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NATURAL GAS TASK FORCE

NATURAL GAS BRIEFING DOCUMENT #2:

Revising the LNG Export Process

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PREFACE AND ACKNOWLEDGEMENTS

In May 2011, The Brookings Institution Energy Security Initiative (ESI) assembled a Task Force of independent natural gas experts, whose expertise and insights provided inform its research on various issues regarding the U.S. natural gas sector. In May 2012, Brookings released its first report, analyzing the case and prospects for exports of liquefied natural gas (LNG) from the United States. The Task Force now continues to meet periodically to discuss important issues facing the sector. With input from the Task Force, Brookings will release periodic issue briefs for policymakers.

The conclusions and recommendations of this report are those of the authors and do not necessarily reflect the views of the members of the task force. The Energy Security Initiative would like to thank the members of the task force for their time and input.

Members of the Brookings Institution Natural Gas Task Force

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Non-participating observers to task Force meetings included officials from the Energy Information Administration and the Congressional Research Service.

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SUMMARY

Applications for liquefied natural gas (LNG) exports to countries that do not have a free-trade agreement with the U.S. are currently only denied if deemed not in the "public interest" by the Department of Energy. This vague definer has raised calls from both supporters and opponents of LNG exports for added clarity in the process. Good policies must offer greater certainty by reflecting the cost of constructing export facilities and be regularly updated to follow changes in the gas market.

On May 17, 2013, the Department of Energy (DoE) gave conditional approval to the Freeport LNG project to export liquefied natural gas (LNG) to countries that do not have a free-trade agreement with the United States. Following the approval in 2012 of Cheniere Energy's Sabine Pass terminal, Freeport LNG is the second project to have received such a clearance from DoE.

The exportation of LNG from the United States has become a controversial topic for policymakers. Opponents, primarily heavy consumers of industrial natural gas like Dow Chemical and the Industrial Energy Consumers of America (IECA), argue that LNG exports will hurt the competitive advantage to the industrial sector provided by abundant, cheap domestic natural gas feedstocks. Proponents, on the other hand, argue that natural gas exports will help, rather than hurt, the U.S. economy. Exports, their argument goes, will require billions of dollars of investment in liquefaction plant infrastructure, new pipeline infrastructure, and will promote additional gas production, all of which would boost domestic employment. They maintain that any domestic price increases resulting from exports will be marginal and will not hamper the growth of domestic manufacturing.[1]

This paper does not serve to revisit these competing claims of whether or not the United States should export LNG. A study commissioned by the Department of Energy released in December 2012 found that exports of LNG will be a macroeconomic benefit to the United States.[2] While there have been two studies that dispute this finding, there is a consensus that LNG exports—to some degree—should be allowed.[3] The argument has shifted from *whether or not* companies should be allowed to export LNG to *how* the government allows for exports. At a recent meeting with experts on the issue Senator Ron Wyden, the Chairman of the Senate Energy and

[1] Part of this briefing memo is redacted from Charles Ebinger and Govinda Avasarala, "The Case for US LNG Exports," *Oxford Energy Forum* 91, February 2013; and Charles Ebinger, Kevin Massy, and Govinda Avasarala, "Assessing the Case for Liquefied Natural Gas Exports from the United States," The Brookings Institution, May 2012.

[2] "Macroeconomic Impacts of LNG Exports from the United States," NERA Economic Consulting, December 2012. Opposing views include Ken Ditzel, Jeff Plewes, and Bob Broxson, "US Manufacturing and LNG Exports: Economic Contributions to the US Economy and Impacts on US Natural Gas Prices," Charles River Associates (CRA), February 2013; and Wallace Tyner, Professor of Agricultural Economics at Purdue University.

[3] Examples of supportive studies include Charles Ebinger, Kevin Massy, and Govinda Avasarala, "Assessing the Case for U.S. Exports of Liquefied Natural Gas," The Brookings Institution, May 2012; Kenneth B. Medlock III, "U.S. LNG Exports: Truth and Consequence," James A. Baker III Institute for Public Policy, August 2012; "New Dynamics of the U.S. Natural Gas Market," Bipartisan Policy Center, May 2013; and Joel Darmstadter, "The Controversy over US Coal and Natural Gas Exports," Resources for the Future, March 2013.

Natural Resources Committee, stated, "our country should not be wedded to this either/or choice between no exports and no limit on exports."[4]

Background

As the policy currently stands, prospective exporters must submit applications to the U.S. Department of Energy for the right to export LNG to countries that have a free-trade agreement (FTA) with the United States and also to those that do not. DoE is required to approve any application to export LNG to FTA nations "without delay." With respect to countries that do not have an FTA with the United States, DoE reviews each proposal and can only deny the application if it finds that exports are not in the "public interest" (It is important to note that aside from South Korea, the United States does not have an FTA with any major LNG importing nation). DoE has repeatedly reaffirmed that the Natural Gas Act presumes that exports are in the national interest unless it is demonstrated otherwise, and 1984 DoE Policy Guidelines declare that the market should be the determining factor for allocating resources.[5]

As the number of applications to the DoE to export LNG to non-FTA countries increased, both opponents and proponents of LNG exports asked for greater clarity in the approval process. Both parties are looking for more certainty in particular about what constitutes the public interest. DoE has clarified that it will prioritize the projects in the order that they were received and by whether they have already received approval from the Federal Energy Regulatory Commission (FERC) to use the FERC pre-filing process. Furthermore, Christopher Smith, the energy department official responsible for oil and natural gas policy, has stated that DoE is focusing on the "cumulative impact" of additional approvals.[6]

Experts following this issue have also taken note of the lack of clarity surrounding the timing of approvals. Nearly one year passed between the conditional authorization approvals for the Sabine Pass terminal and that for the Freeport LNG terminal. During this time, DoE was assessing the results of studies and public comments in order to determine the implications of U.S. LNG exports. At a meeting in May, Smith stated: "it took us a period of two months to go to close of comments to evaluation of all those comments and then Friday we approved [the Freeport project]."[7] This comment has fuelled speculation that new projects will be considered every two months. There is, however, still no clarity as to what determines whether subsequent applications will be approved.

An additional problem with the existing approach is political. There are currently fifteen projects before DoE awaiting approval. These projects represent nearly thirty billion cubic feet per day of exports, or over forty percent of U.S. gas consumption per day. Despite the reality that the outlook for these projects depends on future market conditions and only a fraction of these projects are likely to be constructed, consumers and natural-gas intensive industries are concerned that such a large volume of exports will hurt them.[8]

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[4] Senate Energy & Natural Resources Committee Chairman Ron Wyden, Natural Gas Roundtable on Supply Exports, 21 May 2012.
[5] United States of America, Department of Energy Office of Fossil Energy, "Order Conditionally Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Freeport LNG Terminal on Quintana Island, Texas to Non-Free Trade Agreement Nations," *FE Docket No 10-161-LNG*, 17 May 2013, pgs. 6, 112.
[6] Christopher Smith, Natural Gas Roundtable on Supply Exports, 21 May 2012.
[7] Ibid.
[8] Charles Ebinger, Kevin Massy, and Govinda Avasarala, "Assessing the Case for Liquefied Natural Gas Exports from the United States," The Brookings Institution, May 2012, and Kenneth Medlock.

Policy Recommendations[9]

There is a need to reform the existing rules pertaining to exporting LNG to non-FTA countries in order to reduce the risk and uncertainty that is hurting both producers and consumers.

There are two extreme proposals that have been mooted: the first is a volumetric cap, wherein the volume of LNG exported from the United States would be limited. Analysts have suggested that such a cap would be imposed at somewhere between six and eight billion cubic feet today, or between roughly ten and fifteen percent of domestic gas production. The second proposal is an 'approve them all' policy, wherein all applications before the Department would be approved to export to non-FTA nations.

Both of these approaches are treacherous to implement and may increase, rather than decrease, uncertainty. For instance, a cap is economically inefficient and legally difficult to implement (How will projects be prioritized to fit into the cap? Will it be on a first-come-first-served basis? Or by which project is farthest along in contracting?) Approving all of the projects, on the other hand, might avoid conferring economic benefits based solely on the initial project submission date; it will not, however, alleviate the concerns of the industrial sector.

A balanced approach is one that does not increase the cost of exporting but accurately reflects the cost of building a facility at the beginning of the process. To be approved for exports to non-FTA countries, a prospective exporter should have gone successfully through FERC's pre-filing process and have a portion of its supply contracts signed before being eligible to be considered by DoE for an application to export to non-FTA countries. Both requirements are costly and will encourage only serious projects to move forward.

There also needs to be more clarity on the "public interest" determination, which is currently too vague, creating investor uncertainty. Here, "public interest" could be dependent on the aforementioned two stipulations. In other words, if a company completes its pre-filing process and contracts out a given percentage of its capacity, the exports are deemed to be in the public interest.

DoE has stated that as part of each subsequent LNG approval it will continue to assess the cumulative impact on the gas market and prices. Given the dynamics of the gas market and its competitive importance with other fuels, we do not believe these assessments would be made on a timely basis. Additional delays in the regulatory process will inevitably come about, even with the use of outside consultants.

Finally, the Department should take an audit of the natural gas export policy every five years. This should serve as an important information-gathering exercise. Such an audit would identify what happened to domestic natural gas supply, demand, prices, and international markets during each five-year period. Policy adjustments, if determined necessary, could be made following the review.

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[9] Redacted from testimonies by Charles Ebinger, Director of the Energy Security Initiative at Brookings, before the House Subcommittee on Energy Policy, Health Care, and Entitlements, on March 19, 2013; and before the Senate Energy and Natural Resources Committee on May 21, 2013.

ABOUT THE AUTHORS

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Charles Ebinger is a senior fellow and director of the Energy Security Initiative at Brookings. He has more than 35 years of experience specializing in international and domestic energy markets (oil, gas, coal, and nuclear) and the geopolitics of energy, and has served as an energy policy advisor to over 50 governments. He has served as an adjunct professor in energy economics at the Johns Hopkins School of Advanced International Studies and Georgetown University's Walsh School of Foreign Service.

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