

135 FERC ¶ 61,168  
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.

Pine Prairie Energy Center, LLC

Docket No. CP11-1-000

ORDER ISSUING CERTIFICATE, REQUIRING NEW OPEN SEASON,  
AND AMENDING TARIFF

(Issued May 19, 2011)

1. On October 4, 2010, Pine Prairie Energy Center, LLC (Pine Prairie) filed an application under section 7(c) of the Natural Gas Act (NGA) for a certificate of public convenience and necessity authorizing an expansion of its existing natural gas storage facility located in Evangeline Parish, Louisiana (Phase III Expansion Project). As proposed, the Phase III Expansion Project would increase the total working gas capacity of the Pine Prairie Energy Center by 32 billion cubic feet (Bcf) from 48 Bcf to 80 Bcf. Pine Prairie also requests a reaffirmation of market-based rate authorization for its storage, hub, and wheeling services, and approval of its proposed Cavern Integrity Monitoring Program.

2. As discussed in this order, the Commission will grant Pine Prairie the requested certificate authorization subject to conditions, including the requirement that Pine Prairie hold a new open season. The order also grants Pine Prairie continuing authorization to charge market-based rates, requires Pine Prairie to revise certain tariff language relating to open seasons pursuant to section 5 of the NGA, and approves the proposed Cavern Integrity Monitoring Program.

**I. Background**

3. The Pine Prairie Energy Center is a high deliverability salt dome natural gas storage project located near the Henry Hub, a major natural gas trading center in Southern Louisiana. The Pine Prairie Energy Center was originally certificated in 2004 as a three-cavern storage facility, each cavern with a working gas capacity of 8.0 Bcf (for

a total of 24 Bcf).<sup>1</sup> In 2009, the Commission authorized Pine Prairie's Phase II Expansion Project which expanded the Pine Prairie storage facility's total working gas capacity from 24 Bcf to 48 Bcf by the addition of two new caverns and the expansion of two of the three original caverns.<sup>2</sup>

4. Construction of the Pine Prairie Energy Center began in the summer of 2005. Cavern Nos. 1, 2, and 3 have been placed in service. Cavern No. 4 is scheduled to be placed in service in the spring of 2011, and Cavern No. 5 is scheduled to be placed in service in the spring of 2012. The Pine Prairie Energy Center currently interconnects with eight interstate transmission pipelines.<sup>3</sup>

## II. Proposal

5. Pine Prairie states that this proposed expansion of the Pine Prairie storage facility is needed to satisfy continued growth in demand for natural gas storage services in the Gulf Coast region. Specifically, Pine Prairie cites a study performed for the INGAA Foundation, Inc. entitled "Natural Gas Pipeline and Storage Infrastructure Projections Through 2030" that finds that between 2009 and 2030, the United States and Canada will need 371 to 598 Bcf of additional working gas storage capacity<sup>4</sup> and notes the importance of the development of high deliverability salt cavern storage in the Gulf Coast region.<sup>5</sup>

6. Pine Prairie seeks authorization to construct two additional caverns (Cavern Nos. 6 and 7), each with a working gas capacity of 12.0 Bcf and a total capacity of 15.4 Bcf. Pine Prairie also requests authorization to increase the certificated working gas capacities

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<sup>1</sup> *Pine Prairie Energy Center, LLC*, 109 FERC ¶ 61,215 (2004), *certificate amended*, 116 FERC ¶ 61,316 (2006).

<sup>2</sup> *Pine Prairie Energy Center, LLC*, 128 FERC ¶ 61,136 (2009), *certificate amended*, 131 FERC ¶ 62,226 (2010).

<sup>3</sup> Those pipelines are: ANR Pipeline Company, Columbia Gulf Transmission Company, Florida Gas Transmission Company, LLC; Kinder Morgan Louisiana Pipeline LLC; Tennessee Gas Pipeline Company; Texas Eastern Transmission LP; Texas Gas Transmission, LLC; and Transcontinental Gas Pipe Line Corporation.

<sup>4</sup> Certificate Application at 21 (citing ICF International, *Natural Gas Pipeline and Storage Infrastructure Projections Through 2030* (Oct. 20, 2009), at 3 (report submitted to the INGAA Foundation, Inc.), *available at* <http://www.ingaa.org/cms/31/7306/7828.aspx> (INGAA Report)).

<sup>5</sup> INGAA Report at 70.

of Cavern Nos. 2, 3, 4, and 5 by 2 Bcf each, resulting in individual working gas capacities for each cavern of 12 Bcf and total storage capacities of 15.4 Bcf. In addition, Pine Prairie proposes to increase the total capacity of Cavern No. 1 from 9.6 Bcf to 10.2 Bcf by increasing the base gas from 1.6 Bcf to 2.2 Bcf, with no change to the 8 Bcf of certificated working gas capacity.

7. Pine Prairie also proposes to: (1) install two additional 5,750 horsepower (hp) electric motor drive compressor units in an expansion of an existing compressor building; (2) construct extensions of the existing natural gas, raw water, and brine pipeline systems and associated utility corridors in order to link the new proposed caverns; (3) construct and operate approximately 2.5 miles of 24/20/16-inch diameter brine disposal pipeline; and (4) increase the certificated daily deliveries/receipts quantities at the interconnections between Pine Prairie's header pipeline and two natural gas pipelines (Kinder Morgan Louisiana Pipeline LLC and Texas Gas Transmission, LLC) from 600 million cubic feet per day (MMcf/d) to 900 MMcf/d.

8. Upon completion of the Phase III Expansion Project, the Pine Prairie Energy Center will include seven storage caverns having a total working gas capacity of 80 Bcf, supported by 22.6 Bcf of base gas. Pine Prairie states that it is not proposing to increase the total injection or withdrawal capabilities of the Pine Prairie Energy Center above previously authorized levels. The Pine Prairie Energy Center is currently authorized to withdraw and deliver gas at a rate of up to 3.2 Bcf/d and to receive and inject gas at a rate of up to 2.4 Bcf/d.

9. Pine Prairie held an open season from June 10, 2010, through July 15, 2010, which it states demonstrated market interest in purchasing additional firm natural gas storage capacity beyond the capacity Pine Prairie currently offers. Pine Prairie states that it anticipates that all of the new firm storage capacity proposed herein will be fully subscribed by the time the caverns are placed into service.

10. Pine Prairie proposes to provide its firm and interruptible storage and hub services on an open-access basis at market-based rates under the terms and conditions of its currently-effective FERC Gas Tariff. Pine Prairie states that the additional storage facilities proposed in this application, if approved, will not result in any changes in Pine Prairie's services or require any changes to Pine Prairie's FERC Gas Tariff. Pine Prairie also requests that the Commission reaffirm its authorization to charge market-based rates. Pine Prairie submits a new market power study in Exhibit I that it claims demonstrates that Pine Prairie will lack market power over its storage, hub, and wheeling services.

### **III. Notice, Interventions, and Protest**

11. Notice of Pine Prairie's application was published in the *Federal Register* on Oct. 22, 2010 (75 Fed. Reg. 65,310). Calpine Energy Services, L.P. and BP Energy Company (BP) filed timely, unopposed motions to intervene. Timely, unopposed

motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.<sup>6</sup> BP filed a protest asserting that Pine Prairie failed to comply with the Commission's policy requiring a pipeline that is proposing an expansion to solicit turn-back capacity that should be incorporated into the expansion project. On November 22, 2010, Pine Prairie filed leave to answer and answer to BP's protest. Although the Commission's Rules of Practice and Procedure do not permit answers to protests,<sup>7</sup> the Commission finds good cause to waive Rule 213(a)<sup>8</sup> and admit the answer provided by Pine Prairie because it provides information that has assisted us in our decision making. The issue raised by BP concerning the Commission's open season/capacity turn back policies is discussed below.

#### **IV. Discussion**

##### **A. Certificate Policy Statement**

12. Because the proposed facilities will be used to provide natural gas services in interstate commerce subject to the jurisdiction of the Commission, their construction and operation are subject to the requirements of sections 7(c) and (e) of the NGA.

13. The Certificate Policy Statement provides guidance for evaluating proposals to certificate new construction.<sup>9</sup> 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 in evaluating new pipeline construction.

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<sup>6</sup> 18 C.F.R. § 385.214(c) (2010).

<sup>7</sup> 18 C.F.R. § 385.213(a)(2) (2010).

<sup>8</sup> See section 385.101(e) (permitting the Commission to waive any provision of Part 385 for good cause).

<sup>9</sup> *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).

14. Under this policy, the threshold requirement for 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.

### **1. No-Subsidy Requirement**

15. As discussed below, we are authorizing Pine Prairie to continue to charge market-based rates for its storage, hub, and wheeling services. Under market-based rates, Pine Prairie will continue to assume the economic risks associated with the costs of its storage project, including the facilities approved herein, to the extent any capacity is unsubscribed. Accordingly, the Commission finds that Pine Prairie's proposal satisfies the threshold no-subsidy requirement of the Certificate Policy Statement.

### **2. Open Season/Turn-back Capacity Requirement**

#### *BP's Protest*

16. BP claims that Pine Prairie failed to comply with the Commission's policy requiring a pipeline that is proposing an expansion to solicit offers from existing shippers to permanently turn back or release unneeded capacity that could be incorporated into the expansion. According to BP, the desire of existing shippers to turn back capacity is one of the most significant factors to be considered by the Commission in evaluating the proposed size of expansion facilities.

17. In support, BP explains that due to a change in markets that it serves, BP wants to relinquish storage capacity that it holds on Pine Prairie. BP asserts that the Commission has recognized that providing shippers an opportunity to turn back capacity as part of an expansion is necessary in order to: (1) ensure that the construction is properly sized and

the new construction is needed; (2) reduce an expansion's cost and environmental impact; and (3) give existing shippers an opportunity to relinquish unneeded capacity.<sup>10</sup>

18. BP asserts that the fact that Pine Prairie is seeking certificate authority to charge market-based rates for expansion capacity does not exempt Pine Prairie from the requirements of the public convenience and necessity, including the need for the pipeline to justify a market need for its proposed expansion. According to BP, the Commission's turn-back capacity requirement is not a rate-related issue, but rather a policy intended to ensure that a proposed expansion is properly sized. BP maintains that these concerns that underlie the turn-back capacity requirement apply to the proposed expansion of the Pine Prairie storage facility.

19. Because Pine Prairie did not provide the requisite opportunity to turn back capacity, BP maintains that Pine Prairie has not shown there is sufficient demand for the proposed project and requests that the Commission require Pine Prairie to hold a new open season for the project that is consistent with Commission policy prior to the commencement of construction.

*Pine Prairie's Answer*

20. In response, Pine Prairie asserts that the Commission's policies regarding open seasons generally, and turn-back open seasons in particular, were developed to deal with the circumstances of cost-of-service pipelines, not storage providers like Pine Prairie that have been granted market-based rates. According to Pine Prairie, it is entirely at risk for the recovery of the costs associated with its storage facilities and thus BP bears no risk that the price Pine Prairie charges will increase due to expansion or other cost increases. Pine Prairie also asserts that allowing BP, or any other Pine Prairie customer, a cost-free option to turn back firm storage capacity to Pine Prairie would deprive Pine Prairie of the sole mechanism it has to recover its costs and earn a return on the capital it has invested in its facilities and would give BP an undeserved windfall that would undermine and render meaningless the right to negotiate and enter into contracts based on market-based rates.

21. Pine Prairie states that the Commission has recognized that storage providers authorized to charge market-based rates face entirely different market realities than pipelines subject to cost-of-service regulation. According to Pine Prairie, the Commission has treated such storage providers differently than it has treated cost-based

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<sup>10</sup> BP Protest at 4-5 (citing, e.g., *Order Clarifying Statement of Policy*, 90 FERC at 61,392, *Pricing Policy for New and Existing Facilities Constructed by Interstate Natural Gas Pipelines*, 71 FERC ¶ 61,241, at 61,917 (1995)).

pipelines in applying its open season policies. Specifically, Pine Prairie states that the Commission has allowed market-based rate storage providers, including Pine Prairie, to incorporate provisions in their tariffs making open seasons optional, at the storage provider's discretion.<sup>11</sup> Pine Prairie notes that in *Windy Hill* the Commission dismissed a similar protest filed by BP in that proceeding that requested the Commission to reject tariff language reserving to the storage provider the discretion whether to offer new expansion through open seasons.

22. Pine Prairie asserts that it has acted in accordance with the relevant provisions of its FERC Gas Tariff, which explicitly provide that Pine Prairie is not required to conduct an open season of any sort in advance of an expansion project:

3.1 Procedures for Sale of Capacity.

(a) Sale of Capacity. Upon the availability of new storage capacity resulting from an expansion of [Pine Prairie's] facilities, [Pine Prairie] shall sell such capacity to prospective Customers either via the open season procedures described in Sections 3.1(b)-(f) below or via the first-come, first-served procedures described in Section 3.1(g) below, with the selection of the procedures being at [Pine Prairie's] sole option.<sup>12</sup>

Pine Prairie claims that the Commission has permitted such tariff provisions because it recognizes that storage providers like Pine Prairie operate in competitive markets in which requirements relating to the conduct of open seasons and the solicitation of capacity turn-back are inapplicable.

23. Pine Prairie also disagrees with BP's assertion that Pine Prairie has failed to satisfy the requirements of the Certificate Policy Statement. It states that it satisfies the Certificate Policy Statement's threshold requirement that an expansion not be subsidized

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<sup>11</sup> Pine Prairie's Answer at 6 (citing *Pine Prairie Energy Center, LLC*, 120 FERC ¶ 61,198 (2007); *Pine Prairie Energy Center, LLC*, Docket No. RP07-563-001 (Oct. 9, 2007) (unpublished delegation letter order); *Egan Hub Storage, LLC*, 116 FERC ¶ 61,174, at P 14 (2006); *Bluewater Gas Storage, LLC*, Docket No. CP06-351-001 (Dec. 1, 2006) (unpublished delegated letter order); *Windy Hill Gas Storage, LLC*, 119 FERC ¶ 61,291, at P 74 (*Windy Hill*)).

<sup>12</sup> See Pine Prairie tariff record at Section 6.3, General Terms and Conditions – Request for Service.

by current customers because under its market-based rate proposal it assumes the financial risks of its projects through its authorization to charge market-based rates. Pine Prairie points out that it did not conduct a capacity turn-back open season in connection with its earlier Phase II Expansion and nevertheless the Commission held that its Certificate Policy Statement requirements, including the threshold requirement that an expansion not be subsidized by current customers, were satisfied. It also states that the Commission has approved other expansion projects without mentioning, let alone requiring, capacity turn-back opportunities for existing customers.<sup>13</sup>

24. Pine Prairie argues that BP is not without a means of responding to the changes in the market it now faces because it has the option to offer any portion of its firm storage capacity to third parties by means of the capacity release mechanism incorporated in Pine Prairie's tariff. In addition, Pine Prairie claims that even if it were to accept BP's release of its capacity, Pine Prairie would nevertheless propose essentially all of the facility additions it has included in its Phase III Expansion Project.

25. Finally, Pine Prairie maintains that even if the Commission's capacity turn-back policies were applicable to a market-based storage provider like Pine Prairie, BP is incorrect in asserting that it should be permitted to turn back capacity and be entirely relieved of its obligation to pay the price specified in its contract. According to Pine Prairie, the Commission's turn-back policies require pipelines to credit customers turning back capacity for the incremental price expansion customers are willing to pay; the turn back customer remains liable for any difference between its contract price and the incremental price.<sup>14</sup>

#### *Commission Determination*

26. BP's protest highlights the relationship/interplay between the Commission's rate policies and its certificate policies. The question raised here is whether the Commission should apply its open season/turn-back capacity requirements (essentially, certificate policy) to storage project expansions where the storage provider is authorized to charge market-based rates (rate policy). As discussed below, henceforth, the Commission will require sponsors of all natural gas pipeline projects, including storage projects that create new capacity to comply with our open season/turn-back capacity requirements regardless

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<sup>13</sup> Pine Prairie's Answer at 13-14.

<sup>14</sup> Pine Prairie's Answer at 19-20 (citing, e.g., *Algonquin Gas Transmission Co.*, 87 FERC ¶ 61,262, at 61,990-91 (1999); *Transwestern Pipeline Co.*, 90 FERC ¶ 61,032, at 61,159 (2000)).



of whether the costs of the construction will be recovered through cost-based or market-based rates.

27. As background, the Commission's market-based rate policy was established in the Alternative Rate Policy Statement.<sup>15</sup> The Alternative Rate Policy Statement was specifically focused on establishing criteria to evaluate rates established through methods other than the traditional cost-of-service ratemaking method.<sup>16</sup> There was no consideration in this policy statement of issues related to the certification of new construction.

28. The Commission's policy requiring the solicitation of turn-back capacity in conjunction with proposed expansions was first established in a document ostensibly addressing rate issues. With the goal of providing guidance on how it would price new pipeline construction going forward, the Commission issued its 1995 Pricing Policy Statement<sup>17</sup> which provided that the Commission (1) would make a determination regarding the appropriate rate design to recover the costs of new construction in a pipeline's certificate proceeding, and (2) would evaluate requests for rolled-in pricing on an evaluation of system-wide benefits and the rate impact on existing customers. To reduce uncertainty, the Commission established a presumption of rolled in rates when the rate effect on existing customers would not be substantial.<sup>18</sup> In this context, solicitation of turn-back capacity was viewed as a means of reducing project costs by ensuring that new projects are properly sized, thus moderating the potential rate shock to existing customers that might result from pricing expansion on a rolled-in basis.<sup>19</sup>

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<sup>15</sup> *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).

<sup>16</sup> Alternative Rate Policy Statement, 74 FERC at 61,224.

<sup>17</sup> *Pricing Policy for New and Existing Facilities Constructed By Interstate Natural Gas Pipelines*, 71 FERC ¶ 61, 241).

<sup>18</sup> *Id.* at 61,915.

<sup>19</sup> *Id.* at 61,917.

29. However, the concern that new facilities be properly sized was carried over to the Commission's 1999 Certificate Policy Statement (wherein the Commission changed its pricing preference from rolled-in to incremental):

Accordingly, the Commission is issuing this policy statement to provide the industry with guidance as to how the Commission will evaluate proposals for certificating new construction. This should provide more certainty about how the Commission will evaluate new construction projects that are proposed to meet growth in the demand for natural gas at the same time that some existing pipelines are concerned about the potential for capacity turnback. In considering the impact of new construction projects on existing pipelines, *the Commission's goal is to appropriately consider the enhancement of competitive transportation alternatives, the possibility of overbuilding, the avoidance of unnecessary disruption of the environment, and the unneeded exercise of eminent domain.* Of course this policy statement is not a rule. In stating the evaluation criteria, it is the Commission's intent to evaluate specific proposals based on the facts and circumstances relevant to the application and to apply the criteria on a case-by-case basis. (Emphasis added)<sup>20</sup>

30. The Commission's open season policies, developed through its orders and opinions, require that new interstate pipeline construction be preceded by a fair open season process through which potential shippers may seek and obtain firm capacity rights.<sup>21</sup> An open season is intended to provide transparency to the market concerning potential new capacity and to ensure that new capacity is allocated in a not unduly discriminatory manner. An open season will also provide a project sponsor with valuable information regarding market interest that it can utilize to properly size the project.

31. For expansion projects, the Commission also requires natural gas pipelines to solicit turn-back capacity, so that any turn-back capacity may substitute for the expansion

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<sup>20</sup> Certificate Policy Statement, 88 FERC, at 61,737.

<sup>21</sup> See, e.g., *Algonquin Gas Transmission, LLC*, 120 FERC ¶ 61,072, at P 58 (2007); *Gulf South Pipeline Co.*, 95 FERC ¶ 61,132, at 61,415 (2001).

capacity, thereby minimizing the size of the expansion and potential environmental impacts.<sup>22</sup> In its order clarifying statement of policy,<sup>23</sup> the Commission explained:

The Commission has a two-step process for determining whether the market finds an expansion project economically viable. The first step, which occurs prior to the certificate application, is for the pipeline to conduct an open season in which the existing customers are given an opportunity to permanently relinquish their capacity. The first step ensures that a pipeline will not expand capacity if the demand for that capacity can be filled by existing shippers relinquishing their capacity. The open season policy was not changed by the recent [Certificate] Policy Statement. The second step is that the expansion shippers must be willing to purchase capacity at a rate that pays the full costs of the project, without subsidy from existing shippers through rolled-in pricing. (Footnote omitted)

32. The policy considerations that support our open season requirements are separate and unrelated to the market considerations the Commission uses to evaluate market-based rate proposals. The Commission has granted independent storage providers, including Pine Prairie, the authority to charge market-based rates based upon a record showing that there are sufficient alternatives to prevent the storage provider from exercising market power.<sup>24</sup> Where there is a sufficiently competitive market, the Commission has relied upon market-based prices in lieu of cost-of-service regulation to assure a just and reasonable rate result. However, every pipeline, including storage providers granted market-based rate authority, must still comply with the non-discriminatory access and other service-related requirements of Part 284. Similarly, the fact that a particular market may be sufficiently competitive to support market-based pricing does not address the non-rate-related issues associated with the construction of new capacity that our open season policies are designed to address, namely, ensuring non-discriminatory access and the proper sizing of the new facilities.

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<sup>22</sup> See, e.g., *Algonquin Gas Transmission, LLC*, 120 FERC ¶ 61,072 at P 66; *Natural Gas Pipeline Co. of America*, 101 FERC ¶ 61,125, at P 40 (2002).

<sup>23</sup> Certificate Policy Statement, 90 FERC at 61,392.

<sup>24</sup> See, e.g., *Pine Prairie Energy Center, LLC*, 109 FERC ¶ 61,215 at P 31-37; *Blue Sky Gas Storage, LLC*, 129 FERC ¶ 61,210, at P 20-25 (2009).

33. We disagree with Pine Prairie's claim that because we routinely find that storage providers with market-based rates meet the no-subsidy requirement of the Certificate Policy Statement because they bear the risks of underutilized facilities, the open season requirements are inapplicable. First of all, the Commission applies the no-subsidy requirement to all major construction projects, including projects authorized to charge cost-of-service rates. Additionally, as explained above, the no-subsidy requirement is only one part of the Commission's test for ensuring that an expansion project is economically viable. As stated in the Certificate Policy Statement, the first step in determining whether the market finds an expansion project economically viable and is required by the public convenience and necessity is for the pipeline to conduct an open season prior to the certificate application in which existing customers are given an opportunity to permanently relinquish their capacity.

34. We also do not share Pine Prairie's view that our turn-back open season policy is unnecessary because BP or other customers can offer any portion of its firm storage capacity to third parties by means of the capacity release mechanism in Pine Prairie's tariff. The purpose of our capacity turn-back policy for expansion projects is to enable the project sponsor to consider any requests to turn back capacity in sizing the proposed project. Thus, the capacity release mechanism in Pine Prairie's tariff is not an adequate substitute for the turn-back open season requirement. As pointed out by Pine Prairie, we recognize that the requirement to solicit turn-back capacity may not always result in a project sponsor revising the size of a proposed construction project. However, we find that our turn-back open season policies will appropriately balance the need for additional infrastructure while mitigating the potential for overbuilding, the associated environmental impacts and condemnation of property.<sup>25</sup> Therefore requiring a turn-back open season is a necessary step to finding an expansion project is in the public convenience and necessity.

35. However, we also agree with Pine Prairie that our requirement to solicit turn-back capacity does not mean that a shipper can simply walk away from its contract obligations. Consistent with Commission precedent,<sup>26</sup> Pine Prairie can require shippers offering to turn back capacity to meet reasonable terms designed to keep the company financially whole. Thus, contrary to Pine Prairie's claims, our policies would neither impact Pine Prairie's ability to recover its costs and earn a return on the capital it has invested in its facilities, nor would it give BP or other customers desiring to turn back capacity a windfall.

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<sup>25</sup> 15 U.S.C. 717f(h) (2006).

<sup>26</sup> See, e.g., *Cheyenne Plains Gas Pipeline Co.*, 121 FERC ¶ 61,273, at P 35-37 (2007); *Algonquin Gas Transmission Co.*, 87 FERC at 61,990-91.

36. The Commission recognizes that in recent years the Commission has accepted provisions in the tariffs of storage providers authorized to charge market-based rates that have been interpreted to provide the storage provider with discretion on whether to hold an open season for expansion capacity prior to the in-service date of the facilities.<sup>27</sup> In doing so, the Commission accepted, without elucidation, statements by the storage providers that these provisions were justified to reflect the storage providers' market-based rate environment and to respond to specific market realities.<sup>28</sup> However, none of these cases, including the *Windy Hill* proceeding where the Commission rejected a protest filed by BP, involved a proposed expansion where an existing customer alleged specific harm because it was not given the opportunity to turn back capacity as part of an open season for the project.<sup>29</sup> The facts presented here, specifically BP's inability to offer to relinquish capacity that it asserts it no longer needs that may substitute for the proposed expansion capacity, have caused us to reevaluate these holdings in the context of the goals expressed in the Certificate Policy Statement. Upon examination, we find none of the storage providers, including Pine Prairie, have specified, and we do not identify, any particular "market reality" that would warrant market-based rate storage providers being exempted from the open season requirements, including the requirement to solicit turn-back capacity, applicable to all other pipeline projects. Therefore, to ensure non-discriminatory access and the proper sizing of new facilities, we announce here that, for the reasons discussed above, going forward, we will apply our open season policies to all new construction projects, including market-based rate storage projects, that create capacity. Accordingly, we find that section 3.1 of Pine Prairie's tariff that provides Pine Prairie with the discretion to hold an open season for expansion capacity prior to the in-service date of the facilities is unjust and unreasonable and unduly

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<sup>27</sup> For existing capacity, the Commission has not required pipelines to sell capacity solely through open seasons. Rather, pipelines may elect to sell such capacity on a first-come, first-served basis. This allocation method is appropriate for existing capacity because pipelines are required to post all available capacity (section 284.13(d) of the Commission's regulations) and the proper sizing of the facility is not at issue.

<sup>28</sup> See, e.g., *Windy Hill*, 119 FERC ¶ 61,291, at P 74; *Egan Hub Storage, LLC*, 116 FERC ¶ 61,174 at P 14.

<sup>29</sup> While, as Pine Prairie asserts, Pine Prairie and other storage providers may have in the past proposed expansion projects prior to conducting open seasons or conducted open seasons for expansion projects without soliciting turn-back capacity, no customers alleged harm or otherwise raised open season issues in those proceedings. Accordingly, the Commission did not address its open season/turn-back capacity requirements in the context of those proceedings.

discriminatory. We direct Pine Prairie to make a compliance filing to revise this tariff language in accordance with this discussion within 30 days of this order.

37. In order to ensure that the Phase III Expansion Project is properly sized, we will also require Pine Prairie to hold a new open season and solicit permanent capacity release offers. We will require Pine Prairie to submit the results of its efforts to solicit offers to turn back capacity within 30 days of the close of the open season. At that time, Pine Prairie should also inform the Commission as to whether it will be filing an amendment to its application indicating any changes to its proposed facilities.<sup>30</sup>

### **3. Impact on Existing Customers, Pipelines, and Communities**

38. Pine Prairie's proposal is designed to provide expansion service and will not have a negative impact on the quality of services provided to its existing customers. Further, the concerns of BP, the only existing customer to file a protest in this proceeding, have been resolved as discussed supra.

39. The proposed project should not have any adverse impact on existing storage providers or their captive customers. As discussed below, the proposed project will be located in a competitive market and will serve new demand for storage services in this region. The proposal will also enhance storage options available to transportation customers of existing pipelines.

40. In addition, there should be minimal adverse impact on landowners associated with the development of this storage project. The cavern sites, compressor station site, as well as most of the expanded right-of way for the brine lines, are on land owned by Pine Prairie. In addition, no landowner protested Pine Prairie's application or provided adverse comments on the environmental assessment (EA).

### **4. Conclusion**

41. Based on the benefits the proposal will provide and the lack of any identifiable adverse impacts on existing customers, other pipelines, landowners, and communities, the Commission finds, consistent with the Certificate Policy Statement and NGA section 7(c), that approval of the Phase III Expansion Project is required by the public convenience and necessity, subject to the conditions discussed herein.

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<sup>30</sup> To the extent that all the capacity of its expansion as currently proposed has not yet been subscribed, we anticipate that Pine Prairie would also accept bids for such capacity during the new open season.

## **B. Market-Based Rates**

42. Pine Prairie is seeking reaffirmation of its authority to provide storage, hub, and wheeling services at market-based rates. The Commission previously granted Pine Prairie's initial request to charge market-based rates for its services in 2004<sup>31</sup> and subsequently re-affirmed that authorization in connection with proposed expansion projects.<sup>32</sup>

43. Generally, the Commission evaluates requests to charge market-based rates for storage under the analytical framework of its Alternative Rate Policy Statement. 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.<sup>33</sup> To find that an applicant cannot withhold or restrict services, significantly increase prices over an extended period, or discriminate unduly, the Commission must find that there is a lack of market power<sup>34</sup> because customers have good alternatives<sup>35</sup> or that the applicant or Commission can mitigate the market power with specified conditions.

44. The Commission's analysis of whether an applicant has the ability to exercise market power includes three major steps. First the Commission reviews whether the

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<sup>31</sup> See *Pine Prairie Energy Center, LLC*, 109 FERC ¶ 61,215 at P 31-39.

<sup>32</sup> See *Pine Prairie Energy Center, LLC*, 116 FERC ¶ 61,316, at P 16 (2006); and *Pine Prairie Energy Ctr., LLC*, 128 FERC ¶ 61,136, at P 19-25 (2009).

<sup>33</sup> See *Blue Sky Gas Storage, LLC*, 129 FERC ¶ 61,210; and *Orbit Gas Storage, Inc.*, 126 FERC ¶ 61,095 (2009).

<sup>34</sup> 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.

<sup>35</sup> 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.

applicant has specifically and fully defined the relevant markets<sup>36</sup> 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.<sup>37</sup> Additionally, as part of the first step, the applicant must identify the relevant geographic market.<sup>38</sup> Second, the Commission measures an applicant's market share and market concentration.<sup>39</sup> Third, the Commission evaluates other relevant factors, such as ease of entering the market.

45. In 2006, the Commission issued Order No. 678 which explicitly adopted a more expansive definition of the relevant product market for storage to include close substitutes for gas storage services, including pipeline capacity, and local production/LNG supply.<sup>40</sup> The Commission determined that for a non-storage product to be a good alternative to storage, it must be available soon enough, have a price low enough, and have a quality high enough to permit customers to substitute the alternative for the applicant's services.<sup>41</sup>

### 1. Market-Based Rates for Storage Services

46. Pine Prairie provides a market power analysis and market power data in Exhibit I to support its claim that it does not possess market power over storage and hub services offered in the relevant geographic market. Pine Prairie's market power analysis for storage and hub services defines the relevant product and geographic markets, measures market share and concentration, and evaluates other factors including the ease of entry into the relevant market. Pine Prairie concludes that since it will have a small market

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<sup>36</sup> 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.

<sup>37</sup> Alternative Rate Policy Statement, 74 FERC at 61,321.

<sup>38</sup> *Id.* at 61,232-34.

<sup>39</sup> *Id.* at 61,234.

<sup>40</sup> *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).

<sup>41</sup> Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 27.



share in a large natural gas producing region, it would be extremely difficult for Pine Prairie to exercise market power in its provision of storage and hub services.

**a. Market Definitions**

47. In its market power study,<sup>42</sup> Pine Prairie defines the relevant geographic market as consisting of Louisiana, where the Pine Prairie facility is located, and the neighboring states of Mississippi, Alabama, and eastern Texas (Gulf Coast Market). Pine Prairie states that the Commission has used the Gulf Coast Market definition in analyzing Pine Prairie's previous requests for market-based rate authorizations as well as other Gulf Coast area storage providers' applications for market-based rates authorizations.<sup>43</sup>

48. For purposes of its analysis, Pine Prairie defines the product market as consisting of the underground natural gas storage facilities, as well as the storage and deliverability capacities of LNG terminals, in the relevant market. Pine Prairie maintains that LNG terminals compete directly with traditional underground natural gas storage facilities to serve the market's needs for natural gas deliverability. Pine Prairie notes that in Order No. 678 the Commission specifically recognized that LNG supplies can be a close substitute for gas storage services. Pine Prairie asserts that the capabilities of LNG terminals can be sold in the relevant geographic market at any time during a period of high demand and thus may be considered to be available soon enough. It also states that the quality of the service involving the use of revaporized natural gas delivered from LNG terminals is identical to the quality of the service involving withdrawals of natural gas from storage because both LNG terminals and underground natural gas storage facilities provide fungible units of natural gas that meet the specifications required for transportation on the grid. Finally, Pine Prairie asserts that the price comparability requirement is also satisfied because quantities of natural gas withdrawn from underground storage and natural gas revaporized at LNG terminals are sold into the same competitive natural gas market.

**b. Market Concentration, Market Share, and Other Factors**

49. The Commission examines concentration in the relevant market using the Herfindahl-Hirschman Index (HHI). The Alternative Rate Policy Statement states that a low HHI, generally less than 1,800, indicates that sellers cannot exert market power

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<sup>42</sup> Application, Exhibit I, Attachment 4.

<sup>43</sup> Pine Prairie's Application at 26.

because customers have sufficiently diverse alternatives in the relevant market.<sup>44</sup> If the HHI is above 1,800, the Commission will give the applicant more scrutiny in order to make a determination about a seller's ability to exercise market power because the market is more concentrated. The Commission also considers an applicant's market share and other factors including ease of entry.

50. Pine Prairie's market power study includes 76 natural gas storage and LNG import terminals, including the Pine Prairie Energy Center, with a total working gas capacity of approximately 1.41 Tcf and an aggregate daily deliverability of 62,543 MMcf/d.<sup>45</sup> Pine Prairie's market power analysis generates a market share of 5.64 percent and a HHI of 485 for working gas capacity and a market share of 5.12 percent and a HHI of 454 for maximum daily withdrawal capacity.

51. Pine Prairie also maintains that there are no significant barriers to entry in the natural gas storage market in the Gulf Coast Market. In support, Pine Prairie states that there are at least 49 greenfield underground natural gas storage projects and storage project expansions that have been authorized in the Gulf Coast Market since 2000.<sup>46</sup>

### **c. Commission Determination**

52. We find that the record in this proceeding does not support Pine Prairie's inclusion of LNG terminal supplies in its market power study. For instance, Pine Prairie's inclusion of LNG supplies is based upon its assertion that capabilities of LNG terminals can be sold in the relevant geographic market at any time during a period of high demand and thus may be considered to be an available substitute for natural gas delivered from storage. However, Pine Prairie uses maximum capacity and deliverability quantities of the LNG terminals in its analysis without regard to the actual quantities of regasified natural gas that can be physically delivered into the relevant geographic market from these facilities. It is well documented that LNG terminals in the Gulf Coast region have been underutilized in recent years. For the five operational the LNG import terminals used in Pine Prairie's market power study, the annualized utilization rates for 2010 are all less than six percent.<sup>47</sup> Under these current market conditions, we find that Pine Prairie's

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<sup>44</sup> Alternative Rate Policy Statement, 74 FERC at 61,235.

<sup>45</sup> See Application, Exhibit I, Attachment 4.

<sup>46</sup> Pine Prairie's Application at 29, Exhibit I, Attachment 6.

<sup>47</sup> The operational LNG import terminals consist of Sabine Pass, Quintana Island, Cameron, Lake Charles, and Gulf Gateway Energy Bridge. The utilization rates were

(continued...)

use of maximum deliverability quantities from LNG terminals in the Gulf Coast Market as an alternative to Pine Prairie's storage services is not reasonable.

53. We have recalculated the market concentration and market share measures using only the underground storage alternatives included in Pine Prairie's market power study. We conclude that numerous storage alternatives to Pine Prairie's proposed services exist in the relevant market that will prevent the exercise of market power. The revised HHI for working gas capacity and deliverability in the Gulf Coast Market are both 518, well below the 1,800 HHI level that the Commission uses to be indicative of a lack of market power. In addition, the revised prospective market shares of 5.9 percent for working gas capacity and 6.2 percent for deliverability are small, which further supports a finding that Pine Prairie will lack market power over its proposed storage services. The Commission also notes that Pine Prairie's proposal for market-based rates is unopposed and that barriers to entry are likely to be low in the relevant geographic regions as evidenced by the number of new storage projects that have been authorized.

54. In view of the above considerations, we will grant Pine Prairie's request to charge market-based rates for its proposed storage and hub services.

## 2. Market-Based Rates for Interruptible Wheeling Service

55. 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 those same services from alternative providers. The Commission has relied upon the bingo card analysis to determine whether shippers can avoid the pipeline interconnections provided by the applicant by utilizing alternative interconnections available between the pipelines that are directly or indirectly connected to the applicant.

56. Pine Prairie notes that the Commission previously authorized Pine Prairie to charge market-based rates for interruptible wheeling services as part of its Phase II Expansion Project.<sup>48</sup> Pine Prairie requests that the Commission reaffirm its finding that Pine Prairie lacks market power as to interruptible wheeling services based on the bingo card analysis it filed in the Phase II Expansion Project. Pine Prairie notes that the Phase III Expansion Project does not include any new pipeline interconnections and thus there

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derived using the design deliverability capacity of the LNG facilities and actual sendout volumes reported by Bentek Energy, *available at* [www.bentekenergy.com](http://www.bentekenergy.com).

<sup>48</sup> See *Pine Prairie Energy Center, LLC*, 128 FERC ¶ 61,136 (2009) (Phase II Expansion Order).

are no new wheeling paths to consider in its bingo card analysis. Pine Prairie states that the only element of the Phase III Expansion Project that has any effect on wheeling services is its proposal to increase the authorized maximum daily receipt and delivery rates from 600 MMcf/d to 900 MMcf/d at two pipeline interconnections; Pine Prairie asserts this change will only have a de minimus effect on Pine Prairie's market share for wheeling service.

57. As noted by Pine Prairie, we have previously authorized Pine Prairie to charge market-based rates for interruptible wheeling service. In the Phase II Expansion Order, we found that Pine Prairie's analysis showed that there were a number of alternative paths available to shippers desiring to wheel natural gas between interstate natural gas pipelines in the Gulf States Market.<sup>49</sup> Including Pine Prairie, there are at least twelve market centers and hubs operating in the Gulf Coast Market, with interconnections to numerous interstate and intrastate pipelines. The market power study provided in the Phase II Expansion Project proceeding showed that Pine Prairie's market share for wheeling delivery capacity at alternative hubs and market centers in the Gulf Coast Market was 17 percent and its market share for receipt capacity was 19 percent. The HHIs of 1,059 for delivery capacity and 1,178 for receipt capacity are both below the 1,800 level set forth in the Alternative Rate Policy Statement. The market power study also showed that ample competitive alternatives exist for Pine Prairie's interruptible hub and wheeling services and that there are alternative interconnection paths for every possible flow of gas among the pipelines with which the Pine Prairie facility will interconnect. We find that the results of the bingo card analysis approved in the Phase II Expansion Order are not materially changed as a result of the Phase III Expansion Project. Thus, we will reaffirm Pine Prairie's authority to charge market-based rates for its interruptible wheeling services.

### **3. Notification of Changed Circumstances**

58. As required by section 284.504(b) of the Commission's regulations,<sup>50</sup> Pine Prairie must notify the Commission of future circumstances that may significantly affect its market power status. Thus, our approval of continued market-based rate authority is subject to re-examination in the event that: (a) Pine Prairie adds storage capacity beyond the capacity authorized in this order; (b) an affiliate increases storage capacity; (c) an affiliate links storage facilities to Pine Prairie Energy Center; or (d) Pine Prairie or an affiliate acquires an interest in, or is acquired by, an interstate pipeline connected to Pine Prairie Energy Center. Because these circumstances could affect its market power status,

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<sup>49</sup> *Id.*

<sup>50</sup> 18 C.F.R. § 284.504(b)(2010).

Pine Prairie must notify the Commission within ten days of acquiring knowledge of any such changes. The notification shall include a detailed description of the new facilities and their relationship to Pine Prairie.<sup>51</sup>

#### **4. Waiver of Cost-Based Regulations**

59. Because it proposes to charge market-based rates, Pine Prairie requests waiver of the Commission's cost-based regulations which include: (1) section 157.6(b)(8) (cost and revenue data for rates); (2) sections 157.14(a)(13), (14), (16), and (17) (cost-based exhibits); (3) section 157.14(a)(10) (accessible gas supplies); (4) sections 260.1 and 260.2 and Part 201 (accounting and reporting requirements for cost-of-service rate structure, including Form 2A); (5) section 284.7(e) (reservation charge); and (6) section 284.10 (straight fixed-variable rate design),.

60. The cost-related information required by these regulations is not relevant in light of our approval of market-based rates for Pine Prairie's storage, hub, and wheeling services. Thus, consistent with our findings in previous orders,<sup>52</sup> we will grant Pine Prairie's request for waivers, except for the information necessary for the Commission's assessment of annual charges.<sup>53</sup> Pine Prairie is required to file page 520 of Form No. 2-A, reporting the gas volume information which is the basis for imposing an Annual Charge Adjustment charge. However, these waivers are subject to revision in the event that the Commission finds cause to re-examine Pine Prairie's market power or market-based rates. In addition, the Commission will require Pine Prairie to maintain records to separately identify the original cost and related depreciation on its facilities, and to maintain accounts and financial information of its facilities consistent with generally accepted accounting principles should the Commission require Pine Prairie to produce those reports in the future.

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<sup>51</sup> See, e.g., *Copiah County Storage Co.*, 99 FERC ¶ 61,316 (2002); *Egan Hub*, 99 FERC ¶ 61,269 (2002).

<sup>52</sup> See, e.g., *SG Resources Mississippi, L.L.C.*, 118 FERC ¶ 61,252, at P 29 (2007); *Port Barre Investments, L.L.C. d/b/a Bobcat Gas Storage*, 116 FERC ¶ 61,052 (2006); *Liberty Gas Storage, L.L.C.*, 113 FERC ¶ 61,247, at P 54 (2005).

<sup>53</sup> See *Wykcoff Gas Storage Co., LLC*, 105 FERC ¶ 61,027, at P 65 (2003).

### C. Engineering Analysis

61. The Commission's engineering staff analyzed Pine Prairie's proposal and concluded that if constructed as proposed, the expansion is technically sound and feasible. The proposed cavern locations are well within the design criteria and confinement of the salt dome and the caverns are located at sufficient depth and within proper distances from the five other caverns, the nearest third-party wells, and the salt boundaries to avoid pressure influences between caverns when they are operated at full storage capacity/pressure. The caverns are spaced and designed under the Louisiana Department of Natural Resources (Louisiana DNR) regulations for domal salt storage facilities; the wells are designed properly; and the various tests and logs to be run on these caverns and wells are consistent with the Interstate Oil and Gas Compact Commission guidelines for salt dome storage. The maximum and minimum cavern pressure gradients throughout the storage cycle (0.90 psi/ft and 0.20 psi/ft) have been determined by geomechanical analysis of cores taken from the five other caverns wells and should preserve the structural integrity of the caverns, and are within the limits recommended by the Louisiana DNR. The design dimensions for each cavern were converted to an equivalent gas volume at the maximum and minimum pressure gradients. Material balance estimate of the maximum volume was within +/- one percent of Pine Prairie's proposed cavern capacities. All of the existing caverns were designed and constructed in terms of size and shape with the thought of future expansion using a Solution Mining Under Gas (SMUG) process. Based upon this analysis, staff concludes that the proposed salt caverns and expansions, if constructed as described, are technically sound and well defined.

62. When originally certificated, Cavern No. 1 had a minimum pressure gradient of 0.15 psi/ft, and the cavern has safely operated at this pressure. However, further geomechanical analysis indicated that a minimum pressure gradient of 0.20 psi/ft would better minimize cavern shrinkage due to salt creep. The increase in minimum pressure is not a safety issue but an operational one and conforms Cavern No. 1 with the Louisiana DNR permit's requirement of a 0.20 psi/ft minimum pressure gradient. As a result, Cavern No. 1 will have a total capacity of 10.2 Bcf, with a working gas capacity of 8.0 Bcf and a cushion gas capacity of 2.2 Bcf.

63. The total capacity of the Pine Prairie facility will be 102.6 Bcf, with a working gas capacity of 80 Bcf, and a cushion gas capacity of 22.6 Bcf. The table summarizes the certificate parameters for each cavern and the facility total.

Cavern	Total capacity, Bcf	Working gas capacity, Bcf	Cushion Gas capacity, Bcf	Maximum pressure at casing shoe, psia 0.90 psi/ft	Minimum pressure at casing shoe, psia 0.20 psi/ft

1	10.2	8	2.2	3537	707
2	15.4	12	3.4	3621	805
3	15.4	12	3.4	3505	779
4	15.4	12	3.4	3600	800
5	15.4	12	3.4	3600	800
6	15.4	12	3.4	3600	800
7	15.4	12	3.4	3600	800
Total	102.6	80	22.6		

64. Regarding the two new electric-drive compressors, Pine Prairie states these units are not designed to alter the maximum pressure of the facility's caverns, or to increase the peak withdrawal rate or maximum injection rate, but to decrease the environmental impact of the gas fired compressor units, improve the operational flexibility of the facility, and improve Pine Prairie's ability to fuel switch. However, if all 110,000 hp is used, the maximum injection rate and peak withdrawal rate could be increased above the certificated level. Therefore, Pine Prairie is reminded that the peak withdrawal rate and maximum injection rate are 3,200 MMcf/d and 2,400 MMcf/d, respectively.

#### *Cavern Integrity Monitoring System*

65. The Commission will approve Pine Prairie's requests to use a cavern monitoring system as an alternative to the standard periodic sonar survey engineering condition (*See* Engineering Condition No. 4). The Commission recognizes that advances in technology have resulted in new and alternate ways to monitor cavern integrity other than the standard sonar survey. In response to that, the Commission has altered the periodic sonar survey condition to allow companies to use, upon prior approval of the methodology, a cavern integrity monitoring plan that is consistent with the intent of the sonar survey. Pine Prairie describes their alternate system as a computer simulation package that takes into account the thermal and thermodynamic history of the cavern, gas movements and heat transfer in and out of the cavern, and involves constant, real-time monitoring of wellhead and downhole temperatures and pressures. Pine Prairie summarizes their program as follows. For each cavern:

- A mechanical integrity test will be conducted at least every five years,
- Continuous, real-time monitoring of the pressure in the casing annulus;
- Continuous, real-time monitoring of the flow of natural gas into and out of the cavern;
- Continuous, real-time monitoring of key wellhead parameters, including pressure and temperature;

- An annual inventory verification study of each cavern; and
- Regular surveys of down-hole cavern pressure and temperature.

Industry standard modeling software used in conjunction with the information collected above will be used to evaluate the complete thermal and thermodynamic history of all gas and liquid movement (to account for the SMUG operations) to monitor the size and shape of the caverns.

#### **D. Environmental Review**

66. On October 26, 2010, the Commission issued a Notice of Intent to Prepare an Environmental Assessment for the proposed Phase III Expansion Project and Request for Comments on Environmental Issues (NOI). The NOI was mailed to interested parties including federal, state, and local officials; agency representatives; environmental and public interest groups; Native American tribes; local libraries and newspapers; and affected property owners.

67. We received comments in response to the NOI from the United States Fish and Wildlife Service (USFWS), the National Park Service, the State of Louisiana Department of Wildlife and Fisheries (LDWF), and the Alabama-Coushatta Tribe of Texas. The Alabama-Coushatta Tribe of Texas requested to be notified in the event of any inadvertent discovery of artifacts or human remains. The National Park Service's Southeast Regional Office stated that they have no comments in response to the NOI. The USFWS requested that project impacts on the red-cockaded woodpecker, colonial nesting waterbirds, and migratory birds be addressed in the EA and that jurisdictional wetland impacts be evaluated. The LDWF requested that we address alternatives, wetlands, vegetation, land and waterbody impacts in our EA as well as impacts on the state-listed wand blackroot and old prairie crawfish.

68. To satisfy the requirements of the National Environmental Policy Act, our staff prepared an (EA) for Pine Prairie's proposal. The analysis in the EA addresses geology, soils, water resources, wetlands, vegetation, fisheries, wildlife, threatened and endangered species, land use, recreation, visual resources, cultural resources, air quality, noise, safety, socioeconomics, and alternatives. All substantive comments received in response to the NOI were addressed in the EA.

69. The EA addressed the general scoping comments of the USFWS and the LDWF with its discussion of vegetation and water impacts. The EA determined that the potential use of the work sites and surrounding areas by colonial waterbirds is low and waterbirds would not be adversely affected by the proposed project. In addition, Pine Prairie has committed to complete a pre-clearing survey to avoid or minimize impact on migratory birds. Similarly, the EA concluded that the proposed project is not likely to



adversely affect the federally endangered red-cockaded woodpecker, the state-listed old prairie crawfish, and the wand blackroot.

70. Both the USFWS and the LDWF requested that the environmental analysis address wetlands. The EA evaluated the project impact on wetlands and included a recommended condition that Pine Prairie use the Stump Lake Route Avoidance Variation. This mandates an alternative routing for a temporary access road to avoid additional impacts on Stump Lake and minimize impacts on forested wetlands. We will require this alternative as Environmental Condition No. 12.

71. The EA was placed into the public record on March 18, 2011. We received no comments on the EA.

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

73. 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.<sup>54</sup>

74. At a hearing held on May 19, 2011, the Commission, on its own motion, received and made a part of the record in this proceeding all evidence, including the application and exhibits thereto, 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 Pine Prairie under NGA section 7(c) authorizing the construction and operation of the Phase III Expansion Project as described more fully in this order and in the application.

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<sup>54</sup> See, e.g., *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

(B) The certificate authority granted in Ordering Paragraph (A) is conditioned upon:

(1) Pine Prairie's compliance with all applicable Commission regulations under the NGA, including, but not limited to, the general terms and conditions set forth in Parts 154, 157, and 284, and paragraphs (a), (c)(1) and (2), (e), and (f) of section 157.20 of the regulations.

(2) Pine Prairie's compliance with the engineering and environmental conditions set forth in Appendices A and B to this order.

(3) Pine Prairie's completion of the authorized construction of the proposed facilities and making the integrated storage and header facilities available for service within three years of the date of this order pursuant to section 157.20(b) of the Commission's regulations.

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

(D) Pine Prairie's request to charge market-based rates for firm and interruptible storage and interruptible hub and wheeling services is approved, as discussed and subject to the condition of this order.

(E) Waiver is granted of the Commission's regulations that have been deemed inapplicable to storage providers with market-based rates, as discussed in this order.

(F) Pine Prairie shall file to revise section 3.1 of the GT&C of its tariff in accordance with the discussion herein within 30 days of the issuance of this order

(G) Pine Prairie shall hold a new open season and solicit permanent capacity release offers and submit the results of its efforts to solicit offers to turn back capacity within 30 days of the close of the open season.

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

Appendix A  
Engineering Conditions for Pine Prairie's Phase III Expansion Project

1. Pine Prairie shall establish and maintain a subsidence monitoring network over the proposed cavern storage area.
2. Pine Prairie shall assemble, test, and maintain an emergency shutdown system.
3. Pine Prairie shall periodically log each cavern's wells to check the casing status.
4. Pine Prairie shall conduct sonar surveys of the caverns every five years to:  
(a) monitor their dimensions and shape, including the cavern roof; (b) estimate pillar thickness between caverns throughout the storage operations; and (c) file the results with the Commission.

Pine Prairie's proposed cavern monitoring plan is approved as an alternative to sonar surveys, as discussed in the order.

Further alternatives to the above plan must be filed with the Commission, for prior approval, no less than 30 days before placing the caverns into service or 30 days before a future scheduled monitoring effort.

5. Pine Prairie shall conduct an annual inventory verification study on each cavern.
6. Pine Prairie shall determine and report to the Secretary of the Commission the final gas storage capacity of each cavern (including data and work papers to support the actual operating capacity determination) upon placing each cavern in-service.
7. The following conditions shall apply to the entire Pine Prairie storage facility:
  - a. The total maximum gas storage inventory stored in the caverns shall not exceed 102.6 Bcf at 14.73 psia and 60°F (Cavern No.1 – 10.2 Bcf, Cavern No. 2 – 15.4 Bcf, Cavern No. 3 – 15.4 Bcf, Cavern No. 4 – 15.4 Bcf, Cavern No.5 – 15.4 Bcf, Cavern No. 6 – 15.4 Bcf, and Cavern No. 7 – 15.4 Bcf) without prior Commission authorization.
  - b. The maximum gas storage shut-in stabilized pressure in each cavern shall not exceed 0.90 psi per foot as measured at the casing shoe and the minimum pressure in each cavern shall be limited to 0.20 psi per foot as measured at the casing shoe.

8. Before commencing gas storage operations in any of the caverns, Pine Prairie shall file with Secretary of the Commission:
  - a. the results of the Mechanical Integrity Test for each cavern before conversion of that cavern to natural gas storage;
  - b. The results of any new sonar surveys of each cavern, including plan view and cross-sections;
  - c. copies of the latest interference, tracer surveys, or other testing or analysis, to verify the lack of communication between the caverns;
  - d. the volume of rubble at the base of each cavern, including the methodology for determining such volume; and
  - e. geological cross sections (when additional data is obtained) through the total project area showing all geologic units;
9. Pine Prairie shall file semiannual reports for each cavern (to coincide with the termination of the injection or withdrawal cycles) containing the following information (volumes shall be stated at 14.73 psia and 60°F):
  - a. the daily volume of natural gas injected and withdrawn;
  - b. the inventory of natural gas and shut-in wellhead pressure for each cavern at the end of reporting period;
  - c. the maximum daily injection and withdrawal rates experienced for the entire storage field during the reporting period;
  - d. the average working pressure on such maximum days taken at a central measuring point where the total volume injected or withdrawn is measured;
  - e. the results of any tests performed to determine the actual size, configuration, or dimensions of the storage caverns;
  - f. a discussion of current operating problems and conclusions;
  - g. other data or reports which may aid the Commission in the evaluation of the storage project; and
  - h. the results of leak detection tests performed during storage operations to determine the integrity of each cavern/wellbore, casing and wellhead.

10. Pine Prairie shall file semiannual reports in accordance with section 157.214 (c) of the Commission's regulations until the maximum inventory reaches or closely approximates the maximum capacity authorized and for a period of one year following.

Appendix B  
Environmental Conditions for Pine Prairie's Phase III Expansion Project

1. Pine Prairie 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 environmental assessment, unless modified by the Order. Pine Prairie 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 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**, Pine Prairie shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EI), 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 and shall include the Stump Lake Avoidance Variation. **As soon as they are available, and before the start of construction**, Pine Prairie 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.

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

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

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

- a. implementation of cultural resources mitigation measures;
  - b. implementation of endangered, threatened, or special concern species mitigation measures;
  - c. recommendations by state regulatory authorities; and
  - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **Within 60 days of the acceptance of the certificate and before construction begins,** Pine Prairie shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP. Pine Prairie must file revisions to the plan as schedules change. The plan shall identify:
    - a. how Pine Prairie 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 Pine Prairie will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;

- c. the number of EIs assigned per spread, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
  - d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
  - e. the location of the environmental compliance training Pine Prairie will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change);
  - f. the company personnel (if known) and specific portion of Pine Prairie 's organization having responsibility for compliance;
  - g. the procedures (including use of contract penalties) Pine Prairie will follow if noncompliance occurs; and
  - h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
    - (1) the completion of all required surveys and reports;
    - (2) the environmental compliance training of onsite personnel;
    - (3) the start of construction; and
    - (4) the start and completion of restoration.
7. Beginning with the filing of its Implementation Plan, Pine Prairie 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 Pine Prairie'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 environmental inspector(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
  - d. a description of the corrective actions implemented in response to all instances of noncompliance, and their cost;
  - e. the effectiveness of all corrective actions implemented;
  - f. a description of any landowner/resident complaints which may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and
  - g. copies of any correspondence received by Pine Prairie from other federal, state, or local permitting agencies concerning instances of noncompliance, and Pine Prairie's response.



8. **Prior to receiving written authorization from the Director of OEP to commence construction of any project facilities**, Pine Prairie shall file with the Secretary documentation that it has received all authorizations required under federal law (or evidence of waiver thereof).
9. Pine Prairie must receive written authorization from the Director of OEP **before commencing service from each phase of the project**. 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**, Pine Prairie shall file an affirmative statement with the Secretary, certified by a senior company official:
  - a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
  - b. identifying which of the certificate conditions Pine Prairie 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. Pine Prairie shall file a noise survey with the Secretary **no later than 60 days** after placing the newly authorized units at the Gas Handling Facility (GHF) in service. If the noise attributable to the operation of the GHF at full load exceeds an day-night equivalent noise level ( $L_{dn}$ ) of 55 A-weighted decibels (dBA) at any nearby noise sensitive areas, Pine Prairie should install additional noise controls to meet that level **within 1 year** of the in-service date. Pine Prairie should confirm compliance with the  $L_{dn}$  of 55 dBA requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.
12. Pine Prairie shall use the Stump Lake Avoidance Variation (identified in Figure 3 of the EA) to avoid Stump Lake and associated forested wetlands for the Cavern No. 7 temporary access road.