125 FERC ¶ 61,131
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Suedeen G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

Leaf River Energy Center, LLC Docket No. CP08-8-000

ORDER ISSUING CERTIFICATES

(Issued October 30, 2008)

1. On October 9, 2007, Leaf River Energy Center LLC (Leaf River) filed an application in Docket No. CP08-8-000 under section 7(c) of the Natural Gas Act (NGA) and Part 157 of the Commission's regulations for a certificate of public convenience and necessity authorizing the construction and operation of a high deliverability salt dome natural gas storage facility and associated pipeline facilities (the Leaf River Storage Project) in Smith, Jasper, and Clarke Counties, Mississippi. Leaf River also seeks a blanket certificate under subpart G of Part 284 of the Commission's regulations to provide open-access storage services and authority to charge market-based rates. In addition, Leaf River requests a blanket construction certificate under subpart F of Part 157 of the Commission's regulations.

2. As discussed below, we find that Leaf River's proposed storage facilities and services are required by the public convenience and necessity and issue the requested certificate authorizations, subject to conditions set forth below. We also grant the requests for market-based rate authority and waiver of certain filing and other requirements.

I. Background and Proposal

3. Leaf River is a limited liability company organized and existing under the laws of the State of Delaware, authorized to do business in Mississippi. It is owned by NGS Energy Fund, LP, a limited partnership engaged in natural gas storage development activities, and it was formed to develop, own and operate the proposed natural gas storage

facility in Mississippi.[1] Upon acceptance of the requested certificate authorizations, Leaf River will become a jurisdictional natural gas company within the meaning of NGA section 2(6).

A. New Facilities

4. Leaf River proposes to develop four solution-mined storage caverns [2] (CW-01 through CW-04) in the New Home Salt Dome in Smith and Jasper Counties[3] with a total working gas capacity of 32 Bcf and 9.9 Bcf of cushion gas, with a peak withdrawal rate of 2.5 Bcf per day and a maximum injection rate of 1.0 Bcf per day. It would be capable of cycling up to eight times per year. The project would include a gas handling facility with cavern pipelines connecting with surface facilities, a 43.84-mile long pipeline header system to interconnect the storage facility with five interstate gas pipelines,[4] water supply wells and saltwater disposal wells. The project would include fiber optic cable facilities among the gas handling facility, pipeline interconnections, water supply and disposal wells and the storage cavern wells to transmit communications needed to develop and operate the storage facility.

5. Leaf River proposes to drill and complete four water supply wells into the Wilcox Formation and four saltwater disposal wells into the Eutaw and Tuscaloosa Formations.[5]

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[1] On August 17, 2007, Leaf River was granted a temporary exemption from section 7 certificate requirements to drill test wells to determine the feasibility of the project. 120 FERC ¶ 61,168 (2007).

[2] Salt dome storage caverns are created by a process called solution mining or leaching. The process entails injecting large volumes of water into subsurface geologic salt formations to dissolve the salt (producing a cavern surrounded by salt) and pumping the brine into a disposal facility. Leaf River states that it will use pressure testing, sonar equipment and other means to verify the integrity and safety of the storage caverns.

[3] The New Home Salt Dome is located about 6.5 miles northeast of Taylorsville, Mississippi, which is the nearest town. The top of the salt dome is approximately 1,200 feet below the surface. It is about one mile in diameter and is over 5,000 feet thick.

[4] The interstate pipelines are owned and/or operated by Southern Natural Gas Company (Sonat); Gulf South Pipeline Company, LP (Gulf South); Tennessee Gas Pipeline Company (Tennessee); Transcontinental Gas Pipe Line Corporation (Transco); and Destin Pipeline Company, L.L.C. (Destin).

[5] Leaf River states that the formations used for water supply and brine disposal are not used for potable water supply.

Leaf River states that it has acquired 260 acres of property to allow adequate spacing of well locations.

6. The gas handling facility would be located on a 9.95-acre parcel of company-owned land in Smith County, and would be connected to the storage caverns by gas pipelines contained in the same right of way (ROW) as the water supply and saltwater disposal pipelines, within a corridor varying from 30 to 70 feet in width. The gas handling facility would house the compressor station, gas dehydration equipment, and associated infrastructure. Leaf River states that the main compressor building would be about 65 feet wide by 300 feet long, and would house seven 4,800-horsepower gas-powered compressors, with support equipment. To provide power to the gas handling facility, Leaf River would build a permanent electrical substation within that facility. The electrical substation would be owned by the Southern Pine Electric Power Association. It would have two fully redundant transformers and would be designed to accommodate expansion.[6]

7. The project would also include a system of header pipelines to connect the gas handling facility with Sonat, Gulf South, Tennessee, Transco, and Destin. The header system would include two sections: a 6.61-mile long section called the Dome Lateral, which would have dual 24-inch diameter, bi-directional pipelines extending from the gas handling facility near the storage caverns to Gulf South's interstate mainline right-of-way.[7] The second section would be a 37.23-mile long West-East Lateral. The West-East Lateral facilities would include a 6.88-mile long segment of single, 24-inch diameter pipeline paralleling and in the same corridor as Gulf South pipeline facilities to the west and a 30.35-mile long segment of looped, bi-directional 24-inch pipeline paralleling and in the same corridor as Gulf South pipeline facilities to the east.[8] The final 5.3 miles of

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[6] Leaf River states that an existing 30-foot wide access road would be used for access to the gas handling facility from route CR 5, a county road.

[7] The corridor for the Dome Lateral would also include a 16-inch water pipeline and a 16-inch brine pipeline connecting the leaching equipment at the gas handling facility with the water supply and saltwater disposal wells. Mississippi Power Company's electric transmission line would run directly adjacent to and to the west of the pipeline corridor.

[8] *Gulf South Pipeline Company*, 120 FERC ¶ 61,291 (2007). The Gulf South pipeline facilities are part of its Southeast Expansion Project currently under construction. Leaf River notes that when Gulf South was planning its project it acquired a right-of-way wide enough for multiple pipelines and considered using facilities jointly with Leaf River. Gulf South and Leaf River concluded that using the same facilities to serve both Gulf South's and Leaf River's customers was not feasible.

the West-East Lateral will be in a corridor occupied by Transco pipeline facilities. There would be four meter and regulator stations to connect the pipeline header system to Sonat's, Gulf South's, Tennessee's, Transco's, and Destin's systems.

8. Leaf River states that Gulf South has agreed to assign part of its right-of-way to Leaf River, so that their pipelines may be built parallel and adjacent to each other. Leaf River states that since it seeks to use a 100-foot wide right-of-way for its header system, while Gulf South acquired only 40 to 60 feet of additional right-of-way from landowners in the area, Leaf River will need to negotiate additional easement agreements with and pay additional compensation to all landowners along the corridor.

9. Leaf River proposes that its header system will be operated in conjunction with the gas handling facility to permit gas to be received from or delivered into the interconnecting pipelines and injected into or withdrawn from storage in the caverns. Leaf River states that the header system will not include end-user interconnections and will function exclusively to provide storage and wheeling services nominated by its storage customers. That is, the header facilities will not be used to provide stand-alone transportation service. It seeks authorization to treat its proposed header system as an integral part of its storage facilities, in the same manner that the Commission has found acceptable for other independent gas storage operators with facilities having configurations similar to that of the Leaf River Storage Project.

10. Leaf River states that wheeling of gas from one pipeline to another requires the operation of its gas handling facility's compressors to provide a boost in pressure to overcome the prevailing pressure on the receiving pipeline. Leaf River states that the header will be able to deliver gas into separate pipelines requiring different levels of pressure boost for different prevailing pipeline pressures. As noted, Leaf River requests authority to charge market-based rate for its proposed wheeling services.

11. The Leaf River Storage Project will require non-jurisdictional electric power service connections to bring three-phase, high voltage service to the gas handling facility and standard 120/240 VAC service to the four proposed meter and regulator stations where it will interconnect with other pipeline systems. An overhead utility easement about two miles long will connect the substation to nearby electric transmission lines.

B. Markets and Services

12. Leaf River requests a blanket certificate under subpart G of Part 284 in order to provide firm and interruptible storage services on an open-access basis. It also requests approval of its pro forma FERC Gas Tariff.[9] It proposes to provide firm and interruptible

[9] Application, Exhibit P.

storage, park and loan and hourly balancing services, and interruptible wheeling services. It will not use its proposed header system to provide stand-alone transportation service.

13. Leaf River requests authority to charge market-based rates for all storage, wheeling, and hub services. It supports its request with a market power analysis at Exhibit I to its application that concludes that it will lack market power with respect to the services it proposes to provide.

14. In view of its request for market-based rate authority, Leaf River requests that the Commission waive certain filing and exhibit requirements relating to cost-based rates. Leaf River also requests waiver of the Commission's shipper-must-hold-title rule and other policies. These waiver requests are discussed fully and addressed below.

II. Notice of Application and Interventions

15. Notice of Leaf River's application was issued on October 23, 2007 and published in the *Federal Register* on October 29, 2007 (72 Fed. Reg. 61,125), with protests, comments and interventions due on or before November 14, 2007. S.G. Resources Mississippi, L.L.C. (SG Resources) filed a timely, unopposed motion to intervene. SG Resources states that it is a potential competitor of Leaf River, since SG Resources is developing a natural gas storage facility in the Gulf Coast region where the Leaf River Storage Project is proposed. However, SG Resources does not oppose Leaf River's application. SG Resources' timely, unopposed motion to intervene is granted by operation of Rule 214 of the Commission's regulations.[10]

16. On January 10, 2008, Earth Station Communications, LLC, by its parent company, Bean Industries, Inc. (Bean Industries) filed a late motion to intervene. Bean does not oppose Leaf River's application but asks the Commission to defer action on the application until after the Mississippi State Oil and Gas Board had ruled on certain petitions filed there by Leaf River. Leaf River filed a timely answer to Bean Industries' motion but does not oppose its intervention. Bean has demonstrated an interest in this proceeding[11] and has shown good cause for filing late. Granting the late motion will not

[10] 18 C.F.R. § 385.214(c) (2008).

[11] New Home Storage, LLC, (a subsidiary of Bean Industries) has been granted an exemption from the requirements of section 7 of the NGA, to undertake certain temporary acts and operations (the drilling of test wells) to evaluate a possible storage operation in the same salt dome where Leaf River seeks to develop its storage operations. *New Home Storage, LLC*, 124 FERC ¶ 61,138 (2008).

unduly delay, disrupt, or otherwise prejudice this proceeding or any party's interests. Therefore, we will grant Bean's untimely motion to intervene.[12]

17. Bean Industries' motion to intervene out of time included a limited protest. In its answer to Bean Industries' pleading, Leaf River included an answer to Bean Industries' limited protest. The Commission's Rules of Practice and Procedure generally prohibit the filing of an answer to a protest.[13] However, because Leaf River's answer will help us resolve the issues in this proceeding, we will accept the answer.[14] The issues raised by Bean Industries are addressed in the environmental section of this order.

18. Comments were filed by Henry Thompson regarding the manner in which Leaf River acquired a right-of-way across his property. Mr. Thompson's comments are addressed below in the section of this order discussing non-environmental impacts on land-owners.

III. Discussion

A. Certificate Policy Statement

19. Since the proposed facilities will be used to provide natural gas services 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. Our September 15, 1999 Certificate Policy Statement provides guidance as to how it will evaluate proposals for certificating new construction.[15] 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 pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. Our goal in evaluating new pipeline construction is to give appropriate consideration to enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruption of the environment, and the unneeded use of eminent domain.

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[12] 18 C.F.R. § 385.214(d) (2008).

[13] 18 C.F.R. § 385.213(2) (2008).

[14] *Transcontinental Gas Pipe Line Corporation*, 117 FERC ¶ 61,136, at P 4 (2006).

[15] *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).

20. 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 existing customers. The next step is to determine whether the applicant made efforts to eliminate or minimize any adverse effects the project might have on its existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of the new pipeline. If residual adverse effects on these groups are identified after efforts have been made to minimize them, we will evaluate the project by balancing the 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 we 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. Leaf River is a new entrant in the natural gas storage market with no existing customers. Thus, there will be no subsidization. Moreover, under its market-based rate proposal, Leaf River assumes the economic risks associated with the costs of the new facilities to the extent that any capacity is unsubscribed or revenues are not sufficient to cover costs. The Commission finds that Leaf River has satisfied the threshold requirement of the Certificate Policy Statement. Since it is a new company, it has no existing customers or services to be adversely impacted by its proposal.

22. While SG Resources states that it and Leaf River will be potential competitors, SG Resources does not oppose Leaf River's proposal. Further, there is no evidence that Leaf River's services will displace any existing services by other companies. Therefore, Leaf River's project should have no adverse impact on other interstate pipeline companies, including storage operators, or their captive customers. On the other hand, Leaf River's proposed storage project will be located in a competitive market, as confirmed below, and will serve incremental growth in a region experiencing rapid growth in natural gas use. The proposal will enhance storage options available to pipelines and their customers. Thus, Leaf River's proposed storage facilities and services will increase competitive alternatives. The project will have minimal non-environmental impacts upon existing landowners and communities because of its location and because much of the storage facility will be located in existing right-of-way and on property already owned or leased by Leaf River and much of the header pipeline will be in a right-of-way shared with a pipeline already constructed. Mr. Henry Thompson is a land-owner who has raised non-environmental issues regarding the project. His comments expressed concern that Leaf River acquired its right-of-way over the Thompson property by getting an assignment of right-of-way from Gulf South. He asserts that landowners were deceived by Gulf South when they agreed to allow Gulf South its right-of-way, in that they did not expect another pipeline company to construct facilities in the right-of-way. While the information provided by Mr. Thompson in his comments indicates that the easement he sold Gulf South gave Gulf South the right to assign part of the right-of-way to Leaf

River, this is a contract law issue for the state or local courts to take up if challenged further. In view of these considerations, we find that approval of Leaf River's proposed facilities is consistent with the Certificate Policy Statement and the public convenience and necessity standard in NGA section 7 subject to the conditions discussed below.

B. Storage and Hub Services and Rates

23. Leaf River's pro forma tariff includes two proposed rate schedules for traditional open-access storage services: Firm Storage Service (FSS Rate Schedule) and Interruptible Storage Service (ISS Rate Schedule).[16] The pro forma tariff also includes an open-access firm "no notice" storage service (NNSS Rate Schedule). This no-notice service will allow customers to adjust their injections into, and withdrawals from, Leaf River's storage facilities as their requirements dictate, without having to give Leaf River advance notice of such changes.

1. Hub Services

24. Leaf River proposes to provide several open-access interruptible hub services, as well as open-access firm park and loan services. Its pro forma FERC Gas Tariff would offer a firm parking service under proposed FP Rate Schedule, a firm loan service under proposed Rate Schedule FL, and an interruptible hourly balancing service under proposed Rate Schedule IHBS. It also provides for an interruptible parking service under proposed Rate Schedule IP, an interruptible loan service under proposed Rate Schedule IL, and an interruptible wheeling service under proposed Rate Schedule IW.

a. Park and Loan Services

25. Under proposed Rate Schedules IP and IL for interruptible loan and parking services, respectively, a customer will be allowed to deposit, or "park," gas temporarily in Leaf River's storage facility or to borrow gas from Leaf River's storage facility to meet the customer's balancing or other requirements. Leaf River's proposed FP and FL services would allow Leaf River and a customer to agree to park or loan a fixed quantity of gas for a fixed time period.

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[16] Rate Schedule FSS differs slightly from firm storage service rate schedules offered by other storage providers in that it does not provide for overrun service. Leaf River notes that the Commission has found that storage providers are not required to provide overrun service. *Windy Hill Gas Storage, LLC* (*Windy Hill*), 119 FERC ¶ 61,291 (2007); *Tres Palacios Gas Storage, LLC* (*Tres Palacios*), 120 FERC ¶ 61,253 (2007).

26. The proposed FP service would cover three time periods: (1) an injection period, during which the customer would inject the agreed-upon park quantity; (2) a storage period, during which the customer would keep its gas in Leaf River's storage facility; and (3) a withdrawal period, during which the customer would withdraw the parked gas from storage. FL service would be the reverse of FP service. That is, the FL service would include (1) a withdrawal period, during which the agreed-upon loan quantity would be withdrawal for loan to the customer; (2) the loan period; and (3) an injection period, during which the customer would return the borrowed quantity of gas for injection into storage. In each case, Leaf River and its customers would negotiate the duration of the injection, storage, and withdrawal periods in advance and would specify them in the customer's service agreement. Customers will not have the right under the FP and FL rate schedules to withdraw gas during the injection or storage period, nor will they have the right to inject gas during the withdrawal or storage period. Nevertheless, their capacity, injection, and withdrawal rights will be firm in that they will not be subordinate to other classes of service. Leaf River will reserve capacity and injection and withdrawal capabilities sufficient to support the levels of firm park and loan services it contracts to provide. It will only provide firm park and loan service to the extent it has unsubscribed capacity and gas in storage not dedicated to another service.[17]

b. <u>Hourly Balancing Service</u>

27. Leaf River's interruptible hourly balancing service under proposed Rate Schedule IHBS will allow a customer to refine its daily nominations on an hourly basis. The service is intended to meet the needs of natural gas-fired electric generating facilities that purchase firm hourly service where the delivering pipeline can accommodate hourly

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[17] Because Leaf River proposes to offer firm park and loan services only via otherwise unsubscribed capacity and gas in storage not dedicated to other service, it states that its proposal to offer firm park and loan services is unlike the proposal rejected in *Questar Pipeline Company*, 99 FERC ¶ 61,129 (2002), where a pipeline proposed to offer firm parking service using capacity not used from time to time by firm storage customers. Similarly, it states that its proposal is distinguishable from the proposal rejected by the Commission in *National Fuel Gas Supply Corporation*, 78 FERC ¶ 61,036 (1997), where the applicant sought to offer firm advance service (a form of loan service) using gas in storage dedicated to no-notice service. Leaf River points out that, in accepting a proposal by Bluewater Gas Storage, LLC, to offer firm park and loan services, the Commission explained that the applicant's commitment to support those services using unsubscribed firm capacity overcame the deficiencies found in *Questar* and *National Fuel Gas*. *See Bluewater Gas Storage, LLC*, 117 FERC ¶ 61,122 at P 37; *Windy Hill*, 119 FERC ¶ 61,291 at PP 35, 37; and *Tres Palacios*, 120 FERC ¶ 61,253 at PP 37-39.

variations in takes; however, other end-use customers might also find value in hourly service flexibility. Leaf River states that Rate Schedule IHBS responds to Commission policies and regulations that require natural gas companies to afford shippers the opportunity to take advantage of similar imbalance management services offered by other transporters.[18] It states that its proposed hourly balancing services under Rate Schedule IHBS are similar to hourly balancing services offered by other companies subject to our jurisdiction.[19]

2. Interruptible Wheeling Service

28. Leaf River's proposed Rate Schedule IW is for interruptible wheeling service. This proposed service will use Leaf River's header system and gas handling facility to transfer a customer's gas from one interconnected pipeline to another.

Support for Proposed Services

29. Leaf River states that its proposed project will provide the kind of high-deliverability storage and hub services that natural gas markets require to address, among other things, increasing demand, changes in domestic supply sources, eventual liquefied natural gas (LNG) imports, and heightened gas price volatility. It asserts that need for the project has been confirmed by the expressions of interest it has received from electric utilities, local gas distribution companies, LNG terminal developers, industrial consumers and marketers during and after its non-binding open season, which ran from October 20, 2006 through December 6, 2006 and demonstrated substantial market demand for the project's services. Leaf River states that it received serious expressions of interest in taking service that would require the commitment of two thirds of the project's working gas capacity. It held a binding open season which ended on November 15, 2007 and, according to its website, continues discussions with prospective firm storage customers.

30. Leaf River states that there is significant demand for new natural gas storage capacity, especially salt dome storage capacity, with robust business development and economic growth in the Gulf Coast and Southeast regions of the United States. It asserts that much of this development and growth will lead to an increased demand for energy

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[18] 18 C.F.R. § 284.12(b)(2)(iii) (2008).

[19] Rate Schedule IHBS is similar to El Paso's approved Rate Schedule IHSW, *El Paso Natural Gas Company*, 114 FERC ¶ 61,305 (2006), *reh'g pending*, and to the approved Rate Schedule IHBS in *Bluewater Gas Storage*, 117 FERC ¶ 61,122 (2006). We accepted nearly identical IHBS Rate Schedules proposed by Leaf River's affiliates. *Windy Hill*, 119 FERC ¶ 61,291 at P 42 and *Tres Palacios* 120 FERC ¶ 61,253 at P 43.

resources in general, and for natural gas in particular. Leaf River states that increases in demand for natural gas create more demand for transportation infrastructure, including storage capacity and deliverability. It states that an additional source of demand for storage in the Southeast is the development of new sources of gas supply in East Texas, North Texas, Oklahoma, and Arkansas.

31. Leaf River asserts that we recognized the need for increased storage capacity by stating in Order No. 678 that one of our goals is to reduce natural gas price volatility and encourage development of storage capacity.[20] It contends that approval of the proposed project will further the Commission's goals of encouraging development of new storage capacity and help meet the growing demand for storage services, and it says that high-deliverability salt cavern storage facilities are well suited to meet these growing needs.

C. <u>Header System</u>

32. Leaf River proposes to include in its storage facility a 43.84-mile-long header system to interconnect with five interstate natural gas transmission companies, as previously described. For ease of reference, Leaf River has divided this header system into two parts: (1) the Dome Later, which will consist of a 6.61-mile-long segment extending from the gas handling facility at the storage site in Smith County into Jasper County, and (2) the West East Lateral, which will comprise (i) a 6.88-mile-long segment of single high-pressure 24-inch gas pipeline to the west of the junction of the Dome Lateral and the West East Lateral, and (ii) a segment of 30.35 miles of looped bi-directional 24-inch pipeline to the east of the junction of the Dome Lateral and West East Lateral. As previously stated, Leaf River intends to provide storage and wheeling services through the header system, but does not propose to provide any stand-alone transportation service.

33. Leaf River requests that the Commission consider its header system to be part of the storage facility rather than a stand-alone pipeline system in order to permit it to offer services making use of the header system, including wheeling, at market-based rates. Leaf River urges the Commission not to require it to offer these services as transportation services under separate tariffs. Leaf River will operate its header system as an integrated component of its storage system in support of firm and interruptible storage and hub services, including interruptible wheeling service. It will use the header system only for the purpose of moving natural gas to and from interconnected transmission companies through the gas handling facility and either into or out of storage or to a second

[20] *Rate Regulation of Certain Natural Gas Storage Facilities*, Order No. 678, FERC Stats. & Regs. ¶ 31,220, at P 10 (2006); *order on clarification and reh'g* Order No. 678-A, 117 FERC ¶ 61,190 (2006).

interconnected transmission pipeline. Leaf River will make use of its storage caverns and gas handling facility in connection with all movements of gas that it undertakes, and all movements of gas will be provided under its storage service rate schedules.[21] Leaf River will only be able to offer storage, hub and wheeling service by adjusting pressures and flows through operation of its gas handling facility's compressors and its storage caverns.

D. <u>Market-Based Rates</u>

34. Generally, the Commission evaluates requests to charge market-based rates for storage service under the analytical framework of its Alternative Rate Policy Statement.[22] Under that policy statement, we will approve market-based rates for storage providers where the applicant demonstrates that it lacks market power or has adopted conditions that significantly mitigate market power. We have approved requests to charge market-based rates for storage services based upon findings that the proposed projects would not be able to exercise market power because of their small size, anticipated share of the market, and the existence of numerous competitors.[23]

35. 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 price by a significant amount for a significant period of time, and (2) to determine whether the applicant can discriminate unduly in price or terms and conditions. To find that an applicant cannot withhold or restrict services, significantly increase prices over an extended period, or unduly discriminate, we must

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[21] Application, p. 43.

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

[23] *PetroLogistics Natural Gas Storage*, LLC, 122 FERC ¶ 61,193 (2008); *Egan Hub Partners, L.P.*, 99 FERC ¶ 61,269 (2002); *Egan Hub Partners, L.P.*, 95 FERC ¶ 61,395 (2001); *Moss Bluff Hub Partners, L.P.*, 80 FERC ¶ 61,181 (1997); *Egan Hub Partners, L.P.*, 77 FERC ¶ 61,016 (1996).

find either that there is a lack of market power[24] because customers have good alternatives,[25] or that the applicant or the Commission can mitigate the market power with specified conditions. If an applicant is unable to, or elects not to, demonstrate that it lacks market power, it may still receive authority to charge market-based rates when such rates are determined to be in the public interest to encourage construction of storage, where customers are adequately protected.[26]

36. Our analysis of whether an applicant has the ability to exercise market power includes three major steps: (1) definition of the relevant markets; (2) measurement of a firm's market share and market concentration; and (3) evaluation of other relevant factors. We have also distinguished between production area storage facilities, such as Leaf River's proposed project, and market area storage facilities.[27] In general, alternatives to storage in a production area are less of a concern than in a market area, because production itself can serve as a substitute for storage.

37. Leaf Energy's market power analysis[28] defines the relevant product and geographic markets, measures market share and concentration, and evaluates the ease of entry into the relevant market. Leaf River identifies the relevant product market as firm and interruptible gas storage, hub and wheeling services. Leaf River defines its relevant geographic market as comprising East Texas, Louisiana, Mississippi, and Alabama (the "Gulf States Market"), which definition the Commission has used to analyze other Gulf Coast area storage providers' requests for market-based rate authority.[29]

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[24] Market power is defined as the ability to profitably maintain prices above competitive levels for a significant period of time. Alternative Rate Policy Statement, 74 FERC ¶ 61,076 at 61,230.

[25] A good alternative is an alternative that is available soon enough, has a price that is low enough, and has a quality high enough to permit customers to substitute it for an applicant's proposed service. *Id.* at 61,231.

[26] Order No. 678, FERC Stats. & Regs. ¶ 31,220 (2006); *order on clarification and reh'g*, Order No. 678-A, 117 FERC ¶ 61,190 (2006).

[27] *See, e.g., Moss Bluff Hub Partners, L.P.*, 80 FERC ¶ 61,181 and *Steuben Gas Storage Company*, 72 FERC ¶ 61,102 (1995), *order on compliance filing and denying reh'g*, 74 FERC ¶ 61,060 (1996).

[28] Application, Exhibit 1.

[29] *PetroLogistics Natural Gas Storage, LLC*, 122 FERC ¶ 61,193 (2008); *Tres Palacios*, 120 FERC ¶ 61,253 (2007).

38. Leaf River states that it will be at a competitive disadvantage if the Commission does not grant it market-based rate authority for its storage and hub services. It notes that other storage facilities and service providers in the Gulf States Market are authorized to charge market-based rates.[30] Leaf River states that it will need the flexibility of market-based rates to compete with these facilities and others like them. It contends that granting it market-based rate authority will increase competitive pressure on the owners of existing storage facilities.

39. Leaf River is a new company with no existing customers. Exhibit I, KAR-3, to the application shows that the geographic market used in Leaf River's analysis contains 26 existing and competing storage facilities, controlled by 15 entities with a total working gas capacity of 646.96 Bcf.[31] The new facility will add an additional 32 Bcf, or about 4.7 percent, of working gas capacity to the Gulf States Market. No single entity will control more than 29 percent of the total working gas capacity, with 14 of the 16 entities controlling 15 percent or less each. Exhibit I, KAR-4 shows that the new facility will add 2,500 MMcf per day, or about 12.5 percent, of deliverability from storage to the Gulf States Market, bringing the total to 20,015 MMcf per day. No entity will control more than 13 percent of the market for peak-day deliverability and 12 entities will each control less than 10 percent of the market for peak-day deliverability. Leaf River's relatively small market shares will not enable it to exert market power in the relevant market area.

40. The Commission uses the Herfindahl Hirschman Index (HHI) test to determine market concentration for gas pipeline and storage markets.[32] The Alternative Rate Policy Statement states that a low HHI—generally lower than 1,800—indicates that sellers cannot exert market power because customers have sufficiently diverse

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[30] *Petal Gas Storage Co.*, 102 FERC ¶ 61,243 (2003); *Egan Hub Partners, L.P.*, 95 FERC ¶ 61,395 (2001); *Moss Bluff Hub Partners, L.P.*, 80 FERC ¶ 61,181 (1997).

[31] Leaf River states that there are more than 40 storage facilities in the Gulf States Market but it excluded the facilities that are operated for the sole use of a corporate parent or subsidiary, or are otherwise subscribed under long-term agreements.

[32] An HHI is calculated by summing the squares of each storage seller's market share. The Alternative Rate Policy Statement states that the HHI is used to indicate the level of scrutiny to be given the applicant. An HHI above 1,800 results in the applicant being given closer scrutiny because it indicates that the market is more concentrated and, therefore, more likely that the applicant could have significant market power. *See* Alternative Rate Policy Statement, 74 FERC ¶ 61,076 at 61,235.

alternatives in the relevant market.[33] A higher HHI requires a closer scrutiny to determine about a seller's ability to exert market power. Leaf River's market power analysis shows an HHI calculation of 1,415 for working gas capacity and an HHI of 894 for peak day deliverability.[34] These HHIs are significantly below the 1,800 level, in which circumstances no further market power analysis is required.

41. Leaf River's market power analysis also presents evidence that the relevant market is easy to enter. Exhibit I, KAR-11 identifies 16 storage projects in the relevant market that are currently in various stages of development or expansion of capacity. Leaf River's market power analysis concludes that the lack of any significant barriers to entry and the number of additional or expanded storage facilities in the Gulf States Market would keep Leaf River from raising prices above a competitive level for an extended period of time. The Commission has found in a number of cases that there are no significant barriers to entry in the natural gas storage market in the Gulf Coast production region.[35] The fact that the relevant market is easy to enter supports a finding that Leaf River will not possess market power.

42. In addition to seeking market-based rate authority for its traditional firm and interruptible storage services, Leaf River also seeks market-based rate authority for its proposed firm and interruptible park and loan services and for its interruptible wheeling service using its proposed pipeline header system.[36] Park and loan services are storage

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[33] *See* Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 55 (where the Commission notes that it is not changing the HHI threshold level of 1,800).

[34] *See* Exhibit I, KAR-3 and KAR-4, respectively.

[35] *See, e.g., Port Barre Investments, L.L.C. d/b/a Bobcat Gas Storage*, 116 FERC ¶ 61,052, at P 25 (2006) (noting that there are "over 20 new storage projects or expansions of existing storage facilities in the Gulf Coast region," and "[i]n light of this information, [the Commission] concludes that barriers to entry to the storage markets in the relevant market area are low"); *Katy Storage and Transportation, L.P.*, 106 FERC ¶ 61,145, at P 19 (2004) (proposed increase in storage capacity in the production area is due in part to ease of entry into the market and a high level of competition in the market); *Unocal Keystone Gas Storage, LLC*, 106 FERC ¶ 61,033, at P 16 (2004) (proposed increase in storage capacity in the production area is due in part to ease of entry and a high level of competition in the market).

[36] *Pine Prairie Energy Center, LLC*, 109 FERC ¶ 61,215 (2004); *amended* 116 FERC ¶ 61,316 (2006); *Tres Palacios Gas Storage, LLC*, 120 FERC ¶ 61,253 (2007); *Egan Hub Partners, L.P.*, 77 FERC ¶ 61,016 (1996), *amended*, 79 FERC ¶ 62,174 (1997); *Bluewater Gas Storage, L.L.C.*, 117 FERC ¶ 61,122 (2006); *S.G.*

(continued…)

related services and Leaf River's market power study showing lack of market power with respect to storage also supports market-based rates for the park and loan services. On the other hand, wheeling is a transportation service and the market power analysis for wheeling requires additional information such as a matrix, or "bingo card," identifying all pipeline interconnections and point alternatives and an analysis showing whether the proposed wheeling service using Leaf River's header system can be bypassed. Leaf River's Exhibit I, KAR-5 is a chart of the alternative paths available to shippers wishing to bypass Leaf River's pipeline header system. It shows that shippers will be able to bypass Leaf River's wheeling service over its header system by using any of the five pipelines with which Leaf River's header system will interconnect.

43. Further, Exhibit I, KAR-6 shows that shippers using the five pipelines that will be interconnected with Leaf River's pipeline header system will have 27 alternative receipt and delivery points on those five pipelines. Also, Exhibit I, KAR-7 shows that there will be nine competing gas market centers and hubs, including Leaf River's pipeline header system, with 76 delivery points and 59 receipt points in the Gulf States Market. Shippers will have many choices among competing pipelines for gas transportation in the region.

44. In addition, Exhibit I, KAR-8 shows that the total daily pipeline delivery capacity at the nine hubs and market centers, including the hub that will be created by the interconnections of Leaf River's header system with five pipelines, will be 22,687 MMcf per day, of which Leaf River's pipeline header system's delivery capacity will be 5,000 MMcf per day, or 22 percent, of the total pipeline deliverability capacity. The exhibit also shows that the HHI for total pipeline delivery capacity at these nine hub and market centers in the Gulf States Market is 1,376, significantly below the 1,800 level under which no further market power analysis is required.

45. Exhibit I, KAR-9 shows that the total pipeline receipt capacity at the nine hubs and market centers will be 19,946 MMcf per day, of which Leaf River's header system will have 5,000 MMcf per day, or 25 percent, of the total pipeline receipt capacity. This exhibit shows that the HHI for total pipeline receipt capacity is 1,584, which also is below the 1,800 level below which further market power analysis is not necessary. Finally, Exhibit I, KAR-10 shows that the wheeling services to be offered by Leaf River are available at the other eight hubs and market centers.

46. In summary, Leaf River's analysis shows that its storage facilities and pipeline header system will be in a highly competitive area where many storage service and

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Resources Mississippi, L.L.C., 101 FERC ¶ 61,029 (2002), *amended* 118 FERC ¶ 61,048 (2007); *Liberty Gas Storage LLC*, 113 FERC ¶ 61,247 (2005); *Moss Bluff Hub Partners, L.P.*, 80 FERC ¶ 61,181 (1997); and *Bobcat Gas Storage*, 116 FERC ¶ 61,052 (2006).

transportation alternatives exist for potential customers. Leaf River's entry will add a storage alternative in the market area. Further, within the relevant market, Leaf River's prospective market shares are low, market concentrations are below the threshold that would require closer scrutiny, and barriers to entry in the relevant market are likely to be low. Also, we note that Leaf River's request to charge market-based rates is unopposed.

47. In view of the above findings, we conclude that Leaf River will lack significant market power and approve Leaf River's request to charge market-based rates for its firm and interruptible storage and its hub and wheeling services.

48. In addition to other reporting requirements imposed herein, Leaf River must notify the Commission if future changes in circumstances significantly affect its present market power status. Our approval of market-based rates is subject to reexamination in the event that: (a) Leaf River seeks to add storage capacity beyond the capacity authorized in this proceeding; (b) an affiliate increases storage capacity; (c) an affiliate links storage facilities to Leaf River; or (d) Leaf River or an affiliate acquires an interest in, or is acquired by, an interstate pipeline connected to Leaf River. Since these circumstances could affect its market power status, it shall notify the Commission within 10 days of acquiring knowledge of any such changes. The notification shall include a detailed description of the new facilities and their relationship to Leaf River.[37] The Commission reserves the right to require such an analysis at any intervening time.[38]

E. <u>Waivers of Filing Requirements</u>

49. In light of its request for authority to charge market-based rates and the fact that Leaf River has no pre-existing facilities, Leaf River requests that the Commission waive section 157.6(b)(8) [39] of the Commission's regulations, which requires it to submit cost and revenue information otherwise necessary for the Commission to make an up-front determination on the rate treatment of the project. Leaf River also requests that the Commission waive the filing requirements of section 157.14(a)(13), (14), (15), (16), and (17) to submit Exhibit K (Cost of Facilities), Exhibit L (Financing), Exhibit N (Revenues, Expenses and Income), and Exhibit O (Depreciation and Depletion), since these exhibits

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[37] *Port Barre Investments, L.L.C. d/b/a/ Bobcat Gas Storage*, 116 FERC ¶ 61,052 (2006); *Copiah County Storage Company*, 99 FERC ¶ 61,316 (2002); *Egan Hub Partners, L.P.*, 99 FERC ¶ 61,269 (2002).

[38] *Liberty Gas Storage LLC*, 113 FERC ¶ 61,247, at P 51 (2005); *Rendezvous Gas Services, L.L.C.*, 112 FERC ¶ 61,141, at P 40 (2005).

[39] 18 C.F.R. § 157.6(b)(8) (2008).

are required for cost-based rate authority. Leaf River requests waiver of the accounting and annual reporting requirements under Part 201 of the Uniform System of Accounts and section 260.2 which require natural gas companies to file annual reports in FERC Form Nos. 2 and 2-A) of the Commission's regulations.[40] Similarly, Leaf River requests waiver of the requirement pertaining to straight fixed-variable rate design set forth in sections 284.7(e) and 284.10 also as being inapplicable to market-based rate design. It also requests waiver of the section 157.14(a)(10)[41] requirement to provide total gas supply data (Exhibit H), as being inapplicable to natural gas storage services. Leaf River's customers will supply their own gas for storage.

50. The cost-related information required by the regulations described above is not relevant in light of our approval of market-based rates for Leaf River's proposed services. In *Golden Triangle Storage, Inc.*,[42] the Commission approved market-based rates for storage service and found that where the market is sufficiently competitive to warrant market-based rates, the submission of cost-based data is unnecessary. In light of our decision to permit Leaf River to charge market-based rates for its storage and hub services, we will grant Leaf River's request for waiver of the requirements of sections 157.6(b)(8), 157.20(c)(3), and 157.14 to submit Exhibits K, L, N, and O.[43] We will also grant waiver of section 157.14(a)(10) requiring an applicant to provide gas supply data, since it does not apply to storage operations.

51. There is no regulatory need to have cost-based financial statements prepared in accordance with the Uniform System of Accounts. We grant a waiver of accounting requirements as prescribed in Part 201, Uniform System of Accounts Prescribed for Natural Gas Companies Subject to the Provisions of the Natural Gas Act, and reporting requirements, as prescribed in Section 260.2, FERC Form No. 2-A, Annual Report for

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[40] Leaf River commits to provide information necessary for our assessment of annual charges and will file pages 520 and 520a of Form No. 2-A, reporting gas volume information, the basis for imposing an annual charge adjustment. *See Bluewater Gas Storage, LLC*, 117 FERC ¶ 61,122 at P 49 (2006).

[41] 18 C.F.R. § 157.14(a)(10) (2008).

[42] 121 FERC ¶ 61,313 (2007).

[43] In *Bobcat Gas Storage*, 116 FERC ¶ 61,052 (2006) and *Golden Triangle*, we granted market-based rate authority for storage projects and waivers of Exhibits K, N, and O. We approve omission of Exhibit L since there is no protest and Leaf River bears the financial risks of the project.

Nonmajor Natural Gas Companies, of the regulations, except for the information needed for assessment of annual charges.[44]

52. These waivers are subject to revision in the event the Commission finds cause to review Leaf River's market power or market-based rates. Also, since we may find cause to review records and data showing costs, we require Leaf River 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.

F. Tariff Provisions

53. Leaf River proposes to offer firm and interruptible storage, hub and wheeling services on an open-access basis under the terms and conditions set forth in the pro forma tariff attached as Exhibit P to its application. These services are generally modeled on the services offered by its affiliate, Tres Palacios, whose FERC Gas Tariff we found to be in compliance with the requirements of Part 284 of our regulations.[45] Leaf River's pro forma tariff generally complies with Part 284 of the regulations and policies, with the exception of those requirements from which waivers are granted as discussed below. Leaf River will be directed to file actual tariff sheets consistent with the directives in this order at least 30 days, but no more than 60 days, prior to commencement of service.

1. Segmentation

54. Section 284.7(d) of the regulations provides that an interstate pipeline must allow a shipper to make use of firm capacity for which the shipper has contracted by segmenting it into separate parts for the shipper's own use, or for the purpose of releasing that capacity to replacement shippers to the extent that segmentation is operationally feasible. Leaf River requests a waiver of the Order No. 637 segmentation requirements contained in section 284.7(d), contending that it will not offer stand-alone transportation service and that segmentation is not operationally feasible on its system.

55. In *Clear Creek Gas Storage Company*,[46] we found that the requirements of section 284.7(d) did not apply to pipelines engaged solely in gas storage and not providing stand-alone transportation service. Leaf River meets those requirements. Thus, the

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[44] *Wyckoff Gas Storage Company, LLC*, 105 FERC ¶ 61,207 (2003).

[45] *Tres Palacios* at P 35; *Windy Hill*, 119 FERC ¶ 61,291 at P 2 (2007).

[46] 96 FERC ¶ 61,071 (2001).

requirements of section 284.7(d) do not apply to Leaf River. Other tariff provisions related to segmentation, such as allocation of point rights in segmented release and within-the-path scheduling, also do not apply to Leaf River.

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

56. Leaf River requests a generic waiver of the "shipper must have title" policy for any off-system capacity it may need to acquire in order to provide storage services, to enable it to use that capacity to transport natural gas owned by other parties. Section 30 of Leaf River's pro forma General Terms and Conditions provides:

> LEAF RIVER may, from time to time, acquire transportation and/or storage capacity on a third-party pipeline system. LEAF RIVER will only provide transportation and storage services for others using such capacity pursuant to an open access FERC Gas Tariff subject to its rates approved by the Federal Energy Regulatory Commission, and the "shipper must hold title" policy is waived to permit such use.[47]

57. This language implements our policy with respect to pipelines' acquisition of off-system capacity. In *Texas Eastern Transmission Corporation (TETCO),*[48] we stated 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 gas for others using off-system capacity pursuant to its existing tariff and rates. The proposed tariff language meets these requirements and is consistent with authorizations granted other storage companies authorized to charge market-based rates.[49]

58. We accept the proposed tariff language and grant waiver of the shipper must have title policy, with the following clarifications. Since Leaf River proposes only to offer firm and interruptible storage and hub services and interruptible wheeling service, and has proposed no rates or tariff provisions relating to any transportation service other than storage, hub and wheeling, Leaf River may only use capacity obtained on other pipelines pursuant to the *TETCO* waiver in order to move gas into or out of storage, pursuant to that pipeline's open-access tariff and Commission-approved rates. Leaf River may not

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[47] Pro forma Sheet No. 154.

[48] 93 FERC ¶ 61,273 (2000), *reh'g denied*, 94 FERC ¶ 61,139 (2001).

[49] *See, e.g., SG Resources Mississippi, L.L.C.*, 101 FERC ¶ 61,029 (2002).

use its facilities and its capacity on other pipelines to transport gas that will not physically or contractually enter its storage facility unless and until it has received Commission authorization to provide such transportation services. Also, Leaf River's authorized use of the *TETCO* waiver to provide storage service is limited to the geographic area covered by the market study included as part of its application.

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

60. Within 30 days after its first full year of operation, and every year thereafter, Leaf River is directed to file, for each acquisition of off-system capacity:

a. the name of the off-system provider;
b. the type, level, term, and rate of service contracted for by Leaf River;
c. a description of the geographic location – boundaries, receipt and delivery points, and segments comprising the capacity;
d. the operational purpose(s) for which the capacity is utilized;
e. a description of how the capacity is associated with specific transactions involving customers of Leaf River; and
f. an identification of the total volumes, by Leaf River's rate schedule and customer, that it has nominated on each off-system provider during the reporting period.

3. Implementation of NAESB Standards

61. The Commission adopted in Part 284 of its regulations various standards for conducting business practices and electronic communications with interstate pipelines as promulgated by the North American Energy Standards Board (NAESB).[50] These

[50] *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation, and Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Order No.636, 57 Fed. Reg. 13,267 (April 16, 1992), FERC Stats. & Regs., Regs. Preambles January 1991 – June 1996 ¶ 30,939, at pp. 30,425-427 (April 8, 1992); *order on reh'g*, Order No. 636-A, 57 Fed. Reg. 36,128 (August 12, 1992), FERC Stats. & Regs., Regs. Preambles January 1991 – June 1996 ¶ 30,950 (August 3, 1992); *order on reh'g*, Order No. 636-B, 57 Fed. Reg. 57,911 (December 8, 1992), 61 FERC ¶ 61,272 (1992); *notice of denial of reh'g*, 62 FERC ¶ 61,007 (1993), *aff'd in part and vacated and remanded in part, United Distribution Companies v. FERC*, 88 F.3d 1105 (D.C. Cir. 1996); *order on remand*, Order No. 636-C, 78 FERC ¶ 61,186 (1997).

standards govern nominations, allocations, balancing measurement, invoicing, capacity release, and mechanisms for electronic communication among pipelines and those with whom they do business. Leaf River states that its pro forma Tariff complies with Order No. 587-S, which adopted Version 1.7 of the NAESB Standards,[51] the latest version of the standards adopted by the Commission at the time Leaf River filed its application.[52] It states that it will modify its tariff before placing it into effect to reflect the then-current Commission-adopted NAESB standards. Consistent with Order No. 587-S, Leaf River is directed to revise its tariff provisions to incorporate standards 5.3.13-5.3.16, 5.3.24-5.3.28, 5.3.44-5.3.45 and 5.3.59-5.3.60 for capacity release, or identify the tariff locations of these standards when it files its actual tariff. It may incorporate the standards by reference or verbatim, but not both, in its tariff.

62. Leaf River requests a limited waiver of section 284.12(a)(1)(iv) of the regulations, which requires interstate pipelines to comply with the electronic data interchange (EDI) standards developed by the Wholesale Gas Quadrant of the NAESB. It requests limited waiver in the form of an extension of time to comply with the NAESB standards related to EDI/EDM and FF/EDM requirements to allow it to postpone implementation until 90 days following receipt by Leaf River of a request to send information via EDI/EDM.[53] Leaf River states that it has received no requests to send information via EDI/EDM or FF/EDM and does not expect any, and that its Internet website will include postings of capacity release information that we require to be available to the public and will comply with the NAESB's EBB/EDM standards.

63. Consistent with precedent, we will grant Leaf River's request for a limited waiver in the form of an extension of time to comply with the NAESB standards related to

[51] Section 23 of the GT&C of Leaf River's pro forma tariff contains the Version 1.7 standards adopted by reference. *See* Original Sheet Nos. 151-152.

[52] *Standards for Business Practices of Interstate Natural Gas Pipelines*, Order No. 587-S, FERC Stats. & Regs., Regulations Preambles 2001-2005 ¶ 31,179 (2005).

[53] Leaf River notes that we have granted waivers of the EDI/EDM and FF/EDM standards to pipelines and storage providers that have not received requests to send information via EDI/EDM and FF/EDM and do not expect any such requests, citing *Tres Palacios* at P 52; *Unocal Windy Hill Gas Storage, LLC*, 115 FERC ¶ 61,218, at P 48 (2006); *MoBay Storage Hub, Inc.*, 117 FERC ¶ 61,298, at P 46 (2006); and *Saltville Gas Storage Company*, 109 FERC ¶ 61,200, at PP 36-37 (2004).

EDI/EDM and FF/EDM requirements to allow it to postpone implementation until 90 days following receipt of a request to send information via EDI/EDM, as it proposed.[54]

4. Creditworthiness

64. Section 31 of Leaf River's proposed GT&C outlines the type of information that customers must supply in order to establish creditworthiness and includes provisions concerning the posting of security for the value of gas loaned to customers under Rate Schedules FL or IL.[55] Section 31 provides that upon notification by Leaf River that it has failed to satisfy or no longer satisfies the credit criteria, a customer may still obtain credit approval if it elects to provide additional financial assurances in the form of a prepayment (or advance deposit), an irrevocable letter of credit, a Guaranty (as detailed in the tariff provisions) or another form of financial assurance acceptable to Leaf River. Leaf River states that its proposed creditworthiness provisions are identical to the creditworthiness provisions contained in Tres Palacio's pro forma tariff, which the Commission has approved.[56] It proposes to distinguish not only between creditworthy and non-creditworthy customers, as do most tariffs, but also among those customers found creditworthy, with respect to the amount of credit Leaf River proposes to determine the amount of credit it will extend to those creditworthy customers. It proposes to determine the amount of credit that it will extend based on each creditworthy customer's credit rating, extending higher levels of credit to customers with higher ratings.[57]

65. Leaf River explains that normally a customer deemed "creditworthy" is not required to post any security and will be extended credit equal to the value of its service charges and, if applicable, the value of loaned gas, while a "non-creditworthy" customer must post security for three months' worth of service charges and, if applicable, the value of any gas loaned to the customer. Leaf River states that this approach does not protect

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[54] *Unocal Windy Hill Gas Storage, LLC,* 115 FERC ¶ 61,218 (2006); *Rendezvous Gas Services,* 112 FERC ¶ 61,141 (2005).

[55] Pro forma Original Sheet Nos. 155-157.

[56] *Tres Palacios* at PP 61-64.

[57] Leaf River asserts that its proposal is consistent with credit practices universally employed in the gas commodity trading sector and that the Commission has found that it is appropriate to rely upon gas trading credit practices in establishing credit support standards applicable to gas loan transactions. *See* NAESB Model Credit Support Addendum to the Base Contract for Sale and Purchase of Natural Gas (October 9, 2003); International Swap Dealers Association, Credit Support Annex to the ISDA Master Agreement (December 17, 2002). *See* Application, p. 37.

against the potential for a storage provider's credit exposure to increase dramatically with increases in the value of loaned gas. It asserts that the value of service charges can be determined with relative certainty, as it is not generally subject to market volatility and is typically only a fraction of the commodity value of the gas. In contrast, the value of loaned gas may vary dramatically over time in response to market forces and can be many times greater than the value of service charges.

66. Leaf River proposes to determine an "Unsecured Collateral Limit" applicable to each level of Standard & Poor's and Moody's Investors Service's credit ratings, to be set out in its tariff. Higher limits would apply to higher credit ratings and a customers' Unsecured Collateral Limit would change with changes to the customer's credit rating. Leaf River will also determine the "Credit Exposure" for each customer (typically equal to three months' worth of service charges plus the value of any loaned gas), which it will recalculate daily to reflect changes in the market value of loaned gas. It proposes to require a customer to post security equal to the positive difference, if any, between the Credit Exposure of a customer and the customer's Unsecured Collateral Limit. A customer whose Unsecured Collateral Limit is greater that its Credit Exposure would not be required to post security.

67. Pursuant to Part 284 of its regulations, the Commission issued a policy statement setting forth its approach to credit issues relating to transportation on natural gas pipelines.[58] In that Creditworthiness Policy Statement, we stated that pipelines must establish and use objective criteria to determine creditworthiness.[59] Leaf River appears to have outlined the information that needs to be supplied and the criteria for creditworthiness, as discussed above. We find that its creditworthiness provisions are consistent with the policy statement in that they are objective and transparent.[60] Leaf River proposes to determine the amount of credit extended to creditworthy customers based on each customer's credit rating, as approved in *Tres Palacio*. This will provide it with additional flexibility to address the potential for its credit exposure for loaned gas to increase dramatically due to the volatile gas commodity market. However, certain other Creditworthiness Policy Statement requirements have not been met.

68. First, section 31 of its GT&C does not require Leaf River to provide a written statement supporting its request for additional security (except for the written notice

[58] *Creditworthiness Standards for Interstate Natural Gas Pipelines,* 111 FERC ¶ 61,412 (2005) (Creditworthiness Policy Statement).

[59] *Id.* at P 10.

[60] Creditworthiness Policy Statement at P 10.

required in the event of a material adverse change suffered by the customer, contained in section 31.8) and it is not clear if this will be done in its initial communication on creditworthiness. It should clarify how and when it will communicate initial determinations on creditworthiness to shippers under section 31, and whether it will specify the reasons for any denial of creditworthiness in such initial communication. In the Policy Statement, we held that if a service provider finds a shipper to be uncreditworthy, it should promptly inform the shipper in writing of the reasons for that determination, so that it may evaluate and challenge the determination.[61] In *Natural Gas Pipeline Company of America*, we required that the written communication be made within 10 days of the determination, and that the shipper be provided recourse to challenge the finding.[62] Leaf River is directed to revise section 31 to state that it will communicate its initial creditworthiness determinations and any redeterminations in writing and to clarify when it intends to communicate its initial creditworthiness determinations and any redeterminations, and that it will include the reasons for any denial in such communications.

69. Second, section 31.11 provides that Leaf River will return the financial assurances to the customer when the customer's obligations under the storage service agreement terminate. Leaf River must revise section 31 to provide that if a customer obtains credit approval by providing an advanced deposit and subsequently satisfies the credit criteria, it will return the advanced deposit with interest. Finally, we will require Leaf River to revise section 31 to provide that in such situations, it is responsible for any expenses related to maintenance of this escrow account. We direct Leaf River to clarify its tariff accordingly.

5. <u>Injection Ratchets</u>

70. Leaf River proposes to include a provision in Rate Schedule FSS whereby a customer's Maximum Daily Injection Quantity may be subject to injection ratchets. It proposes to offer a customer the option of receiving either ratcheted or unratcheted firm storage service. Leaf River's pro forma tariff indicates that it cannot at this time state the injection ratchet percentages that will apply to ratcheted services, but will provide the actual injection ratchet values when it files its actual tariff sheets.[63] We have previously

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[61] *See* 111 FERC ¶ 61,412 at P 10 (2005).

[62] 106 FERC ¶ 61,175 at P 89 (2004).

[63] See Rate Schedule FSS, section 9 on Original Sheet No. 24 of Leaf River's pro forma tariff.

allowed storage service providers to offer this option.[64] Consistent with our acceptance of ratchets for other storage service providers, we will accept Leaf River's proposed use of ratchets, subject to it including the injection ratchet values in its actual tariff sheet filing, as proposed.

6. Gas Retention Penalties and Credits

71. Leaf River proposes to retain a customer's gas improperly left in storage in two circumstances: (1) when gas is not withdrawn from storage prior to the expiration of the customer's service agreement; and (2) when gas is not withdrawn from storage by an interruptible storage or parking customer following notice by Leaf River that it will interrupt the customer's service and directing the customer to remove its gas. In the first situation, it proposes to credit the firm shipper with 80 percent of the net revenue that the pipeline receives from an auction sale of the shipper's gas (a 20 percent penalty).[65] In the latter situation, it proposes to retain the gas without crediting to the shipper any of the revenue that Leaf River receives from the sale of the gas (a 100 percent penalty).[66] Leaf River states that such penalties are appropriate and consistent with Order No. 637.

72. Leaf River proposes, in section 32 of its GT&C, to credit[67] to all of its customers whose gas was not purchased or retained, the net proceeds[68] from the sale of the retained gas (*i.e.*, the 20 percent penalty associated with firm service and the 100 percent associated with interruptible service) pursuant to the revenue crediting provisions of Order No. 637. We have accepted similar gas retention proposals by other storage providers, stating that the retention of gas left in storage at the end of the withdrawal period is an operationally-justified deterrent to shipper behavior that could threaten the system or degrade service to firm shippers.[69] If capacity exists, we would expect that a

[64] *Tres Palacios* at PP 53-54 (2007); *Windy Hill Gas Storage, LLC,* 119 FERC ¶ 61,291, at PP 43-44 (2007).

[65] *See* Exhibit P, sections 8.1 of Rate Schedules FSS, FP, ISS, IHBS and IP.

[66] *See* Exhibit P, Rate Schedule ISS, section 2.2; Rate Schedule IP, section 2; and Rate Schedule IHBS, section 2.4.

[67] Leaf River cites *Ozark Gas Transmission, L.L.C.*, 96 FERC ¶ 61,160, at 61,702-03 (2001), as precedent for such revenue crediting.

[68] "Net proceeds" is defined in GT&C, section 32, as "the total proceeds received from the auction less any costs Leaf River incurred as a result of conducting the auction or the purchase or retention of Customer's gas." *See* Original Sheet No. 158.

[69] *Windy Hill,* 119 FERC ¶ 61,291 at PP 51-56.

customer would be able to contract for interruptible service if needed. If capacity does not exist, Leaf River would be unable to provide such service. As for the level of the penalty, Leaf River has proposed to credit 80 percent of the auction value of the gas back to the firm or interruptible customer and credit the net proceeds from the auction to its other customers. Leaf River proposes a less severe penalty than other storage providers, who do not credit any portion of the value of the retained gas to the customer.

73. Finally, if an interruptible storage customer does not remove its gas when Leaf River determines that interruptible storage capacity is needed to provide firm storage service, Leaf River would retain the gas with no credit back to the customer. The provision is consistent with the tariffs of other storage providers.[70] Leaf River's gas retention and penalty proposals are consistent with our precedent and are accepted.

7. <u>Index Pricing</u>

74. Leaf River proposes to use index pricing to calculate penalties to be assessed when a customer violates an action alert or operational flow order (OFO).[71] It would use the "Transco Zone Four" daily index published in *Gas Daily* for calculating Action Alert and OFO penalties. This index satisfies the criteria that we have established for inclusion of price indices in jurisdictional tariffs.[72] We accept Leaf River's proposal.

8. <u>Imbalance Management Services</u>

75. Section 284.12 (b)(2) of the Commission's regulations requires that pipelines establish provisions for the netting and trading of imbalances and other imbalance management services. Orders No. 587-G and 587-L[73] adopt the NAESB standards related to these regulations. Leaf River asserts it is in compliance with the Commission's regulations regarding netting and trading of imbalances because it is does not propose to

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[70] *Tres Palacios* at PP 57-59; *Windy Hill* at PP 54-56; *Pine Prairie* at P 46; and *Blue Lake Gas Storage Company*, 96 FERC ¶ 61,164, at 61,728-729 (2001).

[71] Exhibit P, GT&C, section 5.5(f).

[72] *Price Discovery in Natural Gas and Electric Markets*, 109 FERC ¶ 61,184, (Ordering Paragraph (D)) (2004).

[73] *Standards For Business Practices of Interstate Natural Gas Pipelines,* Order No. 587-G, 63 Fed. Reg. 20,072 (Apr. 23, 1998), FERC Stats. & Regs., Regs. Preambles July 1996-December 2000 ¶ 31,062 (1998), Order No. 587-L, 65 Fed. Reg. 41,873 (July 7, 2000), FERC Stats. & Regs. Regs. Preambles July1996- December 2000 ¶ 31,100 (2000).

charge imbalance penalties. It states that it nevertheless is proposing to provide a variety of services its customers will be able to use for imbalance management, including parking, lending, wheeling and hourly balancing. Also, Leaf River states in its tariff that it will not inhibit the provision of imbalance management services by third parties.[74] In Order No. 637-A[75] we stated that if a pipeline has no authority to assess penalties for imbalances, there is no need to require it to offer such imbalance services. Thus, the regulations requiring imbalance services, including netting and trading of imbalances, are not applicable to Leaf River at this time and there is no necessity for an exemption. If Leaf River seeks to impose imbalance penalties in the future, it must comply with the Commission's policies and regulations regarding imbalance management services.

9. Transmission Provider Standards of Conduct

76. Leaf River requests that the Commission confirm that Leaf River meets the requirements for the independent storage provider exemption set forth in section 358.3(a)(3) of our regulations and, therefore, is exempt from the transmission provider Standards of Conduct promulgated in Order No. 2004. Under section 358.3(a)(3), transmission provider status and the obligations of the Standards of Conduct do not attach to a "natural gas storage provider authorized to charge market-based rates that is not interconnected with the jurisdictional facilities of any affiliated interstate natural gas pipeline, has no captive ratepayers and no market power."[76] We clarify that Leaf River is exempt from the transmission provider Standards of Conduct since it has no interconnections with affiliated pipelines, no captive ratepayers and no market power.

10. Overrun Service

77. Leaf River's pro forma tariff regarding Rate Schedule FSS does not provide for overrun service. As discussed earlier, it will offer hourly flexibility on an operationally available basis so that shippers have flexibility within their contract levels. As Leaf River noted, the Commission does not require storage providers to offer overrun service in excess of contracted volumes.[77]

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[74] Exhibit P, Original Sheet No. 3.

[75] *Id*.

[76] 18 C.F.R. § 358.3(a)(3) (2008).

[77] *Windy Hill at* P 50.

11. Force Majeure

78. In proposed section 17.2 of Leaf River's GT&C force majeure is defined very broadly, including language relating to testing or maintenance of plant facilities, future Commission orders, decisions or rulings of any governmental agency. On October 16, 2008, the Commission ruled on very similar force majeure language, where we approved certain revised language regarding force majeure.[78] Thus, Leaf River is directed to revise section 17.2 of the GT&C accordingly, to remove the reference to testing and maintenance, consistent with the requirements of *Tarpon Whitetail*.

12. Other

79. Leaf River should replace the word "sole" with "non-discriminatory" in section 8.3 of Original Sheet No. 138.

13. Filing and Effectiveness of Tariff

80. Consistent with Commission policy, Leaf River shall file to make its pro forma FERC Gas Tariff effective not more than 60 days, nor less than 30 days, before the date on which it will commence provision of the services proposed herein. The filing shall reflect all modifications detailed in this order, and any intervening changes to the regulations that apply generally to the tariffs of natural gas storage companies.

G. Engineering Analysis

81. Commission staff completed an engineering analysis of the proposed storage facility, including its design capacity. Based on this analysis, we conclude that the facilities are properly designed to provide the services proposed by Leaf River. Also, we conclude that geological and engineering parameters for the underground storage facilities proposed by Leaf River are well defined. The analysis shows that the proposed cavern locations are well within the design criteria and confinement of the salt formation. They are at sufficient depth and within proper distances from both other caverns and salt boundaries to avoid pressure influences between caverns when they are operated at full storage capacity and pressure. The caverns are spaced and designed under the Mississippi State Oil and Gas Board (MSOGB) 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 required by the MSOGB and consistent with the Interstate Oil and Gas Compact Commission (IOGCC) guidelines for salt dome storage.

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[78] *Tarpon Whitetail Gas Storage, LLC*, 125 FERC ¶ 61,050 (2008).

82. The maximum and minimum cavern pressure gradients throughout the storage cycle (0.9 psi/ft and 0.175 psi/ft) were chosen to preserve the structural integrity of the caverns, and are within the limits recommended by the MSOGB. The design dimensions for each cavern were converted to an equivalent gas volume at the maximum and minimum pressure gradients; in addition, material balance estimate of the maximum volume was estimated. The resulting volumes were within +/- 5 percent of Leaf River's proposed capacity for the facility of 41.9 Bcf. Based upon analysis of these findings, the Commission concludes that the proposed storage facility, if constructed as described, is technically sound and well defined. However, Leaf River's authorization is subject to the reporting, monitoring and operating conditions listed in Appendix A to this order.

83. Because salt deforms plastically in relatively short time frames, caverns will shrink over time. As stated in *A Brief History of Salt Cavern Use*, large volume losses due to salt creep have occurred in natural gas storage caverns.[79] Further, the IOGCC's *Hydrocarbon Storage in Mined Caverns* (IOGCC Report) states that monitoring to demonstrate cavern stability and successful hydrodynamic containment should be carried out throughout the life of the facility. To mitigate these concerns, Leaf River shall conduct sonar surveys to monitor the caverns' size and shape to ensure that salt creep does not potentially damage the integrity of the caverns, which may result in lost gas and reductions in storage capacity. The IOGCC 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 measurements shall be counterchecked by product level measurement in the cavern (using the level versus volume curve)."[80] We will require Leaf River to file an annual inventory verification study to assist in identification of potential problems with the storage facility.

H. <u>Blanket Certificates</u>

84. Leaf River has applied for a Part 157, subpart F blanket certificate. The subpart F blanket certificate gives a natural gas company 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 Leaf River will become an interstate pipeline with the issuance of a certificate to construct and operate the proposed facilities, we will issue the requested Part 157, subpart F blanket certificate. However, the Part 157 blanket certificate shall not include automatic

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

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

authorization to increase storage capacity.[81] This restriction on Leaf River's Part 157 blanket certificate is based on the fact that its storage facility is a salt cavern in the initial stages of development for which future expansion will require reevaluation by the Commission of historical data and new engineering and geological data.[82]

85. Leaf River requests a Part 284, subpart G blanket certificate to provide open-access storage services. Under a Part 284 blanket certificate, Leaf River will not need individual authorizations to provide storage services to particular customers. Leaf River filed a pro forma Part 284 tariff to provide open-access storage services. Since a Part 284 blanket certificate is required for it to offer these services, we will grant Leaf River a Part 284 blanket certificate, subject to the conditions imposed herein.

I. Environmental Analysis

86. On December 11, 2007, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment for the Proposed Leaf River Storage Project and Request for Comments on Environmental Issues* (NOI). On January 15, 2008, we issued a *Notice of Public Scoping Meeting and Site Visit for the Proposed Leaf River Storage Project* (Scoping Notice). The public scoping meeting was held on January 29, 2008 in Heidelberg, Mississippi, and the site visit was on January 30, 2008. The NOI and Scoping Notice were sent to affected landowners and abutters; federal, state, and local government agencies; elected officials; Native American tribes; environmental and public interest groups; and local newspapers and libraries. We received written comments from the Mississippi Natural Heritage Program; Bean Industries; and three affected landowners. We also received comments at the public scoping meeting from Bean Industries and five speakers representing landowners.[83]

87. The comments received related to water quality, effects of the project on the gopher tortoise, pipeline easement acquisition and compensation, alternatives to the project, need for the project, pipeline safety, water body crossing methods, erosion control, interference with potential development of storage caverns on adjacent property, proper recordation of locations for the storage caverns at the county courthouse, the Mississippi Sate Oil and Gas Board's permit application and review procedures, and sharing of facilities with another potential gas storage project. The substantive environmental comments are discussed in the applicable sections of the environmental

[81] *See* 18 C.F.R. § 157.214 (2007).

[82] *See, e.g.*, *Unocal Windy Hill Gas Storage*, 115 FERC ¶ 61,218 (2006).

[83] The transcript of the scoping meeting is part of the record of this proceeding.

assessment (EA) that Commission staff prepared pursuant to the requirements of the National Environmental Policy Act of 1969.[84]

88. The EA was issued and placed in the record on April 30, 2008, and mailed to federal, state, and local agencies; public interest groups; interested individuals; parties to this proceeding; and local newspapers and libraries.[85] The analysis in the EA included the project's purpose and need; geology and soils; water resources, fisheries 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 period for submitting comments on the EA ended May 30, 2008. The U.S. Geologic Survey (USGS) and Bean Industries filed comments on the EA. Leaf River also submitted comments which included a response to the USGS comments and provided a few clarifications to the EA.

89. In its comments, USGS stated that the EA did not include sufficient documentation for several statements describing the geology of the area. However, USGS does not state that the documentation in the EA was incorrect or say that it needs additional documentation for its review purposes.[86]

90. Bean Industries filed comments on the EA which reiterated its scoping comments that there would be environmental benefits associated with a sharing of facilities between Leaf River's proposed project and any storage project that Bean Industries might develop on adjacent lands, and notes that the Commission staff acknowledged the point in the EA, depending upon how the concept was implemented.[87] Bean Industries asks that the Commission "maintain the flexibility to consider reasonable facility sharing proposals that New Home may put forward as development of the New Home project proceeds."[88]

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[84] 42 U.S.C. § 4331 *et seq.*

[85] A notice of the availability of the EA was published in the *Federal Register* on May 8, 2008 (73 Fed. Reg. 26103).

[86] Leaf River filed comments to the EA on June 6, 2008, and it provided such citations, supplementing Resource Report 6 of its original certificate application, as clarifications to the EA.

[87] EA, p. 55.

[88] Bean Industries' comments on the EA, p. 2.

91. Reiterating its earlier comments, Bean Industries' comments on the EA suggested that Leaf River share its pipeline and compression facilities, as Bean Industries is currently exploring the feasibility of developing its own storage project at the New Home Salt Dome, adjacent to Leaf River's proposed project. The EA addressed this suggestion and concluded that although co-locating Bean's pipeline facilities with Leaf River's could limit disturbance and reduce environmental impact, both projects would likely be injecting and withdrawing gas during similar periods, and it is unlikely that compression or pipeline capacity could be shared without an agreement between Leaf River and Bean and further engineering to determine the feasibility of jointly conducting operations. Leaf River filed an answer to Bean Industries' comments and stated that while it "will indeed be an open access provider of natural gas storage services in interstate commerce, that status does not obligate Leaf River to make available to its competitors facilities which Leaf River has developed."[89] We agree with the EA's finding that compression or pipeline capacity could not be shared without an agreement between Leaf River and Bean Industries, and no such agreement exists.

92. Further, Bean Industries has not filed an application for a certificate pursuant to section 7(c) of the NGA and has not provided detail for any proposed project describing how facilities would be shared. We are unable to conduct a specific environmental analysis, or any analysis, of Bean Industries' suggestion of sharing facilities with Leaf River. If Bean Industries proposes a jurisdictional natural gas storage project in the future, it would require an environmental review once it is filed with the Commission. As such, we are not inclined to delay certification of a project before us based upon speculative concerns.

93. In comments on the EA Leaf River provided several clarifications. First, it notes that it chose the Wilcox Formation as being the top of the interval selected as a water source for solution mining the caverns after reviewing several geophysical logs obtained from the Mississippi State Oil and Gas Board. Second, Leaf River states that the project is in the Gulf Coastal Plain. Third, Leaf River states that the Upper Wilcox Aquifer has total dissolved solids greater than 1,000 milligrams per liter (mg/L), rather than less than 1,000 mg/L. Finally, Leaf River notes that its water wells would have a 16-inch-diameter outer casing and would use line-shaft vertical turbine pumps and motors instead of submersible turbine pumps and motors as stated in the EA.

94. Based on the analysis in the EA, we have determined that if Leaf River constructs the facilities in accordance with its application and supplements and the mitigation measures included in Appendix B to this order, approval of this project will not constitute a major federal action significantly affecting the quality of the human environment.

[89] Leaf River's March 3, 2008, Answer, p. 8.

95. Any state or local permits issued with respect to facilities authorized herein must be consistent with the conditions of this certificate. We encourage 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.[90]

IV. Conclusion

96. For the reasons discussed above, we find that Leaf River's project is required by the public convenience and necessity and that a certificate authorizing the construction and operation of the facilities described in this order and in the application should be issued, subject to the conditions discussed herein and listed in Appendices A and B.

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

The Commission orders:

(A) A certificate of public convenience and necessity is issued to Leaf River in Docket No.CP08-8-000, authorizing the ownership, construction and operation of the described storage facilities, as described more fully in this order and in the application, as supplemented.

(B) A blanket construction certificate is issued to Leaf River in Docket No. CP08-8-000, under subpart F of Part 157 of the Commission's regulations, provided, however, that Leaf River may not rely on the blanket certificate for automatic authorization to increase storage capacity.

(C) A blanket transportation certificate is issued to Leaf River in Docket No. CP08-8-000, under subpart G of Part 284 of the Commission's regulations.

(D) The certificate issued in Ordering Paragraph (A) is conditioned on Leaf River's compliance with all applicable Commission regulations under the Natural Gas Act, particularly the general terms and conditions set forth in Parts 154, 157, and 284, and paragraphs (a), (c) (1) and (2), (e), and (f) of section 157.20 of the regulations.

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

(E) The facilities authorized in this order shall be constructed and made available for service within three years of the date of the order in this proceeding in accordance with section 157.20(b) of the Commission's regulations.

(F) The certificate issued in Ordering Paragraph (A) is conditioned upon Leaf River's compliance with the engineering and environmental conditions set forth in Appendices A and B to this order.

(G) Leaf River's request to charge market-based storage rates for firm and interruptible storage service and interruptible hub and wheeling services is approved, as discussed in this order. Leaf River's market power and market-based storage rates authority shall be subject to re-examination in the event that:

1. Leaf River expands its storage capacity beyond the amount authorized in this proceeding;
2. Leaf River acquires additional transportation facilities or additional storage capacity;
3. An affiliate provides storage or transportation services in the same market area or acquires an interest in another storage field that can link Leaf River's facilities to the market area; or
4. Leaf River or an affiliate acquires an interest in or is acquired by an interstate pipeline.

(H) Leaf River is granted a waiver of section 157.14 of the Commission's regulations requiring submission of Exhibits K (cost of facilities), L (financing), N (revenue-expenses-income), and O (depreciation and depletion); and the accounting and reporting requirements under Parts 201 and 260.2 of the Commission's regulations, which presume cost-based rates are being charged and collected, except for the information necessary for the assessment of annual charges. This waiver is subject to Leaf River maintaining accounts and financial information of its storage facility consistent with generally accepted accounting principles.

(I) Leaf River shall file, not less than 30 days nor more than 60 days, prior to its proposed effective date, actual tariff sheets consistent with its pro forma tariff, except as directed herein, and in accordance with the NGA and Part 154 of the Commission's regulations.

(J) Within 30 days after its first full year of operation, and every year thereafter, Leaf River is directed to file an annual informational filing on its provision of service using off-system capacity. For each acquisition of off-system capacity, Leaf River shall file:

a. the name of the off-system provider;
b. the type, level, term, and rate of service contracted for by Leaf River;
c. a description of the geographic location – boundaries, receipt and delivery points, and segments comprising the capacity;
d. the operational purpose(s) for which the capacity is utilized;
e. a description of how the capacity is associated with specific transactions involving customers of Leaf River; and
f. an identification of the total volumes, by Leaf River's rate schedule and customer, that it has nominated on each off-system provider during the reporting period.

(K) The authorizations issued in Ordering Paragraphs (A), (B), and (C) are conditioned upon Leaf River's notifying the Commission's environmental staff by telephone, e-mail, or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Leaf River. Leaf River shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

(L) Bean Industries' untimely motion to intervene is granted.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

APPENDIX A

<u>Engineering Conditions for the Leaf River Storage Project</u>
Docket No. CP08-8-000

1. Leaf River shall establish and maintain a subsidence monitoring network over the proposed cavern storage area.

2. Leaf River shall assemble, test and maintain an emergency shutdown system.

3. Leaf River shall periodically log each cavern's wells to check the casing status.

4. Leaf River 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. In the alternative, no less than 30 days before placing the caverns into service, Leaf River 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.

5. Leaf River shall conduct an annual inventory verification study on each cavern.

6. Leaf River 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).

7. The following conditions shall apply to the storage caverns:

    a. The total maximum gas storage inventory stored in the caverns shall not exceed 41.9 Bcf at 14.73 psia and 60ºF (each individual cavern shall not exceed 10.473 Bcf) without prior Commission authorization.

    b. The maximum gas storage shut-in stabilized pressure in each cavern shall not exceed 0.9 psi per foot of cavern depth and the minimum pressure in each cavern shall be limited to 0.175 psi per foot of the cavern depth.

8. Before commencing gas storage operations in any of the caverns, Leaf River shall file with the 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. Leaf River 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 60ºF):

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. Leaf River 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 the Leaf River Storage Project
Docket No. CP08-8-000

1. Leaf River 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 Commission Order. Leaf River must:

   a. request any modification to these procedures, measures, or conditions in a filing with the 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 Commission 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**, Leaf River 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. **As soon as they are available, and before the start of construction**, Leaf River 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 Commission 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.

Leaf River's exercise of eminent domain authority granted under Natural Gas Act (NGA) section 7(h) in any condemnation proceedings related to the Order must be consistent with these authorized facilities and locations. Leaf River'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. Leaf River 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 will 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 our *Upland Erosion Control, Revegetation, and Maintenance Plan,* and/or minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

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

   a. implementation of cultural resources mitigation measures;
   b. implementation of endangered, threatened, or special concern species mitigation measures;
   c. recommendations by state regulatory authorities; and
   d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.

6. **Within 60 days of the acceptance of the Certificate and prior to construction**, Leaf River shall file an initial Implementation Plan with the Secretary for review and written approval by the Director of OEP describing how Leaf River will implement the mitigation measures required by the Commission Order. Leaf River must file revisions to the plan as schedules change. The plan shall identify:

   a. how Leaf River 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;

b. the number of EIs assigned per spread, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;

c. company personnel, including EIs and contractors, who will receive copies of the appropriate material;

d. the training and instructions Leaf River will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change).

e. the company personnel (if known) and specific portion of Leaf River's organization having responsibility for compliance;

f. the procedures (including use of contract penalties) Leaf River will follow if noncompliance occurs; and

g. 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 mitigation training of onsite personnel;
(3) the start of construction; and
(4) the start and completion of restoration.

7. Leaf River shall employ at least one EI per construction spread. The EI(s) shall be:

a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Commission Order and other grants, permits, certificates, or authorizing documents;

b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;

c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;

d. a full-time position, separate from all other activity inspectors;

e. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and

f. responsible for maintaining status reports.

8. Leaf River shall file updated status reports prepared by the head EI with the Secretary on a ***biweekly*** basis during well and cavern drilling and development and on a ***weekly*** basis during pipeline construction **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. the current construction status of each spread, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
b. a listing of all problems encountered and each instance of noncompliance observed by the EI(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
c. a description of corrective actions implemented in response to all instances of noncompliance, and their cost;
d. the effectiveness of all corrective actions implemented;
e. a description of any landowner/resident complaints which may relate to compliance with the requirements of the Commission Order, and the measures taken to satisfy their concerns; and
f. copies of any correspondence received by Leaf River from other federal, state or local permitting agencies concerning instances of noncompliance, and Leaf River's response.

9. Leaf River shall develop and implement an environmental complaint resolution procedure for at least two years following the completion of construction. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the project and restoration of the right-of-way. **Prior to construction**, Leaf River shall mail the complaint procedures to each landowner whose property would be crossed by the project.

a. In its letter to affected landowners, Leaf River shall:

(1) provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;
(2) instruct the landowners that if they are not satisfied with the response, they should call Leaf River's Hotline; the letter should indicate how soon to expect a response; and
(3) instruct the landowners that if they are still not satisfied with the response from Leaf River's Hotline, they should contact the Commission's Enforcement Hotline at (888) 889-8030 or at hotline@ferc.gov.

b. In addition, Leaf River shall include in its status report a copy of a table that contains the following information for each problem/concern:

(1) the identity of the caller and the date of the call;
(2) the identification number from the certificated alignment sheet(s) of the affected property and the location by milepost;
(3) the description of the problem/concern; and
(4) an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.

10. Leaf River must receive written authorization from the Director of OEP **before commencing service** from the project. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas of project-related disturbance are proceeding satisfactorily.

11. **Within 30 days of placing the certificated facilities in service**, Leaf River 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 Leaf River 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.

12. **Prior to construction of the Dome Lateral (DL) and West-East Lateral (WEL)**, Leaf River shall develop a temporary stabilization plan for the right-of-way in consultation with the Natural Resource Conservation Service or other local conservation authority to stabilize the construction right-of-way during the time between construction of the first and second DL and WEL pipelines. The plan shall be filed with the Secretary for review and written approval of the Director of OEP.

13. **During construction of the DL and WEL** on properties with a residence within 50 feet of the edge of the construction right-of-way, Leaf River shall:

a. leave mature trees and landscaping within the construction right-of-way, unless removal is necessary for the safe operation of construction equipment; and

b. fence the edge of the construction work area adjacent to the residence for 100 feet on either side of the residence to ensure that construction equipment and materials, including the spoil pile, remain within the construction work area.

14. **Prior to construction of the DL and WEL,** Leaf River shall describe the construction technique to be used to reduce impacts (such as reduced pipeline separation, centerline adjustment, use of stove-pipe or drag-section techniques, working over existing pipelines, pipeline crossover, bore, etc.) in the vicinity of the four residences within 50 feet of the construction right-of-way.

15. Leaf River shall defer construction and use of facilities and staging, storage, and temporary work areas and new or to-be-improved access roads **until**:

a. Leaf River provides the Mississippi State Historic Preservation Officer (SHPO) with a plan to avoid site 22JS651;
b. files any SHPO comments on the plan; and
c. the Director of OEP notifies Leaf River in writing that it may proceed.

16. Leaf River shall make all reasonable efforts to make sure that the predicted noise levels from the proposed compressor station are not exceeded at all nearby noise sensitive areas (NSA) and file noise surveys showing this with the Secretary **no later than 60 days** after placing the compressor station into service. However, if the noise attributable to the operation of the new compressor station at full load exceeds a day-night sound level (L_{dn}) of 55 decibels on the A-weighted scale (dBA) at any nearby NSA, Leaf River shall file a report on what changes are needed and should install additional noise controls to meet that level **within one year** of the in-service date. Leaf River shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.