September 1, 2015

Shelby Livingston  
Cap and Trade Auction Proceeds Branch Chief  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814  

RE: Southern California Gas Company Comments to the “Concept Paper for the Cap-and-Trade Auction Proceeds Second Investment Plan”

Dear Ms. Livingston:

Southern California Gas Company (SoCalGas) would like to thank the Air Resources Board (ARB) for the opportunity to offer comments on the Concept Paper (Concept Paper) for the Cap-and-Trade Auction Proceeds Second Investment Plan dated July, 2015 (Investment Plan). Investments made pursuant to the Investment Plan must be carefully considered as they will be the foundation for the low carbon economy required to achieve California’s long term climate goals. Through the Concept Paper, ARB has effectively outlined a framework that balances the need for investments that will achieve immediate greenhouse gas reductions with those investments that will help transform California’s economy over the long term.

SoCalGas supports the overall goals outlined by the Legislature for the investment of auction proceeds including the following: 1) maximizing economic, environmental and public health benefits to the State, 2) fostering job creation, 3) complementing efforts to improve air quality, 4) investing in disadvantaged communities, 5) providing opportunities for businesses, public agencies, nonprofits, and other community institutions to benefit from greenhouse gas (GHG) reductions, and 6) reducing the impacts of climate change on the State. In alignment with these goals, SoCalGas is committed to assisting its customers to reduce their GHG emissions through energy efficiency programs and other GHG reduction programs. Natural gas technologies must continue to be a part of the energy transformation envisioned in the Investment Plan. Many of the technologies we support, and highlight in the subsequent sections, achieve near zero
emissions, and are available sooner and more cost-effectively than relying on electric-only technologies.

**Overarching Themes**

SoCalGas agrees with the overarching themes described in the Concept Paper, but offers the following suggestions for ARB’s consideration.

**Beyond 2020**

The Investment Plan should clarify that any approved programs and projects must be analyzed for how well they maximize **technologically feasible and cost effective** GHG reductions. This is the only way for California to ensure that it is getting the greatest return for its climate investment dollars.

**Benefit for All Californians**

SoCalGas agrees with ARB’s identification of the need to provide information on applications and available funding to disadvantaged communities. Utilities are well positioned because of our partnerships with community organizations on utility customer assistance programs to help raise awareness and to educate disadvantaged communities on greenhouse gas reduction fund (GGRF) funding opportunities. We would welcome further dialogue with ARB to discuss opportunities for collaboration in this area.

**Innovative Technologies**

Devoting GGRF dollars to innovative approaches to reducing GHG emissions is important in order to meet California’s long term climate goals. However, we strongly recommend that those innovations be technology- and fuel-neutral so that California businesses and consumers have access to all available technologies to reduce GHG emissions. SoCalGas has been investing its RD&D dollars to develop the next-generation in clean and renewable natural gas technologies, and as further described below, those technologies are available much sooner than comparable electric options.

**Systems Approach Through Integrated Projects in Disadvantaged Communities Utilizing Efficient Financing Mechanisms**

SoCalGas agrees with an integrated approach that leverages opportunities across sectors and geographies, and appreciates the example mentioned by the Concept Paper of converting organic waste to energy, thereby reducing methane while generating renewable natural gas. SoCalGas is currently investigating opportunities to do this in its service territory and recommends additional resources are devoted to projects that integrate energy and transportation solutions in a single disadvantaged community, many of which are located in Southern California. In addition, SoCalGas agrees that innovative financing mechanisms should be leveraged wherever possible.
**Short-Lived Climate Pollutants**

Addressing short-lived climate pollutants is a critical component of the Investment Plan. Although SoCalGas’ natural gas system already has one of the lowest emission rates in the country, the company takes a robust approach to methane leak detection by implementing best practices. According to ARB, the natural gas and oil pipeline sectors represent a total of six percent (6%) of all methane emissions in California, while agriculture and waste management account for eighty-seven percent (87%). SoCalGas supports the Concept Paper’s recognition of the benefits of redirecting organic matter sent to municipal waste facilities to composting and anaerobic digestion and the necessity for larger investments in infrastructure to support resource recovery from organic wastes.

**Rural Communities and Small Businesses**

SoCalGas supports the important role that rural communities and small businesses can play in reducing GHG emissions. Currently the California Public Utilities Commission (CPUC) is investigating the possibility of increasing the affordable access to energy for disadvantaged communities in the San Joaquin Valley including the extension of natural gas pipelines to rural communities that currently burn propane or wood to heat their homes.

**Investment Concepts**

**Transportation**

The Concept Paper highlights the importance of decarbonizing California’s transportation sector to meet both future climate goals and air quality standards through “significant investment in pre-commercial development and demonstrations of innovative freight technologies, followed by greater funding to support widespread deployment.” Natural gas can play an important role in reducing harmful tailpipe emissions, especially in the heavy-duty transportation and goods movement applications where electric transportation options are unavailable and in the rail and marine transportation areas as well.

One example of the type of transportation project that can be funded by climate investments is compressed natural gas (CNG) hybrid drayage trucks. Such trucks can augment and provide long-term solutions to attaining greenhouse gas targets and stringent federal clean air standards. CNG hybrid drayage trucks are designed to operate mostly with zero tailpipe emissions during idling and low-power operations in sensitive zones around ports and rail yards. By utilizing commercially available and widely used CNG engines and components the trucks are expected to be cost competitive and well-positioned for commercialization. While CNG hybrids offer longer term solutions, current CNG engine technology can immediately alleviate the adverse public health hazards of heavy-duty diesel trucks, especially for the surrounding communities along the goods movement corridors and next to major freeways.
Clean Energy and Energy Efficiency

The Concept Paper describes the current sources of funding for clean energy and energy efficiency projects, and identifies some important areas to receive additional funding. SoCalGas would like to add an additional area that should be mentioned along with low-carbon water systems, low-global warming potential alternatives, residential wood smoke reduction and carbon capture and sequestration. SoCalGas believes this list should be expanded to include funding for power-to-gas that converts renewable wind and solar power into renewable gas that can be stored in the natural gas delivery system to meet future energy needs. It can also be used as a multi-purpose energy source for vehicles, micro-turbines, fuel cells or other equipment. Distinct from other storage technologies, power-to-gas has the capability of resolving renewable energy integration issues such as supply/demand imbalances and transportation issues, and can therefore contribute to the state’s renewable energy targets and emission reduction goals. Commercial-scale power-to-gas systems are already being used in Europe and demonstration projects in the U.S. are in progress. Additional resources may accelerate the timeline for commercialization in the U.S. and further utilize natural gas infrastructure currently in place without necessitating “wholesale changes to the State’s current electricity and natural gas systems.”

Natural Resources and Waste Diversion

The final investment concept involves the effective management of natural resources and the efficient diversion of organic waste. SoCalGas supports the implementation of waste diversion strategies that reduce the amount of municipal solid waste that is disposed of in landfills and repurpose that waste as new value-added products. Such diversion strategies would create renewable energy that “can fuel local transportation needs, including powering landfill and dairy trucks, or can be injected into gas pipelines for use in other locations.” Bio-energy systems present a significant opportunity to immediately reduce greenhouse gas emissions in the state and bolster a long-term transition to renewable energy. SoCalGas has a critical stake in the development of renewable natural gas and repurposing our waste streams to energy sources and other value-added products. We urge ARB to increase significantly climate investments in this sector and agree with the Concept Paper’s conclusion that “bio-energy systems in California lag and need additional financial support to advance the market.”
Funding a diverse portfolio of promising technologies is the only way to ensure California’s aggressive climate goals are met in the most cost effective manner possible. SoCalGas hopes that the comments and recommendations provided will inform ARB and help to improve the Investment Plan currently under consideration.

Sincerely,

\textit{Jerilyn López Mendoza}

Jerilyn López Mendoza  
Energy and Environmental Affairs  
Program Manager

CC: Edie Chang, ARB Deputy Executive Officer  
    Cynthia Marvin, ARB Division Chief, Transportation and Toxics Division