Rebuttal Testimony and Schedules
James R. Alders

Before the Minnesota Public Utilities Commission
State of Minnesota

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. E002/CI-13-754
Exhibit ___ (JRA-2)

Resource Planning
Project Economics

August 26, 2014

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is James R. Alders. I am a Regulatory Consultant for Northern States Power Company, a Minnesota corporation ("NSPM" or the "Company"). The Company is a wholly-owned utility operating company subsidiary of Xcel Energy Inc. My business address is 414 Nicollet Mall, Minneapolis, MN 55401.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS PROCEEDING?

A. Yes. I provided Direct Testimony, Exhibit ___ (JRA-1).

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. In my Rebuttal Testimony, I respond to the Department of Commerce, Division of Energy Resources' ("Department") Direct Testimony related to the Company's prudent implementation of the Life-Cycle Management ("LCM") and Extended Power Uprate ("EPU") program ("LCM/EPU Program," "LCM/EPU Project," "Project," or "Program") at the Monticello Nuclear Generating Plant (the "Plant" or "Monticello"), by providing additional detail regarding the resource planning context that influenced the Company's decisions.

I also respond to Department witness Mr. Christopher J. Shaw's discussion of the Company's 2008 modeling undertaken as part of the alternatives analysis in the Certificate of Need process. We agree that 2008 is the correct timeframe for considering our decisions to proceed with the Program, as that is when the critical decisions were made such as (i) our decision to proceed with the LCM and EPU efforts as part of a single integrated initiative, (ii) our decision to proceed with the Certificate of Need based on high-level conceptual designs, and (iii) our decision to multi-track our efforts in order to ensure timely completion of the Program in light of our impending baseload capacity need at that time.

We do not agree, however, that an after-the-fact assessment of "cost effectiveness" is the correct basis to assess prudence or to judge our decisions. Doing so misapplies the prudent investment standard described in the Rebuttal Testimony of Company witness Mr. David. M. Sparby. The Department's proposed cost effectiveness disallowance applies the prudence standard incorrectly because it (i) requires our assumptions to be updated with information known today as opposed to information known in 2008, (ii) relies on hindsight evaluation of our decisions, and (iii) does not assess whether our higher-than-predicted costs were prudently incurred.

We also do not agree with the use of Department witness Dr. William R. Jacobs' modified LCM/EPU split in the Department's modeling. Dr. Jacobs' split is another after-the-fact assessment developed with the benefit of all facts as they are known today, as opposed to what was known to the Company in 2008. To be consistent with the prudence standard, any cost effectiveness analysis should use the same good faith inputs as were used in 2008. Thus, the 58.4/41.6 percent LCM/EPU split that was developed and used to assess alternatives in the 2008 timeframe should guide the economic analysis.

Finally, we disagree with the Department's exclusion of "sunk costs" from its cost effectiveness modeling. The costs we incurred prior to obtaining the

Certificate of Need were necessary to commence construction promptly upon receiving the Certificate of Need, which in turn allowed us to proceed toward capturing the benefits of the integrated Project for our customers in a timely fashion. We believe it was reasonable to consider the costs already expended and the benefits of those investments as we assessed future investments in the Program, and to credit such reasonable costs against any economic analysis.

II. RESOURCE PLANNING

Q. WHY IS IT NECESSARY TO PROVIDE REBUTTAL TESTIMONY REGARDING THE RESOURCE PLANNING ISSUES THE COMPANY FACED WHEN INITIALLY UNDERTAKING THE PROGRAM?

A. As Mr. Sparby discusses in his Rebuttal Testimony, the Department's Direct Testimony focuses substantial attention on our initial implementation of the Program and the cost effectiveness of the initiative as of 2008, rather than management of the implementation process as we expected. Specifically, Department witness Mr. Mark W. Crisp, is critical of the Company's "expedited approach"[1] and suggests we did not rely upon "proper initial scoping of the project."[2] Further, the Company understands Mr. Shaw's Direct Testimony, which rejects the Company's Implementation Analysis, as suggesting that the Company should not have spent money before receiving the Certificate of Need for the uprate.[3]

[1] Crisp Direct at 29.
[2] Crisp Direct at 10.
[3] Shaw Direct at 19-20.

A. Historic Resource Planning Context

Q. WAS MONTICELLO CONSTRUCTED WITH THE IDEA THAT ITS INITIAL OPERATING LICENSE WOULD EVENTUALLY BE RENEWED?

A. No. Mr. Crisp notes that "[w]hile there is no dispute that the age of the design and the small footprint affected costs, it should not have been a critical issue causing cost overruns…"[4] However, our initial operating license for Monticello was issued in 1970 for 40 years without real expectation of renewal or expansion.[5] Although the reactors at our nuclear facilities were designed to be capable of 120 percent of original plant capacity,[6] the potential to extract additional capacity out of a nuclear plant did not arise until much later.

Q. HOW DID CIRCUMSTANCES EVOLVE SUCH THAT A LIFE EXTENSION AT MONTICELLO BECAME FEASIBLE?

A. It was not until 2003 that a life extension became a realistic possibility. Minnesota legislation previously precluded our nuclear units from operating beyond their initial Nuclear Regulatory Commission ("NRC") licenses. However, by 2000 through 2002 it became clear that the Company was going to need incremental baseload resources around the time Monticello would be shutting down.[7] When that law was changed in 2003, we had to act promptly to obtain a license extension with the NRC, undertake needed investments to manage the Plant's life extension, and seek Minnesota Public Utilities

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[4] Crisp Direct at 19.

[5] NRC: Fact Sheet on Reactor License Renewal at http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-reactor-license-renewal.html (last visited Aug. 8, 2014) ("Economic and antitrust considerations, not limitations of nuclear technology, determined the original 40-year term for reactor licenses. However, because of this selected time period, some systems, structures, and components may have been engineered on the basis of an expected 40-year service life.").

[6] 2004 Resource Plan, Reply Comments at p. 27, Docket No. E002/RP-04-1752 (Nov. 23, 2005).

[7] 2000 Resource Plan, Application for Resource Plan Approval, 2000-2014 at p. 5, Docket No. E-002/RP-00-892 (Jul. 10, 2000); 2002 Resource Plan, Initial Filing at p. 10, Docket No. E-002/RP-02-2065 (Dec. 2, 2002).

Commission ("Commission") approval to continue use of the Plant. All of this occurred at the same time we identified the need for over 1,000 megawatts ("MWs") of new baseload generation during the planning horizon.

Q. ARE THERE ANY ADDITIONAL RESOURCE PLANNING CONSIDERATIONS RELEVANT TO YOUR REBUTTAL TESTIMONY?

A. Yes. While there were a variety of resource planning considerations in play from 2003-08, we were starting to see resistance to adding new coal generation and the debate over carbon emissions had started to take shape. As the viability of new coal plants declined, the value of carbon-free nuclear energy increased accordingly.

As this dynamic developed, we explored options to both replace our nuclear units and add incremental new capacity to our system. The steps we took included probing the market with a contingent request for proposals seeking potential coal-fired resources to replace our nuclear units. Although nuclear power and dry-cask storage of spent nuclear fuel remained under scrutiny in Minnesota, the Company continued to monitor the potential for a future license renewal in light of the Company's baseload needs.

Q. WHY DO YOU BELIEVE THIS ADDITIONAL CONTEXT IS IMPORTANT?

A. Mr. Shaw testifies that, in 2008, the Department "reviewed the cost effectiveness of the proposed Monticello EPU by comparing the costs as presented by Xcel … to other alternatives available to meet Xcel's capacity and energy needs."[8] Mr. Shaw does not elaborate on the Company's "capacity and energy needs" in that timeframe and I believe it is of critical importance

[8] Shaw Direct at 5:2-5.

to understand that context when assessing our decisions and actions at the time. We did not make our decisions in a vacuum and provides additional insight into the manner in which we implemented the Program to extend the life of the Plant and maximize the value of the overall asset.

Our 2004 Resource Plan identified a need for "significant new resources – including baseload resources – to meet expected growth."[9] In particular, we identified the need for more than 3,100 MWs of capacity, including 1,125 MWs of baseload generation, needed for our system to meet customer demand.[10] Combined with coal plant emissions considerations and the high cost of natural gas, this forecast made it critical for us to utilize the production capacity at Monticello beyond its initial operating license.

Q. DOES THE DEPARTMENT'S DIRECT TESTIMONY PROVIDE ANY DISCUSSION OF THE RESOURCE PLANNING CONTEXT IN 2004?

A. Not explicitly, although the Department's analysis in the Certificate of Need proceedings included review of the surrounding economic circumstances that supported granting the permits. My Rebuttal Testimony makes those economic circumstances explicit to aid the Commission's consideration.

B. LCM/EPU Program

Q. WHAT TOPIC DO YOU ADDRESS IN THIS SECTION OF YOUR TESTIMONY?

A. I demonstrate that the Company's decision to pursue both the LCM and EPU activities as an integrated Program was appropriate, and was the most efficient way to support 20 years of extended operations as well as our need for

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[9] 2004 Resource Plan, Initial Petition at 1-1, Docket No. E002/RP/04-1752 (Nov. 1, 2004) ("2004 Resource Plan").

[10] 2004 Resource Plan, Docket No. E002/RP/04-1752, Initial Petition at 1-1 (Nov. 1, 20014).

incremental capacity. I do so to rebut the implication of the Department's proposed LCM/EPU split. If taken to its logical conclusion, assigning 85.5 percent of the costs to the EPU would mean the Program was primarily focused on the uprate from the beginning. This was not and is not the case.

Q. WHAT WAS THE COMPANY'S LONG-TERM RESOURCE PLANNING FOR MONTICELLO?

A. Our focus was first on renewing our operating license and identifying the work necessary to support 20 years of extended operations. Our 2005 Independent Spent Fuel Storage Installation ("ISFSI") Certificate of Need application shows the Company's view of the work we had already identified to sustain long-term operations at the Plant.[11] There was no consideration of an uprate as part of the ISFSI proceeding. Instead, this contemporaneous document includes a representative list of the significant aging systems, such as the feedwater heaters, the generator, the steam dryer and control equipment, that needed to be replaced as part of any life extension effort.[12] Although Dr. Jacobs attributes much of this work to the EPU, it had been identified as LCM work before we decided to pursue the uprate and was needed without regard to an uprate.

Q. DID THE POTENTIAL FOR AN UPRATE INFLUENCE THE DECISION OR PROCESS FOR PURSUING A LICENSE RENEWAL?

A. No. From 2003 to early 2006, we focused on extending the life of the facility and obtaining the approvals to continue operations at Monticello.[13] Because

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[11] *Application to the Minnesota Public Utilities Commission for a Certificate of Need to Establish an Independent Spent Fuel Storage Installation at the Monticello Generating Plant*, Initial Application at pp. 5-12 to 5-13, Docket No. E002/CN-05-123 (Jan. 18, 2005).

[12] *Id.*

[13] http://www.nrc.gov/reactors/operating/licensing/renewal/applications/monticello.html.

our ISFSI application for Monticello was the first nuclear storage application to be considered by the Commission following the Minnesota law change, obtaining approvals to renew our license took precedence over considering an uprate.

Q. AT WHAT POINT DID THE COMPANY RAISE THE POSSIBILITY OF A MONTICELLO UPRATE WITH THE COMMISSION?

A. We identified the likely benefits of an uprate at Monticello in our Report on Baseload Study Development Process Study and Options ("Baseload Report"), filed with our November 23, 2005 Reply Comments in our 2004 Resource Plan proceedings. The Baseload Report evaluated in detail our options to begin acquiring and/or constructing new baseload capacity promptly.[14] We discussed the possibility that we could meet a portion of the pending capacity need through a combined capacity upgrade at our Monticello, Prairie Island, and Sherco Unit No. 3 facilities.[15] Other options we considered included the Excelsior Energy IGCC project, other potential coal plants, and a variety of other resources.[16] The Commission's July 28, 2006 Resource Plan Order directed us to pursue increasing capacity at Monticello as part of a larger solution to add capacity to the system.[17]

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[14] 2004 Resource Plan, Reply Comments at pp. 9, 26-27 and Baseload Report at pp. 18, 20-21 (Nov. 23, 2005).
[15] *Id.* at p. 9.
[16] *Id.* at Baseload Report, p. 2.
[17] *In the Matter of Northern States Power Company d/b/a Xcel Energy's Application for Approval of its 2005-2019 Resource Plan*, ORDER APPROVING RESOURCE PLAN AS MODIFIED, FINDING COMPLIANCE WITH RENEWABLE ENERGY OBJECTIVES STATUTE, AND SETTING FILING REQUIREMENTS at pp. 8-9, Docket No. E-002/RP-04-1752 (July 2006) (emphasis added).

Q. HOW DID THE COMPANY IMPLEMENT THE COMMISSION'S ORDER FROM THE 2004 RESOURCE PLAN DOCKET?

A. Upon issuance of the 2004 Resource Plan Order in mid-2006, we made the decision to pursue the LCM/EPU Program as a single integrated Project. As described in the Rebuttal Testimony of Company witness Mr. Timothy J. O'Connor, we adopted this approach because most of the components that needed to be addressed were the same, allowing us to utilize economies and avoid duplication of effort. Further, the integrated nature of the Project allowed us to focus on keeping Monticello viable for the next 20 years while also capturing additional capacity benefits. Because the efforts were so interrelated, we concentrated on the Plant as a whole.

Q. WHY WAS THE COMPANY SO FOCUSED ON BASELOAD POWER AT THIS TIME?

A. In the 2003-06 timeframe, the Company was concerned about having sufficient reliable capacity available to serve our customers' needs during the planning horizon. We were also concerned about the loss of baseload capacity. We were pursuing our Metro Emissions Reduction Program ("MERP") program, which resulted in converting two of our coal plants (High Bridge and Riverside) into combined cycle natural gas units. In light of the natural gas forward price curves mid-decade, it appeared likely that the loss of additional baseload generation could raise issues on our system.

Q. DEPARTMENT WITNESS NANCY A. CAMPBELL STATES THAT "XCEL TREATED THE MONTICELLO LCM AND EPU PROJECTS AS TWO SEPARATE PROJECTS FOR PURPOSES OF REVIEW AND APPROVAL OF THE PROJECTS IN CN PROCEEDINGS BEFORE THE COMMISSION."[18] IN LIGHT OF THIS PROCESS FOR DETERMINING

[18] Campbell Direct 19:22-24.

THE NEED FOR THE UPRATE, SHOULD THE COMPANY HAVE PURSUED THE LCM AND EPU INITIATIVES SEPARATELY?

A. Mr. O'Connor discusses whether this would have been physically possible. But from a resource planning perspective, it would have been highly inefficient and inconsistent with our twin goals of preserving and increasing this generating resource for customers. Because much of the equipment being replaced for LCM purposes also needed to be modified for the EPU, planning for these needs concurrently maximized use of our resources.

Q. HOW DID THIS DECISION PLAY OUT IN THE CERTIFICATE OF NEED?

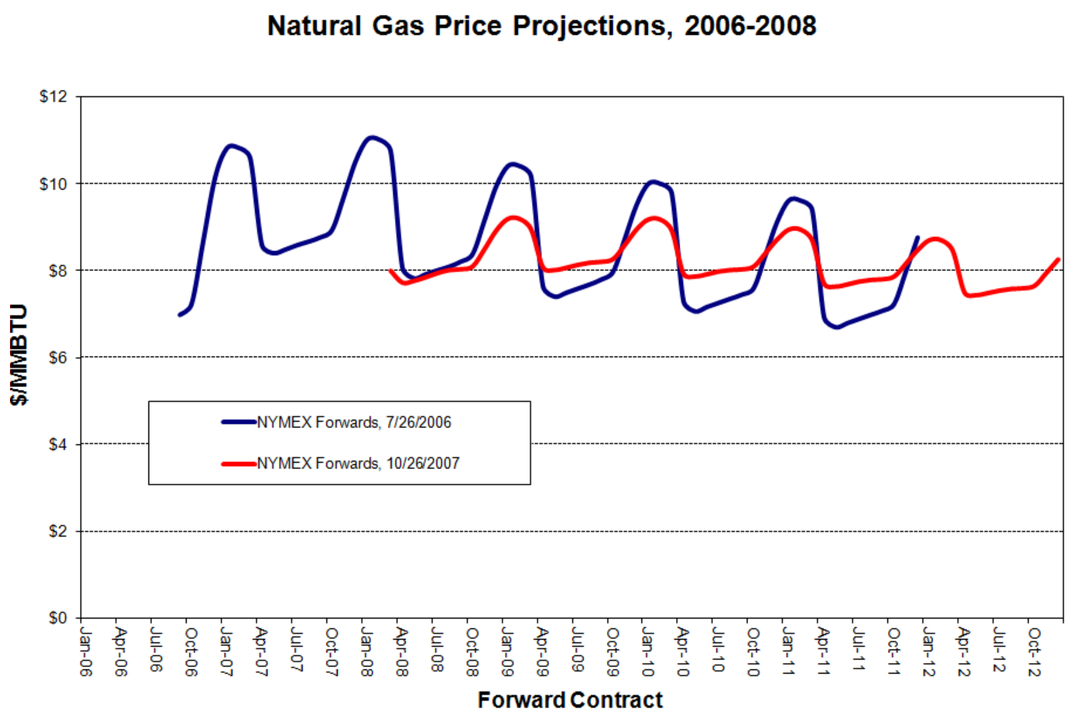
A. Even for the Certificate of Need proceeding, we used a total Program cost of $320-346 million to show the overall cost impact of the overall initiative. While this number was low as events later unfolded, it gave the Commission a better view of the overall impact of the Plant than if our modeling had just shown a somewhat artificial EPU-only number (*i.e.*, $133 million) and had ignored that LCM costs were inherently a part of the total project scope.

We developed a reasonable split to facilitate the Commission's alternatives analysis. It reflected our good faith estimate of an appropriate allocation of the forecasted costs of the overall initiative to its two purposes. To be conservative, we attributed more costs to the EPU than we had previously thought. Rather than use a ratio of six to one as suggested by the presentation included with Mr. O'Connor's Rebuttal Testimony as Exhibit ___ (TJO-2), Schedule 4, we used a ratio of roughly six to four (58.4/41.6 percent) for modeling purposes. This was more reasonable than just using a hypothetical split and ignoring the LCM costs that we knew were needed. Our approach provided the Commission with a more accurate and holistic view.

Q. DID ADDITIONAL CONTEMPORANEOUS DATA SUPPORT THE PRUDENCE OF PROCEEDING WITH THE PROGRAM AS AN INTEGRATED INITIATIVE?

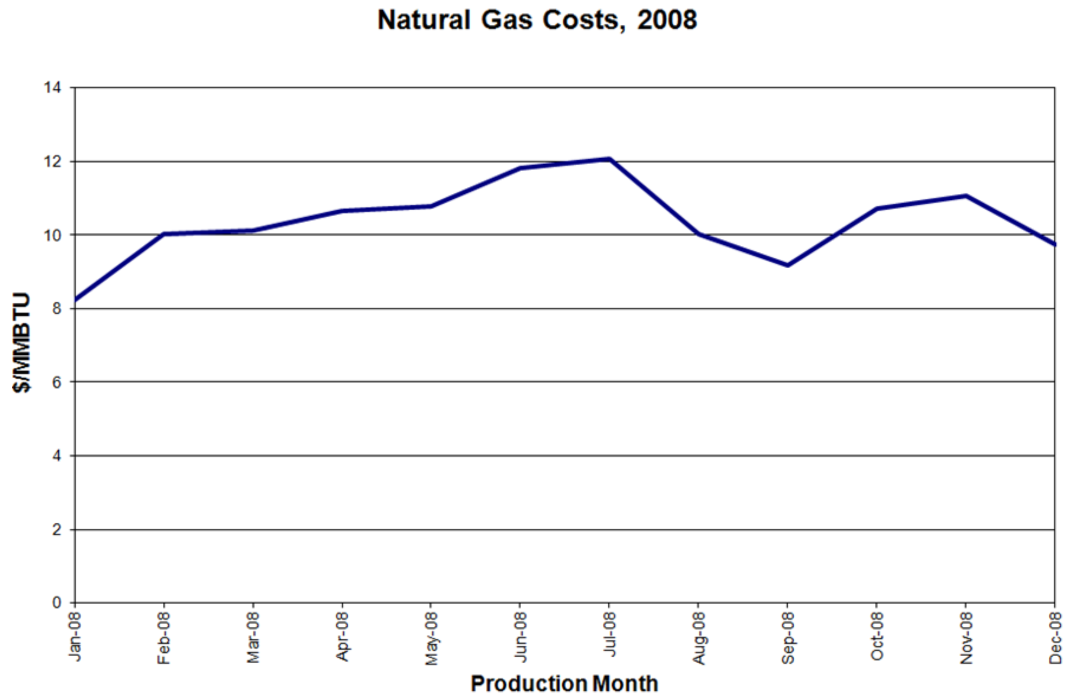
A. Yes. The natural gas forward price curves we were seeing in 2006 and 2008 meant that both preserving Monticello and pursuing the uprate were good choices. Figure 1 provides the NYMEX price curves for 2006 through 2008.

Figure 1



These forward price curves were confirmed by our actual experience in 2008. A summary of our actual natural gas costs for that year are shown in Figure 2.

Figure 2



This shows that during the period we made decisions about the Program, we were experiencing high gas prices that made nuclear upgrades beneficial.

C. Good Faith Total Cost Estimate at Certificate of Need

Q. DID THE COMPANY ALSO PROVIDE A GOOD FAITH ESTIMATE OF THE COMBINED COSTS OF THE LCM/EPU PROGRAM?

A. Yes.

Q. WHAT WERE THE COST ASSUMPTIONS USED IN DEVELOPING THE $346 MILLION MODELED IN THE ALTERNATIVES ANALYSIS?

A. We utilized a high-level analysis of projected Program costs, based in large part upon the estimates provided to us by General Electric as our primary contractor, as well as then-existing industry comparables. As discussed by Mr. O'Connor, the $346 million estimate was significantly higher than the comparables against which the Company had benchmarked the job, recognizing that our initiative was much more heavily weighted to LCM work and included tasks other plants had not needed to undertake.

Q. DID THESE COST ESTIMATES ASSUME A SPECIFIC SET OF UPGRADES WOULD BE UNDERTAKEN TO IMPLEMENT THE PROGRAM?

A. Not specifically; rather, as in the ISFISI Certificate of Need we provided representative information regarding the initiatives we believed would be necessary based on the design and engineering phases we had completed at that time. As with any large-scale construction project, it is critical to recognize that needs identified during detailed design and implementation phases of the project may evolve and must be addressed.

Q. MR. CRISP IS CRITICAL OF THE COMPANY FOR NOT PROVIDING MORE DETAILED DESIGNS IN THE EARLY STAGES OF THE PROGRAM. WHY DIDN'T THE COMPANY PURSUE MORE DETAILED DESIGN ESTIMATES THEN?

A. Mr. O'Connor covers this issue in great detail. From a resource planning perspective, we did not feel we had the time to develop detailed design estimates in light of the impending capacity need as well as the natural gas price environment at the time. Our initial assessment of the cost of the uprate had been developed in our Baseload Report and showed substantial customer benefit even if costs were higher than expected. Given the need to multi-track the effort, maximize value from the facility, and meet our anticipated resource needs, it was not appropriate to proceed as Mr. Crisp suggests.

D. Use of Certificate of Need Cost Estimates

Q. WHAT IS THE DEPARTMENT'S RECOMMENDATION IN THIS PROCEEDING WITH RESPECT TO THE USE OF CERTIFICATE OF NEED-LEVEL ESTIMATES FOR DETERMINING RATE RECOVERY OF PROJECT COSTS?

A. In Ms. Campbell's Direct Testimony, she describes a number of wind-energy dockets in which the Department has challenged the reasonableness of costs exceeding cost estimates provided at the Certificate of Need stage.[19] However, Ms. Campbell does not recommend holding the Company to the high-level cost estimates for the Program, recognizing that particular circumstances need to be assessed in determining cost recovery.[20] She further notes that cost recovery decisions should balance the Company's needs with the needs of customers and consider the financial health of the Company.[21]

Q. WHAT IS THE COMPANY'S RESPONSE TO THIS APPROACH?

A. We appreciate the Department's approach, and agree that capping recovery at the $346 million level would not be appropriate in this proceeding. I would be concerned by consideration of a cost cap here because: (i) costs often cannot be completely predicted during the Certificate of Need stage, especially where the time available to assemble a Certificate of Need application is limited; (ii) the Company made investments in reliance on the prudent investment standard, and a retroactive change in that standard would not be appropriate; and (iii) the Company's investors have already committed funds to the Program with the understanding that the Company's prudence in incurring those costs would be assessed in the future, rather than subject to a pre-established cap on costs.

[19] Campbell Direct at 22-27.
[20] Campbell Direct at 27.
[21] Campell Direct at 28:5, 14-15.

E. Commission Communications Regarding Program

Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR REBUTTAL TESTIMONY?

A. I am responding to Ms. Campbell's overall concern that the Company did a poor job of keeping the Commission and stakeholders informed about the progress of this initiative and the difficulties we were encountering.[22]

Q. HOW DO YOU RESPOND GENERALLY TO MS. CAMPBELL?

A. While we perhaps could have erred on the side of providing more information, on reviewing the situation I believe the Company provided quality information over the course of this six-year Program that afforded stakeholders with reasonable opportunities to identify concerns. It is also my opinion that the Company complied with its obligations to advise the Commission about changed circumstances.

Q. PLEASE DESCRIBE HOW THE COMPANY COMPLIED WITH THE RULES REGARDING UPDATING THE COMMISSION ABOUT CHANGES IN CAPITAL PROJECTS FOR WHICH THE COMPANY HAS RECEIVED A CERTIFICATE OF NEED.

A. Attached to my Rebuttal Testimony as Exhibit ___ (JRA-2), Schedule 1 is a copy of the Company's response to the Department's Information Request No. 120, discussing the Commission's rules and the Company's compliance.

Q. WHAT OTHER COMMUNICATIONS DID THE COMPANY PROVIDE REGARDING CERTIFICATE OF NEED UPDATES?

A. In addition to updates in the Certificate of Need proceeding, we provided updates in our Resource Plan proceedings.[23] In November 2009, we advised

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[22] Campbell Direct at 6-9.

the Commission that the NRC delayed review of our license amendment request.[24] We did not seek Commission action, as we did not believe it was necessary for the Commission to make any formal decisions at that time.

In late 2011, the Company filed a Notice of Changed Circumstances in the Monticello EPU Certificate of Need proceedings.[25] The focus of this filing was the delay in implementation of the Program until the 2013 outage. The Commission notified the Company on January 6, 2012, that this change did not require further action in the Certificate of Need Docket.[26]

Q. WHY DIDN'T THE COMPANY PROVIDE A DISCUSSION OF THE COST ISSUES IN THE 2011 NOTICE OF CHANGED CIRCUMSTANCES?

A. We provided the Commission and stakeholders with cost information about the Program in our rate cases. While Ms. Campbell suggests these communications were inadequate, our perspective is that stakeholders understood the costs of the LCM/EPU Program were much higher than we had projected. By the time we filed the November 2011 Notice of Changed Circumstances in the Certificate of Need Docket, we had already provided multiple updates regarding our experiences at Monticello[27] and committed to undergo an after-the-fact prudence review of the costs of this initiative. At

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[23] 2004 Resource Plan, Compliance Filing at pp. 10-11, Docket No. E002/RP-04-1752 (Jan. 2, 2007); 2007 Resource Plan, ORDER APPROVING FIVE-YEAR ACTION PLAN AS MODIFIED AND SETTING FILING REQUIREMENTS at p. 14, Docket No. E002/RP-07-1572 (Aug. 5, 2009).

[24] *See* Status of Extended Power Uprate at Monticello Nuclear Generating Plant, Docket No. E002/CN-08-185 (Nov. 5, 2009).

[25] Notice of Changed Circumstances, Docket No. E002/CN-08-185 (Nov. 22, 2011).

[26] ORDER, Docket No. E002/CN-08-185 (Jan. 6, 2012).

[27] In the Company's 2011 test year rate case (Docket No. E002/GR-10-971), we provided updated costs for the total LCM/EPU Program. We further updated the estimate in Rebuttal Testimony to $399.1 million for the LCM/EPU Program, and provided post-hearing Supplemental Testimony in August 2011, explaining project delays and cost increases with projections that Program costs would be in excess of $500 million. In November 2011, our then-Chief Nuclear Officer provided live testimony that the final cost of the Project was expected to be approximately $550 to $600 million.

that point, stakeholders knew about our cost increases and that they would have this opportunity to probe the costs as we had committed to undergo this investigation through an executed Stipulation and Settlement Agreement filed in our rate case just prior to the Notice of Changed Circumstances.[28]

More fundamentally, the Notice of Changed Circumstances process is not designed to address cost increase issues in ongoing projects. Rather, it is designed to provide updates on significant size, type and timing considerations and to give the Commission the opportunity to revisit whether to cancel a Certificate of Need if warranted. Since we had already provided this information in our rate case and committed to a prudence review, reiterating cost information in those proceedings appeared to be unwarranted.

Q. WHY DID YOU NOT RAISE THE COST ISSUE FOR MONTICELLO, LIKE YOU DID IN THE PRAIRIE ISLAND PROCEEDING?

A. In the Prairie Island proceedings, construction had not yet begun and the Company was ultimately seeking a decision from the Commission whether we should go forward or abandon the project. To provide the Commission with the information needed to make such a decision, we included a significant amount of information beyond technical compliance with the rules.

By contrast, in the Monticello EPU Certificate of Need Docket, we were at a very different stage in development and we were not seeking a Commission decision whether or not to change course. Unlike with Prairie Island, we had already completed a significant amount of construction at Monticello. I have attached the Company's response to the Department's Information Request

[28] Stipulation and Settlement Agreement at pp. 3-4 and 7, Docket No. E002/GR-10-971 (Nov. 14, 2011).

No. 119 as Exhibit ___ (JRA-2), Schedule 2 to this Rebuttal Testimony for further context on that decision-making process.

III. PROJECT ECONOMICS

Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY RELATING TO THE ECONOMIC ANALYSIS OF THE OVERALL LCM/EPU PROJECT.

A. As Mr. Sparby notes in his Rebuttal Testimony, that we generally agree with Mr. Shaw that 2006-08 is a reasonable perspective from which to review the Company's decision to pursue the Program. With the $665 million investment on a total plant basis, Monticello was cost-effective under 2008 modeling conditions using our model or the Department's model. Thus the costs above our initial estimates do not change that the Program presented an overall value to our customers compared to other resource options.

Furthermore, we agree with Mr. Shaw that it was not reasonable in the 2008 timeframe for the Company to have perfect foresight, to know that the Company's demand forecast would change as dramatically as it did due mainly to the Great Recession, or to know that hydraulic fracturing would dramatically reduce natural gas costs and fundamentally change the economics of power generation.[29]

We do not agree, however, with a number of items in the Department's economic analysis. The areas of disagreement and recommended analyses, which I discuss in this section of my Rebuttal Testimony, are as follows:

[29] Shaw Direct at 27.

- *Integrated Effort*: We disagree that the Commission should attempt to separate the LCM and EPU components for purposes of assessing our prudence. While we recognize that the incremental cost of the EPU MWs was a relevant input for the Commission's alternatives analysis in the Certificate of Need, we do not believe that analysis is appropriate when assessing the prudence of our effort.

- *Application of Prudence Standard to Initial Decision*: We disagree with Mr. Crisp's suggestion that the Company could have predicted the Program's actual final costs in 2008. Since we could make our decision based only on information we knew or reasonably should have known in 2008, any economic analysis should be based on reasonably foreseeable information.

- *Reasonably Foreseeable Costs*: Mr. O'Connor provides support for the reasonableness of our $320-346 million initial estimate. Even if that estimate was not perfect, no one can reasonably claim that we could have foreseen an initial estimate anywhere near $665 million. In fact, the highest potential initial cost estimate described in this record is about $420 million, if the Company had used the estimates described in the 2011 Cost History document (and updated them to make an apples-to-apples comparison). Our estimate, while low, was reasonable at that time.

- *Reasonably Foreseeable LCM/EPU Split*: We disagree with the use of Dr. Jacobs' 85.5/14.5 percent EPU/LCM split for retroactively assessing the cost of the incremental 71 MWs. Dr. Jacobs' split is inconsistent with the proper application of the prudent investment standard because it is inconsistent with the information reasonably known to us in 2008. To the extent the Commission decides a cost split is relevant the reasonableness of our actions in 2008 (a proposition we do not support), the 2008 Certificate of Need 58.4/41.6 percent LCM/EPU split is most appropriate.

- *Sunk Costs*: We disagree with the Department's decision not to credit the economic analysis with the costs we had reasonably incurred prior to obtaining the Certificate of Need. This position implies that we should not have spent the money prior to the Certificate of Need, which would have been inconsistent with our resource plan and would have risked Project delay or failure.

- *Recommended Starting Point Analysis*: The Company recommends that the Commission use the information that was known or reasonably should have been known to assess our prudence in deciding to proceed with the initiative. This means assessing, based on what we knew at the time, whether it was a reasonable choice to proceed: (i) with a $320-346 million initial cost estimate and (ii) allocating costs for the Commission's alternatives analysis using the 58.4/41.6 percent split. If these estimates were reasonable under those circumstances, then no disallowance should be ordered based on any after-the-fact cost effectiveness assessment.

If the Commission decides our initial estimates were not reasonable, then it could determine the reasonably-foreseeable numbers. Any ratepayer harm found should be based on those reasonably foreseeable amounts, not retroactively on the actual costs. Thus, for example, if the Commission decides that the about $420 million starting point described by Mr. O'Connor was a reasonably foreseeable starting point estimate and the Certificate of

Need LCM/EPU split was a good faith conservative estimate, then whether we use our models, or Mr. Shaw's, there is no harm that arises from this approach. Likewise, if the Commission decides that our 58.4/41.6 percent split used in the Certificate of Need was unreasonable, then the Commission would have to decide what split was reasonable at that time and not impose any split that was derived later by the Company or the Department.

I note that other Company witnesses address the Company's management prudence and respond to the Department's concerns regarding our implementation of the Program.

A. 2008 Modeling

Q. THE COMPANY AND THE DEPARTMENT APPEAR TO AGREE ON A NUMBER OF KEY POINTS. FIRST, IS IT YOUR UNDERSTANDING THAT THE DEPARTMENT AGREES THE OVERALL LCM/EPU INITIATIVE IS COST-EFFECTIVE?

A. Yes. Both the Department's and the Company's economic analyses support that "the combined LCM/EPU is overwhelmingly cost-effective as a whole,"[30] as compared to shut down and replacement of Monticello.

Q. DOES THE DEPARTMENT BELIEVE THAT 2008 IS THE CORRECT TIMEFRAME FOR PURPOSES OF DETERMINING THE COMPANY'S PRUDENCE?

A. Yes.

Q. DO YOU BELIEVE THE COMPANY'S MODEL IS APPROPRIATE?

A. Yes. As Mr. Shaw notes, the Administrative Law Judge's ("ALJ") recommendations in the 2008 EPU Certificate of Need proceeding, which

[30] Shaw Direct at 13.

were accepted by the Commission, addressed the Department's and the Company's common finding that "[i]t would be neither reasonable nor prudent of Xcel Energy to choose any [alternatives] over the Monticello power uprate."[31] The ALJ also noted that:

> After submission of the CON Application, Xcel Energy made several modifications to the Strategist model to incorporate a new forecast and other modifications suggested by the OES.... The minimal impact of the numerous changes in the Strategist model and the results of the multiple sensitivities analysis confirms the robustness of Xcel Energy's analysis.[32]

Because the Company's model was acceptable at the time of the 2008 Certificate of Need, and because this is the model on which the Company relied to support and decide to pursue an EPU at Monticello, we continue to utilize our Strategist model as the best information available at the time.

Q. IF 2008 IS THE APPROPRIATE FRAME OF REFERENCE, WHY DID THE COMPANY MODEL AN ANALYSIS USING THE $665 MILLION ACTUAL COSTS?

A. We called this the "perfect foresight" case and used it to show the value of the Program, even if we had known the costs would end up at $665 million. In other words, if we assumed we had actually known the ultimate costs at the outset and used the same 58.4/41.6 percent LCM/EPU split as in the Certificate of Need, the Program was cost-effective in 2008 and in each subsequent year when accounting for sunk costs. As I describe in my Direct Testimony, this modeling was not intended to support the prudent investment test, but was rather offered to provide additional context.

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[31] FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATION at p. 17, Docket No. E002/CN-08-185 (Nov. 19, 2008).
[32] *Id.* at ¶ 85, p. 16 (citing Ex. 37 (Wishart Supplemental Direct) at p. 3, 6-10).

Q. Did the Department also conclude that the Company appropriately used its September 2008 Resource Plan reply comments Strategist base file, as updated to reflect the $665 million in actual program costs, to develop what the Department calls a "2008 EPU CN" analysis?

A. Yes. In addition, Mr. Shaw recommends that a "minor change to the capacity of the EPU" is required.[33] Specifically, Mr. Shaw notes that we had included a planned interim addition of 12 MW of capacity for 2010-2013, but that this addition did not occur. Mr. Shaw therefore suggests that the capacity of Monticello should be reduced by these 12 MW – to 600 MW – for these years.

Q. Is this a reasonable refinement to the model?

A. We do not believe the Department's refinement is consistent with the appropriate application of the prudent investment standard. We believe using the estimates we knew and used at the time results in an approach that is consistent with the prudent investment standard.

Q. There are differences between the Company and Department models. Can you elaborate?

A. While we agree with the Department's philosophy of focusing on 2008, we do not agree that the outcome of the prudence determination should be driven by an after-the-fact imputation of 2013 costs into the 2008 model, as this incorrectly injects hindsight into the inquiry. The analysis should focus on the reasonable information available to us at the time. At a minimum, the Commission could use estimates that were reasonably foreseeable.

[33] Shaw Direct at 9:19-23.

With that said, there are differences between the two models as demonstrated by the Department's results, which are different from the Company's. I note the Company has not been able to replicate the Department's results using the Company's modeling practices. However, we do not believe the outcome of this case should turn on our modeling differences. Under either model, the Program is cost-effective when the 58.4/41.6 percent LCM/EPU split is used. As a result, differences between the two models should not impact the outcome of this proceeding.

Q. WHAT IS THE IMPORTANCE OF CONSIDERING A MODIFIED STARTING POINT?

A. If we reasonably should have known that the starting point estimate needed to be higher, it is fair for the Department and the Commission to consider it. Fundamentally, the question is: if the Company had provided a higher estimate in 2008, would it have changed the outcome?

Q. IF THE COMPANY HAD PROVIDED A HIGHER TOTAL COST ESTIMATE IN 2008 WITH THE SAME 58.4/41.6 PERCENT LCM/EPU SPLIT, WHAT WOULD HAVE BEEN THE OUTCOME FROM AN ECONOMIC PERSPECTIVE?

A. It would have made no difference. The Company would have supported the Program and we believe the Commission would have approved it. This is based primarily on the fact that the Company always viewed this as an integrated Project so a higher initial estimate would always have been spread over the entire Project. This means that if our initial estimate had been about $420 million, we would have still proceeded. While a higher estimate may have been helpful to better understand the overall impact of the Program, it would not have made any difference to the decision whether to proceed.

B. Disagreements With Department Economic Analysis

Q. PLEASE LIST THE THREE AREAS IN WHICH YOU DISAGREE WITH THE DEPARTMENT'S ECONOMIC ANALYSIS.

A. They are: (i) using a "cost effectiveness" measure to propose a cost recovery adjustment, (ii) Dr. Jacobs' 85.5 percent EPU and 14.5 percent LCM split and how it is used, and (iii) the Department's treatment of sunk costs.

1. Cost Effectiveness Adjustment

Q. WHY DO YOU NOT SUPPORT A "COST EFFECTIVENESS" ADJUSTMENT?

A. Mr. Sparby provides Rebuttal Testimony on the standard we are asking the Commission to apply in this case. By taking today's actual costs and imposing them retroactively on 2008 assumptions, the Department is necessarily saying that regardless of whether the Company's decisions and actions were reasonable or events were foreseeable, we should be denied recovery.

2. LCM/EPU Split Value

Q. WHAT IS THE COMPANY'S REBUTTAL POSITION REGARDING ATTRIBUTION OF COSTS TO THE INCREMENTAL 71 MW ASSOCIATED WITH THE EPU?

A. Our position remains unchanged. We do not think any split should be applied because the Commission should consider our work at Monticello from a holistic perspective and judge the value of that work as a whole. To the extent the Commission wants to impute costs to the EPU MWs to assess our decisions and actions in 2008, the 58.4/41.6 percent LCM/EPU split used in the Certificate of Need proceeding is the only viable option, since it was used in making the Commission's decision. To be consistent with the proper application of the prudence standard, it is important to retain the LCM/EPU split that was used in 2008 to assess whether to proceed with the Program.

Company witness Mr. O'Connor provides a discussion in Rebuttal Testimony of Dr. Jacobs' 85.5/14.5 percent split. We do not agree that Dr. Jacobs' split is appropriate for consideration of the prudence of our decisions or actions in 2008. Nor does Dr. Jacobs' split accurately reflect the circumstances we encountered in implementing the Program, as described by Mr. O'Connor.

Q. WHY IS IT INCONSISTENT FOR THE DEPARTMENT TO ATTRIBUTE MORE COSTS TO THE EPU THAN WERE ATTRIBUTED IN THE CERTIFICATE OF NEED?

A. Utilizing a split different from the 58.4/41.6 percent split does not recognize that 2008 is the critical timeframe and that we should be judged by the quality of our decisions and actions in light of what we knew at that time. In addition, the Commission used the 58.4/41.6 percent LCM/EPU split when assessing alternatives. That split was considered reasonable at the time.

While the split involved engineering judgment and did not represent an incremental cost study, it was a reasonable estimate to facilitate the "alternatives analysis" under the Certificate of Need rules. Dr. Jacobs' split, by contrast, superimposes his present day opinion on decisions made in 2008.

Furthermore, we had no incentive at that time to present any split other than our good faith estimate. At that time we did not foresee the significant cost changes we later experienced, and we did not foresee the current investigation. Thus, the original 58.4/41.6 percent split used in the Certificate of Need proceeding represents the reasonably foreseeable estimate of cost allocation between necessary LCM work and the uprate.

Q. SHOULD THE COMMISSION USE THE MOST RECENT SPLIT INFORMATION?

A. Not if to do so would result in second-guessing decisions using hindsight. For purposes of the Department's cost effectiveness analysis, the question is whether the split that was used in 2008 was reasonable. No one has challenged the legitimacy of the 58.4/41.6 percent split as the basis of the Commission's decision in 2008.

Q. IS THIS POSITION INCONSISTENT WITH THE 78/22 PERCENT SPLIT THE COMPANY PROVIDED IN ITS DIRECT TESTIMONY?

A. No. Our presentation of the 78/22 percent split presented an after-the-fact split based on the costs we could have avoided if we had not done the EPU, while the 58.4/41.6 percent split was our good faith estimate based on the facts that were available in the Certificate of Need proceedings. Although we believe it would be inappropriate to impose a disallowance based on an after-the-fact perspective, we recognized that we did not have the benefit of a final analysis in 2008 and ran the results to assure that both views are included in the record. However, we have been clear that the Company does not support using a split in the costs for ratemaking purposes.

Furthermore, we did not expect the Department to base any proposed disallowance in this prudence proceeding on a cost effectiveness analysis focused on our decision to implement the Program, as the 2008 split showed that even the ultimate after-the-fact costs of $665 million were cost-effective as a whole. Because the Certificate of Need proceeding included the 2008 alternatives analysis utilizing a split based on available information, any split analysis used for purposes of determining cost effectiveness should not attribute a higher percentage of costs to the EPU.

Q. IF ONE USED THE 58.4/41.6 PERCENT SPLIT, WOULD THE PROGRAM REMAIN "COST-EFFECTIVE" UNDER 2008 CONDITIONS?

A. Yes. The Company's analysis is presented in my Direct Testimony and shows that the Program is cost-effective when superimposing this split on the $665 million of actual costs under 2008 conditions. Under the Department's analysis, Mr. Shaw acknowledges that any split less than 73 percent EPU would be cost-effective; per force, the 58.4/41.6 percent split would satisfy the Department's cost effectiveness test.

3. Sunk Costs

Q. HOW DO YOU RESPOND TO MR. SHAW'S DISCUSSION OF THE MONEY THE COMPANY SPENT PRIOR TO RECEIVING THE CERTIFICATE OF NEED?[34]

A. I disagree with Mr. Shaw's statement that it creates "perverse incentives" for the utility to spend money as fast as possible if the utility can then take credit for the costs it already incurred.[35] The incentives are, I think, opposite what Mr. Shaw suggests because the utility retains the cost recovery risk for any amounts that are expended imprudently, whether spent quickly or slowly and whether the project is completed or cancelled. That risk of disallowance for imprudent choices is sufficient to overcome any perverse incentive.

Under the regulatory paradigm, if the utility makes reasonable choices and spends money in a reasonable manner, it should obtain recovery of those costs. As a result, the utility should factor previously-incurred costs into its economic decision whether to move forward with the project once circumstances change and remove them from the analysis.

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[34] Shaw Direct at 19-20.
[35] Shaw Direct at 19:18-19.

Q. WHAT ARE SUNK COSTS?

A. In economics and business decision-making, sunk costs are past costs that have already been incurred and cannot be recaptured. The money cannot be unspent. Sunk costs are sometimes contrasted with prospective costs, which are future costs that may be incurred or changed if an action is taken.

Q. HOW SHOULD SUNK COSTS BE TREATED?

A. When making business or investment decisions, organizations typically look at the future costs that they may incur, by following a certain strategy. A utility that has spent a certain amount building or refurbishing a power plant that is not yet complete has to consider the amount already spent to be "sunk" since it cannot avoid spending this amount by adopting a different course of action. It must decide whether continuing construction to complete the project will help the utility achieve the needed outcome, or whether it should walk away from the incomplete project.

Q. WHAT ARE THE SUNK COSTS IN THIS CASE?

A. From mid-2006 through obtaining the Certificate of Need in February 2009, the Company spent approximately $97 million on the initiative.[36] This 32-month period saw an intensive effort to develop the Program and to meet the timelines we needed to satisfy our capacity need. Our pre-Certificate of Need costs included about $60 million in progress payments to General Electric, mainly for detailed engineering and design work for the 2009 modifications. In addition, most of our spending occurred during calendar year 2008, while the Certificate of Need proceeding was pending.

[36] *See* O'Connor Direct Testimony at 27, Table 4.

We spent significant amounts to obtain long-lead-time equipment, such as a firm order on a block of steel needed to be fabricated into the new turbine. Our records show that we estimated we needed to place the order 30 months in advance to preserve our place in the queue. We also refined the scope of work to ensure that we would accomplish our twin goals and actively pursued both State and Federal permits and licenses.

That spending allowed us to commence construction within two months after the Certificate of Need was issued. Had we not done so, we would be at risk of failing to meet our identified capacity need.

Q. HOW SHOULD THESE COSTS BE TREATED IN A COST EFFECTIVENESS ANALYSIS?

A. Any assessment of the cost effectiveness of the Program should recognize that sunk costs were incurred and cannot be unspent. From a cost effectiveness perspective, they should be eliminated from the calculation.

Q. PLEASE RESPOND TO MR. SHAW'S CONCERN THAT THE COMPANY HAD THE INCENTIVE TO SPEND AS MUCH AS POSSIBLE AS QUICKLY AS POSSIBLE?

A. No. In addition to the incentives discussed above, we were utilizing limited Company resources and cash flows to invest in the Project prior to obtaining a Certificate of Need. Because the Company always has more capital needs and goals than resources, we are always constrained to use our existing resources as wisely as possible.

We took the correct level of necessary risk and made appropriate decisions to proceed with Project development in anticipation of the Certificate of Need.

We spent the money because it was the right thing to do, and recognized that if the money was spent imprudently, we would likely not recover it.

IV. CONCLUSION

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

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☒ **Public Document**

Xcel Energy			
Docket No.:	E002/CI-13-754		
Response To:	Department of Commerce	Information Request No.	120
Requestor:	Nancy Campbell/Chris Shaw		
Date Received:	May 5, 2014		

Question:

At what point does Xcel believe it is necessary or advisable to file a Notice of Changed Circumstance as costs of a project for which the Company received a certificate of need from the Minnesota Public Utilities Commission?

Response:

We interpret this question to seek information about both when a formal Notice of Changed Circumstances is required as well as circumstances when the Company believes it is advisable to provide updated information to our regulatory stakeholders. This answer will provide information on both aspects of the question.

The formal requirements for notifying the Commission of changed circumstances in connection with a Certificate of Need are set forth in the Commission's rules. Minn. R. 7849.0400, subp. 2 provide the criteria for notifying the Commission of proposed changes "to the certified size, type, or timing of a proposed facility." This rule generally requires a notice of changed circumstances for (A) delays in excess of one year, (B) change in the size of a project by more than 80 MW or 20%, (C) certain changes of ownership of a facility. The rule does not address cost.

Subpart (H) of this rule provides the mechanism for the Company to advise the Commission of specified changed circumstances. The Company is required to inform the Commission of material changes in the size, type, timing and ownership of the facility and the reasons for them. It then gives the Commission the authority to evaluate the reasons for the changed circumstances and, within 45 days of receipt of the request, notify the applicant whether the change is acceptable or requires further record development.

In addition, there are circumstances when the Company believes it is advisable to provide updated information about the status of projects, even if a formal Notice of Changed Circumstances is not contemplated by the Rule. We have provided updates arising out of changes in our demand forecast, changes in the overall economic landscape and changes in the potential value of a project to our customers. Examples of these types of updates include the process we have proposed in our prior Black Dog Certificate of Need proceeding (Docket No. E002/CN-11-184); the current Competitive Acquisition Process-Certificate of Need proceeding (Docket No. E002/CN-12-1240); and the Prairie Island EPU Certificate of Need (Docket E002/CN-08-509).

In the case of the Certificate of Need granted for the addition of 71 MW of capacity at Monticello in Docket E002/CN-08-125, the Company provided updates that we believed were advisable, as well as one formal Notice of Changed Circumstances. These activities included:

1. We advised the Commission in November 2009 that the NRC decided to delay review of our license amendment request. *See Status of Extended Power Uprate at Monticello Nuclear Generating Plant,* Docket No. E002/CN-08-185, Nov. 5, 2009.

2. We filed a Notice of Changed Circumstances pursuant to the rule on November 22, 2011. *See In the Matter of the Application of Northern States Power, a Minnesota Corporation, for a Certificate of Need for the Monticello Nuclear Generating Plant Extended Power Uprate - Notice of Changed Circumstances*, Docket No. E002/CN-08-185, January 6, 2012, at 3.

3. We provided the Commission with updates on the evolving costs of the Program in our rate cases. We provided a summary of these rate case updates in our response to Information Request DOC IR-94 in this Docket.

The Company recognizes the Department may be interested in discussing the Company's efforts to provide additional cost information to the Commission. The Company provided cost update information during the rate proceedings to facilitate the Commission's consideration of those costs for purposes of cost recovery. We did not discuss the cost issue in the Certificate of Need Docket for several reasons. First, the Notice of Changed Circumstances Rule is not well suited for discussion of cost as described above. Second, at the time we made our Notice of Changed Circumstances in November 2011, the emerging changes in cost of the Program were well known and had already been identified in the pending rate case (Docket E002/GR-10-971).

Indeed, in this time frame, the procedural schedule in the rate case had been extended in part to address issues relating to Monticello and we did not believe it was necessary or appropriate to raise the same issues in the Notice of Changed Circumstances. Third, the changes in cost of the Program did not provide a reasonable opportunity to terminate the initiative. As described more fully in our response to Information Request DOC-119, by this timeframe (late 2011) the Company had invested significant capital into the plant's long-term operation and stopping would have created an undue risk to the viability of the plant.

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Date:	May 15, 2015

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☐ **Public Document – Trade Secret Data Excised**
☒ **Public Document**

Xcel Energy			
Docket No.:	E002/CI-13-754		
Response To:	Department of Commerce	Information Request No.	119
Requestor:	Nancy Campbell/Chris Shaw		
Date Received:	May 5, 2014		

Question:

As Xcel realized that the costs of the EPU project would be higher than expected; did the Company consider abandoning the project and pursing another approach to acquiring the 71 MW of additional capacity? If so, please describe this assessment. If not, please explain why this approach was not considered. Please also provide the title(s) of the officers of Xcel that were responsible for making such a decision.

Response:

The Company considered its options over the course of the multi-year implementation of the LCM/EPU Program as costs increased. The Company specifically considered whether it was feasible to abandon the EPU portion of the program after the time of the 2011 outage.

The Company had executive-level discussions about how to move forward. These discussions involved Mr. Dennis Koehl (then Chief Nuclear Officer), Mr. Scott Wilensky (then VP of Regulatory and Resource Planning), and Mr. Timothy O'Connor (then Site VP of Monticello). The discussions considered the practical operational risks, inseparability of the uprate MWs, and informal cost effectiveness analyses.

Specifically, these discussions explored: (1) the design and engineering challenges of moving forward with only life extension management; (2) the fact that certain equipment needed to be replaced and the costs and timing risks in light of the long lead times for equipment and the time to reanalyze and design work for the upgrades associated with a change in direction including potential NRC issues associated with changing course and the likely delay this could cause; (3) the difficulty in isolating power uprate work and associated costs that could be avoided because the 2007 design leveraged the need to replace aging equipment with designs and equipment sized to support both life extension and the power uprate; and (4) the cost effectiveness of the project based on general resource planning knowledge of natural gas costs, energy and capacity needs; previously modeled breakeven prices for nuclear uprates as well as consideration of the impact of sunk costs and the costs to change plans.

The fact that the LCM upgrades remained necessary to support long-term operations at the plant regardless of whether the uprate was completed, the sunk costs incurred, and the currently estimated cost to complete the Project led to the conclusion that moving forward with the current plan was the best means of retaining the value of the Monticello plant. This recommendation was shared with Mr. David Sparby (then Chief Financial Officer) and Mr. Ben Fowke (then Chief Operating Officer). Similar conversations occurred after 2011 as costs continued to increase, although the same factors led to the same conclusion: that the Company believed it was in customers' best interests to complete the currently planned design.

For additional support, we provided the "To Go" assessments with our initial filing. As described by Company witness Mr. James Alders in Direct Testimony, the To Go analyses assess the value of the LCM/EPU Project assuming perfect foresight as to total project costs and timing recognizing the integrated nature of the Project scope and design. We believe these analyses support our decision, as well as the underlying discussions and high-level analysis, to move forward with the program in the summer of 2011.

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