

122 FERC ¶ 61,227
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Northern Natural Gas Company

Docket No. CP07-108-000

ORDER ISSUING CERTIFICATE AND AUTHORIZING ABANDONMENT

(Issued March 12, 2008)

1. On March 16, 2007, Northern Natural Gas Company (Northern) filed an application pursuant to section 7 of the Natural Gas Act (NGA) for a certificate of public convenience and necessity to: (1) construct, modify, and operate wells, piping, compression and appurtenant facilities to expand, by approximately 8.551 billion cubic feet (Bcf), the storage capacity of the Redfield storage facility (Redfield) in Dallas County, Iowa; (2) increase the certificated withdrawal rate to 600 MMcf/d; and (3) store gas in an additional formation, the Galena Formation, and expand the storage capacities in the Elgin, St. Peter and Mt. Simon Formations at Redfield. Additionally, Northern seeks authorization under NGA section 7(b) to abandon certain compression facilities in Seward County, Kansas. For the reasons stated below, we will grant the requested authorizations.

Background and Proposal

2. Northern is a natural gas company engaged in the transportation of natural gas in interstate commerce pursuant to the NGA. Northern is a Delaware corporation having its principal place of business in Omaha, Nebraska. It is authorized to do business in the states of Delaware, Texas, New Mexico, Oklahoma, Kansas, Nebraska, Iowa, Minnesota, Illinois, Michigan, Wisconsin, North Dakota, South Dakota, and Louisiana.

3. Northern's Redfield storage facility consists of approximately 12,600 acres of surface area with natural gas storage that is certificated in three underground reservoir formations. At present, Northern operates 195 wells at the Redfield storage field, including 151 injection/withdrawal wells, 44 observation wells and a water disposal well. In addition, Northern operates approximately 60 miles of pipelines and a compressor

station at the facility. The Redfield compressor station has a total of four compressor units totaling 7,000 (HP) horsepower that are dedicated to the Redfield storage field.

4. Northern held an open season from December 19, 2005, to January 31, 2006, to seek customer interest in expansion of Northern's Firm Deferred Delivery (FDD) storage service at Redfield.¹ Northern states that its open season announcement indicated that there was a possible expansion of up to 10 Bcf of FDD capacity at Redfield and that Northern would seek market-based rate authority for FDD expansion services. As a result of the open season, shippers executed binding precedent agreements for a total of 8.0 Bcf of FDD capacity to support the proposed expansion at Redfield. Northern states that it contracted with Netherland, Sewell & Associates, Inc. to conduct a study of Redfield to determine the amount of additional capacity available for expansion. According to Northern, the final analysis indicates that the underground aquifer can support 8.0 Bcf of additional working gas volume on a firm basis.

5. Northern estimates that the additional incremental working gas volume of 8.0 Bcf would necessitate an additional 0.551 Bcf of base gas, thereby increasing Redfield's total peak inventory by 8.551 Bcf.² The total storage capacity would increase from 122.102 Bcf to 130.551 Bcf. The increase in capacity would be made possible by expansion into a presently unutilized Redfield formation, the Galena reservoir, and by increasing the storage capacities of Redfield's Elgin, St. Peter and Mt. Simon formations.³

6. Northern states that utilizing the 8.0 Bcf of incremental working gas capacity will require that the certificated withdrawal rate be increased by 140 MMcf/d, from 460 MMcf/d to 600 MMcf/d. The additional storage inventory will result in higher peak reservoir pressures, which will still be below historical peak reservoir pressures, except for the St. Peter reservoir, which is estimated to increase above the historical peak

¹ Existing Rate Schedule FDD sets forth the terms and conditions of Northern's firm storage services. Services using the proposed expansion capacity will be subject to the existing terms and conditions of Rate Schedule FDD and will be provided at any of the storage points available under the FDD Rate Schedule.

² The additional 8.0 Bcf of additional firm working storage capacity would include the 2.102 Bcf of incremental storage capacity that the Commission's July 10, 2007 Order authorized Northern to use on an interruptible basis for injections in the summer of 2007. *Northern Natural Gas Company*, 120 FERC ¶ 62,031 (2007).

³ Northern states that it relied on its authority under its Part 157 blanket certificate to drill an observation well to obtain core samples analysis and perforated existing wells to monitor pressure of the formations.

pressure by 9 psig. This increase in reservoir pressure will support the increased peak day withdrawal capability.⁴

7. For services using the proposed expansion capacity, Northern requests market-based rate authority in accordance with the Commission's finding in its November 16, 2006 Declaratory Order in Docket No. RP06-437-000 that market-based rates would be appropriate for the storage services to be provided by the expansion proposed herein.⁵

Description of Proposed Facilities

8. Northern proposes to abandon, construct and/or modify the facilities described below in order to increase the certificated storage capacity at Redfield. Based upon Northern's analysis of the logging and core sample data, as is more particularly described in the application, Northern proposes to add the Galena formation as a storage reservoir to the existing formations utilized for storage service at Redfield. The proposed facilities, once placed in service, will enable the Galena formation to be utilized for storage service, will increase the withdrawal rate capability to 600 MMcf/d and will increase the storage capacity of Redfield by 8.551 Bcf.

New and Recompleted Wells

9. Northern proposes to drill and complete five new wells and recomplete eight existing wells at the Redfield storage facility in order to facilitate the proposed expansion within the existing storage boundary.

10. Northern states that the five new injection/withdrawal wells will be installed with dual tubing strings and dual well head valves. Well numbers 1, 2, and 3 will be drilled to

⁴ On August 31, 2007, the Commission issued an order temporarily authorizing maximum shut-in bottom hole pressures (BHP) of 744 psig for the Elgin reservoir; 965 psig for the St. Peter reservoir; and 1,404 psig for the Mt. Simon reservoir. *Northern Natural Gas Company*, 120 FERC ¶ 62,158 (2007). In a November 7, 2008 supplement to the instant application, Northern clarified that it proposes maximum shut-in BHPs of 744 psig for the Elgin reservoir; 978 psig for the St. Peter reservoir; 1,409 psig for the Mt. Simon reservoir; and 968 psig for the Galena reservoir.

⁵ *Northern Natural Gas Company*, 117 FERC ¶ 61,191 (2006), *reh'g denied*, 119 FERC ¶ 61,072 (2007). Existing Rate Schedule FDD sets forth the terms and conditions of Northern's firm storage services. Although Northern is requesting market-based rate authority for services using the proposed expansion capacity, the expansion services would be subject, as noted above, to the existing terms and conditions of Rate Schedule FDD and will be provided at any of the storage points available under the FDD Rate Schedule.

a depth of approximately 2,000 feet, with the upper completion in the Galena formation and the lower completion in the St. Peter formation. Well number 4 will be drilled to a depth of approximately 3,000 feet, with the upper completion in the St. Peter formation and the lower completion in the Mt. Simon formation. Well number 5 will be drilled to a depth of approximately 2,000 feet with the upper completion in the Elgin formation and the lower completion in the St. Peter formation.

11. Northern states that it will connect the new wells to nearby existing storage gathering lines, thereby limiting the need for constructing long gathering lines and reducing the overall environmental impact of the project.

12. Northern proposes to recomplate eight existing wells located in the Redfield storage field, converting them from single completion to dual completion wells. Northern will perforate the existing wells in the Galena formation to allow the wells to utilize more than one formation. Seven existing wells, Davis 3, Hummel 3, Hummel 4, Hummel 5, Kern 1, Kern 2, and Nelson 2, are currently completed in the St. Peter formation and operated as injection/withdrawal wells. As a result of this Redfield expansion project, the following wells will be completed in the Galena formation.

13. The Nelson 6 well is currently operated as an observation well and is completed in the Gower formation. Northern proposes to extend the Nelson 6 well an additional 400 feet to reach the Galena formation. Northern proposes to complete the Nelson 6 well in the Galena formation and also continue to use it as an observation well.

14. Northern states that the thirteen new and recompleted wells will receive surface modifications at the wellheads that include separators, heaters, water dump valves, drain lines, control valves, surface piping, and buildings. In addition, Northern proposes to construct, modify and operate auxiliary facilities at the Redfield storage field pursuant to section 2.55(a) of the Commission's regulations.⁶

Compression facilities

Abandonment of Sublette Compression Station Units and Appurtenant Facilities

15. Northern proposes to abandon and remove from its Sublette compressor station Unit #23, a 1,400 HP Waukesha reciprocating turbine, and Unit #27, a 6,960 HP Solar Taurus 60S-7000 gas turbine, and certain associated facilities, more particularly described in the application, and relocate those facilities to the Redfield compressor

⁶ These auxiliary facilities consist of a 16-inch control valve, water drainage lines, two new dehydration towers, a filter separator and a hydrogen sulfide treating facility.

station.⁷ Northern states that all construction activities at the Sublette compressor station will be conducted within the existing station yard. Northern states that this proposed horsepower abandonment will reduce available capacity at Northern's Field Area from Sublette to Mullinville by approximately 60 Dth/d. Northern states that despite this reduction in available capacity, it will be able to meet the current requirements of its firm shippers.

Redfield Compressor Station Unit Additions

16. Northern's Redfield compressor station, located in Section 6, T79N, R28W, in Dallas County, Iowa, currently comprises four units totaling 7,000 HP. Northern states that once Units #23 and #27 and associated facilities from the Sublette compressor station are relocated to the Redfield compressor station, an additional 8,360 HP will be available at the Redfield compressor station, increasing the Redfield compressor station to a total of 15,360 HP. All construction activities will be conducted within the existing station yard.

17. Northern asserts that the increase in horsepower at the Redfield compressor station will enable Northern to meet the requirements associated with an increase of 8.0 Bcf of storage service and capacity at Redfield, as well as providing increased flexibility and reliability to Northern's Redfield storage system. Northern proposes to increase the certificated withdrawal rate of the storage facility from 460 MMcf/d to 600 MMcf/d.⁸

18. Upon approval of this application, the Galena formation will be used for storage at Redfield, the certificated storage capacity at the Redfield storage field will be increased to 130.551 Bcf and the certificated withdrawal rate will be increased to 600 MMcf/d. As noted, the Commission found in Docket No. RP06-437-000 that market-based rates for the incremental FDD service resulting from the additional capacity proposed herein would be appropriate.

Notice, Interventions and Protest

19. Notice of Northern's application in Docket No. CP07-108-000 was published in the *Federal Register* on April 2, 2007 (72 Fed. Reg. 15,679). Eleven parties filed timely

⁷ Northern's Sublette compressor station is located in Section 1, Township 32 South (T32S), Range 33 West (R33W), in Seward County, Kansas, and currently comprises ten units totaling 29,720 HP.

⁸ Northern states that it will rely on section 2.55(a)(2)(ii) of the Commission's regulations to install associated valves and piping to connect the two new units into the station piping.

motions to intervene.⁹ Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.¹⁰

20. Northern Municipal Distributors Group and the Midwest Region Task Force Association jointly protested Northern's application. Their protest centers on Northern's assertion in its application that it has been authorized to use market-based rates for this project. The protestors assert that while the Commission approved market-based rates for this project in its November 2006 declaratory order in Docket No. RP06-437-000,¹¹ the protestors filed a request for rehearing in that proceeding which, at the time of their protest in this proceeding, was still pending before the Commission. Their protest here restates three issues raised in their request for rehearing of the November 2006 declaratory order in Docket No. RP06-437-000. First, they claim that the Commission erred in concluding that Northern's proposed market-based rates are in the public interest because Northern states it will not proceed with the project without market-based rate authority. Second, the protestors assert that Northern failed to provide adequate protections to the shippers that bid on the storage capacity. Third, they claim that Northern failed to provide adequate protections to shippers not participating in the proposed storage project so as to prevent cross-subsidization of the market-based rates by tariff rates.

21. On April 20, 2007, four days after the protest in this proceeding was filed, the Commission issued an order denying the protestors' request for rehearing of its November 16 declaratory order in Docket No. RP06-437-000.¹² Since the April 20 Order addressed and rejected each of the arguments that protestors restate in their protest in the present proceeding, there is no need to address them again in this proceeding.

⁹MidAmerican Energy Company; Clayton Energy Corporation, on behalf of Cascade Municipal Utilities, Remsen Municipal Utilities, West Bend Municipal Gas, Woodbine Municipal Natural Gas, City of Preston, City of Whitemore, Iowa, City of Rolfe, City of Scribner, Round Lake Municipal Utilities, Consumers Energy Cooperative, Fairbank Municipal Gas, and City of Wall Lake; the Iowa Utilities Board; Aquila, Inc. d/b/a Aquila Networks; Northern Municipal Distributors Group; the Midwest Region Task Force Association; Mewbourne Oil Company; Kansas Corporation Commission; SEMCO Energy Gas Company; the Minnesota Energy Resources Corporation; and Xcel Energy Services Inc., on behalf of Northern States Power Company-Minnesota and Southwestern Public Service Company.

¹⁰18 C.F.R. § 385.214(c)(1) (2007).

¹¹ *Northern Natural Gas Company*, 117 FERC ¶ 61,191 (2006).

¹² *Northern Natural Gas Company*, 119 FERC ¶ 61,072 (2007).

Discussion

22. Since the proposed facilities will be used for the storage of natural gas in interstate commerce subject to the jurisdiction of the Commission, the construction and operation of these facilities is subject to the requirements of subsections (c) and (e) of section 7 of the NGA, and the abandonment of certain facilities is subject to NGA section 7(b).

23. The Certificate Policy Statement provides guidance as to how we will evaluate proposals for certificating new construction.¹³ The Certificate Policy Statement established criteria for determining whether there is a need for a proposed project and whether the proposed project will serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new pipeline facilities, we balance 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.

24. Under this policy, the threshold requirement for pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of the new pipeline. If residual adverse effects on these interest groups are identified after efforts have been made to minimize them, we 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 we proceed to complete the environmental analysis where other interests are considered.

25. In anticipation of filing its application for this expansion project, Northern filed a petition in Docket No. RP06-437-000 seeking a declaratory order finding that market-based authority would be appropriate for its services using the expansion capacity proposed in this proceeding. Northern sought such a predetermination based on its conclusion, after conducting its open season, that market-based rate authority would be necessary in order to go forward with this expansion project. Northern stated that, in

¹³ *Certification of New Interstate Natural Gas Pipeline Facilities (Certificate Policy Statement)*, 88 FERC ¶ 61,227 (1999), *order on clarification*, 90 FERC ¶ 61,128, *order on clarification*, 92 FERC ¶ 61,094 (2000).

order to support the required investment for the expansion, the open season indicated a maximum and minimum price, both of which were in excess of the existing maximum FDD rate. By using market-based rates, Northern Natural stated that it would be able to offer prospective customers rate certainty while taking on itself the significant risk of the expansion project, while protecting existing Rate Schedule FDD customers from that risk.

26. The Commission's November 2006 declaratory order in Docket No. RP06-437-000 found that Northern Natural had met the requirements for market-based authority as established by Order No. 678¹⁴ in which the Commission promulgated regulations to implement section 4(f) of the NGA added by section 312 of the Energy Policy Act of 2005 (EPAcT 2005).¹⁵ In approving market-based rates for Northern's project in the November 2006 declaratory order, the Commission found that both existing and initial expansion customers would be adequately protected, both as to risks of cost for the expansion and as to any degradation of service.¹⁶ The Commission determined that market-based rate authority for the expansion services will ensure that the initial expansion shippers will have rate security for the life of their contracts.¹⁷ Requiring Northern to maintain separate accounting records will help enable the Commission to ensure that existing cost-based rate customers will not subsidize the costs of the expansion.¹⁸ Northern will separately account for all costs and revenues associated with

¹⁴*Rate Regulation of Certain Natural Gas Storage Facilities*, Order No. 678, 71 Fed. Reg. 36612 (June 27, 2006), *FERC Statutes and Regulations* ¶31,220 (June 19, 2006), *order on reh'g and clarification*, Order No. 678-A, 117 FERC ¶ 61,190 (2006).

¹⁵ Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005). As amended by EPAcT 2005, the NGA provides in section 4(f) that the Commission may allow a natural gas storage service provider placing new facilities in service to negotiate market-based rates even if it is unable to show that it lacks market power if the Commission determines that market-based rates are in the public interest and necessary to encourage the construction of the storage capacity in the area needing storage services, and that customers are adequately protected. The Commission's implementing regulations are set forth at 18 C.F.R. §§ 284.501, 284.502 and 284.505 (2006).

¹⁶ *Northern Natural Gas Company*, 117 FERC ¶ 61,191 at PP 20-21. However, because Northern did not propose any customer protections in the event that it becomes necessary for it to remarket any of the storage expansion capacity, either after contract expiration or upon bankruptcy or another event leading to turn back of the capacity, the Commission explained that it was not authorizing Northern to charge market-based rates for any subsequent sales of the expansion storage capacity.

¹⁷ *Northern Natural Gas Company*, 119 FERC ¶ 61,072 at P 12.

¹⁸ *Id.* at P 20.

the incremental facilities used to provide the market-based services. First, separate plant-related accounts will be maintained to record the costs associated with all of the new facilities, including the new pipe, compression and the incremental base gas. These costs shall include the funds expended for the testing that was conducted in 2006¹⁹ and the costs associated with the 2007 interim expansion.²⁰ Depreciation for the expansion facilities will be calculated based on the expected economic life of these facilities. Second, separate accounts will also be maintained for the incremental revenue, incremental operation and maintenance expenses and future incremental capital associated with the expansion. Northern will assume the risk of any additional costs required to support this expansion in the future and will not intermingle costs between this proposed expansion and Northern's existing cost-based facilities and services. This accounting methodology will prevent the cost-based customers and the market-based customers from subsidizing each others service. Northern will finance this project with cash provided by its operations and other financing activities. The Commission also determined that as far as expansion shippers were concerned, the rates resulting from the open season reflected competitive prices, not the exercise of market power.

27. Northern states that it has lease agreements covering the use of temporary workspace, roads, and permanent construction areas within its certificated storage boundaries that allow Northern to construct the proposed facilities. In addition, Northern has the mineral rights, leaseholds and right-of-way easements required for the Redfield storage expansion project. Consequently, there will be minimal impact to landowners and communities proximate to the site of the Redfield storage expansion project.

28. The proposed facilities will benefit the market by meeting a demonstrated need for additional storage service. Additionally, the abandonment and reinstallation of compression facilities at the Sublette compressor station will not be subsidized by Northern's existing shippers. Existing pipelines will not be affected by the proposed abandonment of facilities and the abandonment will minimize environmental and landowner impacts at the Sublette Compressor Station.

¹⁹ As noted above, Northern relied on its authority under its Part 157 blanket certificate to drill an observation well to obtain core samples analysis and perforated existing wells to monitor pressure of the formations.

²⁰ As noted above, the additional 8.0 Bcf of additional firm working storage capacity created by this project will include the 2.102 Bcf of incremental storage capacity that the Commission's July 10, 2007 authorized Northern to use on an interruptible basis for injections in the summer of 2007. *Northern Natural Gas Company*, 120 FERC ¶ 62,031 (2007).

29. As discussed above, the proposed project will not impact existing customers and will have only nominal environmental and landowner impacts. No adverse impact on other pipelines or their customers have been claimed or shown. Consistent with the Certificate Policy Statement, since Northern has demonstrated that the proposal will result in benefits without adverse impacts, the proposal is required by the public convenience and necessity.

Engineering

30. In section 7(c) cases, the Commission reviews and approves the design capacity of a project to ensure that the design is appropriate and efficient. Our review of Northern's application supports its proposed 8.551 Bcf capacity increase at Redfield in the Elgin, Galena, St. Peter and Mt. Simon reservoirs. Northern supplemented its application on November 7, 2007 (November 7 filing) proposing maximum, stabilized shut-in BHPs for the Elgin, Galena, St. Peter and Mt. Simon reservoirs. In that filing, Northern referenced Figure 62 of Exhibit Z of its application to highlight the modeled estimated pressures required for the four storage reservoirs to enable the 8 Bcf firm capacity expansion.

31. As noted above, the Commission issued an order on August 31, 2007, to temporarily authorize maximum shut-in BHPs of 744 psig for the Elgin reservoir; 965 psig for the St. Peter reservoir; and 1,404 psig for the Mt. Simon reservoir.²¹ Northern now proposes maximum shut-in BHP's of 744 psig for the Elgin reservoir; 978 psig for the St. Peter reservoir; 1,409 psig for the Mt. Simon reservoir; and 968 psig for the Galena reservoir.

32. The certificated maximum BHPs established by the August 31, 2007 Order were authorized on an interim basis. Our staff's review and analysis of the record determined that reservoir pressures provided in Figure 62 are sufficient to enable an increase in capacity to 130.551 Bcf at Redfield. In view of these considerations, we will authorize the following maximum, stabilized shut-in BHPs at Redfield²²:

- | | |
|------------------------|----------|
| a. Elgin reservoir | 730 psig |
| b. Galena reservoir | 900 psig |
| c. St. Peter reservoir | 910 psig |

²¹ *Northern Natural Gas Company*, 120 FERC ¶ 62,158 (2007).

²² The certificated maximum BHPs are the values shown in the Figure 62 of the Netherland, Sewell & Associates, Inc. for Reservoir Pressure at the stated capacities for Gas-in-Place.

- d. Mt. Simon reservoir 1,338 psig

Environmental

33. On April 16, 2007, we issued a Notice of Intent to Prepare an Environmental Assessment for the Proposed Redfield Expansion 2008 Project and Request for Comments on Environmental Issues (NOI). We received one initial response to the NOI from Christine S. Short who is concerned about the adverse effects of excessive noise and vibrations presently emanating from the Redfield Compressor Station which have caused damage to her property, and the potential increase in noise and vibration that could result from the installation of the compressor unit currently proposed by Northern. In a subsequent comment letter dated June 29, 2007, Ms. Short stated that Northern's personnel are taking steps to reduce the noise and vibrations at the Redfield Compressor Station, and are working with her to reduce their adverse effects on her property.

34. We note that in Docket No. CP07-447-000, filed subsequent to the completion of the environmental assessment (EA) for the current proposal, Northern proposes to install an additional 1,400 horsepower compressor unit at the Redfield Compressor Station. In that proceeding, Northern reported that in June 2007, acoustic filters were installed on the existing suction and discharge piping compressor facilities at the Redfield Station. In addition, on August 14, 2007, Northern performed an ambient noise survey at the nearest noise sensitive areas (NSA) when the Redfield Compressor Station was operated at "maximum summertime load" conditions, which does not appear to represent the full load operating capacity of the compressor station. That survey showed that the measured noise level at Ms. Short's residence was 62 dBA (68.4 equivalent L_{dn}), which is well in excess of the current standard of 55 dBA L_{dn} . No vibration data was provided in that survey report. Our staff is in the process of analyzing the proposal in Docket No. CP07-447-000.

35. We will require that Northern perform and submit to the Commission an updated ambient noise survey taken during full station load with all compressor units running and a vibration survey taken with all compressor units running under maximum vibration operating conditions, in order to document the efficacy of the mitigation measures implemented to date and establish accurate baseline conditions for the station prior to installation of the units proposed here. The importance of documenting the current noise and vibration environment in light of the complaints received to date is underscored by Northern's proposal in Docket No. CP07-447-000, which may further exacerbate the effects of noise and vibration emanating from the Redfield Compressor Station.

36. Our staff prepared an EA for Northern's proposal which was issued on August 7, 2007. The EA addresses geology, soils, water resources, fisheries, wetlands, vegetation, wildlife, threatened and endangered species, cultural resources, land use, air quality, noise, reliability, safety and alternatives.

37. Based on the discussion in the EA, we conclude that if constructed, abandoned, and operated in accordance with Northern's application and supplements, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment. As recommended in the EA, this authorization includes the environmental condition listed in the appendix to this order.

38. 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/replacement or operation of facilities approved by this Commission.²³

39. For the reasons discussed above, and with the conditions imposed by this order, the Commission concludes that the certificate and abandonment authorizations requested by Northern are required by the public convenience and necessity.

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

The Commission orders:

(A) A certificate of public convenience and necessity pursuant to NGA section 7(c) is issued to Northern in Docket No. CP07-108-000 authorizing it to increase the maximum certificated storage capacity at Redfield by 8.551 Bcf to 130.551 Bcf, as conditioned herein and as more fully described in Northern's application and the body of this order.

(B) Permission for and approval of Northern's abandonment of compression facilities under section 7(b) of the NGA, as described in the body of this order and in the application in Docket No. CP07-108-000, is granted.

(C) Northern shall report the maximum shut-in bottom-hole pressures in the Mt. Simon, St. Peter, Galena and Elgin reservoirs, and the corresponding capacities in the Mt. Simon, St. Peter, Galena and Elgin reservoirs, when the total capacity at Redfield reaches 130.551 Bcf, or at the maximum injection capacity for each calendar year.

²³See, 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).

(D) The certificate issued in Ordering Paragraph (A) is conditioned on Northern's:

- (1) implementing the Redfield Storage capacity increase and making the capacity available for service to the facilities described herein within 12 months of the date of the order in this proceeding as required by section 157.20(b) of the Commission's regulations;
- (2) complying with all regulations under the NGA including, but not limited to, paragraphs (a), (c), (e) and (f) of section 157.20 of the Commission's regulations;
- (3) making tariff compliance filings to reflect the increases in FDD services at Redfield;
- (4) The collective maximum amount of gas to be injected into the St. Peter, Elgin and Galena formation shall not exceed 55.472 Bcf. The maximum amount of gas to be injected into the Mt. Simon formation shall not exceed 75.079 Bcf;
- (5) The authorized maximum shut-in BHPs are 730 psig for the Elgin reservoir; 910 psig for the St. Peter reservoir; 1,338 psig for the Mt. Simon reservoir; and 900 psig for Galena reservoir;
- (6) At no time shall gas be injected into the Elgin formation except for operational and maintenance purposes; and
- (7) Complying with the environmental conditions listed in the appendix to this order.

(E) Consistent with the determination in Docket No. RP06-437-000, Northern has market-based rate authority for its services using the expansion capacity approved herein. Northern shall maintain separate accounting records to ensure that existing cost-based rate customers will not subsidize the costs of the expansion:

- (1) Northern will separately account for all costs and revenues associated with the incremental facilities used to provide the market-based services. Separate plant-related accounts will be maintained to record the costs associated with all of the new facilities, including the new pipe, compression and the

incremental base gas. These costs shall include the funds expended for the testing that was conducted in 2006 and the costs associated with the 2007 interim expansion, as discussed herein. Depreciation for the expansion facilities will be calculated based on the expected economic life of these facilities; and

- (2) Separate accounts will be maintained for the incremental revenue, incremental operation and maintenance expenses and future incremental capital associated with the expansion. Northern will assume the risk of any additional costs required to support this expansion in the future and will not intermingle costs between this proposed expansion and Northern's existing cost-based facilities and services.

(F) Northern 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 Northern. Northern shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission. Commissioner Kelly dissenting in part with a separate statement attached.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

APPENDIX

Environmental Conditions

As recommended in the EA, this authorization includes the following condition(s):

1. Northern shall follow the construction procedures and mitigation measures described in its application and as identified in the EA, unless modified by this Order. Northern 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 OEP before using that modification.
2. The Director of the 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 the project construction and operation.
3. **Prior to any construction**, Northern shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EIs), and contractor personnel would be informed of the EI's authority and have been or would be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EA, as supplemented by filed alignment sheets. **As soon as they are available, and**

before the start of construction, Northern 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 the facility 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.

5. Northern shall file updated status reports prepared by the head EI with the Secretary on a **bi-weekly** basis **until all construction and restoration activities are complete**. On request, these status reports would also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:

- a. The current construction status of the project spread, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
- b. A listing of all problems encountered and each instance of noncompliance observed by the EI(s) during the reporting period both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies;
- c. 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 that 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 Northern from other federal, state, or local permitting agencies concerning instances of noncompliance, and Northern's response.

6. **Prior to construction**, Northern shall file for review and approval of the Director of the Office of Energy Projects (OEP):

- a. the results of a revised acoustical analysis, including a current ambient noise survey of the existing facilities operating at full load that clearly demonstrates the results of the mitigation measures

implemented to date, and noise mitigation plan for the proposed project modification areas;

- b. an analysis containing a description and specifications of all noise control measures (such as intake and exhaust silencers, and building and pipe insulation) that Northern would add to the proposed engine/compressor units; and
- c. a description of the construction of the proposed compressor building and insulation specifications for the building walls and ceiling.

The analysis shall quantify the magnitude and frequency spectrum of principal noise sources associated with operations and specify noise mitigation measures, including specific noise control equipment, necessary to reduce the noise levels to meet the FERC criterion of 55 dBA L_{dn} at the nearest noise sensitive area (NSA).

7. **Prior to construction**, Northern shall file with the Secretary, for review and approval by the Director of OEP, a noise analysis for the drill locations. This analysis shall identify the finalized drill location for each well on a U.S.G.S. 7 1/2-minute-series topographic map and all NSAs within one half mile of the well, the estimated length of time for completion of drilling work at the drill site, whether drilling would be done 24-hours per day, the distance and direction of the closest NSAs, the ambient noise, and the estimated noise impact at the NSAs at each location along with all noise mitigation which Northern would implement during drilling activities to reduce noise at the NSAs as follows: During drilling operations Northern shall monitor noise and make all reasonable efforts to restrict noise increases to no more than 10 dBA above ambient if the resulting impact is above 55 dBA L_{dn} .

8. Northern shall conduct a noise survey at the Redfield Compressor Station to verify that: (a) the noise from all the equipment operated at full capacity does not exceed the previously existing noise levels that are at or above an L_{dn} of 55 dBA at the nearby NSAs; and (b) the noise contribution from the proposed units does not exceed 55 dBA at any NSA. The results of this noise survey shall be filed with the Secretary no later than 60 days after placing the modified units in service. If any of these noise levels are exceeded, Northern shall, **within 1 year** of the in-service date, implement additional noise control measures to reduce the operating noise level at the NSAs to or below the previously existing noise level. Northern shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

9. Northern shall assure that the change in total vibration levels from the Redfield Compressor Station are not perceptible at nearby NSAs and file the results of a vibration analysis with the Secretary **no later than 60 days** after placing the modified Redfield Compressor Station in service. If the change in peak vibration attributable to the operation of the Redfield Compressor Station is perceptible at any nearby NSAs, Northern shall file a report on what changes are needed and shall install/implement additional vibration control mitigation measures **within 90 days thereafter**. Northern shall confirm compliance with this requirement by filing the results of a second vibration analysis with the Secretary **no later than 60 days** after it installs the additional vibration controls.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Northern Natural Gas Company

Docket No. CP07-108-000

(Issued March 12, 2008)

KELLY, Commissioner, *dissenting in part*:

As with the November 2006 Declaratory Order in Docket No. RP06-437-000¹, and the April 2007 Order Denying Rehearing of that order², I must dissent from this order to the extent that I continue to believe that the applicant failed to meet the requirements of Order No. 678 to: (1) prove that market-based rates are in the public interest (i.e. needed to permit the expansion) and (2) provide adequate customer protections. My dissents in the earlier proceeding set forth in great detail my reasoning, and therefore I will not repeat the discussion here.

In all other respects, I support the findings set forth in this order.

Sudeen G. Kelly

¹ 117 FERC ¶ 61,191 (2006)

² 119 FERC ¶ 61,072 (2007).