

September 21, 2016

Councilmember Nury Martinez, Chair
Energy and Environment Committee
200 N. Spring St., Ste 470
Los Angeles, CA 90012

RE: Diesel Back Up at LADWP Generating Stations

Dear Councilmember Nury Martinez,

Thank you for introducing a motion (CF 16-0768) on the variance permit granted by the South Coast Air Quality Management District (SCAQMD) Hearing Board which allows the Los Angeles Department of Water and Power (DWP) to burn diesel fuel at three key generating stations in Los Angeles.

Variance Permit Was Not Necessary During Summer 2016

This variance permit was a response to the *Aliso Canyon Risk Assessment Technical Report* issued in April 5, 2016 that claimed that Southern California could face up to 14 days of blackouts or forced curtailments without use of the Southern California Gas Company's (SoCalGas) Aliso Canyon Storage Facility (Aliso Canyon).

However, after doing more investigation into the *Risk Assessment* which was authored by the California Public Utilities Commission, the California Energy Commission and SoCalGas, we found that this report overinflated demand and underestimated gas supply from interstate pipelines and other storage facilities. According to an email obtained under the Public Records Act, SoCalGas authored the most critical piece of the report.

The email from the director of marketing services at the California Independent System Operator (CAISO) to Sempra, LADWP, and California Energy Commission (CEC) representatives, consultants, and officials, shows that SoCalGas exclusively produced the modeling and assessment of operational gas flows, which is the critical to "curtailment day" risk estimates. The outline shows that both CAISO, which is responsible for transmission of electricity, and LADWP, relied on the SoCalGas modeling results to analyze electric reliability risks for the Los Angeles Basin during peak demand seasons in 2016.

In addition to these inaccurate modeling numbers, the *Risk Assessment* did not account for the mitigation measures the State regulatory agencies proposed in the *Aliso Canyon Action Plan to Preserve Gas and Electric Reliability for the Los Angeles Basin*. These mitigation measures proposed several operational changes to the gas system to avoid the need for Aliso Canyon.

The most effective of these operational or rule changes was the switch from the monthly gas balancing requirement to a 5 percent daily gas balancing requirement. The *Risk Assessment* states that if major natural gas users in the L.A. Basin stay within daily requirements, natural gas

supply cut offs would be unlikely this summer and winter¹. SoCalGas implemented these daily requirements on June 1st.

The effectiveness of these daily requirements was demonstrated during the heat wave in June, 2016. On June 20th, the Southern California Edison system experienced the highest 1-hour peak demand in nearly a decade at 23,564 MW.² LADWP also broke a demand record for the month of June on that day, and reached a peak load of 6,080 MW, close to the all-time LADWP demand peak of 6,396 MW.³ However, there were no natural gas curtailments. SoCalGas did not withdraw from the backup gas reserves from Aliso Canyon on that day, and LADWP burned no diesel back-up fuel in its generators. The 5 percent daily balancing summer 2016 mitigation measure was in effect for non-core customers during this heat event and it was effective.

The second heat wave occurred from July 18 – July 22, 2016. The peak SCE electricity demand was approximately 21,500 MW on Thursday, July 21, and exceeded 22,000 MW on Friday, July 22⁴. There were no curtailments, no withdrawals from Aliso Canyon, and no back-up fuel burned by LADWP during this heat event

SoCalGas came within 2 percent of its projected 2016 summer peak demand of 3,380 MMcfd on August 16, 2016⁵, when natural gas demand reached 3,321 MMcfd⁶⁷. On that day, only 396 MMcfd was withdrawn from storage to meet the total natural gas demand, no gas was withdrawn from Aliso Canyon, and no backup fuel was burned by LADWP. By way of comparison the Winter Action Plan states that 1,490 MMcfd is expected to be available for withdrawal from SoCalGas storage this winter, assuming only Honor Rancho, Goleta, and Playa del Rey are available and Aliso Canyon is not utilized⁸.

The bogus claims by SoCalGas of 14 days of blackouts without Aliso Canyon put DWP in the hot seat to guarantee energy supplies and required DWP to take the blackout threats at face value. This variance permit would never have been necessary if the State regulators had included

¹ April 5, 2016 *Aliso Canyon Risk Assessment*, p. 18: *Summer scenarios: “Without supply available from Aliso Canyon, a loss of capacity or difference between expected supply and actual demand greater than 5 percent of the total demand is likely to lead to gas system curtailments.” [Translation – the new summer 2016 protocol that maintains daily imbalance at or below 5 percent likely to avoid curtailments]; pp. 30-31: Winter scenario: [effect of 5 percent balancing requirement] “Not surprisingly, this extra gas supply helps significantly and linepack [pipeline pressure] is fully recovered across the entire system at the end of the operating day.”*

² CAISO OASIS online database, June 20, 2016, 3-4 pm.

³ LADWP press release, LADWP Customer’s Energy Demand Reaches 6,080 MW During Heat Wave, June 20, 2016: <http://www.ladwpnews.com/go/doc/1475/2857086/>.

⁴ CAISO OASIS Database, System Demand – Actual, July 18 - July 22, 2016. See: <http://oasis.caiso.com/mrioasis/logon.do>.

⁵ 2016 California Gas Report, p. 93.

⁶ SoCalGas total BTU Factor (Dth/Mcf) = 1.0353, p. 95.

⁷ SoCalGas Envoy database, August 16, 2016. Sendout = 3,438,000 Decatherms (Dth). Withdrawals from storage = 410,000 Dth. Therefore, total sendout in mmcfd = 3,438,000 Dth ÷ 1.0353 Dth/Mcf = 3,320,777 Mcf (3,321 mmcfd). Total withdrawal from storage = 410,000 Dth ÷ 1.0353 Dth/Mcf = 396,020 Mcf (396 mmcfd).

⁸ Winter Action Plan, p. 16.

mitigation measures and required accurate supply and demand numbers in the *Summer Risk Assessment*.

Variance Permit Not Necessary for Winter 2016-2017

It's possible that Aliso Canyon may remain closed through the rest of the Winter or operate at a limited capacity if brought online. The State released two more reports assessing risks and mitigations measures: *Aliso Canyon Winter Risk Assessment Technical Report* and the *Aliso Canyon Gas and Electric Reliability Winter Action Plan*. In these reports, the State utilized independent consultants to verify SoCalGas' work and claims, and included the impact mitigation measures will have on the system without Aliso Canyon in the *Winter Risk Assessment*. These two reporting changes led to a more accurate and honest *Winter Risk Assessment* by State agencies and SoCalGas.

The *Winter Action Plan* prepared by the CEC, the CPUC, CAISO, and DWP demonstrate that the mitigation measures applied to Los Angeles Basin natural gas users will ensure adequate natural gas supply to reliably meet winter peak demand without Aliso Canyon or back up diesel in DWP's generating stations.

Permanent closure of Aliso Canyon will not compromise L.A. Basin natural gas supply, on either the summer peak day or winter peak day, as long as the key mitigation measures described in these documents are kept in place permanently.

The Winter Risk Assessment states that DWP can meet its winter peak demand while burning zero natural gas.

"The expected reliable winter import capability is a combined 5,010 MW on the Victorville to Los Angeles Transmission Path, Pacific DC Intertie, and Sylmar AC Intertie. The LADWP will meet reliability requirements even with all gas-fired basin generation off, provided two synchronous condensers are available at Scattergood and two are available at Haynes for voltage regulation and support. This is true even after assuming all known planned outages scheduled during December when the winter peak may occur."⁹

What this means in practical terms is that, given there is no need to burn any natural gas in DWP power plants to meet the winter peak demand, there is no cause to consider burning diesel fuel to back up natural gas.

Recommendations

- DWP's authorization to burn backup diesel fuel should be rescinded for Winter 2016-2017
- DWP should provide a written commitment, based on the *Winter Risk Assessment*, p. 14, that it will operate its grid in such a way that it will not burn any backup diesel fuel this winter for reliability reasons.
- DWP should study prior to next summer whether there is any demonstrable need for maintaining backup fuel capability if the current Aliso Canyon summer/winter mitigation

⁹ Winter Risk Assessment, p. 14.

measures remain in force permanently. DWP could save millions of ratepayer dollars by discontinuing the diesel backup fuel capability.

- DWP moved to equip its generating stations with backup diesel capability on the back of the SoCalGas unsubstantiated and ultimately wrong claim of up to 14 days of blackouts in the summer of 2016 without Aliso Canyon. DWP should send SoCalGas a bill for all the money it spent to:
 1. refit its plants to burn backup diesel fuel, and
 2. pay SCAQMD for offsets

Sincerely,

Alexandra Nagy
Senior Organizer
Food & Water Watch

CC: Councilmember Bob Blumenfield
Councilmember Paul Koretz
Councilmember Gil Cedillo
Councilmember Mitch O'Farrell