

**Opening Remarks
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Sempra Energy
Committee on Energy & Commerce
Subcommittee on Energy
June 26, 2018
Hearing on The Shifting Geopolitics of Oil & Gas**

Chairman Upton, Ranking Member Rush, and members of the Subcommittee, thank you for this opportunity to testify regarding U.S. natural gas policy and how it affects our business. My name is Dennis Arriola, and I am Chief Strategy Officer and Executive Vice President of External Affairs and South America for Sempra Energy. In my testimony, I offer Sempra's perspective on the benefits of natural gas to the domestic economy as well as the opportunities for U.S. liquified natural gas -- or LNG -- to capture global export markets. I also offer our perspective on some of the challenges we face and suggestions on how U.S. policymakers might be able to help address those challenges.

Sempra Energy is a Fortune 500 energy services holding company based in San Diego, with revenues of more than \$11 billion in 2017. The Sempra Energy companies' approximately 20,000 employees serve more than 40 million consumers worldwide and we are the utility holding company with the largest U.S. customer base. Sempra Energy operates electric and natural gas distribution utilities and also develops energy infrastructure.

Our utilities include Southern California Gas Company (SoCalGas), the largest natural gas distribution company in the U.S., San Diego Gas & Electric (SDG&E) in Southern California, Oncor Electric Delivery Company (Oncor) in Texas and two electric utilities in South America.

Our energy infrastructure businesses include our investments in Mexico that help import U.S. natural gas and petroleum products to that country and Sempra LNG & Midstream. Sempra LNG & Midstream owns LNG facilities, midstream natural gas infrastructure and natural gas storage. We are an experienced LNG developer and operator with facilities in both Louisiana (Cameron LNG) and Baja California, Mexico. Additionally, we are seeking to develop an additional LNG export facility in Port Arthur, Texas (Port Arthur LNG).

The U.S. Natural Gas Advantage

This hearing could not be timelier, as the World Gas Conference is being held here in Washington, D.C., this week. The U.S. has not hosted the World Gas Conference in three decades. It is the first time that the conference will be held in a country that is both the largest producer and consumer of natural gas. With next stops in the Republic of Korea and China, this is the last time for years to come that the U.S. has the opportunity to shape the discussion as the host country. And the world is watching.

As a result of two key developments -- the U.S. shale energy boom and the growth in U.S. LNG export opportunities -- the outlook for domestic and international natural gas markets has never been better. If we invest wisely and follow smart, pro-market policies, there is little doubt that the U.S. economy will be the big beneficiary with job growth and even greater energy independence.

Advances in technology for extracting gas have resulted in an abundance of affordable energy here in the U.S. The Potential Gas Committee (PGC) recently released its latest biennial assessment of the nation's natural gas resources, which indicated that the U.S. possesses a total technically recoverable resource base of 2,817 trillion cubic feet (TCF) as of year-end 2016, or supplies that will last more than 90 years at current extraction levels. This is the highest resource evaluation in PGC's 52-year history, exceeding the previous high assessment (from 2014) by 302 TCF (increase of 12%).

As a result of this transformative accomplishment, natural gas now serves as the leading fuel source for the industrial, commercial, and residential sectors of the U.S. economy. This increased consumption is providing for significant job growth, bringing back industries to the Gulf Coast that are dependent on reliable and affordable energy, boosting our local and national economies, and lowering air emissions. It is being used increasingly for power generation and assisting in the integration of renewable energy into the electric system, ensuring reliability and resiliency when the sun isn't shining or the wind isn't blowing. When used as a transportation fuel, natural gas reduces fuel costs and helps clean the air. And though transportation-fueling systems require careful planning and investment, these networks have already begun to emerge. The abundance and affordability of natural gas as a transportation fuel is also helping to drive technological investments in engines for heavy-duty trucks.

Natural gas is not only helping bring economic and environmental benefits domestically, but it also is ensuring greater energy security and prosperity globally. Utilizing natural gas will help alleviate energy poverty in developing countries, while helping to reduce emissions by replacing traditional low-grade fuels, such as firewood, animal manure and charcoal for cooking.

The LNG Export Opportunity

This brings me to the possibilities associated with the growth of U.S. LNG exports. As I mentioned earlier, Sempra Energy owns and operates two LNG facilities: Cameron LNG, an import facility in Hackberry, Louisiana, which Sempra decided in 2011 to expand to add natural gas liquefaction and export facilities; and Energía Costa Azul in Baja California, Mexico.

The Cameron LNG export project will be comprised of three liquefaction trains, three storage tanks, two marine berths for the largest LNG ships, and related infrastructure. Construction on the project began in October 2014, with commercial operations expected to begin early next year. We currently have over 10,000 workers on site. As reflected in our 2012 FERC application for the project, the total economic impact in the U.S. from Cameron LNG is estimated to be \$336 billion over the life of the project. The project is expected to generate an average of 53,000 direct and indirect jobs annually during the 20-year operations period, resulting in a total impact during the periods of construction and operation of 1.1 million job-years.

Sempra is also pursuing FERC certificate authority to site, construct and operate an LNG export facility located near Port Arthur, Texas. The Port Arthur LNG project will include interstate pipelines connecting the export facility with major natural gas hubs in Texas and Louisiana. Our consultant, ICF International, estimates the economic impact in the U.S. from this proposed project will be \$287 billion, or slightly over \$11 billion annually, over 25 years. Vice Chairman Olson and Congressmen Barton, Green and Flores, you also may be interested to know that this includes a \$1.85 billion annual and \$46.3 billion cumulative positive impacts on the Texas economy.

Additionally, ICF International anticipates that the Port Arthur LNG Project will help facilitate an average of nearly 5,700 direct and indirect jobs in Texas and 41,000 nationally through 2043, resulting in a cumulative impact of over 143,000 job-years for the state of Texas and one million job-years for the U.S. economy.

The growth of U.S. LNG exports has the potential to strengthen U.S. foreign policy and improve our balance of trade. While an abundance of U.S. natural gas is leading to a manufacturing resurgence in the U.S., it also has the potential to strengthen alliances with developed and developing countries by providing a stable, affordable, flexible, and reliable source of energy that gives those countries the certainty they need to build their energy infrastructure. U.S. natural gas exports also can help our European allies reduce their energy dependence on Russia. Finally, U.S. LNG exports can help countries improve air quality and the environment by displacing less clean resources.

Exports from Cameron LNG and Port Arthur LNG will reduce the U.S. trade deficit could help reduce our overall trade deficit by roughly \$16 billion annually, and generate a combined cumulative value of approximately \$303 to \$402 billion over the life of these projects. These and other U.S. export facilities will promote new pipelines and maintain natural gas production in the many producing states (e.g., Ohio, Pennsylvania, New Mexico, Texas and Louisiana); and at levels that will continue the current cost advantage that benefits U.S. consumers.

The Challenges We Face

But, if we are to benefit from this opportunity, we need to ensure we are working together to promote LNG internationally and are not impeding the development of these projects domestically.

Internationally, the federal government should continue to promote and leverage U.S. LNG exports as part of its trade policy with Europe, the Middle East and Asia. In addition to advancing environmental, job creation and global energy security goals, LNG exports also support the Administration's objective of improving the U.S. trade balance, especially with countries that are large importers of LNG and have significant trade surpluses with the U.S., such as Japan, Korea, Taiwan, and China. The Administration could further advance this objective by removing unjustified tariffs on steel and aluminum, which drive up costs and reduce the competitiveness of the energy sector in general and the LNG and pipeline businesses in particular.

Domestically, we are concerned that the length of time it takes to get through the federal permitting process is increasing, not decreasing, contrary to goal of this Administration. It appears that all infrastructure projects at the Federal Energy Regulatory Commission (FERC) are seeing delays due to what we understand are resource constraints at the agency. These delays jeopardize U.S. developers' efforts to consummate large and complicated agreements with international trading partners. There is an abundant worldwide supply of natural gas chasing a finite demand. You can be sure that other major LNG exporting countries, such as Russia, Australia, Qatar and Mozambique, are doing everything possible to enhance their competitive position. If these and other nations provide better certainty of regulatory process than the U.S. does and enable their native companies to get to the market sooner, then they will dominate the market, and the U.S. will lose out. Moreover, the lack of certainty with respect to timing undermines the ability of developers to develop and finance these types of projects. Once our foreign competitors enter into long-term LNG contracts with customers, the window of opportunity for U.S. based projects closes for decades. And that means we would

lose out on the economic and foreign policy benefits to other countries like Russia. We can't let this happen.

We need to ensure that FERC at least keeps to its typical permit review schedule of no more than 18 to 24 months, and that it looks for opportunities to streamline the process even further. Anything longer would be outside of the President's infrastructure permitting goals of a two-year maximum and would have the current Administration's FERC LNG export permitting record trailing that of the Obama Administration.

In addition, there should be certainty resulting from the robust federal permitting process. Specifically, the Department of Energy (DOE) should act on an application by a time certain after FERC's initial order. We would strongly support the thirty-day time limit that Congressman Johnson (R-OH) has proposed in previous legislation considered by this committee. Moreover, we appreciate DOE's recent Policy Statement indicating it does not foresee circumstances where it would invoke its authority to revoke its non-free trade agreement (non-FTA) permits in the future.

As I mentioned at the beginning of my remarks, the World Gas Conference is meeting here in Washington, D.C. this week, with more than 12,000 participants from more than 100 countries. Indeed, the eyes of the world are upon us. Failure of the U.S. to seize the current LNG opportunity has international implications. As the leading producer of natural gas in the world, the U.S. can become one of the world's top LNG exporters by 2022, as forecasted by the Energy Information Administration, achieve the Administration's goal of energy dominance, and promote greater global energy security, but only if we reduce regulatory roadblocks and act with a sense of urgency.

Conclusion

Mr. Chairman and committee members, with the abundance of domestic natural gas, the U.S. can generate good-paying jobs for American workers, provide economic benefits at the local, state and federal levels, work to create a more sustainable and cleaner future, and help reduce energy poverty around the world. These are objectives that benefit all Americans and we shouldn't settle for less. If policymakers can help developers like Sempra to overcome our current challenges, the U.S. is poised to be a global natural gas energy leader for decades to come with many geopolitical benefits.

Thank you for this opportunity to testify, and I look forward to answering your questions.