



May 24, 2019

President Carla J. Peterman
Commissioner Dave Jones
Commissioner Michael Kahn
Commissioner Pedro Nava
Commissioner Michael Wara
Catastrophic Wildfire Cost and Recovery Commission
Governor's Office of Planning and Research

Dear President Peterman, and Commissioners Jones, Kahn, Nava and Wara,

The recent confirmation by CAL FIRE that the Camp Fire in Butte County triggered by electrical transmission equipment owned and operated by the Pacific Gas and Electric Company (PG&E) points to ever mounting wildfire liability costs. The estimated costs required to compensate the victims of that devastating fire combined with the large-scale damages resulting from the seventeen North Bay area wildfires in 2017 continue to escalate.

The magnitude of those costs, together with PG&E's past culpability in gas system failures, call into question PG&E's capability to provide the leadership required to meet vital climate goals articulated in the recently enacted SB 100 and Governor's Executive Order 8-55-18. Achieving carbon neutrality as soon as possible is at risk if the State of California does not adjust for PG&E's diminished capabilities to address the causes and effects of climate disruption.

Vote Solar believes it is essential for the State of California to identify and elaborate sources of funding for wildfire prevention. However, collecting the billions of dollars needed to address the risks of wildfires primarily through surcharges on energy consumption is not only regressive but risks crowding out the energy system investments that are needed to achieve California's goal of rapidly decarbonizing the electric grid and creating a carbon neutral economy.

Moreover, addressing the issue of wildfire liability in isolation from broader energy policy requirements will surely result in suboptimal policy solutions. To holistically address the threat of future climate crises including wildfires, we recommend that California make several fundamental changes to the state's energy systems regulatory framework to build more reliable and adaptable energy systems and stronger and more resilient local communities. These changes, together with the appropriate re-organization of PG&E, can meaningfully reduce the impact of changing climate conditions on California's residents and businesses.

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We are recommending that the State of California adopt three core initiatives that are needed to assure that California has the foundation for promoting robust, clean and carbon-neutral energy systems¹.

The first initiative is to safely reduce the need for and use of fossil gas (methane) in the PG&E service area by transferring PG&E's gas delivery assets to a publicly-owned gas utility with the mandate to ultimately eliminate the use of gas in residences and businesses, while supporting programs to ensure an equitable transition away from the use of gas.

The second initiative is to reform the current cost-of-service utility regulatory system to one that incentivizes utilities to open up and modernize local electric distribution systems to enable the robust development and use of clean distributed energy resources (DERs) while assuring broad and equitable participation in the realization of their benefits.

The third initiative is to support cities, counties and public agencies, including community choice aggregation entities, in collaborative planning with electric utilities on the development of programs and projects to electrify transportation, reduce the use of fossil energy in buildings and develop community resilience.

1. CREATE A PUBLICLY-OWNED GAS UTILITY TO ASSUME OWNERSHIP AND OPERATION OF PG&E'S FOSSIL GAS DELIVERY SYSTEM

The goals of this initiative are: 1) to improve the safe delivery of combustible gas to homes and businesses, 2) to facilitate deep reductions in greenhouse gas emissions from leaks in the gas delivery system and end-use combustion of natural gas and 3) to assist communities in the transition away from fossil gas.

PG&E's management has failed over the past decade to create a culture that is consistent with the safe delivery of fossil gas.² Improvements in safety will require focused and innovative leadership and management as well as access to low-cost capital. PG&E's cost of capital is increasing as a result of mounting wildfire liabilities and as well as climate risk in general. More expensive capital costs will likely be a constraint on PG&E's ability to make safety improvements and decrease gas leaks for the foreseeable future.

Furthermore, the ownership of both gas and electric distribution system assets by the same company creates a fundamental conflict of interest as state policy focuses on the need for the

¹ We use the term energy systems to include electric, gas, transportation and building heating and cooling systems.

²<https://www.justice.gov/usao-ndca/pr/pge-found-guilty-obstruction-agency-proceeding-and-multiple-violations-natural-gas>



rapid shift of energy end-uses in buildings from gas to electricity. For all of these reasons it is urgent, as part of PG&E's restructuring, that gas delivery system assets be transferred to a public entity that is adequately capitalized to make safety improvements a priority.

As California continues to decarbonize its economy it will also need to recognize that the gas delivery business will be one of declining sales. Currently, California generates one-third of its electricity from gas-fired power plants while 29% comes from defined renewable energy technologies. By state law renewable technologies will grow to at least 60% by 2030 thereby dramatically reducing the need for the existing fleet of gas-fired power plants to provide energy. In additions, efforts to replace gas space and water heating with more cost-effective electric technologies will lead to further deterioration in fossil gas sales.

This situation creates a dual challenge for the owner of the gas delivery system. For a period of time there will continue to be many residential and business customers who use gas for essential needs. The gas utility will have to continue to make investments in assuring the gas infrastructure is safe and reliable. At the same time the gas utility needs to plan for the orderly decommissioning of the gas delivery infrastructure. These conflicting priorities can best be managed by a public entity that both has access to low-cost financing and a commitment to the public interest. A publicly-owned gas utility is best situated to make a fair and equitable transition away from the use of fossil gas that mitigates potential negative impacts on vulnerable and disadvantaged communities.

There are numerous examples of public agencies providing safe and reliable gs service across the United States. A good example is the City of Long Beach which has operated a gas delivery utility since 1924. A publicly owned utility would have the ability to issue tax-exempt revenue bonds and use the power of eminent domain to rapidly effectuate the transfer of ownership of PG&E's gas delivery system. The transfer should be done in a manner that minimizes disruption to the existing workforce responsible for operating and maintaining the delivery infrastructure.

A new public gas enterprise should have as a core part of its mission to reduce and ultimately eliminate the use of fossil gas in residences and businesses. At the same time it needs to proactively protect low-income customers and residents of disadvantaged communities during the transition away from gas. The new public gas utility should be mandated to provide technical assistance and financial support for targeted communities during the transition away from fossil gas.

2. REFORM THE COST-OF-SERVICE UTILITY REGULATORY SYSTEM TO OPEN UP UTILITY DISTRIBUTION SYSTEMS TO THE DEPLOYMENT AND INTEGRATION OF CLEAN DISTRIBUTED ENERGY RESOURCES

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The goals of this initiative are: 1) to reconstitute the mission of the operator of the electric distribution system as a “wires” platform provider that cost-effectively integrates clean energy technologies across the grid, 2) to provide performance incentives to assure that the electric distribution system operator is financially sound and 3) to encourage the timely cost-effective modernization of the electric distribution system to enable two-way delivery of services.

Small-scale clean energy technologies like solar and battery storage are becoming increasingly cost-effective and accessible. At the same time, residential and business customers are seeking greater autonomy and control of their energy sources and uses. Third-parties are addressing this growing market with innovative load management and system integration technologies.

These two trends are fundamentally disrupting the traditional use of the electric distribution system as a one-way delivery system from large-scale generation to a passive end-user. These changes create an opportunity for California to create a regulatory structure that leverages the innovation of third-parties to provide energy- and grid-services in a way that is cost-effectively integrated with the high voltage bulk power system that is largely powered by variable output sources of electricity.

Regulated electric utilities in the United States have invested, over the past decade, over \$20 billion per year in the electric distribution system³. PG&E alone invested over \$14 billion during the past five years in upgrades to its electric grid. As the demand for utility power flattens out, the amount of distribution assets per customer (distribution lines, transformers, capacitors, etc.) continues to rise, thus making electricity more expensive for all customers.

Once approved by the CPUC, utility investments in the distribution system are guaranteed a long-term return. This cost-of-service regulatory approach creates a powerful incentive for utilities like PG&E to over-invest in the distribution system while blocking others from providing lower costs services needed to maintain and improve reliability and resilience of service.

It is now possible to avoid a portion of distribution system investments by using clean DERs in a coordinated way to meet local power needs and to stabilize the operation of the grid. Utilities in California are mandated to develop annual grid needs assessments and identify “non-wires solutions” to defer or avoid investments in distribution system upgrades. However, the progress in using clean DERs for grid services has been excruciatingly slow. This slow progress could be overcome by creating the right set of incentives for utilities like PG&E to better integrate the use of DERs.

³<https://about.bnef.com/blog/u-s-utility-investment-booming-sales-not-keeping/>



California's regulatory structure needs to be changed to one that rewards good performance and penalizes failure to achieve agreed-upon measures of safety, reliability, grid and economy-wide decarbonization, community resilience, customer empowerment and social equity. This type of regulatory reform, often called performance-based regulation (PBR), is underway in several states including Hawaii, Minnesota and Rhode Island. These regulatory reform measure have come both from legislation and executive branch initiatives. PBR is not a new concept but its use to integrate clean DERs, create more resilient communities and assure benefits for disadvantaged communities is timely.

With well-designed incentive mechanisms, California's utilities should no longer have any reason to inhibit or suppress DERs and favor their own capital investments. Particularly as utility cost-of-capital increases in comparison to capital available to competitive enterprises, California should encourage utilities to move to a more balanced structure that reduces costs to consumers. Done right, PBR will help transform PG&E and other California utilities to financially stable wires companies that promote technology innovation and equitable participation in evolving markets by all ratepayers.

3. SUPPORT COLLABORATIVE ENERGY PLANNING BETWEEN LOCAL GOVERNMENTS AND ELECTRIC UTILITIES TO DECARBONIZE THE ECONOMY FROM THE BOTTOM UP AND BUILD COMMUNITY RESILIENCE

The goals of this initiative are: 1) to shift responsibility for planning and procurement of local clean energy resources to local agencies, 2) to facilitate the electrification of transportation and building energy end-uses and 3) to build community resilience to maintain essential quality of life service when severe disruption occurs.

In California, approximately 70% of all greenhouse gas emissions come from uses of fossil fuels in transportation and buildings. California's energy and environmental policymakers have recognized that deep economy-wide reductions in greenhouse gases and achievement of carbon neutrality will require widespread electrification of these sectors of the economy taking advantage of a low-carbon electric grid.

Many of the policies, initiatives and programs that support electrification of transportation and buildings are adopted and implemented at the local governmental level. Local governments have authority for zoning, building code enforcement, transportation infrastructure development and promoting local business development while improving the resilience of essential public services to withstand and recover from disruption. These responsibilities of local government can be more effectively implemented through closer partnerships with distribution utilities like PG&E.

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Many city and county governments over the past several years have formed community choice aggregation entities (CCAs) which have responsibility for procuring and managing energy resources needed to meet local needs. CCAs can be an important bridge between local governments and distribution utilities in planning for the deployment of DERs together with electrifying transportation and building end-uses.

Not all electric customers are served by a CCA or a public power agency. In the PG&E service territory large parts of the Central Valley from Red Bluff to Tehachapi are not yet in a CCA. A significant portion of high fire hazard severity zones are located in this part of California. Local governments in these areas would greatly benefit from a statewide initiative that empowers local governments to partner with distribution utilities to plan and implement energy systems that serve local needs including response to wildfire risks⁴.

A key element of collaborative partnerships between distribution utilities and local governments including CCAs will be assuring access to data on energy consumption and load shapes in sufficient detail to support planning for decarbonization of the economy. Data sharing between distribution utilities and local governments needs to be supported, consistent with protecting individuals' privacy and grid security. Distribution utility collaboration is necessary to locate local distributed energy resources to maximize power system benefits including deferring grid infrastructure, meeting requirements for local generation capacity and providing real-time grid services.

Regulated electric utilities retain some legacy responsibilities for customer-facing programs like energy efficiency and demand response. These activities need to be more closely coordinated with local governments, including CCAs to assure effective implementation of local clean energy policies in the transportation and building energy sectors. Increased local government involvement can also be a way of ensuring increased focus towards and involvement of disadvantaged communities in building community resilience.

This proposed initiative focuses on shifting responsibilities for energy planning and procurement to local governments including CCAs. Local governments can be the agents that encourage public-private partnerships with cleantech companies and customers that will enable product innovation and improve energy systems integration.

Distribution utilities will have a central technical role during this shift as the host for a market where multiple innovators can participate in designing and improving energy technologies with broad community benefits.

⁴ AB 1347 (Boerner Horvath) would establish guidelines for local to develop and deploy community level resources.



CONCLUSION

The increased frequency and severity of wildfires together with the PG&E bankruptcy requires a fundamental re-examination of California's regulatory framework for the delivery of fossil gas and electricity. A narrow focus on liability for wildfires is not sufficient to address the current challenge of climate disruption. The rapid decarbonization, decentralization and diversification of our energy systems require urgent and comprehensive action. We strongly urge that the three policy initiatives outlined above become part of the public discussion in the legislature and at state administrative and regulatory agencies. We request your support for translating these recommendations into actionable policies.

Regards,

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