



Tamara Rasberry

Governmental Affairs Manager
925 L Street, Suite 650
Sacramento, CA 95814
(916) 492-4252
trasberry@semprautilities.com

January 9, 2014

California Energy Commission
Docket Office
1516 Ninth Street
Sacramento, CA 95814-5512

California Energy Commission

DOCKETED

13-IEP-1A

TN 72465

JAN 09 2014

RE: Comments of Southern California Gas Company on the Final 2013 IEPR
Docket No. 13-IEP-1A- "Adoption of Final 2013 IEPR Report"

Dear Commissioners:

The 2013 Integrated Energy Policy Report (IEPR) represents a substantial effort on the part of the California Energy Commission (CEC), its staff, and the numerous parties that participated in the various workshops. Southern California Gas Company (SoCalGas) commends the extensive efforts of the Commission and its staff and offers the following suggested edits to the final IEPR to further clarify issues related to the Zero Net Energy (ZNE) home, combined heat and power (CHP), natural gas, and transportation.

Zero Net Energy definition

In the final IEPR, the CEC has provided some additional guidance on how the ZNE definition will be implemented. SoCalGas appreciates the discussion of community-based renewable resources as an option for large subdivisions, the need for further discussion on a broad list of issues, and acknowledgement of the AB1257 requirement for the CEC to determine the appropriate role for natural gas in the ZNE home.

SoCalGas understands the need for the CEC and CPUC to advance the discussions on the ZNE definition and the programs and standards needed to achieve the goals of the ZNE home. However, SoCalGas believes it is premature to formally adopt a ZNE definition until many of these issues are resolved. As noted on p. 26, recently signed legislation (AB1257) requires the CEC to determine the role of natural gas in the ZNE home. SoCalGas believes this new requirement, signed by the Governor in October 2013, merits deferral of formally adopting a ZNE definition until the natural gas report has been completed.

Furthermore, recent analysis of fuel cell applications document that with an appropriately scaled fuel cell (as utilized in Japan and other nations), a residential home could meet the proposed definition for ZNE (TDV=0), but the use of the word "renewable" in the definition would eliminate the use of this important and promising near zero emission technology alternative. This is another reason to defer or postpone adoption of a definition, in order to explore other potential ways the Zero TDV definition can be met by varying technologies, instead of expressing a technology mandate by using the term "renewable" in the definition.

Therefore, SoCalGas recommends the CEC clarify that the ZNE definition in the IEPR is a working definition to be further refined through discussions with stakeholders and will be revised and adopted after completion of the AB1257 report.

"The Energy Commission, working with the CPUC, has accomplished this recommendation, and

proposes ~~adoption of~~ the following definition.” (Pg. 23)

“This definition will be further refined through discussion with stakeholders and analysis of key issues identified later in this section ~~The adoption of~~ This **working** definition will enable the Energy Commission to update the California Building Energy Efficiency Standards for 2016 and 2019 with clear orientation toward the upcoming ZNE targets for low-rise residential buildings (three stories or fewer) in 2020 and nonresidential buildings in 2030.¹⁶” (Pg. 23)

Executive Summary and Chapter 1 Energy Efficiency

SoCalGas offers the following edit to reflect the variety of technology options identified in the IEPR that will help California meet its greenhouse gas reduction goals, including hydrogen fuel cell vehicles, advanced natural gas technologies, biofuels and carbon capture technologies.

“The state’s economy, environment, and public health depend on reducing greenhouse gas emissions by using less energy, ~~electrifying~~ **de-carbonizing** the transportation system, and producing ~~power~~ **energy** both sustainably and with lower overall greenhouse gas emissions.” (Pg. 1)

Consistent with the additions on page 24 where the CEC addresses the opportunity for community based options to meet the ZNE definition, SoCalGas suggests the following edit to the Executive Summary.

“California also has a goal of making all new buildings zero-net-energy – essentially combining energy efficiency measures and renewable power generation so that a building can produce ~~or acquire~~ as much ~~power~~ **renewable energy or clean energy** as it uses annually – by 2020 for homes and 2030 for businesses.” (Pg. 1)

In most instances, the IEPR uses the term “energy” when discussing the ZNE home. However, in several instances, the word “power” seems to be used interchangeably with “energy”. The use of the term “power”, which is typically associated with electricity, may suggest to some that the ZNE home will be all electric. Therefore, SoCalGas suggests the word “power” be replaced with the word “energy” in the following sections:

“California also has a goal of making all new buildings zero-net-energy – essentially combining energy efficiency measures and renewable power energy generation so that a building can produce as much ~~power~~ **energy** as it uses annually...” (Pg. 1)

“The graphic also shows a “ZNE Ready” level to represent a home with energy efficiency improvements that sufficiently reduce demand so that the addition of onsite renewable ~~power~~ **energy** production could achieve ZNE...” (Pg. 25)

Chapter 7 Natural Gas

Natural Gas Demand

SoCalGas believes the proposed 2013 IEPR unnecessarily limits CHP to top-cycling CHP technologies. The opportunities for CHP are specific to a facility and should not be limited to one certain type of technology. SoCalGas feels that in order to reduce any confusion the last sentence of the paragraph as well as its accompanying footnote should be removed (footnote #387).

“While future CHP development is expected in both the commercial (for example, big box retail and restaurants) and industrial (such as food processing and water treatment) sectors, Energy

Commission staff analysis allocated the shift in natural gas demand from the power generation sector to generation for CHP in the industrial sector. ~~CHP is assumed to be topping-cycle CHP.~~¹³⁷” (Pg. 183)

Natural Gas Development

The proposed IEPR includes a discussion on SoCalGas’ Southern Zone and SoCalGas’ and SDG&E’s application with the California Public Utilities Commission for the North South Project. SoCalGas offers the following clarifications to this discussion on pages 189-190.

“Consequently, on days when the gas deliveries at Ehrenberg are insufficient to serve all load in the Southern System, SoCal Gas has ~~permission the authority~~ from the CPUC to ~~buy and sell gas to maintain Southern System minimum flows go into the market and purchase more gas for delivery on the El Paso Natural Gas south mainline to make up the deficiency.~~ Without this ~~permission~~ authority, SoCal Gas is allowed to purchase gas only for its core customers, which, given the current gas delivery reductions at the Ehrenberg receipt point, would result in curtailments for noncore customers, including electric generators, along the southern system.” (Pg. 189)

“This delivery requirement, known as the Southern System Minimum (SoSysMin), refers to the minimum amount of gas ~~flowing supply needed to serve customers located in SoCalGas’ Southern Zone (the Imperial Valley, portions of Riverside and San Bernardino Counties, and San Diego County). that must be delivered through the pipeline at Ehrenberg to serve all load in the SDG&E gas service area.~~” (Pg. 190)

~~“On December 20, 2013, SoCalGas and San Diego Gas & Electric Company filed an application with the CPUC for rate recovery of the costs of a new proposed North-South Project, which would provide additional pipeline and compression to support Southern System reliability. SoCal Gas is exploring options to solve this issue, which include a minimum percentage of gas that shippers would have to deliver to the Ehrenberg receipt point or a new pipeline that would connect SoCal Gas’s northern system to its southern system.” (Pg.190)~~

Natural Gas Storage in California

“California has 13 underground natural gas storage facilities with a total working gas inventory of 335 Bcf as of 2011. As shown in Figure 19, storage ~~inventory capacities~~ in 2012 rose in the winter and spring by up to 24 percent compared to 2011 on the heels of a warmer-than-usual winter and lower-than-usual demand.” (Pg. 190)

Chapter 8 Transportation Energy

Benefits of the Alternative and Renewable Fuel and Vehicle Transportation Program (ARFVT)

The final IEPR contains a description of the preliminary results from the ARFVTP Benefits report commissioned from the National Renewable Energy Laboratory (NREL). SoCalGas is interested in reviewing the draft report when it is issued. Although the tables cited from the study show significant use of natural and renewable gas, the preliminary

results highlighted in the IEPR focus on electric vehicles, fuel cell vehicles and biodiesel. SoCalGas believes there is significant opportunity to achieve both criteria pollutant and greenhouse gas emissions reductions through technology advancements in NGV and expanded use of renewable natural gas as a transportation fuel.

SoCalGas looks forward to the opportunity to review the NREL study and share additional information on the

benefits of using natural gas and renewable natural gas as a transportation fuel.

Natural Gas Transportation

SoCalGas agrees with the comment added to page 223 noting that “Heavy-duty engines powered by new natural gas engines offer a viable strategy to reduce nitrogen oxide and GHG emissions.” The price advantage of natural gas and the research supported by the CEC to develop cleaner NGV technologies in the heavy-duty sector are already creating opportunities for significant emissions reductions in the near and long-term.

SoCalGas offers the following additional information on actions in the light-duty sector, as well.

“One automaker in the United States produces a dedicated natural gas passenger vehicle, but four others have developed dual-fueled gasoline/natural gas concept cars and may bring them to market in limited production within the next three years. In addition, SoCalGas is currently working with a major new home production builder to install natural gas Home Refueling Appliances (HRA) as part of a ZNE project in Lancaster, CA. HRA units will be offered as a ‘Green Home Upgrade Option’ to all new home buyers within this single-family new home community.” (Pg.223)

In closing, SoCalGas appreciates the opportunity to provide comments on the Final 2013 IEPR.

Respectfully submitted,

