

Energy and Environment Committee

Winter Reliability Action Plan

Council File Nos. 15-1380-S7 and 16-0768

September 21, 2016

Putting Customers First   

Reports on Winter Reliability Released Aug 22: Electric Generation may be able to Mitigate

- Assessment shows risk for this winter is lower than was estimated for summer
- LADWP appears able to rely on generation sources outside the SoCalGas service area to replace lost output, so long as no other transmission or generation outages occur

Working Since December to Understand Reliability Impacts and to Develop Action Plan

- In compliance with the Governor's Proclamation, reliability studies performed by CPUC, CEC, CAISO and LADWP
- Analysis focused on Winter 2016-2017
- Three new reports released on August 19
 - Technical Assessment
 - Independent Review of Hydraulic Analysis
 - Action Plan

Winter Key Finding: Gas Reliability Still Threatened but Electricity Challenges are Fewer than in Summer

- Demand flips, so core customers use 60% of gas supply
- Electric generators are noncore customers and are first to lose gas during a curtailment
- Electricity demand lower in winter; more flexibility to shift generation to resources outside the SoCalGas service area

CAISO and LADWP can Re-dispatch to Avoid Electricity Interruptions...Most of the Time

- Assumes no transmission outages
- Assumes generation needed outside SoCalGas service area has gas and can operate
- Gas curtailment of electric generation may be necessary when the SoCalGas/SDG&E total core and non-core gas demand exceeds 4.5 Bcfd which assumes 100% gas receipt point utilization or 4.2 Bcfd assuming 85% gas point utilization
- If the gas delivery utilization/supply falls below 4.1 Bcfd, Aliso gas withdrawal may be needed to avoid electric load interruption during peak winter load conditions

All Measures from Summer Remain Underway

- LADWP's changes to economic dispatch, halt to block energy/capacity sales and halt to physical gas hedging
- All new summer energy efficiency and demand response programs continue
- Efforts to accelerate electricity storage remain relevant
- LADWP received a variance from the SCAQMD Hearing Board to use diesel fuel, **as a last resort measure**, to reduce risk of outages and protect public health and safety
- Ten new mitigation measures recommended for winter

Questions?

Why LADWP Needed a Variance during the Summer to Use Diesel as a Last Resort

On June 15, the SCAQMD Hearing Board agreed based on compelling public health and safety concerns if rolling blackouts occur:

- Running LADWP's generating units on diesel will avoid more widespread health and safety impacts caused by rolling blackouts (no power for air conditioners, medical equipment, traffic signals, streetlights, etc)
- Running LADWP units on diesel to avoid blackouts would create less harmful regional air quality impacts than running all 2,700 smaller, independent back-up generators owned by commercial customers (shopping centers, commercial buildings, public safety facilities and hospitals)

What the Summer Variance Allowed

- LADWP was permitted to use diesel as a backup fuel in 12 generating units at Haynes, Harbor and Valley stations for emergencies and natural disasters. Combined, the 12 units can generate 1,500 - about 500 MW at each station - enough to serve 2.2M homes
- Through the term of the variance (June 15 - September 13), the summer variance allowed LADWP to:
 - Operate units with diesel for a maximum 14 days for 24 hours continuously for each gas curtailment as a result of Aliso Canyon
 - Run tests to recommission the units. Testing updates were posted weekly at www.ladwp.com/summerreliability
 - Variance required LADWP to comply with 55 SCAQMD conditions

Community Mitigation Efforts under Summer Variance

- LADWP provided \$1,500,000 (for diesel recommissioning and emission testing) to SCAQMD to fund measures to offset air quality impacts
- Measures designed to directly improve air quality in the communities surrounding the Harbor, Haynes and Valley Stations, including:
 - Electric school buses
 - School air filters
- Mitigation efforts proposal was submitted to SCAQMD July 15th

Take-Aways

- Assessment shows risk for this winter is lower than was estimated for summer.
- CAISO and LADWP appear able to rely on generation sources outside the SoCalGas service area to replace lost output *as long as no other transmission or generation outages occur.*

Questions?
