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PG&E Comments on the workshop on next steps to plan for SB 100 resource build

Additional submitted attachment is included below.

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June 22, 2021

California Energy Commission
Commissioners Karen Douglas and Siva Gunda
Docket Unit, MS-4
Docket Number 21-SIT-01
1516 9th Street
Sacramento, CA 95814

Re: Pacific Gas and Electric Company Comments on the Workshop on Next Steps to Plan for Senate Bill 100 Resource Build (Docket Number 21-SIT-01)

Dear Commissioners, Gunda and Douglas,

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to participate in the joint agency workshop on June 2, 2021, on the next steps to plan for the development of energy resources that will be required to achieve the goals of Senate Bill (SB) 100, hosted by the California Energy Commission's (CEC), the California Public Utilities Commission (CPUC), and the California Independent System Operator (CAISO). PG&E supports California's clean energy goals and is committed to partnering with the CEC, CPUC, the California Air Resources Board (CARB), and other energy agencies to initiate a process to explore next steps to plan for the development of resources to implement SB 100.

PG&E offers the following comments aligned with PG&E's Director of Energy Strategy and Innovation, Jan Berman's statements at the workshop to respond to the Commission's questions posed to various Load Serving Entities (LSEs):

1. **What are your priorities for how we transition the electric grid to carbon-free resources?**

PG&E is committed to delivering safe, reliable, and clean energy in a way that achieves the greatest value for our customers. We recognize the foundational role clean energy has in transitioning to a decarbonized economy, and we strongly support California's clean energy policies, renewable goals, and efforts to limit and adapt to climate change.

PG&E would like to highlight three key priorities for transitioning the electric grid to carbon-free resources:

a. Reliability of the grid and energy supply;
b. Transition of the natural gas business to support decarbonization;
c. Energy affordability and an equitable transition for all Californians.

a. Reliability of the grid and energy supply are a top priority.

We anticipate that decarbonized gas-fueled generation resources will be required in the long run to ensure reliability while meeting the state's decarbonization objective. As California's current fossil generation begins to retire, these plants will be replaced by new decarbonized gas-fueled generation. This is likely to be some combination of generation fueled by hydrogen, renewable natural gas, and fossil natural gas combined with carbon capture and storage and direct air capture. We should maintain flexibility for pathways that emerge as these technologies advance. We will need to participate in ongoing research on future carbon-free gas generation resources, while also developing renewables and various types of storage technologies.

We must enable customers to support the reliability of the grid by structuring rates to align load and the use of distributed energy resources (DER) with grid needs. While automated grid-to-device signals are also critical, they must work with in concert with rate structures to deliver benefits to customers in support of grid reliability.

b. Transition of the natural gas business to support decarbonization must be planned, not assumed.

Most pathways studies show that thermal generation supplied by relatively low-cost, decarbonized pipeline gases remains critically important to meeting our decarbonization objectives reliably and affordably. These pathways studies also show declining gas throughput, especially in the residential and commercial sectors.

PG&E believes that the question to focus on is "how will the state make low-cost decarbonized pipeline gas available for power generation even as throughput declines" This may be an ongoing task for interested agencies and stakeholder.

Planning to keep pipeline gas costs low while throughput declines will require engagement at the state level, and across agencies (CEC, CPUC, CARB). Gridworks addressed this issue in a multi-stakeholder process and papers published in California's Gas System in Transition (2019) and Gas Resource and Infrastructure Planning for California (2020). Importantly, they note that maintaining affordable gas rates, especially for low-income customers that are the least able to electrify, will require exogenous sources of funding to enable this transition.

c. Affordability and an equitable transition for **all** Californians is a top priority

In terms of affordability, the rapid and widespread adoption of electric vehicles (EVs) is key. EVs are the engine of affordability driving California's carbon neutral pathway. A rapid transition to EVs displacing expensive gasoline is critical to the state's objectives of an affordable carbon neutral pathway, allowing customers to substitute less expensive electricity for higher-cost gas in their overall energy wallet. The electric utilities must

encourage and prepare for this transition by making the grid ready for rapid, widespread adoption of EVs.

Energy efficiency will also support an affordable pathway to decarbonization – the cheapest kilowatt hour (kwh) is the one not generated. California must plan for an equitable transition, ensuring that transition of the workforce is planned for, and the customers least able to afford new technologies like EVs, solar and battery systems, and electric heat pumps are not left behind. The state and joint agencies will need to ensure that equity is intentionally taken into consideration as we work together to develop affordable pathways to a carbon-free energy supply for California.

PG&E offers the following additional comments that respond to the questions posed by Commission during the workshop:

2. **What priorities may not be adequately accounted for in current planning efforts?**

PG&E considers that in the current planning efforts it is key to include comprehensive reliability assessments to ensure that the changing mix of resources can adequately support operational reliability.

Other topics that PG&E consider should be accounted for in the planning include the following:

- Development of transmission and distribution infrastructure and associated cost estimates for interconnecting and integrating future resources and loads (which include DER solutions) to achieve SB 100;
- Citing transmission to bring wind and solar to California;
- Transition of energy markets to reflect the shift in generation resources from high-variable/low-fixed cost resources, to a future dominated by fixed-cost renewables and storage;
- Transition of the gas business as building decarbonize – how to keep gas affordable for end-use customers and power generation as throughput declines;
- Workforce transition.

3. **What factors or values must be considered when assessing whether a particular option or scenario for this transition is a good idea?**

Some of the factors we believe must be considered are reliability of the grid, affordability for all customers, and equity of the transition. For example, those able to convert to EVs and electric appliances may start to see much lower total energy bills, while those using internal Combustion engine (ICE) vehicles start to see an increasing share of wallet for fuel.

4. **What should be the role of DERs in meeting/addressing reliability concerns?**

DERs, including behind the meter (BTM) solar and storage, flexible customer load, and the growing number of EVs, can play a key role in addressing reliability throughout the transition. California must take the long view in charting rate design and program options to ensure that customers benefit from using DERS in a way that supports the grid, rather than the current system which does not fundamentally support DER-grid alignment with rate design.

5. How do you see the role of the customer changing during the transition?

Customers will need to invest in new vehicles and appliances over time, as they currently do when replacing existing equipment. The options available to them should include controls systems that will ultimately allow this equipment to receive and respond to signals. Rates structures and program designs should provide value to customers who enable the new technologies. To ensure equity in the transition, the state will need to play a role in subsidizing the transition for customers who cannot afford to obtain new technologies.

PG&E appreciates the time and effort that the CEC took to organize SB 100 implementation workshop, the opportunity to speak and provide PG&E's perspective on this, and the opportunity to submit additional comments. Please do not hesitate to contact me if you have any questions.

Sincerely,

Licha Lopez