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Comment Received From: Tamara Rasbery

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Additional submitted attachment is included below.



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California Energy Commission Docket Office, MS-4 1516 Ninth Street Sacramento, CA 95814-5512

RE: 15-IEPR-05. SOCALGAS COMMENTS ON 5/18/15 STAFF WORKSHOP ON ZERO NET ENERGY FOR NEWLY CONSTRUCTED BUILDINGS

Dear Commissioner McAllister:

The 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 appreciates the opportunity to provide the following input from the zero net energy (ZNE) workshop, which took place on May 18, 2015.

For decades, SoCalGas has been actively pursuing highly efficient natural gas use by promoting energy-efficiency, driving advancements in natural gas equipment and low emissions technologies as well as investing in advanced technologies in renewable natural gas and distributed generation. As we move closer toward ZNE goals, it is clear that natural gas is now and will continue to be a critical element in achieving the best result from both the efficiency and cost effectiveness standpoint. To that end, we would like to reiterate our dedication to achieving ZNE through several demonstration projects in which we are involved. Current demonstration projects are:

- i. KB Home's Dawn Creek Zero House 2.0 Project Lancaster, CA¹
- ii. The Resort at Playa Vista Playa Vista, CA²
- iii. Meyers Research Study on Customer Preference

¹ See attachment A for additional information

² See attachment B for additional information

Our effort does not stop there; SoCalGas currently has several projects in development to showcase natural gas further. These projects include:

- i. ABC Green Home 2.0 Walnut, CA³
- ii. ABC Green Home 3.0 Fullerton, CA
- iii. LINC Housing's Village at Beachwood Lancaster, CA
- iv. Navigant Study on Strategy and Impact Evaluation of ZNE Regulations on Gas-Fired Appliances⁴

As work continues on refining the definition of ZNE, we support the inclusion of a community based generation element. Community scale distributed generation (DG) and microgrids can provide a range of efficiency and reliability benefits when deployed in strategic and appropriate ways. Natural gas powered combined heat and power (CHP) technologies, including microturbines and fuel cells, can be integrated with solar PV to provide right-sized community scale DG systems that avoid long-distance electrical transmission losses associated with the traditional grid.

Additionally, a community scale DG system provides local energy reliability in case of power grid failure or excessive load demands. Local power generation systems can provide supply regardless of the time of day or variable weather conditions and could be called upon to support peak load demands. The addition of next-generation technologies such as battery storage will strengthen these DG capabilities.

Community scale DG also provides economies of scale for the installation, operation and maintenance requirements of larger equipment and reduces individual operating and maintenance requirements and the potential for less than optimal operation.

Community scale DG systems provide increased access to those residential customers who would be unable to utilize rooftop solar. Many homes are not suitable for PV due to structural problems, fire code, roof orientation, and shading, which precludes participation for many customers. Multi-family dwellings are often entirely excluded as well.

SoCalGas would like to reiterate some critical components of our presentation.

- Based on a 2014 Meyers Research Study on Customer Preference, consumers prefer natural gas over electric appliances for all major categories including cooking (95%), clothes drying (82%), space heating (83%), water heating (91%) and fireplaces (95%).
- With more than 100 years of domestic natural reserves—the natural gas market is more stable and not subject to the pricing volatility of other energy sources.
- Mixed-fuel ZNE homes have several advantages over electric-only ZNE designs, including: smaller PV system size, lower incremental cost, and higher Total Resource Cost (TRC) values.

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³ See attachments C and D for additional information

⁴ Study not yet released

⁵ Meyers Research, Vision2014 Home Preference Survey

Please do not hesitate to contact me for additional details. We thank you again for the opportunity to provide these comments.

Sincerely,

Tamara Rasberry/s/



KB HOME DAWN CREEK PROJECT: Building a High-Performance Home



Innovation Goes Green: Sustainable design in a home that is functional, affordable and beautiful.

Southern California Gas Company (SoCalGas®) encourages the installation of new and existing natural gas technologies and services in residential housing. SoCalGas helps builders and developers share insights and best practices in green building and sustainability by sharing real-life examples by participating high performing demonstration projects, such as the Dawn Creek Project. The goal is to present examples of how projects designed with energy-efficient natural gas appliances and related technologies help builders meet state energy, sustainability and environmental goals while providing outstanding value and convenience to SoCalGas' residential customers.

THE "WHOLE-HOUSE" PERSPECTIVE

The "whole-house perspective" views the entire home as an integrated energy system with interdependent parts where one component of a home's design affects another. At Dawn Creek, the home's components work together as a system where innovation, cost savings and energy efficiency support each other, adding value to the home.

Incorporating high-tech features into a green project can lead to questions about affordability. However matching the cost of each feature to the value it provides to the home and the home's system, can result in significant energy cost savings to buyers. Applying measures that work with the local climate to design considerations can dramatically affect energy efficiency.

SOCALGAS: PROGRAMS AND INCENTIVES

When companies like KB Home are designing and building green homes they turn to SoCalGas' programs, incentives and expertise to help them break ground on new projects. "The Gas Company has really gone out of its way to help us as builders," said Tom DiPrima, executive vice president, KB Home Southern California Division. "They have programs like the California Advanced Homes Program that provides incentives and expertise to assist us in designing our homes to be energy efficient and affordable."

Beginning in the design phase of a project, experienced SoCalGas account executives provide support and recommendations to improve energy efficiency levels and maximize available builder incentives. SoCalGas works closely with builders and energy analysts to share new ideas and technologies and to help them design better, healthier homes that save new homebuyers money year after year.



THE RESORT AT PLAYA VISTA: THE NEW BENCHMARK IN SUSTAINABLE DESIGN

Near Zero Net Energy

The Resort at Playa Vista is a state-of-the-art common amenities area for use by residents of the Playa Vista community.

This LEED* Platinum facility was developed with innovative, energy-saving technologies through a committed joint effort among SoCalGas*, Los Angeles Department of Water and Power (LADWP) and the developer, Brookfield Residential. The addition of these advanced energy technologies takes us a step closer to achieving California's aspirational goal of Zero Net Energy (ZNE).

This 25,000-square-foot facility boasts three swimming pools, two spas, an outdoor fireplace and cabanas, catering and demonstration kitchens and a two-level, state-of-the-art fitness center, creating impressive energy-saving achievements.

Brookfield Residential first focused the development plan on energy-efficiency measures, followed by a building envelope with passive cooling, and finally, adding renewable energy components to help provide most of the building's electric needs, lower its carbon footprint and reduce its greenhouse gas emissions.

Energy-Efficiency Measures

- Combined Heat and Power System (CHP)
 The CHP system uses natural gas to augment the building's other electricity production methods.
 "Waste" heat is recovered from the natural gas engine to heat the building's lower pools and spas, leading to lower emissions. The efficiency of electricity generation is greater than 80 percent when the engine is operating optimally as designed.
- Photovoltaic Solar Electric System
 The solar electric system generates on-site renewable energy for much of the building's electrical needs.



· Passive Space Conditioning

The building design capitalizes on natural ventilation as a key driver of energy efficiency.

The roof features "cool" and "green" technologies, reflecting heat in various places, filtering rainwater in others and providing a functional thermal mass overall.

Smart Dashboard

The Smart Dashboard monitors both electric and natural gas usage in real time. This dashboard will provide key supply, demand and end-use information via a touch-screen kiosk. The general public may access this information via the Internet. The building's operators will be able to use this information to maximize energy savings from the buildings' systems accordingly.

Water-Efficiency Measures

Low-Flow, High-Performance Bathroom Fixtures
 All bathroom fixtures exceed water efficiency
 standards by 25 percent or more.

· Smart Irrigation

LADWP provides recycled water to this facility for non-potable uses like irrigation. A smart irrigation controller monitors on-site water recycling.

*Leadership in Energy & Environmental Design

Continues on back



Keeping their family warm and comfortable during the cold winter months is a priority for every homeowner.

More Americans rely on natural gas to heat their homes than any other energy source' and, in a recent survey of SoCalGas customers, 83 percent of respondents who indicated they have a preference said they preferred natural gas heating for their homes.²

Plus, today's high-efficiency natural gas furnaces can achieve an Annual Fuel Utilization Efficiency (AFUE) rating up to 98 percent, helping reach energy goals like Zero Net Energy (ZNE).

That means you can construct homes to meet green standards now, and make buyers happy for years to come.

SoCalGas - Your Partner in the Clean Energy Future.





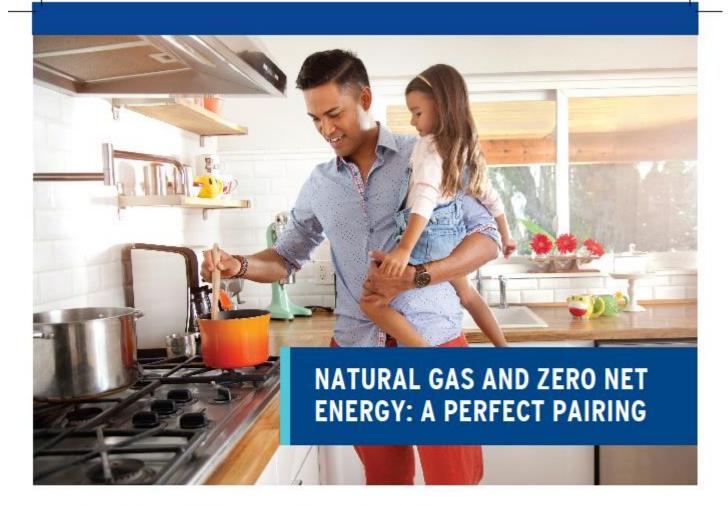












Constructing new homes to meet green building standards like ZNE, LEED and ENERGY STAR® can be a challenge. Natural gas can help you reach those goals.

Developments like the Affordable Buildable Certified (ABC) Green Home 2.0 use high-efficiency natural gas appliances in an overall strategy to achieve desired Platinum, Emerald and other green certifications.

A new home with natural gas appliances not only provides energy savings, it also gives buyers what they like. A recent survey* showed that 89% of SoCalGas* customers prefer gas appliances over electric and 84% were willing to pay more for a home that featured efficient gas appliances.

Equipping your new homes with natural gas makes good energy sense, and it makes good business sense.

Natural Gas: Your Partner in the Clean Energy Future.

*The 2014 Visions Home Preference Survey was administered by Meyers Research LLC, and is based on responses from 1,926 customers in July, 2014 02015 Southern Cultionia Gas Company. Trademarks are property of their respective owners. All rights reserved.

