

107 FERC ¶ 61,267
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, Joseph T. Kelliher,
and Suedeen G. Kelly.

Saltville Gas Storage Company

Docket Nos. CP04-13-000
CP04-14-000
CP04-15-000

ORDER ISSUING CERTIFICATES

(Issued June 14, 2004)

1. On November 10, 2003, Saltville Gas Storage Company L.L.C. (Saltville) filed an application in Docket No. CP04-13-000, pursuant to section 7(c) of the Natural Gas Act (NGA) for a certificate of public convenience and necessity authorizing the construction and operation of natural gas storage facilities in Smyth and Washington Counties, Virginia. In Docket Nos. CP04-14-000 and CP04-15-000, respectively, Saltville requests a blanket transportation certificate pursuant to Part 284, Subpart G of the Commission's regulations and a blanket construction certificate pursuant to Part 157, Subpart F¹ of the Commission's regulations. We find that Saltville's proposals are in the public interest because the project will provide additional storage capacity for the interstate market and provide prospective shippers with more options to meet their market needs.
2. As explained below, Saltville has completed some of the construction of its storage facility. Since the NGA requires prior certification of jurisdictional facilities, no purpose would be served in this case by granting retroactive authorization for construction of the facilities after they have been built. Therefore, as conditioned herein, we are certificating the operation of the storage facility and the construction that remains to be completed, but we decline to grant retroactive construction authority. We will also issue the requested Part 284 and Part 157 blanket certificates as conditioned herein.

¹In its application, Saltville requests a Part 157, Subpart A certificate, as directed by the Commission's September 11, 2003 Order (Saltville Gas Storage Co. LLC, 104 FERC ¶ 61,273 (2003)). The September 11 Order should have directed Saltville to request a Part 157, Subpart F blanket construction certificate and we are construing the application as having so requested.

I. Background

3. Saltville is a limited liability company organized in August 2001 under the laws of the Commonwealth of Virginia to develop a natural gas salt cavern storage facility near Saltville, Virginia. Its two members are NUI Saltville Storage, Inc., a wholly-owned subsidiary of NUI Corporation, and Duke Energy Saltville Gas Storage L.L.C., a wholly-owned subsidiary of Duke Energy Gas Transmission. On October 26, 2001, Saltville filed an application with the Virginia State Corporation Commission (Virginia Commission) requesting a state certificate of public convenience and necessity authorizing Saltville to construct and operate an underground natural gas storage facility using four depleted salt caverns in Smyth and Washington Counties, Virginia. On August 6, 2002, the Virginia Commission authorized Saltville's proposed storage facilities.

4. On January 23, 2002, Cargill, Inc. filed in Docket No. CP02-73-000 a complaint with the Commission alleging that Saltville was attempting to construct jurisdictional facilities and provide jurisdictional services without the requisite NGA authorization. On April 11, 2002 the Commission issued an order² finding that Saltville's proposed facility would be a Hinshaw facility exempt from the Commission's jurisdiction under NGA section 1(c).³ The Commission's findings were based upon Saltville's representations that the primary purpose of its facility was to serve markets within the State of Virginia. On August 23, 2003, Saltville filed an application in Docket No. CP02-430-000 requesting a Part 284.224 limited jurisdiction blanket certificate authorizing firm and interruptible storage services in interstate commerce.⁴ On February 4, 2003, the

²Cargill, Inc. v. Saltville Gas Storage Co. L.L.C., 99 FERC ¶ 61,043 (2002).

³Under NGA section 1(c) a pipeline rendering otherwise jurisdictional service is a Hinshaw pipeline and thus exempt from the provisions of the NGA if it receives natural gas in interstate commerce at or within the boundaries of a State, the gas is ultimately consumed within that State, and the pipeline's rates, service, and facilities are subject to regulation by the State commission.

⁴A section 284.224 certificate permits a Hinshaw pipeline to transport and deliver gas to any interstate pipeline or local distribution company regardless of where the gas will ultimately be consumed without jeopardizing its Hinshaw status.

Commission issued the requested certificate and directed Saltville to file new initial cost-based rates.⁵

5. Dominion Greenbrier, Inc. (Greenbrier) and Saltville filed requests for rehearing of the Commission's February 4, 2003 Order. In its rehearing request Greenbrier asserted that Saltville did not qualify as a Hinshaw pipeline because Saltville would not be providing substantial service in the Commonwealth of Virginia in the foreseeable future. In its rehearing request, Saltville objected to the requirement in the February 4 Order to recalculate its initial rate, arguing that its proposed initial rate was sufficiently cost-based to qualify as its 284.224 rate.

6. In an order issued on September 11, 2003 on rehearing of the February 4 Order, the Commission found that Saltville did not qualify for the Hinshaw exemption since Saltville's anticipated intrastate market for storage services had not materialized and, for the foreseeable future, almost all of the gas stored in Saltville's facilities would be gas stored on behalf of, and ultimately delivered to, consumers outside of Virginia.⁶ The Commission required Saltville, within 60 days of the September 11 Order, to file an application for blanket certificates pursuant to Part 157 and Part 284 of the Commission's regulations, including proposed initial rates and tariff terms and conditions.⁷ Saltville filed its application in this proceeding in accordance with the Commission's direction in the September 11 Order. Saltville states that it has completed some of the facilities pursuant to the authorization issued by the Virginia Commission and other regulatory authorities, and that it commenced initial service on August 1, 2003.

⁵Saltville Gas Storage Co., 102 FERC ¶ 61,123 (2003).

⁶Saltville Gas Storage Co., 104 FERC ¶ 61,273 (2003).

⁷The Commission also authorized Saltville to provide service on an interim basis under its section 284.224 certificate until no later than March 1, 2004 and to charge the rates approved by the Commission in an August 29, 2003 letter order in Docket No. PR03-13-000. Saltville Gas Storage Co., 104 FERC ¶ 61,237 (2003). Subsequently, on February 17, 2004, the Commission issued an order in Docket No. CP02-430-004, which extended the interim service to such time as the Commission issued an order in Docket Nos. CP04-13-000 et. al. Saltville Gas Storage Co., 106 FERC ¶ 61,148 (2004).

II. Proposal

7. Saltville's storage project includes the conversion of four existing salt caverns (Cavern Nos. 1, 2, 3, and 4) for the underground storage of natural gas, compression facilities, and a 6.7-mile, 24-inch pipeline connecting the storage and compression facilities to East Tennessee Natural Gas Company's (East Tennessee) pipeline system. The salt caverns were originally developed by the Olin Mathieson Corporation (Olin Mathieson) which removed brine for salt production and use in its chemical plant located in Saltville, Virginia. Cavern Nos. 1, 2, and 3 are comprised of two or more wells each because the original caverns associated with the wells have merged or coalesced into the three larger caverns. Cavern No. 1 (Well Nos. 25 and 26) and Cavern No. 2 (Well Nos. 27 and 28), with an estimated total gas cavern capacity of approximately 0.76 Bcf and 0.56 Bcf, respectively, have been completed and placed into service. Cavern No. 3 (Well Nos. 18, 19, 21, 22, and 23), which is currently being completed, will have an estimated total capacity of approximately 6.7 Bcf. Cavern No. 4 (Well No. 24) is anticipated to have a capacity of 0.20 Bcf and its development is pending further evaluation by Saltville. Saltville estimates that, once completed over the next several years, the facility will have a total capacity of 8.2 Bcf with a working gas capacity of 5.8 Bcf.

8. The proposed compression facilities include two 5,250 horsepower electrical reciprocating compressor units to be used primarily for injection of natural gas into the storage caverns. Each compressor unit will provide the capability of injecting up to approximately 110 MMcf/d of natural gas. Saltville has completed all construction work and start-up activities on the first compressor unit. This includes the station piping and withdrawal equipment and heating and dehydration equipment to provide a withdrawal capacity of up to 275 MMcf/d. Once construction has been completed for the second unit, the Saltville Facility will have a total injection capacity of up to 220 MMcf/d and a total withdrawal capacity of up to 550 MMcf/d. Saltville has also completed construction of a 6.7 mile, 24-inch diameter pipeline connecting its storage facility with East Tennessee's interstate pipeline system near Chilhowie, Virginia. In addition, Saltville has constructed most of the associated gas and brine piping systems on the facility site. Saltville is currently utilizing an existing 100 gallon per minute (gpm) evaporator plant to process brine and intends to place into service a 400 gpm plant in Spring 2004. Finally, a power substation has been constructed to serve the compressor station.

9. According to Saltville, the storage field capacity, which began service in August, 2003, will increase substantially each year through 2007. Working gas storage capacity will grow from 2.1 Bcf in 2004 to 5.8 Bcf by 2007. Daily injection capacity increases from 104 MMcf in 2004 to 220 MMcf in 2006. Daily withdrawal capacity will increase from 208 MMcf in 2004 to 486 MMcf in 2007.

10. Saltville proposes to offer firm storage service under Rate Schedule FSS, interruptible storage service under Rate Schedule ISS, and short-term interruptible park and loan services under Rate Schedules IPS and LPS, respectively. Saltville proposes to offer negotiated rates under all rate schedules. Saltville's proposed initial rates for its services are the same rates that were approved by the Commission in Docket No. PR03-13-000 as Saltville's rates under section 284.123 of the Commission's regulations on August 29, 2003.⁸ Section 284.123 permits intrastate and Hinshaw pipelines to provide interstate transportation services at cost-based rates that may be discounted to meet market needs.

11. Saltville has entered into firm service agreements with: Public Service Company of North Carolina (PSNC), Virginia Gas Distribution Company, Elk River Public Utility District, Oak Ridge Utility District, NUI-Energy Brokers, Inc., Carolina Power & Light Company (CP&L), and Washington Gas Light Company (WGL) for a total of 1,045 MMBtu of storage capacity in 2003-2004, increasing to 1,373.05 MMBtu of storage capacity in 2004-2005. In addition, Saltville has entered into agreements with: CP&L and WGL for a total of 429.57 MMBtu of firm summer-only storage service commencing in 2004; VGDC and Duke Energy Marketing America, LLC for interruptible storage service; and Virginia Gas Storage Company (VGSC) for interruptible loan service.

12. Saltville has contracted with its affiliate, Virginia Gas Pipeline Company (VGPC), to act as operating manager of the Saltville Storage Facility. The Commission issued a Part 284.224 limited jurisdiction blanket certificate to VGPC, a Hinshaw pipeline, on November 19, 1996.⁹ Saltville's storage facility is located adjacent to VGPC's storage facility.

⁸Saltville Gas Storage Co., 104 FERC ¶ 61,237 (2003).

⁹Virginia Gas Pipeline Co., 77 FERC ¶ 61,199 (1996).

III. Interventions

13. Notice of Saltville's application was published in the Federal Register on December 1, 2003 (68 Fed. Reg. 67163). Timely motions to intervene were filed by PSNC and CP&L.¹⁰ Rick W. Minton, an affected landowner, and the East Tennessee Group¹¹ filed motions to intervene out of time. Mr. Minton and the East Tennessee Group have demonstrated an interest in this proceeding and have shown good cause for seeking to intervene out of time. Further, the untimely motions will not delay, disrupt, or otherwise prejudice this proceeding. Thus, we will grant the late motions to intervene.

14. In its intervention, PSNC comments that nothing in the Commission's assertion of NGA jurisdiction over Saltville should affect the integrity of the previously negotiated arrangements between Saltville and PSNC for firm service under which PSNC receives a discount. PSNC argues that all of the terms and conditions in its agreement with Saltville should continue to be honored. We address PSNC's concerns below.

15. In his intervention, Mr. Minton raises concerns about the geology of the area and its effects on the safety of the proposed project, toxic chemicals from existing abandoned brine wells and piping systems on the site, and effects of the storage facility on property value. Several other landowners commented on similar issues. Saltville filed a response to the various landowner comments. Mr. Minton's and the other landowners comments were addressed in the environmental assessment and the design of the storage caverns is discussed in detail below.

¹⁰Timely notices of intervention and motions to intervene are granted by operation of Rule 214 of the Commission regulations. (18 C.F.R. ' 385.214 (2002)).

¹¹The East Tennessee Group is an association of East Tennessee Natural Gas Co.'s LDC customers in Tennessee. The members are: the Utilities Boards of Athens, Knoxville, Lenoir City, and Sweetwater; the Utility Districts of Citizens Gas, Hawkins County Gas, Jefferson-Cocke County, Middle Tennessee Natural Gas, Oak Ridge, Powell Clinch, Sevier County, and Unicoi County Gas; the Gas Systems of Fayetteville, Gainsboro, Gallatin Natural, Jamestown, Madisonville, Marion Natural, and Mt. Pleasant; and the Harriman Utility Board and Rockwood Water & Gas.

IV. Discussion

16. Since Saltville's certificate applications pertain to services and facilities utilized in interstate commerce, the services and the construction and operation of the facilities are subject to the Commission's jurisdiction and to the requirements of NGA subsections 7(c) and (e).

A. Project Need and the Certificate Policy Statement

17. On September 15, 1999, the Commission issued a Policy Statement to provide guidance as to how we will evaluate proposals for certificating new construction.¹² The 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 Policy Statement explains 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 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.

18. 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.

19. The Commission also considers potential impacts of the proposed project on other pipelines in the market and those existing pipelines' captive customers, or landowners and communities affected by the route of the new pipeline. 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

¹²Certification of New Interstate Natural Gas Pipeline Facilities (Policy Statement), 88 FERC ¶ 61,227 (1999); order clarifying statement of policy, 90 FERC ¶ 61,128 (2000); order further clarifying statement of policy, 92 FERC ¶ 61,094 (2000).

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 then proceed to complete the environmental analysis where other interests are considered.

1. Subsidization

20. Under the Commission's Policy Statement, 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. Since Saltville is a new pipeline company with no existing customers, the threshold requirement is not applicable to its proposal.

2. Benefits

21. Saltville's proposed project will provide public benefits by meeting a portion of the growing energy market needs in the Virginia and Mid-Atlantic region. This market is growing due to the growth of industry and new housing starts in the region. Saltville's facility will be able to service the increased demand associated with any new electric generation projects that may be proposed in the area. Serving this generation load is critical to the continued economic growth of the Virginia and Mid-Atlantic region and to the region's goal of improving air quality by increasing the use of clean-burning natural gas for electric generation and other industrial purposes. By providing access to additional natural gas storage for future electric generation projects and local distribution companies, the Saltville Facility will continue to advance clean air objectives in the region. Finally, Saltville's project will help its customers meet peak period needs, minimize pipeline imbalances, and enhance load factors to account for intra-month swings.

3. Impacts on Existing Pipelines and Their Customers

22. Saltville is a new market entrant in the Virginia and Mid-Atlantic region, a growing market for storage services. It will serve incremental growth, enhance storage options available to pipelines and their customers, and increase competitive alternatives. Saltville's storage facility will have no adverse impact on existing pipelines and their customers.

4. Impacts on Landowners

23. Under the Policy Statement, one factor the Commission considers when certificating a project is the extent to which the applicant has obtained rights-of-way by negotiation to minimize the use of the eminent domain power granted in the NGA to certificate recipients. Since Saltville's storage facilities are located on land owned by Saltville and the associated pipeline connecting the storage facilities to East Tennessee's system is located on existing VGPC rights-of-way, Saltville did not require the use of eminent domain to construct its project.

5. Project Need and Certificate Policy Statement Conclusion

24. The Commission finds that the benefits of Saltville's project outweigh any of the minimal adverse impacts the project may cause. Saltville's proposed project can proceed without subsidies and will not adversely affect other pipelines and their captive customers. The project will provide numerous benefits by providing additional storage capacity for the interstate market and providing prospective shippers with more options to meet their market needs. Accordingly, we find that the public convenience and necessity requires that the Commission approve Saltville's proposed project, as conditioned herein.

B. Rates

1. Recourse Rates

a. Proposal

25. Saltville proposes to offer open access storage and park and loan services under rate schedules FSS (firm storage service), ISS (interruptible storage service), IPS (interruptible park service) and ILS (interruptible loan service) on a non-discriminatory basis pursuant to Part 284 of the Commission's regulations. Services will be offered at both recourse and negotiated rates. Saltville proposes to charge the same maximum lawful settlement rates as those approved on an interim basis by the Commission's August 23, 2003 Order in Docket No. PR03-13-000.¹³ Saltville further states that the August 23, 2003 letter order held that the settlement rates were "fair and equitable" and urges the Commission to approve these rates as its initial rates.

¹³104 FERC ¶ 61,237 (2003).

26. Saltville proposes to offer five types of firm storage service under its FSS Rate Schedule: 10 day withdrawal/10 day injection, 10 day withdrawal/20 day injection, 20 day withdrawal/20 day injection, 20 day withdrawal/40 day injection and a customized service based on the maximum number of turns¹⁴ into and out of storage per year. The number of turns per year depends on the injection/withdrawal cycle chosen, e.g., 10 days injection/10 days withdrawal is 20 days per turn or approximately 18 turns per year; 10 days injection/20 days withdrawal is 30 days per turn or approximately 12 turns per year.

27. Saltville based its rates on an annual cost-of-service of \$15,876,381. This reflects an initial rate base of approximately \$85 million,¹⁵ operating and maintenance and administrative and general expenses representative of those experienced by its nearby affiliate, VGPC, and a proposed overall return of 9.85 percent. Saltville used year two (2004) storage, injection and withdrawal capacities as a starting point for designing its rates.

28. Saltville proposes to charge a reservation or capacity charge, an injection charge, and a withdrawal charge for its firm services. Saltville based its firm service capacity charges on a unit cost-per-turn rate of \$0.469, which was calculated based on Saltville's projected \$14,735,916 fixed cost of service. Using ninety percent¹⁶ of its 2004 design storage capacity, and daily injection and withdrawal capacities, Saltville calculated the number of turns each year that a single unit of natural gas could be injected into and withdrawn from storage. The fixed cost of service was then divided by the product of the maximum number of turns per year and the total working capacity to derive the \$0.469/Dth cost per turn. The annual capacity charge per Dth for a particular service was

¹⁴Under Saltville's rates, a turn is the injection into and withdrawal from storage of a single unit of natural gas.

¹⁵When completed, Saltville estimates the total cost of developing its first three caverns will be just over \$96 million. Of that, \$8 million is attributable to development of Cavern 3, which has not yet been completed, and a little over \$5 million is attributable to the addition of the second compressor (Saltville's Phase II). Application at Exhibit K, pp. 3-4.

¹⁶In its response to staff's February 2, 2004 data request, Saltville states that it used 90 percent since it believes that, because construction of the salt caverns will not be complete for nearly three years, the full design capacity of the storage caverns will not be available for service during this period.

then calculated by multiplying the unit cost-per-turn rate times the maximum number of turns achievable given the particular service's stated injection and withdrawal entitlements.¹⁷ The annual capacity charge for the customized service is the \$0.469/Dth cost per turn times the number of turns per year for the requested service. Customers' monthly capacity charges are then calculated by multiplying the annual capacity charge times the maximum contract storage quantity and dividing by 12.

29. Rate Schedule FSS customers will also be charged an injection/withdrawal usage charge of \$0.05 for each dekatherm injected or withdrawn from storage. Saltville based the injection and withdrawal charges on its projected variable costs plus a small portion of the return on equity and return on taxes. Saltville calculated its injection/withdrawal rate using only 40 percent of year two capacity to derive the \$0.05/Dth injection/withdrawal rate.

30. Saltville is also proposing Rate Schedule ISS interruptible service. Saltville proposes to charge an annual \$1.87/Dth capacity charge, one-twelfth of which is billed monthly based upon the maximum volume of inventory in storage during the month. Rate Schedule ISS customers are also charged the injection and withdrawal charge.

31. Saltville is further proposing to provide short-term, interruptible park and loan services under Rate Schedule IPS (interruptible park service) and Rate Schedule ILS (interruptible loan service). These rates are the daily equivalent of the cost per turn (one injection and one withdrawal). Saltville proposes to charge its park and loan customers a \$0.016/Dth daily capacity charge. Rate Schedule IPS and ILS customers will also be required to pay the injection and withdrawal charge for volumes injected and withdrawn or borrowed and returned.

b. Commission Analysis

32. Saltville has proposed a novel rate design where its capacity charges are based on the number of turns into and out of storage. However, the proposed rate design does not follow the Commission's Equitable¹⁸ method of storage rate design. Under this method

¹⁷The 20 days required for the 10 day withdrawal/10 day injection service to complete a turn was divided into 365 to determine the maximum 18.25 turns per year for the service. The \$0.469/Dth cost per turn was then multiplied by 18.25 to derive the proposed \$8.55/Dth annual rate for the 20/20 service.

¹⁸Equitable Gas Co., 36 FERC ¶ 61,147 (1986).

fifty percent of the fixed costs are collected based on deliverability and fifty percent are collected based on storage capacity; no return on equity and related taxes are permitted in the variable component.¹⁹ Furthermore, injection and withdrawal charges should be designed to recover only variable costs. The Equitable method reflects the fact that storage customers are reserving both deliverability and capacity.²⁰ Saltville is directed to redesign its rates using the Equitable method of storage rate design.

33. Saltville has designed its rates based on a portion of its projected 2004 capacities. However, the Commission notes that there are substantial increases in capacity projected for the next three succeeding years, with projected 2007 storage capacity nearly three-times the 2004 figures. To ensure that the rates charged more closely reflect Saltville's costs and capacities during each period of development, the Commission will require Saltville to propose phased rates that reflect the increments of costs and the substantial capacity additions expected through 2007. In its compliance filing to this order, Saltville must base its rates for each period on the design capacity available for service and on the cost of facilities installed and operating during each respective period.

34. Saltville proposes to bill its firm storage customers on the basis of their maximum storage quantities and developed its rates based on 90 percent of its projected capacity. The Commission rejects Saltville's proposal to base its rates on 90 percent of its design capacity and directs Saltville to use 100 percent of its design capacity in developing its initial rates for each phase, in accordance with Commission policy.²¹

35. Saltville proposes to offer interruptible services under Rate Schedules ISS, IPS and ILS. It does not appear that Saltville either included representative volumes of interruptible services when designing its rates, nor did it propose to credit interruptible revenues to the firm customers. The Commission generally permits two methods for designing interruptible rates. Under the first method, Saltville may include the billing units for the interruptible service in designing the firm storage rates. After the firm storage rates are developed, the interruptible rates are developed using the 100 percent

¹⁹See also, 18 C.F.R. §284.7(e) ("if a reservation fee is charged, it must recover all fixed costs attributable to the firm transportation service, unless the Commission permits the pipeline to recover some of the fixed costs in the volumetric portion of a two-part rate.").

²⁰See Tennessee Gas Pipeline Co., 56 FPC 120 (1976) and Consolidated Gas Transmission Corp., 47 FERC ¶ 61,171 (1989).

²¹See Crossroads Pipeline Co., 71 FERC ¶ 61,077 (1995).

load factor derivative of the firm storage rates. Alternatively, Saltville may credit interruptible revenues to its firm and interruptible shippers, net of variable costs, rather than including projected interruptible billing units in the design of its firm and interruptible rates.²² Saltville is directed to design its interruptible rates in accordance with this discussion.

36. Consistent with Commission policy, Saltville is required to make a filing at the end of its first three years of operation to justify its recourse rates.²³ In its rate filing, Saltville's projected units of service should be no lower than those upon which its initial rates are based. The filing must include a cost and revenue study in the form specified in section 154.313 of the Commission's regulations. After review, we will be able to determine whether we should exercise our authority under NGA section 5 to establish just and reasonable rates. Alternatively, in lieu of this filing, Saltville may make an NGA section 4 filing to propose alternative recourse rates to be effective no later than three years after its in-service date.

37. Saltville requests authority to charge negotiated rates and states that, following the approval of the pro forma Form of Service agreements contained in its pro forma tariff, it will file any executed non-conforming service agreements for the Commission's approval. When Saltville files its actual tariff sheets in accordance with the directives contained herein, it will have on file cost-based recourse rates and will be in compliance with the Commission's policy on negotiated rates.²⁴ Therefore, the Commission

²²See, e.g., Tractebel Calypso Pipeline, LLC, 106 FERC ¶ 61,273 (2004). See also Vector Pipeline L.P., 85 FERC ¶ 61,083 (1998).

²³See, e.g., Horizon Pipeline Co., L.L.C., 92 FERC ¶ 61,205 at 61,688 (2000); Vector Pipeline Co., 85 FERC ¶ 61,083 (1998) order on reh'g and issuing certificates, 87 FERC ¶ 61,225 (1999), order on reh'g and amending certificates, 89 FERC ¶ 61,242 (1999); Trunkline LNG Co., 82 FERC ¶ 61,198 at 61,780 (1998) aff'd., 194 F. 3d 68 (D.C. Cir. 1999); and Alliance Pipeline L.P., 80 FERC ¶ 61,149 at 61,597 (1997), order on reh'g and issuing certificates, 84 FERC ¶ 61,239 (1998), order denying reh'g, 85 FERC ¶ 61,331 (1998), order amending certificate, 88 FERC ¶ 62,224 (1999).

²⁴See Natural Gas Pipeline Negotiated Rate Policies and Practices, 104 FERC ¶ 61,134 (2003). See also Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines, 74 FERC ¶ 61,076 (1996), order on clarification, 74 FERC ¶ 61,194 (1996), order on reh'g, 75 FERC ¶ 61,024 (1996).

approves Saltville's request for negotiated rate authority, effective on the day Saltville's rates filed in compliance with this order go into effect and directs Saltville to file its non-conforming agreements.

2. NAESB Standards

38. Saltville included the North American Energy Standards Board (NAESB) standards²⁵ and the Recommendation R02002 and R02002-2 standards²⁶ in its pro forma tariff. Saltville included some standards by reference in section 22 of the General Terms and Conditions (GT&C) of its pro forma tariff and included a text version of other standards throughout its pro forma tariff.

²⁵Standards For Business Practices of Interstate Natural Gas Pipelines, Order No. 587, 61 Fed. Reg. 39053 (July 26, 1996), FERC Stats. & Regs., Regulations Preambles [July 1996-December 2000] ¶ 31,038 (July 17, 1996); Order No. 587-B, 62 Fed. Reg. 5521 (February 6, 1997), FERC Stats. & Regs., Regulations Preambles [July 1996-December 2000] ¶ 31,046 (January 30, 1997); Order No. 587-C, 62 Fed. - Reg. 10684 (March 10, 1997), FERC Stats. & Regs., Regulations Preambles [July 1996-December 2000] ¶ 31,050 (March 4, 1997); Order No. 587-G, 63 Fed. Reg. 20072 (April 23, 1998), FERC Stats. & Regs., Regulations Preambles [July 1996-December 2000] ¶ 31,062 (April 16, 1998); Order No. 587-H, 63 Fed. Reg. 39509 (July 23, 1998), FERC Stats. & Regs., Regulations Preambles [July 1996-December 2000] ¶ 31,063 (July 15, 1998); Order No. 587-I, 63 Fed. Reg. 53565 (October 6, 1998), FERC Stats. & Regs., Regulations Preambles [July 1996-December 2000] ¶ 31,067 (September 29, 1998); Order No. 587-K, 64 Fed. Reg. 17276 (April 9, 1999), FERC Stats. & Regs., Regulations Preambles [July 1996-December 2000] ¶ 31,072 (April 2, 1999); Order No. 587-M, 65 Fed. Reg. 77285 (December 11, 2000); FERC Stats. & Regs., Regulations Preambles [July 1996-December 2000] ¶ 31,114 (November 30, 2000); Order No. 587-N, 67 Fed. Reg. 11906 (March 18, 2002), III FERC Stats. & Regs. ¶ 31,125 (March 11, 2002); Order No. 587-O, 67 Fed. Reg. 30788 (May 8, 2002), III FERC Stats. & Regs., Regulations Preambles ¶ 31,129 (May 1, 2002); Order No. 587-R, 68 Fed. Reg. 13813 (March 21, 2003), FERC Stats. & Regs., Regulations Preambles ¶ 31,141 (March 21, 2003).

²⁶On March 12, 2003, in Docket No. RM96-1-024, the Commission issued Order No. 587-R (102 FERC ¶ 61,273) which amends the Commission's regulations to incorporate by reference the Version 1.6 standards of the NAESB's Wholesale Gas Quadrant (WGQ) and the standards governing partial day recalls adopted by the WGQ in Recommendations R02002 and R02002-2.

39. Some NAESB and Recommendation R02002 and R02002-2 standards, which were included in Saltville's tariff as text versions, are not the verbatim standards and may misrepresent the intent of the standards. Saltville is therefore directed to include the following Version 1.6 NAESB standards in its tariff verbatim: 1.3.1, 1.3.2(i), 1.3.2(ii), 1.3.2(iii), 1.3.2(iv), 1.3.33, 2.3.9, 3.3.9, 3.3.10, 3.3.15, 3.3.19, 5.2.2, 5.2.3, 5.3.2, 5.3.13, 5.3.14, 5.3.16, 5.3.26 and 5.3.28. Saltville should also include the following Recommendation R02002 and R02002-2 standards in its tariff verbatim: 5.3.45, 5.3.57 and 5.3.58.

3. Penalties

40. Section 6.5 of the GT&C of Saltville's tariff contains an action alert penalty which is equal to 110 percent of the applicable daily Gas Daily posting multiplied by the quantity by which the customer deviated from the action alert. Section 6.5 also contains an operational flow order (OFO) penalty equal to 3 times the applicable daily Gas Daily posting multiplied by the quantity by which the customer deviated from the requirements of the OFO.

41. The Commission is concerned that a customer could incur both the action alert and OFO penalties for the same volumes. Commission policy prohibits multiple penalties for the same volumes.²⁷ Saltville is therefore directed to revise section 6.5 of the GT&C to clearly state that it will not charge both the action alert and OFO penalties for the same volumes. The OFO penalty is substantial; however, both penalties nevertheless comply with Order No. 637 since they will only apply when the system is under operational stress. Therefore we will accept Saltville's penalties with the revisions contained herein and direct Saltville to revise section 6.5 of its GT&C in accordance with this discussion.

4. Natural Gas Price Indices

42. Saltville proposes to use the "Gas Daily" Columbia App. Midpoint Index in its interruptible rate schedules for cashing out quantities that violate Saltville's notices of interruption. Saltville also proposes to base its action alert and OFO penalties on the applicable "Gas Daily" posting.

²⁷Crossroads Pipeline Co., 71 FERC ¶ 61,076 at 61,265 (1995); East Tennessee Natural Gas Co., 98 FERC ¶ 61,060 at 61,157 (2002); and SCG Pipeline, Inc., 104 FERC ¶ 61,159 (2003).

43. The Commission issued a Policy Statement, Price Discovery in Natural Gas and Electric Markets, in Docket No. PL03-3-000 on July 24, 2003.²⁸ In the Policy Statement, the Commission requires that all pipelines, including Saltville, must, in new tariff filings, use indices that meet the criteria in the Policy Statement and reflect adequate liquidity at the referenced locations to be reliable.²⁹ Accordingly, when Saltville files its actual tariff, it must address how the indices which it proposes to use meet each criterion in the Policy Statement. The Commission's staff will then review its provisions to ensure that they meet the Policy Statement's requirements.

5. Compliance Tariff Filing

44. Saltville is directed to file its actual tariff within 30 days of the date of issuance of this order, with a proposed effective date no later than 30 days after the date the actual tariff is filed. Saltville is also directed to submit its rate derivation and a revenue study with the tariff filing consistent with the findings of this order. Since we are requiring Saltville to recalculate its proposed rates, its Part 284 Subpart G initial rates will not be in effect when this order is issued. We will therefore postpone the effective date of the certificates we are issuing in this order to the effective date of the refiled rates. Until that time Saltville shall continue to operate under its existing interim authority and charge its existing rates for service.

6. PSNC's Comments

45. PSNC filed comments urging the Commission to preserve the integrity of its storage agreement with Saltville.³⁰ In this order, we are requiring Saltville to derive new recourse rates. Whether Saltville will have to renegotiate its rates with PSNC will depend on the rates it derives and whether PSNC's rates are in accordance with the new recourse rates. Whether Saltville will have to renegotiate its terms and conditions of

²⁸104 FERC ¶ 61,121 (2003).

²⁹See Natural Gas Pipeline Co., 104 FERC ¶ 61,190 (2003).

³⁰PSNC has a long term agreement (August 1, 2003 to July 31, 2018) with Saltville for firm service at a 600,000 Dth maximum storage quantity level, a maximum daily injection quantity of 13,333 Dth/day and a maximum daily withdrawal quantity of 30,000 Dth/day.

service with PSNC will depend on whether PSNC's contract contains non-conforming terms and conditions of service. The Commission will not make that determination until Saltville files its contracts, as it has agreed to do.

C. Engineering Analysis

1. Geology

46. The salt deposits in the Saltville area are the only known deposits of rock salt in the Southern Appalachian Basin. The main salt deposits occur in the Mississippian aged MacCraday Formation and to a lesser extent in the overlying Mississippian Little Valley and Hillsdale Formations. The salt-bearing formations along with other sedimentary strata have been sharply bent into a northeast-trending structure known as the overturned Greendale Syncline. Forces which caused the folding also created the Saltville Fault, a low-angle thrust fault striking parallel to the axis of the syncline, which brings older Ordovician and Cambrian dolomites, shales, and limestones over the younger deformed salt bearing formation. The older Copper Ridge Formation, the Wolichucky Formation (shales interbedded with thin fossiliferous limestones) and the Cambrian Honaker Dolomites overlie the salt-bearing MacCraday Formation. The Price Formation, consisting of sandstones, is located below the MacCraday Formation. At the storage facility site, the Saltville Fault is located on top of the upper MacCraday Formation. It ranges from about 150 feet to slightly over 900 feet deep in the vicinity of the storage project. The thickness of the MacCraday, Little Valley, and Hillsdale Formations between the roof of the caverns and the Saltville Fault is at least 2800 feet.

47. The salt-bearing MacCraday Formation has been subdivided into three members: (1) the sandstone-siltstone member, which includes a few isolated pockets of evaporites; (2) the dolomite member which includes some calcareous limestone; and (3) the plastic shale member which includes in its lower portion the evaporite layers where Saltville's proposed caverns were dissolved. Individual salt accumulations in excess of 150 feet are not uncommon. These individual bodies can range from a shale/salt intermix of 50 percent salt to almost pure salt. Total salt thickness in the member can reach 500 feet. The apparent thickness of the MacCraday Formation at the storage site is slightly over 2,700 feet and the sedimentary formations on top of the MacCraday Formation range from 150 feet to 900 feet thick. The proposed storage caverns were leached in the lower portion of the MacCraday Formation at depths of about 3,800 feet to 4,000 feet below ground surface.

2. Development

48. Saltville is developing its gas storage facility by converting four existing salt caverns to be used for natural gas storage. Saltville is using caverns that were previously solution mined and abandoned with brine left in them under pressure. The cavern wells were plugged in 1972 when Olin Mathieson ceased salt extraction in the area. As originally proposed, Saltville would develop its storage facility by re-completing the wells in each cavern and then performing a nitrogen-brine interface mechanical integrity test (MIT) to evaluate the well casing and verify cavern integrity. Upon completion of a successful MIT, Saltville would then begin to displace the brine with natural gas.

49. Saltville has recompleted the wells in Cavern No. 1 (Well Nos. 25 and 26) and Cavern No. 2 (Well Nos. 27 and 28) and has run well logs, performed MITs, and placed the caverns into service.³¹ Cavern No. 3 will have five wells (Well Nos. 18, 19, 21, 22, and 23). Saltville has completed well work on the cavern and performed an MIT in Spring 2004.³² Saltville will de-brine Cavern No. 3 and make it available for service later in 2004. Cavern No. 4 will have only a single well (Well No. 24). Development of Cavern No. 4 is dependent upon further technical evaluations by Saltville. Saltville anticipates that when all four caverns are debrined and in operation in 2007, the facility will have a total storage capacity of 8.2 Bcf.

3. Operations and Monitoring

50. Saltville will periodically test each cavern during operations to ensure that no appreciable gas is lost. Saltville will also perform an MIT on each cavern at least once every 5 years as required by the State of Virginia. As an integral part of its storage development and operational plan, Saltville proposes to implement four types of measurements to monitor ground behavior during cavern operations. Saltville will use these measurements to monitor the behavior of the rock strata above the caverns to detect/minimize the risk of subsidence. Saltville notes that these measures are being implemented already as part of VGPC's operations at its adjacent storage facility. Specifically, Saltville proposes:

- (1) Periodic level surveys of the ground surface above the storage caverns using the benchmark network that is already installed.

³¹Saltville submitted the result of the MITs and copies of the well logs for Cavern Nos. 1 and 2.

³²Saltville filed the results of the MIT for Cavern No. 3 on May 10, 2004.

- (2) Yearly gamma ray and caliper logging of all active storage cavern wells to estimate the cavern roof elevation and detect well casing breakage.
- (3) Sonar surveys of the caverns to monitor cavern dimensions and shape and to estimate pillar thickness between caverns throughout operations.
- (4) Monitoring injection pressures, flow rates, and cumulative gas volumes according to Environmental Protection Agency monitoring requirements. Cavern pressures will be continuously monitored and evaluated to ensure safe operations.

4. Analysis

51. Saltville's storage caverns are located within the lower member of the MacCraday Formation, near the contact with the underlying Prince Formation at depths of about 3,800 feet to 4,000 feet below ground surface. The apparent thickness of the MacCraday Formation at the storage site is slightly over 2,700 feet and the sedimentary formation on top of the MacCraday Formation ranges from 150 feet to 900 feet thick. Because of the depth of the caverns and the relatively stiff nature of the rock materials above the caverns, it is estimated that there is little to no subsidence above the cavern area. However, to ensure the safety of its storage facility, Saltville has set up a subsidence monitoring plan. We will require Saltville to continue its subsidence monitoring plan as modified in Environmental Condition No. 3. With respect to the Saltville Fault, the EA found that, based upon several studies, the fault should not have any impact on Saltville's project. The studies indicate that there has been no displacement along the fault during the last 100,000 years.

52. Saltville examined detailed technical data and performed evaluations to determine the suitability of the salt caverns for the storage of natural gas. The results of these studies indicate a safe elastic behavior of the pillars between the caverns as well as the salt materials surrounding the caverns, even under the most critical operating conditions. Saltville also evaluated the structural behavior of existing storage caverns operated since 1995/1996 by VGPC that are adjacent to Saltville's storage facility and compared them with the magnitude and distribution of the corresponding parameters (stress, deformation, and ground subsidence) for the caverns proposed by Saltville. The results of this study and comparison support the development of the proposed caverns because of the location and depth of the caverns and the relatively stiff nature of rock materials above the caverns.

53. The Interstate Oil and Gas Compact Commission (IOGCC) has compiled standards from the various States for the development and operation of storage facilities using salt caverns to store natural gas.³³ We find that the location of Saltville's caverns are within the design criteria recommended by the IOGCC. Specifically, the depth of the caverns within the formation, the confinement of the salt within the formation, and the spacing between the caverns are sufficient to avoid pressure influences between the caverns when all four of Saltville's caverns are operated at full capacity and pressure.

54. Saltville performed MITs on Cavern Nos. 1 and 2 that confirmed the integrity of the well casings and caverns. As a result, Saltville de-brined the caverns and placed the caverns into natural gas service. On May 10, 2004, Saltville filed the MIT results for Cavern No. 3. Saltville utilized the nitrogen/brine interface test procedure when it performed MITs on Cavern Nos. 1, 2, and 3 and intends to utilize the same procedure for Cavern No. 4.³⁴ The nitrogen/brine interface test procedure is the industry standard used for testing the integrity of salt cavern storage facilities. We also note that Saltville will run MITs on each cavern at least every five years to verify cavern integrity and ensure that the well-head and casing is not leaking as required by the State of Virginia. We concur with Saltville's proposed MIT procedures to ensure and maintain cavern, well-head, and casing integrity.

55. Saltville proposes a maximum operating pressure gradient for the four salt caverns of 0.75 psi per foot and a minimum operating pressure of 0.30 psi per foot for the first two years for each cavern. After the second year, Saltville proposes a minimum pressure gradient of 0.25 psi per foot. These pressure limitations are necessary to minimize the creep behavior of the salt. If sufficient pressures are not maintained within the caverns; the salt could creep thus reducing the storage capacity of the caverns. Saltville developed the pressure limitations based upon the MIT results from Cavern Nos. 1 and 2. VGPC uses a minimum pressure gradient of 0.25 psi per foot for its Cavern Nos. 16 and 20 which are adjacent to Saltville's caverns. Therefore, the satisfactory behavior of the

³³The IOGCC is a governmental agency which promotes and encourages conservation and efficient recovery of domestic oil and natural gas resources while protecting health, safety, and the environment. The organization is comprised of twenty-nine oil and gas producing States and six associate member States. In November 1994, the IOGCC published the IOGCC Member State Regulation of Natural Gas Storage which summarizes the various statutes and regulations for the underground storage of natural gas.

³⁴As a condition of this authorization, Saltville will be required to file a copy of the MIT for Cavern No. 4 before injecting gas into the cavern.

caverns being operated by VGPC together with the results of the other engineering/geological analyses (including MITs on Cavern Nos.1 and 2) indicate that maximum and minimum pressure gradients of 0.75 psi per foot and 0.25 psi per foot are appropriate for Saltville's caverns. We find Saltville's proposed operating pressure limits to be within a range that will contain the caverns' storage gas, prevent gas leaks or gas loss, insure cavern stability, minimize cavern closure due to creep, and prevent subsidence.

56. After analyzing all information provided by Saltville, we conclude that the geological and engineering parameters for the underground natural gas salt cavern storage facilities proposed by Saltville are well defined. Specifically, Saltville's proposed cavern locations are well within the design criteria and confinement of the salt formation and the caverns are located at the proper depth and within proper boundaries. The proposed cavern arrangement and spacing follow the IOGCC guidelines for salt cavern storage facilities and should avoid pressure influences between caverns when they are operated at full storage capacity/pressure. The wells are designed, completed, and tested properly and the various test and logs run on these caverns and wells indicate that the cavern design and development plan are proper. Finally, the maximum and minimum cavern pressure gradients throughout the storage cycle have been chosen to preserve the structural integrity of the caverns. Based upon these findings, we conclude that the existing and proposed caverns are properly designed and further development and operation of these storage facilities should continue as they are proposed with the conditions contained in the Appendices to this order.

D. Environmental Analysis

57. On December 16, 2003, we issued a Notice of Intent to Prepare an Environmental Assessment for the Proposed Saltville Storage Project and Request for Comments on Environmental Issues (NOI). This notice was sent to individuals, organizations, and interested parties, including federal, state, county, and local agencies; state and local conservation organizations; elected officials (e.g., federal and state representatives and senators, mayors, and governors); local libraries and newspapers; and property owners and other interested stakeholders in the project area.

58. Our staff prepared an environmental assessment (EA) for Saltville's proposal.³⁵ The EA addresses soils, geology, water resources, wetlands, federally listed threatened and endangered species, land use, cultural resources, air quality, noise, abandonment activities, safety, and alternatives. The EA also addresses all substantive comments filed in response to the NOI.

59. On March 5, 2004, the Commission issued a Notice of Availability of the Environmental Assessment for the Proposed Saltville Storage Project. The EA was mailed to interested stakeholders and the Commission's official service list. Written comments were due on April 5, 2004. Comments were received from Beverly Pauley, Geneva Boardwine, Cletus and Rebecca Boardwine, George and Georgia Boardwine, Rick Minton, the Commonwealth of Virginia, Department of Historic Resources, U.S. Department of the Interior (letters from the U.S. Fish and Wildlife Service (FWS) and the Office of Environmental Policy and Compliance (OEPC)), and Saltville.

60. As discussed above, Saltville is currently developing a new underground natural gas storage facility using existing salt caverns that were previously authorized for construction and operation in Smyth and Washington Counties, Virginia by the Virginia Commission. Saltville has received the State regulatory approvals necessary to construct and operate its storage facility. The new storage facility is being co-located with a storage field that has been successfully operated by VGPC since 1995/96.

61. Stakeholders have reported that individuals living on the northwest side of Saltville's property along State Highway 91 (the Smokey Row area) are being "bombarded with up to 1/8 inch of dust every day." They believe this is caused by a combination of U.S. Gypsum's blasting in the area and Saltville's emissions and fugitive dust. Saltville is using existing dirt/gravel roads along the mountainside above the homes in this area to access the well sites and for continuing operations at the 100 gpm salt evaporator plant. We do not know if traffic on these roads, other activities at the storage field, or other nonjurisdictional activities in the area are creating the dust reported by the residents. However, to ensure that Saltville's operations are not creating inordinate amounts of dust, we will require Saltville to investigate the source(s) of dust in the

³⁵Saltville's proposals in Docket Nos. CP04-14-000 and CP04-15-000 requesting a Part 284, Subpart G blanket transportation certificate and a Part 157, Subpart F blanket construction certificate, respectively, qualify as categorical exclusions 22 and 21 under section 380.4(a) of the Commission's regulations, respectively.

Smokey Row area to determine if its activities are the source of the dust and to provide us with a report on its findings and what steps, if any, it should take to control its dust emissions.

62. The FWS is concerned about water quality issues related to underground gas storage in a karst area. The FWS requested additional information regarding the quality of the discharged water, the specific discharge location into McHenry Creek, and whether the project has the potential to affect federally listed species in the watershed, including the North Fork Holston River.

63. The project's storage of natural gas in the salt caverns will not impact water quality in the project area. As stated on page 15 of the EA, Saltville is discharging distilled water into McHenry Creek. This discharge will not impact species in the North Fork Holston River, which is at least 1.3 miles away. Saltville has received a permit from the Commonwealth of Virginia, Department of Environmental Quality for this discharge. The natural gas will be transported through recently recompleted wells and the salt caverns are tight formations that do not communicate with the shallow karst layer that is located close to the earth's surface.

64. The OEPC is concerned that Commission staff did not fully consider the project's effects on non-insect species, and suggested that staff use additional State database information to assess effects to Federally listed species. As described in the EA, the remaining construction activities will occur primarily at existing stone-covered aboveground facility sites, roadways, or rock-covered well pads that are not habitat for upland threatened and endangered species. The areas where the limited additional construction will occur are subject to extensive on-going human presence and are populated with existing industrial facilities. The project will have no impact on federally listed threatened and endangered species.

65. On March 25, 2004, the Commonwealth of Virginia, Department of Historic Resources indicated that the current activities taking place within the Saltville Gas Storage Project will have no effect on cultural resources. We agree, and condition 4 in the EA is no longer necessary.

66. Saltville has requested that we reconsider the requirement that it monitor certain elevation stations every 6 weeks to check for shallow ground movement and subsidence at monitoring points L-2, H-1, K-5, J-7, K-6, J-3, E-3a, J-4, and J-5. Saltville believes that monitoring these points on a quarterly basis is more appropriate and consistent with the quarterly monitoring it agreed to with the Virginia Department of Mines, Minerals, and Energy.

67. Our requirement for monitoring those points every 6 weeks is only for an initial period until December 2004 and is needed to verify whether the observed elevation changes are in fact a result of slumping rather than subsidence. After that, the monitoring interval may be extended to the 3-month (quarterly) cycle.³⁶ Imposing a conservative interval of 6 weeks for a short period of time should not be onerous for Saltville and will help to clarify for the Commission and the local community whether there is subsidence in the vicinity of, or associated with, the caverns, or whether this phenomenon is only surface soil creep on certain steep slopes.

68. Saltville also seeks a clarification on whether the EA should be recommending a 3-month cycle for monitoring the subsidence monitoring sites in condition 3. Saltville believes the record shows that its normal monitoring cycle is 6 months, not 3 months, for the monitoring points.

69. As described above, it is not at all clear that the normal monitoring cycle is 6 months. However, once it is clear that it is only surface slumping that is occurring at the sites addressed in condition 3 of the EA, we see no harm in lengthening the cycle to 6 months if there is no significant movement (elevation changes) in the rest of the project area. We will modify the condition to this effect.

70. OEPC comments that the geological hazards are not adequately addressed in the EA because the included maps hinder the U.S. Geological Survey from properly reviewing the EA's conclusions, and OEPC does not believe the EA supports a finding of no significant impact.

71. We disagree. The EA is a summary review of the voluminous material which Saltville has filed. Much of this information is available through the Commission's website if an agency believes it is needed to further its review. The EA contains maps sufficient to allow reviewers to locate the facilities involved in this project. Only a limited number of facilities remain to be constructed and all of these are located within sites on Saltville's property that have already received considerable development, e.g., an expansion of the existing compressor building.

72. As noted in the EA, an existing salt storage facility has been in operation at the site for about 8 years, and the State of Virginia has issued approval for Saltville's proposed project. In addition, many of the facilities required for the proposal have been

³⁶We note that the monitoring interval used for September 2001 through November 2002 varied between 1 and 2 months, with the most common interval being 1 month. Since then, the interval has been 5 or 7 months.

put in place and into operation. Under these circumstances, and with the aforementioned filings by the applicant which support the conclusion that the facility can be operated safely, we believe there is ample support for the conclusion that there would be no significant environmental impact associated with the approval of this project.

73. OEPC believes that a plan should be developed that will identify what mitigative actions would be taken if the project is producing surface creep or subsidence. We believe that the EA has recommended adequate mitigation in this area. Since, as noted in the EA, all of the construction activities for the project will occur on previously disturbed/cleared areas, there is little reason to believe that the project could cause “surface creep” or slumping. The subsidence surveys conducted since at least September 2001 have identified only nine locations where some ground movement may be taking place and we have included a requirement that these areas be extensively monitored. Once we have a report on the results of this monitoring, we will be in a position to recommend a course of action, if needed.

74. There is also no evidence of substantial subsidence associated with the project’s operations and development at the storage field. Subsidence associated with other recent and historic mining activities in the region around Saltville’s property have been identified in the EA, are not project related, and should not have an impact on the project.

75. It is also important to note that the nine locations where ground movement may be taking place are on steep slopes generally located to the north or northeast of Cavern Nos. 2 and 3 and their associated access roads. Although these locations are upslope from a few residences, the residences are some distance away. Moreover, Saltville’s facilities are between some of these sites and the residences. Consequently, Saltville will take appropriate steps to ensure that its facilities (and therefore the residences) are protected, if the need arises. The Subsidence Monitoring Plan with our condition that covers these nine sites will be used to determine if this movement is being caused by surface ground creep. Therefore, we believe that we have adequately addressed the issue of slumping.

76. OEPC comments that an analysis of geologic hazards to the gas storage facility needs to be done. Further, it says that there needs to be a complete description of the project including how long gas would be stored, when it would be injected or withdrawn, the process of injection and withdrawal, and the method of containment.

77. We disagree that there has been no analysis of the geologic hazards to the facility. The EA includes extensive discussion of subsidence, karst terrain, collapsed wells, and the Saltville Fault. A complete description of how storage operations take place is not necessary for the purposes of the National Environmental Policy Act. The engineering considerations associated with this project are addressed in other parts of this order.

78. OEPC comments that the seismic data which is reviewed for the project should be updated from 1972 to the present and that the EA should have included a seismic analysis of the entire project area rather than the Saltville Fault alone. OEPC also comments that the effects of injection/withdrawal on the Saltville Fault need to be addressed.

79. We believe that the data included in the EA are adequate to establish that the Saltville Fault is of no concern to the facility. Moreover, since the storage caverns would be at least 2,800 feet from the fault and all of the storage wells have at least four casing strings set and cemented through the fault interval, there is no significant possibility that the operation of the project would result in any fluctuation in fluid pressure which might facilitate movement on the fault. Therefore, there is no reason to believe that injection or withdrawal activities would affect the fault.

80. With the exception of the environmental concerns discussed or clarified above, no new environmental issues were identified in the comments that have not been previously addressed in the EA for this project.

81. Based on the discussion in the EA and responses to the filed comments, we conclude that if constructed and operated in accordance with Saltville's application and supplements, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

82. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction and operation of facilities approved by this Commission.³⁷ Saltville shall notify the Commission's environmental staff by telephone or facsimile of any environmental noncompliance identified by other

³⁷See, 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).

federal, state, or local agencies on the same day that such agency notifies Saltville. Saltville shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

E. Part 284 Subpart G Blanket Transportation Certificate

83. Saltville has applied in Docket No. CP04-14-000 for a Part 284, Subpart G blanket transportation certificate, which is generally applicable to all interstate pipelines. Part 284, Subpart G blanket certificates provide natural gas pipelines certain automatic NGA section 7 natural gas transportation authorizations for individual customers under the terms of its contract and tariff. Because Saltville will become an interstate pipeline with the issuance of a certificate to construct and operate the proposed pipeline facilities, and because a Part 284, Subpart G blanket certificate is required for Saltville to offer transportation services, the Commission will issue the requested Part 284 certificate authority to Saltville.

F. Part 157, Subpart F Blanket Construction Certificate

84. Saltville also has applied in Docket No. CP04-15-000 for a Part 157, Subpart F blanket construction certificate, which is generally applicable to all interstate pipelines. Part 157, Subpart F blanket certificates accord natural gas pipelines certain automatic NGA section 7 facility and service authorizations and allows them to make several types of simplified prior notice requests for certain minimal section 7 facility and service authorizations. Because Saltville will become an interstate pipeline with the issuance of a certificate to construct and operate pipeline facilities, we will also issue the requested Part 157, Subpart F, blanket certificate to Saltville.

85. The Commission, on its own motion, has received and made a part of the record all evidence, including the applications and exhibits thereto, submitted in this proceeding, and upon consideration of the record,

The Commission orders:

(A) A certificate of public convenience and necessity under NGA section 7(c) is issued to Saltville to construct, own, operate, and maintain natural gas facilities as described more fully in this order and in Saltville's application. This certificate and the certificates issued in Ordering Paragraphs (F) and (G) will become effective on the same date that Saltville's initial rates become effective.

(B) The certificate authority issued in Ordering Paragraph (A) is conditioned on the following:

- (1) Saltville's completing the authorized construction by December 31, 2007.
- (2) Saltville's complying with Part 157 of the Commission's regulations especially paragraphs (a), (c), (e), and (f) of section 157.20, and Parts 154 and 284 of the Commission's regulations.
- (3) Saltville shall recalculate its initial recourse rate, as discussed in the body of this order, and file actual tariff sheets within 30 days of the issuance of this order, with a proposed effective date no later than 30 days after the date the actual tariff is filed.
- (4) Saltville shall make a filing within three years after its inservice date, either justifying its existing recourse rates or proposing alternative rates.

(C) Saltville's request for negotiated rate authority is approved, as discussed in the body of this order. Saltville shall maintain separate books, accounts, and records for transportation provided under negotiated rates and for transportation provided under cost-based rates.

(D) Saltville shall comply with the engineering and environmental conditions listed in Appendices A and B to this order.

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

(F) A blanket transportation certificate under Subpart G of Part 284 of the Commission's regulations is issued to Saltville in Docket No. CP04-14-000.

(G) A blanket construction certificate under Subpart F of Part 157 of the Commission's regulations is issued to Saltville in Docket No. CP04-15-000.

(H) The motions to intervene out-of-time are granted.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.

APPENDIX A

Engineering Conditions

1. Saltville shall establish and maintain a subsidence monitoring network over the proposed caverns storage area.
2. Saltville shall assemble, test and maintain an emergency shutdown system.
3. Saltville shall periodically log each cavern's well(s) to check the cavern roof, top of the rubble pile, and casing status.
4. Saltville shall conduct sonar surveys of the caverns every five years to:
(a) monitor their dimensions and shape, and (b) estimate pillar thickness between openings throughout the storage operations.
5. Saltville shall conduct an annual inventory verification study on each cavern.
6. Saltville 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 8,200 MMcf at 14.73 psia and 60°F (Cavern No. 1, 760 MMcf; Cavern No. 2, 560 MMcf; Cavern No. 3, 6,700 MMcf ; and Cavern No. 4, 200 MMcf).
 - b. The maximum gas storage shut-in stabilized pressure in each cavern shall not exceed 0.75 psi per foot of cavern depth and the minimum pressure in each cavern shall be limited to 0.25 psi per foot of the cavern depth.
8. Before commencing gas storage operations in Cavern No. 4, Saltville shall file with Secretary of the Commission:
 - a. the results of the MIT for Cavern No. 4 before conversion of that well(s)/cavern to natural gas storage;
 - b. The results of sonar surveys of Cavern No. 4, including plan view and cross-sections;

- c. copies of the latest interference, tracer surveys, or other testing or analysis on Cavern No. 4, to verify the lack of communication between the caverns;
 - d. the volume of rubble at the base of Cavern No. 4, 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. Saltville shall file semiannual reports for each cavern (to coincide with the termination of the injection or withdrawal cycles) containing the following information (volumes shall be stated at 14.73 psia and 60°F):
 - a. the daily volume of natural gas injected and withdrawn;
 - b. the inventory of natural gas and shut-in wellhead pressure for each cavern at the end of reporting period;
 - c. the maximum daily injection and withdrawal rates experienced for the entire storage field during the reporting period;
 - d. the average working pressure on such maximum days taken at a central measuring point where the total volume injected or withdrawn is measured;
 - e. the results of any tests performed to determine the actual size, configuration, or dimensions of the storage caverns;
 - f. a discussion of current operating problems and conclusions;
 - g. other data or reports which may aid the Commission in the evaluation of the storage project; and
 - h. the results of leak detection tests performed during storage operations to determine the integrity of each cavern/wellbore, casing and wellhead.
10. Saltville shall file semiannual reports in accordance with section 157.214 (c) of the Commission's regulations for a period of one year following the issuance of this order.

APPENDIX B

Environmental Conditions

1. Saltville shall follow the construction procedures and mitigation measures described in its application and supplements including responses to staff data requests, and as described in the EA, unless modified by this Order. Saltville must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Projects (OEP) before using that modification.

2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the project. This authority shall allow:
 - a. the modification of conditions of 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. Saltville shall implement Mr. Gabriel Fernandez's September 23, 2003 recommended elevation monitoring changes to Saltville's ground subsidence monitoring plan. Monitoring points L-2, H-I, K-5, J-7, K-6, J-3, E-3a, J-4, and J-5 shall be surveyed every 6 weeks; a site inspection of these areas shall be conducted to check for shallow ground movements; and if the subsidence trend continues through September 2004, Saltville shall install deeper monitoring points at these locations. Saltville shall file with the Secretary a report on the results of all the survey monitoring points no later than March 2005 on all of the data gathered through December 2004 for review and written approval by the Director of OEP.

If the report confirms that the subsidence at monitoring points L-2, H-1, K-5, J-7, K-6, J-3, E-3a, J-4, and J-5 is being caused by surface ground creep, the survey cycle for the sites being monitored by the Subsidence Monitoring Plan shall be a maximum of 6 months.

4. Saltville shall file a noise survey of the Saltville Compressor Station, 400-gallon-per-minute (gpm) salt evaporator plant, and Virginia Gas Pipeline Company compressor station with the Secretary no later than July 1, 2004. The sound levels measured from these facilities shall be based on operations at full load or full capacity and provide a breakdown of the sound level contribution from each facility.

If the noise survey shows that there is noise attributable to the operation of the Saltville Compressor Station and 400-gpm salt evaporator plant at full load that exceeds an Ldn of 55 dBA at any nearby noise sensitive area (NSA), Saltville shall install additional noise controls to meet that level within 1 year. Saltville shall confirm compliance with the Ldn of 55 dBA requirement for its facilities by filing a second noise survey with the Secretary no later than 60 days after Saltville installs the additional noise controls.

5. Saltville shall file a noise survey with the Secretary no later than 60 days after placing the second authorized 5, 250-hp unit at the Saltville Compressor Station in service. If the noise attributable to the operation of all its facilities at the storage field at full load exceeds an Ldn of 55 dBA at any nearby NSA, Saltville shall install additional noise controls to meet that level within 1 year of the in-service date. Saltville shall confirm compliance with the Ldn of 55 dBA requirement by filing a second noise survey with the Secretary no later than 60 days after Saltville installs the additional noise controls.
6. Saltville shall investigate the source of dust emissions in the Smokey Row area and file a report with the Secretary on its findings within 15 days of acceptance of this certificate. If dust from Saltville's operations or construction activities is the source of the dust or contributing to excessive levels of dust in the area, Saltville shall take steps immediately to control its dust emissions.