

DEPARTMENT OF ENERGY

Record of Decision and Floodplain Statement of Findings for the Cameron LNG, LLC Export Application

AGENCY: Office of Fossil Energy, Department of Energy.

ACTION: Record of Decision.

SUMMARY: The U.S. Department of Energy (DOE) announces its decision in Cameron LNG, LLC, DOE/FE Docket No. 11-162-LNG, to issue DOE/FE Order No. 3391-A, its *Final Opinion and Order Granting Long-Term Multi-Contract Authorization to Export Liquefied Natural Gas by Vessel From the Cameron LNG Terminal in Cameron Parish, Louisiana to Non-Free Trade Agreement Countries* (Order No. 3391-A). Order No. 3391-A is issued under section 3 of the Natural Gas Act. DOE participated as a cooperating agency with the Federal Energy Regulatory Commission (FERC) in preparing an environmental impact statement (EIS) analyzing the potential environmental impacts of a proposed liquefaction project (Liquefaction Project) and a proposed pipeline project (Pipeline Project) and alternatives that, if constructed, will be used to support the export authorization sought from DOE's Office of Fossil Energy (FE).

ADDRESSES: The EIS and this Record of Decision (ROD) are available on DOE's National Environmental Policy Act (NEPA) website at <http://energy.gov/nepa/nepa-documents>. Order No. 3391-A is available on DOE/FE's website at <http://energy.gov/fe/downloads/listing-doefe-authorizations-issued-2014>. Copies of these documents may be requested by writing John Anderson, U.S. Department of Energy (FE-

34), Office of Natural Gas Regulatory Activities, Office of Fossil Energy, 1000 Independence Avenue, SW, Washington, DC 20585.

FOR FURTHER INFORMATION CONTACT: To obtain additional information about the project, the EIS, or the ROD, contact Mr. John Anderson as indicated above under “ADDRESSES” or Mr. Edward LeDuc, U.S. Department of Energy (GC-51), 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

Cameron is a limited liability company organized under the laws of Delaware, with its executive offices located in San Diego, California. Cameron owns the existing Cameron LNG Terminal and has an existing interconnection with Cameron Interstate Pipeline, LCC (Cameron Interstate). Cameron Interstate, an affiliate of Cameron, is an interstate pipeline regulated by FERC. Cameron Interstate’s facilities consist primarily of a 36.2 mile pipeline connecting the Cameron Terminal with five other interstate pipelines. The Terminal initially was used for the sole purpose of receiving and storing foreign-sourced

LNG, re-gasifying such LNG, and sending it out for delivery to domestic markets. In January 2011, FERC authorized Cameron to operate the Cameron Terminal for the additional purpose of exporting previously imported (*i.e.*, foreign sourced) LNG on behalf of its customers.¹

Project Description

Cameron proposes to site, construct, and operate the Liquefaction Project, including liquefaction and export facilities, on a 502 acre site that is partially within the existing Terminal fence line in Cameron Parish, Louisiana. The Liquefaction Project includes three liquefaction systems and a 160,000 cubic meter LNG storage tank, and would allow Cameron to liquefy domestic natural gas supplies for the export of approximately 12 million metric tons per year (mtpy) of LNG.

Cameron Interstate proposes to site, construct, operate, and maintain the Pipeline Project, consisting of a new natural gas pipeline in Cameron, Calcasieu and Beauregard Parishes, Louisiana. The Pipeline Project includes the construction of 21 miles of 42-inch diameter pipeline and a compressor station, and would add bi-directional flow capability to Cameron Interstate's existing pipeline to enable the transport of natural gas to the Cameron Terminal for export. The pipeline right-of-way would be within or abutting existing rights-of-way, and about 15.5 miles of the pipeline would be collocated with Cameron Interstate's existing pipeline right-of-way.

Cameron's Application

¹ *Cameron LNG, LLC*, 134 FERC ¶ 61,049 (2011).

Cameron filed its application with DOE in Docket No. 11-162-LNG on December 21, 2011, seeking authorization to export up to 12 mtpy of domestically produced LNG (the equivalent of 620 billion cubic feet (bcf) per year of natural gas) for a 20-year period to nations with which the United States has not entered into a free trade agreement providing for national treatment for trade in natural gas (non-FTA nations).² On February 11, 2014, DOE/FE issued Order No. 3391 to Cameron, conditionally granting Cameron's application for long-term, multi-contract authorization to export domestically produced LNG by vessel to non-FTA nations. DOE/FE conditionally authorized Cameron to export LNG in a volume equivalent to 620 bcf per year of natural gas, or approximately 12 mtpy of LNG, for a term of 20 years. The Conditional Order addressed the record evidence and DOE/FE's findings on all non-environmental issues considered under NGA section 3(a), including economic impacts, international impacts, and security of gas supply. Because DOE/FE must also consider environmental issues, DOE/FE conditioned the authorization on satisfactory completion of the environmental review process under NEPA and DOE/FE's issuance of a finding of no significant impact or a record of decision.

EIS Process

FERC was the lead federal agency and initiated the NEPA process by publishing a notice of intent (NOI) to prepare an EIS in the *Federal Register* (FR) on August 6, 2012 (77 FR 48145); DOE was a cooperating agency. FERC issued the draft EIS for the Liquefaction Project and Pipeline Project on January 10, 2014 (79 FR 3197), and the final EIS on April

² Cameron previously sought authorization to export the same quantity of LNG to any country with which the United States has, or in the future may enter into, a FTA requiring national treatment for trade in natural gas (FTA countries). DOE/FE granted that FTA authorization by order dated January 17, 2012.

30, 2014 (79 FR 26244). The final EIS recommended that FERC approve Cameron’s proposed projects subject to 76 environmental conditions. Accordingly, on June 19, 2014, FERC issued an “Order Granting Authorization Under Section 3 of the Natural Gas Act and Issuing Certificates” (FERC Order), which authorized Cameron to site, construct, and operate the Liquefaction Project, and for Cameron Interstate to construct the associated Pipeline Project, subject to the 76 environmental conditions contained in Appendix A of that order.³ In accordance with 40 CFR 1506.3, after an independent review of FERC’s final EIS, DOE adopted the EIS on August 7, 2014 (DOE/EIS-0488), and the U.S. Environmental Protection Agency published a notice of that adoption in the **Federal Register** on August 15, 2014. (79 FR 48140)

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 for public comment (79 FR 32258). 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. The Addendum is a review of existing literature and was intended to provide information only on the resource areas potentially impacted by unconventional gas production.

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 Addendum on August 15, 2014. DOE provided a summary of the comments received and responses to substantive comments in Appendix B of the Addendum.

³ *Cameron LNG, LLC*, 147 FERC ¶ 61,230 (2014)

DOE/FE has incorporated the Draft Addendum, comments, and final Addendum into the record in its Cameron proceeding.

Alternatives

The EIS assessed alternatives that could achieve the project objectives. The range of alternatives analyzed included the No-Action Alternative, alternative energy sources, system alternatives, alternative Terminal Expansion sites, alternative Terminal Expansion configurations and designs, alternative Pipeline Expansion above ground facility sites, and alternative compressor station designs. Alternatives were evaluated and compared to the proposed project to determine if the alternatives were environmentally preferable.

The EIS evaluated system alternatives for the Terminal Expansion, including five operating LNG import terminals in the Gulf of Mexico area, and seven proposed or planned liquefaction and export projects along the Gulf Coast. All of the system alternatives were eliminated from further consideration for reasons that include comparatively greater construction , production volume limitations, in-service dates scheduled significantly beyond Cameron's commitments to its customers, and environmental impacts that were considered comparable to or greater than those of the proposed project.

The EIS evaluated two alternative sites for the Terminal Expansion. Construction of the Terminal Expansion at each of the alternative sites would have comparatively greater impacts on open water, marshes, aquatic resources, wetlands and wildlife.

For the Terminal Expansion, the EIS considered the use of on-site power generation as a design alternative to the proposed use of purchased power. During operation, emissions

and noise levels of the turbine generators under this alternative would be greater than those of purchased power in the vicinity of the Terminal Expansion site. However, based on the available data, it was not possible to determine the overall difference in the levels of the key air emissions of the two design options.

For the Pipeline Expansion, the EIS evaluated three existing pipeline systems as system alternatives. None of the systems were determined to be environmentally preferable, as each would require significant expansion of the existing facilities and would likely result in environmental impacts similar to or greater than those of the Pipeline Expansion. The EIS did not identify any site-specific environmental concerns that would necessitate consideration of alternative pipeline routes, because the proposed route largely overlaps or is parallel to existing rights-of-way.

The EIS evaluated four alternative sites for the Holbrook Compressor Station and determined that these alternative sites were not environmentally preferable to the proposed site. The EIS also evaluated four design options for the compressor station. The use of purchased power would result in increased impacts due to installation of an additional 3.5-mile-long electrical distribution line, would not provide the flexibility and quality of service Cameron Interstate requires, would increase the cost of operation, and does not appear to offer an emissions advantage over the proposed on-site power generation. The use of larger turbine engines would decrease the flexibility and reliability of service because the turbines would not have variable speed control, and larger turbines would require more than 35 percent more fuel, resulting in a substantial increase in annual fuel expense. Best available control technology analysis indicated selective catalytic reduction and use of an oxidation catalyst were not feasible pollution

control options due to economic, environmental, and energy impacts. As a result, the EIS determined that there was not a significant advantage to any of the design alternatives considered for the Holbrook Compressor Station.

Environmentally Preferred Alternative

When compared against the other action alternatives assessed in the EIS, as discussed above, the Cameron project is 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 project objectives.

Decision

DOE has decided to issue Order No. 3391-A authorizing Cameron to export domestically produced LNG by vessel from the Cameron LNG Terminal in Cameron Parish, Louisiana, up to the equivalent of 620 bcf/yr of natural gas for a term of 20 years to commence on the earlier of the date of first export or seven years from the date that the Order is issued (September 10, 2014).

Concurrently with this Record of Decision, DOE is issuing Order No. 3391-A in which it finds that a grant of the requested authorization has not been shown to be inconsistent with the public interest, and that the Application should be granted subject to compliance with the terms and conditions set forth in the Order, including the 76 environmental conditions recommended in the EIS and adopted in the FERC Order at Appendix A. Additionally, this authorization is conditioned on Cameron's compliance with any other preventative and mitigative 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. 3391-A that the opponents of Cameron's application have failed to overcome the statutory presumption that the proposed export authorization is consistent with the public interest. Although not required by NEPA, DOE 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. 3391-A authorizing Cameron to export LNG, DOE is imposing requirements that will avoid or minimize the environmental impacts of the project. These conditions include the 76 environmental conditions recommended in the EIS and adopted in the FERC Order at Appendix A. Mitigation measures beyond those included in DOE's Order that are enforceable by other Federal and state agencies are additional conditions of Order No. 3391-A. With these conditions, DOE has determined that all practicable means to avoid or minimize environmental harm from the Cameron project 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 and wetland assessment was conducted during development and preparation of the EIS (see Table 3.6.1-1 and Section 4.1.4.1 of the EIS). DOE determined that the placement of some project

components within floodplains would be unavoidable. However, the current design for the project minimizes floodplain impacts to the extent practicable.

Issued in Washington, D.C. on September 10, 2014.

A handwritten signature in blue ink, appearing to read "Chris Smith", with a horizontal line extending from the end of the signature.

Christopher A. Smith

*Principal Deputy Assistant Secretary
Office of Fossil Energy*