

## DOCKETED

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# Aliso Canyon Public Comments and Response to Comments

Prepared by the Staff of the California Public Utilities Commission, California Energy Commission, the California Independent System Operator, and the Los Angeles Department of Water and Power

May 27, 2016



## Public Comments 16-IEPR -02 Natural Gas

	Date Rec.	Entity	Comments	Staff Response
	<b>Analysis</b>			
1	4/22	Environmental Defense Fund - EDF	<p>Wants analysis modified to assume that customers use greater proportion of existing capacity than historical utilizations. Believes that by assuming customers won't adjust their behavior knowing Aliso is out the curtailment risk is overstated. Suggests limiting use of NG/Aliso, and diversifying generation further, that the prudent use of Aliso should only be a short term solution. Wants to; increase DR programs, restructure tariffs, and continue more utility/agency/ISO coordination. Wants electric shortfalls defined in terms of energy shortfalls so customers know how much energy they need to save. Wants agencies to reassess whether daily balancing is really necessary as the benefits may be uncertain at an increased cost. Recommends cost/benefit analysis of each mitigation measure including GHG reductions.</p>	<p>Technical Report –</p> <ul style="list-style-type: none"> <li>• The analysis focuses on the summer 2016 demonstrates that differences between day-ahead scheduled gas and real-time day gas burn cannot be met and led to the mitigation measures that would use the remaining gas at Aliso when needed and ask customers to more closely match scheduled gas with usage. We can't assume in our analysis that customers have already changed their behavior; the Action Plan team believes that would be imprudent relative to our mandate to develop a plan to preserve reliability this summer. At root, the analysis is a risk assessment. The analysis tells us that if there is no change, we collectively have a problem with gas curtailments that could be large enough to induce electrical outages. To the extent that customers balance, that risk will be mitigated. In addition, the Technical Report described having tested 5% daily balancing on the December day of the four scenarios. The test showed that even with 5% daily balancing, operating pressures would drop so low at some points on the gas system that SoCalGas would have to curtail gas service.</li> <li>• The electric shortfalls in MWh can be found in row 12 of Table 6 of the Technical report.</li> </ul> <p>Action Plan –</p> <ul style="list-style-type: none"> <li>• Many of the mitigation measures suggested by EDF are already included in the Action Plan and are intended to reduce natural gas or electric use. For example, SCE has 1,100 MW of DR and plans to increase DR by 60 MW in 2016-2017.</li> <li>• CAISO has opened a stakeholder process to explore market changes to more closely align electric and natural gas markets.</li> <li>• The joint agencies recognize that customers and shippers are under no obligation to deliver supply matching their actual usage and believe that daily balancing can help mitigate the mismatch between day-ahead schedules and real-time gas day burn.</li> <li>• LADWP implemented several measures to increase operational flexibility, including increasing DR capacity by up to an additional 50 MW in 2016, curtailing physical gas hedging and sales of gas-fired energy, and stopping</li> </ul>

				<p>economic dispatch. These near-term measures are being instituted to deal with the immediate constraints on Aliso Canyon operations. LADWP will also be making available an incremental 370 MW of solar energy with another 560 MW of solar energy with an estimated timeframe of late 2016/early 2017</p> <ul style="list-style-type: none"> <li>• Greater operational coordination among the affected entities is occurring. CPUC and SoCalGas are reviewing maintenance schedules to determine if schedules can be adjusted, but all compliance deadlines will be met. CAISO and LADWP and SoCalGas are coordinating maintenance schedules to ensure maximum availability of resources.</li> <li>• The Action Plan team does not believe a more explicit cost/benefit analysis of each measure is feasible or relevant at this time given the public safety issues associated with reliability.</li> </ul>
2	4/24	Food and Water Watch	<p>Want the Powers Engineering analysis they sponsored considered by joint-agencies in action plan. Indicates that the existing joint-agency studies are inflated and contain flawed or unsubstantiated data. For example:(1) Incorrect statements about the ability of the Honor Rancho storage field, which is 10 miles from Aliso Canyon and located on the same Los Angeles pipeline loop, to serve as an effective substitute for Aliso Canyon to guarantee a reliable supply of natural gas. (2) Unsupported claims that the SoCalGas firm pipeline capacity of 3.875 Bcfd and design storage send-out rate of 1.8 Bcfd from Honor Rancho, La Goleta, and Playa del Rey cannot be relied on at design flow rates. (3) Use of inflated estimates of electric generation natural gas demand in the LA Basin during summer and winter peak events. (4) Failure to acknowledge that firm capacity contracts can be utilized to assure reliability of supply and that</p>	<p>The assessment issued by Powers Engineering argues against the long term need for Aliso Canyon. The Powers analysis does not consider the current operating constraints of the existing gas and electricity systems in the greater Los Angeles area for this immediate summer. The Powers analysis does not factor in the operational characteristics of the gas system and the possibility of electrical outages in Southern California this summer if utilization of Aliso Canyon gas supplies and other mitigation measures are not implemented.</p> <ol style="list-style-type: none"> <li>1) Honor Rancho (HR) is attached to Line 225 of SoCalGas' high pressure transmission system, while Aliso Canyon is connected to SoCalGas' lower pressure transmission system. HR cannot fully substitute for lost supplies from Aliso Canyon for several reasons. First, its withdrawal capability is about half of the amount of Aliso Canyon. Second, it is unable to meet the large and rapid hourly changes in electric generation gas demand due to its additional distance from the load centers in LA Basin, especially the Southern end of the LA Basin system in Orange County. Third, it also serves the communities in the San Joaquin Valley, Coastal Areas, and the Inland Empire, so therefore, it can provide only limited support to the LA Basin.</li> <li>2) The problem identified in the technical analysis is that SoCalGas' total system capacity of 5.7 Bcfd is not relevant if scheduled gas deliveries do not match actual demand.</li> <li>3) The scenarios are based on historical days in 2014 and 2015. The electric generation assumed in the model is based on actual recorded days and not unnecessarily high-consumption days.</li> <li>4) Using firm contracts to access the ability of the upstream interstate pipelines to deliver, in aggregate, 6.2 Bcf to California is not a feasible solution. First, the</li> </ol>

			<p>major LA Basin non-core customers can use this mechanism to reduce dependence on storage. (5) Failure to acknowledge that gas-fired generation should not be occurring above minimum levels at winter or summer peak in the LA Basin to avoid stressing the SoCalGas delivery system, and that CAISO has the authority to guarantee that this happens. (6) Use of inappropriate model inputs in the risk assessment that: exclude the critical Playa del Rey storage field, underestimate reliably available storage and flowing pipeline supply, and overestimate electric generation gas demand. Goes on to contradict scenarios from study, indicating that other states manage without storage by pipeline capacity and firm contracts.</p>	<p>SoCalGas system does not have the pipeline capacity to move 6.2 Bcfd from the border to its customers. SoCalGas can receive only 3.875 Bcfd into its system. Second, even assuming we had matching firm capacity on both sides of the border and customers matched up firm transportation with firm supply, that alone would not eliminate potential mismatches between day-ahead scheduled supply (nominations) and actual demand.</p> <p>5) The technical analysis performed by the CAISO and LADWP calculated the minimum generation needed in LA Basin to maintain reliability and also considered the effect of all gas generation on SoCalGas system as the gas operational impacts can extend beyond the LA Basin when there are mismatches of scheduled gas and actual gas demand</p> <p>6) Playa Del Rey supply was held in reserve to meet system stress conditions. Both of the two simulation days with curtailment results (9/9/2015 and 12/15/2015) used gas from Playa Del Rey in virtually every hour of the day.</p> <p>Operators upstream of California rely heavily on the line pack of their long pipeline systems, which is a form of storage. The LA Basin has minimal line pack available. El Paso Natural Gas does have one storage field attached to it in New Mexico, and the pipelines in these states also have tighter balancing provisions than California.</p> <p>Southern California is at the far end of every interstate pipeline, and has seen supplies consumed by customers upstream during extreme weather conditions.</p> <p>The withdrawal capacity of a storage field is directly related to the inventory in the field. As the inventory is depleted due to storage utilization, the withdrawal deliverability is reduced.</p>
3	4/22	John Smith	<p>Believes Action Plan transfers risk from LA Basin to SD and Orange County. Recommends imports into Southern California should be maximized beyond LADWP and that RA program be used as a mechanism to verify that imports are maximized.</p>	<p>The technical analysis included natural gas analysis and electric analysis. Based on the gas assessment, CAISO and LADWP Balancing Authorities performed a complementary joint assessment translating the gas assessment to electric impacts. The joint assessment performed by the CAISO and LADWP calculated the minimum generation needed in LA Basin to maintain reliability and also assessed the ability to shift electric supply to other sources that do not rely on the SoCalGas system including maximizing imports into Southern California area. Note that gas curtailments may not be limited just to LA Basin and may be spread over SoCalGas' system, which could have an electrical impact that could extend beyond the LA Basin resources.</p>

4	4/25	Powers Engineering Reply to Joint Agencies News Release on Critique of their Report	Points out faulty inputs in "hydraulic modeling" that claims Aliso Canyon necessary to avoid blackouts. Supports mitigation measures in Action Plan, however, suggest that Playa del Rey and Honor Rancho can be used to meet demand. Believes by employing 17 of the 18 mitigation measures except for the use of Aliso Canyon, the curtailment event that occurred June 30-July 1, 2015 would have been avoided.	<p>See response to Food and Water Watch.</p> <p>Mr. Powers has indicated that he agrees with 17 of 18 mitigation measures and only takes issue with the mitigation measure to prudently use the 15 Bcf remaining in the field for this summer. However, the agencies have a responsibility to prudently use the 15 Bcf remaining in the field to maintain reliability.</p> <p>The Powers Engineering claim regarding June 30-July 1 is unsubstantiated. As explained in the Technical Report, the June 30-July 1 curtailment illustrates actual conditions on a day of stress to both the gas and electric systems. Those conditions would most certainly have led to electrical outages had Aliso Canyon not been available. The joint agencies agree that the measures we are implementing will mitigate the impact of similar conditions in the future, but our technical assessment still finds the measures mitigate but do not eliminate the risk without gas from Aliso Canyon this summer.</p>
5	4/22	Richard Matthews – Save Porter Ranch board member	Feels Aliso isn't needed for the Summer. Feels that the 15 Bcf is adequate and that the use of Aliso during the Summer and threat of blackouts is a scare tactic and uses overstated/inflated assumptions. Use of historical storage capacity is misleading; historical usage was less than the maximum capacity because Aliso made it unnecessary to use more. Potential to use backup diesel was ignored in the report.	See response to Powers Engineering analysis. South Coast Air Quality Management District (SCAQMD) phased out the use of liquid fuel in - power generation in order to improve air quality and protect public health. LADWP is the only generation owner that has this alternative fuel capability, and is actively working with SCAQMD on whether this option can be used in certain emergency situations.
6	4/22	Susan Gormon-Chang	Feels that the report favors SCG and misrepresents and/or leaves out critical facts, i.e. the fact that LADWP doesn't buy gas from SCG and that there are alternatives to Aliso Canyon (i.e., additional uncontracted pipeline capacity (6,725-3,875=2,875 MMcf)). Feels the report is nearsighted and doesn't include renewables as a long term solution.	<ul style="list-style-type: none"> <li>• LADWP does not buy gas from SoCalGas, but it uses the SoCalGas system to transport the gas it purchases from others.</li> <li>• The purpose of the Action Plan is to develop mitigation measures to preserve reliability for summer 2016 only. The long-term analysis will come later.</li> </ul>

<b>Environmental impact</b>				
7	4/11	Jan Dietrick, President of Rincon-Vitova Insectaries, Inc.	The full amount of methane needs to be captured. Should evaluate the correct measurements for CO2 versus methane as they are not the same regarding global warming potential. SCG should work with dairy farms to capture methane too. Recommends a tax on uncaptured, unburnt methane.	This is beyond the scope of the summer reliability Action Plan.
8	4/10	Mina Nichols of Oxnard	Wants more research done, feels there are mercury leaks in Simi, along with other gas leaks.	This is beyond the scope of the summer reliability Action Plan.
<b>Mitigation measure</b>				
9	4/22	Agricultural Energy Consumers Association, California Farm Bureau Federation, California Large Energy Consumers Association, California League of Food Processors, California Manufacturers and Technology Association,	Concerned about disruptions of electricity and natural gas supplies. Wants Aliso brought safely and incrementally back online to full service. Wants withdrawal from Aliso to avoid curtailments. Feels the technical report understates the risk of reliability and harm blackouts could cause. Supports coordination with ISO, Flex Alerts for gas, and also the use of Costa Azul with standby cargo as used in other regions (Distrigas Massachusetts). Should evaluate whether Costa Azul as a short-term solution is a viable option. Cautions against trying to 'reinvent' the wheel with stringent balancing and tariff changes. Supports OFO's and EFO's, and the adoption of the curtailment settlement. Recommends working with the current CPUC Application 15-06-020. Overly stringent balancing	<ul style="list-style-type: none"> <li>• The energy agencies are committed to ensuring wells are deemed safe before being brought back in service. The agencies understand the impact of electric service interruptions and have put forth an Action Plan with a list of 18 mitigation measures to reduce but not eliminate the risk of curtailments.</li> <li>• One of the mitigation measures is to use the gas currently at Aliso when needed to avoid electricity outages this summer.</li> <li>• The technical team agrees that its assessment may understate the risk of electricity outages because it assumed normal transmission system configuration with no outages and all lines in service. It also did not include the contingency reserve requirement or the capacity needed to recover required contingency reserves within one hour after they are dispatched. Additionally, the four scenarios used in the analysis were actual days on which demand was less than would occur under a 1-in-10 demand forecast – they were not extreme days.</li> <li>• The Action Plan team continues to explore whether some LNG could be accessed at Costa Azul in Mexico and imported via the Otay Mesa border interconnection. Because of constraints and operating pressures that currently limit deliveries on SoCalGas' southern zone through Moreno Station to 1,010 MMcfd, the quantity accessible would be limited to demand solely for SDG&amp;E, which on many summer days is less than 200 MMcfd. This quantity would not be large enough to eliminate all risk of curtailment but could reduce it. Among</li> </ul>

		Direct Access Customer Coalition, Energy Users Forum, Energy Producers and Users Coalition and the Indicated Shippers - Amie Burkeholder	requirements will punish non-core customers unfairly, points to study by Catherine Yap comparing core forecast versus core actual delivered gas; more than half the time, variances are greater than 5%. Core should be held to the same balancing standard as non-core. Also supports the use of demand response for natural gas. Penalties should be waived if DR is out of compliance due to DR instruction. Need to evaluate whether additional compression is a feasible solution.	<p>the implications of such an LNG import is a significantly higher commodity cost for the LNG versus domestically-produced flowing supply and various Sempra affiliate issues.</p> <ul style="list-style-type: none"> <li>• SoCalGas filed a proposed tariff change for 5% daily balancing in CPUC Application 15-06-020, and the decision to adopt any tariff change will be made in that proceeding. Parties subsequently submitted a settlement agreement, and CPUC action is expected early June.</li> <li>• An April 7 CPUC decision ordered up to \$6 million for So Cal Gas energy conservation messaging campaign plus \$5 million for Flex Alert paid media in 2016. An advisory group comprised of CPUC, LADWP, SoCalGas, SoCalEdison, SDG&amp;E, SCPPA, City of Burbank, City of Glendale, and City of Los Angeles was created to plan a gas conservation messaging campaign around the Aliso Canyon situation. The advisory group plans to meet weekly.</li> <li>• The Action Plan focuses on summer 2016 and mitigation solutions that could be available in the near term to address the immediate needs this summer. Infrastructure changes like additional compression have longer-lead times and will be explored in the long-term analysis.</li> </ul>
10	4/22	California Energy Efficiency Industry Council - Kellie Smith	Supports immediate efficiency measures at the utility level. Mainly calling for the CPUC to release projects that have been held for further study, and use metered energy consumption as baseline. Also, a final suggestion is to suspend recent dispositions that prevent operational, behavioral efficiency (including retro commissioning) from eligibility for ratepayer incentives.	<ul style="list-style-type: none"> <li>• SoCalGas plans to identify large EE projects that could be expedited to come on line by summer or end of year and provide more program administrators to speed approval of projects under development and expected by end of 2016.</li> <li>• LADWP has budgeted \$178 million for the 2016-2017 fiscal year for energy efficiency programs and is in the review and award process of RFP responses to support the following programs: <ul style="list-style-type: none"> <li>a) Commercial Direct Install - Launched during the week of 4/18/2016.</li> <li>b) Behavioral EE - Launch by 7/1/2016.</li> <li>c) Residential LED lighting program - Launch by 7/1/2016.</li> <li>d) AC Tune up - Launch by 7/1/2016.</li> <li>e) Upstream Commercial HVAC - Launch by 7/1/2016.</li> <li>f) Demand Response (DR) program: accelerating to enroll into 2016 DR program from 10 MW to up to 60 MW.</li> </ul> </li> <li>• LADWP completed a memorandum of understanding with L.A. Unified School District to implement energy savings measures. The LAUSD MOU was executed in October, 2015 and formally kicked off on 4/6/2016. Activities are now proceeding to assess schools for LADWP-provided retrofits of lighting systems and controls.</li> </ul>

11	4/22	California Energy Storage Association CESA - Janice Lin	<p>Members could have 22 MW/74 MWh storage online by August 1 and 225 MW/681 MWh online by Dec. 1 with the right incentives. Recommends the following: (1) Act on the applications for rehearing that have stalled the preferred resources authorized in Southern California Edison Company's (SCE) 2013 Local Capacity Requirements (LCR) Request for Offers (RFO). (2) Ensure that customer-sited energy storage can participate in utilities' demand response (DR) programs. (3) Accelerate interconnection processes, site identification, and hosting approval. (4) Authorize additional preferred resources procurement pursuant to the recent RFOs for investor-owned utilities (IOUs) and publicly-owned utilities (POUs), respectively. (5) Authorize procurement of energy storage to be co-located at existing generation facilities. (6) Authorize locational adders to incentivize siting of energy storage in affected LA Basin areas and create a specific PV-plus-storage rebate program for the impacted area. (7) Launch a Storage Auction Mechanism (SAM) or other storage procurement pathway for energy storage projects modeled after the Renewable Auction Mechanism (RAM). Energy storage should be included as a mitigation measure alongside the 18 other recommended mitigation solutions.</p>	<ul style="list-style-type: none"> <li>• The Action Plan team agrees with CESA that there is a role for energy storage and has added storage to the list of mitigation measures. CESA and other interested parties, should follow up by submitting these proposals in the relevant proceedings at the CPUC for specific implementation.</li> <li>• The CPUC is on track with its plan to expand demand response programs that were identified as part of the action plan.</li> <li>• SCE and SDG&amp;E have unused authorization for preferred resources. See CPUC Decision.13-02-015, available online at: <a href="http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M050/K374/50374520.PDF">http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M050/K374/50374520.PDF</a>; CPUC Decision 14-03-004, available online at: <a href="http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M089/K008/89008104.PDF">http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M089/K008/89008104.PDF</a> and CPUC Decision 13-10-040 available online at: <a href="http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M079/K533/79533378.PDF">http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M079/K533/79533378.PDF</a>. The utilities have existing authorization to procure preferred resources and submit applications to the CPUC for approval.</li> </ul>
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12	4/22	California Solar Energy Industries Association - Bernadette Del Chiaro & SEIA - Brandon Smithwood -	Supports use of rooftop solar and solar thermal technologies. Feels that the solar industry could bring more than 7 megawatts of additional solar capacity online in the LA Basin by August 1st and more than 34 megawatts of additional capacity by December 1st. Provides a list of actions for accelerating solar deployment in 2016 and 2017. Recommends that the CPUC order SCG to move gas meters for solar installations where needed, and that SCE lift the cap on its Option R rate schedule so more people can participate. The local municipalities need to expedite their permitting processes & reduce costs. SCE should waive the requirement that they will not move forward on contracts awarded out of the LCR RFO until the CPUC decision is final and non-appealable. LAWDP should lift the ban on PPA's with 3rd party solar farms, reform interconnection, and increase rebates for solar. Legislature should pass law that pilots a LA basin solar project with electric water heaters and rooftop solar, targets affected areas, and funds public education buildings. Increase funding for CSI and faster interconnection times are needed. Allow PPA's in LADWP.	<ul style="list-style-type: none"> <li>• See response to California Energy Storage Association.</li> <li>• CPUC is on track with the solar thermal actions that were presented as part of the action plan.</li> <li>• LADWP is taking steps to reduce approval times for solar system installations. The Customer Net Metered (CNM) LADWP Solar Interconnection process was streamlined in December 2015. The new on-line interconnection process, permit coordination improvements, and technical field requirement simplifications resulted in faster meter installation response times. LADWP continues to improve the process through work management efficiencies resulting in about 1000 installations per month, an approximate 100% increase compared to 2015.</li> <li>• LADWP has an active Feed-in-Tariff (FiT) with an authorized 150MW of approved capacity. LADWP currently offers a FiT program, and once the initial 150MW FiT Program is fully allocated and built out, an expanded FiT Program will be provided. In addition to the FiT program, LADWP also allows lease agreements and equipment purchase by owners, giving a wide variety of financial structures for solar on commercial sites.</li> <li>• LADWP Solar Incentive Program (SIP) still has funding available through 2017 for both residential and commercial installations in the City of LA. The SIP Program has supported the development of about 170 MW of customer solar in the City of LA.</li> </ul>
13	4/22	Citizens Coalitions for A Safe Community - Clyde	Supports ARB Mitigation Program. Want immediate block-by-block installation of solar on homes, including solar thermal and solar pool heating. Over 10,000 units could be	CPUC is evaluating rule changes for solar thermal and evaluating increasing the rebate level.

		Williams	deployed by winter. Indicates there is manpower available to do this.	
14	4/26	Dentons US LLP on behalf of Alliance for Retail Energy Markets and Shell Energy North America (US), L.P. - John Leslie	States "low OFO" were not discussed at the workshop and suggests using it on days forecasted demand exceed scheduled gas deliveries. Does not support daily balancing and believes rules for balancing core customer load should be aligned with balancing non-core customer load. Expresses concern about potential costs to manufacturers, food processors and other noncore customers. Expresses that Reliability plan must be updated to reflect ongoing CPUC docket (A.15-06-020). Suggests increasing transparency including reporting linepack to enable customers to anticipate OFOs. Permit Imbalance Trading After the End of an OFO/EFO Day Need greater transparency of well inspection. Also, mentions LNG imports as a method to meet demand during peak days.	<ul style="list-style-type: none"> <li>• This point appears moot with submission of a settlement on daily balancing issues to the CPUC for action in A. 15-06-020. OFOs are called once there is a problem, while daily balancing is aimed at preventing a problem. The proposed settlement provides for reopening considering of daily balancing if use of the OFOs turns out to be insufficient to reduce customer imbalances.</li> <li>• Changes related to reporting of linepack and imbalance trading should be raised in the appropriate CPUC proceeding. The Action Plan team has noticed that SoCalGas is posting more information on its public Envoy™ system to help shippers recognize system conditions and schedule gas appropriately. Moreover, the mitigation measure to call OFOs sooner in the gas day remains on our standby list such that Shell Energy, Alliance for Retail Energy Markets and others are welcome to help develop such a procedure.</li> <li>• The proposed settlement on daily balancing submitted in A. 15-06-020 appears to provide some ability for imbalance trading and is a level of detail the Action Plan does not intend to address.</li> <li>• Information about the Aliso Canyon well inspection results can be found at <a href="http://www.conservation.ca.gov/dog/AlisoCanyon">http://www.conservation.ca.gov/dog/AlisoCanyon</a>.</li> <li>• Regarding use of LNG, see response to Agricultural Energy Consumers Association, et al.</li> </ul>
15	4/10	Don Wood	The Plan should contain an AC replacement plan for old inefficient units (for both commercial and residential customers).	<ul style="list-style-type: none"> <li>• LADWP has budgeted \$178 million for 2016-2017 fiscal year for energy efficiency programs, which includes HVAC. LADWP is in the review and award process of RFP responses to support the following programs: <ul style="list-style-type: none"> <li>a) Commercial Direct Install - Launched the week of 4/18/2016.</li> <li>b) Behavioral EE - Launch by 7/1/2016.</li> <li>c) Residential LED lighting program - Launch by 7/1/2016.</li> <li>d) AC Tune up - Launch by 7/1/2016.</li> <li>e) Upstream Commercial HVAC - Launch by 7/1/2016.</li> <li>f) Demand Response (DR) program: accelerating to enroll into 2016 DR program from 10 MW to up to 60 MW.</li> </ul> </li> </ul>

				<ul style="list-style-type: none"> <li>LADWP completed a memorandum of understanding with L.A. Unified School District to implement energy savings measures. The LAUSD MOU was executed in October, 2015 and formally kicked off on 4/6/2016. Activities are now proceeding to assess schools for LADWP-provided retrofits of lighting systems and controls.</li> </ul>
16	4/24	Edward Cazalet, MegaWatt Storage Farm	Supports use rooftop solar and large solar in conjunction with storage. Indicates successful dealings with a Japanese battery company. The 300 MWH capacity batteries can be delivered in the LA Basin within 6 months from an order (perhaps by the start of 2017). Additional batteries can be delivered at an average rate of 1000 MWH of storage capacity per year for many years.	<ul style="list-style-type: none"> <li>The Action Plan team added a new mitigation measure, to expand and accelerate battery energy storage. CPUC is on track with the solar thermal actions that were listed in the action plan. The utilities are reviewing whether any of the projects in the pipeline can be accelerated.</li> <li>LADWP will accelerate a utility scale battery storage project of 10 MW for implementation as soon as viable. LADWP is also actively working with our existing solar developers to explore additional battery installation options.</li> </ul>
17	4/22	GE - Joseph Heinzmann	Proposes mitigation solution using gas compressed storage - GE's motor driven CNG in a Box(CIAB) product to be run in parallel with SoCalGas delivery. The concept is to supplement, not replace, entire plant fuel needs. An example is to deploy more than 60 CNG boxes that could collectively store 155 MMcf over a 14 hour off-peak period that could then supply an LMS6000 at sufficient pressure to operate for four hours. States no emissions, competitive cost, no interconnection (assumes existing interconnection), black start, and rapid deployment 1250 MW and 3750 MWh by Aug.1 and double that by Dec. 1.	<ul style="list-style-type: none"> <li>The Action Plan team considered this at a conceptual level early on and excluded it as impractical due to the large number of trailers required, cost and safety reasons. In following up, CIAB deployment could provide some relief that certain customers or utilities could find appropriate given their specific risk exposure and business circumstance. Various gas users are exploring this potential solution with GE.</li> <li>LADWP is exploring this potential solution with GE, however, several major policy issues must be considered, including; the cost of the proposal, the impacts of relocating storage facilities from affluent neighborhoods to disadvantaged neighborhoods, and the impacts of shifting gas storage and distribution responsibility to electric utilities.</li> </ul>

18	4/22	Glendale Water and Power - Stephen Zurn	Supports the use of Aliso for reliability, but wants the action plan to further consider: (1) Recommend that SCG postpone transmission maintenance until after summer peak. (2) The state adopts a policy that safely accesses the 15 Bcf for rest of summer. (3) Expedite well inspections ASAP. (4) Concerned about fairness of OFO and penalties because costs are borne by customers and go to the company who created the problem.	<ol style="list-style-type: none"> <li>1) SoCalGas and CPUC are analyzing whether the deferral of any maintenance is possible. SoCalGas may be able to adjust schedules, but it plans to meet all compliance deadlines and has no relief from federal or other agencies to not do so.</li> <li>2) The CPUC is working on a procedure that outlines safe access to the 15 Bcf remaining in the field.</li> <li>3) Well inspections are underway. DOGGR in consultation with its independent experts have developed an inspection and safety protocol to ensure each well is thoroughly tested before being brought in service. See <a href="http://www.conservation.ca.gov/dog/AlisoCanyon">http://www.conservation.ca.gov/dog/AlisoCanyon</a>.</li> <li>4) Specific details about OFO penalties should be raised in the appropriate CPUC proceeding.</li> </ol>
19	4/20	La Paloma Generating Company	Receives gas from Kern/Mohave interstate and can provide critical support to maximize Path 26 North to South electricity flows into the LA Basin. Plants lacks a contract for 75% of its capacity, so it is considering limiting its availability to the market. If it is needed to support the electricity system due to limited operations of Aliso Canyon, it requests a contract.	The Action Plan team agrees that generation from outside the LA Basin that is served from a non-SoCalGas pipeline can indeed help mitigate the risk of electricity outages on days with curtailments on the SoCalGas system. The specifics of which units and what arrangements should be in place to access them are within the purview of the CAISO.
20	4/22	Large-Scale Solar Association	Recommends utility-scale solar with storage for reliability as a longer-term solution towards 2017. LSA recommends that the state agencies coordinate with Los Angeles County to revise the recently developed Renewable Energy Ordinance (REO) to expedite up to 400 MW of potential projects that have been identified for utility-scale solar. In 2013, Los Angeles County received grant funding from the CEC to develop its REO.	<ul style="list-style-type: none"> <li>• The Action Plan focuses on mitigation measures that could be deployed to address reliability for summer 2016. The joint agencies will consider the role utility-scale solar can play in the longer-term analysis.</li> <li>• LADWP will be making available an incremental 370 MW of solar energy with another 560 MW of solar energy by year end/early 2017. LADWP will accelerate a utility scale battery storage project of 10 MW sited at a large-scale solar installation for implementation as soon as viable. LADWP is also actively working with our existing solar developers to explore additional battery installation options.</li> </ul>

21	4/22	Peak Reliability - Michelle Mizumori	Supports the action plan recommendations. Working with balancing authorities and stakeholders to analyze transmission constraints, and making adjustments to their tools and processes. Concerned about San Diego's ability to import power. Gas curtailments could impact the Interconnection Reliability Operating Limit (IROL) in San Diego area as one of the generators in the Aliso Canyon service area impacts the IROL and San Diego's ability to import power. Taking several actions to help mitigate reliability issues. Running additional analysis to identify reliability issues not identified in the technical report and will share results.	The Action Plan team appreciates the support that Peak Reliability can provide and plan to include Peak in its table top exercises for summer preparedness.
22	4/22	SCE	SCE's primary concern is the safe and reliable operation of the gas pipelines and electric grid systems in southern California. Encourages the safe use of Aliso for reliability. SCE plans to implement several mitigation solutions and accelerate projects in the pipeline, if possible. They are exploring contracts for power outside of Southern California. They are increasing efficiency program (targeting low-income customers), DR programs (existing 500 MW can respond in under 30 min. and 600 MW in under 60 min.; incremental additions of 60 MW in 2016-2017), and additional demand side management efforts.	The Action Plan team encourages SCE to continue its efforts to increase its conservation programs and other mitigation solutions.

23	4/24	Solar City (new comments)	Wants rooftop solar fast tracked to reduce regions dependence on natural gas. Also, supports electric water heaters paired with solar PV, energy storage paired with solar PV. LADWP should fast-track interconnection, improve NEM and rebates, allow PPA's, and reach out to 'super-users.' Promote and implement solar water heaters and rebates, pilot a regional program. Support and incentivize storage with PV- reform SGIP incentives for storage, interconnection, and dispatchable DR programs that include storage.	LADWP is taking steps to reduce approval times for solar system installations. The Customer Net Metered (CNM) LADWP Solar Interconnection process was streamlined in December 2015. The new on-line interconnection process, permit coordination improvements, and technical field requirement simplifications resulted in increased meter installation response times. LADWP continues to improve the process thorough work management efficiencies resulting in about 1000 installations per month, an approximate 100% increase compared to 2015. LADWP Solar Incentive Program (SIP) still has funding available through 2017 for both residential and commercial installations in the City of LA. LADWP is also actively working with our existing solar developers to explore additional battery installation options.
24	4/22	Stem - Ted Ko	Supports customer-sited (behind-the-meter) energy storage solutions. Fast track existing projects, expedite interconnection and permitting issues, and expand projects in state and municipal buildings.	The utilities are evaluating what projects in the pipeline can be accelerated. Specifically, LADWP is actively working with its existing solar developers to explore additional battery installation options. LADWP will accelerate a utility scale battery storage project of 10 MW for implementation as soon as viable.
25	4/22	Tom Lynch for Bluon	Indicates that there are new cost-effective energy efficient replacement refrigerants that provide an immediate reduction up to 25% of electrical consumption for HVAC within existing infrastructure. Would specifically help reduce demand during peak load when HVAC usage is the majority of the electrical load.	<ul style="list-style-type: none"> <li>• New HVAC equipment is regulated under federal appliance efficiency standards. The Energy Commission supports technologies that improve the energy efficiency of equipment that help meet or exceed the federal efficiency standards.</li> <li>• LADWP has budgeted \$178 million for 2016-2017 fiscal year for energy efficiency programs, which includes the following for HVAC: <ul style="list-style-type: none"> <li>a) Air Conditioning Tune up - Launch by 7/1/2016.</li> <li>b) Upstream Commercial HVAC - Launch by 7/1/2016.</li> </ul> </li> </ul>
<b>LA City Council member, California Legislature, State Offices</b>				
26	5/16	California Dept. of Corrections and	Mentions the CDCR procures its gas through the Dept. of General Services, and the distribution lines are independent and not interconnected	The Action Plan team appreciates the efforts that CDCR has made in reducing its energy and natural gas usage and willingness to help the situation by participating in SCE's demand response program and by exploring other ways to reduce consumption.

		Rehabilitati on	to Aliso Canyon, but CDCR has for many years been an active leader in reducing its grid-based energy purchases and lowering its overall electricity and natural gas consumption through a number of efforts. These efforts include: the use of solar and wind generation, aggressive action plan through the California Investor Owned Utilities/CDCR Energy Efficiency Partnership Program to improve energy efficiency, to reduce gas consumption, and to reduce GHGs, which together have helped reduce its natural gas purchases by 20 percent and grid-based purchases by 22 percent. CDCR also participates in SCE's Demand Response program. CDCR is committed to running its operations with energy and natural gas efficiencies in mind and offer its ongoing commitment to explore other opportunities CDCR can undertake to help the situation.	
27	4/13	City of Los Angeles	Repeat submission of Mitchell Englander's 4/8 letter.	
28	5/6	Fran Pavley, California State Senator, District 27	Wants to move the state from its continued dependence on oil and gas, and toward a clean energy future. Concerns about the plan having at	See Energy Commission letter at <a href="http://docketpublic.energy.ca.gov/PublicDocuments/16-IEPR-02/TN211596_20160523T073145_52016_Response_to_Senatro_Pavley_Re_Aliso_Canyon.pdf">http://docketpublic.energy.ca.gov/PublicDocuments/16-IEPR-02/TN211596_20160523T073145_52016_Response_to_Senatro_Pavley_Re_Aliso_Canyon.pdf</a>

			<p>least been partially developed by the own industries its authors seek to regulate. Mentions the plan was not very detailed as to how it will protect LA consumers in at least three areas: mobilizing the states resources to contribute to a massive energy saving campaign, ensuring transparency of gas maintenance events and gas delivery, and limit consumers' exposure to more costs. Submitted a list of recommendations to Governor Brown regarding state-run energy conservation campaign, Aliso Canyon Remediation and Gas Operations, and Greenhouse Gas Emissions - exploring futher legal action against SoCalGas for methane and air contaminant leak. Would like the joint energy agencies to respond to the following questions in the summer and winter reliability plans: how does the reliability Plan help ensure that the state is positioned to achieve its greenhouse gas emissions targets under SB350 and AB32, how does the Reliability Plan relate to the State Air Resources Board's Mitigation Program, and where are there specific opportunities to provide both reliability and emissions mitigation through singular actions, and to what extent do the Technical Assessment Reports account</p>	
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			for alternative resources in its scenario planning?	
29	5/4	Jay Obernolte, California State Assemblyman, 33 <sup>rd</sup> District	Supports use of High Desert Power Plant, which does not receive gas from the SoCalGas system. Wants a response on the specific measures the California Energy Commission is taking to ensure the availability of facilities such as the one found in his district, both on a short-term and long-term basis, to respond to grid reliability needs.	See response to La Paloma Generating Company
30	4/8	Mitch Englander, LA Council President	States the Action Plan presents two unacceptable options: inject into a field that has not been inspected/deemed safe or be at risk of scheduled rolling blackouts. Feels SCG is lagging in inspection process. Wants agencies to hold SCG accountable for the prudent use of the remaining 15 Bcf, quickly complete all of the inspections, crystallize communications between involved entities to maximize predictability and reliability, develop outreach and plans to inform public for reducing energy usage on 'risk' days, and expand customer efficiency programs. Don't make communities suffer anymore.	<ul style="list-style-type: none"> <li>• The well inspections are underway and will be completed before any gas is injected.</li> <li>• The CPUC and other action team members are developing procedures to allow prudent use of the remaining 15 Bcf.</li> <li>• Increased coordination between SoCalGas and the affected electric balancing areas and utilities is also occurring. CAISO has developed a report that reflects gas burn rates 2 days in advance of operating day and is working on mechanism to automate delivery of the data on daily basis. A second table top exercise with LADWP will be held before summer covering operating procedures for gas transmission pipeline outages or de-rates. LADWP, CAISO and SCE are conducting joint emergency training sessions that include specific Aliso Canyon mitigation issues. LADWP plans to automate the process to provide SoCalGas day-ahead gas forecast for high load days.</li> <li>• See response to Agricultural Energy Association et. al., regarding Flex Alert and formation of an advisory group for communication/messaging.</li> <li>• See response to California Energy Efficiency Industry Council for energy efficiency measures.</li> </ul>
	<b>Reliability</b>			
31	4/14	Brissa Sotelo	Pro-use of Aliso Storage Facility. Wants wells deemed safe to back online; rolling brownouts will hurt the economy.	The energy agencies are committed to ensuring wells are deemed safe before being brought back in service. The agencies understand the impact of electric service interruptions and have put forth an Action Plan with a list of 18 mitigation measures to reduce but not eliminate the risk of curtailments.

32	4/22	California Chamber of Commerce	Supports the safe use of Aliso Canyon to mitigate risk of blackouts.	See response to Brissa Sotelo.
33	4/12	Elizabeth Shapiro	Pro-use of Aliso Storage Facility. Wants wells deemed safe to back online; rolling brownouts will hurt the economy.	See response to Brissa Sotelo.
34	4/22	LA Chamber of Commerce	Concerned about energy reliability and financial impact of blackouts (est. \$17-20K average per hour per business). Highlights safety and urgency to inspect and certify every well to expedite the restoration of all or some of Aliso Canyon.	See response to Brissa Sotelo.
35	4/21	Los Angeles County Business Federation aka BizFed	Represents 155 business groups, more than 273,000 regional businesses. Can't afford to risk blackouts, please use Aliso to ensure reliability once it is deemed safe.	See response to Brissa Sotelo.
36	4/22	North Orange County Chamber of Commerce - Theresa Harvey	Supports the safe use of Aliso, considers it vital to providing reliable, reasonably-priced natural gas service 24/7	See response to Brissa Sotelo.
37	4/22	Orange County Business Council - Bryan Starr	Supports the use of Aliso for reliability. The risk of curtailments and potential blackouts translates to billions of dollars in lost economic activity.	See response to Brissa Sotelo.
38	4/12	Richard Xavier Corral	Pro-use of Aliso Storage Facility. Wants wells deemed safe to back online; rolling brownouts will hurt the economy.	See response to Brissa Sotelo.

39	4/22	San Gabriel Valley Economic Partnership - Brad Jensen	Supports the use of Aliso for reliability. Doesn't support closure of Aliso. Fears the economic impact of blackouts/curtailments.	See response to Brissa Sotelo.
40	4/22	Western States Petroleum Assoc. - Catherine Boyd	Concerned about reliability of natural gas and electricity supply. Supports the safe use of Aliso Canyon to mitigate risk of blackouts. Indicates any outages could risk refinery production, etc. Recommends: (1) All stakeholders work to mitigate blackout risk and reduce demand to avoid curtailments. (2) Ensure that the refineries in potentially impacted areas are not curtailed. (3) Assemble a (state) Transportation Fuel Action Team of stakeholders to develop a set of recommendations to reduce the risk posed to the state's transportation fuel supply.	<ul style="list-style-type: none"> <li>• See response to Brissa Sotelo.</li> <li>• The natural gas curtailment rules are defined in SoCalGas' tariff, and changes need to be approved by the CPUC. The changes that SoCalGas proposed in Application 15-06-020 are now the subject of a settlement. CPUC action is expected in early June. Those changes largely address system-wide curtailments, however, while curtailments implemented in a local emergency are expected to focus on electric generators first.</li> <li>• The joint agencies are discussing with WSPA of holding a workshop focused on the risk to the state's transportation fuel supply.</li> </ul>
<b>Safety</b>				
41	4/8	Paul Hunt	The 4/8 workshop was a trick to cloud the real issue- is the facility safe? The government has rubber stamped data that SCG provided for report. All six tests must be performed on all 114 wells at various pressures before it is deemed safe.	<p>The joint agencies are committed to ensuring wells are deemed safe before being brought back in service. DOGGR in consultation with its independent experts have developed an inspection and safety protocol to ensure each well is thoroughly tested before being brought in service. See <a href="http://www.conservation.ca.gov/dog/AlisoCanyon">http://www.conservation.ca.gov/dog/AlisoCanyon</a>.</p> <p>The joint energy agencies are actively pursuing independent third party review of the winter 2016/2017 analyses. The agencies decided not to conduct an independent review of the summer 2016 analysis due to timing since many of the mitigation measures are already well underway.</p>

<b>Shut-it down</b>				
42	4/22	Jacqueline Petralia	Suggest 'reinvent' not reinject. Wants LADWP to promote renewables, and increase their programs and partner with schools, etc. Wants increased solar & geothermal programs in LA.	<ul style="list-style-type: none"> <li>This Action Plan addresses reliability for summer 2016 only. Subsequent analyses will be developed to address longer-term issues.</li> <li>LADWP will be making available an incremental 370 MW of solar energy with another 560 MW of solar energy by year end/early 2017. LADWP completed a memorandum of understanding with L.A. Unified School District to implement energy savings measures. The LAUSD MOU was executed in October, 2015 and formally kicked off on 4/6/2016. Activities are now proceeding to assess schools for LADWP-provided retrofits of lighting systems and controls.</li> </ul>
43	4/8	Ray Mekhtarian	15k residents were displaced. Wants storage relocated elsewhere.	This Action Plan addresses reliability for Summer 2016 only. Subsequent analyses will be developed to address longer-term issues.