ALJ/AA6/ilz **Date of Issuance: 2/28/2020**

Decision 20-02-043 February 27, 2020

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of SOUTHERN CALIFORNIA GAS COMPANY (U904G) to Establish a Demand Response Program.	Application 18-11-005

DECISION RESOLVING THE APPLICATION OF SOUTHERN CALIFORNIA GAS COMPANY TO ESTABLISH A DEMAND RESPONSE PROGRAM

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DECISION RESOLVING THE APPLICATION OF SOUTHERN CALIFORNIA GAS COMPANY TO ESTABLISH A DEMAND RESPONSE PROGRAM

Summary

This decision denies Southern California Gas Company's (SoCalGas') Application seeking authority to establish four gas Demand Response (DR) Programs from winter 2019 through 2022; develop and implement a new energy data sharing platform (EDSP) to support and facilitate the DR Program; and recover costs associated with the implementation of DR programs during the 2016-2017; 2017-2018 and 2018-2019 winter seasons, and the 2018-2019 winter notification marketing campaign (prior years' winter DR Programs).

This decision denies SoCalGas the requested authority due to lack of evidence that the proposed DR programs will provide significant benefits to ratepayers, or that the EDSP is appropriately designed or needed at this time. Finally, this decision denies cost recovery for the prior years' winter DR Programs without prejudice and defers recovery of these costs until the Commission has determined responsibility for the Aliso Canyon leak.

This decision directs SoCalGas to hold a workshop and submit additional information regarding the Commercial and Industrial Load Reduction Pilot (C&I Load Reduction Pilot); and authorizes the Energy Division of the Commission to direct SoCalGas to file an application proposing the approval of the C&I Load Reduction Pilot or other DR programs in the future if it determines such programs would be beneficial to ratepayers.

Finally, before refiling future application(s) for the approval of any of the gas winter season DR programs rejected in this decision, this decision directs Applicant to reevaluate the design and the incentive structures of each of the proposed DR Pilot programs in this Application, drawing on the extensive

proposals and recommendations for modifications in the record of this proceeding.

1. Background and History

1.1. Background

On October 23, 2015, Southern California Gas Company (SoCalGas or Applicant) discovered gas leakage at the Aliso Canyon Natural Gas Storage Facility (Aliso Canyon), resulting in an Emergency Proclamation on January 6, 2016 by the Governor.[1] Through the Emergency Proclamation, the Governor directed the Commission to "take all actions necessary to ensure the continued reliability of natural gas and electricity supplies in the coming months during the moratorium on gas injections into the Aliso Canyon Storage Facility."[2]

On September 13, 2016, the Director of Energy Division (ED) of the California Public Utilities Commission (Commission) directed SoCalGas to develop and submit to the Commission a proposal for gas Demand Response (DR) programs in its service territory for the winter of 2016-2017,[3] in accordance with the Aliso Canyon Winter Action Plan (Action Plan).[4]

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[1] California Public Utilities Commission, "Aliso Canyon Well Failure." http://www.cpuc.ca.gov/aliso/.

[2] Proclamation of a State of Emergency, at 3, Executive Department, State of California, January 6, 2016 (relating to Aliso Canyon Natural Gas Leak) (available at https://www.ca.gov/archive/gov39/wp-content/uploads/2017/09/1.6.16_Aliso_Canyon_Emergency.pdf).

[3] *See* Letter from ED to SoCalGas directing SoCalGas to file winter demand response programs for the winter of 2016, http://cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/News_Room/9-13-016%20Letter%20from%.

[4] *See* Exhibit SCG-08, at 2:9-11 (citing the "Aliso Canyon Gas and Electric Reliability Winter Action Plan" (Submitted September 1, 2016)). Available at https://efiling.energy.ca.gov/getdocument.aspx?tn=213406. The Action Plan, dated August 22, 2016, was prepared by the Staff of the California Public Utilities Commission,

Consistent with the September 13, 2016 direction from ED, SoCalGas proposed and implemented the 2016-2017 winter season DR programs which ran from December 1, 2016 through March 31, 2017.[5] The 2016-2017 winter season DR programs consisted of the first three DR programs implemented by SoCalGas, and included two conservation notification campaigns and a natural gas conservation pilot rebate program with a smart thermostat element.[6]

For the 2017-2018 winter season DR programs, ED, in a letter issued on November 16, 2017, directed SoCalGas to submit an expedited Tier 2 advice letter (AL) proposing a device-based DR Program and a technology assessment for hot water heaters by November 28, 2017.[7] In compliance, SoCalGas submitted AL 5223-G on November 28, 2017 establishing its 2017-2018 winter season DR Programs, which comprised of an expanded smart thermostat load control program (focused on reducing natural gas usage during peak periods by adjusting temperature settings on customers' smart thermostats); a technological assessment of emerging DR technologies for natural gas water heaters;[8] and DR program development activities for the 2018-2019 winter season.[9]

On April 12, 2018, ED issued another letter directing SoCalGas to submit a Tier 2 AL to continue the smart thermostat device-based DR Program for the

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California Energy Commission, the California Independent System Operator and the Los Angeles Department of Water and Power, to address the Aliso Canyon Leak and the resulting operational limitations of the Aliso Canyon gas storage facility; and other challenges (including drought conditions and raging fires) to the delivery of adequate electricity and natural gas to California consumers. (*See* Action Plan, at 3.)

[5] *See* Application, at 2-3.

[6] *See* Exhibit SCG-01, at 3-4; and AL 5035-G.

[7] Exhibit SCG-01, at 4.

[8] Applicant performed a gas water heater demonstration project, citing, Exhibit SCG-01 at 4-5.

[9] *See* AL 5223-G.

2018-2019 winter season DR Programs by June 2018.[10] Consistent with ED's direction, Applicant submitted AL 5303-G on May 31, 2018 continuing the smart thermostat device-based DR Program for the 2018-2019 winter season.[11]

Finally, an April 12, 2018 ED letter directed SoCalGas to file an application for its future DR programs by November 2018.[12] Applicant indicated that this Application was filed on November 6, 2018 consistent with that direction.

1.2. Procedural History

On November 6, 2018, SoCalGas filed this Application to establish a gas DR Program from winter 2019 through 2022 and "a foundational energy data sharing platform (EDSP) to support and facilitate the DR Program."[13] Applicant seeks recovery for costs associated with the implementation of DR programs for the 2016-2017; 2017-2018 and 2018-2019 winter seasons, as well as the 2018-2019 winter notification marketing campaign.

SoCalGas seeks authority from the Commission to: 1) implement four DR Pilot Programs for the 2019-2020 winter season through the 2021-2022 winter season, as well as "the evaluation, measurement and verification (EM&V) of the DR Pilot Programs;"[14] 2) implement a Gas DR Emerging Technologies Program; 3) implement a Winter Notification Marketing Campaign that complements the DR Pilot Programs, (4) implement an EDSP that facilitates and supports the DR Pilot Programs and potential future leveraging opportunities, and (5) recover costs related to prior years' winter DR Programs.

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[10] Exhibit SCG-01, at 5.

[11] Exhibit SCG-01, at 26-27.

[12] Exhibit SCG-01, at 5.

[13] Application, at 1.

[14] *See* Application, at 4; and Opening Brief, at 3 and 12.

The four proposed DR Pilot Programs, namely, the Space Heating Load Control Pilot (Space Heating Pilot); the Water Heating Load Control Pilot (Water Heating Pilot); the Load Reduction Pilot; and the Behavioral Messaging Pilot will focus on load control for space and water heating for residential customers and non-residential customers; and the Commercial and Industrial Load Reduction Pilot (C&I Load Reduction Pilot) and behavioral messaging. The gas DR Emerging Technologies Program will test new technologies for gas equipment to support potential future gas DR efforts; and the Winter Notification Marketing Campaign seeks to "incorporate[s] an overarching communication campaign throughout the winter season and a notification component to support reducing gas usage in response to DR events that are called or during periods of anticipated system stress."[15]

Finally, Applicant contends that this Application responds to the potential for long-term natural gas-based DR programs by providing SoCalGas the opportunity to test and analyze program and incentive designs, gather additional and more detailed data on DR programs' impact on reducing natural gas usage during DR events, and that its request in this Application to establish EDSP will "support these activities."[16]

The Small Business Utilities Advocates (SBUA); Mission:data Coalition (Mission:data); and the Public Advocates Office at the California Public Utilities Commission (Cal Advocates)[17] timely filed responses and/or protests to the

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[15] Application, at 2.

[16] Application, at 4.

[17] Formerly, the Commission's Office of Ratepayer Advocates (ORA). Senate Bill 854 (Stats. 2018, ch. 51) amended Pub. Util. Code Section 309.5(a) renaming the Office of Ratepayer Advocates to "the Public Advocate's Office of the Public Utilities Commission" (PAO). We will refer to this party as "Cal Advocates" in this record, but its Exhibits are identified as

Application, and each is a party to this proceeding. Applicant responded to the responses and protests on December 27, 2018.

On January 17, 2019, a prehearing conference (PHC) was held to discuss the issues of law and fact in this proceeding. Following the PHC, the Assigned Commissioner's Scoping Memo and Ruling (Scoping Memo) was issued on February 15, 2019, setting forth the category, issues to be addressed, and schedule of the proceeding pursuant to Public Utilities Code Section 1701.1, among others.[18]

After the PHC, the Indicated Shippers; EnergyHub and Nest Labs, Inc. (Nest) filed respective motions for party status, which the Commission granted on March 19, 2019. These entities are also parties in this proceeding.

Evidentiary hearing was held and completed on June 29, 2019, and Cal Advocates, SBUA, Indicated Shippers, Nest, Mission:data and EnergyHub submitted testimony. Opening and reply briefs were submitted on July 1, 2019 and August 1, 2019, respectively, as provided in the February 15, 2019 Scoping Memo.

On July 19, 2019, Applicant filed a motion for leave to amend exhibits SCG-01, pages 4 and 23; and PAO-04, page 15 (Motion) in order to correct the calculation and revise upward the estimated therm savings for the DR Pilot during the 2017-2018 winter season. The Motion was an unopposed and is granted.[19]

"PAO Exhibit".

[18] All statutory references are to the California Public Utilities Code, unless otherwise noted.

[19] All other motions not specifically ruled upon in this proceeding including the December 26, 2018 Motion to Dismiss Application are deemed withdrawn or denied.

The record in this proceeding remained opened for the receipt and consideration of Nexant's evaluation report on SoCalGas' 2018-2019 DR Pilot Programs. [20] The report titled the "*2018-2019 Winter Load Impact Evaluation of SoCalGas Smart Therm Program*" (2019 Nexant Report) was issued on October 24, 2019 and served on the parties on in this proceeding on November 4, 2019. With the receipt of the 2019 Nexant Report, the record in this proceeding was closed and this matter was submitted on November 4, 2019.

2. Issues Before the Commission[21]

The issues to be determined in this proceeding are as follows:

1. Whether Applicant's DR Programs proposed in this Application should be approved and how should such DR Program be designed to appropriately measure the cost-effectiveness of the DR Programs?[22]
2. Whether Applicant's should be authorized to develop the EDSP as presented in this Application?[23]

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[20] Nexant is the third-party evaluator hired to evaluate SoCalGas' previous winters DR program. Other than 2019 Nexant Report, Nexant previously produced two reports, as follows: a) the "2016-2017 Winter Demand Response Load Impact Evaluation" Report; (2017 Nexant Report); and the "2017-2018 Winter Load Impact Evaluation" (2018 Nexant Report), after evaluating SoCalGas's 2016-2017 and 2017-2018 DR Pilot programs, respectively.

[21] For clarity and a logical resolution of the issues, Issues 1 through 8 in the February 15, 2019 Scoping Memo have been consolidated, reframed and reorganized as provided below.

[22] If the DR Programs for winter 2019 through 2022 are approved, then the following additional issues presented in the Scoping Memo will be evaluated and addressed: 1) Issue 1 (*partially):* How should such DR Program be designed to appropriately measure the cost-effectiveness of the DR Program?; and 2) Issue 7(a) through 7(e)) as follows:- 7a) what needs are the proposed DR Program attempting to address; 7b) does the proposed DR Program have the potential to address those needs; 7c) whether the proposed DR Program is likely to be cost-effective towards addressing that need, as compared to other possible solutions; 7d) whether the proposed design of Applicant's DR Program is appropriate; and 7e) whether there are other more cost-effective methodologies that could be used in developing a gas DR Program? Otherwise, these issues are be deemed moot, and/or dismissed, and will not be addressed further in this decision.

[23] If <u>Issue 2.2</u> is resolved in the affirmative, the following additional issues (Issues 3, 4, and 5 in

3. Whether Applicant should be authorized to recover its costs for implementing prior DR Programs for the 2016-2017; 2017-2018 and 2018-2019 winter seasons, as well as the 2018-2019 winter notification marketing campaign, or whether any cost recovery review should be delayed until the Commission determines responsibility for the Aliso Canyon leak?

Also, this Application may address issues relating to disadvantaged communities, as raised by the parties within the scope of this proceeding.

3. Positions of the Parties

3.1. SoCalGas

SoCalGas argues that the Commission should authorize it to: 1) implement the four DR Pilot Programs, including the Space Heating Pilot; Water Heating Pilot; Load Reduction Pilot; and Messaging Pilot; 2) implement a Gas DR Emerging Technologies Program; 3) implement a Winter Notification Marketing Campaign; 4) implement the EDSP; and 5) recover costs of previous winter DR Programs and winter notification marketing campaigns.

Applicant argues that each of the pilot DR programs presented for approval in this Application should be authorized by the Commission in order "to assess their potential as a tool to reduce gas demand during times of system

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the Scoping Memo) will be addressed: a) whether the EDSP proposed in this Application should be approved with modification requiring performance metrics and accountability in spending the giving the magnitude of the proposed expenditure for the EDSP, as proposed by Mission:data; b) whether EDSP proposed in the Application is appropriately designed to be cost-effective when it does not utilize San Diego Gas & Electric Company's (SDG&E's) (Applicants' sister utility) preexisting EDSP platform/resources or any other preexisting platform to drive down cost; and c) whether this Application is the appropriate venue for authorizing funding and/or cost recovery for an information technology EDSP system that provides benefits outside of demand response programs; and whether Applicant should be authorized to recover costs for EDSP in this Application?

stress,"[24] and that the Gas DR Emerging Technologies Program, the Winter Notification Marketing Campaign and the EDSP should also be authorized in order to complement, facilitate and support the DR Pilot Programs and Potential Future Leveraging Opportunities. In support of the requests for approval, Applicant described the purpose and structure of each of the DR Pilot Programs, the EM&V of the DR Pilot Programs, Gas DR Emerging Technologies Program, Winter Notification Marketing Campaign, and the EDSP presented in its Application for authorization, discussed potential benefits of each, and included a budget for each program.[25]

Applicant contends that "it is unknown at this time the level to which natural gas demand response can provide support to reducing demand," and whether the reductions attributable to DR Pilot Programs can have a significant impact on reducing gas use on the system, "which is why these DR pilots must be tested to obtain data and experience to adequately asses their ability to impact usage and their potential to scale up."[26]

According to Applicant, the suite of proposed DR Pilot Programs targeting residential and non-residential customers will help determine how effective different approaches to natural gas DR can be on reducing system demand and the eventual potential for a longer-term natural gas DR Program. Thus, Applicant indicated that it plans to refine pilot designs season by season with the learnings from prior winter seasons to improve the effectiveness of DR on the system, and that the results of these pilots should help determine which

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[24] SoCalGas' Opening Brief, at 3.

[25] *See* SoCalGas' Opening Brief, at 3-23.

[26] Exhibit SCG-05-R, at 9.

program, if any, has the greatest potential to impact the natural gas system, and how to scale the approach(es) for the future. This determination, according to Applicant, cannot be made before implementing pilots and understanding customer participation, behavior, and system impact.[27]

Applicant argues that natural gas DR is new, and thus determining its potential to address any demand reduction will require time to develop. According to Applicant, given the newness of its gas DR programs, it did not include a cost-effectiveness showing in this Application as, at this time, "there is no established methodology to measure the cost-effectiveness of natural gas DR programs."[28] Thus, Applicant indicated that it proposes in this Application to develop a cost-effectiveness methodology during the pilot period (via its proposed EM&V activities in the Application) and conduct a cost-effectiveness analysis of the DR pilots at the end of the 2021-2022 winter season.[29]

Applicant contends that the DR Pilot Programs could have the potential to assist in providing relief on the demand for SoCalGas' storage inventory during times of system stress, and could potentially help reduce system demand by activating the DR pilots during Emergency Flow Order, voluntary curtailment, and non-voluntary curtailment events; and that the proposed natural gas DR Pilot Programs are envisioned to be a demand-side tool in reducing use,

[27] Exhibit SCG-05-R, at 10.

[28] SoCalGas' Opening Brief, at 13.

[29] SoCalGas proposes to launch a study to develop a cost-effectiveness methodology for gas DR and develop inputs; and further proposes that the cost-effectiveness methodology be subject to an ED-led workshop, similar to the process used to develop a cost-effectiveness protocol for electric demand response as outlined in Decision (D.) 10-12-024. The methodology and inputs will be used to calculate the cost-effectiveness of the pilots at the end of the pilot period. (*See* Exhibit SCG-01 at 22 and 24.)

similar to EE Programs, which have proven to be successful.[30] According to Applicant, current estimates show that the DR pilots proposed in this Application may help reduce a total of 578,720 therms throughout the pilot timeframe.[31]

Regarding the other proposed programs, SoCalGas contends that the proposed gas DR Emerging Technologies Program will explore the increasing role of integrated distributed energy resources (IDER) and how gas DR equipment may play a bigger role in the future to address system needs.

As presented in the Application, the total budget for the DR and other programs proposed in the applications for the 2019-2020, 2020-2021, and 2021-2022 winter seasons are as follows: (1) Space Heating Pilot - $19.767 million;[32] (2) Water Heating Pilot - $6.137 million;[33] (3) Load Reduction Pilot - $4.313 million;[34] (4) Behavioral Messaging Pilot - $1.310 million;[35] (5) the EM&V of the DR Pilot Programs - $2.044 million;[36] (6) Gas DR Emerging

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[30] Exhibit SCG-05-R, at 8-9.

[31] *See* Exhibit SCG-01, at 4, lines 19-20, and Exhibit SCG-01, at 23 (Table 1-9 – "Estimated Load Reduction Impacts by DR Pilot); and "Southern California Gas Company's (U904G) Motion for Leave to Amend Exhibit SCG-01 and PAO-04 to Correct Error," at 2. The Errata corrected and updated the potential therms savings from to 463,520 to 578,720 therms (if the DR programs were implemented during the 2019 through 2022 winter seasons).

[32] SoCalGas' Opening Brief, at 6.

[33] SoCalGas' Opening Brief, at 8.

[34] SoCalGas' Opening Brief, at 11.

[35] SoCalGas' Opening Brief, at 12.

[36] SoCalGas' Opening Brief, at 13.

Technologies Program -$2.552 million;[37] (7) 2019-2022 Winter Notification Marketing Campaign - $7.232 million;[38] and (8) the EDSP - $7.31 million.[39]

Regarding cost recovery, Applicant seeks $12.17 million in cost recovery for the 2016-2019 prior years' Winter Season DR Programs, and the 2018-2019 Winter Season Notification Marketing Campaign as follows:[40] (a) 2016-2017 - $2.8 million;[41] (b) 2017-2018 - $1.5 million;[42] (c) 2018-2019 - $5.87 million;[43] and (d) the 2018-2019 Winter Season Notification Marketing Campaign - $2.0 million recorded in the Marketing, Education and Outreach Memorandum Account (MEOMA) as directed by the Commission.[44]

Applicant contends that it is entitled to cost recovery for prior years' Winter Season DR Programs, because these winter DR activities were implemented to help address system reliability issues which arose out of "multiple, complex factors, including the system capacity limitations due to the restricted use of Aliso Canyon and pipeline outages, and thus costs associated with these DR efforts cannot be attributed to one singular factor," the Aliso Canyon leakage.[45]

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[37] SoCalGas' Opening Brief, at 15.

[38] The Winter Notification Marketing Campaign will consist of: (1) an education and awareness component; and (2) a winter notification activation. *See* Opening Brief, at 15-16; and Exhibit SCG-03, at 3.

[39] SoCalGas' Opening Brief, at 23.

[40] See SoCalGas' Opening Brief, at 26.

[41] SoCalGas' Opening Brief, at 24; *See* also SGC-04, at 4.

[42] SoCalGas' Opening Brief, at 25; *See* also SGC-04, at 4.

[43] These costs were recorded in the Winter Demand Response Memorandum Account (WDRMA). (*See* Opening Brief, at 25; and SGC-04, at 2.)

[44] *See* Opening Brief, at 25; *See* also SGC-03, at 7-8.

[45] *See* SoCalGas' Opening Brief, at 40, citing Exhibit SCG-05-R, at 20.

Applicant argues that "the ongoing restrictions on using Aliso Canyon does not currently stem from the safety or integrity of the facility and therefore are not the direct result of the Aliso Canyon leak[age]" because Aliso Canyon was fit for service and safe to resume injection operations as far back as November 1, 2016.[46] Applicant contends that because Aliso Canyon's fitness for service predates most of the DR costs incurred during the last three winter seasons, the responsibility for any condition related to the safety of the field and well integrity at Aliso Canyon have no bearing on DR costs incurred for prior years' DR programs and activities at issue in this Application. Thus, Applicant contends that it should be permitted to recover its costs as requested in this Application because the Commission directed the DR programs and activities during the last three winter seasons in order" to help support broader system reliability."[47]

Finally, Applicant addressed Cal Advocate's opposition to cost recovery for the prior years' DR programs in this Application, because, according to Cal Advocates, the language used in establishing the WDRMA and MEOMA clearly shows that the Commission intends "cost recovery for these accounts to be determined at some point after the Commission determines responsibility for that leak."[48] Applicant contends that the referenced language did not specifically state that recovery for the costs sought in this Application must await a

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[46] *See* SoCalGas' Opening Brief, at 40-41; Exhibit SCG-05-R, at 20-21; and Applicant referenced a July 19, 2017 Letter, Senate Bill 380 Findings and Concurrence Regarding the Safety of the Aliso Canyon Gas Storage Facility, available at: https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/News_Room/News_and_Updates/OpenLettertoSoCalGasandPublic.pdf.

[47] SoCalGas' Opening Brief, at 41.

[48] PAO-01, at 3-2 to 3-3.

determination on responsibility for the Aliso Canyon leak[49] Thus, Applicant contends that it is entitled to cost recovery for the prior years' DR Programs presented for cost recovery in this Application.

3.2. Cal Advocates

In its Opening Brief, Cal Advocates provided relevant background and history of the DR Programs in support of its positions in this proceeding. Cal Advocates argues that the need to establish the DR Programs presented in this Application resulted from the discovery of gas leakage at Aliso Canyon on October 23, 2015, which resulted in an Emergency Proclamation on January 6, 2016 by the Governor. According to Cal Advocates, the Emergency Proclamation directed the Commission to "take all actions necessary to ensure the continued reliability of natural gas and electricity supplies in the coming months during the moratorium on gas injections into the Aliso Canyon Storage Facility" due to the gas leak.

Cal Advocates contends that Aliso Canyon continues to operate significantly under capacity following the 2015 gas leak,[50] and that though limited injections into Aliso Canyon have resumed, outages on Applicant's Lines 4000, 3000 and 235-2 have added additional reliability constraints,[51] leading to the need to address reliability concerns, especially during the high-demand winter months. According to Cal Advocates, this was the reason for the

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[49] SoCalGas' Opening Brief, at 42.

[50] California Energy Commission Aliso Canyon Risk Assessment Technical Report Winter 2018-19 Supplement, Oct. 10, 2018; SoCalGas Aliso Canyon Risk Assessment Technical Report Winter 2018-2019 Supplement, November 2, 2018.

[51] SoCalGas' AL 5223-G, at 2, November 28, 2017.

initiation of the winter season DR programs, and the basis for this current Application.

In its Opening Brief, Cal Advocates detailed the winter DR Program history since 2016, citing to: 1) SoCalGas' AL 5027-G (September 15, 2016) seeking expedited approval to establish the WDRMA to track costs of gas DR programs; 2) ED Disposition Letter dated September 30, 2016 approving AL 5027-G and requiring SoCalGas to make clear that the WDRMA account was linked to the Aliso Canyon leak; 3) SoCalGas' AL 5035-G (filed September 27, 2016) for expedited approval of the 2016-2017 winter DR program; and 4) Resolution (Res.) G-3522 dated November 10, 2016 approving AL 5035-G. (*See* Res. G-3522 at 2-3; Res. G-3541, at 4; and Emergency Proclamation, at 3.)

According to Cal Advocates, the 2017-2018 DR Programs proposed for approval by SoCalGas in AL 5223-G was approved by ED on December 21, 2017; and ED, in Res. G-3541, approved the winter 2018-2019 thermostat control DR Program and budget as proposed by SoCalGas in AL 5303-G.[52]

Cal Advocates noted that multiple parties, filed protests and responses to this Application, questioning the need for and design of the DR programs and EDSP presented for approval in the Application;[53] and that, it (Cal Advocates) submitted a Motion to Dismiss the Application for SoCalGas' failure to provide

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[52] SoCalGas AL 5303-G, Southern California Gas Company's Demand Response Programs Budgets and Activities for the 2018-2019 Winter Season at 1, May 31, 2018

[53] Referencing, 1) Protest of the Cal Advocates Office to the Application of the Southern California Gas Company to Establish a Demand Response Program, Dec. 17, 2018; 2) Protest of Mission:data Coalition to Southern California Gas Company's Application to Establish a Demand Response Program, Dec. 14, 2018; and 3) Response of Small Business Utility Advocates to Application of Southern California Gas Company to Establish a Demand Response Program, December 6, 2018.

the Commission with sufficient evidence to conclude that the proposed DR programs would provide ratepayers with any meaningful benefits.[54]

Substantively, Cal Advocates contends that the burden of proof in this Application is on SoCalGas "to establish the reasonableness of energy expenses sought to be recovered"[55] and that SoCalGas must prove that it is entitled to the relief it seeks in this proceeding. Accordingly, Cal Advocates argues that, in this proceeding, SoCalGas must affirmatively show by preponderance of the evidence standard[56] that its requests for funds from ratepayers for the DR programs at issue in this proceeding are just and reasonable, and compliant with applicable law.

Cal Advocates argues that SoCalGas does not meet its burden of proof and has failed to show that this Application for authority to implement prospective DR programs and develop the EDSP is just and reasonable.[57] More specifically, as laid out in its Motion to Dismiss, Prepared Testimony (Exhibit PAO-02), and Opening Brief, Cal Advocates contends that SoCalGas failed to justify the need for these programs; failed to provide any analysis of the particulars of the system reliability needs that these programs are designed to solve;[58] failed to provide

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[54] Motion to Dismiss Application of the Cal Advocates, December 26, 2018, Application (A.) 18-11-005.

[55] *See* Cal Advocates' Opening Brief, at 4, citing "*Re Energy Cost Adjustment Clauses* (1980) 4 CPUC 2d 693, 701; D.92496." (*See* also, Section 451.)

[56] *See Decision Granting a Certificate of Public Convenience and Necessity for the Sunrise Powerlink Transmission* Project, D.08-12-058, at 19 (citing to the California Administrative Hearing Practice, 2nd Edition (2005), at 365). "The preponderance of the evidence standard is generally deemed to require that the evidence presented on one side of an issue is more persuasive than that in the opposition." (Cal Advocates' Opening Brief, at 5.)

[57] Cal Advocates' Opening Brief, at 5-7.

[58] Exhibit PAO-02, at 1-2:15-29;

any discussion of how these programs will improve system reliability;[59] failed to provide sufficient showing or evidence of the expected benefits of the DR programs to ratepayers, or the mechanics of the program; failed to provide adequate reasoning for the design of its programs;[60] and failed to provide sufficient record to evaluate the question of whether the DR programs will result in benefits to ratepayers that outweigh the costs,[61] thus making it impossible for the Commission to judge the DR program's success or failure.[62] To the contrary, Cal Advocates argues that the evidence in the record of this proceeding suggests that these programs will provide no benefits to ratepayers, but instead result in a waste of resources, create unnecessary costs and rate increases.[63]

In summary, Cal Advocates concludes that, based on the preponderance of the evidence, the record in this proceeding shows that: 1) the DR programs proposed for approval in this Application will not provide net benefit to ratepayers and will not aid SoCalGas' system reliability in any meaningful way; 2) the EDSP will not substantially benefit ratepayers; and 3) the past winter DR costs that SoCalGas seeks recovery for are linked to the Aliso Canyon Gas Leak, and therefore should not be recovered in this proceeding.

Accordingly, Cal Advocates concludes that "given these deficiencies, the Commission has no choice but to deny SoCalGas' requests for cost recovery and

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59 Exhibit SBUA-01, at 9:21-26, and 10:1-14.

60 Exhibit PAO-02, at 2-2, and 2-3.

61 Exhibit PAO-02, at 1-5:15-26 and 1-6:1-16; IS-01, at 12:18-28.

62 Exhibit SBUA-01, at 11:15-18.

63 Exhibit SCG-01, Appendix B, Executive Summary, at 2 (Discussing questionable value of previous DR programs administered by SoCalGas) see also discussion in Part IV, Section G, Part A and B below.

funding on these issues."[64] Cal Advocates urges the Commission to reject this Application for these DR Programs; and deny funding for the EDSP because the DR programs that the EDSP is meant to support are recommended to be discontinued because the DR programs proposed in this Application are unlikely to provide any benefits to ratepayers.[65]

3.3. Indicated Shippers

Generally, Indicated Shippers raise two concerns regarding SoCalGas' proposed DR Programs. First, Indicated Shippers express concern that the winter DR Programs proposed by SoCalGas have not been shown to be cost-effective on both an economic front *and* a system reliability front, describing this as an "alarming finding for any program funded by ratepayers.[66] Indicated Shippers argue that SoCalGas failed to meet its foundational burden of proof to justify its proposed DR programs or cost recovery; and that "three years after the first winter DR Program in 2016,[67] the proposed 2019-2022 DR Programs remain in pilot or exploratory phases without a clear showing of cost or reliability benefits."[68]

Indicated Shippers argue that for the Commission to approve ratepayer funds for the proposed natural gas DR Programs in this Application, SoCalGas must show by preponderance of the evidence (*i.e.* "more convincing force and the greater probability of truth when weighed with opposing evidence")[69] that it

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[64] Cal Advocates' Opening Brief, at 5.

[65] Cal Advocates' Opening Brief, at 7.

[66] Indicated Shippers' Opening Brief, at 1.

[67] Exhibit SCG-01, at 2 (describing the formation of the 2016 natural gas program).

[68] Indicated Shippers' Opening Brief, at 2.

[69] D.16-06-056 at 23 (referencing *Decision Granting a Certificate of Public Convenience and Necessity*

is entitled to cost recovery from ratepayers. Indicated Shippers pointed out that SoCalGas admitted omitting *a cost-effectiveness showing* in its Application or testimony "[g]iven the newness of natural gas DR programs."[70] Indicated Shippers noted that SoCalGas' admission is "remarkable," as even in a new program, metrics, such as therms reduced and/or impact of the program on the system load, are necessary information needed to evaluate the proposed outcome, and thus "a minimum expectation."[71]

Indicated Shippers dispute that fact that the DR programs are entirely new as SoCalGas has implemented winter DR programs over the last three winters. In support of its arguments, Indicated Shippers noted that Nexant, hired to evaluate SoCalGas' previous winters DR program, found only minimal success in SoCalGas' DR programs, as documented in the 2017 Nexant Report released on September 1, 2017 and discussed during the Evidentiary hearings.[72] In that report, Nexant described SoCalGas' 2016-2017 winter DR programs as follows:

> The key finding is that the three SoCalGas Advisory programs generally did not produce statistically significant reductions in gas usage. The one exception is that the My Account customer segment of the Pilot Rebate Program delivered a 3.7% reduction in total gas usage during three days of the second Advisory (January 23 through 25, 2017).[73]

Additionally, Indicated Shippers pointed out that the 2018 Nexant Report

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for the Sunrise Powerlink Transmission Project [D.08-12-058] at 19 (citing Witkin, Calif. Evidence, 4th Edition, Vol. 1 at 184).

[70] Exhibit SCG-01, at 24:10-11 (emphasis added).

[71] *See* Indicated Shippers' Opening Brief, at 3.

[72] See Hearing Transcript (May 29, 2019), pp. 118-119. See also, Exhibit SCG-01, Appendix B – the Nexant Report.

[73] *Id*., Appendix A, *SoCalGas 2016-2017 Winter Demand Response Load Impact Evaluation* at 2 (emphasis in original).

(dated August 14, 2018) reached a similar conclusion, when it stated the following after evaluating SoCalGas'2017-2018 winter DR pilot program:

> …**there were no statistically significant net daily therm savings that resulted from this program.** Without statistically significant net daily therm savings there is an open question regarding whether the program created value from a reliability or economic perspective.[74]

Thus, Indicated Shippers argue that the documented lack of success and lack of any data showing ratepayer benefits from the implementation of the DR Programs over the previous few winters, are instructive, and supportive of its recommendation that the Commission should not approve the DR Programs proposed by SoCalGas in this Application.

Secondly, Indicated Shippers oppose the recovery of SoCalGas's proposed and historical DR Program costs within the Public Purpose Program (PPP) surcharge effective January 1 of the following year[75] using the Equal Percent of Allocated Margin (EPAM) method,[76] as proposed by SoCalGas. On this question, Indicated Shippers argues that, generally, in setting customer rates, the Commission uses cost causation principles to allocate program and infrastructure costs, and that: 1) under long-standing Commission rulings, "costs are allocated on the basis of the function served by the expenditure, or cost drivers, and paid by those for whom the costs are incurred;"[77] 2) the Commission

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[74] *Id*., Appendix B, *SoCalGas Demand Response: 2017/2018 Winter Load Impact Evaluation* at 2 (emphasis added).

[75] Exhibit SCG-04, at 2:8-10.

[76] Exhibit SCG-04, at 7:19-20 and Indicated Shipper's Exhibit IS-01, p. 3, line 16. See also, Exhibit SCG-04, p.7; and Exhibit SBUA-02, p. 18, lines 8-12, where EPAM was represented as the "Equal Percent of Margin."

[77] *See* Indicated Shippers' Opening Brief, at 7.

has found that: "[t]he principle of cost causation means that costs should be borne by those customers who cause the utility to incur the expense."[78] Indicated Shippers argue that while it is aware that funding a program through the PPP (thus deviating from cost-causation ratemaking) is sometimes permitted for certain programs, such as those mandated by statute,[79] "no such statutory or other directive exists for SoCalGas to recover these DR program costs through the PPP."[80]

Thus, Indicated Shippers argue that recovering program costs through the PPP surcharge violates long held cost causation principles, as the proposed DR Programs' costs have no justification for being incorporated into PPP rates; and the EPAM methodology does not accurately recognize costs causation.[81] Accordingly, Indicated Shippers urges the Commission to allocate the DR program costs to participating classes only, based on the Commission's long-held ratemaking practice.[82]

3.4. SBUA

SBUA requests, "on the basis of evidentiary record in this proceeding," that the Commission reject the Application without prejudice for failing to demonstrate that the utility charges for the DR pilots are just and reasonable to SoCalGas' ratepayers.[83] In support of its recommendations, SBUA contends that SoCalGas fails to meet its burden of demonstrating that the proposed DR

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[78] D.14-12-024 at 78, Finding of Fact 59 (December 9, 2014).

[79] *See e.g.*, the California Alternate Rates for Energy program under Section 739.1(a).

[80] *See* Indicated Shippers' Opening Brief, at 7.

[81] *See* Indicated Shippers' Opening Brief, at 6-8.

[82] Indicated Shippers' Opening Brief, at 1; and 6-8.

[83] SBUA's Opening Brief, at iii (Summary of Recommendations); and Opening Brief, at 1-2.

Programs are justified, or that the proposed DR Programs will produce customer benefits at a reasonable cost.[84] Specifically, SBUA argues that SoCalGas provides no information in the Application on: 1) the load reduction or the financial benefits the DR Programs might achieve; or 2) any benefits that the targeted load reductions would provide, if they occurred.[85] SBUA contends that without this information, the Commission cannot conclude that customer costs will be just and reasonable, and thus the Commission has no other option but to reject the Application.

SBUA took issue with SoCalGas' argument "that the Public Utilities Code does not require SoCalGas to provide evidence demonstrating [that] the DR Programs will be cost-effective because these programs have the potential to reduce gas usage and are consistent with the Commission's guidance," and its contention that the Commission has previously "rejected the contention that a pilot program must be cost-effective before the Commission may consider if it is just and reasonable under Section 451."[86] SBUA argues that the decision relied upon by SoCalGas for its argument is off point, as the prior case involved "an innovative proposal" by SDG&E for a vehicle-grid integration (VGI) pilot program with no prior cost-effectiveness data to be relied upon.[87] Here, SBUA argues, prior to submitting the Application, SoCalGas had already received

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[84] SBUA's Opening Brief, at 4-6, citing Exhibit SBUA-02, Errata to Direct Testimony of Paul Chernick on Behalf of SBUA (March 26, 2019), at 2:17-25.

[85] Exhibit SBUA-02, at 10:16-28; Exhibit PAO-02, Errata to Prepared Testimony on the Application of Southern California Gas Company (U904G) to Establish a Demand Response Program (March 26, 2019), at 1-5.

[86] SBUA's Opening Brief, at 5, citing to SoCalGas Opposition to Cal Advocates' Motion to Dismiss Application, at 7.

[87] D.16-01-045, *Decision Regarding Underlying Vehicle Grid Integration Application and Motion to Adopt Settlement Agreement* (February 4, 2016), at 11-23.

Commission approval for three one-year pilots and had implemented two of them. Thus, SoCalGas has data from the first two Pilots, and unlike SDG&E's VGI pilot, SoCalGas' Application should have demonstrated the cost-effectiveness of the proposed DR Programs.

In addition, SBUA pointed out that information from prior years' DR Pilots suggests that gas DR is not effective in meeting the benefits "speculated" in the Application.[88] Thus, SBUA urges the Commission not to ignore the existing data showing that SoCalGas' gas DR programs have not been effective tools for reducing gas usage. SBUA pointed to the 2017 Nexant Report, and the 2018 Nexant Report (referenced above), after Nexant evaluated SoCalGas's 2016-2017 and 2017-2018 DR Pilot programs, respectively.

According to SBUA, the 2018 Nexant Report concluded that the programs "did not produce statistically significant reductions in gas usage"[89] due to the "snap backs" following DR events where customers increase gas usage after the DR event is over, negating the savings experienced during the DR event and resulting in a net-zero therm savings.[90]

SBUA argues that while the expressed purpose of the DR Programs is to reduce the possibility of gas curtailments,[91] the DR Programs have not demonstrated any actual impact or benefit in terms of reduction in the

[88] SBUA's Opening Brief, at 5, refencing 2017 Nexant Report, and 2018 Nexant Report.

[89] *See* Exhibit SCG-01, Appendix A, including SoCalGas 2016-2017 Winter Demand Response Load Impact Evaluation, Nexant (September 1, 2017), at 2; *See* also Exhibit SCG-01, Appendix B, SoCalGas Demand Response: 2017-2018 Winter Load Impact Evaluation.

[90] SBUA Opening Brief, at 6-7, citing to Exhibit SCG-01, Appendix B, SoCalGas Demand Response: 2017-2018 Winter Load Impact Evaluation, Nexant (August 14, 2018), at 2.

[91] Exhibit SCG-08, (Testimony, Paul D. Vorkovich, April 26, 2019), at 1:16-20.

curtailments risk or alleviating system stress.[92] SBUA contends that SoCalGas has not conducted any analysis that could support a conclusion that the proposed gas DR programs would address a lack of supply in the system,[93] or that the DR Programs will effectively alleviate any system stress and reduce the possibility of gas curtailments. Accordingly, in its Reply Brief, SBUA registered its disagreement with EnergyHub and SoCalGas' "incorrect assertion" that the record in this proceeding demonstrates there is a need for the Programs,[94] instead arguing that no evidence in this record demonstrates a need for the DR Programs, or showing that the DR Programs will produce customer benefits.[95]

SBUA raises other issues with SoCalGas's proposed programs in this Application. SBUA argues that: 1) SoCalGas' proposed incentive structure for the proposed DR programs do not reward program participants in proportion to their load reductions;[96] 2) SoCalGas' proposed winter notification campaign is deficient because it relies too much on digital and social media[97] at the expense of marketing, education, and outreach strategy that includes direct customer outreach;[98] 3) SoCalGas' proposed cost allocation method fails to meet Section 451's just and reasonable standard as the EPAM method proposed by

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[92] Citing Hearing Transcript, Vol. 1 (May 29, 2019), at 139:14-18 (Direct examination of Paul Borkovich by SBUA). *See* also Indicated Shippers' Opening Brief, at 2.

[93] Transcript, Vol. 1 (May 29, 2019), at 141:3-12 (Direct examination of Paul Borkovich by Cal Advocates).

[94] *See* SBUA's Reply Brief, at 3-4 - refencing EnergyHub and SoCalGas Opening Briefs.

[95] Citing PAO's Opening Brief, at 5 & 7; and Indicated Shippers Opening Brief, at 3.

[96] SBUA Opening Brief, at 7-8; and Exhibit SBUA-02, at 3.

[97] Exhibit SCG-03, at 3:3-13.

[98] SBUA Opening Brief, at 8-9; and Exhibit SBUA-02, at 17:19 – 18:1.

SoCalGas[99] and is "improper" as it would allocate the DR costs in proportion to delivery costs that are unrelated to the benefits of the DR program;[100] and that 4) the Commission should not approve cost recovery for prior years' DR Pilot programs in this proceeding but delay such until the Commission determines responsibility for the Aliso Canyon leak, as Cal Advocates also argued.[101] Accordingly, SBUA argues that the Commission should reject the Application entirely.

Nonetheless, SBUA urges the Commission to permit SoCalGas to seek authorization for future gas DR programs to the extent that SoCalGas, in any new application: 1) determines the potential cost savings and reliability improvements, and plausible DR load reductions to enable the Commission to judge whether DR programs are worth authorizing; 2) determines the period (hours, days, or the heating season) for which load reductions could be valuable, so that appropriate focus can be placed on end uses and program designs of such DR programs; 3) revises its approach to incentives to encourage and reward participants in proportion to the load reductions they provide; and 4) proposes a cost allocator that is consistent with the potential benefits of such future gas DR programs.[102]

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[99] Exhibit SCG-04, Prepared Direct Testimony of Reginald M. Austria and Michael Foster (November 6, 2018), at 7.

[100] SBUA Opening Brief, at 9-11; and Exhibit SBUA-02, at 18:19-20.

[101] SBUA Opening Brief, at 11.

[102] Should the Commission choose not to reject the Application in whole, SBUA also made alternatives recommendations aimed at addressing the deficiencies noted above, in its Summary of Recommendations. (*See* SBUA's Opening Brief, at iii-iv.)

3.5. Mission:data

In this proceeding, Mission:data only addresses issues relating to the proposed EDSP in this Application.[103] Mission:data explains that it has substantial experience with the electric investor-owned utilities' (IOUs') data-sharing platforms and those of other electric and natural gas utilities outside of California.

Mission:data argues that while it generally supports the idea of the EDSP as potentially beneficial to customers and the overall concept, the EDSP as proposed by Applicant "is severely deficient in several areas."[104] Accordingly, Mission:data argues that the EDSP as proposed in this Application should not be authorized due to the lack of necessary detail in the Application and numerous shortfalls in the EDSP's proposed features, including the ability to share data with customer-authorized third parties. Further, Mission:data argues that: 1) Applicant's proposed EDSP is inconsistent with the electric IOU's data-sharing platforms by not including the ability for customers to direct the sharing of their own energy information to third parties; 2) Applicant's efforts indicate lack of knowledge of data-sharing best practices, poor planning and negligent preparation that could lead to high and unnecessary costs for ratepayers; 3) Applicant' proposed EDSP lacks any meaningful oversight mechanism, thus diminishing the Commission's ability to monitor and enforce compliance; and 4) the proposed EDSP is misaligned with Commission policies, including D.11-07-056 and D.10-04-027, among others.[105] Thus, Mission:data argues that the

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[103] Mission:data's Opening Brief, at 5-6.

[104] Mission:data's Opening Brief, at 6; citing Exhibit Mission:data-01 at 3:21 – 4:1.

[105] Mission:data's Opening Brief, at 6-46.

Commission should require Applicant to modify the design and structure of the EDSP before approval.

Regarding cost recovery for the EDSP, Mission:data appears to argue that no ratepayer funds should be used for the EDSP because the Commission's advanced metering infrastructure (AMI) Order approving Applicant's AMI "was contingent upon offering customers the ability to authorize any third party to access their energy data," and that "even if the Commission disagrees with Mission:data's conclusion about the AMI Order, the justification of the EDSP's costs in the Application is so thin that Mission:data urges the Commission to require [Applicant] to submit a detailed and thoroughly substantiated cost proposal, consistent with Mission:data's recommendations, in 90-120 days following a final order in this docket."[106]

3.6. EnergyHub

EnergyHub supports the SoCalGas Application, and recommends that: (1) the Commission approve SoCalGas's proposed Space Heating and Water Heating Pilots as reasonable and consistent with the Commission's directions and purpose for the pilots, with a modification of the proposed incentives; (2) the Commission find that, consistent with Commission precedent, DR pilots, including those proposed by SoCalGas in this Application, are not required to be cost-effective until they are transitioned beyond the pilot phase to permanent programs; (3) the Commission should direct staff to schedule and facilitate a cost-effectiveness workshop to be held for the purpose of receiving stakeholder input and proposals on how to measure the cost-effectiveness of the approved SoCalGas Space Heating and Water Heating DR pilots, in anticipation

[106] Mission:data's Opening Brief, at 46.

of the transition from the pilot phase to permanent programs; (4) the Commission should maintain the $50 enrollment incentive for SoCalGas' proposed Space Heating DR Pilot as reasonable; (5) the Commission should modify SoCalGas's proposed Space Heating DR Pilot by directing SoCalGas to maintain the $25 yearly incentive for the Space Heating DR Pilot as reasonable and rejecting SoCalGas' proposal to change that incentive to a pay-for-performance incentive where participants would be required to participate in 50% of events; and (6) the Commission should modify SoCalGas proposed Water Heating DR Pilot by directing SoCalGas to provide the $50 upfront incentive even to customers who have already enrolled in the thermostat program.[107]

EnergyHub explains that, as detailed in its Exhibit EnergyHub-01, it has been "a longtime leader in providing Mercury, a best-in-class Distributed Energy Resource Management System, to utilities and markets to enable rapid deployment of behind the meter load control and energy efficiency programs," and that its mission is to ensure that utilities and markets get maximum value out of connected devices and the smart home. EnergyHub contends that its "industry-leading Bring Your Own Thermostat DR service helps utilities and markets take advantage of customer-installed connected thermostats to rapidly launch and scale a load control program."[108] EnergyHub advises that it has been an active party in multiple Commission proceedings advocating for increased reliance on DR and energy efficiency solutions to meet California's energy needs,

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[107] *See* EnergyHub Opening Brief, at iv, 3-27; Reply Brief, at iii; and 1-17; and Exhibit EnergyHub-01. EnergyHub does not address the EDSP, or the issue of cost recovery for past years' DR programs in its Opening or Reply Briefs.

[108] EnergyHub Opening Brief, at 1-3, citing Exhibit EnergyHub-01, at 1-2 (Testimony, Diamond).

and that while its work has focused on DR in the electric sector, it is EnergyHub's position that programs to facilitate and encourage natural gas DR will help to preserve and protect the reliability of natural gas systems, including those owned, operated, and managed by SoCalGas, and thus such efforts are long overdue.[109]

EnergyHub contends that, based on the testimony of its expert (Diamond), and Nest's expert witness (Counihan), this record supports SoCalGas' proposed DR program. EnergyHub argues that the testimony makes it clear that SoCalGas' proposed DR Program is fully responsive to directives from this Commission, and that further implementation of natural gas DR programs "will promote the reliability of SoCalGas' system, and should be approved."[110] Finally, EnergyHub argues that "while the 2018 Nexant Report referenced by [Cal Advocates] does note that the savings may not be significant enough over a 24 hour period, that same Nexant Report confirms that SoCalGas' 2017-2018 Thermostat Program "met the objectives of reducing gas consumption during specific windows of time."[111]

3.7. Nest Lab, Inc.

Nest submitted testimony in this proceeding and filed a Reply Brief to respond to two of Cal Advocates' arguments that: 1) SoCalGas DR programs should not be approved because of the absence of a detailed needs analysis; and

[109] EnergyHub Opening Brief, at 2; Exhibit EnergyHub-01, at 1-2.

[110] *See* EnergyHub Opening Brief, at 4-5; citing Exhibit EnergyHub-01, at 1-6, 8 (Diamond); Exhibit Nest-01, at 2-8 (Counihan).

[111] *See* Reply Brief, at 13; Exhibit SCG-01, at 8-9; Appendix B (2018 Nexant Report), at 2 (SoCalGas Hanway).

2) Nest positions in this records should be disregarded or accorded less weight due to its "financial interests in the outcome of these programs."[112]

Nest argues any need analysis or benefits showing in the context of a pilot program would be speculative, and the absence of a need analysis or benefits showing should not be dispositive. According to Nest, SoCalGas' Application "is a *de novo* request for a pilot program," and as such the question of what benefits are achievable is premature.[113] Accordingly, Nest indicated that it "strongly disagrees" with Cal Advocate's recommendation that the Commission "should reject SoCalGas' application because it fails to demonstrate that the programs and funding requested will provide any benefits to ratepayers."[114] According to Nest, SoCalGas has adequately conveyed the benefits that could accrue to ratepayers, and accordingly, these DR Pilot Programs should be approved as proposed.[115]

4. Should Applicant's DR Programs proposed in this Application be approved and how should such DR Programs be designed to appropriately measure the cost-effectiveness of the DR Programs?[116]

The overwhelming evidence in this case shows that the DR Programs proposed in this Application for implementation during winter 2019 through 2022 should be not be approved as currently designed. As set forth in the testimony, hearing transcripts and exhibits, this record establishes that the winter

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112 Otherwise, Nest did not file an Opening Brief.

113 Nest Reply Brief, at 3.

114 Nest Reply Brief, at 2, citing Cal Advocates' Opening Brief, at 1.

115 Nest Reply Brief, at 2-5.

116 As described in Section 2 above, the issues identified in the February 15, 2019 Scoping Memo have been reframed.

2019 through 2022 DR Programs proposed in this Application are poorly designed, lacking in discernable and/or achievable goals, and are not likely to provided significant energy savings or system reliability benefits to ratepayers given their costs. Accordingly, the requested authorization to implement these prospective winter DR programs from 2019 through 2022 is denied without prejudice, as further discussed below.

While SoCalGas contends that the goals of the proposed gas DR programs are to "attempt to address the need to reduce the possibility of gas curtailments large enough to cause electricity service interruptions," and "can be implemented to reduce the number of required curtailments, as well as to reduce the amount of dispatchable electric generation load that would otherwise have to be curtailed to maintain system integrity,"[117] we conclude SoCalGas' rationales for these DR Programs to be unpersuasive and speculative, as further discussed below.

First, we find that Applicant presents no persuasive evidence in this record showing that the goals of the proposed DR Programs/Pilots are achievable, or that the structures and designs of the proposed DR Programs in this Application will meet these goals. That is, based on its Application, SoCalGas indicated that it requests authorization to implement the proposed DR Programs because: 1) the programs could have "the potential to assist" its management efforts by providing relief on the demand for SoCalGas' storage inventory during times of system stress; 2) the programs "could potentially help reduce system demand;" and 3) the programs "are envisioned to be a demand-side tool in reducing use,"

[117] *See* SoCalGas' Opening Brief, at 43, citing Exhibit SCG-08 (Rebuttal), at 1.

similar to energy efficiency programs, which have proven to be successful.[118] Also, SoCalGas admitted that it does not know "the level to which natural gas DR can provide support to reducing gas demand."[119] Accordingly, we find SoCalGas' rationales for these DR Programs to be lacking, and unsupportive of the DR Programs presented in this Application. Second, we find that Cal Advocates, Indicated Shippers, and SBUA arguments are persuasive, and we agree that SoCalGas fails to justify these DR Programs and fails to provide requisite analysis of the system reliability needs that the four proposed DR Programs are designed to solve, or how the programs would improve system reliability. We conclude that the evidence in this case leads to the conclusion that the residential side DR Programs proposed in this Application may produce no significant benefits to ratepayers, and that these programs may "simply create unnecessary rate increases."[120]

Third and overall, we conclude that authorizing the proposed DR Programs for winter 2019 through 2022 proposed in this Application is not supported by this record. More specifically, we find that authorizing the Space Heating/Residential Smart Thermostat Pilots residential DR Programs is not supported due to the: 1) the persistence of the snap-back effect,[121] which

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[118] *See* SoCalGas Opening Brief, at 44; and Exhibit SCG-05-R, at. 8-9.

[119] *See* SoCalGas' Opening Brief, at 44, where applicant provides as follows: "It is unknown at this time the level to which natural gas demand response can provide support to reducing demand." It is also unknown at this time whether the reductions attributable to DR Pilot Programs can have a significant impact on reducing gas use on the system, which is why these DR pilots must be tested to obtain data and experience to adequately asses their ability to impact usage and their potential to scale up." (Citing Exhibit SCG-05-R, at 9.)

[120] Exhibit SCG-01, Appendix B, Nexant Report on 2017-2018 DR Program (2018 Nexant Report, Executive Summary, at 2; and the 2017 Nexant Report).

[121] The snap-back effect occurs when customers dial their thermostats up after the end of the

substantially reduced the savings from the programs to less than two percent of the average daily load of a residential customer; 2) the lack of the DR Program's impact on reliability for the second year in a row, coupled with evidence that the snap-back effect undermines the benefits of peak shaving;[122] and 3) the high cost of the programs due to the incentives for sign-up and participation.[123]

Regarding the other pilot programs, we conclude: 1) that the Water Heating Pilot is not well-justified or sufficiently analyzed in SoCalGas' Application and should not be approved in this Application; 2) that while the C&I Load Reduction Pilot shows more promise (of the four pilots DR Programs proposed in this Application) – because it targets larger loads and longer (daily or multi-day) load reductions and may potentially be more helpful to gas system reliability than the four-hour events on the residential side, the C&I Load Reduction Pilot should not be authorized in this proceeding nonetheless due to certain deficiencies in its design and structure, and other information about the pilot not provided in the Application, as discussed further below; and 3) that since the primary target of the Behavioral Messaging Pilot is to support the residential side DR Programs, and as these residential DR Programs are not

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four-hour activation. This creates operational problems for the system because it takes longer for the pipelines to recover, before the next high-demand period the following morning or evening.

[122] *See* 2017 Nexant Report and 2018 Nexant Report in its analysis.

[123] Appendix 1 Summarizes the data analyzed, including SoCalGas' actual "Smart Therm Activation Events" (Appendix 2) derived from Applicants' 2018-19 Winter DR activations. The analysis assumes a $50 per thermostat plus $25 yearly participation cost spread over seven years. The results show that, even with the higher numbers of 44,000 residential customers participating in the residential DR Program during the 2018-2019 winter, the cost of the DR program with snapback was $375 per Dekatherm. By comparison, the Average Winter Total Procurement Rate ranged from $3.44 to $5.43 per Dekatherm during the four winter months of 2018-19, November through February, thus making these DR Programs about nine or ten times more costly as compared to the avoided gas cost.

authorized in this proceeding to continue, the Behavioral Messaging Pilot should also not be approved in this proceeding, as they have become unnecessary and unneeded.

As provided above, we note that the C&I Load Reduction Pilot targets larger loads and longer load reductions that may potentially be more helpful in aiding gas system reliability than four-hour residential DR events/programs. Accordingly, we direct SoCalGas to review and/or reevaluate the design and the incentive structures of the C&I Load Reduction Pilot rejected in this Application; and hold at least one workshop to discuss, develop and/or gather information about the C&I Load Reduction Pilot. After this workshop, if the Energy Division determines that a future C&I Load Reduction Pilot would be beneficial, it is authorized to direct SoCalGas to file an application for the approval of such a program that SoCalGas would implement. We intend that any such program would include specific modifications addressing the following: a) the identification of the incentives program participants will receive under various scenarios in the C&I Load Reduction Pilot; b) an adjustment of the performance ration default to zero for months when no event is called; c) an increase in the minimum performance ratio from 10% for both Core and Non-Core customers; and d) modification of the incentive scheme to reward demonstrated therm reductions at a higher premium than program signup.[124] Any future DR proposal and/or application should also specify the purpose of the pilot is to improve reliability, such as by avoiding the mandatory curtailment of at least

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[124] *See* PAO-01, at 2-7.

one peaking electric generator, and should provide specific information to help the Commission determine whether the program will achieve its objectives.[125]

Fourth, we rely on the Nexant's 2019 Report, evaluating the "2018-2019 Winter Load Impact" of SoCalGas' Smart Therm Program. Nexant's 2019 Report concluded that last year's daily savings were not statistically significant, due in part to a relatively small number of customers and few events, this year the results are statistically significant; but "with the larger participant population and larger number of events, this year's results are likely more representative of what this program is capable of delivering across all metrics with the current implementation strategy."[126] Nexant nonetheless reached an overall conclusion that "the daily savings this year were lower than 2018 for both morning and evening events;"[127] and gave a not-so-promising review of the DR Pilot Programs as implemented during the 2018-2019 winter season. Specifically, Nexant's 2019 Report, at 20, states:

> ... It has proven that smart thermostats can be used to reduce demand for natural gas during targeted periods of time in the morning and the evening and can achieve net daily savings as a result of calling these events. **However, the snap back**

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[125] Such additional information should include: a) a description of how many customers SoCalGas intends to target in each sector (*e.g.*, schools, retail, warehouses, office buildings), by the proposed year in the three-year program, with a table showing the customers' average daily natural gas consumption and end uses; and b) data about whether an interruptible rate program (either alone or in combination with the above possible C&I demand response program) would be beneficial to the system by avoiding the curtailment of one peaking turbine, or approximately 1 MMcf per hour. This information will help the Commission to better analyze whether the revised proposed C&I Load Reduction Pilot program is likely to achieve its objectives and improve reliability.

[126] Nexant does not guarantee its prediction, noting that "implementation strategies do affect impacts," and "therefore, if vendors change their implementation methods, as some plan to do in the upcoming DR season, it is likely that these impacts will change." (2019 Nexant Report, at 20)

[127] *See* 2019 Nexant Report, at 20.

> **following the event when a customer's preferred temperature settings are restored can be quite significant, and greatly reduces net daily CCF[128] savings when compared to event savings.** [129]

From the results of the previous year's DR Pilot Programs implementation, as reported by Nexant, it is clear the programs as currently designed met the objectives of significantly reducing gas consumption during specific windows of time from a technical perspective. However, due to gas usage snap backs in the hours following events, the net daily savings that resulted from this program were only in the 1% to 2% range depending on the timing of the event.

Accordingly, we find that these programs are not, and may not be well equipped to meet the set objectives of significant gas consumption reduction, curtailments avoidance and/or energy savings on a daily and/or overall basis. We conclude that these results are insufficient to support the continued authorization and implementation of the Proposed DR Pilot Programs and other programs proposed for implementation in this Application.

Additionally, based on this record, we recognize the fact that the 2016 Winter Action Plan identified ten mitigation measures, including a gas DR program, that could help to reduce, but not eliminate, the possibility of gas curtailments large enough to cause electricity service interruptions. Thus, because the prior years' residential DR Pilot Programs have failed to meet their stated curtailments avoidance objectives or the reliability goals it aimed to achieve; and have not demonstrated a significant impact or benefit in reducing

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[128] "CCF refers to "load" or customer gas usage, measured in hundred cubic feet (CCF) or million cubic feet (MMcf). (Source: Nexant's 2019 Report, p. 3)

[129] *See* also, 2019 Nexant Report (Executive Summary), at 2. Emphasis added.

the curtailment risk or alleviating system stress,[130] we find that other mitigation measures discussed in the Action Plan may need to be considered to address curtailment risks or alleviate system stress.[131]

Lastly, we question whether alternative programs (other than the gas winter season DR Programs proposed in this Application for authorization) might better meet the needs sought to be addressed by the proposed gas winter season DR Programs in this Application. For example, whether investing the same capital in alternative programs, *e.g*. energy efficiency, or incentivizing electric heat pumps, might better avoid the gas curtailments sought to be addressed by the gas winter season DR Programs proposed in this Application and reduce gas usage by consumers. We do not address electric heat pumps in this decision, as that is an electric side program beyond the scope of this proceeding. These matters could be addressed in other proceedings including Rulemaking (R.) 13-11-005[132] and the building decarbonization proceeding, R.19-01-011.[133] We encourage parties to consider the breadth of options available to avoid gas curtailment and reduce gas usage in the energy efficiency and building decarbonization proceedings.

Overall, the record in this proceeding, and as further and fully argued/set forth in Section 3 herein above; the testimony in this proceeding; and the hearing transcripts, show that SoCalGas has not met its burden of proof to show that the DR Pilot Programs, or other related programs, presented for authorization in this

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[130] Hearing Transcript, at 139:14-18.

[131] *See* SBUA's Opening Brief, at 6-7.

[132] *See* Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues.

[133] Order Instituting Rulemaking Regarding Building Decarbonization

Application will comply with the Section 451 and the requirement that utility charges are just and reasonable, or Section 454 requiring that new rates are justified. Accordingly, we conclude that the DR Programs proposed in this Application for implementation during winter 2019 through 2022, and other related programs presented in this Application for authorization cannot be authorized and are thus denied, as presented.[134]

The denial of the DR Programs proposed in this Application is without prejudice and accordingly SoCalGas may resubmit an application for the approval of any of the DR pilots proposed in this Application. Before refiling such application(s), SoCalGas must reevaluate the designs and the incentive structures of each of the gas winter season DR programs taking into consideration the various proposals for modifications in this record.[135]

Accordingly, as provided above, SoCalGas is directed to hold at least one workshop[136] and invite the parties in the proceeding and other stakeholders to participate; and refile an application, with the additional information specified above, for the approval of the C&I Load Reduction Pilot.

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[134] Because we have not authorized the DR Programs, we find the question, included in Issue 1 ("*How should the DR Program be designed to appropriately measure the cost-effectiveness of the DR Program*?") to be moot, and this sub-question/sub-issue 1 is dismissed accordingly.

[135] *See* the testimony and various briefs by Mission:data; Cal Advocates; Indicated Shippers; SBUA; EnergyHub, among others for the lists of proposed modifications to the DR Programs presented for approval in this Application.

[136] Among others, the workshop scope should include 1) articulating the purpose of gas winter DR programs and identifying achievable goals of the programs; 2) discussing the cost-effectiveness and viability of the gas winter DR programs; 3) determining how to formulate and/or design appropriate gas winter season DR programs and incentive structures; and 4) considering alternative strategies for addressing SoCalGas system reliability issues or reducing the need for natural gas curtailments, among other relevant matters.[136] If SoCalGas wishes to resubmit any of the rejected DR Pilots in this Application, we recommend similar workshops as well.

Additionally, we encourage SoCalGas to submit future applications for any of the rejected DR programs based on the recommendations herein, and may file new applications for future DR programs that either: (1) reduce load for a few hours in pockets in which delivery is constrained on an hourly basis, but not a daily basis (if such pockets exist); or (2) reduce load without snapback, thus assisting in maintaining adequate supply to firm loads through cold snaps and/or supply restrictions.

Regarding these potential future DR programs, we clarify that SoCalGas' future DR applications need not specifically demonstrate how effective the proposed future DR program(s) will be, but that it may be sufficient for the utility to make a showing, in future applications, how the proposed future DR programs could have a "reasonable likelihood" of being effective in achieving significant gas consumption reduction, curtailments avoidance, and/or energy savings on a daily and/or overall basis, with a reasonable cost per unit of load reduction over a relevant and useful period.

Finally, and for completeness, the issues/sub-issues listed in the Scoping Memo as Issue 7(a) through 7(e) are deemed moot and/or unripe for resolution in this proceeding, and thus are not addressed further in this decision: 7a) What needs are the proposed DR Program attempting to address; 7b) Does the proposed DR Program have the potential to address those needs; 7c) Whether the proposed DR Program is likely to be cost-effective towards addressing that need, as compared to other possible solutions; 7d) Whether the proposed design of Applicant's DR Program is appropriate; and 7e) Whether there are other more cost-effective methodologies that could be used in developing a gas DR Program? Accordingly, these issues/subsides are dismissed.

5. Should Applicant be authorized to develop the EDSP as presented in this Application?

SoCalGas proposes to implement the EDSP to support the DR Programs proposed in this Application "to provide a standardized, automated, and secure approach for sending customer energy usage data to third parties to enable and support DR programs facilitated by third-party vendors under contract to SoCalGas," and "the EDSP will enable third-party implementer-facilitated Behavior Messaging Pilot and will facilitate the data transfers from DR program evaluators required to conduct the EM&V activities proposed for the DR Pilot Programs," among others. [137]

Several parties in this proceeding oppose many aspects of the EDSP as proposed by SoCalGas. Specifically, Mission:data urges the Commission not to approve the EDSP as written, because: 1) Applicant's proposed EDSP is inconsistent with the electric IOU's data-sharing platforms by not including the ability for customers to direct the sharing of their own energy information to third parties; 2) Applicant's efforts indicate lack of knowledge of data-sharing best practices in developing the EDSP; 3) Applicant shows poor planning and negligent preparation that could lead to high and unnecessary costs for ratepayers; 4) Applicant' proposed EDSP lacks meaningful oversight mechanism; and 5) the proposed EDSP is misaligned with Commission policies, including D.11-07-056 and D.10-04-027, among others. Thus, Mission:data requests that the Commission require SoCalGas to modify the design and structure of the EDSP before approval.

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[137] *See* SoCalGas' Opening Brief, at 17-19; and Exhibit SCG-02, at 1.

Cal Advocates argues that the Commission should not approve the EDSP at this time because: a) the EDSP is specifically designed to support the proposed gas winter season DR Programs in this Application; b) the gas winter season DR Programs are not authorized herein because they will not provide any measurable benefits to system reliability or significant benefits to ratepayers; and thus, c) there are no DR Programs for the EDSP to support. Cal Advocates also argues that the need for the EDSP functionality is not established in this record, and that, because the DR Programs are likely to be ineffective and ultimately discontinued,[138] the EDSP, even if the Commission wishes to authorize it, will not be needed in the future and thus would serve little to no purpose, especially when the current DR Programs are no longer in existence.[139] Thus, the EDSP will have no DR Programs to support.

Finally, Cal Advocates contends that any approval of the EDSP and its $7.31 million budget[140] would be shortsighted, given the numerous deficiencies and likelihood of failure of the programs in this Application, and thus the development of the EDSP and incurring costs for the EDSP cannot be justified

[138] *See* discussion regarding ineffectiveness of demand response programs below, in Section G. *See* also discussion in Exhibit PAO-3, at 3, regarding ineffectiveness of marketing, education, and outreach programs similar to the Winter Notification Marketing Campaign ("The current state of natural gas supply in Southern California does not warrant funding for marketing, education, and engagement activities." "SoCalGas does not believe that continued ME&O funding is an effective way to address these conditions." "...prior ME&O efforts have had a "limited impact").

[139] While SoCalGas refers to potential energy efficiency (EE) uses for the EDSP (*See* Exhibit SCG-07, at 5:3-6, 5:14-18; Evidentiary Hearing, Testimony of Nancy Carrell Lawrence, at 40:17-28, at 41:1-2), SoCalGas provided no particulars on the interaction between the EDSP and EE programs, such that the Commission could make any conclusion with regards to the usefulness of the EDSP for EE programs. Nonetheless, such showing maybe beyond the scope of this proceeding.

[140] Exhibit SCG-02, at 1-1:16.

based on this record.[141] Accordingly, Cal Advocates concludes that SoCalGas has failed to meet its burden of showing that the EDSP is needed or necessary, or that it will be cost-effective or provide benefits to ratepayers. Thus, Cal Advocates urges the Commission to deny SoCalGas the authority to develop the EDSP.[142]

We agree with many of the above observations and conclusions by the intervenors. Independently, we have considered the entire record in this proceeding and conclude that Applicant has not demonstrated it should be authorized to develop the EDSP as presented in this Application, for the reasons presented above, and further below.

First, we find Applicant's proposed EDSP are intended to "support" the implementation of the proposed gas winter season DR Programs from 2019 through 2022.[143] Second, we find that the proposed gas winter DR Programs from 2019 through 2022 will not provide any significant benefits to ratepayers. Third, we note that we have denied approval for the 2019 through 2022 gas winter season DR Programs proposed in this Application, and that these DR Programs are not authorized for implementation. Thus, we conclude that the need for the EDSP is currently moot as the EDSP is not necessary to support non-existent gas winter season DR Programs.

Based on the foregoing reasons and more,[144] we deny Applicant's request for authority to develop and implement the EDSP, without prejudice.[145]

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[141] Cal Advocates' Opening Brief, at 8-9.

[142] *See* also, Cal Advocates' Reply Brief, at 6-7.

[143] Exhibit SCG-05, at 19:9-11.

[144] Also, we find Cal Advocates persuasive in its contention that delaying the design of the EDSP may prove beneficial in the long-term to ratepayers and SoCalGas as such delay may help

Finally, because we deny Applicant's request for authority to develop and implement the EDSP, we also find that the following additional issues (identified in the Scoping Memo as Issues 3, 4 and 5, respectively) are moot, and are not addressed further in this decision: a) whether the proposed EDSP should be approved with modification requiring performance metrics and accountability in spending the giving the magnitude of the proposed expenditure for the EDSP, as proposed by Mission:data; b) whether the proposed EDSP is appropriately designed to be cost-effective when it does not utilize SDG&E's (Applicant's sister utility) preexisting EDSP platform/resources or any other preexisting platform to drive down cost; and c) whether this Application is the appropriate venue for authorizing funding and/or cost recovery for an information technology EDSP system that provides benefits outside of demand response programs; and whether Applicant should be authorized to recover costs for EDSP in this Application? Alternately, these issues are dismissed without prejudice as they are deemed moot and/or found to be unripe for resolution in this proceeding because the related DR Programs are not authorized for implementation in this decision.[146]

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ensure that the EDSP designs meets future and newly-designed DR programs' needs, and complaint with improving and ever changing technological landscape, thus "allowing for a more useful and longer lasting EDSP." (*See* Cal Advocates' Opening Brief, at 9.)

[145] As recommended by Mission:data and Cal Advocates, before the Commission finds the EDSP or similar system to be a just and reasonable use of ratepayer funds, SoCalGas may be required to provide further information about the functionality and performance of the EDSP/system, and the Commission may require specific tracking and accountability features as part of any approval.

[146] That is, if these issues must be addressed pursuant to Section 1701.1(b)(1); and Section 1701.5.(a).

6. Should Applicant be authorized to recover its costs for implementing prior DR Programs for the 2016-2017; 2017-2018 and 2018-2019 winter seasons, as well as the 2018-2019 winter notification marketing campaign, or should any cost recovery review be delayed until the Commission determines responsibility for the Aliso Canyon leak?

On this issue, Applicant seeks $12.17 million in cost recovery for the 2016-2019 prior years' Winter Season DR Programs and the 2018-2019 Winter Season Notification Marketing Campaign, as detailed in Section 3.1. above. The 2018-2019 Winter Season Notification Marketing Campaign spending of $2.0 million was recorded in the MEOMA as earlier authorized and directed by the Commission. Applicant argues that it is entitled to the $12.17 million in cost recovery in this Application because these prior winter DR activities were implemented to help address system reliability issues resulting from "multiple, complex factors; and that even though these activities addressed system capacity limitations due to the restricted use of Aliso Canyon and pipeline outages following the Aliso Canyon leakage, the costs associated with these DR efforts cannot be attributed to one singular factor, that is, the Aliso Canyon leakage. Additionally, Applicant contends that Aliso Canyon has been deemed fit for service since November 1, 2016 and that the ongoing restrictions on using Aliso Canyon do not currently stem from the safety or integrity of the facility and therefore is not the direct result of the Aliso Canyon leakage. Thus, Applicant argues that it should be permitted to recover its costs as requested in this Application, without waiting for determination of responsibility in the Aliso Canyon Leakage as argued by Cal Advocates.

Cal Advocates opposes cost recovery for the 2016-2019 prior years' Winter Season DR Programs and the 2018-2019 Winter Season Notification Marketing Campaign in this Application, contending that the language the

Commission used in authorizing the establishment of the WDRMA and MEOMA accounts (used by Applicant to record prior years' DR costs), shows that the Commission intended that cost recovery for these accounts will be determined at some point after the Commission has determined responsibility for the Aliso Canyon leakage.[147] According to Cal Advocates, the Commission authorized the creation of the WDRMA and MEOMA accounts in or order "to track cost for the Aliso Canyon leak response activities,"[148] noting that, the disposition letter, issued by ED on September 30, 2016, that approved the WDRMA stated that the WDRMA was approved due to "uncertainty surrounding the availability of gas storage and withdrawal capabilities at Aliso Canyon."[149] Additionally, Cal Advocates similarly pointed out that the MEOMA was established by D.16-04-039, and that in creating the account, the Commission noted as follows:

> We are not approving ratepayer funding at this time…and we make no determination today regarding whether these costs will ultimately be determined to be the responsibility of SoCalGas ratepayers or shareholders. As noted by several parties in comments, the Governor directed this Commission to ensure that SoCalGas covers costs related to the natural gas leak and its response while protecting ratepayers. <u>Because these costs are not yet known, at this time it is appropriate to track the costs…and defer determination of responsibility for those costs until a future proceeding that can examine all aspects of the Aliso Canyon gas leak and its aftermath at one time</u>.[150] (Underline added.)

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[147] *See* Exhibit PAO-01, at 3-2 – 3-3.

[148] *See* Exhibit PAO-01, at 3-2, lines 20-21.

[149] *See* Exhibit PAO-01, at 3-2, lines 20-21, referencing the Disposition Letter from ED Director responding to SoCalGas AL 5027-G (September 30, 2016). (*See* also Exhibit PAO-01, at 3-2, line 20 through 3-3, line 11.)

[150] Exhibit PAO-01, at 3-3, citing D.16-04-039, at 21-22.

Accordingly, Cal Advocates argues that because: 1) both the WDRMA and MEOMA accounts were established in response to the Aliso Canyon gas leakage; 2) the Commission's language in establishing these accounts demonstrates that it intends cost recovery for these accounts to be determined at some point after the Commission determines responsibility for that leak; and 3) the Commission has yet to determine responsibility for the Aliso Canyon gas leakage, SoCalGas should not be allowed to recover the costs recorded in those memorandum accounts as requested in this Application

Applicant disputed the referenced language, and contends that because the Commission did not specifically state that recovery for the costs sought in this Application must await a determination on responsibility for the Aliso Canyon leakage, it is entitled to cost recovery for prior years' Winter Season DR Programs in this Application.[151] We disagree with Applicant.

We are persuaded by Cal Advocates' arguments that, based on the clear language establishing the WDRMA and MEOMA accounts, these accounts are directly linked to the Aliso Canyon leak, and we conclude that cost recovery for the prior years' DR programs, including those recorded in the WDRMA and MEOMA must be delayed until the Commission has determined responsibility for the Aliso Canyon gas leakage. This position was also supported by SBUA, when it urges the Commission not to approve cost recovery for prior years' DR Pilot programs in this proceeding, but delay such until the Commission determines responsibility for the Aliso Canyon leak.[152]

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[151] SoCalGas' Opening Brief, at 42.

[152] SBUA Opening Brief, at 11.

Accordingly, Applicant's request to be authorized to recover its costs for implementing prior years' DR Programs during the 2016-2017; 2017-2018 and 2018-2019 winter seasons, as well as the 2018-2019 winter notification marketing campaign is denied without prejudice to SoCalGas' ability to: 1) recover the prior years' DR Programs costs in the future; and 2) recover any prior years' DR costs previously authorized by the Commission for recovery. We conclude that the recovery of prior years' DR Programs costs requested in this Application should be delayed until the Commission determines responsibility for the Aliso Canyon leak.

7. Conclusion and Outcomes

Based on the preponderance of the evidence, the substantial and overwhelming evidence in this proceeding leads to the conclusion that Applicant fails to meet its burden, and this Application must be denied in its entirely. Accordingly, as discussed and resolved above:

a. we deny the requested authorization to implement the four DR Pilot Programs proposed in the Application, namely, the Space Heating Pilot; the Water Heating Pilot; the C&I Load Reduction Pilot; and the Behavioral Messaging Pilot during the 2019-2020 winter season through the 2021-2022 winter season, as well as other related programs proposed in this Application, including: a) the evaluation, measurement and verification of the DR Pilot Programs; b) the Gas DR Emerging Technologies Program; and c) the Winter Notification Marketing Campaign to complement the DR Pilot Programs;

b. we deny the requested authorization to implement a new energy data sharing platform;

c. we deny Applicant's request to be authorized to recover its costs for implementing prior DR Programs for the 2016-2017; 2017-2018 and 2018-2019 winter seasons, as well as the 2018-2019 winter notification marketing campaign in this Application without prejudice, and we conclude that recovery of these costs must wait until the Commission has determined responsibility for the Aliso Canyon leak; and

d. we direct SoCalGas to hold at least one public workshop to refine the C&I Load Reduction Pilot, and authorize Energy Division to direct SoCalGas for file an application proposing a pilot if it determines this to be in the ratepayer interest.

Overall, we conclude that authorizing any of the four DR Pilot Programs, or the related programs, presented in this Application will not comply with the Section 451 and the requirement that utility charges are just and reasonable, or Section 454 requiring that new rates are justified. Accordingly, we deny this Application in its entirely without prejudice. Nonetheless, as provided in this decision, Applicant may refile future application(s) for approval of gas winter season DR programs based on the extensive proposals and recommendations for modifications of the denied DR Programs and related programs, as discussed in this decision.

8. Comments on Proposed Decision

The proposed decision (PD) of ALJ Ayoade in this matter was mailed to parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Opening comments were timely filed by SBUA, Cal Advocates, Indicated Shippers, Applicant, Mission:data, EnergyHub, and Nest on January 27, 2020, and reply comments were timely received on February 3, 2020 from Applicant, SBUA, Cal Advocates, and EnergyHub.

Based on the Comments received, non-substantive changes were made to the PD: 1) to clarify the basis for rejecting the ESDP proposed in the Application; and 2) further clarify: a) that SoCalGas may submit future applications for

DR programs meeting certain identified goals; and b) that future DR applications need not specifically demonstrate how effective the proposed DR program(s) will be at the onset, but that it may be sufficient for the utility to make a showing in its application a "reasonable likelihood" that such proposed DR program(s) will be effective in achieving significant gas consumption reduction, curtailments avoidance, and/or energy savings goals on a daily and/or overall basis, with a reasonable cost per unit of load reduction over a relevant and useful period.

9. Assignment of Proceeding

Martha Guzman Aceves is the assigned Commissioner and Adeniyi A. Ayoade is the assigned ALJ in this proceeding.

Findings of Fact

1. On October 23, 2015, SoCalGas discovered gas leak at the Aliso Canyon Natural Gas Storage Facility which resulted in Emergency Proclamation on January 6, 2016 by the Governor. The Emergency Proclamation directed the Commission to take all actions necessary to ensure the continued reliability of natural gas and electricity supplies in the coming months during the moratorium on gas injections into the Aliso Canyon Storage Facility.

2. On September 13, 2016, the Commission's ED Director directed SoCalGas to develop and submit to the Commission a proposal for gas DR in its service territory for the winter of 2016-2017, in accordance with the Aliso Canyon Winter Action Plan. Consistent with the September 13, 2016 ED directive, SoCalGas proposed and implemented the 2016-2017 winter season DR programs which ran from December 1, 2016 through March 31, 2017.

3. For the 2017-2018 winter season DR programs, SoCalGas implemented an expanded smart thermostat load control program; a technological assessment of

emerging DR technologies; and DR program development activities for the 2018-2019 winter season.

4. During the 2018-2019 winter season, SoCalGas implemented a smart thermostat device-based DR program.

5. The result of the gas winter season DR Programs during the 2016-2017, 2017-2018, and the 2018-2019 winter season shows that these DR Programs did not provide significant benefits to ratepayers, and that the costs of implementing these DR Programs may lease to unnecessary rate increases.

6. In a letter dated April 12, 2018, ED directed SoCalGas to file an application for authority to implement future DR programs.

7. On November 6, 2018, SoCalGas filed this Application requesting authority to: a) to establish a gas DR Program from winter 2019 through 2022; b) develop and implement the EDSP platform to support the future DR Program; and c) recover its costs associated with the implementation of DR Programs for the 2016-2017; 2017-2018 and 2018-2019 winter seasons, as well as the 2018-2019 winter notification marketing campaign, in compliance with ED's April 12, 2018 letter.

8. The DR Programs proposed in this Application for implementation during winter 2019 through 2022 are not appropriately designed or incentivized to meet the stated natural gas curtailments and/or system reliability goals, and will not provide significant energy savings or system reliability benefits to ratepayers given their costs.

9. The C&I Load Reduction Pilot proposed in the Application targets larger loads and longer load reductions that may potentially be helpful in aiding gas system reliability, and thus provide significant benefit to ratepayers if designed and incentivized appropriately based ratepayers' s input and participation.

10. SoCalGas failed to include relevant details about the design and implementation of the C&I Load Reduction Pilot in its Application and thus failed to provide the Commission information needed to evaluate the C&I Load Reduction Pilot presented for approval in this proceeding. .

11. Because SoCalGas failed to establish that the DR Programs proposed in this Application for implementation during winter 2019 through 2022 will provide ratepayers with any meaningful benefits, SoCalGas's request for funds from ratepayers for the DR programs at issue in this proceeding are not just and reasonable under Section 451, or Section 454 which requires that new rates are justified.

12. The requested authorization to implement the DR Programs proposed in this Application for implementation during winter 2019 through 2022 cannot be approved, based on this record.

13. Based on this record, it is reasonable to direct SoCalGas to hold at least one workshop and reevaluate the designs and the incentive structures of the gas winter season DR programs proposed for approval in this Application.

14. Based on this record, it is reasonable to encourage SoCalGas to refile application(s) for the approval and implementation of any of the gas winter season DR programs rejected in this decision based on the various proposals for modifications of the DR Programs by the other parties in this record; and further encourage SoCalGas to file applications for future DR programs that either reduce load for a few hours in pockets in which delivery is constrained on an hourly basis, but not necessarily on a daily basis (if such pockets exist), or reduce load without snapback thus assisting in maintaining adequate supply to firm loads through cold snaps and/or supply restrictions.

15. Based on this record, it is reasonable to clarify that SoCalGas' future DR applications need not specifically demonstrate how effective these future DR programs will be, but that it may be enough to make a showing, in the applications, how the proposed future DR programs could or will have a "reasonable likelihood "of being effective in achieving significant gas consumption reduction, curtailments avoidance, and/or energy savings on a daily and/or overall basis, with a reasonable cost per unit of load reduction over a relevant and useful period.

16. Because we deny Applicant the requested authority to implement the DR Programs during the winter of 2019 through 2022, Issue 1 (partially), *i.e.*, *"How should the DR Program be designed to appropriately measure the cost-effectiveness of the DR Program?"*), and Issue 7(a) through 7(e)) in the Scoping Memo are deemed moot and are not addressed further in this decision. We find that the resolution of these issues is not necessary in the proceeding, as discussed in Section 4 above.

17. Because the gas winter season DR Programs proposed for implementation in this Application are not authorized for implementation, this record fails to support a finding that the EDSP is needed or necessary at this time, or that the EDSP should be authorized for development and or implementation.

18. The EDSP is not necessary to support gas winter season DR programs that are not authorized in this decision, and Applicant should not be authorized to develop the EDSP presented for approval in this Application.

19. Because we deny Applicant's request in this Application for authority to develop and implement the EDSP, Issues 3, 4 and 5 in in the Scoping Memo are moot, and not necessary to be addressed or resolved in this proceeding, as discussed in Section 5 above.

20. Applicant failed to establish that it should be authorized to recover its costs for implementing prior DR Programs for the 2016--2017; 2017-2018 and 2018-2019 winter seasons, as well as the 2018-2019 winter notification marketing campaign in this proceeding.

21. The language used by the Commission in authorizing the establishments of the WDRMA and MEOMA accounts (used by SoCalGas to record prior DR program cost, and the cost of the 2019-2019 winter notification marketing campaign, shows that these accounts and/or the DR programs are directly linked to the Aliso Canyon leak.

Conclusions of Law

1. The request to implement four DR Programs during winter 2019 through 2022 as well as the Gas DR Emerging Technologies Program; the Winter Notification Marketing Campaign; the EDSP platform; and the evaluation, measurement and verification of the proposed DR Programs should be denied without prejudice.

2. SoCalGas should be permitted to redesign any of its gas winter season DR programs rejected in this Application, and refile future applications for the approval and implementation of any re-designed and/or modified gas winter season DR programs based on the various proposals for modifications of the DR Programs by the other parties in this record.

3. SoCalGas should be encouraged to submit future applications for DR programs that either reduce load for a few hours in pockets in which delivery is constrained on an hourly basis, but not necessarily on a daily basis (if such pockets exist), or reduce load without snapback - thus assisting in maintaining adequate supply to firm loads through cold snaps and/or supply restrictions.

4. SoCalGas' future DR applications need not specifically demonstrate how effective the DR programs will be, but should be required to make a showing, in the application(s), how the proposed future DR programs could/will have a "reasonable likelihood "of being effective in achieving significant gas consumption reduction, curtailments avoidance, and/or energy savings on a daily and/or overall basis, with a reasonable cost per unit of load reduction over a relevant and useful period.

5. SoCalGas should be directed to hold at least one workshop to evaluate the need for the DR program and consider other alternatives that could be effective in addressing natural gas curtailments and reliability issues aimed to be addressed by the DR Pilot Programs, among other relevant matters.

6. The Energy Division should be authorized to direct SoCalGas to file an application proposing a pilot if Energy Division determines after the workshop that doing so would be in best interest of the ratepayers.

7. Applicant's request to recover costs for implementing prior DR Programs during the 2016--2017; 2017-2018 and 2018-2019 winter seasons, as well as the 2018-2019 winter notification marketing campaign should be denied without prejudice to SoCalGas' ability to recover these costs in the future, or its ability to recover any prior years' DR costs previously authorized by the Commission for recovery.

8. This Application should be denied without prejudice, and this proceeding closed.

O R D E R

IT IS ORDERED that:

1. Southern California Gas Company's Application and request to establish and implement a Demand Response (DR) Space Heating Load Control Pilot; DR

Water Heating Load Control Pilot; DR Load Reduction Pilot; and the Behavioral Messaging Pilot to support the DR programs during winter 2019 through 2022 is denied without prejudice.

2. Southern California Gas Company's Application and request to develop and implement a new energy data sharing platform to support and facilitate the proposed Demand Response Programs is denied without prejudice.

3. Southern California Gas Company's Application and request to recover costs associated with the implementation of prior Demand Response programs during the 2016-2017; 2017-2018 and 2018-2019 winter seasons, and the 2018-2019 winter notification marketing campaign is denied without prejudice to SoCalGas' ability to recover these DR costs in the future, or its ability to recover any prior years' DR costs previously authorized by the Commission for recovery.

4. Southern California Gas Company's requests to establish a related Gas Demand Response (DR) Emerging Technologies Program; a Winter Notification Marketing Campaign; and the evaluation, measurement and verification of the DR Pilot Programs to complement and support the DR programs proposed in this Application are denied without prejudice.

5. Within 120 days of this decision, Southern California Gas Company shall hold at least one public workshop to seek public input and participation and develop needed information on the design and implementation of the Commercial and Industrial (C&I) Load Reduction Pilot; and may refile an application for the approval of the C&I Load Reduction Pilot with adequate information and details regarding the design and implementation of the Load Reduction Pilot within 60 days of the workshop.

6. The Energy Division of the California Public Utilities Commission (ED) is authorized to direct Southern California Gas Company to file an application

proposing a pilot if ED determines after the workshop that doing so would be in best interest of the ratepayers.

7. Prior to filing a new application for the approval of any of the gas winter season Demand Response Programs (DR Programs) rejected in this Application, Southern California Gas Company must reevaluate the designs and the incentive structures of such DR Program and hold at least one workshop to evaluate the need for the DR Program and consider other alternatives that could be more effective in addressing the natural gas curtailments and reliability issues that these DR Pilot Programs aimed to address, among others. Such new application shall be based on a redesigned, modified and updated DR program(s) based on the feedbacks provided in this decision.

8. Application 18-11-005 is closed.

This order is effective today.

Dated February 27, 2020, at San Francisco, California.

MARYBEL BATJER
President
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
GENEVIEVE SHIROMA
Commissioners

APPENDIX 1

ILLUSTRATIVE GAS DEMAND RESPONSE-7 YEAR DEPRECIATION
(Based on Historical Smart Therm Activation Events)

The Smart Therm Program is voluntary and only those customers who sign up for the Program through their smart thermostat vendor can participate. SoCalGas offers various incentives to encourage customers to enroll and participate. Customers earn an initial $50 for enrolling in the program. Those who enrolled by March 1, 2019 and stay enrolled through April 1, 2019 were eligible to receive an additional $25 and customers receive this $25 credit for each winter season they remain enrolled. As such, customers who participated in the 2018 Demand Response season received a $25 credit for remaining in the Program for the 2019 winter season.
Source: Nexant 2018 Report, page 4

Costs are based on approved budget in G-3541

	Item	Data	Note
A	Customers Enrolled	44,400	Actual # of participants
D1	Total cost (incentives)	$4,771,000	AL 5303 and G-3541
D2	Total cost (budget)	$5,870,000	AL 5303 and G-3541
E	Total event savings (Dth)	$6,283	
G1	**$/Dth cost (D1/E)**	**$759**	
G2	**$/Dth cost (D2/E)**	**$934**	
H	Total event savings with snapback (Dth)	$3,798	
J1	**$/Dth cost (D1/H)**	**$1,256**	
J2	**$/Dth cost (D2/H)**	**$1,546**	

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
$50 Incentive Amortized over 7 Years	$317,142.86	$317,142.86	$317,142.86	$ 317,142.86	$317,142.86	$317,142.86	$317,142.86
$25 Incentive	$1,110,000.00	$1,110,000.00	$1,110,000.00	$1,110,000.00	$1,110,000.00	$1,110,000.00	$1,110,000.00
Sum of $50 Amortized Incentive and $25 Incentive	$1,427,142.86	$1,427,142.86	$1,427,142.86	$1,427,142.86	$1,427,142.86	$1,427,142.86	$1,427,142.86
Total Costs (Dth)	**$227.13**	**$227.13**	**$227.13**	**$227.13**	**$227.13**	**$227.13**	**$227.13**
Total Costs (Dth) with Snapback	**$375.78**	**$375.78**	**$375.78**	**$375.78**	**$375.78**	**$375.78**	**$375.78**

(END OF APPENDIX 1)

APPENDIX 2

2017-2018 WINTER DR - SMART THERM ACTIVATION EVENTS

Date	Time	Daily Sendout (MMcf)	OFO	OFO Stage	Curtailment	Aliso Canyon Usage	Aggregate Event Savings (MMcf)	Aggregate Daily Savings (MMcf)	Aggregate Daily Savings as a % of Total System Sendout
Jan 2	5am - 9am	3484	Low	3	Voluntary EG	Yes	0.13	0.003	0.000%
Jan 3	5am - 9am	3305	Low	3	Voluntary EG	Yes	0.12	0.016	0.000%
Jan 4	5am - 9am	3072	No	N/A	Voluntary EG	Yes	0.14	0.029	0.001%
Jan 7	5am - 9am	2947	Low	3	Voluntary EG	No	0.12	0.070	0.002%
Jan 15	5am - 9am	3245	Low	2	Voluntary EG	Yes	0.13	0.065	0.002%
Jan 16	5am - 9am	2811	Low	2	Voluntary EG	Yes	0.12	0.094	0.003%
Jan 17	5am - 9am	2876	Low	2	Voluntary EG	Yes	0.11	0.134	0.005%
Jan 22	5am - 9am	3246	Low	1	Voluntary EG	Yes	0.12	0.084	0.003%
Jan 23	5am - 9am	3291	Low	2	Voluntary EG	Yes	0.20	0.142	0.004%
Jan 24	5am - 9am	2836	Low	2	Voluntary EG	Yes	0.23	0.162	0.006%
Feb 4	5am - 9am	3298	Low	3	Voluntary EG	No	0.34	0.345	0.010%
Feb 5	5am - 9am	3931	Low	3	Voluntary EG	Yes	0.37	0.334	0.008%
February 6	5am - 9am	3980	Low	3	Rule 23	Yes	0.33	0.159	0.004%
Feb 7	5am - 9am	3603	Low	4	Rule 23	Yes	0.32	0.138	0.004%
Feb 8	5am - 9am	3272	Low	4	Rule 23	Yes	0.34	0.178	0.005%
Feb 11	5am - 9am	3693	Low	3	Voluntary EG	Yes	0.29	0.179	0.005%
Feb 11	6pm – 10pm	N/A	Low	3	Voluntary EG	Yes	0.03	0.013	N/A
Feb 12	5am - 9am	3256	Low	3	Voluntary EG	Yes	0.21	0.076	0.004%

Feb 12	6pm – 10pm	N/A	Low	3	Voluntary EG	Yes	0.06	0.042	N/A
Feb 13	5am - 9am	3408	Low	3	Voluntary EG	Yes	0.22	0.199	0.006%
Feb 13	6pm – 10pm	N/A	Low	3	Voluntary EG	Yes	0.09	0.008	N/A
Feb 14	5am - 9am	3172	Low	3	Voluntary EG	Yes	0.19	0.158	0.007%
Feb 14	6pm – 10pm	N/A	Low	3	Voluntary EG	Yes	0.08	0.057	N/A
Feb 15	5am - 9am	3236	Low	3	Voluntary EG	Yes	0.24	0.183	0.006%
Feb 15	6pm – 10pm	N/A	Low	3	Voluntary EG	Yes	0.08	0.017	N/A
Feb 19	5am - 9am	3672	Low	3	Voluntary EG	Yes	0.35	0.149	0.004%
Feb 20	5am - 9am	3642	Low	4	Rule 23	Yes	0.40	0.237	0.007%
Feb 21	5am - 9am	3828	Low	4	Rule 23	Yes	0.41	0.303	0.008%
February 22	5am - 9am	3524	Low	3	Voluntary EG	Yes	0.42	0.165	0.005%

Demand response source: Joe Mock 5/16/19

(END OF APPENDIX 2)