Congressional Research Service

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To: Senate Energy & Natural Resources Committee
Attention: Tristan Abbey

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Subject: **LNG Exports Permitting Process**

The following memorandum compares federal agency procedures and timeframes for issuing permits related to liquefied natural gas (LNG) exports. Statistics cited herein are drawn from agency public records. Please be advised that information for background in this memorandum may be used in other CRS products.

Parties seeking to export LNG from the United States must obtain at least two federal authorizations. First, parties must be authorized to export the commodity itself. This authorization is obtained from the Department of Energy's Office of Fossil Energy (DOE/FE). Second, parties must obtain authorization to construct and operate the export facility itself. For LNG terminal facilities located onshore or within state waters, that authorization is granted by the Federal Energy Regulatory Commission (FERC) pursuant to Section 3 of the Natural Gas Act (NGA). For facilities located offshore beyond state waters, authorization is granted by the Department of Transportation (DOT) pursuant to the Deepwater Port Act. This memorandum provides some detail regarding the applicable laws and regulations for each of these authorizations, and explores the timeline and other noteworthy aspects of the authorization process using case studies.

Exporting the Commodity

As mentioned above, under Section 3 of the NGA, the export or import of natural gas without prior authorization is prohibited. Any person seeking authorization to export natural gas from the United States, or seeking to amend an existing import or export authorization, must file an application to do so with DOE/FE.[1] Under Section 3, such authorization is to be granted unless the agency finds that "the proposed exportation or importation will not be consistent with the public interest."[2]

[1] Requirements applicable to LNG exports are specified under Section 3 of the NGA (15 U.S.C. §717b). Regulations implementing requirements applicable to the export authorization application process were established under 10 C.F.R. Part 590, the "Administrative Procedures with Respect to the Import and Export of Natural Gas."

[2] 15 U.S.C § 717b(a).

The generic requirement for a permit in order to export natural gas found in Section 3 of the NGA was amended by the Energy Policy Act of 1992[3] to create a more streamlined authorization process for imports from, and exports to, certain countries. This legislation added new language to Section 3 of the NGA: subsection (c), which provides that the importation of natural gas from or exportation of natural gas to a country with which the United States has in effect "a free trade agreement requiring national treatment for trade in natural gas shall be deemed to be consistent with the public interest, and applications for such importation and exportation shall be granted without modification or delay."[4] This provision eased the authorization process for certain countries in the interest of free trade, including Canada and Mexico, the only countries with whom natural gas importation and exportation takes place, via pipeline. If the United States has a free trade agreement (FTA)[5] in effect with the nation to which the LNG would be exported, that application will be automatically deemed consistent with the public interest.[6] LNG exports to non-FTA countries must also be authorized of course, but such authorization requires the Office of Fossil Energy to publish a notice of the application in the *Federal Register* and seek public comments, protests, and notices of intervention as part of a public interest determination. Denial of an authorization occurs only if an export is deemed "not consistent with the public interest." That is, there is a presumption that exports to non-free trade agreement (non-FTA) countries are in the public interest unless shown otherwise.[7]

Section 3 of the NGA also protects the role of the states in the permitting decisions. Section 3(d) protects state rights under various environmental statutes are protected with respect to both export authorization by DOE/FE and permitting by FERC (discussed below),[8] and Section 3(e), which mandates the notification of relevant state authorities in order to gather their input during the process.[9]

Authorization of Onshore Facilities

As mentioned above, parties seeking to export LNG need not only natural gas export authority as required by Section 3(a) of the NGA, but also authority to construct and operate the export facility. Section 3(e) of the NGA, adopted in the Energy Policy Act of 2005,[10] assigns the "exclusive authority to approve or deny an application for the siting, expansion or operation of a Liquefied Natural Gas (LNG) terminal" to FERC.[11] The 2005 Act requires FERC to promulgate regulations for pre-filing of LNG import terminal siting applications and directs FERC to consult with designated state agencies regarding safety in considering such applications. The act designates FERC as the "lead agency for the purposes of

[3] P.L. 94-163.

[4] 15 U.S.C. § 717b(c).

[5] The countries with which the United States has a free trade agreement requiring national treatment for trade in natural gas include, Australia, Bahrain, Canada, Chile, Colombia, Dominican Republic, El Salvador, Guatemala, Honduras, Jordan, Mexico, Morocco, Nicaragua, Oman, Panama, Peru, Republic of Korea, and Singapore. Costa Rica and Israel have FTAs with the United States but do not require national treatment in natural gas.

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

[7] Applicants seeking authorization to export LNG may seek either a blanket or a long-term authorization. The blanket authorization enables the applicant to export on a short-term or spot market basis for up to two years. The long-term authorization is used when an applicant has, or intends to have, a signed gas purchase or sales agreement/contract for a period of time longer than two years.

[8] *Id.* at § 717b(d).

[9] *Id.* at § 717b(e)(2).

[10] P.L. 109-58.

[11] 15 U.S.C. § 717b(e). Gas must be converted to LNG for export by means other than pipeline.

coordinating all applicable Federal authorizations" and for complying with federal environmental requirements, including the National Environmental Policy Act (NEPA). It also establishes FERC's authority to set schedules for federal authorizations and establishes provisions for judicial review of FERC's siting decisions in the U.S. Court of Appeals.

FERC implements its authority over onshore LNG terminals through the agency's regulations in 18 C.F.R. § 153. These regulations detail the application process and requirements under Section 3 of the NGA. The process begins with a pre-filing, which must be submitted to FERC at least six months prior to the filing of a formal application. The pre-filing procedures and review processes are set forth at 18 C.F.R. § 157.21. Once the pre-filing stage is completed, a formal application may be filed. FERC's formal application requirements include detailed site engineering and design information, evidence that a facility will safely receive or deliver LNG, and delineation of a facility's proposed location.[12] The regulations also require LNG facility builders to notify landowners who would be affected by the proposed facility.[13]

Authorization of Offshore Facilities

The authority of FERC to permit LNG export facilities is limited by the terms of the NGA, which defines LNG terminals as including "all natural gas facilities *located onshore or in state waters* that are used to receive, unload, store, transport, gasify, liquefy or process natural gas ..."[14] Therefore, any LNG facility that does not fall within those geographic boundaries is not subject to FERC's LNG terminal permitting authority as set forth in section 3 of the NGA.

Instead, facilities located in waters of the United States but located beyond state waters are licensed in accordance with the terms of the Deepwater Port Act.[15] The act defines "deepwater port" in part to mean:

> any fixed or floating manmade structure other than a vessel, or any group of such structures, that are located beyond State seaward boundaries and that are used or intended for use as a port or terminal for the transportation, storage, or further handling of oil or natural gas for transportation to any state ... [16]

Because offshore LNG facilities would be considered "deepwater ports" under the definition found in the Deepwater Port Act, parties wishing to construct, own or operate these facilities must obtain authorization pursuant to terms of the act. Section 4 of that act provides in part that:

> No person may engage in the ownership, construction, or operation of a deepwater port except in accordance with a license issued pursuant to this Act. No person may transport or otherwise transfer any oil or natural gas between a deepwater port and the United States unless such port has been so licensed and the license is in force.[17]

The statute assigns deepwater port licensing authority to the Secretary of Transportation. This authority has been delegated to the United States Maritime Administration (MARAD), a branch of the Department of Transportation, in conjunction with the United States Coast Guard.[18] A license may only be issued if

[12] 18 C.F.R. § 153.8.

[13] 18 C.F.R. § 157.6d.

[14] 15 U.S.C. § 717a(11)(emphasis added).

[15] 33 U.S.C. § 1501 *et seq.*

[16] *Id.* at § 1502(9)(A).

[17] *Id.* at § 1503(a).

[18] Prior to the creation of the Department of Homeland Security, the Coast Guard was part of the Department of Transportation, (continued...)

MARAD and the Coast Guard find that a number of conditions have been met, including a determination that the construction and operation of the port will be "in the national interest and consistent with national security and other national policy goals and objectives, including energy sufficiency and environmental quality."[19] The regulatory authority must also conclude that the deepwater port will not unreasonably interfere with international navigation or other uses of the high seas.[20] Other applicable requirements include (but are not limited to) the following: the applicant must demonstrate that "the deepwater port will be constructed and operated using the best available technology so as to prevent or minimize adverse impact on the marine environment"[21]; consultation with various other agencies regarding possible environmental[22] and military[23] concerns; the Governor of the adjacent state or states must approve the issuance of the license;[24] and the applicant must satisfy certain financial responsibility and bonding requirements.[25] As with the FERC review of LNG terminals, the licensing process is a federal action that requires compliance with the requirements of NEPA. Some NEPA review guidelines specific to deepwater ports are set forth in Section 6 of the Deepwater Port Act.[26]

The application procedure for deepwater port licenses is set forth in Section 5 of the Deepwater Port Act.[27] The regulations adopted pursuant to the authority granted by Section 5 can be found at 33 C.F.R. Part 148. These regulations include details regarding the content of applications, the consultation and hearing processes, further criteria for approval or denial, license terms, and other details of the application, review and licensing process. MARAD has also published a flow chart on its website summarizing the licensing process along with a "typical" timeline, which is summarized in **Table 1**.

Table 1. Typical MARAD Licensing Timeline

	Days	Action
Step 1	0-26	Application submittal—Notice of Application issued on day 26
Step 2	27-63	Notice of Intent to prepare an Environmental Impact Statement is issued and scoping period begins
Step 3a	64-151	Draft Environmental Impact Statement is published
Step 3b	152-197	Public comment on Draft Environmental Impact Statement
Step 3c	198-251	Final Environmental Impact Statement

(...continued)

and thus the authority granted to that Department by the Deepwater Port Act was jointly assumed by Coast Guard and MARAD as branches of the Department of Transportation. This arrangement survived after the Coast Guard was transferred to the Department of Homeland Security pursuant to interagency agreement.

[19] *Id*. at § 1503(c)(3).

[20] *Id*. at § 1503(c)(4).

[21] *Id*. at § 1503(c)(5).

[22] *Id*. at § 1503(c)(6).

[23] *Id*. at § 1503(c)(7).

[24] *Id*. at § 1503(c)(8).

[25] Id. at § 1503(c)(1) and (e)(3).

[26] 33 U.S.C. § 1506.

[27] 33 U.S.C. § 1504.

	Days	Action
Step 3d	252-266	Final Public Hearing
Step 4	267-311	Governor of adjacent coast state and Federal agency comment period
Step 5	312-356	Maritime Administration issues a Record of Decision for the Environmental Impact Statement by the 356th day.

Source: The Maritime Administration, ttp://www.marad.dot.gov/image_library/Other/Deepwater_Port_Timeline.JPG

The regulations also include detailed requirements for deepwater port design, construction and equipment at 33 C.F.R. Part 149 and deepwater port operations at 33 C.F.R. Part 150.

The Ongoing LNG Export Permitting Process

As of May 30, 2013, there have been 27 proposed LNG export projects, including proposed expansions, which have started the federal permitting process pursuant to the NGA. DOE/FE has received applications for a permit to export to countries that have an FTA with the United States for each of these projects; 24 have been approved and three are pending. Twenty-two companies have applied to DOE/FE to export to non-FTA countries, with only two receiving approval to date. No applications have been rejected thus far. In addition to the export authorization from DOE/FE, parties wishing to export LNG must also obtain a permit for the construction and operation of an LNG terminal from FERC. Fifteen of the companies have entered the pre-filing phase to receive a permit from FERC to construct an LNG export terminal, of which six have subsequently entered the FERC filing phase, and one has received approval to begin construction. Two proposed projects that would use the same facility would be in non-state waters and subject to MARAD, but neither has applied to MARAD.

Much of the attention by those involved in the issue of LNG exports has focused on DOE/FE's permit to export to non-FTA countries. The permit to export to FTA countries is presumed by statute, 15 USC §717b(b), to be in the public interest and is granted without delay. While the FERC permitting process is more onerous and costly than the DOE process (which deals exclusively with the commodity), the FERC process is well defined and has not received the same level of criticism as has the DOE/FE permit to export LNG to non-FTA countries.

DOE has sent mixed messages about the approval process in terms of both its content and timing. In testimony before the House Energy & Commerce Committee in June, Secretary of Energy Ernest Moniz said DOE will move "expeditiously" to process the remaining export license applications, and confirmed that there will be more export permitting decisions by the end of the year.[28] The next day, Acting Assistant Secretary of Energy for Fossil Energy, Christopher Smith, whose office is responsible for processing the export applications, defended DOE's process for approving or not approving export applications.[29] The amount of time DOE has taken to process export applications to non-FTA countries has been one of the biggest criticisms it has received.

[28] House of Representatives, Energy & Commerce Committee, Subcommittee on Energy and Power, "Committee Welcomes Moniz's First Hill Testimony as Secretary of Energy," press release, June 13, 2013, http://energycommerce.house.gov/press-release/committee-welcomes-moniz-first-hill-testimony-secretary-energy.

[29] "US Official Defends LNG Exports Process," *Oil Daily*, June 19, 2013, p. 4.

An additional component of the criticism of DOE is the amount of time it has taken to approve the non-FTA permits. The Sabine Pass project, the first to receive approval, took 255 days to receive its permit from DOE/FE. However, the recently approved Freeport project took 882 days from when the company filed with DOE/FE. There are seven other projects that have waited over 500 days and still have not received DOE/FE's approval or denial to export LNG to non-FTA countries. In comparison, the time to receive the FTA permit has averaged just over two months, with a low of 29 days and a high of 280 days.

The FERC permit process has also taken a long time, although it can be undertaken concurrently with the DOE/FE non-FTA permit process. As noted previously, not as many companies have applied to FERC. Only one project, Sabine Pass, has received FERC approval, which took 441 days from filing its application. This does not include the pre-filing process that a company can request prior to formally applying to FERC. From pre-filing to approval took 621 days for the Sabine Pass project. FERC established the pre-filing process to encourage the natural gas industry to engage in early project-development involvement with the relevant public and government agencies. A company can stay in the pre-filing phase indefinitely. Once a company enters the filing phase, there will be more significant costs associated with the required documentation, estimated to be approximately $100 million for engineering reports, environmental analysis, market studies and other application requirements. By comparison, the cost for submitting an application to DOE/FE is only $50 plus associated legal and administrative costs that may cost thousands of dollars.[30]

There are two applications, Main Pass Energy Hub and the Freeport-McMoRan, that need approval of the MARAD within the Department of Transportation instead of FERC because they are proposed to be floating facilities beyond state waters.[31] Neither has yet applied to MARAD. MARAD has its own approval process that has time limits for granting or denying an application—330 days from the date that a notice of a complete application is published in the Federal Register.[32] MARAD, similar to FERC, has a pre-application phase to companies can confer with MARAD and better prepare their applications.

[30] 10 C.F.R. § 590.206.

[31] As explained above, offshore siting authority is handled by the Department of Transportation pursuant to the Deepwater Port Act of 1974, as amended (33 U.S.C. § 1501 et seq.).

[32] MARAD has up to 21 days after initially receiving an application to determine whether it is complete. The agency may suspend the "clock" on the process if it is waiting for additional submittals from an applicant.