

Minnesota Public Utilities Commission
Staff Briefing Papers

Meeting Date: November 14, 2013..... **Agenda Item #** *8

Company: Northern States Power Company d/b/a Xcel Energy (Xcel or the Company)

Docket No. E-002/CI-13-754
In the Matter of a Commission Investigation into Xcel Energy’s Monticello Life Cycle Management/Extended Power Uprate Project and Request for Recovery of Cost Overruns

Issue: Should the Commission refer this matter to the Office of Administrative Hearings for a contested case proceeding?

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Relevant Documents

Xcel Electric - 2012 Rate Case - Docket No. E-002/GR-12-961
PUC Staff Briefing Papers (pp. 9-27) Aug. 6 & 8, 2013
PUC - Findings of Fact, Conclusions, and Order (pp. 6; 17-20; & 46, ¶¶ 3, 4 & 5) Sep. 3, 2013

Xcel Electric - Monticello LCM/EPU Investigation - Docket No. E-002/CI-13-754
Xcel - Initial Filing Oct. 18, 2013
 Filing Letter & Summary
 Prudence Report
 Prefiled Direct Testimony: O’Connor, Weatherby, Alders, and Stall

The attached materials are workpapers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless otherwise noted.

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Statement of the Issue

Should the Commission refer this matter to the Office of Administrative Hearings for a contested case proceeding?

Xcel's Monticello Life Cycle Management/Extended Power Uprate Project

In 2005-2006, Xcel obtained a certificate of need from the Minnesota Public Utilities Commission (Commission) to store spent nuclear fuel on site at the Monticello plant. Xcel also received a renewal of its operating license from the Nuclear Regulatory Commission (NRC) that allows Xcel to operate the Monticello plant through 2030. Shortly after that, Xcel combined its Life Cycle Management (LCM) program with an effort to get permission from the NRC for an additional 71 MW of capacity to the Monticello plant through the Extended Power Uprate (EPU) process. In 2009, Xcel was granted a certificate of need by the Minnesota Commission which authorized Xcel to make the necessary upgrades and install the necessary equipment to implement the 71 MW uprate in capacity.

In the certificate of need proceeding, Xcel projected the cost of the LCM/EPU project would be approximately \$320 million. As of August 2013, the cost of this project had increased to at least \$665 million.

Most of this increase in the cost of this project was incorporated into Xcel's base rates in Xcel's last two rate cases, in dockets 10-971 and 12-961. In both cases, Xcel committed to a comprehensive prudence review of all costs associated with this project and "agreed to waive any defense [it] may have that the outcome of this investigation could be limited by the prohibition against retroactive ratemaking." Xcel has indicated that additional costs associated with concluding this project would be requested in its 2013 rate case and multiyear rate plan filing, in docket 13-868.

Order Opening Investigation into Xcel's Handling of the Monticello Project

Because of the complexity of the prudence and cost recovery issues, the Commission opened an investigation into Xcel Energy's handling of the Monticello Life Cycle Management/Extended Power Uprate ("LCM/EPU") project, at the end of Xcel's 2012 rate case. In its September 3, 2013 Order, the Commission stated that:

The Company shall move from plant in-service to CWIP: 41.6% of the Monticello LCM/EPU costs for 2011 and 2012 additions added to the rate base in this case, 41.6% of 2013 May plant addition costs, and 100% of NRC fees, as well as the related depreciation reserve, deferred taxes, depreciation expense, AFUDC, and any other applicable costs. The Company may be allowed to recover those costs in future rate cases once the EPU is in service, subject to the plant being used and useful, and subject to a determination that the costs—including cost overruns—were prudent.

The Commission opens a new proceeding to investigate the prudence, reasonableness, and rate recoverability of the Monticello LCM/EPU project, *In the Matter of a Commission Investigation into Xcel Energy's Monticello Life Cycle Management/Extended Power Uprate Project and Request for Recovery of Cost Overruns*, Docket No. E-002/CI-13-754.¹

Xcel's October 18, 2013 Filing

Xcel included in its filing a summary, a prudence report, and testimony from four witnesses. In the prudence report, Xcel described the experience of other utilities with nuclear generating plants that have been involved in similar uprate projects. Xcel also explained that it believes the Monticello project was handled in a prudent manner, remains cost effective and the cost overruns were reasonable. Xcel provided explanations for the cause of each of the major cost overruns.

To support its prudence report, Xcel provide testimony from four witnesses:

- Timothy J. O'Connor – Chief Nuclear Officer and Project Champion. Context and details regarding the development and implementation of the project.
- Scott L. Weatherby – Vice President, Nuclear Finance and Business Planning. Project accounting database, related materials and review of the costs incurred.
- James R. Alders – Regulatory Consultant. Historical context for the Monticello project, relevant certificate of need and resource planning proceedings, and the Strategist modeling that supports this project.
- J. Arthur Stall – Retired Chief Nuclear Officer, Florida Power & Light. Outside perspective on the appropriateness of the scope and design of the Monticello project.

Staff Comment

Introduction

In its September 3, 2013 Order, the Commission stated that it:

... directs the Executive Secretary, in consultation with the Department, to develop a proposal to be approved by the Commission for the conduct of an investigation into whether the Company's handling of the Monticello LCM/EPU project was prudent and whether the Company's request for recovery of Monticello LCM/EPU project cost overruns is reasonable. The proposal shall include the investigation scope, work plan, and retention of an expert under Minn.

¹ Findings of Fact, Conclusions, and Order, *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota*, Docket No. E-002/GR-12-961 (September 3, 2013) p. 46, ¶¶ 3 & 4

Stat. § 216B.62, subd. 8, to develop a report and recommendation to the Commission.²

PUC staff met with Xcel and DOC representatives to discuss the scope of this investigation and how to proceed. PUC staff has also been working with DOC staff on the request for proposals (RFP) that may be used to hire a consultant/engineer to assist in the evaluation of the engineering modifications and other changes that were made during the Monticello project based on NRC requirements and the Fukushima incident, and also to determine if cost levels for those modifications were reasonable.

Purpose of this Investigation & Issues to be Investigated

In the RFP, the purpose of this investigation is described as follows:

This investigation is designed to investigate whether the Xcel Energy's handling of the Monticello Life Cycle Management/Extended Power Uprate Project ("LCM/EPU") was prudent and whether the Company's request for recovery of Monticello LCM/EPU project cost overruns is reasonable.

This investigation should evaluate the prudence, reasonableness, and rate recoverability of the Monticello LCM/EPU project with particular attention given to the cause and reason for the cost overruns that have occurred since the project was first approved. The consulting engineer selected for this engagement will be required to evaluate the four principle engineering modifications as well as other smaller changes referred to in this RFP to determine:

- 1) whether the modifications were necessary because of NRC requirements, the Fukushima incident, or other related factors,
- 2) whether the cost levels for these modifications were reasonable, and
- 3) how these costs should be allocated between the Life Cycle Management and Extended Power Uprate parts of the Monticello project.

Staff believes the purpose and scope of this investigation is relatively clear and well defined and stems directly from the record in Xcel's 2012 rate case, in docket 12-961. Staff does not believe there is any disagreement amongst Xcel, the Department and Commission staff on this point. Other parties will have an opportunity to develop other issues as they believe may be appropriate, necessary and relevant, either in this docket, if it is referred to OAH for a contested case proceeding, or in Xcel's 2013 rate case, in docket 13-868.

² Findings of Fact, Conclusions, and Order, *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota*, Docket No. E-002/GR-12-961 (September 3, 2013) p. 46, ¶ 5

Contested Case Proceeding

Staff believes the most administratively workable path for this investigation to follow would be a contested case proceeding. Putting this case on its own independent track will help to better manage this investigation during the pending Xcel rate case, in docket 13-868, which was filed on November 4. A contested case proceeding would also ensure that this investigation and the use of the outside independent consultant follows an open and transparent process.

Staff believes that in cases where there is no requirement or right to a contested case proceeding, the Commission's authority to refer cases to the Office of Administrative Hearings for a contested case proceeding stems from Minn. Stat. § 216A.05 and Minn. Rules, Ch. 7829.

Minn. Stat. § 216A.05, subd. 5. Commission Functions and Powers. Hearing upon petition. With respect to those matters within its jurisdiction the commission shall receive, hear, and determine all petitions filed with it in accordance with the rules of practice and procedure promulgated by the commission, and may investigate, hold hearings, and make determinations upon its own motion to the same extent, and in every instance, in which it may do so upon petition.

Minn. Rules, part 7829.1000. Referral for Contested Case Proceeding.

If a proceeding involves contested material facts and there is a right to a hearing under statute or rule, or if the commission finds that all significant issues have not been resolved to its satisfaction, the commission shall refer the matter to the Office of Administrative Hearings for contested case proceedings, unless:

- A. all parties waive their rights to contested case proceedings and instead request informal or expedited proceedings, and the commission finds that informal or expedited proceedings would be in the public interest; or
- B. a different procedural treatment is required by statute.

Xcel, the Department and PUC staff have discussed various procedural alternatives for this investigation. In the interest of developing a clear, well documented record, staff asked Xcel to submit its filing in the form of testimony so that if there is a dispute amongst the parties this matter could be handled as a contested case without Xcel having to redo its filing in question and answer format. Xcel submitted its October 18 filing in the form of testimony (questions and answers) to help facilitate this process.

Staff recognizes that Xcel is the only party that has submitted a filing in this docket to date and none of the potential parties (including Xcel) have been asked to file or have filed procedural comments. Nevertheless, after consulting with Xcel and the Department, staff does not believe there is any disagreement amongst the parties and potential intervenors that this matter should be referred to the Office of Administrative Hearings for a contested case proceeding. Because the scope and cost of the Monticello project has been an issue in previous Xcel rate cases and the Commission opened an investigation into this matter at the end of the 2012 rate case, staff believes this matter should be referred to the OAH for a contested case as soon as possible.

There is a possibility this will not be contested after the Department completes its investigation on the Commission's behalf and with the help of the outside consulting engineer. In the event there is a dispute, or parties want to ask the questions at a hearing, it will be administratively easier to have the ALJ manage the development of the record and prepare a report for the Commission. It will also help with scheduling and coordinating this docket with Xcel's upcoming rate case.

Staff expects that if this matter is referred to the Office of Administrative Hearings for a contested case, the ALJ assigned to this docket would convene a prehearing conference for the initial scheduling of intervenor pre-filed direct testimony. The ALJ would also need to authorize a protective agreement for parties that want to have access to Xcel's non-public information and to establish discovery procedures for intervenors.

Staff expects the process for this investigation would follow all of the normal contested case procedures for record development. However, staff also expects there would need to be a fair amount of coordination amongst the parties in developing a schedule in this docket and Xcel's 2013 rate case, in Docket E-002/GR-13-868.

Some of the coordination and timing issues involve the scheduling of a deadline for the Department's pre-filed direct testimony. This date (and others) will need to be in synch with the dates in the request for proposals (RFP) that the Department is soliciting from outside engineering experts to help conduct its investigation on the Commission's behalf. Another scheduling issue the ALJ and parties will need to address at the first prehearing conference is the deadline for petitions to intervene in the investigation and whether other intervenors, i.e. parties other than Xcel and the Department should be required to file their pre-filed direct at the same time as the Department or whether they should be allowed a later deadline.

There is a possibility that the Department's investigation of Xcel's October 18 filing will result in a recommendation that the Commission completely accept Xcel's filing and incorporate that information into Xcel's request for a rate increase and multiyear rate plan in Xcel's pending rate case, in Docket E-002/GR-13-868. There is also a possibility that all of the parties would then agree with Xcel and the Department. If that's the result of the parties' investigation, staff expects the ALJ would send this matter back to the Commission without holding evidentiary hearings and with a recommendation the Commission accept Xcel's October 18 filing.

In any event, staff believes it would be appropriate for the ALJ to convene a second prehearing or status conference after all the parties have filed initial testimony, to determine whether there are issues in dispute and there is a need for technical evidentiary hearings.

Staff assumes that if there is a dispute, the ALJ would set a schedule for filing rebuttal and surrebuttal testimony, conducting technical evidentiary hearings, and filing briefs, before making a report to the Commission.

Staff would expect the ALJ and parties to develop a timeline that would allow for the ALJ to submit his or her report to the Commission in a sufficient amount of time for the Commission to make its decision and to incorporate that decision into Xcel's rate case, in docket 13-868, if that

is appropriate and necessary. (It should be remembered that Xcel is already collecting in base rates the cost of the Monticello project and has waived its right to challenge the outcome of this investigation on the grounds of retroactive ratemaking.)

The following table is from the preliminary, non-binding, outline of the hearing schedule in the draft RFP for the Independent Engineering Evaluation:

Prefiled direct testimony due	to be determined but no earlier than June 15, 2014
Prefiled rebuttal testimony due	to be determined and only if necessary but no earlier than July 15, 2014
Prefiled surrebuttal testimony due	to be determined and only if necessary but no earlier than July (or August) 15, 2014
Evidentiary hearing	to be determined and only if necessary but no earlier than September 15, 2014
Assistance with Department briefings	October/November 2014 - to be determined and only if necessary
Commission meeting	to be determined

Retention of an Expert under Minn. Stat. § 216B.62, subd. 8, to Develop a Report and Recommendation to the Commission

Staff believes the most reasonable approach for doing this is to have the Department hire the consultant/engineer and to conduct this investigation on the Commission's behalf. Because the Department will be conducting its investigation on behalf of the Commission and staff believes the Department, through the Commission's September 3 Order, has been authorized to hire an outside engineering expert to evaluate Xcel's request and to assess Xcel for the cost of hiring the outside expert.

The outside engineering expert would be hired to help the Department evaluate the four engineering modifications and other smaller changes identified in the 2012 rate case to determine whether the modifications were required based on NRC requirements and the Fukushima incident, and also to help determine if cost levels for those modifications were reasonable.

The consultant/engineer would be used by the Department as their expert witness on these issues in the proceeding. Department staff will be used for other issues in this investigation; e.g., forecasting/resource planning and need, auxiliary financial/accounting issues. The Department is still working on the RFP in preparation for submitting it to MMB for approval and authorization to assess Xcel, pursuant to Minn. Stat. § 216B.62, subd. 8, for the cost of hiring the consultant.

There has not been any disagreement over the scope or purpose of what the consultant will be asked to do in the RFP. In the RFP, the scope of the work that will be performed by the consulting engineer was described as follows:

The Consulting Engineer hired for this engagement will be expected to evaluate

- whether the modifications were necessary because of NRC requirements, the Fukushima

incident, or other related factors,

- whether the cost levels for these modifications were reasonable, and
- how these costs should be allocated between the Life Cycle Management and Extended Power Uprate parts of the Monticello project

In order to fulfill the purpose described above, the designated consultant will be expected to analyze, interpret and make specific recommendations with respect to the specific items identified below. The primary focus of the investigation should be on the reasons Xcel Energy indicated were the most significant cause of cost overruns. While there were cost increases overall from the start of the project, the following four major project modifications shall be addressed by the independent consultant:

- Steam dryer acoustic monitoring and replacement of the steam dryer;
- Installation of the 13.8 kV electrical distribution system;
- Replacement of reactor feedwater pumps, valves, flow transmitters, and feedwater heaters; and
- Replacement of the condensate pump and impeller system and replacement of the condensate demineralizer system.

The following table provides a more detailed description of four major project modifications and the cost overruns associated with those modifications.

Monticello LCM/EPU Cost Estimates from 2008 to 2013:
See DOC Ex. 171 NAC-30 (Campbell Direct) in Docket E-002/GR-12-961.

	Subproject (& in millions)	Work order number	Jan. 2008 Estimate	Dec. 2010 Estimate	Oct. 2012 Estimate	Jan. 2013 Estimate	Increase (Decrease) 2013 vs 2008
1a	Engineering, Licensing and Project Support (Common)	10435578	\$90.0	\$140.6	\$162.5	\$163.7	\$73.7
1b	License Development	11536446	included in 1a above	included in 1a above	included in 1a above	included in 1a above	included in 1a above
2	13.8 KV Distribution system	11257804	Not in scope	28.2	64.1	96.8	96.8
3	Replace Reactor Feedwater Pump	11286955	9.8	17.3	65.8	66.2	56.4
4	Replace 14 & 15 Feedwater Heater (split out in 2011)	11286961 and 11757884	2.9	13.5	15.1	15.1	12.2
5	Replace 13A&B Feedwater Heater (split out in 2011)	11638897	included in 4 above	included in 4 above	37.5	37.6	37.6
6	Condensate Demineralization System Replacement	11133705	9.0	42.9	62.8	62.8	53.8

	Subproject (& in millions)	Work order number	Jan. 2008 Estimate	Dec. 2010 Estimate	Oct. 2012 Estimate	Jan. 2013 Estimate	Increase (Decrease) 2013 vs 2008
7	Condensate Impeller	10943052	0.7	5.1	14.6	14.9	14.2
8	Steam Dryer Replacement	11215274	30.0	28.1	30.1	30.1	0.1
9	Turbine Replacement	11133668	44.3	37.7	37.7	37.7	(6.6)
10	Main Power transformer	10943007	13.1	15.1	18.9	18.9	5.8
	Subtotal - Largest 10 projects		199.8	328.5	509.1	543.8	344.0
	All Other Projects	various	120.2	70.6	77.6	76.1	(44.1)
	Contingency	--	0.0	0.0	0.0	20.0	20.0
	Total - All Subprojects		\$320.0	\$399.1	\$586.7	\$639.9	\$319.9

As discussed in Xcel's response to OAG-9, Xcel presents these 10 largest subprojects of Monticello's LCM/EPU on a pre-allocation basis, to maintain consistent comparability for all periods shown. Common project costs in Item 1a are those not directly assignable to a specific subproject - mainly upfront engineering, license application preparation and related studies, and overall project support - and are allocated proportionately to subprojects after they are completed. This pre-allocation view helps identify the impact of licensing delays and additional engineering, which are discussed below as drivers of project cost increases.

Xcel notes that in the project cost summary included in Schedule 4 of Mr. O'Connor's Direct Testimony, a significant portion of the common costs were allocated to individual subprojects, based on equipment installations completed to date. Such allocations account for any differences between Schedule 4 amounts and the corresponding amounts shown in the table above under the Oct. 2012 Estimate column.

In addition, the Company stated that the increase in cost was also caused by the following factors, which shall also be addressed by the independent Consultant:

- e. Outside events have affected the NRC's schedule and requirements, adding time and cost to the Project. Evolving NRC standards and requirements due to developments at other plants that have undergone license renewals, EPUs, and the 2011 events at Fukushima have added to licensing and engineering costs and contributed to Project delays. NRC licenses now require that current industry experience lessons learned be implemented while the license review period is in progress thus causing the license review process, and the related impacts to our Project to evolve continuously.
- f. The original estimate was based on preliminary engineering and a conceptual framework. The Project was neither fully defined nor engineered when Xcel prepared the Certificate of Need. Subsequent, more detailed engineering, design, and cost analysis revealed that significantly more and more expensive work was needed to execute the Project.
- g. Xcel discovered additional work necessary once its planned work entered the construction phase. The Project has required it to address emergent work required by the plant's "as found" condition.
- h. All other pertinent issues that may arise as the investigation proceeds.

Responders [to this RFP] may propose additional tasks, based on their understanding of the issues in this Commission proceeding that will substantially improve the outcome of this project. Any additional tasks and costs included in the responder's proposal must be separated from the required tasks and cost proposal.

Decision Alternatives

Investigation proposal

1. Approve the proposal for this investigation as described in the briefing papers including the retention of an expert, under Minn. Stat. § 216B.62, subd. 8, to assist the Department conduct its investigation on the Commission's behalf. or
2. Do not approve the proposal for this investigation as described in the briefing papers.

Contested case proceeding

3. Refer this investigation to the Office of Administrative Hearings for a contested case proceeding as discussed in the briefing papers. Request a report and recommendation from the Administrative Law Judge as soon as is practical and ideally, if possible, no later than December 31, 2014. or
4. Do not refer this investigation to the Office of Administrative Hearings for a contested case proceeding.

Delegation of authority

5. Delegate authority to the Commission's Executive Secretary to approve on the Commission's behalf the:
 - a. Request for proposals for the retention of the outside engineering expert, and
 - b. Selection of the outside engineering expert.
6. Delegate authority to the Commission's Executive Secretary to:
 - a. Vary time periods set forth in the Commission's Orders in this matter, and
 - b. Establish any new processes (including deadlines) that may be necessary to facilitate resolution of this investigation. or
7. Do not delegate authority to the Commission's Executive Secretary.