United States Senate
WASHINGTON, DC 20510

February 20, 2013

The Honorable Steven Chu
Secretary
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Dear Secretary Chu:

We are writing in response to comments that were filed expressing concerns about the conclusions of the NERA Economic Consulting Report commissioned by your agency to determine whether U.S. Liquefied Natural Gas (LNG) exports would be in the public interest. The report concluded decisively that "in all of the scenarios analyzed…NERA found that the U.S. would experience net economic benefits from increased LNG exports," and that "U.S. economic welfare consistently increases as the volume of natural gas exports increased."

Some critics contend that the findings of the report are an insufficient basis for any DOE decision to approve permits to export natural gas. As you make determinations under the Natural Gas Act, we urge you to fully consider the sound science and economic theory that comprises the conclusions of the NERA study.

Among the things critics of the report took issue with is that it uses data based on the Energy Information Administration's (EIA) Annual Energy Outlook 2011 ("AEO2011"). They wrote that the outdated information used by NERA does not account for the significant domestic demand growth expected to occur over the next decade. They point out that the more recent EIA Annual Energy Outlook 2013 ("AEO2013") predicts that U.S. natural gas consumption will be nearly 10% higher in 2035 than the figures provided in AEO2011.

While we agree that domestic natural gas demand is expected to increase over the next several decades, the critics generally failed to point out that domestic production is expected to increase *dramatically* over the next several decades. AEO2013 projects that the 20% increase in natural gas consumption between now and 2040 will be fully offset by a 40% increase in natural gas production. We believe production has the potential to be even greater if producers are allowed greater access to the onshore and offshore federal mineral estate, and we are hopeful that the President will work with us to ensure this objective is met. The future expansion of production will largely be dependent upon the access natural gas producers have to consumption markets. The recent and dramatic increase in U.S. production has outpaced increases in domestic consumption, which has increased producer uncertainty and yielded a decline in new natural gas exploration and production activity. Without greater natural gas demand, future natural gas production will be inhibited, to the detriment of economic growth.

Unfortunately, absent access to world markets, natural gas supply is likely to remain "demand-limited" for the foreseeable future. The artificially restrained global market access to U.S. supplies of natural gas deters producers from investing in consistent and reliable production streams, forcing them to anticipate the supply and demand equilibrium to return to more sustainable levels prior to making additional investments. As demand trends increase, whether from utility, vehicle, or industrial users, producers will unlock and bring online additional supply, which will encourage sustained stability of the natural gas market. If demand uncertainty remains, then producers will continue to limit their long term capital investments in natural gas resources, in favor of natural gas liquids (NGLs) and crude oil.

If, however, demand certainty increases, the economics justifying producer decisions to exercise development rights for natural gas, NGLs, and crude oil all simultaneously improve. This could have the significant impact of reversing the trend of recent drilling rig count reductions and increase total capital expenditures made by the extraction industry in future years. In September 2008, the total number of active natural gas drilling rigs was 1,606. In February, this number had fallen to 428, a total decline of 73%. This decline in natural gas drilling rigs has not been fully offset by increases in oil drilling rigs; between 2008 and 2013, the total number of active oil and gas drilling rigs has declined a total 16.2%. Insufficient demand for energy products, and particularly natural gas, has contributed to these reductions, to the detriment of economic growth and job creation. As this demand scenario escalates, we expect there to be a corresponding, positive trend in economic activity and job growth, which minimizes concerns that have been raised and bolsters the case for allowing LNG exports.

Further, Deloitte found in its LNG report that "producers can develop more reserves in anticipation of demand growth." And it stated that future LNG exports will have limited disruptions to natural gas markets because they "will likely be backed by long-term supply contracts, as well as long-term contracts with buyers. There will be ample notice and time in advance of the exports to make supplies available."[1]

The combined factors of increasing natural gas production (which most experts agree will continue) and a demand-limited supply scenario welcome the potential of additional demand to be simultaneously brought online by LNG exports, electric generation, and transportation equipment; however, some critics raised concerns about the impact LNG exports could have on transportation and electric generation applications of natural gas.

We find these concerns to be premature, rooted in flawed economic theory that ignores the true state of our natural gas resources and the associated restrained demand scenario, which is further offset by the extensive infrastructure needs and initial capital investments required to transition transportation equipment from diesel fuel to natural gas fuel. For large over-the-road diesel fueled heavy vehicle trucks, the initial capital cost of conversion requires as long as six years to pay off, assuming that the current natural gas fuel cost benefit is not eroded by a subsequent decline in demand for diesel fuel, which is a significant risk. Potential erosions of

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[1] http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/Energy_us_er/us_er_MadeinAmerica_LNGPaper_122011.pdf

fuel cost benefits is also a risk to the benefits of converting locomotives from diesel fuel to natural gas, which is another potential new source of demand. Furthermore, conversion of either large heavy vehicle trucks or locomotives to any new source of fuel would require a corresponding build up in infrastructure, which will take significant time to develop. While we do recognize the benefits of natural gas conversion for transportation equipment, we believe the existing infrastructure and financial constraints will reduce the risk of the shock in natural gas demand some critics are concerned may occur.

Some critics also raised concerns that LNG exports would have a negative impact on the manufacturing sector, but it is important to note that the NERA report concluded that "no sector analyzed...would experience reductions in employment more rapid than normal turnover."[2] The Brookings Institute agreed, stating that "the evidence suggests that the competitive advantage of U.S. industrial producers relative to its competitors in Western Europe and Asia is not likely to be affected significantly by…LNG exports."[3] Brookings also found that the increased natural gas production expected to occur as a result of LNG exports will result in additional NGL production, "in which case exports can be seen as providing a benefit to the petrochemical industry,"[4] because it is primarily a user of NGLs, and not of the dry natural gas that will be used for conversion into LNG for export.

Ultimately, the concerns of most critics center on the potential for LNG exports to disrupt current economic advantages industrial, commercial, and residential consumers of natural gas enjoy. We appreciate these concerns, and we share their desire to ensure that the cost of energy across the economy and across sources remain as competitive as possible. However, we believe that an oppressive regulatory environment poses a more direct and immediate threat to increasing energy costs.

For the United States to be a hub of cheap energy, it is imperative to pursue government policies that allow the private sector to make every energy resource as abundant, accessible, and as versatile in its consumption as possible. Achieving this objective requires that producers be allowed access to markets, and that consumers be allowed access to resources. Providing this access without bias for one source over another will encourage more widespread production of all energy resources. This will benefit the economy, as it will be accompanied by increased economic activity, job creation, and more widespread energy choices.

Enabling energy consumers to make unencumbered decisions regarding the type of energy they use improves the efficiency of the entire economy. No industry, sector of the economy, or region of the country is alike; each is different with its own preferences, resources, advantages, and needs. Expanding energy choice by encouraging robust resource development will only improve the strength of our nation and economy, particularly as we get closer to achieving our goal of energy independence. Achieving this goal is attainable within the next few

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[2] NERA Report Page 9
[3]www.brookings.edu/~/media/Files/rc/reports/2012/0502_lng_exports_ebinger/0502_lng_exports_ebinger.pdf, p. 35, May 2012)
[4] ibid

decades, but limiting market access to producers and restricting the choices available to energy consumers will only discourage resource development and make this goal more difficult to attain.

When determining how increased international trade of LNG will impact the economy, we cannot dismiss the impact trade has had on other sectors of the economy. Agriculture is a prime example. The federal government works diligently to open and maintain international market access for U.S. agriculture producers. This was highlighted recently by the announcement that Japan would ease its restrictions on U.S. beef imports, which has been a major goal of the current and previous administration for years. This determination was hailed by the administration, by many members of Congress, and other interested parties, including the Chairmen of the Senate Finance and Agriculture Committees. The consensus is that this additional market access for beef producers will provide a foundation for greater economic activity and wealth creation in the United States, which is always the case when free trade is allowed.

Further, it is important to note that Congress recognizes such trade benefits and already codified a presumption in favor of approving all LNG exports. 15 U.S.C. 717b(a) states "The Commission shall issue such order upon application, unless, after opportunity for hearing, it finds that the proposed exportation…will not be consistent with the public interest." While some critics may insist that the Department of Energy must find justification in favor of allowing natural gas exports, we would like to remind you that the law instructs the opposite: you must allow LNG exports unless there is clear and compelling evidence that such actions would be to the detriment of the public interest.

We were encouraged – and not surprised – that the NERA Report concluded that "across the scenarios, U.S. economic welfare consistently increases as the volume of natural gas exports increases," and that "wealth transfers from incremental LNG exports" would benefit U.S. households. We have seen this case to be true for agriculture; it will certainly hold true in the energy sector as well.

The United States has been blessed with an abundance of energy resources, with natural gas being among the most prevalent. Expanding market access to producers will not only result in a wealth transfer from foreign countries to U.S. households, but it will also encourage greater exploration and production activity. This will grow the economy and create jobs. It is clear that LNG exports are in the public interest. With this in mind, we respectfully urge you to disregard comments questioning the value of the NERA Study and quickly approve the pending LNG export permits.

Sincerely,

James M. Inhofe
United States Senator

Mary Landrieu
United States Senator

David Vitter
United States Senator

Mark Begich
United States Senator

Tom Coburn
United States Senator