

Comments of Pacific Gas & Electric Company

System Market Power Analysis July 15th Workshop

| Submitted by | Company | Date Submitted |
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Pacific Gas and Electric Company (PG&E) offers the following comments on the California Independent System Operator's (CAISO) System Market Power Analysis July 15th Workshop. PG&E would like to reiterate the need for CAISO to expediate a System Market Power Stakeholder initiative so that the proper mitigation measures can be filed, tested, and implemented in time for summer 2020. CAISO's current proposed timeline is rather delayed.

PG&E appreciates the work the CAISO has done to shed light on the frequency that the CAISO is structurally uncompetitive at the system level. The CAISO tariff (and fundamental assumptions about market pricing) are based on the premise that the market is competitive. Given the uncertainty about the validity of this assumption, PG&E urges the CAISO move expeditiously to develop a method for mitigating market power at the system level that continues to provide efficient dispatch signals to supply while ensuring competitive outcomes and just and reasonable prices.

Per CAISO's request, PG&E is providing comments based on the comment template. PG&E's comments are in blue font.

1. Resource adequacy provisions and bilateral capacity contracting

Please provide your organization's feedback on the *resource adequacy provisions and bilateral capacity contracting* topic. Please explain your rationale and include examples if applicable.

CAISO posits that the contemplated resource adequacy (RA) changes in the RA Enhancement initiative and the recent CPUC rulings may provide more resources to address tight supply conditions, which in turn would mitigate system-level market power concerns. This assumes that high prices are consistently the result of true scarcity (i.e., physical shortage to meet system capacity needs—resulting in curtailing load or dispatching demand response resources) versus the result of economic or physical withholding (i.e., the exercise of market power). PG&E believes that CAISO has not provided sufficient data to definitely conclude that high prices are a direct result of true scarcity rather than the exercise of market power. PG&E continues to request CAISO to provide detail analysis, especially during the high-price hours in 2018 when the CAISO and DMM has shown that the market is structurally uncompetitive via the three pivotal supplier (RSI3) test. A detailed analysis that looks at the amount of residual internal gas resources not fully

¹ CAISO System-level market power presentation – July 15th, 2019 Stakeholder Working Group

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dispatched as well as their bidding behavior would more clearly show what is the true driver of high prices.

It is also important to note that a System Market Power Mitigation Initiative would not conflict with efforts to improve the resource adequacy program. PG&E supports those efforts but do not see them as ways to replace the need for proper safeguards against system-level market power. Thus, PG&E maintains that CAISO should press forward with a System Market Power Mitigation Initiative as soon as possible.

2. Load-serving entity energy procurement and hedging

Please provide your organization's feedback on the *load-serving entity energy* procurement and hedging topic. Please explain your rationale and include examples if applicable.

PG&E believes that CAISO's belief that system level market power is not an issue if Load Serving Entities (LSE) simply sign forward hedges reflects an understanding of California's retail energy landscape that no longer exists. As PG&E has commented before, simple recommendations that LSE "hedge" or "bid defensively" quickly run into collective action problems that did not exist five to ten years ago when most of the demand was served by three Investor Owned Utilities regulated by the CPUC. CAISO has a responsibility to respond to this changing energy landscape by mitigating market failures, such as the exercise of market power, which create inefficient pricing and unjust rates for retail consumers in California. PG&E would like to reiterate the following points:

Not All Forward Hedges Mitigate Against Seller Market Power.

PG&E is concerned with CAISO's recommendation because market outcomes (and the effectiveness of the mitigation measures) can have a direct effect on the prices of the hedges. All forward hedges are not created equal in terms of mitigating the incentives for generators to increase their energy bids above their marginal costs. A range of financial products are available to hedge price exposure of LSEs without entering into traditional long-term tolling agreements². Long-term tolling agreements where Load Serving Entities take on the scheduling coordinator role for generators and provide capacity payments as were common when the majority of load in California was served by the three Investor Owned Utilities (IOUs), effectively mitigated against the exercise of market power.

² Forward energy hedging can include purchasing a fixed-priced, forward power contract, more complex financial options/swaps, cross-commodity hedges such as heat rate options typically engaged in by financial institutions, and/or including price level guarantees in scheduling coordinator contracts with third parties. Many of these products provide the LSE with price certainty, hedging the financial exposure to higher market prices, but do not provide remove the incentive for generators to exercise market power.

However, load shift from IOUs to smaller Community Choice Aggregators (CCAs) has complicated forward contracting practices and introduced significant uncertainty for hedging through traditional tolling arrangements. The large number of LSEs now engaged in forward procurement likely creates additional problems as large generators now need to enter into multiple contracts with multiple LSEs, creating a collective action problem. Furthermore, LSEs in a competitive structure have less ability and fewer incentives to sign long-term deals.

These contracting complications highlight the need for effective market power mitigation at the CAISO level to ensure market prices and bilateral hedges are just and reasonable. As more and more tolling contracts expire with the traditional IOUs in the coming years, the CAISO must put into place effective system market power mitigation. Hey

3. System-level market power mitigation process

Please provide your organization's feedback on the *system-level market power mitigation process* topic. Please explain your rationale and include examples if applicable.

PG&E believes that CAISO should work to craft a system-level market power mitigation process with two key principles in mind: 1) maintain efficient dispatch and 2) just and reasonable prices. From our perspective, maintaining efficient dispatch means that the Default Energy Bid (DEB) would not be below marginal plus opportunity cost. Also, mitigation should be limited only to hours when market power exists. These mitigation measures should also result in just and reasonable prices where energy prices reflect the marginal costs of incremental energy.

PG&E believes the proposed objectives of the System-level Market Power Mitigation initiative should be twofold. First, the initiative should develop a metric for measuring the existence of market power. CAISO should publish this metric and use it as a determination of times when market power exists. Second, the stakeholder process should evaluate different mitigation measures, and CAISO should ultimately implement the mitigation measure based on stakeholder input.

While CAISO claims that such an initiative would require significant policy development and implementation efforts, PG&E believes that CAISO can and should leverage many of the existing methodology and tools in order to move forward expeditiously. PG&E appreciates all the work CAISO has done to date and believes that there is a strong foundation for us to move forward. After all, dealing with the aftermath of an energy crisis due to the exercise of market power would be way more work and more complicated than crafting and implementing a viable mitigation measure. As many know, we are still unraveling the mess from the energy crisis from more than 15 years ago.

4. Enhanced ISO market scarcity pricing provisions

Please provide your organization's feedback on the *enhanced ISO market scarcity pricing* provisions topic. Please explain your rationale and include examples if applicable.

CAISO asks whether improvements to scarcity pricing provision would diminish incentives to submit bids above marginal costs. PG&E understands from CAISO's presentation during the Workshop that the current scarcity pricing provision is rarely triggered in the day-ahead market. Scarcity pricing provision is designed to address situations where there is reserve shortage in ancillary services. If those provisions have not been triggered in the past few years, then it suggests the CAISO day ahead market is not actually scarce—in other words, there is sufficient physical supply to meet load plus reserve requirements. Ultimately, the issue at hand is system-level market power, which is different than scarcity.

5. Optional comments on stakeholder-presented topics

PG&E would like to echo a key point DMM highlighted in its presentation—local market power mitigation provisions do not mitigation system market power in CAISO. The bedrock underpinning local market power mitigation is a competitive market on a system-level. This underscores the importance and the urgent need for proper mitigation measures. In essence, when system market power exists, the CAISO market is vulnerable to market manipulation on the system and local system level.

6. Additional comments

Please offer any other feedback your organization would like to provide on the topics discussed during the workshop.

Based on the feedback from the workshop, there was widespread support for upholding the principles PG&E laid out and stated above for a market power mitigation initiative. Significant uncertainty exists today about the level of structural competitiveness in the CAISO market. This is not a problem that can be wished away and will get worse in the future as more dispatchable gas resources retire.

The CAISO must act swiftly to increase confidence on the part of market participants that the prices that clear in its market, specifically day-ahead market, reflect fundamental drivers of supply and demand rather than the ability of participants with market power to increase prices above a competitive level.