171 FERC ¶ 61,231 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman; Richard Glick, Bernard L. McNamee, and James P. Danly.

Magnolia LNG LLC

Docket No. CP19-19-000

ORDER AMENDING AUTHORIZATION UNDER SECTION 3 OF THE NATURAL GAS ACT

(Issued June 18, 2020)

1. On November 19, 2018, Magnolia LNG LLC (Magnolia LNG) filed an application pursuant to section 3 of the Natural Gas Act (NGA)¹ and Part 153 of the Commission's regulations² to amend its authorization to site, construct, and operate facilities for the liquefaction and export of liquefied natural gas (LNG) at a facility near Lake Charles, Calcasieu Parish, Louisiana (Magnolia LNG Project).³ Specifically, Magnolia LNG seeks to increase the authorized total LNG production capacity of the Magnolia LNG Project from 8.0 million metric tons per annum (MTPA) to 8.8 MTPA. For the reasons discussed below, the Commission will grant Magnolia LNG's requested authorization, subject to the conditions in this order.

I. <u>Background and Proposal</u>

2. Magnolia LNG, a limited liability company organized under the laws of Delaware with its principal place of business in Houston, Texas, is a wholly owned indirect subsidiary of Magnolia LNG Holdings LLC,⁴ which is also a limited liability company organized under the laws of Delaware.

¹ 15 U.S.C. § 717b (2018).

² 18 C.F.R. pt. 153 (2019).

³ Magnolia LNG, LLC, 155 FERC ¶ 61,033, order on reh'g, 157 FERC ¶ 61,149 (2016).

⁴ On May 26, 2020, Magnolia LNG Holdings LLC acquired Magnolia LNG from Liquefied Natural Gas Limited, a publicly listed Australian company. Magnolia LNG

3. The Magnolia LNG Project includes two full containment LNG storage tanks; four LNG trains; LNG vessel berthing, mooring, and loading facilities; and LNG truck loading facilities.

4. Magnolia LNG states that it calculated the original capacity of 8.0 MTPA based on conservative design and operating assumptions and that through further refinement it has optimized the design of the liquefaction process by the final selection of the mixed refrigeration compressor and associated gas turbine; optimization of the mixed refrigeration circuit; reduction of boil off gas from the storage tanks; and sizing of equipment and piping. According to Magnolia LNG, this optimization process has resulted in an increase in the maximum total LNG that the Magnolia LNG Project will be capable of producing each year. Thus, Magnolia LNG requests authorization to increase the authorized production capacity of the Magnolia LNG Project from 8.0 MTPA to 8.8 MTPA. Magnolia LNG states that it is not requesting any increase in feed gas rates, which remain unchanged at 1.4 Bcf/d.

II. Notice, Interventions, and Comments

5. Notice of Magnolia LNG's amendment application was published in the *Federal Register* on December 12, 2018, with interventions and protests due on or before December 27, 2018.⁵ Kinder Morgan Louisiana Pipeline LLC filed a timely motion to intervene.⁶ No comments were filed.

III. <u>Discussion</u>

6. Because the proposed facilities will be used to export natural gas to foreign countries, the siting, construction, and operation of the facilities require Commission approval under section 3 of the NGA. While section 3(a) provides that an application under that section shall be approved unless the Commission finds that the proposal "will not be consistent with the public interest," section 3 also provides that an application may

Holdings LLC is a subsidiary of the Glenfarne Group, LLC. Magnolia LNG June 16, 2020 Monthly Status Report at 2 (filed in Docket No. CP14-347).

⁵ 83 Fed. Reg. 63,849 (Dec. 12, 2018).

⁶ Timely, unopposed motions to intervene are automatically granted by operation of Rule 214 (c) of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214 (c) (2019).

be approved "in whole or in part, with such modification and upon such terms and conditions as the Commission may find necessary or appropriate."⁷

7. Magnolia LNG requests that the Magnolia LNG Project's currently authorized total LNG production capacity of 8.0 MTPA be increased to a maximum capacity of 8.8 MTPA, which is the estimated maximum LNG production for the Magnolia LNG Project.

8. We recognize that calculating the maximum or peak capacity of a given set of liquefaction facilities may not be possible at the time an initial application for construction is filed. However, we find that it is appropriate for an ultimate authorization to reflect the maximum or peak capacity, as such a level represents the actual potential production of LNG.⁸ Thus, based on Magnolia LNG's further refinement and design of the liquefaction process, we find that an increase in the authorized LNG production capacity to a maximum of 8.8 MTPA is not inconsistent with the public interest.⁹ We note that Magnolia LNG states that it intends to file an application with the Department of Energy to authorize any export of LNG volumes in excess of the amount already approved.¹⁰

⁸ See, e.g., Sabine Pass Liquefaction, LLC, 146 FERC ¶ 61,117, at P 12, order on reh'g, 148 FERC ¶ 61,200 (2014) (approving request to increase authorized LNG production capacity to 20 million tons per year, or 2.76 Bcf per day, based on more detailed engineering analysis).

⁹ See, e.g., *EcoElectrica*, *L.P.*, 160 FERC ¶ 61,023, at P 8 (2017) (finding the Commission shall grant a request to amend an authorization under section 3 of the NGA "unless it finds that the proposal 'will not be consistent with the public interest").

¹⁰ The Department of Energy/Office of Fossil Energy (DOE/FE) authorized Magnolia LNG to export up to 8 million MTPA to countries with which the United States has a free trade agreement (FTA) requiring national treatment for trade in natural gas. *Magnolia LNG, LLC,* DOE/FE Order No. 3406 (2014); *Magnolia LNG, LLC,* DOE/FE Order No. 3245 (2013). The Department of Energy has also authorized Magnolia LNG to export up to 8 MTPA to countries with which the United States does not have an FTA in place requiring national treatment for trade in natural gas and with which trade is not prohibited by United State law or policy. *Magnolia LNG, LLC,* DOE/FE Order No. 3909 (2016).

⁷ For a discussion of the Commission's authority to condition its approvals of LNG facilities under section 3 of NGA, *see, e.g., Distrigas Corp. v. FPC*, 495 F.2d 1057, 1063–64 (D.C. Cir. 1974), *cert. denied*, 419 U.S. 834 (1974), and *Dynegy LNG Prod. Terminal, L.P.*, 97 FERC ¶ 61,231 (2001).

9. In accordance with the Memorandum of Understanding signed on August 31, 2018, by the Commission and the Pipeline and Hazardous Materials Safety Administration (PHMSA) within the Department of Transportation,¹¹ PHMSA undertook a review of the proposed facility's ability to comply with the federal safety standards contained in Part 193, Subpart B, of Title 49 of the Code of Federal Regulations.¹² On December 26, 2019, PHMSA issued a Letter of Determination (LOD)¹³ indicating that Magnolia LNG had demonstrated that the proposed amendment complies with those federal safety standards for hazardous releases of LNG. PHMSA conditioned the LOD on Magnolia LNG submitting additional information regarding hazardous releases of mixed refrigerants, heavy hydrocarbons, and anhydrous ammonia.¹⁴ PHMSA further stated that it would prepare a supplemental LOD upon receipt of the requested additional information. On April 21, 2020, PHMSA issued a supplemental conditional LOD¹⁵ indicating that Magnolia LNG had demonstrated that the proposed amendment complies with Subpart B of the federal safety standards for hazardous releases of mixed refrigerants, heavy hydrocarbons, and anhydrous ammonia provided that final design information is provided as described in the supplemental LOD. If the proposed LNG Terminal is subsequently modified so that it differs from the details provided in the documentation submitted to PHMSA, further review would be conducted by PHMSA.

IV. Environmental Analysis

10. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA),¹⁶ Commission staff evaluated in a supplemental environmental impact statement (supplemental EIS) potential changes to the air quality, noise, and reliability

¹² 49 C.F.R. pt. 193, subpt. B (2019).

¹³ PHMSA December 26, 2019 LOD.

¹⁴ Id. at 4.

¹⁵ PHMSA April 21, 2020 Supplemental LOD.

¹⁶ 42 U.S.C. §§ 4321–4370h (2018). *See also* the Commission's NEPAimplementing regulations at Title 18 of the Code of Federal Regulations, Part 380.

¹¹ Memorandum of Understanding Between the Department of Transportation and the Federal Energy Regulatory Commission Regarding Liquefied Natural Gas Transportation Facilities (Aug. 31, 2018), https://www.ferc.gov/legal/mou/2018/FERC-PHMSA-MOU.pdf.

and safety analyses presented in the final EIS for the Magnolia LNG Project in Docket No. CP14-347-000.¹⁷

11. On June 7, 2019, the Commission issued *Notice of Intent to Prepare a* Supplemental Environmental Impact Statement for the Proposed Production Capacity Amendment and Request for Comments on Environmental Issues (NOI). The NOI was published in the Federal Register on June 13, 2019, establishing a 30-day public comment period ending on July 8, 2019.¹⁸ Also, the NOI was sent to 466 potentially interested parties, including the updated environmental mailing list for the original Magnolia LNG Project, as well as additional stakeholders identified during the processing of the amendment application. We received no comments on the NOI.

12. The NOI stated that, based on the proposed modifications to the Magnolia LNG Project, Commission staff had determined that the potential environmental consequences of the proposal were limited to air and noise emissions, and factors related to the reliability and safety engineering analyses. PHMSA, the U.S. Coast Guard, and the U.S. Department of Energy participated as cooperating agencies in the preparation of the supplemental EIS. Cooperating agencies have jurisdiction by law or special expertise with respect to resources potentially affected by the proposals and participate in the NEPA analysis.

13. On September 27, 2019, the Commission issued the draft supplemental EIS for public review and comment. Notice of the draft supplemental EIS was published in the *Federal Register* on October 3, 2019, establishing a 45-day public comment period ending on November 18, 2019.¹⁹ Notice of the draft supplemental EIS was also sent to the environmental mailing list for the project. The Commission received one comment, from the U.S. Environmental Protection Agency, Region 6 (EPA), which is included in the public record for the project.²⁰

14. On January 24, 2020, the Commission issued the final supplemental EIS and published notice of the document in the *Federal Register* on January 30, 2020.²¹ The

¹⁸ 84 Fed. Reg. 27,627 (June 13, 2019).

¹⁹ 84 Fed. Reg. 52,881 (Oct. 3, 2019).

²⁰ See Commission January 24, 2020 Final Supplemental EIS at App. D (Final Supplemental EIS) (reproducing and responding to EPA's comment on the draft supplemental EIS).

²¹ 85 Fed. Reg. 5424 (Jan. 30, 2020).

¹⁷ Commission, Final EIS, Docket No. CP14-347-000 (issued Nov. 13, 2015).

final supplemental EIS addresses potential changes to air quality, noise, and the reliability and safety analyses as a result of the proposed amendment and concludes that, with implementation of recommended mitigation measures, impacts associated with the proposed modifications will be avoided or reduced to less-than-significant levels and the engineering design would reduce the risk of a potentially hazardous scenario from developing into an event that could impact the public.²² No adverse comments concerning the final supplemental EIS have been filed.

15. The final supplemental EIS addresses EPA's comment regarding potential noise generated by the project.²³ Operation of the LNG terminal, as modified by the amendment, would produce noise likely to be noticeable by residents at the nearest noise-sensitive areas (NSAs). EPA recommended that the Commission mitigate noise impacts at NSAs if EPA's noise criterion (i.e., a day-night sound level of 55 decibels on the A-weighted scale) is exceeded. Such mitigation (e.g., modifying operation of the project or installing additional noise controls) is already required by the Commission's April 15, 2016 Order for the Magnolia LNG Project.²⁴ Accordingly, the final supplemental EIS concludes that the proposed amendment would not result in significant noise impacts.²⁵

16. The final supplemental EIS also concludes that the proposed amendment would not result in significant air quality impacts and that the air permit issued by the Louisiana Department of Environmental Quality for the Magnolia LNG project would not need to be revised based on the proposed amendment.²⁶ Similarly, the modeled air quality impacts from operation of the facility would be similar to those previously identified and would not result in any exceedances of the National Ambient Air Quality Standards.²⁷

17. Regarding reliability and safety, the regulatory oversight, hazards, and engineering designs remain largely unchanged from that analyzed in the November 13, 2015 final EIS. However, the limited modifications to the engineering design, including additional

²³ Id. at 10.

²⁴ Magnolia LNG, LLC, 155 FERC ¶ 61,033, at Environmental Conditions 25–26
(2016). As stated in Ordering Paragraph (B) below, those requirements remain in effect.

²⁵ Final Supplemental EIS at 10.

²⁶ Id. at 8.

²⁷ Id.

²² Final Supplemental EIS at ES-3.

equipment and different process conditions, would result in larger offsite hazards that warranted a reevaluation of the layers of protection provided by the project.

18. As part of its review in the final supplemental EIS, Commission staff assessed whether the proposed facilities would operate safely, reliably, and securely. Based on this engineering and technical review, the final supplemental EIS made additional recommendations (in addition to the mandatory conditions already in effect from Magnolia LNG's 2016 authorization) to ensure continuous oversight prior to initial site preparation, construction of final design, commissioning, introduction of hazardous fluids, and commencement of service, as well as throughout life of the facility, to enhance the reliability and safety of the facility to mitigate the risk of impact on the public.²⁸ We conclude that with such measures, the design of the proposed amendment will include acceptable layers of protection or safeguards that will reduce the risk of a potentially hazardous scenario from developing into an event that could impact the public.²⁹

19. We have reviewed the information and analysis contained in the final supplemental EIS, as well as other information in the record. We are adopting the environmental recommendations in the final supplemental EIS, as modified herein, and include them as conditions appended to this order. Compliance with the environmental conditions appended to our orders is integral to ensuring that the environmental impacts of approved projects are consistent with those anticipated by our environmental analyses. Thus, Commission staff carefully reviews all information submitted. Commission staff will only issue a notice to proceed with an activity when satisfied that the applicant has complied with all applicable conditions. We also note that the Commission has the authority to take whatever steps are necessary to ensure the protection of environmental resources during construction and operation of the project, including authority to impose any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the order, as well as the avoidance or mitigation of unforeseen adverse environmental impacts resulting from project construction and operation.³⁰

20. We agree with the conclusions presented in the final supplemental EIS and find that if the project is constructed and operated as described in that document, the environmental impacts associated with the project are acceptable considering the public benefits that will be provided by the project. Further, for the reasons discussed

³⁰ See Environmental Condition 2.

²⁸ Id. at 49–51; see also Environmental Conditions 4–17.

²⁹ Final Supplemental EIS at 52.

throughout the order, as stated above, we find that the proposed amendment is not inconsistent with the public interest.

21. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this authorization. The Commission encourages cooperation between jurisdictional companies and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.³¹

22. At a hearing held on June 18, 2020, the Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application, and exhibits thereto, and all comments, and upon consideration of the record,

The Commission orders:

(A) The authorized maximum LNG production capacity of the Magnolia LNG Project is increased from 8.0 MTPA to 8.8 MTPA to reflect the facilities' modified capabilities, as described and conditioned herein, and as more fully described in the application.

(B) All other requirements and conditions of the Commission's prior orders authorizing the construction and operation of the facilities remain in effect.

(C) Magnolia LNG must notify the Commission's environmental staff by telephone or e-mail of any environmental noncompliance identified by other federal,

³¹ See 15 U.S.C. § 717r(d) (2018) (state or federal agency's failure to act on a permit considered to be inconsistent with Federal law); see also Schneidewind v. ANR *Pipeline Co.*, 485 U.S. 293, 310 (1988) (state regulation that interferes with FERC's regulatory authority over the transportation of natural gas is preempted) and *Dominion Transmission, Inc. v. Summers*, 723 F.3d 238, 245 (D.C. Cir. 2013) (noting that state and local regulation is preempted by the NGA to the extent it conflicts with federal regulation, or would delay the construction and operation of facilities approved by the Commission).

state, or local agencies on the same day that such agency notifies Magnolia LNG. Magnolia LNG must file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission.

(SEAL)

Kimberly D. Bose, Secretary.

Environmental Conditions

As recommended in the supplemental EIS, this authorization includes the below conditions. In addition, all of conditions of the Commission's April 15, 2016 authorization of the Magnolia LNG Project (not repeated here) apply to the amended facilities.

- 1. Magnolia LNG shall follow the construction procedures and mitigation measures described in its application for the Production Capacity Amendment, and supplements (including responses to staff data requests), and as identified in the supplemental EIS, unless modified by the Order. Magnolia LNG must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Projects (OEP), or the Director's designee, **before using that modification**.
- 2. The Director of OEP, or the Director's designee, has delegated authority to address any requests for approvals or authorizations necessary to carry out the conditions of the Order, and take whatever steps are necessary to ensure the protection of life, health, property, and the environment during construction and operation of the project. This authority shall allow:
 - a. the modification of conditions of the Order;
 - b. stop-work authority and authority to cease operation; and
 - c. the imposition of any additional measures deemed necessary to ensure continued compliance with the intent of the conditions of the Order as well as the avoidance or mitigation of unforeseen adverse environmental impact resulting from project construction and operation.
- 3. Magnolia LNG shall continue to comply with all environmental and engineering conditions set forth in the Appendix of the April 15, 2016 Order issued in Docket No. CP14-347-000.

4. **Prior to construction of final design**, Magnolia LNG shall file with the Secretary documentation of consultation with the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) staff as to whether the use of drain valves to remove stormwater from curbed areas would meet PHMSA requirements.

Conditions 5 through 17 shall apply to the amended LNG terminal facilities. Information pertaining to the following specific conditions shall be filed with the Secretary for review and written approval by the Director of OEP, or the Director's designee, within the timeframe indicated by each condition. Specific engineering, vulnerability, or detailed design information meeting the criteria specified in Order No. 833 (Docket No. RM16-15-000), including security information, shall be submitted as critical energy infrastructure information pursuant to 18 CFR §388.113. See Critical Electric Infrastructure Security and Amending Critical Energy Infrastructure Information, Order No. 833, 81 Fed. Reg. 93,732 (December 21, 2016), FERC Stats. & Regs. 31,389 (2016). Information pertaining to items such as offsite emergency response, procedures for public notification and evacuation, and construction and operating reporting requirements are subject to public disclosure. All information shall be filed <u>a minimum of 30 days</u> before approval to proceed is requested.

- 5. **Prior to construction of final design**, Magnolia LNG shall include LNG tank fill flow measurement with a high flow alarm.
- 6. **Prior to construction of final design**, Magnolia LNG shall specify a discretionary vent valve on each LNG storage tank that is operable through the Distributed Control System with a car sealed open manual block valve provided upstream of the discretionary vent valve.
- 7. **Prior to construction of final design**, Magnolia LNG shall specify a means to prevent liquid flows to the boil-off gas compressor (e.g., boil-off gas suction/knock out drum with high alarm and high-high level shutdown).
- 8. **Prior to construction of final design**, Magnolia LNG shall specify that anhydrous ammonia piping and piping nipples 2 inches nominal pipe size or less in diameter are to be no less than schedule 160 for carbon steel and no less than schedule 80S for stainless steel in accordance with American Society of Mechanical Engineers (ASME) B36.10M and ASME B36.19M, respectively.
- 9. **Prior to construction of final design**, Magnolia LNG shall specify that anhydrous ammonia pressure vessels meet the minimum requirements for lethal service in accordance with ASME BPVC Section VIII.

- 10. **Prior to construction of final design**, Magnolia LNG shall specify that all piping containing anhydrous ammonia have 100 percent of all longitudinal, spiral, circumferential butt, socket, and fillet welds radiographed or ultrasonically tested in accordance with ASME B31.3.
- 11. **Prior to construction of final design**, Magnolia LNG shall specify that all pressure vessels containing anhydrous ammonia be subject to 100 percent non-destructive examination of both longitudinal/meridional and latitudinal/circumferential welds of hydraulic load bearing shells with curved surface in accordance with ASME BPVC Section VIII, Division 1.
- 12. **Prior to construction of final design**, Magnolia LNG shall file piping and instrument diagrams, specifications, and procedures that clearly show and specify the tie-in details required to safely connect subsequently constructed facilities with the operational facilities.
- 13. **Prior to construction of final design**, Magnolia LNG shall specify that the flammable and combustible gas detection and flame and heat detection systems should be in accordance with International Society for Automation 84.00.07 or equivalent methodologies and would need to demonstrate that 90 percent or more of releases (unignited and ignited) that could result in an off-site or cascading impact would be detected by two or more detectors and result in isolation and de inventory within 10 minutes. The analysis must take into account the set points, voting logic, wind speeds, and wind directions.
- 14. **Prior to construction of final design**, Magnolia LNG shall file drawings and specifications for the structural passive protection systems to protect equipment and supports from low temperature releases.
- 15. **Prior to construction of final design**, Magnolia LNG shall file calculations or test results for the structural passive protection systems to protect equipment and supports from low temperature releases.
- 16. **Prior to construction of final design**, Magnolia LNG shall specify that the firewater flow test meter is equipped with a transmitter and that a pressure transmitter is installed upstream of the flow transmitter. The flow transmitter and pressure transmitter shall be connected to the Distributed Control System and recorded.
- 17. **Prior to construction of final design**, Magnolia LNG shall file drawings of internal road vehicle protections, such as guard rails, barriers, and bollards to

protect transfer piping, pumps, compressors, hydrants, monitors, etc. to ensure that they are located away from roadway or protected from inadvertent damage from vehicles.