

124 FERC ¶ 61,154
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Natural Gas Pipeline Company of America

Docket No. CP08-32-000

ORDER ISSUING CERTIFICATE

(Issued August 11, 2008)

1. On December 7, 2007, in Docket No. CP08-32-000, Natural Gas Pipeline Company of America (Natural) filed an application under section 7 of the Natural Gas Act (NGA) and Part 157 of the Commission's regulations for authority to construct and operate natural gas storage, compression, water removal and disposal systems and pipeline facilities in Kankakee County, Illinois. Natural states that the proposal will enable it to provide an additional 10 billion cubic feet (Bcf) of incremental firm storage service for its customers by better utilizing the Herscher Galesville (HG) storage field with minimal impact to the environment. Natural also requests that the certificated peak day withdrawal level at HG be increased from 1.0 Bcf to 1.1 Bcf. Natural does not propose any increase in the certificated total storage capacity of the HG facility.

2. As discussed below, we find that the proposed project is required by the public convenience and necessity and will grant the requested certificate authorizations, subject to conditions.

I. Background

3. Natural is a natural gas company within the meaning of section 2(6) of the NGA, engaged in the business of transporting natural gas and operating storage fields in interstate commerce under authorizations granted by and subject to the regulations of the Commission. Natural operates facilities in Arkansas, Illinois, Iowa, Kansas, Louisiana, Missouri, New Mexico, Oklahoma and Texas. Natural owns and operates substantial underground storage facilities in Illinois, Iowa, Oklahoma and Texas.

4. Natural was authorized to develop the HG storage facility in orders issued between 1952 and 1989.¹ HG is a storage reservoir near the north end of Natural's system, approximately sixty-five miles south of Chicago. The storage field utilizes a aquifer formation known as the Galesville sandstone. HG is unique because it requires the continuous removal of water to make room for the natural gas being stored.

5. At present, the certificated maximum total inventory at HG is 54.7 Bcf, with a certificated peak day withdrawal of 1.0 Bcf. However, as discussed further below, HG is not operated at its maximum certificated capacity in order to prevent storage gas from migrating. Thus, Natural asserts the reservoir currently is capable of holding only 37.5 Bcf of gas, including 13.35 Bcf working gas and 24.15 Bcf cushion gas.

6. Natural owns and operates the compressor station known as CS 201 at Herscher in Kankakee County, Illinois, with nine compressors dedicated to HG totaling 41,000 horsepower (hp). Five other compressor units at the same site are dedicated to another storage field, which is operated separately, and are unrelated to this proceeding.

7. An open season was held from April 25 to May 22, 2007, for the 10 Bcf of additional storage service that will be made possible by the proposed project. The open season resulted in five binding precedent agreements for an additional 136,000 dekatherms per day (Dth/d) of incremental firm storage service under Rate Schedule Nominated Storage Service (NSS). Natural states that the precedent agreements provide for over 90 percent of the expansion volume to be under contract for a term of ten years and for the remaining expansion volume to be under contract for five years. Two of the precedent agreements, representing 55 percent of the expansion volumes, are for service at the proposed maximum recourse rate. The other three precedent agreements, representing 45 percent of the expansion volumes, are for service at negotiated rates.

II. Proposal

8. In order to provide 10 Bcf of incremental firm storage service, Natural requests authorization to: (1) increase the peak day withdrawal capacity of HG from 1.0 Bcf to

¹ *Natural Gas Storage Company of Illinois (NGSCI)*, 11 FPC 366 (1952), 12 FPC 794 (1953), 14 FPC 917 (1955), 20 FPC 735 (1958), 22 FPC 484 (1959), 24 FPC 508 (1960), 25 FPC 123 (1961), and 27 FPC 1104 (1962); *Natural Gas Pipeline Company of America*, 28 FPC 542 (1962) (authorizing Natural's acquisition of Natural Gas Storage Company of Illinois), 29 FPC 278 (1963), 30 FPC 19 (1963), 31 FPC 1288 (1964), 34 FPC 507 (1965), 35 FPC 828 (1966), 36 FPC 1168 (1966), 39 FPC 621 (1966), 40 FPC 1005 (1968), 40 FPC 1201 (1968), 43 FPC 299 (1970), 43 FPC 817 (1970), 45 FPC 521 (1971), 3 FERC ¶ 61,116 (1978), 26 FERC ¶ 61,028 (1984), and 52 FERC ¶ 61,190 (1990). Other authorizations relating to HG were granted in *Natural Gas Pipeline Company of America*, 60 FERC ¶ 62,034 (1992) and 67 FERC ¶ 61,024 (1994).

1.1 Bcf; (2) add fifteen water removal wells with associated lateral extensions at strategic locations throughout the field; (3) add up to eleven water disposal wells with associated lateral extensions at strategic locations throughout the field; (4) recomplete up to four existing water disposal wells adding downhole horizontal laterals; (5) install surface booster pumps and associated tanks on three existing water disposal wells; (6) replace and/or add larger laterals at specified locations within the existing water disposal system; (7) perform workovers on five injection/withdrawal wells; (8) install an additional 8,180 hp of compression within the CS 201 station area of which Natural states 4,630 hp will support the proposed expansion, and 3,550 hp will serve as redundant horsepower for reliability purposes benefiting all customers; (9) purchase 2.0 Bcf of additional cushion gas; and (10) install and operate miscellaneous appurtenant facilities necessary to develop the proposed project.

9. The proposed project will increase the storage capability of the HG reservoir by 12.0 Bcf, from 37.5 Bcf to 49.5 Bcf, including the additional 2.0 Bcf of cushion gas that Natural proposes to purchase and inject. The expansion will require an increase in late season deliverability over the current capability to support the incremental firm storage service under Rate Schedule NSS. To meet this increase, Natural proposes to construct up to 26 new water removal/disposal wells, most of which will be located within existing rights-of-way, and to reenter five existing injection/withdrawal wells and underream and deepen the wells' existing open hole intervals in an underbalanced environment. This will increase the diameter of the existing open hole interval 14 to 20 feet and each well will be deepened up to five feet, staying above the gas/water interface. This technique to stimulate and improve the injection/withdrawal wells' deliverability is based on successful results with similar workovers on wells in this field in the past.

10. The total project cost is estimated to be \$75,349,207. Natural attributes \$60,816,899 of its total estimated costs to costs for the expansion storage capacity and incremental services using such capacity.² Natural attributes the remaining project costs of \$14,532,308 to the portion of the proposed compression at HG that is in excess of that needed for the proposed expansion services. When analyzing the size of the compressor unit to be installed to support the proposed expansion, Natural reviewed its total compression at CS 201 and determined it would be prudent to install a unit larger than that which would be required for the proposed expansion. Natural states that the additional proposed compression will increase overall system reliability and result in an overall cost saving since the installation of one larger compressor unit is more cost effective than the installation of separate expansion compression units to support the expansion services and to increase reliability of service for existing customers.

² The \$60,816,899 attributed to the expansion storage capacity and incremental services includes the estimated \$15,300,000 to acquire the 2.0 Bcf of additional cushion gas that Natural proposes to acquire and inject.

11. Natural states it used only the \$60,816,899 that it attributes to the expansion capacity in calculating its proposed incremental rate for services using the incremental capacity. Therefore, Natural proposes to charge an incremental rate of \$6.8750 per Dth per month, based on a cost of service of \$11.2 million and a rate design volume of 136,000 Dth/d. Natural further proposes a \$0.2260 per Dth authorized overrun service charge and to recover fuel by assessing the incremental shippers the current Rate Schedule NSS fuel factor of 1.7 percent.

III. Notices, Interventions, and Comments

12. Notice of Natural's application was published in the *Federal Register* on January 10, 2008 (73 Fed. Reg. 1867), with protests and interventions due on or before January 24, 2008. Timely, unopposed motions to intervene were filed by Peoples Gas Light and Coke Company and North Shore Gas Company (Peoples) and by Chevron, U.S.A., Inc. These timely, unopposed motions to intervene are granted by operation of Rule 214.³

13. MidAmerican Energy Company (MidAmerican), Northern Indiana Public Service Company, and the County of Kankakee, Illinois (Kankakee) filed motions to intervene out of time. These parties have demonstrated an interest in these proceedings and granting their late interventions at this stage of the proceeding will not unduly delay resolution of the issues or unfairly prejudice other parties. Therefore, for good cause shown, we are granting these late motions to intervene pursuant to Rule 214(d) of the Commissions Rules of Practice and Procedure.⁴

14. Peoples and Kankakee also filed comments, which are discussed below.

IV. Discussion

15. Since the subject facilities will be used to store and 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

16. On September 15, 1999, the Commission issued a Certificate Policy Statement providing guidance as to how proposals for certificating new construction will be

³ 18 CFR § 385.214 (2008).

⁴ 18 C.F.R. §385.214 (2008).

evaluated.⁵ Specifically, the Certificate Policy Statement explains that the Commission, in deciding whether to authorize the construction of new pipeline facilities, 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.

17. Under this policy the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the applicant's existing customers, existing pipelines in the market area and their captive customers, or landowners and communities affected by the route of a 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 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.

18. As discussed more thoroughly below, Natural proposes to charge incremental rates for services using the proposed expansion capacity, thus meeting the threshold requirement of no subsidization by existing customers. The new services will be provided on an incremental basis at the recourse rate under two of the precedent agreements and at negotiated rates under the other three agreements. The construction of the facilities as proposed will not result in any adverse operational effects on existing Natural customers. Further, while Natural asserts that a portion of the proposed 8,180 hp compression unit will increase reliability of service for existing customers and states that it anticipates seeking rolled-in rate treatment for its costs associated with this portion of the compression, Natural will have the burden of proof, as discussed below, to justify any future request for rolled-in rate treatment for the costs associated with the additional compression that it has not included in its incremental rates for the expansion services.

19. The proposed project will have no adverse effects on the quality of Natural's services for its existing customers. Nor is there any evidence that Natural's proposal will have any adverse impacts on other pipelines or their customers. Further, construction of

⁵ *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *order on clarification*, 90 FERC ¶ 61,128 (2000), *order on clarification*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

the proposed facilities will have minimal adverse impacts on landowners or communities. The new compression will be located within the fenced perimeter of Natural's existing CS 201 compressor station at Herscher in Kankakee County, Illinois. The majority of the up to 26 new wells will be located within existing rights-of-way and will be directionally drilled to their bottom hole locations. Only eleven surface drilling sites will be required for all of the new wells. Seven of the drilling pad sites will be located at existing sites. The remaining well work will be performed at existing injection/withdrawal wells, that Natural will reenter to improve the wells' deliverability. All of the proposed horizontal recompletions, workovers and booster pump locations are on existing sites, so no newly-disturbed ground is required for them. Most of the new water withdrawal and water disposal wells will require only a short run of pipe to connect them to the existing water disposal system. Thus all of Natural's work will result in little or no change in overall land use.

20. Natural has demonstrated that there is a need for the additional storage capacity to provide service, the rate treatment will not result in subsidization of the project by existing shippers, and no other pipelines, their captive customers or landowners will be adversely affected. For these reasons, the Commission finds that Natural's proposal complies with the Certificate Policy Statement and the public convenience and necessity standard in section 7 of the NGA.⁶

B. Rate Issues

Contribution in Aid of Construction

21. Commonwealth Edison (ComEd) owns and operates the local electrical distribution network serving the surrounding Herscher, Illinois community, including Natural's HG storage facility, which utilizes electric power for conducting its storage operations.⁷ Because Natural's expansion project will increase its demand for electric power, ComEd will install a new, non-jurisdictional, 9.5 mile-long, 34 kv power line to

⁶ Consistent with Commission practice, we will condition Natural's certificate authority to require that prior to commencement of construction, it execute final contracts for firm service volumes equivalent to those represented by its precedent agreements. *See, e.g., Natural Gas Pipeline Company of America*, 120 FERC ¶ 61,050, at Ordering Paragraph (F)(1) and n.7 (2007).

⁷ Natural uses downhole submersible water pumps that are electrically driven for removing water from the formation and surface booster pumps that are electrically driven for distributing the water to the disposal wells.

enhance electric service to Natural's HG storage facility.⁸ Natural's estimated project costs include a \$2,274,250 contribution in aid of construction to reimburse ComEd for the construction of the new electric distribution facilities.

22. Natural's May 13, 2008 data response explains that ComEd's electric power distribution network serving this area is currently operating at capacity and Natural's proposed storage expansion creates electrical demand in excess of what the existing distribution system can support.⁹ Without ComEd's electric distribution infrastructure upgrades to its system, the HG storage expansion project would not be able to proceed. Therefore, Natural asserts its contribution in aid of construction to ComEd is essential to the viability of the proposed project. Natural proposes to amortize the contribution in aid of construction to ComEd at a 2.32 percent depreciation rate, the same rate it is using for its other construction costs.

23. The Commission has previously expressed concern regarding recovery of contributions in aid of construction related to pipeline facilities that would not be operated under the Commission's open-access policies and regulations.¹⁰ However, that is not the situation here. Rather, in this case Natural is making a payment to ComEd, the local electric distribution company, for upgrades to ComEd's electric distribution infrastructure necessary to support Natural's proposed storage expansion project. All of the contribution in aid of construction is assigned to the expansion services and the incremental rate design for the project ensures that only expansion shippers will pay for these costs. The Commission approves Natural's contribution in aid of construction to ComEd in the initial incremental rates for this project.

Incremental Rate Schedule NSS Rates

24. While Natural's total estimated project costs are \$75,349,207, Natural uses only \$60,816,899 of these costs in calculating the incremental rates that it proposes to charge under Rate Schedule NSS for services using the expansion capacity. The proposed maximum cost-based recourse reservation rate is \$6.8750 per Dth per month, which is

⁸ Most of ComEd's new 9.5 mile-long electric power line will replace and enhance its existing power line in its existing right-of-way. About 1.8 miles of ComEd's power line will be located along new right-of-way.

⁹ Natural estimates an increase of approximately 4,000 kW of electrical power demand during the gas injection season which is typically during the months of April through September.

¹⁰ See, e.g., *Trunkline Gas Company, LLC*, 122 FERC ¶ 61,050, (2008); *Southern Natural Gas Company (Southern)*, 82 FERC ¶ 61,249 (1998), *reh'g denied*, 85 FERC ¶ 61,330, at 62,297 (1998).

higher than Natural's existing NSS recourse rate of \$3.07 per Dth. The proposed higher recourse rate for services using the proposed incremental capacity is based on a cost of service of \$11.2 million and a rate design volume of 136,000 Dth per day, the design capacity of the proposed facilities. In developing the cost of service for the expansion services, Natural has used the pretax rate of return and depreciation rate underlying the currently effective NSS service rates approved by the Commission in Docket No. RP95-326.¹¹ Natural proposes a \$0.2260 per Dth authorized overrun service charge (AOS) for expansion customers consistent with the derivation of the AOS charge applicable to its other NSS shippers. Natural also proposes to recover fuel by assessing the incremental shippers at the Rate Schedule NSS storage fuel retention factor, which is currently 1.7 percent.

25. The Commission finds that Natural's proposal to charge incremental NSS rates for services using its proposed HG expansion capacity is appropriate since they are higher than Natural's currently effective rates for NSS service. Further, the proposed initial incremental recourse rates are designed appropriately, and will not over recover Natural's cost of service associated with the expansion services.

Rate Treatment of Compression Costs

26. As discussed above, Natural's project includes installation of an 8,180 hp compression unit of which Natural states 4,630 hp will support the proposed expansion services and 3,550 hp will serve as redundant horsepower, thereby increasing service reliability and thus benefiting existing customers. Natural further explains that the installation of one larger compressor unit is more cost effective than the installation of separate expansion compression units to support the expansion services and to increase reliability of service for existing customers. Natural attributes \$14,532,308 of the project's costs to the 3,550 hp that it states will be in excess of the additional 4,630 hp needed to support the expansion services.

27. In its application, Natural states that the five oldest existing compressor units at CS 201 were installed in 1953 and are 2,800 hp each. Natural states that obtaining replacement parts for these units has at times been difficult and, by proposing the new 8,180 hp unit, Natural hopes to reduce the wear and tear on the older units. Natural further states that the lowest amount of the existing horsepower that will not be operated at any one time will be 2,800 hp. Adding the proposed 8,180 hp to the existing total 41,000 hp, and then subtracting 2,800 hp, equals 46,380 hp, and Natural proposes to

¹¹*Natural Gas Pipeline Company of America*, 81 FERC ¶ 61,160 (1997) (approving settlement based on, among other things, a 14.98 percent pre-tax return and a 2.32 percent underground storage depreciation rate).

operate all or any combination of the existing and proposed compression units in such a manner as to not exceed 46,380 hp.

28. Although Natural states that it anticipates seeking rolled-in rate treatment for the costs of the reliability portion of the compression in a future rate proceeding, it does not request that we make any finding in this proceeding regarding the appropriate rate treatment for any of the compression costs that it has not included in its incremental recourse rate for the expansion services. Thus, while we are approving construction of the 8,180 hp compression unit, there will be no presumption of rolled-in rate treatment for the costs associated with the 3,550 hp that Natural asserts is needed to increase reliability of existing service. Natural will have the burden of proof that inclusion of the costs associated with this additional horsepower in its generally applicable rates will not result in subsidization by non-expansion shippers if it proposes in a future rate proceeding to roll in these costs.

Peoples' Requests for Clarification

29. Peoples requests that the Commission affirm that Natural is providing the incremental Rate Schedule NSS storage service through the aggregate use of all its storage facilities and that the expansion shippers do not hold any preferential or field-specific rights to the HG expansion capacity. Peoples states that these distinctions have service and cost implications for Natural's services and rates as well as possible tax implications for its shippers. Natural clearly states in its application (page 5, n. 6) that it operates all of its storage fields in the aggregate. In addition, section 2(d) of Natural's Rate Schedule NSS states that the capacity available to provide the NSS service is based on the capacity and functions of all of Natural's storage fields. Therefore, the Commission grants Peoples' requested clarification.

30. Peoples also states that although Natural marketed the proposed expansion capacity for service under both Rate Schedule DSS and Rate Schedule NSS, the application proposes that the expansion capacity will only provide incremental Rate Schedule NSS service. Peoples states there are important distinctions between the DSS and NSS rate schedules that have service and cost implications under Natural's tariff as well as possible tax consequences for shippers. Therefore, Peoples requests that the incremental capacity resulting from this expansion be deemed Rate Schedule NSS capacity and that it continue to be so designated after the agreements contemplated by the precedent agreements expire.

31. We will also grant this clarification requested by Peoples, as shippers that have rollover rights or are eligible for the right of first refusal will have the ability to continue to receive service under Rate Schedule NSS pursuant to the terms of section 22 of Natural's tariff. In addition, Natural's proposed addition to section 6.1 of Rate Schedule NSS states that the incremental rates for the expansion service shall apply to any capacity which becomes available due to the expiration or termination of an expansion service

agreement. Therefore, Peoples is correct that so long as the expansion service is offered at an incremental rate under Rate Schedule NSS, the proposed incremental storage capacity will continue to be deemed Rate Schedule NSS capacity after the final agreements executed pursuant to Natural's precedent agreements have expired.

Record Keeping

32. Natural commits to tracking and clearly identifying the costs that are associated with the proposed expansion of the HG storage field. Natural must maintain its records for the expansion facilities in a manner to comply with the requirements of section 154.309 of the Commission's regulations, which applies to incremental expansions. This information must be in sufficient detail so that the data can be identified in Statements G, I, and J in any future NGA section 4 or 5 proceedings.

Negotiated Rates

33. Consistent with our policy in certificate cases, we will not approve the three precedent agreements containing negotiated rates here.¹² Rather, prior to commencing service, Natural must make a filing under section 4 of the NGA that complies with the Commission's Alternative Rate Policy Statement, which, among other things, addresses the Commission's procedures and requirements for charging negotiated rates.¹³ If the service agreements contain non-conforming provisions, they must also be filed for Commission approval not less than 30 days or more than 60 days prior to the commencement of service, and Natural must clearly delineate the differences between the non-conforming rate agreements and its form of service agreement in redline and

¹² The Commission has declined to examine negotiated rates in the context of its review of the merits of a certificate application. *See, East Tennessee Natural Gas Company*, 98 FERC ¶ 61,331 (2002); *Texas Eastern Transmission Corporation*, 95 FERC ¶ 61,057, *order on reh'g*, 95 FERC ¶ 61,367 (2001); and *Independence Pipeline Company, et al.*, 91 FERC ¶ 61,102 (2000) and 92 FERC ¶ 61,022 (2000), *order on reh'g*, 92 FERC ¶ 61,268 (2000).

¹³ *Alternatives to Traditional Cost-of-Service Ratemaking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines*, 74 FERC ¶ 61,076 (1996), *reh'g and clarification denied*, 75 FERC ¶ 61,024 (1996), *reh'g denied*, 75 FERC ¶ 61,066 (1996); *petition for review denied sub nom., Burlington Resources Oil & Gas Co. v. FERC*, 172 F.3d 918 (D.C. Cir. 1998); *Natural Gas Pipeline Negotiated Rate Policies and Practices*, 104 FERC ¶ 61,134 (2003), *order on reh'g and clarification*, 114 FERC ¶ 61,042 (2006); *criteria modified, Rate Regulation of Certain Natural Gas Storage Facilities*, FERC Stats & Regs. ¶ 31,220 (2006) (Order No. 678), *order on clarification and reh'g*, 117 FERC ¶ 61,190 (2006) (Order No. 678-A) (Alternative Rate Policy Statement).

strikeout.¹⁴ In addition, Natural is required to maintain separate and identifiable accounts for volumes stored, billing determinants, rate components, surcharges, and revenues associated with the negotiated rate agreements in sufficient detail to allow identification of the data in Statements G, I and J in any future NGA section 4 or 5 rate proceeding.¹⁵

C. Tariff Issues

34. Natural's application includes proposed tariff sheets that revise Rate Schedule NSS and the related rate sheet, and adds definitions to the General Terms and Conditions (GT&C) to reflect the new incremental service. Specifically, Natural proposes to revise: (1) the rate sheet applicable to Rate Schedule NSS to add the \$6.875 per Dth maximum recourse rate as the incremental recourse rate for firm services using the expansion capacity at the HG storage facility and the \$0.2260 per Dth authorized overrun charge (Fourteenth Revised Sheet No. 20) as the incremental recourse rate for overrun services using the expansion capacity at the HG storage facility; (2) Rate Schedule NSS at Section 6.1 to provide that Natural will separately identify the expansion project for purposes of cost allocation (Sixth Revised Sheet No. 176A); and (3) the definitions in its GT&C to reference the new incremental capacity, the related agreements, the shippers, and the rates (Ninth Revised Sheet No. 203A and Original Sheet No. 203D).

35. With respect to Natural's proposed tariff sheets, we find that the proposed changes are appropriate and consistent with previous tariff changes accepted by the Commission for comparable incrementally-priced projects.¹⁶ Thus, we will require Natural to file actual tariff sheets placing the incremental rates approved herein, as well as the related tariff references, into effect no less than 30 days, but no more than 60 days, prior to commencing service.

¹⁴ See, e.g., *Columbia Gas Transmission Corporation*, 122 FERC ¶ 61,021, at P 44 (2008).

¹⁵ See *Tennessee Gas Pipeline Co.*, 110 FERC ¶ 61,047, at P 38 (2005).

¹⁶ See *Natural Gas Pipeline Company of America*, 114 FERC ¶ 61,061 (2006) (approving incremental initial rates under Rate Schedule NSS for Natural's North Lansing expansion); *Natural Gas Pipeline Company of America*, 110 FERC ¶ 61,361 (2005) (approving incremental initial rates under Rate Schedule NSS for Natural's 2003 expansion).

D. Engineering Analysis and Maximum Total Certificated Capacity

36. The HG storage field is an aquifer storage field, located in Kankakee County, Illinois. It is located in the Galesville sandstone of the Herscher Anticline, and is 7.5 miles long, 3.5 miles wide, 100 feet thick, and at a depth of 1,750 feet. It was activated for storage operations in 1953 and certificated with a total capacity of 54.7 Bcf. It is not operated at its maximum certificated capacity or at pressures above the water pressure in order to prevent gas from migrating into shallower aquifer formations. It currently operates at an inventory of 37.5 Bcf and storage pressure of 640 psi, as measured at the wellhead. Water is continuously withdrawn during the injection season below and outside the gas bubble to allow the bubble to expand.

37. Natural continuously operates the HG storage facility at pressures below the surrounding water pressure, i.e., 0.433 psi/ft or 760 psi. The cushion gas forms the gas bubble which is continuously being compressed by the surrounding water. During injection season, water is continually withdrawn below and immediately outside the bubble to create the physical space for the working gas, while the working gas is injected in the center of the bubble to expand it. During withdrawal season, the water withdrawal rate is reduced and the water pressure begins to compress the bubble as water influxes back into the gas filled space, letting the working gas be withdrawn. The new water wells are to be located along the edges of the gas bubble and will provide for the increase in the water withdrawal rate, which will create the space for the incremental 10 Bcf of working gas. Natural states it determined the number and location of water wells needed through detailed simulation studies.

38. The HG storage facility's cushion gas is currently 64 percent of total capacity. Aquifer storage fields typically require the cushion gas to be between 50 percent and 80 percent of the total capacity of the field. Natural proposes to increase the total inventory by 12 Bcf, 10 Bcf working gas and 2 Bcf cushion gas. Without this additional 2 Bcf of cushion gas, the risk of water influx cutting off portions of the gas bubble increases. Natural's proposal for 2 Bcf of additional cushion gas is the result of simulation studies on expansion size, pump well locations and numbers, and gas bubble growth and behavior. However, because the percentage of cushion gas is near the lower range of normal for water drive storage fields, it will be necessary for Natural to carefully monitor the field for gas loss due to excessive water influx.

39. To accommodate delivery of the 10 Bcf of stored gas, Natural proposes to increase the late season deliverability to 1,100 MMcf/d. This would be accomplished by under reaming and deepening five gas injection/withdrawal wells, and adding 4,630 hp of compression. The utilization of larger diameter and longer open hole sections should provide the additional capability, and is a method Natural has used successfully in this field before.

40. The Commission's staff has evaluated Natural's proposal and concludes that the proposed project is technically sound and well defined. We will require that Natural comply with the engineering conditions enumerated in Appendix B to this order. Those conditions require that Natural file semiannual reports on, *inter alia*, the results of any tracer program by which the leakage of injected gas may be determined. If leakage of gas exists, the reports will be required to 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. Natural will be required to continue filing reports semiannually until the total HG storage inventory volume and pressure have reached or closely approximate 49.5 Bcf, which the reservoir should be capable of holding following completion of the project authorized by this order.

41. Since the HG storage facility still will not be capable of reaching its maximum certificated total capacity of 54.7 Bcf, Natural will be required to file, within 60 days following its semiannual report as required in Appendix B, an application to establish a certificated maximum storage capacity that accurately reflects the reservoir's capabilities.

E. Environmental

42. On January 25, 2008, we issued a *Notice of Intent (NOI) to Prepare an Environmental Assessment (EA) for the Proposed Herscher-Galesville Expansion Project and Request for Comments on Environmental Issues*. We received comments from the County of Kankakee, Illinois, the U.S. Department of Health and Human Services (DHHS), and the U.S. Environmental Protection Agency (EPA).

43. The County of Kankakee expressed concern over the potential impact of this project on the value and use of property crossed by the proposed waterlines. The DHHS stated its primary concern was the proposed project's effect on water quantity, quality, treatment, and usage for local and adjacent populations now and in the future. Both the DHHS and the EPA requested the EA discuss a large number of issues, including: (1) effects on groundwater, streams, wetlands, vegetation, wildlife, land use, housing, soil and water contamination, air quality and noise impacts, and occupational health and safety; (2) consultation under the National Historic Preservation Act; (3) an analysis of cumulative impacts; and (4) an examination of the effects of the project on low-income/minority status communities. No other comments concerning the environment from federal, state, and local agencies, or landowners were filed in response to the NOI.

44. The above-referenced comments were addressed in the EA issued on May 9, 2008. The EA addressed impacts on geology, soils, water resources, vegetation, wildlife, fisheries, federally listed endangered and threatened species, land use, cultural resources, noise, air quality, pipeline safety, and alternatives. Following issuance of the EA, we received letters from the National Marine Fisheries Service and the U.S. Fish and Wildlife Service. Both agencies indicated that they have no comments, and no further involvement with these agencies would be required.

45. Natural also filed comments in response to the EA's Environmental Recommendation Nos. 11 and 12. Regarding the EA's Environmental Recommendation No. 11, Natural provided documentation supporting a determination of no effect on historic properties regarding the proposed non-jurisdictional electric service lines and substation. Regarding the EA's Environmental Recommendation No. 12, Natural provided its Soil Erosion and Sedimentation Control Plan, approved by the Kankakee County Soil and Water Conservation District. We have reviewed this plan and find it acceptable. Therefore, the EA's Environmental Recommendation Nos. 11 and 12 are no longer applicable and are not included in the environmental conditions in Appendix A to this order.

46. Based on the analysis in the EA, we have determined that if Natural constructs the facilities in accordance with its application and supplements and the staff's mitigation measures listed in Appendix A, approval of this project would not constitute a major federal action significantly affecting the quality of the human environment.

47. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.¹⁷

F. Conclusion

48. Natural seeks to enhance an existing storage field through the construction of additional water withdrawal and water disposal wells, reworked gas injection/withdrawal wells, additional compression and related appurtenances. Construction of the proposed facilities will permit Natural to provide an additional 10 Bcf of incremental firm storage capacity without exceeding the currently certificated total capacity of the storage field. The project will increase the HG storage field's peak day withdrawal capability and its late season withdrawal capability. The benefits of increased use of HG will benefit the gas market as a whole. Therefore, the proposal in Natural's application is required by the public convenience and necessity.

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

¹⁷ 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).

The Commission orders:

(A) A certificate of public convenience and necessity is issued to Natural in Docket No. CP08-32-000, authorizing the construction and operation of the proposed facilities and the acquisition of an additional 2.0 Bcf of cushion gas, as described in this order and the application to increase the storage capability of the HG reservoir by 12.0 Bcf, from 37.5 Bcf to 49.5 Bcf.

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

(C) Natural's proposed initial recourse rates for incremental services under Rate Schedule NSS using the authorized expansion capacity are approved. Natural shall file actual tariff sheets, as discussed herein, not less than 30 days or more than 60 days prior to placing the expansion capacity in service.

(D) There will be no presumption of rolled-in rate treatment for the portion of the project's costs associated with the costs of compression exceeding the amount necessary to provide services using the expansion capacity authorized herein.

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

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

(G) Natural shall file, not less than 30 nor more than 60 days prior to the effective date, actual tariff sheets consistent with its pro forma tariff placing the incremental rates approved herein, as well as the related tariff references, into effect.

(H) The certificate authorization granted herein is conditioned on Natural's executing, prior to commencing construction of the authorized facilities, firm contracts for service amounts equivalent to the volumes specified in its precedent agreements, i.e., an additional 136,000 dekatherms per day (Dth/d) of incremental firm storage service under Rate Schedule Nominated Storage Service (NSS) for terms of five to ten years.

(I) Within 60 days following its final semiannual report as required in Appendix B, Natural shall file an application to establish a certificated maximum storage capacity that accurately reflects the HG reservoir's capabilities.

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

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

APPENDIX A

Environmental Conditions

1. Natural shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the environmental assessment, unless modified by this order. Natural 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 OEP before using that modification.
2. The Director of OEP has delegation 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. **Prior to any construction**, Natural shall file an affirmative statement with the Secretary, 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 location shall be as shown in the EA, as supplemented by filed alignment sheets. **As soon as they are available, and before the start of construction**, Natural shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by 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.

Natural's exercise of eminent domain authority granted under Natural Gas Act (NGA) section 7(h) in any condemnation proceedings related to this order must be consistent with these authorized facilities and locations. Natural'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. Natural shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction in or near that area.**

This requirement does not apply to route variations required herein or extra workspace allowed by the *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 this certificate and before construction** begins, Natural shall file an Implementation Plan with the Secretary for review and written approval by the Director of OEP describing how Natural will implement the mitigation measures required by this order. Natural must file revisions to the plan as schedules change. The plan shall identify:

- a. how Natural will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
 - b. the number of environmental inspectors assigned per spread, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
 - c. company personnel, including environmental inspectors and contractors, who will receive copies of the appropriate material;
 - d. the training and instructions Natural will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change);
 - e. the company personnel (if known) and specific portion of Natural's organization having responsibility for compliance;
 - f. the procedures (including use of contract penalties) Natural will follow if noncompliance occurs; and
 - g. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - (1) the completion of all required surveys and reports;
 - (2) the mitigation training of onsite personnel;
 - (3) the start of construction; and
 - (4) the start and completion of restoration.
7. Natural shall employ at least one environmental inspector. The environmental inspector (EI) shall be:
- a. responsible for monitoring and ensuring compliance with all mitigative 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. 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
 - e. responsible for maintaining status reports.
8. Natural shall file updated status reports prepared by the EI with the Secretary on a **biweekly** basis **until all construction-related activities, including restoration and initial permanent seeding, are complete**. On request, these status reports

will also be provided to other Federal and state agencies with permitting responsibilities. Status reports shall include:

- a. the current construction status of the project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - b. a listing of all problems encountered and each instance of noncompliance observed by the environmental inspector during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other Federal, state, or local agencies);
 - c. corrective actions implemented in response to all instances of noncompliance, and their cost;
 - d. the effectiveness of all corrective actions implemented;
 - e. a description of any landowner/resident complaints which may relate to compliance with the requirements of this order, and the measures taken to satisfy their concerns; and
 - f. copies of any correspondence received by Natural from other Federal, state or local permitting agencies concerning instances of noncompliance, and Natural's response.
9. Natural 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 is proceeding satisfactorily.
10. **Within 30 days of placing the certificated facilities in service**, Natural shall file an affirmative statement with the Secretary, 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 Natural has complied with or will comply with. This statement shall also identify any areas affected by the project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
11. Natural shall file with the Secretary, **prior to the start of construction**, a list of proposed private leased access roads that it would use for the project, indicating length, width and current land use, for review and written approval by the Director of OEP.

12. Natural shall develop and implement an environmental complaint resolution procedure. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the project and restoration of the right-of-way. **Prior to construction**, Natural shall mail the complaint procedure to each landowner whose property would be crossed by the project.
 - a. In its letter to affected landowners, Natural shall:
 - (1) provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;
 - (2) instruct the landowners that, if they are not satisfied with the response, they should call Natural's Hotline; the letter shall indicate how soon to expect a response; and
 - (3) instruct the landowners that, if they are still not satisfied with the response from Natural's Hotline, they should contact the Commission's Enforcement Hotline at (1-888-889-8030) or by email at hotline@ferc.gov.
 - b. In addition, Natural shall include in its biweekly status report a table that contains the following information for each problem/concern:
 - (1) the date of the call;
 - (2) the identification number from the certificated alignment sheets of the affected property and approximate location by milepost or station number;
 - (3) the description of the problem/concern; and
 - (4) an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.
13. **Prior to the start of construction**, Natural shall file an updated noise analysis for Well Pad E for review and written approval by the Director of OEP. The analysis should include background noise levels, estimated drilling noise contributions, and mitigated drilling noise levels at the nearest NSAs.
14. Natural shall file noise surveys with the Secretary **no later than 60 days** after placing the authorized unit at Compressor Station 201 in service. If the noise attributable to the operation of the new unit at full load exceeds an L_{dn} of 55 dBA at any nearby NSAs, Natural shall install additional noise controls to meet that level **within 1 year** of the in-service date. Natural shall confirm compliance with the L_{dn} of 55 dBA requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

APPENDIX B

Engineering Conditions

1. The total gas inventory stored in the Herscher Galesville shall not exceed 49.5 Bcf at 14.73 psia and 60 degrees Fahrenheit without prior Commission authorization.
2. The Herscher Galesville shall be operated in such manner as to prevent/minimize gas loss or migration.
3. Natural 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):
 - a. The daily volumes of natural gas injected into and withdrawn from each storage reservoir;
 - b. The volume of natural gas in the reservoirs at the end of the reporting period;
 - c. 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;
 - d. 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;
 - e. Any surveys of pressures in gas wells, and the results of back-pressure tests conducted during the reporting period;
 - f. The latest revised structural and isopach maps showing the 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;
 - g. 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;
 - h. Discussion of current operating problems and conclusions;
 - i. Such other data or reports which may aid the Commission in the evaluation of the storage project; and
 - j. Reports shall continue to be filed semiannually until the storage inventory volume and pressure have reached or closely approximate

49.5 Bcf at 14.73 psia and 60 degrees Fahrenheit. Thereafter, the reports shall continue on a semiannual basis for a period of one year.