Attachment dated December 3, 2019, p.4

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*solutions to avoid the worst impacts of PSPS events. As part of this analysis, PG&E must assess the efficacy of its PSPS decision-making and whether there are particular locations and customers that are repeatedly subject to PSPS events. Where the social cost is high and customers are predictably at high risk of repeated and prolonged power loss, durable solutions, such as undergrounding, must be considered.”<sup>264</sup>*

Regarding PG&E’s post-event report for its November 20 event, SBUA noted:

*“...the Report does not consider the extreme detrimental impacts to small businesses, which are particularly vulnerable to outages.”<sup>265</sup>*

Regarding PG&E’s post-event report for its November 20 event, CforAT stated:

*“PG&E continues to disregard the effects that extended power outages have on customers, and only considers its own liability when weather conditions are right for a wildfire. PG&E, as well as the other IOUs, must begin to truly recognize the risks of de-energization to their customers, and they must actually weigh those risks against the benefits of de-energization.”<sup>266</sup>*

In response to the OII, CSAC stated:

*“PG&E failed to adequately consider the impacts on local governments when determining whether to have a PSPS event...”<sup>267</sup>*

TURN also noted in response to the OII and referring to the specific Guideline requirement:

*“For example, the PSPS Guidelines required the utilities to explain in its post-event report ‘how the utility determined that the benefit of de-energization outweighed potential public safety risks.’ As TURN noted previously, PG&E did not comply with this requirement and continues to ignore this requirement in its recent post-event reports.”<sup>268</sup>*

### Southern California Edison

In its post-event reports for October 26, 2019 and November 4, 2019, SCE did not provide an in-depth discussion on how SCE determined that the benefit of de-energization outweighed potential public safety risks. In its reports, SCE provided general information with minimal quantitative supporting data or rationale. However, in the data request response to this requirement, SCE stated:

*“SCE coordinates closely with county emergency management officials and first responder agencies prior to and throughout PSPS events to understand the risks of de-energizing and SCE takes into account the conversations with its public safety partners as it evaluates the public safety risk of deenergizing circuits (e.g. impacts on essential services such as public safety agencies, water pumps, traffic controls, etc.)*

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<sup>264</sup> R.18-12-005, Comments of SBUA on PG&E Post-PSPS Event Report for October 26-29, 2019, filed January 7, 2020, Attachment dated January 7, 2020, p.1-2

<sup>265</sup> R.18-12-005, Comments of SBUA on PG&E Post-PSPS Event Report for November 20-21, 2019, filed January 7, 2020, Attachment dated December 26, 2019, p.4

<sup>266</sup> R.18-12-005, CforAT Comments on PG&E Post-PSPS Event Reports for September 23 and 25, 2019; October 5 and 9, 2019; October 26 and 29, 2019; and November 20, 2019, filed January 7, 2020, Attachment dated December 23, 2019, p.2

<sup>267</sup> I.19-11-013, Response of CSAC to OII, dated January 10, 2020, p.2

<sup>268</sup> I.19-11-013, Response of TURN to OII, dated January 10, 2020, p.2



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*when it decides whether to de-energize circuits. SCE weighs the viewpoint of its public safety partners as an input to the final recommendation from SCE's PSPS Incident Management Team (IMT), but the ultimate decision of whether to de-energize is made by the IMT Incident Commander, who weighs all the risks of de-energizing against the very extreme risk of fire if SCE were not to de-energize."*<sup>269</sup>

SCE should document in its reports the efforts made to identify essential services and the public safety risks considered as it weighed the benefit of de-energization and the potential public safety risks.

For the majority of late 2019 events conducted by SCE, CforAT repeatedly noted the shortcomings of SCE in its explanation on the consideration of potential public safety risks.

Regarding the October 2 PSPS event, CforAT stated:

*"SCE provides a brief paragraph on its 'decision criteria leading to de-energization, and two further brief paragraphs purporting to explain 'how the utility determined that the benefit of de-energization outweighed potential public safety risks,'[footnote omitted] makes no effort whatsoever to justify turning off the power as a 'last resort.'[footnote omitted] Instead, the purported explanation simply sets out a statement of forecasted fire risk, with no consideration whatsoever of the public safety risks associated with turning off power to large numbers of customers."*<sup>270</sup>

*"SCE appears to weight the scales in favor of de-energization by noting the risk of harm of ignition while ignoring the risk of harm from a shutoff."*<sup>271</sup>

Regarding the October 21 and October 27 PSPS events, CforAT stated:

*"Instead, the purported explanation simply sets out a statement of forecasted fire risk, with no consideration whatsoever of the public safety risks associated with turning off power to large numbers of customers..."*<sup>272 273</sup>

Regarding the November 23 PSPS event, CforAT noted:

*"Its continued recitation of various weather conditions that indicate a wildfire is likely has not provided any consideration of the effects of de-energization on customers. Not only has SCE failed to consider the effects on customers for each individual de-energization event, but it has not considered the effects of repeatedly de-energizing its customers."*<sup>274</sup>

Regarding the November 23 PSPS event, the Small Business Utility Advocates (SBUA) stated that SCE's description of its decision to de-energize:

*"...fails to identify consideration of any countervailing risks to public safety that would be created by de-energizing power lines. For instance, was lack of traffic controls at intersections and street lights,*

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<sup>269</sup> SCE Response to SED-001, Question 20, dated March 25, 2020

<sup>270</sup> R.18-12-005, CforAT Comments on SCE Post-PSPS Event Reports for September 16, 2019; October 2, 2019; October 21, 2019; October 27, 2019; and November 23, 2019, CforAT Comments on SCE Post-PSPS Event Report for October 2, 2019, dated November 19, 2019, p.4

<sup>271</sup> *Id.*, p.4

<sup>272</sup> *Id.*, CforAT Comments on SCE Post-PSPS Event Report for October 21, 2019, dated December 3, 2019, p.4

<sup>273</sup> *Id.*, CforAT Comments on SCE Post-PSPS Event Report for October 27, 2019, dated December 16, 2019, p.4

<sup>274</sup> *Id.*, CforAT Comments on SCE Post-PSPS Event Report for November 23, 2019, dated December 23, 2019, p.2-3

*wireless and wired communication outages, failure of HVAC systems, spoilage of food, ignition risk from operation of personal generators or candles for light or other hazards created by the PSPS event...”<sup>275</sup>*

Regarding the October 2019 PSPS events, the Joint Local Governments noted that:

*“SCE never explains what public safety risks it was looking for, what the assessment process was, or how the determination that no such risks existed was made. There are multiple significant public safety risks inherent in every de-energization—AFN individuals’ health is put at risk, water pumps stop working, cell towers and other communications systems may fail, backup generators spark fires—which calls SCE’s decisionmaking into question.”<sup>276</sup>*

Based on the above comments and SCE’s explanations for de-energization, more details regarding SCE’s consideration of potential public safety risks need to be included in its reports. SCE should make more of an effort to identify public safety risks in order to prudently weigh the option to de-energize.

#### San Diego Gas & Electric

In its post-event reports for October 10-11, 2019 and October 20-November 1, 2019, SDG&E did not provide an adequate explanation regarding its decision to de-energize. SDG&E did not provide an in-depth discussion on how it determined that the benefit of de-energization outweighed potential public safety risks. In its reports, SDG&E provided general information with minimal quantitative supporting data or rationale. In a subsequent response to SED’s data request, SDG&E continued to discuss the conditions for an extreme weather event that may lead to significant wildfires. SDG&E further stated that its “largest PSPS events have impacted less than 10% of the its customers within the HFTD and less than 2% of the overall customer base. And while that in no way diminishes the impacts those customers experience, in SDG&E’s experience and even the experience across the state, that the losses that occur with a power outage are nowhere near the potential loss of life and property associated with wildfires.”<sup>277</sup>

This risk-benefit explanation was provided at a general level with minimal supporting data or rationale.

Regarding SDG&E’s October 20 post-event report, CforAT stated:

*“Its section titled ‘An explanation of how the utility determined that the benefit [sic] of de-energization outweighed potential public safety risks’ explains in detail that weather conditions were right for a wildfire, but makes no effort whatsoever to justify turning off the power as a ‘last resort.’ Instead, the purported explanation simply sets out a statement of forecasted fire risk, with no consideration whatsoever of the public safety risks associated with turning off power to large numbers of customers.”<sup>278</sup>*

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<sup>275</sup> R.18-12-005, Comments of SBUA on SCE’s Post-PSPS Event Report for November 23-26, 2019, filed January 7, 2020, attachment dated December 26, 2019, p.2

<sup>276</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.35

<sup>277</sup> SDG&E Response to SED-001, dated March 24, 2020, p.31

<sup>278</sup> R.18-12-005, CforAT Comments on SDG&E Post-PSPS Event Reports for October 24 and 28, 2019; and November 17, 2019, Attachment 1, filed January 7, 2020, p.3

Regarding SDG&E's October 20 post-event report, SBUA noted:

*"It does not explain how SDG&E determined that the benefit of de-energization outweighed the costs and risks of de-energization because the Report does not describe how, or whether, the costs and risks of PSPS were assessed."*<sup>279</sup>

SDG&E should make more of an effort to identify public safety risks that it considers when it weighs the decision to de-energize.

#### **vi. Customer Complaints and Claims**

Resolution ESRB-8, required that electric IOUs' post-event reports to the Director of SED shall summarize:

*"...the number and nature of complaints received as the result of the de-energization event and include claims that are filed against the IOU because of de-energization."*<sup>280</sup>

#### Pacific Gas & Electric

In its corrected amended post-event report for the October 5 PSPS event, PG&E reported:

*"PG&E received a number of complaints between October 9 and October 22 and will report on these complaints in the October 9 and the October 23 de-energization reports."*<sup>281</sup>

In PG&E's post-event report for the October 9 PSPS event, PG&E reported that "[a]s of October 22, PG&E had received three written, three phone and one e-mail CPUC complaints."<sup>282</sup>

While PG&E provided information regarding complaints about the October 5 PSPS event in subsequent post-event reports, there were potential discrepancies between PG&E's descriptions and information in parties' comments.

CalCCA noted that regarding the October 26-29 post-event report:

*"PG&E claims 13 written complaints and 1 email. CalCCA questions how these complaint statistics are compiled and what metric PG&E uses to qualify a communication as a complaint. CalCCA knows that several of the jurisdictions in its members' service areas, both counties and cities, sent letters of complaint not only to the PG&E, but to the Governor's office and the President of the Commission."*

In response to SED's first data request, PG&E stated in an attachment that "[a]ny customer issue where a customer contacts another line of business or our customer service Contact Center Operations is an 'inquiry.'"<sup>283</sup> This response raises concerns that a number of complaints may be missing from the number reported for each event.

PG&E did not identify which customers submitted complaints; however, due to the widespread impact of both the October 9 and October 26 PSPS events, it is surprising to see the low complaint

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<sup>279</sup> R.18-12-005, Comments of SBUA on SDG&E's Post-PSPS Event Report for October 20 through November 1, 2019, filed January 7, 2020, p.2

<sup>280</sup> Resolution ESRB-8, p.5

<sup>281</sup> Correction to Updated Post-PSPS Report for October 5-6, 2019, dated February 28, 2020, p.12

<sup>282</sup> Amended PG&E PSPS Report to the CPUC October 9-12, 2019 De-Energization Event, p.19

<sup>283</sup> PG&E Response to SED-001, Question 35 Attachment, dated March 24, 2020

numbers that PG&E reported. For the October 9 PSPS event, PG&E reported a total of seven complaints when the event impacted approximately 735,440 customers over a period of four days. For the October 26 PSPS event, PG&E reported a total of 14 complaints when the event impacted approximately 967,700 customers. Additional data collection would be required to verify complaint and claim figures reported by PG&E.

#### Southern California Edison

According to SCE's Response to the OII, SCE received 35 complaints pursuant to the October 2019 PSPS events.<sup>284</sup>

- For the October 2 PSPS event, SCE received five complaints/concerns.<sup>285</sup>
- For the October 12 PSPS event, SCE received no complaints.<sup>286</sup>
- For the October 21 PSPS event, SCE received 12 complaints/concerns and processed 40 claims.<sup>287</sup>
- For the October 27 PSPS event, SCE received 18 complaints/concerns and processed 126 claims.<sup>288</sup>
- For the November 15 PSPS event, SCE received no complaints and processed 45 claims.<sup>289</sup>
- For the November 23 PSPS event, SCE received no complaints.<sup>290</sup>

However, Acton reported that "SCE received more than 50 complaints about the October PSPS events from just the rural residents of Acton and Agua Dulce alone."<sup>291</sup>

In response to SED's first data request regarding how SCE determines the figures for complaints and claims in post-event reports, SCE provides information about claims but does not address how complaints are identified or tracked.<sup>292</sup> Without additional detailed data collection about SCE's operations, it is unclear if SCE accurately determined the reported figures.

#### San Diego Gas & Electric

In response to SED's first data request regarding how SDG&E determines the figures for complaints and claims in post-event reports, SDG&E provides information about claims but does not address how complaints are identified or tracked.<sup>293</sup> It is unclear whether SDG&E accurately determines the reported complaint and claim figures.

### **vii. Number of Affected Customers**

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<sup>284</sup> I.19-11-013, SCE (U 338-E) Response to OII on the Commission's Own Motion on the Late 2019 PSPS Events, dated December 13, 2019

<sup>285</sup> *Id.*, p.A-15

<sup>286</sup> *Id.*, p.A-110

<sup>287</sup> *Id.*, p.A-185-186

<sup>288</sup> *Id.*, p.A-298

<sup>289</sup> *Id.*, p.A-390

<sup>290</sup> *Id.*, p.A-431

<sup>291</sup> I.19-11-013, Acton Town Council Response to OII of Power Shutoff Events, dated January 10, 2020, p.7

<sup>292</sup> SCE Response to SED-001, Question 37, dated March 25, 2020

<sup>293</sup> SDG&E Response to SED-001, Question 36, dated March 24,2020, p.52

In Resolution ESRB-8, the Commission found it appropriate to apply the reporting requirements adopted in D.12-04-024 to all electric IOUs' de-energization events.<sup>294</sup> In D.12-04-024, the Commission required SDG&E to provide a report to the Director of SED within 10 business days after the shut-off event ends that includes, among other elements, the number of affected customers, broken down by residential, medical baseline, commercial/industrial, and other categories."<sup>295</sup>

#### Southern California Edison

In its post-event reports for October 26 and November 4 PSPS events, SCE did not include the number of affected customers, broken down by residential, medical baseline, commercial/industrial, and other categories. In response to SED's first data request, SCE provided copies of Appendix C from the October 26 PSPS event report.<sup>296</sup> However, the information did not summarize or break down customers affected by residential, medical baseline, commercial/industrial, and other categories. SCE should, in each post-event report, summarize the total number of affected customers, broken down by these specific categories; residential, medical baseline, commercial/industrial, and other categories. Additionally, SCE should ensure that its documentation in the de-energization reporting is legible. Appendix C for the November 4 post-event report had extremely small blurred text, making it unreadable.

#### San Diego Gas & Electric

In its post-event report for the October 20 PSPS event, SDG&E did not include a breakdown of the number of affected customers for one circuit or device. For SDG&E's Weather Event 3, Circuit/Device 1021-CB, SDG&E only provided a total number of customers without a breakdown by customer type.<sup>297</sup> This was one line in the table of 45 different circuits/devices that did not provide a breakdown by customer type. In a follow-up response to SED's first data request, SDG&E provided the missing information and stated that the figures were "inadvertently not included in the subject post-event report."<sup>298</sup>

### **viii. Lessons Learned Reports**

The Guidelines require electric IOUs to:

*"...report on lessons learned from each de-energization event, including instances when de-energization protocols are initiated, but de-energization does not occur, in order to further refine de-energization practices."*<sup>299</sup>

#### Pacific Gas & Electric

In its post-event reports, PG&E mentions that it conducts after-action reviews of the de-energization events to discuss the lessons learned from each event. During these discussions, PG&E states that the Emergency Preparedness and Response team consolidates internal feedback along with

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<sup>294</sup> Resolution ESRB-8, p.3

<sup>295</sup> *Id.*, p.3

<sup>296</sup> SCE Response to SED-001, Question 22, dated March 25, 2020

<sup>297</sup> SDG&E Report on PPS Shutoff Event: October 20-November 1, 2019, dated November 15, 2019, p.26

<sup>298</sup> I.19-11-013 SED-SDG&E DR 1, Response to Question 22, dated March 24, 2020, p.33

<sup>299</sup> D.19-05-042 in R.18-12-005, Appendix A, p. A3

external feedback from Cal OES and CAL FIRE representatives. PG&E also states that it focuses its lessons learned on six workstreams:

- Enhanced scoping ability and timing accuracy
- Strengthening data quality
- Improved Estimated Time of Restoration (ETOR) precision and communication
- Improved map precision and communication
- Optimizing external communication
- Addressing EOC staff fatigue

Although the six workstreams PG&E concentrates on for its lessons learned reviews are important, PG&E should also include in its lessons learned reviews an evaluation of the thresholds used to decide whether to de-energize and the failures to facilities that occurred.

In evaluating its decisions to de-energize, PG&E should consider lessons learned regarding the criteria for de-energization and the thresholds used for strong wind events as well as the conditions used to define “an extreme fire hazard” (humidity, fuel dryness, temperature, etc.) that PG&E used in deciding whether to shut off power. For example, PG&E can discuss whether the thresholds applied were warranted in all areas. Was there less damage to overhead facilities in some areas versus others? PG&E can discuss how it is refining the thresholds for de-energization. PG&E states in several post-event reports that the cause of damage to some of its facilities “could not be identified.” It is imperative that PG&E conduct a thorough investigation into the root cause of the failures, so that it can implement mitigating measures and prevent other similar failures.

#### San Diego Gas & Electric

SDG&E’s post-event reports focused on the PSPS event itself which, while important, only pertains to a portion of improvements that can be made based on the experience gained from each event. SDG&E identified lessons learned in the following categories:

- Notification and communication
- Process enhancements for updating GIS maps
- Training for managing the PSPS event
- Internal and external coordination
- Equipment in place to minimize PSPS impact
- Efforts to re-energize circuits
- Outreach efforts for AFN communities

SDG&E noted in its October 10 post-event report that it needs to continue defining and refining processes related to activation levels and timing. For this issue, SDG&E stated that more coordination is required and processes need to be updated.<sup>300</sup>

SBUA provided comments on SDG&E’s October 20 post-event report regarding a meaningful discussion that SDG&E could provide in order to reduce the scope of future PSPS events:

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<sup>300</sup> SDG&E PSPS Shutoff Report, dated October 25, 2019, p.35

*“At a minimum, this section should include discussion of potential vegetation management that would have been beneficial, infrastructure hardening, including undergrounding, and microgrid opportunities, such as in areas already served by photovoltaic power installations on municipal facilities, that could have prevented the need for de-energization in some areas.”<sup>301</sup>*

Although the SDG&E-identified lessons learned are important, SDG&E should also consider specific improvements in thresholds to de-energize and perhaps identify improvements to its vegetation management operations or maintenance of its electric facilities. SDG&E could review its criteria for high wind events and high wildfire risk after every event to identify any opportunities for reducing the scope of future PSPS events.

## IV. Analysis of Effectiveness of IOUs’ Conduct of PSPS in 2019 and Recommendations

In this section, SED presents analysis to respond to the questions in the preliminary scoping memo about the overall effectiveness of the IOUs’ conduct of PSPS in 2019. SED’s analysis is based on the information presented in the preceding sections, as well as additional comments by parties and stakeholders that are relevant to effectiveness. Second, SED provides recommendations about potential future revisions to the Guidelines, content of post-event reports, and reporting standardization. As noted above, the recommendations here are presented based on staff’s experience in preparing this report, and any consideration of potential Guideline revisions is best undertaken in a public setting.

### A. Reporting Issues that Impeded Analysis

The following reporting issues shared by all of the electric IOUs impeded SED’s analysis:

#### i. Non-standard Report Formatting

The formatting and information provided by each of the IOUs varied in their post-event reports. Some reports provided an extensive summary while some did not. Some reports summarized the data in the body of the report while others directed the reader to the appendices, where the requested data was not summarized but rather buried in numerous pages of tables. In order to efficiently decipher and compare the progress and work of each electric IOU, there needs to be more consistency among the IOUs on how the reports are produced and the level of detail provided.

#### ii. Unclear Thresholds Supporting Decision to De-energize

All IOUs failed to provide concrete explanation about what triggered the de-energization events. They all cite to weather conditions, wind speed, dry brush, humidity, etc. but do not articulate the thresholds that triggered the de-energization events. None of the IOUs elaborate on specific sustained wind speeds or wind gusts that factor into the decision to de-energize, nor is there any clear consistency among the IOUs on when to de-energize.

#### iii. Insufficient Descriptions of Lessons Learned

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<sup>301</sup> R.18-12-005, Comments of SBUA on SDG&E’s Post-PSPS Event Report for October 20 Through November 1, 2019, p.4

Regarding lessons learned, all three electric IOUs list some areas of lessons learned as required by the Guidelines. While most of the focus for the IOUs is largely on event communications, not a lot of attention is focused on the PSPS itself. For example, SDG&E's October 10 post-event report did not note damage to overhead facilities but there does not appear to be an analysis as to whether the PSPS event was needed. This may signify that the thresholds in place to determine a PSPS event are too low.

In instances where damage was found, a follow-up investigation and action plan should be put in place to understand the root cause of the incident. For example, in PG&E's October 9 post-event report, under the "Damage to Overhead Facilities" section of the report, PG&E stated that the cause of damage to some of its assets could not be identified. This would be an ideal case to conduct a thorough investigation into the failure of the asset. Additionally, if damage was caused by vegetation hitting a conductor, the electric IOU should perform an investigation into its vegetation management program to find any inadequacies or failures of its own vegetation management activity. Through such focused investigations, utilities could determine if additional trimming beyond minimum required clearances is necessary if minimum clearances were met but vegetation debris still caused damage.

## B. Effectiveness of Notifications and Communications

Sections II and III above discuss specific notification and communication difficulties during the electric IOUs' PSPS events. The following presents SED's analysis of the overall effectiveness of their notifications and communications.

### i. Pacific Gas & Electric

In SED's analysis, PG&E's notification of its customers for all five of its events was ineffective. As identified in Section III, the major cause was PG&E's incomplete list of customer information. PG&E admitted it failed to give some customers a two-hour notice, or any notice, for all five of its events. Below are additional issues SED identified that contributed to ineffective notification and communication.

#### a. Communication Network Outages

Regarding PG&E's October 9 PSPS event, CalCCA noted that many CCAs experienced a loss of communications infrastructure provider networks, which rendered notifications and communications ineffective.<sup>302</sup> However, CalCCA was uncertain whether the PSPS event was the direct cause of the communications outages and whether backup power was available. PG&E and the communications infrastructure providers are responsible for assessing the need for backup power in the event emergency communications are required.

#### b. Positive/Affirmative Notifications for Medical Baseline Customers

Regarding the notification of medical baseline customers, PG&E mentions in its October 23 post-event report:

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<sup>302</sup> R.18-12-005, CalCCA Submission of Comments on IOU Post-Event Reports, Appendix B, filed January 7, 2020, letter dated November 19, 2019, p.8



*"If confirmation is not received, a PG&E representative visits the customer home to check on the customer (referred to as the "door knock process"). If the customer does not answer, a door hanger is left at the home. In both cases the notification is considered successful."*<sup>303</sup>

CalCCA noted its concern "that [PG&E] considers leaving a door hanger on a customer's door to be a 'successful' notification of a pending de-energization."<sup>304</sup> SED agrees that the statement in PG&E's in its October 23 post-event report is concerning. PG&E must more accurately report its notifications, or lack thereof, to the Commission and impacted entities.

c. Education and Notifications for Resources Provided by Utility or Utility's Partners

For PG&E's October 9 PSPS event, San Jose noted that:

*"...PG&E told medical baseline customers to have an emergency plan ready and referred them to the website, which did not work and did not provide information on resources they could access."*<sup>305</sup>

*"At most, it directed the AFN population to ask their local government for help in dealing with the PSPS, which is inconsistent with PG&E's 'ultimate responsibility for notification and communication throughout a de-energization event.'" <sup>306</sup>*

Regarding PG&E's October 26 PSPS event, San Jose mentioned:

*"While PG&E uses robocalls to contact this population to warn them of an upcoming PSPS event, it does not provide them with information about available resources. It is then up to San José or Santa Clara County to check on their wellbeing and/or provide services."*<sup>307</sup>

In response to the OII, the Joint Local Governments stated the following regarding PG&E's late 2019 PSPS events:

*"The Joint Local Governments have never been able to determine if information about available resources, participating Independent Living Centers, or whom to contact and how to access the resources was ever provided directly to AFN individuals."*<sup>308</sup>

One PG&E medical baseline customer commented that PG&E left a message to go online for information and that they would appreciate more information about where to go for internet, hot water and perhaps a meal.<sup>309</sup>

Utilities are required to convey what resources are available to the public during PSPS events. People and communities with access and functional needs, which includes medical baseline customers,

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<sup>303</sup> Amended PG&E PSPS Report to the CPUC October 23-25, 2019 De-Energization Event, p.16, ftn.10

<sup>304</sup> R.18-12-005, CalCCA's Submission of Comments on IOU Post-Event Reports, Appendix A, filed January 7, 2020, letter dated December 3, 2019, p.12

<sup>305</sup> R.18-12-005, City of San Jose's Comments on PG&E's Post-PSPS Event Report for October 9-12, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.2

<sup>306</sup> *Id.*, p.5

<sup>307</sup> R.18-12-005, City of San Jose's Comments on PG&E's Post-PSPS Event Report for October 26 & 29, 2019, filed January 7, 2020, Attachment dated December 3, 2019, p.4

<sup>308</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.14

<sup>309</sup> R.18-12-005, Public Comments, dated December 8, 2019, p.10

should not only understand how to prepare for an emergency event, but also know where to find additional resources for each, inherently different PSPS event.

d. Local Jurisdiction Representative Embedded in PG&E EOC

PG&E offered to embed a local representative from a requesting local jurisdiction in its EOC if the local jurisdiction preferred that instead of PG&E providing a liaison to embed at the local EOC. In its response to SED's first data request, PG&E did not state whether all requests to embed local staff in PG&E's EOC were met.<sup>310</sup> The following comments from the various entities described the communication of information as inaccurate, untimely or not available.

When PG&E met the request to embed local staff in PG&E's EOC, the Joint Local Governments noted that the location of the staff was not within PG&E's EOC:

*"Sonoma County sent liaisons to PG&E's EOC on two consecutive days, and during both visits Sonoma's liaisons were again kept in a separate room outside the EOC. ...PG&E admitted after the September 25, 2019 PSPS event that isolating a local liaison in a room separated from the EOC by three security gates was not an acceptable plan."*<sup>311</sup>

If PG&E invited a local liaison to its EOC, it should have provided a seat within the EOC to ensure the rapid and accurate sharing of information.

San Jose stated the following regarding a request to embed a liaison in PG&E's EOC for its October 9 PSPS event:

*"San Jose cannot validate the claims made in Section 2 by PG&E, due to the denial of PG&E to allow a member of San Jose's emergency management liaison into PG&E's EOC to be involved with the decision-making process."*<sup>312</sup>

However, it is unclear whether the liaison was explicitly denied a seat inside PG&E's EOC, denied involvement in the decision-making process, or both. In either case, PG&E did not properly embed the local representative in its EOC and impaired communications with local jurisdictions.

e. Transmission Customer Notifications

CLECA stated in its comments: "CLECA believes that PSPS events impacting transmission lines continue to warrant greater scrutiny due to the greater impact on customers and the public of such PSPS events."<sup>313</sup> CLECA requested consideration of transmission-level impacts and possible associated need for different communication and/or notification procedures.

NCPA stated:

*"Throughout the Commission's de-energization proceeding, NCPA has stressed the need for PG&E to provide notice to publicly owned utilities that are transmission customers of PG&E as soon as possible."*

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<sup>310</sup> *Id.*

<sup>311</sup> R.18-12-005, Joint Local Governments' Comments on PG&E Post-PSPS Event Report for October 9, 2019, filed January 3, 2020, Attachment dated November 19, 2019, p.2

<sup>312</sup> R.18-12-005, City of San Jose's Comments on PG&E's Post-PSPS Event Report for October 9-12, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.3

<sup>313</sup> I.19-11-013, Response by the CLECA to the OII, dated January 10, 2020, p.3

*PG&E is required to provide publicly owned utilities priority notification, yet throughout the PSPS event that began on October 9, PG&E repeatedly failed to provide critical information in a timely manner to their transmission-level customers for planning and preparedness. The moment PG&E begins assessments of whether a transmission line is even potentially within the scope of a planned de-energization event, it is required to notify POUs.”<sup>314</sup>*

NCPA suggested the following solution for PG&E:

*“In order to avoid this kind of confusion in obtaining critical information, PG&E must establish a single point of contact for all transmission-dependent POUs; for NCPA, for example, that contact must be someone that is knowledgeable and actionable regarding the transmission lines serving NCPA members and plants.”<sup>315</sup>*

**ii. Southern California Edison**

SED acknowledges that sudden changes in weather played a major role in SCE’s ineffective customer notifications. SCE explained the lack of notification within 1-4 hours of a power shut-off was due to the “sudden appearance of extreme winds around particular circuits”<sup>316</sup> that caused SCE to immediately cut power; problems with weather models;<sup>317</sup> and other unexpected weather changes. (See Section III above.) In addition to these difficulties experienced by SCE, the following issues contributed to ineffective notification and communication.

**a. Notifications Unrelated to the PSPS event**

For SCE’s October 2 PSPS event, CCTA stated:

*“A major challenge stemming from SCE’s recent PSPS events concerned the burdensome nature of SCE’s over-notification email process. Specifically, SCE appears to use only one distribution list for all notifications, including those unrelated to the PSPS event. For example, during the PSPS event, SCE sent out numerous notices, not just for PSPS-related events but notices for routine maintenance, rescheduling of maintenance, and the completion of maintenance. Those maintenance notices were not related to the PSPS event.”<sup>318</sup>*

For the November 23 PSPS event, CCTA noted that the “event would also have benefited from more distinct stand-alone PSPS notices.”<sup>319</sup>

In certain circumstances, excessive notification may be counterproductive. Some agencies may find it helpful to be aware of SCE’s maintenance activities but other public safety partners may find it confusing and difficult to understand how the maintenance work impacts their efforts. SCE’s notification

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<sup>314</sup> R.18-12-005, NCPA Comments on PG&E Post-PSPS Event Report for October 26 to November 1, 2019, filed December 31, 2019, letter dated December 13, 2019, p.3-4

<sup>315</sup> *Id.*, p.5

<sup>316</sup> SCE October 27 Post-Event Report, p.17

<sup>317</sup> SCE November 15 Post-Event Report

<sup>318</sup> R.18-12-005, CCTA Comments on SCE’s Post-PSPS Event Reports for October 2-12, 2019 and November 23-26, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.2

<sup>319</sup> *Id.*, Attachment dated December 26, 2019, p.3

protocol may benefit from coordination with public safety partners to identify which notifications are essential and helpful for PSPS events.

b. Unreadable PSPS Maps

For SCE's October 2 PSPS event, CforAT stated:

*"CforAT identified that the public maps showing areas where power is turned off are provided only as static pdf documents, with no ability to zoom and with poor color contrasts. A person with low vision would have an extremely difficult time determining where the shut-off boundaries are located, and a person who relies on a screen reader would not be able to obtain any information whatsoever from these maps."*<sup>320</sup>

For SCE's October 21 PSPS event, CforAT noted the same issues and stated:

*"In addition, website lacked any easily identifiable way to find shutoff information from the home page."*<sup>321</sup>

SED notes that as a result of feedback from the impacted entities, SCE has since completed its actions to address the static map problems by implementing an interactive PSPS map on SCE's website and also adding searchability by customer address beginning with the November 15 PSPS event.<sup>322</sup>

iii. San Diego Gas & Electric

SDG&E notified many more customers about a possible PSPS than the number of customers who were de-energized. For example, SDG&E notified 43,012 customers and 2,298 medical baseline customers on October 8, 2019, at 2100 hours, of a possible upcoming PSPS but only 395 customers were ultimately de-energized on October 10.<sup>323</sup>

Such overbroad notification does not aid public safety partners and local jurisdictions in focusing efforts on ensuring public safety and coordinating efforts to mitigate the impact to the public. Instead, it requires entities to commit their resources to support the public over a broader area than may be needed, and means that SDG&E's notifications were ineffective.

Further, SDG&E's notification of 2,298 medical baseline customers may have caused these customers to relocate or take extreme actions. The 2,298 medical baseline customers notified 48-72 hours in advance, then 24-48 hours in advance, dwindled to 882 medical baseline customers to whom SDG&E sent out notifications that the power would go off overnight.<sup>324</sup> However, only 28 medical baseline Customers were ultimately de-energized.<sup>325</sup>

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<sup>320</sup> R.18-12-005, CforAT Comments on SCE Post-PSPS Event Reports for September 16, 2019; October 2, 2019; October 21, 2019; October 27, 2019; and November 23, 2019, CforAT Comments on SCE Post-PSPS Event Report for October 2, 2019, dated November 19, 2019, p.2

<sup>321</sup> *Id.*, CforAT Comments on SCE Post-PSPS Event Report for October 21, 2019, dated December 3, 2019, p.3

<sup>322</sup> SCE Response to Data Request SED-001, Question 45, dated March 24, 2020

<sup>323</sup> SDG&E October 10 Report, Appendix 1, p.3-4.

<sup>324</sup> *Id.*, p.A1-5

<sup>325</sup> *Id.*, p.6

C. Effectiveness of Efforts to Minimize Public Impact and Ensure Public Safety (IOUs and other Entities)

i. **Community Resource Centers (CRC)/Community Assistance Locations**

Resolution ESRB-8 requires that in an electric IOU's post-event report:

*"The IOU shall identify the address of each community assistance location during a de-energization event, describe the location (in a building, a trailer, etc.), describe the assistance available at each location, and give the days and hours that it was open."*<sup>326</sup>

The electric IOUs generally met this requirement by describing the details above for each CRC.

The OII's Preliminary Scoping Memo for Phase 1 ("Phase 1 Scoping Memo") posed the question:

*"How effective were the Community Resource Centers and what challenges were faced by customers using these centers?"*<sup>327</sup>

Because Resolution ESRB-8 requires limited reporting about CRCs, SED could not perform extensive analysis about the effectiveness of CRCs. To enable more extensive analysis in the future, SED proposes that, at a minimum and in addition to the current requirements, the IOUs report the ratio of the number of CRCs opened in relation to counties and customers affected during each future PSPS event. This would assist in an assessment of the effectiveness of the CRCs, such as shown in Table 2 below for the late 2019 PSPS events.

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<sup>326</sup> Resolution ESRB-8, p.5

<sup>327</sup> OII, p.6

**Table 2** – Community Resource Center Figures for each event, sorted by electric IOU. CRCs documented below include mobile units in addition to static structures.

IOU	Event Start Date in 2019 (MM/DD)	Event End Date in 2019 (MM/DD)	Number of Counties Affected	Number of Customer Accounts Affected	Number of CRCs Opened	CRCs Opened per Counties Affected (CRC/Counties Affected)	Customer Accounts Affected per CRC opened (Customer Accounts/1 CRC)
PG&E	10/5	10/6	3	11,609	3	3/3	3,870
PG&E	10/9	10/12	35	735,440	33	33/35	22,286
PG&E	10/23	10/25	17	178,800	28	28/17	6,385
PG&E <sup>1</sup>	10/26	10/29	30	967,700	77	77/30	12,568
PG&E <sup>2</sup>	11/20	11/21	15	49,000	34	34/15	1,441
SCE <sup>1</sup>	10/2	10/12	5	23,824	3	3/5	7,941
SCE <sup>1</sup>	10/12	10/21	4	444	3	3/4	148
SCE <sup>1</sup>	10/21	10/26	6	31,386	4	4/6	7,847
SCE <sup>1</sup>	10/27	11/4	10	126364	9	9/10	14,040
SCE <sup>2</sup>	11/15	11/17	3	49	1	1/3	49
SCE <sup>2</sup>	11/23	11/26	5	1,192	2	2/5	596
SDG&E <sup>2</sup>	10/10	10/11	1	395	2	2/1	198
SDG&E*	10/20	11/1	1	27,703	7	7/1	3,958

Note 1 - OII event dates revised based on utility post-event reports.

Note 2 - Added events to include all PSPS events for October 2019 and November 2019.

In addition, for each event it may be helpful to identify the affected square miles, population densities of those areas, egress routes from the CRC itself and from the community in which it is located, and results of surveying the areas for CRC feedback. SDG&E responded to SED’s first data request with additional information that may be helpful to the Commission:

*“[SDG&E] evaluates the event as a whole for factors such as projected duration of the event, ambient temperatures in the areas impacted, and proximity of publicly available resources in relation to the impacted customers...Resources provided are intended to help customers hydrate, nourish, charge cell phones, and stay informed.”<sup>328</sup>*

With this information, the Commission could be more informed about the effectiveness of CRCs and may craft additional minimum requirements for activation of CRCs.

Pacific Gas & Electric

The comments below were provided by various entities affected by the late 2019 PSPS events conducted by PG&E and speak to the effectiveness of PG&E’s CRCs.

<sup>328</sup> SDG&E Response to SED-001, Question 36, dated March 24, 2020

## Public Report on the Late 2019 Public Safety Power Shutoff Events

San Jose's comments regarding the October 9 PSPS event stated:

*"Depending on the size of the outage, PG&E's plan to set up just one CRC in each county is not enough; it is not even enough to set up one CRC within San Jose. San Jose covers a large geographic area."*<sup>329</sup>

San Jose also commented on the October 26 PSPS event:

*"During the October 26 PSPS event, San José set up its own five CRCs to accommodate its affected residents more effectively. ...If PSPS events will continue for another 10 years, then San José believes PG&E should fund equipment for additional CRCs, so San José will not have to scramble for resources each time."*<sup>330</sup>

For the October 9 and October 23 PSPS events, RCRC stated:

*"Unfortunately, Community Resource Centers (CRCs) have been too few in number, too far from residents, open too few hours, and sometimes delayed in opening during PSPS events."*<sup>331</sup>

RCRC also suggested three recommendations that are discussed in Section IV.E. below.

Regarding the late 2019 PSPS events, the Joint Local Governments noted:

*"While the CRCs undoubtedly provided a benefit to customers impacted by the de-energizations, PG&E's protocols for standing up CRCs were designed without any consideration for the needs of the communities and customers the CRCs would serve. And while PG&E appears to have realized its mistake, the fact remains that the utility went into the 2019 (and 2018) fire season with no intention of involving the impacted communities in the CRC process."*<sup>332</sup>

In response to SED's first data request, PG&E stated that:

*"In January 2020, PG&E contacted all 47 counties within its service area, as well as tribal governments, inviting the governments to propose CRC sites."*<sup>333</sup>

PG&E understood the lack of coordination with local jurisdictions and attempted to correct the issue with the late 2019 PSPS events. However, based on the comments above, the utility has room for improvement regarding minimizing public impacts through its CRCs. As the Commission Guidelines stated, "electric utilities are ultimately responsible and accountable for the safe deployment of de-energization"<sup>334</sup> but the Commission should also recognize that resources are also provided by local jurisdictions.

### Southern California Edison

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<sup>329</sup> R.18-12-005, City of San Jose's Comments on PG&E's Post-PSPS Event Report for October 9-12, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.12

<sup>330</sup> R.18-12-005, City of San Jose's Comments on PG&E's Post-PSPS Event Report for October 26 & 29, 2019, filed January 7, 2020, Attachment dated December 3, 2019, p.6

<sup>331</sup> R.18-12-005, Rural County Representatives of California Comments on PG&E's Post-PSPS Event Reports for October 10, 2019, October 25, 2019 and November 8, 2019, dated January 6, 2020, p.5-6

<sup>332</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.18

<sup>333</sup> PG&E Response to SED-001, Question 30, dated March 24, 2020

<sup>334</sup> D.19-05-042, Appendix A, p.A2

## Public Report on the Late 2019 Public Safety Power Shutoff Events

The comments below were provided by various entities affected by the late 2019 PSPS events conducted by SCE and speak to the effectiveness of SCE's CRCs or community assistance vehicles.

The Los Angeles County Department of Public Health (LACDPH) responded to the post-event reports for October 21, October 27 and November 15:

*"For the first PSPS events in the Reports, LACDPH had a difficult time obtaining information on SCE community resources established for the public and what their capability was to serve vulnerable persons."*<sup>335</sup>

*"SCE did not provide resources sufficient to best assist County residents during the October and November PSPS events. LACDPH recommends that SCE partner with local government to establish a network of permanent CRCs, available to the public and those with access and functional needs to charge devices, connect electrical medical equipment, provide a temperature-controlled and filtered air environment, receive light refreshments or meal deliveries, and get up-to-date information on outages in remote areas."*<sup>336</sup>

The Joint Local Governments also generally responded to the late 2019 PSPS events conducted by SCE:

*"SCE has not provided adequate community shelters or CRCs to ensure the safety of AFN residents. PSPS events generally occur during times of high daytime temperatures and/or low overnight temperatures; leaving medically fragile individuals without heating or air conditioning for extended periods of time can be life-threatening."*<sup>337</sup>

*"In Kern County and Santa Barbara County, SCE has relied more heavily on its mobile CRCs, called Community Crew Vehicles, or 'CCVs,' rather than stationary tents or permanent buildings."*<sup>338</sup>

The resources provided by SCE were found inadequate as the affected entities noted above. Some communities may not have even known about the existence of the supporting resources provided by SCE. SCE was the only IOU to provide mobile stations instead of temporary or permanent structures that may potentially provide resources for larger portion of the communities they intend to serve. It may be beneficial to have more discussion about the benefits of both mobile and more permanent solutions for CRCs.

As a result of the identified shortcomings of the CRCs in both PG&E's and SCE's territories, SED provides recommendations in Section IV.E. to aid in improving CRC coordination and overall effectiveness in reducing public impacts and ensuring public safety.

### **ii. Other Efforts from Other Entities: Emergency Disaster Relief Program Proceeding (R.18-03-011)**

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<sup>335</sup> R.18-12-005, LACDPH's Comments on SCE's PSPS Reports for the October 21-26, 2019, October 27-November 4, 2019 and November 15-17, 2019 Consolidated Events, dated December 13, 2019, p.3

<sup>336</sup> *Id.*, p.4

<sup>337</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.23

<sup>338</sup> *Id.*, p.23



While the electric utilities are ultimately responsible for the decision to initiate PSPS events, other entities can aid in minimizing the public impact and ensuring public safety.

On November 13, 2019, President Batjer sent a letter<sup>339</sup> to communications service providers involved in the Emergency Disaster Relief Program rulemaking (R.18-03-011) regarding the late 2019 PSPS events. The letter directed communications service providers to respond to three directives: (1) Responsiveness during the latest wildfires and public safety power shutoffs to keep communications services on; (2) Engagement and timely responsiveness to requests from Cal OES and CAL FIRE; and (3) Compliance with D.19-08-025.

On March 6, 2020, President Batjer issued proposals<sup>340</sup> for maintaining resilient and dependable communications networks during emergency events, such as PSPS events, that will better aid emergency responders and ensure the public's ability to reliably communicate and receive critical information. The Commissioner's Ruling and Proposal includes a proposed 72-hour backup power, immediately following a power outage, for all essential communications equipment as well as proposals for developing uniform protocols to ensure that communications service providers are providing safe and reliable service to the public in future disasters and PSPS events. Coordination with R.18-03-011 is needed when considering critical communications facilities and infrastructure.

### **iii. Coordination with First/Emergency Responders and Public Safety Partners**

Sections II and III describe coordination issues between each electric IOU and its respective public safety partners. In SED's analysis, each of the IOUs was ineffective in its coordination efforts.

#### Pacific Gas & Electric

Although PG&E's efforts to coordinate with its public safety partners are well documented through its numerous coordination meetings, issues were still identified by affected entities that signified ineffective coordination activity:

- Confusion around the identification of public safety partners.
- Critical facilities and infrastructure losing power without an alternative source of power.
- Difficulty communicating through PG&E liaisons.
- Inconsistent notifications and information across public safety partners.
- Inability to notify public safety partners when PG&E activated its EOC.
- Inability to notify public safety partners upon re-energization.
- Requiring NDAs to share confidential but vital information.

#### Southern California Edison

SCE recognized in its response to this OII that while it made efforts to hold biweekly calls with emergency management partners, it identified additional opportunities to engage with communications service and water agency providers through the California Utilities Emergency Management

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<sup>339</sup> R.18-03-011, President Batjer Letter to Communications Industry Leaders for Information, dated November 13, 2019

<sup>340</sup> R.18-03-011, Assigned Commissioner's Ruling and Proposal, dated March 6, 2020.

Association.<sup>341</sup> This signifies ineffective coordination with all public safety partners and thus the following issues identified by the various affected entities:

- Confusion around the identification of public safety partners.
- Missed opportunities to conduct operational coordination.
- Critical facilities and infrastructure losing power without an alternative source of power.
- Inconsistent notifications and information across public safety partners.
- Ineffective information sharing protocols.
- Real-time data not provided to all public safety partners through its GIS REST service or other method.

#### San Diego Gas & Electric

SDG&E's September 2019 Progress Report describes its coordination activities with public safety partners, including weekly and biweekly meetings with other IOUs, Cal OES and CAL FIRE.<sup>342</sup> In the September 2019 Progress Report, SDG&E notes coordination with first/emergency responders and local governments but lacks specificity regarding coordination with all communications service and water agency providers. Below are the coordination issues with public safety partners identified for SDG&E:

- Difficulty identifying points of contact for critical facilities and infrastructure providers.
- Did not demonstrate sufficient effort with public safety partners to address emergency situations that may arise during PSPS.
- Notifications were inconsistent or lacked required content for public safety partners.

#### **iv. Consideration of Impacts on People and Communities with Access and Functional Needs**

The OII asks:

*"Did the electric utility appropriately consider the impact of the PSPS event on Access and Functional needs populations, including, but not limited to, low-income and medically vulnerable communities?"<sup>343</sup>*

The three electric IOUs have made steps in the right direction to consider people/communities with access and functional needs but can improve consistency in identifying and communicating effectively with those populations. The electric IOUs have generally worked with CBOs but did not specify if resources were made available to them and the communities they serve.

#### Pacific Gas & Electric

While PG&E made efforts to consider impacts to some of the people/communities with access and functional needs, additional considerations for accessibility would be helpful. In addition to the comments in the previous sections regarding AFN accessibility, below are additional issues identified by impacted entities.

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<sup>341</sup> I.19-11-013, SCE Company's (U 338-E) Response to OII on the Commission's Own Motion on the Late 2019 PSPS Events, dated December 13, 2019, p.A114-115

<sup>342</sup> SDG&E Company's Progress Report on Implementation of De-Energization Guidelines, dated September 4, 2019, p.5

<sup>343</sup> OII, p.6

## Public Report on the Late 2019 Public Safety Power Shutoff Events

San Jose stated in its comments for the October 9 PSPS event:

*“Lastly, while PG&E had a contact center to field calls, this would not help much of the deaf, hard of hearing, or speech-impaired population who no longer use TTY but text instead. San Jose also recommends that PG&E invite a representative from an AFN service organization into its EOC to issue spot and help communicate with the AFN population.”<sup>344</sup>*

In comments regarding the October 5 and October 9 PSPS events, CforAT found that the website was not up-to-date, accessible or in-language for the AFN communities:

*“PG&E has also failed to make its website accessible to people who use screen readers or people who do not speak English as their primary language.”<sup>345</sup>*

### Southern California Edison

In its consideration of people/communities with access and functional needs, SCE fails to consider outreach efforts for these people and minimally mentions its efforts to identify and consider AFN customers in its September 2019 Progress Report.<sup>346</sup>

Regarding SCE’s post-event report for its October 21 PSPS event, CforAT stated:

*“Not only has SCE failed to make efforts to identify these customers, the Report appears to simply disregard all requirements for AFN outreach. The Report notes the number of notification efforts made to Critical Care and Medical Baseline customer notifications, but fails to include any further information about AFN populations.”<sup>347</sup>*

Regarding the October 27 PSPS event, CforAT notes:

*“SCE does not indicate whether it provided any support for people with medical devices requiring electricity, or whether it coordinated with any CBOs to attempt to provide resources to AFN customers.”<sup>348</sup>*

### San Diego Gas & Electric

Regarding its consideration of people/communities with access and functional needs, SDG&E did not provide detailed information related to outreach for them. SED notes that SDG&E provided

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<sup>344</sup> R.18-12-005, San Jose’s Comment on PG&E’s Post-PSPS Event Report for October 9-12, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.8

<sup>345</sup> R.18-12-005, CforAT Comments on PG&E Post-PSPS Event Reports for September 23 and 25, 2019; October 5 and 9, 2019; October 26 and 29, 2019; and November 20, 2019, filed January 7, 2020, Attachment dated November 19, 2019, p.1

<sup>346</sup> SCE Company’s Progress Report on the Implementation of De-energization Guidelines set forth in Appendix “A” of D.19-05-042, dated September 4, 2019, p.19-20

<sup>347</sup> R.18-12-005, CforAT Comments on SCE Post-PSPS Event Reports for September 16, 2019; October 2, 2019; October 21, 2019; October 27, 2019; and November 23, 2019, CforAT Comments on SCE Post-PSPS Event Report for October 21, 2019, dated December 3, 2019, p.3

<sup>348</sup> *Id.*, CforAT Comments on SCE Post-PSPS Event Report for October 27, 2019, dated December 16, 2019, p.3

some information in its September 2019 Progress Report about its partnerships with state and local CBOs to identify AFN communities.<sup>349</sup>

CforAT noted that for SDG&E's October 20 PSPS event:

*"In its report, SDG&E fails to provide any useful information about identifying AFN customers. The report notes how many Medical Baseline customers were impacted, but fails to include any further information about AFN populations. This leads to the and how many Medical Baseline customers the utility contacted in person."*<sup>350</sup>

#### **v. Impacts on Critical Facilities and Infrastructure Coordination**

As discussed above in Section IV.C.ii, coordination with the Emergency Disaster Relief Program proceeding (R.18-03-011) is needed when considering backup power for critical communications facilities and infrastructure. Although the Commission adopted an interim list of critical facilities and critical infrastructure aligned with the Department of Homeland Security's Critical Infrastructure Sectors in the Guidelines,<sup>351</sup> affected entities still experienced power loss without an alternative source of power for their facilities. Below is a discussion of how coordination between the electric IOUs and public safety partners resulted in critical facility outages that could impair critical infrastructure, such as communications and water supplies.

##### Pacific Gas & Electric

In PG&E's response to SED's first data request, the utility described how it identified critical facilities and infrastructure:

*"Prior to this automated approach being developed, PG&E identified critical facilities manually using similar information and customer input, but without the benefit of an automated approach....In 2019, PG&E requested agencies to provide a list of critical facilities that PG&E then cross checked with their system of record."*<sup>352</sup>

In addition to the critical infrastructure power failures described in Section II, impacted entities provided more insight into backup power assessments and preparations or the lack thereof. As mentioned in Section III regarding PG&E's events, the CLECA noted inconsistencies between PG&E's critical facilities in comparison with CLECA's list which resulted in de-energization without prior notice.<sup>353</sup>

For PG&E's October 9 PSPS event, San Jose made the following statements:

- *"The October 9 PSPS event affected three fire stations, four water pump stations, and two radio towers that transmit police and fire communications, requiring fuel not just for facility generators, but in some cases, for the fire trucks themselves via on-site fuel storage tanks. The inaccurate identification of affected facilities caused San Jose to re-route its refueling*

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<sup>349</sup> SDG&E Company's Progress Report on Implementation of De-Energization Guidelines, dated September 4, 2019, p.8-9

<sup>350</sup> R.18-12-005, CforAT Comments on SDG&E Post-PSPS Event Reports for October 24 and 28, 2019; and November 17, 2019, filed January 7, 2020, Attachment 1 dated December 10, 2019, p.2

<sup>351</sup> D.19-05.042, Appendix A, p.A5-6

<sup>352</sup> PG&E Response to SED-001, Question 31, dated March 24, 2020

<sup>353</sup> I.19-11-013, Response by the CLECA to the OII, dated January 10, 2020, p.4

*trucks to different facilities and deploy electricians to pull the correct generators for the correct facilities.”<sup>354</sup>*

- *“PG&E states that it has been ‘[coordinating with cities and counties to confirm critical facilities in their jurisdictions,’ but there is a discrepancy between the list of critical facilities San Jose had during the October 9 event (10 facilities) and the list PG&E had (3 facilities).”<sup>355</sup>*
- *“Another important example is that San Jose could not tell whether PG&E coordinated with the telecommunications companies on deenergization. One customer reported that her mother was in an outage area, and the telecommunications company servicing her landline phone only had enough backup power for 4-5 hours. This is a dangerous situation for people who live in remote regions or who have limited mobility.”<sup>356</sup>*

During the October 26 PSPS event, San Francisco lost tens of thousands of gallons of water when the event created a power outage for critical water supply facilities.<sup>357</sup>

As described in Sections II and III, the Joint Local Governments noted PG&E’s failure to assess the need for backup generation for the Joint Local Governments’ critical facilities. The Joint Local Governments also state:

*“As far as the Joint Local Governments can tell, PG&E’s strategy is to let local emergency managers and first responders worry about the dwindling backup battery life on local communications infrastructure, or the failure of wildfire notification systems that rely on cellular phones, or how to ensure the wellbeing of isolated residents.”<sup>358</sup>*

Regarding the events that began on October 26, NCPA stated:

*“During this time, not only was Ukiah unable to obtain accurate information specific to the de-energization of the transmission lines into the city, but communications were further challenged since Ukiah experienced some issues with connectivity for both cell phone and internet service during the PSPS event.”<sup>359</sup>*

CalCCA stated the following about the October 9 PSPS event:

- *“Larger, extended PSPS events result in inoperability of vital security, safety, health and communications infrastructure equipment such as traffic lights, water/sewer pumps, natural gas supply, gas stations and cell towers. resulting in near catastrophic socio-economic impacts to the local economies and the State of California.”<sup>360</sup>*

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<sup>354</sup> R.18-12-005, City of San Jose’s Comments on PG&E’s Post-PSPS Event Report for October 9-12, 2019, dated November 19, 2019, filed January 7, 2020, p.5

<sup>355</sup> *Id.*, p.8

<sup>356</sup> *Id.*, p.13

<sup>357</sup> I.19-11-013, Response of the City and County of San Francisco, dated January 10, 2020, p.2-3.

<sup>358</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.32

<sup>359</sup> R.18-12-005, NCPA Comments on PG&E Post-PSPS Event Report for October 26 to November 1, 2019, filed December 31, 2019, letter dated December 13, 2019, p.6

<sup>360</sup> R.18-12-005, CalCCA Submission of Comments on IOU Post-Event Reports, Appendix B, filed January 7, 2020, letter dated November 19, 2019, p.2

## Public Report on the Late 2019 Public Safety Power Shutoff Events

- *“In addition to customers not receiving notice that their power would be turned off, the Placer County area experienced extensive cell tower and cable connection outages, which affected internet voice over internet protocol phones.”<sup>361</sup>*
- *“Uniquely, the Placer County area also experienced hardline outages reported in an area ranging from North Auburn to Colfax.... These lines are the actual copper hardlines operated by AT&T that many residents in rural areas maintain for emergency communication during power outages during storms and because cell service in the Sierra Nevada can be patchy.”<sup>362</sup>*

A PG&E customer also left public comments regarding their own personal experiences after losing their landline service. The customer noted the risk associated with the loss of power to cell towers and land lines.<sup>363</sup>

As the statements above suggests, there was a widespread impact on critical facilities and there was a lack of coordination or preparation between electric infrastructure providers and critical facility operators. In addition to coordination between electric utilities and all public safety partners, the Commission is considering proposals in the Emergency Disaster Relief Program proceeding (R.18-03-011) regarding additional requirements for prolonged backup power for critical communications facilities.

### Southern California Edison

In SCE’s response to SED’s first data request, the utility described how it identified critical facilities and infrastructure: “SCE uses the North American Industry Classification System (NAICS) codes to identify critical infrastructure providers.”<sup>364</sup> Additionally, SCE describes its coordination with its critical infrastructure providers in its March 2020 Progress Report: “SCE Business Customer Division (BCD) account managers consistently engage with these customers. Customer contact verification is an integral part of the account manager role.”<sup>365</sup>

However, the Joint Local Governments noted multiple instances of critical facilities experiencing power outages due to the late 2019 PSPS events:

- Kern County – water districts and water facilities were unable to provide water or wastewater services<sup>366</sup>
- Golden Hills Water District – forced to suspend customers in order to maintain safe water pressure<sup>367</sup>
- Community of Bear Valley Springs – water system disrupted but SCE provided bottled water<sup>368</sup>
- Community of Stallion Springs – received 10 minutes’ notice of the outage<sup>369</sup>

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<sup>361</sup> *Id.*, p.8

<sup>362</sup> *Id.*, p.8

<sup>363</sup> R.18-12-005, Public Comments, p.11

<sup>364</sup> SCE Response to SED-001, Question 33, March 24, 2020

<sup>365</sup> SCE’s Second Progress Report on the Implementation of De-energization Guidelines set forth in Appendix A of Decision 19-05-042, amended March 13, 2020, p.25

<sup>366</sup> I.19-11-013, Response of the Joint Local Governments to the OII, dated January 10, 2020, p.24

<sup>367</sup> *Id.*, p.27

<sup>368</sup> *Id.*, p.27

<sup>369</sup> *Id.*, p.27

Improved coordination and preparation with water and wastewater facility operators are immediately required ahead of the 2020 fire season.

**vi. Public Safety Impacts and Risks**

Across all three electric IOUs, reporting of potential public safety impacts and risks requires more supporting data and detail. Within the utilities' post-event reports and Progress Reports, the utilities focused on wildfire risks and the factors that may contribute to those risks but did not thoroughly explain or consider other risks to the public due to de-energization. The lack of thorough explanations may signify that the electric IOUs did not properly consider public safety impacts and risks.

**D. Late 2019 PSPS Event Challenges Due to Delays in Guideline Implementation**

The Preliminary Scoping Memo asks: "Did delay in implementing any of the requirements present challenges during the late 2019 PSPS events?"<sup>370</sup>

In addition to the post-event reports, SED reviewed the electric IOUs' Progress Reports, party comments in the OII and OIR, and responses to two data requests to identify how each IOU's planning and implementation activities correlated with any of the challenges identified during execution of the late 2019 PSPS events.

**i. Pre-planning and Rehearsals**

**a. Consideration of Public Safety Risks**

Nowhere in the three electric IOUs' post-event reports and Progress Reports was there a discussion of a comprehensive list of public safety risks considered. The main focus of the utilities' decision to de-energize appeared to be reducing wildfire risks, which, while important, was not weighed against the impact on the public. The apparent delay in conducting the proper research in order to meet the requirement to consider all public safety risks, in addition to potential wildfires, appears to have led to numerous issues described in the previous sections, such as losing critical water facilities and all methods of communication, ineffective notifications for people/communities with access and functional needs, inadequate resources provided to mitigate PSPS impacts, etc.

**b. In-Language PSPS Information**

SCE stated in its September 2019 Progress Report that it:

*"...is enhancing all outreach collateral, its webpage on PSPS and the alerts and notifications whose primary language is Spanish, Mandarin, Cantonese, Korean, Tagalog and Vietnamese and ensuring SCE resources are available to support other languages customers speak through use of SCE's translation services vendor."*<sup>371</sup>

Due to SCE's delay in implementing the Guideline requirement that information be provided to customers in different languages, SCE's webpage did not provide in-language PSPS information to the non-English speaking public.

**ii. Internal and External Coordination**

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<sup>370</sup> *Id.*

<sup>371</sup> SCE Progress Report, dated Sept 4, 2019, p.19

- a. Coordinate with First/Emergency Responders and Local Jurisdiction to Identify and Assess Needs of Critical Facilities and Infrastructure

Pacific Gas & Electric

Prior to the late 2019 PSPS events, PG&E did not clearly state whether it coordinated with first/emergency responders in its September 2019 Progress Report. This delay in coordination and assessment of backup power needs may have contributed to the outages experienced by critical facilities and infrastructure within PG&E's service territory as described in previous sections.

San Diego Gas & Electric

SDG&E only stated in its September 2019 Progress Report that it "is prepared" to coordinate with first/emergency responders and local jurisdictions to identify critical facilities and infrastructure. However, SED did not identify any comments regarding critical facilities losing power in SDG&E's territory.

- b. Invite Water and Communications Infrastructure Providers to the IOU's EOC

Neither PG&E nor SCE invited water and communications infrastructure provider into its respective EOCs. As described in the previous sections, critical facilities lost power and may not have had the backup power necessary to maintain emergency communications or provide water to the public. The impact of PG&E and SCE PSPS events could have been minimized had the proper representatives been invited to each EOC or if adequate coordination occurred in advance.

- c. Providing GIS Shapefiles

PG&E and SCE had difficulty providing or making accurate GIS shapefiles available to their public safety partners, as described in previous sections. GIS shapefiles and the information in those files depicting the potential de-energization are vital for public safety partners to fully understand the impact on their own facilities and to prepare to mitigate any negative impacts on the public. The most accurate data should be provided to public safety partners and adjacent jurisdictions with priority notification. The two utilities should have also worked toward providing real-time data to their public safety partners. However, the delay in proper implementation of this secure data transfer process led to difficulties described above, including critical facilities losing power without an alternative source of power.

**iii. Situational Awareness**

The three electric IOUs generally described the various factors for high winds and high fire risks considered in their decision to de-energize in their September 2019 Progress Reports. The IOUs also described PSPS protocols implemented and situational awareness equipment installed in proximity to their systems to measure the various environmental factors. Overall, the IOUs are working toward building a network of equipment to measure these factors across their respective territories that would most likely not have been completed by the start of the 2019 fire season. The lack of equipment to measure localized events would lend to an ill-informed decision to de-energize. SED did not have enough information to determine if the situational awareness protocols and tools implemented had a significant impact on the late 2019 PSPS events. Therefore, in the following section, SED proposes that



electric IOUs include in an annual report, status updates on the various situational awareness projects planned, pending, and completed.

## E. Recommendations

### i. Proposed Guideline Modifications

Based on its learnings through requesting and examining documentation, performing analysis, and writing this report, SED recommends that the Commission consider revisions to the Guidelines in a public venue, as noted above.

#### a. Guideline Clarifications

Throughout the review process, SED found it difficult at times to assess implementation consistently across the three electric IOUs. The fact that PSPS requirements appear in three separate Commission orders (D.19-05-042, Resolution ESRB-8, and D.12-04-024) added to the complexity.

##### 1. Public Safety Partners and Communications Service Providers

As described in Section II, some cities and communications service providers were not clearly identified as public safety partners for coordination and preparation for the various activities that must take place leading up to the next fire season. The definition of local governmental agencies could include counties and cities that request to become a public safety partner, and that the definition of communications service providers can include internet service providers, e.g., cable, wireless, etc.

##### 2. Lessons Learned Include Refining Thresholds and Decision Criteria

While SED appreciates the lessons learned provided by the electric IOUs, a more meaningful response would include planned improvements to de-energization protocols, post-event observations of no damage found, number of customers notified in comparison to number of customers de-energized, and any additional factors or actions being considered by the electric IOU at the time of the report that may help mitigate the impact of future PSPS events.

##### 3. Timing of Notifications – Required Versus Recommended

The Guidelines prescribe specific timeframes for notifications sent to public safety partners and all other customers/populations.<sup>372</sup> However, it is unclear which notifications are strictly required and which are recommendations. Establishing clear categories of notifications would be helpful.

#### b. Programmatic and Procedural Requirements that Could Be Addressed in Appropriate Venues

##### 1. Minimum Notification and Communication Procedures

In addition to the minimum notification and communication requirements in the Guidelines, the following notifications would help improve local jurisdiction response and transmission level operations.

After notification of potential de-energization is sent to all affected entities, including the public, an additional notification identifying a cancellation or removal of circuit operating restrictions would

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<sup>372</sup> D.19-05-042, Appendix A, p.A8-9

ease the amount of resources that the local jurisdiction was planning to deploy in response to the potential PSPS event.

This “notice of cancellation” could occur within one hour after the IOU decides to lift its operating restrictions on a circuit or lessen the scope of the potential de-energization in some other way.

## 2. Transmission-Level Customer Notification

The electric IOUs have a slightly different transmission-level notification protocol in comparison to distribution-level customers (live calls vs automated calls) and the Guidelines require coordination with the CAISO. In addition to notifying and coordinating with the CAISO, at a minimum, the same priority notification can also be sent to transmission-level customers when considering de-energization of the customer’s facilities and that the notification must occur 48-72 hours in advance.

## 3. Emergency Management Experience or Emergency Management Training for Electric IOU Staff in an EOC

In order to communicate effectively, accurately and consistently, all electric IOUs require a standardized framework for handling PSPS events which can be considered an emergency event due to widespread power outages. The Guidelines make clear that “standardized nomenclature based on existing emergency frameworks”<sup>373</sup> is essential for PSPS events. However, SED found that not all electric IOUs required emergency management experience or training for staff within each respective EOC.

By requiring all electric IOU staff to, at a minimum, have emergency management experience for a set amount of years or complete emergency management training prior to working in an EOC, communication between public safety partners can only improve.

## 4. Coordinate with Local Jurisdictions to Proactively Identify Medical Baseline Customers and Those Reliant on Life Sustaining Equipment

To reach the people/communities with access and functional needs, the IOUs mainly identified medical baseline customers as those requiring positive/affirmative notification since medical baseline was already designated in their customer databases. In this aspect, IOUs should be required to coordinate with local jurisdictions, e.g., counties, cities and tribes, to comprehensively identify medical baseline populations, including those that rely on electric-powered life-sustaining devices, and populations who may qualify for low-income assistance programs. Populations considered in this context should include customers and non-customers. The IOUs should be required to share and receive compiled lists of the populations identified above from local and tribal governments. The lists should be maintained and updated annually before each wildfire season.

## 5. CBO Partnerships

In an effort to improve outreach and assistance for people/communities with access and functional needs, electric IOUs should be required to build partnerships with CBOs to lessen the impact of PSPS events on AFN communities and at-risk populations.

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<sup>373</sup> D.19-05-042, Appendix A, p.A16

Through these partnerships, the utilities could better disperse information to people/communities with access and functional needs, including where to find physical resources provided by the IOU or IOU partners, such as temporary shelter, charging stations, heat, water, food, etc. The partnerships could also be leveraged to start programs that reimburse for portable charging units for qualified households.

#### 6. Critical Facilities and Infrastructure

The Guidelines currently identify water utilities and communications facilities as critical facilities and infrastructure. The Guidelines require coordination with first/emergency responders and local governments to identify critical facilities and also recommends that IOUs partner with local government and public safety partners in high fire risk areas to develop a list of critical facilities and infrastructure in those areas. However, disparities between lists of critical facilities and infrastructure existed between the different entities and negatively impacted public safety by de-energizing water and communications facilities that did not have alternative sources of power. SED recommends the Commission consider requiring electric IOU coordination with public safety partners, including first/emergency responders, and local jurisdictions, e.g., counties, cities and tribes, and critical facilities and infrastructure providers, to comprehensively identify critical facilities and infrastructure.

In addition, the Commission may consider requiring the electric IOUs to assess the need for extended backup power beyond the minimum required time following a power outage by the appropriate regulatory entity. For example, the FCC requires communications infrastructure to have 8-hour backup power immediately following a power outage. This topic is being considered in the Disaster Relief Program Proceeding, R.18-03-011.

#### 7. Community Resource Centers/Assistance Locations

In an effort to minimize the impacts of PSPS events, the electric IOUs implemented CRCs or mobile assistance vehicles. To more effectively minimize public impacts due to PSPS events, the electric IOUs should be required to coordinate with their local jurisdictions and CBOs to better serve their communities during PSPS events. For example, as RCRC recommends:

- *“Require utilities to coordinate in advance with local governments to identify sites for community resource centers and the level of services that will be available at those centers.*
- *Require standing contracts to be executed in advance to ensure that CRCs can be opened quickly when needed.*
- *Require the utility to ensure that the CRCs can provide the services and supplies required by medical baseline and AFN populations as suggested by the respective local government.*
- *Require the utility to work with the impacted local government to identify the CRC to be opened from the prepared list of facilities.*
- *Ensure that the CRC is open 24 hours a day from the beginning of the PSPS event until the final service restoration.”<sup>374</sup>*

The Commission could consider adopting some or all of these recommendations to improve public safety and reduce PSPS impacts.

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<sup>374</sup> *Id.*, p.5-6

## 8. Situational Awareness Projects Update

Understandably, the IOUs are developing a network of situational awareness tools, such as, weather stations, high-resolution cameras, etc., to utilize across their respective territories to monitor wildfire risks in HFTDs. SED found it difficult to determine if the protocols and equipment in place had a significant impact on the late 2019 PSPS events. The Commission could consider requiring electric IOUs include in an annual report, status updates on the various situational awareness projects planned, pending, and completed, as well as how those projects affected the IOU's decisions about and conduct of PSPS. This requirement could provide more insight into each electric IOU's decision to de-energize.

## 9. Annual Reporting

As noted earlier, SED recognizes that IOU performance regarding guideline requirements is not clearly reported in IOU post-event reports or Progress Reports. Therefore, SED recommends that the Commission consider requiring an annual report for IOUs to address all non-event specific requirements that are not explicitly required in post-event reports. The annual report would include all non-event specific requirements identified in D.19-05-042 Appendix A Guidelines, Resolution ESRB-8, D.12-04-024, and any additional PSPS requirements resulting from related proceedings.

In order to determine that each electric IOU adequately considered alternatives and mitigation measures to PSPS, the Commission should require each electric IOU to provide in an annual report the status of all electric infrastructure projects planned or in progress, relating to mitigating impacts of PSPS events, such as sectionalization, microgrid installations, etc.

This will provide more transparency into the entire PSPS process that includes preparation and coordination activities leading up to each fire season. The report could be served on service lists for the PSPS OIR and this OII as well as the Director of SED and any other Commission Division that requests the annual report.

## 10. Explore Allowing Public Safety Partners to Opt Out of Notifications

SDG&E reported that some public safety partners wanted to opt out of notifications but gave no additional explanation.<sup>375</sup> SED recommends that the Commission explore this further with the electric IOUs.

### **ii. Post-event Reporting Standardization and Additional Proposed Post-event Reporting Requirements**

As stated in the Decision (D.19-05-042), the Commission has already recognized the need for a standardized post-event report template. The three IOUs used very different formats and each format created difficulties when SED tried to assess performance relative to the Guidelines. In addition, staff found that many requirements prescribed in the Guidelines did not have an associated reporting requirement. SED proposes that the Commission consider requiring additional information to include in a standard post-event report template and additional annual reporting requirements, described above. As a starting point, the Commission could consider requiring each electric IOU to address the questions

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<sup>375</sup> SDG&E October 10 Post-Event Report, p.37

in SED's first data request<sup>376</sup> in its post-event reports. Standardized reports should also include appendices with script templates, and actual scripts sent by the electric IOU by time period and location.

Any reports issued by the electric IOU could be served on service lists for the de-energization OIR (R.18-12-005) and this OII (I.19-11-013) as well as the Director of SED and any other Commission Division that requests the reports. The Commission may also consider the following reporting requirements to include in the electric IOU post-event reports.

a. Metrics for Notification of People/Communities with Access and Functional Needs

In order to verify the effectiveness of each electric IOU's outreach and notifications protocol, the Commission could consider requiring the following to be reported in post-event reports:

- Total number of people identified with access and functional needs
- Number of people with access and functional needs positively-notified
- Number of people with access and functional needs not positively-notified prior to being de-energized

The IOUs should include successful positive/affirmative notifications and notifications that did not reach the intended groups of AFN communities, with an analysis of why the notification failed and how it can be made successful in the future. This SED recommendation would help the public understand the success rate of each electric IOU.

b. Information on CRC Effectiveness

SED proposes that, in addition to the current requirements for each PSPS event, the IOUs report the number of CRCs opened in relation to counties and customers affected, identify the affected square miles, population densities of those areas, and results of surveying the areas for CRC feedback. This would assist in an assessment of the effectiveness of the CRCs.

c. Maps Depicting Actual PSPS Event Impact

While not a requirement identified in the Guidelines, the utilization of maps to depict the PSPS event would help readers understand the extent and actual impact of each PSPS event's impact. The Commission could consider requiring illustrative maps for each PSPS event that depict the following information, at a minimum:

- Areas depicting those who were sent a PSPS notification
- Areas actually de-energized
- Time of each area actually de-energized
- Time of each area restored

d. PSPS Related Electric Infrastructure Project Impacts on Each Event

In order to better understand the impact of sectionalization, microgrids and any other system improvements or modernization, the Commission could consider requiring electric utilities to describe the extent to which the improvement or modernization impacted the size and scope of each PSPS event.

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<sup>376</sup> Data Request SED-001-PG&E, Data Request SED-001-SCE, Data Request SED-001-SDG&E dated March 12, 2020.

This post-event reporting requirement would be an expansion of the existing Guideline requirement, which is limited to required reporting on the impacts of sectionalization.<sup>377</sup>

## V. Supporting Documents Available Upon Request

- A. I.19-11-013 Phase I Preliminary Scoping Memo
- B. PSPS Non-Event-Specific Guidelines (Extracted from D.19-05-042, ESRB-8, and D.12-04-024)
- C. PSPS Event-Specific Guidelines (Extracted from D.19-05-042, ESRB-8, and D.12-04-024)
- D. Decision 19-05-042
- E. Resolution ESRB-8
- F. Decision 12-04-024
- G1. PG&E PSPS Progress Report, September 4, 2019
- G2. SCE PSPS Progress Report, September 4, 2019
- G3. SDG&E PSPS Progress Report, September 4, 2019
- H1. PG&E PSPS Progress Report, March 4, 2020
- H2. SCE PSPS Progress Report, March 4, 2020
- H3. SDG&E PSPS Progress Report, March 4, 2020
- I1. PG&E PSPS Report Letter for October 5 Event
- I2. PG&E PSPS Report Letter for October 9 Event
- I3. PG&E PSPS Report Letter for October 23 Event
- I4. PG&E PSPS Report Letter for October 26 Event
- I5. PG&E PSPS Report Letter for November 20 Event
- J1. SCE PSPS Report Letter for October 2 Event
- J2. SCE PSPS Report Letter for October 12 Event
- J3. SCE PSPS Report Letter for October 21 Event
- J4. SCE PSPS Report Letter for October 27 Event
- J5. SCE PSPS Report Letter for November 21 Event
- J6. SCE PSPS Report Letter for November 23 Event
- K1. SDG&E PSPS Report Letter for October 10 Event

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<sup>377</sup> D.19-05-042, Appendix A, p.A23

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- K2. SDG&E PSPS Report Letter for October 20 Event
- L1. Data Request SED-001 sent to PG&E, March 12, 2020
- L2. Data Request SED-001 sent to SCE, March 12, 2020
- L3. Data Request SED-001 sent to SDG&E, March 12, 2020
- M1. Data Request SED-002 sent to PG&E, March 27, 2020
- M2. Data Request SED-002 sent to SCE, March 27, 2020
- M3. Data Request SED-002 sent to SDG&E, March 27, 2020
- N1. PG&E Consolidated Response to SED-001, March 24, 2020
- N2. SCE Consolidated Response to SED-001, March 24-25, 2020
- N3. SDG&E Consolidated Response to SED-001, March 24, 2020
- O1. PG&E Consolidated Response to SED-002, April 7, 2020
- O2. SCE Consolidated Response to SED-002, April 7, 2020
- O3. SDG&E Response to SED-002, April 7, 2020
- P1. R1812005 AT&T Comments on PG&E October 9 Event
- P2. R1812005 AT&T Comments on PG&E October 26 Event
- Q1. R1812005 CalCCA Comments on PG&E October 9 Event
- Q2. R1812005 CalCCA Comments on PG&E October 23 to November 1 Consolidated Events
- R1. R1812005 CCTA Comments on PG&E October 9 Event
- R2. R1812005 CCTA Comments on SCE October 2 Event
- S. R1812005 EBMUD Comments on PG&E Events
- T1. R1812005 Joint Local Governments' Comments on PG&E October 9 Event
- T2. R1812005 Joint Local Governments' Comments on PG&E October 23 Event
- T3. R1812005 Joint Local Governments' Comments on PG&E October 26 Event
- U. R1812005 LACDPH Comments on SCE Events
- V1. R1812005 NCPA Comments on PG&E October 9 Event
- V2. R1812005 NCPA Comments on PG&E October 26 Event
- W. R1812005 Cal Advocates Comments on SDG&E November 17 Event
- X. R1812005 RCRC Comments on PG&E October 10, October 25, and November 8
- Y1. R1812005 San Jose Comments on PG&E October 9 Event

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- Y2. R1812005 San Jose Comments on PG&E October 26 and 29 Event
- Z1. R1812005 SBUA Comments on PG&E October 26 Event
- Z2. R1812005 SBUA Comments on PG&E November 20 Event
- Z3. R1812005 SBUA Comments on SCE November 23 Event
- Z4. R1812005 SBUA Comments on SDG&E October 20 Event
- AA. R1812005 UCAN Comments on SDG&E Events
- AB. R1812005 Verizon Comments on PG&E October 9 Event
- AC1. CPUC Executive Director Letter on Medical Baseline Customers, October 8, 2019
- AC2. CPUC Executive Director Letter on Address Information, October 23, 2019
- AC3. Resolution L-598 Ratifying October 8 and October 23 Executive Director Letters
- AD1. CPUC President Letter to Communications Industry Leaders for Information and Hearing on Emergency Disaster Relief Programs, November 13, 2019
- AD2. R1803011 CPUC President Proposals, March 6, 2020
- AE. PG&E Response to SED-001, Question 26, dated March 24, 2020
- AF. PG&E Question 35 Attachment in Response to SED-001, dated March 24, 2020
- AG. R.1812005 Public Comments



Mar 19, 2021, 10:24am EDT | 1,939 views

# Department Of Energy Price Data Spotlights Regressive Nature Of ‘Electrify Everything’ Effort



**Robert Bryce** Contributor

Energy

*I write about energy, power, innovation, and politics.*



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Climate activists like Bill McKibben insist we must "stop burning things" and electrify all of our ... [+] LIGHTROCKET VIA GETTY IMAGES

On Wednesday, a short item in the *Federal Register* underscored the regressive nature of the “electrify everything” effort that is being promoted by some of America’s highest-profile [environmental groups](#), climate-change

activists, [politicians](#), and [academics](#). The item, published by the Office of Energy Efficiency and Renewable Energy at the Department of Energy, forecasts the “representative average unit costs of five residential energy sources for the year 2021.”

The forecast shows that on an energy-equivalent basis, electricity will cost about \$39 per million Btu. It also projects that one million Btu in the form of natural gas will cost about \$11, propane will cost about \$19, No. 2 heating oil will cost \$20, and kerosene will cost \$23. Thus, electricity will cost nearly four times as much as natural gas and twice as much as propane, a fuel that is commonly used by rural Americans in their homes, and on their farms and ranches.



Pricing data published in the Federal Register on Wednesday show that on an energy-equivalent basis, ... [+] ROBERT BRYCE, FROM DOE DATA

As I wrote in these pages last month during the deadly blizzard that paralyzed Texas for almost a week, there are a myriad of problems with attempting to electrify all of our transportation, industrial and residential energy systems. I wrote, “attempting to electrify everything would be the opposite of anti-fragile. Rather than make our networks and critical systems more resilient and less vulnerable to disruptions caused by extreme weather, bad actors, falling trees, or simple negligence, electrifying everything would

concentrate our dependence on a single network, the electric grid, and in doing so make nearly every aspect of our society prone to catastrophic failure if — or rather, *when* — a widespread or extended blackout occurs.”

Indeed, the risks to our energy security, resilience, and reliability are obvious. But the bigger, and more immediate issue is the regressive nature of forcing consumers to use electricity instead of energy sources like natural gas and propane that sell for a quarter, or half, as much as the energy that consumers can get from the electric grid.

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Last year, I published [a report for the Foundation for Research on Equal Opportunity](#) that looked at the natural gas bans that are being implemented in dozens of communities in California. [According to the Sierra Club, 42 California communities](#) have now imposed bans. On its website, the club, which is the largest environmental group in America, claims that gas-free homes are “a win for our climate, health, and safety.” In January, the city of [Denver released a plan that aims to ban natural gas connections](#) in new buildings by 2027. In February, the city of [Seattle enacted legislation that bans the use of natural gas](#) in new commercial buildings and large multifamily buildings. In [Massachusetts](#), about a dozen towns have partnered with the Rocky Mountain Institute, which recently got a [\\$10 million grant from the Bezos Earth Fund](#), to advocate for the right to ban the use of natural gas in homes and commercial buildings.

Banning natural gas forces consumers to use more-expensive electricity to heat their homes, cook their food, and heat the water needed to wash their

clothes and dishes. Proponents of the electrify everything push, including the [Natural Resources Defense Council](#), which got \$100 million from the [Bezos Earth Fund](#), prefer to call their efforts “beneficial electrification.” The more accurate term is “forced electrification” because it will increase the [energy burden on low- and middle-income consumers](#).

Increasing the energy burden in states like California, which has one of the highest poverty rates in the country, is indefensible. When accounting for the cost of living, [18.1% of the state’s residents are living in poverty](#). Forcing poverty-stricken Californians to use electricity instead of lower-cost natural gas will increase the energy burden and worsen poverty.

Despite these facts, bans on natural gas are being cheered by some of America’s highest-profile climate activists. In January, Bill McKibben, the founder of [350.org](#) published an article in the *New Yorker* in which he said if there is a “basic rule of thumb for dealing with the climate crisis, [it would be: stop burning things](#)” including natural gas. McKibben says we should shift our energy needs to solar and wind energy. Also in January, Mayor Bill de Blasio declared that New York City will “[renounce fossil fuels fully](#)” and “ban fossil fuel connections in the city by the end of this decade.”

In March, Peter Iwanowicz, executive director of Environmental Advocates of New York, declared that policymakers should stop looking at the use of alternative fuels like renewable natural gas because they “[distract from the basic task of getting New Yorkers to stop burning things](#).”

I am pro-electricity. But the idea that we humans should “stop burning things” in the name of climate change ignores the need for energy security, resilience, and basic fairness. Over the past five years, I traveled to India, Iceland, Lebanon, Puerto Rico, Colorado, and New York to look at the world through the lens of electricity. I’ve recently published a book ([A Question of Power: Electricity and the Wealth of Nations](#)) and co-produced (with my colleague, [Tyson Culver](#)) a documentary ([Juice: How Electricity Explains the World](#)) that spotlights electricity. The book and film show that we need

many terawatts of new generation capacity to bring the 3 billion people in the world who are now living in energy poverty out of the dark and into the bright lights of modernity.

In short, the people of the world need more electricity. Lots more. But the Texas Blackouts proved that we need diverse and resilient energy networks that can deliver huge quantities of energy during extreme weather events. Attempting to electrify everything is a recipe for increased inequality and decreased energy security and resilience.

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# The Paradox of Declining Renewable Costs and Rising Electricity Prices



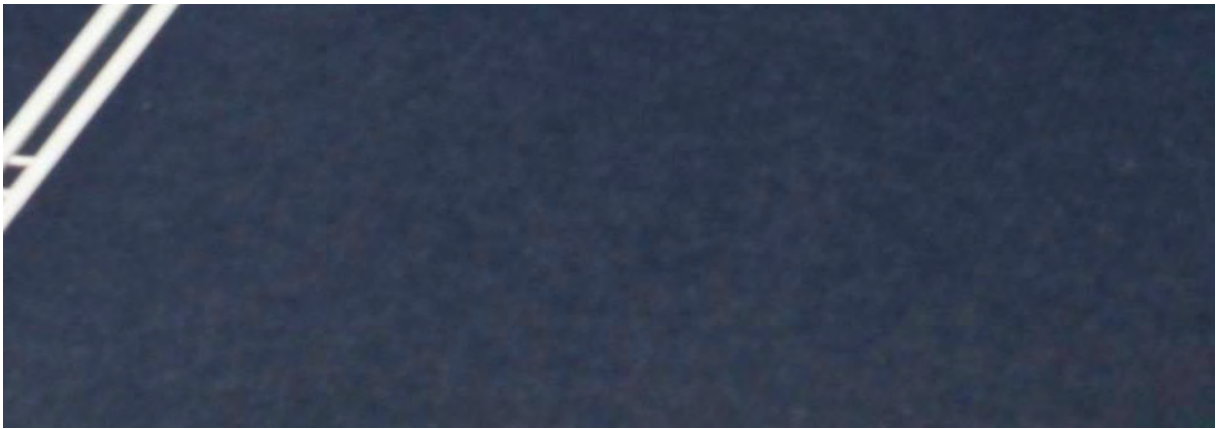
**Brian Murray** Contributor 

[Energy](#)

*I write about the nexus of energy, the environment and the economy.*

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Most energy observers recognize that the cost of renewable energy has declined dramatically in the last decade. The investment firm Lazard produces a periodic report on the average cost of generation from different electric power sources – the “levelized cost of electricity” in energy geek parlance. [Their latest report](#) shows that over the last decade the levelized cost per unit of electricity from new utility-scale onshore wind and photovoltaic (PV) solar power plants has dropped about *70 and 90 percent, respectively*. In many places, the cost of new renewable generation is at or below that of existing conventional sources like natural gas, coal and nuclear.

This would seem to be good news for those interested in making energy clean and cheap. Yet, a recent study suggests that policies that mandate renewable use have driven up the retail price of electricity and have been an expensive way to achieve greenhouse gas reductions – often an implicit reason for those mandates. While it seems paradoxical that electricity prices could be rising while generation costs are falling, this possibility is an artifact of how electricity markets work and how these workings have grown more complex as the industry evolves from a more centralized fossil fuel-based generation base to a more distributed and renewable base. Let’s explore this and see what it says about the road ahead.

## **Why Renewable Generation Costs Have Plummeted**

There are several reasons for the steep reduction in renewable costs. One is the improvement in basic product design. Wind turbines are [now much larger and have much higher capacity factors](#) than a decade ago. Although the new designs are more expensive up front, increased capacity and capacity utilization have outpaced those higher costs to lower the cost of energy produced. A typical base-to-blade tip height for onshore turbines is now often over 500 feet – as tall as the Washington Monument – and we are seeing single turbine capacity of 5 MW or more, enough to power around 1,700 US homes over the course of a year.

Another reason for the cost decline is improvement in manufacturing efficiency which has lowered the costs of producing solar PV panels dramatically, particularly in China. And per unit installation “soft” costs are declining as project developers gain more experience and installations have moved from small scale (rooftop solar) to utility-scale operations (solar farms of hundreds of acres).

These dramatic renewable generation cost declines have been attributed to policies such as tax credits, preferential feed-in tariffs, and renewable portfolio standards (RPS), which directly target the use of renewables, expand demand and create cost-reducing economies of scale to meet that demand. Renewables that were once inarguably much more expensive and required large subsidies and mandates to incentivize adoption have slid into grid parity territory, now able to compete directly with conventional sources in many places.

### **How Electricity Prices Can Rise While Generation Costs Fall**

The release this spring of a [working paper](#) by economists at the Energy Policy Institute at University of Chicago (EPIC) ignited a debate on the cost-effectiveness of renewable mandates. The paper examined the effects of renewable portfolio standards (RPS) programs, which have been adopted by 29 states and Washington DC, finding that these policies have raised retail prices considerably and have reduced CO<sub>2</sub> emissions only modestly.



We will return to that debate in a moment, but for now let's ask - if the cost of renewable power generation is falling, how can their use cause retail prices to rise?

This paradox is even more striking when we consider that more renewables actually can drive down the *wholesale* prices that electricity generators are paid. Because variable renewable energy (VRE) resources wind and solar incur virtually all of their costs up front and incur no fuel costs to produce electricity, the average cost of VRE generation is much higher than the marginal cost, which is close to zero. Much electricity in the US is transacted in states with competitive wholesale electricity markets. Marginal costs set prices in competitive markets, which means that the penetration of VRE can push *down* wholesale power prices, even more so when the VRE resource is receiving a per unit subsidy, as is the case with wind. This is something that has placed [financial pressure on legacy resources](#) such as coal, nuclear and natural gas plants that do incur fuel costs and other marginal costs of generation. It would seem, then, that higher renewables should lead to lower electricity prices.

But wholesale prices are paid to the generators; the retail prices paid by final customers reflect the full cost of delivering electricity. Generation, though the largest component, only accounts for [44 percent](#) of the total cost. The other main costs affected by renewables integration are transmission and distribution of electricity to its point of use, reliability costs to maintain stable voltage and frequency, maintenance needed to keep the system running, depreciation and taxes.

Unit costs, however, tell only part of the story. Individual power generators, whether conventional power plants or wind farms, seldom operate in isolation; they are each part of a larger grid-connected system that aggregates power across generators to deliver power to a region of consumers. VRE's effect on system costs will depend in part on the cost of the electricity that it is displacing, which in turn depends on the location and

timing of its deployment. Wind generation at night in the Midwest may be displacing coal, while solar generation in the afternoon in California may be displacing natural gas, each with different cost profiles. And to handle the intermittency of VRE, system operators need to activate ramping resources more frequently to meet demand. These flexible plants are typically more expensive to operate and thus higher deployment can raise total system costs even as renewable costs decline. Moreover, these resources must be kept on hand to provide reliable capacity in a market characterized by more intermittent supply and the costs of maintaining this capacity is passed along to consumers.

To cost-effectively scale up renewables, they must be sited where they are most productive – in places with plenty of sun, wind and land. That is typically not close to the population centers where users locate, so more transmission infrastructure is required to connect supply and demand. This may be having an effect on system costs. Between 2012 and 2017, when [non-hydro renewables generation grew by 77 percent](#), [transmission costs rose by 50 percent](#). While not all transmission cost increases nationally can be attributed to renewables expansion – maintaining old lines and modernizing for grid reliability are other reasons – there are notable cases where renewables are driving transmission investments. The [Competitive Renewable Energy Zone](#) project in Texas, for example, invested \$7 billion to connect wind generation in sparsely populated west Texas to the state’s population centers.

The connection between generation costs and retail prices is also affected by whether the state in question has traditional cost-of-service regulation or has restructured to allow wholesale or retail competition. The former situation may create more room for passing along to rate payers the recovery costs of stranded non-renewable assets resulting from RPS mandates.

The EPIC paper mentioned above took many of these factors into consideration and used econometrics to conclude that states with an RPS had statistically significant higher post-implementation prices than those without. Some critics argued against [the methods](#) used, the extent to which it was peer-reviewed, and [the implications](#) drawn for the wider policy debate. Criticism is standard fare in academic research, especially when a critical and high profile policy is at issue. I don't intend here to divine the criticisms and render a verdict on the study's validity. Rather, if we were to take their findings at face value that RPS mandates drive up retail prices, what does that foretell about future efforts to scale up renewables?

### **The Past Is Not Prologue**

As the saying goes, past results do not guarantee future performance. For one thing, some of what is observed RPS effects on retail prices may reflect the initial use of older, higher-cost renewable technologies when the programs first started. As newer and lower cost technologies get adopted, lower prices may follow.

But while early RPS programs may have created some high generation cost legacies, the relatively modest targets may mean that system limits were only barely tested – VRE levels in the US are still below 10 percent. [Several states](#) have set targets for the US of up to 100 percent renewables by mid-century.

[The National Renewable Energy Lab reports](#) that a large grid system with 30 percent VRE can operate with minimal system disruption. Going beyond 30 percent, however, can present new challenges. Lawrence Berkeley National Lab (LBNL) examined [three scenarios](#) (high wind, balanced VRE, and high solar) across several different US power markets. In each scenario, ancillary services costs to maintain reliability increase substantially. They also report modest retirement of legacy capacity (4-16%), especially coal, oil and steam turbines, which could lead to some stranded asset cost pass-through to consumers during the transition. The LBNL study did show annual average

wholesale energy prices declining with increasing VRE penetration, but also an increase in price volatility.

To the extent that intermittency contributes to higher system costs, technological fixes like improvements in the capacity and cost of grid-scale energy storage, economic fixes like real-time pricing to drive more efficient demand response, and institutional fixes like the establishment of a regional transmission organization (RTO) in the [renewables-rich western US](#), could mitigate these factors and push generation costs down. Again, though, at the expense of higher transmission costs.

The more we move toward a system with a high share of renewables, though, the more likely that the entire [business model for electricity](#) will need to change. A world in which high renewables penetration translates to low wholesale prices is a world in which investment incentives are not strong for any form of generation. If private capital is to fuel the renewables wave, it seems likely the sector will need to move from a more commoditized market where revenues are determined by a price per kilowatt hour to one in which revenue is generated by providing guaranteed delivery of electricity when it is needed from sources either desired by the customer or required by regulation. This is much like the way phone and internet service is delivered today. When that happens, customer costs will reflect quality more than quantity and the means by which generators are compensated will become even more complex, but perhaps easier to identify whether customers will pay more or less for higher use of renewables.

*[Will Niver of the Duke University Energy Initiative provided research assistance for this article.]*



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# Urban Heatwaves Are Worse For Low-Income Neighborhoods



**Nives Dolsak and Aseem Prakash** Contributor ⓘ

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Phoenix, Arizona. GETTY

Temperatures this summer have hit record levels across major cities, such as [New York](#), [Houston](#), [Phoenix](#), [Miami](#), [London](#), [Athens](#), [Baghdad](#), and [Qatar](#). Yesterday, an [excessive heat warning](#) was issued for South Central and Southwest Arizona and Southeast California.

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Climate change is leading to increased severity and frequency of heat waves, sea-level rise, and flooding due to heavy rainfall. These events tend to hurt some groups more than others. Those who suffer the most are the poor who, ironically, have small carbon footprints. Addressing this uneven climate impact is among the core issues for climate justice advocates such as Senator Kamala Harris, Joe Biden's VP pick.

### Why care about urban heatwaves?

According to [the EPA](#), urban heatwaves kill more people than any other weather-related event. Local authorities often issue advisories to stay indoors and drink plenty of water. Because urban areas tend to be hotter than nearby rural areas, sometimes [by double digits](#), the media talks about the “[urban heat island](#)” effect. But the media does not sufficiently emphasize that heatwaves impact urban neighborhoods differently. [Reports](#) document that neighborhoods with minorities and underprivileged populations experience higher temperatures. A [recent study](#) of 108 urban areas suggests that formerly “[redlined](#)” (predominantly nonwhite) neighborhoods were hotter than the non-redlined neighborhoods, some by nearly 13°F.

This sort of inequity is accentuated because, whether outside or inside their homes, low-income households have fewer resources and opportunities to adapt to extreme heat.

### Inequities in adaptation outside the home

Trees and green spaces are a natural protection against heatwaves, while paved areas contribute to the heat island effect. The [EPA](#) notes: “Trees and vegetation lower surface and air temperatures by providing shade and through evapotranspiration. Shaded surfaces, for example, maybe 20–45°F (11–25°C) cooler than the peak temperatures of unshaded material.”

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If canopy cover and green acreage were similar across ZIP codes in a city, all residents would have comparable protection against heatwaves. But canopy cover varies by ZIP codes, and even within ZIP codes [by census blocks](#).

Nonwhite neighborhoods tend to have fewer trees. In Washington, DC, this sort of canopy gap is quite evident. [The Washington Post](#) article on D.C. notes: “A clear fault line that begins at upper 16th Street in Northwest and follows the Potomac River south of the city separates leafy neighborhoods from communities with fewer trees ... To the west of the line, in the affluent Northwest quadrant of the city and similarly well-heeled Virginia and Montgomery County suburbs, trees are abundant and the land well-planted, the analysis shows.”

Nonwhite neighborhoods also have smaller green spaces. The [Trust for Public Land](#) finds that parks serving majority-white communities have twice the acreage of those serving nonwhite communities. Because nonwhite neighborhoods also have higher population densities, on a per-acre basis, public parks are five times more crowded in nonwhite neighborhoods than in white neighborhoods.

**Inequities in adapting inside the home**



In response to heatwaves, households can use cooling devices such as fans or air conditioners. This requires that households have access to electricity and the resources to pay for it.

Cooling devices are costly to run. Poor households tend to spend a [large percentage of their incomes on energy bills](#). Turning on the air conditioner might require that the household cuts expenditure somewhere else. This is challenging because household budgets are already stretched thin and getting through a heatwave might mean cutting spending on food or healthcare.

In the extreme case where households do not have access to (or have resources to use) air conditioners, heatwaves can be fatal. As the documentary [Cooked: Survival by Zipcode](#) showed, the 1995 heatwave killed 739 people in Chicago alone, most of them being elderly, poor, or minorities.

In anticipation of extreme heat events, cities now open air-conditioned buildings such as public libraries for individuals to take refuge. But this requires that individuals have transport to reach these designated areas. Further, in the time of COVID-19, when gatherings in enclosed spaces are often prohibited, this shelter strategy might not work.

## **How to increase attention to climate inequities**

Why this neglect of the underprivileged on the critical issue of climate adaptation? One reason might be that media and policymakers tend to focus on “average” statistics at the city or county level: the average temperature, the average tree cover, etc. But averages provide an incomplete, perhaps misleading, picture in highly inequitable societies.

For example, as we write this commentary, there is a heat advisory for Maricopa County, Arizona. There is also tremendous variation within this county regarding heat levels. Gila Bend in Phoenix, AZ, is under an [excessive heat warning](#). The median household income in this ZIP code is

**\$31,000**. Other areas, such as Carefree Ranch north of Scottsdale, AZ, have **temperatures that are about 10°F lower**. The median household income in this ZIP code is **\$119,498**. Thus, a county-level focus could hide the severity of the heatwave (which correlates with household income and race) across different neighborhoods.

To capture the experiences of the vulnerable sections, media and local officials could report (alongside the average temperature) the temperatures for low-income areas.

Similarly, realtors should also provide information on temperatures and heat advisories. Many already report data on say neighborhood walkability and solar energy potential. Why not also report data such as in 2019, the Gila Bend area experienced 109 days with **temperatures above 100°F** of which 38 days had temperatures above 110°F. In contrast, the numbers for the Carefree Ranch area are 42 days and 0 days, respectively. This sort of information should be made available both to home buyers and renters.

The same methodology could be adopted to report canopy cover and green acreage in the neighborhood or at least in the ZIP code. For example, New York is ranked among the **top 10 U.S. cities in terms of canopy cover** of about 22%. But there are significant variations across neighborhoods, as the **Cool Neighborhood NYC** report identifies.

To conclude, climate justice is an important dimension of climate adaptation. As the world becomes **more urbanized**, issues such as heatwaves, canopy cover, and green acreage, will require particular attention and leadership by city and county governments.



**Nives Dolsak and Aseem Prakash**

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## Energy justice towards racial justice

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Black and African American people face systematic disadvantages in energy costs and limited access to renewable energy benefits. Addressing these disparities is an important part of achieving racial justice.

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The COVID-19 pandemic and racial protests in response to the murder of George Floyd have highlighted systemic inequities affecting ethnic and racial minority populations. For example, in the US, Black and Latinx people have an increased risk of contracting the virus, and of experiencing severe illness in the case of infection<sup>1</sup>. The disproportionate impacts of COVID-19 for communities of colour are not limited to the illness itself. COVID-19 is expected to increase the prevalence of energy poverty as households face higher energy bills from being at home more, particularly during the summer months, and unemployment that makes these bills more difficult to afford<sup>2</sup>. In this way, too, African American households are at greater risk, as they already face higher rates of energy poverty than other racial groups (they account for nearly half of energy-

poor households in the US<sup>3</sup>) and they are more likely to receive disconnection notices and experience utility shut-offs<sup>4</sup>.

The higher rate of energy poverty among African Americans has been attributed to a history of racist housing policies that have segregated African Americans in low-resource neighbourhoods<sup>4</sup>. Consequently, African Americans are more likely to live in older homes with structural deficiencies and poorly functioning energy infrastructure<sup>4</sup>. These energy inefficient homes require more energy to heat or cool to comfortable living conditions, resulting in a higher energy burden.

As examined by Dominic Bednar and Tony Reames in a [Review](#) in our May issue, the US has federally-funded energy programmes that ostensibly address energy poverty<sup>5</sup>. However, funding for the Weatherization Assistance Program (WAP), which provides eligible low-income families with cost-effective energy efficiency upgrades, pales in comparison to that for the Low Income Home Energy Assistance Program (LIHEAP), which provides energy bill assistance to subsidize high energy expenditures. This indicates a preference for short-term solutions based on a narrow definition of energy poverty focused on affordability (LIHEAP) over programmes such as WAP, which aim to provide a more sustainable, long-term solution with a broader range of benefits, including for public health<sup>5</sup>. Notably, it is programmes like WAP that would go toward addressing the consequences of structural racism — in the form of residential segregation policies — that have led to higher rates of energy poverty among African Americans<sup>4</sup>. In fact, it has been argued that weatherization and energy efficiency initiatives could be a form of restorative justice for this community<sup>4</sup>.

As Sanya Carley and David Konisky describe in a [Review](#) in this issue, the disproportionate prevalence of energy poverty within communities of colour is one of the inequities that could be perpetuated by the clean energy transition, assuming it increases the near-term costs of energy. However, justice considerations for energy transitions are not just about disproportionate burdens, but also disparity in the distribution of benefits, such as access to employment opportunities in the

clean energy economy. Here, too, there is evidence of systematic disadvantage on the basis of race; only 8% of the US energy efficiency workforce is Black or African American, compared to the national average for the overall labour force of 12%<sup>6</sup>.

There is also evidence of racial disparity in access to the benefits afforded by low-carbon technologies. For example, Black- and Hispanic-majority neighbourhoods in the US have significantly fewer rooftop solar photovoltaics (PV) installed, even after accounting for differences in household income and home ownership<sup>7</sup>. This suggests the possible influence of systematic racial and ethnic biases, such as less initial deployment of PV in minority neighbourhoods, which limits processes of social dispersion that promote more widespread PV adoption. This uneven distribution in deployment may in turn reflect a lack of diverse representation in decision-making at solar firms.

African Americans are not the only vulnerable group that must be considered to ensure just and equitable energy transitions. Indeed, many of the issues described above also apply to low-income groups, the elderly, those with disabilities, women and other minorities. Nor are energy justice and equity issues unique to the US. But vulnerable groups differ in the root causes of their vulnerability, which result in different susceptibility to adverse impacts and necessitate different solutions and protections.

For instance, a study in the southwestern US found that elderly people and those with disabilities had greater bill increases than non-vulnerable counterparts when moved to time-of-use electricity rates, whereas other vulnerable groups included in the study — low-income, Hispanic, African American or households with young children — did not. Meanwhile, Hispanic households and those with disabilities experienced worse health outcomes on time-of-use rates<sup>8</sup>. Understanding how different forms of vulnerability manifest and interact with energy policies and programmes in different contexts is essential to avoid exacerbating existing injustices.