

Data Request to SoCalGas 12/23

General Questions about Aliso Canyon

1. What is the maximum velocity of gas flow from Aliso to major Intrastate or Interstate pipelines? What is the maximum flowrate from Aliso Canyon Storage under current and anticipated winter operating conditions?
2. Is this different from the withdrawal rate? If so, please explain how.
3. Is the flow rate limited by velocity? Please explain how.
4. What is the total amount of injection capability usable at Playa Del Rey? Why is Playa Del Rey storage field the only other storage field that physical gas from Aliso can be injected?
5. Identify all constraints that make it infeasible to flow gas from Aliso to intrastate pipelines. Does current pressure reduction in any part of your system impact the technical constraint at Aliso Storage to flow gas into Intrastate or Interstate pipeline?
6. Identify all physical constraints that make it infeasible to flow gas from Aliso Canyon Storage to the Honor Ranch, Goleta storage fields or PG&E facilities.
7. Identify all mitigation activities in your pipeline system and the timeframe to make physical supplies possible for gas to flow from Aliso Canyon Storage to the Honor Ranch or Goleta storage fields.
8. Please explain what parts of the SoCalGas system gas from Aliso Canyon can reach under expected late December and January demand conditions.
9. What is the total relative demand on the SoCalGas system split between the part of the system 'within the LA basin' that gas from Aliso Canyon can reach versus 'outside the LA basin' that gas from Aliso Canyon cannot reach?
10. Has the Aliso Canyon turbine replacement project completed (tie-in was scheduled to take place on December 18, 2015).

Inventory

11. Please provide SoCalGas' estimate of the relationship between field pressure and inventory.
12. What is estimate of inventory level that will reduce Aliso field pressure to 1000 psig? 750 psig? Please explain how this is estimated and provide calculations.
13. What are the high and low estimates for Aliso Canyon inventory levels projected at current withdrawal rates on January 1, January 15, February 1 and February 15?
14. What are the associated withdrawal rates achievable at those projected inventory levels?
15. What is the current reservoir pressure compared October 23, 2015 and each day since then. What are the projections for the pressure associated with the inventory projections above?
16. How much gas does SoCalGas need to be able to withdraw under normal peak winter conditions (i.e. a typical cold January weekday) and what inventory does it need at Aliso

Canyon versus its other fields in order to do so? For core? For non-core? Same question, but for an "extreme peak day."

17. Given the current weather predictions for January and February, how would winter supplies be affected in January and February on core customers under the best and worst case Aliso Canyon inventory levels? On non-core customers?

Reliability and Cost

18. What is SoCalGas' forecast of core and none core demand during the months of January and February and on a winter peak day? Please describe your plans to meet this demand forecast.
19. Given the forecasted inventory level at Aliso Canyon during Jan and Feb 2016, what is your forecast of additional cost to core and non-core customers of reduced availability of storage gas in these months?
20. Does SoCalGas need any additional authorizations or tools to manage reliability on its gas system because of the Aliso Canyon storage problems?
21. Does SoCalGas have any plans to place additional financial hedges for January and February to compensate for the decreased storage levels at Aliso Canyon? If so, how much does SoCalGas plan on spending and what hedging options would be available?

Reducing Pressure at Aliso Canyon

22. Is there a forecast for how much gas would need to be evacuated from Aliso Canyon to extinguish the leak?
23. How long will it take to evacuate gas from the reservoir to a minimal pressure if ordered to flare and/or vent gas into atmosphere? Identify all safety factors and constraints that result from flaring. What would be the flow rate if the gas could be safely flared/vented? How much gas would be lost per day?
24. Identify safety implications of using flaring to reduce the leak's environmental and health impacts.
25. Please indicate what the current Northern Zone and Southern Zone receipt point capabilities are given the limitations posted on Envoy on December 10. Is there any room to increase these and what are risks of doing so?
26. What is the reason for the maintenance schedule posted on Envoy showing a reduction in Aliso Canyon withdrawal capability due to 'ongoing operations at Aliso Canyon?'
27. What negative consequences would occur if SoCalGas further relaxed the imbalance rules and forgave under-delivery penalties to customers located in the LA basin?
28. Please break net imbalance into its over-deliveries and under-deliveries component parts. What customers are tending to still over-deliver? How many are located within the LA basin?
29. Has SoCalGas communicated with customers to encourage under-deliveries and use of gas from storage?

30. Has SoCalGas evaluated the potential to use CNG trailers to capture more gas from Aliso Canyon? How much gas could that capture? What is cost? What are logistics?
31. Has SoCalGas conferred with Occidental on ability to use any of their storage and/or shut in any production?
32. Why are deliveries from PG&E at Kern River Station continuing?
33. Is SoCalGas connected to the High Desert power plant and is there any room there to displace other deliveries?

Other Mitigation Activities

34. What other mitigation activities SCG will deploy if the Relief Wells and current effort does not reduce or cure the rate and quantity of gas leak at Aliso Storage?
35. Provide the status of the “recovery wells” or other, more sophisticated methods of trying to “capture” and dispose of some of the leaking gas at Aliso Canyon.
36. Are these methods experimental or proven practical methods? Please provide citations documenting either type of method.
37. What are safety implications on the transmission from the ongoing leak at Aliso Canyon?
 - Are any Pipeline Safety Enhancement Plan projects being postponed (e.g. replacements)
 - Is SoCalGas operating any pipelines at significantly higher pressures (within MAOP but significantly above recent MOP) than in recent years to accommodate the gas
38. Residents of Porter Ranch are being exposed to mercaptan, which will reduce their ability to smell a local gas leak on SoCalGas distribution lines or in the house. What steps is SoCalGas taking to ensure the safety of the community where residents may not be able to smell gas and notify the company?
39. Explain why the wellhead was oscillating during the last well-kill operation and SCG’s detail contingency plan to prevent a catastrophic failure of the wellhead.
40. Provide a detailed Heat Exclusion zone calculations and its fire suppression contingency plan in case the reservoir engulfs in flame.