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Rick Bowen President - Energy

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VIA ELECTRONIC DELIVERY

Mr. John Anderson U.S. Department of Energy (FE-34) Office of Natural Gas Regulatory Activities Office of Fossil Energy Forrestal Building, Room 3E-042 1000 Independence Avenue SW Washington, DC 20585

RE: Comments on 2012 LNG Export Study 77 Fed. Reg. 29894

Dear Mr. Anderson:

Alcoa is a manufacturing company employing 26,000 people in the United States, producing primary aluminum and value-added components for major US industries, including aerospace, automotive and building and construction. Our locations are major economic engines for the communities in which we operate, providing good jobs with competitive pay and benefits as well as substantial tax revenue to local and state government. Our upstream businesses are energy-intensive trade-exposed industries, which makes us particularly interested in the energy climate in the United States and, more specifically, the cost of natural gas. Throughout our production chain, the cost of energy has a substantial impact on our US manufacturing locations' ability to compete in global markets.

With that in mind, we respectfully submit this reply argument to the comments made by parties for and against the unlimited exports of Liquid Natural Gas (LNG) to non-Free Trade Agreement (FTA) countries. Alcoa, like many others, has previously commented on the many weaknesses of the NERA Economic Consulting (NERA) study. The most vociferous proponents have stated that LNG exports should be accelerated, that the public interest is best served by 'free and open' trade. They incorrectly assert that the Department of Energy (DOE) is required by law to assume an entirely passive *laissez-faire* posture, not having the right to commission studies or do other research necessary to determine if the public good is being served by LNG exports.

Alcoa has always been and remains a strong supporter of free trade. Our experience as a global competitor makes us keenly aware of the careful and in-depth evaluation required to ensure that policymakers strike the right balance between the interests of Energy Intense Trade Exposed companies like Alcoa and US support for free trade. We want to re-emphasize our strong belief that a cautious and go-slow approach is the best choice when faced with a policy decision as potentially disruptive for American consumers as the large scale export of LNG.

The United States now has the opportunity to build upon its growing energy advantage to reverse a long-term decline in manufacturing employment. For Alcoa, low cost natural gas is already enhancing the competitive position of our facilities where a few years ago their survival was in doubt. Our Point Comfort refinery in Texas is one example of a facility employing more than

600 workers that has gone from one of Alcoa's higher cost producers of alumina to a core operating facility able to compete with refineries around the globe, creating in the process more than 200 full-time jobs. This has been the result of accessible and economically priced natural gas. We believe rapidly expanding, large-scale exports of LNG could quickly raise prices to the point where once again the future of this facility and others like it would be much less certain.

Alcoa's Position

Alcoa believes the potential economic disadvantages to large sectors of the economy resulting from the unfettered export of LNG demands a deliberate and measured 'go slow' approach to granting LNG export licenses. Data in the NERA study, as well as comments from other consumers, point out the disparity between the relatively small and concentrated group that benefits from exports and the negative impact that exports have on all consumers in the United States. NERA states that in every export scenario, regardless of the level of export, labor and capital income as well as indirect tax receipts all decline. And this finding does not take into account the correct baseline of higher employment that would have resulted from using the gas for new industrial applications at home. Other commenters correctly point out that all of the studies and models used to date likely understate the negative economic impacts of LNG exports because they fail to recognize the twin negative trade impacts resulting from lost export revenue that would have been generated from using the gas domestically and higher imports of value-added goods. It is clearly not in the public interest to export unlimited amounts of LNG.

Alcoa submits these additional comments in rebuttal of these arguments and offers additional support to our original position that the unlimited export of LNG without due consideration to the impact on domestic manufacturing is not in the public interest.

Discussion

I. The DOE has the statutory authority and obligation to conduct a dialogue concerning LNG exports.

Some proponents of unlimited exports assert that the DOE does not have the statutory mandate to commission a study such as the one conducted by NERA. Alcoa asserts that as a governmental body which has within its statutory mandate the protection of the public interest, the DOE is fully empowered to seek whatever information it deems necessary to make a well-reasoned and impartial decision as it pertains to the protection of the interests of the U.S. public. While we have serious issues with the NERA study, Alcoa fundamentally disagrees with those who contend that the DOE does not have the right or obligation to investigate whether these exports are in the national interest and we applaud the DOE's effort.

Proponents of unlimited LNG export point to the Natural Gas Act (NGA) and create the false impression that there are strict limits on the DOE's authority regarding natural gas exports by citing only the first two sentences of the relevant subsection of the US Code.

"After six months from June 21, 1938, no person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the Commission authorizing it to do so. The

Commission shall issue such order upon application, unless, after opportunity for hearing, it finds that the proposed exportation or importation will not be consistent with the public interest. ... 1"

These proponents of unlimited LNG exports then assert that the conclusions posited by the NERA study are proof that unlimited LNG exports are consistent with the public interest and therefore, under the NGA, the DOE is obliged to issue export licenses to all applicants without limitation or delay.

However, this argument omits the third and concluding sentence of that very same subsection:

"...The Commission may by its order grant such application, in whole or in part, with such modification and upon such terms and conditions as the Commission may find necessary or appropriate, and may from time to time, after opportunity for hearing, and for good cause shown, make such supplemental order in the premises as it may find necessary or appropriate.²"

Contrary to the position of those advocating unlimited LNG exports, this language clearly gives the DOE wide latitude to define and pursue the public interest and reflect that public interest in how it denies, grants or conditions export orders in whichever way it deems best in its reasonable discretion.

II. We are in a new era of energy for the US where precedents do not apply and certainly do not force the Federal Government to proceed along a pre-defined path.

The proponents of unlimited LNG exports incorrectly advocate relying on precedent to drive the acceptance of any and all export license applications. In supporting their position, the proponents of unlimited LNG exports further argue that precedent and policy guidelines require immediate issuance of export licenses. However, the shale gas revolution presents us with an entirely new set of circumstances that could not have been contemplated in the past – which is to say that neither precedents nor policy guidelines apply to the present situation.

As recently as five years ago, the opportunity to seriously consider LNG exports could not have been predicted. We now have the freedom and the flexibility to reverse long-term trends by fueling a manufacturing renaissance in the US. Clearly the paradigm has shifted and it is not reasonable to impose outdated limitations on decisions that need to be made in these new circumstances. We believe that the DOE should use the broad authority and discretion granted to it by the NGA to study, determine and pursue what it deems to be in the interest of the US general public.

We believe that the law, when read in its entirety, unmistakably gives the DOE the authority and the discretion to act in the public interest of the US by imposing reasonable limits on LNG exports and allowing all of the resulting benefits described above to accrue to the entirety of the US economy.

¹ 15 USC 717b(a)

² 15 USC 717b(a)

III. The NERA report gives sufficient evidence that unlimited LNG exports are not in the public interest of the US. Actual experience in Australia and additional analysis by Purdue University support this conclusion.

Another argument made by proponents of unlimited LNG exports is that the NERA study correctly shows an economic benefit to the US, thereby making unlimited exports consistent with the public interest. Alcoa asserts that not only was the study deeply flawed, it also gave evidence that unlimited exports are not consistent with the public interest because the economic result would be to transfer large amounts of wealth from a large number of energy consumers to a limited group of natural gas resource owners. Figure 3 on page 8 of the NERA study shows substantial reductions in labor, capital and tax receipts for large portions of the economy with offsetting gains for natural gas resource owners resulting in a very modest net gain. Further, because no one can assume that all natural gas resource owners are US-based, the NERA study could actually indicate a negligible or even net negative result for the broad US economy.

In Australia, there is currently a public outcry against the mass export of natural gas resources and the resulting lack of availability of reasonably priced natural gas. A study conducted in Australia by the National Institute of Economic and Industry Research concluded: "for each petajoule of natural gas that is shifted away from industrial use towards export, whether because of tight supply or uneconomic pricing, means giving up \$255 million in lost industrial output for a \$12 million gain in export output. That is, for every dollar gained \$21 is lost. This increases to \$24 million when economy-wide impacts are taken into account.³"

In less than five years since the major development of LNG exports in Western Australia, spot prices have essentially doubled. We encourage the DOE to review the specifics of the Australia experience; from the Alcoa perspective, it provides a real-time example of the negative consequences of unlimited exports which are clearly not in the public interest.

Second, Purdue University's comparative analysis of the its study and the NERA study focuses the debate on the key question: "Should the nation accept the economic losses in many key economic sectors to provide wealth transfers to natural gas resource owners?"

The Purdue study shows that while the total impact to Gross National Product (GDP) is not great, and it is debatable whether it's a positive or negative impact, the sectoral effects on agriculture, energy intensive manufacturing, electrical generation and the environment are much greater and much more negative than the NERA study allows. Even at relatively modest export amounts of 6 BCF/day, the Purdue data shows higher natural gas prices resulting in higher Green House Gas (GHG) emissions from electric generation and higher electricity costs which are passed through the entire economy through the industrial, commercial and residential sectors. The potential for compressed natural gas use in transportation is virtually eliminated and decreased economic output from the metals, non-metals, paper and chemical sectors results in a decrease in output in all energy intensive sectors of between 1 percent and 4 percent. The Purdue comments also note that because neither model is a complete global model that can account for the loss of competitiveness in the global market, the US economic losses would likely be larger than estimated by either model.

³ Large scale export of East Coast Australia natural Gas: unintended consequences, by the National Institute of Economics and industry research, October 2012, ABN: 72 006234626, page iii.

IV. The U.S. has stranded reserves in Alaska that may be considered for export.

As we have repeatedly stated, Alcoa is not opposed to exports in all cases. For instance, we would support the idea of natural gas exports that would provide an outlet for stranded resources in Alaska. We recognize the shale revolution impact on the value of North Slope natural gas and can understand the desire of the citizens of Alaska to benefit from their potential value. Naturally isolated from the robust markets of North America but with ocean access to Asia, Alaskan LNG exports could be an acceptable way to provide flexibility in our export policies while protecting American consumers.

Conclusion

How the DOE decides to proceed with the granting of orders authorizing the export of LNG is a strategic issue for the US, with far reaching consequences for all energy consumers and, consequently, all US consumers. The DOE has the full authority, right and obligation to use any means that the DOE deems necessary or appropriate to determine whether the grant of an application to export LNG is consistent with the public interest. The NERA study, although seriously flawed, shows that the export of LNG imposes a cost many times greater than the net benefits on large sections of the domestic economy. Others have shown that these costs are likely significantly understated, making the claims of net benefit highly questionable. And to the extent that there are actual benefits, they are realized by a select few resource owners to the detriment of the US public at large. Alcoa's actual experience with our Point Comfort refinery provides a real-life example of the benefits to our domestic economy from low-cost natural gas. Conversely, Alcoa's actual experience in Western Australia provides a real-life example of the damage from excessive natural exports. We again respectfully request that the Department of Energy proceed with restraint and a bias toward erring on the side of domestic consumers in considering the issuance of orders authorizing parties to export LNG to non-FTA countries.

Sincerely,

Rick Bowen President

Alcoa Energy