



Memorandum

TO: RULES AND OPEN
GOVERNMENT COMMITTEE

FROM: Mayor Sam Liccardo

SUBJECT: SEE BELOW

DATE: October 22, 2019

Approved

Date



mm 10-22-2019

REPLACEMENT MEMORANDUM

SUBJECT: PUBLIC SAFETY POWER SHUTOFFS: MAKING SAN JOSE GRID-RESILIENT

RECOMMENDATION

1. **After-Action Report:** Return to Council with a verbal after-action report outlining the measures taken by City staff and partners to prepare residents for the Public Safety Power Shutoff (PSPS), and what lessons might be drawn from our experience. Further:
 - a. Identify the public cost of the City's response to the PSPS.
 - b. Identify those resources – from PG&E, the state of California, or other sources – that could compensate San José taxpayers for that expenditure, including the \$75 million PSPS preparedness funding from last year's State budget.
 - c. If any private cost data becomes available, provide an estimate of losses incurred by San José residents and businesses as a result of the PSPS, and any means for families to recover for those losses.
 - d. Identify the recorded wind speeds, humidity, and temperature at the time that power on distribution lines was shut off in relevant neighborhoods in Alum Rock, Evergreen, and Almaden, and how those measurements compared to thresholds announced by PG&E in California Public Utilities Commission (CPUC) filings for PSPS events.
 - e. Showcase the unique tools and methods that City staff developed in preparation for a PSPS event, particularly the crowd-sourcing app that provided highly accurate real-time information about outages, and the map-based data-sharing tool that identified such elements as potential and actual outage areas, medically vulnerable residents, and critical facilities for responders and other agencies.

2. **Table-Top Exercise:** Invite PG&E and other key local emergency response decision makers to participate in an expedited table-top exercise to identify and implement concrete improvements in communication in preparation for the next PSPS.
3. **Microgrids and Related Investments in Resilience:**
 - a. Return to Council to identify the steps required for the strategic development of microgrids in key locations throughout our city, with particular emphasis on critical infrastructure and areas requiring high levels of redevelopment and infrastructure investment.
 - b. Explore the role that San José Clean Energy and City partners can play a role in helping residents “get off the grid” during a blackout by installing infrastructure necessary to create hybrid off-grid solar systems with backup utility power, by assessing the feasibility of:
 - i. Developing “resiliency islands” within residential neighborhoods that can provide support to neighbors during PSPS events;
 - ii. Supporting efforts of low- and modest-income residents to purchase solar panels and storage with the benefit of generous subsidies created by the California’s Self-Generation Incentive Program;
 - iii. Building partnerships that could engage residents in group purchases of off-grid inverters, solar charge controllers, and battery storage at a bulk discount; and/or
 - iv. Providing information to homeowners willing to commit to opening their homes to neighbors in the event of a power shut-down.
4. **Customer-Owned Utility:** Inform the Council regarding the benefits and risks of mutualization, i.e., creating a customer-owned utility. Seek Council authority to engage in agreements with other jurisdictions for joint advocacy before the California legislature, CPUC, and Bankruptcy Court.
5. **Voter Support for Bonds:** In Fall polling for potential ballot measures, include questions that will enable the Council and Staff to evaluate voter support for:
 - a. Acquisition of all electrical distribution infrastructure currently owned by PG&E necessary to municipalize the local electrical utility; and
 - b. Bond financing to develop renewable energy storage and generation facilities - such as microgrids - that can insulate critical city facilities or participating neighborhoods to improve energy resilience, reliability, and costs.
6. **Full Municipalization:** If polling reveals substantial support for acquisition of PG&E infrastructure, then:
 - a. Return to Council with a draft scope and cost estimate for a feasibility study;
 - b. Provide Council with any preliminary findings from Staff’s ongoing exploration of municipalization regarding issues such as: the cost of infrastructure acquisition, any estimates of capital repair and replacement, the legal obstacles to municipal purchase of the assets, taxpayer liability for infrastructure failures, and anticipated operational issues; and
 - c. Communicate with the leadership of the local IBEW to assure them that in the event of municipalization, the City of San José will not undercut established commitments on pay, benefits, or representation.

7. **Legislative Advocacy:** Advocate with the CPUC and state legislature to:
- a. Authorize appropriately trained City and County staff to supplement PG&E inspection teams during a PSPS event—such as by taking geo-tagged photos of distribution lines—to accelerate the restoration of power to affected residents.
 - b. Require PG&E to clearly disclose the specific conditions (wind speed, temperature, humidity, etc.) that triggered any specific PSPS at the time of the deenergization decision.
 - c. Require PG&E to share all data they hold regarding areas potentially affected by a PSPS with relevant public agencies, including cities, to enable those agencies to “scrub” the data to better protect vulnerable populations and critical facilities.
 - d. Ensure medical baseline data is shared with the Cities and Counties of affected PSPS areas.
 - e. Expand the funding for the Self-Generation Incentive Program or other programs that offer financial incentives to install distributed resources, including solar and storage.
 - f. Provide state funding and eliminate barriers to the establishment and feasible operation of microgrids, restricting discriminatory fees imposed by utilities, and streamlining the regulatory approval processes.

BACKGROUND

The limitations of California’s investor-owned-utility (IOU) model became all too apparent to more than 60,000 San Joséans in early October, when we experienced the first of likely many Public Safety Power Shutoff (PSPS) events. Fortunately, our first experience with a PSPS had a short duration, avoiding the more serious threats to public safety and public health that come with extended blackouts. We may not be so fortunate next time.

That is not to say that we didn’t see this day coming, nor that we haven’t worked fervently to avoid it. Since May’s ruling by the California Public Utilities Commission (CPUC), City staff has warned of the perils of the CPUC’s decision to provide PG&E with unilateral authority to shut down power over large swaths of Northern California to mitigate wildfire risk. I published an op-ed in the San Francisco Chronicle in July,¹ urging greater government oversight and authority over PG&E’s decisions to implement each PSPS, and subsequently held a press conference urging more assertive state action. At the invitation of Senator Jerry Hill, I, along with Lori Mitchell and Ray Riordan, testified before a legislative subcommittee in August, and lobbied the Governor and members of our local legislative delegation for change. The City ultimately sponsored a bill carried by Senator Scott Wiener, SB 378, to better align the IOUs’ financial incentives and governmental oversight with the public interest.

In the short run, the State and PG&E can do much to improve communication with local public agencies. Open sharing of data will help local communities prepare better. For example, when PG&E presented summary information regarding potential impact to City staff in our Emergency Operations Center, they identified 67 schools. When City staff cleaned up the data manually, it

¹ <https://www.sfchronicle.com/opinion/openforum/article/Blackout-decisions-Don-t-leave-them-to-the-14076103.php>

revealed only 39 school sites potentially affected, leaving 28 schools unnecessarily scrambling to prepare for blackouts. Similarly, when (after the City prodded) PG&E finally released data to identify medical baseline customers (those residents depending on electrical power for life-sustaining medical equipment, such as respirators and wheelchairs), it became clear that several residents had been missed, while others were unnecessarily included. We need clear mandates and protocols for PG&E to “lift the hood” on such data.

The most feasible long-term solution lies in distributed, off-grid electricity generation, and storage, which can take several forms. Enabling residents with solar arrays to create islands of resiliency within neighborhoods can help, as can investing in larger microgrids in strategic parts of the City. Residents living in low-income neighborhoods can achieve access to this infrastructure through participation in California’s Self-Generation Incentive Program, a \$100 million state program that can provide as much as a 98% subsidy for residential battery storage systems for low-income and medical-baseline residents.² Expanding microgrids beyond a single home or block, however, will require the creating of a public utility within the City of San Jose, or modification of state legislation to lift geographic constraints in state law.

Another potential long-term solution lies in public ownership of PG&E or of its assets, which City staff have already begun to quietly explore. We need to see the company’s financial interests better aligned with the public interest. We also need to ensure that the post-bankruptcy company can access capital markets at a low cost, because all of the experts agree that we will only achieve resilience with large capital investments.

The most promising approach lies in mutualization—that is, the creation of a customer-owned utility. This is hardly a novel notion; there are already more than 900 utility cooperatives in the United States, serving 19 million ratepayers. Most are small entities, but at least two earn more than a billion in revenues. Creating a customer-owned utility will realign PG&E’s orientation because customers will be represented on the board overseeing the company’s management and its decision making. It will also dramatically reduce PG&E’s cost of capital when it emerges from bankruptcy—by about half—because a utility cooperative would not have to pay dividends to shareholders, nor taxes to the federal or possibly state government.

While I prefer mutualization, I also urge that we take a closer look at full municipalization, to ensure that the Council—and the public—have all of the options on the table. Any move toward acquisition of PG&E’s assets will require voter approval under the Charter, so poll testing should inform our options. While fraught with legal challenges, multi-billion-dollar capital costs, and operational challenges, a deeper examination of municipalization is overdue.

Creating a utility owned by the public—whether its customers or a municipality—will not provide a panacea to the PSPS problem. It will ensure that the company that emerges from bankruptcy is not distracted by demands by investors for short-term financial performance, and better able to access capital to invest in its infrastructure.

² <https://www.greentechmedia.com/articles/read/california-approves-100m-in-energy-storage-incentives-for-wildfire-resilien#gs.9fmgbf>

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It will also ensure that decisions about PSPS are made with properly aligned incentives. Beyond any questions about PG&E's judgement, every IOU has asymmetrical risk exposure—and misaligned incentives—when facing a decision to shut down power due to wildfire risk. PG&E faces financial liability for wildfires, but very uncertain liability, if any, for lost lives and livelihoods resulting from lengthy blackouts. PG&E can use frequent power shut-downs to hedge against wildfire risks created by its own poor safety and maintenance practices. PG&E's ostensible exposure to only one side of the risk equation puts the well-being and safety of millions of Californians on the other side.

We simply cannot rely upon PG&E to act in our residents' best interests. The company announced \$11 million in bonuses in July, apparently based upon a prior-year's performance that resulted in the company's second bankruptcy filing in the last two decades, and the accumulation of \$30 billion in wildfire-related liabilities arising from their negligence. According to a December 2018 CPUC report, PG&E falsified its infrastructure maintenance and safety records for a half-decade. The same PG&E issued \$7 billion in dividends to shareholders between 2009 and 2017, while cutting needed investment in maintenance and safety. It's easy to overlook, moreover, that the corporation has been convicted of felony crimes for its transgressions in San Bruno. It's time to explore a San José without PG&E. It's time to move on, and to take bolder action to protect our residents.

I'd like to thank all the staff, led by Kip Harkness, Dave Sykes, Kim Walesh, and Lee Wilcox, who worked around the clock at the Emergency Operations Center during the PSPS event. Months of preparation clearly paid off, and staff's creative work in developing a data visualization platform and a crowd-sourcing app enabled smooth coordination and more accurate real-time information than they were able to receive from PG&E. Staff also quickly mobilized outreach to ensure vulnerable residents received the information they needed. We were fortunate to avoid a longer power shut-down, but staff's hard work has prepared us as well as we could reasonably hope for the next one.