BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

FILED
11/20/20
04:59 PM

A2011004

Application of Southern California Gas Company (U 904 G), San Diego Gas & Electric Company (U 902 G), Pacific Gas and Electric Company (U 39 G), and Southwest Gas Corporation (U 905 G) regarding Hydrogen-Related Additions or Revisions to the Standard Renewable Gas Interconnection Tariff.

JOINT APPLICATION OF SOUTHERN CALIFORNIA GAS COMPANY (U 904 G), SAN DIEGO GAS & ELECTRIC COMPANY (U 902 G), PACIFIC GAS AND ELECTRIC COMPANY (U 39 G), AND SOUTHWEST GAS CORPORATION (U 905 G) REGARDING HYDROGEN-RELATED ADDITIONS OR REVISIONS TO THE STANDARD RENEWABLE GAS INTERCONNECTION TARIFF

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I. INTRODUCTION

Pursuant to Article 2 of the Rules of Practice and Procedure of the California Public Utilities Commission (CPUC or Commission) and the Assigned Commissioner's November 21, 2019 Ruling Opening Phase 4 (Phase 4 Ruling) of the Order Instituting Rulemaking to Adopt Biomethane Standards and Requirements, Pipeline Open Access Rules, and Related Enforcement Provisions (Rulemaking), Southern California Gas Company (SoCalGas), San Diego Gas & Electric Company (SDG&E), Pacific Gas and Electric Company (PG&E), and Southwest Gas Corporation (Southwest Gas) (collectively, the Joint Utilities) respectfully submit this Application in lieu of an application offering revisions to the Standard Renewable Gas Interconnection Tariff (SRGI Tariff).[1]

This Application is submitted to discuss the current policy and technical status of hydrogen as an energy source, to request authorization to submit a Tier 3 Advice Letter for approval of a hydrogen injection standard in lieu of submitting a supplemental Application, and to seek approval of memorandum accounts for each respective Utility. Specifically, SoCalGas

[1] Pursuant to Rule 1.8(d) of the Commission's Rules of Practice and Procedure, SoCalGas has been authorized to submit this Application on behalf of the Joint Utilities.

and SDG&E are requesting memorandum accounts to record the incremental costs to implement a hydrogen blending demonstration program (the Program) and to develop and implement a hydrogen injection standard. PG&E and Southwest Gas each request a memorandum account to record any incremental costs that may be incurred in connection with the development and implementation of a hydrogen injection standard. The Joint Utilities are requesting by a separate motion to be filed shortly after this Application for a ruling approving the creation of these memorandum accounts effective as of the date of this filing so that the Joint Utilities will have some additional certainty regarding these costs before the end of this proceeding.

The Joint Utilities propose the Program at this time in lieu of offering revisions to the SRGI Tariff that would include (1) a preliminary renewable hydrogen injection standard, (2) any modification to the hydrogen standard for biomethane, and (3) any modifications to the interconnection protocols and agreements, which were requested in the Phase 4 Ruling. Due to current knowledge and testing limitations, the Joint Utilities are currently unable to recommend a hydrogen injection standard with sufficient confidence that public safety, pipeline integrity, and reliability will not be compromised. The Program will help measure such limitations and concerns to inform future changes to the injection standards, protocols, and agreements.

As discussed in more detail below and in Chapter 3 of the accompanying prepared direct testimony, the Program itself consists of small-scale field demonstration projects on isolated polyethylene (PE) plastic, steel, and mixed systems in the SoCalGas and SDG&E territories. These initial projects will generate crucial information and knowledge that will help inform and guide future large-scale demonstration projects involving additional materials and systems, with the ultimate goal of gradually increasing the percentage of hydrogen blended into the Joint Utilities' existing pipeline systems.

In this Application and the accompanying prepared direct testimony, the Joint Utilities establish that the Program is a safe and reasonable alternative to the Commission's directive for the Joint Utilities to propose preliminary hydrogen injection standards and protocols. The demonstrations and data collected through the Program will answer critical technical, operational, and safety questions that will help determine the future hydrogen blending injection standard. The Program will also help validate literature and research regarding material compatibility with a hydrogen and natural gas blend. Because safety, system integrity, and reliability are core concerns for the Joint Utilities, the Program will be the next step toward the

Joint Utilities proposing a hydrogen standard and corresponding tariff changes.

Based on the foregoing, as expanded on herein and in the supporting testimony, the Joint Utilities request authority to implement the Program, and to establish proposed cost recovery mechanisms.

II. PROCEDURAL BACKGROUND

On February 13, 2013, the Commission initiated the Rulemaking (R.) 13-02-008 with the intent of adopting standards and requirements for biomethane, pipeline open access rules, and related enforcement provisions.

On July 5, 2018, the Assigned Commissioner issued a scoping memo ordering the Joint Utilities to jointly file a proposed standard biomethane interconnection tariff and pro forma agreement forms within 90 days.

On August 22, 2019, the Assigned Commissioner extended the deadline for filing the proposed standard biomethane interconnection tariff to November 1, 2019. The Assigned Commissioner also directed that the tariff be designated as the Standard Renewable Gas Interconnection Tariff (referred to herein as the SRGI Tariff), because of the likelihood that the Commission would permit other renewable gases besides biomethane to be included in pipeline gas.

On November 1, 2019, the Joint Utilities filed a proposed SRGI Tariff.

On November 21, 2019, Commissioner Clifford Rechtschaffen issued the Phase 4 Ruling mandating that such phase to address (1) standards for injection of renewable hydrogen gas into gas pipelines, and (2) implementation of Senate Bill (SB) 1440. Commissioner Rechtschaffen also ordered the Joint Utilities to submit within twelve months an application addressing the following proposed additions or revisions to the SRGI Tariff:

a. A definition of renewable hydrogen for purposes of the SRGI Tariff;

b. A preliminary renewable hydrogen injection standard;

c. Any modification to the hydrogen standard for biomethane; and

d. Any modifications to the interconnection protocols and agreements.

(Phase 4 Ruling at 12).

On May 1, 2020, pursuant to an allowed extension of time, the Joint Utilities filed proposed renewable gas (RG) interconnection and operating agreements for the SRGI Tariff.

On July 27, 2020, the Commission issued its proposed decision (PD) on the SRGI Tariff that included changes to the SRGI Tariff's language.

On September 4, 2020, the Commission issued its final Decision (D.) 20-08-035 adopting the SRGI Tariff.

III. PURPOSE OF APPLICATION AND RELIEF SOUGHT

The purpose of this Application is to comply with the Phase 4 Ruling directing the Joint Utilities to file an Application proposing changes to the SRGI Tariff in connection with the following four issues. Although the Joint Utilities are unable at this time to propose changes for a particular hydrogen blending level, this Application and the accompanying testimony lay out a pathway for achieving that end at a future time.

A. Proposed Definition of Renewable Hydrogen for SRGI Tariff Purposes

The Joint Utilities propose adding to the SRGI Tariff the definition of renewable hydrogen listed below.

Renewable hydrogen means hydrogen derived from one of the following:

1) Electrolysis of water using renewable electricity. In this context, renewable electricity refers to electricity produced from sources which are eligible renewable energy resources as defined in California Public Utilities Code sections 399.11-399.36.
2) Steam methane reforming (SMR), autothermal reforming (ATR), or methane pyrolysis of Renewable Gas (RG).[2]
3) Thermochemical conversion of biomass, including the organic portion of municipal solid waste (MSW).

Although hydrogen produced by SMR, ATR, methane pyrolysis and thermochemical conversion of conventional methane with carbon capture and utilization or storage (CCUS)[3] is

[2] SMR, ATR, methane pyrolysis and thermochemical conversion of biomass combined with carbon capture and sequestration or utilization allows for net zero or even net negative GHG emissions. In addition, using RNG as feedstock in these processes can further reduce GHG emissions. The hydrogen resulting from any of these methods can be blended and injected into the natural gas system for storage and/or transportation. Downstream, it could be separated out and used as fuel for vehicles (e.g., H2 fuel cell vehicles) or remain as a blend and provided to customers.

[3] Carbon capture, utilization, and storage (CCUS) refers to technologies that can reduce carbon dioxide emissions by capturing carbon emissions, transporting essentially pure carbon dioxide streams, and either

not included in the Joint Utilities' proposed definition of renewable hydrogen, CCUS can be employed to reduce greenhouse gas (GHG) emissions or to produce carbon negative hydrogen and should be included in any hydrogen injection standard approved by the Commission.

B. Proposed Preliminary Renewable Hydrogen Injection Standards

The Joint Utilities are not ready to propose renewable hydrogen injection standards because of knowledge and testing limitations. There is no current maximum allowable hydrogen limit in the Joint Utilities' tariffs. However, there is a trigger level of 0.1 vol% hydrogen that is specified in the SRGI Tariff. Exceeding the trigger level results in additional monitoring and measurement controls at the specific interconnection(s) that exceeds the threshold. These controls may include increased frequency of the hydrogen testing to quarterly, an impact study and installation of corrosion monitoring probes, and are based on the specific interconnector's gas stream that is exceeding the threshold, rather than a system-wide deviation.

Furthermore, the current SRGI Tariff includes a list of "Constituents of Concern," and hydrogen is identified as one of the Pipeline Integrity Constituents that poses a risk to the safety and integrity of the pipelines. A trigger level of 0.1% is set to monitor the levels of hydrogen in the renewable gas, with no lower and upper action levels defined. The Joint Utilities propose to conduct more substantial research on how to safely blend hydrogen into the gas systems, as detailed in the Joint Utilities direct testimony (Chapter 4).

C. Proposed Modifications to Hydrogen Standard for Biomethane

Because the Joint Utilities are not currently proposing a hydrogen injection standard, they are not ready to propose modifications to the hydrogen standard for biomethane. However, as presented at the Technical Hydrogen Working Group in June 2020, the Joint Utilities are requesting approval of the Program. As the Joint Utilities progress through the Program, fill the knowledge gaps and prepare the gas system for injection of hydrogen, proposed modifications to the hydrogen standard for biomethane will be submitted to the CPUC for review and approval through a Tier 3 Advice Letter. A Tier 3 Advice Letter is appropriate as it is subject to Commission approval via adoption of a resolution during a voting meeting and is subject to public comment.

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storing it in underground reservoirs or using the CO_2 as a feedstock for commercial products including advanced materials.

D. Proposed Modifications to Interconnection Protocols and Agreements

The Joint Utilities are not currently proposing any modifications to interconnection protocols and agreements because doing so at this point would be premature. Nonetheless, as the Joint Utilities progress and learn from the Program, they will submit proposed changes to protocols, SRGI Tariff, and agreements as warranted.

IV. SUMMARY OF TESTIMONY

Support for the Joint Utilities' requests is provided in the accompanying prepared direct testimony and attachments. The direct testimony consists of four chapters: (1) Introduction and Policy (Yuri Freedman, Austin Hastings, and Joseph C. Varela), (2) Cost Recovery (Reginald Austria, Armando Duran, and Kasey Bohannon), (3) Hydrogen Blending Demonstration Program (Hilary E. Petrizzo), and (4) Technical (Kevin Woo, David McQuilling, and Kevin Lang).

a. Chapter 1: Introduction and Policy

The Introduction and Policy Chapter covers the purpose and overarching policy reasons supporting the Program. This chapter (1) presents a framework of what will be included and considered in a future hydrogen injection standard, (2) proposes a definition of renewable hydrogen, and (3) provides the rationale for why hydrogen can and should be an essential component of the future carbon neutral energy economy.

The proposed framework outlines the current biomethane injection standard that only has a trigger level of 0.1% for hydrogen and no lower or upper limits. If the trigger level is reached, the hydrogen injection will be analyzed and addressed on an individual basis based on the biomethane's potential impact on pipeline system integrity. As the pool of knowledge deepens and expands, the Joint Utilities expect to be able to propose changes to the hydrogen injection standard while prioritizing safety, system integrity, affordability, and reliability.

The Joint Utilities expect to gradually increase the hydrogen percentage blend over time as data and information is gathered from on-going analysis, research, and smaller-scale demonstration projects. Such work will guide changes to the SRGI Tariff that will incorporate key elements for the interconnection and injection of hydrogen into the Joint Utilities' pipelines. The Joint Utilities propose a preliminary schedule of hydrogen research milestones focused on strategy, demonstration projects, end-user equipment (residential and commercial), system

equipment (appurtenances, industrial, manufacturers, etc.), and system integrity. This progression of work is dependent upon receiving approval for adequate funding mechanisms for the work to be completed. The Joint Utilities also recommend continuing to hold an annual technical hydrogen working group open to the public to track research progress.

Furthermore, this chapter proposes the renewable hydrogen definition identified in Section III.A herein. Generally, renewable hydrogen would be generated from renewable electricity (through electrolysis); SMR, ATR, or methane pyrolysis of RG; and thermochemical conversion of biomass (including MSW). Although hydrogen produced by SMR, ATR, methane pyrolysis and thermochemical conversion of conventional methane with CCUS is not included in the Joint Utilities' proposed definition of renewable hydrogen, CCUS should be included in any hydrogen injection standard approved by the Commission.

Chapter 1 also aptly highlights the essential role of hydrogen in a carbon neutral economy. Hydrogen is a flexible energy carrier and its unique attributes make it capable of providing renewable and sustainable energy for multiple end-uses, such as fuel cell electric vehicles, stationary power and heat for buildings, backup power, industrial heat and feedstock, and distributed and central station generation. Hydrogen also offers zero carbon solutions for hard-to-abate industries that include aviation, shipping, heavy-duty long-haul transportation, iron and steel production, chemicals, and manufacturing processes that require high-temperature industrial heat, such as aluminum, glass and cement.

This chapter further emphasizes that hydrogen supports California's climate and energy goals, including reducing emissions to 40% below 1990 levels by 2030 (SB 32[4]) and achieving 100% clean energy by 2045 (SB 100[5]). Hydrogen can also reduce inefficiencies in renewable energy generation because there are times when renewable energy cannot be consumed by the electric grid. To prevent overloading, excess renewable energy is either curtailed or given away to nearby states. In order to address this issue, consideration should be given to long-term energy storage solutions (such as hydrogen) because battery storage's short discharge duration (4 to 6 hours) may be unable to meet this challenge. Thus, hydrogen as a form of long-term

[4] SB 32, Pavley. 2006, *available at* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32.
[5] SB 100, De Leon. 2018, *available at* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100#:~:text=This%20bill%20would%20state%20that,agencies%20by%20December%2031%2C%202045.

energy storage could be a critical component to help reduce renewable energy generation inefficiencies as California works toward achieving its clean energy goals.

The Joint Utilities emphasize that their gas infrastructure can be leveraged to provide a significant boost towards achieving gas pipeline decarbonization by blending hydrogen into the existing gas systems. A key advantage of hydrogen as a form of stored energy is that it can be transported, stored for long periods of time, and used as energy across the broad range of applications. Hydrogen blending into the natural gas system, where feasible, could also be a lower cost option of transporting hydrogen compared to developing new hydrogen transmission and distribution infrastructure. With technological progress and sufficiently large, sustained, and localized demand, gas pipelines can be one of the most cost-effective long-term choices for hydrogen delivery.

Notably, California would not be alone in testing and promoting a hydrogen infrastructure. Australia, France, Germany, Japan, and the United Kingdom have all implemented a hydrogen strategy, investing billions of dollars to support hydrogen-powered projects. Chapter 1 discusses the endeavors by these countries.

b. Chapter 2: Cost Recovery

Chapter 2, along with the Joint Utilities' motion for an interim order approving the creation of memorandum accounts (to be filed shortly after this Application), addresses the estimated costs for implementing the Program and cost recovery. SoCalGas and SDG&E propose to establish a Hydrogen Blending Demonstration Program Memorandum Account (HBDPMA), which would be an interest-bearing memorandum account recorded on SoCalGas' and SDG&E's financial statements. The HBDPMA will record the incremental O&M and capital-related costs associated with the Program. Costs recorded to the HBDPMA may also include other costs such as, but not limited to, mitigative measures (e.g., upgrades, replacements or retrofits) which may be incurred in the future. The HBDPMA's balance will be addressed in SoCalGas' and SDG&E's next general rate case or other proceeding designated by the Commission. Pro forma HBDPMA Preliminary Statements are attached to Chapter 2 testimony.

PG&E and Southwest Gas propose that the Commission authorize PG&E and Southwest Gas each to establish a Renewable Hydrogen Memorandum Account (RHMA) effective as of the filing date of this Application to record any respective incremental costs PG&E and Southwest Gas may incur in connection with the development and implementation of a preliminary

renewable hydrogen injection standard in accordance with the requirements of Phase 4 of R.13-02-018. The memorandum accounts would preserve PG&E's and Southwest Gas' ability to demonstrate reasonableness of the costs and request cost recovery in a future application. Pro forma RHMA Preliminary Statements are attached to Chapter 2 testimony.

c. Chapter 3: Hydrogen Blending Demonstration Program

Chapter 3 outlines how the Program would be conducted by SoCalGas and SDG&E. The Program will start with an isolated, primarily polyethylene (PE) plastic distribution system in the SoCalGas territory. This demonstration will inform subsequent demonstrations including an isolated mixed plastic and steel natural gas distribution system, and an isolated steel pipeline demonstration. Initial hydrogen blend levels for the PE plastic project are planned to start at 1% and potentially go up to 20% over time. Subsequent demonstrations, including the mixed material and steel demonstration, will be evaluated to consider using a higher starting blend and/or increase to a higher blend based on safety and technical feasibility. These initial demonstrations will inform later broader scale demonstrations addressing additional materials and systems, in line with the Joint Utilities' overall goal to continue research efforts. An end-of-project report will also be part of the demonstration projects, guided by the "Utility Evaluations" steps in the SRGI Tariff[6] which will document the evaluation of the feasibility of hydrogen blending and the safety assessment supporting blending percentages.

The Program will consider the current international hydrogen blending projects and demonstrations, which currently include a hydrogen blend range from 5%-20% hydrogen. Various international feasibility studies and demonstrations concluded that 5% to 20% of hydrogen can be safely blended into PE plastic distribution pipelines and utilized by residential and small commercial customers. However, it should be noted that end-use appliance acceptance of hydrogen blends varies throughout the world. SoCalGas and SDG&E will undertake safety precautions throughout the Program's implementation, including (but not limited to) selecting distribution sites that are compatible with PE plastic and steel infrastructure, surveying end-user equipment to determine the compatibility of behind-the-meter appliances, conducting leak surveys, and creating hydrogen-specific customer protocol and emergency response.

[6] SRGI Tariff, Section L, Pipeline Blending Study (Blending Study) approved August 4, 2020.

d. Chapter 4: Technical

The Technical Chapter details the literature review, research and studies conducted by the Joint Utilities to determine the feasibility of utilizing their existing natural gas infrastructure for hydrogen blending. It outlines work completed and any conclusions or proposed mitigation, and identifies planned additional work to inform the Joint Utilities in proposing a program for injecting hydrogen.

The testimony points to research indicating that hydrogen-natural gas blends may be compatible in the near-term (within five years) with large portions of existing, lower pressure (i.e., gas distribution) systems, depending on the types of appurtenances, end-user equipment, and varying system conditions. Successful completion of the demonstration projects outlined in Chapter 3 may accelerate the estimated five-year time for hydrogen injection into a controlled and isolated natural gas system. Additional research is needed to comprehensively evaluate system configurations, components, construction methodologies, and materials of construction to encompass the variety and categories of piping systems for each Utility.

The chapter surveys a multitude of research projects and initiatives underway around the world to further study the impact of hydrogen-natural gas blends in higher pressure (i.e., gas transmission) systems. Multiple international research initiatives are ongoing to further evaluate and mitigate risks associated with material compatibility, compression, processing, storage, measurement, regulation, and use of hydrogen-natural gas blends at higher pressures where it has been observed that risks may increase. The Joint Utilities recommend prioritizing blending in "state-of-the-art" plastic systems (installed after 1985) and conducting further research on the new and existing steel systems in California's natural gas infrastructure.

V. STATUTORY AND PROCEDURE REQUIREMENTS

This Application is made pursuant to California Public Utilities Code Sections 451, 454, 701, and 1701, Rule 5.2 of the Commission's General Order 96-B, Section 6 of Article XII of the California Constitution, the Commission's Rules of Practice and Procedure, the Phase 4 Ruling in the Rulemaking, and relevant decisions, orders, and resolutions of the Commission. In accordance with Rule 2.1(a)-(c) of the Commission's Rules of Practice and Procedure, the Joint Utilities provide the following information.

a. Rule 2.1(a) – Legal Name

SoCalGas is a public utility corporation organized and existing under the laws of the State of California. SoCalGas's principal place of business and mailing address is 555 West Fifth Street, Los Angeles, California, 90013.

SDG&E is a public utility corporation organized and existing `under the laws of the State of California. SDG&E is engaged in the business of providing electric service in a portion of Orange County and electric and gas service in San Diego County. SDG&E's principal place of business is 8330 Century Park Court, San Diego, California, 92123.

Pacific Gas and Electric Company has been operating as a public utility corporation since October 10, 1905, organized under California law. It is engaged principally in the business of furnishing gas and electric service in northern and central California. PG&E's address for this matter is Post Office Box 7442, San Francisco, California, 94120.

Southwest Gas is a public utility corporation organized and existing under the laws of the State of California, whose exact legal name is Southwest Gas Corporation. Southwest Gas is engaged in the business of providing gas service in portions of San Bernardino County in Southern California and portions of Placers, El Dorado and Nevada Counties in Northern California. Southwest Gas is also engaged in the intrastate transmission, distribution and sale of natural gas as a public utility in certain portions of the states of the Nevada and Arizona. Southwest Gas' principal place of business is 8360 South Durango Drive, LVD-110, Las Vegas, Nevada, 89113.

b. Rule 2.1(b) – Correspondence

All correspondence and communications to SoCalGas and SDG&E regarding this Application should be addressed to:

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c. Rule 2.1(c) – Category, Hearings, Issues, Schedule

i. Proposed Category of Proceeding

The Joint Utilities propose that this phase of the proceeding be categorized as "Ratesetting" under Rule 1.3(e) and 7.1(e)(2) because the Application could eventually lead to a potential future effect on the proposed Utilities' rates if a memorandum account and costs are approved, and because the proceeding does not otherwise clearly fit into another category under Rule 1.3.

ii. Need for Hearings

The Joint Utilities anticipate that evidentiary hearings will not be necessary.

iii. Issues to be Considered and Relevant Safety Considerations

The principal issues to be considered in this Application are whether the Commission should approve the Program, and whether it should therefore grant the relief requested as summarized in Section VI below. There do not appear to be relevant safety concerns with respect to this Application.

iv. Proposed Schedule

The Joint Utilities propose the following schedule for this Application:

EVENT	DATE
Application	November 20, 2020
Responses/Protests	within 30 days Daily Calendar notice
Utilities' Reply Responses/Protests	within 10 days (see Rule 2.6)
Prehearing Conference	Early February 2021
Scoping Memo	March 2021
Intervenor Testimony	April 2021
Rebuttal Testimony	May 2021
Opening Briefs	June 2021
Reply Briefs	July 2021
Proposed Decision	August 2021
Commission Decision	September 2021

d. Rule 2.2 – Articles of Incorporation

A copy of SoCalGas's Restated Articles of Incorporation, as last amended, presently in effect and certified by the California Secretary of State, was previously filed with the Commission on October 1, 1998, in connection with A.98-10-012, and is incorporated herein by reference.

A copy of SDG&E's Restated Articles of Incorporation as last amended, presently in effect and certified by the California Secretary of State, was filed with the Commission on September 10, 2014, in connection with SDG&E's Application No. 14-09-008, and is incorporated herein by reference.

A certified copy of PG&E's Amended and Restated Articles of Incorporation, effective June 22, 2020, is on record before the Commission in connection with PG&E's Application 20-07-002, filed with the Commission on July 1, 2020. These articles are incorporated herein by reference.

A copy of Southwest Gas' Articles of Incorporation with Statement of Conversion, dated

January 4, 2017, were filed in Application 18-02-008 and are incorporated herein by this reference.

e. Rule 3.2 Compliance Based on Category

Although their applicability here is unclear, in accordance with Rule 3.2(a)–(d) of the Commission's Rules of Practice and Procedure, the Joint Utilities provide the following information.

i. Rule 3.2(a)(1) – Balance Sheet and Income Statement

The most recent updated Balance Sheet and Income Statements for SoCalGas, SDG&E, PG&E, and Southwest Gas are attached to this Application as Attachments 1, 2, 3, and 4, respectively.

ii. Rules 3.2(a)(5) and (6) – Summary of Earnings

A summary of earnings for SoCalGas, SDG&E, PG&E, and Southwest Gas are included herein as Attachments 5, 6, 7, and 8, respectively.

iii. Rule 3.2(a)(10)

Any rate increase resulting from approval of the memorandum accounts requested herein will not solely reflect pass through to customers of increased costs to the Joint Utilities for the services or commodities furnished by them.

f. Rule 1.9

The Joint Utilities are serving this Application on all parties to R.13-02-008 (Rulemaking to Adopt Biomethane Standards and Requirements, Pipeline Open Access Rules, and Related Enforcement Provisions), R.19-09-009 (Order Instituting Rulemaking Regarding Microgrids Pursuant to Senate Bill 1339 and Resiliency Strategies), and R.20-01-007 (Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in CA & perform Long-Term Gas System Planning).

VI. CONCLUSION

For the reasons described above and in the testimony supporting this Application, the Joint Utilities respectfully request that the Commission:

- Authorize the Joint Utilities to establish individual Renewable Hydrogen Memorandum Accounts effective as of the date of this Application;

- Authorize the Joint Utilities to amend the SRGI Tariff to include the proposed definition for Renewable Hydrogen; and
- Authorize the Joint Utilities to file a Tier 3 Advice Letter requesting approval of a hydrogen injection standard, protocols, and interconnection agreements, and containing the appropriate technical information supporting the request.

Respectfully submitted,

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November 20, 2020

OFFICER VERIFICATION

I am an officer of Southern California Gas Company and am authorized to make this verification on its behalf. The matters stated in the foregoing Application are true to my own knowledge, except as to matters that are stated therein on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 20th day of November 2020, at Los Angeles, California.

By: */s/ Gina Orozco*
Gina Orozco

Vice President – Gas Engineering and System Integrity for:

SOUTHERN CALIFORNIA GAS COMPANY

I am an officer of San Diego Gas & Electric Company and am authorized to make this verification on its behalf. The matters stated in the foregoing Application are true to my own knowledge, except as to matters that are stated therein on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 20th day of November 2020, at San Diego, California.

By: */s/ Gina Orozco*
Gina Orozco

Vice President – Gas Engineering and System Integrity for:

SAN DIEGO GAS & ELECTRIC COMPANY

I am an officer of Southwest Gas Corporation and am authorized to make this verification on its behalf. The matters stated in the foregoing Application are true to my own knowledge, except as to matters that are stated therein on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 20th day of November 2020, at Las Vegas, Nevada.

By: */s/ Justin Lee Brown*
Justin Lee Brown

Senior Vice President/General Counsel for:

SOUTHWEST GAS CORPORATION

I am an officer of Pacific Gas and Electric Company and am authorized to make this verification on its behalf. The matters stated in the foregoing Application are true to my own knowledge, except as to matters that are stated therein on information and belief, and as those matters, I believe them true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 20th day of November 2020, at San Francisco, California.

By: */s/ Christine Cowsert*
Christine Cowsert

Vice President, Gas Asset Management and System Operations for:

PACIFIC GAS AND ELECTRIC COMPANY

ATTACHMENT 1

SOUTHERN CALIFORNIA GAS COMPANY
BALANCE SHEET
ASSETS AND OTHER DEBITS
MARCH 31, 2020

	1. UTILITY PLANT	2020
101	UTILITY PLANT IN SERVICE	$18,724,949,165
102	UTILITY PLANT PURCHASED OR SOLD	-
105	PLANT HELD FOR FUTURE USE	-
106	COMPLETED CONSTRUCTION NOT CLASSIFIED	-
107	CONSTRUCTION WORK IN PROGRESS	971,985,638
108	ACCUMULATED PROVISION FOR DEPRECIATION OF UTILITY PLANT	(6,258,007,065)
111	ACCUMULATED PROVISION FOR AMORTIZATION OF UTILITY PLANT	(70,392,869)
117	GAS STORED-UNDERGROUND	61,422,045
	TOTAL NET UTILITY PLANT	13,429,956,914

	2. OTHER PROPERTY AND INVESTMENTS	
121	NONUTILITY PROPERTY	33,461,989
122	ACCUMULATED PROVISION FOR DEPRECIATION AND AMORTIZATION OF NONUTILITY PROPERTY	(14,812,653)
123	INVESTMENTS IN SUBSIDIARY COMPANIES	-
	NONCURRENT PORTION OF ALLOWANCES	-
124	OTHER INVESTMENTS	15,619
125	SINKING FUNDS	-
128	OTHER SPECIAL FUNDS	250,000
175	LONG TERM PORTION OF DERIVATIVE ASSETS	-
	TOTAL OTHER PROPERTY AND INVESTMENTS	18,914,955

Data from SPL as of August 13th, 2020.

SOUTHERN CALIFORNIA GAS COMPANY
BALANCE SHEET
ASSETS AND OTHER DEBITS
MARCH 31, 2020

3. CURRENT AND ACCRUED ASSETS

		2020
131	CASH	75,638,029
132	INTEREST SPECIAL DEPOSITS	-
134	OTHER SPECIAL DEPOSITS	-
135	WORKING FUNDS	124,064
136	TEMPORARY CASH INVESTMENTS	313,300,937
141	NOTES RECEIVABLE	-
142	CUSTOMER ACCOUNTS RECEIVABLE	694,028,373
143	OTHER ACCOUNTS RECEIVABLE	31,266,983
144	ACCUMULATED PROVISION FOR UNCOLLECTIBLE ACCOUNTS	(4,081,676)
145	NOTES RECEIVABLE FROM ASSOCIATED COMPANIES	145,788
146	ACCOUNTS RECEIVABLE FROM ASSOCIATED COMPANIES	3,281,269
151	FUEL STOCK	-
152	FUEL STOCK EXPENSE UNDISTRIBUTED	-
154	PLANT MATERIALS AND OPERATING SUPPLIES	55,969,009
155	MERCHANDISE	-
156	OTHER MATERIALS AND SUPPLIES	-
158	GHG ALLOWANCE	351,060,671
	(LESS) NONCURRENT PORTION OF ALLOWANCES	-
163	STORES EXPENSE UNDISTRIBUTED	(559,916)
164	GAS STORED	32,488,653
165	PREPAYMENTS	135,623,049
171	INTEREST AND DIVIDENDS RECEIVABLE	805,472
173	ACCRUED UTILITY REVENUES	-
174	MISCELLANEOUS CURRENT AND ACCRUED ASSETS	23,794,557
175	DERIVATIVE INSTRUMENT ASSETS	7,235,934
176	LONG TERM PORTION OF DERIVATIVE ASSETS	-
	TOTAL CURRENT AND ACCRUED ASSETS	1,720,121,198

4. DEFERRED DEBITS

181	UNAMORTIZED DEBT EXPENSE	32,825,993
182	UNRECOVERED PLANT AND OTHER REGULATORY ASSETS	3,550,799,238
183	PRELIMINARY SURVEY & INVESTIGATION CHARGES	1,934,596
184	CLEARING ACCOUNTS	1,098,085
185	TEMPORARY FACILITIES	-
186	MISCELLANEOUS DEFERRED DEBITS	966,234,727
188	RESEARCH AND DEVELOPMENT	-
189	UNAMORTIZED LOSS ON REACQUIRED DEBT	2,885,189
190	ACCUMULATED DEFERRED INCOME TAXES	398,166,648
191	UNRECOVERED PURCHASED GAS COSTS	-
	TOTAL DEFERRED DEBITS	4,953,944,475
	TOTAL ASSETS AND OTHER DEBITS	$ 20,122,937,541

Data from SPL as of August 13th, 2020.

SOUTHERN CALIFORNIA GAS COMPANY
BALANCE SHEET
LIABILITIES AND OTHER CREDITS
MARCH 31, 2020

5. PROPRIETARY CAPITAL

		2020
201	COMMON STOCK ISSUED	(834,888,907)
204	PREFERRED STOCK ISSUED	(21,551,075)
207	PREMIUM ON CAPITAL STOCK	-
208	OTHER PAID-IN CAPITAL	-
210	GAIN ON RETIRED CAPITAL STOCK	(9,722)
211	MISCELLANEOUS PAID-IN CAPITAL	(31,306,680)
214	CAPITAL STOCK EXPENSE	143,261
216	UNAPPROPRIATED RETAINED EARNINGS	(4,186,048,172)
219	ACCUMULATED OTHER COMPREHENSIVE INCOME	22,439,046
	TOTAL PROPRIETARY CAPITAL	(5,051,222,249)

6. LONG-TERM DEBT

221	BONDS	(4,450,000,000)
224	OTHER LONG-TERM DEBT	(9,338,770)
225	UNAMORTIZED PREMIUM ON LONG-TERM DEBT	-
226	UNAMORTIZED DISCOUNT ON LONG-TERM DEBT	8,573,975
	TOTAL LONG-TERM DEBT	(4,450,764,795)

7. OTHER NONCURRENT LIABILITIES

227	OBLIGATIONS UNDER CAPITAL LEASES - NONCURRENT	(101,584,516)
228.2	ACCUMULATED PROVISION FOR INJURIES AND DAMAGES	(114,930,267)
228.3	ACCUMULATED PROVISION FOR PENSIONS AND BENEFITS	(846,172,167)
228.4	ACCUMULATED MISCELLANEOUS OPERATING PROVISIONS	-
245	NONCURRENT DERIVATIVE INSTRUMENT LIABILITIES	-
230	ASSET RETIREMENT OBLIGATIONS	(2,207,744,711)
	TOTAL OTHER NONCURRENT LIABILITIES	(3,270,431,661)

Data from SPL as of August 13th, 2020.

SOUTHERN CALIFORNIA GAS COMPANY
BALANCE SHEET
LIABILITIES AND OTHER CREDITS
MARCH 31, 2020

8. CURRENT AND ACCRUED LIABILITES

		2020
231	NOTES PAYABLE	-
232	ACCOUNTS PAYABLE	(692,523,116)
233	NOTES PAYABLE TO ASSOCIATED COMPANIES	-
234	ACCOUNTS PAYABLE TO ASSOCIATED COMPANIES	(45,472,390)
235	CUSTOMER DEPOSITS	(73,120,266)
236	TAXES ACCRUED	(7,473,382)
237	INTEREST ACCRUED	(37,177,003)
238	DIVIDENDS DECLARED	(323,265)
241	TAX COLLECTIONS PAYABLE	(25,595,450)
242	MISCELLANEOUS CURRENT AND ACCRUED LIABILITIES	(255,790,813)
243	OBLIGATIONS UNDER CAPITAL LEASES - CURRENT	(26,465,028)
244	DERIVATIVE INSTRUMENT LIABILITIES	(4,263,985)
245	DERIVATIVE INSTRUMENT LIABILITIES - HEDGES	
	TOTAL CURRENT AND ACCRUED LIABILITIES	(1,168,204,699)

9. DEFERRED CREDITS

252	CUSTOMER ADVANCES FOR CONSTRUCTION	(100,257,517)
	OTHER DEFERRED CREDITS	(395,471,955)
254	OTHER REGULATORY LIABILITIES	(3,793,344,666)
255	ACCUMULATED DEFERRED INVESTMENT TAX CREDITS	(6,292,063)
257	UNAMORTIZED GAIN ON REACQUIRED DEBT	-
281	ACCUMULATED DEFERRED INCOME TAXES - ACCELERATED	-
282	ACCUMULATED DEFERRED INCOME TAXES - PROPERTY	(1,395,462,297)
283	ACCUMULATED DEFERRED INCOME TAXES - OTHER	(491,485,640)
	TOTAL DEFERRED CREDITS	(6,182,314,137)
	TOTAL LIABILITIES AND OTHER CREDITS	$ (20,122,937,541)

Data from SPL as of August 13th, 2020.

SOUTHERN CALIFORNIA GAS COMPANY
STATEMENT OF INCOME AND RETAINED EARNINGS
THREE MONTHS ENDED MARCH 31, 2020

1. UTILITY OPERATING INCOME

400	OPERATING REVENUES		1,394,289,617
401	OPERATING EXPENSES	710,144,825	
402	MAINTENANCE EXPENSES	94,650,720	
403-7	DEPRECIATION AND AMORTIZATION EXPENSES	158,557,938	
408.1	TAXES OTHER THAN INCOME TAXES	34,729,197	
409.1	INCOME TAXES	78,413,782	
410.1	PROVISION FOR DEFERRED INCOME TAXES	25,459,847	
411.1	PROVISION FOR DEFERRED INCOME TAXES - CREDIT	(22,491,470)	
411.4	INVESTMENT TAX CREDIT ADJUSTMENTS	(711,331)	
411.6	GAIN FROM DISPOSITION OF UTILITY PLANT	-	
411.7	LOSS FROM DISPOSITION OF UTILITY PLANT	-	
	TOTAL OPERATING REVENUE DEDUCTIONS		1,078,753,508
	NET OPERATING INCOME		315,536,109

2. OTHER INCOME AND DEDUCTIONS

415	REVENUE FROM MERCHANDISING, JOBBING AND CONTRACT WORK	-	
417	REVENUES FROM NONUTILITY OPERATIONS	-	
417.1	EXPENSES OF NONUTILITY OPERATIONS	(4,851,950)	
418	NONOPERATING RENTAL INCOME	172,447	
418.1	EQUITY IN EARNINGS OF SUBSIDIARIES	-	
419	INTEREST AND DIVIDEND INCOME	1,324,696	
419.1	ALLOWANCE FOR OTHER FUNDS USED DURING CONSTRUCTION	8,413,010	
421	MISCELLANEOUS NONOPERATING INCOME	(335,194)	
421.1	GAIN ON DISPOSITION OF PROPERTY	0	
	TOTAL OTHER INCOME	4,723,009	
421.2	LOSS ON DISPOSITION OF PROPERTY	-	
425	MISCELLANEOUS AMORTIZATION	-	
426	MISCELLANEOUS OTHER INCOME DEDUCTIONS	(5,313,493)	
		(5,313,494)	
408.2	TAXES OTHER THAN INCOME TAXES	(46,577)	
409.2	INCOME TAXES	30,745,852	
410.2	PROVISION FOR DEFERRED INCOME TAXES	(36,214,173)	
411.2	PROVISION FOR DEFERRED INCOME TAXES - CREDIT	34,119,059	
420	INVESTMENT TAX CREDITS	-	
	TOTAL TAXES ON OTHER INCOME AND DEDUCTIONS	28,604,160	
	TOTAL OTHER INCOME AND DEDUCTIONS		28,013,676
	INCOME BEFORE INTEREST CHARGES		343,549,785
	NET INTEREST CHARGES*		40,268,209
	NET INCOME		$303,281,576

**NET OF ALLOWANCE FOR BORROWED FUNDS USED DURING CONSTRUCTION. ($8,413,010)*

Data from SPL as of August 13th, 2020.

STATEMENT OF INCOME AND RETAINED EARNINGS
THREE MONTHS ENDED MARCH 31, 2020

3. RETAINED EARNINGS

RETAINED EARNINGS AT BEGINNING OF PERIOD, AS PREVIOUSLY REPORTED	$3,883,089,862
NET INCOME (FROM PRECEDING PAGE)	303,281,576
DIVIDEND TO PARENT COMPANY	-
DIVIDENDS DECLARED - PREFERRED STOCK	(323,266)
OTHER RETAINED EARNINGS ADJUSTMENT	-
RETAINED EARNINGS AT END OF PERIOD	$4,186,048,172

ATTACHMENT 2

SAN DIEGO GAS & ELECTRIC COMPANY
STATEMENT OF INCOME AND RETAINED EARNINGS
Mar 2020

1. UTILITY OPERATING INCOME

400	OPERATING REVENUES		$ 1,306,839,272
401	OPERATING EXPENSES	646,278,145	
402	MAINTENANCE EXPENSES	61,595,416	
403-7	DEPRECIATION AND AMORTIZATION EXPENSES	196,993,781	
408.1	TAXES OTHER THAN INCOME TAXES	43,656,441	
409.1	INCOME TAXES	70,092,556	
410.1	PROVISION FOR DEFERRED INCOME TAXES	24,967,431	
411.1	PROVISION FOR DEFERRED INCOME TAXES - CREDIT	(35,596,743)	
411.4	INVESTMENT TAX CREDIT ADJUSTMENTS	(188,685)	
411.6	GAIN FROM DISPOSITION OF UTILITY PLANT	-	
	TOTAL OPERATING REVENUE DEDUCTIONS		1,007,798,342
	NET OPERATING INCOME		299,040,930

2. OTHER INCOME AND DEDUCTIONS

415	REVENUE FROM MERCHANDISING, JOBBING AND CONTRACT WORK	-	
417	REVENUES OF NONUTILITY OPERATIONS	-	
417.1	EXPENSES OF NONUTILITY OPERATIONS	(789,099)	
418	NONOPERATING RENTAL INCOME	11,811	
418.1	EQUITY IN EARNINGS OF SUBSIDIARIES	-	
419	INTEREST AND DIVIDEND INCOME	4,330,707	
419.1	ALLOWANCE FOR OTHER FUNDS USED DURING CONSTRUCTION	20,727,642	
421	MISCELLANEOUS NONOPERATING INCOME	118,264	
421.1	GAIN ON DISPOSITION OF PROPERTY	-	
	TOTAL OTHER INCOME	24,399,325	
421.2	LOSS ON DISPOSITION OF PROPERTY	-	
425	MISCELLANEOUS AMORTIZATION	62,512	
426	MISCELLANEOUS OTHER INCOME DEDUCTIONS	6,398,393	
	TOTAL OTHER INCOME DEDUCTIONS	$ 6,460,905	
408.2	TAXES OTHER THAN INCOME TAXES	181,542	
409.2	INCOME TAXES	(3,873,493)	
410.2	PROVISION FOR DEFERRED INCOME TAXES	18,413,296	
411.2	PROVISION FOR DEFERRED INCOME TAXES - CREDIT	(15,814,998)	
	TOTAL TAXES ON OTHER INCOME AND DEDUCTIONS	$ (1,093,653)	
	TOTAL OTHER INCOME AND DEDUCTIONS		$ 19,032,073
	INCOME BEFORE INTEREST CHARGES		318,073,003
	EXTRAORDINARY ITEMS AFTER TAXES		-
	NET INTEREST CHARGES*		56,461,596
	NET INCOME		$ 261,611,407

**NET OF ALLOWANCE FOR BORROWED FUNDS USED DURING CONSTRUCTION, ($6,123,921)*

SAN DIEGO GAS & ELECTRIC COMPANY
STATEMENT OF INCOME AND RETAINED EARNINGS
Mar 2020

3. RETAINED EARNINGS

RETAINED EARNINGS AT BEGINNING OF PERIOD, AS PREVIOUSLY REPORTED	$	5,454,653,820
NET INCOME (FROM PRECEDING PAGE)		261,611,407
DIVIDEND TO PARENT COMPANY		-
DIVIDENDS DECLARED - PREFERRED STOCK		-
DIVIDENDS DECLARED - COMMON STOCK		(200,000,000)
OTHER RETAINED EARNINGS ADJUSTMENTS		
RETAINED EARNINGS AT END OF PERIOD	$	5,516,265,227

SAN DIEGO GAS & ELECTRIC COMPANY
BALANCE SHEET
ASSETS AND OTHER DEBITS
Mar 2020

1. UTILITY PLANT

		2020
101	UTILITY PLANT IN SERVICE	19,855,463,099
102	UTILITY PLANT PURCHASED OR SOLD	-
104	UTILITY PLANT LEASED TO OTHERS	112,194,000
105	PLANT HELD FOR FUTURE USE	-
106	COMPLETED CONSTRUCTION NOT CLASSIFIED	-
107	CONSTRUCTION WORK IN PROGRESS	1,575,513,358
108	ACCUMULATED PROVISION FOR DEPRECIATION OF UTILITY PLANT	(6,158,368,553)
111	ACCUMULATED PROVISION FOR AMORTIZATION OF UTILITY PLANT	(768,833,524)
114	ELEC PLANT ACQUISITION ADJ	3,750,722
115	ACCUM PROVISION FOR AMORT OF ELECTRIC PLANT ACQUIS ADJ	(2,062,896)
118	OTHER UTILITY PLANT	1,473,765,381
119	ACCUMULATED PROVISION FOR DEPRECIATION AND AMORTIZATION OF OTHER UTILITY PLANT	(316,910,382)
120	NUCLEAR FUEL - NET	-
	TOTAL NET UTILITY PLANT	$ 15,774,511,205

2. OTHER PROPERTY AND INVESTMENTS

121	NONUTILITY PROPERTY	6,030,598
122	ACCUMULATED PROVISION FOR DEPRECIATION AND AMORTIZATION	(326,050)
158	NON-CURRENT PORTION OF ALLOWANCES	189,218,523
123	INVESTMENTS IN SUBSIDIARY COMPANIES	-
124	OTHER INVESTMENTS	-
125	SINKING FUNDS	-
128	OTHER SPECIAL FUNDS	986,596,852
175	LONG-TERM PORTION OF DERIVATIVE ASSETS	77,489,111
	TOTAL OTHER PROPERTY AND INVESTMENTS	$ 1,259,009,034

SAN DIEGO GAS & ELECTRIC COMPANY
BALANCE SHEET
ASSETS AND OTHER DEBITS
Mar 2020

3. CURRENT AND ACCRUED ASSETS

		2020
131	CASH	150,358,359
132	INTEREST SPECIAL DEPOSITS	-
134	OTHER SPECIAL DEPOSITS	-
135	WORKING FUNDS	500
136	TEMPORARY CASH INVESTMENTS	52,800,000
141	NOTES RECEIVABLE	-
142	CUSTOMER ACCOUNTS RECEIVABLE	341,028,934
143	OTHER ACCOUNTS RECEIVABLE	110,865,124
144	ACCUMULATED PROVISION FOR UNCOLLECTIBLE ACCOUNTS	(4,122,301)
145	NOTES RECEIVABLE FROM ASSOCIATED COMPANIES	-
146	ACCOUNTS RECEIVABLE FROM ASSOCIATED COMPANIES	119,913
151	FUEL STOCK	-
152	FUEL STOCK EXPENSE UNDISTRIBUTED	-
154	PLANT MATERIALS AND OPERATING SUPPLIES	130,626,904
156	OTHER MATERIALS AND SUPPLIES	-
158	ALLOWANCES	202,302,974
158	LESS: NON-CURRENT PORTION OF ALLOWANCES	(189,218,523)
163	STORES EXPENSE UNDISTRIBUTED	-
164	GAS STORED	497,881
165	PREPAYMENTS	147,597,242
171	INTEREST AND DIVIDENDS RECEIVABLE	2,481,949
173	ACCRUED UTILITY REVENUES	74,432,540
174	MISCELLANEOUS CURRENT AND ACCRUED ASSETS	32,679,971
175	DERIVATIVE INSTRUMENT ASSETS	110,810,576
175	LESS: LONG -TERM PORTION OF DERIVATIVE INSTRUMENT ASSETS	(77,489,111)
	TOTAL CURRENT AND ACCRUED ASSETS	1,085,772,932

4. DEFERRED DEBITS

181	UNAMORTIZED DEBT EXPENSE	35,092,904
182	UNRECOVERED PLANT AND OTHER REGULATORY ASSETS	2,290,620,740
183	PRELIMINARY SURVEY & INVESTIGATION CHARGES	1,451,660
184	CLEARING ACCOUNTS	960,377
185	TEMPORARY FACILITIES	685,270
186	MISCELLANEOUS DEFERRED DEBITS	471,754,887
188	RESEARCH AND DEVELOPMENT	-
189	UNAMORTIZED LOSS ON REACQUIRED DEBT	4,211,589
190	ACCUMULATED DEFERRED INCOME TAXES	144,378,940
	TOTAL DEFERRED DEBITS	2,949,156,367
	TOTAL ASSETS AND OTHER DEBITS	21,068,449,538

SAN DIEGO GAS & ELECTRIC COMPANY
BALANCE SHEET
LIABILITIES AND OTHER CREDITS
Mar 2020

5. PROPRIETARY CAPITAL

		2020
201	COMMON STOCK ISSUED	291,458,395
204	PREFERRED STOCK ISSUED	-
207	PREMIUM ON CAPITAL STOCK	591,282,978
210	GAIN ON RETIRED CAPITAL STOCK	-
211	MISCELLANEOUS PAID-IN CAPITAL	802,165,368
214	CAPITAL STOCK EXPENSE	(24,605,640)
216	UNAPPROPRIATED RETAINED EARNINGS	5,516,265,227
219	ACCUMULATED OTHER COMPREHENSIVE INCOME	(15,390,911)
	TOTAL PROPRIETARY CAPITAL	7,161,175,417

6. LONG-TERM DEBT

221	BONDS	5,122,695,000
223	ADVANCES FROM ASSOCIATED COMPANIES	-
224	OTHER LONG-TERM DEBT	200,000,000
225	UNAMORTIZED PREMIUM ON LONG-TERM DEBT	-
226	UNAMORTIZED DISCOUNT ON LONG-TERM DEBT	(11,949,177)
	TOTAL LONG-TERM DEBT	5,310,745,823

7. OTHER NONCURRENT LIABILITIES

227	OBLIGATIONS UNDER CAPITAL LEASES - NONCURRENT	1,341,394,678
228.2	ACCUMULATED PROVISION FOR INJURIES AND DAMAGES	25,993,775
228.3	ACCUMULATED PROVISION FOR PENSIONS AND BENEFITS	160,782,684
228.4	ACCUMULATED MISCELLANEOUS OPERATING PROVISIONS	1
244	LONG TERM PORTION OF DERIVATIVE LIABILITIES	70,324,725
230	ASSET RETIREMENT OBLIGATIONS	865,545,570
	TOTAL OTHER NONCURRENT LIABILITIES	2,464,041,433

SAN DIEGO GAS & ELECTRIC COMPANY
BALANCE SHEET
LIABILITIES AND OTHER CREDITS
Mar 2020

8. CURRENT AND ACCRUED LIABILITES

		2020
231	NOTES PAYABLE	200,000,000
232	ACCOUNTS PAYABLE	504,036,583
233	NOTES PAYABLE TO ASSOCIATED COMPANIES	-
234	ACCOUNTS PAYABLE TO ASSOCIATED COMPANIES	58,942,644
235	CUSTOMER DEPOSITS	83,952,556
236	TAXES ACCRUED	47,577,320
237	INTEREST ACCRUED	63,372,046
238	DIVIDENDS DECLARED	-
241	TAX COLLECTIONS PAYABLE	6,427,969
242	MISCELLANEOUS CURRENT AND ACCRUED LIABILITIES	104,072,495
243	OBLIGATIONS UNDER CAPITAL LEASES - CURRENT	47,310,746
244	DERIVATIVE INSTRUMENT LIABILITIES	104,448,871
244	LESS: LONG-TERM PORTION OF DERIVATIVE LIABILITIES	(70,324,725)
245	DERIVATIVE INSTRUMENT LIABILITIES - HEDGES	-
	TOTAL CURRENT AND ACCRUED LIABILITIES	1,149,816,505

9. DEFERRED CREDITS

252	CUSTOMER ADVANCES FOR CONSTRUCTION	75,772,282
253	OTHER DEFERRED CREDITS	497,502,549
254	OTHER REGULATORY LIABILITIES	2,373,242,714
255	ACCUMULATED DEFERRED INVESTMENT TAX CREDITS	14,239,664
257	UNAMORTIZED GAIN ON REACQUIRED DEBT	-
281	ACCUMULATED DEFERRED INCOME TAXES - ACCELERATED	-
282	ACCUMULATED DEFERRED INCOME TAXES - PROPERTY	1,802,140,437
283	ACCUMULATED DEFERRED INCOME TAXES - OTHER	219,772,714
	TOTAL DEFERRED CREDITS	4,982,670,360
	TOTAL LIABILITIES AND OTHER CREDITS	21,068,449,538

ATTACHMENT 3

PACIFIC GAS AND ELECTRIC COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF INCOME

	(Unaudited)			
	Three Months Ended September 30,		Nine Months Ended September 30,	
(in millions)	**2020**	**2019**	**2020**	**2019**
Operating Revenues				
Electric	$ 3,810	$ 3,554	$ 10,285	$ 9,292
Natural gas	1,072	878	3,436	3,094
Total operating revenues	**4,882**	**4,432**	**13,721**	**12,386**
Operating Expenses				
Cost of electricity	1,114	1,070	2,418	2,506
Cost of natural gas	90	68	508	515
Operating and maintenance	2,311	2,208	6,421	6,252
Wildfire-related claims, net of insurance recoveries	25	2,548	195	6,448
Wildfire fund expense	120	—	293	—
Depreciation, amortization, and decommissioning	845	840	2,574	2,433
Total operating expenses	**4,505**	**6,734**	**12,409**	**18,154**
Operating Income (Loss)	**377**	**(2,302)**	**1,312**	**(5,768)**
Interest income	5	18	33	61
Interest expense	(323)	(52)	(764)	(213)
Other income, net	101	57	287	187
Reorganization items, net	(82)	(69)	(286)	(237)
Income (Loss) Before Income Taxes	**78**	**(2,348)**	**582**	**(5,970)**
Income tax provision (benefit)	(92)	(738)	434	(1,943)
Net Income (Loss)	**170**	**(1,610)**	**148**	**(4,027)**
Preferred stock dividend requirement	3	3	10	10
Income (Loss) Attributable to Common Stock	**$ 167**	**$ (1,613)**	**$ 138**	**$ (4,037)**

See accompanying Notes to the Condensed Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	(Unaudited)			
	Three Months Ended September 30,		Nine Months Ended September 30,	
(in millions)	2020	2019	2020	2019
Net Income (Loss)	**$ 170**	**$ (1,610)**	**$ 148**	**$ (4,027)**
Other Comprehensive Income				
Pension and other post-retirement benefit plans obligations (net of taxes of $0, $0, $0, and $0, at respective dates)	1	—	1	—
Total other comprehensive income	**1**	**—**	**1**	**—**
Comprehensive Income (Loss)	**$ 171**	**$ (1,610)**	**$ 149**	**$ (4,027)**

See accompanying Notes to the Condensed Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY
CONDENSED CONSOLIDATED BALANCE SHEETS

	(Unaudited)	
	Balance At	
(in millions)	**September 30, 2020**	**December 31, 2019**
ASSETS		
Current Assets		
Cash and cash equivalents	$ 202	$ 1,122
Restricted cash	215	7
Accounts receivable:		
Customers (net of allowance for doubtful accounts of $98 and $43 at respective dates)	1,775	1,287
Accrued unbilled revenue	1,078	969
Regulatory balancing accounts	2,608	2,114
Other	1,081	2,647
Regulatory assets	346	315
Inventories:		
Gas stored underground and fuel oil	94	97
Materials and supplies	552	550
Wildfire fund asset	465	—
Other	1,112	628
Total current assets	**9,528**	**9,736**
Property, Plant, and Equipment		
Electric	65,498	62,707
Gas	23,636	22,688
Construction work in progress	2,941	2,675
Other	18	18
Total property, plant, and equipment	**92,093**	**88,088**
Accumulated depreciation	(27,423)	(26,453)
Net property, plant, and equipment	**64,670**	**61,635**
Other Noncurrent Assets		
Regulatory assets	7,986	6,066
Nuclear decommissioning trusts	3,318	3,173
Operating lease right of use asset	1,887	2,279
Wildfire fund asset	5,932	—
Income taxes receivable	66	66
Other	1,764	1,659
Total other noncurrent assets	**20,953**	**13,243**
TOTAL ASSETS	**$ 95,151**	**$ 84,614**

See accompanying Notes to the Condensed Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY
CONDENSED CONSOLIDATED BALANCE SHEETS

	(Unaudited)	
	Balance At	
(in millions. except share amounts)	**September 30, 2020**	**December 31, 2019**
LIABILITIES AND EQUITY		
Current Liabilities		
Short-term borrowings	$ 2,432	$ —
Debtor-in-possession financing, classified as current	—	1,500
Accounts payable:		
Trade creditors	2,719	1,949
Regulatory balancing accounts	2,326	1,797
Other	759	675
Operating lease liabilities	533	553
Interest payable	298	4
Disputed claims and customer refunds	240	—
Wildfire-related claims	1,975	—
Other	1,998	1,263
Total current liabilities	**13,280**	**7,741**
Noncurrent Liabilities		
Long-term debt	31,657	—
Regulatory liabilities	9,981	9,270
Pension and other post-retirement benefits	1,797	1,884
Asset retirement obligations	6,019	5,854
Deferred income taxes	1,387	442
Operating lease liabilities	1,354	1,726
Other	4,456	2,626
Total noncurrent liabilities	**56,651**	**21,802**
Liabilities Subject to Compromise	—	**49,736**
Shareholders' Equity		
Preferred stock	258	258
Common stock, $5 par value, authorized 800,000,000 shares; 264,374,809 shares outstanding at respective dates	1,322	1,322
Additional paid-in capital	28,286	8,550
Reinvested earnings	(4,648)	(4,796)
Accumulated other comprehensive income	2	1
Total shareholders' equity	**25,220**	**5,335**
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	**$ 95,151**	**$ 84,614**

See accompanying Notes to the Condensed Consolidated Financial Statements.

ATTACHMENT 4

SOUTHWEST GAS HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(Thousands of dollars, except par value)

December 31,	2019	2018
ASSETS		
Utility plant:		
Gas plant	$ 7,813,221	$ 7,134,239
Less: accumulated depreciation	(2,313,050)	(2,234,029)
Construction work in progress	185,026	193,028
Net utility plant	5,685,197	5,093,238
Other property and investments	784,173	623,551
Current assets:		
Cash and cash equivalents	49,539	85,361
Accounts receivable, net of allowances	474,097	413,926
Accrued utility revenue	79,100	77,200
Income taxes receivable, net	31,751	14,653
Deferred purchased gas costs	44,412	4,928
Prepaid and other current assets	180,957	243,701
Total current assets	859,856	839,769
Noncurrent assets:		
Goodwill	343,023	359,045
Deferred income taxes	856	1,264
Deferred charges and other assets	496,943	440,862
Total noncurrent assets	840,822	801,171
Total assets	$ 8,170,048	$ 7,357,729

December 31,	2019	2018
CAPITALIZATION AND LIABILITIES		
Capitalization:		
Common stock, $1 par (authorized – 120,000,000 shares; issued and outstanding – 55,007,433 and 53,026,848 shares)	$ 56,637	$ 54,656
Additional paid-in capital	1,466,937	1,305,769
Accumulated other comprehensive loss, net	(56,732)	(52,668)
Retained earnings	1,039,072	944,285
Total Southwest Gas Holdings, Inc. equity	2,505,914	2,252,042
Noncontrolling interest	—	(452)
Total equity	2,505,914	2,251,590
Redeemable noncontrolling interest	84,542	81,831
Long-term debt, less current maturities	2,300,482	2,107,258
Total capitalization	4,890,938	4,440,679
Commitments and contingencies (Note 10)		
Current liabilities:		
Current maturities of long-term debt	163,512	33,060
Short-term debt	211,000	152,000
Accounts payable	238,921	248,993
Customer deposits	69,165	67,940
Income taxes payable, net	2,069	1,083
Accrued general taxes	48,160	43,560
Accrued interest	21,329	21,369
Deferred purchased gas costs	60,755	79,762
Other current liabilities	264,950	290,878
Total current liabilities	1,079,861	938,645
Deferred income taxes and other credits:		
Deferred income taxes and investment tax credits, net	599,840	529,201
Accumulated removal costs	395,000	383,000
Other deferred credits and other long-term liabilities	1,204,409	1,066,204
Total deferred income taxes and other credits	2,199,249	1,978,405
Total capitalization and liabilities	$8,170,048	$7,357,729

The accompanying notes are an integral part of these statements.

SOUTHWEST GAS HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(In thousands, except per share amounts)

Year Ended December 31,	2019	2018	2017
Operating revenues:			
Gas operating revenues	$1,368,939	$1,357,728	$1,302,308
Utility infrastructure services revenues	1,750,978	1,522,285	1,246,484
Total operating revenues	3,119,917	2,880,013	2,548,792
Operating expenses:			
Net cost of gas sold	385,164	419,388	355,045
Operations and maintenance	424,150	406,393	392,763
Depreciation and amortization	303,237	249,212	250,951
Taxes other than income taxes	62,328	59,898	57,946
Utility infrastructure services expenses	1,573,227	1,387,689	1,148,963
Total operating expenses	2,748,106	2,522,580	2,205,668
Operating income	371,811	357,433	343,124
Other income and (expenses):			
Net interest deductions	(109,226)	(96,671)	(78,064)
Other income (deductions)	10,085	(17,426)	(6,030)
Total other income and (expenses)	(99,141)	(114,097)	(84,094)
Income before income taxes	272,670	243,336	259,030
Income tax expense	56,023	61,684	65,088
Net income	216,647	181,652	193,942
Net income (loss) attributable to noncontrolling interests	2,711	(625)	101
Net income attributable to Southwest Gas Holdings, Inc.	$ 213,936	$ 182,277	$ 193,841
Earnings per share:			
Basic	$ 3.94	$ 3.69	$ 4.04
Diluted	$ 3.94	$ 3.68	$ 4.04
Weighted average shares:			
Basic	54,245	49,419	47,965
Diluted	54,312	49,476	47,991

The accompanying notes are an integral part of these statements.

SOUTHWEST GAS HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Thousands of dollars)

Year Ended December 31,	2019	2018	2017
Net income	$216,647	$181,652	$193,942
Other comprehensive income (loss), net of tax			
Defined benefit pension plans:			
Net actuarial loss	(54,026)	(15,524)	(32,701)
Amortization of prior service cost	966	1,015	828
Amortization of net actuarial loss	17,766	25,549	15,776
Prior service cost	(1,426)	—	—
Regulatory adjustment	28,077	(6,257)	12,590
Net defined benefit pension plans	(8,643)	4,783	(3,507)
Forward-starting interest rate swaps ("FSIRS"):			
Amounts reclassified into net income	2,541	2,541	2,073
Net forward-starting interest rate swaps	2,541	2,541	2,073
Foreign currency translation adjustments	2,038	(3,010)	1,771
Total other comprehensive income (loss), net of tax	(4,064)	4,314	337
Comprehensive income	212,583	185,966	194,279
Comprehensive income (loss) attributable to noncontrolling interests	2,711	(625)	112
Comprehensive income attributable to Southwest Gas Holdings, Inc.	$209,872	$186,591	$194,167

The accompanying notes are an integral part of these statements.

SOUTHWEST GAS HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Thousands of dollars)

Year Ended December 31,	2019	2018	2017
CASH FLOW FROM OPERATING ACTIVITIES:			
Net income	$216,647	$181,652	$193,942
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	303,237	249,212	250,951
Deferred income taxes	54,162	51,041	63,389
Changes in current assets and liabilities:			
Accounts receivable, net of allowances	(54,245)	(15,862)	(40,947)
Accrued utility revenue	(1,900)	1,000	(2,000)
Deferred purchased gas costs	(58,491)	82,574	(95,608)
Accounts payable	(1,865)	11,778	19,961
Accrued taxes	5,243	(11,955)	2,112
Other current assets and liabilities	74,137	(54,073)	(8,203)
Gains on sale of equipment	(5,473)	(1,703)	(4,196)
Changes in undistributed stock compensation	6,896	6,111	10,888
Equity AFUDC	(4,161)	(3,627)	(2,296)
Changes in deferred charges and other assets	(21,051)	(5,738)	(22,269)
Changes in other liabilities and deferred credits	(12,764)	38,446	4,231
Net cash provided by operating activities	500,372	528,856	369,955

Year Ended December 31,	2019	2018	2017
CASH FLOW FROM INVESTING ACTIVITIES:			
Construction expenditures and property additions	(938,148)	(765,914)	(623,649)
Acquisition of businesses, net of cash acquired	(47,638)	(251,373)	(94,204)
Changes in customer advances	19,001	13,463	323
Other inflows	15,153	4,341	16,645
Net cash used in investing activities	(951,632)	(999,483)	(700,885)
CASH FLOW FROM FINANCING ACTIVITIES:			
Issuance of common stock, net	157,946	354,402	41,155
Dividends paid	(116,127)	(100,240)	(92,130)
Centuri distribution to redeemable noncontrolling interest	—	—	(204)
Issuance of long-term debt, net	531,596	565,172	407,063
Retirement of long-term debt	(213,789)	(237,758)	(338,969)
Change in credit facility and commercial paper	—	—	145,000
Change in short-term debt	59,000	(62,500)	214,500
Principal payments on finance lease obligations	(212)	(648)	(980)
Redemption of Centuri shares from noncontrolling parties	—	—	(23,000)
Withholding remittance – share-based compensation	(1,858)	(3,110)	(3,176)
Other	(1,276)	(2,744)	(3,074)
Net cash provided by financing activities	415,280	512,574	346,185
Effects of currency translation on cash and cash equivalents	158	(208)	301
Change in cash and cash equivalents	(35,822)	41,739	15,556
Cash and cash equivalents at beginning of period	85,361	43,622	28,066
Cash and cash equivalents at end of period	$ 49,539	$ 85,361	$ 43,622
SUPPLEMENTAL INFORMATION:			
Interest paid, net of amounts capitalized	$ 102,258	$ 86,562	$ 71,943
Income taxes paid (received), net	$ 2,752	$ 1,221	$ 5,673

The accompanying notes are an integral part of these statements.

ATTACHMENT 5

SOUTHERN CALIFORNIA GAS COMPANY
SUMMARY OF EARNINGS
THREE MONTHS ENDED MARCH 31, 2020
(DOLLARS IN MILLIONS)

Line No.	Item	Amount
1	Operating Revenue	$1,394
2	Operating Expenses	1,079
3	Net Operating Income	$316
4	Weighted Average Rate Base	$7,825
5	Rate of Return*	7.30%

*Authorized Cost of Capital

ATTACHMENT 6

SAN DIEGO GAS & ELECTRIC COMPANY
SUMMARY OF EARNINGS
Mar 2020
($ IN MILLIONS)

Line No.	Item		Amount
1	Operating Revenue	$	1,307
2	Operating Expenses		1,008
3	Net Operating Income	$	299
4	Weighted Average Rate Base	$	10,569
5	Rate of Return*		7.55%

*Authorized Cost of Capital

ATTACHMENT 7

PACIFIC GAS AND ELECTRIC COMPANY
REVENUE, EXPENSE, RATE BASE AND RATE OF RETURN
YEAR 2019 SUMMARY OF EARNINGS
RECORDED ADJUSTED FOR RATEMAKING
$000

Line No.		Electric Operations	Gas Operations	Total Utility Operations
1	**Operating Revenue**	14,234,492	4,616,436	18,850,928
2	**Expenses**			
3	Operation & Maintenance Expense	21,376,964	3,103,425	24,480,388
4	Depreciation	2,458,365	771,873	3,230,238
5	Taxes	(2,682,623)	145,540	(2,537,083)
6	Other	(6,639)	(2,818)	(9,457)
7	**Total Expenses (Line 3 to Line 6)**	21,146,067	4,018,019	25,164,086
8	**Operating Income (Line 1 less Line 7)**	**(6,911,575)**	**598,416**	**(6,313,159)**
9	Weighted Average Rate Base	29,560,265	11,263,714	40,823,979
10	**Return on Rate Base (Line 8/Line 9)**	**-23.38%**	**5.31%**	**-15.46%**
11	**Return on Equity**	**-49.69%**	**5.50%**	**-34.46%**

ATTACHMENT 8

SOUTHWEST GAS CORPORATION
SUMMARY OF EARNINGS
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

Line No.	Description	Southern Cailfornia	Northern California	South Lake Tahoe
	(a)	(b)	(c)	(d)
1	Operating Revenue	$ 128,364,946	$ 35,662,486	$ 23,474,169
2	Operating Expenses	114,575,702	30,640,645	21,782,687
3	Net Operating Income	$ 13,789,244	$ 5,021,841	$ 1,691,482
4	Rate Base at 12/31/19	$ 240,160,826	$ 80,319,367	$ 52,580,666
5	Rate of Return	5.74%	6.25%	3.22%

SOUTHWEST GAS CORPORATION
SUMMARY OF EARNINGS
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2019

Line No.	Description	Southern Cailfornia	Northern California	South Lake Tahoe
	(a)	(b)	(c)	(d)
1	Operating Revenue	$ 128,364,946	$ 35,662,486	$ 23,474,169
2	Operating Expenses	114,575,702	30,640,645	21,782,687
3	Net Operating Income	$ 13,789,244	$ 5,021,841	$ 1,691,482
4	Rate Base at 12/31/19	$ 240,160,826	$ 80,319,367	$ 52,580,666
5	Rate of Return	5.74%	6.25%	3.22%