



SACHI A. HAMAI  
Chief Executive Officer

## County of Los Angeles CHIEF EXECUTIVE OFFICE

Kenneth Hahn Hall of Administration  
500 West Temple Street, Room 713, Los Angeles, California 90012  
(213) 974-1101  
<http://ceo.lacounty.gov>

Board of Supervisors  
HILDA L. SOLIS  
First District

MARK RIDLEY-THOMAS  
Second District

SHEILA KUEHL  
Third District

JANICE HAHN  
Fourth District

KATHRYN BARGER  
Fifth District

January 24, 2019

To: Supervisor Janice Hahn, Chair  
Supervisor Hilda L. Solis  
Supervisor Mark Ridley-Thomas  
Supervisor Sheila Kuehl  
Supervisor Kathryn Barger

From: Sachi A. Hamai  
Chief Executive Officer

### **REPORT BACK ON THE REVIEW OF SOUTHERN CALIFORNIA EDISON'S PUBLIC SAFETY POWER SHUTOFF PROGRAM (ITEM NO. 48-A, AGENDA OF OCTOBER 2, 2018)**

On October 2, 2018, the Board of Supervisors (Board) directed the Chief Executive Office (CEO), in conjunction with the County's emergency responders, critical service providers, and affected County departments to review Southern California Edison's (SCE) Public Safety Power Shutoff (PSPS) program and report back within 21 days. Due to the complexity of the analysis required, a two-week extension was granted on October 23, 2018.

The report was further delayed as a result of the unprecedented response and recovery operation committed to the Woolsey Fire. The report has now been completed, and includes a response to the following:

1. Identification of the unincorporated areas most likely to be affected by SCE's PSPS program, including an estimate of the number of times the PSPS program may have been implemented over the previous five years using SCE's proposed criteria;
2. Potential impacts to critical infrastructure and emergency responders along with the risks associated with those impacts;
3. An analysis of the lessons learned from other jurisdictions, such as San Diego County where power shutoff procedures have been in use for a number of years;
4. An analysis of whether the identified impacts and risks can be mitigated including any recommendations for doing so;

5. Inventory and status of back-up systems with their state of repair, remaining useful life, and capacity to operate (hours/days); and
6. Point out the back-up system types (Diesel/Battery) and replacement/update needs at our critical facilities such as hospitals, dams, yards, and other County operated facilities.

### **Implementation of Public Safety Power Shutoff in Los Angeles County (County)**

According to the California Public Utility Commission, the State's Investor Owned Utilities, Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) have general authority to shutoff electric power to protect public safety under California law, specifically California Public Utilities Code (PU Code) Sections 451 and 399.2(a). This process is called de-energization. This authority includes shutting off power to prevent fires caused by strong winds. The State's utilities have recently developed programs to exercise this authority during severe wildfire threat conditions as a preventative measure of last resort.

In April 2018, SCE announced the implementation of the PSPS program in the County. Although the County has been through many disruptive events impacting electrical power delivery, PSPS represented a new type of power outage. Unlike previous outages which were generally caused by accidental means, or were scheduled outages related to equipment maintenance, this outage was premeditative in nature and had the possibility of occurring for a much longer period than an accidental or scheduled outage.

SCE's initial implementation of the PSPS program was disruptive. It did not provide the County sufficient opportunity to collaborate with SCE about protocols and possible ways to reduce impacts of the power outages to affected County residents and infrastructure. To correct this, the CEO-Office of Emergency Management (OEM), in collaboration with the Sheriff's Department, Fire Department, Department of Public Health, Department of Public Works and numerous other County Departments; began an aggressive engagement process with SCE in an attempt to address the numerous unknowns associated with a PSPS in the County.

As an output of that engagement, and in response to the Board Motion, the County has developed an Action Plan (Attachment I) for SCE and other relevant stakeholders. The Action Plan includes ways that SCE can work with the County to lessen the impacts of a power outage as a result of implementation of its PSPS program in the County.

Attachment II provides additional information on:

- PSPS Background
- A PSPS Case History: October 14-15, 2018, Red Flag Warning Event
- Responses to the Directives of the Board Motion
- Conclusion

### **Conclusion**

The impacts of PSPS to the County are varied and diverse. It will take numerous carefully evaluated real world implementations of the program to determine the most appropriate County response.

Therefore, it is imperative that the implementation of PSPS involve a continued and ongoing education effort prior to implementation, accompanied by input from all of the relevant stakeholders, and that the decision-making process of when and where power is shutoff by SCE be transparent and justifiable. Also, SCE must invest in strategies that reduce the PSPS impacts to the County's most vulnerable residents.

Even though the implementation of PSPS creates these challenges, PSPS has the potential to reduce fire ignitions and ultimately improve outcomes in the unprecedented wildfire threat we face today.

If you have any questions or need additional information, please contact Jeff L. Reeb, Director of the OEM, at (323) 980-2261 or via e-mail at [jreeb@ceooem.lacounty.gov](mailto:jreeb@ceooem.lacounty.gov).

SAH:JJ:AC  
JLR:LL:lac

### **Attachments**

c:     Executive Office, Board of Supervisors  
       County Counsel  
       All Department Heads



**County of Los Angeles - Chief Executive Office**  
**OFFICE OF EMERGENCY MANAGEMENT**  
**Action Plan**  
**for**  
**Southern California Edison's Public Safety Power Shutoff (PSPS)**

ATTACHMENT I

Task	Agencies Involved	County of Los Angeles Impact	Corrective Action	Timeframe	Status
County of Los Angeles (County) Board of Supervisors (BOS) briefing by Southern California Edison (SCE) Senior Leadership	SCE and BOS	Improves communications and the establishment of priorities	Not applicable	October 23, 2018 - January 30, 2019	Pending
SCE to conduct PSPS Community Focus Planning meetings for communities in the County who are in high hazard fire zones	SCE, Chief Executive Office (CEO)-Office of Emergency Management (OEM) and other departments as needed	To better inform residents and more thoroughly address the impacts of PSPS outages	SCE to conduct face-to-face small group meetings, to increase community awareness of the PSPS protocol and address community concerns over PSPS impacts	November 2018 - April 2019	Pending
Notification Protocols	Cities, Special Districts, community organizations, and BOS and other departments	The PSPS notification process for the October 2018 Red Flag event did not reach all of the intended recipients	Addressed via the After Action Report (AAR) process and the conduction of joint tactical exercises by SCE and County departments (*See Exercise Task)	The AAR is scheduled for January 16, 2019, at the County Emergency Operations Center	Underway
County Charging Centers	County Library, Workforce Development, Aging and Community Services, and Parks and Recreation	Improves outcomes for affected residents	Determine SCE support to County operated Charging Centers	The County Plan is completed. SCE has not offered material to support the County charging centers or implemented their own program to date	N/A

**County of Los Angeles - Chief Executive Office**  
**OFFICE OF EMERGENCY MANAGEMENT**  
**Action Plan**  
**for**  
**Southern California Edison's Public Safety Power Shutoff (PSPS)**

ATTACHMENT I

Task	Agencies Involved	County of Los Angeles Impact	Corrective Action	Timeframe	Status
SCE Outage Area Maps	Los Angeles County Operational Area Disaster Management Area Coordinators (DMACs), Operational Area Partners, and County departments	Initial outage area maps provided by SCE lacked sufficient detail for accurate planning	Provide complete set of Countywide outage area maps in the requested resolution	January 3, 2019, SCE provided complete set of outage maps.	Completed
*Joint County/SCE Exercises	SCE, DMACs, Operational Area stakeholders, and County departments	Improve communications, collaboration, develop Standard Operating Guidelines (SOG), and clarify roles and responsibilities	Incorporate lessons learned from the October 14-15, 2018 event	<b>Table Top (TTX):</b> Joint scheduling underway. <b>Functional:</b> Date will be determined after the TTX is completed	Pending
Formation of Executive Steering Committee and Work Group Task Force	County Sheriff, Animal Care and Control (ACC), Children and Family Services (DFCS), County Counsel, Fire, Health Services (DHS), Internal Services (ISD), DPR, Probation, Public Health (DPH), and Public Works	Improves outcomes through development of SOG, information sharing protocols, and exercise activities	Not applicable	Not applicable	Completed
Digital Information Portal	SCE and County departments	Improves information sharing, especially for GIS files which are very large	Not applicable	The portal has been created. Further utilization will support trainings and exercises	Completed



**County of Los Angeles - Chief Executive Office  
OFFICE OF EMERGENCY MANAGEMENT  
Action Plan  
for  
Southern California Edison's Public Safety Power Shutoff (PSPS)**

**ATTACHMENT I**

Task	Agencies Involved	County of Los Angeles Impact	Corrective Action	Timeframe	Status
Planning meeting specific to medical and health concerns including critical care lists access for emergency planning and response	SCE and County DHS, DPH, and Public Social Services	Personal data regarding County residents who may be medically dependent on electrical power exists on several separate data bases, including one managed by SCE	This meeting will explore options to reconcile these lists to ensure that residents on both lists are notified of the planned PSPS and their needs addressed before they lose power	DHS met with SCE on November 27, 2018, and requested the SCE GIS files and boundaries of all the circuits so that the medical and health layers could be installed by DHS. This has been completed. DHS is also working on how to improve sharing of lists (eMpower) and their critical care list. This will need more development due to legal concerns	Significant progress made, legal review remains underway
Standby power assessments and planning services for County departments	ISD	Enhance standby power capabilities and fiscal needs to add/replace backup systems. Provide estimates of when comprehensive review of standby power will be completed. Share portions of ISD Strategic Plan related to enhancing standby power capabilities	Not applicable	To be determined	Underway
Identification of unincorporated communities at risk of PSPS	County Sheriff, Fire, CEO-OEM and Unincorporated Area Services, and DPH	Reduces unknown impacts and facilitates enhanced planning and preparedness	Not applicable	Assessments ongoing	Continuous

**County of Los Angeles - Chief Executive Office  
OFFICE OF EMERGENCY MANAGEMENT  
Action Plan  
for  
Southern California Edison's Public Safety Power Shutoff (PSPS)**

**ATTACHMENT I**

Task	Agencies Involved	County of Los Angeles Impact	Corrective Action	Timeframe	Status
Determine PSPS impacts to Long Term Care (LTC) facilities	SCE, DHS and DPH. Work with the County Department of Mental Health as appropriate to determine the impact to mental health facilities and infrastructure	LTC are particularly impacted by PSPS	LTC facilities are concerned about PSPS and timely notification because some don't have emergency back-up power. Once DHS completes the circuit and boundary maps, we will be able to identify the facilities that will be impacted by PSPS and provide timely notification	November 1, 2018 - January 31, 2019	Underway
The impact of PSPS to cellular providers is not well defined	SCE	Residents reliant on voice over internet protocol or cellular services may be adversely impacted by PSPS	OEM to engage with SCE to facilitate the sharing of SCE outage area maps with cellular providers so that unknowns can be eliminated and solutions deployed	January 1 - January 30, 2019	Underway

Revised 1-23-2019

County of Los Angeles  
Chief Executive Office  
Office of Emergency Management

Review of  
Southern California Edison Public Safety Power Shutoff (PSPS)  
Item No. 48-A, Agenda of October 2, 2018

---

I. **Background**

Southern California Edison (SCE) recently announced a plan to de-energize power lines in response to very high fire-danger conditions. These conditions are normally associated with high winds strong enough to topple trees into power lines and blow combustible materials into the energized lines where it falls back to the ground igniting fires. To combat this problem, SCE is taking steps to reduce the likelihood of SCE power lines starting wildfires. These steps include proactively de-energizing the lines when weather conditions promote fire development, making upgrades to their electrical infrastructure, bolstering their situational awareness capabilities, and enhancing their operational practices.

Public Safety Power Shutoff (PSPS) as described by SCE:

*In alignment with its operational safety practices, we may proactively shut off power in high fire risk areas when extreme weather conditions present a clear and imminent danger to public safety. We take pride in service reliability; de-energizing customers is not something we take lightly and is only sparingly used in the most extreme conditions. This will only occur after exhausting a number of other operational practices.*

This practice of PSPS has already been implemented by other California electrical power providers such as Pacific Gas & Electric Company (PG&E) and San Diego Gas & Electric Company (SDG&E), but it is a new practice for SCE.

The implementation of PSPS has raised numerous concerns amongst elected officials, public safety leaders, health care providers, emergency management planners, the private sector, educational institutions, residents who reside in hazardous fire areas and SCE customers who are medically dependent on electrical power for life serving functions.



## **II. A PSPS Case History: October 14-15, 2018, Red Flag Warning Event**

SCE implemented PSPS for Los Angeles County for the first time on October 14-15, 2018, due to the region experiencing Red Flag Warning fire conditions as determined by the National Weather Service. A Red Flag Warning condition exists when a combination of strong winds, warm temperatures, and low humidity combine to increase the likelihood of damaging wildfires. In general, PSPS events will almost always coincide with Red Flag Warning days, as the natural phenomenon's that create Red Flag conditions are the same that trigger PSPS, although milder Red Flag Warning days may not trigger a PSPS.

In response to the October Red Flag conditions, SCE notified the County of Los Angeles (County) on October 13, 2018, that SCE would be monitoring numerous circuits for potential PSPS over a wide swath of the County on October 14, 2018. This short-notice announcement by SCE triggered a significant response by County emergency management and public safety leadership. Notification to County departments and local jurisdictions was initiated as a substantial amount of planning and preparedness was required to address the numerous unknowns generated by the PSPS's impact to the County's operations and to the impacted cities.

Constant communication between County staff and SCE was necessary; including the assignment of two County staff to the SCE Emergency Operations Center on October 14, 2018, to ensure close coordination should PSPS circuits be shutoff. Ultimately, SCE reported that no circuits were shutoff as a result of PSPS, but there were outages attributed to weather conditions. From this inaugural event, there were numerous lessons learned and documented through an ongoing after-action process.

The initial lessons learned include:

- Outreach efforts by SCE did not reach all of the potential stakeholders impacted by the PSPS event. Although SCE's protocol is to notice their customers through text, voice, and e-mail, not all of their customers are reachable by these methods. As an example, there are instances where the owner of a multi-family dwelling is entered in SCE's customer notification database, but the individual occupants are not.
- Board offices, prior to and during the event, were not adequately informed or provided with sufficient referral resources for constituents who called in with questions.
- The broad reach and thorough message penetration of broadcast media were not fully utilized by SCE. SCE indicated they were generally focused on

regional media markets associated with the areas likely to be impacted by PSPS. Although people residing in the more PSPS prone areas utilize regional media, the reach and pace of regional media are not suited to the highly dynamic nature of PSPS events.

For example, when the Southern California Gas Company faced the possibility of curtailing gas supplies which could have affected electrical power generation, they retained the services of a media marketing company to develop a communication strategy, which included public service orientated promotional materials, and commercial airtime to educate and inform their customers of the impacts. Their material is available on the Internet at: <http://conserveenergysocal.com/>.

- SCE underestimated the sheer size of the scale and scope needed to adequately inform and communicate with the Los Angeles County Operational Area's government officials, public safety leaders, emergency managers, healthcare providers, critical infrastructure managers and other critical stakeholders. This notification process is a direct responsibility of SCE.
- The highly compressed timeframe between PSPS announcement and implementation for the October 14-15, 2018, Red Flag Warning was disruptive to County operations and did not follow SCE's own PSPS notification guidelines. According to SCE's own published timeline, public safety leaders are to be alerted between seventy-two (72) and forty-eight (48) hours in advance of a PSPS, whereas for the October 14-15, 2018, event, the notification was thirty (30) hours.
- PSPS circuit outage maps initially provided by SCE lacked sufficient detail to be of operational use. The maps showed SCE circuits but did not clearly identify the boundaries of the power outage. Having detailed outage maps are the single most important resource that County emergency planners can use to pre-plan for the impacts of PSPS. Without the detailed outage maps, a very large ramp-up of County resources was necessary to plan for any and all contingencies, which was inefficient and taxing to County responders.

On January 3, 2019, SCE provided a complete set of Outage Boundaries Maps to OEM. These maps are now being integrated into the PSPS planning process.

- A staff member from a County Board of Supervisors (Board) office checked the functionality of the call in telephone numbers provided to the public and found the SCE call taker to be poorly informed about the PSPS program.
- SCE emergency management and government affairs staff did maintain a high level of availability around-the-clock and responded promptly to County

requests for information. Many of the emerging hurdles were overcome as a direct result of the SCE emergency management staff working hand-in-hand with County staff to resolve issues.

- The determination that a combination of after-action processes and joint exercises is necessary to identify in finer detail the potential impacts to County operations, critical infrastructure, and emergency response capabilities. Additionally, the risks associated with those impacts must be calculated, and further overall refinement of the PSPS procedures by SCE is necessary.

### **III. Responses to the Board Motion**

1. Identification of the unincorporated areas most likely to be affected by SCE's PSPS program including an estimated number of times the PSPS program may have been implemented over the previous five years.

Response:

Determining which unincorporated communities will be affected by PSPS requires further analysis by SCE and County emergency planners. The County has just recently received a complete set of the outage area maps for the entire County. These maps must be analyzed to determine if they have sufficient detail for accurate determinations, as well as County emergency planners need to better understand how SCE implements the shutoffs during actual events. As an example, SCE has explained that they will initially take down an entire circuit, but as the outage progresses, they are able to fine-tune the outage to only the area most at risk. Any reduction of the outage areas is welcome, but understanding how this occurs operationally will take further analysis and experience.

As for the frequency of PSPS events, determining this is very difficult as the outages are determined by actual conditions on the ground, as observed in real time by SCE staff. These conditions such as topography, weather, the structural integrity of SCE equipment, and a prediction of risk are all factors evaluated in the decision of when and where to shutoff circuits.

PSPS tends to occur during Red Flag Warning conditions. Reviewing historical data for the number of Red Flag days can give some insights as to the number of days PSPS could be implemented. This is at best a very rough indicator as the relationship between Red Flag and PSPS is not direct, and Red Flag conditions are frequently in effect for only a portion of the County at any one time.

Although the data available from the National Weather Service only covers the last four years, there is an unmistakable upward trend in the number of Red



Flag Warning days with the year 2017 having both a record total number of days, as well as the single longest continuous uninterrupted Red Flag Warning event which coincided with the second largest wildfire in California history, the Thomas Fire. See Exhibit A, Red Flag Days in Los Angeles County, 2015-2018.

2. Potential impacts to critical infrastructure and emergency responders along with the risks associated with those impacts.

Response:

Since the announcement of the PSPS, a considerable amount of review and assessment of the County infrastructure has been initiated by the County Departments of Sheriff, Health Services (DHS), Fire, Public Works (DPW), and Internal Services (ISD). In general, the County's most critical and essential functions are protected with standby power (i.e. hospitals, dams, and waterworks). Further assessments are underway with a focus on second and third tier operations where prolonged outages could disrupt operations. Should these assessments reveal significant impacts from PSPS, additional reporting will be provided.

Fire, in particular, has identified certain facilities, which will require additional investment in standby power capabilities to address the impacts of PSPS. In the short term, they have developed a redeployment strategy of existing generator resources to address this need while they develop a long-term strategy.

For County facilities not currently equipped with standby power, ISD who takes a leadership role in assessing, maintaining, and providing standby power capabilities to many County departments, maintains a generator mechanic on standby 24/7/365 with access to 20 portable generators, and has arrangements in place with private vendors that offer additional standby power capabilities.

Also, for the first time, County emergency planners will have access to the SCE outage area maps that identify the areas where a PSPS may occur. This is a new resource previously unavailable, which we will use to analyze and identify County infrastructure located in these outage areas.

Even with existing standby power in place and ISD's quick reaction capability, the concern is still high for the unknowns that the PSPS's create. These unknowns include:

- A potential for an increase in 911 calls for service by first responders.

- Possible disruptions to community notification and emergency response communication systems due to power outages, which exceed existing standby power design requirements.
  - Insufficient backup power capabilities for community members who are medically dependent on electrically powered equipment.
  - Residents reliant on electrical power to operate domestic well water systems are particularly impacted by the loss of power as they lose access to water for drinking, cooking, and bathing.
  - Increased property loss and damage related to power disruptions impacting water delivery systems used for firefighting purposes.
  - An acute impact to long-term care facilities should the length of outages exceed existing mandated standby power capabilities.
3. Analysis of lessons learned from other jurisdictions, such as San Diego County where power shutoff procedures have been in use for a number of years.

Response:

As described above, the recent Red Flag Warning and implementation of PSPS by SCE provided a real-time opportunity to assess the lessons learned in the County. In comparison, SDG&E, and San Diego County (SD County) implemented the practice of PSPS in 2013 after nearly two years of negotiations between the SD County and SDG&E. Two years were necessary to clearly define and articulate policy, assign roles and responsibilities, and educate consumers in a County that is one-third the population of this County and contains just eighteen (18) independent cities versus the Los Angeles County's (LA County) eighty-eight (88) independent cities. Since the program's conception, SDG&E has de-energized on 19 occasions/days resulting from 10 weather events, affecting approximately 21,450 customers.

Lessons learned from SD County and SDG&E include:

- Implementing a Community Resource Center Program: SDG&E has made generators available and provided the required facility electrical connections to eight Community Resource Centers (CRC). If SDG&E anticipates the power to be off for an extended period, they plan to open a CRC in affected areas as needed. These CRC are places residents can go to get water and snacks, charge their mobile telephones, obtain Wi-Fi access, and get up-to-date information on outages from SDG&E staff. These CRC are open for up to 10 hours at a time during daylight hours only,

for the length of the PSPS event. SCE has not offered a similar program to LA County residents impacted by PSPS.

In the absence of a program by SCE, the County departments of LA County Library (Library), Parks and Recreation (DPR), and Workforce Development, Aging, and Community Services (WDACS) are developing a plan to offer a County version of the charging center concept in County facilities near PSPS impacted communities.

SDG&E is researching the feasibility of Micro Grids and battery storage for some areas.

SCE did an analysis of lessons learned from other jurisdictions, such as SDG&E's practice of PSPS and provided a response for inclusion in this Report (Exhibit B).

Lessons learned from other jurisdictions:

- The California Office of Emergency Services (Cal-OES) is the State agency responsible for emergency preparedness, response, and recovery statewide and has experience with all three of the California electrical power providers who have implemented PSPS. The Director of Cal-OES, in conjunction with the President of the California Public Utilities Commission (CPUC), the Director of the California Department of Forestry and Fire Protection, and the Commissioner of the CPUC have issued a letter of expectations to all three utility providers (Exhibit C). The letter outlines many of the same concerns expressed throughout this report and requests the utility providers to respond appropriately to address these concerns.
4. An analysis of whether the identified impacts and risks can be mitigated and recommendations for doing so.

Response:

To assess the impacts of PSPS and determine the appropriate preparedness, response and recovery measures necessary to protect lives, property, and the environment, OEM has been proactively engaged with agencies and departments to properly communicate the PSPS plan with the County departments, local jurisdictions, and County residents.

The following is a list of partners involved in our collaborative effort:

- SCE
- Los Angeles County cities and Special Districts in the Operational Area



- County departments: Sheriff, Animal Care and Control, Fire, DHS, ISD, Library, DPR, Public Health, DPW, Probation, and WDACS

This engagement remains ongoing and includes the development of an Action Plan (Attachment I) which is further described below:

- Assembling the information needed to build a GIS map of the County unincorporated communities, critical County infrastructure, and the SCE circuits identified for PSPS. This single integrated map will allow the identification of critical County infrastructure likely to be effected by specific PSPS outage scenarios. County emergency planners believe these outage area maps are a critical tool necessary for the County to do a thorough job of planning for, and responding to, PSPS.
  - Critical analysis of the SCE plans and protocols which guide the implementation of PSPS and the alerting and notification process for Board offices, County departments, Operational Area cities and Special Districts, community stakeholders, and the private sector.
  - Facilitating face-to-face briefings between SCE's representatives and the County leadership at the Board, Department Head, and field operational levels.
  - The establishment of a County owned and managed digital portal where the PSPS related information can be stored and be accessible to both County and SCE emergency planners.
  - The establishment of a PSPS Executive Steering Committee and Work Group Task Force to bring County public safety and emergency management leadership together to jointly address the numerous operational aspects of the PSPS.
  - Ongoing analysis of the County's infrastructure and standby power needs to ensure the delivery of critical and essential County services.
  - Establishment of a procedure with SCE to prioritize re-energizing critical County and Operational Area facilities.
  - Determination of SCE provided support to critical care customers and vulnerable communities to offset PSPS impacts.
  - Conducting an after-action process following each activation to identify areas of concern and assign responsibility to mitigate the issue.
5. and 6. Inventory and status of back-up systems with their state of repair, remaining useful life, and capacity to operate (hours/days) and identify system types and replacement needs at critical County owned facilities.

Response:

The implementation by SCE PSPS has prompted numerous County departments to make a fresh assessment of their standby power capabilities.

Historically, most existing standby systems are powered by fossil fuels, with diesel being the most common fuel type. There is no single all-encompassing list of standby power capabilities within the County available at the time of this report, as individual departments are responsible for the maintenance and replacement schedules for their systems, or entering into service agreements with ISD for these services. However, we are currently evaluating facilities and compiling a list of existing back-up systems and their status.

As a component of the new five-year Strategic Plan for ISD, Facilities Operations Service (FOS), has made it a priority to engage customer departments in prevention and early intervention planning for seasonal activities such as heat waves, cold and wet weather, and wind. ISD FOS will be establishing routine planning with customer departments to take advance actions such as additional generator tests and special service maintenance needs prior to predictable seasonal activity that can cause power issues impacting departmental operations.

Additionally, FOS will be incorporating planning work with customer departments, and as-needed coordination with DPW and CEO Capital Projects, to establish standards and guidelines for sufficient generator power where gaps may exist.

**RED FLAG DAYS IN LOS ANGELES COUNTY**  
**2015-2018**

<u>Zone</u>	2015	2016	2017	2018
Los Angeles Coast	2	4	11	4
Santa Monica Mountains	6	7	20	9
San Fernando Valley	1	4	16	9
San Gabriel Valley	0	2	11	3
Los Angeles Mountains	4	20	22	13
Antelope Valley	0	9	1	0
Santa Clarita Valley	4	6	15	12
Total	17	52	96	50

Sources @ National Weather Service: [www.noaa.gov/](http://www.noaa.gov/)



***“Identification of the unincorporated areas most likely to be affected by Edison’s PSPS program including an estimate of the number of times the PSPS program would have been implemented in each community over the previous 5 years using SCE’s proposed criteria”***

- SCE identified approximately 420 distribution circuits in Los Angeles County that traverse High Fire Risk Areas (HFRA). SCE has defined HFRA as areas identified as Tier 2 or 3 on the California Public Utilities Commission Fire-Threat Map adopted January 2018, plus areas SCE previously designated as HFRA. This represents approximately 18 percent of the total number of circuits in Los Angeles County.
- SCE has provided Office of Emergency Management and other county departments the GIS layers of all HFRA circuits in Los Angeles County in both incorporated and unincorporated areas. All circuits in HFRAs are subject to the PSPS protocol.
- SCE understands knowing where and how often SCE would have used PSPS in the past may help the County understand where and how often it may happen in the future. Based on our analysis, we anticipate that extreme fire conditions will likely result in close monitoring of the candidate circuits that traverse through the HFRA. While we anticipate reaching this close monitoring stage, including the possibility of initial customer notification of an impending PSPS, this may or may not lead to an actual power shut off. An activation of PSPS will only be made on selected circuits that pose imminent danger to the communities served based on a variety of factors discussed previously. The actual number of events that would result in a pre-emptive shutoff (independent of automatic protective devices opening circuits as-designed) is impossible to forecast with any level of certainty.
- SCE cannot estimate the number of times the PSPS program would have been implemented in the past. As we discussed in our meeting, weather is not the only factor considered when SCE makes the decision to de-energize circuits. Without information on each of these factors, we cannot provide an estimate of the number of times we would have activated PSPS at the community or county level. Below is some of the important input that we do not have to make this estimate:
  - A key information source used to evaluate if a circuit should be de-energized is the observations of experienced field personnel reporting on conditions.  
Without the input of our field personnel, we do not have sufficient information to determine if a circuit would be de-energized
  - Another factor used to determine if a circuit should be de-energized is input from local emergency managers and fire personnel. Specifically, SCE will be seeking input on current emergency operations that may impact our decision to de-energize. Without the information on past emergency operations, we do not have sufficient information to determine if a line would be de-energized.
  - SCE does not have detailed data on historical weather conditions by community. Even if we did have that information, without the above information we cannot determine if a particular circuit would be de-energized.

***“An analysis of any lessons learned from other jurisdictions, such as San Diego County where power shutoff procedures have been in use for a number of years”***

- SCE met with SDG&E and the San Diego County Office of Emergency Services. Among the recommendations we heard and have implemented are:
  - Early education of customers and stakeholders
    - Letter sent to all customers that may be impacted by a PSPS. The letter (attached) describes the PSPS protocol, provides information on how customers could update their contact information, and provides personal preparedness and safety information.
  - Holding community meetings – five in Los Angeles County
    - West San Gabriel Valley
    - East San Gabriel Valley
    - Palos Verdes Peninsula
    - Santa Clarita/Antelope Valley
    - Malibu/Calabasas/Topanga area
  - Outreach to local government
    - Briefed elected officials and emergency responders in impacted cities in LA County
    - Briefed Supervisor Offices
    - Briefed multiple LA County departments
    - SCE has met with Essential Use customers including water providers, hospitals, and communication companies to educate them about the potential for PSPS, so they are prepared to provide mitigation for the potential outages
  - Provide advance notification to customers and government agencies
    - To the extent possible, provide 48-and 24-hour advance notifications. Rapidly changing weather conditions may result in less advance notification.
    - Designated officials in impacted cities and counties will receive notification before customers are notified
  - Conduct community meetings in the impacted areas after an PSPS event to solicit feedback for future improvements
    - SCE will host additional community meetings after a PSPS de-energization event to seek feedback for continuous improvement.



## Protecting Against the Threat of Wildfires

Dear Neighbor,

Protecting you and your family from the threat of wildfires is our company's highest priority. Taking important actions to reduce the risk of wildfires has long been a focus for us, and today we continue to look for ways to enhance our operational practices and strengthen our infrastructure to address the increased threat of wildfires.

The 2017 wildfire season demonstrated the increased threat of wildfires in California. Wildfires threaten not only our homes, our lives and our economy, but also our fight to reduce California's carbon footprint. Without action, things will only get worse. It will lead to a hotter and drier California. With the reality of a now year-round wildfire season, we must all take significant measures to help mitigate these risks under the new normal conditions in our state.

As a community member, who has a home or business in a high fire risk area, we are writing you today to share information about what we at SCE are doing to help mitigate wildfire risks. We also want you to know that we are hosting community meetings throughout our service territory to share more details about our Wildfire Mitigation Program, including our Public Safety Power Shutoff protocol and other efforts to help keep our customers and communities safe. You should receive information about a meeting in your area soon.

### **What is a Public Safety Power Shutoff?**

**When extreme fire conditions — such as high winds — present a clear danger to the public, we may shut off power in high fire risk areas.** De-energizing customers is not something we take lightly. Being without power can be disruptive to you and your family and it is our intention to use this protocol sparingly to manage only the most extreme conditions. We view these Public Safety Power Shutoffs as a last resort, only after a number of other operational practices have been exhausted.

Should a Public Safety Power Shutoff be likely, we will attempt to notify you prior to shutting your power off. In order for us to do this, it is important for us to have your most updated contact information. **Please call us at 1-800-655-4555, or sign up online for our "Outage Alerts" at [SCE.com](http://SCE.com) and click on My Account > Profile > Outage Alert Preferences.**

To learn more about Public Safety Power Shutoffs, visit [www.sce.com/wildfire](http://www.sce.com/wildfire).

### **Ready to Respond Together**

Roughly a quarter of our service territory, covering about 9 million acres, is considered to be in high fire risk areas. California's wildfire season is now year-round. Nothing is more important than the safety of you, your family and your community.



We have a comprehensive wildfire safety program to address this. It includes, but is not limited to, the following:

- Working closely with local fire agencies and coordinating on response plans
- Partnering with and funding nonprofits that work on various fire mitigation efforts, such as the California Conservation Corps (which helps remove excess brush that can fuel fires)
- Aggressively pruning trees and vegetation adjacent to power lines
- Using technologies to advance fire safety throughout our system (e.g. weather stations and real-time cameras to monitor high fire risk areas)

As we share more about SCE's ongoing efforts to keep you and your family safe, we encourage you to take steps to learn more about how you can be prepared. Please consider taking a moment to do the following:

- Visit the CAL FIRE website at [www.readyforwildfire.org](http://www.readyforwildfire.org) to learn more about defensible space, hardening your home and fire safe landscaping
- Inquire about your city/county vegetation ordinances
- Visit your county's Office of Emergency Service website to learn important information about what to do and where to go in emergencies
- Develop and practice a customized family disaster plan

## Safety Tips for Outages and Emergency Events

- Customers with a medical condition that requires electric-powered life support equipment should be sure to have a backup power system in place or make other plans for health and welfare during an outage.
- If you use medical equipment in your home, SCE offers a Medical Baseline program. To learn more about the program and its benefits, including enrollment, please visit [sce.com](http://sce.com) or call SCE at 1-800-655-4555.
- If you have electric gates, learn how to operate them manually. Notify any security companies that monitor your home or business.
- Shut off or disconnect all sensitive electronics before the outage to prevent damage or loss of data. If you have a portable gas generator, identify an outdoor location where you can safely use it during a power outage. Never use it indoors.
- Never connect a generator directly to your home's circuit breaker panel. This can cause "backfeeding," which poses serious electrocution risks for utility workers when trying to restore your power.
- Only use a UL-approved extension cord and power strip for your most critical loads (e.g., lights, refrigerator, computer or medical equipment).
- Consider extra fuel for your generator for extended outages since local fueling stations may be without power as well. Keep fuel in approved containers and in a safe location away from ignition sources.





**Cal OES**  
GOVERNOR'S OFFICE  
OF EMERGENCY SERVICES



---

October 26, 2018

Geisha Williams  
Chief Executive Officer  
Pacific Gas and Electric Company  
77 Beale Street  
San Francisco, California 94105

Kevin Sagara  
Chairman and Chief Executive Officer  
San Diego Gas and Electric  
8330 Century Park Court  
San Diego, California 92123-4150

Kevin M. Payne  
Chief Executive Officer  
Southern California Edison  
2244 Walnut Grove Avenue  
Rosemead, California 91770

**Subject: Public Safety Power Shut-Off**

Dear Ms. Williams, Mr. Sagara, and Mr. Payne:

Ensuring the safety of Californians is of the utmost importance to the Governor's Office of Emergency Services (Cal OES), the Department of Forestry and Fire Protection (CAL FIRE), and the California Public Utilities Commission (CPUC). Recent actions of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E), to proactively de-energize power lines during high wildfire danger weather conditions make clear that utilities must provide specific, real-time information so the State can take appropriate steps to ensure public safety. This letter sets forth Cal OES, CAL FIRE, and the CPUC's expectations regarding your potential Public Safety Power Shut-off (PSPS) that may occur during high wildfire danger weather conditions.

NOTIFICATIONS

The State expects PG&E, SCE, and SDG&E to provide notifications at several distinct stages of a PSPS event. These notifications must be made to the California State Warning Center [[warning.center@caloes.ca.gov](mailto:warning.center@caloes.ca.gov); (916) 845-8911] as follows:







**Cal OES**  
GOVERNOR'S OFFICE  
OF EMERGENCY SERVICES



- First, immediately notify the California State Warning Center upon the utility's decision to activate its PSPS program to consider de-energization during high wildfire danger weather conditions. This notice to the California State Warning Center must be made in advance of any public notice of this potential de-energization.
- Second, immediately notify the California State Warning Center upon the decision to carry out the de-energizing of power lines.
- Third, immediately notify the California State Warning Center upon the actual de-energization of power lines.
- Finally, immediately notify the California State Warning Center upon the restoration of power.

#### INFORMATION AND BRIEFINGS

In its initial notification(s) to the California State Warning Center, the utility must provide the designated point of contact, to include name, phone number, and email address, within that utility who will serve as the primary source of updated information regarding the potential PSPS.

The utility must also provide the State with its proposed operational periods and provide briefings prior to the PSPS, during the power shut-down, and during restoration. The State expects no less than three briefings per day. In the event the State requests a modification to the briefing schedule, the utility is expected to make its best effort to comply with the State's request.

In these briefings, the State expects the utility to provide information including, but not limited to: the expected duration of the power outage; the number of customers potentially impacted; the method of public notification, including the proposed language to be disseminated to the public; the plan for public messaging, as well as coordination with Cal OES, CAL FIRE, and local public safety agencies; and information regarding the deployment of any asset.

Additionally, if Cal OES, CAL FIRE, or the CPUC deploys a representative to a utility's Emergency Operations Center, the State expects the utility to accommodate that deployment, include the State representative in its operational briefings, and provide workspace within its Emergency Operations Center.

#### DATA

It is critical that each utility provide the State with real-time data, in advance of the utility's actual de-energization, so the State can prepare for the proposed power outage. Therefore, upon its initial notification to the California State Warning Center of a potential de-energization, the utility must provide the State with all data related to the potentially-impacted areas, as set forth below. Additionally, the State must have the ability to share such data with any state or local agency it deems necessary to protect public safety.





**Cal OES**  
GOVERNOR'S OFFICE  
OF EMERGENCY SERVICES



The utility must provide the State with maps in PDF format, containing: outage areas; circuits; impacted critical customers; and roads for distribution to emergency response personnel at the local, state, and federal partner agencies. Additionally, each utility must provide GIS datasets, as set forth below, in an ESRI-compliant web service updated and maintained by the utility. If web service is unavailable, data can be in geodatabase format, shapefile, or a KMZ file type. The utility must provide updated files as the data changes. Any point location data provided via a spreadsheet must include an address and/or latitude and longitude.

The specific GIS datasets are as follows:

- Planned Outage Areas (Polygon)
  - Customers per outage area
  - Time of outage
  - Time to restoration
  - # of Medical Baseline Customers
- Current Outage Areas (Polygon)
  - Customers per outage area
  - Time of outage
  - Time to restoration
  - # of Medical Baseline Customers
- Impacted Circuits (Line)
  - Circuit type
  - Customers per circuit
  - Voltage
  - # of Medical Baseline Customers
- Impacted Critical Customers (e.g. Hospitals, Fire Stations, Police Stations, Water/Irrigation Districts, Waste Water Treatment Plants, Telecom, Schools) (Point)
  - Facility Name
  - Street Address
  - City
  - ZIP
  - County
  - Latitude
  - Longitude
  - Customer Type
- Medical Baseline Customer (this can be provided in a spreadsheet format)
  - Impacted Population, by County
  - Impacted Population, by City







**Cal OES**  
GOVERNOR'S OFFICE  
OF EMERGENCY SERVICES



Having real-time information in preparation for, during, and following a utility's de-energization of a community is essential for the preservation of public safety. This effort will ensure that the State, as well as all potentially-impacted local jurisdictions, are able to effectively prepare for any impacts that may result from a utility's de-energization and respond accordingly. We look forward to your cooperation.

Sincerely,

Mark S. Ghilarducci  
Director, Governor's Office of  
Emergency Services

Ken Pimlott  
Director, California Department of  
Forestry and Fire Protection

Michael Picker  
President, California Public Utilities  
Commission

Cliff Rechtschaffen  
Commissioner, California Public Utilities  
Commission

