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Docket Number: 21-IEPR-01

SoCalGas Comments on the 2021 IEPR Draft Scoping Order

Additional submitted attachment is included below.
February 19, 2021

California Energy Commission  
Docket Unit, MS-4  
Docket No. 20-IEPR-01  
1516 Ninth Street  
Sacramento, CA 95814-5512


Dear Chair David Hochschild and Commissioners J. Andrew McAllister, Karen Douglas, Patty Monahan and Siva Gunda:

Southern California Gas Company (SoCalGas) appreciates the opportunity to provide public comments on the Draft Scoping Order of the 2021 Integrated Energy Policy Report (IEPR). SoCalGas offers the attached comments submitted in underline strikeout\(^1\) on the 2021 IEPR Draft Scoping Order. As we move in a decarbonized energy economy, we must ensure that our policies and investments also benefit disadvantaged communities.\(^2\) We commend the California Energy Commission (CEC) for tackling such difficult, yet timely, energy issues as they relate to affordability, reliability and resiliency in a decarbonized economy.

According to the Greenlining Institute, California “communities continue to experience high energy costs and energy insecurity, as well as high rates of disconnection when households [cannot] afford their bills.”\(^3\) These higher energy burdens are not only because of lower incomes, but also because of inefficiencies in the home and the time of use of energy. There is very little flexibility in the time of use of their energy consumption. Most low-income households use their energy in the early morning when preparing for work and children for school, and in the evening hours when returning home. This time of use coincides with higher rates. It is in the public’s interest that energy investments reach low-income households and energy policies do not favor the wealthy at the

\(^1\) Language we recommend including in the 2021 IEPR Scoping Order is in underline strikeout. Language not underlined and in brackets are our comments.

\(^2\) The Joint Agencies Disadvantaged Communities Advisory Group (DACAG) defines disadvantaged communities as those that consist of communities in the 25% highest scoring census tracts according to the most recent version of the California Communities Environmental Health Screening Tool (CalEnviroScreen); all California tribal lands; census tracts with area median household income/state median income, less than 80 percent; and households with median household income less than 80 percent of area median income (AMI).

\(^3\) See Greenlining Institute, Affordable Clean Energy webpage. Available at https://greenlining.org/our-work/energy/affordable-clean-energy/.
expense of moderate to lower income families. SoCalGas suggests the 2021 IEPR Scoping Order recognize this key issue by making it core to the topics that will be explored.

The summer of 2020 brought a prolonged heatwave through much of the west causing the first rolling blackouts in California since the 2001 energy crisis. Indeed, as cold weather descends on the Midwest, central US, and Texas, it serves as a cautionary tale as over 5 million Americans are without electricity or have access to heat since many of these residents are living in all-electric homes. The Energy Commission’s focus on the vital role reliability and resiliency serve in the State’s energy planning and policy documents is timely and well-placed.

To this end, SoCalGas strongly supports the Energy Commission’s prioritization of reliability and resiliency and encourages the Energy Commission to examine and refine existing processes (such as energy demand forecasting) to enable a more granular assessment of energy system needs. This will ensure the collaborating Joint Agencies have the best available data to enable system needs. Summer 2020 underscored the need to have adequate resources to deliver energy during peak demand. Thus, any assessment of electric reliability must be done holistically examining the critical interdependencies of the electric and gas systems. It would be “incomplete” for the IEPR to guide policies or evaluate energy portfolios of the future for California without including a rigorous affordability, reliability and resiliency screen in the Scope of the Plan.

Careful energy planning is difficult and takes courage to not overlook the issues affecting Californians on a day to day basis. SoCalGas offers these comments in the spirit of collaboration. We must collectively pursue climate policy goals through careful energy planning that focuses on reliability and resiliency while reducing energy cost burdens.

Respectfully,

/s/ N. Jonathan Peress

Naim Jonathan Peress
Senior Director
Business Strategy & Policy

cc: Heather Raitt
In the matter of:                    ) Docket No. 21-IEPR-01

Preparation of the )


Background

California has enacted a suite of policies aimed at reducing the state’s greenhouse gas (GHG) emissions, while also maintaining energy reliability, controlling costs, and ensuring that all Californians benefit from the state’s clean energy initiatives. Key legislative actions and executive orders (EOs) are listed below and build toward achieving an electricity system that is 100 percent zero carbon by 2045, and, more broadly, a statewide goal of carbon neutrality by 2045. These innovative policies, coupled with rapid market changes and the growing effects of a changing climate, create new opportunities and require creative solutions to transform the state’s energy system.

The heat storm experienced in August 2020 that led to rotating power outages prompted a redoubling of efforts to assure energy reliability in this changing climate. The CEC, CPUC, and the California ISO are working to ensure grid reliability in response to the heat storm and other increasingly severe events related to climate change. In the October 2020 Preliminary Root Cause Analysis, Mid-August 2020 Heat Storm, the CEC, CPUC, and California ISO identified factors that led to the two rolling outages, and recommended actions for improving resource planning, procurement and market practices (http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf). Implementation of these actions is underway. The 2021 IEPR can provide additional information to inform these actions, particularly those aimed at improving near-term reliability.

Energy use and the resulting emissions in building sector remains a key focus for the state as it aims to decarbonize the economy by 2045. The Lead Commissioner proposes the 2021 IEPR build on the goals and work responding to Assembly Bill (AB) 758 (Skinner, Chapter 470, Statutes of 2009), Senate Bill (SB) 350 (De León, Chapter 547, Statutes of 2015), AB 3232 (Friedman, Chapter 373, Statutes of 2018), and the 2019 IEPR to further a comprehensive approach toward decarbonizing buildings in a cost-effective and equitable manner.

Also, as the state decarbonizes its energy system, it must prudently optimize manage its aging gas- pipeline infrastructure. Factors driving an evolving role of the gas system include:
• Potentially widespread electrification of buildings and reduction of other pipeline gas end-uses would significantly reduce demand for fossil gas over the next few decades, presenting opportunities to strategically downsize and/or repurpose the gas system to reduce system costs.

• Critical interdependencies between the gas and electricity systems create the need to ensure reliability for both systems, particularly to meet ramping requirements associated with additional renewable electricity generation, as zero-carbon solutions are being developed.

• Opportunities to increase and accelerate the use of renewable gas and hydrogen.

• Energy equity opportunities to concentrate benefits and defray costs to low-income and disadvantaged customers.

Finally, in every odd numbered year (such as 2021), the CEC undertakes a new 10-year energy demand forecast. For the 2021 IEPR, the CEC proposes to make the following enhancements to the forecast; 1) extend the forecast timeframe to 15 years to coincide with several state goals that are planned for 2035, and 2) improve methodologies to better quantify and predict the likelihood, severity, and duration of future extreme heat events. In addition to the forecast, beginning with 2021 IEPR, CEC will further the development of demand scenario analyses to help address the growing magnitude of uncertainty in long-term energy planning due to economy-wide decarbonization efforts. Transportation was the focus of the 2020 IEPR Update, which identifies important changes and trends in the state’s transportation system. While not the focus of the 2021 IEPR, planning for changes in the transportation system is a major element of energy planning.

Key Legislative Initiatives and Executive Orders

The 2021 IEPR will reflect the many key policy initiatives that shape California’s energy policies, including:

• AB 758 (Skinner, Chapter 470, Statutes of 2009): required the CEC to develop and periodically update an action plan to increase energy efficiency savings in existing buildings.

• EO B-16-2012: set a goal of reaching 1.5 million ZEVs on California’s roadways by 2025.

• SB 1383 (Lara, Chapter 523, Statutes of 2014): set a target of achieving a 40 percent reduction in statewide methane emissions below 2013 levels by 2030.

• SB 350: elevated the need for energy equity and updated renewables and energy efficiency goals towards reducing GHG emissions by 2030.

• SB 32 (Pavley, Chapter 249, Statutes of 2016): set a statewide goal to reduce California’s GHG emissions 40 percent below 1990 levels by 2030.

• AB 1257 (Bocanegra, Chapter 749, Statutes of 2013): requires the Energy Commission concurrent with the IEPR to identify strategies to maximize the benefits obtained from natural gas as an energy source.

• AB 197 (Garcia, Chapter 250, Statutes of 2016): assured that the state’s implementation of its climate change policies is transparent and equitable, with the benefits reaching disadvantaged communities being fundamental to these efforts.
• SB 100 (De León, Chapter 312, Statutes of 2018): accelerated the state’s renewables goal to 60 percent by 2030 and put into law the state’s commitment to 100 percent renewable and a zero-carbon electricity system by 2045.

• EO B-55-18: established a statewide goal to achieve carbon neutrality by 2045.

• AB 3232: called on CEC to assess potential to reduce GHG emissions 40 percent below 1990 levels from residential and commercial buildings by 2030.

SB 1477 (Stern, Chapter 378, Statutes of 2018): required the CPUC, in consultation with the CEC, to create two incentive programs to promote the installation of low- emission and near-zero-emission space- and water-heating technologies in new and existing homes (the Building Initiative for Low-Emissions Development [BUILD] and Technology and Equipment for Clean Heating [TECH]).

• SB 49 (Skinner, Chapter 697, Statutes of 2019): gave the CEC new authority to develop flexible demand appliance standards within Title 20 and requires the CEC to report on implementation in the IEPR.

• EO B-48-18: called for at least 5 million ZEVs on California’s roads by 2030 and spurs the installation of 250,000 plug-in electric vehicle chargers, including 10,000 direct current fast chargers and 200 hydrogen refueling stations by 2025.

• EO N-79-20: called for 100 percent of in-state sales of new passenger cars and trucks to be zero-emission by 2035, set a goal of 100 percent of medium- and heavy-duty vehicles in the state be zero-emission by 2045 for all operations where feasible and by 2035 for drayage trucks, and set a goal for the state to transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible.

Proposed Scope of the 2021 IEPR

The 2021 IEPR will continue and expand on previous efforts to decarbonize California’s energy system while ensuring that the benefits are equitably spread. The Lead Commissioner proposes that the 2021 IEPR address four major topics as described below:

1. Energy reliability over the next five years
2. Evolving role of the pipeline gas system
3. Building decarbonization and energy efficiency
4. Energy demand
5. Economic and Energy Equity [The Energy Commission has done great work on prioritizing disadvantaged communities and it is important for our customers that this stays front and center in the 2021 IEPR.]

The Lead Commissioner also proposes that the 2021 IEPR include an analysis of the benefits of transitioning to a clean transportation system, as required by statute.

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4 The Joint Agencies Disadvantaged Communities Advisory Group (DACAG) defines disadvantaged communities as those that consist of communities in the 25% highest scoring census tracts according to the most recent version of the California Communities Environmental Health Screening Tool (CalEnviroScreen); all California tribal lands; census tracts with area median household income/state median income, less than 80 percent; and households with median household income less than 80 percent of area median income (AMI).
**Energy Reliability Over the Next Five Years**

**Electric Reliability:** In coordination with CPUC, California ISO and other statewide Balancing Authorities (BAAs), the *2021 IEPR* will discuss opportunities to improve electric reliability in California ISO territory as well as California as a whole with specific focus over the next five years. Specific areas for discussion will include:

- Electric reliability assessments in the California ISO footprint as well as all of California over the next five years. This will include an evaluation of progress towards ensuring sufficient replacement resources are available to enable the most expedient retirement of the remaining once-through cooling power plants (consistent with recommendations in the *2019 IEPR*) and of the Diablo Nuclear Power Plant.

- Consideration of mechanisms to cost-effectively enhance energy reliability during PSPS events while mitigating local air quality impacts of back-up generation (for example, fuel cells). [Millions of Californians have been without power at some point this past year due to planned outages during high fire risk times. During these times, Californians are using backup diesel generation that increases local air quality impacts.]

- Opportunities to reduce reliance on fossil gas-fired electric generation in California over the next five years while maintaining electric reliability.

- Longer-duration storage will be an increasingly important part of the energy reliability portfolio (for example fuel cells). [Given the lead time on development of long-duration storage assets and the vital role it can play in cost abatement during seasonal renewable generation doldrums, the IEPR should examine planning criteria to accelerate deployment of these assets.]

- Opportunities to increase reliability in California through better integration and coordination with the western regional electric and gas grids.

- Whether it is economically workable to retrofit existing pipeline gas-fired electric generation resources to improve their efficiency and opportunities for renewable gases to support achieving policy goals.

- Develop reliability modeling capabilities to examine and refine existing processes (such as energy demand forecasting) to enable a more granular assessment of system needs. [Summer 2020 underscored the need to have the right resources delivering during net peak demand and concurrently demonstrated the importance of a capable and robust gas grid in supporting electric reliability. Thus, any assessment of electric reliability must be done holistically examining the critical interdependencies of the electric and gas systems.]

- Opportunities to address issues and barriers related to expanding the role of distributed energy resources and demand response in supporting reliability and resource sufficiency both in the near term and in long-term planning. This exploration will consider market trends and will examine the current and potential roles of smart meter data in enabling these resources.

- Publicly owned utility (POU) compliance with energy storage system procurement targets and policies adopted by their governing boards (Public Utilities Code 9506).

**Southern California:** The *2021 IEPR* will identify and address remaining challenges in ensuring energy reliability in Southern California. Infrastructure challenges with the
pipeline gas system in Southern California continue as result of aging pipelines and limitations on the use of the Aliso Canyon pipeline gas storage facility. As replacement resources from retirement of the San Onofre Nuclear Generating Station (SONGS) once-through cooling (OTC) plants [SONGS went offline in 2012 and replacement energy planning for SONGS should be deemed complete nearly a decade later. OTC retirements recently have been postponed due to a lack of replacement resources coming to fruition in time for their planned retirement.] continue to be developed, ongoing assessments of near-term summer and winter reliability for the electric and natural gas systems are needed.

**Evolving Role of Pipeline Gas: Trends and Outlook**

In the 2021 IEPR, the CEC proposes to assess pipeline gas supply and demand issues including the role the gas system may play in meeting California’s GHG emissions reduction goals and the transition planning needed to ensure a safe and reliable gas system while protecting gas consumers from undue cost burdens. The CEC will collaborate with the CPUC as the Public Utilities Commission is also looking at these key topics in their Gas Planning OIR Track 2. Key topics of focus will include:

- Assess the outlook for gas use in California both in the 10-year and 25-year planning horizons across key sectors through development and refinements to gas demand forecasts and scenarios, to accurately reflect the impacts of decarbonization policies and goals of the state.

- In coordination with CPUC, begin the discussion and development of necessary analytical assessments to inform how the state can potentially reduce, repurpose, and transform its pipeline gas infrastructure as the demand for fossil gas declines. Key areas of focus include gas prices, gas system costs, impacts on rates, and electric and gas system reliability and integration.

- Explore the role of renewable gas, hydrogen, and other zero-carbon alternatives such as engineered carbon removal (ECR) [Please define what the Energy Commission means by ECR.] in a low carbon future, to replace and/or complement the use of fossil gas with focus on: identification of the most suitable applications; availability and pricing; and opportunities to repurpose existing infrastructure to integrate the usage of renewable gas, hydrogen, and ECR.

**Building Decarbonization and Energy Efficiency**

Decarbonizing California’s building stock is an essential element of meeting the state’s long-term carbon neutrality goals. The Lead Commissioner proposes the 2021 IEPR include an in-depth discussion on building decarbonization policies and strategies, provide updates and analysis of the various standards and incentive programs aimed at supporting building decarbonization and maintaining system reliability, and assess the contributions of existing and potential policies and programs toward meeting the state’s decarbonization goals in an equitable manner. Expanding on the building decarbonization assessment called for by AB 3232, the 2021 IEPR building decarbonization analysis will include discussion of:

- Residential and commercial building decarbonization strategies, as well as strategies to decarbonize industrial and agricultural sectors.

- The varying energy needs and uses in residential buildings, commercial...
buildings, industrial processes, and the agricultural sector. Effective building decarbonization strategies need to address the distinct needs of these four sectors. [These sectors are unique and warrant specific decarbonization strategies for each sector.]

☐ Assessment and prioritization of decarbonization strategies across all four sectors per ($/GHG reduction) using a consistent and open methodology.

☐ An update on targets towards a statewide doubling of energy efficiency, as required by SB 350 to reduce overall grid load and, subsequently, operational costs for energy use in homes and businesses.

☐ The development of load flexibility standards for technologies that have the ability to make operational adjustments in response to signals from the grid. SB 49 gave the CEC new authority to develop flexible demand appliance standards within Title 20 and requires the CEC to report on implementation in the IEPR.

☐ Analysis of equity considerations related to decarbonization to support equitable decarbonization measures. Upfront and ongoing costs should be assessed on a wide variety of customers, across various climate zones, geographies, utility service territories, and economic and demographic boundaries.

- Strategies to increase innovative financing approaches – removing the upfront costs barriers such as energy panel upgrades and asbestos abatement and removal – for the comprehensive retrofits of existing buildings that support California’s decarbonization goals, including expanded financing opportunities for renters and low-income Californians, to be done in collaboration with CPUC initiatives (for example, CPUC Rulemaking 20-08-022).

☐ The Building Energy Efficiency Standards 2022 Update and future updates.

☐ POU energy efficiency targets in comparison with actual savings (Public Utilities Code 9505, PRC 25305.2).

- Needed data and analytical tools to enhance assessments and measure progress of decarbonization of California’s building stock.

☐ Energy Demand

Electricity, Natural Gas, and Transportation Demand Forecasts: The CEC will prepare new end-user electricity, natural gas, and transportation fuel demand forecasts to 2035. Several forecasting products will be developed, including forecasts of electricity consumption and peak electricity demand for California and for individual utility planning areas and forecast zones in the state and analysis of procurement trends amongst load serving entities. In this, the CEC will reassess the impacts on electricity demand of climate change, behind-the-meter generation, adoption of battery storage, energy efficiency standards, fuel substitution programs (fuel substitution programs are often equated with electrification, however it is important for the CEC to consider a broad range of low- and zero-carbon resources like renewable natural gas and hydrogen), and electrification of transportation [Electrification trends seem too narrow. There is growing recognition that multiple renewable fuels like hydrogen and drop-in fuels will play an important role in meeting California’s climate and air quality goals; as a complement to electrification.] trends. In developing the peak demand forecast, the CEC will improve
methodologies for quantifying the likelihood, severity, and duration of future extreme heat events. The CEC will also develop exploratory transportation demand scenarios to assess energy impacts of state goals, proposed policies, and other potential market changes.

**Energy Demand Scenarios:** Staff proposes to initiate a process to develop economy-wide energy demand scenarios through a “what if” analysis geared towards policy compliance and aspirational goal setting. Staff will engage stakeholders to inform development of the “what if” scenarios. Staff will explore new programs, policies, potential market changes, and other demand-side strategies that are (1) needed to meet California’s long-term decarbonization goals, and (2) outside the scope of the ten-year energy demand forecast.

The demand scenarios will be designed to assess options for achieving several goals related to a renewable and carbon-free electricity system by 2045, GHG emissions reductions, and the sale of zero-emission vehicles. The demand scenarios are a tool to assess the potential of policies and strategies needed to meet decarbonization goals, as well as their impact on state energy system planning.

**Economic and Energy Equity**

Low-income households continue to experience high energy costs and energy insecurity, as well as high rates of disconnection when these households cannot afford their energy bills. Low-income families experience higher energy burdens not only because of lower incomes, but also because of inefficiencies in the home and the time of use of their appliances.

Reducing California’s greenhouse gas footprint is a goal shared by everyone; however, the cost should not be balanced on the back of our most vulnerable and disadvantaged communities. The findings from a white paper prepared for the CPUC’s En Banc state that the Net Energy Metering (NEM) cost shift has continued to increase since 2016. The costs of NEM are disproportionately paid by young, less wealthy, and more disadvantaged ratepayers, many of whom are renters. [While homeowners in non-disadvantaged communities continue to reap the benefits of the NEM program. For instance, only about five percent of PG&E’s CARE customers participate in NEM, “meaning approximately 95 percent of CARE customers did not participate and therefore bear the cost of compensating NEM customers.”] While only four percent of SCE’s CARE customers participate in NEM, “meaning about 96 percent, [or over 1.4 million], CARE customers shoulder the additional cost burden from all NEM customers.”

According to the California Energy Commission, “particularly concerning is the prospect that low- and moderate-income Californians or renters, who may be unable to electrify due to

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5 According to the Energy Institute at HAAS (June 2020), Black renters pay $273 more a year than white renters (16% of the sample average of $1,705), and Black homeowners pay $408 more a year than white homeowners (15% of the sample average of $2,649); the gap is largest for low-income households.


7 Id.

8 Id.
upfront costs or lack of home ownership, could bear the impact of these cost increases.”

However, energy efficiency programs in low-income communities are to address long-term energy affordability needs and improve overall benefits to our customers. These programs are proven to be the most cost effective to reduce energy burdens and emissions, which also improves the quality of life for our most vulnerable customers.

The CEC will explore and model current programs and policies as well as evaluate the impacts on energy cost burdens for disadvantaged communities and low-income households. This will guide the pathways for an affordable, resilient, and reliable decarbonized energy transition.

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