INSTITUTE FOR 21ST CENTURY ENERGY
U.S. CHAMBER OF COMMERCE

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U.S. Department of Energy
Office of Regulation and International Engagement
Office of Fossil Energy (FE-34)
Forrestal Building; Room 3E-042
1000 Independence Avenue S.W.
Washington, DC 20585

Re: 2015 LNG Export Study

Dear Sir/Madam:

The Institute for 21st Century Energy (Institute), an affiliate of the U.S. Chamber of Commerce, is pleased to submit written comments in support of the conclusions reached in the study recently released by the Department of Energy (DOE), *The Macroeconomic Impact of Increasing U.S. LNG Exports* (study) performed by the Center for Energy Studies at Rice University's Baker Institute and Oxford Economics. The Chamber is the world's largest business federation representing the interests of more than three million businesses and organizations of every size, sector and region, and dedicated to promoting, protecting, and defending America's free enterprise system.

Not impeding free trade of liquefied natural gas (LNG) will provide an economic boost across the economy and enable America to more fully capitalize on its incredible natural gas resource base. This view is substantiated by the study's conclusion that the U.S. economy benefits from LNG exports across all scenarios reviewed, a conclusion that is fully consistent with the overwhelming majority of previous studies conducted on the topic.

One tremendous economic bright spot has been the energy sector's production of increasing volumes of natural gas from shale formations. The unconventional gas bonanza being unlocked by U.S. industry is having profound and positive impacts on our economy and energy security. This rapid development was catalyzed by market forces and the unleashing of technology and innovation developed over many years. The U.S. must ensure that the market is free to fully realize the potential of this resource. Ensuring an efficient and transparent regulatory process for DOE's import and export authorization program is essential to this process. If the shale gas boom we are experiencing has taught us anything, it is that government cannot predict when or where technology breakthroughs will occur. Therefore, it is important to

allow the market to work to efficiently allocate resources to their most productive use and to let the private sector take the associated investment risks.

All else being equal, exporting any significant volume of LNG would create upward pressure on natural gas prices that would impact industrial consumers of methane (the form of natural gas that would be exported), especially energy intensive industries. However, the laws of supply and demand dictate that licensing of new export facilities would send the necessary market signal to encourage producers to increase natural gas exploration and production. Because the construction of an export facility requires some three to five years, there would be ample time for that market signal to motivate additional production, moderating if not eliminating entirely any long-term upward price pressure.

We have seen this occur in real time. As of this writing, Cheniere Energy, a U.S. company that develops LNG terminals, is weeks, if not days, away from sending the first LNG shipment from the Continental United States to markets abroad from its facility on the Louisiana side of the Sabine Pass. In spite of a prolonged glut, methane production has not declined, partially because of the expectation of new demand being realized by Sabine Pass, and other export facilities, coming on-line in the near future.

Additionally, the increased exploration and production of methane would have an ancillary benefit of increasing the production of natural gas liquids (NGLs). These hydrocarbons, such as ethane or butane, are the feedstocks of the petrochemical industry and are used to produce plastics, fertilizers, and pharmaceuticals. Increased NGL production would, in turn, place downward price pressure on these important feedstocks, helping to offset potential upward pressure created by LNG exports.

Shale gas supply

The Unites States has a large and growing natural gas resource base. We have seen our reserves and resource base grow because of the incredible developments around producing natural gas from shale formations. The Potential Gas Committee's biennial natural gas reserve estimate released in April, 2015, found that the United States possess 2,853trillion cubic feet (tcf) of future natural gas supply. Historically, we have seen that as new resources are developed, actual reserves increase. This occurs when rising price signals spur development of incremental resources. A reserve base of 2,853 tcf is many generations of supply and should be seen as a significant competitive advantage for the United States. This resource base is sufficiently large to allow the market to work to best allocate how development occurs for both domestic use as well as potential exports.

Regulatory process

The key decision criteria stated in the Natural Gas Act for the DOE authorization decisions is "...The Commission shall issue such order upon application, unless, after opportunity for hearing, it finds that the proposed exportation or importation will not be in the public interest...." Congress clearly intended that there would be a presumption that the free trade of natural gas would be in the public interest. Implicit in this statutory language is that markets work better at allocating capital and can respond more effectively to changes than the

government can. The study's fundamental conclusion that LNG exports would result in a net economic benefit across all scenarios fully supports the conclusion that it is in the public's interest to not impede natural gas exports.

History: constraining markets/demand has reduced supply

The United States has an unfortunate history of unintended and adverse impacts from government policy in the natural gas sector. One of the most significant were the policy-driven natural gas shortages of the 1970's, the direct result of U.S. government price controls at the wellhead. These shortages were further exacerbated by government restrictions on gas use by power and industrial users, which created wide seasonal volatility in natural gas markets. It was not until natural gas prices and use were deregulated that gas supply expanded through investment and innovation by producers, primarily independent production companies. This investment and risk taking occurred in deep gas, tight gas reservoirs, coalbed methane, and, as we are seeing today, shale gas. All of these resource targets were seen as less economic than conventional resources when exploration began, but it was the prospect of a growing natural gas market and market based prices that attracted investors.

When the natural gas market has been allowed to function, the answer to high prices has been innovation and private sector risk taking. This has resulted in new resources being developed that have lowered prices. Constraining demand had the opposite effect of limiting supply development, resulting in higher prices and reduced supply. The Institute advocates that the government should let markets work and bring the power of innovation to our resource development. The study fundamentally supports this position in finding that, "[a]cross the scenarios, U.S. economic welfare consistently increases as the volume of natural gas exports increased."

Challenge of predicting the future

In addition to this study, there has been a great deal of speculation and modeling work on the impact LNG exports might have on natural gas prices in North America. While forecast models can be a valuable tool in evaluating potential policy impacts, it is important to remember that while some models are useful, all models are wrong. Models are tools, and their forecasts of the future depend in large part on the assumptions used. While the Institute supports the fundamental conclusion of this study, it also recognizes that DOE was responsible for determining the assumptions and parameters that constrained the universe that Rice and Oxford analyzed in this study.

Global energy markets are complex and dynamic, and as we have seen with natural gas over the past 10 years (a very short timeframe), it is impossible to predict the impact technology may bring to bear on markets. Therefore, when it comes to major government decisions that involve trade and other alternative natural gas demand, the best policy is to rely on core principles that have shown their value over time.

These principles should include:

- A regulatory process that is clear , transparent, and predictable;
- Allowing the market to determine the amount of natural gas that is exported; and

- Allowing the market to determine which developer exports natural gas and from where.

The government does have a role to ensure that data on supply and demand are made available in a timely manner. In addition, while government has a role to ensure that the environment is protected during natural gas development and production, it is also critical that government, when managing risk, does so in a way that does not impose excessive regulatory burdens that would unnecessarily limit the market responding to price signals and expanding production.

Trade Law Implications

While the report does not analyze how America's international trade commitments impact DOE's process, this is an absolutely vital issue that cannot be ignored. A review of U.S. trade policies endorsed by both Democratic and Republican administrations shows the United States has long been averse to the use of export restraints. An early example is the Constitution's so-called Export Clause, which provides that "[n]o Tax or duty shall be laid on Articles exported from any State." The United States has also undertaken commitments in the World Trade Organization (WTO) Agreement to forego quantitative export restraints such as discretionary or nonautomatic export licensing requirements. These considerations apply to LNG exports.

Underscoring the strength of this prohibition, the WTO appellate body in 2012 ruled in favor of the United States in a dispute with China, which had imposed restraints on the exportation of certain raw materials such as bauxite. There is broad support in the U.S. business community for the U.S. government's stance in this dispute and in the case of China's similar export restraints on rare earths, which are currently the subject of a separate dispute now before the WTO.

Export restraints are generally inconsistent with the WTO Agreement unless they can be justified under an exception. For instance, the WTO Agreement allows an exception for export restraints imposed with the goal of conserving "exhaustible natural resources." However, U.S. proponents of export restraints indicate their goal in disallowing exports is to keep the domestic price of natural gas low, thus affording an advantage to domestic industry. The WTO ruled in the raw materials case that such a position is inconsistent with the goal of conserving exhaustible natural resources. Further, it would be the hypocritical for the United States to embrace export restraints when it has found them objectionable when employed by other countries.

The Energy Institute believes that export restraints violate both the letter and the spirit of U.S. trade law and international trade agreements. The United States would surrender the moral high ground to challenge other countries' export restraints if it embraces such practices. In fact, export restraints implemented by the United States would likely be emulated by other countries and could easily limit U.S. access to key natural resources that are not readily available from domestic sources, undermining U.S. competitiveness. Abiding by the WTO clearly is in the public interest.

Conclusion

The United States has a tremendous resource endowment. What differentiates the United States from other parts of the world is that we have coupled resource endowment with a creative and

entrepreneurial spirit, private ownership, a predictable and effective regulatory system, and free trade. Allowing businesses to operate in a globally competitive market has allowed U.S. companies to become global leaders and has benefited American consumers. This same formula will create the greatest value of our shale gas resources as well.

Sincerely,

Karen Harbert