

192 FERC ¶ 61,080
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Mark C. Christie, Chairman;
David Rosner, Lindsay S. See,
and Judy W. Chang.

Black Bayou Gas Storage, LLC

Docket No.

CP24-494-000

ORDER ISSUING CERTIFICATES

(Issued July 24, 2025)

1. On July 17, 2024, Black Bayou Gas Storage, LLC (Black Bayou) filed an application pursuant to section 7(c) of the Natural Gas Act (NGA)¹ and Parts 157 and 284 of the Commission's regulations² requesting authorization to construct and operate a new salt dome natural gas storage project (Black Bayou Storage Project) on the Black Bayou salt dome in Cameron Parish, Louisiana. Black Bayou also requests: (1) a blanket certificate under Part 284, Subpart G of the Commission's regulations to provide open-access natural gas storage services, with pre-granted abandonment approval; (2) a blanket certificate under Part 157, Subpart F of the Commission's regulations to perform certain routine construction activities and operations; (3) authorization to charge market-based rates for its proposed interstate storage and hub services; (4) approval of its *pro forma* tariff; and (5) waiver of certain filing, reporting, and accounting requirements. For the reasons discussed below, we grant the requested authorizations, subject to certain conditions.

I. Background and Proposal

2. Black Bayou, a Louisiana limited liability company, is a wholly-owned subsidiary of Black Bayou Energy Hub.³ Upon commencing operations of the proposed Black Bayou Storage Project, Black Bayou will become a natural gas company within the

¹ 15 U.S.C. § 717f(b), (c).

² 18 C.F.R. pt. 157 (2024).

³ Black Bayou Energy Hub is a privately held project development company based in Lafayette, Louisiana.

meaning of section 2(6) of the NGA,⁴ and, as such, will be subject to the Commission's jurisdiction.

3. Black Bayou proposes to construct and operate the Black Bayou Storage Project, a high-deliverability salt dome natural gas storage facility with approximately 34.7 billion cubic feet (Bcf) of working gas storage capacity and 18 Bcf of base gas, at the Black Bayou salt dome in Cameron and Calcasieu Parishes, Louisiana. The project will be capable of accommodating up to 1.6 Bcf per day of maximum daily natural gas injection quantities at minimum operating cavern pressures and up to 2.0 Bcf per day of maximum daily withdrawal quantities at maximum operating cavern pressures.

4. Black Bayou states that it executed one binding precedent agreement for 8 Bcf of firm storage service.⁵ Subsequently, Black Bayou held a non-binding open season for the project from June 6, 2024, through June 27, 2024, and received responses indicating interest for firm storage services in excess of the proposed 34.7 Bcf of working gas capacity.⁶ Black Bayou states it is now in the process of working with the open season participants to allocate capacity and execute additional binding precedent agreements for the remaining working gas capacity.⁷

A. Proposed Facilities

5. Black Bayou proposes to construct four underground salt dome natural gas storage caverns (Gas Storage Area), two looped, bi-directional natural gas pipelines (Header Pipelines), and associated facilities, as further described below.

1. Gas Storage Area

6. The proposed Gas Storage Area will be located at the Black Bayou salt dome, which is in a sparsely populated area in the northwest corner of Cameron Parish, Louisiana. Although the Black Bayou salt dome is a virgin salt dome which has not been mined for brine or previously used for storage of any kind, the surrounding area has been developed for industrial oil and gas operations.⁸ Black Bayou states it will

⁴ 15 U.S.C. § 717a(6).

⁵ Application at 26.

⁶ *Id.* at 26.

⁷ *Id.* at 27.

⁸ Application at 8-9. In 2007, the Commission issued a certificate under NGA section 7(c) to a different entity named Black Bayou Storage, LLC for a storage project at the same site (2007 Black Bayou Project). *Black Bayou Storage, LLC*, 123 FERC ¶ 61,277

utilize existing infrastructure and previously disturbed areas for its project to the extent practicable.⁹ Black Bayou holds the exclusive lease for surface and subsurface rights within 300 feet of the outer edge of the Black Bayou salt dome, totaling approximately 2,444 acres and wholly encompassing the Gas Storage Area plus buffer acreage.¹⁰

7. Facilities proposed to be constructed in the Gas Storage Area include:

- Four underground salt dome natural gas storage caverns, each with 8.7 Bcf of working gas capacity and requiring 4.5 Bcf of base gas (Caverns 1-4);
- One 44,000-horsepower (hp) compressor station consisting of eight 5,500-hp natural-gas-driven reciprocating compressor engines;
- One brine leaching plant;
- Nine freshwater wells, each located on its own pad;
- Nine saltwater disposal wells located on three pads;
- Permanent access roads;
- An electrical area for electrical supply; and
- Associated piping, valve settings, and auxiliary equipment.

8. Black Bayou anticipates placing the first two natural gas storage caverns (Cavern 1 and Cavern 2) into service about three years after commencing construction of the project and placing the remaining two storage caverns (Cavern 3 and Cavern 4) into service about two years after that.

2. Header Pipelines

9. The proposed Header Pipelines, two parallel, 27.4-mile-long,¹¹ 24-inch-diameter, bi-directional pipelines (North A and North B), will extend west and then north from the

(2007). The 2007 Black Bayou Project was never constructed, and the certificate expired in 2014. Application at 5.

⁹ Application at 9.

¹⁰ Application at 16.

¹¹ After filing its application, Black Bayou adopted a reroute, which added 0.3 mile of length to the pipelines. Black Bayou's January 17, 2025 Filing. While the

Gas Storage Area in Cameron Parish into Calcasieu Parish, Louisiana, for approximately 27 miles to a proposed interconnect with Transcontinental Gas Pipe Line Company, LLC (Transco) in Calcasieu Parish. Approximately 89% of the Header Pipelines will be co-located with other utility corridors.¹²

10. In addition to the interconnection with Transco, the Header Pipelines will interconnect with nine other existing and planned interstate natural gas transmission pipelines.¹³ Additionally, Black Bayou proposes to construct a metering and regulation station at each interconnect, five mainline valve sites, and a launcher/receiver site at the northern terminus of the Header Pipelines, as well as temporary and permanent access roads. Black Bayou anticipates placing the Header Pipelines into service about six months after commencing construction of the project.¹⁴ At that time, Black Bayou proposes to commence providing wheeling services on the Header Pipelines.¹⁵

B. Blanket Certificates & Pro Forma Tariff

11. Black Bayou requests a blanket certificate of public convenience and necessity pursuant to Part 284, Subpart G of the Commission's regulations, authorizing it to provide transportation service to customers requesting and qualifying for transportation service under its proposed FERC Gas Tariff, with pre-granted abandonment authorization, and a blanket certificate of public convenience and necessity pursuant to Part 157, Subpart F of the Commission's regulations, authorizing certain future facility construction, operation, and abandonment. In addition, Black Bayou requests approval of its *pro forma* tariff.

EA described the pipelines as being 27.1 miles long, the EA analyzed the pipelines as being 27.4 miles long, as amended by the reroute.

¹² Application at 15.

¹³ The Header Pipelines will interconnect with: (1) Port Arthur Pipeline, LLC; (2) Kinder Morgan Louisiana Pipeline LLC; (3) Sabine Pipe Line LLC; (4) Florida Gas Transmission Company, LLC; (5) Venture Global CP Express, LLC; (6) Tennessee Gas Pipeline Company, L.L.C.; (7) Golden Pass Pipeline LLC; (8) Texas Eastern Transmission, LP; (9) Transcontinental Gas Pipe Line Company, LLC; and (10) Gulf Run Transmission, LLC. *Id.* at 15.

¹⁴ Application at 7.

¹⁵ *Id.*

C. Market-Based Rates

12. Black Bayou requests authority to charge market-based rates for its proposed natural gas storage and hub services.¹⁶ To support its market-based rate proposal,¹⁷ Black Bayou included in its application a market power study based on the criteria set forth in the policy statement.¹⁸ Black Bayou states that the study demonstrates that it will lack market power in the provision of firm and interruptible storage, storage-related hub services,¹⁹ and wheeling services in the relevant product and geographic markets and, accordingly, that it has fully met the criteria for granting authorization for market-based rates.²⁰

D. Waivers

13. Black Bayou requests waivers of certain filing and other requirements that it considers inapplicable to its proposal for storage and hub services with market-based rates. The specific requests for waivers and the Commission's treatment of such requests are discussed below.

II. Notice, Interventions, and Comments

14. Notice of Black Bayou's application was published in the *Federal Register* on August 7, 2024, with interventions, comments, and protests due August 21, 2024.²¹

¹⁶ Hub services include wheeling, parking, and loaning services.

¹⁷ The rate schedules proposed by Black Bayou are as follows: Rate Schedules FSS, NNSS, NNSS-EU, ESS, and ISS for firm, no-notice, end-use facility no-notice, enhanced, and interruptible storage service, respectively; Rate Schedules FPS, EPS, and IPS for firm, enhanced, and interruptible parking service, respectively; Rate Schedules FLS, ELS, and ILS for firm, enhanced, and interruptible loaning service, respectively; Rate Schedules FWS, EWS and IWS for firm, enhanced, and interruptible wheeling service, respectively; and Rate Schedules FHBS and IBS for firm and interruptible hourly balancing service, respectively.

¹⁸ Application at Ex. I (Market Power Study).

¹⁹ Storage-related hub services are hub services that involve the storage of natural gas, such as parking and loaning. *Id.* at 11. Wheeling services are hub services that involve transferring gas from one pipeline to another, and do not involve storage, and therefore are not storage-related. *Id.*

²⁰ *Id.* at 27-28.

²¹ 89 Fed. Reg. 64443 (Aug. 7, 2024).

Timely, unopposed motions to intervene were filed by: Golden Pass Pipeline LLC; Golden Pass LNG Terminal LLC; Center for LNG; Natural Gas Supply Association (DC); Chevron U.S.A. Inc.; and Mercuria Energy America, LLC.²² The Louisiana Oil and Gas Association filed comments in support of the project.

15. On September 3, 2024, Sierra Club, Fishermen Involved in Sustaining our Heritage (FISH), For a Better Bayou, Habitat Recovery Project, Healthy Gulf, Micah Six Eight Mission, and Vessel Project of Louisiana (collectively, Environmental Coalition) jointly filed a motion to intervene out-of-time, which was granted by Secretary's Notice on December 4, 2024. With its intervention, the Environmental Coalition filed a protest, arguing that the project would cause harm to local communities and the environment and is not in the public interest. On September 16, 2024, Black Bayou filed an answer responding to the comments in the Environmental Coalition's protest. Although the Commission's Rules of Practice and Procedure do not permit answers to protests,²³ we will accept the answer herein because it clarifies the issues raised and provides information that has assisted in our decision-making. The matters raised in the protest were addressed in the Environmental Assessment (EA) prepared by Commission staff regarding the proposal.

III. Discussion

16. Because the proposed facilities will be used to provide natural gas storage service subject to the Commission's jurisdiction, the construction and operation of the facilities are subject to the requirements of subsections (c) and (e) of section 7 of the NGA.²⁴

A. Certificate Policy Statement

17. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.²⁵ The Certificate Policy Statement establishes criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. It explains that, in deciding whether to authorize the construction of new pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to appropriately

²² Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(c) (2024).

²³ 18 C.F.R. § 385.213(a)(2) (2024).

²⁴ 15 U.S.C. §§ 717f (c) and (e).

²⁵ *Certification of New Interstate Nat. Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (Certificate Policy Statement), *corrected*, 89 FERC ¶ 61,040 (1999), *clarified*, 90 FERC ¶ 61,128, *further clarified*, 92 FERC ¶ 61,094 (2000).

consider the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new project construction.

18. Under this policy, the threshold requirement for applicants proposing new projects is that the applicant must be prepared to financially support the project without relying on subsidization from its existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, and landowners and communities affected by the proposed project and the route of the new pipeline facilities. If residual adverse effects on these interest groups are identified after efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission proceed to complete the environmental analysis, where other interests are considered.

1. No Subsidy Requirement and Project Need

19. As discussed above, the threshold requirement for applicants proposing new projects is that the applicant must be prepared to financially support the project without relying on subsidization from its existing customers. Black Bayou is a newly formed entity with no existing operations or customers.²⁶ Further, because Black Bayou proposes to charge market-based rates for its storage services, it assumes the economic risk associated with its facilities to the extent that the project's capacity is undersubscribed, or revenues are not sufficient to recover costs. Accordingly, we find that the project has met the threshold no-subsidy requirement of the Certificate Policy Statement.

20. Black Bayou proposes the Black Bayou Storage Project to meet demand from power generators, LNG exporters, natural gas pipelines and producers, local distribution companies, and other natural gas consumers in the Gulf Coast market for increased reliable, high-turn²⁷ natural gas storage capacity.²⁸ It states that project services will help

²⁶ Application at 20.

²⁷ High-turn refers to the facility's ability to make frequent injections and withdrawals. The proposed Black Bayou Storage Project will provide up to 1.6 Bcf of peak daily natural gas injection capability, and up to 2.0 Bcf of peak daily natural gas deliverability. *Id.* at 23.

²⁸ *Id.* at 20.

to meet the increasing balancing needs throughout the Gulf Coast region via interconnections with existing and planned third-party interstate natural gas pipelines.

21. In describing why the project is needed and of commercial interest to a variety of customers, Black Bayou asserts that the project's highly flexible natural gas storage, wheeling, and balancing services, including the ability to cycle between injection and withdrawal services on short notice, are designed to help mitigate the adverse effects of potential upstream production and pipeline disruptions and/or periods of high demand or lost supply, such as those seen during storms; to support highly variable loads, such as peaking natural gas-powered electric generation; and to support the operations and meet the balancing needs of LNG export facilities.²⁹ It maintains that the proposed project is optimally situated to serve LNG export terminals in the Gulf Coast area, with a combined total of over 30 Bcf/day of existing and planned LNG export terminal operations within 25 miles of the project.³⁰

22. In its open season, Black Bayou solicited non-binding bids for 16 Bcf or more of working gas capacity and received bids from 32 unique entities³¹ for a total of more than 69.8 Bcf of working gas capacity, over four times the capacity offered in the open season.³² As a result of the open season, Black Bayou increased the size of the project from two caverns to four, to better accommodate this demonstration of market demand for storage services. Black Bayou states that it has executed a long-term binding precedent agreement for 8 Bcf of firm storage service and is in the process of executing additional binding precedent agreements for project service.³³

23. In comments on the EA, RESTORE, a nongovernmental organization, questions whether there is a genuine need for the Black Bayou Storage Project, asserting that

²⁹ *Id.* at 23-25.

³⁰ *Id.*

³¹ Bidding entities included: integrated oil and gas companies; LNG operators and shippers; regulated natural gas and electric utilities; natural gas pipeline companies; natural gas producers; natural gas marketers; natural gas end users; and other market participants. *Id.* at 26-27.

³² *Id.*

³³ *Id.* at 26. We note that where need has been otherwise sufficiently demonstrated, the Commission does not require that storage facilities proposing to charge market-based rates execute binding precedent agreements prior to authorization. *See, e.g., Mississippi Hub, LLC*, 190 FERC ¶ 61,175, at P 8 (2025); *Spire Storage West, LLC*, 179 FERC ¶ 61,123, at P 5 (2022); and *Magnum Gas Storage, LLC*, 134 FERC ¶ 61,197, at P 12 (2011).

nearby LNG projects already have sufficient gas supply.³⁴ We are not convinced that this unsupported statement demonstrates that LNG exporters do not have a need for the project's storage services, particularly in light of the potential for the project's storage services to accommodate rapid fluctuations in demand for gas at LNG terminals and improve reliability by helping pipelines and their customers mitigate the effects of disruptions in upstream gas production or periods of lost supply. More generally, as explained above, LNG exporters are just one category of many potential customers whose needs may be served by the project. Black Bayou has already executed a precedent agreement for a portion of the project's capacity and will increase competitive alternatives available in the market. Based on the above, we find that Black Bayou has demonstrated a need for the proposed project.

2. Impacts on Existing Customers, Existing Pipelines or Storage Providers and Their Customers, and Landowners and Surrounding Communities

24. As discussed above, Black Bayou has no existing customers. In addition, there is no evidence that the Black Bayou Storage Project will adversely impact any existing pipelines, storage providers, or their customers. As discussed below, the proposed project will be located in a competitive market, and project construction will not involve the displacement of any other market-area storage capacity. The Black Bayou Storage Project will enhance storage options available to pipelines and their customers and should increase competitive alternatives. Additionally, no pipelines, storage companies, or their customers have objected to Black Bayou's proposal. Therefore, we find that there will be no adverse impacts on existing customers or other existing pipelines or storage companies and their customers.

25. We are further satisfied that Black Bayou has taken appropriate steps to minimize adverse impacts on landowners. The proposed project will be located in an area that has long been used for oil and gas production, and the proposed facilities will be constructed in sparsely populated areas.³⁵ The Gas Storage Area will require 124.2 acres for use during construction, of which 109.8 acres will be maintained for operation and are located on property exclusively leased to Black Bayou.³⁶ The Header Pipelines will impact 564.5 acres, with 165.9 acres being converted for permanent aboveground facilities or maintained within the permanent right-of-way.³⁷ Approximately 89% of the

³⁴ RESTORE May 19, 2025 Comments at 1.

³⁵ Application at 21.

³⁶ EA at 43.

³⁷ *Id.* at 42.

route of the Header Pipelines will be co-located with other utility corridors, minimizing the environmental impact of construction and operation. Accordingly, we find that the proposed project has been designed to minimize adverse economic impacts on landowners and the surrounding communities.

3. Certificate Policy Statement Conclusion

26. We find that Black Bayou has demonstrated a need for the project, that the project will not have adverse impacts on existing customers, existing pipelines, or other storage providers and their customers, and that the project will have minimal economic impacts on landowners and surrounding communities. Therefore, we conclude that the project is consistent with the criteria set forth in the Certificate Policy Statement and analyze the environmental impacts of the project below.³⁸

B. Blanket Certificates

27. Black Bayou requests a Part 284, Subpart G blanket certificate in order to provide open-access transportation services. Under a Part 284 blanket certificate, Black Bayou would not need individual authorizations to provide storage and hub services to particular customers. Black Bayou filed a *pro forma* Part 284 tariff to provide open-access storage and storage-related services. Because a Part 284 blanket certificate is required for Black Bayou to participate in the Commission's open-access regulatory regime, we will grant Black Bayou a Part 284 blanket certificate, subject to the conditions imposed herein.

28. Black Bayou also requests a Part 157, Subpart F blanket certificate. A Part 157 blanket certificate gives the certificate holder NGA section 7 authority to automatically, or after prior notice, perform a restricted number of routine activities related to the construction, acquisition, abandonment, and replacement and operation of existing facilities, provided that the activities comply with constraints on costs and environmental impacts.³⁹ Because the Commission has previously determined through a rulemaking that these blanket-certificate eligible activities are in the public convenience and necessity,⁴⁰ it is the Commission's practice to grant new natural gas companies a Part 157

³⁸ See Certificate Policy Statement, 88 FERC at 61,745-46 (explaining that only when the project benefits outweigh the adverse effects on the economic interests will the Commission then complete the environmental analysis).

³⁹ See 18 C.F.R. § 157.203 (2024).

⁴⁰ *Revisions to the Blanket Certificate Reguls. & Clarification Regarding Rates*, Order No. 686, FERC Stats. & Regs. ¶ 31,231, at P 9 (2006) (cross-referenced at 117 FERC ¶ 61,074), *order on reh'g*, Order No. 686-A, 119 FERC ¶ 61,303, *order on reh'g*, Order No. 686-B, 120 FERC ¶ 61,249 (2007).

blanket certificate if requested.⁴¹ Accordingly, we will grant Black Bayou a Part 157 blanket certificate, subject to the conditions imposed herein.

C. Rates

1. Market-Based Rates

29. The Commission evaluates requests to charge market-based rates for storage and hub services under the analytical framework of its Alternative Rate Policy Statement.⁴² The Commission's main concern in granting an applicant the use of market-based rates for a service is the presence that the applicant has in the relevant marketplace. Simply put, if the applicant has market power over a service in the relevant marketplace, then the Commission will not permit it to charge market-based rates for that service.⁴³ The Commission will approve market-based rates for storage providers where the applicant has demonstrated it lacks market power⁴⁴ or has adopted conditions that significantly mitigate market power.⁴⁵ The Commission has approved requests to charge market-based rates for storage services based on a finding that the applicant of the proposed project would not be able to exercise market power due to small size, anticipated share of the market, and numerous competitors.⁴⁶

⁴¹ Cf. *Rover Pipeline LLC*, 161 FERC ¶ 61,244, at P 13 (2017) (denying a request for a blanket certificate where the company's actions had eroded the Commission's confidence it would comply with all the requirements of the blanket certificate program, including the environmental requirements).

⁴² *Alternatives to Traditional Cost-of-Serv. Ratemaking for Nat. Gas Pipelines*, 74 FERC ¶ 61,076, *reh'g denied*, 75 FERC ¶ 61,024 (1996), *petitions for review denied and dismissed sub nom. Burlington Res. Oil & Gas Co. v. FERC*, 172 F.3d 918 (D.C. Cir. 1998) (Alternative Rate Policy Statement), *criteria modified, Rate Regul. of Certain Nat. Gas Storage Facilities*, Order No. 678, FERC Stats. & Regs. ¶ 31,220 (cross-referenced at 115 FERC ¶ 61,343), *order on clarification and reh'g*, Order No. 678-A, 117 FERC ¶ 61,190 (2006).

⁴³ *Golden Triangle Storage, Inc.*, 152 FERC ¶ 61,158, at P 9 (2015).

⁴⁴ Market power is defined as the ability to profitably maintain prices above competitive levels for a significant period of time. Alternative Rate Policy Statement, 74 FERC at 61,230.

⁴⁵ Order No. 678, FERC Stats. & Regs. ¶ 31,220, *order on clarification and reh'g*, Order No. 678-A, 117 FERC ¶ 61,190.

⁴⁶ *Egan Hub Partners, L.P.*, 99 FERC ¶ 61,269 (2002); *Egan Hub Partners, L.P.*,

30. Pursuant to the Alternative Rate Policy Statement, the Commission has developed a framework to evaluate requests for market-based rates. This framework has two principal purposes: (1) to determine whether the applicant can withhold or restrict services and, as a result, increase price by a significant amount for a significant period of time; and (2) to determine whether the applicant can discriminate unduly in price or terms and conditions of service. To find that an applicant cannot withhold or restrict services, significantly increase prices over an extended period, or unduly discriminate, the Commission must find that either there is a lack of market power because customers have good alternatives,⁴⁷ or that the applicant or the Commission can mitigate the market power with specified conditions.

31. Consistent with the methodology provided by the Alternative Rate Policy Statement, our analysis of whether Black Bayou has the ability to exercise market power includes three major steps. First, we will review whether Black Bayou has specifically and fully defined the relevant markets to determine which specific products or services are identified, and the suppliers of the products and services that provide good alternatives to the applicant's ability to exercise market power.⁴⁸ As part of this step, we will also identify the relevant geographic market. Second, we will assess Black Bayou's market share and market concentration. We use market share and the Herfindahl-Hirschman Index (HHI) as screens to assess whether an applicant has the ability to exercise market power in defined product and geographic markets. However, HHI is just one factor we may evaluate.⁴⁹ The Alternative Rate Policy Statement recognizes that having a large market share in a concentrated market does not constitute market power if ease of entry and other

95 FERC ¶ 61,395 (2001); *Moss Bluff Hub Partners, L.P.*, 80 FERC ¶ 61,181 (1997); *Egan Hub Partners, L.P.*, 77 FERC ¶ 61,016 (1996).

⁴⁷ A "good alternative" is an alternative that is available soon enough, has a price that is low enough, and has a quality high enough to permit customers to substitute the alternative for an applicant's service. Alternative Rate Policy Statement, 74 FERC at 61,231.

⁴⁸ The relevant product market consists of the applicant's services and other services that are good alternatives to the applicant's services. *Id.*

⁴⁹ For example, the Commission has accepted an HHI of 1,800 as the threshold indicating the potential ability for an applicant to exercise market power. In cases where the HHI was higher than 1,800, the Commission has performed further review to determine whether other competitive factors nevertheless will prevent the applicant from being able to exercise market power. *See, e.g., UGI Storage Co.*, 133 FERC ¶ 61,073 (2010); *Arlington Storage Co., LLC*, 125 FERC ¶ 61,306 (2008); *Rendezvous Gas Servs., L.L.C.*, 112 FERC ¶ 61,141 (2005).

competitive factors can prevent the applicant from exercising significant market power.⁵⁰ Third and lastly, we will evaluate other relevant factors such as ease of entering the market.

32. Black Bayou requests authorization to charge market-based rates for its firm, interruptible, and no-notice storage and storage-related hub services (collectively, storage services)⁵¹ and its firm and interruptible wheeling services. In its application, Black Bayou

⁵⁰ In the Alternative Rate Policy Statement, the Commission stated that its consideration of a market-based rate proposal will include an examination of market concentration. Further, it explained that:

[t]o measure market concentration, one generally considers the summary measure of market concentration known as the Herfindahl-Hirschman Index (HHI). If the HHI is small then one can generally conclude that sellers cannot exercise market power in this market. A small HHI indicates that customers have sufficiently diverse sources of supply in this market that no one firm or group of firms acting together could profitably raise market price. If the HHI is higher then additional analysis may be needed to determine if the seller can exercise market power.

The Commission will analyze the HHI calculation for the relevant markets. The HHI will be evaluated for each relevant path and/or origin market and each destination market utilizing the relevant data for each mainline receipt point (origin market) and each delivery point (destination market). If an applicant wishes to argue for either a broader or narrower market definition, it should also include calculations for its market definitions. Only sales or capacity figures associated with good alternatives should be used in calculating the HHI. In addition, applicants should aggregate the capacity of affiliated companies into one estimate for those affiliates as a single seller.

Alternative Rate Policy Statement, 74 FERC at 61,234 (footnote omitted); *see also Golden Triangle*, 152 FERC ¶ 61,158 at P 11 & n.10.

⁵¹ *See Leak River Energy Ctr., LLC*, 125 FERC ¶ 61,131, at P 42 (2008) (finding that the applicant's market-based rate authority for storage services extends to variants of storage services, including parking and loaning services); *see also Rager Mountain Storage Co., LLC*, 152 FERC ¶ 61,098, at P 9 (2015) (finding that, because parking and lending are storage-related services, the applicant's market power study showing lack of

provided a market power study in support of its requests. We review Black Bayou's requests below.

a. Relevant Product and Geographic Markets

33. For its proposed storage and storage-related hub services, Black Bayou defines the relevant product market as interstate and intrastate underground natural gas storage facilities and pipelines, as well as local production in East Texas, Louisiana, and Mississippi.⁵² Black Bayou states that local production in East Texas, Louisiana, and Mississippi is the only non-storage alternative in this analysis, noting that the Commission has previously recognized such production as a good alternative for storage.⁵³ Black Bayou notes that local production that is sold in the relevant geographic market during a peak period can be considered readily available, both in terms of ease of acquiring gas supply and the ability for a shipper to transport these gas supplies.⁵⁴ Black Bayou further notes that the quality of the local production is identical to storage as both services provide an identical unit of natural gas at the same point in time, and that local production is price comparable to storage services.⁵⁵ For its proposed wheeling services, Black Bayou states these services are a substitute for pipeline interconnections to transfer gas from one pipeline to another.⁵⁶

market power with respect to storage also supports market-based rates for parking and lending services).

⁵² Market Power Study at 12.

⁵³ *Id.* at 14 (citing *Transcon. Gas Pipe Line Co., LLC*, 181 FERC ¶ 61,079, at P 23 (2022); *LA Storage, LLC*, 180 FERC ¶ 61,188, at PP 29-30 (2022); *Jefferson Island Storage & Hub, L.L.C.*, 175 FERC ¶ 61,074, at P 11 (2021); *Tenn. Gas Pipeline Co., L.L.C.*, 171 FERC ¶ 61,085, at P 17 (2020)).

⁵⁴ Black Bayou estimates the daily deliverability for local production in the Gulf Coast Production Area is 27,658,796 thousand cubic feet per day (Mcf/d) and asserts that local production is readily available to through the numerous interstate and intrastate pipelines that traverse the Gulf Coast Production Area. Market Power Study, Attachment 4 at 6-7.

⁵⁵ Market Power Study at 12-13.

⁵⁶ *Id.* at 21. *See infra* section III.C.1.b.ii for a discussion of Black Bayou's "bingo card" analysis which explains how pipeline interconnections are an appropriate alternative to Black Bayou's proposed wheeling services.

34. For all proposed services, Black Bayou defines the relevant geographic market as the Gulf Coast Production Area, which includes eastern Texas, Louisiana, Mississippi, and Alabama, noting that this geographic market has been previously accepted by the Commission in analyzing other storage projects in the area.⁵⁷ Black Bayou states that this geographic market is supported by a vast number of interconnected pipelines and a cluster of storage facilities.⁵⁸ Black Bayou asserts that this geographic scope is narrow, consistent with Commission precedent, because it does not include storage facilities in other nearby states, such as Arkansas, Oklahoma, and the west portion of Texas, even though those areas are very interconnected with the Gulf Coast Production Area.⁵⁹

35. We have reviewed the analyses provided by Black Bayou and find that its proposed product market, wherein local production is included as a competitive alternative to storage, is both reasonable and consistent with Commission precedent.⁶⁰ We also find Black Bayou's geographic market to be an appropriate geographic market, noting the Commission's policy that market areas should be defined as narrowly as possible.⁶¹

b. Market Share and Market Concentration

i. Firm, Interruptible, and No-Notice Storage Services

36. In its market power study, Black Bayou identifies a total of 67 underground natural gas storage facilities and hundreds of local producers that are interconnected to numerous pipelines in the geographic market.⁶² According to Black Bayou, within the Gulf Coast Production Area, Black Bayou will have a 0.6% market share for working gas

⁵⁷ *Id.* at 14 (citing *Gulf S. Pipeline Co., LP*, 168 FERC ¶ 61,034 (2019); *Tres Palacios Gas Storage Inc.*, 153 FERC ¶ 61,331 (2015); *Golden Triangle Storage, Inc.*, 152 FERC ¶ 61,158; *Leaf River Energy Ctr. LLC*, 142 FERC ¶ 62,233 (2013) et al.).

⁵⁸ Market Power Study, attach. 1 at Map 1B and Map 1C.

⁵⁹ *Id.* at 14-15.

⁶⁰ *See, e.g., LA Storage, LLC*, 180 FERC ¶ 61,188; *Spire Storage W. LLC*, 179 FERC ¶ 61,123.

⁶¹ *See, e.g., Petal Gas Storage, L.L.C.*, 97 FERC ¶ 61,097, at 61,520 (2001), *reh'g granted in part and denied in part*, 106 FERC ¶ 61,325 (2004), *rev'd on other grounds, Petal Gas Storage, L.L.C. v. FERC*, 496 F.3d 695 (D.C. Cir. 2007).

⁶² Market Power Study at 15.

capacity and a 2.7% market share for daily deliverability, indicating that Black Bayou cannot exercise market power acting alone.⁶³ Furthermore, Black Bayou contends that the corresponding HHI of 251 and 523 for working gas capacity and daily deliverability, respectively, are well below the Commission's 1,800 HHI threshold, indicating that Black Bayou acting together with other storage providers and local gas producers cannot exercise market power.⁶⁴

37. As set forth above, to determine whether additional scrutiny is needed, we examine concentration in the relevant market using HHI. The Alternative Rate Policy Statement states that an HHI of less than 1,800 indicates that sellers cannot exert market power because customers have sufficiently diverse alternatives in the relevant market.⁶⁵ If the HHI is above 1,800, we will give the applicant more scrutiny in order to determine a seller's ability to exercise market power in a more concentrated market.

38. Black Bayou has satisfactorily shown that, within the relevant market, its market share and market concentration demonstrate that it will lack market power in the provision of storage services. Black Bayou's analysis shows that it will have a small market share and its HHI numbers are substantially lower than 1,800, representing the effect of 67 underground natural gas storage facilities, as well as hundreds of local producers in the Gulf Coast Production Area. The HHIs of 251 and 523 for working gas capacity and daily deliverability, respectively, indicate that Black Bayou is less likely to be able to exert market power because customers have sufficiently diverse alternatives in the relevant market. Furthermore, as shown in the Market Power Study, Black Bayou's low market shares of 0.6% for working gas capacity and 2.7% for daily deliverability support the conclusion that it lacks market power in the Gulf Coast Production Area. For these reasons, we approve Black Bayou's request for authority to charge market-based rates for its proposed firm, interruptible, and no-notice storage services.

ii. Firm and Interruptible Wheeling Services

39. Black Bayou identified 22 hubs located within the Gulf Coast Production Area that offer wheeling services between three or more pipelines, including the proposed Black Bayou facilities. For its firm and interruptible wheeling services, Black Bayou

⁶³ Black Bayou states that the total working gas capacity and deliverability for the storage facilities and local producers in the Gulf Coast Production Area are 5,437,151,582 Mcf and 75,374,352 Mcf/day, respectively, and that the working gas capacity and daily deliverability of the Black Bayou facilities would be 34,720,000 Mcf and 2,000,000 Mcf/d, respectively. See Market Power Study, Attachment 2 at 2-3.

⁶⁴ Market Power Study at 16.

⁶⁵ Alternative Rate Policy Statement, 74 FERC at 61,235.

states it will have a market share of 5.3% with an associated HHI of 1,142 for receipt capacity and a 4.9% share with an associated HHI of 1,102 for delivery capacity, demonstrating that competition is sufficient to prevent Black Bayou from exercising market power acting alone or acting together with competing hubs.⁶⁶

40. In addition to the hub analysis, the Commission also uses a “bingo card” analysis to assess whether prospective customers of an applicant seeking market-based rate authority for wheeling services could obtain those same services from alternative providers. The Commission has relied upon the bingo card analysis to determine whether shippers can avoid the pipeline interconnections provided by the applicant by using alternative interconnections available between the pipelines that are directly or indirectly connected to the applicant.⁶⁷

41. Black Bayou’s “bingo card” analysis⁶⁸ identified all possible interconnects connected to Black Bayou’s proposed Header Pipelines and indicated where good alternatives exist.⁶⁹ Black Bayou states its bingo card is completely filled-in,⁷⁰ meaning that the pipelines that will be directly and indirectly interconnected to the Black Bayou Storage Project are also interconnected with each other in various other locations in close proximity to the project. This indicates that shippers can avoid the wheeling services on Black Bayou’s facilities and rely entirely on other pipeline interconnections currently available in the market if Black Bayou were to attempt to raise prices and exercise market power. For these reasons, we approve Black Bayou’s request for authority to charge market-based rates for its proposed firm and interruptible wheeling services.

⁶⁶ Market Power Study at 22-23. The total receipt and delivery capacity for the 22 hubs is 94,084 million cubic feet per day (MMcf/d) and 101,760 MMcf/d, respectively. *Id.* at 22.

⁶⁷ See *Leaf River Energy Ctr., LLC*, 125 FERC ¶ 61,131 at P 42 (explaining that “wheeling is a transportation service and the market power analysis for wheeling requires additional information such as a matrix, or ‘bingo card,’ identifying all pipeline interconnections and point alternatives and an analysis showing whether the [applicant’s] proposed wheeling service. . . can be bypassed.”).

⁶⁸ Black Bayou’s bingo card analysis is provided in Attachment 7 to the Market Power Study.

⁶⁹ Market Power Study at 24.

⁷⁰ *Id.*

c. **Other Relevant Factors Mitigating Potential Market Power**

42. Black Bayou asserts that the 67 storage facilities owned by various corporate entities in the Gulf Coast Production Area, as well as production owned by hundreds of small independent local producers, demonstrate a low barrier to market entry.⁷¹ In addition, Black Bayou is a new entity that does not have current customers for its proposed services, and its proposed storage and wheeling services will introduce entirely new capacity into the Gulf Coast Production Area.⁷² Consequently, it must compete for customers who are currently being served by alternative providers by offering services at an attractive price.⁷³ Black Bayou notes that the Commission has previously found that barriers to entry are likely to be low in the Gulf Coast Production Area.⁷⁴

43. Black Bayou also asserts that increased natural gas production in the United States is likely to provide additional competition to Black Bayou's proposed storage services, which would further decrease Black Bayou's market share and market concentration measures with regard to storage services.⁷⁵ It states that increased production can offset short-term price volatility during seasonal movements of natural gas prices, thus decreasing the value of storage (all things being equal).⁷⁶

44. Similarly, Black Bayou identified 22 hubs in the Gulf Coast Production Area that offer wheeling services from a large number of market participants, proving the ease of entry into the market.⁷⁷ By introducing new wheeling capacity in the region, Black Bayou and other market participants must compete for customers, further showing that Black Bayou lacks market concentration.

⁷¹ *Id.* at 17.

⁷² *Id.* at 18.

⁷³ *Id.* at 18-19.

⁷⁴ *Id.* (citing *Transcon.*, 181 FERC ¶ 61,079 at P 61; *Tenn. Gas Pipeline Co., L.L.C.*, 171 FERC ¶ 61,085 at P 22; *Gulf S. Pipeline Co., LP*, 168 FERC ¶ 61,034 at P 30; *Jefferson Island Storage & Hub, L.L.C.*, 163 FERC ¶ 61,049, at PP 13, 17 (2018)).

⁷⁵ Market Power Study at 17.

⁷⁶ *Id.*

⁷⁷ *Id.* at 26.

45. For the reasons discussed above, we find that Black Bayou's analysis demonstrates that its proposed storage facilities are in a highly competitive area where numerous storage service alternatives exist for potential customers. We also find that Black Bayou's analysis properly identifies good alternatives.

d. Change in Circumstances

46. We require that Black Bayou notify the Commission if future changes in circumstances significantly affect its present market power status, as required by the Commission's regulations.⁷⁸ Any event which would affect Black Bayou's ability to withhold or restrict services or increase its ability to discriminate unduly in price or terms of service must be reported to the Commission within 10 days of acquiring knowledge of any such changes. Failure to timely file a change in circumstance report or failure to comply with the reporting requirements would constitute a violation of the Commission's regulations. We also reserve the right to require an updated market power analysis at any time.⁷⁹

2. Requests for Waiver: Filing, Reporting, and Accounting Requirements

47. Black Bayou requests that the Commission waive certain accounting and reporting requirements. Specifically, Black Bayou asks that the Commission waive: (1) section 157.6(b)(8) (submission of cost and revenue data); (2) section 157.20(c)(3) (submission of post-construction cost data); (3) sections 157.14(a)(13), (14), (16), and (17) (exhibits relevant to cost-based rates); (4) Part 201 (accounting and reporting requirements); (5) sections 260.1 and 260.2 (related to cost-of-service rate structure, Form 2, and Form 2-A, except for information necessary for assessment of annual charges); (6) section 260.300 (quarterly financial reporting); (7) sections 284.10 and 284.7(e) (straight fixed-variable rate design methodology); and (8) section 157.14(a)(11) (total gas supply data).

48. We find that the cost-related information required by the cited regulations is not relevant in light of our authorization of market-based rates for Black Bayou's storage and hub services. Thus, consistent with the Commission's findings in previous orders,⁸⁰ we

⁷⁸ 18 C.F.R. § 284.504(b) (2024).

⁷⁹ *Golden Triangle*, 152 FERC ¶ 61,158 at P 24.

⁸⁰ See, e.g., *PetroLogistics Nat. Gas Storage, LLC*, 139 FERC ¶ 61,225, at P 31 (2012); *Golden Triangle Storage, Inc.*, 121 FERC ¶ 61,313, at P 36 (2007); *Port Barre Invs. L.L.C.*, 116 FERC ¶ 61,052, at PP 32-34 (2006); *Liberty Gas Storage, L.L.C.*, 113 FERC ¶ 61,247, at PP 54-55 (2005).

grant Black Bayou's requests for waiver of these accounting and reporting requirements. We clarify that these waivers do not cover the information necessary for the Commission's assessment of annual charges.⁸¹ Black Bayou is required to file page 520 of Form No. 2-A, reporting the gas volume information which is the basis for determining the Annual Charge Adjustment (ACA). Furthermore, these waivers are subject to revision in the event that the Commission finds cause to re-examine Black Bayou's market power status or market-based rates. In addition, we require Black Bayou to maintain records to separately identify the original cost and related depreciation on its facilities, and to maintain accounts and financial information of its facilities consistent with generally accepted accounting principles should the Commission require Black Bayou to produce those reports in the future.

3. Tariff Provisions

49. Black Bayou proposes to offer firm and interruptible storage and wheeling services on an open-access basis under the terms and conditions set forth in the *pro forma* tariff attached as Exhibit P to its application.⁸² We find that Black Bayou's proposed tariff generally complies with Part 284 of the regulations; however, certain provisions are discussed further below.

a. Segmentation

50. Section 284.7(d) of the Commission's regulations provides that an interstate pipeline must permit a shipper to make use of the firm capacity for which the shipper has contracted by segmenting that capacity into separate parts for the shipper's own use, or for the purpose of releasing that capacity to replacement shippers to the extent that segmentation is operationally feasible. Black Bayou requests waiver of the segmentation requirements in section 284.7(d), contending that segmentation is not feasible since it will not be offering stand-alone transportation services, but rather all transportation service will be provided as part of the storage/hub services offered.

51. We have found in several proceedings that the requirements of section 284.7(d) do not apply to companies engaged solely in natural gas storage and that do not provide

⁸¹ See *Wyckoff Gas Storage Co., LLC*, 105 FERC ¶ 61,027, at P 65 (2003).

⁸² On March 3, 2025, Black Bayou filed a revised Ex. P containing a new Firm Hourly Balancing Service and consolidating provision governing reservation charge crediting, as well as numerous housekeeping edits. Unless otherwise noted, we refer to this version of the tariff in the following sections.

stand-alone transportation services.⁸³ Since Black Bayou is such a storage provider, the requirements of section 284.7(d) do not apply to Black Bayou. Other tariff provisions related to segmentation, such as the allocation of primary point rights in segmented release and within-the-path scheduling, also do not apply to Black Bayou.

b. Acquisition of Off-System Capacity and Waiver of Shipper Must Have Title Policy

52. Black Bayou requests a generic waiver of the shipper must have title policy for any off-system capacity it may acquire in the future to enable it to use that capacity to transport natural gas owned by other parties in connection with its storage or hub services. Section 27 of the General Terms and Conditions (GT&C) of Black Bayou's *pro forma* tariff states that Black Bayou will only use such off-system capacity, and will only provide service to customers on the acquired capacity, pursuant to its open-access tariff and subject to its rates.

53. Black Bayou's off-system capacity statement implements the Commission's policy with respect to the acquisition of off-system capacity. In *TETCO*,⁸⁴ the Commission found that pipelines no longer need to obtain prior approval to acquire capacity on another pipeline, provided that the acquiring pipeline has filed tariff language specifying that it will only transport for others on off-system capacity pursuant to its tariff provisions and rates. Black Bayou's proposed tariff language is consistent with the requirements set forth in *TETCO*.

54. We accept Black Bayou's tariff language and grant waiver of the shipper must have title policy, with the following clarification. Because Black Bayou has proposed only to offer firm and interruptible storage and firm and interruptible wheeling services, and does not propose to offer any transportation services other than storage and wheeling services, Black Bayou may only use capacity obtained on other pipelines in order to render the services set forth in its tariff. That is, Black Bayou may not use capacity on other pipelines to transport gas which will not physically or contractually enter its storage facility unless and until it has received Commission authorization to provide such transportation services. Furthermore, Black Bayou's authorized use of the *TETCO*

⁸³ See, e.g., *Port Barre Invs. L.L.C.*, 116 FERC ¶ 61,052 at P 37; *Pine Prairie Energy Ctr., LLC*, 109 FERC ¶ 61,215, at P 44 (2004); *Egan Hub Partners, L.P.*, 98 FERC ¶ 61,284 (2002); *Clear Creek Gas Storage Co.*, 96 FERC ¶ 61,071 (2001).

⁸⁴ *Tex. E. Transmission Corp.*, 93 FERC ¶ 61,273 (2000), *reh'g denied*, 94 FERC ¶ 61,139 (2001) (*TETCO*).

waiver to provide storage service shall be limited to the geographic area covered by Black Bayou's Market Power Study.⁸⁵

55. In order to ensure that Black Bayou uses acquired off-system capacity in a manner consistent with its market-based rate authority and tariff provisions, and in order to satisfy our responsibility to monitor and prevent the exercise of market power, Black Bayou is directed to make, once it becomes operational, an annual informational filing on its provision of service using off-system capacity, as detailed below.

56. Within 30 days after its first full year of operation, and every year thereafter, Black Bayou is directed to file, for each acquisition of off-system capacity: (a) the name of the off-system provider; (b) the type, level, term and rate of service contracted for by Black Bayou; (c) a description of the geographic location-boundaries, receipt and delivery points, and segments comprising the capacity; (d) the operational purpose(s) for which the capacity is utilized; (e) a description of how the capacity is associated with specific transactions involving customers of Black Bayou; and (f) an identification of total volumes, by Black Bayou's rate schedule and customer, that Black Bayou has nominated on each off-system provider during the reporting period.

c. System Map

57. Section 154.106 of the Commission's regulations requires a company's tariff to include a uniform resource locator (URL), designating a location on the Internet at which the general public may display and download system maps.⁸⁶ GT&C section 3.0, Map of System, of Black Bayou's *pro forma* tariff does not include a URL to the map of its system and therefore does not comply with the Commission's regulations. Black Bayou is required to revise its tariff to provide URLs designating a location on its Internet website for publication of its system maps.

d. Gas Quality

58. In section 6.8 of the GT&C, Black Bayou sets forth its gas quality and interchangeability standards for natural gas on its system. On June 15, 2006, the Commission issued its *Policy Statement on Provisions Governing Natural Gas Quality and Interchangeability in Interstate Natural Gas Pipeline Company Tariffs*.⁸⁷ Paragraph 45 of the policy statement states that the Commission intends to apply its new policy on gas quality and interchangeability in its review of *pro forma* tariffs filed as part

⁸⁵ See *Starks Gas Storage, L.L.C.*, 111 FERC ¶ 61,105, at P 55 (2005).

⁸⁶ 18 C.F.R. § 154.106 (2024).

⁸⁷ *Nat. Gas Interchangeability*, 115 FERC ¶ 61,325 (2006).

of section 7(c) certificate applications. Specifically, paragraph 45 states that applicants: (1) should ensure that the Exhibit P *pro forma* tariff includes general terms and conditions addressing quality and interchangeability; (2) should include relevant information about the gas quality and interchangeability specifications of interconnecting pipelines and of the competing pipelines serving customers to be served directly by the new entrant as well as the relevant information about the gas supplies to be received by the new entrant for transportation or storage; and (3) must show how they derived gas quality and interchangeability specifications stated in the *pro forma* tariff.

59. In its initial application, Black Bayou failed to comply with parts (2) and (3) of the policy statement because its application did not include information about the gas quality and interchangeability specifications of interconnecting pipelines and of competing pipelines or information about how Black Bayou derived its gas quality specifications. In response to a December 19, 2024 data request, Black Bayou provided the gas quality specifications of the 10 pipelines with which Black Bayou intends to interconnect. Additionally, Black Bayou clarified that these specifications are materially the same as those proposed by Black Bayou in its *pro forma* tariff, which will allow for the interchange of gas with interconnecting pipelines. We find that Black Bayou's response meets the requirements of the policy statement and accept its proposed gas quality specifications.

e. **Force Majeure**

60. GT&C section 15.5 provides Black Bayou's proposed language governing the occurrences of *force majeure* events on the system. Black Bayou proposes that the term means any cause, whether of the kind enumerated in the GT&C section or otherwise, leading to the interruption of service that is not reasonably within the control of the company. Black Bayou goes on to list numerous examples of causes of interruptions, such as sabotage or storms. Nowhere does Black Bayou's *force majeure* definition include the requirement that such events must be unforeseen by the company. Therefore, Black Bayou is required to include the word "unexpected" into the definition of *force majeure*.⁸⁸

61. Additionally, Black Bayou's GT&C section 15.1(c) states:

For purposes of this GT&C 15.1(c), the term "PHMSA Event" will refer to any testing, repair, replacement, refurbishment, or maintenance activity including scheduled maintenance that is commenced prior to December 31, 2017, to comply with Section 60139(c) of Chapter 601 of Title 49, as added by section 23 of the Pipeline Safety, Regulatory Certainty and Job Creation Act of 2011 or

⁸⁸ *N. Baja Pipeline, LLC v. FERC*, 483 F.3d 819, 823 (D.C. Cir. 2007).

requirements issued by the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) pursuant to Section 60139(c).

62. As GT&C section 15.1(c) states, that PHMSA exception applies to activities commenced prior to December 31, 2017. Because Black Bayou is receiving its initial authorization for the Black Bayou Storage Project in 2025, this exception does not apply. Therefore, we direct Black Bayou to delete this provision when it submits its tariff.

f. Implementation of NAESB Standards

63. The Commission adopted, in Part 284 of its regulations, various standards for conducting business as promulgated by the North American Energy Standards Board (NAESB). These standards govern nominations, allocations, balancing, measurement, invoicing, capacity release, and mechanisms for electronic communication between pipelines and those with whom they do business. On November 22, 2024, the Commission updated its NAESB requirements in Order No. 587-AA⁸⁹ issued in Docket No. RM96-1-043. Black Bayou states that the proposed tariff provisions in GT&C section 6.20 implement the NAESB Wholesale Gas Quadrant’s (WGQ) Version 4.0 business practice standards (Version 4.0 Standards) that the Commission incorporated by reference in Order No. 587-AA.

64. Black Bayou requests an extension of time to implement certain Version 4.0 Standards⁹⁰ relating to various Electronic Data Interchange (EDI),⁹¹ Electronic Delivery Mechanism (EDM),⁹² and electronic transaction messaging (IET)⁹³ requirements until

⁸⁹ *Standards for Bus. Practices of Interstate Nat. Gas Pipelines*, Order No. 587-AA, 189 FERC ¶ 61,135 (2024).

⁹⁰ On March 3, 2025 and March 31, 2025, Black Bayou submitted supplemental filings reflecting revised *pro forma* tariff records and providing additional information regarding its requests for extension of time to implement certain Version 4.0 standards.

⁹¹ EDI standards require computer-to-computer electronic data interchange of information in files as mapped from the NAESB WGQ datasets and communicated between trading partners over the Internet using the NAESB Internet Electronic Transport (IET).

⁹² EDM standards relate to the use of the Internet for pertinent business practice and electronic communications.

⁹³ IET refers to electronic transaction messaging standards which, in concert with Quadrant-specific EDM (QEDM), enable NAESB parties to securely and reliably exchange transactions over the Internet.

after it receives a request from a shipper to implement EDI or send information via EDM. Black Bayou states that it does not use an EDI/EDM, that it has not received any requests to implement these mechanisms, and it does not anticipate any requests in the foreseeable future. Moreover, Black Bayou notes that the Commission has previously granted an extension of time to comply with these standards to interstate pipeline and storage service providers under circumstances where no such requests had been received or were expected.⁹⁴ For good cause shown, we grant Black Bayou an extension of time to comply with EDI, EDM, and IET requirements, as requested. The extension of time is limited to the NAESB WGQ Version 4.0 Standards promulgated by Order No. 587-AA,⁹⁵ and will be in effect until Black Bayou receives a request from a shipper to offer the EDI, EDM, and IET transactions or data via its website.

g. Annual Charge Adjustment

65. Black Bayou proposes to include references to the Commission's ACA in each of its respective rate statements. Section 154.402(b) of the Commission's regulations requires the filing of a separate tariff record addressing the ACA.⁹⁶ Black Bayou's tariff does not include a separate ACA tariff record. Therefore, we will require Black Bayou to file a separate tariff record addressing the ACA, consistent with section 154.402(b) of the Commission's regulations.

h. Transmission Provider Standards of Conduct

66. As referenced in GT&C section 6.32, Black Bayou requests waiver of the requirements set forth in Part 358 of the Commission's regulations. In Part 358 of its regulations, the Commission adopted new standards of conduct to ensure that transmission providers cannot extend their market power over transmission by giving energy affiliates unduly preferential treatment.⁹⁷ As set forth in section 358.3(a)(3) of the

⁹⁴ March 31 Supplemental Filing at 2 (citing *Pine Prairie Energy Ctr., LLC*, 120 FERC ¶ 61,198, at P 6 (2007); *E. Shore Nat. Gas Co.*, 154 FERC ¶ 61,250, at P 57 (2016); *E. Tenn. Nat. Gas, LLC*, 179 FERC ¶ 61,150 (2022)).

⁹⁵ See *B-R Pipeline Co.*, 128 FERC ¶ 61,126, at P 6 (2009) (each time the Commission adopts new versions of the standards, a pipeline seeking to retain an existing waiver must request a waiver of the new standards).

⁹⁶ Section 154.402 of the Commission's regulations states that a company may not recover the Commission's annual charge through an ACA charge until it pays the annual charge and records it in Account No. 928. 18 C.F.R. § 154.402 (2024).

⁹⁷ *Standards of Conduct for Transmission Providers*, Order No. 2004, 105 FERC ¶ 61,248 (2003), *order on reh'g*, Order No. 2004-A, April 107 FERC ¶ 61,032 (2004).

Commission's regulations, the Commission, in Order No. 2004-A, granted a request "to generically exempt from the definition of "Transmission Provider" natural gas storage providers authorized to charge market-based rates that are not interconnected with the jurisdictional facilities of any affiliated interstate natural gas pipeline, have no exclusive franchise area, no captive ratepayers and no market power."⁹⁸

67. Black Bayou states that it is not interconnected with affiliated "Transmission Providers." As a result, Black Bayou states that it qualifies for the exemption granted to natural gas storage providers. We find that Black Bayou is exempt from the transmission provider standards since it is not interconnected with any affiliated pipeline, has no captive ratepayers, and has been found to lack market power.

D. Engineering Review

68. The Commission reviews proposed natural gas facilities to ensure that their design is appropriate and technically sound. Staff's analysis of the Black Bayou Storage Project concluded that the proposed facilities are appropriately designed to support a maximum injection rate of 1.6 Bcf/d, and a maximum withdrawal rate of 2.0 Bcf/d.

69. Caverns 1, 2, 3, and 4 are each designed to store up to 8.7 Bcf of working gas and 4.5 of base gas, summing to a total storage capacity of 13.2 Bcf of natural gas. As a result, the Black Bayou Storage Project will have a total capacity of 52.7 Bcf, a working gas capacity of 34.7 Bcf, and a base gas capacity of 18.0 Bcf.

70. Staff's analysis confirms that Black Bayou's proposed cavern locations are within the design criteria established by Black Bayou and are confined to the salt formation. The maximum and minimum operating stabilized bottomhole pressures for each cavern corresponds to a maximum pressure gradient of 0.9 pounds per square inch per foot (psi/ft) and a minimum pressure gradient of 0.3 psi/ft, respectively.⁹⁹ Black Bayou must confirm the final maximum and minimum operating pressures for each cavern and file the final bottomhole pressures with the Commission for approval prior to placing each cavern into service.

71. Because salt deforms plastically in relatively short time frames, caverns will shrink over time. Large volume losses due to salt creep have occurred in natural gas storage caverns.¹⁰⁰ The Interstate Oil and Gas Compact Commission (IOGCC) states that

⁹⁸ 18 C.F.R. § 358.3(a)(3) (2024).

⁹⁹ The maximum and minimum operating stabilized bottomhole pressures are measured at the casing shoe of each well.

¹⁰⁰ Thomas, Robert and Gehle, Richard, A Brief History of Salt Cavern Use, Solution Mining Research Institute, 2000.

monitoring to demonstrate cavern stability and successful hydrodynamic containment should be carried out throughout the life of the facility.¹⁰¹ To mitigate these concerns, Engineering Condition 6 in Appendix A to this order requires Black Bayou to conduct sonar surveys to monitor each cavern's size and shape to ensure that salt creep does not potentially damage the integrity of the caverns, which may result in lost gas and reductions in storage capacity. The IOGCC states “[a]ll gaseous and/or liquid products injected into or withdrawn from the storage facility shall be metered using industry accepted standards. The measurements shall be counterchecked by product level measurement in the cavern (using the level versus volume curve).”¹⁰² Engineering Condition 7 in Appendix A to this order requires Black Bayou to file an annual inventory verification study to assist in identification of potential problems with the storage facility.

72. Based on Commission staff's analysis, we conclude that the proposed facilities' design is appropriate, and if constructed in accordance with Black Bayou's application and operated in compliance with the engineering conditions in Appendix A to this order, the facilities will maintain their operability, structural integrity, and adherence to their design criteria.

E. Environmental Analysis

73. On August 28, 2024, the Commission issued a *Notice of Scoping Period Requesting Comments on Environmental Issues for the Proposed Black Bayou Gas Storage Project, and Notice of Public Scoping Session* (Notice of Scoping). The Notice of Scoping was published in the *Federal Register*¹⁰³ and mailed to interested parties including federal, state, and local officials; agency representatives; environmental and public interest groups; Native American Tribes; local libraries and newspapers; and affected property owners. We received comments in response to the Notice of Scoping from one trade group, seven environmental groups, one landowner, and one local government agency.

74. On September 25, 2024, the Commission staff conducted a public scoping session in Vinton, Louisiana to provide the public with an opportunity to learn more about the project and comment on environmental issues that should be addressed in the

¹⁰¹ Hydrocarbon Storage in Mined Caverns: A Guide for State Regulators, Interstate Oil and Gas Compact Commission, 2000.

¹⁰² *Id.*

¹⁰³ 89 Fed. Reg. 72388 (Sept. 5, 2024).

environmental document. Thirteen individuals provided verbal comments on the project at the Commission's scoping session.¹⁰⁴

75. The primary issues raised during the scoping process included: purpose and need of the project; impacts on surface water; salt dome stability; Coastal Prairie habitat; fisheries; visual and recreational lands; air quality; groundwater contamination; nearby carbon sequestration; and benefits to local communities and landowners.

76. Pursuant to the National Environmental Policy Act of 1969 (NEPA),¹⁰⁵ Commission staff prepared an EA for Black Bayou's proposal, which was issued on April 18, 2025.¹⁰⁶ Notice of availability of the EA was published in the *Federal Register*¹⁰⁷ and established a 30-day comment period. The notice was mailed to interested parties including: federal, state, and local officials; agency representatives; environmental and public interest groups; Native American Tribes; local libraries and newspapers; and affected property owners. The analysis in the EA addresses geology, soils, water resources, wetlands, vegetation, fisheries, wildlife, threatened and endangered species, land use, recreation, visual resources, cultural resources, air quality, noise, safety, socioeconomics, cumulative impacts, including climate change, and alternatives. The EA addressed all environmental comments received during scoping and concluded that approval of the project would not constitute a major federal action significantly affecting the quality of the human environment.¹⁰⁸

¹⁰⁴ A transcript of the scoping session was entered into the public record in Docket No. CP24-494-000.

¹⁰⁵ 42 U.S.C. §§ 4321 *et seq.*, *see also* 18 C.F.R. pt. 380 (2024) (Commission's regulations implementing NEPA). The Council on Environmental Quality's (CEQ) final rule rescinding its NEPA regulations became effective on April 11, 2025. 90 Fed. Reg. 10610 (Feb. 25, 2025).

¹⁰⁶ For tracking purposes under NEPA, the unique identification number for documents relating to this environmental review is EAXX-019-20-000-1726746869.

¹⁰⁷ 90 Fed. Reg. 17252 (Apr. 24, 2025).

¹⁰⁸ EA at 78. Commission staff could not determine whether the impacts from GHG emissions attributable to the project would be significant or insignificant. *Id.* at 73-74; *see* 42 U.S.C. § 4336(b)(2) ("An agency shall prepare an environmental assessment with respect to a proposed agency action that does not have a reasonably foreseeable significant effect on the quality of the human environment, or if the significance of such effect is unknown . . ."). We note that NEPA does not require that the Commission formally label project-related GHG emissions as significant or insignificant. *See Citizens Action Coal. of Ind., Inc. v. FERC*, 125 F.4th 229, 241-242 (D.C. Cir. 2025) (holding that

77. Under NEPA, the Commission considers impacts on all potentially affected communities. Project activities that would affect local communities include construction and operation of the natural gas storage facility and header pipelines. The project would impact a total of 689 acres of land during construction, including about 291 acres of permanent impacts during operation.¹⁰⁹

78. As described in the EA, the project's potential impacts on local communities during construction include air quality and noise impacts,¹¹⁰ surface water impacts,¹¹¹ visual and recreational impacts from temporarily limiting access to recreational waterbodies,¹¹² and housing impacts,¹¹³ all of which would be less than significant throughout the 8 months of construction on the Header Pipelines and the 5 years of construction of the storage caverns. Similarly, the project's contribution to cumulative impacts with other projects would be less than significant.¹¹⁴ The EA recommended implementation of Black Bayou's proposed construction procedures and mitigation measures and Commission staff recommendations,¹¹⁵ which we have adopted as conditions in Appendix B of this order. Black Bayou has committed to several minimization and mitigation measures to reduce impacts related to construction dust and noise, such as using the horizontal directional drill (HDD) crossing method for select major waterbody crossings, limiting construction at minor and intermediate waterbody crossings to 24- or 48-hour duration, flagging work zones on recreational waterbodies, minimizing engine idling time for power equipment, using low-sulfur diesel fuel to reduce engine emissions, following the Project's Dust Control Management Plan,

“the absence of a ‘significance’ label does not violate NEPA, CEQ guidance, or FERC regulations”) (citing *Food & Water Watch v. FERC*, 104 F.4th 336, 346 (D.C. Cir. 2024) (*East 300*)); see also *Transcon. Gas Pipe Line Co.*, 187 FERC ¶ 61,200, at P 33 (2024) (applying *East 300* in the context of an EA).

¹⁰⁹ *Id.* at 6.

¹¹⁰ *Id.* at 51-60.

¹¹¹ *Id.* at 23-28.

¹¹² *Id.* at 44.

¹¹³ *Id.* at 46-47.

¹¹⁴ *Id.* at 68-74.

¹¹⁵ *Id.* at 78-82.

installing temporary noise barriers at well and HDD drill rig locations, and installing a silencer for blowdown events.

79. The operation of the gas storage facilities and compressor station will have less than significant impacts on local communities given the remote location of the aboveground facilities. Black Bayou would continue to implement relevant mitigation measures, such as blowdown silencers and emissions controls.¹¹⁶ The aboveground meter stations at interconnects along the Header Pipelines will not significantly impact local communities once construction activities are completed.

80. The Commission received comments on the EA from RESTORE on April 18 and May 19, 2025,¹¹⁷ and from Black Bayou on May 19, 2025.¹¹⁸ We address these comments below.

1. Preparation of an EA versus an EIS

81. RESTORE questions whether Commission staff should have prepared an Environmental Impact Statement (EIS), rather than an EA, for the project.¹¹⁹ NEPA requires a federal agency to prepare an EIS if the proposed action has a reasonably foreseeable significant impact on the quality of the human environment.¹²⁰ However, a federal agency may prepare an EA if the proposed action does not have a reasonably

¹¹⁶ *Id.* at 55.

¹¹⁷ Attached to its May 19, 2025 Comments, RESTORE included two comment letters it previously sent to the Louisiana Department of Energy and Natural Resources (Louisiana DENR) concerning the Black Bayou Storage Project's Coastal Use Permit application and the Hackberry Carbon Sequestration, LLC's Class VI Injection Well Permit application, respectively. To extent these comments are relevant to this proceeding, they are addressed herein.

¹¹⁸ Black Bayou's comments included updates regarding correspondence with other federal agencies and minor corrections to errata in the EA, such as quantities of acreage, pipeline lengths, correspondence with federal agencies regarding Essential Fisheries, and temporary construction facility locations. Commission staff concluded that the errata do not affect the conclusions presented in the EA, and we do not address them further in this order.

¹¹⁹ RESTORE May 19, 2025 Comments at 1.

¹²⁰ 42 U.S.C. § 4336(b)(1).

foreseeable significant effect on the quality of the human environment or if the significance of such effect is unknown.¹²¹

82. Here, Commission staff prepared an EA to determine whether the Black Bayou Storage Project would have a significant impact on the human environment and thus require the preparation of an EIS. The EA assessed the potential impacts of the project on a variety of resources, including impacts on land use, air quality, and noise, and determined that the construction and operation of the project would not constitute a major federal action significantly affecting the quality of the human environment.¹²² Accordingly, an EIS is not required.

2. Red Wolf

83. RESTORE notes that while the EA acknowledged RESTORE's previous statement that there may be a remnant pack of Red Wolves (*Canis rufus*) in the area due to the presence of wolf DNA in captured wild canines (*e.g.*, coyotes), the EA did not recommend any mitigation measures for the protection of the species and states that the applicant must "self-regulate" to ensure that the project does not harm the species.¹²³ As discussed in the EA, the Red Wolf is believed not to be present in the project area, and the U.S. Fish and Wildlife Service does not consider the Red Wolf to be a species of concern in the project area.¹²⁴ Further, the EA explains that the Red Wolf is highly mobile and, in the unlikely event any are present, would likely move away from project activities.¹²⁵ We agree.

3. Geologic Hazards

84. RESTORE challenges the adequacy of the stratigraphic information provided in the EA and its analysis of the potential collapse of the salt dome and subsidence at the surface level.¹²⁶ As described in the EA, Black Bayou commissioned a geomechanical

¹²¹ *Id.* § 4336(b)(2).

¹²² EA at 78.

¹²³ RESTORE May 19, 2025 Comments at 1.

¹²⁴ EA at 38-39.

¹²⁵ *Id.*

¹²⁶ RESTORE May 19, 2025 Comments at 2.

study¹²⁷ of the feasibility of constructing storage caverns in the Black Bayou salt dome.¹²⁸ The study concludes that, over a 30-year period of injection/withdrawal storage cycles, the 146-foot diameter caverns would close due to slow salt creep of the cavern walls at about 1.9 feet per year, for a total of loss in diameter of 57 feet after 30 years.¹²⁹ Further, Black Bayou has prepared and will implement a Subsidence Monitoring Plan, and will report the measured rates of subsidence to the Louisiana Department of Energy and Natural Resources (Louisiana DENR) annually.¹³⁰ In the event subsidence within the salt caverns is detected, Black Bayou will cease operations immediately and work with appropriate agencies, contractors, and other area operators to assess and respond to the situation.¹³¹ The EA concludes that potential ground subsidence will not significantly impact the proposed project.¹³² We agree.

4. Impacts from Groundwater Use during Construction

85. RESTORE comments that the Solution Mining Impacts section of the EA does not convincingly make the case that groundwater impacts summarized in a report included in Black Bayou's application overpredict groundwater drawdowns expected during project construction.¹³³ In particular, RESTORE notes that describing the regional aquifers¹³⁴ as "leaky"¹³⁵ suggests that Black Bayou's groundwater study may have underestimated the impact if there are additional impacts on the aquifer layers interconnected with the

¹²⁷ The geomechanical study was filed in the docket as Attachment A to Black Bayou's December 11, 2024 Response to Environmental Information Request #3. Stratigraphic information for the Black Bayou salt dome is provided in Table 3-1 of the study.

¹²⁸ EA at 17.

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ *Id.*

¹³² *Id.* at 17-18.

¹³³ RESTORE May 19, 2025 Comments at 2.

¹³⁴ An aquifer is a geologically isolated groundwater zone.

¹³⁵ A "leaky" aquifer is a partially isolated aquifer where some reduced groundwater flow crosses between shallower and deeper aquifers.

withdrawal aquifer.¹³⁶ RESTORE also comments that the EA did not address the potential adverse consequences that may result from the increased subsurface movement of fluids from the project's proposed nine freshwater supply wells and nine saltwater disposal wells.¹³⁷

86. While the EA acknowledges that Black Bayou's groundwater report may have overpredicted aquifer drawdown due to the effects of infiltration, leaky aquitards, and cross-formational flow, the EA's analysis of potential impacts on groundwater resources was based on the report's conservative estimate of aquifer drawdown without consideration of potential mitigating factors.¹³⁸ Further, we find that there is no evidence to support RESTORE's assertion that leakage between the regional aquifers suggests the project's impact on groundwater is underestimated. The groundwater study included calculations of the drawdown in groundwater levels with and without leakage from aquifer zones overlying the aquifer targeted as a source for groundwater.¹³⁹ Based on the calculations in Black Bayou's groundwater study the drawdown of groundwater levels at a radius of 25,000 feet would decrease by about 85% if the target aquifer were augmented by leakage from a shallower aquifer.¹⁴⁰ Finally, if impacts to other groundwater users are identified by groundwater monitoring data during project construction, Black Bayou will coordinate with Louisiana DENR to determine appropriate corrective actions.¹⁴¹

87. Based on the groundwater report's conservative estimate of aquifer drawdown resulting from groundwater withdrawal for the solution mining water supply, the EA explains that aquifer drawdown would be between 22 and 38 feet at a radius of 4.7 miles from the wells, and the drawdown would be negligible at a radius of about 22 miles.¹⁴² The EA concludes that if the freshwater supply wells and saltwater disposal wells are completed and groundwater is used as described in Black Bayou's application and

¹³⁶ RESTORE May 19, 2025 Comments at 2.

¹³⁷ *Id.* at 1-2.

¹³⁸ EA at 22. Black Bayou's groundwater report was included with its application in Appendix 2C to the Resource Report 2 (Groundwater Report).

¹³⁹ Resource Report 2 at 2-13.

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² EA at 22.

supplemental filings, including in accordance with Louisiana DENR's permit conditions, the impacts on geologic and groundwater resources would not be significant. We agree.

5. Intervals between Storage Caverns

88. RESTORE comments that the minimum 200-foot intervals between the project's proposed caverns and the minimum 300-foot intervals between the caverns and the edge of the salt dome described in the EA are less than the 700-foot interval that is advisable at the nearby Federal Strategic Petroleum Reserve.¹⁴³ As stated in the EA, Black Bayou's proposed caverns and affiliated cavern buffers meet or exceed the applicable federal and Louisiana regulations and guidance.¹⁴⁴ Furthermore, RESTORE does not provide any evidence to suggest that the Strategic Petroleum Reserve, which has different geologic conditions and operating parameters and stores a different amount and type of substance (i.e., fluid as opposed to gas), is analogous to the Black Bayou Storage Project. We are satisfied that Black Bayou's proposed intervals between the caverns and buffer will not result in significant impacts on the human environment.

6. Greenhouse Gas Emissions

89. RESTORE comments that the release of methane during "blowdowns" of natural gas at the project would contribute to global warming and negatively impact future generations.¹⁴⁵ As discussed in the EA, Black Bayou would conduct four blowdown events¹⁴⁶ per year at each of the compressor engines, two full compressor station blowdown events per year, and two blowdown events at the pipeline pig launcher and receiver sites per year.¹⁴⁷ The estimated potential methane emissions from these blowdown events is 43.14 tons per year (tpy) and is included in the total estimated potential carbon dioxide equivalent (CO₂e) emissions from project operations per year.¹⁴⁸

¹⁴³ RESTORE May 19, 2025 Comments at 2.

¹⁴⁴ EA at 17.

¹⁴⁵ RESTORE May 19, 2025 Comments at 2.

¹⁴⁶ A blowdown event is the process used to depressurize a station or unit and take it offline for maintenance, system testing, or an emergency. This involves closing the station or unit isolation valves and venting the gas within the system and associated piping to the atmosphere.

¹⁴⁷ EA at 53.

¹⁴⁸ *Id.* at Table 10.

The EA disclosed the GHG emissions associated with construction and operation of the project, and discussed potential impacts associated with climate change.¹⁴⁹

7. Cumulative Impacts Associated with the Hackberry Carbon Sequestration Project

90. RESTORE asserts that the EA did not consider the potential cumulative impacts of the Black Bayou Storage Project and the proposed Hackberry Carbon Sequestration Project (HCS Project) on groundwater and soil resources and the stability of the salt dome. Black Bayou's closest well is about 1.3 miles from the projected carbon dioxide (CO₂) plume for the HCS well and about 3 miles from the projected critical pressure zone of the HCS well. The planned HCS injection interval is in the same formation as that proposed for the Black Bayou saltwater disposal wells and there is likely to be some overlap of the zones of increased pressure from the two projects. However, the overlapping pressure fronts¹⁵⁰ will occur about 1.3 miles from the Black Bayou salt dome and about 2 miles from the proposed caverns for Black Bayou Storage Project. We conclude that the potential cumulative impacts associated with the HCS Project would not be significant.

91. RESTORE comments that soil liquefaction could result from vibrations associated with installation of the planned HCS injection well.¹⁵¹ The EA addressed soil liquefaction associated with seismic activity and concluded that the risk of soil liquefaction impacting the Black Bayou Storage Project facilities is not significant.¹⁵² Given the distance between the project and the planned HCS well and that the pressure front from the HCS well would not reach the project, Commission staff concludes that vibrations from CO₂ injection at the HCS well are unlikely to be strong enough to induce soil liquefaction at the project area. We agree.

8. Historic Preservation

92. On May 2, 2025, Black Bayou filed the Louisiana State Historic Preservation Office's (Louisiana SHPO) comments on the revised Phase I cultural resources survey

¹⁴⁹ *Id.* at 71-74.

¹⁵⁰ Pressure fronts are the limits of the zones of increased groundwater pressure induced by the injected fluids (saltwater at the Black Bayou site and CO₂ at the HCS site).

¹⁵¹ RESTORE May 19, 2025 Comments at 2.

¹⁵² EA at 16-17.

report.¹⁵³ Therefore, the EA's recommended environmental condition 14(a)(1), which required Black Bayou to file the Louisiana SHPO's comments on the revised Phase I survey, has been satisfied and Environmental Condition 14 in Appendix B to this order has been modified to reflect this change.

9. Environmental Analysis Conclusion

93. We have reviewed the information and analysis contained in the EA, as well as the other information in the record, regarding potential environmental effects of the project. We accept the environmental recommendations in the EA, as modified above, and are including them as conditions in Appendix B to this order. Based on the analysis in the EA, as supplemented or clarified herein,¹⁵⁴ we conclude that, if constructed and operated in accordance with Black Bayou Gas Storage, LLC's application and supplements, and in compliance with the environmental conditions in Appendix B to this order, our approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.¹⁵⁵

IV. Conclusion

94. We find that Black Bayou has demonstrated a need for the Black Bayou Storage Project, that the project will not have adverse impacts on existing customers, existing pipelines, or other storage providers and their existing customers, and will have minimal impacts on the interests of landowners and surrounding communities. We have analyzed the technical aspects of the project and conclude that it has been appropriately designed to achieve its intended purpose. Based on the discussion above, we find under section 7 of the NGA that the public convenience and necessity requires the approval of Black Bayou's Black Bayou Storage Project, subject to the conditions in this order.

95. 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. Only when satisfied that the applicant has complied with all applicable conditions will a notice to proceed with the activity to which the conditions are relevant be issued. We also note that the Commission has the authority to take whatever

¹⁵³ Black Bayou's May 2, 2025 Supplemental Filing.

¹⁵⁴ Although the analysis in the EA provides substantial evidence for our conclusions in this order, it is the order itself that serves as our record of decision. The order supersedes any inconsistent discussion in the EA.

¹⁵⁵ We are not making a significance determination regarding GHG impacts for the reasons discussed in *supra* note 108.

steps are necessary to ensure the protection of environmental resources during abandonment, 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.

96. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines 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.¹⁵⁶

97. 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) A certificate of public convenience and necessity is issued to Black Bayou authorizing it to construct and operate the Black Bayou Storage Project, as described and conditioned herein, and as more fully described in the application and subsequent filings by the applicant, including any commitments made therein.

(B) The certificate authority in Ordering Paragraph (A) is conditioned on Black Bayou's:

- (1) completion of the construction of the proposed facilities and making them available for service within five years of the date of this order, pursuant to section 157.20(b) of the Commission's regulations;
- (2) compliance with all applicable Commission regulations, particularly the general terms and conditions set forth in Parts 154, 157, and 284,

¹⁵⁶ See 15 U.S.C. § 717r(d) (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).

and paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations;

- (3) compliance with the environmental conditions in Appendix B of this order; and
- (4) compliance with the engineering conditions in Appendix A of this order.

(C) A blanket transportation certificate is issued to Black Bayou under Subpart G of Part 284 of the Commission's regulations.

(D) A blanket construction certificate is issued to Black Bayou under Subpart F of Part 157 of the Commission's regulations.

(E) Black Bayou's request to charge market-based rates for its firm, interruptible, and no-notice storage and hub services is approved.

(F) Black Bayou shall file a written statement affirming that it has executed firm contracts for the capacities and terms of service represented in the signed precedent agreement, prior to commencing construction.

(G) Black Bayou must notify the Commission, as required by section 284.504(b) of the Commission's regulations, if future changes in circumstances affect its market power status. Black Bayou must notify the Commission within 10 days of acquiring knowledge of any such changes. The notification must include a detailed description of the new facilities and their relationship to Black Bayou.

(H) Black Bayou is granted waiver of Commission regulations that are not applicable to storage providers with market-based rate authority, as discussed in this order.

(I) Black Bayou shall submit within 30 days after its first full year of operation, and every year thereafter, an annual informational filing regarding its provision of service using off-system capacity.

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(J) Black Bayou shall notify the Commission's environmental staff by telephone or e-mail of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Black Bayou. Black Bayou shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission.

(S E A L)

Carlos D. Clay,
Deputy Secretary.

Appendix A**Engineering Conditions**

This authorization includes the following conditions:

- (1) The following engineering conditions shall apply to the Black Bayou Storage Facility:
- (a) The total capacity of natural gas stored at the Black Bayou Storage Facility shall not exceed the certificated levels of 52.7 Bcf at 14.73 psia and 60 degrees Fahrenheit.
- (b) The total capacity for each cavern shall not exceed the certificated levels in the table below at 14.73 psia and 60 degrees Fahrenheit.

Cavern	Total Capacity, Bcf	Working Gas Capacity, Bcf	Base Gas Capacity, Bcf
1	13.2	8.7	4.5
2	13.2	8.7	4.5
3	13.2	8.7	4.5
4	13.2	8.7	4.5

- (c) The maximum gas storage shut-in stabilized pressure measured at the casing shoe and corresponding to a pressure gradient of 0.9 psi/ft shall be:

Cavern	Maximum Pressure, psia
1	3,150
2	3,150
3	3,150
4	3,150

- (d) The minimum gas storage shut-in stabilized pressure measured at the casing shoe and corresponding to a pressure gradient of 0.3 psi/ft shall be:

Cavern	Minimum Pressure, psia
1	1,050
2	1,050
3	1,050
4	1,050

- (e) The maximum injection rate of the Black Bayou Storage Facility shall be 1.6 Bcf/d.
 - (f) The maximum withdrawal rate of the Black Bayou Storage Facility shall be 2.0 Bcf/d.
- (2) The final storage operating parameters (total, working, and base capacities, maximum and minimum pressures, and maximum injection and withdrawal rates) for each cavern shall be determined after construction of each cavern (including data work papers to support the actual operating capacity determination). Black Bayou shall file with the Secretary of the Commission each caverns final storage operating parameters for approval before commencing natural gas storage operations.
 - (3) Black Bayou shall operate its facility in such manner as to prevent/minimize gas loss or migration.
 - (4) Black Bayou shall establish and maintain a subsidence network over the proposed new caverns storage area.
 - (5) Black Bayou shall periodically log Caverns 1, 2, 3, and 4 wells to check casing integrity.
 - (6) Black Bayou shall conduct sonar surveys of Caverns 1, 2, 3, and 4 every five years to:
 - (a) monitor their dimensions and shape, including the cavern roof,
 - (b) estimate pillar thickness between caverns throughout the storage operations, and
 - (c) file the results with the Commission. In the alternative, no less than 30 days before placing the cavern into service, Black Bayou may file with the Commission, for prior approval of the methodology, a detailed cavern integrity monitoring plan that is consistent with the intent of the sonar survey.
 - (7) Black Bayou shall conduct an annual inventory verification study for each cavern.
 - (8) Before commencing natural gas storage operations in each cavern, Black Bayou shall:

- (a) conduct Mechanical Integrity Tests (MIT) on each cavern, and file with the Secretary of the Commission the results of the MITs and confirmation from Louisiana Department of Natural Resources (LDNR) that the results meet LNDR's standards.
 - (b) File with the Secretary of the Commission/Provide a statement from the LNDR confirming compliance with LNDR's regulations prior to placing a cavern into service.
 - (c) File with the Secretary of the Commission confirming the placement of the casing shoe and construction of the cavern neck meet the design requirements submitted by Black Bayou for each cavern.
 - (d) File with the Secretary of the Commission the results of any new sonar surveys of Caverns 1, 2, 3, and 4, including plan view and cross-sections;
 - (e) File with the Secretary of the Commission copies of well logs including Neutron logs, Gamma Ray logs, Cement Bond and Caliper logs for Cavern Wells 1, 2, 3, and 4.
 - (f) File with the Secretary of the Commission a casing inspection base log or an equivalent survey or test obtained over the entire cased interval for the innermost string of Cavern Wells 1, 2, 3, and 4.
 - (g) File with the Secretary of the Commission copies of the latest interferences, tracer surveys, or other testing or analysis on the caverns, to verify the lack of communication between the caverns.
 - (h) File with the Secretary of the Commission, the volume of rubble at the base of each cavern, including the methodology for determining such volume; and
 - (i) File with the Secretary of the Commission, geological cross sections (when additional data is obtained) through the total project area showing all geologic units.
- (9) Twice annually, Black Bayou shall conduct a leak detection test during storage operations to determine the integrity of each cavern/wellbore, casing, and wellhead. In addition, Black Bayou shall file a report, with the Secretary of the Commission summarizing the results of these tests until one year after the operating capacities of Caverns 1, 2, 3, and 4 have reached the maximum defined in Engineering Condition (1)(a).

- (10) Black Bayou shall file with the Secretary of the Commission semi-annual reports (to coincide with the termination of the injection and withdrawal cycles) containing the following information in accordance with Section 157.214(c) of the Commission's regulations (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 cavern.
 - (b) the volume of natural gas and the shut-in wellhead pressures for each cavern at the end of the reporting period.
 - (c) the maximum daily injection and withdrawal rates experienced for each cavern during the reporting period, including the average working pressure on such maximum days taken at a central measuring point where the total volume injected or withdrawn is measured.
 - (d) the results of any tests performed to determine the actual size, configuration, or dimensions of the storage caverns.
 - (e) a discussion of current operating problems and conclusions.
 - (f) other data or reports which may aid the Commission in the evaluation of the storage project.
- (11) Black Bayou shall file the semi-annual reports in Engineering Condition 10 in accordance with section 157.214(c) of the Commission's regulations until one year after the storage inventory volume of each cavern has reached or closely approximates the maximum level defined in this order.
- (12) Black Bayou shall file its Integrity Monitoring Program for the Black Bayou Storage Facility consistent with the parameters outlined in American Petroleum Institute's (API) Recommended Practice (RP) 1170: Design and Operation of Solution-Mined Salt Caverns Used for Natural Gas Storage (as applicable).

Appendix B

Environmental Conditions

As recommended in the Environmental Assessment (EA), and modified herein, this authorization includes the following conditions:

1. Black Bayou Gas Storage, LLC (Black Bayou) shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the EA, unless modified by the Order. Black Bayou 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 environmental resources during construction and operation of the Project. This authority shall allow:
 - a. the modification of conditions of the Order;
 - b. stop-work authority; 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 impacts resulting from Project construction and operation.
3. **Prior to any construction**, Black Bayou shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EI), and contractor personnel would be informed of the EI's authority and have been or would be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, Black Bayou shall file with the Secretary any revised detailed

survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Order. All requests for modifications of environmental conditions of the Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Black Bayou's exercise of eminent domain authority granted under Natural Gas Act (NGA) section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Black Bayou's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas facilities to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. Black Bayou shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP, or the Director's designee, **before construction in or near that area.**

This requirement does not apply to extra workspace allowed by the Commission's *Upland Erosion Control, Revegetation, and Maintenance Plan* and/or minor field realignments per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
 - b. implementation of endangered, threatened, or special concern species mitigation measures;
 - c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **Within 60 days of the acceptance of the authorization and before construction begins**, Black Bayou shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP, or the Director's designee.

Black Bayou must file revisions to the plan as schedules change. The plan shall identify:

- a. how Black Bayou would implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by the Order;
 - b. how Black Bayou would incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to on-site construction and inspection personnel;
 - c. the number of EIs assigned, and how the company would ensure that sufficient personnel are available to implement the environmental mitigation;
 - d. company personnel, including EIs and contractors, who would receive copies of the appropriate material;
 - e. the location and dates of the environmental compliance training and instructions Black Bayou would give to all personnel involved with construction and restoration (initial and refresher training would be provided as the Project progresses and personnel change).
 - f. the company personnel (if known) and specific portion of Black Bayou's organization having responsibility for compliance;
 - g. the procedures (including use of contract penalties) Black Bayou would follow if non-compliance occurs; and
 - h. for each discrete facility, a Gantt or PERT chart (or similar Project scheduling diagram) and dates for:
 - (1) the completion of all required surveys and reports;
 - (2) the environmental compliance training of on-site personnel;
 - (3) the start of construction; and
 - (4) the start and completion of restoration.
7. Black Bayou shall employ at least one EI per construction spread. The EI(s) shall be:
- a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;

- c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;
 - d. a full-time position, separate from all other activity inspectors;
 - e. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
 - f. responsible for maintaining status reports.
8. Beginning with the filing of its Implementation Plan, Black Bayou shall file updated status reports with the Secretary on a **bi-weekly** basis during construction of the Header Pipelines and on a **monthly** basis during construction of the well pads and storage caverns, until all construction and restoration activities are complete. Upon request, these status reports would also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
 - a. an update on Black Bayou's efforts to obtain the necessary federal authorizations;
 - b. the construction status of the Project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - c. a listing of all problems encountered and each instance of non-compliance observed by the EI(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
 - d. a description of the corrective actions implemented in response to all instances of non-compliance;
 - e. the effectiveness of all corrective actions implemented;
 - f. a description of any landowner/resident complaints that may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and
 - g. copies of any correspondence received by Black Bayou from other federal, state, or local permitting agencies concerning instances of non-compliance, as well as Black Bayou's response.
9. Black Bayou must receive written authorization from the Director of OEP, or the Director's designee, **before commencing construction of any Project facilities.** To obtain such authorization, Black Bayou must file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).

10. Black Bayou must receive written authorization from the Director of OEP, or the Director's designee, **before placing the Project into service**. Such authorization would only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the Project are proceeding satisfactorily.
11. **Within 30 days of placing the authorized facilities in service**, Black Bayou shall file an affirmative statement with the Secretary, certified by a senior company official:
 - a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities would be consistent with all applicable conditions; or
 - b. identifying which of the conditions in the Order Black Bayou has complied with or would comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
12. Black Bayou **shall not begin construction activities until**:
 - a. FERC staff receives comments from the U.S. Fish and Wildlife Service (USFWS) regarding the effects of the proposed action on the West Indian manatee and the eastern black rail;
 - b. FERC staff completes section 7 of the Endangered Species Act consultation with the USFWS; and
 - c. Black Bayou has received written notification from the Director of OEP, or the Director's designee, that construction or mitigation measures may begin.
13. **Within 5 days of receipt of a water quality certification issued by the Louisiana Department of Environmental Quality**, Black Bayou shall file the complete certification, including all conditions. All conditions attached to the water quality certification constitute mandatory conditions of the Certificate Order. **Prior to construction**, Black Bayou shall file, for review and written approval of the Director of OEP, or the Director's designee, any revisions to its project design necessary to comply with the water quality certification conditions.
14. Black Bayou shall **not begin** construction of facilities and/or use of staging, storage, or temporary work areas and new or to-be-improved access roads **until**:
 - a. Black Bayou files with the Secretary any further required cultural resources survey report(s) or plan(s), and the state historic preservation office's comments on the report(s) and plan(s).

- b. The Advisory Council on Historic Preservation is afforded an opportunity to comment if historic properties would be adversely affected; and
- c. FERC staff reviews and the Director of OEP, or the Director's designee, approves the cultural resources reports and plans, and notifies Black Bayou in writing that treatment plans/mitigation measures (including archaeological data recovery) may be implemented and/or construction may proceed.

All materials filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "**CUI//PRIV - DO NOT RELEASE.**"

- 15. Black Bayou shall **not begin** construction activities **until** it files with the Secretary a copy of the determination of consistency with the Coastal Zone Management Plan issued by the Louisiana Department of Energy and Natural Resources.
- 16. **Prior to horizontal directional drill (HDD) construction at the Milepost 14.6 entry location**, Black Bayou shall file with the Secretary, for review and written approval by the Director of OEP, or the Director's designee, a HDD noise mitigation plan to reduce the projected noise level attributable to the proposed drilling operations at the noise sensitive areas (NSA) within 0.5 mile of the entry location. **During drilling operations**, Black Bayou shall implement the approved plan, monitor noise levels, document the noise levels in the construction status reports, and restrict the noise attributable to the drilling operations to no more than a day-night sound level (L_{dn}) of 55 decibels on the A-weighted scale (dBA) at the NSAs.
- 17. Black Bayou shall file a noise survey with the Secretary **no later than 60** days after placing the compressor station in service. If a full load condition noise survey is not possible, Black Bayou shall provide an interim survey at the maximum possible horsepower load and provide the full load survey **within 6 months**. If the noise attributable to the operation of the equipment at the compressor station under interim or full horsepower load conditions exceeds an L_{dn} of 55 dBA at any nearby NSA, Black Bayou shall file a report on what changes are needed and shall install additional noise controls to meet that level within 1 year of the in-service date. Black Bayou shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

Document Content (s)

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