

132 FERC ¶ 61,115
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Cadeville Gas Storage LLC

Docket No. CP10-16-000

ORDER ISSUING CERTIFICATE

(Issued August 10, 2010)

1. On November 6, 2009, Cadeville Gas Storage LLC (Cadeville) filed an application under section 7(c) of the Natural Gas Act (NGA)¹ and Part 157 of the Commission's regulations² requesting a certificate of public convenience and necessity authorizing the construction and operation of a natural gas storage facility (Cadeville Project) in Ouachita Parish, Louisiana. Cadeville also requests: (i) a blanket certificate under Part 284, Subpart G of the Commission's regulations³ to provide firm and interruptible storage services and interruptible hub services; (ii) a blanket certificate under Part 157, Subpart F of our regulations authorizing certain construction and other activities; (iii) authority to charge market-based rates for the proposed storage and hub services; (iv) approval of the proposed pro forma tariff; and (v) waiver of certain filing, accounting, and reporting requirements.
2. As discussed below, the Commission grants Cadeville's requested certificate authorizations, subject to the conditions described herein. We also grant Cadeville's request for market-based rate authority and waiver of certain filing, accounting, and reporting requirements.

¹ 15 U.S.C. §717f(c) (2006).

² 18 C.F.R. Part 157 (2010).

³ 18 C.F.R. Part 284 (2010).

I. Background

3. Cadeville is a limited liability company organized under the laws of the State of Delaware.⁴ Cadeville is a newly-formed company and currently does not own any existing storage facilities and is not engaged in any natural gas operations. It is not currently a natural gas company within the meaning of section 2(6) of the NGA.⁵ Upon completion of the proposed construction and commencement of operations approved herein, Cadeville will be a natural gas company within the meaning of NGA section 2(6) and will be subject to the Commission's jurisdiction.⁶

II. Proposal

A. Facilities

4. Cadeville proposes to construct and operate a high-deliverability natural gas storage facility which will provide for the injection, storage, and withdrawal of natural gas by conversion of the James Sand, a depleted natural gas reservoir in the Cadeville Field, to storage service. This natural gas reservoir is located in Ouachita Parish, Louisiana, approximately three miles east of the Community of Cadeville. Upon completion of the facilities,⁷ the storage capacity of the Cadeville Project will include approximately 16.4 billion cubic feet (Bcf) of working gas capacity and approximately 5.4 Bcf of base gas.⁸ The project will provide 420 million cubic feet (MMcf) per day of maximum withdrawal capability and 420 MMcf per day of maximum injection capability. Cadeville states that the project has been designed to completely cycle the 16.4 Bcf of working gas three times per year.

⁴ Cadeville is owned by Cardinal Gas Storage Partners LLC, which is a joint venture of Martin Resource Management Corporation and Energy Capital Partners.

⁵ 15 U.S.C. § 717a(6) (2006).

⁶ The Commission has previously exempted Cadeville from the certificate requirements of NGA section 7(c) in a proceeding related to its current application. In that proceeding, the Commission authorized Cadeville to drill a reservoir test well to determine the technical, environmental, and economic feasibility of developing the underground natural gas storage facility which is the subject of the current application. *See Cadeville Gas Storage LLC*, 128 FERC ¶ 61,141 (2009).

⁷ A location map of the proposed facilities is shown in Exhibit F, Sheet 3 to Cadeville's application.

⁸ Cadeville states that the 5.4 Bcf of base gas will include approximately one Bcf of non-recoverable, native gas in the James Sand.

5. Cadeville proposes to drill and complete eight new horizontal natural gas wells (Wells CGS-1 through CGS-8) within the James Sand formation from two well pad locations, which it refers to as South Well Pad and North Well Pad. The well pads will be constructed from structural grade fill material to provide a place for the drilling rig and associated equipment and the permanent facilities. Each well pad will require approximately 3.1 acres of land. Wells CGS-2, CGS-3, and CGS-4 will be drilled from the North Well Pad, and Wells CGS-1, CGS-5, CGS-6, CGS-7, and CGS-8 will be drilled from the South Well Pad. These wells will be used to inject and withdraw gas from the James Sand formation.

6. Cadeville proposes to convert three existing production wells (to be re-named Wells CGS-M1, CGS-M2, and CGS-M3) to observation wells. One well is on the northeast side of the field, another is centrally located within the field, and the third is on the south side of the field. These wells will be used to monitor storage field pressure and the adjacent zones to detect any gas migration. Each well will require approximately 0.5 acres of land. To convert the wells, Cadeville will position a workover rig over the well, test the existing casing, install pressure monitoring devices, and install a wellhead. Subject to the condition of the existing wells, additional work may be performed.

7. Cadeville proposes to construct a compressor station on 5.4 acres of land in the Ervin Cotton Road Tract in the southern part of the storage field (compressor station). Compression required for injection and withdrawal into and from the storage field and for receipt and delivery of gas from and to the pipeline-header pipelines will be achieved by using five gas-fired, engine-driven reciprocating compressor units. The five engines will be rated at 4,735 horsepower (hp) each at 1,000 revolutions per minute (rpm), with the total proposed compression for the Cadeville Project being 23,675 hp. The compressors will be designed to compress gas at suction pressures ranging from 325 pounds per square inch gauge (psig) to 800 psig, and discharge pressures from 700 psig to a maximum of 2,650 psig. The five compressor units will be housed in a single fully enclosed pre-engineered and prefabricated field-erected metal building.

8. Cadeville proposes to construct the 0.2 mile long, 20-inch diameter South Injection/Withdrawal Pipeline to connect the wells at the South Well Pad to the compressor station. Cadeville proposes to construct the 1.4-mile, 16-inch diameter North Injection/Withdrawal Pipeline to connect the wells at the North Well Pad to the compressor station. This storage field pipeline network will include associated aboveground facilities, including pig launcher and receiver facilities and valve sites.

9. Cadeville proposes to construct three headers to connect its storage facilities with nearby interstate pipelines — the Tennessee Header, a 16-inch diameter pipeline beginning at the compressor station and running generally northwest for approximately 2.6 miles to an interconnection with Tennessee Gas Pipeline Company (Tennessee); the

Gulf South Header, a 16-inch diameter pipeline beginning at the compressor station and running generally east for approximately 0.9 miles to an interconnection with Gulf South Pipeline Company (Gulf South); and the CenterPoint Header, a 24-inch diameter pipeline that will begin at the compressor station and run generally southeast for approximately 6.4 miles to an interconnection with CenterPoint Energy Gas Transmission (CenterPoint). At the interconnections with Tennessee, Gulf South, and CenterPoint, Cadeville will construct a bi-directional custody transfer meter and associated electronic flow measurement equipment. Each header pipeline will occupy a 50-foot-wide permanent easement and will require an additional 25 feet of temporary right-of way for construction.

10. Cadeville states that Entergy Louisiana LLC (Entergy) will construct certain non-jurisdictional facilities to complete the Cadeville Project. Specifically, the facilities include electrical upgrade and service line extensions that will supply electrical power to the Cadeville Project, including each meter station. Entergy will be responsible for the design, construction, and permitting of the facilities, and Entergy will own, operate, and maintain them.

11. Cadeville contends that Ouachita Parish is an ideal location for a high-deliverability gas storage project because of its close proximity to extensive natural gas pipeline infrastructure near Delhi, Louisiana. As noted, Cadeville is proposing interconnections near Delhi with Tennessee, Gulf South, and CenterPoint.

B. Markets and Services

12. Cadeville proposes to offer firm (FSS) and interruptible (ISS) storage service and interruptible hub services (such as park and loan, wheeling, balancing, and imbalance trading services) on an open-access, non-discriminatory basis.⁹ Cadeville proposes to charge market-based rates for all storage and hub services under its pro forma tariff. Cadeville contends that it will operate in a competitive market and that it lacks market power with respect to the storage and hub services it proposes.

13. Cadeville states that it conducted a 30-day open season during April 2009 and a second open season in June 2010 for the purpose of obtaining commitments for storage capacity. Cadeville states that it received total bids for more than twice the amount of working gas capacity proposed in its application. Cadeville asserts that it is currently negotiating service requirements with potential customers and believes that significant interest in the project will result in agreements for substantially all of the proposed capacity.

⁹ The terms and conditions of these services are set forth in Cadeville's pro forma gas tariff. *See* Application, Exhibit P.

C. Blanket Certificate and Waiver Requests

14. Cadeville requests a blanket certificate under Part 284, Subpart G of the Commission's regulations to provide storage and hub services on an open-access, non-discriminatory basis pursuant to its proposed tariff. Cadeville also requests a blanket certificate under Part 157 Subpart F of the Commission's regulations to perform routine activities in connection with the construction, maintenance, and operation of the proposed facilities.

15. Because it proposes to charge market-based rates, Cadeville requests waiver of certain filing, accounting, and reporting requirements applicable to cost-based rate proposals, which the Commission has previously found inapplicable to storage providers that are granted market-based rate authority.

III. Notice and Interventions

16. Notice of Cadeville's application was published in the *Federal Register* on November 27, 2009.¹⁰ Tommy D. Kelley filed a timely, unopposed motion to intervene.¹¹ Mr. Kelley's comments are discussed below. No protests were filed.

IV. Discussion

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

A. The Certificate Policy Statement

18. The Certificate Policy Statement provides guidance for evaluating proposals for certificating new construction.¹² 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 construction of major new natural gas facilities, the

¹⁰ 74 Fed. Reg. 62,293 (2009).

¹¹ Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214(c) (2010).

¹² *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).

Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment, and the unneeded exercise of eminent domain in evaluating new pipeline construction.

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

20. Cadeville is a new entrant in the natural gas storage market and has no existing customers. Therefore, there will be no subsidization. Moreover, under its market-based rate proposal, Cadeville assumes the economic risks associated with the cost of the proposed facilities to the extent that any capacity is undersubscribed or that revenues are not sufficient to recover costs. Thus, the Commission finds that Cadeville satisfies the threshold requirement of the Certificate Policy Statement.

21. Since Cadeville is a new company with no current customers or services, the proposed project will have no impact on existing customers or services. Further, the Cadeville Project should not have any adverse impact on existing storage providers or their customers, since, as discussed below, the proposed project will be located in a competitive market and will also enhance storage options available to pipelines and their customers. Additionally, no storage company or customer in Cadeville's market area has protested Cadeville's application.

22. A landowner, Tommy D. Kelley, intervened raising concerns about his compensation for mineral rights. After examining project maps and the underground geologic formation, it is clear that Mr. Kelley will not be affected by the project because the storage formation does not occur underneath his property. Project maps included in the Environmental Assessment (EA) for this project show the boundaries of the formation. Moreover, compensation issues as such are not within the jurisdiction of the Commission. Instead, issues of compensation are to be addressed through negotiations between the parties or in a court of competent jurisdiction.

23. Cadeville states that construction of the project will affect 141.3 acres of land, with 80.2 acres permanently affected. Cadeville contends that it owns in fee or holds through lease a significant portion of the necessary surface and subsurface land requirements for the project. Cadeville asserts that it is negotiating for the remaining lease and easement rights. Other than the concerns of Mr. Kelley noted above, there is no landowner opposition to Cadeville's proposals. Thus, the Commission finds that the development of the Cadeville Project will have minimal impact on landowners and surrounding communities.

24. The Cadeville Project will enhance storage options available to pipelines and their customers in the southeastern United States and increase competitive alternatives. Based on the benefits that the project will provide and the minimal adverse effects on other storage providers and their captive customers and landowners and surrounding communities, the Commission finds, consistent with the Certificate Policy Statement and section 7 of the NGA, that the public convenience and necessity requires approval of the proposals, subject to the conditions discussed below.

B. Market-based Rates

25. Cadeville requests authority to charge market-based rates for its proposed firm and interruptible storage services. Cadeville also proposes to offer interruptible hub services, including parking services (IPS), a loan service (ILS) wheeling (IWS), balancing (IBS), and imbalance trading (IBTS), all at market-based rates.¹³

26. Generally, the Commission evaluates requests to charge market-based rates for storage under the analytical framework of the Alternative Rate Policy Statement.¹⁴ Under the Alternative Rate Policy Statement, the Commission's framework for evaluating requests for market-based rates has two principal purposes: (1) to determine whether the applicant can withhold or restrict services and, as a result, increase prices by a significant amount for a significant period of time; and (2) to determine whether the

¹³ Application at 16.

¹⁴ *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines*, 74 FERC ¶ 61,076 (1976); *reh'g and clarification denied*, 75 FERC ¶ 61,024 (1996), *petitions for review denied sub nom. Burlington Resources Oil & Gas Co. v. FERC*, 172 F.3d 918 (D.C. Cir. 1998); *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).

applicant can discriminate unduly in price or terms and conditions of service.¹⁵ To find that an applicant cannot withhold or restrict services, significantly increase prices over an extended period, or discriminate unduly, the Commission must first find that there is a lack of market-power¹⁶ because customers have good alternatives¹⁷ or that the applicant or Commission can mitigate the market power with specified conditions.¹⁸

27. The Commission's analysis of whether an applicant has the ability to exercise market power consists of three major steps. First, the Commission reviews whether the applicant has specifically and fully defined the relevant markets¹⁹ to determine which specific products or services are identified and the suppliers of those products and services that provide good alternatives to the applicant's ability to exercise market power.²⁰ Additionally, as part of the first step, the applicant must identify the relevant geographic market.²¹ Second, the Commission measures an applicant's market share and market concentration.²² Third, the Commission evaluates other relevant factors, such as ease of entering the market.

¹⁵ *Orbit Gas Storage, Inc.*, 126 FERC ¶ 61,095 (2009).

¹⁶ The Commission defines "market power" as "the ability of a pipeline to profitably maintain prices above competitive levels for a significant period of time." *See* Alternative Rate Policy Statement, 74 FERC at 61,230.

¹⁷ A good alternative is an alternative to the proposed project that is available soon enough, has a price low enough, and has a quality high enough to permit customers to substitute the alternative for an applicant's service. *See* Alternative Rate Policy Statement, 74 FERC ¶ 61,076 at 61,230.

¹⁸ Generally, an applicant will include in its application a market power study in support of its request, as Cadeville has done in this case. *See* Application, Exhibit I. A market power study usually defines the relevant products and geographic markets, measures market shares and concentrations, and evaluates other factors such as replacement capacity, ease of entry, and non-storage alternatives.

¹⁹ Relevant product market consists of the applicant's service and other services that are good alternatives to the applicant's services. *See* Alternative Rate Policy Statement, 74 FERC ¶ 61,076 at 61,231.

²⁰ Alternative Rate Policy Statement, 74 FERC ¶ 61,076 at 61,231.

²¹ *Id.* at 61,232-34.

²² *Id.* at 61,234.

28. Cadeville identifies the relevant product market as underground natural gas storage, including firm and interruptible natural gas storage and hub services. Cadeville identifies the relevant geographic market region as the Gulf Coast Supply Region, which includes portions of East and South Texas, Louisiana, Mississippi, and Alabama. Cadeville submits that the Gulf Coast Supply Region has over 60 storage facilities and numerous market centers that are either existing or approved and expected to be operating by December 31, 2011. Further, Cadeville states that these facilities, together with over 30 new or expanding storage facilities planned in this Gulf Coast Supply Region, establish that it will be virtually impossible for any single facility to exert market power.²³

29. A company can exercise market power because it has a large market share so it can raise prices acting alone or because it can act with others to raise prices.²⁴ Here, with relatively small market shares, as Exhibit No. KLB-4 of Cadeville's market-power analysis²⁵ shows, Cadeville will not be able to exert market power in the relevant market area. The Cadeville Project and Cadeville's affiliates, Arcadia Gas Storage and Perryville Gas Storage LLC, will have a total, combined working gas capacity of 45.3 Bcf.²⁶ Exhibit No. KLB-4 lists 95 storage facilities that are not affiliated with the Cadeville Project and shows that Cadeville and its affiliates would control in the relevant market approximately 3.9 percent of the total working gas capacity and 5.9 percent of total deliverability. Thus, Cadeville is unlikely to be able to exercise market power with its small market shares.

30. The Commission relies on the Herfindahl-Hirschman Index (HHI), which is used to analyze whether a competitive market exists for a specific product, to determine market concentration for gas pipeline and storage markets. The Alternative Rate Policy Statement states that a low HHI - generally less than 1,800 - indicates that sellers are less likely to be able to exert market power because customers have sufficiently diverse alternatives in the relevant market. While a low HHI suggests lack of market power, a high HHI - generally greater than 1,800 - requires closer scrutiny in order to make a determination about a seller's ability to exert market power.²⁷ Cadeville's market power

²³ See Exhibit No. KLB-3, Page 1, of Exhibit I of Cadeville's Application.

²⁴ See Alternative Rate Policy Statement, 74 FERC ¶ 61,076 at 61,234.

²⁵ See Exhibit I of Cadeville's Application.

²⁶ See Exhibit No. KLB-4, Page 1, of Exhibit I of Cadeville's Application. Cadeville's affiliates currently operate seven storage facilities in the Gulf Coast Supply Region with 30.3 Bcf of working gas capacity.

²⁷ Alternative Rate Policy Statement, 74 FERC ¶ 61,076 at 61,235.

analysis shows that its HHI calculation is 595 for working gas capacity and 553 for peak day deliverability. These measures of market concentration are significantly below the 1,800 HHI level, indicating that Cadeville would be unable to exert market power in the relevant market area.

31. Finally, Cadeville's market power study also shows that there are no significant barriers to entry in the relevant market. The Commission has found previously that barriers to entry in the Gulf Coast Supply Region are not significant.²⁸ In addition, the services to be provided by the project are offered by twelve competing hubs and market centers in the region.

32. Based on these factors, the Commission finds that Cadeville's analysis demonstrates that its proposed project will be in a highly competitive area where numerous storage service alternatives exist for potential customers. The Commission also finds that Cadeville's entry will increase the storage alternatives in the Gulf Coast region. Further, the Commission finds that Cadeville's prospective market shares are low and that the market concentration is below the threshold which would require closer scrutiny. Finally, the Commission finds that barriers to entry are likely to be low in the relevant market area. Thus, the Commission concludes that Cadeville will lack significant market power.

33. The Commission uses a "bingo card" analysis to assess whether prospective customers of an applicant seeking market-based rate authority for interruptible wheeling service could obtain the same services from alternative providers. The Commission has relied on the bingo card analysis to determine whether shippers can avoid the pipeline interconnections provided by the applicant by using alternative interconnections between the pipelines that are directly or indirectly connected to the applicant's proposed facilities.

34. Cadeville's bingo-card analysis²⁹ shows that there are a number of alternative paths available to shippers desiring to wheel natural gas among interstate natural gas pipelines in the Gulf Coast Supply Region. In addition, Cadeville's market power study shows that Cadeville's market share for wheeling delivery capacity at alternative hubs and market centers in the Gulf Coast will be 1.9 percent and its market share for receipt

²⁸ The Commission has found in numerous cases that there are no significant barriers to entry in the natural gas storage market in the Gulf Coast Supply Region. *See, e.g., Tarpon Whitetail Gas Storage, LLC*, 123 FERC ¶ 61,274, at P 28 (2008); *Enstor Houston Hub Storage and Transportation, LP*, 123 FERC ¶ 61,019, at P 32 (2008) (*Houston Hub*); *Port Barre Investments, L.L.C.*, 116 FERC ¶ 61,052, at P 25 (2006).

²⁹ *See* Exhibit No. KLB-9 and 9a of Exhibit I of Cadeville's Application.

capacity will be 2.2 percent.³⁰ These percentages are similar to the percentages the Commission has determined to be acceptable in the past.³¹ The HHI for delivery capacity is 733 and for receipt capacity is 743, which are well below the 1,800 level set forth in the Alternative Rate Policy Statement. The market power study also shows that Cadeville will be unable to exercise market power because there are ample competitive alternatives for Cadeville's proposed wheeling services and alternative interconnection paths exist for every possible flow of gas among the pipelines with which Cadeville's project will interconnect.

35. For these reasons, in addition to the fact that Cadeville's request for market-based rate authority is unopposed, the Commission will approve Cadeville's request to charge market-based rates for all firm and interruptible storage, hub, and wheeling services. Nevertheless, Cadeville must notify the Commission if future circumstances significantly affect its present market power status. The Commission's approval of market-based rates for the indicated services is subject to re-examination in the event that: (i) Cadeville adds storage capacity beyond the capacity authorized in this order; (ii) an affiliate increases storage capacity; (iii) an affiliate links storage facilities to Cadeville; or (iv) Cadeville or an affiliate acquires an interest in, or is acquired by, an interstate pipeline connected to Cadeville. Since these circumstances could affect its market power status, Cadeville shall notify the Commission within 10 days of acquiring knowledge of any such changes. The notification must include a detailed description of the new facilities and their relationship to Cadeville.³² The Commission reserves the right to require an updated market power analysis at any time.

C. Waivers of Filing, Reporting, and Accounting Requirements

36. In light of its request for authority to charge market-based rates and the fact that it has no existing interstate pipeline operations, Cadeville requests waiver of the Commission's cost-based regulations in section 157.6(b)(8) (cost and revenue data for rates); section 157.20(c)(c) (final cost of construction); section 157.14(a)(13) (Exhibit K – Cost of Facilities); (14) (Exhibit L – Financing); (16) (Exhibit N – Revenues, Expenses, and Income); and (17) (Exhibit O – Depreciation and Depletion). Cadeville requests such additional waivers of the regulations as are necessary to carry out the authorizations requested in its application and as are customarily issued.

³⁰ See Exhibit Nos. KLB-11 and KLB-12 of Exhibit I of Cadeville's Application.

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

³² See, e.g., *Port Barre Investments, L.L.C.*, 116 FERC ¶ 61,052 (2006); *Copiah County Storage Company*, 99 FERC ¶ 61,316 (2002); *Egan Hub Partners, L.P.*, 99 FERC ¶ 61,269 (2002).

37. For the same reasons, Cadeville requests waiver of the accounting and annual reporting requirements under Part 201 (accounting and reporting requirements of Uniform System of Accounts) and sections 260.1 and 260.2 (which require natural gas companies to file annual reports in Form Nos. 2 and 2-A) of the Commission's regulations. Cadeville also requests waiver of the rate and cost information filing requirements of sections 157.14(a)(10) and 157.20(c)(3) to submit total gas supply data (Exhibit H), as being inapplicable to natural gas storage services.

38. The cost-related information required by these regulations is not relevant in light of our approval of market-based rates for Cadeville's storage and hub services. Thus, consistent with previous Commission orders,³³ the Commission will grant Cadeville's request for waiver of the regulations requiring cost-based related information for these services. The Commission also grants a waiver of sections 157.14(a)(10) and 157.20(c)(3), which require an applicant to submit gas supply data, which does not pertain to gas storage service, since Cadeville's customers will supply their own gas.

39. The Commission has also found in previous orders no ongoing regulatory need to have cost-based financial statements prepared in accordance with the Uniform System of Accounts. Accordingly, the Commission will grant Cadeville's request for waiver of accounting requirements, as provided in Part 201 (Uniform System of Accounts Prescribed for Natural Gas Companies Subject to the Provisions of the Natural Gas Act). In addition, the Commission will also grant Cadeville's request for waiver of reporting requirements, as set forth in section 260.2 (Form No. 2-A, Annual Report for Nonmajor Natural Gas Companies) and section 260.300 (Form No. 3-Q, Quarterly Financial Report of Electric Utilities, Licensees, and Natural Gas Companies), but the Commission notes that such waivers do not extend to the Annual Charge Assessment (ACA).³⁴ Therefore, Cadeville is required to file the Gas Account-Natural Gas Schedule currently at page 520 of Form No. 2-A, reporting the gas volume information that is the basis for an ACA charge.³⁵ In addition, the Commission requires Cadeville to maintain records to separately identify the original cost and related depreciation on its storage facilities should the Commission require Cadeville to produce those reports in the future.

³³ See, e.g., *Port Barre Investments, L.L.C.*, 116 FERC ¶ 61,052 (2006); *Copiah County Storage Co.*, 99 FERC ¶ 61,316 (2002); *Egan Hub Partners, L.P.*, 99 FERC ¶ 61,269 (2002).

³⁴ See *BGS Kimball Gas Storage, LLC*, 117 FERC ¶ 61,112, at P 49 (2006).

³⁵ *Id.* *Unocal Windy Hill Gas Storage, LLC*, 115 FERC ¶ 61,218, at P 38 (2006).

D. Tariff Provisions

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

1. Rate Schedule FSS

41. Section 8 of Rate Schedule FSS provides that Cadeville may retain storage inventory not withdrawn from storage, free and clear of any adverse claims, after a shipper's FSS agreement expires and the shipper has not renewed its agreement. The Commission has found that provisions for confiscation of gas left in storage when the agreement terminates or upon notice, are operationally justified deterrents to shipper behavior which could threaten the system or degrade Cadeville's ability to provide service to its firm customers. However, in accordance with Order No. 637³⁶ and Commission action in Colorado Interstate Gas Company and other proceedings,³⁷ the Commission will require Cadeville to credit the value of the gas retained to its existing customers. Accordingly, the Commission directs Cadeville to file revised tariff provisions to implement a mechanism to credit the value of any retained gas.

³⁶ See *Regulation of Short-Term Natural Gas Transportation Services and Regulation of Interstate Natural Gas Transportation Services*, Order No. 637, FERC Stats. & Regs. ¶ 31,091, at 31,294, *clarified*, Order No. 637-A, FERC Stats. & Regs. ¶ 31,099, *reh'g denied*, Order No. 637-B, 92 FERC ¶ 61,062, *aff'd in part and remanded in part sub nom. Interstate Natural Gas Association of America v. FERC*, 285 F.3d 18 (D.C. Cir. 2002), *order on remand*, 101 FERC ¶ 61,127 (2002), *order on reh'g*, 106 FERC ¶ 61,088 (2004), *aff'd sub nom. American Gas Association v. FERC*, 428 F.3d 255 (D.C. Cir. 2005).

³⁷ See *Colorado Interstate Gas Co.*, 95 FERC ¶ 61,321, at 62,125 (2001); *ANR Storage Co.*, 96 FERC ¶ 61,162 (2001); and *Blue Lake Gas Storage Co.*, 96 FERC ¶ 61,164 (2001).

2. Priority, Interruption of Service, and Operational Flow Orders

42. Section 5 of the General Terms and Conditions (GC&T) relates to priority of service for any customer executing a storage service agreement with Cadeville.³⁸ Specifically, section 5.3(a) provides for the implementation of interruption of service when Cadeville is unable to receive or deliver all the quantities which are scheduled:

“If firm storage service must be interrupted, then interruption of service to firm storage Customers shall be pro rata based on MDWQ, MDIQ, or MSQ, as applicable. Interruption of service to Interruptible Customers under Rate Schedules ISS, Hub Service, and to firm Customers utilizing Excess Injection Gas and/or Excess Withdrawal Gas (pursuant to Section 2 of Rate Schedule FSS) shall be on a first come, first served basis.”

With respect to interruptible customers, it is not clear how Cadeville intends to implement interruption of service “on a first come, first served basis” and the Commission is concerned that allocating capacity on the basis of the day an interruptible contract was signed, for example, may result in capacity being allocated in a discriminatory manner. Therefore, the Commission directs Cadeville to revise its tariff to provide further clarity and explain with specificity how interruption of service for interruptible customers will be implemented.

3. Minimum Gas Quantity

43. Sections 7.1, 7.2, and 7.3 of the GT&C provide that Cadeville will not be obligated to receive, deliver, or wheel at any point any quantity of gas when the total quantity at the point results in a net metered flow which is less than or equal to 10,000 dekatherms (Dth) per day.

44. Under sections 284.7(b) and 284.9(b) of the Commission’s regulations, the transporter may not discriminate as to the level of volumes transported. The Commission, however, has allowed a pipeline to include a minimum volume restriction in its tariff when the pipeline was able to show that quantities below the threshold were too small to be metered and provided operational and cost justification for the restriction.³⁹ For example, in *Gulf South Pipeline Company, LP (Gulf South)*,⁴⁰ the

³⁸ See Original Pro Forma Sheet Nos. 88 and 89 of Cadeville’s pro forma tariff, attached as Exhibit P to the application.

³⁹ See, e.g., *Gulf South Pipeline Co., LP*, 103 FERC ¶ 61,105, at P 13 n.7 (2003); *Trailblazer Pipeline Co.*, 39 FERC ¶ 61,103, at 61,336 (1987); *Texas Eastern*

Commission accepted a proposal for a 100 Dth per day threshold for connections of new receipt and delivery points. In that case, the Commission relied on Gulf South's assertions that serving small volume points presented operational challenges because these receipt points were difficult to measure, which increased the potential for lost system gas.⁴¹ In addition, Gulf South stated that the costs associated with operating small points would be greater than the maximum rate would cover.⁴² Accordingly, unless a pipeline provides justification for why a minimum volume restriction is warranted, the Commission has not permitted a pipeline to include a minimum volume restriction in its tariff.⁴³

45. Unlike Gulf South, where Gulf South provided operational and cost justification for its 100 Dth per day minimum volume condition, Cadeville has not provided any justification here. For this reason, Cadeville is required to eliminate the proposed minimum volume condition or, in the alternative, justify that a 10,000 Dth per day minimum volume condition is warranted.

4. Gas Quality

46. Cadeville included a provision on gas quality and interchangeability in section 10 of its pro forma tariff, but did not provide the other information required by the Gas Quality Policy Statement.⁴⁴ The Gas Quality Policy Statement provides that applicants should: (i) ensure that their Exhibit P pro forma tariff includes general terms and conditions addressing quality and interchangeability; (ii) include relevant information about the gas quality and interchangeability specifications of interconnecting pipelines and of the competing pipelines serving customers to be served directly by the new entrant, as well as the relevant information about the gas supplies to be received by the new entrant for transportation or storage; and (iii) show how they derived their gas quality and interchangeability specifications stated in their pro forma tariff.⁴⁵

Transmission Corp., 37 FERC ¶ 61,260, at 61,680-81 (1986).

⁴⁰ 103 FERC ¶ 61,105 at P 13.

⁴¹ *Id.*

⁴² *Id.* PP 9 and 12.

⁴³ *See, e.g., Perryville Gas Storage LLC*, 130 FERC ¶ 61,065 at P 45 (2010) (*Perryville*).

⁴⁴ *Natural Gas Interchangeability, Policy Statement on Provisions Governing Natural Gas Quality and Interchangeability in Interstate Natural Gas Pipeline Company Tariffs*, 115 FERC ¶ 61,325 (2006).

⁴⁵ *Id.* P 45.

47. In Perryville,⁴⁶ the Commission found that Perryville did not provide information required by the Gas Quality Policy Statement, and directed Perryville to submit conforming changes to its tariff before Perryville could go into service. Consistent with Perryville, the Commission will require that Cadeville submit conforming changes to its tariff consistent with requirements set forth in the Gas Quality Policy Statement for review and approval before the Cadeville Project goes into service.

5. Segmentation

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

49. In Perryville and *Clear Creek Gas Storage Company* (Clear Creek),⁴⁷ the Commission found that the requirements of section 284.7(d) do not apply to pipelines engaged solely in natural gas storage service and which do not provide stand-alone transportation service.⁴⁸ Thus, the Commission finds that the requirements of section 284.7(d) do not apply to Cadeville. The Commission also finds that other tariff provisions related to segmentation, such as the allocation of primary point rights in segmented releases and within-the-path scheduling, do not apply to Cadeville.

6. Acquisition of Off-System Capacity and Waiver of Shipper-Must-Hold-Title Policy

50. Cadeville requests a generic waiver of the "shipper-must-hold-title" policy to enable it to obtain off-system capacity that may be necessary to render storage services. Section 31 of the GT&C includes an affirmative statement that Cadeville will only transport gas for others using off-system capacity under its open-access tariff and subject to Commission-approved rates.

⁴⁶ See note 43.

⁴⁷ 96 FERC ¶ 61,071 (2001).

⁴⁸ *Id.* at 61,318; *Pine Prairie Energy Center, LLC*, 109 FERC ¶ 61,215, at P 44 (2004).

51. The Commission has imposed conditions on the use of off-system capacity by independent storage companies authorized to charge market-based rates.⁴⁹ In *Texas Eastern Transmission Corporation* (Texas Eastern),⁵⁰ the Commission found that pipelines no longer need to obtain prior approval to acquire capacity on another pipeline, when the acquiring pipeline has filed tariff language specifying that it would only transport for others using off-system capacity pursuant to its existing tariff and rates. Cadeville's proposed tariff language is consistent with the requirements set forth in Texas Eastern, as well as authorizations granted other storage companies with market-based rate authority. Therefore, the Commission accepts Cadeville's tariff language and grants waiver of "the shipper-must-hold-title" policy, but clarifies that Cadeville may only use capacity obtained on other pipelines in order to move gas into or out of storage. Thus, Cadeville may not use capacity on other pipelines, pursuant to the requirements in Texas Eastern, to transport gas which will not physically or contractually enter its storage facility unless and until it has received Commission authorization to provide such transportation services. Furthermore, Cadeville's authorized use of the Texas Eastern waiver to provide storage services shall be limited to the geographic area covered in the market power study.

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

- (1) the name of the off-system provider;
- (2) the type, level, term and rate of service contracted for;
- (3) a description of the geographic location of boundaries, receipt and delivery points, and segments comprising the capacity;
- (4) the operational purpose(s) for which the capacity is used;
- (5) a description of how the capacity is associated with specific transactions involving customers; and
- (6) an identification of total volumes, by rate schedule and customer, that were nominated for each off-system provider during the reporting period.

⁴⁹ See, e.g., *Freebird Gas Storage, LLC*, 111 FERC ¶ 61,054 (2005); *Caledonia Energy Partners, L.L.C.*, 111 FERC ¶ 61,095 (2005).

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

7. Force Majeure

53. Section 17 of the GT&C relates to force majeure and associated effects and obligations.⁵¹ Specifically, Section 17.1(b) provides that Cadeville will calculate credits against a customer's reservation charges to reflect any reduction in Cadeville's ability to render firm services resulting from an event of force majeure declared by Cadeville that cannot be cured in a period of 15 days. The Commission allows either full reservation credits after 10 days or partial crediting starting at day one of a force majeure event.⁵² However, the Commission is open to alternative approaches if fully justified and supported. Therefore, the Commission directs Cadeville to revise its tariff to provide full reservation charge credits after 10 days or partial credit from day one or to provide further justification and support of its proposal.

8. Confidentiality

54. Section 25.8 of the GT&C, Confidentiality, addresses confidentiality regarding all transactions entered into by the parties to a storage service agreement executed with Cadeville. Specifically, section 25.8 states:

The contents of all transactions entered into by the parties to an executed Storage Service Agreement shall be kept confidential by each, except to the extent that any information must be disclosed to a third party as required by law, for either party's financial needs, or for the purpose of effectuating the transaction.

The Commission has previously held that “[a]lthough the [Natural Gas Act] gives the Commission some discretion with respect to how to provide for the disclosure of rate schedules and contracts, clearly the public disclosure of rate schedules and related contracts, in some manner, is required.”⁵³ The confidentiality provisions violate

⁵¹ See Original Pro Forma Sheet No. 114 of Cadeville's pro forma tariff attached as Exhibit P to the application.

⁵² See, e.g., *El Paso Natural Gas Co.*, 104 FERC ¶ 61,045 (2003), *order clarifying prior order*, 108 FERC ¶ 61,056 (2004) (partial reservation charge credits from day one); *Natural Gas Pipeline Company of America*, 106 FERC ¶ 61,310 (2004) (full reservation charge credits once the 10-day period ends).

⁵³ See *Contract Reporting Requirements of Intrastate Natural Gas Companies*, Order No. 735, FERC Stats. & Regs. ¶ 31,310, at P 73 (2010), (citing *SG Resources Mississippi, L.L.C.*, 115 FERC ¶ 61,191, at P 23 (2008)).

Commission policy.⁵⁴ Cadeville's section 25.8 would allow certain transactions that the Commission requires to be made public to be kept confidential. Therefore, the Commission directs Cadeville either to remove section 25.8 from its GT&C or to revise section 25.8 to conform to Contract Reporting Requirements set forth in Order No. 735.

V. Engineering Analysis

55. The Commission's staff completed an engineering analysis of the facility proposed for natural gas storage, including the design capacity of the proposed facility. Based on this analysis, the Commission concludes that the proposal is technically sound and feasible. Cadeville proposes to develop a storage facility with 16.4 Bcf of working gas capacity and approximately 5.4 Bcf of cushion gas and a maximum injection/withdrawal rate of approximately 420 MMcf per day. The maximum bottomhole reservoir pressure for the Cadeville Project Field is 2,825 psig after injection and a minimum pressure of 500 psig after the withdrawal of all working gas.

VI. Environmental Analysis

56. On November 30, 2009, the Commission issued a Notice of Intent to Prepare an Environmental Assessment (NOI). The NOI was mailed to affected landowners; federal, state, and county agencies; Native American tribes; and libraries and newspapers in the project area. In response to the NOI, the Commission received three comment letters – one from the United States Fish and Wildlife Service (FWS), one from the Louisiana Department of Wildlife and Fisheries (LDWF), and one from a landowner (Tommy D. Kelley). The primary issues raised included landowner compensation, effects on threatened and endangered species and migratory birds, impacts on South Cheniere Creek, and the protection of wetlands and surface waters.

57. To satisfy the requirements of the National Environmental Policy Act of 1969, an environmental assessment (EA) was prepared for Cadeville's proposal and was placed into the public record on April 30, 2010. The EA addressed geology, soils, water resources, threatened and endangered species, land use, cultural resources, air quality and noise, cumulative impacts and alternatives. All substantive comments received in response to the NOI were addressed in the EA.

⁵⁴ In *Bay Gas Storage Company*, 110 FERC ¶ 61,154 (2005), the Commission required an intrastate pipeline performing jurisdictional service pursuant to section 311 of the Natural Gas Policy Act of 1978 (NGPA) to remove from its Statement of Operating Conditions a provision that the terms of any storage or transportation service agreement must be kept confidential, with certain exceptions, holding that the provision was “contrary to the Commission's policy favoring public disclosure”

58. In its comment letter, the FWS identified the red-cockaded woodpecker as a federally listed endangered species that may be present in the project area.⁵⁵ FWS expressed concerns regarding the potential impacts on the red cockaded woodpecker as a result of pine tree clearing and potential noise related disturbance during nesting season (March through July) from pipeline construction and subsequent pipeline maintenance. The EA did not identify red cockaded woodpecker nesting habitat in the project area, and the FWS concurred with Cadeville's determination of no effect for this species on December 10, 2009.

59. The EA evaluated the potential impact on migratory birds and concluded that although project activities could cause some migratory birds to avoid the construction areas, this indirect impact will be limited to the relatively short period of active construction, which does not occur during the nesting season.

60. In its scoping comments, the LDWF expressed concerns regarding a pipeline crossing of South Cheniere Creek. The EA discussed Cadeville's proposal to avoid direct impact on South Cheniere Creek by using the horizontal directional drill (HDD) crossing method.

61. The LDWF also requested that the applicant implement adequate control measures to reduce impacts on wetlands and to prevent sediments and other construction debris from entering waters of the state. The EA discussed Cadeville's construction plans that include its Upland Erosion Control, Revegetation, and Maintenance Plan, Wetland and Waterbody Construction and Mitigation Procedures, Spill Prevention Containment and Countermeasures Plan, and HDD Contingency Plan. The EA concluded that proper implementation of these plans will adequately minimize impacts on these resources.

62. In response to the EA, the FWS stated that the EA addressed all of the concerns raised in their December 10, 2009 letter, that all avoidance and minimization measures they recommended were taken into account, and that there were no major outstanding issues remaining.

63. Based on the discussion in the EA, the Commission concludes that if constructed and operated in accordance with Cadeville's application and supplements, and in compliance with the environmental conditions in the Appendix to this order, approval of this project would not constitute a major federal action significantly affecting the quality of the human environment.

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

⁵⁵ See FWS' December 10, 2009 comment letter.

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.⁵⁶

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

The Commission orders:

(A) A certificate of public convenience and necessity is issued to Cadeville under section 7(c) of the NGA, authorizing the construction and operation of the storage facilities, as described more fully in this order and in the application.

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

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

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

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

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

(3) Cadeville's constructing and making available for service the facilities authorized in this order within two years of the date of the order in this proceeding in accordance with section 157.20(b) of the Commission's regulations.

(E) Cadeville's request to charge market-based rates for firm and interruptible storage service and interruptible hub service is approved, subject to the conditions in this order.

(F) Waiver is granted of the Commission's regulations that have been deemed

⁵⁶ See, e.g., *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P., et al.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

inapplicable to storage providers charging market-based rates, as discussed in this order.

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

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

(I) Cadeville shall file revised tariff sheets that comply with the requirements contained in the body of this order not less than 60 days, or more than 90 days, prior to commencement of service.

(J) Within 30 days after its first full year of operation, and every year thereafter, Cadeville shall submit an annual informational filing on its provision of service using off-system capacity, as described in this order.

(K) Cadeville shall notify the Commission's environmental staff by telephone, email, or facsimile of any environmental non-compliance identified by other federal, state or local agencies on the same day that such agency notifies Cadeville. Cadeville shall file written confirmation of such notification with the Office of the Secretary (Secretary) within 24 hours.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

APPENDIX A

Environmental Conditions for the Cadeville Gas Storage Project

1. Cadeville shall follow the construction procedures and mitigation measures described in its applications and supplements (including responses to staff information requests), and as identified in the Environmental Assessment (EA), unless modified by this Order. Cadeville 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 Cadeville Gas Storage Project. This authority shall allow:
 - a. the modification of conditions of this Order; and
 - b. the design and implementation of any additional measures deemed necessary (including stop-work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from project construction and operation.
3. **Prior to any construction**, Cadeville shall file an affirmative statement, certified by a senior company official, that all company personnel, environmental inspectors, and contractor personnel will be informed of the environmental inspector's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs before becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets, and shall include all of the staff's recommended facility locations identified in the EA. **As soon as they are available, and before the start of construction**, Cadeville shall file any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by this Order. All requests for modifications of environmental conditions of this Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Cadeville'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. Cadeville'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. Cadeville shall file 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. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP before construction in or near that area.

This requirement does not apply to route variations required herein or extra workspace allowed by Cadeville's Upland Erosion Control, Revegetation, and Maintenance Plan, minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands. Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
 - b. implementation of endangered, threatened, or special concern species mitigation measures;
 - c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. **Within 60 days of the acceptance of the certificate and before construction begins**, Cadeville shall file an Implementation Plan for review and written approval by the Director of OEP. Cadeville must file revisions to the plan as schedules change. The plan shall identify:
 - a. how Cadeville will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by this Order;
 - b. how Cadeville will incorporate these requirements into the contract bid

- documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
- c. the number of environmental inspectors (EIs) assigned per spread, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
 - d. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
 - e. the location and dates of the environmental compliance training and instructions Cadeville will give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);
 - f. the company personnel (if known) and specific portion of Cadeville's organization having responsibility for compliance;
 - g. the procedures (including use of contract penalties) Cadeville will follow if noncompliance occurs; and
 - h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - i. the completion of all required surveys and reports;
 - ii. the environmental compliance training of onsite personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.
7. Cadeville shall employ at least one EI per construction spread. The environmental inspector shall be:
- a. responsible for monitoring and ensuring compliance with all mitigation measures required by this Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
 - c. empowered to order correction of acts that violate the environmental conditions of this 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 this Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
 - f. responsible for maintaining status reports.
8. Beginning with the filing of its Implementation Plan, Cadeville shall file updated

status reports on a **bi-weekly** basis **until all construction and restoration activities are complete**. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

- a. an update on Cadeville's efforts to obtain the necessary federal authorizations;
 - b. the 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;
 - c. a listing of all problems encountered and each instance of noncompliance observed by the EIs during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);
 - d. a description of the corrective actions implemented in response to all instances of noncompliance, and their cost;
 - e. the effectiveness of all corrective actions implemented;
 - f. a description of any landowner/resident complaints which may relate to compliance with the requirements of this Order, and the measures taken to satisfy their concerns; and
 - g. copies of any correspondence received by Cadeville from other federal, state, or local permitting agencies concerning instances of noncompliance, and Cadeville's response.
9. Prior to receiving written authorization from the Director of OEP to commence construction of any project facilities, Cadeville shall file with the Secretary documentation that it has received all authorizations required under federal law (or evidence of waiver thereof).
10. Cadeville must receive written authorization from the Director of OEP before commencing service for each phase of the project. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way and other areas affected by the project are proceeding satisfactorily.
11. **Within 30 days of placing the certificated facilities in service**, Cadeville shall file an affirmative statement, certified by a senior company official:
- a. that the facilities have been constructed /installed 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 Cadeville 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. For all residences located within 50 feet of construction workspaces, Cadeville shall:
 - a. not remove mature trees and landscaping unless necessary for safe operation of construction equipment;
 - b. restore all disturbed lawn areas and landscaping immediately after backfilling the trench; and
 - c. fence the edge of the construction work area adjacent to the residence for a distance of 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.
13. **Prior to construction**, Cadeville shall file the location by milepost of all private wells within 150 feet of pipeline construction activities. Cadeville shall conduct, with the well owner's permission, pre- and post-construction monitoring of well yield and water quality for these wells. Within 30 days of placing the facilities in service, Cadeville shall file a report addressing whether any complaints were received concerning well yield or water quality and how each was resolved.
14. Cadeville Storage shall file noise surveys **no later than 60 days** after placing the proposed Cadeville Compressor Station in service. If the noise attributable to the operation of all of the equipment at the proposed Cadeville Compressor Station at full load exceeds an Ldn of 55 decibels (dBA) at any nearby noise sensitive areas (NSAs), Cadeville shall install additional noise controls to meet the level within **one year** of the in-service date. Cadeville shall confirm compliance with the above requirement by filing a second noise survey **no later than 60 days** after it installs the additional noise controls.
15. **Prior to construction**, Cadeville shall file an updated Well Drilling Analysis and Mitigation Plan for observation wells JY Head, Manville Forest, and Reod, for review and written approval by the Director of OEP, that will reduce the drilling noise levels at the NSAs to less than 55 dBA.

APPENDIX B**Engineering Conditions for the Cadeville Project**

- (A) The maximum inventory of natural gas stored in the Cadeville Project shall not exceed the certificated levels of 21.8 Bcf, with approximately 16.4 Bcf of working gas capacity and 5.4 Bcf of cushion gas capacity at 14.73 psia and 60 degrees Fahrenheit, and the maximum bottom hole storage pressure shall not exceed 2,825 psig, without prior authorization by the Commission.
- (B) Cadeville shall operate the Cadeville Project in such a manner as to prevent/minimize gas loss or migration.
- (C) Cadeville shall submit semiannual reports (to coincide with the termination of the injection and withdrawal cycles) containing the following information (volumes shall be stated at 14.73 psia and 60 degrees Fahrenheit and pressures shall be stated in psia):
 - (1) The daily volumes of natural gas injected into and withdrawn from the storage reservoir. The monthly volumes of oil and water produced from the storage reservoir.
 - (2) The volume of natural gas in the reservoir at the end of the reporting period.
 - (3) The maximum daily injection and withdrawal rates experienced during the reporting period. Average working pressure on such maximum days taken at a central measuring point where the total volume injected or withdrawn is measured.
 - (4) Results of any tracer program by which the leakage of injected gas may be determined. If leakage of gas exists, the report should show the estimated total volume of gas leakage, the volume of recycled gas, and the estimated remaining inventory of gas in the reservoir at the end of the reporting period.
 - (5) Any surveys of pressures in gas wells, and the results of back-pressure tests conducted during the reporting period.
 - (6) The latest revised structural and isopach maps showing the surface and bottomhole locations of the wells and the location of the gas-water contact.

These maps need not be filed if there is no material change from the maps previously filed.

- (7) For the reporting period, a summary of wells drilled, worked over, or recompleted with subsea depth of formation and casing settings. Copies of any new core analyses, back-pressure tests, or well log analyses.
- (8) Discussion of current operating problems and conclusions.
- (9) Such other data or reports which may aid the Commission in the evaluation of the storage project.
- (10) Reports shall continued to be filed semiannually until the storage inventory volume and pressure have reached or closely approximate the maximum permitted in the Commission's Order. Thereafter, the reports shall continue on a semiannual basis for a period of one year.