168 FERC ¶ 61,126
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Cheryl A. LaFleur, Richard Glick,
and Bernard L. McNamee.

Monroe Gas Storage Company, LLC Docket No. CP19-53-000

ORDER AUTHORIZING ABANDONMENT AND AMENDING CERTIFICATE

(Issued August 28, 2019)

1. On January 18, 2019, Monroe Gas Storage Company, LLC (Monroe) filed an application pursuant to section 7(b) of the Natural Gas Act (NGA)[1] and Part 157 of the Commission's regulations[2] for authorization to abandon 3.74 billion cubic feet (Bcf) of working gas capacity at Monroe's natural gas storage facility in Monroe County, Mississippi (Monroe Gas Storage Facility). Monroe also requests, pursuant to section 7(c) of the NGA,[3] authorization to amend the project's certificated total, working, and base gas capacities. For the reasons discussed below, we will grant Monroe's requested authorizations, subject to conditions.

I. Background and Proposal

2. Monroe, a Delaware limited liability company and wholly-owned subsidiary of Cardinal Gas Storage Partners LLC,[4] is a natural gas company as defined by section 2(6) of the NGA.[5] Monroe operates the Monroe Gas Storage Facility, which provides interstate natural gas storage and hub services at market-based rates.

[1] 15 U.S.C. § 717f(b) (2012).

[2] 18 C.F.R. pt. 157 (2018).

[3] 15 U.S.C. § 717f(c) (2012).

[4] Cardinal Gas Storage Partners LLC acquired Monroe in 2011.

[5] 15 U.S.C. § 717a(6) (2012).

3. In 2007, the Commission issued a certificate to Monroe to construct and operate the Monroe Gas Storage Facility with a total certificated capacity of 23.04 Bcf, consisting of 12.08 Bcf of working gas and 10.96 Bcf of base gas.[6] The Monroe Gas Storage Facility was developed in a depleted gas field, Four Mile Creek Field,[7] and consists of three sand reservoirs—Carter Massive, Carter A, and Carter B.[8] The Carter Massive water-drive[9] reservoir constitutes the west side of the field, and the Carter A and Carter B reservoirs constitute the east side of the field. Monroe describes the Carter A and Carter B reservoirs as "stratigraphically complex" and "poorly communicating."[10]

4. Monroe states that, despite its best efforts, it has been unable to achieve the certificated total and working gas capacities at the storage facility. In 2010, Monroe conducted fracture stimulation of seven wells in the east side of the storage field to improve performance after the field's productivity and gas cycling capabilities had failed to meet their projections. The east side of the field then began producing significant volumes of water, indicating water encroachment prior to storage development, and Monroe drilled one water disposal well and two new directional wells. In 2012, Monroe deepened two wells and worked over five wells on the field's east side.[11] However, after failing to push back the water column with gas injections and increased capacity because

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[6] *Monroe Gas Storage Co., LLC*, 121 FERC ¶ 61,285 (2007) (2007 Certificate Order). Due to problems arising from the drilling of the planned horizontal injection and withdrawal wells, the certificate was amended to revise the drilling plan from three horizontal wells to twelve vertical wells. *Monroe Gas Storage Co., LLC*, 127 FERC ¶ 62,046 (2009).

[7] Four Mile Creek Field, discovered in 1973, produced a total of 14.2 Bcf of natural gas from seven wells in the Mississippian-aged Carter Sands.

[8] Monroe January 8, 2019 Application at 2–5 (Application).

[9] A water-drive reservoir uses free water to drive hydrocarbons into a wellbore and up to the surface.

[10] Monroe states that the Carter B reservoir contains multiple sands and shale laminations that impact storage injections and withdrawals. Monroe May 24, 2019 Data Response at 4.

[11] A well workover involves repairing or stimulating an existing well to restore, prolong, or enhance its hydrocarbon production.

of the laminated nature of the Carter B reservoir, Monroe self-imposed a 1,000 pounds per square inch (psi) limitation on surface injection pressures.[12]

5. With respect to the west side of the field, after conducting reservoir modeling and a "blowdown" test[13] in June 2011, Monroe concluded that 2.5 Bcf of injected gas was no longer effectively communicating with the wells. Accordingly, Monroe reduced its booked storage capacity, and, in 2012, drilled a horizontal well. In 2012 and 2013, Monroe also developed seismic data for the entire field, which indicated that the existing wells are suitably positioned to cycle gas from the structurally high regions of the reservoirs.

6. Monroe states that it cannot achieve the certificated working gas or total storage capacity and proposes to abandon 4.58 Bcf of working gas and reclassify 0.96 Bcf of working gas to base gas.[14] Monroe seeks to amend its certificated total, working, and base gas capacities as shown in Table 1.[15]

Table 1: Current and Proposed Certificated Capacities of the Monroe Gas Storage Facility

Capacity (Bcf)	Current	Proposed[16]
Working Gas	12.08	6.54
Injected Base Gas	4.46	5.42

[12] Monroe states it is not proposing changes to its certificated maximum shut-in bottomhole pressure of 1,200 pounds per square inch absolute. Monroe July 29, 2019 Submission.

[13] A blowdown test is used to determine a well's gas-water contact to assess the in-place volume of the gas cap or native gas.

[14] Monroe does not propose to abandon any facilities.

[15] Application at 2–3, 5–7; Monroe May 24, 2019 Data Response at 3–4 (providing corrected volumes for certificated capacity that reflect the conversion from dekatherms to cubic feet).

[16] Monroe May 24, 2019 Data Response at 3–4.

Total Capacity (without native base gas)	16.54	11.96
Native Base Gas	6.50	6.50
Total	23.04	18.46

7. In support of its request, Monroe states that the field has operated at inventories below the total proposed certificated capacity of 18.46 Bcf for the majority of the past five years and has not experienced operational issues at this reduced capacity.[17] Further, Monroe provides that its service obligations can be met based on the field's reduced working gas and that the proposal would have no impact on current customers' existing service.[18]

II. Notice, Interventions, and Comments

8. Notice of Monroe's application was issued on January 23, 2019.[19] The notice established February 13, 2019, as the deadline for filing comments and interventions. No comments were filed. Range Resources-Appalachia, LLC and NJR Energy Services Company filed timely, unopposed motions to intervene. Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.[20]

III. Discussion

9. Monroe seeks to abandon a portion of its certificated storage capacity at the Monroe Gas Storage Facility, which is subject to the jurisdiction of the Commission. In addition, Monroe seeks to amend the certificated total, working, and base gas capacities

[17] *Id.*; Application at 2–3, 5–7.

[18] Monroe states it is not proposing changes to the certificated injection rate of 445 million cubic feet per day (MMcf/d) or the certificated withdrawal rate of 465 MMcf/d. Monroe July 29, 2019 Submission.

[19] January 23, 2019 Notice of Application.

[20] 18 C.F.R. § 385.214(c) (2018).

of the Monroe Gas Storage Facility. Therefore, Monroe's proposals are subject to the Commission's jurisdiction pursuant to sections 7(b) and (c) of the NGA.[21]

10. Section 7(b) of the NGA provides that a natural gas company may abandon jurisdictional facilities or services only if the Commission finds the abandonment is permitted by the present or future public convenience and necessity.[22] The Commission has stated that continuity and stability of existing service are the primary considerations in assessing whether the public convenience and necessity permit the abandonment.[23] If the Commission finds that the proposed abandonment will not jeopardize continuity of existing gas transportation services, it will defer to the company's business judgment to abandon the facilities.[24]

11. Commission policy also requires storage companies to obtain prior approval from the Commission before making changes to the certificated parameters of their storage facilities, including capacities and pressures.[25] This requirement allows staff and the public to review and analyze the new design parameters and confirm that they are technically sound and feasible. When analyzing the proposed changes to parameters, the Commission's concern is the integrity of the storage field.[26]

12. Here, Monroe's proposal will not disrupt service to any existing customer. The proposed working gas capacity is greater than Monroe's contractual commitments and no customers filed adverse comments to Monroe's proposal. Therefore, we find that the proposal will not result in the loss of service to any current customers.

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[21] 15 U.S.C. §§ 717f(b), (c) (2012).

[22] *Id.* § 717f(b).

[23] *WBI Energy Transmission, Inc.*, 163 FERC ¶ 61,033, at P 22 (2018) (*WBI Energy*); *Tres Palacios Gas Storage LLC*, 160 FERC ¶ 61,107, at P 25 (2017) (*Tres Palacios*).

[24] *WBI Energy*, 163 FERC ¶ 61,033 at P 22; *National Fuel Gas Supply Corp.*, 160 FERC ¶ 61,050, at P 17 (2017).

[25] *Transcontinental Gas Pipe Line Co., LLC*, 142 FERC ¶ 61,095, at P 45 (2013) (*Transco*).

[26] *Tres Palacios*, 160 FERC ¶ 61,107 at P 26; *Transco*, 142 FERC ¶ 61,095 at P 45.

13. The proposal also will not diminish the integrity of the storage field. As stated above, the field has operated at inventories below the proposed capacities for the majority of the past five years with no operational or field integrity issues. Additionally, we will require Monroe to continue to comply with the engineering conditions in the 2007 Certificate Order, provided in the Appendix of this order, to ensure adequate protection and preservation of the integrity of the storage facility.[27]

14. We have reviewed Monroe's proposal, including the supporting data provided by Monroe, and find that the abandonment and amendment are permitted by the public convenience and necessity.

Environmental Analysis

15. Because Monroe does not propose any construction, removal, ground disturbing activities, or changes to land use activities, the proposal will have no environmental impacts and environmental review of the proposed action is not necessary.[28]

16. 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) Monroe's proposed abandonment is granted.

(B) Monroe's request for amendment of its certificate authority to reduce the Monroe Gas Storage Facility's total certificated capacity from 23.04 Bcf to 18.46 Bcf, consisting of 6.54 Bcf of working gas, 5.42 Bcf of injected base gas, and 6.50 Bcf of native base gas, is granted. All other certificated parameters and engineering conditions for the storage facility remain unchanged.

(C) Monroe shall complete the abandonment of the working gas as authorized herein within one year of the date of this order.

[27] 2007 Certificate Order, 121 FERC ¶ 61,285 at Appendix A.

[28] *See* February 4, 2019 Environmental Assessment Report.

(D) Monroe shall notify the Commission within 10 days of the date of abandonment described above.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

APPENDIX

This authorization includes the following conditions:

1. The total maximum gas storage inventory stored in the Four Mile Creek field shall not exceed 18.46 billion standard cubic feet (Bcf) at 14.73 pounds per square inch absolute (psia) and 60ºF without prior Commission authorization. The maximum gas storage shut-in stabilized bottomhole pressure shall not exceed 1,200 psia.

2. Monroe shall operate the Four Mile Creek field in such manner as to prevent/minimize gas loss or migration.

3. Monroe shall periodically conduct an inventory verification study on the field.

4. Monroe shall submit semiannual reports (to coincide with the termination of the injection and withdrawal cycles) containing the following information (volumes shall be stated at 14.73 psia and 60 degrees Fahrenheit and pressures shall be stated in psia):

    (a) The daily volumes of natural gas injected into and withdrawn from each side of the reservoir.
    (b) The volume of natural gas in the reservoir at the end of the reporting period.
    (c) The maximum daily injection and withdrawal rates experienced during the reporting period, and the average working pressure on such maximum days taken at a central measuring point where the total volume injected or withdrawn is measured.
    (d) Results of any tracer program by which the leakage of injected gas may be determined. If leakage of gas exists, the report should show the estimated total volume of gas leakage, the volume of recycled gas, and the estimated remaining inventory of gas in the reservoir at the end of the reporting period.
    (e) Any surveys of pressures in gas wells, and the results of back-pressure tests conducted during the reporting period.
    (f) The latest revised structural and isopach maps showing the locations of the wells and the location of the gas-water contact. These maps need not be filed if there is no material change from the maps previously filed.
    (g) A summary of wells drilled, worked over, or recompleted during the reporting period, indicating the subsea depth of formation and casing settings, as well as summary reports of any new core analyses, back-pressure tests, or well log analyses.
    (h) Discussion of current operating problems and conclusions.

(i) Such other data or reports which may aid the Commission in the evaluation of the storage project.

5. Reports shall continue to be filed semiannually until the storage inventory volume and pressure have reached or closely approximate the maximum permitted in the Commission's Order. Thereafter, the reports shall continue on a semiannual basis for a period of one year.