BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Gas Company (U904G) and San Diego Gas & Electric Company (U902G) for Low Operational Flow Order and Emergency Flow Order Requirements	Application 14-06-021
Triennial Cost Allocation Proceeding Phase I Application of Southern California Gas Company (U904G) and San Diego Gas & Electric Company (U902G) for Authority to Revise their Natural Gas Rates Effective January 1, 2016 .	Application 14-12-017

RESPONSE TO JOINT MOTION FOR EXPEDITED RELIEF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

On August 15, 2018, Southern California Edison Company (SCE) and Southern California Generation Coalition (SCGC) filed a petition for modification (Petition) of Decision (D.) 15-06-004 and D.16-06-039, as modified by D.16-12-16 (Decisions), which developed the low and high Operational Flow Order (OFO) rules in Southern California Gas Company (SoCalGas) Tariff Rule 30, Paragraph G. As a basis for the Petition, SCE and SCGC cited gas price spikes and related increases in electric market prices. The California Independent System Operator Corporation (CAISO) responds to the Petition to provide additional information regarding gas commodity price impacts on the CAISO electric markets.

I. INTRODUCTION

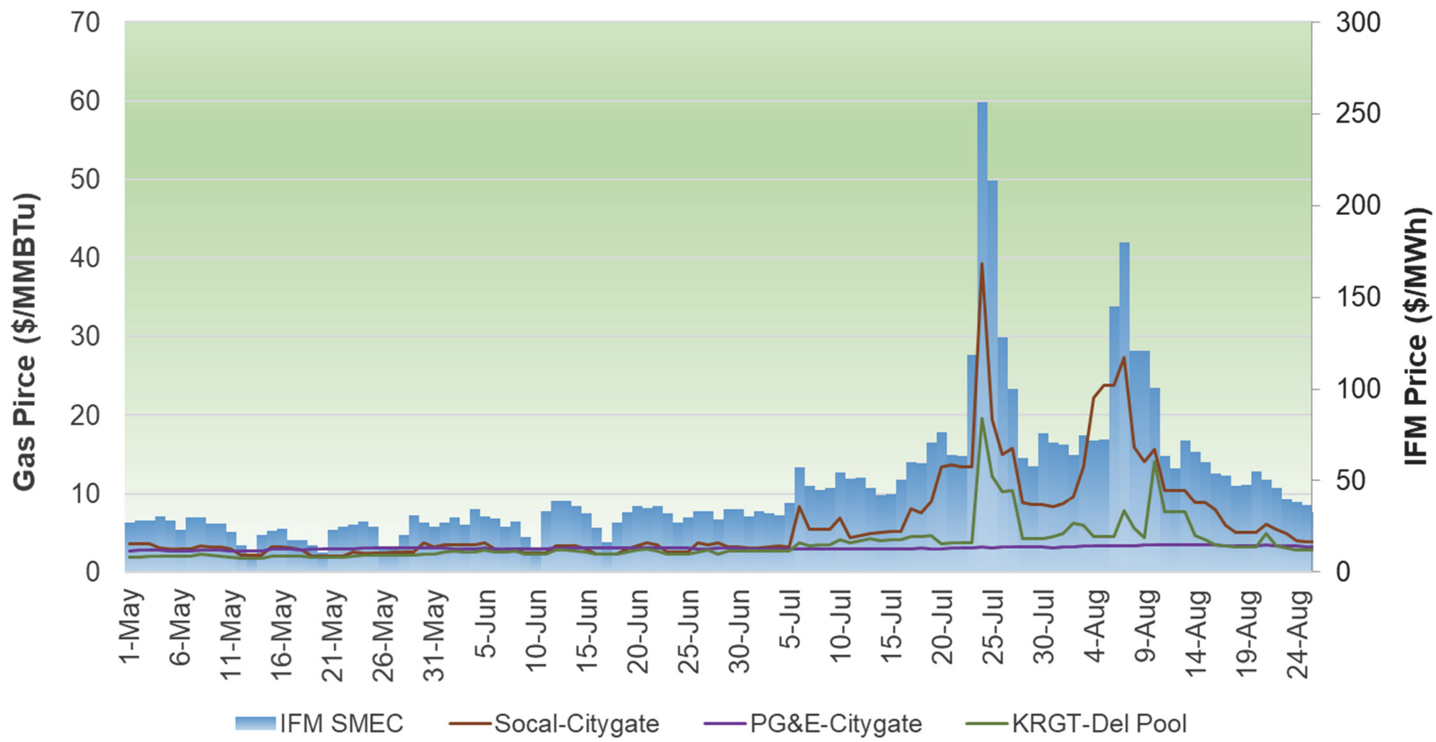
The Petition requests that the Commission temporarily cap the $25/dekatherm (dth) component of the Stage 4 and Stage 5 OFO noncompliance charges in SoCalGas Rule 30.G at $5/dth until the Commission can assess if a replacement OFO noncompliance charge structure is necessary. SCE and SCGC assert that temporarily modifying the OFO noncompliance charges is necessary because "Stage 4 and 5 OFOs with noncompliance charges starting at $25/dth appear to be a significant contributor to the substantial recent increases in SoCalGas citygate and corresponding CAISO wholesale power prices without providing a meaningful increase in gas and electric system reliability."[1] The CAISO is also concerned that OFO noncompliance penalties may be impacting electric market prices and recommends that the Commission review the current structure, but the CAISO urges that any changes to the OFO noncompliance penalty structure should be carefully considered to minimize any reliability impacts.

II. DISCUSSION

A. Modifying OFO Noncompliance Penalties

As discussed in the Petition, CAISO energy markets experienced significant price spikes during recent gas price increase events, as shown in Figure 1 below.

Figure 1: Comparison of gas hub prices and electric energy price



This figure shows the three main gas hub prices used in the CAISO systems to clear the electric market. The blue bars represent the electric market prices and the solid lines represent gas hub prices. Although other factors, such as high electric loads, may have also contributed to these electric market prices, the electric market price spikes were closely correlated with the gas price spikes in the SoCalGas system. Other gas-fired generators within the CAISO have also noted significant issues related to gas price volatility, specifically the price spikes experienced between July 23 and August 7, 2018.[2] NRG, for example, has asserted that the gas price volatility increases the risk of operating gas-fired resources in California because gas-fired generators have limited opportunity to reflect intraday gas volatility in their energy bids.[3] NRG has indicated that it may request reimbursement from FERC for unrecovered gas costs related to the July 24 event.[4] The CAISO notes that if NRG elects to pursue this remedy, it would be the first such entity to apply for unrecovered gas costs pursuant to the CAISO tariff.

In addition to the increase in energy costs discussed above, the increased gas prices appear to have triggered or exacerbated other electric cost increases as well. During the July 23-25 and August 7-9 gas price spikes, the CAISO observed an increase in system congestion and congestion costs. This occurred, in part, because the CAISO's day-ahead market responded to increased gas prices in the Southern California system by increasing electric generation in other areas. This resulted in increased power flows from the north to the south on the electric grid, leading to increased congestion and related costs. The gas price spikes also correlate with increases in CAISO commitment costs and related bid cost recovery that are not reflected in the

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[2] See NRG Power Marketing LLC's (NRG) Comments In Support of Complaint, filed with the Federal Energy Regulatory Commission (FERC) on August 24, 2018, Docket No. EL18-177-000.
[3] Id. at p. 4.
[4] Comments of NRG representative Brian Theaker to the CAISO Board of Governors, July 26, 2018. Section 30.11 of the CAISO tariff allows generators apply to FERC to recover fuel costs incurred but not recovered through market mechanisms.

energy prices. The CAISO cannot determine whether the OFO noncompliance penalties were the direct cause of the gas prices, which led to electric price increases, but gas commodity prices are a key determinant in setting the CAISO's dispatch schedules and wholesale power prices, which are used to financially settle all energy transactions cleared in the CAISO markets.

SCE and SCGC state that the gas price spikes caused by the OFO noncompliance penalties did not provide a meaningful increase in gas system reliability because "shippers have very limited ability to bring their daily gas deliveries into balance with their daily gas demand if they observe that they will be in an imbalance situation after the conclusion of the gas trading day."[5] The CAISO believes that OFO noncompliance penalties should increase overall gas system reliability, but also notes that gas commodity prices have complex interactions with CAISO markets and can significantly impact resource dispatch and electric grid flow patterns. As a result, the Commission should consider the penalties carefully to ensure that the existing or any changes to the OFO compliance penalties minimize unintended consequences on the electric markets. For example, the Commission should ensure that the gas penalty structure is not diverted from one gas system to another unintentionally —*i.e.*, from the SoCalGas system to the Pacific Gas & Electric Company (PG&E) system—solely because PG&E OFO noncompliance penalties are higher than SoCalGas penalties.

B. Electric-Gas Coordination

In recent years, the CAISO has made significant improvements to its markets and operations to ensure that the electric and natural gas systems are better coordinated. Frequent use of the OFO procedures can result in sub-optimal coordination, despite interested parties' best efforts. Frequent OFO usage should not be a substitute for a well-functioning gas system.

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[5] Petition, p. 2.

Continued close coordination is necessary to optimize natural gas usage for electrical generation, especially in circumstances where natural gas storage opportunities are limited and pipeline outages continue to limit gas supply.

III. CONCLUSION

The CAISO appreciates this opportunity to provide comments and looks forward to working with the Commission to ensure the gas and electric systems work in coordination to the greatest extent possible.

Respectfully submitted
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