

139 FERC ¶ 61,225
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Philip D. Moeller, John R. Norris,
and Cheryl A. LaFleur.

PetroLogistics Natural Gas Storage, LLC

Docket Nos. CP11-50-000
CP11-50-001

ORDER ISSUING CERTIFICATE

(Issued June 19, 2012)

1. On December 14, 2010, PetroLogistics Natural Gas Storage, LLC (PetroLogistics) filed an application, as amended on January 27, 2012, pursuant to section 7(c) of the Natural Gas Act (NGA) for authorization to construct and operate: (1) one new natural gas storage cavern; (2) a 13-mile, 30-inch diameter pipeline header; (3) two new electric driven compressor units; and (4) associated pipeline, measuring, and appurtenant facilities at its existing Choctaw Hub storage facility in Iberville Parish, Louisiana (Choctaw Hub Expansion Project). In addition, PetroLogistics requests continued authority to charge market-based rates for its proposed services, and waivers of certain filing, accounting, and reporting requirements applicable to storage providers proposing cost-based rates.

2. The Commission will grant the requested certificate authorizations, subject to the conditions described herein. The Commission will also grant PetroLogistics' request for continued market-based rate authority and its request for waivers, as more fully discussed and conditioned below.

I. Background

3. PetroLogistics, a wholly owned subsidiary of PetroLogistics Olefins (PL Olefins), is owner and operator of the Choctaw Hub.¹ The Choctaw Hub facility is a high-

¹ The Commission issued PetroLogistics a certificate of public convenience and necessity to construct and operate an interstate storage facility consisting of one cavern in 2008. *PetroLogistics Natural Gas Storage, LLC*, 122 FERC ¶ 61,193 (2008). In March

(continued...)

deliverability salt cavern natural gas storage facility located in Iberville Parish, Louisiana. The facility consists of two natural gas storage salt caverns totaling 23.7 billion cubic feet (Bcf) of capacity (15.9 Bcf working gas and 7.8 Bcf cushion gas); a 24-inch, 7.3-mile pipeline; a 16-inch, 5.83-mile pipeline; bi-directional metering and regulation sites; and a compressor station comprising two 10,000 horsepower (hp) electrically driven compressors. As currently authorized, the Choctaw Hub facility is capable of delivering natural gas at the rate of approximately 450 MMcf per day, and injecting gas at a rate of approximately 350 MMcf per day. PetroLogistics is authorized to charge market-based rates for firm and interruptible storage, hub, and wheeling services.

II. Proposal

A. Facilities

4. PetroLogistics proposes to acquire, modify, and operate a third natural gas storage cavern (Cavern 28) and incorporate it into its Choctaw Hub facility.² Cavern 28 is currently operated by PL Olefins in non-jurisdictional brine supply service. Once placed into natural gas storage service, Cavern 28 will have a total capacity of 15.6 Bcf, comprising 10.7 Bcf of working gas and 4.9 Bcf of cushion gas. The proposed project will increase the total capacity of the Choctaw Hub storage facility to 39.3 Bcf (26.6 Bcf working gas and 12.7 Bcf cushion gas).

5. PetroLogistics also proposes to construct one 12,000 hp electric-driven compressor unit and one 15,000 hp electric-driven compressor unit at its existing compressor station, which will increase the total station compression to 47,000 hp. PetroLogistics states the proposed compression will allow it to increase the maximum daily injection rate from 350 MMcf per day to 1,350 MMcf per day and the maximum daily withdrawal rate from 450 MMcf per day to 1,600 MMcf per day.

2010, the Commission authorized PetroLogistics to increase the capacity of its previously-authorized storage cavern at the Choctaw facility. *PetroLogistics Natural Gas Storage, LLC*, 130 FERC ¶ 62,273 (2010). In October 2010, the Commission authorized PetroLogistics to place a second, at the time non-jurisdictional, storage cavern (Cavern 24) into jurisdictional service as part of its Choctaw Hub facility and authorized an increase in maximum deliverability of the overall facility. *PetroLogistics Natural Gas Storage, LLC*, 133 FERC ¶ 62,074 (2010).

² PetroLogistics originally proposed to acquire and operate two new storage caverns, Caverns 28 and 102. In its amended application PetroLogistics states that the U.S. Department of Energy acquired Cavern 102 by eminent domain in December, 2011; therefore, PetroLogistics withdrew its proposal with respect to Cavern 102.

6. Additionally, PetroLogistics proposes to construct a new 13-mile, 30-inch pipeline header (Expansion Header) that will parallel the existing pipeline header. The Expansion Header will include interconnections with Florida Gas Transmission Company, LLC; CrossTex LIG Pipeline Company; Bridgeline Pipeline System; and Southern Natural Gas Company. PetroLogistics will also install taps on the Expansion Header to accommodate planned future interconnects with Gulf South Pipeline Company, Cypress Pipeline Company, and Enterprise Products Partners' Acadian Gas System. Lastly, PetroLogistics proposes to construct a 0.9-mile, 20-inch pipeline to connect the Expansion Header to an existing interconnect with Texas Eastern Transmission Company, LLC.

B. Open Season and Proposed Services

7. PetroLogistics states that it held an open season for the storage capacity associated with the proposed expansion from August 5, 2010, through August 31, 2010. PetroLogistics states that the open season resulted in bids equal to or in excess of the proposed capacity.³ PetroLogistics seeks reaffirmation of its authority to provide storage and hub services at market-based rates. The Commission granted PetroLogistics' initial request to charge market-based rates for its services in 2008⁴ and subsequently reaffirmed that authorization in connection with subsequent expansion projects.⁵

C. Requests for Waivers

8. Because it proposes to charge market-based rates, PetroLogistics requests waiver of the Commission's cost-based regulations at 18 C.F.R. which include: (1) sections 157.14(a)(13), (14), (16), and (17) (cost-based exhibits); (2) section 284.7(e) (reservation charge); (3) section 284.10 (straight fixed-variable rate design); (4) sections 260.1 and 260.2 and Part 201 (accounting and reporting requirements for cost-of-service rate structure, including Form 2A); (5) the reporting requirements in section 260.300; (6) 157.6(b)(8) (cost and revenue data for rates); and (7) 157.20 (c)(3) (construction cost statement).

³ PetroLogistics conducted its open season prior to filing its amendment on January 27, 2012. Therefore, PetroLogistics received bids equal to or in excess of the 18 Bcf of working gas capacity that was proposed in the original application which anticipated two new caverns.

⁴ See *PetroLogistics*, 122 FERC ¶ 61,193.

⁵ See *PetroLogistics*, 130 FERC ¶ 62,273; and *PetroLogistics*, 133 FERC ¶ 62,074.

III. Public Notice, Interventions, and Comments

9. Public notice of PetroLogistics' original application was published in the *Federal Register* on January 5, 2011 (76 Fed. Reg. 544). BG Energy Merchants, LLC and A. Wilbert's Sons, LLC filed timely, unopposed motions to intervene. Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.⁶

10. Public notice of PetroLogistics' amended application was published in the *Federal Register* on February 6, 2012 (77 Fed. Reg. 5788). No comments, protests, or motions to intervene were filed.

IV. Discussion

11. Because the proposed facilities will be used to transport natural gas in interstate commerce, subject to the jurisdiction of the Commission, the construction and operation of the facilities are subject to the requirements of subsections (c) and (e) of section 7 of the NGA.

A. Certificate Policy Statement

12. The Certificate Policy Statement provides guidance as to how the Commission will evaluate proposals for new construction.⁷ The Certificate Policy Statement established criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explained that in deciding whether to authorize the construction of major new natural gas facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to give appropriate consideration to 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.

13. Under this policy, the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without

⁶ 18 C.F.R. § 385.214(c) (2011).

⁷ *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *order on clarification*, 90 FERC ¶ 61,128, *order on clarification*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

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, or landowners and communities affected by the construction. 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.

14. As stated, the threshold requirement is that the applicant must be prepared to financially support the project without relying on subsidization from its existing customers. Here, PetroLogistics proposes to charge market-based rates and assumes the economic risks associated with the costs of the project's facilities to the extent that any new capacity is unsubscribed or revenues are not sufficient to recover costs. Accordingly, the Commission finds that PetroLogistics satisfies the threshold requirement of the Certificate Policy Statement.

15. There should be little or no adverse impact on existing customers or services; the proposal should provide PetroLogistics customers access to additional pipelines and markets. In addition, the Commission is satisfied that there should be minimal adverse impact on existing pipelines or storage providers, or their captive customers. The proposed storage project will be located in a competitive market and will serve new demand. We note that PetroLogistics states it received bids in excess of the proposed expansion capacity in response to its open season. Further, the proposed project will enhance storage options available to pipelines and their customers and, thus, will increase competitive alternatives. No pipeline or storage company in PetroLogistics' market area has protested its proposed project.

16. There should be minimal adverse impact on landowners associated with the development of this storage project. The cavern and the two new compressor units, as well as most of the expanded pipeline right-of way, are on land owned by PetroLogistics.⁸ No landowner has protested PetroLogistics' application.

17. Based on the indication of project benefits, and the lack of adverse impacts on existing customers, other pipelines and their captive customers, landowners or communities, the Commission finds consistent with the Certificate Policy Statement and

⁸ PetroLogistics is acquiring Cavern 28 from its parent, PL Olefins. Therefore, PetroLogistics will own all subsurface rights for the proposed project.

section 7 of the NGA, that the public convenience and necessity requires approval of the Choctaw Hub Expansion Project, subject to the conditions discussed below.

B. Market-Based Rates

18. As stated above, PetroLogistics requests authority to continue to charge market-based rates for its proposed firm and interruptible storage and hub services. Generally, the Commission evaluates requests to charge market-based rates for storage under the analytical framework of its Alternative Rate Policy Statement.⁹ The Commission's review of market-based rates under Alternative Rate Policy Statement has two principal purposes: (1) to determine whether the applicant can withhold or restrict services and, as a result, increase prices 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.¹⁰ To find that an applicant cannot withhold or restrict services, significantly increase prices over an extended period, or discriminate unduly, the Commission must find that there is a lack of market power¹¹ because customers have good alternatives¹² or that the applicant or Commission can mitigate the market power with specified conditions.

⁹ *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines*, 74 FERC ¶ 61,076, at 61,230 (1996), *reh'g and clarification denied*, 75 FERC ¶ 61,024 (1996), *petitions for review denied sub nom.*, *Burlington Resources Oil & Gas Co. v. FERC*, 172 F.3d 918 (D.C. Cir. 1998) (Alternative Rate Policy Statement); *criteria modified, Rate Regulation of Certain Natural Gas Storage Facilities*, Order No. 678, FERC Stats. & Regs., Regulations Preambles 2006-2007 ¶ 31,220, Order No. 678-A, *order on clarification and reh'g*, 117 FERC ¶ 61,190 (2006).

¹⁰ *See Blue Sky Gas Storage, LLC*, 129 FERC ¶ 61,210; *Orbit Gas Storage, Inc.*, 126 FERC ¶ 61,095 (2009).

¹¹ The Commission defines "market power" as "the ability of a pipeline to profitably maintain prices above competitive levels for a significant period of time." *See* Alternative Rate Policy Statement, 74 FERC at 61,230.

¹² A "good alternative" is an alternative to the proposed project 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. *See* Alternative Rate Policy Statement, 74 FERC at 61,230.

19. The Commission's analysis of whether an applicant has the ability to exercise market power includes three major steps. First, the Commission reviews whether the applicant has specifically and fully defined the relevant markets¹³ 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.¹⁴ Additionally, as part of the first step, the applicant must identify the relevant geographic market.¹⁵ Second, the Commission measures an applicant's market share and market concentration.¹⁶ Third, the Commission evaluates other relevant factors, such as ease of entering the market.

1. Market-Based Rates for Storage Services

20. PetroLogistics provided a market power analysis and market power data to support its claim that with the inclusion of new capacity and deliverability it does not possess market power over storage and hub services offered in the relevant geographic market.¹⁷ PetroLogistics' market power analysis for storage and hub services defines the relevant product and geographic markets, measures market share and concentration, and evaluates other factors including the ease of entry into the relevant market. PetroLogistics concludes that because it will have a small market share in a large natural gas producing region, it would be extremely difficult for PetroLogistics to exercise market power in its provision of storage and hub services.

¹³ "Relevant product market" consists of the applicant's service and other services that are good alternatives to the applicant's services. *See* Alternative Rate Policy Statement, 74 FERC at 61,231.

¹⁴ Alternative Rate Policy Statement, 74 FERC at 61,231.

¹⁵ *Id.* at 61,232-34.

¹⁶ *Id.* at 61,234.

¹⁷ *See* Exhibit I to the Application. In addition, PetroLogistics provided an updated market power study to reflect the fact that it will no longer acquire Cavern 102. *See* Exhibit I to the Amended Application.

a. Market Definitions

21. In its market power study,¹⁸ PetroLogistics defines the relevant geographic market as the Gulf Coast Supply Region, which consists of Louisiana, where the PetroLogistics facility is located, and Mississippi, Alabama, and portions of East and South Texas.

22. For purposes of its analysis, PetroLogistics defines the product market as underground natural gas storage.

b. Market Concentration, Market Share, and Other Factors

23. The Commission examines concentration in the relevant market using the Herfindahl-Hirschman Index (HHI). The Alternative Rate Policy Statement states that a low HHI, generally less than 1,800, indicates that sellers cannot exert market power because customers have sufficiently diverse alternatives in the relevant market.¹⁹ If the HHI is above 1,800, the Commission will give the applicant more scrutiny in order to make a determination about a seller's ability to exercise market power because the market is more concentrated. The Commission also considers an applicant's market share and other factors including ease of entry.

24. PetroLogistics' market power study includes 90 natural gas storage facilities, including the Choctaw Hub Expansion Project, with a total working gas capacity of approximately 1.29 Tcf and an aggregate daily deliverability of 48,068 MMcf per day. PetroLogistics' market power analysis generates a market share of 2.1 percent and a HHI of 548 for working gas capacity and a market share of 3.3 percent and a HHI of 531 for maximum daily withdrawal capacity.

c. Commission Determination

25. We conclude that numerous storage alternatives to PetroLogistics' proposed services exist in the relevant market that will prevent the exercise of market power. The HHI for working gas capacity and deliverability in the Gulf Coast Market are 548 and 531, respectively, well below the 1,800 HHI threshold level the Commission uses to determine the presence of market power. In addition, the prospective market shares of 2.1 percent for working gas capacity and 3.3 percent for deliverability are small, which

¹⁸ See Application, Exhibit I, Attachment 4.

¹⁹ Alternative Rate Policy Statement, 74 FERC at 61,235.

further supports a finding that PetroLogistics will lack market power over its proposed storage services. The Commission also notes that PetroLogistics' proposal for market-based rates is unopposed and that barriers to entry are likely to be low in the relevant geographic regions as evidenced by the number of new storage projects that have been authorized. In view of the above considerations, we will grant PetroLogistics' request continue to charge market-based rates for its proposed storage and hub services.

2. Market-Based Rates for Interruptible Hub Services

26. The Commission uses a bingo card analysis to assess whether prospective customers of an applicant seeking market-based rate authority for hub and market center 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 utilizing alternative interconnections available between the pipelines that are directly or indirectly connected to the applicant.

27. The Commission previously authorized PetroLogistics to charge market-based rates for interruptible hub services in the certificate order authorizing its Cavern 24 Facilities²⁰ and its Cavern 24 Expansion Project.²¹ PetroLogistics requests that the Commission reaffirm its finding that PetroLogistics lacks market power as to interruptible hub services, which will include wheeling, transportation, parking and loaning, balancing, overrun and imbalance trading, peaking and title transfer services, based on the bingo card analysis provided in the instant filing.

28. As noted by PetroLogistics, we have previously authorized PetroLogistics to charge market-based rates for interruptible hub services. PetroLogistics' analysis shows that there are a number of alternative providers of hub services available to shippers desiring hub services in the Gulf Coast Market Region. Including PetroLogistics, there are 23 market centers, hubs and headers operating in the Gulf Coast Market Region, with interconnections to numerous interstate and intrastate pipelines. The market power study provided by PetroLogistics shows that its market share for hub delivery capacity at alternative hubs and market centers in the Gulf Coast Market is 4.3 percent and its market share for receipt capacity is 4.5 percent. The HHIs of 594 for delivery capacity and 599 for receipt capacity are both below the 1,800 level set forth in the Alternative Rate Policy Statement. The market power study also shows that ample competitive alternatives exist to PetroLogistics' interruptible hub and hub services and that there are alternative

²⁰ See *PetroLogistics*, 122 FERC ¶ 61,193.

²¹ See *PetroLogistics*, 133 FERC ¶ 62,074.

interconnection paths for the flow of gas among the pipelines with which the PetroLogistics facility will interconnect. We find that the bingo card analysis provided by PetroLogistics indicates that it will lack market power over its proposed hub services. Thus, we will reaffirm PetroLogistics' authority to charge market-based rates for its interruptible hub services.

3. Notification of Changed Circumstances

29. As required by section 284.504(b) of the Commission's regulations,²² PetroLogistics must notify the Commission of future circumstances that may significantly affect its market power status. Thus, our approval of continued market-based rate authority is subject to re-examination in the event that: (a) PetroLogistics adds storage capacity beyond the capacity authorized in this order; (b) an affiliate increases storage capacity; (c) an affiliate links storage facilities to PetroLogistics Energy Center; or (d) PetroLogistics or an affiliate acquires an interest in, or is acquired by, an interstate pipeline connected to PetroLogistics Energy Center. Because these circumstances could affect its market power status, PetroLogistics must notify the Commission within ten days of acquiring knowledge of any such changes. The notification shall include a detailed description of the new facilities and their relationship to PetroLogistics.²³

C. Open Season

30. In *Pine Prairie Energy Center, LLC*,²⁴ the Commission clarified its policy with regard to open seasons for natural gas pipeline (including storage) projects. In that proceeding, the Commission conditioned its authorization of Pine Prairie's proposed storage expansion to require Pine Prairie Energy Center to hold a new open season for the expansion capacity it was proposing to add at its existing natural gas storage facility in order to solicit capacity turn-back offers. On March 7, 2011, PetroLogistics responded to a data request from the Commission's staff and stated that it had not solicited offers for turn-back capacity during its open season. Accordingly, so that PetroLogistics might comply with the Commission's open-season policy, we will direct PetroLogistics to hold a new open season for the proposed additional capacity, solicit permanent capacity turn-

²² 18 C.F.R. § 284.504(b) (2011).

²³ See, e.g., *Copiah County Storage Co.*, 99 FERC ¶ 61,316 (2002); *Egan Hub Partners, L.P.*, 99 FERC ¶ 61,269 (2002).

²⁴ 135 FERC ¶ 61,168 (2011), *order on reh'g and compliance*, 137 FERC ¶ 61,060 (2011).

back offers, and submit the results of its efforts to the Commission within 30 days of the close of the open season.

D. Waivers of Filing, Reporting and Accounting Requirements

31. As stated above, PetroLogistics requests waiver of the Commission's cost-based regulations. We find the cost-related information required by these regulations is not relevant in light of our approval of market-based rates for PetroLogistics' storage and hub services. Thus, consistent with our findings in previous orders,²⁵ we will grant PetroLogistics' request for waivers, except for the information necessary for the Commission's assessment of annual charges.²⁶ PetroLogistics is required to file page 520 of Form No. 2-A, reporting the gas volume information which is the basis for imposing an Annual Charge Adjustment charge. However, these waivers are subject to revision in the event that the Commission finds cause to re-examine PetroLogistics' market power or market-based rates. In addition, the Commission will require PetroLogistics 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 PetroLogistics to produce those reports in the future.

E. Engineering Review

32. The Commission staff completed an engineering analysis of the proposed facilities, including the design capacity. The Commission concludes that the facilities are properly designed to provide a total of 15.6 Bcf of total capacity, comprising of 10.7 Bcf of working gas and 4.9 Bcf of base gas, with withdrawal capability of up to 1,600 MMcf per day. The Commission further concludes that the geological and engineering parameters for the proposed underground salt cavern gas storage facilities are well defined, and that the cavern locations are well within the design criteria and confinement of the salt formation.

33. However, because salt changes shape in response to pressure in a relatively short time, caverns will shrink over time. As stated in *A Brief History of Salt Cavern Use*,

²⁵ See, e.g., *SG Resources Mississippi, L.L.C.*, 118 FERC ¶ 61,252, at P 29 (2007); *Port Barre Investments, L.L.C. d/b/a Bobcat Gas Storage*, 116 FERC ¶ 61,052 (2006); *Liberty Gas Storage, L.L.C.*, 113 FERC ¶ 61,247, at P 54 (2005).

²⁶ See *Wykcoff Gas Storage Co., LLC*, 105 FERC ¶ 61,027, at P 65 (2003).

large volume losses due to salt creep have occurred in natural gas storage caverns.²⁷ Further, the Interstate Oil and Gas Compact Commission's *Hydrocarbon Storage in Mined Caverns Report* (IOGCC Report) states that monitoring to demonstrate cavern stability and successful hydrodynamic containment should be carried out throughout the life of the facility.²⁸ In order to mitigate these concerns, the Commission will require PetroLogistics to conduct, every five years, sonar surveys or other approved plans to monitor the caverns' size and shape to ensure that salt creep does not damage the integrity of the cavern or result in lost gas or reductions in storage capacity.

34. Further, the IOGCC Report states "[a]ll gaseous and/or liquid products injected into or withdrawn from the storage facility shall be metered using industry accepted standards. The measurement shall be counterchecked by using product level measurement in the cavern (using the level versus volume curve)."²⁹ Accordingly, the Commission will require PetroLogistics to file annually an inventory verification study to assist in identification of potential problems with the storage facility. PetroLogistics shall comply with the engineering conditions listed in Appendix A of this order.

F. Environmental Review

35. On January 25, 2011, the Commission issued a Notice of Intent to Prepare an Environmental Assessment for the Proposed Choctaw Hub Expansion Project and Request for Comments on Environmental Issues (NOI). The NOI was sent to affected landowners; federal, state, and local government agencies; elected officials; an environmental group; a Native American tribe; other interested parties; and local libraries and newspapers.

36. We received comments in response to the NOI from the U.S. Fish and Wildlife Service (FWS), the Louisiana Department of Wildlife and Fisheries (LDWF), the Iberville Parish Council (Iberville Council), and one interested individual, Jean Public. The primary issues raised by the comments concern the potential impacts on forested wetlands and the clearing of migratory bird habitats for the compressor station site. Also, Jean Public commented on the need for an environmental impact statement (EIS) instead of an environmental assessment (EA).

²⁷ Thomas, Robert and Gehle, Richard, *A Brief History of Salt Cavern Use*, Solution Mining Research Institute, 2000.

²⁸ *Hydrocarbon Storage in Mined Caverns, A Guide for State Regulators*, Interstate Oil and Gas Compact Commission, 2000.

²⁹ *Id.*

37. To satisfy the requirements of the National Environmental Policy Act (NEPA), our staff prepared an EA for PetroLogistics' proposal. The EA was prepared with the cooperation of the U.S. Army Corps of Engineers (USACE). The EA addresses geology, soils, water resources, wetlands, vegetation, fisheries, wildlife, threatened and endangered species, land use, cultural resources, air quality, noise, safety, cumulative impacts, and alternatives. All substantive comments received in response to the NOI were addressed in the EA.

38. The EA addresses the scoping concerns of the Iberville Council, LDWF and FWS regarding the need to protect waterbodies and wetlands from soil erosion, sedimentation and loss of vegetation. As stated in the EA,³⁰ PetroLogistics will minimize impacts on waterbodies by crossing 16 of the 17 waterbodies using either the horizontal directional drill (HDD) or boring method. By using these methods, PetroLogistics will minimally impact water quality, vegetation, and fish and wildlife habitat along the proposed pipelines. The EA describes how the impacts on waterbodies and wetlands will be minimized by use of PetroLogistics' Wetland and Waterbody Construction and Mitigation Procedures (Procedures). The EA concludes that the use of the HDD or boring method to cross almost all of the waterbodies and wetlands, along with use of other construction methods and mitigation measures contained within PetroLogistics' Procedures will result in minor and temporary impacts on soils, water quality and vegetation associated with the project's waterbodies and wetlands.

39. The FWS requested that PetroLogistics place above-ground facilities, mainly the compressor station, outside of wetlands or appropriately justify the instances where the placement of facilities in wetlands cannot be avoided. After evaluating two alternative sites, the EA concluded that the compressor station expansion site is the most practicable alternative environmentally and economically.³¹ The EA also discusses how the size of the compressor station's footprint within forested wetlands was substantially modified and reduced from approximately 17 acres to 7.65 acres.³² Additionally, the EA concludes that temporary and permanent impacts on wetlands resulting from constructing and operating the compressor station expansion was minimized to the extent practicable and that wetlands impacts may be further mitigated through the USACE permitting process.

³⁰ EA at 6 and 27.

³¹ EA at 49.

³² EA at 22.

40. The LDWF and FWS requested that PetroLogistics carry out any required clearing of forested vegetation at the compressor station site during the fall and winter to avoid the nesting of migratory birds, specifically nesting songbirds. The EA discusses migratory birds and concludes that a specific tree-clearing restriction at the compressor station expansion site is warranted.³³ We agree, and Environmental Condition 12 attached to this order reflects this determination.

41. Regarding the scoping comment made by Jean Public asking for preparation of an EIS, the EA concluded that the environmental impacts disclosed in section B of the EA did not identify any impacts on the resources that are considered significant. The Council on Environmental Quality (CEQ) regulations implementing NEPA state that one of the purposes of the EA is to assist agencies in determining whether to prepare an EIS or a finding of no significant impact. Here, Commission staff prepared an EA to determine whether the Choctaw Hub Expansion Project would have significant impact, thus necessitating the preparation of an EIS. As explained below, the EA concludes, and we agree, that the project would not constitute a major federal action significantly affecting the quality of the human environment.³⁴ Therefore, an EIS is not required.³⁵

42. The EA was issued for a 30-day comment period and placed into the public record on March 16, 2012. The Commission received comments on the EA from the National Park Service (NPS), the LDWF, and the U.S. Environmental Protection Agency (EPA) Region 6. The NPS letter stated that it had no comments at this time.

43. In its comments on the EA, the LDWF requested the Commission require PetroLogistics to develop a fish and wildlife mitigation plan. However, we concur with the EA's findings that the pipeline installation will result in no significant impacts on waterbody and wetland habitat given the extensive use of drilled crossing methods.³⁶

³³ EA at 26.

³⁴ EA at 4-1. Under 40 C.F.R. § 1508.18 of the CEQ's regulations, "a 'major federal action' includes actions with effects that may be major and which are potentially subject to Federal control and responsibility. Major reinforces but does not have a meaning independent of significantly. (Sec. 1508.27)." "Significantly" requires consideration of both the context and intensity of the project. *See* 40 C.F.R. § 1508.27 (2011).

³⁵ CEQ regulations state that, where an EA concludes in a finding of no significant impact, an agency may proceed without preparing an EIS. *See* 40 C.F.R. §§ 1501.4(e), 1508.13 (2011).

³⁶ EA at 6, 18, 20, and 23.

Therefore, we believe that further mitigation efforts for the project's fish and wildlife impacts are not necessary.

44. EPA Region 6 commented on the EA and requested additional information about consultation efforts and waterbody crossing methods, and made suggestions on several environmental issues. EPA inquired whether or not coordination had occurred with the Natural Resource Conservation Service (NRCS) in considering impacts on prime farmland soils. The EA states that virtually all of the prime farmland soils impacted by the project occur within existing cultivated sugar cane and hay fields that will be returned to cultivation after construction.³⁷ We also note the NOI and EA were sent to the National Environmental Coordinator of the NRCS and we received no comment.

45. EPA Region 6 also requested a definition of an HDD "frac-out" and information about how any frac-out would be contained or remediated/mitigated. As described in the EA, frac-outs are instances of drilling fluids (typically comprised of water and clay) reaching the ground surface along some portion of the drill path. PetroLogistics' HDD Plan contains response measures it will implement in the event of a frac-out, including work stoppage, containment of fluid, cleanup, and notification of the LDWF. The EA states where the HDD Plan can be found in the project's record.³⁸ This plan was reviewed by Commission staff, and the EA concluded that it is sufficient.³⁹

46. Additionally, EPA Region 6 requested an explanation of the use of a conventional bore instead of an HDD to cross the waterbody located at Station Number 21+77, on the 30-inch, 0.67-mile pipeline connecting to Cavern 28. As described in the EA, this waterbody is a small, unnamed canal that is 50-feet wide and has limited use by aquatic life and wildlife. The use of a conventional bore at this location is acceptable because, similar to an HDD, there would be no in-stream work, and minimal work space is required. An HDD at this location would likely require more work space and would not offer any environmental advantage over a conventional bore.

47. Based on the analysis in the EA and in this order, we conclude that if constructed and operated in accordance with PetroLogistics' application and supplements, and in compliance with the environmental conditions in the Appendix to this order, our approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

³⁷ EA at 17.

³⁸ EA at 6.

³⁹ EA at 27.

48. 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.⁴⁰

V. Conclusion

49. The Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application, as supplemented, and exhibits thereto, submitted in support of the authorizations sought herein, and upon consideration of the record,

The Commission orders:

(A) A certificate of public convenience and necessity is issued to PetroLogistics under section 7 of the NGA to construct and operate the proposed facilities, as described herein and in the application and amendment.

(B) The authorization issued in Ordering Paragraph (A) is conditioned on PetroLogistics' compliance with all applicable Commission regulations under the Natural Gas Act, particularly the general terms and conditions set forth in Parts 154, 157, and 284, and paragraphs (a), (c), (e), and (f) of section 157.20 of the regulations, except that the requirements of section 157.20(c)(3) are waived.

(C) Pursuant to section 157.20(b) of the Commission's regulations, the facilities authorized in Ordering Paragraph (A) must be constructed and placed in service within three years of the date of the final order in this proceeding.

(D) PetroLogistics shall hold a new open season for the additional capacity, solicit capacity turn-back, and submit the results of its efforts to the Commission within 30 days of the close of the open season.

⁴⁰ See, e.g., *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

(E) The authorization issued in Ordering Paragraph (A) is conditioned upon PetroLogistics' compliance with the engineering and environmental conditions set forth in Appendices A and B of this order.

(F) PetroLogistics' request for continued authority to charge market-based rates for firm and interruptible storage service and interruptible hub and wheeling service is approved, subject to the conditions in this order.

(G) Waiver is granted of the Commission's regulations deemed inapplicable to storage service providers charging market-based rates, as discussed in this order.

(H) PetroLogistics shall notify the Commission within 10 days of acquiring knowledge of: (a) PetroLogistics adding storage capacity beyond the capacity authorized in this order; (b) an affiliate's increasing storage capacity; (c) an affiliate's linking storage capacity to PetroLogistics; (d) PetroLogistics or an affiliate's acquisition of an interest in, or being acquired by, and interstate pipeline connected to PetroLogistics. The notification shall include a detailed description of the new facilities and their relationship to PetroLogistics. PetroLogistics is also directed to file an updated market power analysis within five years of the date of this order and every five years thereafter. The Commission reserves the right to require such an analysis at any intervening time.

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

By the Commission. Commissioner Clark is not participating.

(S E A L)

Kimberly D. Bose,
Secretary.

Appendix A

Engineering Conditions for the PetroLogistics Choctaw Hub Expansion Project

1. The maximum inventory of natural gas stored in PetroLogistics' Cavern 28 shall not exceed the certificated level of 15.6 Bcf at 14.73 psia and 60° F. The maximum shut-in stabilized pressure gradient for the cavern shall not exceed 0.9 psi/ft at the casing shoe. The minimum pressure gradient shall be limited to 0.20 psi/ft at the casing shoe.
2. The final gas storage operating capacity of the cavern, working gas capacity, cushion gas capacity and minimum pressure shall be determined after the facility's operating parameters are evaluated and filed with the Commission (including data and work papers to support the actual operating capacity determination).
3. Before commencing storage operations, PetroLogistics shall:
 - (a) Conduct a Mechanical Integrity Test for the cavern before initiation of the well/cavern to natural gas storage and file the results with the Commission;
 - (b) File with the Commission copies of the latest interference tracer surveys, or other testing or analysis on the cavern to verify the lack of communication between the caverns;
 - (c) Establish and maintain a subsidence monitoring network over the proposed cavern's storage area;
 - (d) Assemble, test, and maintain an emergence shutdown system;
 - (e) Conduct and file with the Commission the results of the sonar surveys of the cavern, including plan view and cross sections; and
 - (f) Determine and file with the Commission the volume of rubble at the base of the cavern, including the methodology of determining such volume.
4. Until one year after the storage inventory reaches or closely approximates the full authorized capacity, PetroLogistics shall twice annually conduct a leak detection test during storage operations to determine the integrity of the cavern, well bore, casing and wellhead, and file the results with the Commission, unless otherwise ordered by the Commission.
5. The cavern's well shall be periodically logged to check the integrity of the casing string. Additionally, every five years, PetroLogistics shall conduct sonar surveys of the cavern to monitor its dimensions and shape, including the cavern roof, and to estimate pillar thickness between openings throughout the storage operations, and file the results with the Commission. In the alternative, no less than 30 days before placing the cavern into service, PetroLogistics 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.

6. PetroLogistics shall conduct an annual inventory verification study on the cavern, and file the results with the Commission.
7. The PetroLogistics storage project shall be operated in such a manner as to prevent gas loss from migration.
8. PetroLogistics shall file with the Commission semi-annual reports (to coincide with the maximum and minimum storage pressures) 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° F, and pressures shall be stated in psia):
 - (a) The daily volume of natural gas injected into and withdrawn from the cavern;
 - (b) The inventory of natural gas and shut-in wellhead pressure for the cavern at the end of each reporting period;
 - (c) The maximum daily injection and withdrawal rates experienced for the storage facility during the reporting period, and the average working pressure on such maximum days, taken at a central measuring point where the volume injected or withdrawn is measured;
 - (d) The results of any tests performed to determine the actual size, configuration, or dimensions of the storage cavern;
 - (e) A discussion of any operating problems and conclusions;
 - (f) Other data or reports which may aid the Commission in the evaluation of the storage project.
9. PetroLogistics shall continue to file the above semi-annual reports in accordance with section 157.214(c) of the Commission's regulations for a period of one year following the date facility operation at maximum level is initiated.

Appendix B

Environmental Conditions for the PetroLogistics Choctaw Hub Expansion Project

1. PetroLogistics Natural Gas Storage, LLC (PetroLogistics) shall follow the construction procedures and mitigation measures described in its application and supplemental filings (including responses to staff data requests) and as identified in the environmental assessment (EA) unless modified by this order. PetroLogistics 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 (OEP) **before using that modification.**
2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of life, health, property and the environment during construction and operation of the Project. This authority shall allow:
 - a. the modification of conditions of this order; and
 - b. the design and implementation of any additional measures deemed necessary (including stop work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impacts resulting from project construction and operation.
3. **Prior to any construction**, PetroLogistics shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EIs), and contractor personnel will be informed of the EI's authority and have been or will 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 or plot plans. **As soon as they are available, and before the start of construction**, PetroLogistics 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 this order. All requests for modifications of environmental conditions of this order or site-specific clearances

must be written and must reference locations designated on these alignment maps/sheets.

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

5. PetroLogistics 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, and 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, and 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 **before construction in or near that area.**

This requirement does not apply to extra work space allowed by PetroLogistics' Upland Erosion Control, Revegetation, and Maintenance Plan and/or minor field realignments per landowner needs and requirements which 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 certificate and before construction begins,** PetroLogistics shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. PetroLogistics must file revisions to the plan as schedules change. The plan shall identify:

- a. how PetroLogistics will 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 this order;
- b. how PetroLogistics will 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 onsite construction and inspection personnel;
- c. the number of EIs assigned per spread, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
- d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
- e. the location and dates of environmental compliance training and instructions PetroLogistics will give to all personnel involved with construction and restoration;
- f. the company personnel (if known) and specific portion of PetroLogistics' organization having responsibility for compliance;
- g. the procedures (including use of contract penalties) PetroLogistics will follow if noncompliance 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 onsite personnel;
 3. the start of construction; and
 4. the start and completion of restoration.

7. **Beginning with the filing of its Implementation Plan**, PetroLogistics shall file updated status reports with the Secretary **on a monthly basis until all construction and restoration activities are complete**. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

- a. an update on PetroLogistics' 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 noncompliance 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 noncompliance, and their cost;

- e. the effectiveness of all corrective actions implemented;
 - f. a description of any landowner/resident complaints which may relate to compliance with the requirements of this Order, and the measures taken to satisfy their concerns; and
 - g. copies of any correspondence received by PetroLogistics from other federal, state, or local permitting agencies concerning instances of noncompliance, and PetroLogistics' response.
8. **Prior to receiving written authorization from the Director of OEP to commence construction of any project facilities**, PetroLogistics shall file with the Secretary documentation that it has received all applicable authorizations required under federal law (or evidence of waiver thereof).
 9. PetroLogistics must receive written authorization from the Director of OEP **before placing the project into service**. Such authorization will 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.
 10. **Within 30 days of placing the authorized facilities in service**, PetroLogistics 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 will be consistent with all applicable conditions; or
 - b. identifying which of the certificate conditions PetroLogistics has complied with or will 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.
 11. PetroLogistics shall limit vegetation removal above horizontal directional drill paths in forested wetlands during construction and operation to the clearing of brush and saplings using hand tools only.
 12. PetroLogistics shall only clear trees for the compressor station expansion between the dates of September 1 and March 1 of any year.
 13. PetroLogistics shall file noise surveys with the Secretary **no later than 60 days** after placing the new equipment at the PetroLogistics Choctaw Compressor Station in service. If the noise attributable to the operation of the entire station at full load exceeds a day-night sound level (Ldn) of 55 decibels (dBA) at any nearby noise sensitive area, PetroLogistics shall install additional noise controls to meet

that level **within 1 year** of the in-service date. PetroLogistics shall confirm compliance with the Ldn of 55 dBA requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.