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# U.S. LNG Exports to Non-FTA Countries: Frequently Asked Questions

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# Introduction

On January 26, 2024, the Biden Administration announced a "temporary pause" in the approval process of natural gas export permits to countries that do not have a free trade agreement (FTA) with the United States.[1] This has the potential to affect liquefied natural gas (LNG) exports and the facilities associated with liquefying and exporting the natural gas. The Department of Energy's non-FTA permit to export natural gas is one component of the federal regulatory process.

# Questions and Answers

## Where does the pause fit into the LNG exporting permitting process?

To export natural gas from the United States, a company must obtain two permits: one from the Federal Energy Regulatory Commission (FERC) to construct the facility to liquefy the natural gas and load it on a tanker, and one from the Department of Energy (DOE) to export the commodity itself. The DOE permitting process depends upon where the natural gas is going and whether or not that country has a free trade agreement (FTA) requiring national treatment for natural gas with the United States.[2] If the shipment is going to a country that does not have a free trade agreement with the United States, DOE must make a determination as to whether the export is in the public interest prior to granting or denying the permit. This is the part of the process the pause is affecting. If the United States has an FTA with that country, the export, as defined in statute, is in the public interest and the permit must be granted "without modification or delay."[3] This process is laid out in the Natural Gas Act and regulations promulgated by FERC and DOE pursuant to their authority under the act.[4]

## How is the public interest defined?

Congress did not define the public interest, which gives DOE flexibility to adjust its determination to changes. For example, when Russia invaded Ukraine in 2014, DOE started emphasizing national security when discussing the public interest determination. This also highlights that DOE has adjusted the factors of its public interest determination over time, although it has never publicly defined these factors in specific terms.[5] Based on the contents of the first permit granted in 2010 by DOE to export to a non-free trade country, analysts surmised that the DOE criteria likely included national security, climate change, jobs, and other such issues.

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[1] The White House, "FACT SHEET: Biden-Harris Administration Announces Temporary Pause on Pending Approvals of Liquefied Natural Gas Exports," press release, January 26, 2024, https://www.whitehouse.gov/briefing-room/statements-releases/2024/01/26/fact-sheet-biden-harris-administration-announces-temporary-pause-on-pending-approvals-of-liquefied-natural-gas-exports/.

[2] National treatment for natural gas means treating the import from a country that the United States has a free trade agreement with the same as natural gas produced in the United States.

[3] 15 U.S.C. §717b(c).

[4] 15 U.S.C. §717b.

[5] U.S. Congress, House Committee on Energy and Commerce, Subcommittee on Energy and Power, *Quadrennial Energy Review and Related Discussion Drafts*, 114th Cong., 1st sess., June 2, 2015, Serial #114-47.

After that first approval, the Senate Committee on Energy and Natural Resources held a hearing on LNG exports in November 2011.[6] At the hearing, DOE was asked to undertake two studies, in part, to better understand the important effects on consumers and the country of LNG exports. The first study was related to domestic natural gas prices and was undertaken by the Energy Information Administration (EIA) with hypothetical export volumes.[7] The second study was an economic evaluation by an external consulting firm, called NERA Consulting, of exports, using the price study as an input.[8] The first study provided a range of outcomes based on the criteria. The second study concluded that more exports were better for the overall economy.

DOE stopped issuing permits while the congressionally requested studies were being conducted, although this was not mandated by statute or executive order. The next DOE permit approval was not granted for approximately two years from when the company's application was submitted, whereas the first permit took ten months. Additionally, since those two studies were completed, DOE has periodically commissioned other studies, e.g., on price effects of different levels of exports and on life cycle greenhouse gas emissions and particularly on the effect of exports on domestic natural gas prices.[9]

## What was the context for when this happened previously and how was the United States different?

The Administration's pause, as it is referred to, is not unprecedented, as noted above, and the United States is in a much different place than it was in 2020 vis-à-vis natural gas imports and exports.

Prior to 2008, the United States was viewed as a growing importer of natural gas and built LNG import terminals in preparation for rising volumes coming to the United States. The projected import dependence did not occur, in part because of shale gas development. Between 2008 and 2023, U.S. natural gas production increased by 23%. The planned import terminals have mostly been converted to export terminals today. In 2011, the United States became the world's largest producer of natural gas, surpassing Russia, and has remained the largest producer ever since.[10] The United States is also the largest exporter of natural gas, in part because of Russia's self-imposed curtailment of its exports to certain European countries.

## When did the United States start exporting LNG and what has been the effect on the global market?

The United States has been an LNG exporter since 1969, initially from a relatively small facility in Alaska and exporting almost exclusively to Japan. From the lower 48 states, LNG exports

[6] U.S. Congress, Senate Committee on Energy and Natural Resources, "To Consider Market Developments for US Natural Gas, Including the Approval Process and Potential for Liquefied Natural Gas Exports," 112th Cong., 1st sess., November 8, 2011, https://www.energy.senate.gov/hearings/2011/11/full-committee-hearing-to-consider-market-developments-for-us-natural-gas-including-the-approval-pro.

[7] Energy Information Administration, *Effect of Increased Natural Gas Exports on Domestic Energy Markets*, Department of Energy, January 2012, https://www.energy.gov/sites/prod/files/2013/04/f0/fe_eia_lng.pdf.

[8] NERA Economic Consulting, *Macroeconomic Impacts of LNG Exports from the United States*, Department of Energy, December 3, 2012, https://www.energy.gov/sites/prod/files/2013/04/f0/nera_lng_report.pdf.

[9] Department of Energy, Office of Fossil Energy and Carbon Management, List of additional studies on the office's website, https://www.energy.gov/fecm/regulation.

[10] Energy Institute, *Statistical Review of World Energy Data*, 2023, https://www.energyinst.org/__data/assets/excel_doc/0007/1055545/EI-stats-review-all-data.xlsx.

started in February of 2016 with Cheniere Energy's Sabine Pass facility in Sabine, Louisiana. As new export terminals have begun operations, U.S. LNG export quantities have increased every year, to the point where the United States LNG export quantities are comparable to those of Qatar and Australia. The United States is poised to become the largest LNG exporter by volume. Additionally, while U.S. LNG exports have been the focus of policy, the United States also exports large quantities of natural gas by pipeline, primarily to Mexico. In 2022, the United States was the largest exporter of natural gas in total.[11]

In addition to bringing growing volumes of natural gas to the global market, U.S. LNG exports have changed the market dynamics. U.S. contracts were more market oriented and pushed other countries to follow suit. Most global contracts had been indexed to oil prices and contained destination clauses, which limited where the exports could go. Today, the market for natural gas is much more tradeable, with more buyers, sellers, and risk management tools, making it more like oil as a commodity.

## What is the United States LNG export capacity?

As of early 2024, the United States has almost 15 billion cubic feet per day of liquefaction capacity.[12] It also has approximately 17 billion cubic feet per day of liquefaction capacity under construction and approximately another 12 billion cubic feet per day of liquefaction capacity that has been approved by FERC and DOE, but has not broken ground.[13] This last category indicates some market hesitation for companies that could, in theory, start construction but have chosen not to. The second category of projects, those that are under construction, are likely to be completed. Construction of liquefaction terminals is expensive, somewhere between $10 and $20 billion. Companies generally do not make such investment without confidence that they will receive a return on their investment. Additionally, to get financing for the facility, owners of the facilities generally have had to secure contracts, usually for up to 80% of the plant's capacity.

## Since the United States started exporting LNG, what has happened to domestic natural gas prices?

In 2008, U.S. natural gas prices were nearly $8 per million British thermal unit (mmBtu). Since the advent of shale gas, gas prices have come down and remained stable below $4 per mmBtu. Excluding countries that subsidize their natural gas prices, the United States natural gas prices currently are the lowest price. (See **Figure 1**.) Additionally, since 2016, when the United States started exporting LNG in larger quantities, domestic natural gas prices have stayed stable and relatively low, except for the occasional external factor like Russia's invasion of Ukraine.

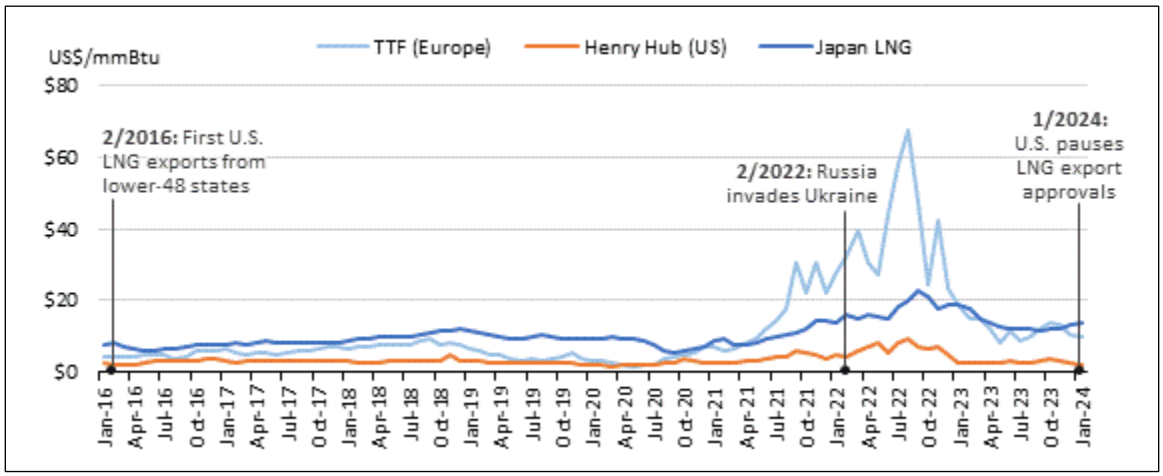
[11] Energy Institute, *Statistical Review of World Energy 2023*, 2023, pp. 37-38, https://www.energyinst.org/statistical-review.

[12] Federal Energy Regulatory Commission, *United States LNG Export Terminals - Existing,* April 2, 2024, https://www.ferc.gov/media/us-lng-export-terminals-existing-approved-not-yet-built-and-proposed.

[13] Federal Energy Regulatory Commission, *United States LNG Export Terminals – Approved, Not Yet Built,* April 2, 2024, https://www.ferc.gov/media/us-lng-export-terminals-existing-approved-not-yet-built-and-proposed.

**Figure 1. Select Global Natural Gas Prices**

January 2016-January 2024




**Source:** Bloomberg L.P.

**Notes:** Units = U.S. dollars per million British thermal unit (US$/mmBtu).

## What role does U.S. LNG play in replacing Russian gas to Europe during the war?

U.S. LNG and gas piped from Norway are currently the largest suppliers of natural gas to the European Union and other parts of Europe. Prior to the war, U.S. LNG accounted for 6% of Europe's natural gas imports. Since Russia's invasion of Ukraine in early 2022, U.S. LNG accounted for 15% in 2022 and 18% in 2023.[14] That was the largest rise of any country's exports to Europe. During the same time period, Russia provided 24% and 15%, respectively

## What does the Administration's announced pause mean for U.S. LNG export projects?

The pause has different effects depending on the status of the facilities. The facilities that are operating with existing permits will continue to be able to operate. The facilities under construction will likely continue to move toward operations and eventually into service. These projects will be able to operate under the current conditions. The companies that have received the DOE non-free trade agreement permit will have to determine if their project can make the needed returns to go forward. The companies that have not received the non-free trade permit will be unable to export to non-FTA countries unless the permitting process is restarted.

[14] European Commission, *2023 State of the Energy Union Report*, October 24, 2023, p. 14 (Figure 3), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023DC0650.

# Appendix. Overview of Approvals Required Under the Natural Gas Act

Pursuant to Section 3(a) of the Natural Gas Act (NGA), parties seeking to enter into natural gas transactions with foreign buyers must file for an export authorization.[15] If the United States has an FTA in effect with the nation to which the LNG would be exported, the NGA directs DOE to deem the export consistent with the "public interest."[16] Exports to non-FTA countries are presumed to be in the public interest, unless, after opportunity for a hearing, DOE finds that the authorization would not be consistent with the public interest.[17] Pursuant to Section 3(e) of the NGA, the siting, construction, expansion, or operation of an LNG export terminal, onshore or in state waters, requires approval from FERC.[18] Depending on the details of the commodity export or terminal facility, requirements established under additional state, tribal, or federal law may also apply to the project. LNG permit approvals from DOE and FERC are federal actions subject to environmental review under the National Environmental Policy Act (NEPA, 42 U.S.C. §§4321 et seq.).

## Summary of DOE Public Interest Evaluation Process

The NGA does not detail what factors DOE must consider when making a public interest determination for exports to non-FTA countries. According to DOE's regulations, its primary public interest evaluation is on the domestic need for the natural gas that is proposed to be exported, but may consider any other issues determined to be appropriate. Those other factors may include U.S. energy security, economic impacts (e.g., domestic natural gas prices), and environmental considerations, among others. Generally, the administrative process for reviewing applications to export natural gas includes the following steps:

- An entity submits an application to DOE with information regarding the proposed export;[19]
- After ensuring it has all necessary information about the project, DOE publishes a notice in the *Federal Register* inviting public participation and comment on the proposed project;[20]
- DOE and, typically, the applicant respond to comments or protests;
- DOE considers any other relevant information included in the administrative record and issues a final opinion and order on the application, attaching any necessary conditions it determines are needed to ensure the project is in the public interest.[21]

[15] 15 U.S.C. §717b(a); DOE regulations implementing those requirements were promulgated at 10 C.F.R. Part 590, "Administrative Procedures with Respect to the Import and Export of Natural Gas."

[16] 15 U.S.C. §717b(c).

[17] 15 U.S.C. §717b(a).

[18] See 15 U.S.C. §717b(e). FERC regulations implementing this section of the NGA were promulgated at 18 C.F.R. Part 153, "Applications for Authorization to Construct, Operate, or Modify Facilities Used for the Export or Import of Natural Gas."

[19] As required in 10 C.F.R. §590.202.

[20] 10 C.F.R. §590.205.

[21] 10 C.F.R. §590.404.

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