

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in California and Perform Long-Term Gas System Planning.

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**ORDER INSTITUTING RULEMAKING TO ESTABLISH POLICIES,  
PROCESSES, AND RULES TO ENSURE SAFE AND RELIABLE GAS  
SYSTEMS IN CALIFORNIA AND PERFORM LONG-TERM GAS SYSTEM  
PLANNING**

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**ORDER INSTITUTEING RULEMAKING TO ESTABLISH POLICIES,  
PROCESSES, AND RULES TO ENSURE SAFE AND RELIABLE GAS  
SYSTEMS IN CALIFORNIA AND PERFORM LONG-TERM GAS PLANNING**

**Summary**

The Commission issues this Order Instituting Rulemaking to respond to past and prospective events that together will require changes to certain policies, processes, and rules that govern the natural gas utilities in California. With respect to past events, several operational issues in Southern California prompt the Commission to reconsider the reliability and compliance standards for gas public utilities. Over the next 25 years, state and municipal laws concerning greenhouse gas emissions will result in the replacement of gas-fueled technologies and, in turn, reduce the demand for natural gas.

Thus, in order to ensure safe and reliable natural gas service at just and reasonable rates in California, the Commission will (1) develop and adopt updated reliability standards that reflect the current and prospective operational challenges to gas system operators; (2) determine the regulatory changes necessary to improve the coordination between gas utilities and gas-fired electric generators; and (3) implement a long-term planning strategy to manage the state's transition away from natural gas-fueled technologies to meet California's decarbonization goals.

The Commission names the following gas utilities and independent storage providers as respondents: Alpine Natural Gas, Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Gas Company, Southwest Gas Corporation, West Coast Gas Company, Inc., Central Valley Gas Storage, Gill Ranch Storage, Lodi Gas Storage, Sacramento Natural Gas Storage, LLC, and Wild Goose Storage.

This proceeding will be conducted in three phases, and the Commission will issue a decision following each phase. The first phase, Track 1A, will address the reliability standard issues. Track 1B will determine the regulatory changes needed to improve the coordination between gas utilities and gas-fired electric generators. Track 2 will implement the long-term planning strategy.

## 1. Background

As part of the Commission's prior rulemaking on natural gas reliability and long-term planning, Rulemaking (R.) 04-01-025,<sup>1</sup> initiated on January 27, 2004, the Commission adopted system reliability standards for certain gas public utilities.<sup>2</sup> In R.04-01-025, the Commission directed PG&E and SoCalGas to ensure that their backbone transmission systems have enough capacity to serve all system demand on an average day in a one-in-ten cold and dry-hydroelectric year.<sup>3</sup> The gas utilities were also directed to plan their backbone and storage systems to meet the peak day criteria established for their local transmission system.<sup>4</sup> In addition, the Commission considered requiring the gas utilities to hold capacity in excess of peak demand throughput on their backbone and

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<sup>1</sup> Order Instituting Rulemaking to Establish Policies and Rules to Ensure Reliable, Long-term Supplies of Natural Gas to California, R.04-01-036; Opinion on Phase I Issues, Decision (D.) 04-09-022, rehearing denied, D.05-10-045, modification granted, D.12-12-006 (Phase I Opinion); Opinion on Phase II Issues, D.06-09-039, correcting error, D.06-09-044, denying rehearing, D.07-02-032 (Phase II Opinion).

<sup>2</sup> The following gas public utilities were respondents to R.04-01-025: Pacific Gas & Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Southern California Gas Company (SoCalGas), and Southwest Gas Corporation (Southwest Gas).

<sup>3</sup> Phase II Opinion, D.06-09-039 at 27, Ordering Paragraph (OP) 1.

<sup>4</sup> *Id.* at 27, note 20, OP 2. SoCalGas' peak day planning standards for its local transmission system are one-in-35 years for core customers and one-in-ten years for non-core customers, and PG&E's standard are one-in-90 years on an abnormal peak day for core customers and one-in-two years on a cold winter day for noncore customers.

storage systems, referred to as slack capacity.<sup>5</sup> However, the Commission determined that, because the gas utilities' firm backbone capacity was adequate, establishing a specific slack capacity requirement was unwarranted.<sup>6</sup> The Commission also determined that "California utilities must rely upon firm transportation contracts with interstate pipelines ... to preserve or provide for the infrastructure required to meet their core customers' annual demand."<sup>7</sup>

Since the Commission's last decision in R.04-01-025, several events, such as (1) greenhouse gas legislation, (2) operational issues and constraints, and (3) gas pipeline and storage safety-related incidents, require the Commission to reevaluate the policies, processes, and rules that govern gas utilities.

### **1.1. Gas Pipeline and Storage Safety-Related Incidents**

The first safety-related incident occurred on September 9, 2010, when PG&E's natural gas pipeline ruptured in San Bruno, causing multiple fatalities and extensive damage to private property. In determining that "[t]he depth of this tragedy is the source of [the Commission's] resolve to take all actions necessary to ensure that it never happens again," the Commission initiated several proceedings to set forth pipeline safety rules and regulations,<sup>8</sup> including

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<sup>5</sup> Phase II Opinion, D.06-09-039 at 20.

<sup>6</sup> *Id.* at 26.

<sup>7</sup> Phase I Opinion, D.04-09-022 at 30.

<sup>8</sup> The Commission initiated Rulemaking 13-11-006, Order Instituting Rulemaking to Develop a Risk-based Decision-Making Framework to Evaluate Safety and Reliability Improvements and Revise the General Rate Case Plan for Energy Utilities (R.13-11-006). In R.13.11-006, the Commission established the following risk-based decision-making frameworks: The Safety Model Assessment proceeding and the Risk Assessment Management Plan. *See also* D.14-12-025.

R.11-02-019.<sup>9</sup> In that proceeding, the Commission established the Pipeline Safety Enhancement Plan (PSEP) process and related requirements, most of which are codified in Section 957 of the California Public Utilities Code.<sup>10</sup> Among other things, the PSEP process requires all gas transmission pipeline operators in California to file a plan that outlines how they will replace or pressure test all intrastate natural gas transmission pipelines that have not been tested or for which reliable records are not available. Pursuant to the Commission-approved PSEP plans, PG&E will incur capital costs of at least \$877 million,<sup>11</sup> SDG&E will incur at least \$229 million,<sup>12</sup> and SoCalGas will incur at least \$1.2 billion.<sup>13</sup> In complying with federal regulations requiring pipeline integrity tests, gas utilities will incur ongoing expenses to integrity test and remediate pipelines.<sup>14</sup>

Next, on October 23, 2015, SoCalGas identified a leak in well SS25 located at its Aliso Canyon natural gas storage field. The leak was capped on

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<sup>9</sup> Order Instituting Rulemaking on the Commission's own Motion to Adopt New Safety and Reliability Regulations for Natural Gas Transmission and Distribution Pipelines and Related Ratemaking Mechanisms, R.11-02-019 at 1.

<sup>10</sup> All statutory references herein are to the California Public Utilities Code unless otherwise indicated.

<sup>11</sup> Pacific Gas and Electric Company, Application 13-10-017, Settlement Agreement, Appendix I, Table E-4.

<sup>12</sup> *San Diego Gas & Elec. et al*, D.14-06-007 at 3, Findings of Fact 8 and 17, (finding, however, that SDG&E must record the costs in a balancing account that will be subject to a reasonableness review); *see also* D.19-03-025.

<sup>13</sup> *Id.* (finding, however, that SoCalGas must record the costs in a balancing account that will be subject to a reasonableness review).

<sup>14</sup> Pursuant to 49 CFR Parts 190-199, the Pipeline and Hazardous Materials Safety Administration (PHMSA) requires gas utilities to test and remediate certain pipelines located in High Consequence Areas, defined as a certain radius of buildings intended for human occupancy. The gas utilities manage compliance activities for 49 CFR Parts 190-199 in their respective Transmission Integrity Management Plans.

February 12, 2016, after an estimated volume of 120,000 metric tons of methane had leaked.<sup>15</sup> In response to this incident, Governor Edmund G. Brown Jr. issued a proclamation that, among other things, prohibited SoCalGas from injecting gas into the storage wells at Aliso Canyon until further direction and directed state agencies to resolve various issues related to the leak.<sup>16</sup> The California Division of Oil, Gas, and Geothermal Resources (DOGGR)<sup>17</sup> implemented new rules requiring gas utilities to install additional barriers within the wells and perform biennial inspections.<sup>18</sup>

Pursuant to SB 380,<sup>19</sup> on July 19, 2017, DOGGR determined that it was safe to resume injections at Aliso Canyon, up to a maximum inventory of approximately 68.6 billion cubic feet (Bcf), and the CPUC agreed.<sup>20</sup> After finding that, in the short-term, maintaining a certain level of storage inventory at Aliso Canyon was necessary to ensure gas and electric service reliability in California during peak demand periods, the Commission reinstated SoCalGas' ability to a

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<sup>15</sup> See Blade Energy Partners, Root Cause Analysis of the Uncontrolled Hydrocarbon Release from Aliso Canyon SS-25 at 155 (published May 16, 2019) available at: [ftp://ftp.cpuc.ca.gov/News\\_and\\_Outreach/SS-25%20RCA%20Final%20Report%20May%2016,%202019.pdf](ftp://ftp.cpuc.ca.gov/News_and_Outreach/SS-25%20RCA%20Final%20Report%20May%2016,%202019.pdf).

<sup>16</sup> Governor Edmund G Brown Jr., January 6, 2016 Proclamation, available at: <https://www.ca.gov/archive/gov39/2016/01/06/news19263/index.html>.

<sup>17</sup> On January 1, 2020, DOGGR was renamed the California Geologic Energy Management Division.

<sup>18</sup> As an example of the cost of compliance, PG&E's estimated capital expenditures for retrofitting its wells to comply with the new DOGGR rules include \$58.8 million for 2019, \$59.9 million for 2020, and \$29.8 million for 2021. See *Pacific Gas and Elec. Co.*, D.19-09-025 at 91.

<sup>19</sup> SB 380, Pavley, Natural Gas Storage: Moratorium (Stats. 2016, Ch. 14).

<sup>20</sup> SB 380 Concurrence Letter, available at: [https://www.cpuc.ca.gov/uploadedFiles/CPUC\\_Public\\_Website/Content/News\\_Room/News\\_and\\_Updates/7-19-17\\_CPUC\\_LtrtoKenHarrisDOGGRreSB380Concurrence.pdf](https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/News_Room/News_and_Updates/7-19-17_CPUC_LtrtoKenHarrisDOGGRreSB380Concurrence.pdf).

inject gas into storage wells at Aliso Canyon, at quantities consistent with DOGGR's recommendation,<sup>21</sup> and subject to continued Commission oversight.<sup>22</sup>

## 1.2. Operational Issues and Constraints

To provide reliable gas service in its service territory, particularly the Los Angeles area, SoCalGas relies on capacity from both its intrastate pipeline and storage fields.<sup>23</sup> During 2017, SoCalGas experienced operational issues with two pipelines (Line 235-2 and 4000) that connect to critical interstate transmission receipt points,<sup>24</sup> limiting the level of gas supply on its system. The lines were either out of service or operating at reduced pressure through 2018 and most of

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<sup>21</sup> May 8, 2017 Letter from Timothy J. Sullivan, Executive Director, California Public Utilities Commission to Bret Lane, Chief Operating Officer, Southern California Gas Company, available at:

[https://www.cpuc.ca.gov/uploadedFiles/CPUC\\_Public\\_Website/Content/News\\_Room/News\\_and\\_Updates/5-8-17\\_Ltr%20to%20SoCal%20Gas%20re%20SoCalGas%20Summer%20Reliability%20and%20Storage%20Instructions\\_A1507014.pdf](https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/News_Room/News_and_Updates/5-8-17_Ltr%20to%20SoCal%20Gas%20re%20SoCalGas%20Summer%20Reliability%20and%20Storage%20Instructions_A1507014.pdf).

<sup>22</sup> Aliso Canyon Withdrawal Protocol, June 23, 2019:

[https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News\\_Room/NewsUpdates/2019/UpdatedWithdrawalProtocol\\_2019-07-23%20-%20v2.pdf](https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News_Room/NewsUpdates/2019/UpdatedWithdrawalProtocol_2019-07-23%20-%20v2.pdf). On September 19, 2019, Alice Stebbins, Executive Director of California Public Utilities Commission, issued a letter directing SoCalGas to increase injections at all of its natural gas storage fields. The letter is available at: [https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News\\_Room/NewsUpdates/2019/Signed%20Letter%20to%20Bret%20Lane%20So%20Cal%20Gas%20Company%20re%20Injection%20Required%20for%20SCG%20Winter%20Reliability%20and%20Storage%20Inventory\\_v2.pdf](https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News_Room/NewsUpdates/2019/Signed%20Letter%20to%20Bret%20Lane%20So%20Cal%20Gas%20Company%20re%20Injection%20Required%20for%20SCG%20Winter%20Reliability%20and%20Storage%20Inventory_v2.pdf).

<sup>23</sup> SoCalGas' winter peak demand of approximately 5.1 Bcf is served by its backbone pipeline system capacity of 3.87 Bcf (maximum) and gas storage capacity. To balance its system on an hourly basis, SoCalGas relies on its gas storage fields, particularly Aliso Canyon because of its size and close proximity to Los Angeles. See Aliso Canyon Action Plan to Preserve Gas and Electric Reliability for the Los Angeles Basin at 7-8, available at: [https://ww2.energy.ca.gov/2016\\_energypolicy/documents/2016-04-08\\_joint\\_agency\\_workshop/Aliso\\_Canyon\\_Action\\_Plan\\_to\\_Preserve\\_Gas\\_and\\_Electric\\_Reliability\\_for\\_the\\_Los\\_Angeles\\_Basin.pdf](https://ww2.energy.ca.gov/2016_energypolicy/documents/2016-04-08_joint_agency_workshop/Aliso_Canyon_Action_Plan_to_Preserve_Gas_and_Electric_Reliability_for_the_Los_Angeles_Basin.pdf).

<sup>24</sup> SoCalGas' Line 3000 was also out of service from July 2016 until September 2018, for maintenance and repairs.

2019.<sup>25</sup> As noted earlier, SoCalGas' Aliso Canyon natural gas storage field is operating at restricted injection, withdrawal, and inventory capacities. Thus, to balance its gas system during the sustained unseasonably cold temperatures in 2018, SoCalGas depleted its non-Aliso Canyon storage fields and was at risk of ordering mandatory curtailments for noncore customers, a risk that materialized during the winter of 2019.<sup>26</sup> Unlike PG&E, which curtails customers based on a pro rata share of nominations,<sup>27</sup> SoCalGas curtails specific customers classes, starting with electric generators. Because 30 percent of California's energy portfolio is supplied by gas-fired generation,<sup>28</sup> these curtailments caused

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<sup>25</sup> SoCalGas returned both lines to service during October 2019. See SoCalGas Envoy Maintenance Schedule, available at: [https://scgenvoy.sempra.com/#nav=/Public/ViewExternalEbb.getMessageLedger%3FledgerType%3Dmessage%26Page%3Dfilter%26datePosted\\_from%3D10%252F09%252F2019%26datePosted\\_to%3D10%252F31%252F2019%26keyword%3D%26folderId%3D9%26rand%3D498](https://scgenvoy.sempra.com/#nav=/Public/ViewExternalEbb.getMessageLedger%3FledgerType%3Dmessage%26Page%3Dfilter%26datePosted_from%3D10%252F09%252F2019%26datePosted_to%3D10%252F31%252F2019%26keyword%3D%26folderId%3D9%26rand%3D498).

<sup>26</sup> See Commission Staff, Winter 2017-18 SoCalGas Condition and Operations Report, available at: [https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News\\_Room/NewsUpdates/2018/Winter2017-2018LookbackReportCleanFinal\\_2018-12-06%20-%20v2.pdf](https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News_Room/NewsUpdates/2018/Winter2017-2018LookbackReportCleanFinal_2018-12-06%20-%20v2.pdf). (“[A] a 15-day period of exceptionally cold weather (the cold snap) began on February 19, 2018, which led SoCalGas to issue a systemwide [voluntary] curtailment of electric generation and to withdraw 7.64 Bcf from its non-Aliso storage fields.”); Commission Staff, Winter 2018-19 SoCalGas Condition and Operations Report ; Commission Staff, Winter 2018-19 SoCalGas Condition and Operations Report at 5, 7, 22, 26-27 Available at: [https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News\\_Room/NewsUpdates/2019/Winter2018-19LookbackReport\\_PublicDraft.pdf](https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News_Room/NewsUpdates/2019/Winter2018-19LookbackReport_PublicDraft.pdf).

<sup>27</sup> Pacific Gas and Electric Company, Gas Rule No. 14, Capacity Allocation and Constraint of Natural Gas Service at 1.a.

<sup>28</sup> California Independent System Operator, Department of Market Monitoring, 2018 Annual Report on Market Issues and Performance at 32 (2018 DMM Report). While this amount includes all gas-fired generation in California, most gas-fired generators are located in SoCalGas' service territory.

reliability issues for grid operators,<sup>29</sup> requiring them to rely on out-of-state energy imports, which are not guaranteed to be available, particularly during peak demand periods.

In addition to reliability issues, operational issues can cause price spikes in the local gas and wholesale electricity markets in California. Following the outage of Line 235-2, the gas price at the local natural gas market in Southern California (SoCal Citygate) increased from its average price of \$3/MMBtu to as high as \$20/MMBtu during sustained cold temperatures in February 2018 and to \$40/MMBtu during a heat wave in July 2018.<sup>30</sup> Approximately 80 percent of California's gas generation capacity relies on interruptible contracting,<sup>31</sup> which exposes gas-fired electric generators to price volatility at SoCal Citygate. Thus, the higher than average gas prices along with fees for customers who were not able to transport gas within the bandwidth stated in SoCalGas' Operational Flow Order rules<sup>32</sup> increased the marginal price for generators that bid into CAISO's wholesale markets. Because most of the gas-fired generators dispatched on the CAISO-controlled grid are located in SoCalGas' service territory, the higher than average marginal costs contributed to a 25 percent increase in the price of

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<sup>29</sup> That is, California Independent System Operator (CAISO) and Los Angeles Department of Water and Power (LADWP).

<sup>30</sup> 2018 IEPR at 216.

<sup>31</sup> Wood Mackenzie, Western Interconnection Gas-Electric Interface Study at 12 (published June 2018), available at: <https://www.wecc.org/Administrative/WECC%20Gas-Electric%20Study%20Public%20Report.pdf>.

<sup>32</sup> See Southern California Gas Company, Gas Rule 30, Section D; see generally, *So. Cali. Gas Co.*, D.19-05-030 (granting in part petition to temporarily cap fees for noncompliance with Operational Flow Orders that were issued to resolve transmission system conditions outside of the noncore customers' control).

wholesale electricity during 2017,<sup>33</sup> and 24 percent in 2018,<sup>34</sup> costing electric ratepayers over \$1 billion.<sup>35</sup>

### **1.3. Greenhouse Gas Legislation**

Compliance with local and statewide greenhouse gas legislation will cause the demand for natural gas, in particular fossil-derived gas, the primary type of gas supplied through the gas systems in California, to decline over the next 25 years. Statewide Renewable Portfolio Standard (RPS) goals require retail sellers of electricity to procure a certain percentage of generation from renewable sources over the next 25 years.<sup>36</sup> Retail sellers may exceed the statewide minimum requirements. As retail sellers procure less electricity from gas-fired generators, which comprise approximately 30 percent of the demand for natural gas in California, the gas throughput assigned to these customers will also decline, thereby allocating more costs to remaining customers, such as residential, small commercial, and industrial ratepayers. In addition, however, state laws regulating climate pollutants promote the production and distribution

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<sup>33</sup> California Independent System Operator, Department of Market Monitoring, 2017 Annual Report on Market Issues and Performance at 3 (2017 DMM Report).

<sup>34</sup> 2018 DMM Report at 3. Approximately, four percent of the increase is attributable to factors other than natural gas prices. *Id.* at 65.

<sup>35</sup> Total estimated wholesale cost of service load in 2017 was \$9.3 billion. *See* 2017 DMM Report at 3. Total estimated wholesale cost of serving load in 2016 was \$7.4 billion. *See* 2018 DMM Report at 3. As stated in the note immediately above, four percent of the increase is attributable to factors other than natural gas price increases.

<sup>36</sup> SB 350, De Leon, Clean Energy and Pollution Reduction Act of (Stats. 2015, Ch. 547); SB 100, De Leon, California Renewables Portfolio Standard Program: emissions of greenhouse gas (Stats. 2018, Ch. 312); *see also* Pub. Util. Code § 399.13; Order Instituting Rulemaking to Continue Implementation and Administration, and Consider Further Development of California Renewables Portfolio Standard Program, R.18-07-003.

of biomethane gas<sup>37</sup> and provide that the Commission should consider uses for certain forms of electrolytic hydrogen.<sup>38</sup>

With respect to building decarbonization, AB 3232 requires the California Energy Commission (CEC) to evaluate the state's ability to reduce greenhouse gas emissions from residential and commercial buildings to 40 percent below 1990 levels by 2030.<sup>39</sup> While no specific statewide laws set forth a framework for implementing building decarbonization yet,<sup>40</sup> SoCalGas and SDG&E filed an application proposing to allow customers to purchase carbon-neutral gas that is derived from non-fossil sources (e.g., biomethane gas),<sup>41</sup> and many municipalities have enacted local building electrification laws. The laws vary in degree, with some banning the use of natural gas in new building construction and others allowing ratepayers to decide between using electricity or natural gas. For example, the City of Berkeley enacted legislation that prohibits natural gas

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<sup>37</sup> Assembly Bill (AB) 1900, Gatto, Renewable Energy Resources: Biomethane, (Stats. 2012, Ch. 602); *see also* R.13-02-008, Order Instituting Rulemaking to Adopt Biomethane Standards and Requirements, Pipeline Open Access Rules, and Related Enforcement Provisions. Senate Bill (SB) 1440, Hueso, Energy, Biomethane, Biomethane Procurement (Stats. 2018, Ch. 739). Biomethane is biogas that meets the standards adopted pursuant subdivisions (c) and (d) of Section 25421 of the Health and Safety Code for injection into a common carrier pipeline. Biogas is gas that is produced from the anaerobic decomposition of organic material. Health and Safety Code § 25420 (a).

<sup>38</sup> SB 1369, Skinner, Energy: Green Electrolytic Hydrogen (Stats. 2018, Ch. 567). Electrolytic hydrogen is gas produced through electrolysis.

<sup>39</sup> SB 3232, Friedman, Zero-Emissions buildings and sources of heat energy, Section 25403 of the Public Resources Code (Stats. 2018, Ch. 373); *see also* Order Instituting Rulemaking Regarding Building Decarbonization, R.19-01-011.

<sup>40</sup> The Commission instituted a rulemaking to, among other things, “develop a framework for establishing future policies, rules, and procedures for reducing greenhouse gas emissions from buildings, in coordination with the CEC . . . and other stakeholders.” R.19-01-011, Order Instituting Rulemaking Regarding Building Decarbonization.

<sup>41</sup> Southern California Gas Company et al, Application 19-02-015.

pipes in low-rise (three and fewer stories) residential buildings,<sup>42</sup> starting on January 1, 2020. Similarly, the City of San Francisco enacted a phase-in plan that requires large commercial buildings (i.e., over 50,000 square feet) to rely solely on electricity generated from renewable sources, by 2030.<sup>43</sup> In contrast, the City of Los Angeles is using rebate programs to incent customers to install electric equipment, such as heating devices, in buildings.<sup>44</sup> Also, the Board of Supervisors for the County of Riverside passed a resolution declaring that the board does not support a statewide mandate requiring its county to use a specific fuel source in buildings or otherwise.<sup>45</sup>

Energy industry specialists have opined on the need for the Commission, among other state agencies, to develop long-term plans for phasing-out gas utility assets and to identify regulatory accounting mechanisms that will mitigate stranded costs for utilities while maintaining affordable gas rates for customers. The Environmental Defense Fund and Gridworks each assert that, as the demand

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<sup>42</sup> City of Berkeley, California, Ordinance No. 7,672-N.S, Chapter 12.80 Berkeley Municipal Code Prohibiting Natural Gas Infrastructure in New Buildings, July 9, 2019. The scope of this law will extend after the California Energy Commission approves more all-electric building types.

<sup>43</sup> San Francisco Board of Supervisors, Ordinance No. 220-19, passed on September 24, 2019, approved on October 4, 2019.

<sup>44</sup> City of Los Angeles Building and Safety Department, Report on Recommendations for CF-18-0002-S7, filed May 2, 2018; City of Los Angeles, Motion CF-18-0002-S7, filed February 6, 2018 (Instructing the Building and Safety Department, in consultation with the Department of Water and Power, to submit a report on “recommendations that would be effective in reducing demand in buildings for natural gas.”); City of Los Angeles, Resolution G-3536, filed February 8, 2018 (motion opposing the California Public Utilities Commission (Commission) Resolution G-3536 establishing a temporary moratorium on all gas service connections for new commercial and industrial developments in Los Angeles County because of reliability concerns related to the natural gas supply in Southern California).

<sup>45</sup> County of Riverside, Board of Supervisors, Resolution No. 2019-257, available at: [http://riversidecountyca.iqm2.com/Citizens/Detail\\_LegiFile.aspx?Frame=&MeetingID=2059&MediaPosition=8346.854&ID=11438&CssClass=](http://riversidecountyca.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=2059&MediaPosition=8346.854&ID=11438&CssClass=).

for natural gas decreases, over time, segments of the natural gas pipeline system will no longer be use and useful and, therefore, ineligible for rate recovery from ratepayers, potentially leaving the gas utilities with an excessive amount of stranded costs.<sup>46</sup> Ratepayers who remain on the system the longest will likely be customers who may not be able to afford to switch from gas to electric home heating and cooling systems, yet these customers would be required to cover the revenue requirement of the remaining pipeline system at higher rates.

## **2. Rulemaking Objectives**

Pursuant to Sections 451, 701 and 761, and Article XII, Section 6 of the California Constitution, the Commission has the authority and responsibility to regulate the natural gas public utilities in California and to do all things that are necessary to ensure adequate and reliable public utility service to California ratepayers at just and reasonable rates. To that end, this Order Instituting Rulemaking (OIR) proceeding will examine how industry-related events that have occurred since the last OIR require the Commission to change the rules, processes, and regulations governing gas utilities, including but not limited to, reliability standards, long-term contracting, regulatory accounting, reporting, and tariff changes for operational flow orders.

This proceeding will be conducted in three phases, as discussed in the subsections below. Track 1A will examine reliability standards for the gas transmission systems to determine, among other things, whether design changes

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<sup>46</sup> Environmental Defense Fund, *Managing the Transition: Proactive Solutions for Stranded Gas Asset Risk in California*, 2019, available at:

[https://www.edf.org/sites/default/files/documents/Managing%20the%20Transition\\_1.pdf](https://www.edf.org/sites/default/files/documents/Managing%20the%20Transition_1.pdf);

Gridworks, *California's Gas System in Transition: Equitable, Affordable, Decarbonized and Smaller*, 2019, available at:

[https://gridworks.org/wp-content/uploads/2019/09/CA\\_Gas\\_System\\_in\\_Transition.pdf](https://gridworks.org/wp-content/uploads/2019/09/CA_Gas_System_in_Transition.pdf).

are necessary to account for a warming climate, and the service capacity of current and future gas system infrastructure. Track 1B will examine proposals for mitigating the negative impact that operational issues with gas transmission systems have on wholesale and local gas market prices, and gas system and electric grid reliability. Track 2 will determine the regulatory solutions and planning strategy that the Commission should implement to ensure that, as the demand for natural gas declines, gas utilities maintain safe and reliable gas systems at just and reasonable rates, and with minimal or no stranded costs.

### **2.1. Track 1A – System Reliability Standards**

This OIR will examine the parameters of the existing reliability standards and consider whether updated and new requirements, such as designated amounts of slack or reserved capacity, are necessary. As noted above, the gas utilities are required to meet certain reliability standards for their backbone and local transmission pipeline systems. The reliability standards generally focus on the historical temperatures for winter months, yet average winter temperatures in California are projected to warm over the next fifteen years.<sup>47</sup> In addition, SoCalGas' most recent technical assessment of its gas system indicated that it would not be able to ensure that it could meet gas demand under the current

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<sup>47</sup> 2018 California Gas Report at 37 (“[I]n 2022, total December/January heating degree days are only 2 percent below the 20-year average. By 2035, however, the impact is more significant, with the difference at 9 percent.”). Total gas demand by electric generators and cogenerations in Northern California is estimated to decrease at a rate of about 1.7 percent from 2019-2035. This estimate excludes gas delivered by nonutility pipelines to electric generators and cogenerations in PG&E’s service territory. *Id.* at 36. *See also* Climate, Drought, and Sea level Rise Scenarios for California’s Fourth Climate Change Assessment at 10-20, 64, available at: [https://www.energy.ca.gov/sites/default/files/2019-07/Projections\\_CCCA4-CEC-2018-006.pdf](https://www.energy.ca.gov/sites/default/files/2019-07/Projections_CCCA4-CEC-2018-006.pdf).

reliability standards.<sup>48</sup> Accordingly, this OIR will also consider mechanisms for the Commission to ensure that gas utilities consistently meet minimum system requirements necessary to provide reliable gas transmission service.

With respect to slack capacity, in R.04-01-025, the Commission considered establishing requirements for the gas utilities to maintain a certain amount of slack capacity but ultimately declined to set an amount, in part, because the Commission determined that the firm backbone gas capacity in Northern and Southern California was sufficient. With the operational issues that SoCalGas has experienced over the last few years, such as the pipeline outages and storage leaks, the underpinning for that decision has changed, warranting the Commission revisiting the need for a slack capacity requirement, recognizing that a decision in this area must be consistent with the long-term planning strategy determined in Track 2 of this proceeding.

We will also evaluate whether the proposed LNG export facility at Energía Costa Azul located in Ensenada, Baja California, could cause reliability issues.<sup>49</sup>

## **2.2. Track 1B: Market Structure and Regulations**

The operational issues on SoCalGas' transmission system over the last few years demonstrate that gas supply shortages during peak demand periods pose reliability issues not only to its shippers, but also to both CAISO's and LADWP's balancing areas, and cause price spikes in the wholesale electricity markets and

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<sup>48</sup> Southern California Gas Company Winter 2019-20 Technical Assessment, Executive Summary (published October 8, 2019), available at: [https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News\\_Room/NewsUpdates/2019/SOCALGAS%20WINTER%202019-20%20TECHNICAL%20ASSESSMENT.pdf](https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News_Room/NewsUpdates/2019/SOCALGAS%20WINTER%202019-20%20TECHNICAL%20ASSESSMENT.pdf).

<sup>49</sup> The proposed North Baja XPress Project, FERC Docket No. CP20-27, would deliver up to an incremental 495 MDth/d off the El Paso Southern Mainline System and could divert gas from the SoCalGas Southern Mainline System.

local gas market. The price spikes occur, in part, because gas-fired generators in SoCalGas' balancing area primarily purchase gas at the rate established by the spot market at SoCal Citygate, rather than by firm long-term contracts for gas and transportation. The current market structure does not appear to provide gas-fired generators sufficient incentives to pursue firm long-term contracts that might mitigate the potential for price spikes.

Accordingly, this phase of the proceeding will identify and evaluate opportunities for mitigating the risk that gas supply shortages pose to electric reliability and market prices.

### **2.3. Track 2: Long-Term Natural Gas Policy and Planning**

State laws establishing greenhouse gas reduction requirements are expected to reduce the demand for natural gas in California as retail electricity will be primarily sourced from carbon-free generation sources. While no state law currently mandates building decarbonization, residential and industrial use of gas-fueled heating and cooling appliances could nevertheless decline as municipalities have begun to pass legislation limiting the use of gas. However, planning for the impending demand reduction must be balanced with the need to ensure that existing transmission of gas is delivered in a safe and reliable manner, long-term statewide electricity procurement requirements are met, and rates are just and reasonable. For example, the Commission's Integrated Resource Planning program determines, among other things, California's long-term generation procurement needs, which currently includes gas-fired generation.<sup>50</sup> In addition, PSEP requirements, PHMSA regulations, and DOGGR

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<sup>50</sup> Order Instituting Rulemaking to Develop and Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements,

*Footnote continued on next page.*

rules require periodic pipeline testing and remediation, activities that will need to continue for any pipeline that is in operation.

In Track 2, the Commission will determine a long-term planning strategy to balance the impact that the projected reduction in gas demand will have on the gas systems with the existing statutorily mandated rules and programs that ensure the safe and reliable provision of energy in California (e.g., PSEP). The Commission will evaluate demand scenarios that will materialize from state and local greenhouse gas-related laws. To facilitate this examination, the gas utilities will provide the Commission with data on how forecasted demand scenarios will translate into gas operational gas flows on their systems (e.g., backbone, transmission, distribution), accounting for balancing and pressure rating requirements. Using this information, the Commission will also examine the extent to which the projected reduction in gas demand will require regulatory changes, such as shortening the useful life of gas assets, to ensure that gas transmission costs are allocated fairly and that stranded costs are mitigated.

### **3. Preliminary Scoping Memo**

As required by Rule 7.1(d) of the Commission's Rules of Practice and Procedure,<sup>51</sup> this OIR includes a preliminary scoping memo that describes the issues to be considered in this proceeding and the timetable for resolving the proceeding. The preliminary issues for each Track are as follows:

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R.16-02-007; D.19-11-016 at 3, 30 and Conclusion of Law (COL) 21, 22, 23 (finding that, for reliability purposes, generation from all-sources, including gas-fired generation, will be needed for the incremental procurement requirements directed herein).

<sup>51</sup> All references to "Rules" are to the Commission's Rules of Practice and procedure unless otherwise indicated.

### 3.1. Issues

#### 3.1.1. Track 1A: Reliability Standards

1. What are SoCalGas' and PG&E's current system capabilities?
  - a. Do PG&E and SoCalGas have the requisite gas transmission pipeline and storage capacity to meet the demand for an average day in a one-in-ten cold and dry-hydroelectric year for their respective backbone gas transmission systems?
  - b. Do PG&E and SoCalGas have the requisite gas transmission pipeline and storage capacity to meet the local transmission standards adopted in D.06-09-039?
  - c. How should the Commission respond to a gas utility's sustained failure to meet minimum transmission system design standards?
2. Are the existing natural gas reliability standards still adequate? If not, how should they be changed?
  - a. Should the Commission establish uniform reliability standards for PG&E and SoCalGas, rather than allow the utilities to continue to use different standards?
  - b. Temperature forecasts for Northern California indicate that between 2018-2035, the average temperature during December and January will be between two to nine percent above the 20 year average. Will the current reliability standards overstate the capacity that gas utilities must maintain?
  - c. Gas-fired generators comprise approximately 40 percent of electric supply during the summer months. Temperature trends forecast warmer summers in California; thus, should the Commission establish separate reliability standards for the summer months?
3. Should gas utilities maintain a specific amount of slack capacity or additional infrastructure in excess of the amount of backbone transmission and storage capacity necessary to meet the existing one-in-ten cold and dry year reliability standard? If so, how much?

4. Will transportation of gas to the planned Energía Costa Azul LNG export facility, owned and operated by an affiliate of SoCalGas, over the proposed expanded North Baja pipeline which is the subject of FERC Docket No. CP20-27, impact reliability and prices in SoCalGas' service territory and beyond? If so, what measures should SoCalGas undertake to assure reliability, and how should such costs be recovered?

### **3.1.2. Track 1B: Market Structure and Regulations**

1. Should gas-fired electric generators be required to purchase a specific amount of long-term firm interstate and intrastate capacity?
2. During 2017 and 2018, the higher than average gas prices at SoCal Citygate caused the price of wholesale electricity to significantly increase. To ensure that natural gas supply is available and gas prices are affordable, should the Commission establish contract or tariff terms and conditions or new rules to facilitate coordination between electric utilities and natural gas utilities?
3. Should pipeline operating procedures, such as those for curtailments and operational flow orders, be uniform across the state to avoid the possibility of regulatory arbitrage?

### **3.1.3. Track 2: Long-Term Natural Gas Policy and Planning**

1. Given the current greenhouse gas-related laws, what is the appropriate gas infrastructure portfolio for gas utilities that operate in California?
  - a. How much gas infrastructure is needed to ensure reliable gas service from 2019-2030, 2030-2040, and beyond 2045 (Time Horizons)? What type of data should the Commission collect from gas utilities to forecast the expected decline in demand for each customer class on the gas utilities' backbone, local transmission and distribution systems during each Time Horizon?
  - b. For each Time Horizon, during which gas demand is expected to decline, how does the Commission ensure that the gas

utilities maintain safe and reliable gas systems at rates that are just and reasonable?

- c. For each Time Horizon, how can the Commission manage the transition of gas infrastructure so that the stranded costs and operations and maintenance expenses caused by declining throughput are mitigated? Should the Commission consider accelerated depreciation or targeted infrastructure retirements?
  - d. Should the Commission establish parameters to determine when aging infrastructure, such as assets that are near the end of their useful lives, should be replaced to meet reliability needs?
2. Should the Commission reconsider gas rate design and cost allocation methods, particularly marginal cost allocation methods versus embedded cost methodologies, in subsequent General Rate Cases? Do rate design changes raise affordability and other economic concerns, especially for disadvantaged residential customers, and what criteria should the Commission apply when considering this issue?
  3. How should the Commission manage the natural gas transition indicated by the long-range portfolio modeling in the Commission's Integrated Resource Plan program, in which gas-fired generation undergoes economic retirements but also remains needed in the short term for reliability purposes?
  4. What utility workforce considerations are raised by a transition away from natural gas, and how should these be included in the long-term gas planning process?

### **3.2. Preliminary Schedules for Tracks 1A, 1B, and 2**

The preliminary schedule for each phase of the proceeding is below. Separate prehearing conferences will be conducted for each Track in this proceeding. A scoping memo will be issued for each Track, in advance of the scheduled workshop. Accordingly, the schedule for each Track will be finalized in the scoping memo.

Tracks 1A and 1B are expected to conform to the 18-month statutory case management deadline for quasi-legislative matters as set forth in Section 1701.5. For Track 2, the Commission exercises its authority under Section 1701.5(b) to extend the statutory deadline to 31 months so that it can first resolve the issues in Track 1A and 1B and coordinate with other proceedings.

Initial comments on the Preliminary Scoping Memo must be filed within 30 days after the OIR has been issued and reply comments must be filed within 45 days after the OIR has been issued.

### **3.2.1. Tracks 1A: Reliability Standards, 1B: Market Structure and Regulations**

Activity	Time Period	
	Track 1A	Track 1B
Hold Prehearing Conference	March 2020	
Conduct Workshop	Early July 2020	Mid-July 2020
Publish Workshop Report	Late August 2020	Mid-September 2020
Initial Comments on Workshop Report	Late September 2020	Mid-October 2020
Reply Comments on Workshop Report	Mid-October 2020	Late October 2020
Proposed Decision	Late April 2021	Mid-May 2021
Final Decision	No earlier than 60 days after the Proposed Decision has been issued	

### **3.2.2. Track 2: Long-Term Natural Gas Policy and Planning**

Activity	Time Period
Hold Prehearing Conference	Mid-June 2021
Conduct Workshop	Mid-October 2021
Publish Workshop Report	Early January 2022
Initial Comments on Workshop Report	Early February 2022

Reply Comments on Workshop Report	Late February 2022
Proposed Decision	August 2022
Final Decision	No earlier than 60 days after the Proposed Decision has been issued.

#### **4. Proceeding Category and Need for Hearing**

The Commission's Rules require that an OIR preliminarily determine the category of the proceeding and the need for hearing.<sup>52</sup> As a preliminary matter, we determine that this proceeding will be preliminarily categorized as quasi-legislative as defined in Rule 1.3(e). Because significant factual issues could be raised in Tracks 1A and 2, evidentiary hearings may be needed for these phases of the proceeding.

Any person who objects to the preliminary categorizations of this rulemaking or to the preliminary hearing determination shall state their objections in the comments on the rulemaking. After considering the comments, the assigned commissioner will issue a scoping memo making a final category determination; this final category determination is subject to appeal as specified in Rule 7.6.

#### **5. Ex Parte Communications**

For this proceeding, *ex parte* communications are permitted without restriction or reporting requirement.

#### **6. Respondents**

The following Commission-jurisdictional natural gas providers shall be the primary respondents to this proceeding: Alpine Natural Gas, PG&E, SoCalGas,

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<sup>52</sup> Rule 7.1(a).

SDG&E, and Southwest Gas, and West Coast Gas Company, Inc.<sup>53</sup> The Independent Storage Providers (i.e., Wild Goose Storage, Lodi Gas Storage, Gill Ranch Storage, Central Valley Gas Storage, Sacramento Natural Gas Storage, LLC) shall also be respondents but are not required to participate in the intervenor compensation program.

We encourage CAISO; Core Transport Agents;<sup>54</sup> Environmental Defense Fund; Gridworks; the large investor-owned electric distribution utilities, including Southern California Edison Company; municipal utilities, such as Sacramento Municipal Utility District, LADWP; the City of Palo Alto; Public Advocates Office; and other interested persons or entities to participate in this proceeding.

Within 15 days of mailing of this rulemaking, each respondent shall inform the Commission's Process Office of the contact information for a single representative.

## **7. Service List or Subscription Service**

This OIR will be served on the service lists for R.04-01-025 and I.17-02-002, respondents, and named entities that we encouraged to participate. Service of the OIR does not confer party status or place any person who has received such service on the Official Service List for this proceeding, other than respondents.

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<sup>53</sup> Alpine Natural Gas and West Coast Gas, Inc., are not required to participate in the intervenor compensation program

<sup>54</sup> The Core Transport Agents are listed in Appendix A.

Additions to the official service list are governed by Rule 1.9(f) of the Commission's Rules. Respondents are parties to the proceeding.<sup>55</sup> Persons who file responsive comments become parties to the proceeding and will be added to the "Parties" category of the official service list upon such filing.<sup>56</sup>

In order to assure service of comments and other documents and correspondence in advance of obtaining party status, persons should promptly request addition to the "Information Only" category as described above; they will be removed from that category upon obtaining party status. Any person will be added to the "Information Only" category of the official service list upon request, for electronic service of all documents in the proceeding, and should do so promptly in order to ensure timely service of comments and other documents and correspondence in the proceeding.<sup>57</sup> The request must be sent to the Commission's Process Office by e-mail (Process\_Office@cpuc.ca.gov) or letter (Process Office, California Public Utilities Commission, 505 Van Ness Avenue, San Francisco, CA 94102). Please include the Docket Number of this Rulemaking in the request.

With respect to subscription service, persons may monitor the proceeding by subscribing to receive electronic copies of documents in this proceeding that are published on the Commission's website. There is no need to be on the official service list in order to use the subscription service. Instructions for enrolling in the subscription service are available on the Commission's website at:

<http://subscribecpuc.cpuc.ca.gov/>.

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<sup>55</sup> See Rule 1.4(d)

<sup>56</sup> *Id.* at 1.4(a)(2)

<sup>57</sup> *Id.* at 1.9(f)

## 8. Public Advisor

Any person or entity interested in participating in this rulemaking who is unfamiliar with the Commission's procedures should contact the Commission's Public Advisor in San Francisco at (415) 703-2074 or (866) 849-8390, or e-mail [public.advisor@cpuc.ca.gov](mailto:public.advisor@cpuc.ca.gov). The TTY number is (866) 836-7825.

## 9. Intervenor Compensation

Intervenor Compensation is permitted in this proceeding. Any party that expects to claim intervenor compensation for its participation in this rulemaking shall file its notice of intent to claim intervenor compensation within 30 days after the filing of reply comments, except that notice may be filed within 30 days of a prehearing conference as well.<sup>58</sup> Intervenor compensation rules are governed by Section 1801 et seq. Parties new to participating in Commission proceedings may contact the Commission's Public Advisor.

### IT IS ORDERED that:

1. This rulemaking is initiated on the Commission's own motion to establish policies, processes and rules to ensure safe and reliable gas systems and perform long-term gas system planning.
2. The following gas public utilities and independent storage providers are respondents to his proceeding: Alpine Natural Gas, Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Gas Company, Southwest Gas Corporation, West Coast Gas Company, Inc., Central Valley Gas Storage, Gill Ranch Storage Lodi Gas Storage, Sacramento Natural Gas Storage, LLC, and Wild Goose Storage.

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<sup>58</sup> *Id.* at 17.1(a)(2).

3. Wild Goose Storage, Lodi Gas Storage, Gill Ranch Storage, Central Valley Gas Storage, and Sacramento Natural Gas Storage, LLC, Alpine Natural Gas and West Coast Gas Company, Inc., are not obligated to fund the Commission's intervenor compensation program.

4. The Executive Director shall cause this Order Instituting Rulemaking to be served on the respondents to this proceeding, and the service lists for Rulemaking 04-01-025 and Investigation 17-02-002.

5. The preliminary category for this proceeding is quasi-legislative. *Ex parte* communications are permitted without restriction or reporting requirement.

6. Evidentiary hearings are anticipated for Tracks 1A and 2.

7. Respondents and prospective parties may file and serve comments on the preliminary scope of this proceeding outlined in this document by no later than 30 days after the issuance of this order. Reply comments may be filed no later than 45 after the issuance of this order. Pursuant to Rule 6.2 of the Commission's Rules of Practice and Procedure, parties shall include in their comments any objections regarding the category, need for hearing, issues to be considered, or schedule. Comments shall be limited to no more than 25 pages per party.

8. Any party that expects to claim intervenor compensation for its participation in this rulemaking shall file its notice of intent to claim intervenor compensation no later than 30 days after any of the prehearing conferences related to their contribution to this proceeding.

9. The assigned Commissioner or Administrative Law Judge may make any revisions to the scheduling and filing determinations made herein as necessary to facilitate the efficient management of the proceeding.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California



**APPENDIX A – CORE TRANSPORT AGENTS**

The Core Transport Agents include: Tiger Natural Gas, Inc.; Everyday Energy, LLC; Viridian Energy PA; Calpine Energy Solutions, LLC; United Energy Trading, LLC; Commercial Energy of California; Vista Energy Marketing, L.P.; North Star Gas Company, LLC; Just Energy Solutions Inc.; Spark Energy Gas, LLC; IGS Energy; Direct Energy Business LLC; Entrust Energy, Inc.; SFE Energy California, Inc.; Peak Six Power and Gas, LLC; GHI Energy, LLC; Clean Energy Renewable Fuels, LLC; Agera Energy LLC; XOOM Energy California, LLC; Mansfield Power and Gas, LLC; Smart One Energy LLC; Shell Energy North America; Continuum Energy Services, LLC; Element Markets Renewable Energy, LLC; Greenwave Energy, LLC; Oasis Power LLC; CenterPoint Energy Services, Inc.; EDF Energy Services, LLC; BP Energy Company; Direct Energy Business Marketing, LLC; Constellation New Energy - Gas Division, LLC; AAA Natural Gas; National Gas & Electric, LLC; Trillium USA Company, LLC; StateWise Energy California, LLC; Ambit California, LLC; Pacific Summit Energy LLC; and Bold Energy Services LLC.

(End of Appendix A)