BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (U902M) for Authority, Among Other Things, to Update its Electric and Gas Revenue Requirement and Base Rates Effective on January 1, 2019.

Application 17-10-007 (Filed October 6, 2017)

Application of Southern California Gas Company (U904G) for Authority, Among Other Things, to Update its Gas Revenue Requirement and Base Rates Effective on January 1, 2019.

Application 17-10-008 (Filed October 6, 2017)

OPENING BRIEF OF SIERRA CLUB AND UNION OF CONCERNED SCIENTISTS

Matthew Vespa
Earthjustice
50 California Street, Suite 500
San Francisco, CA 94111
Telephone: (415) 217-2123
Email: mvespa@earthjustice.org

Attorney for Sierra Club and Union of Concerned Scientists

Alison Seel Sierra Club 2101 Webster Street, Suite 1300 Oakland, CA 94612 Telephone: (415) 977-5753 Email: alison.seel@sierraclub.org

Attorney for Sierra Club

Dated September 21, 2018

TABLE OF CONTENTS

TAI		F AUTHORITIES	
I.	INTR	ODUCTION AND SUMMARY OF RECOMMENDATIONS	. 1
II.	EVID	ENTIARY STANDARDS AND THE BURDEN OF PROOF	.5
III.		UMENT	
111.	A.	Gas Transmission (Common Briefing Issue #11): Recovery of Over \$21 Million in Expense from the Rejected North-South Pipeline Application is Contrary to Well-Established Commission Precedent and Would Improperly Encourage Proposals for Costly and Unnecessary Fossil Fuel Infrastructure Projects.	es
	B.	Customer Service and Information (Common Briefing Issue #23.3): SoCalGas' Request for	. 0
	В.	Increased Funding for Climate-Related Communications Should Be Disallowed.	8
		SoCalGas' Request for Increased Customer Marketing and Communications Funding is Contradictory and Vague	
		2. Communications Intended to Inform Customers about the Climate Change Impact of Natural Gas are Institutional Advertising and Inappropriate for Rate	
		Recovery. 3. SoCalGas is Not a Reliable Information Source on the Benefits or Climate Change Impact of Natural Gas.	
	C.	Customer Service: Technologies, Polices, and Solutions – SoCalGas Only (Common Briefin Issue #23.5).	ng
		1. The Policy and Environmental Solutions Group ("Policy Group") Advances SoCalGas' Shareholder Interest to Impede Electrification of Natural Gas End-Uses and its Costs Should Not Be Borne by Customers	
		2. Ratepayer-Funded Natural Gas Research and Development Should be Administered Through at Single Program at the California Energy	
		a) In Contrast to SoCalGas' R&D Program, the CEC-Administered, Ratepayer-Funded Natural Gas R&D Program is More Transparent and	22
		Has Meaningful Opportunities for Public Engagement. b) Sole CEC Implementation of Natural Gas R&D is Needed to Ensure Objective Analysis and That Project Funding is Consistent with	
		California's Decarbonization Objectives. c) SoCalGas Has Inappropriately Used Ratepayer-Funded R&D Grants for its Public Relations Benefit.	
		d) SoCalGas Justifications for Maintaining a Separate R&D Program are Unpersuasive	28
	D.	Fleet Services and Facility Operations (Common Briefing Outline #25).	29
		 SoCalGas Has Not Met its Burden to Demonstrate Additional NGVs are Needed to Meet California's Climate Objectives, and Its Requested AFV 	
		Premium Should be Limited to Purchase of Hybrid Passenger Vehicles	
		a) New AFV Procurement Required to Comply with EPAct is Limited.b) SoCalGas' Request for AFV Premiums for NGVs to Achieve	30
		Greenhouse Gas Reduction Requirements is Fundamentally Flawed	32
		2. SoCalGas Should Not Recover Costs in this GRC for Vehicle Replacement	
		under CARB Regulations that is Not Required Until 2023.	33
		3. SoCalGas Should Not Recover Costs for New NGV Refueling Stations.	
		4. SDG&E Should Not Recover Costs for New NGV Refueling Stations	
	E.	Other Issues (Common Briefing Outline #50): The Commission Should Expressly Find that SoCalGas Cannot Recover Costs Related to the Opposition to Electrification of End-Uses	
IV.	CON	CLUSION	

TABLE OF AUTHORITIES

	Page(s)
Cases	
City of Los Angeles v. Public Utilities Commission, 7 Cal.3d 331 (1972)	12, 14
Pacific Telephone & Telegraph Co. v. Pub. Util. Comm'n, 62 Cal.2d 634 (1965)	28
California Public Utilities Commission Decisions	
Decision 04-07-022, Opinion on Base Rate Revenue Requirement and Other Phase 1 Issues (July 16, 2004)	5, 6, 17, 31
Decision 04-08-010, Order Regarding Implementation of Assembly Bill 1002, Establishing a Natural Gas Surcharge (Aug. 19, 2004)	23, 28
Decision 06-09-039, Phase 2 Order Addressing Infrastructure Adequacy & Slack Capacity, Interconnection & operational Balancing Agreements, an Infrastructure Working Group, natural Gas Supply and Infrastructure Adequacy for Electric Generators, Natural Gas Quality, and other Matters (Sept. 27, 2006)	7
Decision 12-11-051, Decision on Test Year 2012 General Rate Case for Southern California Edison Company (Dec. 10, 2012)	5, 33
Decision 15-11-021, Decision on Test Year 2015 General Rate Case for Southern California Edison Company (Nov. 12, 2015)	5, 6, 8, 9, 12
Decision 16-07-015, Decision Denying Application (July 18, 2016)	6, 7
Decision 17-04-039, Decision on Track 2 Energy Storage Issues (May 8, 2017)	27
Decision 18-05-040, Decision on the Transportation Electrification Standard Review Projects (June 6, 2018)	37
Decision 18-05-041, Decision Addressing Energy Efficiency Business Plans (June 5, 2018)	17
Decision 18-06-028, Decision Denying SDG&E and SoCalGas' Proposed Certificate of Public Convenience and Necessity for Proposed Gas Pipeline 3602, Reclassification of Gas Pipeline 1600 From Transmission to Distribution Service, and Redefinition of the Existing CPUC Reliability Criterion (June 26, 2018)	8
Decision 89-12-057, Re Pacific Gas & Electric Co., 34 CPUC 2d 199 (Dec. 20, 1989)	6, 7
Decision 91-12-076, Re Southern California Edison Co., 42 CPUC 2d 645 (Dec. 20, 1991)	7

Decision No. 90405, Re San Diego Gas & Electric Co., 1979 WL 462102 (June 5, 1979)	12
Decision 84-06-111, <i>Re Pacific Telephone and Telegraph Co.</i> , 15 CPUC 2d 232, 1984 WL 1021580 (Cal.P.U.C.) (June 13, 1984)	11
Decision No. 84902, In re PG&E Co., 78 CPUC 638 (Sept. 16, 1975)	14
Decision No. 86794, <i>In re Southern California Edison Co.</i> , 81 CPUC 49, 1976 WL 36453 (Cal.P.U.C.) (Dec. 21, 1976)	11-12
Statutes	
Health and Safety Code § 25420.	19
Health and Safety Code § 39730.5.	20
Pub. Util. Code § 740	23
Pub. Util. Code § 740.12(a)(1)(D)	32
Pub. Util. Code § 740.12(a)(2)	32
Pub. Util. Code § 740.12(a)(1)(E)	37
Regulations	
79 Fed. Reg. 15882 (Mar. 21, 2014) (codified at 10 C.F.R. Part 490)	31, 32

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (U902M) for Authority, Among Other Things, to Update its Electric and Gas Revenue Requirement and Base Rates Effective on January 1, 2019.

Application 17-10-007 (Filed October 6, 2017)

Application of Southern California Gas Company (U904G) for Authority, Among Other Things, to Update its Gas Revenue Requirement and Base Rates Effective on January 1, 2019.

Application 17-10-008 (Filed October 6, 2017)

OPENING BRIEF OF SIERRA CLUB AND UNION OF CONCERNED SCIENTISTS

Sierra Club and the Union of Concerned Scientists ("UCS") respectfully submit this Opening Brief on the Application of San Diego Gas & Electric Company ("SDG&E") for Authority, Among Other Things, to Update its Electric and Gas Revenue Requirement and Base Rates Effective on January 1, 2019, and the Application of Southern California Gas Company ("SoCalGas") for Authority, Among Other Things, to Update its Gas Revenue Requirement and Base Rates Effective on January 1, 2019. This Opening Brief is timely submitted pursuant to the oral ruling of Administrative Law Judge ("ALJ") Lirag at the evidentiary hearing on September 8, 2018.

I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

SoCalGas' General Rate Case ("GRC") Application comes at a time when California's aggressive decarbonization trajectory is rapidly diverging from SoCalGas' shareholder interest in retaining demand for natural gas. Independent studies "analyzing how California can achieve its 2050 greenhouse gas reduction targets agree that it will require widespread electrification of end uses of energy—such as transportation or space and water heating." Because a large percentage of the carbon emissions in California today are attributable to natural gas combustion, the California Air Resources Board ("CARB") has similarly found that "reducing use of fossil

1

¹ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 5:1-4.

natural gas whenever possible will be critical to achieving the State's long-term climate goals."²

The financial impact of California's commitment to drastically reduce reliance on fossil fuels on a company whose business is to sell and deliver natural gas is not lost on SoCalGas. As the company acknowledged in its most recent Form 10-K:

California legislators and stakeholder, advocacy and activist groups have expressed a desire to further limit or eliminate reliance on natural gas as an energy source by advocating increased use of renewable energy and electrification in lieu of the use of natural gas. A substantial reduction or the elimination of natural gas as an energy source in California, could have a material adverse effect on SDG&E's, SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations.³

To further its shareholder interest in maintaining demand for natural gas, SoCalGas has engaged in a web of activity at ratepayer expense to obstruct progress on electrification of natural gas end-uses such as space and water heating and medium- and heavy-duty vehicles. These activities include making repeated meritless assertions to state agencies by its Policy and Environmental Solutions Group ("Policy Group") that building electrification would "impede" implementation of California's climate goals; attempting to dissuade local governments and transit agencies from replacing natural gas and diesel buses with electric options by citing erroneous information on their relative environmental benefit; misleading its customers on the comparative operational cost of gas and electric heating by comparing the most efficient gas furnace available on the market to an electric option so inefficient it could not legally be sold in California; and commissioning costly studies that purport to compare the relative cost of gas and electric homes using this same flawed comparison.

Enough is enough. Southern California ratepayers should not be forced to subsidize SoCalGas' pro-gas lobbying activities, which run counter to California's aggressive greenhouse gas reduction requirements. The California Public Utilities Commission ("Commission") must finally recognize the Policy Group for what it is: a SoCalGas lobbying arm that acts to further its shareholder interest in maintaining California's dangerous reliance on fossil fuels. Indeed, in the

² *Id.* at pp. 4:10-11 (quantifying CO2 emissions from different fossil fuels in California) (citing CARB Greenhouse Gas Emission Inventory, 2017 Edition), 5:18-8:4 (quantifying limited potential for biomethane to substitute for fossil natural gas), 4:12-13, fn. 9 (citing 2017 Climate Change Scoping Plan, p. 66).

³ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 5, Sempra Energy, SoCalGas and SDG&E, Form 10-K Annual Report (Feb. 27, 2018).

midst of yet another year of devastating wildfires and the release of California's Fourth Climate Change Assessment projecting grave consequence for the environment, economy, and public health absent aggressive action to reduce greenhouse gas pollution, SoCalGas' actions are a profound disservice to California and the customers it purports to serve. Because Policy Group activities are in the interest of SoCalGas shareholders – and not customers – cost recovery must be denied.

Moreover, in at least two instances, SoCalGas ascribed costs of anti-electrification activities, including authoring an op-ed in the Sacramento Bee that argued against proposed legislation that would facilitate building electrification, to its Operations and Maintenance ("O&M") budget. Use of O&M to underwrite anti-electrification activities raises serious concerns that, absent explicit Commission direction, ratepayers will continue to pay for these types of shareholder activities. The Commission should therefore expressly find that SoCalGas cannot use ratepayer funds for activities related to the opposition to electrification of natural gas end-uses and require attestation by a SoCalGas corporate officer that no ratepayer funds were used for this purpose in all subsequent GRCs.

SoCalGas' request to significantly increase the number of natural gas vehicles ("NGVs") in its fleet and to triple investment in NGV refueling stations should also be largely denied. The purported need for NGVs, and the corresponding new refueling stations to serve them, is based on a self-imposed discretionary objective to have a majority NGV fleet. While SoCalGas attempts to justify its expansion of NGVs on the grounds that it is needed to help California meet its climate objectives, NGVs provide little, if any, climate benefit compared to conventional fuel, particularly when methane leakage is fully accounted for. In fact, the Legislature is clear that widespread transportation electrification is required to achieve California's greenhouse gas reduction requirements. SoCalGas' costly proposed expansion of its NGV fleet and refueling stations does not benefit ratepayers and is nothing more than a rushed effort to lock-in as much combustion-based infrastructure as possible before continued rapid advances in electric vehicles make their stranded asset risk even more apparent.

The time has also come for the Commission to end two separate ratepayer-funded natural gas research and development ("R&D") programs and consolidate the administration of R&D with the California Energy Commission ("CEC"). The CEC's Natural Gas R&D Program is substantially more transparent, offers meaningful opportunities for public engagement, and

avoids the conflicts evident in SoCalGas' administration of its program, which include funding studies with biased assumptions to make natural gas homes appear more economic than their all-electric counterparts as well as issuance of press releases that create the misleading impression that ratepayer-funded R&D grants are corporate gifts. To the extent the Commission is inclined to maintain overall natural gas R&D funding levels, it is free to increase funding to the CEC's Natural Gas R&D Program.

Finally, SoCalGas' request for \$21 million in costs associated with an application for a proposed transmission pipeline the Commission determined was unneeded must also be denied. Recovery of these costs is in direct contravention of Commission precedent and, with no shareholder assumption of risk, would create a perverse incentive for utilities to continue to propose superfluous fossil fuel infrastructure projects.

In sum, the Commission should disallow the following costs, listed in the order the request appears in the common briefing outline:⁴

- Gas Transmission (Common Briefing Issue #11):
 - o \$21.486 million for costs of the rejected North-South Pipeline application.
- Customer Service: Information SoCalGas Only (Common Briefing Issue #23.3)
 - \$0.566 million for requested cost increase to Customer Marketing and Communications (\$276,000), Creative Services (\$230,000), and Digital Engagement to create videos for disadvantaged communities (\$60,000).
- Customer Service: Technologies, Policies, and Solutions SoCalGas Only (Common Briefing Issue #23.5)
 - \$2.508 million for costs of all shared services of SoCalGas' Policy and Environmental Solutions Group.
 - \$0.448 million for half of the requested costs of non-shared services on SoCalGas' Policy and Environmental Solutions Group. Non-shared services include franchise-related activity which Sierra Club and UCS do not contest.
 - \$14.329 million for test year ("TY") 2019 costs of SoCalGas administration of an R&D program.

4

⁴ This list is limited to the specific issues examined by Sierra Club and UCS and does not constitute implicit agreement with requested costs in other areas of SoCalGas and SDG&E's GRC Applications.

Fleet Services (Common Briefing Issue #25)

- o \$1,694,620 reflecting a reduction in the requested Alternative Fuel Vehicle ("AFV") Premium from \$1.841 million to \$146,380 to only authorize the purchase premium for hybrid passenger vehicles.
- O At least \$1,876,560 to reflect at least a 42 percent reduction in the \$4.468 million in asserted costs of compliance with CARB Truck and Bus regulations to exclude replacement vehicles with a 2023 compliance deadline.
- o \$13.136 million, the difference between \$5.663 million in 2016 recorded expenditures for NGV refueling stations and TY 2019 request of \$18.799 million to maintain existing levels and exclude costs for new refueling stations.
- o \$2.617 million in costs by SDG&E for proposed new refueling stations.

Other Issues (Common Briefing Issue #50)

o An express finding that SoCalGas may not use ratepayer funds for activities related to the opposition to electrification of natural gas end-uses with verification required through attestation by a SoCalGas corporate officer.

II. EVIDENTIARY STANDARDS AND THE BURDEN OF PROOF

Two key principles inform Commission review of SoCalGas' revenue request. First, SoCalGas "has the burden of affirmatively establishing the reasonableness of all aspects of its request."⁵ To meet this burden, SoCalGas must "prov[e] by clear and convincing evidence that it is entitled to the relief it is seeking." The "burden is not on ORA or other intervenors to demonstrate that [the utility's] request is unreasonable." Accordingly, where SoCalGas "fails to demonstrate that its proposed revenue requirements are just and reasonable, the Commission has the authority to protect ratepayers by disallowing expenditures that the Commission finds unreasonable."8

⁵ Decision 15-11-021, Decision on Test Year 2015 General Rate Case for Southern California Edison Company, p. 8 (Nov. 12, 2015) ("D.15-11-021").

⁶ Decision 04-07-022, Opinion on Base Rate Revenue Requirement and Other Phase 1 Issues, p. 10 (July 16, 2004) ("D.04-07-022").

⁷ *Id*.

⁸ Decision 12-11-051, Decision on Test Year 2012 General Rate Case for Southern California Edison Company, p. 8 (Dec. 10, 2012) ("D.12-11-051").

Second, in determining whether costs should be imposed on ratepayers, the Commission examines the extent to which the proposed expense benefits "ratepayer and company interests." Thus, utility public affairs activities, such as interactions with state, regional, or local governments that "are, at best, of debatable value to ratepayers," are disallowed. Similarly, costs of communications that promote utility activities, such as a corporate responsibility report "to explain actions on safety, environment, and ethics," have been rejected as institutional advertising. 11

III. ARGUMENT

A. Gas Transmission (Common Briefing Issue #11): Recovery of Over \$21 Million in Expenses from the Rejected North-South Pipeline Application is Contrary to Well-Established Commission Precedent and Would Improperly Encourage Proposals for Costly and Unnecessary Fossil Fuel Infrastructure Projects.

It is well-established that cost recovery for expenses associated with a rejected application is unreasonable because it would force ratepayers to assume the risks and "become the utility's underwriter' for all cancelled projects." Yet SoCalGas nonetheless requests over \$21 million (\$7,162,000 annually for three years) for expenses associated with "the development and presentation to the Commission of the North-South Project" in Application 13-12-013. The Commission denied the application for the North-South Project in D.16-07-015, finding that SDG&E and SoCalGas "failed to demonstrate there is a need" for the project and that "various non-physical actions" offered lower cost solutions to "provide enhanced supply reliability." Accordingly, SoCalGas' \$21.486 million request for recovery of application costs must also be denied.

SoCalGas' claim that it is entitled to the costs associated with a rejected pipeline application because it has a continuing obligation to "study and report on the adequacy of their

⁹ D.04-07-022, p. 233.

¹⁰ *Id.* at pp. 230-33 (disallowing 25 percent of requested public affairs expenses).

¹¹ D.15-11-021, p. 362.

¹² Decision 89-12-057, *Re Pacific Gas & Electric Co.*, 34 CPUC 2d 199, 230 (Dec. 20, 1989) ("D.89-12-057") (citing D. 84-05-100).

¹³ Exh. 30, Bermel/Musich Direct Testimony (SoCalGas), pp. MAB-1:11-12, MAB-30-32.

¹⁴ Decision 16-07-015, *Decision Denying Application*, pp. 21, 25 (July 18, 2016) ("D.16-07-015").

entire system" does not withstand scrutiny. 15 The decision SoCalGas cites for support, D.06-09-039, addresses reliability standards, not cost recovery for unneeded projects. 16 In fact, "[t]he general rule for abandoned projects is well-settled. Utilities cannot recover the costs of plant that is not used and useful."17 The proposed North-South Project was never in service, never used and useful, and therefore cost recovery is not appropriate.

While the Commission has created a narrow exception for cost recovery "during periods of great uncertainty," those circumstances are far from present here, nor has SoCalGas even attempted to meet its burden to make such a showing. 18 Among other things, the utility must show "that the project ran its course during a period of unusual and protracted uncertainty" and "that the project was reasonable through the project's duration in light of both the relative uncertainties that then existed and of the alternatives for meeting the service needs of the customers." Unlike the oil embargo cited in D.89-12-057, no such unusual and protracted uncertainty existed at the time of the North-South Project. To the contrary, the Commission determined in D.16-07-015 that the uncertainty of gas supply and demand in the area served by the North-South Project was limited, finding that "Applicants have not proven either that gas demand is increasing or that customer supplies are decreasing to such an extent as to pose significant risk to the ability of SoCalGas to meet daily minimum flow requirements using existing tools available to it."²⁰ In addition, because the Commission found that numerous alternatives to the project, including both non-physical solutions like tariff changes as well as alternative pipeline solutions, could provide similar benefits at lower costs, the project was also not reasonable in light of the alternatives for meeting the service needs of the customers.²¹

Sound public policy also demands that utilities are incentivized to only propose projects that are needed, are an appropriate scale, and are the most cost-effective solution. If utilities can

¹⁵ Exh. 30, Bermel/Musich Direct Testimony (SoCalGas), p. MAB-31:23-24.

¹⁶ See Decision 06-09-039, Phase 2 Order Addressing Infrastructure Adequacy & Slack Capacity, Interconnection & operational Balancing Agreements, an Infrastructure Working Group, natural Gas Supply and Infrastructure Adequacy for Electric Generators, Natural Gas Quality, and other Matters, (Sept. 27, 2006).

¹⁷ Decision 91-12-076, Re Southern California Edison Co., 42 CPUC 2d 645 (Dec. 20, 1991) ("D.91-12-076") (rejecting engineering and environmental work for proposal to construct new dams and reservoirs). ¹⁸ D.89-12-057 (citing oil embargo as "period of dramatic and unanticipated change").

¹⁹ D.91-12-076 (quoting D.89-12-057).

²⁰ D.16-07-015, p. 12.

²¹ *Id.* at pp. 21-22.

expect rate recovery for rejected infrastructure proposals, they face no risk in putting forward costly and superfluous projects. Not only would these proposals come at ratepayer expense regardless of their merit, but also every time a utility proposes an unneeded infrastructure project such as the North-South Pipeline, ²² it diverts limited Commission and intervenor resources. Accordingly, the Commission must reject SoCalGas' \$21 million cost request because it is contrary to Commission precedent and because a clear message must be sent to utilities to propose only those projects that are needed and cost-effective.

B. Customer Service and Information (Common Briefing Issue #23.3): SoCalGas' Request for Increased Funding for Climate-Related Communications Should Be Disallowed.

SoCalGas requests a \$1.02 million increase in Customer Strategy and Engagement in part to increase communications to customers on climate and clean energy issues.²³ Of this request, increased funding for Customer Marketing and Communications (\$276,000), Creative Services (\$230,000), and Digital Engagement activities to create videos for disadvantaged communities (\$60,000), totaling \$566,000, should be disallowed for at least three reasons. First, because SoCalGas has provided vague and contradictory information on the focus and nature of these communications, it has not met its burden of "establishing the reasonableness of all aspects of its request."²⁴ Second, providing purported "climate education" is far beyond SoCalGas' core function to provide safe and reliable gas service; this type of communication is properly viewed as institutional advertising and is not appropriate for rate recovery. Third, SoCalGas communications to date, including a grossly misleading representation of the relative efficiency of gas and electric appliances, underscore its institutional bias toward fossil fuel technologies and the absurdity of awarding ratepayer money to develop communications on climate and energy issues to an entity whose shareholder interest is in the sale of fossil fuels.

_

²² The North-South Pipeline is not the only recent example of this type of infrastructural overreach. SoCalGas' request for a second, similar proposed pipeline was also determined to be unneeded, and rejected. Decision 18-06-028, *Decision Denying SDG&E and SoCalGas' Proposed Certificate of Public Convenience and Necessity for Proposed Gas Pipeline 3602, Reclassification of Gas Pipeline 1600 From Transmission to Distribution Service, and Redefinition of the Existing CPUC Reliability Criterion*, (June 26, 2018) (rejecting SoCalGas and SDG&E's request for new proposed 36" transmission pipeline).

²³ Exh. 156, Cheung Revised Direct Testimony (SoCalGas), p. ASC-19.

²⁴ D.15-11-021, p. 8.

1. SoCalGas' Request for Increased Customer Marketing and Communications Funding is Contradictory and Vague.

SoCalGas requests \$276,000 in increased funding for its Customer Marketing and Communications group to:

Allow SoCalGas to take a more proactive approach to inform customers about the role of renewable gas in meeting the state's goals to combat climate change, communicate the benefits of clean transportation in providing environmental benefits to customers especially in DACs, and educate customers on how SoCalGas is addressing its GHG emissions and SLCPs.²⁵

SoCalGas also requests \$230,000 in additional funding for Creative Services, to support the increased communications of the Marketing and Communications group. ²⁶ These increases in funding include non-labor costs for the additional customer communications, as well as four new full-time equivalents ("FTEs") to manage the increase in messaging. ²⁷ However, SoCalGas has not met its "burden of affirmatively establishing the reasonableness of all aspects of its request" because it has not sufficiently explained the content of the communications to justify its request or to demonstrate that the communications will be in the customer interest. ²⁸

During evidentiary hearings, the witness on "Customer Services – Information" could not provide basic details about the content or audience of the proposed new communications and appeared to contradict written testimony, leaving the Commission without clarity on the purpose of or need for the expanded funding. When asked about the content of the increased communications "to inform customers about the role of renewable gas in meeting the state's goals to combat climate change," SoCalGas testified that "we don't know exactly what the content is going to be." Furthermore, the witness testified that because "the communications may not have been yet developed," she could not specify which customer classes would receive them. When asked to confirm a definition of "renewable natural gas" as used in the witness's

²⁵ Exh. 156, Cheung Revised Direct Testimony (SoCalGas), p. ASC-19.

²⁶ *Id.* at ASC-20:12-14.

²⁷ *Id.* at ASC-18 (Request for 1 FTE Market Advisor and 1 FTE Communications Advisor for the Customer Marketing and Communications Group, plus 1 Project Manager and 1 Production Advisor for the Creative Services group).

²⁸ D.15-11-021, p. 8

²⁹ Tr. Vol. 18, 1638:16-18 (Magana, SoCalGas).

³⁰ *Id.* at 1637:24-26 ("I don't know exactly who will get -- these communications may not have been yet developed so it all depends on the content that we're developing.").

Direct Testimony, to provide clarity on which of many types of biomethane would be addressed in communications, the witness could not answer the question.³¹

Furthermore, the limited information that SoCalGas has provided on the content of the requested new communications is contradictory. Its written testimony states that the new communications would "inform customers about the role of renewable natural gas in meeting the state's goals to combat climate change" – implying that the communications would discuss the greenhouse gas benefits of renewable natural gas. However, the SoCalGas witness on this topic testified during hearings that the communications would instead "inform our customers on the *products and services that are available to them* in regards to renewable gas." Communications presenting information on the climate impacts of different fuels – especially when the fuels discussed are not available to the customer – have a different ratepayer value from communications on products and services available to the customer. Similarly, SoCalGas' written testimony states the new communications will "communicate the benefits of clean transportation in providing environmental benefits," implying that the requested communications would tell customers about the emissions from NGVs. SoCalGas testified to the contrary during hearings, stating that the communications would instead describe the products, services, and programs SoCalGas offers to its customers related to NGVs.

While SoCalGas asserted in oral testimony that the communications would inform customers about biomethane and NGV products and services available to them, these products and services do not exist. SoCalGas does not procure biomethane for sale to its customers.³⁵ Moreover, even if advertising on a third party's behalf was an appropriate use of ratepayer

3

³¹ *Id.* at 1628:8-14.

³² Compare Exh. 156, Cheung Revised Direct Testimony (SoCalGas), p. ASC-19 with Tr. Vol. 18, 1630: 9-12 (Magana, SoCalGas) (emphasis added), Tr. Vol. 18, 1634: 22-28 (Magana, SoCalGas) ("And as far as renewable gas and providing communications on that is to provide education and outreach on the available products and services to the extent that there is a product available to our residential customers or any customer, we would provide that information.")

³³ Exh. 156, Cheung Revised Direct Testimony (SoCalGas), p. ASC-19.

³⁴ Compare with Tr. Vol. 18, 1639:18-21 (Magana, SoCalGas) ("Q. So these communications will be primarily about products and services offered by SoCalGas related to natural gas vehicles? A. Products services and/or programs.").

³⁵ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-04, Q.5(a) ("SoCalGas currently does not procure any RNG"). SoCalGas stated that they recently entered into a contract for biomethane vehicle fuel for fleet vehicle use, not for resale to customers. Tr. Vol. 18, 1632:12-23 (Magana, SoCalGas).

funding, there are no third party providers selling biomethane to end users whose services SoCalGas could advertise. SoCalGas does not sell NGVs. The only existing product, service, or program related to NGVs offered by SoCalGas is its public NGV fueling stations; however, communications on this very limited issue can in no way justify the creation of four new FTE positions.

SoCalGas has not provided the Commission with a consistent or credible description of the content or purpose of the requested increase in customer communications. Without this basic information allowing the Commission to evaluate the reasonableness of the utility's request, the Commission is unable to evaluate the customer benefit of the increased work and SoCalGas' request for increased funding must be denied.

2. Communications Intended to Inform Customers about the Climate Change Impact of Natural Gas are Institutional Advertising and Inappropriate for Rate Recovery.

While SoCalGas requests the increased funding to "take a more proactive approach" to informing customers about the environmental benefits of biomethane and NGVs, broadening the purview of customer communications in this manner is an inappropriate use of ratepayer funding. Providing customers with purported "climate education" stretches far beyond SoCalGas' core function to provide safe and reliable gas service. These types of communications constitute institutional advertising that function to build the utility's reputation and are therefore properly funded by shareholders.

Communications "tending primarily to build the image of the company" are classified as institutional advertising, and utilities are not allowed to recover these expenses in rates.³⁸

11

_

³⁶ SoCalGas witness Rosalinda Magana testified at hearing that residential customers can procure biomethane for personal use, referring to a SoCalGas "Renewable Natural Gas Tool Kit," Tr. Vol. 18, 1633:18-24 (Magana, SoCalGas) (citing SoCalGas' "Renewable Natural Gas Tool Kit," Exh. 159R, SoCalGas Response to Data Request Sierra Club/UCS-SCG-03, Q.14, Attach. 1). However, the referenced document does not support the witness's statement. Of the 27 "Biogas Suppliers" listed in the Renewable Natural Gas Tool Kit, only one sells biomethane to the public, as a vehicle fuel. *See* Renewable Natural Gas Tool Kit, pp. 14-15. All other companies listed, the majority of which are headquartered outside of California, assist *owners of biomethane sources*, such as dairies or landfills, in designing and/or building a biomethane production facility. *See id.* (information on the specifics of each company can be found on the company websites listed in the SoCalGas Renewable Natural Gas Tool Kit).

 ³⁷ See Tr. Vol. 18, 1641:26-28 (Magana, SoCalGas).
 ³⁸ Decision 84-06-111, Re Pacific Telephone and Telegraph Company, 15 CPUC 2d 232, 1984 WL
 1021580 (Cal.P.U.C.) at *263 (June 13, 1984). See also Decision No. 86794, In re Southern California

Courts have distinguished institutional advertising, which results in "a mere fostering of goodwill," from appropriate customer communications, which "result in reductions in operating costs and more efficient service to the ratepayer."³⁹ The Commission has previously denied requests for customer communications on this basis. For example, the Commission rejected utility requests to ratebase informative materials, such as a report "to explain [the utility's] actions on safety, environment, and ethics," as improper institutional advertising. ⁴⁰ Similarly, a request by SDG&E to distribute communications educating customers on "energy supply pricing, peak-load problems, environmental considerations, the National Energy Conservation Policy Act (act), utility financing, and the general atmosphere in which SDG&E conducts its business" was denied, with the Commission agreeing with staff that communications on these topics were "corporate image building" that should not be borne by ratepayers. ⁴¹

SoCalGas' request to communicate with customers about climate change will serve only to foster goodwill for the company. While SoCalGas has not described the content of its intended future communications beyond the barest detail, examples of past customer communications obtained through discovery are clearly intended to build SoCalGas' corporate image and, alarmingly, foster customer complacency with the continued combustion of fossil fuels. For example, SoCalGas provided a flyer titled "Renewable Natural Gas: Part of California's Renewable Energy Future" as an example of past customer communications on biomethane. This flier describes biomethane production generally, stating that "Methane is captured rather than released into our atmosphere." The flyer neglects to mention that while methane may be captured, harmful criteria pollutants like NO_x and particulate matter are still released when the gas is burned, just like natural gas from fossil sources. It also neglects to mention that biomethane that leaks from a pipeline has the same damaging climate impact as fossil natural gas, or that the potentially available sources of biomethane are limited and at best, represent a small fraction of fossil gas demand. In addition to not presenting the full range of

Edison Co., 81 CPUC 49, 1976 WL 36453 (Cal.P.U.C.) at *23 (Dec. 21, 1976) ("All institutional advertising shall be disallowed for ratemaking purposes.").

³⁹ City of Los Angeles v. Public Utilities Commission, 7 Cal.3d 331, 351 (1972).

⁴⁰ D.15-11-021, p. 362.

⁴¹ Decision No. 90405, Re San Diego Gas & Electric Co., 1979 WL 462102 (June 5, 1979).

⁴² Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-03, Q.14, Attach. 2.

⁴³ *Id*.

facts about biomethane, there is no action the customer can take in response to receiving this flyer, as SoCalGas does not procure biomethane for sale to its customers. ⁴⁴ In this light, the flyer's statement that "SoCalGas is working diligently to bring cost-effective sources of RNG to its customers" can be seen as an attempt to make customers feel more positively about the utility, build its corporate image as a company that cares about greenhouse gas emissions, and provide a false sense that reliance on natural gas can continue because biomethane will someday be available as a climate friendly substitute fuel. ⁴⁵

Similarly, when asked for an example of customer communications on NGVs, SoCalGas provided a company YouTube video describing a heavy-duty vehicle engine sold by Cummins Westport. As an initial matter, SoCalGas has failed to explain why it is appropriate to use ratepayer funds to advertise a product sold by a third party private company. The video describes the technical specifications of the engine and only mentions SoCalGas at the beginning and the end, to bolster the company's image by delivering the message that "SoCalGas is leading the way to clean air technology for transportation." Moreover, this video further underscores the fundamental flaw in SoCalGas' request for \$60,000 to "target [disadvantaged communities] and climate change content." At the Public Participation hearing in Riverside, numerous SoCalGas ratepayers spoke out against the NGVs that SoCalGas uses their money to advertise, stating that they want SoCalGas to invest in electric vehicles instead, as "there's no longer any reason to tolerate trucks that pollute our air running on dirty fossil fuels like natural gas." If SoCalGas was authentic in its concern for frontline communities, it would listen to and respond

_

⁴⁴ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-04, Q.5(a) ("SoCalGas currently does not procure any RNG").

⁴⁵ *Id.* at SoCalGas Response to Data Request Sierra Club/UCS-SCG-03, Q.14, Attach. 2.

⁴⁶ Id. at SoCalGas Response to Data Request Sierra Club/UCS-SCG-03, Q.14.

⁴⁷ *Id.* at SoCalGas Response to Data Request Sierra Club/UCS-SCG-03, Q.14(a) (citing "Near-Zero NO_x Natural Gas Vehicle Engine (Extended)" video at timestamp 4:15–4:20).

⁴⁸ Exh. 156, Cheung Revised Direct Testimony (SoCalGas), p. ASC-22.

⁴⁹ Tr. Vol. 7, 287:28-288:3 (Tizoc Arenas, resident of Ontario). *See also* Tr. Vol. 7, 290:25-291:6 (Jesse Parks, resident of Riverside) ("I am asking SoCalGas as a Riverside resident, American, activist, student, youth, minority, but most importantly as a human to demonstrate their commitment to the health of my community by using money to invest into zero emission in electronic vehicles"), Tr. Vol. 7, 294:23-27 (Erica Ruiz, resident of San Bernardino) ("I'm here because I believe that SoCalGas should invest in zero emission vehicles. As someone who has lived here my whole life, I have personally suffered from the poor air quality."), Tr. Vol. 7, 297:24-28, 298:1-11 (Bernard De La Garza, resident of San Bernardino) ("I believe that my utility bill should fund investments that agree with the community such as zero emission vehicles. . . . That's what the community wants.").

to community concerns, not attempt to "educate" residents on what is best for them. Indeed, with only 614 views on the natural gas engine video in the 14 months after it was first posted, this is not a message in which the community appears to be interested. ⁵⁰

Customer communications that provide selective information and do not ask customers to change their behavior in any way or to take any action in response in no way "result in reductions in operating costs or more efficient service." SoCalGas' request to use its ratepayers' money to send these same ratepayers advertisements building its corporate image is not a permissible use of customer funds and must be denied.

3. SoCalGas is Not a Reliable Information Source on the Benefits or Climate Change Impact of Natural Gas.

Given its shareholder and corporate interest in maintaining demand for natural gas, SoCalGas is not an impartial source for information intended to educate customers on the climate benefits of natural gas or other fossil fuels, and it is inappropriate to award it customer money to promote its corporate interest. Just as the Commission has previously disallowed utility requests to communicate with customers about topics where the interests of ratepayers and the utility are not aligned, these costs should be disallowed here. For example, the Commission rejected Pacific Gas & Electric Company's ("PG&E") rate recovery request for communications on nuclear power, concluding that "PG&E's simplified, unilateral presentations on the subject of nuclear generation are more political than impartially informative." Similar logic applies here. Past customer communications obtained by Sierra Club and UCS demonstrate that SoCalGas' previous communications on this topic presented information to customers that not only fails to be impartial, but also is inaccurate. For example, as part of a newsletter sent to SoCalGas Commercial and Industrial customers, SoCalGas included a chart and other information taken from the American Gas Association, a trade association for companies that sell natural gas. Similar logic applies here.

⁵⁰ Exh. 159-R, SoCalGas Response to Data Request Sierra Club/UCS-SCG-03, Q.14, p. 2 (The video was posted on January 31, 2017, and as of April 5, 2018, had 614 views).

⁵¹ City of Los Angeles, 7 Cal.3d at 351.

⁵² Decision No. 84902, *In re PG&E Co.*, 78 CPUC 638 at *43 (Sept. 16, 1975).

⁵³ Exh. 160, SoCalGas Response to Data Request Sierra Club/UCS-SCG-02, O.19.

In the chart in the newsletter, reproduced below, SoCalGas compared the most efficient gas furnace available with an electric heating system so inefficient it could not be sold in California.⁵⁴

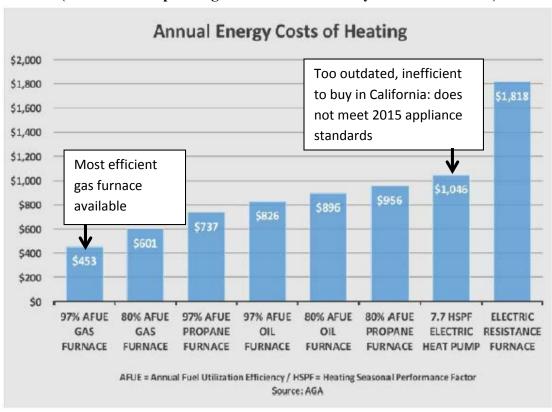


Figure 1. Chart Included in SoCalGas Commercial-Industrial ("C&I") Newsletter (Text Boxes Explaining Efficiencies Added by Sierra Club/UCS)

Using this apples to oranges comparison, SoCalGas then communicated to its customers that "[w]hen you compare annual operating costs of heating equipment and account for equipment efficiency, natural gas is also the best deal." SoCalGas admitted it would be reasonable that a customer who received this communication would conclude a gas furnace is the option with the lowest annual energy cost. Similarly, the SoCalGas video advertising the Cummins Westport

⁵⁴ See id.; Exh. 162, Energy Star Most Efficient 2018 – Furnaces (showing "exceptional furnaces [that] represent the leading edge in energy efficient products," all of which range in Annual Fuel Utilization Efficiency ("AFUE") from 97-98.7%); Exh. 163, CEC, 2015 Appliance Efficiency Regulations (July 2015), Table C-2 (minimum Heating Seasonal Performance Factor ("HSPF") for split system heat pumps under California 2015 appliance standards is 8.2). *Compare with* Exh. 164, Energy Star Most Efficient 2018 – Central Air Conditioners and Air Source Heat Pumps, p. 14 (showing most efficient heat pump available with HSPF of 13.5).

⁵⁵ Exh. 160, SoCalGas Response to Data Request Sierra Club/UCS-SCG-02, Q.19.

⁵⁶ Tr. Vol. 18, 1654:18-23 (Magana, SoCalGas).

engine claims that "most electric vehicles are actually charged using electricity generated by natural gas power plants." This claim is highly misleading, as over 50% of the electricity consumed in California today comes from carbon-free sources. In fact, using the final grid emissions for California electricity sources in 2016, battery electric buses have 77 percent lower global warming emissions than buses fueled by compressed natural gas ("CNG"). 59

SoCalGas has acknowledged the negative impact of electrification of transportation and buildings on its shareholder interest. 60 Misleading communications such as these demonstrate the imprudence of awarding ratepayer dollars to a utility to design customer communications that serve only to obstruct progress on electrification in service of its corporate interest.

- C. Customer Service: Technologies, Polices, and Solutions SoCalGas Only (Common Briefing Issue #23.5).
 - 1. The Policy and Environmental Solutions Group ("Policy Group")
 Advances SoCalGas' Shareholder Interest to Impede Electrification
 of Natural Gas End-Uses and its Costs Should Not Be Borne by
 Customers.

The SoCalGas Policy Group is effectively a SoCalGas lobbying arm advocating in service of its shareholder interest to maintain California's reliance on natural gas. For far too long, ratepayers have improperly shouldered the costs of SoCalGas' aggressive anti-electrification advocacy before state agencies and local governments. The communications from the Policy Group to state agencies and local governments are replete with misinformation and omission, do not provide ratepayer benefit, and are therefore not entitled to rate recovery. Accordingly, SoCalGas' request for \$2.508 million for shared services of its Policy Group

⁵⁷ See Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-03, Q.14(a) (citing "Near-Zero NO_x Natural Gas Vehicle Engine (Extended)" video at timestamp 2:55–3:01).

⁵⁸ See CEC, "Total System Electric Generation,"

http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html (showing California's power mix in 2017 was 29% renewables, 9% nuclear, and 14.7% large hydro).

⁵⁹ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 19:1-4.

⁶⁰ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 5, Sempra Energy, SoCalGas and SDG&E, Form 10-K Annual Report (Feb. 27, 2018).

⁶¹ The shared services performed by the Policy Group include engaging with "local and state regulatory organizations as they develop rules and regulations on air quality, climate change and energy utilization." Exh. 137, Alexander Direct Testimony (SoCalGas), p. LLA-25:3-7. This work before CARB, the CEC, and air districts includes "attendance at meetings and workshops, evaluation of technologies and monitoring systems, preparation of comments, and education of customers." *Id.* at p. LLA-27:26-28:5.

should be rejected in its entirety.⁶² The Commission should also deny \$0.448 million of SoCalGas' request for non-shared services costs, representing half of the TY 2019 request.⁶³

Disallowance of SoCalGas' policy activities is firmly grounded in Commission precedent. The extent to which utility activity serves shareholder as opposed to ratepayer interests is determinative of whether those costs should be imposed on customers or disallowed. Moreover, as the Commission recently recognized, SoCalGas' shareholder interest in maintaining gas demand creates an incentive to act against its ratepayers' interests in reducing gas consumption. Thus, the Commission stripped SoCalGas of its "role in statewide code and standards advocacy" due to the "potential for SoCalGas to misuse ratepayer funds" following the discovery of "internal emails among SoCalGas managers discussing the potential for the proposed standards to raise the cost of some gas furnaces and thereby encourage fuel switching away from natural gas." 65

The Policy Group engages in a similar misuse of ratepayer funds. Like its efforts to block efficiency standards that could encourage fuel switching away from natural gas, the Policy Group consistently seeks to block measures by state agencies and local governments that would replace natural gas end uses with electric options despite the critical importance of reducing reliance on fossil fuels to achieve California's greenhouse gas reduction objectives. ⁶⁶ In its

⁶² *Id.* at p. LLA-25:21-26.

⁶³ *Id.* at p. LLA-20, Table LLA-11. Non-shared services include both (1) work related to franchise agreements with municipalities and (2) "analysis, strategy development and implementation on local sustainability planning and on other local and regional planning initiatives." *Id.* at p. LLA-21:6-7. Sierra Club and UCS do not contest costs for the franchise-related activity. However, SoCalGas has stated it does not track costs between the two categories of activities. Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-02, Q.4. Lacking this information, Sierra Club and UCS have therefore assumed half of the expenses for non-shared services are for franchise activity and do not contest half of the \$0.897 million request.

⁶⁴ See, e.g., D.04-07-022, pp. 228-33, (disallowing portion of requested public affairs expenses to "strike[] a fair balance of ratepayer and company interests").

⁶⁵ Decision 18-05-041, *Decision Addressing Energy Efficiency Business Plans*, pp. 139, 141-44 (June 5, 2018), http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M215/K706/215706139.PDF. The emails also detail "several situations in which SoCalGas appears to have frustrated the other IOUs' efforts to advance higher standards, including backing out of drafting a joint letter just one day before the response deadline to a 2017 DOE request for information (despite having decided a week earlier that they would not sign on)." *Id.*

⁶⁶ As more fully discussed in the Sierra Club/UCS Testimony, "California must burn far less natural gas in the future than it does today" in order to make the reductions in global warming emissions required by California law. *See* Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 4 (citing 2017 Climate Change Scoping Plan, p. 66 ("Moving forward, reducing use of fossil natural gas wherever

application, SoCalGas has failed to demonstrate that these activities are intended to lower utility bills for ratepayers, or to improve the safety or reliability of gas service. For example, in comments to the CEC on the Integrated Energy Policy Report proceeding, the Policy Group went so far as to assert that "Electrification of Final End-Uses Impedes Implementation of Climate **Goals**."⁶⁷ The Policy Group separately argued against including building electrification targets in the process to double energy efficiency savings as required by Senate Bill 350 by stating that electrification of final end-uses would "decelerate achievement of the state's climate goals."68 SoCalGas' rationale for these assertions is that electrification might preclude the use of renewable gas. ⁶⁹ However, this claim is entirely without merit: "Even if California's supply of biomethane is used exclusively in buildings, and not used in other sectors like electricity generation or transportation, biomethane could replace no more than 10 percent of gas demand from buildings statewide." Regardless of whether California's biomethane supply is successfully developed and devoted entirely to the building sector, electrification will still be needed. SoCalGas' efforts to delay action on building electrification are against ratepayers' interest because "delayed action on transitioning space and water heating to electricity will increase both the total cost of the transition and the cumulative emissions."71

Indeed, SoCalGas' selective statements to policymakers are nowhere more apparent than in its communications on biomethane. As illustrated in the graph below, even if potential sources of biomethane from waste were developed, this fuel could meet only a small fraction of California's current demand for natural gas.⁷²

_

possible will be critical to achieving the State's long-term climate goals.")).

⁶⁷ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 6(i), CEC Docket No. 17-IEPR-06, SoCalGas, *Comments on the IEPR Staff Workshop on 2030 Energy Efficiency Targets*, p. 3 (June 30, 2017) (emphasis in original).

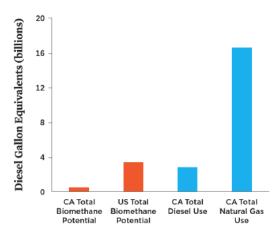
⁶⁸ *Id.* at Attach. 6(j), CEC Docket No. 17-IEPR-06, SoCalGas, *Comments on CEC Staff's Two Draft Papers on SB 350 Energy Efficiency Savings Doubling Targets*, p. 2 (Aug. 3, 2017) (emphasis added). ⁶⁹ *Id.* at Attach. 6(i), CEC Docket No. 17-IEPR-06, SoCalGas, *Comments on the IEPR Staff Workshop on 2030 Energy Efficiency Targets* (June 30, 2017); *see also id.* at Attach. 6(f), CEC Docket No. 17-IEPR-06, SoCalGas, *Comments on the Joint Agency IEPR Workshop on 2030 Energy Efficiency Targets* (Feb. 15, 2017).

⁷⁰ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 12.

⁷¹ *Id.* at pp. 13-14 (citing Attach. 8, Imran A. Sheikh, *Lowest cost reduction of space and water heating emissions in California* (Nov. 2017)).

⁷² Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 8. Other biomethane potential studies yield similar result. *Id.* at p. 7. While SoCalGas cites to a memo prepared for it by the consultancy ICF to support its claims that biomethane is a feasible alternative to electrification, the report does not support

Figure 2. Availability of Biomethane from Waste Compared with Diesel and Natural Gas Use in California⁷³



The amount of biomethane potentially available in California is much smaller than the amount of diesel and natural gas used in the state.

However, despite the limited potential for biomethane to replace fossil natural gas consumption, SoCalGas recommends it with abandon, suggesting biomethane as a viable alternative to not only building energy use, but also electricity generation, city transit fleets, heavy-duty vehicles and freight movement, and rail.⁷⁴ The Policy Group's communications never mention the limited potential of this resource to replace current uses of fossil fuels, giving policymakers the false impression that biomethane can replace sufficient fossil natural gas and therefore no action is needed to electrify end uses.⁷⁵

_

SoCalGas' arguments. Exh. 145R, SoCalGas Response to Data Request Sierra Club/UCS-SCG-09, Q.9, attaching Memorandum from Philip Sheehy, ICF, to Allison Smith, SoCalGas, Re: "Re-Assessment of Renewable Natural Gas" (Feb. 2016). ICF's estimate for California biomethane potential would still meet a mere 5-9 percent of California's demand for natural gas. *Id.* at p. 41. Furthermore, this estimate includes synthetically produced methane through the thermal gasification of agricultural residue and forestry residue, which does not fall with the definition of biomethane under California law. *Id.* at pp. 39-40; Health and Safety Code § 25420 (defining biomethane as "gas that is produced from the anaerobic decomposition of organic matter" that is treated to meet standards for injection into a common carrier pipeline). In addition, "[w]hile it is technically feasible to convert additional sources of biomass such as wood or dedicated energy crops into synthetic biomethane, these sources are markedly different in terms of cost-effectiveness and climate benefits compared to biomethane from landfills, dairies, and wastewater." Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 6, fn. 17.

⁷³ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), pp. 7-8 (citing Attach. 3, Union of Concerned Scientists, *The Promises and Limits of Biomethane as a Transportation Fuel*, p. 2 (May 2017)).

⁷⁴ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), pp. 20-21.

⁷⁵ SoCalGas also misrepresented the requirements of state laws to reduce methane emissions when it testified that "the state's goals require capture of 40 percent of methane emissions." Exh. 137, Alexander Direct (SoCalGas), p. 4:16. In fact, statute requires "reduction in the statewide emissions of methane by

The Policy Group has also actively sought to impede procurement of electric transit over natural gas alternatives. On multiple occasions, SoCalGas has told regional planning entities and local governments that buses powered by renewable natural gas have emissions lower than electric buses. ⁷⁶ For example, SoCalGas wrote to CARB that "the use of RNG [renewable natural gas] and low-NO_x CNG engines is more effective at reducing GHGs than battery electric or fuel cell powered buses that are commercially available today."⁷⁷ This statement is false, both when considering vehicle tailpipe emissions and from a life cycle perspective. ⁷⁸ Considering a CNG vehicle with the latest NO_x emission controls, a battery electric vehicle on the 2016 grid has 41 percent lower life cycle global warming emissions than a CNG vehicle fueled with biomethane.⁷⁹

Buses Powered by Biomethane from Landfills Buses Powered by Today's Fuels 2,500 Grams CO,e per Mile 2,000 1,500 1.000 500 0 CNG Battery Fuel Cell Low-NO_x Fuel Cell Battery

Figure 3. Life cycle global warming emissions of transit buses powered by diesel, natural gas, biomethane, electricity, and hydrogen.⁸⁰

Biomethane generates the lowest carbon emissions when used to produce electricity or hydrogen for battery and fuel cell electric vehicles. Battery electric vehicles on today's grid also have lower global warming emissions than low-NO, CNG vehicles fueled with biomethane.

Notes: CO₂e stands for carbon dioxide equivalent, Bus-related emissions are a representative example of emi Biomechane emissions are based on landfill gas, as it is the predominant source of biomechane emissions are based on landfill gas, as it is the predominant source of biomechane consumed in California (CARB 2017b). The dashed line indicates emissions from a battery electric bus using an estimate of California's grid mix in 2020; it assumes 50; it assumes 50 (per Senate Bill 350) and 50 percent of electricity comes from natural gas power plants. This represents a conservative estimate of California's future sources of electricity. Life cycle emissions include those from fuel production ("upstream") and fuel consumption ("taipipe").

⁸⁰ *Id.* at p. 18 (citing Attach. 3, UCS 2017, p. 6).

^{40 %.&}quot; Health and Safety Code § 39730.5 (emphasis added). "Capture" of methane is not required because methane emissions can also be reduced by preventing methane from forming in the first place, for example by increasing landfill diversion or changing manure management practices. Tr. Vol. 17, 1463:3-14 (Tomkins, SoCalGas).

⁷⁶ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 15 (citing Attach. 6(a), SoCalGas, Comments to Southern California Association of Governments on the Regional Transportation Plan/Sustainable Communities Strategy, p. 3 (Feb. 1, 2016); see also Attach. 6(b), SoCalGas and SDG&E, Written Comments to CARB on the 2030 Target Scoping Plan Update Concept Paper, p. 5 (July 8, 2016)).

⁷⁷ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 6(b), SoCalGas and SDG&E, Written Comments to CARB on the 2030 Target Scoping Plan Update Concept Paper, p. 5 (July 8, 2016). ⁷⁸ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 15.

⁷⁹ *Id.* at p. 19:9-14.

The Policy Group also created a series of flyers in an attempt to dissuade Los Angeles Metro from committing to phase-out natural gas buses. One flyer included the heading "Lower Emissions than Electric," and provided statistics claiming that "low NO_x" natural gas buses provide greater greenhouse gas emissions than electric buses. ⁸¹ This claim is a labored misrepresentation of a study by the consultancy Ramboll that disingenuously compares greenhouse gas emissions under a scenario where CNG buses are fully deployed in 2018 while electric vehicles are not fully deployed until in 2038. ⁸² The artificial 20-year head start for CNG buses allows the natural gas bus scenario to generate lower emissions than the electric scenario. ⁸³

SoCalGas' reliance on the Ramboll study is related to another inaccurate claim the utility often makes before policymakers: that electric buses will not be available for 20 years. For example, in comments written in 2017 on the CEC's Integrated Energy Policy Report, SoCalGas claims that transitioning natural gas buses is preferable because the state can switch to natural gas "in the next several years and not wait 20 years – a generation – before we begin to realize these emission reductions." SoCalGas similarly tried to dissuade the city of Indio from including a statement supporting electric vehicles in the city's General Plan Update by stating that "electrification is either not a readily economically feasible option or has a long timeline projection for development. Such is the case, currently, for . . . buses." Contrary to SoCalGas' assertions, electric buses are readily available today with 22 models offered from eight manufacturers. Over 100 electric buses have been deployed in California and more than 300 additional electric buses are on order. An additional 285 zero-emission transit buses were

15205.pdf).

⁸¹ *Id.* at pp. 19-20 (citing Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-06, Q.7, Attachment "LA Metro Fact Sheet – Final Mar 2017.")

 ⁸² Id. at p. 19:21-27 (citing M.J. Bradley & Associates and Ramboll Environ., Zero Emission Bus Options: Analysis of 2015-20155 Fleet Costs and Emissions (Sept. 29, 2016),
 http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-10/TN220202 20170714T152616 SoCalGas Comments Zero Emission Bus Options Analysis of 20

⁸³ *Id.* at 19:26-27.

⁸⁴ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 20 (citing Attach. 6(a), SoCalGas, Comments to Southern California Association of Governments on the Regional Transportation Plan/Sustainable Communities Strategy, p. 3 (Feb. 1, 2016)).

⁸⁵ Id. at p. 20:10-13 (citing Attach. 6(p), SoCalGas, Letter to Leila Namvar, Assistant Planner, City of Indio, Re: Indio General Plan Update, p. 2 (undated)).

⁸⁶ *Id.* at p. 20:15-16 (citing CARB, *Innovative Clean Transit*, Slide 12 (Dec. 15, 2017), https://arb.ca.gov/msprog/ict/meeting/mt171215/171215presentation.pdf).

⁸⁷ Id. at p. 20:16-17 (citing CARB, Innovative Clean Transit, Slide 10 (Dec. 15, 2017),

recently awarded to California transit agencies from the California State Transportation Agency. ⁸⁸

SoCalGas has also misrepresented the cost of electric buses, suggesting in comments to the CEC on the Integrated Energy Policy Report that the "use of electric buses in lieu of other alternate fuels and technologies will be extremely expensive." However, the total cost of ownership for a battery electric bus is competitive with diesel and natural gas technologies today. 90

While SoCalGas' intervention in state agency policy proceedings and the procurement decisions of local governments may benefit its shareholders, its dissemination of false or misleading information to local decision-makers undermines the achievement of California's climate objectives and is not an activity that should be funded by SoCalGas ratepayers. The Commission must end SoCalGas' efforts to hold back climate progress at ratepayer expense, find that the Policy Group is properly viewed as a lobbying arm serving the shareholder interest of SoCalGas, and disallow the requested costs for its activities.

2. Ratepayer-Funded Natural Gas Research and Development Should be Administered Through at Single Program at the California Energy Commission.

SoCalGas' \$14.329 million 2019 TY request for Research, Development, and Demonstration ("R&D"), a 35 percent increase from 2016 levels, should be rejected in its entirety. SoCalGas' R&D program operates at Commission discretion. While Commission authorization of rate recovery for utility R&D expenses may have served a purpose when first

⁸⁸ *Id.* at p. 20:17-19 (citing California State Transportation Agency, *Transportation Agency Awards* \$2.6 *Billion in Funding to Support Transit and Intercity Rail* (Apr. 26, 2018), https://calsta.ca.gov/2018/04/26/transportation-agency-awards-2-6-billion-in-funding-to-support-transit-and-intercity-rail/).

22

https://arb.ca.gov/msprog/ict/meeting/mt171215/171215presentation.pdf).

⁸⁹ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), pp. 20:22-21:2 (citing Attach. 6(o), CEC Docket No. 17-IEPR-01, SoCalGas, *Comments on the Proposed Final 2017 Integrated Energy Policy Report*, p. 4 (Feb. 7, 2018)).

⁹⁰ *Id.* at p. 21:2-3 (citing CARB, 5th *Innovative Clean Transit Workgroup Meeting*, Slide 40 (June 26, 2017), https://arb.ca.gov/msprog/ict/meeting/mt170626/170626 wg pres.pdf. Development of commercial electric vehicle rates such as those proposed by SCE offer even more favorable charging rates than today).

⁹¹ Exh. 137, Alexander Direct Testimony (SoCalGas), p. LLA-9.

⁹² Pub. Util. Code § 740; Tr. Vol. 17, 1477:9-12 (Tomkins, SoCalGas) ("Q. Is it your understanding the Commission has the discretion to disallow all or part of SoCalGas's R&D requests? A. That is correct.").

permitted by statute in 1973,⁹³ SoCalGas' R&D program is no longer needed or appropriate given the creation of a separate CEC-administered, ratepayer-funded natural gas R&D program. In contrast to SoCalGas' R&D program, the CEC's Natural Gas R&D Program provides meaningful opportunities for public participation and greater assurance that funding aligns with California's decarbonization priorities. To the extent the Commission believes overall levels of ratepayer-funded natural gas R&D should be maintained, it can increase funding to the CEC's Natural Gas R&D Program.

a) In Contrast to SoCalGas' R&D Program, the CEC-Administered, Ratepayer-Funded Natural Gas R&D Program is More Transparent and Has Meaningful Opportunities for Public Engagement.

The CEC's Natural Gas R&D Program originated with Assembly Bill ("AB") 1002 (2000), which provided a funding vehicle for public interest natural gas R&D through a natural gas consumption surcharge. The Commission implemented AB 1002 in D.04-08-010, "appoint[ing] an administrator, the California Energy Commission (CEC), to improve gas energy efficiency and environmental quality, develop renewable technologies, and otherwise provide benefits to the public." The Commission approved the CEC's proposed \$24 million budget for implementation of the Natural Gas Research and Development Program in 2016 and 2017 in Resolution G-3519. SoCalGas has recently proposed CEC-administered R&D funding be doubled and offered "to work with CEC staff to prepare a letter proposal to the CPUC."

The CEC's Natural Gas R&D Program is transparent, responsive, and affords meaningful opportunities for public participation. Each year, the CEC holds a public workshop where staff "present the proposed natural gas research initiatives," with recommendations "considered and used to refine" research priorities.⁹⁷ CEC staff also provide written responses to each public comment.⁹⁸ In contrast, SoCalGas' administration of its ratepayer R&D funding has "no public

⁹³ Pub. Util. Code § 740 (added by Stats. 1973).

⁹⁴ Decision 04-08-010, Order Regarding Implementation of Assembly Bill 1002, Establishing a Natural Gas Surcharge, p. 2 (Aug. 19, 2004).

⁹⁵ CPUC, *Resolution G-3519* (Sept. 30, 2016), http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M167/K772/167772745.PDF.

⁹⁶ Exh. 142, CEC, Staff Report: Natural Gas Research and Development Program, Proposed Program Plan and Funding Request for Fiscal Year 2017-2018, Appendix C, p. C-2.

⁹⁸ *Id.* at Appendix B (specific responses to stakeholder comments are available at

workshops" and corresponding opportunity for public engagement. 99 While SoCalGas attempts to reference its GRC as a vehicle for public participation, this is wholly insufficient for several reasons. First, participation in a GRC, which calls for a motion for party status, data requests, testimony, cross-examination, and briefing, is far too high a barrier to enable public engagement. Second, SoCalGas' GRC testimony provides limited information on potential projects. SoCalGas has ultimately funded endeavors, such as a study that purported to analyze the "technical, economic and market outlook" of mixed-fuel (gas and electric) zero-net-energy ("ZNE") homes over electric-only homes, that were nowhere identified in their GRC R&D request. 101 Third, SoCalGas has revealed itself to be extremely hostile and unresponsive to public questions and concerns on potential R&D funding in its GRC. When SoCalGas was asked how it would ensure a proposed power-to-gas project, for which it is requesting \$1.7 million in R&D funding, would only utilize surplus renewable energy and therefore not increase greenhouse gas emissions, SoCalGas stated this question was "outside the scope of the subject matter involved in the pending proceeding." ¹⁰² SoCalGas has also sought to exclude evidence in the Sierra Club/UCS Testimony raising concerns about implementation of its R&D program. ¹⁰³ Whereas the CEC "benefits from and appreciates" public comment in implementation of its ratepayer-funded natural gas R&D program, ¹⁰⁴ SoCalGas aggressively attacks public concerns over its administration of ratepayer R&D money to keep them from Commission consideration.

http://www.energy.ca.gov/research/notices/2018-01-

²⁵ workshop/Appendix B Workshop Questions and Answers.pdf).

⁹⁹ Tr. Vol. 17, 1483:8-9 (Tomkins, SoCalGas). While SoCalGas references its annual R&D reports, these are retrospective reports issued after funding decision have been finalized. *See* Tr. Vol. 17, 1481:11-20. ¹⁰⁰ Tr. Vol. 17, 1481:11-17 (Tomkins, SoCalGas).

¹⁰¹ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-05, Q.2 (SoCalGas' Zero Net Energy Assessment Report). When asked to identify the section of its previous application that authorized the study, SoCalGas referred to testimony stating funding would be directed to the "[d]evelopment of efficient natural gas technologies to support" ZNE buildings. Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-04, Q.4(b)(ii) (citing Attach. 14, Excerpts of Exh. SCG-13-R, Revised Direct Testimony of Jeffrey Reed in A.14-11-004, pp. JGR-12–13 (Mar. 2015)).

¹⁰² Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-06, Q.2(c).

¹⁰³ SoCalGas & SDG&E Opening Brief on Evidentiary Objections to Exhibit 475 (Aug. 13, 2018), Attach. A, p. A-7 (seeking to exclude entirety of Sierra Club/UCS Testimony raising concerns over proposed funding of power-to-gas project).

¹⁰⁴ Exh. 142, CEC, Staff Report: Natural Gas Research and Development Program, Proposed Program Plan and Funding Request for Fiscal Year 2017-2018, p. 2.

b) Sole CEC Implementation of Natural Gas R&D is Needed to Ensure Objective Analysis and That Project Funding is Consistent with California's Decarbonization Objectives.

The need for administration of R&D funding by an impartial agency with an accessible, transparent process is all the more apparent from a review of past SoCalGas funding practices. For example, SoCalGas spent \$384,000 of R&D funding on a study to examine the relative costs of gas-fueled and all-electric ZNE homes, which it then used as the basis for its arguments at the CEC that renewable natural gas should be used in residential buildings instead of electrification. To reach its conclusions, the study assumed use of the most efficient gas appliance available on the market and compared that to a home using an inefficient electric model. Other key assumptions, such as efficiency of electric water heating, were not disclosed.

¹⁰⁵ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-05, Q.1, Attachment 2017 RD&D Report, p. 52 (excerpt); Attach. 6(m), CEC Docket No. 17-IEPR-01, SoCalGas, *Comments on the Draft 2017 Integrated Energy Policy Report*, p. 5 (Nov. 13, 2017).

Figure 4. Excerpt from Navigant Report: Strategy and Impact Evaluation of Zero-Net-Energy Regulations on Gas-Fired Appliances (Text Boxes Added by Sierra Club/UCS)¹⁰⁶

Table C-1. Baseline and ZNE Building Features for Mixed-Fuel and Electric-Only Homes

Fuel Type		Mixed-Fuel		Electric-Only	
		Baseline	ZNE	Baseline	ZNE
Foundation Insulation		None	R-10	None	R-10
Framing / Insulation		2x4, 16in oc, R-15	2x6, 21in oc, R-21	2x4, 16in oc, R-15	2x6, 21in oc, R-2
Attic Type / Insulation		R-38	R-60	R-38	R-60
Internal Insulation		R-5 wall sheathing; R-15 internal walls	R-10 wall sheathing; R-21 internal walls	R-5 wall sheathing; R-15 internal walls	R-10 wall sheathing; R-21 internal walls
Air Sealing		5 ACH	2 ACH	5 ACH	2 ACH
Windows		Dual-pane, low-e, U 0.32, SHGC 0.25	Dual-pane, low-e, R-5, U 0 26-0 29, SHGC 0.19-0.22	Dual-pane, low-e, U 0.32, SHGC 0.25	Dual-pane, low-e, R-5, U 0.26-0.29, SHGC 0.19-0.22
	100000000000000000000000000000000000000	efficient·gas·	► 16 SEER A/C; 0.96 EF tankless combination space and water heating system w/ hydronic air handler	ce 14 SEER, 8.6 g HSPF heat pump	16 SEER, 9.3 HSPF heat pump
HVAC System		14 SEER A/C; 80% gas furnace			
Duct Insulation		R-8, 5% leakage	R-8, 5% leakage	Best-systems·have·SEER·28·/· HSPF·13.5,·i.e.··50%·more· efficient·¶	
Water Heater		0.62 EF gas storage	0.96 EF tankless combination space and water heating system	Heat pump water heater heater	
Plumbing Insulation		R-2, trunk	R-2, manifold	R- Efficiency-not impossible-to	

¹⁰⁶ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 45:3-4 (citing Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-05, Q.1, Attachment 2017 RD&D Report at 52 (excerpt)); Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-05, Q.2 (Table C-1); Exh. 162 (showing "exceptional furnaces [that] represent the leading edge in energy efficient products," all of which range in AFUE from 97-98.7%); Exh. 164, p. 14 (showing most efficient heat pump available with HSPF of 13.5).

The study also did not appear to include the cost of gas pipeline infrastructure, either to construct the gas distribution network or to connect the home to the distribution system. ¹⁰⁷ SoCalGas' use of ratepayer funding to commission a study that it never even identified in its GRC testimony and that used biased assumptions to favor continued reliance on natural gas is wholly inappropriate and underscores the need for CEC-administration of all natural gas R&D funding.

In addition to its lack of bias, the CEC is better able to ensure funding is directed at projects that further California's environmental objectives. For example, the Sierra Club/UCS Testimony identifies a number of environmental concerns with SoCalGas' proposed \$1.7 million funding for power-to-gas, an inefficient synthetic process to create methane through hydrolysis and methanation where none would otherwise exist. ¹⁰⁸ Notably, the CEC has declined to include power-to-gas in the 2018-2020 Electric Program Investment Charge ("EPIC") Investment Plan or as part of its natural gas R&D program, and the Commission has also rejected requests to classify power-to-gas as eligible to count toward energy storage targets. ¹⁰⁹ While SoCalGas may have a different view of project benefits, this only highlights the importance of CEC-administration of ratepayer R&D funding so that diverse stakeholder viewpoints can be effectively solicited, impartially weighed, and resolved.

c) SoCalGas Has Inappropriately Used Ratepayer-Funded R&D Grants for its Public Relations Benefit.

Administration of R&D funding through the CEC will also avoid SoCalGas' improper characterizations of R&D grants as corporate philanthropy. For example, in a SoCalGas-authored press release titled "SoCalGas Donates \$100,000 to Support Cal State LA Combustion Engineering Research," SoCalGas described this R&D funding as "a gift" and stated that SoCalGas is "committed to giving back to the communities that it serves." SoCalGas' press

¹⁰⁸ *Id.* at pp. 43:12-44:18 (Sierra Club/UCS Motion for Reconsideration pending to admit testimony into evidence).

¹⁰⁷ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 45.

<sup>Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), pp. 43:7-8 (citing CEC Docket No. 17-EPIC-01, CEC, EPIC Proposed 2018-2020 Triennial Investment Plan (Apr. 2017) (adopted on Apr. 27, 2017)); Exh. 142, CEC, Staff Report: Natural Gas Research and Development Program, Proposed Program Plan and Funding Request for Fiscal Year 2017-2018, pp. 38-40, C-8 (SoCalGas proposing power-to-gas be included in CEC natural gas R&D funding but not included in CEC R&D funding); Decision 17-04-039, Decision on Track 2 Energy Storage Issues, pp. 11-13 (May 8, 2017).
Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 12, SoCalGas Press Release, SoCalGas Donates \$100,000 to Support Cal State LA Combustion Engineering Research that Advances</sup>

release nowhere disclosed that its "donation" was 70 percent ratepayer-funded. ¹¹¹ Because the Commission has long held that "donations" are not recoverable in rates, ¹¹² SoCalGas' characterization of rate-based R&D funding as a donation is grossly improper and indicative of the inherent conflict in administration of publicly funding research by a self-interested private actor.

d) SoCalGas Justifications for Maintaining a Separate R&D Program are Unpersuasive.

SoCalGas' claim that its R&D program should be retained because it "complements such other R&D programs such as the CEC's Natural Gas R&D program" ignores that both programs are funded by ratepayers. SoCalGas' program does not complement the CEC; it gives SoCalGas two bites at the apple, first in determining how ratepayer funding is used through its own program, and then by actively engaging in the CEC's R&D selection process. Indeed, SoCalGas is an extremely active stakeholder in the CEC's Natural Gas R&D Program, with an entire appendix of the last CEC staff report on the proposed direction of natural gas R&D dedicated to SoCalGas comments. This is where SoCalGas' involvement should begin and end: as a stakeholder, not as an administrator.

As the Commission looks to increase transparency and accountability in its proceedings, it must also look to programs implemented by utilities at ratepayer expense. So long as ratepayers continue to fund natural gas R&D, they have the right to a process that is transparent, accessible, seeks and responds to public concern, and is administered by an impartial entity that does not squander funds on biased studies or suggest ratepayer-funded grants are from a corporate parent at shareholder expense. Denying SoCalGas' request to continue to administer its own ratepayer-funded R&D program does not mean total R&D funding must consequently diminish. The Commission is free to consider a request by the CEC to increase funding to its Natural Gas R&D Program budget. However, the time to end SoCalGas' separate

_

¹¹⁵ D.04-08-010, p. 32.

Clean Air and Energy Efficiency Technologies (Mar. 14, 2018), https://sempra.mediaroom.com/index.php?s=19080&item=137437.

¹¹¹ Id.; Exh. 475, Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-03, Q.12.

¹¹² See, e.g., Pacific Telephone & Telegraph Co. v. Pub. Util. Comm'n, 62 Cal.2d 634, 668-69 (1965).

¹¹³ Exh. 139, Tomkins Rebuttal Testimony (SoCalGas), p. ST-6:4-5 (June 18, 2018).

¹¹⁴ Exh. 142, CEC, Staff Report: Natural Gas Research and Development Program, Proposed Program Plan and Funding Request for Fiscal Year 2017-2018, Appendix C.

administration of natural gas R&D program is long overdue. The Commission should deny its \$14.329 million request in its entirety.

D. Fleet Services and Facility Operations (Common Briefing Outline #25).

SoCalGas' substantial increase in proposed costs for fleet services and facility operations is in large part premised on a self-imposed "target of a majority of NGV fleet." SoCalGas' NGV target, which comes with both a high vehicle purchase premium and a corresponding asserted need for new costly NGV refueling stations, does not withstand scrutiny. The bulk of the NGV purchases are based on either the erroneous claim that NGVs are needed to meet state greenhouse gas reduction requirements or an accelerated timeline to comply with CARB Truck and Bus regulations. In fact, California law is clear that widespread transportation electrification, not further investment in combustion technologies, is required to meet state climate objectives. NGVs provide little, if any, greenhouse gas benefits benefit and will be deficit-generating by 2024 under proposed changes to the Low Carbon Fuel Standard ("LCFS"). SoCalGas' effort to increase its NGVs and invest in new refueling stations at substantial ratepayer expense does not benefit ratepayers and creates significant stranded asset risk given the rapid regulatory and market advances in medium- and heavy-duty electric vehicles and infrastructure. Accordingly, as described below, SoCalGas' rate request for additional NGVs and supporting infrastructure should be largely denied.

1. SoCalGas Has Not Met its Burden to Demonstrate Additional NGVs are Needed to Meet California's Climate Objectives, and Its Requested AFV Premium Should be Limited to Purchase of Hybrid Passenger Vehicles.

SoCalGas requests \$1.841 million for vehicle purchases in 2019 to meet "EPAct and State GHG reduction mandates," reflecting "the incremental cost differential between current replacement cost for a gasoline or diesel vehicle versus an alternative fuel vehicle." In its GRC Application, SoCalGas fails to distinguish between procurement to meet EPAct requirements and procurement to purportedly assist in the achievement of greenhouse gas reduction requirements. SoCalGas has not met its burden to demonstrate additional AFV purchases are needed to meet EPAct requirements or to help meet state greenhouse gas reduction

29

-

¹¹⁶ Exh. 188, Herrera Revised Direct Testimony (SoCalGas), p. CLH-53:15-16, 27-29.

¹¹⁷ Exh. 192, Herrera Rebuttal Testimony (SoCalGas), p. CLH-7, Table CLH-3, Column(e), fn. 3; Exh. 189, Workpapers to Herrera Direct Testimony (SoCalGas) at 7.

mandates. At most, the Commission should approve no more than \$146,380, which is the approximate costs of the premium for anticipated 2019 purchases of hybrid automobiles that are covered under EPAct requirements.

a) New AFV Procurement Required to Comply with EPAct is Limited.

With regard to vehicle procurement under EPAct, SoCalGas states that "[a]s an Alternative Fuel Provider Fleet, 90% of SoCalGas' annual light duty vehicle purchases are required under the EPAct to be approved AFVs."118 SoCalGas states that "21% of SoCalGas' Fleet vehicles fall under this requirement," referring to automobiles and compact trucks vehicle categories." 119 SoCalGas' fleet of automobiles and compact trucks currently includes 180 CNG and 102 bi-fuel automobiles (passenger vehicles) that can run off both gasoline and natural gas. 120 However, as SoCalGas has admitted, passenger vehicle models running off natural gas are no longer available for purchase. 121 When these vehicles retire, SoCalGas stated it replaces them with Prius hybrids (which do not use natural gas). 122 Accordingly, the total number of automobiles in SoCalGas' fleet operating off natural gas is decreasing with turn-over, and an AFV premium for EPAct compliance should be based on the premium for a hybrid automobile. 123 Anticipated purchases are minimal, with SoCalGas identifying 40 AFV automobile replacements: 10 in 2017, 10 in 2018, and 20 in 2019. 124 Using the \$7,319 AFV premium for passenger sedan vehicles SoCalGas identified for 2017 purchases, this amounts to a \$146,380 AFV premium for 20 2019 AFV automobile purchases. 125 No AFVs are available in the compact truck category. 126

. .

¹¹⁸ Exh. 192, Herrera Rebuttal Testimony (SoCalGas), p. CLH-19:14-15.

¹¹⁹ *Id.* at p. CLH-19:14-16 (calculated from sum of automobiles and compact trucks divided by over-theroad ("OTR") total).

¹²⁰ *Id.* at p. CLH-19:16, fn. 37; Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach 4. SoCalGas Response to Data Request Sierra Club/UCS-SCG-01, Q.2(a).

¹²¹ Tr. Vol. 20, 1911:7-13 (Herrera, SoCalGas); Exh. 201, SoCalGas Response to Data Request Sierra Club-UCS-SCG-09, Q.1(a); Tr. Vol. 20, 1951:25-1952:2 (Herrera, SoCalGas).

¹²² Tr. Vol. 20, 1911:7-19 (Herrera, SoCalGas).

¹²³ The premium for hybrids is confidentially identified at Exh. 191C, p. 1.

¹²⁴ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-02, Q.12.

¹²⁵ *Id.* at SoCalGas Response to Data Request Sierra Club/UCS-SCG-01, Q.3(c).

¹²⁶ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), pp. 29:17-30:3; Tr. Vol. 20, 1921:17-20 (Herrera, SoCalGas).

SoCalGas has failed to meet its burden to demonstrate with "clear and convincing evidence" that additional AFV purchases are needed to comply with EPAct. SoCalGas has stated it is using "banked" credits accumulated from previous years to meet its current EPAct compliance requirements. SoCalGas has not explained to what extent, if any, proposed new NGV purchases in other vehicle categories, rather than historic banked credits, would be needed to meet EPAct requirements. Accordingly, there is insufficient basis to approve the remainder of SoCalGas' request.

Even if SoCalGas had shown that additional EPAct credits are needed, this does not warrant approval of AFV premiums for additional NGVs. Because EPAct is focused on light-duty vehicles, SoCalGas should first maximize credits from passenger vehicles through electric vehicle procurement, which unlike hybrids, provide a full EPAct credit. While SoCalGas asserts "the charging requirements and range limitations" would limit its ability to use electric vehicles "without impacting operational needs," it fails to support this assertion with any data on daily mileage or hourly usage of its passenger vehicles. SoCalGas "does not track total vehicle miles traveled or average daily mileage for each class of vehicle" and was only able to state that its vehicles average "10,000 miles per year." However, SoCalGas identifies the range of a Chevrolet Bolt at 238 miles – meaning that even assuming the Bolt was only driven 50 days out of the year (about once per week), its daily mileage would still not exceed the vehicle's range. SoCalGas also seemed to assume only Level 1 charging (standard 110V outlets) and

¹²⁷ D.04-07-022, p. 10.

¹²⁸ Tr. Vol. 20, 1926:22-27 (Herrera, SoCalGas) ("[W]e have banked credits from previous years that we've accumulated, and were able to use those banked credits with the current year's purchases to meet an existing year's requirements.").

¹²⁹ Tr. Vol. 20, 1919:9-15 (Herrera, SoCalGas). Exh. 201, SoCalGas Response to Data Request Sierra Club/UCS-SCG-09, Q.1(c) (hybrid vehicles that cannot independently run off electricity provide half of an EPAct compliance credit). Because EPAct is "inherently a light duty vehicle requirement" applicable to vehicles with a gross vehicle weight rating of 8,500 pounds or less, banked credits for medium- and heavy-duty duty vehicles can only be used "after the fleet has met its light duty AFV-acquisition requirement." Alternative Fuel Transportation Program; Alternative Fueled Vehicle Credit Program Modification and Other Amendments, 79 Fed. Reg. 15882, 15885, 15893, 15894 (Mar. 21, 2014) (codified at 10 C.F.R. Part 490).

¹³⁰ Exh. 192, Herrera Rebuttal Testimony (SoCalGas), p. CLH-24:18-20.

¹³¹ See Exh. 201, SoCalGas Response to Data Request Sierra Club/UCS-SCG-09, Q.2 (referencing SoCalGas Response to Data Request Sierra Club/UCS-SCG-04, Q.2).

¹³² Exh. 192, Herrera Rebuttal Testimony (SoCalGas), p. CLH-21. A vehicle that drives 10,000 miles a year, divided over 50 days, would drive 200 miles per day of operation. Presumably, SoCalGas vehicles operate more one day per week, meaning that actual daily mileage would be much lower than 200 miles

when asked to "provide all analysis SoCalGas has conducted on the cost of installing Level 2 and Level 3 charging infrastructure" for light-duty vehicles (which would reduce charging time of a Bolt to 9.5 and 1.3 hours, respectively), SoCalGas asserted this question was outside the scope of the GRC. (Notably, SoCalGas would also receive one EPAct credit per \$25,000 of investment in electric vehicle infrastructure.) Not only has SoCalGas failed to demonstrate AFV premiums in other vehicle categories are needed for EPAct compliance, but absent a legitimate demonstration that electric passenger vehicles are infeasible, none should be awarded. 135

b) SoCalGas' Request for AFV Premiums for NGVs to Achieve Greenhouse Gas Reduction Requirements is Fundamentally Flawed.

The bulk of SoCalGas' contemplated AFV purchases appear to be in furtherance of SoCalGas' unsupported assertion that additional NGV purchases are needed to help California "achieve greenhouse gas (GHG) emission reduction targets of 40 percent below 1990 levels by 2030, with continued progress towards an 80 percent reduction by 2050." Yet when questioned at hearings, SoCalGas was unable to point to any support for the notion that increased procurement of NGVs are needed to meet these objectives. To the contrary, California law is clear that it is "widespread transportation *electrification*" that is required to meet California's greenhouse gas objectives and that "[i]t is the policy of the state and the intent of the Legislature to encourage transportation electrification as a means to achieve ambient air quality standards and the state's climate goals." 138

The exclusion of natural gas is unsurprising. As a transportation fuel, gas's carbon

Exh. 201, SoCalGas Response to Data Request Sierra Club/UCS-SCG-09, Q.4.

per day.

¹³⁴ 79 Fed. Reg. at 15895.

¹³⁵ Purchase of zero emissions vehicles was also supported by commenters at Public Participation Hearings. *See, e.g.*, Tr. Vol. 7, 290:14-19 (Jesse Parks, resident of Riverside) ("[U]tility bills should fund investment that will not just benefit So Cal but the whole world. We can start by investing in zero emission electronic vehicles that will diminish air pollution."); *Id.* at 294:23-27 (Erica Ruiz, resident of San Bernardino) ("I'm here because I believe that SoCalGas should invest in zero emission vehicles. As someone who has lived here my whole life, I have personally suffered from the poor air quality."); *Id.* at 297:24-27 (Bernard De La Garza, resident of San Bernardino) ("I believe that my utility bill should fund investments that agree with the community such as zero emission vehicles.").

¹³⁶ Exh. 188, Herrera Revised Direct Testimony (SoCalGas), pp. CLH-20:28-CLH-21:2.

¹³⁷ Tr. Vol. 20, 1930:8-28 (Herrera, SoCalGas).

¹³⁸ Pub. Util. Code §§ 740.12(a)(1)(D), (a)(2) (emphasis added).

emissions offer minimal reductions compared to conventional fuel. ¹³⁹ Indeed, some studies have found natural gas can be worse than diesel from a climate perspective depending on the assumptions on methane leakage (of which 13 instances were reported from SoCalGas refueling stations in 2016 alone). ¹⁴⁰ Given its high carbon intensity, CARB has proposed updates to the LCFS that would render natural gas a deficit-generating fuel by 2024, which would require purchase of LCFS credits by natural gas suppliers, adding to the cost of natural gas as a vehicle fuel. ¹⁴¹ Notably, in proposing its additional procurement of NGVs, SoCalGas did not consider that natural gas could be deficit-generating fuel nor the resulting cost impacts from the need to procure LCFS credits to offset its use. ¹⁴² SoCalGas' requested premium for additional NGV purchases do not benefit ratepayers or the environment and should be rejected.

2. SoCalGas Should Not Recover Costs in this GRC for Vehicle Replacement under CARB Regulations that is Not Required Until 2023.

SoCalGas' request for \$4.468 million for TY 2019 to replace diesel units to comply with CARB Truck and Bus regulations should be substantially reduced. In reviewing a utility's request for rate recovery, the Commission must take "hard look at each proposed expense, including whether it is necessary during the coming rate cycle and is appropriately calculated." Of the 221 vehicle replacements SoCalGas contends are needed to comply with CARB regulations, 92 – or 42 percent – are not needed until 2023. Moreover, SoCalGas has stated that 102 vehicles have already been purchased. It therefore appears that few, if any remaining vehicles are actually needed in TY 2019. At a minimum, SoCalGas' rate request for

33

¹³⁹ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), pp. 15-18.

¹⁴⁰ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 25:1-4; *see also id.* at Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-01, Q.10(b)(ii).

¹⁴¹ Exh. 202, CARB Staff Report: Initial Statement of Reasons for the Proposed Amendments to the LCFS Regulation, pp. EX-2–EX-4; Exh. 203, Proposed Amendments to the LCFS Regulation, p. 4 (showing fossil CNG as deficit-generating in 2024).

¹⁴² Tr. Vol. 20, 1934:4-10 (Herrera, SoCalGas).

¹⁴³ Exh. 188, Herrera Revised Direct Testimony (SoCalGas), p. CLH-20:11-12.

¹⁴⁴ D.12-11-051, p. 9.

¹⁴⁵ Exh. 204, CARB Truck and Bus Regulation Compliance Requirement Overview (identifying 2023 as compliance deadline for vehicles with 2007-2009 model engines); Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-01, Q.4(a) (identifying 221 vehicles for replacement, with 92 in model year 2007 or 2008).

¹⁴⁶ Tr. Vol. 20, 1936:5-11 (Herrera, SoCalGas).

compliance with CARB Airborne Toxic Control Measures should be reduced by 42 percent to appropriately evaluate replacement of vehicles with a 2023 compliance date in the next GRC.

SoCalGas' assertion that accelerated procurement of replacement vehicles is needed because of "anticipated manufacture capacity constraints" is wholly unsupported and falls far short of the showing necessary to justify this costly and accelerated proposed vehicle procurement. In fact, because CARB compliance deadlines occur on a rolling basis, heavier vehicles subject to the rule with a model year engine from 2000 to 2004 must be replaced by 2021, model year engines from 2005 to 2006 must be replaced by 2022, and model year engines from 2007 to 2009 must be replaced by 2023. Accordingly, SoCalGas' proposed accelerated procurement for later model years only functions to create additional constraints for older vehicles that must meet compliance deadlines sooner.

SoCalGas' rushed effort to recover costs to lock in additional medium- and heavy-duty NGVs should also be rejected because it needlessly limits future opportunity for medium- and heavy-duty electric vehicle procurement. Electric vehicle options in these vehicle categories are fast emerging and provide far superior greenhouse gas and air quality benefits than NGV options. Given the rapid advances in this market segment, it is far more prudent to await the next GRC and re-assess market options at that time before authorizing procurement of vehicles that need not be deployed until 2023.

3. SoCalGas Should Not Recover Costs for New NGV Refueling Stations.

In this GRC, SoCalGas requests Commission approval to *triple* ratepayer investment in NGV refueling infrastructure and build 19 new refueling stations: eight that would only serve SoCalGas' fleet and 11 that would be open to the public. SoCalGas' attempt to justify the significant cost for these facilities on the need to serve the additional NGVs it seeks to procure fails for several reasons. First, as discussed above, the vast majority of the NGVs SoCalGas seeks to procure are discretionary, and impose even higher cost to ratepayers when the costs of

¹⁴⁸ Exh. 204, CARB Truck and Bus Regulation Compliance Requirement Overview.

¹⁴⁷ Tr. Vol. 20, 1954:3-5 (Herrera, SoCalGas).

¹⁴⁹ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), pp. 18, 31:17 to 34:18, 35:1-6.

¹⁵⁰ Exh. 188, Herrera Revised Direct Testimony (SoCalGas), p. CLH-53, Table CLH-25 (requested expenditure increasing from \$5.66 million in 2016 to \$18.799 million in 2019); Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-02, Q.10.

new refueling infrastructure is accounted for. Second, even if SoCalGas does purchase additional NGVs, as set forth in testimony by The Utility Reform Network ("TURN"), existing infrastructure can serve refueling needs. Third, refueling stations are a long-term commitment to combustion-based infrastructure that poses significant stranded asset risk given the rapid regulatory and market advances in vehicle electrification. Accordingly, rather than approve the significant increase in proposed refueling station costs to \$18.799 million in TY 2019, the Commission should maintain costs at 2016 levels – \$5.663 million – to avoid SoCalGas' unneeded, costly, and risky proposed expansion of NGV refueling infrastructure. ¹⁵¹

The entire premise for increased NGV refueling stations is to serve SoCalGas' ambitions for an NGV fleet. SoCalGas asserts that "[i]n order to increase AFV Fleet vehicles, SoCalGas must install infrastructure to refuel at bases that do not currently have this infrastructure." Similarly, when confronted with the stranded asset risk of increased investments in NGV refueling stations given the rapid expansion of electric vehicles into the medium- and heavy-duty vehicle market, SoCalGas simply restated its "target of a majority NGV fleet of over 1,300 AFV's." SoCalGas' circular reasoning comes at an exorbitant cost to ratepayers. On top of the premium for an NGV, which SoCalGas states is \$50,000 to \$65,000 for a medium-duty truck, ratepayers would also bear the cost of 19 new refueling stations to serve what amounts to roughly only 300 additional NGVs. With Applicants estimating the cost of a single new refueling station at \$2.617 million, this adds over \$165,000 to the cost of each vehicle when refueling infrastructure is considered. 155

As set forth above, the vast majority of the proposed NGVs that SoCalGas asserts drive the need for new refueling stations are discretionary purchases, and are not needed to meet state or federal mandates. Indeed, because manufacturers no longer even offer NGV models of passenger vehicles, and SoCalGas is replacing NGV passenger vehicles with hybrids, those vehicle replacements will reduce overall NGV ownership. SoCalGas' asserted need for 19 new

_

¹⁵¹ Exh. 188, Herrera Revised Direct Testimony, p. CLH-53, Table CLH-25.

¹⁵² Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-02, Q.11.

¹⁵³ Exh. 192, Herrera Rebuttal Testimony (SoCalGas), p. CLH-62:12.

Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-01, Q.3(c); Exh. 498, Jones/Marcus Direct Testimony (TURN), p. 20:8-11 (noting SoCalGas currently has 996 AFVs across its service territory).

¹⁵⁵ Exh. 11, Orozco-Mejia Revised Direct (SDG&E), pp. GOM-98–99. Over \$165,000 derived from (\$2.617 million*19 new stations)/300 additional vehicles).

refueling stations to support a self-declared objective of a majority NGV fleet only underscores the need to reject both the proposed NGV procurement and the proposed new refueling stations.

Even assuming the Commission does approve SoCalGas' discretionary request to significantly increase the NGVs in its fleet, new refueling stations would still not be warranted. As TURN details in its testimony, "the company can deploy substantial numbers of AFVs by relying more heavily on the existing SCG and 3rd-party refueling infrastructure, without the large increase in expenditures that it has proposed."156

SoCalGas has also fallen woefully short of its burden to demonstrate ratepayers should bear the costs of new refueling stations open to the public. Indeed, SoCalGas has been unable to provide even basic supporting data. With regard to "Fleet-Public" NGV stations, SoCalGas states that "[a]nalysis was performed to support the need for new proposed public NGV refueling stations" yet then states that the "actual analysis cannot be provided since customer vehicle data used in the analysis was purchased, is proprietary and under the terms of the purchase agreement cannot be provided to 3rd parties." ¹⁵⁷ SoCalGas also stated that its "Fleet-Public NGV stations are planned based on surveys conducted by the SoCalGas NGV team." 158 When asked for the surveys, SoCalGas then "clarifie[d] that the surveys referenced in the original response were conducted by a third party that develops and sells proprietary fleet vehicle data. SoCalGas has no knowledge of the methodology used for the survey and SoCalGas is not in possession of the surveys or responses." When then asked to provide all non-proprietary information supporting the need for the proposed Fleet-Public NGV stations, SoCalGas was unable to provide any. 160 Accordingly, there is insufficient evidentiary basis to approve SoCalGas' request for public access refueling stations.

Finally, investment in new NGV refueling creates significant stranded asset risk given the regulatory and market advances in electric vehicles and California's commitment to

¹⁵⁶ Exh. 498, Jones/Marcus Revised Direct Testimony (TURN), p. 30:17-19.

¹⁵⁷ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-02, Q.11.

¹⁵⁹ *Id.* at SoCalGas Response to Data Request Sierra Club/UCS-SCG-03, Q.1(a).

¹⁶⁰ Id. at SoCalGas Response to Data Request Sierra Club/UCS-SCG-05, O.9. SoCalGas provided a list of third party NGV fueling stations closest to its proposed new locations, noting that these third party facilities are not suitable for heavy-duty vehicles. However, this fact does not explain why heavy-duty charging is needed at the proposed locations or include information on distance to the nearest charging station that would be suitable for heavy-duty vehicles.

"[w]idespread vehicle electrification." ¹⁶¹ Indeed, SoCalGas recognized this same risk in sworn testimony opposing proposed investments in medium- and heavy-duty electric vehicle infrastructure, stating:

SoCalGas currently owns and operates twelve (12) CNG stations at utility-owned facilities which serve utility fleet vehicles and the general public. Ratepayer assets supporting these stations, including equipment related distribution service upgrades, have a current book value of \$14.5 million. Furthermore, the net book value of natural gas system upgrades, funded by ratepayers, supporting CNG stations owned by 3rd parties is \$18.7 million. Accordingly, total SoCalGas ratepayer assets at risk from the possibility of transportation fuel-switching, is potentially \$33.2 million. ¹⁶²

Yet despite Commission approval of the electric vehicle infrastructure investments contested by SoCalGas, it now seeks to triple investment in NGV refueling infrastructure and exacerbate the stranded risk it previously identified in sworn testimony. The stranded asset risk of additional investments in new NGV refueling stations is far from hypothetical. In D.18-05-040, the Commission "agree[d] with the 'utilities, transit agencies, and technology providers . . . that the time is now to invest in the success of transportation electrification." The Commission further determined that medium- and heavy-duty vehicles "are ripe for electrification, are the targets of other public investment for electrification, provide platforms for technology development that will promote transfer to other categories, and are primed for acceleration from utility infrastructure investment." ¹⁶⁴

Moreover, the Commission's actions to accelerate medium- and heavy-duty electrification are being amplified by other state agencies. For example, CARB is further driving the transition to zero-emission vehicles through standards that include the Innovative Clean Transit standard (all zero-emission transit bus *purchases* by 2029); ¹⁶⁵ the Zero-Emission Airport

¹⁶¹ Pub. Util. Code § 740.12(a)(1)(E).

¹⁶² Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 10, A.17-01-021, Direct Testimony of Edwin T. Harte on Behalf of SoCalGas, pp. 22:19-23:3 (Aug. 1, 2017). The admissibility of SoCalGas' prior sworn testimony is currently pending a ruling on Sierra Club/UCS' Motion for Reconsideration. If the Motion is denied, the above reference to SoCalGas' prior sworn testimony should be disregarded.

¹⁶³ Decision 18-05-040, *Decision on the Transportation Electrification Standard Review Projects*, p. 91 (June 6, 2018).

¹⁶⁴ *Id.* at pp. 90-91.

¹⁶⁵ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 38:18-19 (citing CARB, *Public Workshop on the Proposed Innovative Clean Transit Regulation Discussion Document*, p. 10 (Dec. 15,

Shuttle Bus standard (all zero-emission *fleet* by 2035); ¹⁶⁶ the Advanced Clean Local Truck standard (zero-emission trucks comprise 15 percent of manufacturer sales by 2030); ¹⁶⁷ and recently-proposed action for a zero-emission drayage truck standard, for implementation 2026-2028. ¹⁶⁸ The California Sustainable Freight Action Plan, calling for the deployment of over 100,000 zero-emission heavy-duty vehicles and equipment by 2030, represents a multi-agency commitment to zero-emission vehicles. ¹⁶⁹

As set forth more fully in the Sierra Club/UCS Testimony, the rapid regulatory advances to facilitate widespread deployment of electric vehicles are mirrored by rapid advances in the electric vehicle market, with numerous examples of "announcements and commitments from private sector fleets and manufacturers around zero-emissions trucks" that "point to the transition to battery and fuel cell electric vehicles." In requesting Commission approval to vastly increase its spending, it would appear SoCalGas hopes to ratebase as much NGV refueling infrastructure as possible before continued advancements in electric vehicles make the wisdom of such long-term investments even more dubious. SoCalGas' requested costs for new refueling

_

^{2017), &}lt;a href="https://arb.ca.gov/msprog/ict/meeting/mt171215/171215ictconcept.pdf">https://arb.ca.gov/msprog/ict/meeting/mt171215/171215ictconcept.pdf). The testimony citing CARB's proposed regulation is currently excluded. Its admissibility is contingent on a pending ruling on Sierra Club/UCS' Motion for Reconsideration.

¹⁶⁶ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 38:19-20 (citing CARB, *Zero-Emission Airport Shuttle Bus Regulatory Language Outline*, p. 4 (Mar. 6, 2018) https://www.arb.ca.gov/msprog/asb/workshop/asbdraftreglanguage.pdf). The testimony citing CARB's proposed regulation is currently excluded. Its admissibility is contingent on a pending ruling on Sierra Club/UCS' Motion for Reconsideration.

¹⁶⁷ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 38:20-21 (citing CARB, *Advanced Clean Local Trucks, Second Workgroup Meeting*, Slide 3 (Aug. 30, 2017), https://www.arb.ca.gov/msprog/actruck/mtg/170830arbpresentation.pdf). The testimony citing CARB's proposed regulation is currently excluded. Its admissibility is contingent on a pending ruling on Sierra Club/UCS' Motion for Reconsideration.

¹⁶⁸ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 39:1-2 (citing CARB, *Concepts to Reduce the Community Health Impacts from Large Freight Facilities*, Slide 21, https://www.arb.ca.gov/board/books/2018/032218/18-2-6pres.pdf). The testimony citing CARB's proposed regulation is currently excluded. Its admissibility is contingent on a pending ruling on Sierra Club/UCS' Motion for Reconsideration.

¹⁶⁹ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 39:4-7 (citing California Department of Transportation *et al.*, *California Sustainable Freight Action Plan*, Attachment B, p. B-3 (July 2016), http://www.dot.ca.gov/casustainablefreight/documents/CSFAP AppendixB FINAL 07272016.pdf). The testimony citing the Sustainable Freight Action Plan is currently excluded. Its admissibility is contingent on a pending ruling on Sierra Club/UCS' Motion for Reconsideration.

¹⁷⁰ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 39:8-10; *see generally id.* at pp. 39:10-40:14. This testimony is currently excluded. Its admissibility is contingent on a pending a ruling on Sierra Club/UCS' Motion for Reconsideration.

stations are not needed, create significant and unnecessary stranded asset risk, and should not be approved.

4. SDG&E Should Not Recover Costs for New NGV Refueling Stations.

SDG&E's request to build one NGV refueling station per year in 2018 and 2019 at a cost of \$2.617 million per station should also be rejected because SDG&E has not met its burden to demonstrate the refueling station is needed and provides ratepaver benefit.¹⁷¹ Rather, SDG&E only states that "[c]ompany owned public access CNG stations serve the increasing use of CNG vehicles throughout Southern California" but provides no data or projections supporting the need for additional facilities. ¹⁷² In response to a data request on this issue from TURN, SDG&E provided a customer survey conducted at its NGV fueling stations in January 2012. 173 A survey conducted in 2012 cannot logically be used to support the need for the new charging stations in 2018 and 2019, given the proliferation of electric vehicle options since 2012 and the decline in availability of natural gas passenger vehicles.

E. Other Issues (Common Briefing Outline #50): The Commission Should Expressly Find that SoCalGas Cannot Recover Costs Related to the **Opposition to Electrification of End-Uses.**

In addition to the activities of the Policy Group, R&D, and marketing and communications, SoCalGas has funded anti-electrification activities through its ratepayer-funded O&M budget. Not only is use of O&M for this purpose highly inappropriate, but it also raises significant concerns that absent specific Commission action, SoCalGas will continue to use ratepayer funds to underwrite its anti-electrification activities regardless of what specific funding requests the Commission disallows in this GRC. Accordingly, the Commission should also expressly find that SoCalGas may not use ratepayer funds to undertake activities related to the opposition to electrification of natural gas end-uses and require attestation by a SoCalGas corporate officer that no ratepayer funds were used for this purpose in subsequent GRCs.

The need for Commission action is exemplified by SoCalGas' use of O&M to pay for costs incurred from an op-ed authored by SoCalGas Regional Vice President George Minter in

39

¹⁷¹ Exh. 11, Orozco-Mejia Revised Direct Testimony (SDG&E), pp. GOM-98–99.

¹⁷² *Id.* at p. GOM-98:14-15.

¹⁷³ SDG&E Response to Data Request TURN-SDG&E-055, Q.1. The results of the survey were designated as confidential.

the Sacramento Bee to lobby public opinion against pending legislation that would facilitate building electrification, writing, "Assembly Bill 3232 would drive up energy bills, make housing more expensive and stall innovation." The editorial states without basis that electrification of home energy use would "drive us deeper into the affordable housing and homelessness crises we're facing" and implies that the legislation would "forc[e] families already struggling with the high cost of housing and rising transportation costs to swap out their perfectly good appliances for all electric alternatives," which is not true. The Yet regardless of the veracity of the op-ed, communications intended to influence the outcome of proposed legislation are a misuse of ratepayer funds. However, SoCalGas admitted that the "cost of preparing the article was categorized as GRC ratepayer-funded operations and maintenance (O&M) expense" and asserted that other than "costs resulting in new additions of plant, property and equipment that have a useful life of more than one year. . . . [a]ll other costs incurred are charged to O&M." Commission direction and accountability are needed to disabuse SoCalGas of its belief that O&M serves a catch-all to impose the costs of its anti-electrification activities on its ratepayers.

Similarly, in 2015, SoCalGas commissioned a study using O&M funds that was intended to demonstrate that biomethane and power-to-gas projects could replace sufficient fossil gas to make electrification unnecessary. However, the report ultimately underscores that a climate solution using pipeline gas instead of electrification is not feasible because it is not compatible with California climate strategy. In order to generate enough "decarbonized" gas, the report

¹⁷⁴ Exh. 475, O'Dea/Golden Direct Testimony, Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-08, Q.1 & 4 (attaching George Minter, *Most of us can't afford to go all-electric. Here's a fairer way to curb climate change*, Sacramento Bee (Apr. 20, 2018)).

¹⁷⁵ *Id.* As an initial matter, the legislation would not have required or "forced" families to replace working appliances, as Mr. Minter falsely alleges. Furthermore, the study supporting Mr. Minter's claims used the same flawed assumption of comparing an efficient gas appliance with an inefficient electric model. A rebuke of study assumptions was set forth by the Natural Resources Defense Council. *See* Merian Borgeson, *Electric Home Study Biased, But Shows CA Wants Clean Energy*, Natural Resources Defense Council (Apr. 27, 2018), https://www.nrdc.org/experts/merrian-borgeson/electric-home-study-biased-shows-ca-wants-clean-energy.

¹⁷⁶ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-08, Q.4 & 1(a).

¹⁷⁷ E3, Decarbonizing Pipeline Gas to Meet California's 2050 Greenhouse Gas Reduction Goal (Jan. 2015), https://www.ethree.com/wp-content/uploads/2017/02/E3 Decarbonizing Pipeline 01-27-2015.pdf; Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-01, Q.21; Attach. 4, SoCalGas Response to Data Request Sierra Club/UCS-SCG-05, Q.3.

assumes paper transactions for massive quantities of credits generated from the gasification of biomass on the East Coast. As the report acknowledges, a system where California "would take credit for assumed emissions reductions associated with these biofuels, regardless of where the fuel is actually produced," "may not reflect California's long-term emissions accounting strategy." But like the SoCalGas op-ed, regardless of the dubious merits of this report, it is not an appropriate O&M expense.

These examples make clear that it is not enough to disallow proposed costs for policy activities, climate communications, and R&D. Given SoCalGas' use of O&M as a catch-all for the costs of its anti-electrification activities, the Commission must expressly find that ratepayer funds cannot be used for this purpose and require an attestation of compliance by a SoCalGas corporate officer in subsequent GRCs.

IV. CONCLUSION

For the reasons set forth above, Sierra Club and UCS request the proposed disallowances to SoCalGas' and SDG&E's GRC request be granted.

Respectfully submitted,

/s/ Matthew Vespa

Matthew Vespa Earthjustice 50 California Street, Suite 500 San Francisco, CA 94111

Telephone: (415) 217-2123

Email: mvespa@earthjustice.org

Alison Seel Sierra Club

2101 Webster Street, Suite 1300

Oakland, CA 94612

Telephone: (415) 977-5753

Email: alison.seel@sierraclub.org

Attorney for Sierra Club and Union of

Concerned Scientists

Attorney for Sierra Club

Dated: September 21, 2018

¹⁷⁸ Exh. 475, O'Dea/Golden Direct Testimony (Sierra Club/UCS), p. 15:1-4 (citing Decarbonized Gas Report, p. 31) (internal quotation marks omitted).