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**SMUD Comments on Joint CEC/CPUC Workshop on Climate Adaptation and Resiliency**

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*Additional submitted attachment is included below.*

August 16, 2018

**POSTED ELECTRONICALLY TO  
DOCKET 18-IEPR-05**California Energy Commission  
Dockets Office, MS-4  
Docket No. 18-IEPR-05  
1516 Ninth Street  
Sacramento, CA 95814-5512Re: Docket 18-IEPR-05: Pacific Gas and Electric Company Comments on the 2018 IEPR Update Joint Agency Workshop on Climate Adaptation and Resiliency**A. Introduction**

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide comments on the California Energy Commission's (CEC) 2018 Integrated Energy Policy Report (IEPR) Update Joint Agency Workshop on Climate Adaptation and Resiliency. PG&E commends the CEC for recognizing the importance of addressing climate change risks, and looks forward to continued engagement and partnership with the State of California on this issue.

Just as PG&E has long been a leader<sup>1</sup> on climate change mitigation,<sup>2</sup> PG&E has and will continue to support the State's leadership on climate change adaptation. Indeed, California is already experiencing impacts from climate change such as increasing severity and frequency of wildfires, heatwaves, drought and rising sea levels, among others.<sup>3</sup> However, the confluence of these factors is a recent development. Reliance on historical trends to plan for, and mitigate against, these risks is becoming increasingly less relevant as climate change ushers in the "new normal" recently referenced by Governor Brown.<sup>4</sup> Investing in relevant climate science, designing tools to access

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<sup>1</sup> For example, PG&E leaders joined California's delegation to the 2015 COP21 international climate talks in Paris; PG&E was named to the "Climate A List" by the CDP (formerly the Carbon Disclosure Project) in 2016; and PG&E earned the No. 4 overall ranking in the Newsweek Green Rankings in 2017.  
[http://www.pgecorp.com/corp\\_responsibility/reports/2017/en02\\_climate\\_change.html](http://www.pgecorp.com/corp_responsibility/reports/2017/en02_climate_change.html)

<sup>2</sup> "Climate change mitigation is generally defined as actions that reduce carbon emissions, while adaptation is generally defined as actions that reduce the vulnerability to climate impacts." CPUC, *Climate Adaptation in the Electric Sector*, January 6, 2016, p. 3, footnote 2.

<sup>3</sup> See CPUC, *Climate Adaptation in the Electric Sector*, January 6, 2016, p. 2, including footnote 1 noting that "[c]limate scientists have not determined whether the drought is caused by climate change, but all scientists working on the topic agree that climate change has made the drought worse."

<sup>4</sup> "California faces "new normal" of intense wildfires, Governor says" <https://www.nbcnews.com/storyline/western-wildfires/california-faces-new-normal-wildfires-governor-says-n828106>

and apply that science, and helping define the “new normal” scenarios for energy sector planning purposes is critical. In these comments, PG&E affirms support for continued action by the State across multiple proceedings, presents PG&E’s latest, wildfire-specific mitigation efforts, and discusses the insurance impacts of climate-driven extreme weather events.

## **B. Highlighting Important Issues from the CPUC’s New Rulemaking on Climate Change Adaptation**

PG&E recognizes the CEC’s role in the State’s multi-agency effort to address climate adaptation and resilience, and appreciates the emphasis placed on this issue in the 2018 IEPR Update as well as the CEC’s continued financial commitment to addressing climate threats through EPIC research. The CPUC is also addressing the issue of climate resilience as it relates to California’s utilities through the Order Instituting Rulemaking to Consider Strategies and Guidance for Climate Change Adaptation.<sup>5</sup> By referencing PG&E’s opening comments from that proceeding, PG&E submits those comments into the IEPR record, and highlights two particularly relevant issues from that proceeding below.<sup>6</sup>

### **a. Common Planning Scenarios**

The State has developed a number of useful climate-related data sources and tools, among them the CEC-funded Cal-Adapt tool, that can further state agency and utility adaptation efforts. Consistent with the *Safeguarding California Plan: 2018 Update*, PG&E has recommended that the CPUC and other relevant state agencies endorse common climate scenarios, regularly updated by subject matter experts to incorporate evolving climate science, for use in all energy research and planning. Establishing a common climate baseline is a critical first step in establishing a decision-making framework that the state’s critical service providers, from energy to telecommunications to water organizations, can use to take appropriate action. PG&E’s comments to the CPUC go into more detail about how this baseline might be established.

### **b. Working Together to Bolster Resiliency**

While energy utilities are an important stakeholder supporting California’s climate resilience, so too are local, state, and federal governments, other private sector entities, other public and investor-owned utilities (IOUs), community-based organizations, and many more. A coordinated response is important to the efficacy of mitigations taken. PG&E commends the work of the Integrated Climate Adaptation and Resiliency Program (ICARP), which is “designed to develop a cohesive and coordinated response to the impacts of climate change across State, local, and regional levels.” Appropriately responding to the varied, interactive, and increasing threat of climate change will take close

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<sup>5</sup> Order Instituting Rulemaking to Consider Strategies and Guidance for Climate Change Adaptation. California Public Utilities Commission. Issued May 7, 2018.  
<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M213/K511/213511543.PDF>

<sup>6</sup> Comments of Pacific Gas and Electric Company on Order Instituting Rulemaking to Consider Strategies and Guidance for Climate Change Adaptation. Pacific Gas & Electric. Submitted June 6, 2018.  
<http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M215/K795/215795981.PDF>

collaboration amongst all stakeholders, an effort that will be assisted and made efficient by coordinated State leadership. The need for a multi-pronged, partnered adaptation approach is particularly important in the context of addressing the needs of disadvantaged communities, which often have less adaptive capacity with which to confront the challenges of climate change.

### **C. Wildfire Adaptation and Mitigation**

The devastating, record-breaking wildfires that continue to impact the entire state underscore the effects of climate change on California. Increased frequency and severity of wildfires throughout the year are just some of the many reasons that all utilities, and all California businesses, must adapt to a changing climate, and it is an area where PG&E is working in close coordination with other IOUs to mitigate risk and build a more resilient electric system.

To address the impacts of years of drought, extreme heat, and 129 million dead trees<sup>7</sup>, following last year's wildfires, PG&E has launched its Community Wildfire Safety Program (CWSP), which implements additional precautionary measures intended to further reduce wildfire risk, with a focus on three particular areas: bolstering wildfire prevention and emergency response, implementing new and enhanced safety measures, and long-term hardening of the electric system.

PG&E has established a dedicated Wildfire Safety Operations Center to monitor wildfire risks and coordinate prevention and response efforts with first responder partners. Additionally, PG&E is expanding its network of weather stations to enhance forecasting and modeling and better predict when and where extreme wildfire danger could occur. This year, more than 60 new stations have been deployed across PG&E's service area with more than 200 in total planned to be in place by the end of the year.

New and enhanced safety measures include augmenting already rigorous vegetation management practices to meet new state vegetation and fire safety standards and partnering with customers to create fire defense zones around power lines in high fire-threat districts. Within these Zones, PG&E will remove overhanging trees and dead fuel from around distribution lines. PG&E may also proactively turn off electric power for safety as a last resort when extreme fire danger conditions occur. This program considers weather and fuel conditions, field observations, and other factors to determine where and when to proactively turn off power lines for safety.

Additionally, long-term hardening of the electric system along with the integration of new technologies will create a stronger, more resilient grid. These long-term plans include investing in stronger, insulated power lines, using new and enhanced safety equipment, replacing wood poles with non-wood material, and piloting the development of resilience zones designed to allow quick installation of energy resources to keep critical community facilities in service during emergencies.

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<sup>7</sup> See, e.g., [https://www.fs.fed.us/psw/topics/tree\\_mortality/california/bark-beetles.shtml](https://www.fs.fed.us/psw/topics/tree_mortality/california/bark-beetles.shtml)

#### **D. Insurance Impacts of Climate Change**

At the August 2, 2018 Workshop, Chair Weisenmiller requested details from the utilities that were present on insurance impacts related to wildfires and the state's "new normal" of year-round fire season.

Traditional insurance providers are adjusting to the increased frequency and severity of wildfires across the state, coupled with the unsustainable strict liability standard, by offering less coverage at an increased cost. Some carriers have significantly reduced their exposure to California utilities by reducing limits or excluding events that were previously covered, and all insurers have significantly increased their premiums.

Recent negotiations between PG&E and insurers illustrate this challenge. On its July 26, 2018 earnings call, PG&E stated that it had been seeking to transfer approximately \$1 billion to \$1.5 billion of financial risk to the insurance and capital markets, including a first-of-its kind wildfire catastrophe bond. The cost of this coverage was expected to be roughly \$350 million annually, which exceeds the amount that PG&E currently recovers in rates by approximately \$300 million.

#### **E. Conclusion**

PG&E appreciates this opportunity to comment on this critical work and looks forward to continued participation in this IEPR Update.

Sincerely,

/s/

Spencer Olinek