



City of Lafayette Memorandum

Date: August 12, 2019

To: Niroop Srivatsa, Interim City Manager

From: Benjamin Alldritt, Police Services Manager

Subject: PG&E Public Safety Power Shutoffs – City Preparedness Standings

Executive Summary:

In June 2019, PG&E began publicly warning of the possibility of Public Safety Power Shutoffs (PSPS) in the event conditions warranted it. PG&E Public Safety Power Shutoffs will be referenced as “PSPS” throughout this staff report.

PG&E advises that no single factor will drive a Public Safety Power Shutoff and have provided some factors that will be considered:

- A red flag warning declared by the National Weather Service
- Low humidity levels; generally, 20% and below
- Forecasted sustained winds generally above 25 mph and wind gusts in excess of approximately 45 mph; depending on location and site-specific conditions such as temperature, terrain, and local climate
- Condition of dry fuel on the ground and live vegetation (moisture content)
- On-the-ground, real-time observations from PG&E’s Wildfire Safety Operations Center and field observations from PG&E crews

PG&E’s Public Safety Power Shutoff program includes all electric lines that pass through high fire-threat areas – both distribution and transmission. Electric lines most likely to be considered are those that pass through areas that have been designated by the CPUC as at elevated (Tier 2) or extreme (Tier 3) risk for wildfire. The energy system relies on power lines working together to provide electricity, meaning any PG&E customer could have their power shut off. Per the CPUC Fire Threat Map, many areas of Lamorinda are designated as Tier 2 or Tiers 3. **Refer to Attachment A.**

PG&E advises that their goal, dependent on weather, is to provide customers with advance notice prior to turning off the power and provide updates until power is restored. PG&E advised their time of notifications (when possible) are as follows:

- 48 hours before electricity is turned off
- 24 hours before electricity is turned off
- Just before electricity is turned off
- During the public safety outage
- Once power has been restored

PG&E advises they will attempt to reach customers through calls, texts, and emails. They will also use social media and keep local news and radio outlets informed and updated. PG&E also advised they will make every attempt to provide notice to City and County agencies in advance of notifying customers.

PG&E advised they will only restore power when they are certain it is safe to do so. PG&E will have to conduct a visually inspect lines, poles, and towers for potentially weather-related damage and fix any damage prior to energizing electric lines. PG&E advises they should be able to conduct this process within 24 to 48 hours after the extreme weather has passed.

**** The above PG&E information was provided via the PG&E Community Wildfire Safety Program in a presentation made to the Moraga-Orinda Fire District on June 24, 2019.**

All government agencies within the PG&E service area, along with residents and businesses, are faced with the challenge of providing services during a prolonged power shutoff.

City of Lafayette Emergency Preparation Standings, July 2019:

Police and Fire departments have historically prepared for power interruptions during emergencies, such as earthquakes and fires, to allow for the continuation of services. This is an ongoing process that evaluates current and emerging technologies, along with associated fiscal impacts.

Immediately after being made aware of PG&E's proposed Public Safety Power Shutoffs, Lafayette City Staff began meeting to evaluate the City's current capabilities during a multi-day shutoff, specifically continuity of government and ability to respond to a critical incident during a PSPS. City Staff reviewed staffing levels and what staff would be required during a PSPS.

It was determined that designated staff, to include Department Heads, will respond to the Community Hall/EOC to conduct essential city functions. The primary function will be reacting and activating the EOC in response to any natural disaster or emergency that might arise during a PSPS; recognizing that a PSPS was instituted by PG&E due to extreme fire danger. Staff would also be able to manage a phone bank to continue operations. A small number of staff would be needed to operate the Jennifer Russell Building if the below proposal is approved.

The Police Department will always be fully staffed in any situation or emergency. It was identified that Public Works will be fully staffed to handle priority calls for service and assist the Police Department. City Department Heads have evaluated their staff and required functions and will scale down to a minimum number of personnel.

Administrative Services has suggested that the Council adopt a policy with regard to employees who are unable to work during prolonged power outages or emergencies. Staff suggests that employees who are unable to work during sustained power outages or emergencies, and who are not expected to report to the EOC, be paid up to a total of 40 hours in a calendar year without having to use any accrued leaves. If this is acceptable to Council, staff will return with a formal Administrative Regulation for adoption on a future Council meeting.

Interim-City Manager Niroop Srivatsa and Police Chief Ben Alldritt have met with Lafayette School District Superintendent Richard Whitmore, Library management, and Veterans Memorial Building staff to discuss PSPS and their policies/procedures in a response to a prolonged power outage. Communications Analyst Jeff Heyman has developed a PSPS resource page at www.lovelafayette.org under the Residents tab to assist residents in being prepared.

The following is a summary of City's current capabilities during a prolonged power outage. The information is broken down by City Department.

Police Department

- 60Kw CAT Diesel Generator, 134 Gal. Capacity – Approx. Runtime of 4 Days Continuous
- Air Conditioning/Heating on Generator Power
- Battery Backup on all computers
- 50 Gallon Portable Diesel Tank to be filled on demand
- 48 Portable Ham Radios to be distributed to volunteers if needed
- Licensed “Public Works” repeated radio frequency for volunteers (separate from Police radios)
- Multiple Redundant Internet Connections for Data and Phone
- Portable “Satellite In-A-Box” Internet system for field use
- Video Conference system
- Laptop Cache for “WEB EOC” operations
- 10-phone portable call center that can be setup anywhere with one incoming phone number
- 4x Honda 2000-watt Generators
- 2x 5500-watt Generators

Currently the City of Lafayette Police Department Building is capable of being self-sufficient (apart from water) without interruption in the services provided to the citizens of Lafayette. The

60Kw permanent CAT generator in the rear of the building can power the entire station, including heating and A/C, for 4 continuous days before needing to refuel the 134-gallon tank. The police department does own a 50-gallon portable diesel tank that can be transported in a truck bed and used to refill diesel tanks around the city. The station has 3 total connections to the internet (Comcast, Verizon and AT&T FirstNet) for data and phones, additionally, we are in the process of installing a satellite internet connection for total redundancy. Should the need arise, a 10-phone portable “call center” can be setup anywhere in the city. All 10 phones have the capacity to call outbound and will receive calls on a shared number that can be distributed to the public. In addition to the police department radios, a cache of 48 portable HAM radios are available to be distributed to volunteers for emergency communication by using the City’s Public Works repeated frequency.

Library/Community Hall

- 60 Kw CAT Diesel Generator – Runtime to be determined
- Community Hall on generator power for EOC operations (No A/C, Heat)
- Server Room on Generator Power with full battery backup
- Redundant Internet connection back to Police Department for Data in EOC

Currently the City of Lafayette Library/Community Hall is the primary emergency operations center (EOC) for the city. The community hall has a permanent 60Kw CAT generator in an underground storage area, the runtime on the generator to be determined. Currently the generator provides emergency outlets and lighting in the community hall and all the technical infrastructure in the server room. The generator DOES NOT provide power to any heating or A/C. The library data network has a redundant connection to the police station via a point-to-point wireless system; however, the phone system does not have any redundant connections as of right now. All the redundancies at the police station (including future satellite) will be passed to the library as well. We are currently in the process of searching for a solution for air-conditioning in the community hall.

City Offices

- Approx. 45 Minute Battery Backup for IT Infrastructure/Servers
- No redundant Internet Connection for Data or Phones
- No Generator

Currently City Hall does not have the capacity to operate at any capacity during a power shutdown or unexpected disaster. All server data is backed up to an onsite data retention system as well as the cloud for redundancy. There is currently a plan to move the onsite backup to the Lafayette Library server room for greater redundancy.

Public Works

- 20Kw Propane Generator
- No redundant internet for data/phones

Currently the Public Works has the capacity to continue basic operations with an onsite 20Kw propane generator. The current runtime of the generator under normal load (no A/C or Heat) is estimated at around 4 days. There is a plan in place to install a redundant cellular internet connection for the public works infrastructure to provide uninterrupted data and phones.

Community Center

- No Generator
- “Redundant” internet currently provided through Comcast Cellular
- Commercial Sized Kitchen
- Parking Lot/Staging Area

The community center is slated to have a cellular backup internet connection installed to provide uninterrupted data and phone connections.

Fire Station 15 – 3338 Mt Diablo Blvd

- 1000 Gallon Diesel Fuel Tank with pump
- CAT Generator
- 3 Bay Indoor Garage (Shelter if needed)

Fire Station 16 – 4007 Los Arabis Drive

- CAT Generator
- Additional capabilities unknown currently, pending the opening of the station.

Fire Station 17 – 620 St Mary’s Road

- No Generator (small generator to power bay doors)
- No Fuel Tank

Proposal:

To enhance the City’s preparedness during a power outage, City staff have identified areas of improvement. Due to the uncertain nature of PG&E Public Safety Power Shutoffs and what it means for City/County/State agencies, everyone is trying to determine the appropriate level of preparedness with respect to the associated costs.

Staff is recommending two items for immediate consideration and approval:

- 1) **Jennifer Russell Building** – Staff recommends installing a generator tap which will allow for a trailered generator to be connected. Staff recommends renting a trailered generator to have onsite in advance of a PSPS. This will allow the City to make the Jennifer Russell Building a temporary cooling and charging site for residents. The generator would provide power for outlets, lighting, and HVAC systems in the JRB only. The remainder of the community center does not have the infrastructure to support backup power.

Associated costs to accomplish this are approximately \$5,000.00 for purchase and installation of a generator tap and a four-month rental (August – November) of a trailered generator at approximately \$1,100 per month.

Total cost would be approximately \$9,400.00.

- 2) **Community Hall (EOC)** – Purchase a 61k BTU Portable Air Conditioner (230V) at an approximate cost of \$8,000.00. The portable air conditioner would be able to cool the Community Hall during a prolonged power outage and would be powered by the Library’s generator.

Total cost – approximately \$8,000.00.

Staff is currently evaluating additional items to enhance the City’s readiness in the future:

- **Fuel** – There is an immediate concern about fueling Police and Public Works vehicles during a PSPS. Gas stations will not be able to power their gas pumps during a power outage. Staff is exploring options for a 500-1000 gallon gasoline above-ground storage tank, with pump, to be installed at the Public Works Yard. Cost is still to be fully determined, but would likely be in the \$30,000 to \$50,000 range depending on size and model.
- **City Owned Trailered Generator** – For 2019, staff recommends renting a trailered generator. Staff has received a quote of approximately \$50,000.00 for a new trailer generator and it would take two-three months for delivery. Trailered generators are not stocked by vendors and are ordered as purchased.
- **Power for Traffic Signals** – During a power outage traffic lights will not function. Per the California Vehicle Code, when traffic signals are inoperable, drivers are required to treat them as a stop sign. Staff has researched a switch that can be installed at intersections that allows for plug-in generator power. Conservatively it would cost \$2,000.00 per intersection and would require staff to regularly refuel the generators. There is a more costly trailer generator option with a larger fuel tank that would cost approximately \$3,500.00 per intersection. Staff prioritized six main intersections for consideration: Mt Diablo Blvd/Moraga Rd, Mt Diablo/1st St., St. Mary’s Rd./Moraga Rd., Pleasant Hill Rd./Mt Diablo Blvd, Pleasant Hill Rd./Deer Hill Rd., and Mt Diablo/Oak Hill Rd.

Funding Source:

The City currently has an Emergency Response fund of \$50,000.00 (011-360-861/Contingency for Local Emergencies). This program is used to track expenses incurred by the City while responding to natural and man-made emergency events. Funds from this program can only be spent with explicit approval from the City Council.

Conclusion:

As with any endeavor in Public Safety and Emergency Preparedness, it is a challenge to determine what will be required while being cognizant of the associated costs and the fiscal impact to the City's budget. The City of Lafayette has always strived to be prepared for emergencies and has done well in this respect. Public Safety Power Shutoffs are presenting a new challenge for everyone. The high probability of a PSPS occurring annually and more than once a year forces public agencies to review their level of preparedness during a prolonged power outage. This review process will be on-going and evaluated after each PSPS.

Attachments:

(A) – CPUC Fire Threat Map for Lamorinda and surrounding areas.

Attachment A – CPUC Fire Threat Map for Lamorinda and surrounding areas.

