

**From:** [Carter, Susan E](#)  
**To:** [LNGStudy](#)  
**Subject:** ExxonMobil's Reply Comments - LNG Study  
**Date:** Monday, February 25, 2013 11:56:24 AM  
**Attachments:** [EM Reply Comments to DOE.PDF](#)

---

Attached are ExxonMobil's reply comments related to the LNG Export Study, submitted by Theresa Fariello, Vice President, ExxonMobil Washington Office.

Susan E. Carter  
Senior Director, Federal Relations  
t-2028620275  
c-2024124252  
Asst: Jacilyn Gutzmer, 2028620217

**Theresa M. Fariello**  
Vice President  
Washington Office

February 25, 2013

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

Re: 2012 LNG Export Study

Dear Mr. Anderson:

On behalf of Exxon Mobil Corporation, attached please find our reply comments to matters raised in the initial comments filed with the Department of Energy regarding the 2012 LNG Export Study by NERA.

The NERA study was rigorous and comprehensive, and confirmed that LNG exports will yield net economic benefits for the U.S., and are in the public interest. As our reply comments describe in further detail, the study provides a clear basis for DOE to expeditiously approve LNG export applications.

Thank you for the opportunity to provide reply comments. Should you have questions, please contact me at 202-862-0235.

Sincerely,



## REPLY COMMENTS OF EXXON MOBIL CORPORATION REGARDING 2012 LNG EXPORT STUDY

### Summary

Exxon Mobil Corporation (“ExxonMobil”) appreciates the opportunity to reply to initial comments filed with DOE regarding the 2012 LNG Export Study by NERA. As stated in our initial comments, the NERA study confirms that LNG exports will yield net economic benefits for the U.S. economy and are in the public interest. The study provides a clear basis for DOE to expeditiously approve LNG export applications. With regard to other organizations’ initial comments filed on the NERA study, ExxonMobil issues the following observations:

- A small number of industrial commenters claim that the NERA study “fails to compare the economic benefits of consuming the same quantities of gas domestically as exported.”<sup>1</sup> This argument ignores the fact that natural gas production would increase in response to higher demand from U.S. gas consumers and exports. Natural gas production increases can support growth in domestic use and LNG exports – it is not a zero sum game.
- A few filers argued that natural gas should be kept in the U.S. for use by higher value-added manufacturers. That logic would lead one to argue that chemical products, plastics and aluminum produced in the U.S. should not be exported and should be kept in the U.S. for use in automobile, airplane and other manufactured final products. Ultimately the logic would mean that the U.S. should not export anything but final products.
- Some critics claimed that “natural gas is different than other trade product issues”<sup>2</sup> and suggest it requires special export limits to economically advantage certain U.S. industrial users. International trade rules restrict a nation from imposing export restraints where the purpose is to provide some companies an anti-competitive advantage.
- The comments critical of the NERA study did not present credible evidence required to override the presumption in favor of approval of LNG exports, as set forth in the Natural Gas Act.

### Comprehensive and Rigorous NERA Study Concludes U.S. Gains from LNG Exports

As stated in our initial comments, the NERA study confirms that LNG exports will yield net economic benefits for the U.S. economy and are in the public interest. Some critics suggest that NERA should address more supply/demand scenarios. However, the NERA study yielded 63 distinct scenarios, credibly examining all sectors of the economy and incorporating a wide range of U.S. natural gas supply and demand outlooks. Across all scenarios, the U.S. was projected to gain net economic benefits from allowing LNG exports.

When subjected to economic scrutiny, assertions by a few industrial critics of the NERA study misrepresent economic fundamentals in areas such as supply-demand response, economic impacts or multiplier effects, and the application of free trade principles.

<sup>1</sup>Industrial Energy Consumers of America (IECA), “RE: 2012 LNG Export Study – NERA” at 2 (Jan. 24, 2013).

<sup>2</sup>*Id* at 13.

Several commenters have attempted to frame the issue as one of manufacturing versus LNG exports. However, that is a false choice in light of the abundant natural gas resources in the U.S. that can supply both increased U.S. gas demand and LNG exports. As the largest producer of natural gas in the U.S. as well as a major consumer of natural gas, ExxonMobil understands the potential that the U.S. natural gas base holds. For example, the availability of an abundant resource of natural gas creates great opportunity to expand manufacturing and production of chemical products. This is another area in which ExxonMobil has core expertise and is planning new investments in its U.S. chemical facilities.

The criticism that the NERA study “fails to compare the economic benefits of consuming the same quantities of gas domestically as exported”<sup>3</sup> is fundamentally at odds with the economic realities of supply response to higher gas demand. The argument assumes a zero sum game that domestic consumption is fully displaced by an equal amount of export volumes. A one-to-one trade-off can only occur if the U.S. natural gas supply curve were totally inelastic and completely unresponsive to changes in demand or price. In reality, LNG exports would lead the U.S. natural gas demand curve to shift outward and producers would respond by increasing the amount of gas production. As a result, gas exports would generate supply responses and relatively modest impact on domestic consumption as found in studies by NERA/EIA, Deloitte, the Baker Institute and other energy experts. Because of supply response in a market economy, there is no zero sum trade-off between exports and domestic gas use.

Michael Levi, author of an LNG export study for Brookings, notes:

“There is no policy decision to be made between allowing X units of gas to be exported and having X units of natural gas to be used in manufacturing. The logic ... appears to be based in a zero-sum vision of natural gas exports that does not accord with reality. In its view of the world every cubic foot of natural gas that’s export is a cubic foot that would otherwise have been used in industry. That’s wrong; most natural gas that would be exported will instead stay in the ground if exports aren’t allowed. Meanwhile the gains in manufacturing that are being spurred by abundant natural gas will largely materialize regardless of whether exports are allowed.”<sup>4</sup>

To further demonstrate that the natural gas supply curve is elastic, the January 2012 EIA study of LNG exports based on the EIA AEO2011 indicates that LNG exports would lead to increased natural gas production and not a one-to-one trade-off between exports and consumption. Furthermore, the EIA AEO2013 projects higher U.S. production and lower natural gas prices than the EIA AEO2011, indicating that the supply curve has become even more elastic. A more elastic supply curve indicates that the U.S. gas supply response to demand growth will be even greater than projected in the AEO2011. To summarize, the one-to-one comparison ignores the positive impacts of this increase in gas production, overstates the potential impact on domestic consumption, and underestimates the net benefits of LNG exports.

<sup>3</sup>Id at 2.

<sup>4</sup>Michael Levi, “*Rebutting the IECA Attack on My Natural Gas Exports Study*,” blog, Energy, Security, and Climate, Council of Foreign Relations, July 20, 2012, <http://blogs.cfr.org/levi/2012/07/20/rebutting-the-ieca-attack-on-my-natural-gas-exports-study/>.

One critic argued that NERA underestimated U.S. gas demand and thus, underestimated the price impact of LNG exports. To illustrate that NERA underestimated demand, it supplied a chart titled “Natural Gas Production and Demand,”<sup>5</sup> projecting that U.S. production in 2020 will be approximately 80 bcf/d -- an amount that is 16 bcf/d more than the 2020 projection in the EIA AEO2011. However, what the critic does not mention is that its 80 bcf/d case could only come about if the price impact of increased demand (whether to meet higher domestic use, LNG exports, or both) would be far less than projected by EIA/NERA. In other words, underlying its 80 bcf/d case is a supply curve even more responsive to demand increases than in the EIA/NERA study and that more elastic supply curve contradicts its criticism of the potential price impacts of exports in the NERA study.

Another misleading assertion relates to claims about comparing the economic impacts or multiplier effects of various industrial sectors and LNG exports.<sup>6</sup> This is another attempt to apply a misleading “one-to-one” comparison. The comparative impact to the economy cannot be ascertained by simply comparing the multiplier for industrial sectors that consume natural gas with the multiplier for LNG since the latter would not account for the volumes of increased production created by exports, and the former overstates potential effects on industrial gas use.

One must consider the combination of the multiplier of oil and gas production and the multiplier for LNG facilities to assess the total economic value added by LNG exports. By focusing only on export facilities, these few industrial critics also fail to take into account the jobs and economic output of the U.S. manufacturers that support natural gas exploration and development activity by supplying steel pipe, equipment, heavy duty trucks, cement and other industrial products.

More fundamentally, a conventional multiplier for LNG liquefaction facilities does not capture the gains from trade of LNG exports. As the NERA study determined, there is a gain that the U.S. economy receives from international buyers of U.S. LNG that is not captured by a simple domestic multiplier.

#### LNG Exports are Consistent with U.S. International Trade Policy and Agreements

A few industrial critics of LNG exports recognize the benefits of free trade for their own products as evidenced by their statements and participation in trade groups that support free trade. According to the Aluminum Association its members “are fully committed to a fair and open world market for aluminum.”<sup>7</sup> Another industrial critic of LNG exports states that:

“[O]pen markets yield numerous economic and societal benefits, as opposed to protectionist, restrictive or non-transparent trade policies. Lack of access to the global market ultimately hurts all manufacturers. [We are] advocating for reduced tariffs, as well as removal of the non-tariff barriers ... - that impede the free flow of products, services and technologies.”<sup>8</sup>

<sup>5</sup>Dow Chemical Company (Dow), “Comments of the Dow Chemical Company” at 15 (Jan. 24, 2013).

<sup>6</sup>IECA, *Id* at 3; Dow, *Id* at 6 & 29; Nucor Corporation, “Initial Comments on the 2012 LNG Export Study” at 3 (Jan. 23, 2013).

<sup>7</sup>The Aluminum Association, “Trade Statement of The Aluminum Association,” <http://www.aluminum.org/Content/NavigationMenu/TheIndustry/GovernmentPolicy/default.htm>.

<sup>8</sup>Dow Chemical Company Public Policy position on Trade, Dow Chemical Company website, [http://www.dow.com/publicpolicy/global\\_policy/trade/](http://www.dow.com/publicpolicy/global_policy/trade/).

Despite their strong support for rules-based trade and for the removal of trade barriers, these critics directly or implicitly propose that LNG exports should be constrained.

One commenter argues, “Using gas to make value-added products creates greater benefits, including ripple effects, for the U.S. economy than simply exporting raw BTUs.”<sup>9</sup> While this valued-added comparison was shown above to be factually incorrect, the policy logic is also flawed. This commenter notes that industries accounting for over 96% of manufacturing production use chemical products and also highlights the \$35 billion in net basic chemical exports in 2011.<sup>10</sup> The critic’s logic relating to natural gas can also be applied to basic chemicals used in manufacturing. With that logic, \$35 billion in basic chemical exports should have instead been used to supply U.S. manufacturing rather than overseas manufacturing. One could argue that with the critic’s unsound policy logic, chemical products, plastics and aluminum produced in the U.S., should be kept in the U.S. for use in automobiles, airplanes and other manufactured final products. This would mean that the U.S. should not export anything but final products. Implementing such a broad policy would have serious negative repercussions for the U.S. and world economies.

One critic of LNG exports tries to sidestep its inconsistency by alleging “We must remember that natural gas is different than other trade product issues,” implying that free trade works for all products but natural gas.<sup>11</sup> On the contrary, natural gas is simply another input or feedstock used by manufacturing companies and should be treated as such.

The few opponents of LNG exports are not representative of the manufacturing sector as a whole. Major manufacturing trade associations -- the National Association of Manufacturers , the Business Roundtable, the Alliance of Automobile Manufacturers, the Edison Electric Institute, the Information Technology Industry Council, the Emission Control Technology Association, the U.S. Chamber of Commerce, and many others -- opposed export barriers in a letter to G-20 leaders urging governments to:

“Refrain from export taxes, quotas or other market-distorting measures on rare earth elements that restrict global supply...Renounce interference with commercial sale of rare earth elements, domestically or internationally, to advance industrial policy or political objectives.”<sup>12</sup>

Caterpillar likewise filed comments supporting LNG exports, calling any export restrictions “...counterproductive to our ongoing efforts to keep other countries from embracing similar policies.”<sup>13</sup> General Electric makes a similar point, stating that denial of natural gas exports

“...would be squarely at odds with the United States’ longstanding policy and international trade norms disfavoring export restraints (see GATT Article XI)...[and] would fundamentally undermine its own international trade policy, which has served to preserve critical access to raw materials globally.”<sup>14</sup>

<sup>9</sup>Dow, *Id* at 29.

<sup>10</sup>Dow, *Id* at 29, 32.

<sup>11</sup>IECA, *Id* at 13.

<sup>12</sup>Letter from over 35 business owners to G-20 Leaders (Nov. 3, 2010) (regarding export constraints on rare earth minerals).

<sup>13</sup>Caterpillar, “Caterpillar Opposes Efforts to Ban LNG Exports” (Jan. 24, 2013).

<sup>14</sup>GE Oil &Gas, “Comments on 2012 LNG Export NERA Study” at 4-5 (Jan. 24, 2013).

The U.S. has been a strong advocate of the removal of export barriers as demonstrated by the WTO January 2012 decision requiring China to remove export restraints. The Office of the U.S. Trade Representative hailed the decision by the WTO "... that China's export restraints on several industrial raw materials used as key components in the steel, aluminum, and chemicals industries to be inconsistent with China's WTO obligations."<sup>15</sup>

It is important to note that China, in effect, determined a "sweet spot" for exports that would provide its industrial companies an advantage internationally and restricted exports beyond the "sweet spot." The WTO ruled that these export limits imposed by China were in violation of its WTO obligations as the limits were intended to be harmful to international competitors.<sup>16</sup>

In their initial comments on the NERA study, a few industrial companies in the steel, aluminum and chemical industries explicitly or implicitly urged the DOE to implement LNG export limits so as to provide them with international competitive advantages. International trade rules do not allow a nation to erect an export barrier that is expressly imposed to give some companies in its domestic sector an anti-competitive advantage in international trade. Export restraints abroad that harmed the U.S. chemical, aluminum and steel industries were strongly denounced by the Obama Administration as anti-competitive and in violation of WTO agreements.

It would be inconsistent with the public interest for the Administration to advocate against export barriers in other nations and yet allow export barriers for U.S. natural gas.

#### NERA Study Provides Support for a DOE Finding that Exports Are in the Public Interest

The NERA study found that the U.S. will be a net beneficiary from exports. The U.S. would receive net economic benefits from exports at both high and low levels of domestic demand. The degree of responsiveness of U.S. gas production (i.e., the degree of supply elasticity) would only impact the size of the net benefits. This means that having NERA re-run cases based on different U.S. supply/demand assumptions would simply reinforce the conclusion that LNG exports will generate gains from trade and net benefits for the U.S. Additional studies, beyond the 63 NERA analytical scenarios, would cause further undue delay in the application review process.

The DOE is guided by the Natural Gas Act, which mandates granting applications to export to non-free trade agreement countries unless it can be demonstrated that LNG exports are inconsistent with the public interest.<sup>17</sup> The commenters critical of the NERA study did not meet their burden of presenting credible evidence required to override the presumption in favor of approval of LNG exports, set forth in the Natural Gas Act. The NERA study does provide additional strong support for the statutory presumption in favor of the approval of all qualified LNG export applications.

<sup>15</sup>Press Release, Office of the United States Trade Representative, "U.S. Trade Representative Ron Kirk Announces U.S. Victory in Challenge to China's Raw Materials Export Restraints," (Jan. 25, 2012).

<sup>16</sup>*Id.*

<sup>17</sup>15 U.S.C. § 717b(a).

## Conclusion

The comprehensive and rigorous NERA study fulfilled its purpose of addressing the economic effects associated with natural gas exports and in every scenario LNG exports generated net benefits for the U.S. economy. The findings of the NERA study are consistent with third party economic studies by Brookings, the Baker Institute, Deloitte and others that the LNG exports will expand the U.S. economy. The findings are also consistent with fundamental economic principles regarding the value of free trade.

U.S. projects are subject to intense competition with projects from other nations for limited market opportunities. Further delays in issuing export authorizations may diminish this opportunity to create jobs and expand our country's economy. Time is of the essence, and prolonged reviews of proposed projects are not justified.

We encourage the DOE to adhere to its tradition of embracing free trade principles by avoiding artificial limits on U.S. exports of LNG. The DOE should expeditiously evaluate and act upon LNG export applications, and allow the competitive market to direct investment and capital expenditures. LNG exports will create jobs and economic benefits for the U.S. for decades to come.