134 FERC ¶ 61,247
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

Northern Natural Gas Company Docket No. CP10-449-000

ORDER GRANTING CERTIFICATE AND DENYING AUTHORITY TO CHARGE MARKET-BASED RATES

(Issued March 30, 2011)

1. On June 2, 2010, Northern Natural Gas Company (Northern) filed an application under sections 7(c)[1] and 4(f)[2] of the Natural Gas Act (NGA) and Part 157 of the Commission's regulations[3] requesting authority to: (1) increase the currently certificated maximum storage and withdrawal capacities at its existing Redfield storage facility in Dallas County, Iowa; (2) construct minor improvements, and (3) provide the additional firm storage service made possible by those improvements and additional base gas at market-based rates. Northern has designated the proposed expansion as its Redfield Expansion 2011 Project and proposed to initiate such service on June 1, 2011. The Commission will grant Northern authority to construct and operate facilities to provide additional levels of firm storage service but will deny Northern's request for authorization to charge market-based rates for the storage services under NGA section 4(f). Instead, the certificate authorization is conditioned upon Northern's filing to establish cost-based recourse rates for the proposed services.

I. Background

2. Northern operates an interstate natural gas pipeline system extending approximately 1,150 miles from the production areas of West Texas to Northern Minnesota. Northern stores natural gas in several storage fields and delivers gas supply to geographically dispersed markets located in the upper Midwest.

---

[1] 15 U.S.C. § 717(f)(c) (2006).

[2] 15 U.S.C. § 717(c)(f)(1)(A) (2006).

[3] 18 C.F.R. § 157.1, *et seq*. (2010).

3. The Redfield storage facility, originally certificated in 1954,[4] encompasses approximately 12,600 acres of surface area, with natural gas storage certificated in four stacked underground aquifer-type reservoir formations: Elgin, Galena, St. Peter, and Mt. Simon. The Elgin, Galena, and St. Peter reservoirs are connected by a naturally occurring geological pathway through the major faults on the eastern edge of the main storage structure. Within the Redfield storage facility there are approximately 60 miles of pipeline, a compressor station with seven compressor units totaling 16,760 horsepower, and injection/withdrawal and observation wells into each reservoir.

4. In the last five years, Northern has pursued several projects incrementally increasing the certificated capacity of its Redfield storage facility by approximately 14 Bcf, to a total of 133.75 Bcf of working and base gas.[5] In 2008, the Commission authorized Northern to provide service utilizing 8 Bcf of the working gas capacity at market-based storage rates, pursuant to the provisions of section 4(f) of the NGA.[6] Northern currently provides service utilizing the remainder of the capacity at cost-based rates.

II. <u>Proposal</u>

5. Northern proposes to construct and operate facilities to increase the maximum certificated capacity of the Redfield storage facility by 1 Bcf[7] of base gas and to increase

---

[4] *Northern Natural Gas Co.*, 13 FPC 1344 (1954).

[5] *See Northern Natural Gas Co.*, 114 FERC ¶ 61,308 (2006) (authorizing 2 Bcf working gas capacity increase); 120 FERC ¶ 61,031 (2007) (authorizing 2 Bcf increase in working gas capacity); and 122 FERC ¶ 61,227, *reh'g granted and order clarified*, 122 FERC ¶ 61,270 (2008) (authorizing additional 6 Bcf of working gas capacity – total of 8 Bcf including 2 Bcf authorized in 2007). In addition in 2010, Northern increased its working gas capacity by another 2.1 Bcf under its blanket certificate authority. *See* Prior Notice Request in Docket No. CP10-37-000 (2010). (Northern proposed to use this increment of capacity to provide only interruptible, as opposed to firm, service until such time as the actual associated base gas requirement was determined and finalized – anticipated no later than the end of the third cycle storage period of 2012-2013).

[6] *See Northern Natural Gas Co.*, 117 FERC ¶ 61,191 (2006), *reh'g denied*, 119 FERC ¶ 61,072 (2007); and 122 FERC ¶ 61,227, *reh'g granted and order clarified*, 122 FERC ¶ 61,270 (2008).

[7] Specifically, Northern proposes that the certificated capacity of the Mt. Simon formation be increased from 80.25 Bcf to 81.25 Bcf and that the certificated storage capacity of the Redfield storage field be increased from its current 133.75 to 134.75 to accommodate 1 Bcf of additional base gas.

the certificated withdrawal rate to 640 MMcf per day. Northern states that its proposals will enable it to provide 2 Bcf of working gas storage service on a firm basis.

6. More specifically, Northern proposes to construct and operate eight existing, injection/withdrawal well tie-overs to allow gas to flow from the Mt. Simon formation into the St. Peter piping; upgrade programming for an existing dehydration tower; install (on an existing compressor) a second suction-side gas filtering vessel to eliminate flow restrictions; replace a leaky discharge check valve; upgrade a turbine fuel control system; install a new valve for three-stage compression; and implement other unstated plant modifications. Northern states that the addition of these facilities, together with the injection of up to 1 Bcf of new base gas (in addition to injection of the 1.1 Bcf of additional base gas authorized in Northern's 2010 prior notice application but, according to Northern's application in this proceeding, not yet injected) will enable it to convert to firm service the 2 Bcf of interruptible storage service authorized in the 2010 prior notice proceeding.[8]

7. Northern held an open season between April 12, 2010, and May 12, 2010, for up to 2.0 Bcf of firm storage service under Rate Schedule FDD at its Redfield storage field. The open season announcement specified that Northern would seek market-based storage rates for all firm volumes awarded through the process. Northern states that for purposes of the open season it established a reserve price of $1.75 per Dth, which is the 100 percent load factor annual cycle unit rate for its project, and specified a minimum term of 15 years and a maximum term of 20 years. Northern states that it received three bids meeting its specified terms, requesting a total of 2.5 Bcf of firm service. On May 21, 2010, Northern executed a precedent agreement with CenterPoint Energy Resources Corp. dba CenterPoint Energy Minnesota Gas (CenterPoint), a local gas distribution company, for all of the proposed 2 Bcf of firm storage service for a 20-year period at a market-based rate of $1.75 per Dth.[9]

8. Northern maintains that market-based storage rates are necessary to induce Northern to assume what it characterizes as significant operating risk to expand an aquifer storage facility, together with the cost risk related to the uncertain base gas requirements and the potential need for additional facilities to provide the deliverability to support injections and withdrawals, while providing rate certainty to its project customer under a 20-year contract. Northern asserts that the fact that its

---

[8] *See* Prior Notice Request in Docket No. CP10-37-000 (filed December 30, 2009) became effective on March 9, 2010.

[9] Northern did not accept the two other bids during the open season, each for 250,000 Dth for 16 years, at rates of $1.21 per Dth and $1.10 per Dth. *See* Northern's Data Response No. 3 (filed December 2, 2010). *See* Certificate Application at Exhibit I.

proposed firm service is fully-subscribed demonstrates that its project is needed and can be constructed without subsidies from existing cost-based customers. Northern further contends that since all of the proposed capacity has been subscribed under a 20-year agreement, there is no way it would be able to exert market power or withhold the capacity. Finally, Northern asserts that the new market-based rate firm storage service will not operationally impact existing firm service.

III. Public Notice, Interventions, and Comments

9. Public notice of Northern's application was published in the *Federal Register* on June 23, 2010 (75 Fed. Reg. 35,779 (2010)). Timely motions to intervene were filed by Black Hills Utility Holdings, Inc.; CenterPoint; Minnesota Energy Resources Corporation (Minnesota Energy); Northern States Power Company – Minnesota, Northern States Power Company – Wisconsin, and Southwestern Public Service Company, jointly (Xcel Energy Companies); MidAmerican Energy Company; Madison Gas and Electric Company; and Golden Spread Electric Cooperative, Inc. Minnesota Energy's and Xcel Energy Companies' interventions included comments. Xcel Energy Companies filed supplemental comments on January 19, 2011. Northern filed answers to the comments on July 27, 2010 and February 11, 2011.[10]

10. Xcel Energy Companies, while not opposing Northern's request for market-based storage rate authority, ask the Commission to provide guidance and clarify the standards the Commission will apply in determining whether or not to grant a future application filed pursuant to NGA section 4(f) for market-based storage rate authority. Xcel Energy Companies ask the Commission to announce that, in future cases, applicants will not be permitted to use section 4(f) to convert existing or previously-certificated cost-based storage capacity to market-based rate storage capacity. Xcel Energy Companies also seek clarification that before granting market-based rate authority under NGA section 4(f), the Commission must find that, in cases involving an existing storage field, the proposal will expand the physical capacity of the field above the pre-existing level, and that an applicant's risk assessment is credible and is supported by Exhibits K (cost of facilities) and N (Revenues, Expenses, and Income) at the maximum cost-based rates in effect and at the market-based rates at which the storage applicant has agreed to sell capacity. Xcel Energy Companies assert that without such guidance and clarification, section 4(f) will be well along the path of being transformed from a statute designed to encourage the construction of storage capacity that would not be constructed at cost-based rates, into a death blow for the construction of otherwise viable cost-based rate storage capacity.

[10] In order to provide a complete record upon which to base its decision, the Commission will grant waiver as provided for in Rule 213 of the Commission's Rules of Practice and Procedure to accept Northern's answers. 18 C.F.R. § 385.213 (2010).

11. Minnesota Energy, a transportation and firm storage customer on Northern's system, does not oppose expansion of the storage field, but asserts that existing pipeline take-away capacity through Palmyra, Oakland, and Ogden, Iowa, does not support the proposed expansion of firm storage capacity and increased withdrawal rights. Northern asserts that the take-away capacity issue is not relevant to the merits of market-based storage rates.

IV. Discussion

12. Since the construction and operation of the proposed facilities would involve the transportation of natural gas in interstate commerce subject to the jurisdiction of the Commission, the proposals are subject to the requirements of sections 7(c) and (e) of the NGA.

A. Certificate Policy Statement

13. The Certificate Policy Statement provides guidance as to how the Commission will evaluate proposals for certificating new construction.[11] The Certificate Policy Statement establishes 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 expansion of pipeline facilities, the Commission balances the public benefits against the potential adverse consequences. The Commission's goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, and the avoidance of the unnecessary exercise of eminent domain or other disruptions of the environment.

14. 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 existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any other 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 proposals. 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

[11] *Certification of New Interstate Natural Gas Pipeline Facilities*, 88 FERC ¶ 61,227 (1999), *clarified*, 90 FERC ¶ 61,128 (2000), *further clarified*, 92 FERC ¶ 61,094 (2000) (Certificate Policy Statement).

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

15. As proposed, Northern's expansion project satisfies the threshold requirement of the Certificate Policy Statement because recovery of the costs of the project through market-based storage rates would preclude subsidization of those costs by existing customers. However, as is discussed below, the Commission is denying Northern's request for authority to charge market-based storage rates for service related to this project and will require Northern to establish cost-based recourse rates for that service that will still protect existing customers from subsidizing the costs of the project. Thus, we will condition the certificate authority granted by this order on Northern's filing proposed initial recourse rates for 2 Bcf of firm storage service within 30 days of the issuance of this order. In addition, we will require Northern to hold a new open season for the firm capacity that includes a cost-based recourse rate option.

16. We find that the proposed project will have no adverse impacts on Northern's existing customers or their services. Minnesota Energy, while not protesting the application, expressed concerns that the firm storage capacity currently offered by Northern already exceeds firm take-away capacity at locations like Ogden, Iowa. Minnesota Energy contends that such shortages of take-away capacity limit the ability of existing shippers to fully use their firm storage rights. Minnesota Energy is concerned that adding additional levels of firm storage service (by converting the capacity recently authorized in Docket No. CP10-37-000 from interruptible to firm storage service)[12] will only worsen the existing take-away problems.

17. The issue raised by Minnesota Energy does not relate directly to Northern's current or proposed storage service. Rather, it involves separate transportation services used by storage customers to deliver gas to or withdraw gas from storage. In *Columbia Gas Transmission Corp.*,[13] the Commission explained that it does not require that pipelines provide incremental transportation service to support new storages service, noting that potential shippers usually have several options available for obtaining firm transportation service, including entering into agreements with pipelines that would support the construction of additional transmission facilities, obtaining firm transportation service via capacity release, or bidding on existing capacity as it becomes available for renewal. These same options are available to existing customers desiring additional pipeline transportation service.

18. Further, the Commission is satisfied that the project should have no adverse impact on existing pipelines or storage providers, or their captive customers, as the

---

[12] *See Supra*/Note 5.

[13] 126 FERC ¶ 61,237 (2009), at P 54 and n.51.

project is designed to serve an incremental demand evidenced by the fact the project is fully-subscribed under a precedent agreement with a 20-year term. No pipeline, storage provider, or customer protested the project. In addition, the project will be constructed entirely within the existing fenced storage facility yard. Northern will not need to acquire any additional land for the projects, and no new permanent or temporary access roads will be constructed. Accordingly, no adjacent landowners will be affected by the project, nor have any landowners or communities filed protests. Thus, consistent with the Certificate Policy Statement and section 7(c) of the NGA, the Commission concludes that the proposed expansion of the Redfield storage facility, as conditioned to require that service be provided at cost-based rates, is required by the public convenience and necessity.

B. Criteria for Market-Based Storage Rates under NGA Section 4(f)

19. Section 4(f) of the NGA provides that the Commission "may" authorize a natural gas company to provide storage and storage-related services at market-based storage rates notwithstanding the fact that the company is unable to demonstrate that it lacks market power, if the Commission determines that certain specified requirements are met. It is significant that the Commission's grant of market-based storage rates pursuant to this provision is discretionary. A company that is unable to demonstrate that it lacks market power is not entitled to charge market-based rates for its storage services, even if all of the statutory criteria are met. However, as discussed below, the Commission finds that Northern has not demonstrated that the project proposed here meets all the statutory and regulatory requirements to receive market-based storage rates under section 4(f) of the NGA.

20. In Order No. 678, the Commission promulgated rules to implement NGA section 4(f).[14] The Commission determined that under its rules, storage providers would be able to seek market-based storage rates for service associated with capacity related to any "specific facility" requiring certification placed in service after August 8, 2005 (the effective date of the Energy Policy Act of 2005), be it a new storage cavern or a facility which expands capacity at an existing cavern or reservoir.[15] However, the storage provider would still need to demonstrate that (1) market-based storage rates are in the public interest and necessary to encourage the construction of the storage capacity in the area needing storage services; and (2) the storage provider has provided a means of protecting customers from the potential exercise of market power.[16]

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

[15] Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 115.

[16] 18 C.F.R. § 284.505(a) (2010).

21. For the reasons discussed below, the Commission will deny Northern's request for authorization to charge market-based rates for the storage services under NGA section 4(f). While the minimal facilities proposed and approved herein will enable Northern to provide firm storage service using 2 Bcf of capacity that is currently available only on an interruptible basis, Northern's proposal will not increase the currently-certificated working gas capacity of its Redfield storage facility. Moreover, Northern does not assert that it was unable to obtain sufficient long-term commitments at cost-based rates to support its project or otherwise demonstrate that market-based rates are necessary for it to secure financing for the project. Rather, it merely states that without market-based rate authority, it will not proceed with the project. As discussed below, the Commission finds that this assertion alone, especially in the context of what appears to be a relatively low-risk undertaking for an established natural gas company, is insufficient to support a determination that "market-based rates are in the public interest and necessary to encourage the construction of the storage capacity."[17]

22. As listed above, the physical facilities which Northern needs to construct in connection with this project are minimal. In fact, it is arguable that the proposed tie-overs, gas filtering facilities, dehydration controls, and valves would qualify as auxiliary facilities as defined in section 2.55 of the Commission's regulations,[18] and thus, be excluded from the certificate requirements of NGA section 7(c), but for the fact, as alleged by Northern, that they are not being constructed "only for the purpose of obtaining more efficient or more economical operation" of the existing storage facilities. Rather, Northern contends that they are necessary to enable Northern to provide firm service from capacity that is currently only used for interruptible services. Beyond these

---

[17] 15 U.S.C. § 717(c)(f)(1)(A) (2006).

[18] 18 C.F.R. § 2.55(a)(10) provides:

> For purposes of section 7(c) of the Natural Gas Act, as amended, the word *facilities* as used therein shall be interpreted to exclude:
>
> (a) *Auxiliary installations.* (1) Installations (excluding gas compressors) which are merely auxiliary or appurtenant to an authorized or proposed transmission pipeline system and which are installations only for the purpose of obtaining more efficient or more economical operation of the authorized or proposed transmission facilities, such as: Valves; drips; . . . yard and station piping; . . . gas cleaning, cooling and dehydration equipment . . . .

minimal facilities,[19] Northern is proposing to acquire and inject up to 1 Bcf of additional base gas, which it states is a facility for which certificate authority is required.[20]

23. Presuming Northern has met the "facility" requirement of NGA section 4(f), it still bears the burden of showing that market-base rates are in the public interest and necessary to encourage the construction of storage capacity.[21] The Commission views these as two separate requirements and expects each applicant to support its contentions with respect to each element.[22]

24. As noted by Xcel Energy Companies in their comments, Northern's proposal does not create any working storage capacity above Northern's currently certificated working gas level. Rather, Northern contends that the proposed reworking of existing wells, together with the injection of additional base gas, will enable it to provide on a firm basis 2 Bcf of storage service using capacity that was previously-authorized through its prior-notice filing in Docket No. CP10-37-000. The authorization obtained by Northern in the prior-notice proceeding did not limit Northern's use of the capacity created therein, achieved without the construction of any additional facilities, to the provision of

---

[19] There was significantly more construction involved in other proceedings in which the Commission authorized market-based rates under section 4(f). *See, e.g.*, *Southern Star Central Gas Pipeline, Inc.*, 131 FERC ¶ 61,154 (2010) ($23.1 million cost to construct new compressor station with a 6,283 horsepower compressor unit to enable a 4 Bcf increase in certificated storage and withdrawal capacities); *Columbia Gas Transmission, LLC*, 126 FERC ¶ 61,237 (2009) (construct 13.4 miles of pipeline within the storage field, 19 new storage wells, convert 21 existing wells to injection/withdrawal/counter storage wells, recondition 21 wells, and construct new anode ground beds and new mainline and gate valves to enable 6.7 Bcf of new storage capacity); *Northern Natural Gas Co.*, 122 FERC ¶ 61,227 (2008) (construct and modify wells, piping, compression, and auxiliary facilities, store gas in a new reservoir and expand capacity in existing reservoirs, and add 0.551 Bcf of base gas to enable an 8 Bcf increase in firm working gas storage capacity); *Texas Gas Transmission, LLC*, 122 FERC ¶ 61,190 (2008) (construct 2,900 foot storage lateral pipeline, field tributary pipeline, injection/withdrawal wells, 5,488 horsepower gas turbine compressor, and other pipeline facilities to enable an 8.25 Bcf increase in firm working gas storage capacity and up to 92.2 MMcf/d of increased firm deliverability).

[20] *See Williston Basin Interstate Pipeline Co.*, 125 FERC ¶ 61,117 (2008) (certificate granted to acquire cushion gas by lease) and *Consolidated Gas Supply Corp.*, 42 FPC 1008 (1969) (cushion gas is a facility under NGA section 7).

[21] Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 125.

[22] *Id*.

interruptible service. Instead, as noted by Northern in its prior-notice filing, the incremental capacity would be offered as interruptible storage service "until such time as the base gas requirement is determined and finalized."[23] Northern stated that it expected to finalize the base gas increase requirement no later than the end of the third cycle period (the 2012-2013 storage cycle). Moreover, since the 2.1 Bcf of interruptible working gas capacity proposed in Docket No. CP10-37-000 was authorized under Northern's blanket certificate, it is presumed that all services using that capacity will be provided at an existing system rate.[24] Thus, while Northern may be proposing in its instant application to add new facilities (i.e., up to an additional 1 Bcf of base case and minor improvements), we find that it is not proposing the creation of any "new storage capacity" which can be used to provide market-based rate storage service. Rather, it is seeking to construct additional facilities which will enhance its ability to provide firm storage service at market-based rates using storage capacity which it is already authorized to use for cost-based storage services.[25]

25. The Commission acknowledges that it is not uncommon for a pipeline to incorporate capacity initially approved in one proceeding as part of a subsequently-proposed and authorized project. Indeed, the Commission allowed Northern to incorporate 2 Bcf of capacity proposed and approved for interruptible service at cost-based rates in Docket No. CP06-461-000[26] as part of its 8 Bcf section 4(f) market-based rate expansion of this same Redfield storage field. However, in that instance Northern filed for case-specific authorization to construct the initial 2 Bcf of capacity (instead of proceeding under its blanket certificate authority) and it was clearly understood by all parties that the 2 Bcf expansion was intended as an interim step toward a larger project

---

[23] Prior Notice Request in Docket No. CP10-37-000, at n. 14.

[24] *See, e.g., Tennessee Gas Pipeline Co.,* 110 FERC ¶ 61,047, *reh'g denied,* 111 FERC ¶ 61,094 (2005), discussing the Commission's rejection of a pipeline's proposal to construct a five-mile lateral line under blanket authority and charge an incremental rate. Blanket certificate projects are afforded a presumption that they will qualify for rolled-in rate treatment in a future NGA section 4 rate proceeding because the resulting rate impact is usually very small. *See Destin Pipeline Co., L.L.C.,* 83 FERC ¶ 61,308 (1998).

[25] *See Northern Natural Gas Co.,* 133 FERC ¶ 61,210, at P 11 (2010), *reh'g pending.* The Commission found that requirements of section 4(f) (that the storage capacity for which market-based rates is being sought is related to new facilities and is necessary to encourage the construction of the storage capacity) cannot be satisfied with respect to storage capacity that has already been constructed.

[26] *Northern Natural Gas Co.,* 120 FERC ¶ 61,031, *certificate amended,* 120 FERC ¶ 62,158, *reh'g granted*, 121 FERC ¶ 61,254 (2007).

for which market-based storage rates would be requested.[27] Such was not the case with Northern's prior notice expansion in Docket No. CP10-37-000.

26. In Order No. 678, the Commission stated that in determining whether market-based storage rates for a particular project are in the public interest, the Commission will consider, among other things, the risk of the project and the investment required to fund it. The Commission noted that, generally, it would expect that for market-based storage rates to be in the public interest, such rates would be necessary in order for the project sponsor to secure financing and move forward with the project. The Commission indicated that it is unlikely that market-based storage rate authorization would be in the public interest or necessary to encourage relatively risk-free expansions of storage.[28] It also stated that it believed that an existing pipeline will face fewer difficulties in securing financing for incremental expansions of existing storage facilities.[29] Here, Northern estimated a total facility cost for its Redfield Expansion 2011 Project, excluding base gas costs, of approximately $1.7 million.[30] Northern itself states that this is "not a large project."[31] Even with the addition of base gas, Northern intends to finance the project with internally generated funds.[32] The Commission is not persuaded that Northern requires the ability to charge market-based rates in order to finance this project.

27. The amount of risk associated with the proposed project is an important consideration in the Commission's determination of whether to grant market-based storage rates under section 4(f). We noted in Order No. 678 that a new entrant in the market faces higher risk than a going concern with existing customers and financial relationships pursuing an incremental expansion.[33] Northern is a sophisticated, established participant in the business of providing open access storage at Redfield. Redfield has been used for gas storage since 1954. Storage gas has been cycled through the Mt. Simon reservoir since 1957 and the reservoir has undergone several capacity expansions. Northern's consultant states that Northern operates the Redfield facility in a

[27] *Id.*, 120 FERC ¶ 61,031 at P 7.

[28] Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 126.

[29] *Id.* P 127.

[30] S*ee* Northern's Data Response No. 1, Exhibit K (filed December 2, 2010).

[31] *See* Certificate Application at Resource Report at 10-1. Additionally, Northern's own consultant questions the need for the proposed improvements to enable the requested firm service. Certificate Application at Exhibit Z at 11.

[32] *See* Northern's Data Response No. 1, Exhibit L (filed December 2, 2010).

[33] Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 127.

predictable fashion in terms of injections, withdrawals, and pressure changes within the reservoir.[34] The consultant estimates any new firm working gas will behave similarly to the historical behavior of earlier expansions.

28. Northern asserts that market-based storage rates are justified because of the risks associated with unknown base gas requirements. Northern was authorized in its prior notice proceeding in Docket No. CP10-37-000 to increase its base gas at Redfield by up to 1.1 Bcf. Here, Northern seeks authority to add another 1 Bcf of base gas. Northern presents one scenario in which up to a total of 3.8 Bcf of base gas might be needed. At the same time, the study provided by Northern's consultant suggests that, based on historical performance and new reservoir data, minimal increases to base gas volumes may be required because gas saturation is extensive in the Redfield reservoirs.[35] In quantifying this risk, Northern assumes base gas requirements ranging from 2.2 Bcf to 3.8 Bcf, at prices ranging from $5.51 per Dth to $10.34 per Dth.[36] We accept Northern's position that the actual amount of base gas needed to provide 2 Bcf of firm storage service will not be known for certain until the end of the 2013-2014 storage cycle. However, we do not find the fact that the long-range base gas requirement and future gas prices are unknown to be adequate justification to grant Northern authority to charge market-based rates under section 4(f) for the proposed firm storage services.

29. We acknowledge that the Commission relied on similar arguments in 2006 when it found that Northern's 2008 FDD Expansion would qualify for market-based storage rates under section 4(f).[37] However, we believe the factual differences between the cases support the different outcome. The 2008 project was a major (8 Bcf) expansion of the then certificated level of working gas storage capacity at the Redfield storage facility and, notably, involved the initial connection of the Galena reservoir to the rest of the field. In addition, the project involved the construction of significantly more facilities, including five new injection/withdrawal wells and the addition of 8,360 horsepower of new compression. In its current application, Northern points out that it has completed a technical resource evaluation of its Redfield storage facility which represents a

---

[34] *See* Certificate Application at Exhibit Z at 4.

[35] *See* Certificate Application at Exhibit Z at 9.

[36] *See* Northern's Data Response No. 1, Exhibit N (filed December 2, 2010). However, we note that forecasts for natural gas supply have increased and well-head prices are stabilizing at prices significantly below $10 per Dth. *United States Energy Information Administration, Forecasts and Analyses, Short-Term Energy Outlook, Table 5b (U.S. Regional Natural Gas Prices)* (2011).

[37] *Northern Natural Gas Co.*, 117 FERC ¶ 61,191 (2006), *reh'g denied*, 119 FERC ¶ 61,072 (2007).

continuation of the analysis performed for the four previous expansions at Redfield.[38] While we accept that Northern might not know all there is to know about its Redfield storage facility, Northern's own consultant states that the Redfield storage facility operates in a relatively predictable fashion. This operating predictability should reduce the risks associated with future expansions in the Mt. Simon formation. The Commission acknowledges, as Northern contends, that aquifer storage facilities can be more difficult, or riskier, to develop than depleted reservoir or salt cavern facilities. However, those difficulties, in and of themselves, are insufficient to justify market-based storage rates for a company that has market power,[39] and where, as here, the company has demonstrated a record of consistent and effective operation of the facility. In addition, we find that Northern's use of its blanket certificate authority[40] to provide 1.1 Bcf of base gas to increase working gas capacity by 2.1 Bcf in Docket No. CP10-37-000 undercuts its argument that the addition of a nearly identical increment (up to 1 Bcf) of base gas in this proceeding requires the support of market-based storage rates.

30. Order No. 678 suggests that the best way for an applicant to show that market-based storage rates are necessary to encourage the construction of storage capacity would be to present evidence that it offered its capacity at cost-based rates through an open season and was unable to obtain sufficient long-term commitments at those cost-based rates.[41] However, the Commission indicated it was open to applicants making another type of showing. Here, Northern argues that it satisfied this requirement because its existing storage facilities are fully subscribed and its open season, conducted on a non-discriminatory basis, resulted in a single customer willing to subscribe to all project capacity at market-based storage rates on a long-term basis.

31. We find that Northern's open season does indicate that there is demand for the proposed firm capacity in the area to be served. We do not, however, find Northern's bare assertion that it would not build the proposed facilities without authority to charge the market-based storage rates agreed to by its project customer sufficient to demonstrate that the statutory criteria has been met. There is no indication that during the open season Northern gave potential customers the opportunity to consider entering into long-term

---

[38] Certificate Application at Exhibit Z.

[39] The Commission will presume that any storage provider seeking market-based rates for storage capacity pursuant to NGA section 4(f) has market-power. 18 C.F.R. § 284.505(b) (2010) and Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 176.

[40] The Commission's blanket certificate program is intended to facilitate the construction of *routine* projects, the costs of which are required to fall below limits set forth in our regulations.

[41] Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 129.

contracts at cost-based rates and that such customers decided against cost-based rates. Because Northern's open season lacked a cost-based option, and in the absence of a more detailed derivation of its market-based storage reserve price which would enable us to determine that that price approximated Northern's actual costs, it is impossible for the Commission to conclude that there were no potential long-term customers willing to pay Northern cost-based rates for the project.[42]

32. We also reject Northern's argument that market-based storage rates are necessary in order to provide rate certainty to its long-term customer. That same result could be obtained under Northern's negotiated rate authorization. Accordingly, the Commission will not find that market-based storage rates are necessary to encourage the construction of the firm storage capacity.[43] In addition, the Commission will condition its authorization to proceed with the project at cost-based rates on Northern's holding an open season for its firm expansion service that includes a cost-based recourse rate option.

33. Having determined that Northern has failed to show that market-based storage rates are in the public interest and necessary to encourage construction of needed storage capacity, the Commission need not address whether customers would be adequately protected under Northern's proposal if the Commission were to authorize market-based storage rates.[44]

34. We note, however, that Order No. 678 requires that the applicant must demonstrate how it intends to safeguard customers against withholding and specify whether and how it will establish a reserve price that is reasonable in the market to be served.[45] A reserve price is generally the minimum price a pipeline will accept for new capacity.[46]

---

[42] Pipelines seeking market-based rates under NGA section 4(f) have, in some instances, used cost-based rates to establish their reserve prices. *See Southern Star Central Gas Pipeline, Inc.*, 131 FERC ¶ 61,154, at P 40-43 (2010); *Columbia Gas Transmission Corp.*, 126 FERC ¶ 61,237, at P 36 (2009); and *Texas Gas Transmission, LLC*, 122 FERC ¶ 61,190, at P 33 (2008).

[43] It is, of course, up to a natural gas company to decide whether or not to go forward with a project under the conditions imposed by the Commission.

[44] In Order No. 678, the Commission discussed potential customer protection mechanisms. *See* Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 93-98, 153-167; Order No. 678-A, 117 FERC ¶ 61,190 at P 24.

[45] Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 155, 160-167.

[46] *Columbia Gas Transmission Corp.*, 126 FERC ¶61,237, at P 37 (2009).

35. Northern proposed in its open season a market-based reserve price of $1.75 per Dth, which Northern described as the 100 percent load factor annual cycle unit rate.[47] Northern invited bids at that level. Northern did not also include a project cost-based rate or a recourse rate[48] as a point of comparison for the prospective customer to evaluate. Even if a pipeline opts not to use a cost-based reserve price, knowledge of the project costs and a cost-based unit rate is valuable customer information that may influence a potential customer's bidding behavior.[49] We find that Northern has failed to indicate in detail how it derived its reserve price or that it is a reasonable price in the market to be served. The best place to provide this information is in the open season announcement.

36. As indicated in Order No. 678, the Commission ultimately will make decisions on whether market-based storage rates under NGA section 4(f) are in the public interest on a case-by-case basis, after consideration of all aspects of the section 4(f) proposal, including, but not limited to, the risk faced by the project sponsors, the extent to which additional capacity is needed in the area of the project, and the strength of the applicant's showing that the facilities would not be built but for market-based rate treatment.[50] Considering all those factors here, we find that Northern's proposal has attributes of a relatively low-risk project, dependent on previously-certificated working gas capacity, roughly equivalent amounts of previously-certificated and new base gas, and very minor facilities construction. We further find that Northern has failed to make a persuasive demonstration that market-based storage rates are necessary to encourage construction of the proposed facilities. Accordingly, we will deny Northern's request for authority to charge market-based rates for the storage service associated with its proposal.

37. Because it is requesting market-based rate authority, Northern requests waiver of 18 C.F.R. § 157.20(c)(3) (2010), requiring the true-up of project costs. For the same reason, Northern's application omits Exhibit K (cost of facilities), Exhibit L (financing), Exhibit N (revenues, expenses, and income), Exhibit O (depreciation), and Exhibit P

[47] The $1.75 per Dth rate appears to be based on the project's facility cost and a cost of $8.70 per Dth for base gas. *See* Northern's Data Response No. 1, Exhibit N (filed December 2, 2010).

[48] Northern states that the currently effective unit rate for its cost-based FDD service is approximately $0.75. *See* Northern's Data Response No. 9 (filed December 2, 2010).

[49] For example, Northern's lowest derived project cost-based unit rate, including base gas at $5.51 per Dth, was $1.19 per Dth. *See* Northern's Data Response No. 1, Exhibit N (filed December 2, 2010). This information was not in the open season announcement in Certificate Application at Exhibit Z-1.

[50] Order No. 678, FERC Stats. & Regs. ¶ 31,220 at P 128.

(pro forma tariff revisions) required by 18 C.F.R. § 157.14 (2010) for the proposed storage service. Since we are denying Northern's request for market-based storage rates, we find that Northern's request for waiver of the cost-related information required by the Commission's regulations is not justified and is denied. As explained above, our certificate authorization is conditioned on Northern's filing proposed initial recourse rates for the proposed storage service. Northern's compliance filing should include the cost-based exhibits required by the Commission's regulations, i.e., Exhibits K, L, N, O, and P.

C. Engineering

38. Northern seeks to construct facilities, including 1 Bcf of base gas, to enable the provision of firm storage service using 2 Bcf of the 2.1 Bcf of capacity authorized in Docket No. CP10-37-000. Northern states that its firm service will rely on a total of 2.2 Bcf of base gas: 1 Bcf of new base gas requested in this proceeding and 1.1 Bcf of base gas (and 0.1 Bcf of working gas capacity) authorized in Docket No. CP10-37-000. In its December 2, 2010 data request response, Northern presented in Exhibit N a scenario in which 3.8 Bcf of base gas would be required. However, Northern's consultant, Netherland, Sewell, & Associates, presented data indicating that most likely 2.2 Bcf of base gas capacity will be sufficient to support 2 Bcf of firm service.[51]

39. Since Northern states that the base gas requirements may not actually be known until after the 2013-2014 storage cycle, we will approve Northern's requested increase of 1 Bcf of capacity, conditioned on Northern's filing the final base gas requirement to support the 2 Bcf of firm service once that base gas requirement has been established but no later than the end of the 2013-2014 storage season. Further, should the base gas requirement be higher than 1 Bcf, Northern must file for authority to increase the certificated capacity of the Redfield storage facility accordingly. With this condition, we find that the proposed facilities, if constructed in accordance with the specifications discussed in the application, should enable Northern to provide 2 Bcf of additional firm service and to increase its maximum certificated withdrawal rate to 640 MMcf/d.

D. Environmental

40. To satisfy the requirements of the National Environmental Policy Act, our staff prepared an environmental assessment (EA) for Northern's proposal. The analysis in the EA is limited to Northern erosion control and restoration plans, compliance with the Endangered Species Act and National Historic Preservation Act, and alternatives, because all ground disturbing activities would occur entirely within Northern's existing fences and graveled natural gas facility yards. No additional land will be needed and no new permanent or temporary access roads would be constructed by the project. No environmentally sensitive resources will be affected.

---

[51] *See* Certificate Application at Exhibit Z.

The EA was placed into the public record on July 23, 2010. We received no comments on the EA. Northern states that the proposed facilities would be designed, constructed, tested, operated, and maintained in compliance with the requirements of Title 49 Code of Federal Regulations (CFR), Part 192, Transportation of Natural and Other Gas by Pipeline: Minimum Safety Standards; 18 CFR, 380.15 Siting and Maintenance Requirements; and all other applicable federal and state regulations.

41. Construction will be conducted in accordance with the Commission's Upland Erosion Control, Revegetation and Maintenance Plan. Based on the discussion in the EA, we conclude that if constructed and operated in accordance with Northern's application, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

42. Any state or local permits issued with respect to the jurisdictional facilities authorized here 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.[52]

Conclusion

43. In conclusion, this order grants Northern's request for authorization to construct and operate certain facilities and to increase capacity, but rejects Northern's request for market-based storage rate authority for its proposed expanded firm storage service because its proposal does not satisfy the criteria of NGA section 4(f) that: (1) market-based rates are in the public interest (i.e., facilities would not be built but for market-based rate treatment); (2) market-based rates are necessary to encourage the construction of storage capacity in the area needing storage services; and (3) customers are adequately protected.[53] The Commission finds that market-based storage rates are not necessary to encourage construction of Northern's proposed facilities and are not in the public interest. Northern's project involves the construction of minimal facilities, relies on previously-certificated base and working gas capacity, and appears to entail little corporate or project risk. A grant of market-based storage rates to a company with market power under these

[52] *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); *Iroquois Gas Transmission System, L.P. et al.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

[53] NGA section 4(f), 15 U.S.C. § 312(f); *see also* Order No. 678, at P 125-139; *Columbia Gas Transmission Corp.*, 126 FERC ¶ 61,237, at PP 24-47 (2009).

circumstances is unjustified.[54] As described below, the certificate authority granted herein is conditioned upon Northern's further filing to establish cost-based recourse rates and holding a new open season.

The Commission orders:

(A) Northern's request for a certificate of public convenience and necessity is granted as discussed in the body of this order.

(B) Northern's request for market-based storage rate authority is denied as discussed in the body of this order.

(C) Northern must file to establish appropriate cost-based recourse rates within 30 days after the issuance of this order.

(D) Northern is directed to hold a new open season for its firm expansion service that includes a cost-based recourse rate option.

(E) Northern's must file its final base gas requirement for the requested firm service once the base gas requirements have been established but no later than the end of the 2013-2014 storage season.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

[54] The Commission declines to grant Xcel Energy Companies' requests for specific clarifications regarding how we will consider future applications under NGA section 4(f). Our findings in this order, like our findings in past orders, will serve as precedent in future proceedings. However, beyond that, we will continue to consider such applications on a case-by-case basis.