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Extending Natural Gas Export Authorizations to Non-Free Trade Agreement Countries Through the Year 2050

AGENCY: Office of Fossil Energy, Department of Energy.

ACTION: Notice of final policy statement and response to comments.

SUMMARY: The U.S. Department of Energy’s (DOE) Office of Fossil Energy (FE) will act on applications and amendments requesting to export domestically produced natural gas—including liquefied natural gas (LNG), compressed natural gas, and compressed gas liquid—from the lower-48 states to non-free trade agreement (non-FTA) countries for a term ending on December 31, 2050, discontinuing its practice of issuing standard 20-year export terms. In this Final Policy Statement, DOE responds to the 22 public comments received on the Proposed Policy Statement and describes the implementation process for long-term non-FTA authorization holders and applicants to request this term extension, and for DOE to adjudicate each request.
DATES: This policy statement is effective on [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].


SUPPLEMENTARY INFORMATION:

Acronyms and Abbreviations. Frequently used acronyms and abbreviations are set forth below for reference.

AEO Annual Energy Outlook
API American Petroleum Association
Bcf/d Billion Cubic Feet per Day
Bcf/yr Billion Cubic Feet per Year
CPP Clean Power Plan
CLNG Center for Liquefied Natural Gas
DECP Dominion Energy Cove Point LNG, LP
DOE U.S. Department of Energy
EA Environmental Assessment
EIA U.S. Energy Information Administration
EIS Environmental Impact Statement
FTA Free Trade Agreement
GDP Gross Domestic Product
GHG  Greenhouse Gas
IECA  Industrial Energy Consumers of America
LCA  Life Cycle Analysis
LNG  Liquefied Natural Gas
NEPA  National Environmental Policy Act of 1969
NETL  National Energy Technology Laboratory
NGA  Natural Gas Act
NGSA  Natural Gas Supply Association

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I. Authority and Background

DOE is responsible for authorizing exports of natural gas, including LNG, to foreign countries pursuant to section 3 of the Natural Gas Act (NGA), 15 U.S.C. 717b. The policy announced in this notice is specific to applications to export natural gas to countries with which the United States does not have a free trade agreement (FTA) requiring national treatment for trade in natural gas, and with which trade is not prohibited by U.S. law or policy (non-FTA countries). For such applications, NGA section 3(a) authorizes the exportation of natural gas from the United States unless DOE determines that doing so “will not be consistent with the public interest.” DOE has consistently interpreted this provision as creating a rebuttable presumption favoring export authorization. Accordingly, DOE will conduct an informal adjudication and grant a non-FTA application unless DOE finds that the proposed exportation of natural gas will not be consistent with the public interest.

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1 In referring to natural gas, DOE refers primarily, but not exclusively, to LNG. To date, two non-FTA proceedings have involved types of natural gas other than LNG: Compressed natural gas (CNG) in FE Docket No. 13–157–CNG, and compressed gas liquid (CGL) in FE Docket No. 16–22–CGL. See 15 U.S.C. 717a(5) (definition of natural gas); 10 CFR 590.102(i) (same).

2 The authority to regulate the imports and exports of natural gas, including LNG, under section 3 of the NGA (15 U.S.C. 717b) has been delegated to the Assistant Secretary for FE in Redelegation Order No. 00–002.04G, issued on June 4, 2019.

3 15 U.S.C. 717b(a). This Final Policy Statement does not apply to exports to FTA countries under section 3(c) of the NGA, 15 U.S.C. 717b(c). DOE recognizes, however, that authorization holders and applicants likely will seek to align their long-term non-FTA export terms under this Final Policy Statement with their FTA export terms, as discussed herein. See infra § III.C.


6 See id. (“there must be ‘an affirmative showing of inconsistency with the public interest’ to deny the application” under NGA section 3(a)) (quoting Panhandle Producers & Royalty Owners Ass’n v. Econ. Regulatory Admin., 822 F.2d 1105, 1111 (D.C. Cir. 1987)). As of August 24, 2018, qualifying small-scale exports of natural gas to non-FTA countries are deemed to be consistent with the public interest under NGA section 3(a). See 10 CFR 590.102(p); 10 CFR 590.208(a); see also U.S. Dep’t of Energy, Small-Scale Natural Gas Exports: Final Rule, 83 FR 35106 (July 25, 2018).
Before reaching a final decision, DOE must also comply with the National Environmental Policy Act of 1969 (NEPA).\textsuperscript{7} DOE’s environmental review process under NEPA may result in the preparation or adoption of an environmental impact statement (EIS) or environmental assessment (EA) describing the potential environmental impacts associated with the application.\textsuperscript{8} In other cases, DOE may determine that an application is eligible for a categorical exclusion from the preparation or adoption of an EIS or EA, pursuant to DOE’s regulations implementing NEPA.\textsuperscript{9}

Both the NGA and DOE’s regulations (10 CFR 590.404) provide DOE with broad authority to attach conditions to non-FTA export authorizations.\textsuperscript{10} However, neither NGA section 3(a) nor DOE’s regulations prescribe a specific time period for a non-FTA authorization. For this reason, DOE has determined that it has discretion under 10 CFR 590.404 to impose a suitable term for long-term non-FTA authorizations, in light of the evidence in each proceeding.\textsuperscript{11}

For nearly a decade, DOE has issued long-term authorizations to export LNG (and compressed natural gas) produced from the lower-48 states to non-FTA countries for a standard term of 20 years.\textsuperscript{12} As set forth in each order, the 20-year term begins when the authorization

\textsuperscript{7} 42 U.S.C. 4321 \textit{et seq}.
\textsuperscript{8} Typically, the federal agency responsible for permitting the export facility—either the Federal Energy Regulatory Commission or the U.S. Department of Transportation’s Maritime Administration—serves as the lead agency in the NEPA review process, and DOE serves as a cooperating agency. Where no other federal agency is responsible for permitting the export facility, DOE serves as the lead agency in the NEPA review process.
\textsuperscript{9} In prior non-FTA proceedings where DOE has determined that a categorical exclusion under NEPA is appropriate, DOE has relied on 10 CFR 1021.410, appendix B to subpart D of part 1021, Categorical Exclusion B5.7 (“Approvals or disapprovals of new authorizations or amendments of existing authorizations to import or export natural gas under section 3 of the Natural Gas Act that involve minor operational changes (such as changes in natural gas throughput, transportation, and storage operations) but not new construction.”).
\textsuperscript{10} For purposes of this policy, DOE uses the terms “authorization” and “order” interchangeably.
\textsuperscript{11} Under DOE practice, “long-term” refers to authorizations and contracts greater than two years in duration.
\textsuperscript{12} See U.S. Dep’t of Energy, 10 CFR Part 590; Extending Natural Gas Export Authorizations to Non-Free Trade Agreement Countries Through the Year 2050; Notice of Proposed Policy Statement and Request for Comments, 85 FR 7672, 7676 (Feb. 11, 2020) [hereinafter Proposed Policy Statement] (explaining basis for 20-year term). This Final Policy Statement applies to exports of natural gas produced from the lower-48 states. Because there is no natural gas pipeline interconnection between Alaska and the lower 48 states, DOE generally views those LNG export markets as distinct.
holder commences commercial export from its facility. DOE also allows a term for commercial export operations to commence—typically seven years—set from the date the order is issued, and a three-year “make-up period” following the end of the 20-year export term, during which the authorization holder may continue to export any “make-up volume” that it was unable to export during the 20-year export term.

To date, DOE has issued 43 final long-term non-FTA authorizations to export domestically produced LNG and compressed natural gas from the lower-48 states—each with an export term of 20 years. These authorizations total a cumulative volume of 45.89 billion cubic feet (Bcf) per day (Bcf/d) of natural gas, or approximately 16.7 trillion cubic feet per year. Additionally, 16 long-term non-FTA applications requesting to export domestically produced LNG or compressed gas liquid from the lower-48 states are currently pending before DOE.

On February 11, 2020, DOE published a notice in the Federal Register proposing to extend this standard 20-year term for non-FTA authorizations (Proposed Policy Statement or Proposal). Publication of the notice began a 30-day public comment period that ended on March 12, 2020. In the Proposed Policy Statement, DOE proposed an end date of December 31,

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14 See id. at 123 (Ordering Paras. B & C).
15 See id. at 112-16. This volume includes existing authorizations involving U.S. natural gas produced in the lower-48 states and liquefied in Canada and Mexico for export to non-FTA countries. DOE notes that the amount of U.S. LNG export capacity that is currently operating or under construction totals 15.54 Bcf/d of natural gas across eight large-scale export projects in the lower-48 states. See U.S. Energy Info. Admin., U.S. Liquefaction Capacity (Apr. 22, 2020), available at: https://www.eia.gov/naturalgas/U.S.LiquefactionCapacity.xlsx (total of 15.54 Bcf/d calculated by adding Column N in the “Existing & Under Construction” worksheet).
16 U.S. Dep’t of Energy, Summary of LNG Export Applications as of July 6, 2020, available at: https://www.energy.gov/fe/downloads/summary-lng-export-applications-lower-48-states. This number includes one pending application involving U.S. natural gas produced in the lower-48 states, proposed to be liquefied in Mexico for export to non-FTA countries.
2050, for non-FTA exports, inclusive of any make-up period. DOE explained that, under this change, existing authorization holders would be able to extend their export term from 20 to 30 (or more) years, depending on when the authorization holder begins exporting LNG.\textsuperscript{18} DOE stated, however, that for the majority of existing authorization holders, the proposed term extension would result in a maximum 30-year export term. Likewise, DOE stated that it would provide up to a 30-year export term—through December 31, 2050—for new authorizations issued beginning this year \textit{(i.e.,} in 2020). DOE explained that, by extending the period over which these exports would occur, a term extension would provide a mechanism for existing authorization holders to increase the total volume of LNG exports over the life of their authorization.

The Proposed Policy Statement described an implementation process based on the status of the authorization holder or applicant, as follows:

(1) Existing non-FTA authorization holders would apply to DOE to extend their export term through December 31, 2050, on a voluntary opt-in basis;

(2) Existing non-FTA applicants would amend their pending non-FTA application to request an export term through December 31, 2050, on a voluntary opt-in basis; and

(3) DOE would issue all future non-FTA export authorizations with a standard export term lasting through December 31, 2050, unless a shorter term was requested by the applicant.

DOE explained that, in each individual non-FTA proceeding, the authorization holder or applicant would be required to submit an application (for #1 and #3) or an amendment to its pending application (for #2) with relevant facts and argument supporting the term request.

Following the notice and comment period in each proceeding, DOE would conduct a public

\textsuperscript{18} \textit{Id.}, 85 FR 7679.
interest analysis of the application (or amended application) under NGA section 3(a). DOE also would have to comply with NEPA, as discussed herein.

DOE offered two principal reasons for this proposed term extension. First, DOE stated that there is new evidence to support changing from the standard 20-year export term to an export term with an end date of December 31, 2050. DOE cited its 2018 LNG Export Study, which was performed by NERA Economic Consulting (NERA). The principal conclusion of the 2018 LNG Export Study is that the United States will experience net economic benefits from the export of domestically produced LNG through the 30-year study period, i.e., from 2020 through 2050. DOE explained that, although it had limited its existing non-FTA export authorizations to a 20-year export term based on the projections in its prior LNG export studies, that limitation is no longer required based on the findings of the 2018 LNG Export Study that included analysis on an expanded time period. Specifically, because the 2018 LNG Export Study considered unconstrained (or market-determined) levels of LNG exports and included analysis through the year 2050, the 2018 LNG Export Study supports export terms lasting through December 31, 2050.

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19 Id., 85 FR 7678-7679.
20 DOE published the 2018 LNG Export Study on its website on June 7, 2018, and concurrently provided notice of the availability of the Study. See NERA Economic Consulting, Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports (June 7, 2018), available at: https://www.energy.gov/sites/prod/files/2018/06/f52/Macroeconomic%20LNG%20Export%20Study%202018.pdf [hereinafter 2018 LNG Export Study or 2018 Study].
21 See U.S. Dep’t of Energy, Study on Macroeconomic Outcomes of LNG Exports; Notice of Availability of the 2018 LNG Export Study and Request for Comments, 83 FR 27314 (June 12, 2018); U.S. Dep’t of Energy, Study on Macroeconomic Outcomes of LNG Exports; Response to Comments Received on Study, 83 FR 67251 (Dec. 28, 2018) [hereinafter 2018 Study Response to Comments].
22 Proposed Policy Statement, 85 FR 7678; see also id. 85 FR 7677 (citing 2018 Study Response to Comments, 83 FR 67260-67272).
23 The Proposed Policy Statement provides additional background on DOE’s practice of issuing non-FTA export authorizations and the various studies DOE has commissioned to evaluate the reasonably foreseeable economic and environmental impacts of natural gas exports, including the 2018 LNG Export Study that is the basis for this Final Policy Statement.
DOE also pointed to a new environmental analysis entitled *Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas From the United States: 2019 Update* (LCA GHG Update). In 2018, DOE’s National Energy Technology Laboratory (NETL) conducted this study as a follow-up to its life cycle analysis (LCA) conducted in 2014. The analysis in the LCA GHG Update was based on the most current available science, methodology, and data from the U.S. natural gas system to assess emissions of greenhouse gases (GHGs) associated with exports of U.S. LNG. In January 2020, upon review of both the LCA GHG Update and the public comments received on that study, DOE determined that it saw no reason to conclude that U.S. LNG exports will increase global GHG emissions in a material or predictable way. DOE thus found that the LCA GHG Update “supports the proposition that exports of LNG from the lower-48 states will not be inconsistent with the public interest.”

Second, DOE stated that authorization holders have indicated that a 30-year export term would better match the operational life of LNG export facilities, which are typically designed for a service life of 30 to 50 years. A 30-year export term thus would provide authorization holders with greater security in financing their export facility and would maximize their ability to enter into natural gas supply and export contracts for a longer period of time.

In particular, DOE observed that a 30-year export term would benefit U.S. authorization holders as they compete for long-term export contracts in the global market. DOE noted that, in December 2019, the Canadian Government granted the first-ever 40-year export term to a Canadian LNG export project—the proposed Kitimat LNG project, being developed by Chevron Canada Limited. Additionally, citing an earlier comment in a proceeding made by Cheniere

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Energy, Inc. (Cheniere)—the first company to have large-scale exports of U.S. LNG to non-FTA countries from the lower-48 states, and currently the leading U.S. exporter in terms of volume—DOE observed that foreign buyers have shown an interest in securing long-term contracts for U.S. LNG that last beyond 20 years. Therefore, a 30-year export term could prove decisive when foreign buyers are deciding between U.S. LNG and alternative long-term sources of LNG, such as the Canadian project.

II. Public Comments and DOE’s Response

DOE received 22 comments on the Proposed Policy Statement from a variety of sources, including U.S. Senators, participants in the natural gas industry, environmental organizations, and individuals. Eight comments supported the Proposed Policy Statement, 13 comments opposed the Proposed Policy Statement, and one comment was non-responsive. The Proposed Policy Statement and comments received in response are available on DOE’s website at https://fossil.energy.gov/app/docketindex/docket/index/22. Several comments express general opposition to LNG exports and the use of fossil fuels, advocate for the use of renewable energy, argue against an individual non-FTA application, or challenge the design of the 2018 LNG Export Study. DOE has considered these comments carefully, but considers them outside the scope of the Proposed Policy Statement, which addressed whether DOE should extend the

25 Cheniere owns and operates two LNG facilities: the Sabine Pass LNG Terminal in Cameron Parish, Louisiana, and the Corpus Christi Liquefaction Facility in San Patricio County, Texas.
26 Supporting comments were submitted by Delfin LNG LLC (Delfin); Dominion Energy Cove Point LNG, LP (DECP); LNG Allies, The U.S. LNG Association (LNG Allies); Golden Pass LNG Terminal LLC (Golden Pass LNG); Cheniere; American Petroleum Institute (API); U.S. Senators John Barrasso, Bill Cassidy, John Hoeven, and Kevin Cramer (filing jointly); and the Center for Liquefied Natural Gas and the Natural Gas Supply Association (filing jointly, and together, CLNG/NGSA).
27 Opposing comments were submitted by Senators Edward Markey and Jeffrey Merkley (filing jointly), Cindy Spoon, Industrial Energy Consumers of America (IECA), Public Citizen, Jody McCaffree, A. Pani, Morgan Schmitz Anonymous, Sarah-Hope Parmeter, Suzanne Sorkin, Corey Capehart, Jean Connochie, and Margaret Gordon.
28 A non-responsive comment was submitted by Lindsey Cox-McQueen.
standard 20-year term for non-FTA authorizations through December 31, 2050. DOE previously received public comments on the 2018 LNG Export Study, and addressed those comments in the Federal Register in December 2018.\textsuperscript{29} The remaining relevant comments are summarized below, together with DOE’s response to these comments.

A. Economic Benefits of the Term Extension

a. Comments

Commenters in support of the Proposed Policy Statement cite the 2018 LNG Export Study, maintaining that economic benefits for the United States will increase with U.S. LNG exports “since the U.S. natural gas industry … will remain demand-limited, and not supply-limited.”\textsuperscript{30} The commenters also identify the following positive commercial benefits that, in their view, will accrue as a result of the proposed term extension.

- **Planning and financing.** Delfin, DECP, API, and CLNG/NGSA state that an extended export term through December 31, 2050, will better align with the expected lifespan of export facilities—which, DECP states, is “much longer than 20 years.”\textsuperscript{31} Commenters including LNG Allies and API emphasize that LNG export projects are highly capital intensive and require a considerable amount of planning and construction time.\textsuperscript{32} They state that, for an export project to be successful, developers must be reasonably certain that the LNG project can remain in operation long enough to recover those costs and generate a return.\textsuperscript{33} According to Delfin and Senators Barrasso, Cassidy, Hoeven, and Cramer, the longer export term will provide reassurance that export facilities have a reasonable expectation of recouping their investment.\textsuperscript{34}

\textsuperscript{29} See 2018 Study Response to Comments, 83 FR 67251.
\textsuperscript{30} Comment of LNG Allies at 2; see also Comment of Cheniere at 1; Comment of API at 2-3.
\textsuperscript{31} Comment of DECP at 2; see also Comment of Delfin; Comment of API at 1; Comment of CLNG/NGSA at 4.
\textsuperscript{32} Comment of LNG Allies at 2; Comment of API at 2.
\textsuperscript{33} Comment of API at 2; see also Comment of CLNG/NGSA at 4.
\textsuperscript{34} Comment of Delfin; Comment of Senators Barrasso, Cassidy, Hoeven, and Cramer at 1.
This reassurance, in turn, will facilitate the financing of such projects, as well as enable project development teams to move forward with greater confidence when making critical investment decisions.35

- **Market competitiveness.** API and other commenters assert that the proposed term extension will afford U.S. authorization holders more flexibility in responding to LNG buyers, and thus will level the playing field in competing with other global suppliers.36 LNG Allies states that DOE’s current non-FTA practice—authorizing exports for a 20-year term—constrains the flexibility that U.S. companies can offer in contract negotiations. Specifically, LNG Allies and API assert that the inability of U.S. exporters to offer export terms longer than 20 years is a major disadvantage in an increasingly competitive, dynamic global LNG market with new projects planned in Qatar, Russia, Mozambique, and elsewhere. According to LNG Allies, export facilities require most U.S. project sponsors to raise financing of up to $10 billion or more to construct their terminals, underwritten by long-term LNG offtake contracts. A longer export term thus would allow U.S. companies to offer contract arrangements that have a greater certainty of supply and that are more attractive to potential customers.37 LNG Allies points to the proposed Kitimat LNG export facility to be constructed in British Columbia, Canada, which it states has a 40-year export license and will be a direct competitor to U.S. projects seeking to serve importing countries in Asia.38 API also notes that other exporting countries, such as Russia, place few limitations on a project’s operational timeline.39 In sum, these commenters

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35 Comment of Delfin.  
36 Comment of API at 2.  
37 Comment of LNG Allies at 2-3; Comment of Delfin.  
38 Comment of LNG Allies at 3.  
39 Comment of API at 2.
argue that the proposed term extension will better reflect domestic and international market
dynamics.\textsuperscript{40}

- **Regulatory certainty in the United States and abroad.** CLNG/NGSA and Senators
  Barrasso, Cassidy, Hoeven, and Cramer state that the proposed term extension provides a more
certain pathway for U.S. natural gas to be sold abroad, sends a clear statement of confidence in
U.S. LNG, and provides greater regulatory certainty to the industry.\textsuperscript{41}

  On the other hand, opponents of the Proposed Policy Statement challenge the anticipated
economic and commercial benefits associated with an extended export term. IECA, for example,
contends that DOE should not extend export terms to 2050 or approve any additional LNG
export applications until DOE conducts economic studies that, in IECA’s view, fully evaluate the
economic impacts of exporting U.S. LNG.\textsuperscript{42} Additionally, Public Citizen asserts that the trend of
LNG exports is shifting away from long-term, fixed price contracts and towards spot and short-
term sales.\textsuperscript{43} According to Public Citizen, this shift increases the likelihood that LNG export
destinations will be determined by the markets offering the highest prices, and thus is at odds
with DOE’s proposal to “lock in” 30-year export volumes.\textsuperscript{44}

b. DOE Response

DOE agrees with the commenters stating that this Final Policy Statement will provide
important commercial benefits to existing and future authorization holders in the lower-48 states,
while enhancing long-term regulatory certainty for both authorization holders and foreign buyers
of U.S. LNG. More generally, DOE notes that the 2018 LNG Export Study, as well as DOE’s

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\textsuperscript{40} See id. at 5; see also Comment of CLNG/NGSA at 1, 4.
\textsuperscript{41} Comment of CLNG/NGSA at 5; Comment of Senators Barrasso, Cassidy, Hoeven, and Cramer at 1.
\textsuperscript{42} Comment of IECA at 2.
\textsuperscript{43} Comment of Public Citizen.
\textsuperscript{44} Id.
four prior LNG export studies, consistently have projected positive economic benefits from increased levels of U.S. LNG exports, as measured by GDP.\textsuperscript{45}

Although Public Citizen notes certain commercial trends in the U.S. LNG market—such as the use of flexible short-term sales, in addition to long-term contracts—Public Citizen does not explain how these market variations are any more or less significant whether existing authorization holders have a 20-year export term or an extended export term lasting through 2050.\textsuperscript{46}

Insofar as IECA argues that the 2018 LNG Export Study used propriety economic models and failed to evaluate certain economic impacts, and thus cannot provide support for the Proposed Policy Statement, DOE finds that these issues are beyond the scope of this proceeding. DOE previously addressed IECA’s (and other commenters’) arguments concerning the scope, design, and methodology of the 2018 LNG Export Study. In that proceeding, DOE determined that none of the comments opposing the 2018 LNG Export Study—including IECA’s arguments—provided sufficient evidence to rebut the findings of the 2018 Study.\textsuperscript{47}

B. Distributional Impacts

1. Gross Domestic Product (GDP) and Consumer Welfare

a. Comments

Some commenters, including IECA, Public Citizen, and Senators Markey and Merkley, suggest that any net economic benefits associated with the proposed term extension are

\textsuperscript{45} See, e.g., 2018 Study Response to Comments, 83 FR 67259 (citing 2018 LNG Export Study), 67263.

\textsuperscript{46} Additionally, DOE continues to be guided by the longstanding principles established in the 1984 Policy Guidelines of minimizing federal involvement in energy markets and promoting market competition. \textit{See Jordan Cove Energy Project L.P.}, DOE/FE Order No. 3413-A, at 28-30 (citing, e.g., U.S. Dep’t of Energy, New Policy Guidelines and Delegations Order Relating to Regulation of Imported Natural Gas, 49 Fed. Reg. 6684, 6685 (Feb. 22, 1984)).

\textsuperscript{47} 2018 Study Response to Comments, 83 FR 67260-67273.
overstated and not sustainable. Senators Markey and Merkley contend, for example, that the Proposed Policy Statement will result in higher profits for the natural gas industry, while “cutting American consumers out of any potential benefits.” 48 Likewise, IECA and Public Citizen argue that the Proposed Policy Statement prioritizes the supply of natural gas to foreign countries and the financial interests of natural gas producers and LNG exporters at the expense of domestic consumers and households. 49

Public Citizen and Morgan Schmitz also contend that extending export terms for LNG would link U.S. GDP to price-volatile, finite natural resources that will become increasingly more difficult to obtain. 50 Ms. Schmitz argues that the fossil fuel industry causes negative economic effects, and the United States would experience more economic gain over the long term by expanding renewable energy sources and investing in jobs in “green energy.” 51

Other commenters, including LNG Allies, Cheniere, and API, seek to rebut these concerns by pointing to the conclusion of the 2018 LNG Export Study that the United States will experience net economic benefits from the export of domestically produced LNG (in a volume up to 52.8 Bcf/d of natural gas) through the year 2050. 52 Cheniere also emphasizes the Study’s conclusion that “there is greater gain in GDP as the LNG export volume increases.” 53

Additionally, Senators Barrasso, Cassidy, Hoeven, and Cramer maintain that LNG exports will help the U.S. natural gas industry continue to be an engine for growth—creating thousands of jobs in the United States and generating millions in tax revenue for federal, state, and local

48 Comment of Senators Markey and Merkley.
49 Comment of IECA at 2; Comment of Public Citizen.
50 Comment of Public Citizen; see also Comment of Morgan Schmitz at 3.
51 Comment of Morgan Schmitz at 3-4.
52 Comment of LNG Allies 2-3; Comment of Cheniere at 1; Comment of API at 2-3.
53 Comment of Cheniere at 1 (quoting 2018 LNG Export Study at 67-68).
governments.\textsuperscript{54} API adds that the 2018 LNG Export Study’s conclusion was consistent with an API study published in 2017, which found that an increase in LNG export volumes to approximately 16 Bcf/d in 2040 could support between 220,000 to 452,000 additional jobs and add $50 to $73 billion to the U.S. economy.\textsuperscript{55}

b. DOE Response

The 2018 LNG Export Study measured the broad macroeconomic effects of LNG exports on the U.S. economy through several metrics, including the wellbeing of the average U.S. consumer, total household income from all sources, economy-wide investment, output effects on key manufacturing sectors, and GDP.

With respect to GDP, the 2018 LNG Export Study showed that, for each of the supply scenarios, higher levels of LNG exports in response to international demand consistently lead to higher levels of GDP.\textsuperscript{56} Specifically, GDP grows as LNG exports increase because the U.S. economy benefits from investment in liquefaction facilities, export revenues, income from the upstream and midstream natural gas industry, and tolling charges generated by the LNG export facilities. With respect to consumer well-being, the 2018 LNG Export Study found that all scenarios within the “more likely” range of results are welfare-improving for the average U.S. household.\textsuperscript{57}

Upon review, DOE is not persuaded by the commenters’ claims of negative economic impacts from the proposed term extension. The commenters have not presented sufficient evidence to support their assertions of economic harm and, indeed, do little more than

\textsuperscript{54} Comment of Senators Barrasso, Cassidy, Hoeven, and Cramer at 1.
\textsuperscript{55} Comment of API at 2.
\textsuperscript{56} See 2018 Study Response to Comments, 83 FR 67255 (citing 2018 LNG Export Study at 18).
\textsuperscript{57} See id., 83 FR 67264 (citing 2018 LNG Export Study at 66-67). For a detailed discussion of these distributional impacts in the context of the 2018 LNG Export Study, see id., 83 FR 67264 (GDP), 67265-67266 (consumer welfare).
acknowledge the 2018 LNG Export Study without rebutting its analysis. Consistent with the conclusions of the 2018 LNG Export Study, DOE finds that exports of U.S. LNG under the proposed term extension will generate positive economic benefits in the United States through the year 2050.

2. Sectoral Impacts

a. Comments

IECA and Public Citizen contend that LNG exports will impact the domestic energy-intensive, trade exposed (EITE) sectors disproportionately. Specifically, IECA states that, if natural gas prices rise due to LNG exports over an extended export term, U.S. manufacturers will lose their current competitive advantage of relatively low natural gas prices. IECA asserts that DOE’s implementation of this Final Policy Statement thus “could jeopardize nearly 13 million manufacturing jobs and trillions of dollars in assets.”

In contrast, LNG Allies asserts that IECA has failed to cite evidence supporting its claim that manufacturers have been adversely affected over the past four years as U.S. LNG exports have increased. LNG Allies states that IECA cannot point to any manufacturing facility in the United States that has been forced to cut back its operations due to an inability to secure an adequate or affordable supply of natural gas.

b. DOE Response

In response to IECA’s claim that increases in LNG exports will threaten the competitiveness of the U.S. manufacturing base by driving up natural gas prices, DOE notes that the 2018 LNG Export Study and U.S. Energy Information Administration’s (EIA) Annual Energy Outlook 2020

58 Comment of IECA at 2; see also Comment of Public Citizen.
59 Comment of LNG Allies (Response of LNG Allies to IECA) at 1.
60 Id.
project robust domestic supply conditions that are more than adequate to satisfy both domestic needs and exports of LNG under the proposed term extension—i.e., through December 31, 2050.\textsuperscript{62}

Further, the 2018 LNG Export Study consistently shows macroeconomic benefits to the U.S. economy in every scenario, as well as positive annual growth across the energy intensive sectors of the economy.\textsuperscript{63} Specifically, the 2018 Study found that, “[a]ll negatively affected sectors, and in particular the natural gas intensive sectors, continue to grow robustly at higher levels of LNG exports, albeit at slightly lower rates of increase than they would at lower levels.”\textsuperscript{64} Based on these and other findings in the 2018 LNG Export Study, DOE does not find it credible that approval of the Proposed Policy Statement would put trillions of dollars of U.S. manufacturing assets and millions of jobs at risk, as IECA claims.\textsuperscript{65}

C. Market-Based Export Levels and Price Impacts

a. Comments

Some commenters, such as IECA, Public Citizen, and Senators Markey and Merkley, warn of large increases in domestic prices of natural gas if the term extension is implemented. They contend that increases in LNG exports through 2050 will increase demand for natural gas—thus driving up prices in the United States and adversely affecting electric and natural gas utility customers (including residential customers) and manufacturing-based energy-intensive industries.\textsuperscript{66}

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\textsuperscript{62} See, e.g., 2018 Study Response to Comments, 83 FR 67262.

\textsuperscript{63} See id. 83 FR 67268–67269 (citing 2018 LNG Export Study at 67, 70).

\textsuperscript{64} See id. 83 FR 67265 (quoting 2018 LNG Export Study at 70).

\textsuperscript{65} For a detailed discussion of sectoral impacts in the context of the 2018 LNG Export Study, see id. 83 FR 67265-67266.

\textsuperscript{66} See, e.g., Comment of Public Citizen.
According to Senators Markey and Merkley, EIA has concluded that increased LNG exports result in increased domestic consumer expenditures and higher natural gas prices. Senators Markey and Merkley, along with Public Citizen, further contend that extending non-FTA export terms will harm American consumers by giving companies “free rein” to export natural gas overseas for a higher profit, which drives up domestic household costs. Public Citizen argues that, in Australia, domestic natural gas prices skyrocketed in response to “unfettered LNG exports,” which caused Australian manufacturers to close their doors as they became unable to compete globally.

Other commenters dispute that the proposed term extension will increase the price of domestic natural gas. LNG Allies states that, due to the large size of the U.S. resource base (among other factors), EIA forecasts U.S. natural gas prices to remain low at increasing levels of production through at least 2050. LNG Allies states that EIA has revised its estimate of U.S. natural gas prices downward—despite increasing exports—for each year in recent years. LNG Allies thus asserts that the proposed term extension will not have a negative impact on the availability or price of U.S. natural gas in the domestic market. Citing DOE’s 2018 LNG Export Study and a study conducted by API in 2017, API likewise contends that increased exports of LNG are estimated to have a minimal effect on the domestic price of natural gas.

67 Comment of Senators Markey and Merkley.
68 See id.; see also Comment of Public Citizen.
69 Comment of Public Citizen; see also Comment of IECA at 2.
70 Comment of LNG Allies at 3.
71 Id.; see also Comment of LNG Allies (Response of LNG Allies to IECA) at 2.
72 Comment of API at 2.
Finally, LNG Allies disputes IECA’s claim that increases in U.S. LNG exports will increase price volatility.73 LNG Allies contends that, in fact, natural gas price volatility has declined since the first cargo of U.S. LNG was shipped in 2016.74

b. DOE Response

As a preliminary matter, DOE emphasizes that DOE’s approval of non-FTA applications to date—and its proposal in this proceeding—does not amount to the “rubber stamping” of unlimited exports of natural gas.75 In the context of individual non-FTA proceedings, DOE has performed its statutory obligation under NGA section 3(a), which creates a rebuttable presumption that a proposed export of natural gas is in the public interest.76 In evaluating the public interest, DOE takes seriously the potential economic impacts of higher natural gas prices. In addition to commissioning five economic studies since 2011 to examine these issues (most recently, the 2018 LNG Export Study), DOE has taken into account factors that could mitigate price impacts, such as the current oversupply situation and data indicating that the natural gas industry would increase natural gas supply in response to increasing demand from the export markets.77

Further, it is far from certain that all or even most of the proposed LNG export projects will ever be realized because of the time, complexity, and expense of commercializing, financing, and constructing LNG export terminals, as well as the uncertainties inherent in the global market demand for LNG. The 2018 Study found that exports of LNG from the lower-48 states, in volumes up to and including 52.8 Bcf/d of natural gas, will bring net economic benefits to the

73 See Comment of LNG Allies (Response of LNG Allies to IECA) at 1.
74 Id.
75 See, e.g., Comment of Senators Markey and Merkley.
76 See supra § 1.
These scenarios exceed the current amount of LNG exports authorized in the final non-FTA export authorizations to date (45.89 Bcf/d of natural gas). Additionally, the volume of LNG export capacity that is currently operating or under construction in the United States totals 15.54 Bcf/d of natural gas in the lower-48 states. The LNG export capacity actively operating or undergoing commissioning in the United States is lower still—currently 10.24 Bcf/d of natural gas.

Most recently, in EIA’s *Short-Term Energy Outlook* issued on July 7, 2020, EIA observed that “[h]istorically low natural gas and LNG spot prices in Europe and Asia have reduced the economic viability of U.S. LNG exports, which are highly price sensitive.” Thus far in the summer of 2020, more than 100 LNG export cargoes under long-term contract from authorized LNG exporters in the United States have been cancelled. EIA estimates that, as a result of these cancellations, U.S. LNG exports averaged 3.6 Bcf/d of natural gas in June 2020. EIA forecasts that U.S. LNG exports will average 2.2 Bcf/d in July and August 2020, implying a 25% utilization of U.S. LNG export capacity. EIA projects that, as global natural gas demand gradually recovers, U.S. LNG exports may average 7.1 Bcf/d from December 2020 to February 2021. Each of these export levels is below the capacity actively operating or undergoing commissioning in the United States referenced above (10.24 Bcf/d).

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78 2018 Study Response to Comments, 83 FR 67272.
79 See supra note 15.
82 See id.
83 See id.
Additionally, DOE takes administrative notice of EIA’s recent authoritative projections for natural gas supply, demand, and prices, set forth in the *Annual Energy Outlook 2020* (AEO 2020), issued on January 29, 2020.\(^\text{84}\) DOE has analyzed AEO 2020 to evaluate any differences from *Annual Energy Outlook 2017* (AEO 2017),\(^\text{85}\) which formed the basis for the 2018 LNG Export Study.\(^\text{86}\) Comparing key results from 2050 (the end of the projection period in the Reference case without the Clean Power Plan (CPP) from AEO 2017) shows that the Reference case outlook in AEO 2020 projects lower-48 market conditions that would be even more supportive of LNG exports than in AEO 2017, including higher production and demand coupled with lower prices. For example, for the year 2050, the AEO 2020 Reference case anticipates over 13% more natural gas production in the lower-48 states than the AEO 2017 Reference case without the CPP.\(^\text{87}\)

Turning to the commenters’ concerns about increases in natural gas prices, the 2018 LNG Export Study found that “[i]ncreasing U.S. LNG exports under any given set of assumptions about U.S. natural gas resources and their production leads to only small increases in U.S. natural gas prices.”\(^\text{88}\) The 2018 LNG Export Study also found that, because available natural

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\(^\text{86}\) AEO 2017 included two versions of the Reference case—one with, and one without, the implementation of the Clean Power Plan. In recent non-FTA orders, DOE discussed both versions of the AEO 2017 Reference case, noting that the U.S. Environmental Protection Agency (EPA) was reviewing the CPP and considering an alternative regulatory approach. On June 19, 2019, EPA repealed the CPP and issued the final Affordable Clean Energy (ACE) rule. See U.S. Envtl. Prot. Agency, Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations, 84 FR 32520 (July 8, 2019). Accordingly, in this Final Policy Statement, DOE refers only to the AEO 2017 Reference case without the CPP. The AEO 2020 Reference case does not include the CPP, so the comparisons between AEO 2017 and AEO 2020 are consistent in that regard.

\(^\text{87}\) See, e.g., *Jordan Cove Energy Project L.P.*, DOE/FE Order No. 3413-A, at 104-05 & Table 1 (row entitled “Lower-48 Dry Natural Gas Production”).

\(^\text{88}\) See 2018 Study Response to Comments, 83 FR 67258 (quoting 2018 LNG Export Study at 55) (emphasis added).
gas resources have the largest impact on natural gas prices, “U.S. natural gas prices are far more
dependent on available resources and technologies to extract available resources than on U.S.
policies surrounding LNG exports.”

In analyzing AEO 2020 to evaluate any differences from AEO 2017 (the basis for the 2018
LNG Export Study), DOE notes that, for the year 2050, AEO 2020 projects an average Henry
Hub natural gas price that is lower than the AEO 2017 Reference case without the CPP by over
38%. Further, in the period since authorization holders began exporting U.S. LNG from the
lower-48 states in 2016, wholesale prices of U.S. natural gas at Henry Hub have remained low.
This is a function of the size of domestic natural gas supply to meet both domestic and export
demand.

Finally, the 2018 LNG Export Study consistently showed macroeconomic benefits to the
U.S. economy in every scenario at the projected Henry Hub natural gas prices, as well as positive
annual growth across the energy-intensive sectors. The commenters opposing the Proposed
Policy Statement did not offer studies or other evidence to rebut these findings. For these
reasons, and as explained in DOE/FE’s Response to Comments on the 2018 Study, the
commenters’ arguments concerning domestic price increases are not supported by the record
evidence.

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89 *Id.*, 83 FR 67268 (quoting 2018 LNG Export Study at 55).
90 See, e.g., *Jordan Cove Energy Project L.P.*, DOE/FE Order No. 3413-A, at 104-05 & Table 1 (row entitled
“Henry Hub Spot Price”).
the first half of 2020” (July 13, 2020), available at: https://www.eia.gov/todayinenergy/detail.php?id=44337 (graph
93 *Id.*
D. International Trade and Geopolitical Impacts

a. Comments

API states that increasing the availability of U.S. natural gas over longer export terms will benefit both the United States and its trading partners. According to API, increasing the use of U.S.-sourced natural gas enhances national security in both the United States and abroad by providing a reliable alternative to U.S. allies around the world, who otherwise would rely more heavily on foreign energy supplies. Senators Barrasso, Cassidy, Hoeven, and Cramer add that the Proposed Policy Statement “sends a strong signal to our allies and trading partners” on U.S. global energy leadership—in particular, as a leader in clean energy and as a committed natural gas trading partner.

On the other hand, Public Citizen argues that the ability of LNG exports to increase American influence for geopolitical reasons—such as reducing the dependency of European countries on the Russian natural gas supply—is limited. Public Citizen critiques what it calls “commodity diplomacy,” stating that the destination of U.S. LNG is market-driven, not determined by the U.S. Government.

b. DOE Response

DOE’s long-standing review of non-FTA applications under NGA section 3(a) includes consideration of the international consequences of DOE’s decisions. An efficient, transparent international market for natural gas with diverse sources of supply provides both economic and strategic benefits to the United States and its allies. After four years exporting at market-based

94 Comment of API at 5.
95 Comment of Senators Barrasso, Cassidy, Hoeven, and Cramer at 1; see also Comment of CLNG/NGSA at 5.
96 Comment of Public Citizen.
97 Id.
levels, the United States has become one of the top three global LNG exporters. Cheniere points out, for example, that its two LNG facilities—Sabine Pass and Corpus Christi—have produced, loaded, and exported more than 1,000 LNG cargoes since 2016.99

Public Citizen points out that the destination of U.S. LNG cargoes around the world is driven by market demand. However, DOE notes that to the extent U.S. exports can diversify global LNG supplies and increase the volumes of LNG available globally, these exports will improve energy security for many U.S. allies and trading partners. Indeed, the reach of U.S. LNG exports has been expansive, with cargoes already delivered to the majority of importing countries.100 Further, shipments of LNG that would have been destined to U.S. markets have been redirected to Europe and Asia, improving energy security for many of our key trading partners. Therefore, by providing a mechanism for authorization holders to increase the total volume of LNG exports over the life of their authorization, this Final Policy Statement will advance the public interest.

E. Environmental Issues

a. Comments

Some commenters argue that the Proposed Policy Statement is inconsistent with the public interest on environmental grounds. They assert that extending the standard 20-year term for export authorizations through 2050 will lead to the increased production and transportation of natural gas (in the form of LNG)—which, in turn, will result in negative environmental and public health impacts.101

99 Comment of Cheniere at 1.
100 Since February 2016, U.S. LNG has been delivered by region as follows: Europe and Central Asia (31.5%), East Asia and Pacific (35.2%), Latin America and the Caribbean (22.4%), Middle East and North Africa (4.9%), and South Asia (6.1%). See U.S. Dep’t of Energy, Office of Fossil Energy, LNG Monthly, at 1, Table 1a (July 2020), available at: https://www.energy.gov/sites/prod/files/2020/07/f76/LNG%20Monthly%202020%202.pdf (Table of Exports of Domestically Produced LNG Delivered by Region, Cumulative from February 2016 through May 2020).
101 See, e.g., Comment of Senators Markey and Merkley; Comment of Cindy Spoon; Comment of Morgan Schmitz at 2; Comment of Public Citizen (Attachment at 10-11).
Specifically, these commenters express concerns regarding hydraulic fracturing (or fracking). Public Citizen states, for example, that increasing LNG exports directly correlates to increases in domestic gas production, mostly through the fracking of shale gas. The commenters also argue that increased exports of natural gas under the Proposed Policy Statement will result in increased emissions of GHGs, which they contend will accelerate climate change both in the United States and in the importing countries.

According to these commenters, the proposed term extension will prolong the use of fossil fuels, making it harder for the United States and other countries to transition from fossil fuels to clean, renewable sources of energy. They argue that DOE should be focused on encouraging renewable sources of energy on a global scale, rather than facilitating exports of natural gas over a longer time period.

Two commenters add that LNG facilities have negative impacts on local communities. Cindy Spoon asserts that communities living near proposed LNG export facilities in Texas have made it clear they do not want to live close to these facilities. Jody McCaffree describes the threat of eminent domain to landowners who live near the site of the proposed Jordan Cove LNG Terminal and associated pipeline in Oregon.

In contrast, DECP and Senators Barrasso, Cassidy, Hoeven, and Cramer maintain that exports of U.S. LNG are important to providing clean, safe, and affordable energy to U.S.

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102 See, e.g., Comment of Sarah-Hope Parmeter; Comment of Suzanne Sorkin; Comment of Public Citizen; Comment of Morgan Schmitz at 2-3; Comment of Margaret Gordon.
103 Comment of Public Citizen (Attachment at 10); see also Comment of Cindy Spoon.
104 See, e.g., Comment of Senators Markey and Merkley; Comment of Public Citizen.
105 See id.
106 See, e.g., Comment of Senators Markey and Merkley; Comment of Jean Connocchie; Comment of Morgan Schmitz; Comment of Sarah-Hope Parmeter; Comment of Suzanne Sorkin; Comment of Corey Capehart.
107 Comment of Cindy Spoon at 1.
108 Comment of Jody McCaffree at 1, 7.
trading partners around the world.\textsuperscript{109} LNG Allies, API, and CLNG/NGSA likewise assert that the proposed term extension will help to reduce global GHG emissions by reducing the use of coal for electric power and industrial uses.\textsuperscript{110} In support of this argument, the commenters point to DOE’s life cycle analyses of greenhouse gases—the first conducted in 2014 (the LCA GHG Report) and the second conducted in 2019 (the LCA GHG Update).\textsuperscript{111} API states that the LCA GHG Update is an extensive “cradle-to-grave” assessment of GHG emissions associated with LNG exports over 20- and 100-year global warming potential time horizons.\textsuperscript{112} In API’s view, the LCA GHG Update not only supports the Proposed Policy Statement, but likely would satisfy the requirement of any NEPA review associated with the proposed term extension.\textsuperscript{113} LNG Allies further states that the findings of DOE’s LCA GHG studies have been confirmed by other peer-reviewed LNG life-cycle analyses conducted by academic research teams.\textsuperscript{114}

CLNG/NGSA also points out that, while the greater use of natural gas will help to reduce carbon emissions, it also will help to reduce traditional pollutants, such as emissions of sulfur dioxide, nitrogen oxides, and particulate matter.\textsuperscript{115}

Addressing renewable energy, CLNG/NGSA argues that when countries increase their use of natural gas for power generation, they not only reduce their GHG emissions through fuel switching (from coal to less carbon-intensive natural gas), but they also have the opportunity to increase their use of renewable energy. According to CLNG/NGSA, natural gas is a “perfect

\textsuperscript{109} Comment of Senators Barrasso, Cassidy, Hoeven, and Cramer at 1; Comment of DECP at 3.
\textsuperscript{110} Comment of LNG Allies at 1; see also Comment of Senators Barrasso, Cassidy, Hoeven, and Cramer at 1; Comment of API at 4-5; Comment of CLNG/NGSA at 3.
\textsuperscript{111} See supra § I.
\textsuperscript{112} Comment of API at 4; see also id. at 5.
\textsuperscript{113} See id.
\textsuperscript{114} Comment of LNG Allies at 1.
\textsuperscript{115} Comment of CLNG/NGSA at 3.
ally” to ramp up and support renewable resources, allowing for more generation to be powered by renewables.\textsuperscript{116}

b. DOE Response

Upon review, the commenters’ environmental concerns associated with natural gas production do not establish that a term extension under the Final Policy Statement is inconsistent with the public interest. DOE notes that, in 2017, the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) rejected similar arguments challenging non-FTA authorizations issued by DOE on this basis.\textsuperscript{117} The Court’s conclusions and reasoning in \textit{Sierra Club I} and \textit{II} guide DOE’s review of comments regarding environmental concerns in this proceeding.\textsuperscript{118}

Turning to the issue of GHG emissions and climate impacts raised by several commenters, DOE notes that the recent LCA GHG Update demonstrated that the conclusions of DOE’s original 2014 LCA GHG Report remained the same. While acknowledging uncertainty, the LCA GHG Update shows that, to the extent U.S. LNG exports are preferred over coal in LNG-importing nations, U.S. LNG exports are likely to reduce global GHG emissions on per unit of energy consumed basis for power production.\textsuperscript{119} Further, to the extent U.S. LNG exports are preferred over other forms of imported natural gas, they are likely to have only a small impact on global GHG emissions.\textsuperscript{120} The LCA GHG Update thus concluded that the use of U.S. LNG

\textsuperscript{116}Comment of CLNG/NGSA at 3-4.
\textsuperscript{118} See also Proposed Policy Statement, 85 FR 7676-7677.
\textsuperscript{120} \textit{Id}. 
exports for power production in European and Asian markets will not increase global GHG emissions from a life cycle perspective, when compared to regional coal extraction and consumption for power production.\textsuperscript{121} On this basis, DOE found that the 2019 Update “supports the proposition that exports of LNG from the lower-48 states will not be inconsistent with the public interest.”\textsuperscript{122}

In the Proposed Policy Statement, DOE discussed the LCA GHG Update and noted that it was a recent regulatory development supporting the proposed term extension.\textsuperscript{123} No commenters in this proceeding disputed the findings of the LCA GHG Update or DOE’s reliance on it to support the proposed term extension.

In response to commenters who assert that exports of U.S. natural gas provide clean, safe, and affordable energy to countries around the world, DOE notes that foreign demand for U.S. natural gas has increased as countries in the Caribbean, Central America, and South America seek to import cleaner sources of energy. DOE further observes that many of these countries are currently dependent on diesel and/or fuel oil for their generation needs. These energy needs are challenging from both a cost- and emissions-perspective. By importing LNG from the United States, these countries will have access to a more reliable, cost-effective supply of energy that also has emissions benefits over current energy sources. At the same time, the United States will facilitate stronger relationships with these importing countries, while promoting U.S. leadership in the global energy market.

\textsuperscript{121} Id. at 85 FR 78, 85.
\textsuperscript{122} Id. at 85 FR 86. DOE notes that, in Sierra Club I, the D.C. Circuit rejected a challenge to the 2014 LCA GHG Report. The Court’s decision in Sierra Club I guided DOE’s development of the 2019 LCA GHG Update.
\textsuperscript{123} Proposed Policy Statement, 85 FR 7677-7678.
DOE also recognizes that numerous commenters are advocating for the development and use of renewable energy on a global scale, rather than for DOE to facilitate exports of natural gas over an extended time period. However, imports of U.S. LNG can work in concert with the development of renewable generation both in the United States and in importing countries. Imported natural gas can provide reliable standby energy supply immediately, while renewable development is occurring. Imported LNG also can provide continued reliability to enhance solar or other renewable sources once they are developed. For these reasons, authorization holders who qualify for the proposed term extension may provide indirect benefits to the use of renewable energy in importing countries.

F. Categorical Exclusion From NEPA for Existing Non-FTA Authorizations

a. Comments

Commenters including API, Cheniere, and CLNG/NGSA assert that DOE’s action to grant a term extension to any existing non-FTA authorization under the Proposed Policy Statement should be eligible for a categorical exclusion under DOE’s NEPA regulations—specifically, categorical exclusion B5.7 (10 CFR part 1021, subpart D, appendix B). Cheniere and CLNG/NGSA state that local environmental and land use impacts associated with each existing

124 See, e.g., Comment of Senators Markey and Merkley; Comment of Jean Connochie; Comment of Morgan Schmitz.
125 See, e.g., U.S. Energy Info. Admin., Today in Energy, “EIA projects less than a quarter of the world’s electricity generated from coal by 2050” (Jan. 22, 2020), available at: https://www.eia.gov/todayinenergy/detail.php?id=42555 (projecting that “global electric power generation from renewable sources will increase more than 20% throughout the projection period (2018–2050),” while the share of natural gas generation remains fairly stable through 2050).
126 Some commenters discussed the environmental and health risks that, in their view, are associated with the siting and operation of LNG export facilities near their home or community. These concerns generally involve the siting of natural gas-related infrastructure, and thus they are outside the scope of this proceeding. DOE notes, however, that all authorization holders under NGA section 3 are required to comply with any preventative and mitigative measures at export facilities imposed by federal, state, and local agencies, including by the Federal Energy Regulatory Commission. See, e.g., Jordan Cove Energy Project L.P., DOE/FE Order No. 3413-A, at 124 (Ordering Para. H).
127 See supra note 9; Comment of Cheniere at 2; Comment of API at 3-4; Comment of CLNG/NGSA at 2.
authorization holder’s facility have already been considered by DOE. \textsuperscript{128} Cheniere further argues that a categorical exclusion would be appropriate for existing authorizations because the proposed term extension would not require approvals for new construction projects associated with the export facilities. \textsuperscript{129} CLNG/NGSA adds that any pending and future non-FTA authorizations will be subject to NEPA, and thus will “complete the appropriate process for public notice, comment and disclosure of environmental impacts.” \textsuperscript{130} Finally, API asserts that application of a categorical exclusion for existing authorization holders would assist in reducing unnecessary regulatory burdens and delays under NEPA, thus facilitating exports of clean-burning natural gas. \textsuperscript{131}

b. DOE Response

As explained in the Proposed Policy Statement, DOE’s environmental review process under NEPA may result in the preparation or adoption of an EIS or EA describing the potential environmental impacts associated with the application. In some cases, DOE may determine that an application is eligible for a categorical exclusion pursuant to DOE’s regulations implementing NEPA, 10 CFR 1021.410, appendices A & B. As the commenters note, the categorical exclusion most commonly used by DOE in this context is categorical exclusion B5.7 (10 CFR part 1021, subpart D, appendix B5.7), which applies to natural gas import or export activities requiring minor operational changes to existing projects, but no new construction. \textsuperscript{132}

DOE agrees with the suggestion of API and CLNG/NGSA that categorical exclusions facilitate NEPA by allowing federal agencies to focus their environmental review and resources

\textsuperscript{128} Comment of Cheniere at 2; Comment of CLNG/NGSA at 2.
\textsuperscript{129} Comment of Cheniere at 2.
\textsuperscript{130} Comment of CLNG/NGSA at 2.
\textsuperscript{131} Comment of API at 3; see also Comment of LNG Allies at 3 (asking DOE to conduct term extension proceedings for existing authorization holders “in an expedited manner”).
\textsuperscript{132} See supra note 9 (quoting categorical exclusion B5.7).
on actions that could have significant impacts. The Council on Environmental Quality’s NEPA regulations provide for categorical exclusions when an agency has identified a “category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency …. “133 DOE has made such a determination with respect to categorical exclusion B5.7.134

Nonetheless, it is possible that an application to extend the export term of an existing non-FTA authorization could involve “extraordinary circumstances” that warrant additional consideration under NEPA.135 DOE therefore declines to decide whether all applications requesting term extensions for existing non-FTA authorizations will fit within categorical exclusion B5.7 (or any other categorical exclusion). When implementing the Final Policy Statement for existing authorization holders, DOE will review the record and comply with its NEPA obligations in each individual application proceeding, consistent with its NEPA implementing regulations.

DOE acknowledges the concerns about delay raised by API, LNG Allies, and other commenters, who urge DOE to make efficient, timely decisions on applications for term extensions. As stated both in the Proposed Policy Statement and below, DOE is seeking to streamline these proceedings by providing a suggested application template for existing authorization holders and current applicants to utilize.136

133 40 CFR 1508.4.
134 10 CFR 1021.410(a).
135 10 CFR 1021.410(b)(2) (under DOE’s NEPA regulations, a proposal may not be categorically excluded from NEPA where there are “extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal”).
136 See infra § III.B.
G. Clarification of Export Limits

a. Comments

DOE stated in the Proposed Policy Statement that “[a] proposed change in export terms through the year 2050 would not alter the maximum daily rate of export currently approved under each existing non-FTA authorization,” because “[t]he maximum daily rate of export, set in billion cubic feet per day (Bcf/d), is already based on each facility’s maximum approved liquefaction production capacity ….”137

Industry commenters raise questions over DOE’s use of the phrase “maximum daily rate of export.” They point out that DOE’s non-FTA orders authorize the volume of natural gas that may be exported each year—meaning in Bcf/yr—not each day (in Bcf/d).138 Accordingly, they ask DOE to clarify that the reference to “maximum daily rate of export” in the Proposed Policy Statement is not intended to establish daily export limits in existing or future non-FTA authorizations. Finally, they ask DOE to clarify that varying export quantities on any given day are permissible, so long as the authorization holder does not exceed its authorized annual quantity of exports (in Bcf/yr).139

b. DOE Response

In Ordering Paragraph A of all existing long-term non-FTA orders, DOE authorizes exports strictly in annual terms (Bcf/yr).140 DOE clarifies that its reference to a LNG facility’s “maximum daily rate of export” in the Proposed Policy Statement was not intended to suggest

138 Comment of DECP at 2; Comment of LNG Allies at 3; Comment of Golden Pass LNG at 1, 4-6; Comment of CLNG/NGSA at 4.
139 Comment of DECP at 2; Comment of LNG Allies at 3; Comment of Golden Pass LNG at 6; Comment of CLNG/NGSA at 4.
140 See, e.g., Jordan Cove Energy Project L.P., DOE/FE Order No. 3413-A, at 123 (Ordering Para. A) (authorizing exports “in a volume up to the equivalent of 395 Bcf/yr of natural gas”). DOE notes that it routinely expresses the cumulative total of approved non-FTA exports in daily terms (Bcf/d), but it authorizes export volumes in annual terms (Bcf/yr).
any deviation from this annual volume limitation. Rather, DOE’s intent was to make clear that, although DOE’s proposed term extension will increase the total volume of exports over the life of each authorization (by extending the duration of each qualifying authorization through December 31, 2050), the term extension will not affect the day-to-day liquefaction and export operations of any facility. Accordingly, so long as authorization holders do not exceed the annual export volume set forth in their order (in Bcf/yr), DOE takes no position on the quantities of LNG (or other natural gas) exported on any given day during their authorization term. A maximum daily rate would be impracticable, given the varied capacity of LNG tankers and the variability in volumes being handled at LNG export facilities each day.\footnote{See Comment of Golden Pass LNG at 6.}

III. Final Policy Statement

A. Extended Term for Long-Term Non-FTA Authorizations

For the reasons provided in the Proposed Policy Statement and in this Final Policy Statement, DOE adopts a term through December 31, 2050, as the standard export term for long-term non-FTA authorizations. DOE has considered its obligations under NGA section 3(a), the public comments supporting and opposing the Proposed Policy Statement, and a wide range of information bearing on the public interest.\footnote{See Proposed Policy Statement, 85 FR 7674-7678.} DOE is thus discontinuing its practice of granting a standard 20-year export term for long-term authorizations to export domestically produced natural gas from the lower-48 states to non-FTA countries. For such applications and amendments granted under NGA section 3(a), DOE will authorize an export term lasting through December 31, 2050, inclusive of any make-up period (unless an applicant requests a shorter time period).\footnote{Although the Final Policy Statement applies only to long-term exports from the lower-48 states (see supra note 12), DOE will consider whether to authorize a similar export term to non-FTA exports from Alaska as appropriate, in the context of any such application proceedings.}
This Final Policy Statement does not affect the continued validity of long-term non-FTA orders that DOE has already issued. Nor are existing authorization holders required to apply for the term extension. If an authorization holder wishes to maintain its current 20-year term—or is uncertain whether or when to apply for the term extension—the authorization holder is under no obligation to take action under this Final Policy Statement. For authorization holders and applicants who wish to apply for the term extension, however, DOE will implement the process for the term extension as proposed.

B. Implementation Process

DOE’s process for implementing the term extension will be based on the status of the authorization holder or applicant, as follows:

(1) **For existing non-FTA authorizations:** As noted, DOE has issued 43 final long-term non-FTA authorizations.\(^{144}\) These existing authorization holders may request the term extension on a voluntary opt-in basis. Specifically, each non-FTA authorization holder may file an application with DOE requesting to amend its authorization to extend its export term through December 31, 2050 (inclusive of any make-up period), with an attendant increase in the total export volume over the life of the authorization;

(2) **For pending non-FTA applications:** There are currently 16 long-term non-FTA applications pending before DOE.\(^{145}\) On a voluntary opt-in basis, these applicants may amend their application to request an export term through December 31, 2050 (inclusive of any make-up period), with an attendant increase in the total requested export volume over the life of the authorization;\(^{146}\) and

\(^{144}\) See supra note 15.
\(^{145}\) See supra note 16.
\(^{146}\) See 10 CFR 590.204.
(3) **For future non-FTA applications:** Future long-term non-FTA export authorizations, if granted, will have a standard export term lasting through December 31, 2050, unless a shorter term is requested by the applicant. Accordingly, all new long-term applications to export domestically produced natural gas from the lower-48 states, including LNG, should request an export term lasting through December 31, 2050 (inclusive of any make-up period)—or state that the applicant requests a shorter export term.

In each individual docket proceeding, the authorization holder or applicant will be required to submit an application (for #1 and #3) or an amendment to its pending application (for #2) with relevant facts and argument supporting the term request.\(^{147}\) For applications to amend existing non-FTA orders and pending non-FTA applications (#1 and #2), DOE is providing a suggested application template (including an option for consolidated non-FTA and FTA application proceedings) to ensure more consistent, streamlined proceedings. This template may be found on DOE/FE’s website at: www.energy.gov/node/4513092.

For applications to amend existing non-FTA orders and pending non-FTA applications (#1 and #2), DOE will provide notice of the term extension in the *Federal Register*. Interested parties will be provided 15 days in which to submit protests, motions to intervene (or notices of intervention, as applicable), and written comments on the requested term extension only.\(^{148}\) Following the notice and comment period in each proceeding, DOE will conduct a public interest analysis of the application (or amended application) under NGA section 3(a).

For existing non-FTA orders, the public interest analysis will be limited to the application for the term extension—meaning an intervenor or protestor may challenge the requested extension

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\(^{147}\) See 10 CFR 590.201, 590.202, 590.204(a) (“The applicant may amend … the application at any time prior to issuance of the Assistant Secretary’s final opinion and order resolving the application ….”), 590.407 (“Reports of changes”).

\(^{148}\) See 10 CFR 590.205.
but not the existing non-FTA order. DOE also will comply with NEPA. Consistent with its established practice, DOE will respond to any comments or protests received in its final order on each application (or amendment) requesting the extended export term.

For new long-term non-FTA applications (#3), DOE will provide notice of the application in the Federal Register and will take action on the application consistent with its established procedures.\(^{149}\)

**C. Alignment of FTA Export Terms**

Applicants typically apply for both long-term FTA and non-FTA authorizations to have flexibility in determining their export destinations.\(^{150}\) As stated, however, this Final Policy Statement does not apply to applications and authorizations to export natural gas to FTA countries.\(^{151}\) Under NGA section 3(c), DOE is required to grant FTA applications “without modification or delay.”\(^{152}\) Because of this statutory standard, applicants for long-term FTA authorizations have not been subject to DOE’s standard 20-year term for non-FTA authorizations, and numerous FTA orders already have export terms of 25 or more years. Nonetheless, authorization holders often prefer to align their FTA and non-FTA exports over the same time period for administrative efficiencies.\(^{153}\) For this reason, DOE anticipates that authorization holders and applicants who take action under this Final Policy Statement will

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149 See id.

150 The United States currently has FTAs requiring national treatment for trade in natural gas with Australia, Bahrain, Canada, Chile, Colombia, Dominican Republic, El Salvador, Guatemala, Honduras, Jordan, Mexico, Morocco, Nicaragua, Oman, Panama, Peru, Republic of Korea, and Singapore. FTAs with Israel and Costa Rica do not require national treatment for trade in natural gas.

151 See supra note 3.


153 Under DOE’s long-term orders, the volumes authorized for export to FTA and non-FTA countries are not additive to one another. Rather, each order grants authority to export the entire volume of a facility to FTA or non-FTA countries, respectively, to enhance flexibility. See, e.g., Jordan Cove Energy Project L.P., DOE/FE Order No. 3413-A, at 122 (Term and Condition I) (stating that “Jordan Cove may not treat the FTA and non-FTA export volumes as additive to one another”).
request a comparable extension in their existing or future long-term FTA export terms, respectively. Where possible, DOE requests that authorization holders and applicants submit a consolidated FTA and non-FTA extension application (using DOE’s suggested template) to ensure more consistent, streamlined proceedings.

IV. Administrative Benefits

In this Final Policy Statement, DOE is not proposing any new requirements under 10 CFR part 590. Rather, DOE’s intent is to minimize administrative burdens and to enhance certainty for both authorization holders and foreign buyers of U.S. LNG. This, in turn, will make U.S. export projects even more competitive in the global market.

V. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this Final Policy Statement.

Signing Authority

This document of the Department of Energy was signed on July 29, 2020, by Steven Eric Winberg, Assistant Secretary, Office of Fossil Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for
publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.


Steven Winberg  
Assistant Secretary  
Office of Fossil Energy