

134 FERC ¶ 61,221
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Tallulah Gas Storage, LLC

Docket No. CP10-494-000

ORDER ISSUING CERTIFICATES

(Issued March 18, 2011)

1. On August 31, 2010, Tallulah Gas Storage, LLC (Tallulah) filed an application pursuant to section 7(c) of the Natural Gas Act (NGA) for authorization to construct and operate a salt dome natural gas storage facility and associated pipeline facilities in Madison Parish, Louisiana (the Tallulah Gas Storage Project). Tallulah also requests a blanket construction certificate under Subpart F of Part 157 of the Commission's regulations, and a blanket transportation certificate under Subpart G of Part 284 of the Commission's regulations authorizing Tallulah to provide open-access firm and interruptible natural gas storage and hub services. In addition, Tallulah requests 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. Further, Tallulah requests waiver of the Commission's "shipper must have title" policy and certain other tariff requirements, as well as approval of its proposed *pro forma* gas tariff.

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

I. Background

3. Tallulah is a subsidiary of Icon NGS, LLC (Icon), a Delaware limited liability company based in Houston, Texas, that develops acquires, and will operate high-deliverability, multi-cycle natural gas storage facilities in the United States. Icon is a subsidiary of Quantum NGS Holdings, LLC (Quantum), a portfolio company of Quantum Energy Partners that invests primarily in the United States and Canada and focuses exclusively on the natural gas storage industry. Tallulah is affiliated with Delhi Gas Storage, LLC (Delhi Gas), a wholly-owned subsidiary of Icon, that holds an

exclusive option to acquire rights to complete the development of the Fort Necessity Gas Storage Project in Franklin Parish, Louisiana.¹ In addition, Quantum owns Merchant Energy Partners, LLC, whose subsidiary East Cheyenne Gas Storage, LLC holds a certificate of public convenience and necessity to develop the East Cheyenne Gas Storage Project in Logan County, Colorado.² Upon completion of the proposed construction, Tallulah will become a natural gas company within the meaning of section 2(6) of the NGA and be subject to the Commission's jurisdiction.

II. Proposal

4. Tallulah proposes to construct and operate a new, high-deliverability, multi-cycle salt cavern natural gas storage facility on the Tallulah Salt Dome in Madison Parish, Louisiana, approximately 5.5 miles south of Tallulah, Louisiana. Tallulah states that by meeting demand for storage in this region, the Tallulah Gas Storage Project will support the development of the nearby, emerging Delhi Hub in northern Louisiana as a significant trading hub connecting natural gas supplies from the Haynesville, Barnett, and Fayetteville shales, the Gulf of Mexico, and Gulf Coast LNG facilities to markets in the Ohio Valley, Midwest, Northeast, and Southeast regions of the United States. The proposed project is located within three miles of four interstate natural gas pipelines with which the project will interconnect: Midcontinent Express Pipeline LLC (Midcontinent Express), Columbia Gulf Transmission Company (Columbia Gulf), Gulf South Pipeline Company, LP (Gulf South), and Southeast Supply Header, LLC (Southeast). Once fully operational, the project will provide 24 Bcf of natural gas storage working gas capacity.

5. On July 23, 2010, the Commission issued an order that granted Tallulah an exemption from section 7(c) of the NGA to drill two test wells on Tallulah's salt dome site to determine the feasibility of the project.³ Work on the test wells was commenced in August 2010. Tallulah states that based on logs from other wells in close proximity to the proposed project, interpreted 3D seismic data, regional geological data, and related data, it believes the salt dome is suitable for the development of natural gas storage caverns.

¹ See *Atmos Pipeline and Storage, LLC and Fort Necessity Gas Storage, LLC*, 131 FERC ¶ 62,224 (2010).

² See *East Cheyenne Gas Storage, LLC*, 132 FERC ¶ 61,097 (2010).

³ *Tallulah Gas Storage, LLC*, 132 FERC ¶ 61,063 (2010).

A. Facilities

6. Tallulah proposes to construct and operate the following facilities:

- Three salt dome storage caverns to be developed using solution mining techniques. Each cavern will have 8 billion cubic feet (Bcf) of working gas capacity and 3.4 Bcf of base gas capacity, for a total combined project capacity of 34.2 Bcf;
- A compressor station with six natural gas-driven compressors totaling 28,410 horsepower and appurtenant equipment, housed in a permanent building on a site shared with the project's leaching plant;
- One observation well, three raw water supply wells, and up to 14 brine disposal wells. The brine disposal wells will be located adjacent to the proposed pipeline right-of-way, between the storage field and the interconnecting interstate pipelines;
- A leaching plant on the southern half of the compressor station site, including other appurtenant pumps, piping, and facilities;
- Four meter and regulator stations and associated facilities to interconnect with Gulf South, Columbia Gulf, Southeast, and Midcontinent Express.
- Dual 24-inch diameter, bi-directional natural gas pipeline approximately 3.3 miles in length extending north from the storage field and providing interconnections with Gulf South, Columbia Gulf, and Southeast;
- One 24-inch, 683-foot pipeline extending north-northeast from the meter and regulator station site to the interconnection with Midcontinent Express;
- Four segments of raw water and brine disposal pipeline totaling about 3.0 miles in length (ranging from 12 to 20 inches in diameter); and
- A 3.3 mile fuel and instrument gas pipeline constructed at the same time as the leaching plant and providing fuel gas to the leaching plant during leaching and instrument gas to the salt water disposal wells prior to placing the natural gas storage caverns in service.⁴

⁴ Tallulah will construct 4.5 miles of non-jurisdictional electric distribution lines to provide service to the compressor/leaching plant, meter and regulator stations, and well

(continued...)

7. The Tallulah Gas Storage Project is designed to provide a combined maximum daily injection rate of approximately 900 MMcf per day, and a maximum daily withdrawal rate of approximately 1,575 MMcf per day. In addition, the project will have a receipt and delivery capacity of 750 MMcf per day at interconnections with Midcontinent Express, Gulf South, and Southeast, and a receipt and delivery capacity of 500 MMcf per day at the interconnection with Columbia Gulf.

8. Tallulah proposes to construct the three storage caverns in stages, with proposed in-service dates for the first, second, and third storage caverns of September 2013, September 2014, and September 2015, respectively. Concurrently with the construction of the first cavern and subject to the results of the open season for the project, Tallulah proposes to construct all four pipeline interconnects and the meter and regulator stations and to install two of the compressors, the mining water supply wells, and disposal wells. Two additional compressors will be installed during the construction of each of the second and third caverns.

9. Additionally, Tallulah requests a blanket certificate under Part 157, Subpart F of the Commission's regulations to perform routine activities in connection with the construction, acquisition, maintenance, and operation of its facilities.

B. Market Support

10. Tallulah asserts that it had received expressions of "strong interest" for high deliverability, multi-cycle gas storage in the project area from numerous potential customers.⁵ Tallulah held a non-binding open season for proposed storage capacity between August 24 and September 23, 2010. On September 30, 2010, Tallulah supplemented its application with the results of the open season, which it states demonstrated significant market interest in the project. Tallulah states that it received bids from 19 bidders, including marketers, pipelines, producers, local distribution companies, and financial institutions, for a total of 28.1 Bcf of firm storage capacity, thereby exceeding the 24 Bcf of total storage capacity proposed by Tallulah. Tallulah indicates that it is in the process of evaluating the bids and negotiating precedent agreements with the potential project shippers.

sites, and additional electric facilities. The electricity distribution facilities will be constructed, owned, and operated by Entergy Louisiana, LLC.

⁵ Application at 20.

C. Storage and Hub Services and Rates

11. Tallulah seeks a blanket certificate under Part 284, Subpart G, to offer open-access firm and interruptible storage and hub services. Tallulah also requests approval of the *pro forma* tariff included in its application as Exhibit P. Tallulah proposes to provide firm storage service under Rate Schedule FSS, interruptible storage service under Rate Schedule ISS, and enhanced interruptible storage service under Rate Schedule EISS.⁶ Tallulah also proposes to offer a variety of hub services, including firm and interruptible parking service under Rate Schedules FP and IPS, firm and interruptible loan service under Rate Schedules FLS and ILS, enhanced park and loan services under Rate Schedules EP and ELS, interruptible wheeling service under Rate Schedule IWS, imbalance trading service under Rate Schedule ITS, and firm and interruptible hourly balancing services under Rate Schedules FHBS and IHBS.⁷ In addition, Tallulah proposes to offer an inventory transfer service under which storage customers will be able to transfer title to a quantity of gas stored in the project's storage caverns to or from other storage customers.

12. Tallulah requests authorization to charge market-based rates for its proposed storage and hub services. Tallulah's market power study, submitted as Exhibit I to its application, concludes that Tallulah lacks market power in the provision of storage services and interruptible hub services.

D. Requests for Waivers

13. Because it proposes to charge market-based rates, Tallulah requests waiver of certain filing, accounting, and reporting requirements which the Commission has previously found inapplicable to storage providers that are granted market-based rate authority. These regulations include: (1) sections 157.6(b)(8) and 157.20(c)(3) (applicants to submit cost and revenue data); (2) sections 157.14(a)(13), (14), (16), and (17) (cost-based exhibits); (3) section 157.14(a)(10) (gas supply data); (4) the accounting and reporting requirements of Part 201 and sections 260.1, 260.2 and 260.300 (Form Nos. 2, 2A, and 3Q, respectively); (5) section 284.7(e) (reservation charge); and (6) section 284.10 (straight fixed-variable rate design methodology).

⁶ Enhanced interruptible storage service will provide customers an interruptible storage service with a priority below that accorded firm services, but above the priority given to other non-enhanced interruptible services.

⁷ See Application at Exhibit P.

14. Tallulah also requests a waiver of several additional Commission regulations and policies, such as the “shipper must have title” policy, the policy requiring imbalance management services, segmentation requirements, and certain North American Energy Standard Board (NAESB) requirements.

III. Public Notice, Interventions, and Comments

15. Public notice of Tallulah’s application was published in the *Federal Register* on September 17, 2010 (75 Fed. Reg. 57,011). Columbia Gulf filed a timely, unopposed motion to intervene and comment in support of the application. Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission’s Rules of Practice and Procedure.⁸ The Turner-Washington Washitaw Land Trust (Washitaw Land Trust) filed a motion to intervene out-of-time.⁹ The Commission will grant the late-filed motion to intervene.

16. Comments on Tallulah’s application for the Tallulah Gas Storage Project were filed by the U.S. Department of the Interior’s Fish and Wildlife Service (FWS) and National Park Service, the Louisiana Department of Wildlife and Fisheries (Louisiana DWF), the Washitaw Land Trust, and five landowners residing in the vicinity of the proposed project: Jackie and Victoria Truelove; Ashley and Stuart Moberley; Lance M. Cone; Robert Adams; and Lisa and Jeff Reddick. These five residents express concerns regarding noise impacts, construction traffic, and the potential devaluation of their property in the project area. Four of the five residents expressed safety concerns. The resource agencies raise concerns regarding the project’s potential impacts on wetlands and bayous crossed by the right-of-way and on federally listed species. Finally, the Washitaw Land Trust expresses concern that the project could impact artifacts, burial mounds and sacred locations of spiritual gatherings, but states that it does not have enough information to take a final position on the project. These comments are addressed below.

17. On October 8, 2010, Tallulah filed a response to the landowner’s comments regarding project safety, increased noise, construction concerns, and devaluation of property values.

⁸ 18 C.F.R. § 385.214(c) (2010).

⁹ The members of the Washitaw Land Trust, Verdiacee Turner Gotson and her son, Fredrix “Joe” Washington, also seek to intervene individually.

IV. Discussion

18. Since 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

19. The Certificate Policy Statement provides guidance as to how the Commission will evaluate proposals for new construction.¹⁰ 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.

20. 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 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.

21. 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, Tallulah is a new entrant in the natural gas storage market and has

¹⁰ *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).

no existing customers. Thus, there will be no subsidization. Moreover, under its market-based rate proposal, Tallulah 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 Tallulah satisfies the threshold requirement of the Certificate Policy Statement.

22. In addition, there will be no adverse impact on existing customers or services, since the proposed Tallulah Gas Storage Project is a new facility and Tallulah has no current customers or services. Further, the Commission is satisfied that there should be no adverse impact on existing pipelines or storage providers, or their captive customers. The proposed Tallulah storage facility will be located in a competitive market and will serve new demand in a region that is experiencing steady growth in natural gas storage requirements. 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 Tallulah's market area has protested its proposed project.

23. Tallulah's proposed storage field, including the caverns, related above-ground facilities, and a storage buffer zone, will permanently occupy approximately 74 acres of land currently used for agricultural purposes, which Tallulah states it will own in fee or under lease. Tallulah states that it has acquired most of the rights necessary to develop the project and that it anticipates successful negotiation of agreements for the remainder of the requisite property rights. At the time of its application, Tallulah also stated that it had obtained agreements for 82 percent of the permanent pipeline corridor rights-of-way, and was in negotiations for the remainder of the right-of-way.¹¹ Tallulah maintains that it intends to use eminent domain only as a last resort.

24. Moreover, Tallulah states that the proposed storage project is only three miles from the corridor of the interconnecting pipelines, which will minimize construction of interconnecting lateral pipelines. In addition, Tallulah indicates that it will make use of temporary and permanent access roads, pipeline corridors, and pullback areas necessary for the construction and maintenance of the pipeline facilities.

25. Each of the landowners filing comments on the proposed project expresses concern that the proposed Tallulah project will negatively impact their property value. In its response, Tallulah points out that none of the commenting landowners' properties are directly affected by the proposed project and that no easements are needed on these properties. In determining whether a project is in the public convenience and necessity under the Certificate Policy Statement, the Commission's primary concern is the

¹¹ Application at 13.

“unneeded exercise of eminent domain.”¹² It is clear that Tallulah would not need to exercise eminent domain to obtain easements on these landowner’s properties, since the project facilities are not on their land.

26. The impact of the project on the property value of land adjacent to land directly affected by the project and requiring easements, or on property values of land in the general area of the project, is subjective and speculative. A project’s impact on land values depends on many factors, including the project size, the existence of other energy projects and pipelines, the current value of the land, and current land use. Appraisal methods used to value land are based on objective characteristics of the property and include considerations of any modification. Each potential purchaser could have different considerations and different capabilities to purchase land and, thus, subjective valuation is not generally considered in appraisals. The Commission finds that there is no basis to conclude that property sales, demand, and development decisions would be significantly impacted on land surrounding Tallulah’s proposed storage project facilities. Landowners who believe that their property values have been negatively impacted can appeal to the local taxing authority for reappraisal and potential reduction in taxes. Accordingly, the Commission concludes that the proposed facilities will have minimal adverse impacts on landowners and any affected communities. Moreover, as discussed below, construction of the Tallulah project will have only short-term, mitigable noise and traffic impacts.

27. The Tallulah Gas Storage Project will supply high-deliverability natural gas storage capacity to four interconnecting interstate pipelines and their customers. The proposed storage facility will facilitate the development of the Delhi Hub, which connects natural gas supplies from several shale sources, the Gulf of Mexico, and Gulf Coast LNG facilities to markets from the Midwest, eastward. The proposed project will provide greater liquidity, supply options, and supply security to these markets. As a salt dome storage facility, the project will be capable of providing natural gas at high rates of deliverability and on short notice, thereby providing reliability to a region prone to hurricane and other supply disruptions. Also, the project will be well suited to support highly variable loads such as natural gas-fired electricity generators. Based on the above findings, the Commission concludes that the proposed project will provide benefits to the market without any identifiable adverse impacts on existing customers, other pipelines, landowners, or communities. Thus, consistent with the Certificate Policy Statement and section 7(c) of the NGA, the Commission concludes that approval of Tallulah’s proposals is required by the public convenience and necessity, subject to the conditions discussed below.

¹² *BCR Holdings, Inc.*, 132 FERC ¶ 61,085, at P 16 (2010).

B. Market-Based Rates

28. As stated above, Tallulah requests authority to charge market-based rates for its proposed firm and interruptible storage and hub services.

29. Generally, the Commission evaluates requests to charge market-based rates for storage under the analytical framework of its Alternative Rate Policy Statement.¹³ Under the Alternative Rate Policy Statement, the Commission's framework for evaluating requests for market-based rates 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.¹⁴ To find that an applicant cannot withhold or restrict services, significantly increase prices over an extended period, or discriminate unduly, the Commission must first find either that there is a lack of market power¹⁵ because customers have good alternatives¹⁶ or that the applicant or Commission can mitigate the market power with specified conditions.¹⁷

¹³ *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, *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). *Rate Regulation of Certain Natural Gas Storage Facilities*, Order No. 678, FERC Stats. & Regs. ¶ 31,220, *order on clarification and reh'g*, Order No. 678-A, 117 FERC ¶ 61,190 (2006).

¹⁴ *Orbit Gas Storage, Inc.*, 126 FERC ¶ 61,095 (2009) (*Orbit Gas*).

¹⁵ 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.

¹⁶ 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.

¹⁷ Generally, an applicant will include in its application a market power study in support of its request, as Tallulah has done in this case. *See* Application, Exhibit I. A market power study usually defines the relevant products and geographic markets, measures market shares and concentrations, and evaluates other factors such as replacement capacity, ease of entry, and non-storage alternatives.

30. The Commission's analysis of whether an applicant has the ability to exercise market power consists of three major steps. First, the Commission reviews whether the applicant has specifically and fully defined the relevant markets¹⁸ 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.¹⁹ Additionally, as part of the first step, the applicant must identify the relevant geographic market.²⁰ Second, the Commission measures an applicant's market share and market concentration.²¹ Third, the Commission evaluates other relevant factors, such as ease of entering the market.

31. Tallulah's market power study in Exhibit I identifies the relevant product market as firm and interruptible natural gas storage services, including hub services, and interruptible wheeling services. The market power study identifies the relevant geographic market as the Gulf States region, which includes portions of east and south Texas, Louisiana, Mississippi, and Alabama. Tallulah's market power study reflects a conservative analysis of Tallulah's ability to exercise market power because it: (1) does not include in the relevant product market close substitutes to the services offered by Tallulah; (2) includes only storage facilities in the Gulf States region that are currently operational or have nearly completed construction and omits any additional authorized or proposed new storage projects or expansions even if they will be in service prior to the Tallulah Gas Storage Project; and (3) assumes that Tallulah is currently affiliated with the Fort Necessity Storage Project, in which its affiliate, Delhi Gas, holds an as-yet unexercised option to acquire the rights, and assumes that the Fort Necessity Storage Project will be constructed and placed into service.

32. Tallulah's market power study demonstrates that it is highly unlikely Tallulah will be able to exercise market power in the Gulf States region for firm and interruptible storage services. Appendices 4 and 5 of the market power study indicate that there are 45 separate storage facilities in the Gulf States region that are unaffiliated, and compete, with Tallulah. With the addition of the Tallulah Gas Storage Project, there will be over 1,006 Bcf of working gas capacity and over 38 Bcf per day of maximum daily

¹⁸ 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.

¹⁹ Alternative Rate Policy Statement, 74 FERC at 61,231.

²⁰ *Id.* at 61,232-34.

²¹ *Id.* at 61,234.

deliverability in the Gulf States region. Thus, Tallulah would have a market share of 3.9 percent of the total working gas capacity and 6.1 percent of the total maximum daily deliverability in the relevant market.²² Such relatively low market shares in the Gulf States region are indicative of an inability to exert market power.

33. The Commission uses the Herfindahl-Hirschman Index (HHI), which is used to analyze whether a competitive market exists for a specific product, to determine market concentration for gas pipeline and storage markets.²³ The Alternative Rate Policy Statement states that a low HHI (generally less than 1,800) indicates that sellers are less likely to be able to exert market power because customers have sufficiently diverse alternatives in the relevant market.²⁴ While a low HHI suggests a lack of market power, a high HHI (generally greater than 1,800) requires closer scrutiny in order to make a determination about a seller's ability to exert market power. Tallulah's market power study shows an HHI calculation of 682 for working gas capacity and 601 for maximum daily deliverability in the Gulf States region.²⁵ These measures of market concentration are significantly below the 1,800 HHI level, indicating that Tallulah would be unable to exert market power in the relevant market area.

34. Lastly, Tallulah's market power study demonstrates that the relevant market is easy to enter. Tallulah's market power study shows that there have been 41 separate, unaffiliated storage expansions or new storage facilities certificated by the Commission in the Gulf States market since 2000,²⁶ and there are numerous proposed storage projects in the relevant market as well. Specifically, Tallulah's market power study presents at least 32 additional new or expansion storage projects that have been proposed in the Gulf

²² See Application at Appendices 4, 5 and 8 of Exhibit I.

²³ Alternative Rate Policy Statement, 74 FERC at 61,235.

²⁴ See *Rate Regulation of Certain Natural Gas Storage Facilities*, Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 55 (noting that the Commission is not changing the 1,800 HHI threshold level).

²⁵ See Appendices 4 and 5 of Exhibit I.

²⁶ Exhibit I at 18.

States region.²⁷ Further, the Commission has found previously that barriers to entry in the Gulf States region are not significant.²⁸

35. Interruptible wheeling service is a transportation service that is not considered a substitute for gas storage service and, therefore, requires a separate market power analysis to evaluate a storage provider's ability to exercise market power in the interruptible wheeling service market. The Commission uses a "bingo card" analysis to assess whether prospective customers of an applicant seeking market-based rate authority for interruptible wheeling service could obtain the same services from alternative providers. The Commission has relied on the bingo card analysis to determine whether shippers can avoid the pipeline interconnections provided by the applicant by using alternative interconnections between the pipelines that are directly or indirectly connected to the applicant.

36. Tallulah's market power study includes a bingo-card analysis²⁹ for interruptible wheeling service that conservatively understates the wheeling options available to customers in the Gulf States region by including only those pipelines with which Tallulah will directly interconnect. The bingo-card analysis demonstrates that shippers will not be dependent on the Tallulah Gas Storage Project to wheel natural gas in the Gulf States region, as there are a number of other pipeline interconnections or alternative paths currently available to shippers in the Gulf States region.

37. Tallulah's market power study also reflects that, with the addition of the Tallulah Gas Storage Project, there will be at least 14 competing hubs and market centers in the Gulf States market. These 14 market hubs have a total of 120 delivery interconnections and 94 receipt interconnections. The market power study shows that Tallulah's market share for wheeling delivery capacity at these hubs and market centers in the Gulf States region will be 6.2 percent, and its market share for receipt capacity will be 7.1 percent.³⁰ These shares are similar to the market shares the Commission has determined to be

²⁷ Appendix 8 of Exhibit I.

²⁸ See, e.g., *Tarpon Whitetail Gas Storage, LLC*, 123 FERC ¶ 61,274, at P 28 (2008) (*Whitetail*); *Enstor Houston Hub Storage and Transportation, LP*, 123 FERC ¶ 61,019, at P 32 (2008) (*Houston Hub*); *Port Barre Investments, L.L.C. d/b/a Bobcat Gas Storage*, 116 FERC ¶ 61,052, at P 25 (2006) (*Bobcat*).

²⁹ Appendix 6 of Exhibit I.

³⁰ See Appendix 7 of Exhibit I.

acceptable in the past,³¹ and are below the market shares of other storage providers for which the Commission has approved market-based rate authority for wheeling service.³² In addition, Tallulah's market power analysis shows that the market concentration for delivery and receipt capacity at hubs in the Gulf States region results in HHI levels of 1,023 and 1,015, respectively,³³ which are below the 1,800 level set forth in the Alternative Rate Policy Statement. Thus, the Commission finds that Tallulah will be unable to exert market power in providing interruptible wheeling services.

38. For these reasons, and given that Tallulah's request for market-based rate authority is unopposed, the Commission will approve Tallulah's request to charge market-based rates for all firm and interruptible storage, hub, and wheeling services. Nevertheless, Tallulah must notify the Commission if future circumstances significantly affect its present market power status. The Commission's approval of market-based rates for the indicated services is subject to re-examination in the event that: (i) Tallulah adds storage capacity beyond the capacity authorized in this order; (ii) an affiliate increases storage capacity; (iii) an affiliate links storage facilities to Tallulah; or (iv) Tallulah, or an affiliate, acquires an interest in, or is acquired by, an interstate pipeline connected to Tallulah. Since these circumstances could affect its market power status, Tallulah shall notify the Commission within 10 days of any such changes. The notification shall include a detailed description of the new facilities and their relationship to Tallulah.³⁴ The Commission reserves the right to require a market power analysis at any time.³⁵

³¹ See, e.g., *Arlington Storage Co., LLC*, 125 FERC ¶ 61,306 (2008).

³² See, e.g., *Perryville Gas Storage LLC*, 130 FERC ¶ 61,065, at P 36 (2010) (approving market-based rates for interruptible wheeling service provider in Gulf States supply region with 13.8 percent market share for delivery capacity and 10.2 percent market share for receipt capacity); *Leaf River Energy Center, LLC*, 125 FERC ¶ 61,131, at P 44-45 (2008) (approving market-based interruptible wheeling rates with 22 percent market share for delivery capacity and 25 percent for receipt capacity).

³³ Appendix 7 of Exhibit I.

³⁴ See *Bobcat*, 116 FERC ¶ 61,052; *Copiah County Storage Co.*, 99 FERC ¶ 61,316 (2002) (*Copiah*); *Egan Hub Partners, L.P.*, 99 FERC ¶ 61,269 (2002) (*Egan Hub*).

³⁵ See *Liberty Gas Storage LLC*, 113 FERC ¶ 61,247, at P 51 (2005); see also *Rendezvous Gas Services, L.L.C.*, 112 FERC ¶ 61,141, at P 40 (2005). In Order Nos. 678 and 678-A, the Commission chose not to impose a generic requirement that storage providers, granted market-based rate authority on the basis of a market power analysis,

(continued...)

C. Waivers of Filing, Reporting and Accounting Requirements

39. In light of its request for authority to charge market-based rates and the fact that it has no existing interstate pipeline operations, Tallulah requests that the Commission waive section 157.6(b)(8) of the Commission's regulations, which would require it to submit cost and revenue information otherwise necessary for the Commission to make a determination of the rate treatment for the project. Tallulah also requests that the Commission waive the filing requirements of section 157.14(a)(13), (14), (16) and (17), which require submission of Exhibit K (Cost of Facilities), Exhibit L (Financing), Exhibit N (Revenues, Expenses, and Income), and Exhibit O (Depreciation and Depletion), since these exhibits are required for cost-based rate authority. Tallulah further requests that the Commission waive the filing requirements pertaining to straight fixed-variable rate design set forth in sections 284.7(e) and 284.10 of the Commission's regulations, also as being inapplicable to market-based rates. Tallulah requests such additional waivers of the regulations as necessary to carry out the authorizations requested in its application and as customarily issued.

40. For the same reasons, Tallulah requests waiver of the accounting and annual reporting requirements under Part 201 (accounting and reporting requirements of the Uniform System of Accounts), sections 260.1 and 260.2 (which require natural gas companies to file annual reports in Form Nos. 2 and 2-A), and section 260.300 (which require natural gas companies to file a quarterly financial report in FERC Form No. 3-Q) of the Commission's regulations. Tallulah also requests waiver of the rate and cost information filing requirements of sections 157.14(a)(10) and 157.20(c)(3) to submit total gas supply data (Exhibit H), as being inapplicable to natural gas storage services.

41. In light of the Commission's approval of market-based rates for Tallulah's storage and hub services, the cost-related information required by the above-described regulations is not relevant. Thus, consistent with previous Commission orders,³⁶ the Commission will grant Tallulah's request for waiver of the regulations requiring cost-based related information for these services. The Commission also grants a waiver of sections 157.14(a)(10) and 157.20(c)(3), which require an applicant to submit gas supply data, which does not pertain to gas storage service.

file an updated market power analysis every five years, or at other periodic intervals. *See* Order No. 678-A, 117 FERC ¶ 61,190 at P 12-15.

³⁶ *See, e.g., Bobcat*, 116 FERC ¶ 61,052; *Copiah*, 99 FERC ¶ 61,316; *Egan Hub*, 99 FERC ¶ 61,269.

42. The Commission has also found in orders dealing with similar projects no ongoing regulatory need to have cost-based financial statements prepared in accordance with the Uniform System of Accounts. Accordingly, the Commission will grant Tallulah's request for waiver of accounting requirements, as provided in Part 201 (Uniform System of Accounts Prescribed for Natural Gas Companies Subject to the Provisions of the Natural Gas Act). In addition, the Commission will grant Tallulah's request for waiver of reporting requirements, as set forth in section 260.2 (Form No. 2-A, Annual Report for Nonmajor Natural Gas Companies) and section 260.300 (Form No. 3-Q, Quarterly Financial Report of Electric Utilities, Licensees, and Natural Gas Companies), but the Commission notes that such waivers do not extend to the Annual Charge Assessment (ACA).³⁷ Therefore, Tallulah is required to file the Gas Account-Natural Gas Schedule currently at page 520 of Form No. 2-A, reporting the gas volume information that is the basis for an ACA charge.³⁸ In addition, the Commission will require Tallulah to maintain records to separately identify the original cost and related depreciation on its storage facilities should the Commission require Tallulah to produce those reports in the future.

D. Tariff Provisions

43. Tallulah proposes to offer its firm and interruptible storage, hub, and wheeling services at market-based rates under the terms and conditions set forth in the *pro forma* tariff attached as Exhibit P to the application. As discussed below, the Commission finds that Tallulah's proposed tariff generally complies with Part 284 of the Commission's regulations, with the exceptions noted. Tallulah shall file actual tariff records at least 30 days, but not more than 60 days, prior to commencement of service.³⁹ As a reminder, Tallulah must comply with the Commission's electronic filing

³⁷ See *BGS Kimball Gas Storage, LLC*, 117 FERC ¶ 61,112, at P 49 (2006).

³⁸ *Id.* *Unocal Windy Hill Gas Storage, LLC*, 115 FERC ¶ 61,218, at P 38 (2006).

³⁹ The Commission further notes that Tallulah's tariff contains a provision, at section 2.5(a) of its General Terms and Conditions, stating that new storage capacity resulting from an expansion of Tallulah's facilities will be sold via either an open season or on a first-come, first-served basis, at Tallulah's sole option. While this provision appears in the approved tariffs of a number of independent storage providers, a protest regarding the operation of the provision is currently pending before the Commission in Docket No. CP11-1-000, Pine Prairie Energy Center, LLC. When Tallulah files its actual tariff records, the Commission will expect it to comply with all Commission policies and regulations in effect at that time.

requirements set forth in Order No. 714⁴⁰ and Part 154 of the Commission's regulations.⁴¹

1. Segmentation

44. 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 segmentation is operationally feasible. Tallulah requests waiver of the segmentation requirements in section 284.7(d), contending that it will not be offering stand-alone transportation service, since all transportation service will be provided as part of storage service.

45. The Commission has found in several proceedings that the requirements of section 284.7(d) do not apply to pipelines engaged solely in natural gas storage and which do not provide firm stand-alone transportation services.⁴² Tallulah meets these requirements. Thus, the Commission finds that the requirements of section 284.7(d) do not apply to Tallulah. The Commission also finds that other tariff provisions related to segmentation, such as the allocation of primary point rights in segmented releases and within-the-path scheduling, do not apply to Tallulah.

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

46. Tallulah requests a generic waiver of the "shipper must have title" policy to enable it to obtain off-system capacity that may be necessary to render storage services. Section 17 of the General Terms and Conditions (GT&C) of Tallulah's *pro forma* tariff⁴³ includes an affirmative statement that Tallulah will only transport gas for others using off-system capacity under its open-access tariff and subject to Commission-approved rates.

⁴⁰ *Electronic Tariff Filings*, Order No. 714, FERC Stats. & Regs. ¶ 31,276 (2008).

⁴¹ 18 C.F.R. § 154.4 (2010).

⁴² See, e.g., *East Cheyenne Gas Storage, LLC*, 132 FERC ¶ 61,097, at P 55 (2010); *Chestnut Ridge Storage, LLC*, 128 FERC ¶ 61,210, at P 50 (2009) (*Chestnut*); *Bobcat*, 116 FERC ¶ 61,052 at P 37; *Pine Prairie Energy Center, LLC*, 109 FERC ¶ 61,215, at P 44 (2004) (*Pine Prairie*); *Egan Hub Partners, L.P.*, 98 FERC ¶ 61,284 (2002).

⁴³ Part 6 – General Terms and Conditions, 17. Off-system Capacity, 0.0.0.

47. The Commission has imposed conditions on the use of off-system capacity by independent storage companies authorized to charge market-based rates.⁴⁴ In *Texas Eastern Transmission Corp.*,⁴⁵ the Commission found that pipelines no longer need to obtain prior approval to acquire capacity on another pipeline, provided the acquiring pipeline has filed tariff language specifying that it will only transport for others using off-system capacity pursuant to its existing tariff and rates. Tallulah's proposed tariff language is consistent with the requirements set forth in *Texas Eastern*, as well as authorizations granted other storage companies with market-based rate authority. Therefore, the Commission accepts Tallulah's tariff language and grants waiver of the "shipper must have title" policy, but clarifies that Tallulah may only use capacity obtained on other pipelines in order to move gas into or out of storage. Thus, Tallulah may not use capacity on other pipelines, pursuant to the requirements in *Texas Eastern*, 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. Further, Tallulah's authorized use of the *Texas Eastern* waiver to provide storage service shall be limited to the geographic area covered in the market power study.

48. In order to ensure that Tallulah uses acquired off-system capacity in a manner consistent with its tariff provisions, and in keeping with the Commission's responsibility to monitor and prevent the exercise of market power, the Commission directs Tallulah to make annual filings, once the project becomes operational, within 30 days after its first full year of operation, and then every year thereafter. The following information must be filed for each acquisition of off-system capacity:

- (1) the name of the off-system provider;
- (2) the type, level, term, and rate of service contracted for;
- (3) a description of the geographic location – boundaries, receipt and delivery points, and segments comprising the capacity;
- (4) the operational purpose(s) for which the capacity is used;
- (5) a description of how the capacity is associated with specific transactions involving customers; and

⁴⁴ See, e.g., *Freebird Gas Storage, LLC*, 111 FERC ¶ 61,054 (2005); *Caledonia Energy Partners, L.L.C.*, 111 FERC ¶ 61,095 (2005).

⁴⁵ *Texas Eastern Transmission Corp.*, 93 FERC ¶ 61,273 (2000), *reh'g denied*, 94 FERC ¶ 61,139 (2001) (*Texas Eastern*).

- (6) an identification of total volumes, by rate schedule and customer, that were nominated for each off-system provider during the reporting period.

3. Transmission Provider Standards of Conduct

49. The Commission's Standards of Conduct in Part 358 of the regulations ensure that transmission providers cannot extend their market power over transmission by giving marketing affiliates undue preferential treatment.⁴⁶ However, section 358.3(k)(3) provides that "[a] transmission provider does not include a natural gas storage provider authorized to charge market-based rates."⁴⁷ For this reason, Tallulah requests that the Commission confirm that Tallulah is exempt from the Standards of Conduct requirements of Part 358.

50. Since the Commission in this order is approving Tallulah's request to charge market-based rates for firm and interruptible storage and interruptible hub services, including wheeling service, the Commission finds that, under current circumstances, Tallulah is exempt from the Standards of Conduct.

4. Netting and Trading of Imbalances

51. Section 284.12(b)(2) of the Commission's regulations requires pipelines to establish provisions for netting and trading imbalances and other imbalance management services.⁴⁸ However, in Order No. 637-A, the Commission stated that if a pipeline has no authority to assess penalties for imbalances, then there is no need to require that pipeline to offer such imbalance services.⁴⁹ Tallulah states that its tariff does not contain

⁴⁶ *Standards of Conduct for Transmission Providers*, Order No. 717, FERC Stats. & Regs. ¶ 31,280 (2008), *order on reh'g*, Order No. 717-A, 129 FERC ¶ 61,043, *order on reh'g*, Order No. 717-B, 129 FERC ¶ 61,123 (2009), *order on reh'g*, Order No. 717-C, 131 FERC ¶ 61,045 (2010).

⁴⁷ *See* 18 C.F.R. § 358.3(k)(3) (2010).

⁴⁸ *See* 18 C.F.R. § 284.12(b)(2) (2010).

⁴⁹ *Regulation of Short-Term Natural Gas Transportation Services and Regulation of Interstate Natural Gas Transportation Services*, Order No. 637, FERC Stats. & Regs. ¶ 31,091, *clarified*, Order No. 637-A, FERC Stats. & Regs. ¶ 31,099, *reh'g denied*, Order No. 637-B, 92 FERC ¶ 61,062 (2000), *aff'd in part and remanded in part sub nom. Interstate Natural Gas Ass'n of America v. FERC*, 285 F.3d 18 (D.C. Cir. 2002), *order on remand*, 101 FERC ¶ 61,127 (2002), *order on reh'g*, 106 FERC ¶ 61,088 (2004), *aff'd sub nom. American Gas Ass'n v. FERC*, 428 F.3d 255 (D.C. Cir. 2005).

imbalance penalties. Therefore, Tallulah requests waiver of the regulations requiring pipelines to offer imbalance services.

52. Since Tallulah is not proposing to assess imbalance penalties, the Commission finds that it qualifies for the exemption and grants Tallulah's requested waiver.⁵⁰ Nevertheless, if Tallulah seeks to implement imbalance penalty provisions in the future, Tallulah must comply with section 284.12(b)(2) of the Commission's regulations.

5. Injection Ratchets

53. In Rate Schedules FSS and ISS, and in the corresponding *pro forma* service agreements, Tallulah includes a provision that enables a customer to receive either ratcheted or unratcheted storage services, which would be available for both injections into, and withdrawals from, storage and based on a percentage of the customer's Maximum Daily Injection Quantity and Maximum Daily Withdrawal Quantity.

54. While the Commission has previously allowed storage service providers to offer customers the option of receiving either ratcheted or unratcheted storage service, the Commission has required specific and generally applicable ratchet percentages to be stated in the tariff when implemented.⁵¹ Tallulah states that it will provide specific and generally applicable ratchet percentages when its tariff is implemented.⁵² Consistent with our acceptance of ratchets for other storage service providers, the Commission will accept Tallulah's proposed use of ratchets, subject to Tallulah revising its Rate Schedules FSS and ISS, and the corresponding *pro forma* service agreements, to set forth specific and generally applicable ratchet percentages, as agreed.

6. Definitions

55. GT&C sections 1.25 through 1.29 (Definitions) imply that all gas quantities nominated will be scheduled. In *Whitetail*, the Commission required Whitetail to revise similar language to clarify that scheduled quantities are subject to the other provisions of the tariff controlling the priorities of service and factors that may result in scheduled

⁵⁰ See *Orbit Gas*, 126 FERC ¶ 61,095 at P 41; *Pine Prairie*, 109 FERC ¶ 61,215 at P 47.

⁵¹ See *Orbit Gas*, 126 FERC ¶ 61,095 at P 60 (citing *Windy Hill Gas Storage, LLC*, 119 FERC ¶ 61,291, at P 43-44 (2007)); see also *Southeast Gas Storage, LLC*, 125 FERC ¶ 61,307, at P 48 (2008); *Tres Palacios Gas Storage, LLC*, 120 FERC ¶ 61,253, at P 53-54 (2007) (*Tres Palacios*).

⁵² Application at 35.

quantities less than nominated quantities.⁵³ Therefore, the Commission will require Tallulah when it submits its actual tariff filing to revise GT&C sections 1.25 through 1.29 to clarify that scheduled quantities are subject to the nomination and scheduling provisions of GT&C section 7 and the scheduling priority order in GT&C section 8.

7. Minimum Gas Quantity

56. GT&C section 6 (Wheeling Operations) provides that Tallulah will not be obligated to receive, deliver, or wheel at any point any quantity of gas when the total quantity at the point results in a net metered flow which is less than or equal to 5,000 dekatherms (Dth) per day.

57. Under sections 284.7(b) and 284.9(b) of the Commission's regulations, the transporter may not discriminate as to the level of volumes transported. The Commission, however, has allowed a pipeline to include a minimum volume restriction in its tariff when the pipeline was able to show that quantities below the threshold were too small to be metered and where the company provided operational and cost

justification for the restriction.⁵⁴ For example, in *Gulf South*,⁵⁵ the Commission accepted a proposal for a 100 Dth per day threshold for connections of new receipt and delivery points. In that case, the Commission relied on Gulf South's assertions that serving small volume points presented operational challenges because these receipt points were difficult to measure, which increased the potential for lost system gas.⁵⁶ In addition, Gulf South stated that the costs associated with operating small points would be greater than the maximum rate would cover.⁵⁷

58. Unlike in *Gulf South*, where Gulf South provided operational and cost justification for its 100 Dth per day minimum volume condition, Tallulah has not provided any justification here. For this reason, the Commission will require Tallulah to eliminate the

⁵³ See *Whitetail*, 123 FERC ¶ 61,274 at P 66.

⁵⁴ See, e.g., *Gulf South Pipeline Co., LP*, 103 FERC ¶ 61,105, at P 13 n.7 (2003) (*Gulf South*); *Trailblazer Pipeline Co.*, 39 FERC ¶ 61,103, at 61,336 (1987); *Texas Eastern Transmission Corp.*, 37 FERC ¶ 61,260, at 61,680-81 (1986).

⁵⁵ *Gulf South*, 103 FERC ¶ 61,105 at P 13.

⁵⁶ *Id.*

⁵⁷ *Id.* P 9 and 12.

proposed minimum volume condition or, in the alternative, justify that a 5,000 Dth per day minimum volume condition is warranted.

8. Billing and Payments

59. In GT&C section 13.4, Tallulah provides in relevant part that “[i]f Customer’s failure to pay [an] undisputed portion of any invoice rendered ... continues beyond [30 days] after the due date of such invoice, ... Tallulah ... [may] suspend further deliveries [of] gas until such default shall have been cured.” Pipelines that opt to suspend service are making an election of remedies, i.e., they are determining that the risk of continued service outweighs the potential collection of reservation or other charges during the time of the suspension. The Commission has not permitted pipelines to impose reservation charges during the period of suspension, since the pipeline is making an election to suspend service and is not providing the service required under the contract during the period of suspension.⁵⁸ For these reasons, the Commission will require Tallulah to expressly state in GT&C section 13.4 that it will not impose reservation charges during any period of suspension.

9. Gas Retention Penalties

60. Section 284.12(b)(2)(v) of the Commission’s regulations provides in relevant part that “[a] pipeline may include in its tariff transportation penalties only to the extent necessary to prevent the impairment of reliable service. Pipelines may not retain net penalty revenues, but must credit them to shippers in a manner to be prescribed in the pipeline’s tariff.”⁵⁹ Most of Tallulah’s rate schedules allow Tallulah to retain gas improperly left in storage by customers under certain circumstances.⁶⁰ Further, section 16.2 of Tallulah’s *pro forma* tariff provides for an auction of such retained gas and for the auction proceeds to be credited to all customers that did not have gas sold during the auction.

61. The Commission has accepted similar gas retention proposals by other storage providers, holding that the retention of gas left in storage at the end of the applicable withdrawal period is an operationally justified deterrent to shipper behavior that could

⁵⁸ *Golden Triangle Storage, Inc.*, 121 FERC ¶ 61,313, at P 49 (2007).

⁵⁹ *See* 18 C.F.R. § 284.12(b)(2)(v) (2010).

⁶⁰ *See* Rate Schedules FSS, FP, FHBS, ISS, IPS, IHBS, EISS, and EP.

threaten the system or degrade service to firm shippers.⁶¹ Thus, the Commission accepts the proposed tariff provisions, including the proposal to credit net proceeds to non-offending shippers.⁶²

10. Limitation of Liability

62. GT&C section 27 provides in relevant part that “nothing in this [section] shall limit the liability of either Party to the other Party, if any[,] arising out of gross negligence, willful misconduct, or bad faith actions.” Tallulah’s proposed gross negligence liability standard is inconsistent with Commission policy that a simple negligence standard is appropriate for the liability and indemnification provisions of open-access tariffs on the grounds that all parties, including the pipeline, should be liable for their negligent acts.⁶³ Thus, when it submits its actual tariff filing, the Commission will require Tallulah to remove the gross negligence liability standard proposed in GT&C section 27 and replace it with a simple negligence standard. This action will prevent Tallulah from being insulated from loss or damages attributable to its own simple negligence.

11. Implementation of NAESB Standards

63. In Part 284 of its regulations, the Commission adopted various standards for conducting business practices and electronic communication with interstate pipelines as promulgated by the NAESB.⁶⁴ These standards are intended to govern nominations, allocations, balancing, measurement, invoicing, capacity release, and mechanisms for electronic communication between pipelines and those with whom they do business. Tallulah states that it has adopted all relevant provisions of Version 1.9 of the NAESB

⁶¹ See *Houston Hub*, 123 FERC ¶ 61,019 at P 57; *Monroe Gas Storage Co., LLC*, 121 FERC ¶ 61,285, at P 57 (2007); *Tres Palacios*, 120 FERC ¶ 61,253.

⁶² *MoBay Storage Hub, Inc.*, 117 FERC ¶ 61,298, at P 46 (2006); *Pine Prairie*, 109 FERC ¶ 61,215 at P 46.

⁶³ See *Orbit Gas*, 126 FERC ¶ 61,095 at P 58 (citing *Port Arthur LNG*, 115 FERC ¶ 61,344, at P 37 (2006); *Cameron LNG, LLC*, 115 FERC ¶ 61,229, at P 37 (2006); and *Guardian Pipeline, L.L.C.*, 101 FERC ¶ 61,107, at P 18 (2002)).

⁶⁴ *Standards for Business Practices for Interstate Natural Gas Pipelines*, Order No. 587-U, FERC Stats. & Regs. ¶ 31,307 (2010) (incorporating by reference into its regulations Version 1.9 of the standards adopted by the Wholesale Gas Quadrant (WGQ) of the NAESB).

standards in its *pro forma* tariff, except for the requested waivers applicable to storage projects authorized to charge market-based rates. Tallulah's tariff generally complies with Order No. 587-U. However, the Commission will require Tallulah's tariff to comply with the currently effective version of the NAESB standards at the time Tallulah makes its compliance filing to this order.

12. Electronic Data Interchange/Electronic Delivery Mechanism (EDI/EDM) and Flat File/Electronic Delivery Mechanism (FF/EDM) Requirements

64. Tallulah requests an extension of time to implement NAESB Wholesale Gas Quadrant (WGQ) Version 1.9 Standards relating to certain Electronic Data Interchange (EDI)/Electronic Delivery Mechanism (EDM), and Flat File (FF)/EDM requirements. Tallulah states that it does not anticipate receiving any requests to send information via EDI/EDM and, therefore, requests an extension of time to comply with the EDI/EDM and FF/EDM requirements until 90 days following Tallulah's receipt of such a request. Tallulah further states that the Commission has previously granted similar extensions of time of the EDI/EDM and FF/EDM standards.⁶⁵ For good cause shown, the Commission grants Tallulah an extension of time to comply with the EDI/EDM, and FF/EDM requirements, as requested. The extension of time is limited to the NAESB WGQ Version 1.9 Standards promulgated by Order No. 587-U,⁶⁶ and applies until a request is made to use the standards, in which case Tallulah will have 90 days following receipt of the request to implement the requested standard.

13. Form of Consent and Agreement

65. Tallulah proposes to include a form of Consent and Agreement in its *pro forma* tariff.⁶⁷ Tallulah explains that it intends to seek project financing to construct the project, which will require that Tallulah grant project finance lenders a collateral security interest in contracts that support the project's financial viability. Tallulah further explains that granting a security interest in a customer's service agreement would require that the customer execute a Consent and Agreement to acknowledge the lender's security interest and the lender's rights to step in and cure borrower defaults. Tallulah states that each

⁶⁵ *Chestnut*, 128 FERC ¶ 61,210 at P 53.

⁶⁶ See *B-R Pipeline Co.*, 128 FERC ¶ 61,126 (2009) (“[E]ach time the Commission adopts new versions of [the] standards ... pipelines must request waiver of the new standards.”).

⁶⁷ See Exhibit P, Part 7.9, Consent and Agreement.

Consent and Agreement may be treated as a non-conforming service agreement. Therefore, Tallulah states that in order to avoid filing with the Commission the multiple non-conforming agreements that would be necessary to obtain project financing, it proposes to include a form of Consent and Agreement in its *pro forma* tariff that would be applicable to Tallulah's customers whose storage service agreements will be used as collateral by project lenders. Tallulah further proposes to include in its tariff provisions that require a customer to execute a Consent and Agreement upon request.⁶⁸

66. The Commission finds that the form of Consent and Agreement in Tallulah's *pro forma* tariff deviates materially from Tallulah's *pro forma* service agreements. Such deviations may present a substantial risk of undue discrimination. Tallulah implies that the deviations (e.g., granting lenders certain rights in the event Tallulah defaults on its loan) reflect the financing arrangements required by Tallulah's lenders. The Commission finds that Tallulah has not sufficiently supported inclusion of such a provision in its tariff, or adequately explained the impact on shippers and on the operations of Tallulah's storage project. Accordingly, Tallulah is directed to either remove this provision from its tariff when it files its actual tariff records or fully support the need for this tariff provision and its impact on shippers' rights and on the operations of the storage project in a compliance filing within 30 days of the issuance of this order.

E. Engineering Review

67. 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 34.2 Bcf of storage capacity (24 Bcf of working gas capacity and 10.2 Bcf of cushion gas capacity), with withdrawal capability of up to 1,575 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.

68. Because salt deforms relatively quickly, caverns will shrink over time. As stated in *A Brief History of Salt Cavern Use*, large volume losses due to salt creep have

⁶⁸ See Exhibit P, Part 6, GT&C Section 27.4; Exh. P, Part 7.1, FSS Service Agreement Section 6; Exh. P, Part 7.2, ISS Service Agreement Section 6; Exh. P, Part 7.3, FP Service Agreement Section 6; Exh. P, Part 7.4, FLS Service Agreement Section 6; Exh. P, Part 7.5, FHBS Service Agreement Section 6; Exh. P, Part 7.6, IHBS Service Agreement Section 6; and Exh. P, Part 7.7, Hub Services Agreement, Section 7.

occurred in natural gas storage caverns.⁶⁹ 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.⁷⁰ Accordingly, the Commission will require Tallulah 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 caverns or result in lost gas or reductions in storage capacity.

69. Additionally, 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)."⁷¹ Therefore, the Commission will require Tallulah to file annually an inventory verification study to assist in identification of potential problems with the storage facility. Tallulah shall comply with the engineering conditions listed in Appendix A of this order.

70. Tallulah proposes a minimum pressure gradient for their storage caverns of 0.18 psi per foot. As support, Tallulah states that the pressure gradient is consistent with other salt cavern facilities and is supported by geomechanical modeling. However, Tallulah did not provide any geomechanical modeling or data for analysis. In the absence of geomechanical support, the Commission finds that Tallulah's proposed minimum pressure gradient is not properly designed. As stated above, because salt deforms plastically, caverns will shrink over time and the absence of an adequate minimum pressure gradient will result in a faster loss of capacity.

71. Tallulah's contends that its proposed 0.18 psi/ft gradient is consistent with other storage facilities approved by the Commission. However, previous salt caverns approved by the Commission have generally had a minimum gradient of 0.20 psi/ft or above.⁷²

⁶⁹ Thomas, Robert and Gehle, Richard, *A Brief History of Salt Cavern Use*, Solution Mining Research Institute, 2000.

⁷⁰ *Hydrocarbon Storage in Mined Caverns, A Guide for State Regulators*, Interstate Oil and Gas Compact Commission, 2000.

⁷¹ Id.

⁷² *BCR Holdings Inc.*, 132 FERC ¶ 61,085 (2010) (approving a minimum pressure gradient of 0.24 psi/ft); *Perryville Gas Storage, LLC*, 130 FERC ¶ 61,065 (2010) (approving a minimum pressure gradient of 0.25 psi/ft); *Atmos Pipeline and Storage, LLC*, 127 FERC ¶ 61,260 (2009) (approving a minimum pressure gradient of 0.20 psi/ft); *Pine Prairie Energy Center, LLC.*, 128 FERC ¶ 61,136 (2009) (approving a minimum

(continued...)

Where the Commission has allowed a pressure gradient below 0.20 psi/ft, the lower gradient has been supported by a specific geomechanical study that analyzes the particular salt characteristics of the storage facility and concludes that the lower pressure gradient will not adversely effect the storage facility's operations.⁷³ Nevertheless, even in these cases, conditions can change. For example, Pine Prairie Energy Center, LLC has recently requested an increase in their minimum pressure gradient for their Cavern 1 from 0.15 to 0.20 psi/ft, based on updated geomechanical information obtained from testing salt cores that shows that the lower pressure gradient is insufficient to maintain optimal cavern size.⁷⁴

72. In sum, Tallulah merely states that the proposed minimum pressure gradient is supported, but does not provide the geomechanical study for its facility. Therefore, we will require Tallulah to operate its storage caverns at a minimum pressure gradient of 0.20 psi/ft. However, Tallulah may, in the future, request a different pressure gradient provided it files engineering and geomechanical information that supports its proposal.

F. Environmental Review

73. On October 18, 2010, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment* (NOI).⁷⁵ The NOI was mailed to affected landowners; federal, state, and local government representatives and agencies; elected officials; environmental and public interest groups; Native American tribes; and local libraries and newspapers. Prior to issuance of the NOI, and in response to the September 9, 2010 Notice of Application, the Commission received comments from the FWS, the Louisiana DWF, five landowners, and the Washitaw Land Trust, as noted above. In response to the NOI, the Commission received comments from the Natural Resources Conservation Service (NRCS), and the National Park Service.

74. The primary issues raised by FWS, the Louisiana DWF, and the NRCS concern potential project impacts on wetlands, federally listed species, and prime farmland. The National Park Service stated that it had no concerns regarding the project. The primary

pressure gradient of 0.20 psi/ft); *Black Bayou Storage, LLC*, 123 FERC ¶ 61,277 (2008) (approving a minimum pressure gradient of 0.25 psi/ft).

⁷³ *Port Barre Investment, LLC d/b/a Bobcat Gas Storage*, 122 FERC ¶ 61,197 (2008) (approving a decrease in minimum pressure gradient to 0.18 psi/ft).

⁷⁴ See Pine Prairie Energy Center, LLC's application in CP11-1-000 (2010).

⁷⁵ 75 Fed. Reg. 65,475 (October 25, 2010).

environmental issues raised by the landowner comments concern the project's impact on noise, safety, and traffic (from construction), and its impact on the bayous in the project vicinity.

75. To satisfy the requirements of the National Environmental Policy Act of 1969 (NEPA), the Commission staff prepared an environmental assessment (EA) for the Tallulah Gas Storage Project. The EA was placed into the public record for this proceeding on January 25, 2011. The analysis in the EA addresses geology; soils; water resources and wetlands; vegetation and wildlife; land use, recreation, and visual resources; cultural resources; air quality and noise; reliability and safety; cumulative impacts; and alternatives. The substantive environmental comments are addressed in the applicable sections of the EA.

76. In its comments, FWS discusses the project's potential impacts on the threatened Louisiana black bear and migratory birds, and makes a number of recommendations to minimize impacts to forested wetlands and the fish and wildlife inhabiting such wetlands. The Louisiana DWF, in its comments, requests that the Commission require Tallulah to implement adequate erosion/sediment control measures, including the use of vegetated buffers and silt fences, and to employ the use of culverts to ensure the existing flow of surface water.

77. As described in the EA, Tallulah will implement the protective measures included in its *Wetland and Waterbody Construction and Mitigation Procedures* and its *Upland Erosion control, Revegetation, and Maintenance Plan*. The Commission notes that these protective measures include vegetation buffers, erosion and sedimentation control devices (i.e., silt fences), and measures to maintain the existing flow of surface water during construction and operation of the project. In addition, Tallulah will use the horizontal directional drill (HDD) construction method to avoid disturbance of wetlands and bayous crossed by the proposed rights-of-way.⁷⁶

78. The use of the HDD construction method would also avoid impacts on areas designated as critical habitat for the Louisiana black bear.⁷⁷ Accordingly, FWS subsequently agreed that the project is not likely to adversely affect the federally threatened Louisiana black bear.⁷⁸ Section B.4.2 of the EA describes the potential

⁷⁶ EA at 34-35.

⁷⁷ EA at 38-39.

⁷⁸ FWS also noted that mitigation to offset impacts to migratory birds would not be necessary.

impacts on migratory birds in the project area due to construction activities during the nesting season. The EA concludes that the project complies with the requirements of Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, because no priority habitats or migratory bird species of special concern were identified in the project area.⁷⁹ In addition, while the project may have an impact on migratory bird nests or individuals during construction, the EA concludes that these impacts are not expected to have a long-term or significant impact on migratory bird populations.

79. The Commission finds, consistent with the discussion in the EA, that Tallulah's proposed mitigation measures, including Tallulah's Bear Management Plan,⁸⁰ adequately address the FWS' and Louisiana DWF's concerns regarding wetlands, federally listed species, and migratory birds.

80. The NRCS raised general concerns about the project's potential impact on prime farmland, and specifically stated that if federal funds were used for the project, the Farmland Protection Policy Act requirements would apply. As clarified in the EA, no federal funds would be used for the project. Because the project is located within a region that consists almost entirely of prime farmland, permanent impacts on prime farmland at the proposed aboveground facilities cannot be avoided. Tallulah has minimized the temporary impacts on prime farmland by locating the proposed pipeline facilities in shared rights-of-way to the extent practical. The Commission will also require Tallulah to minimize the impact on prime farmland through implementation of the protective measures included in the company's *Upland Erosion Control, Revegetation, and Maintenance Plan*.

81. The five landowners expressed concern regarding noise impacts related to the drilling of proposed cavern wells and the use of the HDD construction method to cross State Highway 603 and Roundaway Bayou. The EA recognized that construction of project facilities and operation of the proposed Central Facility (i.e., the compressor station and leaching facility) may affect overall noise levels in the project area. The project area is primarily rural, with a few scattered residences located within one mile of the Central Facility site.

82. As described in the EA, the noise associated with the HDD and well drilling operations is predicted to be below our criterion of a day-night sound level (Ldn) of 55 decibels on the A-weighted scale (dBA) at all the noise-sensitive areas (NSA) (i.e.,

⁷⁹ See EA at 37-38.

⁸⁰ See EA at 39.

residences).⁸¹ Noise levels attributable to the HDD equipment could, however, increase the ambient noise levels at the noise-sensitive areas by about five decibels (dB). In general, an increase of three dB is the threshold of noticeable difference for humans and five dB would be clearly noticeable. Tallulah will have to employ partial noise barriers around noise generating equipment and low noise generators to mitigate noise at the one HDD site where NSAs could be impacted. Based on the anticipated noise levels attributable to the HDD and well drilling activities, and the mitigation measures proposed by Tallulah, the EA concludes, and we concur, that the adjacent landowners would not be significantly affected by the temporary construction-related noise.

83. The EA also analyzed the noise impacts on the nearest noise-sensitive areas associated with operation of the proposed Central Facility. The EA concludes that the predicted noise levels from the Central Facility at the nearest noise-sensitive areas would not exceed an Ldn of 55 dBA. To verify Tallulah's predictions, Environmental Conditions 12 and 13 require Tallulah to file the results of noise surveys during development of the storage project and after placing the Tallulah Compressor Station into service.⁸² These conditions also require Tallulah to install additional noise mitigation measures, if necessary.

84. Several of the landowners near the Tallulah Storage Field site expressed concerns about the safety of the storage facility. As explained in the EA, the pipeline and aboveground facilities associated with the Tallulah Gas Storage Project must be designed, constructed, operated, and maintained in accordance with the U.S. Department of Transportation (DOT) Minimum Federal Safety Standards in 49 C.F.R. Part 192 and the Louisiana Administrative Code (LAC). These regulations are intended to ensure adequate protection for the public and to prevent natural gas facility accidents and failures. Consistent with the findings of the EA, the Commission concludes that safe operation of the proposed project would be accomplished by Tallulah's compliance with the DOT's standards and LAC.

85. All five landowners are concerned about construction traffic. The EA found that traffic would increase in the vicinity of the project during construction. Most of the proposed access roads that would be used by construction crews are about one to three miles from Interstate 20. The roads in the area are flat and wide with little current traffic. Based on this information, the Commission adopts the EA's conclusion that the increase

⁸¹ See EA at 53-58. The Commission has adopted the U.S. Environmental Protection Agency's criteria of an L_{dn} of 55 dBA to protect the public from indoor and outdoor activity interference due to noise.

⁸² Appendix B of this order.

in traffic caused by construction would not have a significant impact on existing traffic in the vicinity of the project.

86. Finally, the Washitaw Land Trust claims that the land on which the proposed project will be constructed is the property of the descendants of the Ancient Moundbuilders, the oldest indigenous people in America, according to the Trust. The Trust is concerned that project construction may destroy any aboriginal moundbuilder burial sites or other artifacts unearthed during the mining or construction processes.

87. Tallulah conducted an archaeology survey for the entire project location, which concluded that out of nine archaeology sites, one prehistoric period site was recommended as potentially eligible for listing on the National Register of Historic Places. However, as described in the EA, this site would be avoided by all construction activities.⁸³ The Louisiana State Historic Preservation Office concurred with the results of the survey report. Tallulah also provided an Unanticipated Discovery Plan to deal with the unexpected discovery of historic properties and human remains during construction. Therefore, the Commission concludes, consistent with the determinations in the EA, that the project would not have a significant impact on cultural resources.

88. Based on the findings in the EA, the Commission concludes that if constructed operated in accordance with Tallulah's application and supplements, and the environmental conditions attached in Appendix B to this order, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

89. 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.⁸⁴

⁸³ EA at 43.

⁸⁴ 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., et al.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

G. Blanket Certificates

90. Tallulah requests a Part 157, subpart F blanket certificate, giving it section 7 authority to automatically, or after prior notice, perform certain activities related to the construction, acquisition, abandonment, and replacement and operation of pipeline facilities. Because Tallulah will become an interstate pipeline with the issuance of a certificate to construct and operate the subject facilities, the Commission will issue the requested certificate.

91. Tallulah also requests a Part 284, subpart G blanket certificate in order to provide open-access storage services, and filed a *pro forma* Part 284 tariff to provide its open-access services. The Commission will grant Tallulah a Part 284 blanket certificate.

III. Conclusion

92. 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 Tallulah under section 7 of the NGA to construct and operate the proposed facilities, as described herein and in the application.

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

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

(D) The certificate authority issued in Ordering Paragraphs (A), (B), and (C) is conditioned on Tallulah's compliance with all applicable Commission regulations under the NGA, particularly the general terms and conditions in Parts 154, 157, and 284, and paragraphs (a), (c), (e), and (f) of section 157.20 of the regulations.

(E) The minimum pressure gradient for each storage cavern shall be limited to 0.20 psi/ft at the casing shoe. Additionally, Tallulah must comply with all other engineering conditions set forth in Appendix A to this order.

(F) Tallulah must comply with the environmental conditions set forth in Appendix B to this order.

(G) The facilities authorized herein must be constructed and made available for service within four years of the date of the order in this proceeding, as required by section 157.20(b) of the Commission's regulations.

(H) Tallulah's request to charge market-based rates for firm and interruptible storage and hub services is approved, consistent with the discussion in the body of this order. This authorization is subject to reexamination in the event that: (a) Tallulah expands its storage capacity beyond the amount authorized in this order; (b) an affiliate increases storage capacity; (c) an affiliate links storage facilities to Tallulah; or (d) Tallulah, or an affiliate, acquires an interest in, or is acquired by, an interstate pipeline connected to Tallulah. Tallulah shall notify the Commission within 10 days of any such changes.

(I) Tallulah's request for waivers of the Commission's cost-based regulations is granted, as discussed herein. Tallulah is required to file page 520 of Form No. 2-A to report gas volume information as the basis for imposition of ACA charges. These waivers are subject to reexamination in the event that Tallulah's market power or market-based rates need to be reexamined. Tallulah shall maintain records consistent with the Uniform System of Accounts.

(J) Waiver is granted of the Commission's "shipper must have title" policy, subject to the conditions discussed in the body of this order.

(K) Within 30 days after its first full year of operation and every year thereafter, Tallulah shall submit an annual information filing on its provisions of service using off-system capacity as discussed in the body of this order.

(L) Tallulah must submit actual tariff records that comply with the requirements contained in the body of this order no less than 30 days, or more than 60 days, prior to the commencement of service. If Tallulah elects to retain the form of Consent and Agreement in its tariff, it must file supporting documentation within 30 days of the issuance of this order.

(M) Tallulah shall notify the Commission's environmental staff by telephone, electronic mail, and/or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Tallulah.

Tallulah shall file written confirmation of such notification with the Secretary of the Commission (Secretary) within 24 hours.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

Appendix A

Engineering Conditions for the Tallulah Gas Storage Project

1. The maximum inventory of natural gas stored in Tallulah's storage facility shall not exceed the certificated levels of 11.4 Bcf at 14.73 psia and 60° F for each cavern. The maximum shut-in stabilized pressure gradient for each 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 each 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, Tallulah shall:
 - (a) Conduct a Mechanical Integrity Test for each cavern before initiation of each 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 each cavern to verify the lack of communication between the caverns;
 - (c) Establish and maintain a subsidence monitoring network over the proposed caverns' 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 each cavern, including plan view and cross sections; and
 - (f) Determine and file with the Commission the volume of rubble at the base of each cavern, including the methodology of determining such volume.
4. Until one year after the storage inventory reaches or closely approximates the full authorized capacity, Tallulah shall twice annually conduct a leak detection test during storage operations to determine the integrity of each cavern, well bore, casing and wellhead, and file the results with the Commission, unless otherwise ordered by the Commission.
5. Each cavern's well(s) shall be periodically logged to check the integrity of each casing string. Additionally, every five years, Tallulah shall conduct sonar surveys of the caverns to monitor their 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 caverns into service, Tallulah 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. Tallulah shall conduct an annual inventory verification study on each cavern, and file the results with the Commission.
7. The Tallulah storage project shall be operated in such a manner as to prevent gas loss from migration.
8. Tallulah 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 each cavern;
 - (b) The inventory of natural gas and shut-in wellhead pressure for each cavern at the end of each reporting period;
 - (c) The maximum daily injection and withdrawal rates experienced for the storage field 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 each 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. Tallulah 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.
10. Tallulah shall file any test or study obtained from the authorization granted in *Tallulah Gas Storage LLC*, 132 FERC ¶ 61,063 (2010).

Appendix B

Environmental Conditions for the Tallulah Gas Storage Project

1. Tallulah 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. Tallulah 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) **before using that modification.**
2. The Director of the OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the project. This authority shall allow:
 - a. the modification of conditions of the 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 impact resulting from project construction and operation.
3. **Prior to any construction**, Tallulah 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. **As soon as they are available, and before the start of construction**, Tallulah 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.

Tallulah's exercise of eminent domain authority granted under NGA section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Tallulah's 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. Tallulah 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, 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 workspace allowed by Tallulah's *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:

- (i) implementation of cultural resources mitigation measures;
 - (ii) implementation of endangered, threatened, or special concern species mitigation measures;
 - (iii) recommendations by state regulatory authorities; and
 - (iv) 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**, Tallulah shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. Tallulah must file revisions to the plan as schedules change. The plan shall identify:
 - a. how Tallulah 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 the Order;
 - b. how Tallulah 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, 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 materials;
 - e. the location and dates of environmental compliance training and instructions Tallulah will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change), with the opportunity for OEP staff to participate in the training sessions;
 - f. the company personnel (if known) and specific portion of Tallulah's organization having responsibility for compliance;
 - g. the procedures (including use of contract penalties) Tallulah will follow if noncompliance occurs; and
 - h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - (i) the completion of all required surveys and reports;
 - (ii) the environmental compliance training of onsite personnel;
 - (iii) the start of construction; and
 - (iv) the start and completion of restoration.
7. Beginning with the filing of its Implementation Plan, Tallulah shall file updated status reports with the Secretary **on a biweekly 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 Tallulah'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 noncompliance observed by the EIs 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 the Order, and the measures taken to satisfy their concerns; and

- g. copies of any correspondence received by Tallulah from other federal, state, or local permitting agencies concerning instances of noncompliance, and Tallulah's response.
8. **Prior to receiving written authorization from the Director of OEP to commence construction of any project facilities**, Tallulah shall file with the Secretary documentation that it has received all authorizations required under federal law (or evidence of waiver thereof).
9. Tallulah must receive written authorization from the Director of OEP **before placing the project facilities 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 certificated facilities in service**, Tallulah shall file an affirmative statement with the Secretary, certified by a senior company official:
- that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - identifying which of the certificate conditions with which Tallulah 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. Tallulah shall not exercise the eminent domain authority granted under section 7(h) of the NGA to acquire a permanent pipeline right-of-way exceeding 60 feet in width for the dual 24-inch-diameter pipelines in the Main Corridor and 50 feet in width for the single 24-inch-diameter lateral pipelines.
12. Tallulah shall file a noise survey with the Secretary **no later than 30 days** after each set of compressor units at its Compressor Station is placed into service. If the noise attributable to the operation of the equipment at the Central Facility exceeds an L_{dn} of 55 dBA at any nearby NSA, Tallulah should reduce operation of the Central Facility or install additional noise controls until a noise level below an L_{dn} of 55 dBA at the nearby NSA is achieved. Tallulah shall confirm compliance with the above requirement by filing a second noise survey with the Secretary **no later than 30 days** after it installs the additional noise controls.
13. Tallulah shall file a noise survey with the Secretary **no later than 60 days** after placing the Tallulah Compressor Station in full service. If the noise attributable to the operation of all the equipment at the Tallulah Compressor Station at full load exceeds an L_{dn} of 55 dBA at any nearby NSA, Tallulah shall install additional

noise controls to meet the level **within one year** of the in-service date. Tallulah shall confirm compliance with the above requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.