

## Comments of Pacific Gas and Electric Company on the Review Transmission Access Charge Wholesale Billing Determinant Issue Paper

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### **Introduction**

Pacific Gas and Electric Company (PG&E) recognizes that the CAISO is exploring issues emerging as the California energy landscape evolves to incorporate higher levels of distributed generation (DG) and other distributed energy resources (DER). The topics CAISO raised in the Review Transmission Access Charge (TAC) Billing Determinant Issue Paper are complex and far-reaching, and PG&E anticipates joining stakeholders in examination and consideration of this topic.

By drawing stakeholder attention to both the Clean Coalition's proposal and to broader issues underlying the proposal, the CAISO is asking stakeholders to do two things: (1) to review the Clean Coalition's proposal to change the TAC billing determinant; and (2) to consider policy issues and principles affecting the CAISO market and its participants. The distinction between a discussion about the proposal itself and one about the objectives driving the proposal is an important one. Combining the two areas of inquiry would limit stakeholders' ability to analyze issues with the depth they are due. Considering the broader issues only within the context of the Clean Coalition proposal presupposes a set of solutions, narrowing and oversimplifying critical discussions. In any endeavor to address broader policy issues, PG&E strongly recommends a process in an appropriate venue that facilitates the necessary deep-dive discussions to frame questions, develop shared objectives and guiding principles, and shape next steps, before focusing on a specific solution.

The CAISO comments template, like the Issue Paper, examines the Clean Coalition proposal while also raising questions that cannot be answered—or even sufficiently considered-- by simply agreeing or disagreeing with the proposal. PG&E's comments reflect that two different discussions would be necessary to properly address all of the CAISO's questions:

- In Part I, PG&E addresses the CAISO's questions related to the Clean Coalition proposal. PG&E and the Clean Coalition share a commitment to realizing the full potential of DG and DER. However, PG&E does not believe that the current proposal is mechanically or conceptually appropriate to achieve clean energy goals, nor to advance those objectives while providing affordable, reliable, and safe energy to all customers.
- In Part II, PG&E discusses its approach to considering policy issues and principles. PG&E reiterates the importance of continuing stakeholder dialogue around broader issues, and cautions against constraining the discussion within the narrow frame of the Clean Coalition proposal.

PG&E is committed to continuing its leadership role in promoting clean energy, alongside the critical pillars of safety, reliability, and affordability. This commitment includes, for example, developing new methods for measuring DER benefit in the Distribution Resources Plan (DRP) proceeding, which includes avoided transmission costs associated with specific distribution grid project locations. It is important to note that PG&E's backbone transmission and distribution systems both support and complement intermittent resources.

## **Comments**

### **Part I**

In this section, PG&E responds to the CAISO's questions about the Clean Coalition proposal. These questions, specifically questions 1 and 5, ask stakeholders to review the merits of the Clean Coalition's recommendations, not to discuss the broader issues the proposal aims to address.

*1. At this point in the initiative, do you tend to favor or oppose Clean Coalition's proposal? Please provide the reasons for your position.*

PG&E shares the Clean Coalition's enthusiasm for distributed generation and distributed energy resources. As evidence, PG&E has integrated more rooftop solar homes and businesses than any other utility in the country. PG&E also leads the nation in the time to interconnect a standard solar customer, at around only three business days. In addition, PG&E offers procurement contracts for DG through market mechanisms, including Renewable Auction Mechanism (RAM) and Renewable Market Adjusting Tariff (ReMAT). However, PG&E has concerns with the practical and conceptual elements of the Clean Coalition proposal

From an implementation perspective, the Clean Coalition proposal is constructed on factual errors that are embedded in the proposal's arguments. The proposal presents an inaccurate picture of the current TAC methodology and transmission planning processes, and makes incorrect assumptions about the technical feasibility of executing recommended changes. For instance, only load serving PTOs are billed TAC by the CAISO. When a load serving entity other than the PTO, such as a CCA or DA, is serving load within the service area of the PTO, the CAISO still invoices the load serving PTO for TAC for the CCA/DA load. The load serving PTO recovers TAC charges from either the CCA/DA or the end-use customer depending on the billing arrangements between the CCA/DA and the load serving PTO. PG&E encourages the CAISO to review CLECA's comments, which address misunderstandings of the current TAC structures. As the Clean Coalition proposal does not reflect status quo, it is unlikely that the recommended changes would, in fact, produce the outcomes claimed by the Clean Coalition.

One of the more troubling concepts implied by the Clean Coalition proposal is that TAC represents the tipping point between valuing and failing to value the use of DG and DER. Ultimately DG/DER and non-DG/DER customers benefit from access to the transmission system, so both types of customers appropriately contribute to TAC. The Clean Coalition proposal has not appropriately demonstrated that it captures value of DG, and will instead result

in fewer customers paying for transmission assets that serve all customers. TAC is not the mechanism in which DG/DER is or is not valued; instead, TAC captures the cost of having a transmission system on which all customers rely, and which was built to serve load determined through agreed-upon standards and processes.

More broadly, PG&E is troubled by oversimplification and implied linkages underlying the proposal. All customers use the transmission system, and the current TAC methodology is not suited to the type of modification proposed by Clean Coalition. As PG&E noted in comments in the ESDER Phase 2 stakeholder initiative, although a portion of load may be offset by distributed generation for some periods of time, DG/DER does not eliminate the need for or reduce the cost of existing transmission and the underlying revenue requirement. Exempting some load from paying for a system that was originally developed to support the load, and that the load still relies on, would shift costs in an inequitable manner. While it is important for a fair and competitive marketplace to accurately reflect the value of DG/DER, it is equally important that all customers contribute their fair share to the cost of the transmission system. Valuing DG/DER is not inherently tied to how much value is recognized in the transmission system. Transmission and DG/DER are both critical components of today's energy landscape, and are not at odds with one another. For example:

- Increasing customer access to clean energy is often facilitated by the transmission system, not limited by it. In fact, much of the investment in transmission in recent years has been related to fulfilling Renewable Portfolio Standard objectives.
- Any mitigation of transmission investments by DG/DER is location-specific, making it impossible to link DG/DER use in a particular location to the need for a surrounding transmission system.
- The intermittency of DG/DER is still a reality. PG&E joins Clean Coalition in seeking methods to rely more heavily on DG/DER. At this time, however, preserving reliability requires access to the transmission system.
- Economic analysis of DG/DER and transmission assets is more complex than the Clean Coalition suggests. For example, DG/DER, local or otherwise, loses value over time. A solar panel array, for example, will degrade in efficiency over time and change in value. Overlooking the complexity of immediate and long-term costs would lead to oversimplified and therefore inaccurate comparisons.

*5. In the issue paper and in the stakeholder conference call, the ISO pointed out that the need for new transmission capacity is often driven by peak load MW rather than the total MWh volume of load. This would suggest that load offset by DG should get relief from TAC based on how much the DG production reduces peak load, rather than based on the total volume of DG production. Please comment on this consideration.*

PG&E shares the CAISO's concerns about how transmission capacity is characterized in the Clean Coalition proposal. As a guiding principle, any transmission cost allocation methodology should be aligned with how transmission infrastructure is developed and used by customers. Suggesting that capacity costs can be avoided strictly because there is a reduction in usage is flawed, because capacity costs are not driven by MWh usage. Instead, transmission costs are driven by the need for capacity to serve customers. The cost to provide this service remains, even when intermittent resources are in use.

Transmission infrastructure investment is driven mainly by peak load (per MW) and RPS procurement obligations to meet that load, even though TAC is structured as a volumetric rate (per MWh), because the transmission system must be capable of reliably serving load whenever that load is present. Most Transmission Planning Process projects are driven by MW flows and MVAR flows, generally based on a 1-in-10 loading level forecast. The 1-in-10 loading event standard is the measurement considered adequate to ensure reliable power for customers. Rather than conducting planning by studying MWh, which is a less relevant and informative measure, transmission planning is driven by peak MW flows, which determine the capacity of the lines needed for future reliability. Capacity projects are driven by measures other than MWh because MWh information does not tell transmission planners what infrastructure is needed to reliably and safely meet load.

Current TAC rates reflect transmission infrastructure that has been planned, approved and built to serve the load that existed or was forecasted at the time these investment decisions were made. These investment decisions were driven by the CAISO Transmission Planning Process and the CEC load forecast, rather than the individual decision of a single entity. The necessary infrastructure was built according to accepted methodologies and need determinations. As energy resource options expand, PG&E is already taking an active role in adapting these methodologies to capture new realities. Looking back to how the current system was developed, however, it is clear that the current system exists because it served—and continues to serve—a purpose. In Fresno and Bakersfield, for example, temperatures can remain above 100 degrees Fahrenheit even after the sun has set and local solar energy is not available to meet load. Customers continue to use air conditioning, and so rely on the available transmission assets to provide uninterrupted service, even if some of that load had been met at other times of the day by distribution assets.

Further underscoring the importance of transmission to all customers is the shift in system peaks to later in the day, illustrated in recent CAISO and CEC system load forecasting processes. Across the PG&E system, the system demand has recently been greatest around 5-6 pm on peak days, a time of day when solar output is approximately 25 percent or less compared to coincident-peak solar output in years prior, when system peak occurred earlier in the day. The system loading at 8 pm, when solar output is essentially nonexistent, some portions of the transmission system can see loading as high as 90 percent of their currently observed peak. In next cycle of CEC load forecast, the peak time definition will be shifted to 8-9 pm with zero effective solar output. The transmission capacity projects will be driven by this new peak demand without any contribution from solar for peak shaving. Even as solar and other alternatives become available, reliability concerns for peak demand will still drive the need for capacity projects in the future.

PG&E and its customers do not benefit from unnecessary transmission build, and PG&E has supported opportunities to cancel approved transmission projects where they have later been determined to not be needed. Looking ahead, PG&E is working to make its own transmission investments as cost effective as possible without compromising reliability, and has already done so as part of the CAISO's Transmission Planning Process. PG&E continues to demonstrate its commitment to enhancing transmission planning so that the methodology and outcomes support

evolving technologies and cleaner options. To do this effectively, PG&E recognizes that transmission planning is fundamentally an exercise in ensuring reliability. Access to the transmission system remains crucial for customers, including those who receive some of their power locally, in order to meet reliability objectives. PG&E takes pride in its investments to provide customers with energy options, but making those investments cannot come at the cost of reliability.

Building transmission strategically and thoughtfully recognizes that the transmission system still serves a critical role in the state's energy infrastructure. Regardless of the value of DG/DER, it cannot reliably replace energy delivered by the transmission system. Enhancing DG/DER investment and use cannot be met by undervaluing safety and reliability. When DG/DER are not physically capable of reliably meeting a set amount of load at all times of day and under all circumstances, customers require uninterrupted access to the transmission system. In other words, even when the transmission system is not used by a subset of customers at a given moment in time, these customers have access to the transmission system and, with it, reliability in their power supply. Effectively penalizing non- DG/DER customers by burdening them with higher costs is not appropriate, and overlooks the importance for all customers of having access to the transmission system.

## **Part II**

The questions being asked by the CAISO are complex, and call for more extensive analysis and discussion among stakeholders than could be accomplished in the few weeks since the launch of this initiative. PG&E anticipates participating in a robust stakeholder dialogue going forward.

At this time, PG&E supports re-framing any further discussion that may occur with an initial focus on clarifying questions and issues, and in concert with any existing processes in which these issues are being considered. As the initiative continues, PG&E recommends that the CAISO further emphasize the following:

- The subjects being discussed in this initiative will have far-reaching impacts. Setting a course for how to plan and pay for the transmission system, how to value DG/DER in the market, and how to promote clean energy without compromising reliability, safety, and affordability requires a process that reflects the significance of these topics in both complexity and importance.
- Productive outcomes from this initiative depend on the quality of stakeholder dialogue. To move the conversation forward, the CAISO must ensure all stakeholders begin at a shared starting point. Taking time to define the questions, frame the discussion, agree on shared objectives, and get grounded in facts and a clear understanding of the status quo—separate from assessing the merits of the Clean Coalition's recommendations—will result in more effective, considered conclusions.
- Similarly, framing the broader issues by using Clean Coalition recommendations as a guide may draw stakeholders away from more fundamental discussions about the issues themselves. There are more approaches and more solutions than those provided in a single proposal; to artificially limit the conversation would do a disservice to crucial issues.