

PUBLIC ALERTS FOR PUBLIC SAFETY POWER SHUTOFFS AND EMERGENCIES

SUMMARY

The 2019-20 Santa Barbara County Grand Jury investigated the methods and effectiveness of County public communications providing actionable information and alerts for Public Safety Power Shutoffs (PSPS) and emergencies. The methods include webpages, hotlines, announcements on public and social media, and contacts with individuals by email, phone, text and sometimes personal visit. PSPS and emergencies present different decision-making challenges, so the procedures for timely and reliable communications are different. A PSPS event is scheduled and predictable but it is difficult to ensure that everyone is contacted because a small staff is used to cover a large area and population. Emergency events often involve a larger staff and a smaller affected population, but they are rarely predictable and need rapid decisions and communications. The Jury found that staff in the County's Office of Emergency Management (OEM), Sheriff's Office, and the Public Health and Fire Departments have identified and made plans for many communications problems, both existing and potential.

Some of these plans are incomplete, and the Jury found other problems needing attention. The Jury recommends three areas for improvement:

1. Some groups may not get the alerts they need, including those whose electricity accounts are held by landlords or property managers, and those who understand neither English nor Spanish.
2. People who depend on electricity for survival to run medical devices, refrigerate medications, or run air conditioners, wheelchairs, elevators and other appliances may not get the extra information they need, or be able to carry out the actions advised for them. Those who cannot find shelter with family or friends could be especially at risk.
3. People seeking information to prepare for PSPS or emergencies may not be able to find it on County web pages, which are scattered, hard to navigate, incomplete and poorly coordinated.

INTRODUCTION

This report describes two related investigations by the 2019-20 Santa Barbara County Grand Jury (Jury).

The first concerns Public Safety Power Shutoffs (PSPS). The 2017 California wildfire season was the most destructive on record. Several of these fires were later determined to have been ignited by power lines. One pro-active safety measure is to temporarily shut off power to a line predicted to be at high risk of causing a fire due to dry vegetation, imminent strong winds and extreme heat. This measure, called a PSPS or a De-energization, was first used by San Diego Gas and Electric in 2013. Santa Barbara County's power lines are owned by Southern California Edison (SCE) and Pacific Gas and Electric (PG&E). Both began using PSPS in December 2017 and early 2018 respectively.

Active power lines can ignite wildfires in several ways, especially in high winds. These include:

- Breaking: in up to 30% of cases the fuses and circuit breakers are not triggered when the line breaks. The line remains active, producing high-temperature arcs which can ignite nearby vegetation.
- Vegetation contact: if a branch falls across two lines, it can cause high-temperature arcing or itself become ignited.
- Conductor slap: lines slapping together can create high-energy arcing and eject hot metal particles capable of igniting nearby vegetation.¹

Decisions in Santa Barbara County to begin or end a PSPS are made entirely by SCE or PG&E, which are overseen by the California Public Utilities Commission (PUC) and the State legislature. Neither public officials nor the public have any input to these decisions. The Jury has no jurisdiction over these entities. The investigation focused on local issues: possible dangers to the public and especially to vulnerable groups, methods for notifying these groups and averting these dangers, the reliability of these methods, and the actions people should take before and after notification.

After initial study, the Jury restricted its investigation to communications with the public. PSPS raises many other issues. For example, the most important communications are usually those with vital services, such as firefighting, law enforcement including the California Highway Patrol, hospitals, medical clinics, businesses such as groceries, gas stations or hotels, transportation and communications systems, water suppliers, sanitation, public information agencies, and the emergency operations themselves. Averting dangers in the future may require new infrastructure, such as cooling centers, buried power lines, micro-grids, and neighborhood self-help groups. These issues are complex, and not covered in this Grand Jury report.

The second investigation concerns emergencies in general. The 2010-2011 Santa Barbara County Grand Jury produced a valuable report on this topic. It discussed the role of city governments as well as the County. However, there have been some organizational and technology changes at the County level since then.

Emergencies raise far more issues than PSPS. There is a great variety of possibilities listed on the Federal Emergency Management (FEMA) website² under Disasters and Emergencies, and in Table 1 of the 2017 Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan.³ Nearly all emergencies require different types of preparation and complex responses, including contingency plans and quick decisions as events unfold. Many of these are not discussed in this Report. For example, this Report does not discuss the COVID-19 pandemic, or future catastrophes such as those expected from climate change and sea level rise. Nor does it discuss earthquakes and tsunamis⁴ for which warnings are mainly a State or Federal responsibility, though local authorities are very active in the responses, including the alerts and notifications, and have detailed Emergency Plans.

For both PSPS and emergencies, public communications provide action advice as well as information. The advice must reach the people who need it and be acted on promptly. Although there are many differences, most public communication issues arising in PSPS events also arise in emergencies.

¹ wildfiremitigation.tees.tamus.edu/faqs/how-power-lines-cause-wildfires. Last visited May 25, 2020.

² www.ready.gov/ Last visited May 25, 2020

³ www.countyofsb.org/ceo/asset.c/3416 Last visited May 25, 2020

⁴ earthquake.ca.gov/ and www.tsunami.gov/ Last visited May 25, 2020

For these communications four problems must be solved: whom to tell, how to tell, when to tell and what to tell. The answers to all four are constrained both by resource limitations and the need to avoid confusion and warning fatigue due to frequent false alarms.

Differences between PSPS and Emergencies

Despite their similarities, PSPS and emergencies face different challenges. A PSPS event will not be classified as an emergency by the County except in extreme cases when external help is needed.

A defining characteristic of an emergency is the potential need for the evacuation of a neighborhood. A PSPS does not lead to such broad evacuations, though some groups may need to move so that vital medical equipment can be powered, medications can be kept cold, and heat stress can be avoided. Unlike an emergency, when a utility declares a PSPS it has the ability to mitigate the effects that the PSPS may cause.

There are two further differences between emergencies and PSPS which affect public alerts and notifications.

First, a PSPS usually follows a standard timeline which can be confidently predicted. The main constraint is that weather can be reliably forecast only about three days in advance. This timeline allows decision-making and notification processes to be set up with little need for major last-minute changes during the event. Most key services can continue to function at near-normal levels; however, extra staffing, office relocation, or other arrangements may be required. In contrast, the predictability and timeline of an emergency depend on the event: no detailed standard protocol is possible. Earthquakes, tsunamis, law enforcement crises and toxic spills can require very rapid action. Fires and storms allow more time for assessment, but whether an alert should be issued because a small fire is likely to grow, or a heavy rainstorm threatens a debris flow, often requires a judgment by trained officers at the site.

Second, the area affected by a PSPS event is usually too large for door-to-door notification or other intensive methods. Most people must be notified by electronic means, which reach only those who are either registered or able to receive messages on mass or social media. In contrast, many emergencies affect a relatively small neighborhood, so that door-to-door notification or alerts from loudspeakers attached to vehicles may reach almost all who need them.

Because of the above differences, the County agencies with most responsibility for public alerts are not the same for PSPS as they are for emergencies.

METHODOLOGY

The Jury studied websites, reports and documents from PG&E, SCE, OEM, Santa Barbara County Public Health, and non-profits; read articles in journals, newspapers, news magazines, and internet pages; and attended public meetings.

The Jury also interviewed several County officials from the County Board of Supervisors, the Chief Executive Officer's office, OEM, the Sheriff's Office, the Fire Department, and the Public Health Department.

In addition, representatives from both SCE and PG&E made helpful presentations to the Jury, provided documents outlining their procedures, and answered many questions clearly and in detail, both in interviews and in follow-up emails. Their help was voluntary and is appreciated.

OBSERVATIONS

PSPS: Dissemination of Preparation Advice

For both PSPS and emergencies, the County's main "one stop" website is OEM's ReadySBC.⁵ PG&E⁶ and SCE⁷ also maintain websites dealing with PSPS. These websites contain information about the reasons and decision procedures for PSPS events, advice about preparations, and descriptions of particular events as they unfold. The preparation advice includes ways to stay abreast of future events, such as sign-ups and websites. These sites also have recommendations for vital supplies, which might be difficult to obtain once a PSPS has begun.

PSPS Alerts and Advice: Imminent Shutdown

The decision to declare a PSPS is made exclusively by the utility, either PG&E or SCE. Neither the County nor the Grand Jury has jurisdiction over them.

The utility's decision is subject to the PUC's Rule-making Resolutions and Guidelines and its reporting requirements. Potential sanctions can follow a PUC hearing on adherence to the guidelines, including that the utilities "must deploy de-energization as a measure of last resort and must justify why de-energization was deployed over other possible measures or actions," and an overall requirement that the decision be "reasonable."⁸ Public notifications also form a significant part of these guidelines.

Each utility outlines its decision process on its website. Neither PG&E nor SCE base their decision on a formula. Both use factors describing conditions near the power line and likely effects of the shutdown, but the factors are not identical. Those common to both are not given the same weight. For example, a wind speed of 35 mph or a humidity level of 20 percent may be of more concern to one utility than to the other. The factors include:

- National Weather Service Red Flag Warnings
- low humidity levels
- high forecasted sustained winds and strong wind gusts
- dry fuel
- information from field crews and hundreds of weather stations (both public and corporate)
- assessments by in-house meteorologists using their own high-resolution weather models
- public safety advice from state and local authorities (fire, police, emergency services)
- expected impact of a shutdown on essential services
- the state of the potentially impacted circuits

Similar factors are used to decide when power may be safely restored. Before this can be done, crews must patrol the affected lines to check for damage and make repairs. These activities must be done in

⁵ readysbc.org and readysbc.org/psps Last visited May 25, 2020

⁶ www.pge.com. Choose OUTAGES and use the list under PUBLIC SAFETY POWER SHUTOFF. Last visited May 25, 2020

⁷ www.sce.com/safety/wildfire/psps See also www.sce.com/safety/wildfire/psps/fire-weather Last visited May 25, 2020

⁸ "De-Energization (PSPS)" California Public Utilities Commission. www.cpuc.ca.gov/deenergization/ Last visited May 25, 2020

daylight, and can take as long as two or more days. Once the decision is made, power can be restored in minutes. However, the public is advised to disconnect appliances during the outage to avoid surges, leaving a single lamp on to show when the power returns.

PG&E notes that the shutdown will affect all users served by the power line, even if they are far from the high-threat section. Much of Santa Barbara's North County could be shut down even when it is at low risk for fire, because it is served by PG&E lines which come from Atascadero or Morro Bay. SCE is further ahead in modernizing its grid and dividing it into sections, so its shutdowns are likely to affect smaller areas.

The City of Lompoc owns its electrical utility, but uses PG&E lines. The City has no control over these lines.⁹ PG&E can shut off the City's power, even if there is no fire risk in the area.

After the shutdown decision has been made, usually three days before it is planned to begin, each utility sends PSPS alerts to the County's OEM, Fire, Sheriff and Public Health, other critical service providers such as cities, hospitals, telecommunications, water and sanitation agencies, and to the other public utility. Earlier notification seems to be unwise: the inaccuracy of weather prediction beyond three days increases the likelihood that the shutoff will be canceled after disrupting all these essential services and creating warning fatigue among these groups, as well as the public.

Once alerted by the utility, OEM immediately sends alerts directly to all County departments, affected cities and special districts, and hospitals. It also notifies other key services such as grocery stores, gas stations and hotels.¹⁰ The Public Health Department notifies health facilities and senior centers.¹¹ Also, SCE notifies these facilities and centers soon after notifying OEM.

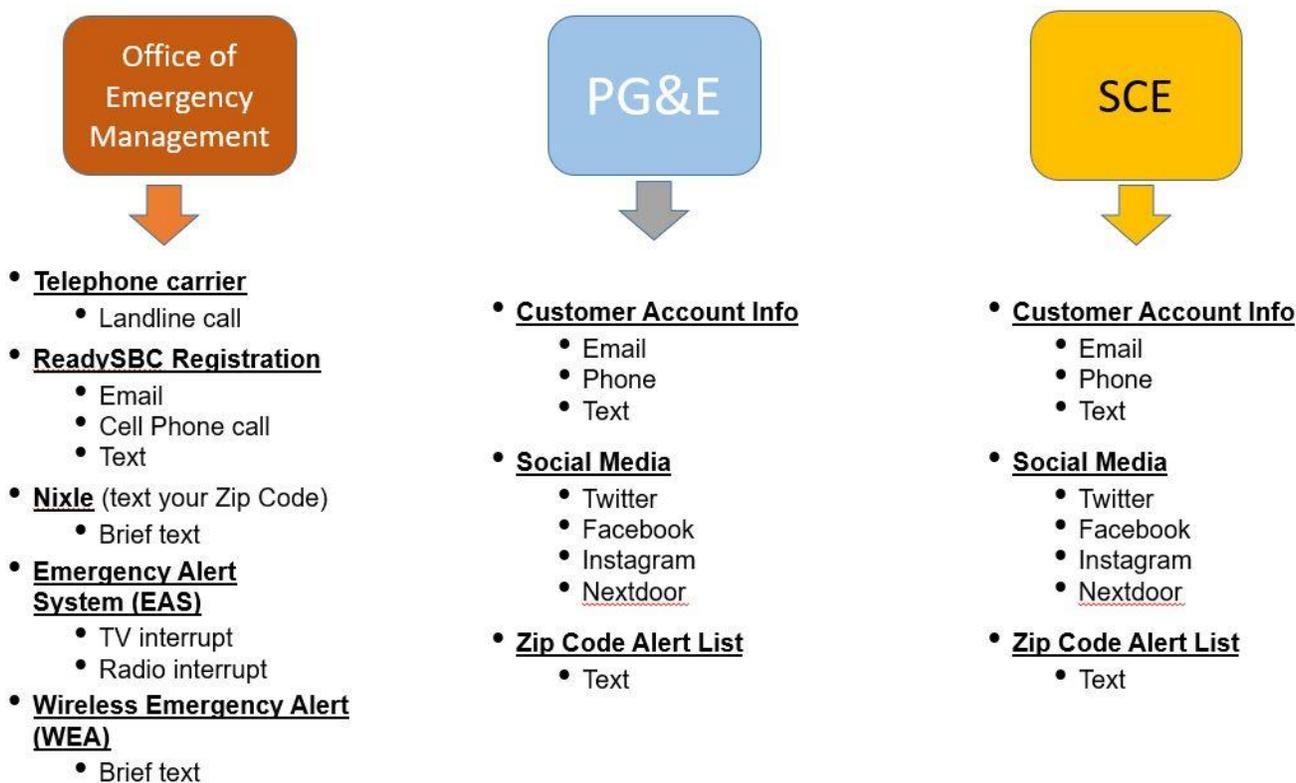
OEM and the utilities send alerts and advice to the public usually one day after they have been notified, by direct contact to individuals and by social media. In addition, OEM may interrupt public media. The active methods used are summarized in Figure 1. The next section gives more details of these efforts and those of Public Health, as well as passive methods, which provide more information to those who actively seek it.

⁹ www.cityoflomdoc.com/government/departments/utilities https://www.cityoflomdoc.com/government/departments/utilities
Last visited May 25, 2020

¹⁰ OEM also notifies education (all levels), hazardous materials facilities, and communications infrastructure managers.

¹¹ Public Health alerts nursing homes, blood banks, dialysis centers, and skilled nursing, health care and hospice facilities.

Figure 1: PSPS Active Public Contact Methods: Summary



Whom to Tell and How to Tell

Utilities

Two days before the planned shutdown, PG&E and SCE alert their customers automatically, in English and Spanish, using customers' billing account information.

Earlier on the same day, both utilities notify Access and Functional Needs (AFN, or Medical Needs) customers enrolled in their Medical Baseline Programs. Both utilities will make extra individual phone calls to these customers if an initial automated email, text or phone call is not acknowledged. If the extra phone calls are unsuccessful, they will try to visit these customers in person.

Both utility websites say that residents whose electric service accounts are held by a landlord or property manager such as in apartment buildings or mobile home parks, are usually alerted only if they have registered for Zip Code alerts¹² or their manager alerts them. SCE has asked the account holders to post information telling tenants they can sign up for alerts and notifications at the zip code level or for the exact address if the account holder is willing to give tenants the account information.

For customers who understand neither English nor Spanish, PG&E offers the options to receive messages in Chinese, Russian, Vietnamese, Korean and Tagalog. SCE offers Mandarin, Cantonese, Korean, Vietnamese and Tagalog. Both allow users to choose these different language versions of their websites by clicking "English" at the right of the main page.

¹² www.sce.com/ Search for Zip Code Alerts. Last visited May 25, 2020

Both utilities use platforms such as Nextdoor.com and Nixle¹³ to notify their subscribers. These outlets are less preferred because many of the people they inform are likely to be outside the affected area. The area affected will be identified on the utility's website, as well as OEM's, but even a brief false alarm can contribute to warning fatigue.

Office of Emergency Management (OEM)

OEM has different lists of contacts, so it may reach some people the utilities miss. Its main contacts for individual communications are people who are signed up for alerts on ReadySBC. Previously, residents used Aware and Prepare¹⁴ to register for emergency notices. Those that do so now have their information automatically sent to ReadySBC.

As of May 2020, OEM sends its individual messages only in English and Spanish. It is considering sending messages in some Mixtec languages, especially for the Santa Maria area. There is no in-house capability for this yet, but interpreters have been identified.

OEM does not make a separate or increased effort to notify people medically dependent on electrical power. For example, ReadySBC has no provision for including such information when signing up.

Public Health Department

The Santa Barbara County Departments of Public Health and Social Services (DSS) work together to identify potentially affected AFN (Medical Needs) residents. DSS uses its client database including Adult Protective Services, In Home Support Services, and Child Welfare Services.

Public Health uses information from healthcare providers, the Independent Living Resource Center, other partner agencies, and its own lists of licensed and unlicensed facilities providing support services. It has a list of Medicare patients who are dependent on electrical medical equipment; however, there are no phone numbers attached to the list. This list and those from other local agencies and facilities are not always accurate and may be outdated: the person listed may be in hospice, deceased, recovered or moved. Public Health can also request limited information on community members through the federal Health and Human Services emPOWER Program. It has no lists of people who depend on electricity to refrigerate medications.

When a utility notifies OEM of a potential event, it provides phone numbers of registered Medical Needs customers; upon written request from OEM, the utility will provide a list with contact information for those in the affected circuits. Earlier notification is not possible under national privacy rules established in the Health Insurance Portability and Accountability Act of 1996 (HIPAA). If the Emergency Operations Center (EOC) is activated, it can set up a center to take calls for assistance from individuals. The Jury learned that many of those on the AFN lists compiled by Public Health have not signed up for the Medical Baseline programs of the utilities.

Public Health relies on its partner agencies and support facilities it is able to contact, to make sure information gets to its clients. It is very difficult for Public Health to make door-to-door visits, even after reducing its lists to non-respondents who are not on the lists of other agencies, facilities or utilities. In a few cases, such visits may be possible with the help of personnel from other County agencies.

¹³ To sign up for Nixle, send your Zip Code as a text to 888777.

¹⁴ www.awareandprepare.org/ Aware and Prepare began in Santa Barbara, replacing the Reverse 9-1-1 system that was previously used, but will soon be national and focus on emergency preparation, not alerts. Last visited May 25, 2020

When

Usually three days before the planned shutdown, the first contacts are from the utility to OEM and then from both the utility and OEM to County agencies and essential services. Two days before the shutdown, both the utility and OEM send their first alerts to the public. Another automated alert is sent one day before shutdown, and another just before it begins.

During the shutoff, and for a short period after it, OEM and the utility continue to send updates through social media, local news, radio and their websites, and also to each other to keep messages consistent. This can be especially important close to the time when power is restored to avoid surges.

What

The initial automated message from the utilities has a standard format and content. The following template is from OEM, which bases its message closely on the slightly longer one from the utility:

PSPS Update: Potential Outage [*General Area*] On [*Day Of The Week*] ([*Date*])

[*Utility Name*] has notified the public that they are considering turning off power to part of Santa Barbara County this week in order to reduce the risk of fire. Power has not yet been turned off. The outage may occur in [*Area Description*], beginning on [*Day Of The Week*] ([*Date Fraction*]). Residents in that area are encouraged to make preparations for a possible multiple day power outage and to check on friends and neighbors to make sure they are prepared. To determine if you live or work in or near a potential outage area, view the Public Safety Power Shutoff (PSPS) Interactive Map. Call [*Utility Acronym*] at [*Utility Phone Number*] or visit [*Utility PSPS Website*] for more info on this potential outage.

Subsequent messages can depend on later events so they are less easily standardized or predicted. However, they are also coordinated between OEM and the utility for consistency.

For most people, the information and action advice in these messages and on the websites they suggest are expected to be adequate if carefully read and promptly acted on. However, the Jury learned they may not be adequate for people who are ill, frail, disabled, or need power for vital medical resources. Many of these may need to evacuate, not only for medical reasons but also because elevators, garage doors, electric gates, air conditioners and other items will not work. Others may need assistance for tasks like food preparation without cooking facilities. The County does not provide appropriate shelters of its own or directions to any operated by others. The Red Cross will construct shelters in some emergencies, but it does not regard PSPS events as emergencies and does not respond to them.

OEM's advice to people dependent on electricity can be downloaded from readysbc.org/psps, under Additional Preparedness Resources. Briefly, its advice is either to rely on a generator or back-up batteries, or to plan for a local and an out-of-area location where power can be accessed. One interviewee told the Jury that even large batteries, costing more than \$1,000, may need to be recharged after running major equipment for 32 hours.

Emergency Warnings and Advice to the Public

Initially, the County's public communications for emergencies are the responsibility of the Sheriff's Office and Fire Department, whose officers are at the scene. If the emergency persists, control of most decisions and messages moves to a Unified Command which meets in the Emergency Operations Center at the OEM building.

Emergencies: Dissemination of Preparation Advice

The main source of County advice on preparing for an emergency is the ReadySBC website. At present, the only mention of "emergencies" on this website's main page is a link for sign-ups to ReadySBC itself. The Jury learned that ReadySBC was originally developed in response to the Thomas Fire and the January 2018 debris flows. Most of its information on emergencies is specific to storms and found under Storm Readiness.

This page has a Build a Disaster Kit link to basic and emergency lists on the FEMA site. These may be daunting for some residents. A Chapman University study estimated that only 29.8 percent of U.S. adults who speak English or Spanish would answer "Yes" to Question 12 of its 2018 Survey¹⁵: "Have you or anyone in your household put together a disaster or emergency supply kit, containing supplies such as food, water and medical supplies?" If ReadySBC were to suggest that only a few items need to be constantly on hand while other may be obtainable after evacuating, more people might make useful survival kits.

Based on responses to Question 33 of the Chapman survey, the study estimated that 10.9 percent feel they would not know where to go if required to evacuate. Some who think they do know may find their choice to be unavailable. This percentage might be higher among those who are old or disabled, though some are likely to have caregivers or agencies to help them. The Jury found little guidance on shelters in County sites beyond "out-of-town friends or relatives." Step 9 of ReadySBC's Storm Readiness section, 10 Steps to Protect Yourself links the user to the FEMA site's section on Landslides & Debris Flow, which suggests "Text SHELTER + your ZIP code to 43362 (4FEMA) to find the nearest shelter in your area." The Jury did not test this advice. Family and friends may provide adequate refuge and resources for some. Others may be able to find refuge and resources from non-government organizations (NGOs) but contact lists for the NGOs are unavailable on ReadySBC. The websites of the County and other local governments do not publicize shelters of their own.

Also, ReadySBC has a Video Gallery. Its videos, some of them in Spanish, show press conferences, community meetings, interviews and on-scene films, all describing aspects of the Montecito Debris Flow. There are no videos on other emergency events or topics.

Public Health has an Emergency Preparedness webpage¹⁶ but most of the advice is not for the general public. There is a Sign-Up link to Aware and Prepare. This has the same effect as signing up for ReadySBC, and its users will be automatically taken there. The Public Health page does not mention ReadySBC. The link promises "emergency notifications... based on the location you care about... events that may affect your home, workplace, school and... alerts for flooding or road closures in your area (and) for multiple facility locations." These promises appear less prominently on ReadySBC, under FAQs on the sign-up page. Only one location can be entered when signing up, but after logging in the user can add more locations. The notifications may not cover emergencies other than flooding, but the Jury could not find a description of what is covered on ReadySBC except as "events."

The Sheriff's website¹⁷ has an Emergency Notifications page with a Register link to ReadySBC and two videos directing users to sign up at Aware and Prepare. One of these videos also describes Nixle

¹⁵ www.chapman.edu/wilkinson/research-centers/babbie-center/survey-american-fears.aspx Click Full Survey and Methodology to download "fear-V-methodology-report-ssrs.pdf." Last visited May 25, 2020

¹⁶ www.countyofsb.org/phd/ems/epp.sbc Last visited May 25, 2020

¹⁷ www.sbsheriff.org/ Last visited May 25, 2020

and has a clear summary of how emergencies are handled; half of this summary describes activities at OEM, but the video does not appear on ReadySBC or elsewhere on the OEM website.

The Santa Barbara County Fire Department's website¹⁸ has an FAQ, "How do I subscribe to emergency notifications?", leading to ReadySBC. Its Emergency Operations page describes only its own operations teams and equipment. For the public, background information and advice on a variety of emergencies appear under Programs and Education, especially Safety Preparedness. The user needs to hover the cursor over these headings; clicking either heading gives a page with no links to the advice shown by hovering.

The Preparedness Tips page of the website are for estates and rural areas, entirely about wildfires, and sometimes repetitious. It mixes long- and short-term advice, for example:

"Build or re-model your home with fire resistant materials,"

"Leave keys in the ignition,"

"Turn on the lights,"

"Do not forget the pets."

The Fire Prevention Tips page is entirely about children playing with fire. The Child Car Seat page does not mention "hot car" dangers. These examples and other parts of this website seem a work in progress and in need of updating.

Early stage: decisions made on the spot

Emergency actions usually begin with a 911 call from the public, a short-term weather prediction (e.g., storms or debris flows), or an urgent message from either local law enforcement or the California Highway Patrol (e.g., a major accident, an overturned vehicle with a toxic cargo, or a dangerous police action). The nearest available Sheriff's Deputies or Fire Department officers, often both, will be directed to the scene.

If the emergency event is confined to the jurisdiction of a city, the city has command of the initial response. If the city has its own police department (Guadalupe, Lompoc, Santa Barbara and Santa Maria), and/or its own fire department (Carpinteria-Summerland, Guadalupe, Lompoc, Montecito, Santa Barbara and Santa Maria), the city or its department may have formal command over the initial response though this can be shared or passed to the County if the emergency persists and grows. (These lists exclude Vandenberg Air Force Base, University of California Santa Barbara's Police Department, and volunteer fire departments.) This report covers only County procedures. Links to some city emergency plans are below.¹⁹

At the scene, the most senior relevant officer (Sheriff or Fire) becomes the Incident Commander (IC). Usually the Field Supervisor for the geographic area takes over this role quickly. The IC informs the Sheriff and Fire Department leaders and may send out non-urgent informational messages using social

¹⁸ www.sbctfire.com/ Last visited May 25, 2020

¹⁹ www.cityoflompoc.com/government/departments/fire-services/disaster-preparedness/local-hazard-mitigation-plan; Last visited May 25, 2020
www.santabarbaraca.gov/gov/depts/fire/oes/emergency.asp; Last visited May 25, 2020
www.cityofsantamaria.org/city-government/departments/fire-services/fire-prevention-emergency-management. Last visited May 25, 2020

media (Twitter, Instagram, Facebook), a "Code 20" alerting the media of a newsworthy event by text message, and a phone message recorded on the News Line (1-805-681-5546).

If there is a threat to the nearby area, the IC has the authority to call for evacuation. If the area is small, the officers present may be able to go door-to-door, possibly assisted by a loudspeaker. In other cases, depending on the time of day, type of incident and alternative possible actions, alerts can be sent by County Dispatch. The rapid individual contact methods used by Dispatch are shown in this table²⁰:

Table 1: Emergency Alerting Methods

Alerting Method	Limitations	How to Receive
Text messaging	240 characters	Sign up for Alerts.
Email	No character limits	Sign up for Alerts.
Robo calls to cell phones and to landlines	Slow: delays if a long queue of phones needing the alert	Sign up for Alerts.
Wireless Emergency Alerting (WEA)	90 characters	Be in the area impacted with a WEA-capable cell phone.
Emergency Alert System (EAS) - TV and Radio	2-minute message, Volunteer broadcasters	Have local radio or TV turned on.
Nixle Alert	138 characters	Sign up for Nixle.

The first three rows refer to signing up for Alerts with either ReadySBC or Aware and Prepare.

An evacuation warning or order requires specification of the area to be evacuated. In the best case, the IC can define the exact boundaries. In many cases the boundaries are uncertain and the IC is too busy to choose good ones. In these cases, Dispatch officers will use past practice and what they know about the situation to determine an appropriate area as quickly as possible. If the area is not yet large, the officers can use the IC's information, their own expertise and experience, and their maps of the region to make these choices. In other cases, they may use pre-planned evacuation maps. These are described in the next section, since they are more frequently used in the later stage.

Later stage: decisions made at the Emergency Operations Center (EOC)

If the emergency threatens to overwhelm the resources of the officers in Dispatch or on the scene, to become a multi-day incident, or to require multiple County agencies or significant County resources, control of the response is shifted to a Unified Command. This comprises senior representatives from OEM and the Sheriff's Office and Fire Department, and other agencies depending on the type of emergency. County Public Health, County Behavioral Wellness and the local Red Cross are frequent

²⁰ santabarbara.legistar.com/LegislationDetail.aspx?ID=3715997&GUID=6CC5C72B-5CE5-4085-8A40-98267496BD21&Options=&Search= Meeting of November 6, 2018, Attachment and Presentation of Item 18-00844.
Last visited May 25, 2020

participants. The Unified Command meets at the Emergency Operations Center (EOC) in the OEM building, where it sets up a Joint Information Center (JIC). From this point, all information from the field goes to the JIC. Messages intended for the public are re-crafted by Unified Command to ensure consistency, and then distributed by OEM.

The IC and other officers on the scene, especially Public Information Officers, may continue to inform by public and social media, including live interviews. These and other updated information are often shown on CSBTV.²¹ Other media outlets, which reach only the residents aware that they should monitor them, include Facebook, dial 2-1-1²² and almost all local radio and TV stations.

If an evacuation is needed, it is usually first requested by the IC or other officers on the scene. The request is passed up the chain of command to the EOC and Unified Command. Command, with input from the JIC, confirms the validity of the request, and shares it with the JIC and any involved agencies so that all have the same information. The notification is usually sent out ("published") by OEM. In some cases, Dispatch will have re-assumed these responsibilities and will send some notifications.

In these later stages, the area in danger may have grown larger and more complex. Defining the area can involve the time needed for evacuation, the roads in and out, and the likely future path of the danger. In 2012, the Montecito Fire District, where such problems are especially severe, devised a map of predesignated Evacuation Zones.²³ The idea attracted County Fire, which expanded the project to the rest of the County with the participation of other in-County agencies. These maps were used for the Thomas Fire. Several factors are considered but the basic thought is to take about 60-90 minutes to evacuate each area if needed. This approach is not used in all cases but appears very valuable for large areas with difficult topography, narrow winding roads, and other difficulties.

DISCUSSION

Interviewees for this report pointed out areas which could improve as resources become available, and the Jury found others for itself.

Several groups are at risk of missing alerts and notifications. People with limited understanding of both English and Spanish are clearly offered other languages on utility websites but may not know of that service. These sites are not intended for emergencies in general. Mixtec languages are not included, but OEM is working on them for both PSPS and emergencies. For PSPS, people whose electricity accounts are held by landlords or property managers need to sign up for Zip Code Alerts. Special efforts are made by the utilities to contact customers dependent on electricity to run medical devices. However, these customers must first register with their utilities. Special efforts are not made for non-registrants, non-customers, or people dependent on electricity for other medical needs, such as refrigerating medications or avoiding heat stress. Usually, these latter groups will only get extra attention if a County agency makes the extra effort.

However, the Jury recently learned of a new partnership²⁴ between PG&E and the California Foundation for Independent Living Centers.²⁵ This appears to be a significant improvement for

²¹ www.countyofsb.org/ceo/csbtv/home.sbc Last visited May 25, 2020

²² 211santabarbaracounty.org Last visited May 25, 2020

²³ www.montecitofire.com/district-map Last visited May 25, 2020

²⁴ disabilitydisasteraccess.org Last visited May 25, 2020

²⁵ cfilc.org and cfilc.org/issues/press-releases.php?id=27 Last visited May 25, 2020

residents whose age or disability makes them dependent on electricity for survival and includes those dependent on electrical medical devices. This partnership offers not only preparation advice, including one-on-one assistance and training for helping others, but also access and vouchers, if needed, for hotel lodging, transportation, food, and additional resources such as portable batteries.

The County's emergency information and advice for the public is scattered over several sites. The Jury did not find any contradictions among the sites, but they appear uncoordinated and opaque. All need more frequent updating. Some of them do not mention other sites either prominently or at all. ReadySBC is intended to be the County's main site, but it is not easy to navigate and not mentioned at all by Public Health or Aware and Prepare, and not clearly mentioned by the Sheriff's site, although there is a sign-up button that leads to it.

The advice itself, especially on preparation for emergencies, is often hard to find or incomplete, and some advice needs editing and explanation. The Fire Department's Preparedness Tips are an example of such advice, but all these problems occur on ReadySBC. Several of these problems are due to the site's origins, giving a near-exclusive focus on storms and debris flow. Some problems were noted with evacuation shelters and lists of survival kit items. There are existing facilities which might serve as shelters, such as senior centers, community centers, meeting halls, libraries, and school or university theaters and gymnasiums. Many of these have volunteered assistance in past crises. Compiling lists, checking availability and publicizing options in a given crisis may not be easy but seems possible, at least for PSPS. For people dependent on electricity who do not evacuate there is a good list of the resources they are likely to need. However, there is no guidance on how or where to obtain them or what features to look for and there are some information gaps such as the life-lengths of even expensive batteries.

Whether such problems as people not alerted and advice not found or followed are significant is unclear. A survey could help prioritize future work and improve the accessibility and wording of advice. It seems likely that contact is inadequate for some groups, but the available data (census, tax rolls, utility accounts, signups for Baseline or Medicare, etc.) do not allow accurate estimates. One local survey²⁶ checked sign-ups for alerts. The Jury did not examine its sampling methods, but the survey did not focus on special groups. However, the survey found that 52 percent do not know what Aware and Prepare is, but 82 percent had signed up for it!

CONCLUSION

During this investigation, it became clear to the 2019-20 Santa Barbara County Grand Jury that planning and carrying out County responses to PSPS and emergencies are complex, difficult tasks. Even for PSPS, the Jury found it necessary to limit its inquiry to communications with the public. The limitations were much more drastic for dealing with emergencies. The details in this Report and the far greater details in the County and City Plans show conscientious work by local government staff.

²⁶ [santabarbara.legistar.com/LegislationDetail.aspx?ID=3715997&GUID=6CC5C72B-5CE5-4085-8A40-98267496BD21&Options=&Search= Meeting of November 6, 2018, Attachment and Presentation of Item 18-00844.](http://santabarbara.legistar.com/LegislationDetail.aspx?ID=3715997&GUID=6CC5C72B-5CE5-4085-8A40-98267496BD21&Options=&Search=Meeting%20of%20November%206%2C%202018%2C%20Attachment%20and%20Presentation%20of%20Item%2018-00844)
Last visited May 25, 2020

FINDINGS AND RECOMMENDATIONS

Finding 1a

Residents who do not comprehend either English or Spanish are at risk of not understanding PSPS warnings.

Finding 1b

Residents whose electricity accounts are held by landlords or property managers are at risk of not receiving the PSPS warnings sent by their power company.

Recommendation 1

That the Santa Barbara County Board of Supervisors direct and fund the Office of Emergency Management to update and improve its contact lists and communication methods to maximize the likelihood that all residents will receive the PSPS warnings or advice they need.

Finding 2

Residents who depend on electricity for vital medical devices or to keep medications refrigerated may not receive the PSPS or emergency notifications intended for them.

Recommendation 2

That the Santa Barbara County Board of Supervisors direct and fund the Office of Emergency Management and the Department of Public Health to identify individuals dependent on electricity for essential medical needs.

Finding 3

Residents who depend on electricity for essential medical devices, keeping medications refrigerated, or other vital needs may not be able to carry out the PSPS or emergency recommendations intended for them.

Recommendation 3

That the Santa Barbara County Board of Supervisors direct and fund the Office of Emergency Management and the Department of Public Health to ensure the access of individuals dependent on electricity for survival to the supplies and locations recommended for them on County websites.

Finding 4

Santa Barbara County's emergency information and advice for the public is scattered over several websites, which are not coordinated, infrequently updated, sometimes confusing, and may not link to each other.

Recommendation 4

That the Santa Barbara County Board of Supervisors direct and fund the Office of Emergency Management to ensure that all County websites providing emergency information are coordinated, easy to understand and navigate, regularly updated, and use clear links to each other to make all information readily accessible.

Finding 5

PSPS decisions are made entirely by the power companies without input from public agencies and elected officials until after the shutdown ends, via the California Public Utilities Commission.

Recommendation 5

That the Santa Barbara County Board of Supervisors publicly urge the State of California legislature to require local governmental input into PSPS decisions before they are announced and carried out.

REQUEST FOR RESPONSE

Pursuant to *California Penal Code Section 933 and 933.05*, the Santa Barbara County Grand Jury requests each entity or individual named below to respond to the enumerated findings and recommendations within the specified statutory time limit:

Responses to Findings shall be either:

- Agree
- Disagree wholly
- Disagree partially with an explanation

Responses to Recommendations shall be one of the following:

- Has been implemented, with brief summary of implementation actions taken
- Will be implemented, with an implementation schedule
- Requires further analysis, with analysis completion date of no more than six months after the issuance of the report
- Will not be implemented, with an explanation of why

Santa Barbara Board of Supervisors – 90 days

Findings 1a, 1b, 2, 3, 4, and 5

Recommendations 1, 2, 3, 4, and 5