MEMORANDUM

TO: UTILITIES ADVISORY COMMISSION
FROM: UTILITIES DEPARTMENT
DATE: August 7, 2019
SUBJECT: Outreach and Response Required for Wildfire Safety, PG&E Public Safety Power Shutoff Program, and Local Outages

This report is provided to inform the discussion of the Utilities Advisory Commission (UAC) about public safety power shutoffs in response to high wildfire risk conditions. The report provides an overview of the City’s coordination with PG&E and other stakeholders for communication and response to potential power outages that may occur resulting from PG&E’s public safety power shutoff program. This discussion is also intended to inform the UAC of the City’s plan for coordination and response to localized conditions that may warrant a power shutdown on Palo Alto’s electric distribution system. It outlines the City’s communication strategies with internal and external stakeholders for advance awareness and safety outreach, as well as operational response to power outages and wildfires.

EXECUTIVE SUMMARY

In recent years, wildfires have intensified in California, and utilities are taking action to reduce fire risks related to utility infrastructure. Certain conditions such as high wind, low humidity, dry vegetation, and Red Flag Warnings declared by the National Weather Service can pose an increased risk of wildfire when paired with extreme weather events. The state of California is working with utilities statewide to reduce wildfire incidents, including through implementation of public safety power shutoff programs.

This report provides information on the Pacific Gas and Electric (PG&E) public safety power shutoff program, in which the company plans to de-energize its power lines when weather and fuel conditions heighten the risk for fire. It also provides information about Palo Alto’s plans for any localized power shutoffs required for wildfire safety. While PG&E does not directly serve electricity to Palo Alto utility customers, the City of Palo Alto Utilities (CPAU) intakes electricity from PG&E’s transmission system. Staff are coordinating with PG&E and partner agencies to understand the impacts to publicly owned utilities that are transmission-dependent on PG&E infrastructure. CPAU is updating emergency response plans to prepare for potential power outages affecting part or all of CPAU’s electric distribution system. Staff are also coordinating with the City’s public safety, fire and emergency services departments on communication and outreach strategies for wildfire and power outage safety.
DISCUSSION

PG&E is communicating plans to de-energize transmission lines passing through high-fire threat areas when conditions create a high risk for fire. While PG&E does not directly serve electricity to Palo Alto utility customers, the City intakes electricity from PG&E’s transmission system, so outages could affect CPAU customers. Even though Palo Alto has its own small electric generation sources, there is a possibility of outages within the City if PG&E shuts off power to a major transmission line serving our area. If there is a statewide incident that impacts the transmission network feeding Palo Alto, this could result in rolling blackouts.

Staff are working through partner agencies such as the Northern California Power Agency (NCPA) to establish clear communication protocols between PG&E and customers when PG&E anticipates shutting down power to a major transmission line. CPAU is updating emergency response plans and contact information to ensure that appropriate staff in Utilities, Emergency Services, Fire, Police and other impacted City departments are informed and prepared to respond to a large power outage and/or wildfire. Utilities engineering and operations staff are evaluating available resources to supply temporary power to critical facilities in the event of a large power outage.

CPAU and other City departments are also implementing measures related to local electric system operation and vegetation management to reduce the risk of fires caused by overhead electric lines. The Foothills areas is at the greatest risk of wildfire in Palo Alto, and City staff continually monitor conditions very closely. If PG&E makes a decision to shut off power lines west of highway 280, CPAU may need to shut off power locally to customers in the Foothills. CPAU will coordinate to make local operational decisions based on the safety and best interests of our community members and our utility’s infrastructure.

The City is working to share information about utility infrastructure safety, wildfire prevention, emergency preparation and response with all affected stakeholders. CPAU has created a webpage about wildfire safety and provides emergency contact information via outreach materials such as brochures, magnets, and other educational items to utility customers. Although PG&E has said the company will provide a 24- to 48-hour notice for major outages, it is not certain that PG&E or CPAU will be able to guarantee this advance notification. In this case, residents and businesses must be prepared for power outages without warning and CPAU is developing communication protocols in the event there is a widespread or localized power outage.

Staff are currently reaching out to residential, business, and other community groups to spread awareness of potential impacts in Palo Alto and assist customers with emergency preparedness and safety measures. Our goal is to be clear about what the City’s actions will be, how we will communicate with our utility customers, and what we ask our residents and businesses to do in turn. Once additional outreach materials are ready, the City will utilize its full comprehensive communication channels including city websites, newsletters, print and digital ads, and community events, to inform the community about our emergency response and communication plans.
LOCAL WILDFIRE CONDITIONS

In 2012, the California Public Utilities Commission (CPUC) created a statewide fire threat map to identify areas of increased risk for utility associated wildfires (https://www.cpuc.ca.gov/FireThreatMaps/). All Electric Utility companies in California participated in the process along with State Fire Agencies. In High Fire Threat areas, the State implemented stricter construction requirements, including significantly increased clearance requirements between utility lines and vegetation.

In accordance with CPUC’s Fire Threat map, in Palo Alto, all areas within the city limits west of Highway 280 (Foothills) are considered at Elevated Risk. The rest of the city is considered at Moderate Risk – the lowest risk level.
MITIGATION PLAN AND PREVENTION
The City is undertaking measures to reduce the risk of fires caused by overhead electric lines. CPAU is leading the development of a Utilities Wildfire Mitigation Plan that outlines the processes and activities undertaken by CPAU and other city departments to mitigate the threat of wildfires associated with overhead electric lines and associated equipment owned and operated by CPAU. This plan will be presented to City Council for approval by the end of 2019.

Ongoing local wildfire prevention methods include increased vegetation management and electric line inspections, prioritized maintenance, and additional staff training. CPAU works with the Urban Forestry division to ensure that trees are trimmed and inspected annually to prevent contact with electric lines as an ignition source of fires. Future activities include rebuilding, replacing and rerouting overhead lines and poles, refining construction practices, improving communication systems, and coordinating activities with PG&E.

<table>
<thead>
<tr>
<th>Type of Clearance</th>
<th>General Order 95: Rule 35 Minimum Clearance</th>
<th>Appendix E Clearance at time of trim (allows for tree growth between tree trimming)</th>
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</thead>
<tbody>
<tr>
<td>Radial clearance of bare line conductors from tree branches or foliage</td>
<td>18 inches</td>
<td>4 feet</td>
</tr>
<tr>
<td>Radial clearance of bare line conductors from vegetation in the Fire-Threat District</td>
<td>48 inches</td>
<td>12 feet</td>
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</tbody>
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CPAU participated in a conference call on June 28, 2019 with several municipalities and relevant organizations about the PG&E public safety power shutoff program. The purpose of this call was to learn about different outreach and awareness methods and create a unified strategy to communicate with the public in the case of a power shutdown. Municipalities reported limited resources to provide to the public and limited information from PG&E about how power shutoffs may affect their residents, however representatives expressed a willingness to develop and share outreach materials. Of those who have already prepared outreach materials, Silicon Valley Public Power, Santa Clara County Public Health, and Santa Clara County Fire have stated a willingness to share if materials may be useful to other agencies. In subsequent discussions, CPAU will be sharing information with other stakeholders including California Municipal Utilities Association (CMUA), NCPA, and the California Independent System Operator (CalISO).

CONCLUSION
The City is coordinating emergency response and communication plans with internal and external stakeholders who could be potentially affected by power outages related to wildfire conditions. CPAU is organizing comprehensive outreach strategies in anticipation of a Citywide power outage associated with the PG&E power shutoff program or any local power shutoff related to fire risks from city utility infrastructure. Wildfire risk is elevated in the Foothills and moderate in all other areas of Palo Alto.
Utilities department is currently leading the development of the Utilities Wildfire Mitigation Plan and working with other departments and divisions such as Urban Forestry to prioritize utility safety.

**NEXT STEPS**

CPAU will continue to coordinate with PG&E and other stakeholders, such as NCPA and other City departments, to publish wildfire and power safety shutoff information including overall outage preparedness, and emergency checklists or toolkits, and CPAU will proactively engage in local outreach campaigns. Engineering staff will continue to evaluate local on-site electric generation capabilities and update the UAC as new information is available. CPAU staff will update the UAC with any critical information related to these topics.

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**APPROVED BY:**

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DEAN BATCHELOR
Director of Utilities