

[6450-01-P]

DEPARTMENT OF ENERGY

Record of Decision and Floodplain Statement of Findings for the Magnolia LNG, LLC Application to Export Liquefied Natural Gas to Non-Free Trade Agreement Countries

AGENCY: Office of Fossil Energy, Department of Energy.

ACTION: Record of Decision.

SUMMARY: The U.S. Department of Energy (DOE) announces its decision in Magnolia LNG, LLC (Magnolia LNG), DOE/FE Docket No. 13-132-LNG, to issue DOE/FE Order No. 3909, granting final long-term, multi contract authorization for Magnolia LNG to engage in the export of domestically produced liquefied natural gas (LNG) from the proposed Magnolia LNG facility located near Lake Charles, Calcasieu Parish, Louisiana, in a volume equivalent to 394.2 Bcf/yr (equal to 1.08 Bcf/day) of natural gas for a term of 25 years. Magnolia LNG is seeking to export LNG from the terminal to countries with which the United States has not entered into a free trade agreement (FTA) that requires national treatment for trade in natural gas, and with which trade is not prohibited by U.S. law or policy (non-FTA countries). Order No. 3909 is issued under section 3 of the Natural Gas Act (NGA) and 10 CFR Part 590 of DOE's regulations. DOE participated as a cooperating agency with the Federal Energy Regulatory Commission (FERC) in preparing an environmental impact statement (EIS)¹ analyzing the potential environmental impacts resulting from the proposed LNG facility.

ADDRESSES:

¹ Final Environmental Impact Statement for the Magnolia LNG and Lake Charles Expansion Projects, Docket Nos. CP14-347-000 and CP14-511-000, FERC/EIS – 0260F (Nov. 2015)

The EIS and this Record of Decision (ROD) are available on DOE's National Environmental Policy Act (NEPA) website at: <http://energy.gov/nepa/downloads/eis-0498-final-environmental-impact-statement>. Order No. 3909 is available on DOE/FE's website at:

[http://www.fossil.energy.gov/programs/gasregulation/authorizations/2013_applications/Magnolia LNG%2C LLC - FE Dkt. No. 13-132-L.html](http://www.fossil.energy.gov/programs/gasregulation/authorizations/2013_applications/Magnolia_LNG%2C_LLC_-_FE_Dkt_No._13-132-L.html). For additional information

about the docket in these proceedings, contact Larine Moore, U.S. Department of Energy, Office of Regulation and International Engagement, Office of Oil and Natural Gas, Office of Fossil Energy, Room 3E-042, 1000 Independence Avenue, SW, Washington, DC 20585.

FOR FURTHER INFORMATION CONTACT:

To obtain additional information about the EIS or the ROD, contact Mr. Kyle W. Moorman, U.S. Department of Energy, Office of Regulation and International Engagement, Office of Oil and Natural Gas, Office of Fossil Energy, Room 3E-042, 1000 Independence Avenue, SW, Washington, DC 20585, (202) 586-5600, or Mr. Edward Le Duc, U.S. Department of Energy, Office of the Assistant General Counsel for Environment, 1000 Independence Avenue, SW, Washington, DC 20585.

SUPPLEMENTARY INFORMATION:

DOE prepared this ROD and Floodplain Statement of Findings pursuant to the National Environmental Policy Act of 1969 (42 United States Code [U.S.C.] 4321, et seq.), and in compliance with the Council on Environmental Quality (CEQ) implementing regulations for NEPA (40 Code of Federal Regulations [CFR] parts 1500 through 1508), DOE's implementing procedures for NEPA (10 CFR part 1021), and

DOE's "Compliance with Floodplain and Wetland Environmental Review Requirements" (10 CFR part 1022).

Background

Magnolia LNG, a Delaware limited liability company with its principal place of business in Houston, Texas, proposes to construct liquefaction facilities in Lake Charles, Calcasieu Parish Louisiana (Magnolia LNG Project). The Magnolia LNG Project will connect to the U.S. natural gas pipeline and transmission system through a proposed pipeline system modification and upgrade project (Lake Charles Expansion Project) to an interstate natural gas pipeline owned by Kinder Morgan Louisiana Pipeline LLC (KMLP).

On October 15, 2013, Magnolia LNG filed the application (Application) with DOE/FE seeking authorization to export domestically produced LNG. Magnolia LNG proposes to export this LNG to non-FTA countries in a total volume equivalent to 394.2 billion cubic feet per year (Bcf/yr) of natural gas.

Magnolia LNG has also submitted two applications to DOE/FE for authorizations to export LNG to FTA countries, each in the amount of 197.1 Bcf/yr (0.54 Bcf/day) for a 25-year term, for a combined total authorized FTA export volume of 394.2 Bcf/yr (1.08 Bcf/day). DOE/FE subsequently granted these FTA applications.² The authorized FTA export volumes are not additive to the export volumes requested in this proceeding.

Therefore, DOE's grant of the pending non-FTA export application in this proceeding

² *Magnolia LNG, LLC*, Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Proposed Magnolia LNG Terminal in Lake Charles, Louisiana to Free Trade Agreement Nations, DOE/FE Order No. 3245, February 26, 2013 (FE Docket No 12-183-LNG); *Magnolia LNG, LLC*, Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel from the Proposed Magnolia LNG Terminal in Lake Charles, Louisiana to Free Trade Agreement Nations, DOE/FE Order No. 3406, March 5, 2014 (FE Docket No 13-131-LNG).

will not provide Magnolia LNG with the authority to export more than 394.2Bcf/yr of natural gas from the Magnolia LNG Project.

In addition to its Application to DOE/FE for export authority, on April 30, 2014, Magnolia LNG submitted an applications to FERC under sections 3 of the NGA for the siting, construction, and operation of the Magnolia LNG Project and, on June 30, 2014, KMLP submitted an application under section 7 of the NGA for approval of the Lake Charles Expansion Project. FERC issued an order granting Magnolia LNG its requested Section 3 authorization and KMLP its requested certificate of public convenience and necessity under Section 7 (c) on April 15, 2016 (the “FERC Order”).³

Project Description

The Magnolia LNG Project will include a new liquefaction facility consisting of four liquefaction trains, two LNG storage tanks with a capacity of approximately 160,000 cubic meters each, a LNG vessel loading berth, and a LNG truck loading area. The Lake Charles Expansion Project will require varying lengths/diameters of new pipeline/pipeline facilities in Acadia, Calcasieu and Evangeline Parishes, Louisiana, to supply natural gas to the liquefaction facility from existing gas transmission pipelines. This pipeline project includes the construction of approximately 6,400 feet of 36-inch-diameter and 700 feet of 24-inch-diameter header pipelines in existing KMLP right-of-way along with one new compressor station.

³ *Order Granting Authorization Under Section 3 of the Natural Gas Act and Issuing Certificates*, FERC Docket Nos. CP14-347-000 and CP14-511-000, 155 FERC ¶ 61,033 (issued April 15, 2016).

EIS Process

FERC was the lead federal agency and initiated the NEPA process by publishing a Notice of Intent (NOI) to prepare an EIS for the Magnolia LNG Project in FERC Docket No. PF13-9 on June 18, 2013, and for the Lake Charles Expansion Project in CP14-511 on August 11, 2014. FERC conducted a single environmental review process, that addressed both of these projects and DOE was a cooperating agency. FERC issued the draft EIS for the Liquefaction and Expansion Projects on July 17, 2015 and published in the Federal Register a notice of availability (NOA) for the draft EIS on July 24, 2015 (80 FR 44093). FERC issued the final EIS on November 13, 2015 and published a NOA for the final EIS on November 19, 2015 (80 FR 72431). The final EIS addresses comments received on the draft EIS. Among other resource areas, the final EIS addresses groundwater, water resources, socioeconomics, air quality and noise, reliability and safety, and cumulative impacts.

The final EIS recommended that FERC subject any approval of the Magnolia LNG and Lake Charles Expansion Projects to 114 conditions to reduce the environmental impacts that would otherwise result from the construction and operation of the project. Accordingly, FERC issued an Order authorizing the Projects on April 15, 2016, subject to 115 environmental conditions contained in Appendix H of that Order.⁴

In accordance with 40 CFR 1506.3, after an independent review of FERC's final EIS, DOE/FE adopted FERC's final EIS (DOE/EIS-0498). The U.S. Environmental

⁴ Within its Order, FERC included an additional condition to the 114 conditions listed in the EIS related to commissioning volumes to its environmental mitigation measures. See Appendix H of the FERC Order for more details.

Protection Agency published a notice of the adoption on September 30, 2016 (81 FR 67348).

Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States (Addendum)

On June 4, 2014, DOE/FE published the Draft Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States (Draft Addendum) for public comment (79 FR 32258). The purpose of this review was to provide additional information to the public concerning the potential environmental impacts of unconventional natural gas exploration and production activities, including hydraulic fracturing. Although not required by NEPA, DOE/FE prepared the Addendum in an effort to be responsive to the public and to provide the best information available on a subject that had been raised by commenters in this and other LNG export proceedings.

The 45-day comment period on the Draft Addendum closed on July 21, 2014. DOE/FE received 40,745 comments in 18 separate submissions, and considered those comments in issuing the Final Addendum on August 15, 2014. DOE provided a summary of the comments received and responses to substantive comments in Appendix B of the Addendum. DOE/FE has incorporated the Draft Addendum, comments, and Final Addendum into the record in this proceeding.

Alternatives

The EIS assessed alternatives that could achieve the Magnolia LNG and Lake Charles Expansion Projects' objectives. The range of alternatives analyzed included the No-Action alternative, system alternatives, site alternatives, and process alternatives.

Alternatives were evaluated and compared to the Magnolia LNG and Lake Charles Expansion Projects to determine if the alternatives were environmentally preferable.

In analyzing the No-Action Alternative, the EIS reviewed the effects and actions that could result if the proposed Magnolia LNG and Lake Charles Expansion Projects were not constructed. FERC determined that other LNG export projects could be developed in the Gulf Coast region or elsewhere in the U.S., resulting in both adverse and beneficial environmental impacts. LNG terminal developments and pipeline system expansion of similar scope and magnitude to the proposed projects would likely result in environmental impacts of comparable significance, especially those projects in similar regional settings.

The EIS evaluated system alternatives which included an evaluation of the LNG terminal design as well as the pipeline system. For the LNG terminal, the EIS evaluated nine existing LNG terminals with approved, proposed, or planned status and 19 greenfield LNG terminals that are approved, proposed, or planned along the Gulf Coast of the U.S. In order to be a compatible alternative, it would have to meet Magnolia LNG's purpose and objective: to construct and operate a terminal to serve both domestic and export markets for LNG. The alternatives each lacked infrastructure to support LNG truck loading facilities and/or the proposed liquefaction volume capacity, and were therefore not further considered as viable alternatives.

For the alternatives to the pipeline system, the EIS evaluated three major natural gas pipeline systems within three miles of the proposed site. Although the proposed pipeline expansion requires reconfiguration (e.g. new metering station and new

interconnect pipeline), the three alternatives either do not meet the necessary capacity requirements or require the construction of longer pipeline connections.

The EIS evaluated four site alternatives. In order to meet the stated objectives of Magnolia LNG Project, the EIS considered following factors when identifying the site that would most likely pose some environmental advantage to the proposed terminal site: waterfront access; property size; existing land use; site availability; natural gas pipelines and transmission lines; population center/residences; distance to an interstate highway; and wetlands. After evaluating each of the site alternatives, the EIS concluded that the proposed site would have less impact on wetlands, greater separation between population center/residences, and greater optimization of existing land use.

For the process alternatives, the EIS considered several liquefaction technologies in addition to the proposed Optimized Single Mixed Refrigerant (OSMR)® Process by LNG Technology). Although the OSMR® Process uses anhydrous ammonia, which present several safety hazards, methods of mitigating the safety hazards are well understood and subject to additional federal regulation. The EIS determined that none of the alternatives would have a significant safety or environmental advantage over the OSMR® Process when considering additional mitigation measure outlined in LNG Facility Siting Requirements at section 4.12.5 of the EIS.

Environmentally Preferred Alternative

When compared against the other action alternatives assessed in the EIS, as discussed above, the proposed Magnolia LNG and Lake Charles Expansion Projects are the environmentally preferred alternative. While the No-Action Alternative would avoid

the environmental impacts identified in the EIS, adoption of this alternative would not meet the Magnolia LNG and Lake Charles Expansion Projects objectives.

Decision

DOE has decided to issue Order No. 3909 authorizing Magnolia LNG to export domestically produced LNG by vessel from the Magnolia LNG terminal located in Lake Charles, Calcasieu Parish, Louisiana to non-FTA countries, in a volume up to the equivalent to 394.2 Bcf/yr of natural gas for a term of 25 years to commence on the earlier of the date of first export or seven years from the date that the Order is issued.

Concurrently with this Record of Decision, DOE is issuing Order No. 3909 in which it finds that the requested authorization has not been shown to be inconsistent with the public interest, and the Application should be granted subject to compliance with the terms and conditions set forth in the Order, including the environmental conditions recommended in the EIS and adopted in the FERC Order at Appendix H. Additionally, this authorization is conditioned on Magnolia LNG's compliance with any other mitigation measures imposed by other federal or state agencies.

Basis of Decision

DOE's decision is based upon the analysis of potential environmental impacts presented in the EIS, and DOE's determination in Order No. 3909 that the opponents of Magnolia LNG's Application have failed to overcome the statutory presumption that the proposed export authorization is not inconsistent with the public interest. Although not required by NEPA, DOE/FE also considered the Addendum, which summarizes available

information on potential upstream impacts associated with unconventional natural gas activities, such as hydraulic fracturing.

Mitigation

As a condition of its decision to issue Order No. 3909 authorizing Magnolia LNG to export LNG to non-FTA countries, DOE is imposing requirements that will avoid or minimize the environmental impacts of the project. These conditions include the environmental conditions recommended in the EIS and adopted in the FERC Order at Appendix H. Mitigation measures beyond those included in Order No. 3909 that are enforceable by other Federal and state agencies are additional conditions of Order No. 3909. With these conditions, DOE/FE has determined that all practicable means to avoid or minimize environmental harm from the Magnolia LNG and Lake Charles Expansion Projects have been adopted.

Floodplain Statement of Findings

DOE prepared this Floodplain Statement of Findings in accordance with DOE's regulations, entitled "Compliance with Floodplain and Wetland Environmental Review Requirements" (10 CFR part 1022). The required floodplain assessment was conducted during development and preparation of the EIS (see Section 4.1.3.3 of the EIS). DOE determined that the majority of the LNG terminal site is outside the 500-year floodplain and the pipeline facilities are outside the 100- and 500-year floodplains. However, placement of some project components within floodplains would be unavoidable. Overall, the current design for the Magnolia LNG and Lake Charles Expansion Projects

minimizes floodplain impacts to the extent practicable.

Issued in Washington, D.C. on November 30, 2016.

A handwritten signature in black ink, appearing to read "Chris Smith", written in a cursive style.

Christopher A. Smith
Assistant Secretary
Office of Fossil Energy