BEFORE THE MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS 600 NORTH ROBERT STREET
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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	OAH Docket No. 48-2500-31139 MPUC Docket No. E002/CI-13-754

REPLY BRIEF OF THE MINNESOTA DEPARTMENT OF COMMERCE

NOVEMBER 21, 2014

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I. INTRODUCTION

The Minnesota Department of Commerce, Division of Energy Resources, Energy Regulation and Planning Unit (Department or DOC) respectfully submits this Reply Brief to Administrative Law Judge (ALJ) Steve M. Mihalchick and the Minnesota Public Utilities Commission (Commission), together with separately filed Proposed Findings of Fact. At issue is whether Northern States Power Company, d/b/a Xcel Energy (NSP, Xcel, or the Company) has shown its request that ratepayers pay for all of the cost overruns, amounting to over $400 million to be reasonable, based on what it knew or should have known regarding all project costs for the Life Cycle Management (LCM) and Extended Power Uprate (EPU) programs at the Monticello Nuclear Generating Plant (Monticello), particularly given cost representations by Xcel in its 2005 certificate of need (E002/CN-05-123 or 2005 CN), in which Xcel identified expected costs of the LCM, and its 2008 certificate of need (E002/CN-08-185 or 2008 CN) for the EPU.[1]

The primary purpose of the Department's Reply Brief is to respond to Xcel's Initial Brief, with minor response to the Initial Briefs of the Minnesota Office of Attorney General – Antitrust and Utilities Division (OAG-AUD), and of the Xcel Large Industrials (XLI). Key issues addressed in this Reply Brief include response to: Xcel's incorrect legal assertions regarding its burden of proof and the Commission's standard of review, Xcel's flawed affirmative case and Xcel's incorrect representations regarding testimony by Department witnesses.

[1] December 18, 2013, *Order Approving Investigation and Notice and Order for Hearing,* MPUC Docket No. E002/CI-12-754 at 3 (noting acknowledgement of the Department and Xcel that "the scope of the investigation would include all project costs that Xcel seeks to recover that differ from what Xcel initially proposed.").

Based on the record, and as set forth in its Initial Brief, the Department continues to conclude that:[2]

- Xcel failed to demonstrate the prudency of the entire $402 million in cost overruns,[3] based on what the Company knew or reasonably should have known at the time of its decisions and actions;
- Department witnesses raised significant doubt that all of the $402 million in cost overruns were prudently and reasonably incurred; and any doubt as to reasonableness must be given to ratepayers; and
- It would be unreasonable for the Company to recover from ratepayers the entire $402 million in excess of initial cost estimates.

Accordingly, the Department continues to recommend a $71.42 million reduction to the capital costs of the Monticello EPU resulting in a $10.237 million revenue requirement downward adjustment in revenue requirements for 2015 on a Minnesota jurisdictional basis,[4] and ongoing adjustment for the life of the plant, stepped down over time for accumulated depreciation.[5] Department testimony as well as that of the OAG-AUD provides the Commission with various options to consider with respect to determining the amount of a reasonable disallowance of the cost overruns. In its Initial Brief, XLI now recommends a disallowance based on no-return on the $402.1 million cost overrun.[6] The Department does not repeat its analysis of disallowance options in this Reply Brief.

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[2] *See, e.g.* DOC Initial Br. at 100.
[3] Based on costs identified in March, 2014; final costs may be higher.
[4] Assuming that the EPU is in service in 2015.
[5] *Id;* DOC Ex. 315 at 38-39 (Campbell Surrebuttal).
[6] XLI Initial Br. at 2, 8.

II. XCEL DOES NOT CITE APPLICABLE LAW

A. Burden Of Proof: Xcel Does Not Enjoy A Rebuttable Presumption Of Prudency Or Reasonableness

Without citation to Minnesota law, Xcel argued incorrectly that it is entitled to a rebuttable presumption of "management prudence," absent substantial evidence to the contrary.[7] Also, while acknowledging that it bears the ultimate burden of proof, Xcel claimed in error that it has made a *prima facie* showing of prudence and reasonableness such that it is entitled as a matter of law to recover the full $402.1 million cost overrun from ratepayers unless other parties sustain a "burden of production or of going forward" to present evidence sufficient to rebut the Company's showing.[8] Xcel then suggested erroneously that evidence from Department witnesses was not of a sufficient quantum to rebut Xcel's rebuttable presumption of prudency and reasonableness. *Id.*

A multi-faceted response to these incorrect assertions is in order. First, the Minnesota Supreme Court has ruled that a public utility such as Xcel does not enjoy a presumption of reasonableness as to utility management judgments. In its 1987 decision, *In the Matter of the Petition of Northern States Power Company for Authority to Change its Schedule of Rates for Electric Service in Minnesota (In re NSP),*[9] the Court discussed at length the different fact-finding process and evidentiary standard applicable to utility rate setting. It held that no such presumption of reasonableness exists in Minnesota, and that "regulatory commissions must scrutinize the judgments of utility management for ratemaking purposes," as follows:[10]

> ***NSP argues,*** and the administrative law judge agreed, that by proof of its actual capital structure, ***there arose a "rebuttable presumption of***

[7] Xcel Initial Br. at 16 n. 27.
[8] Xcel Initial Br. at 16-17.
[9] 416 N.W.2d 719 (1987).
[10] *Id.* at 725-26 (emphasis added).

> ***reasonableness" which could be overcome only by competent evidence in rebuttal.*** However, ***the MPUC rejected that contention, reasoning that because the company had at all times the burden of proving the proposed rate charge***, and by necessity the components that form the basis for the proposal, Minn. Stat. § 216B.16, subd. 4 (1986), that in this instance that burden had not been met.
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> . . . . [T]he Commission contends that the alleged presumption has been modified in some jurisdictions by statute; and MPUC asserts the Minnesota legislature has done so, if such a presumption ever existed in utility ratemaking in this state, by enactment of Minn. Stat. § 216B.16, subd. 4 (1986), which unequivocally places the burden of proof to establish reasonableness of a rate change upon the public utility.
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> ***We agree with the Commission. If there ever existed in this state a presumption to be applied in ratemaking, enactment of Minn. Stat. § 216B.16, subd. 4 (1986) effectively removed any presumption, and placed on the petitioning utility the burden of proving the proposed rate is fair and reasonable[.]*** . . . . When, in the Commission's judgment, a petitioning utility has failed to establish the reasonableness of costs which it claims justifies a proposed rate increase, the Commission itself may compute a hypothetical capital structure that will afford an ultimate determination of a reasonable and just rate. [citations omitted] Moreover, in setting rates, by necessity, ***regulatory commissions must scrutinize the judgments of utility management for ratemaking purposes.*** [citations omitted].

Xcel did not cite this case, even though it bears Xcel's name, and even though this standard has been in place for over twenty-five years.

Second, Xcel's insistence that *other parties* must demonstrate imprudence and unreasonableness, and that the quantum of proof by Department witnesses was insufficient, misses the mark.[11] In its *In re NSP* decision, the Court rejected Xcel's claim that parties other than Xcel had a burden of proof, reasoning that the company "had at all times the burden of

[11] The Department agrees that the law does not require Xcel to have acted "perfectly" and that it does not erect "insurmountable barriers" for cost recovery, *see* Xcel Initial Br. at 7, 14, 72 and 133. ***No party suggested otherwise*** in this case.

proving the proposed rate charge,"[12] and the Court agreed with the Commission's analysis.[13] The Court did not use the terms "burden of persuasion," "burden of production" or of "going forward," but its analysis clearly rejected -- for utility ratemaking cases -- the strict legal consequences that would result from application of the traditional civil standard of burden shifting.[14] The Court explained that Minnesota utility ratemaking ***differs from traditional civil cases*** both in terms of evidentiary standards and regarding the standard of review on appeal,[15] and provided no basis for Xcel's assertion in the present case that the traditional burden shifting present in traditional civil cases applies to utility rate proceedings.[16] The Court explained:[17]

> NSP argues that in a rate application proceeding the MPUC should weigh the evidence under the "fair preponderance' standard ***in the same manner traditionally employed by courts in a civil case,*** and that since, in that case, the MPUC failed to do so there should be a remand for further findings. ***We disagree.*** While a "fair preponderance standard may be applicable in a ratemaking proceeding, ***the "weighing" to be employed by the utility commission substantially differs from the type of "weighing" traditionally employed by a court in a civil case.***
>
> The "weighing" by court in a civil case applying the "fair preponderance" standard involves a determination by the court whether the proponent of the conclusion has produced ***sufficient credible evidence*** to sustain that conclusion. ***In contrast, the task of the MPUC is not so much concerned with the sufficiency and credibility of the evidence, as it is concerned with whether the evidence submitted, even if true, justifies the conclusion sought by the petitioning utility when considered together with the Commission's statutory responsibility to enforce the state's public policy that retail consumers of utility services shall be furnished such services at reasonable rates.*** *See, e.g.,* Minn.

[12] *In re NSP, id.* at 722-727.
[13] *Id.* at 725.
[14] Xcel did not cite *In re NSP,* nor did it cite any Commission ratemaking decision for support of its claim that in a utility rate proceeding the legal burden of going forward shifts to parties other than the utility.
[15] *In re NSP, id.* at 722-727.
[16] Xcel made a similar erroneous burden shifting argument in its Reply Brief at 8-11 in the pending Xcel rate case, MPUC Docket No. E002/GR-13-868, without citation to any Minnesota Commission decision, or analysis of *In re NSP*. There was no opportunity in that rate case for other parties to respond to Xcel's Reply Brief.
[17] *In re NSP, supra,* at 722 (emphasis added).

> Stat. § 216B.01 (1986). The burden of proof rests with the public utility seeking the change to demonstrate that the rate change is just and reasonable. Minn. Stat. § 216B.16, subd. 4, (1986).

The Court agreed that establishment of basic facts such as the amount of a cost is subject to classic fact-finding (and noted that such calculations or amounts of those costs often are uncontested, as is largely true in the present matter), but disagreed that classic evidentiary standards apply to the issue of whether shareholders or ratepayers should pay a particular cost; that result is determined by the Commission as part of its quasi-judicial and partially legislative capacity,[18] and not as a matter of law as in a traditional civil case. The Court identified the Commission's role in determining the legal consequence of facts for ratemaking purposes, as follows:[19]

> To state it differently, in evaluating the disputes in the typical ***rate case the accent is more on the inferences and conclusions to be drawn from the basic facts (i.e., amount of claimed costs) rather than on the reliability of the facts themselves.***
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> * * *
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> In such case ***the MPUC may draw its own inferences and arrive at its own conclusions from the undisputed basic facts.*** [citations omitted] Moreover, in ratemaking, as ***contrasted to civil litigation, evidence in the hearing record consists mostly of economic facts and the opinions of experts*** who have analyzed those facts rather than reports of sensorily perceived phenomena. Thus, it becomes apparent that the ***logic and relevance of the facts to the ultimate determination of whether the rate request is reasonable is of substantially more importance than the quantum of proof needed.***

The Court noted that these differences also affect appellate review such that the substantial evidence test on appeal of the Commission's ratemaking decision "differs in some respects from that employed in other contexts and proceedings," as follows:[20]

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[18] *In re NSP, id.* at 722.
[19] *Id.* at 722-723 (emphasis added).
[20] *Id.* at 724 (emphasis added).

> As we noted in *Minnesota Power & Light Co. v. Minnesota Public Utilities Commission,* 342 NW.2d 324 (Minn. 1983), frequently ***it is difficult to review commission findings*** "under the traditional substantial evidence standard because ***it is not susceptible to precise verification on the evidentiary record due to its judgmental nature."*** [citations omitted] In *Minnesota Power and Light* we concluded, "[t]hus, when applying the substantial evidence test to that type of finding, ***the reviewing court should determine whether the agency has adequately explained how it derived its conclusion and whether that conclusion is reasonable on the basis of the record.***" [citation omitted].

Only the Minnesota Supreme Court has the authority to make a definitive statement of Minnesota law,[21] and not the Court of Appeals or, certainly, courts of other states. The Court's *In re NSP* decision strongly suggests that the traditional civil standard of shifting burdens either is wholly inapplicable to rate proceedings before the Commission or, at minimum, is very different from that applied in traditional civil cases. Xcel's complete silence regarding the Court's *In re NSP* decision and lengthy discussion is troubling, as is Xcel's encouragement that the Commission rely instead on secondary sources such as *Corpus Juris Secundum,* the decisions of other states, and statements of Minnesota law that make no reference to ratemaking under Minn. Stat. § 216B.16 or to Minn. Stat. § 216B.03 (any doubt as to reasonableness must go to ratepayers).[22]

Third, Xcel's burden shifting argument is a red herring. Department witnesses raised significant doubt as to the reasonableness of some portion of the $402 million in cost overruns that Xcel seeks from ratepayers.[23] They identified many decisions and actions including poor project management by Xcel that were not reasonable at the time, based on what Xcel knew or should have known, and that likely resulted in costs being higher than they would have been if

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[21] *See, e.g., Willis v. County of Sherburne,* 555 N.W.2d 277, 281-82 (Minn. 1996).
[22] *See* Xcel Initial Br. at 16-17.
[23] *See, e.g.,* DOC Ex. 419 (Crisp Opening Statement); DOC Ex. 436 (Campbell Opening Statement).

reasonable decisions and actions had occurred.[24] Xcel did not show these decisions to be reasonable when made or performed; such decisions included:[25]

> …pursuit of a "fast-track" approach, the lack of separate cost tracking for the LCM and the EPU projects, lack of effective cost controls, lack of reasonable planning and design scoping, and the lack of reasonable use of contingencies in the budgeting process and economic justification for the EPU.

As noted in the Department's Initial Brief, without reasonable management of projects, including highly detailed scoping, design, and implementation, cost overruns for EPU-related work can be staggering. Xcel's failure to manage the LCM and EPU projects reasonably explains in part the extraordinarily high costs at issue in this proceeding.[26]

Finally, Minnesota law provides that "any doubt" as to reasonableness must go to the consumer (ratepayer).[27] Nowhere in Xcel's 143-page Initial Brief did the Company acknowledge this important statutory requirement and extraordinary ratepayer protection nor did it note Xcel's obligation to overcome such doubt once created. In light of the Department's expert testimony that raised significant doubt as to the prudence and reasonableness of Xcel's actions, ratepayers rather than Xcel must be provided the benefit of that doubt, and a disallowance of some significant sum is warranted.

B. Prudence Is A Simple Concept In This Matter

Xcel's claim that the "prudent investment standard" applies to this case appears to be incorrect. To be clear, the concept of prudency in the present docket is simple. Xcel bears the same burden to demonstrate prudency of cost recovery in the present case as it did in its 2012 rate case from which this supplemental proceeding stems and through which Xcel seeks to

[24] DOC Ex. 419 (Crisp Opening).
[25] DOC Ex. 419 at 1-2 (Crisp Opening Statement).
[26] DOC Initial Br. at 9-11.
[27] Minn. Stat. § 216B.03 (2014).

achieve rate recovery of its cost overruns. To show that its costs were prudently incurred, the Company must demonstrate the reasonableness of its actions as of the time those actions or decisions were made,[28] and because Xcel seeks recovery of every dollar of the $402.1 million cost overrun, it must demonstrate that ***all*** of those dollars were prudently and reasonably incurred. To the extent that Xcel fails to meet that burden (keeping in mind that "any doubt" as to reasonableness must go to ratepayers), the Commission has significant latitude to balance shareholder and ratepayer interests in determining a reasonable amount of money that ratepayers are not required to pay. Ultimately, the Commission's *overall* rate decision must be just and reasonable.[29] This requirement is based on the same standard that the Commission has applied countless times in rate proceedings, particularly where facilities were constructed prior to a test year such that the utility seeks present rate recovery of those past costs.

In contrast, Xcel suggested that the Minnesota Commission is bound by the "prudent investment standard" that speaks to a "zone of reasonableness."[30] Xcel provided the United States Supreme Court's definition of this standard, in *Duquesne Light Co. v. Barasch* (*Duquesne),*[31] as follows:[32]

> The prudent investment standard focuses on compensating a utility "for all prudent investments at their actual cost when made (their 'historical' cost), irrespective of whether individual investments are deemed necessary or beneficial in hindsight." [citing *Duquesne Light Co. v. Barasch,* 488 U.S. 299, 309, 109 S. Ct. 609, 616 (1989)]

The term "prudent," however, does not clothe the "prudent investment standard" with legitimacy as a ratemaking standard in Minnesota. Rather, the Department found no Commission order in

[28] DOC Ex. 309 at 17 (Shaw Direct).
[29] Minn. Stat. § 216B.03.
[30] Xcel Initial Br. at 14-16.
[31] *Duquesne,* 488 U.S. 299, 109 S. Ct. 609 (1989).
[32] Xcel Initial Br. at 14.

which the Commission adopted the "prudent investment standard" for ratemaking purposes or any Minnesota appellate decision, and found no indication of such a standard in Minnesota statutes.

The "prudent investment standard" seems to be a vestige of an earlier time. Application of the standard, which also has been called the "original cost rule" or the "historic cost rule," was not imposed on the state commission in the *Duquesne* case. *Duquesne* involved a utility's appeal of a state commission ruling based on the state's failure to apply the "prudent investment standard." The *Duquesne* Court upheld a Pennsylvania commission order that denied rate base treatment for capital investments made, but not used and useful to ratepayers, consistent with the state's ratemaking statute.[33] The Court affirmed the Pennsylvania commission's rejection of the "prudent investment standard" (i.e., it upheld the state commission's denial of a return on prudently incurred investments that were not used and useful). The *Duquesne* Court explained its ruling, in part, as follows:[34]

> It cannot seriously be contended that the Constitution prevents state legislatures from giving specific instructions to their utility commissions. We have never doubted that state legislatures are competent bodies to set utility rates. And the Pennsylvania PUC is essentially an administrative arm of the legislature. [citations omitted]. We stated in *Permian Basin* that the commission "must be free, within the limitations imposed by pertinent constitutional and *statutory commands* [emphasis in original], to devise methods of regulation capable of equitably reconciling diverse and conflicting interests." [citations omitted].

Regarding constitutional propriety, the *Duquesne* Court looked to the "overall effect" of a rate order as to whether rates were unjust or unreasonable, and not a particular rate component.[35]

Similarly, Minnesota law requires that for a utility's capital investments to receive rate base treatment (*i.e.,* earning a return) the facilities must be, at a minimum, used and useful to

[33] *Duquesne,* 488 U.S. at 312-14, 109 S. Ct. at 618-19.
[34] *Id.*
[35] *Id.,* 488 at 311-12, 109 S. Ct. at 617-18.

ratepayers,[36] and it further requires that rates overall must be just and reasonable.[37] Xcel's silence as to Minnesota Commission precedence, to Minnesota appellate case law and to Minnesota statutes suggests that the Company found no Minnesota legal authority for its position that the "prudent investment standard" applies to this Minnesota proceeding.

The Department also concludes that Xcel's legal citation to *jurisdictions other than Minnesota* are unpersuasive for the proposition that the Minnesota Commission must apply some sort of tort standard (i.e., "proximate cause," "duty of care," "foreseeable harm" and "damages") in its ratemaking decision regarding a reasonable disallowance in this matter.[38] Again, the Company's arguments are off track. The concepts of prudency and cost recovery with respect to the present docket reflect simple, well-understood ratemaking concepts, as noted above. Xcel's continued assertions without citation to Minnesota legal authority that non-ratemaking civil standards apply to Minnesota utility ratemaking in this matter are unsupported, and inappropriately encourage the Commission to apply inapplicable law in this case.

C. Conclusion

For the reasons stated above, reliance on the Company's legal analyses regarding applicable standards of law for burden of proof and standard of review is not warranted, and must be rejected.

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[36] Minn. Stat. § 216B.16, subd. 6 (2014).
[37] Minn. Stat. § 216B.03 (2014). *See also,* Minn. Stat. § 216B.16, subd. 6 (2014).
[38] Xcel Initial Br. at 15-16 and n.22. Xcel also stated, "Notably, the Department and OAG do not specifically find imprudence and do not find specific damages." *Id.* at 16. Because the *burden of proof rests entirely on Xcel to show that its proposed rate recovery is reasonable,* the public agencies are not required to establish either of these findings. Nonetheless, Department witnesses affirmatively raised significant doubt as to the reasonableness of Xcel's actions, at the time made and based on what the Company knew or should have known, and testified that costs likely are higher than they otherwise would have been. DOC Initial Br. at 9-11, 22-50, 55-56, 61-64, 72-73.

III. XCEL'S INITIAL BRIEF DID NOT DEMONSTRATE PRUDENCE AND REASONABLENESS

The Department continues to rely on its Initial Brief to show that its witnesses raised significant doubt as to the prudency and reasonableness of Xcel actions, and that Xcel's poor project management likely resulted in costs being greater than they otherwise would be.[39] Nonetheless, the Department provides this brief response to Xcel's affirmative case to highlight Xcel's failure to demonstrate that every dollar of the $402 million in cost overruns was prudently and reasonably incurred.

Xcel discussed its testimony which explained that the doubling of costs (from estimated to completion) for the LCM and EPU projects was reasonable due primarily to the following three circumstances, and that these three circumstances largely were beyond Xcel's control:[40]

1. Nuclear Regulatory Commission (NRC) compliance;
2. Necessary design changes; and
3. Installation complexities.

The Company, however, failed to show the accuracy of its claims as to any of these three cost drivers.

First,as to Xcel's doubling of costs, the Department disagrees that its examination assumed that Xcel must have mismanaged the project due solely to the fact that project costs doubled. It did not. As Dr. Jacob testified, the magnitude of the cost overrun established no presumption of imprudence, but provided a reason to investigate.[41] As part of its examination of Xcel's cost overruns, the Department identified likely higher costs due to poor project

[39] DOC Initial Br. at DOC Initial Br. at 9-11, 22-50, 55-56, 61-64, 72-73.
[40] Xcel Initial Br. at 44-75. It bears noting that the first twelve pages of Xcel's Initial Brief make distinct statements of claimed fact with little or no record citation.[40]
[41] Tr. Vol. 4 at 31 (Jacobs).

management, poor oversight, the start and stop process of contractors, fast-tracking the project without adequate detailed pre-planning, and human performance errors.[42] Department witness Ms. Nancy Campbell listed some of the many reasons for the Department's conclusion that the Company failed to demonstrate the prudence and reasonableness of all of the $402.1 million cost overrun, including:[43]

- lack of upfront planning as addressed by Mr. Crisp;
- effects of the "fast-track" approach as addressed by Mr. Crisp;
- inadequate understanding of the true scope of work as addressed by Mr. Jacobs;
- insufficient oversight of contractors and the entire process as addressed by Mr. Crisp;
- start and stop process of contractors addressed by Mr. Crisp;
- poor project management as addressed by Mr. Crisp;
- ineffective use of contingencies as addressed by Mr. Crisp;
- lack of cost controls and tracking concerns as addressed by Ms. Campbell;
- human performance errors raised by NRC as addressed by Ms. Campbell;
- low cost estimates and inadequate information in initial CNs and in this case regarding necessary capital costs as addressed by Ms. Campbell and Mr. Shaw;
- lack of communication by Xcel with Commission and interested parties regarding cost overruns as addressed by Ms. Campbell;
- lack of showing that it is reasonable to allow recovery from ratepayers of the amount of EPU project that is not cost effective as addressed by Mr. Shaw.

[42] DOC Initial Br. at 9-11, 22-50, 55-56, 61-64, 72-73, and 80-82.
[43] DOC Initial Br. at 73-74; DOC Ex. 436 at 3 (Campbell Opening Statement).

Second, Department examination of Xcel's three claimed cost drivers led to the following conclusions, based on the information Xcel provided:

1. Dr. Jacobs explained in detail that NRC did not cause significant additional capital costs or impact the overall LCM/EPU project schedule given the Company's own project delays;[44]

2. Mr. Crisp testified that Xcel, and its contractors, failed to adequately pre-plan, design and implement the project, particularly in light of the Xcel Board's decision to fast track the LCM and EPU projects by two years, which likely resulted in costly design changes and implementation problems;[45] and

3. Department witness Shaw explained that neither the Xcel 2007 resource plan nor the Commission's orders required Xcel to fast-track the EPU.[46]

Third, the Company's Initial Brief paid particular attention to Xcel's many, many re-scoping, re-designing and fixing of a multitude of problems discovered during construction/implementation (and under a self-imposed extremely compressed schedule) *apparently to demonstrate* that its actions were reasonable at the times when those changes were made.[47]

The Department reached the opposite conclusion following review of the Company's overall approach for insight into how Xcel got itself into such a costly mess.[48] The Company's Initial Brief all but ignored the essential focus of Mr. Crisp's testimony, and to a degree that of Dr. Jacobs, that Xcel's many, many changes during construction suggested that it was not reasonable at that time for Xcel to have begun implementation and construction without first

[44] DOC Initial Br. at 49, 61-62; DOC Ex. 305 at 15 (Jacobs Public Direct); DOC Ex. 307 at 2, 7 (Jacobs Surrebuttal). *See also,* DOC Ex. 300 at 11-15 (Crisp Public Direct).
[45] DOC Initial Br. 9-11, 22-47. *See also,* DOC Initial Br. 62-64 (Dr. Jacobs' conclusion that Xcel had not understood the true scope of the work)..
[46] DOC Initial Br. at 66-69.
[47] Xcel Initial Br. at 38-75.
[48] DOC Ex. 419 (Crisp Opening Statement); DOC Ex. 421 (Jacobs Opening Statement); DOC Ex. 436 (Campbell Opening Statement).

insisting on highly detailed pre-planning for this very complex project, *particularly in light of the Xcel Board's decision to fast track* the LCM and EPU projects by two years.[49]

The Company's support for its decision to combine into one massive project (as a "single initiative") the EPU work together with all of the normal maintenance and repair LCM projects omitted a rational explanation for this escalation of complexity in light of the already significant complexities of constructing the EPU.[50] Further, Xcel's decision to compress the EPU schedule, without ensuring adequate time within that expedited schedule for necessary highly detailed pre-planning was also problematic, as discussed below. Xcel generalized that it was "far better to combine all of that work in a single initiative that maximized the value of the asset and also allowed for a longer depreciation schedule to lower customer costs."[51] Saying so doesn't make it so; in fact, this unsupported statement begs that important question. The Company clearly did not demonstrate that it was reasonable at the time to exponentially increase complexity with a combined project, together with a fast-tracked schedule, and without detailed pre-planning.

Another example of Xcel's failure to show that its many, many mid-course corrections evidenced a reasonably managed project was the Company's claimed justification that certain areas of the plant were inaccessible during normal operation due to high levels of radiation, and that approximately ***2,000 instances of field design changes*** were made during implementation because the Company couldn't have known in advance about the confined spaces and other physical interferences.[52] This argument is not plausible. Missing is a reasonable explanation, if

[49] DOC Initial Br. at 9-11, 22-50, 55-56, 61-64, 72-73.
[50] An EPU is a massive undertaking. Tr. Vol. 4 at 65 (Jacobs).
[51] Xcel Initial Br. at 84-85; *see also id* at 31.
[52] Xcel Initial Br. at 68-69.

one exists, for Xcel's choice not to have taken the time to identify the "as-found" physical conditions within its own plant.

For instance, the Company didn't explain why it chose to start implementation during the 2009 refueling outage (RFO) rather than use that outage to physically assess plant conditions such as the dimensions and configurations of physical space and, together with information as to the dimensions/configurations of the equipment that would be removed and the facilities (sometimes larger) that would be installed, to use such advance knowledge to define in great detail the initial scope and design of the work.[53] A wise old construction adage, "Measure twice, cut once," was breached for this project. Instead, Xcel itself or through poor oversight of its contractors, chose not to identify in advance the very "as-found" conditions such as those concerning the feedwater heater and 13.8 kV modifications that likely resulted in costly re-design and delay in project completion.[54] Certainly, some of the "as-found" physical conditions existed in plain view, had Xcel chosen to identify them in advance of implementation.

The Company did not demonstrate reasonable management of the project at the time and, as Department witnesses testified, such management failures likely caused delay and higher costs.[55] The Department continues to rely on its Initial Brief for the many concerns identified primarily by Mr. Crisp and Dr. Jacobs in this regard.

[53] DOC Initial Br. 9-11, 22-42, 49, 55-56, 62-64.
[54] *See* DOC Initial Br. at 35-39.
[55] DOC Initial Br. 9-11, 22-42, 49, 55-56, 62-64.

IV. DEPARTMENT WITNESSES RAISED SIGNIFICANT DOUBT AS TO REASONABLENESS; XCEL'S CRITICISMS ARE UNFOUNDED

Xcel's criticisms of Department expert testimony is not credible, as detailed in part, below. The Department continues to rely on its Initial Brief, and has attempted not to be unduly repetitious.

A. Mr. Crisp's Testimony Did Not Rely On Only One Document

Xcel's claim that Nuclear engineer Mark Crisp relied on a single document, the 2011 Cost History,[56] is incorrect and unsupported by the record. Mr. Crisp, an engineer with extensive experience with nuclear projects over several decades, reviewed the many documents produced by the Company in response to discovery, interviewed Xcel personnel, and demonstrated during cross-examination and redirect his familiarity with documents produced in this matter.[57] The 2011 Cost History,[58] one of approximately 3,000 documents that were produced by Xcel in discovery,[59] supported Mr. Crisp's observations and concerns that the LCM and EPU projects appeared to have been poorly managed, and that poor management likely resulted in costs being higher than they otherwise would have been.[60]

The 2011 Cost History, by all accounts, is an extraordinary document. It was prepared following the 2011 refueling outage by Mr. Steve Hammer, an engineer and member of the Monticello Site EPU Project team, as an internal status document at the request of then-Chief Nuclear Officer Mr. Dennis Koehl.[61] Mr. Koehl requested the document to provide "input on the

[56] Xcel Initial Br. at 3, 17.
[57] *See, e.g.,* Tr. Vol. 3 at 75-84 (Crisp).
[58] DOC Ex. 302 at MWC-3 (Crisp Trade Secret Attachment) (*EPU Cost History).*
[59] *See* Tr. Vol. 3 at 100 (Jacobs).
[60] DOC Initial Br. at 28-35, 40-42; DOC Ex. 303 at 26-28 (Crisp Surrebuttal)..
[61] DOC Ex. 300 at 24 (Crisp Public Direct).

Project structure and opinions on the best way to proceed forward to complete the installation."[62] The document was contemporaneous with continued project construction and identified a multitude of then-recent problems, with their chronology, including the project's inadequate initial scope, fast-track schedule, poor contractor performance, escalating cost increases and suggested their likely causes.[63] It was prepared during the time, just after the 2011 RFO, that Mr. O'Connor acknowledged the Company contemplated abandoning the project.[64] Given the seriousness of the project circumstances at that point in time, it is telling that Xcel's Notice of Changed Circumstances (NOCC) filed with the Commission in 2011 omitted any reference to the Company's incurred cost overruns or the likely continued cost overruns needed to complete the project.[65]

As Mr. Crisp testified, Xcel did not state that the 2011 Cost History was incorrect,[66] but only argued that it was one person's viewpoint.[67] The Company produced no similarly contemporaneous document that provided a different, highly detailed viewpoint.

Rather than produce Mr. Hammer as a witness to explain his own document for the benefit of the Commission, Xcel called witnesses who had little or nothing to do with the Monticello LCM and EPU project at that time. Nonetheless, Xcel witnesses Mr. Sparby and

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[62] *Id.*
[63] DOC Ex. 302 at MWC-3 (Crisp Trade Secret Attachment) (*EPU Cost History).*
[64] Tr. Vol. 1 at 47-48 (O'Connor) (after the 2011 outage Xcel considered whether to abandon the project).
[65] *See* Tr. Vol. 1 at 48 (O'Connor). DOC Initial Br. at 79-80, 82-85 (details Xcel's omission from its 2011 NOCC of any suggestion that the LCM and EPU projects were and likely would be far more costly than initially represented to the Commission in 2008).
[66] DOC Ex. 303 at 26 (Crisp Surrebuttal).
[67] Xcel Initial Br. at 104. The Company also said that it began construction in 2009 (i.e., during the 2009 and 2011 outages) "to meet customer needs" and that doing so "allowed us to move forward promptly under the circumstances." *Id.* Again, Xcel offers non-specific generalizations that do not appear to have been reasonable under the circumstances. DOC Initial Br. at 9-11, 22-42, 55-56, 62-64.

Mr. O'Connor together with outside witnesses Mr. Stahl and Mr. Sieracki testified essentially that Mr. Hammer's detailed and contemporaneous document should be minimized if not dismissed.[68] The recipient of the document, Mr. Koehl, who no longer works for the Company, also was not offered as a witness in this proceeding. Xcel arranged for Mr. Koehl to be interviewed by outside Xcel witnesses Mr. Stahl and Mr. Sieracki (although apparently not by current Xcel employee witnesses), but the Company apparently chose not to arrange for Mr. Koehl to provide testimony in this matter for the Commission.

Xcel has not shown to be credible its criticism of Mr. Crisp's use of the 2011 Cost History document and, therefore, such criticism should be disregarded.

B. Mr. Crisp's Testimony As To Xcel's Final Scope of Modifications Does Not Support Xcel's Claim of Reasonable Management or Resulting Costs

Mr. Crisp addressed the Company's clearly inadequate *initial* scope and design work regarding the ten key project modifications.[69] At trial, Mr. Crisp explained in detail that the Company's extensive "*final scope*" of many, many fixes and changes needed to implement the modifications showed that Xcel's initial pre-planning was unreasonable at that time.[70] Nonetheless, Xcel appeared to imply incorrectly that Mr. Crisp's lack of position to the reasonableness of the Company adding items to the final scope of work for these costly modifications somehow supports Xcel's claim of reasonable management.[71] The Company also

[68] *See generally,* Xcel Ex. 12 at 27-28 (Sparby Rebuttal); Xcel Ex. 9 at 64-65 (O'Connor Public Rebuttal); Xcel Ex. 16 at 20 (O'Connor Public Surrebuttal); Xcel Ex. 13 at 11 (Stahl Rebuttal); Xcel Ex. 11 at 18, 22-23 (Sieracki Rebuttal).
[69] Tr. Vol. 3 at 57-58, 75-84 (Crisp).
[70] *Id.*
[71] Xcel Initial Br. at 99.

criticized Mr. Crisp for having not performed "a technical analysis" of the project and stated that he ignored the project's benefits.[72]

Again, Xcel's criticisms are off-point and are unworthy of consideration. Mr. Crisp's testimony raised significant doubt as to the reasonableness of Xcel's initial scope definition of the project as a whole and as shown by Xcel's sketchy initial scope descriptions for the major capital modifications.[73]

Mr. Crisp testified that Xcel's lack of adequate development of project design coupled with a "fast-track" approach, among other factors, resulted in costs being much higher than Xcel initially estimated:[74]

> Projects such as Monticello with (as the Company indicates) a "small footprint" benefit from the time and effort to build a 3-dimensional model on the computer of the activities required to construct the design. Had Xcel not been so aggressive with schedules a 3-D design model would have been invaluable to point out conflicts and construction interferences. It is simply not wise to expedite a project without the benefit of proper project planning on the front end.
>
> Undoubtedly, the expedited approach caused delays and budget increases that could have been avoided with proper pre-planning, project management and proper design sequencing. Proper Project Management and management strategy could have actually supported the 2011 or 2013 refueling outage. Unfortunately, neither of these occurred satisfactorily.

As Mr. Crisp explained, poor initial planning of a complex project "almost guarantees" cost overruns,[75] as is borne out in this case. The Company in response provided no reasoned explanation for why its initial scope and design of the extremely costly modifications were so poorly thought out prior to Xcel's commencement of construction. To the extent that General

[72] *Id.*
[73] Tr. Vol. 3 at 57-58, 75-84 (Crisp).
[74] DOC Ex. 300 at 29 (Crisp Public Direct).
[75] DOC Initial Br. 23-24; DOC Ex. 300 at 7-8 (Crist Public Direct).

Electric (GE) or other contractors are to blame, then Xcel must hold those contractors accountable based on contracts that Xcel negotiated with those entities. Given its inadequate initial planning, it is no surprise that at some point Xcel had to make the many, many detailed changes, re-designs and fixes to problems it encountered during the course of failed attempts to implement those poorly pre-planned modifications.

Further, and contrary to Xcel's conclusion, the fact that Mr. Crisp did not use the word "imprudent" as to modification or project costs does not mean that he agreed that Xcel's costs were prudent or reasonable or that Mr. Crisp had some sort of obligation to quantify the extent of such higher costs.[76] Mr. Crisp testified factually about Xcel's conduct that was not reasonable at the time and likely resulted in higher costs[77] – which, of course, is testimony that can be applied to the prudency standard. He did not testify as to specific dollars associated with specific conduct. Rather he testified to the effects of decisions of the Company at various points in time.[78] His testimony was part of the Department's overall prudency conclusion and recommendation.[79]

C. Xcel's 2008 Project Cost Estimate And Lack of Contingency Were Unreasonable

The Department raised significant doubt as to the reasonableness of *both* Xcel's 2008 project cost estimate and the level of contingency that the Company included for the

[76] *See* Xcel Initial Br. 3, 89-90, 109, and 132. Department witness Ms. Campbell explained that the record does not allow easy quantification of the likely amount by which Xcel's unreasonable conduct likely caused delay and increased costs. DOC Ex. 315 at 29 at (Campbell Surrebuttal).
[77] DOC Initial Br. at 9-11, 22-47.
[78] Tr. Vol. 3 at 23 (Crisp).
[79] *See* Tr. Vol. 3 at 68 (Crisp).

Commission's consideration in the 2008 CN.[80] In its Initial Brief, Xcel incorrectly stated otherwise through the following assertions that:

1. The Department consultants did not dispute its 2008 "high-end estimate" provided to the Commission in the 2008 CN,[81]
2. Mr. Crisp only considered the 2008 cost estimates to be unreasonable "because no contingency was used, or alternatively, the Company should have used a 100 percent contingency,"[82]
3. Xcel developed a cost estimate "that was 75 percent higher than the most expensive benchmarked plant,"[83] and
4. Criticism of Mr. Crisp's reliance on a cost estimation protocol that was standard in the industry at that time.[84]

These statements require corrections.

1. Xcel did not adequately represent potential costs of the EPU in the 2008 certificate of need proceeding

The record demonstrates that Xcel's cost estimates provided to the Commission in the 2008 CN surely were lacking. Mr. Crisp testified on the importance of using as-built drawings,[85] appropriate overall project management, including proper staffing, scope definition, scheduling, budgeting, design, procurement and construction,[86] along with appropriate tracking of actual

[80] DOC Initial Br. at 43-45
[81] Xcel Initial Br. at 9.
[82] Xcel Initial Br. at 91.
[83] Xcel Initial Br. at 32, 35-36, and 89.
[84] *Id.* at 92-93.
[85] DOC Ex. 300 at 5-6 (Crisp Public Direct).
[86] *Id*. at 6.

costs. He concluded that "project management for the Monticello project suffered from failure of several of these activities to be adequately defined.[87]

Moreover, Mr. Crisp pointed out Xcel's admission to including in its initial cost estimate ***only $27.5 million for installation costs***, and only for GE's portion of the work, while its actual installation costs ***exceeded that estimate by 955%.***[88] Xcel never told the Commission that its initial cost estimate omitted likely installation costs or that it only covered one portion of the work to construct the proposed facility.[89]

Clearly, a fair reading of Mr. Crisp's testimony does not support a conclusion that he considered Xcel's 2008 estimate to be reasonable when that estimate was not a complete estimate for the entire project, and when Xcel knew how little work had gone into its cost estimates and when Xcel knew that it had omitted likely installation costs for the project at issue in the 2008 CN.[90]

2. Xcel's assertions regarding contingencies contradict both earlier representations by Xcel and elementary math

As to contingency, Xcel continues to claim without adequate support that its initial estimate in the 2008 CN was as low as $320 million, but with "contingency added" (a difference of $26 million) the estimate became $346 million.[91] However, as Xcel's own responses to discovery indicated and as Ms. Campbell demonstrated, the only "contingency" associated with this $26 million was whether or not a steam dryer was added.[92] The contingency was *not* the

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[87] *Id*.
[88] DOC Initial Br. at 35; DOC Ex. 300 at 16 (Crisp Public Direct).
[89] *See* DOC Ex. 300 at 16 (Crisp Public Direct) ($27.5 million in installation costs only was for GE's work).
[90] *Id.;* DOC Initial Br. at 27.
[91] *Id.* at 32-33; *see also* Xcel Initial Br. at 91 ("the $320-$346 million cost estimate").
[92] Tr. Vol. 4, p. 127-129 (Campbell) and DOC Ex. 314 at NAC-5, pages 1-3 (Campbell Direct Attachments).

kind used in standard industry practice in 2008, to reflect unknown costs, given what Xcel now represents was then the minimal development of the estimated costs in the 2008 CN proceeding for the EPU.[93]

Xcel's own testimony and responses to information requests indicate that the Company had little to no contingencies in the cost estimates for the EPU in the 2008 CN. Mr. Sparby's rebuttal testimony stated that the Company chose to use the lower cost estimate without the contingency:[94]

> …*the $362.5 million figure* cited in the 2011 Cost History document *was the high-end of the $299-362.5 million range* that was also developed in 2006 to include additional contingency in the estimate. Recognizing that the study work supporting the initial rollout of the Program was preliminary, ***management requested funding at the lower level because there was not substantial cost support at that time for other estimates.***

Moreover, Xcel's response to Department discovery stated that no contingency was added for the 2008 cost estimate.[95] Following the Company's contradictory Rebuttal Testimony, Department Nancy Campbell demonstrated through a simple calculation using an inflation escalator of 4% (as applied to Xcel's $135 million for the 2005 LCM costs, plus the $133 million, which includes the cost of the steam dryer approved in the 2008 CN) equals $346 million.[96] Xcel's claim of a "contingency added" does not hold up to elementary math.

Xcel criticized Mr. Crisp's reliance on Xcel's own discovery response that showed that the Company had included no contingency in its 2008 cost estimates, and argued that he should have accepted the Company's later explanation that about $22.5 million in contingency was

[93] DOC Ex 303 at 23-24 and MWC-S-1, page 3 (Crisp Surrebuttal).
[94] Xcel Ex. 12 at 27-28 (Sparby Rebuttal) (emphasis added).
[95] DOC Initial Br. at 44; DOC Ex. 303 at 20-23 (Crisp Surrebuttal).
[96] Tr. Vol. 4 at 128-129, 132 (Campbell). Mr. Crisp testified that a 2% to 2.5% inflation rate would have been reasonable to use for estimating the cost of a project in 2005 or 2008, Tr. Vol. 3 at 74 (Crisp); the DOC assumed a higher number of 4%.

buried within those 2008 cost estimate figures.[97] However, as discussed above, Xcel's explanation for the contradiction in its statement in response to Mr. Crisp's Direct Testimony does not hold up under elementary math.

3. Even if Xcel used limited contingencies, such levels were clearly inadequate

Moreover, even if the Company had included $22.5 million in contingency out of its $346 million cost estimate, that level of contingency would have been a mere 6.5 percent of the estimated project costs.[98] Mr. Crisp testified that in 2008 it was standard in the industry to have included 100% if not 150% contingency for such a complex nuclear utility project that had not been examined at anything but a conceptual "high level."[99] Clearly, had Xcel included obvious categories of costs (like installation costs) in its 2008 cost estimates, along with a contingency of at least 100% to 150% of those estimates, the Commission would have had a reasonable basis to deny the requested CN relative to other potentially less costly projects.[100]

4. Xcel's assertions about "benchmarking" in the 2008 proceeding do not reflect facts that Xcel knew or should have known in 2008

Regarding the third point above, the Company's repeated assertion that its 2008 cost estimate was 75 percent higher than the most expensive benchmarked plant is vacuous upon examination. Xcel "benchmarked" only three EPU-only projects.[101] From Mr. O'Connor's Rebuttal Testimony on page 9, the extent to which any of the three "benchmarked" EPU projects was a completely integrated/combined LCM/EPU project is not shown, the complete combination of which added significant complexity to Xcel's proposed project in 2008. Also

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[97] Xcel Initial Br. at 91.
[98] $22.5/$346 = .065 X 100 = 6.5%.
[99] Tr. Vol. 3 at 72-74 (Crisp).
[100] DOC Initial Br. at 65-66.
[101] Xcel Initial Br. at 89; Xcel Ex. 9 at 9 (O'Connor Public Rebuttal).

unknown is the extent to which those three EPU projects were "fast-tracked," or the extent to which any had a comparably small footprint, a fact that Xcel knew or should have known in 2008 likely would be problematic at Monticello. Moreover, Xcel itself had performed an EPU at Monticello in the 1990's, which had used all existing equipment margin to enhance capacity.[102] From the level of detail provided by Xcel, the extent of EPU-related construction involved in any of the three benchmarked projects cannot be assessed. Other similarities or dissimilarities between the three "benchmarked" EPU projects and Xcel's LCM/EPU project cannot be drawn from the information Xcel provided.[103]

Of significance is that *Xcel knew its $346 million cost estimate was incomplete in 2008* (it included only GE's work and omitted likely significant installation costs) and was no more than conceptual or "high level." Yet, the Company repeatedly relied on its proposed costs in 2008 ranking "75% higher" than three other EPU-only projects as evidence that Xcel's 2008 cost estimate was more than reasonable. However, given that: 1) Xcel has not shown the other projects to have been sufficiently similar to Xcel's Monticello project, 2) Xcel did not follow industry practices at that time regarding contingencies, particularly given that Xcel was aware of how little the Company had developed its cost estimate in 2008, and 3) Xcel knew that its estimate was incomplete, Xcel's assertion that its benchmarking was an adequate representation of costs is not convincing.

[102] DOC Initial Br. at 17-18.
[103] *See generally,* DOC Ex. 303 at 19-21 (Crisp Surrebuttal).

5. The construction guidelines used by the Department may *understate* the level of contingencies required for the complex work at Monticello

Finally, Xcel's criticism of Mr. Crisp's use of a cost estimate protocol that "mentions no applicability to nuclear projects"[104] misconstrues his testimony. The Company emphasized incorrectly that the cost estimating guideline applied only to "production of chemical, petrochemicals, and hydrocarbon processing."[105] Mr. Crisp provided an independent estimating guideline, applicable in 2008, for the Commission to consider as another means to assess the degree to which Xcel's 2008 cost estimate together with contingency measured up to reasonable ***utility*** standards that Xcel either knew or should have known about at the time. Specifically, the document reflected "generally-accepted cost engineering practices" for:[106]

> process facilities [that] center on mechanical and chemical process equipment, and . . . have significant amounts of piping, instrumentation and process controls involved. As such, this addendum may apply to portions of other industries, such as pharmaceutical, ***utility,*** metallurgical, converting, and similar industries.

Moreover, in sharp contrast to its repeated assertions about the complexity of the work at Monticello, Xcel did not address the likely *greater complexity* of a nuclear utility project compared to other commercial projects that might be estimated under the guideline, but instead discussed the extent to which addition of a 100% contingency on top of an initial cost estimate would or would not be used for *less complex* industries that were at the conceptual phase of a project.[107]

Of course, Mr. Crisp's point was that, with a highly complex utility project like the Monticello LCM and EPU project, a reasonable contingency over and above a conceptual cost

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[104] Xcel Initial Br. at 92.
[105] Xcel Initial Br. at 92.
[106] DOC Ex. 303 at MWC-S-1 at 1-2 of 10 (Crisp Surrebuttal) (emphasis added). *See* Xcel Ex. 3 at (TJO) Schedules 23-28 (O'Connor Direct) (modification scoping identifies piping and what appear to be instrumentation equipment).
[107] Xcel Initial Br. at 92.

estimate likely would have *exceeded 100%* of the cost estimate.[108] As the Department's Initial Brief showed, had Xcel provided a reasonable cost estimate together with a reasonable contingency, the amount likely would have exceeded the cost-effective break-even point calculated by Mr. Shaw such that the Department likely would not have recommended approval of Xcel's 2008 CN.[109] Xcel's clearly inadequate 2008 CN total cost estimate deprived the Commission of an opportunity for reasoned analysis and decision making.

D. Dr. Jacobs' 85% EPU Cost Split Is Reasonable And Supported By The Record

The Department's Initial Brief thoroughly discussed the reasonableness of Dr. Jacobs' 85% EPU-related cost split as to total estimated project costs.[110] The Commission expressly requested that this issue be addressed.[111] Given the circumstances of this case, Dr. Jacobs used a basic criterion that if Monticello could not operate at the higher EPU power level without the particular work or project being evaluated, he considered that work to be an EPU project.[112] He allocated remaining costs to the LCM.[113] His 85% percent determination of EPU-related costs underestimates those costs because he included no costs that were identified as both EPU and LCM projects.[114] Xcel, however, stated several objections to Dr. Jacobs' methodology and conclusion that are addressed, below.

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[108] Tr. Vol. 3 at 44, 72-74 (Crisp).
[109] DOC Initial Br. at 65-66. Xcel also appears to suggest, incorrectly, that a reasonable cost estimate in 2008, which would have been in the range of final project costs, must mean that Xcel's final project costs were reasonably incurred. *See* Xcel Initial Br. at 93. Certainly, it does not. Xcel's final project costs appear to have been the result in part of the Company's own mismanagement rather than factors outside of its control.
[110] DOC Initial Br. at 48-64.
[111] DOC Initial Br. at 7.
[112] Tr. Vol. 3 at 88 (Jacobs); Tr. Vol. 4 at 61-74, 81-84 (Jacobs).
[113] DOC Ex. 421 at 2 (Jacobs Opening Statement).
[114] *Id.;* Tr. Vol. 3 at 89 (Jacobs).

1. Dr. Jacobs' cost split of 85% (EPU) is reasonable and does not constitute impermissible "hindsight"

Xcel disagreed with Dr. Jacobs' cost split mainly on the grounds that if there had been no EPU, Dr. Jacobs agreed that some of the modifications would have been needed as part of normal repair and maintenance at some point in time and, therefore, Dr. Jacobs should have allocated a greater amount of cost to LCM-related work.[115] The Company also claimed that any cost split other than one based on Xcel's cost representations in its 2005 and 2008 certificates of need of 58.4% (LCM) vs. 41.6% (EPU) is unreasonable "hindsight." The Department disagrees.

The Department provided significant discussion in its Initial Brief regarding the reasonableness of Dr. Jacobs' determination of that about 85% of total project costs that reasonably are attributable to the EPU.[116] As the record indicates and as discussed above, some significant portion of the $402 million in cost overruns appears to have been incurred because of the Xcel Board's decision to fast-track the EPU-related work and to do so without highly detailed pre-planning and design work. Moreover, Xcel's criticism of Dr. Jacobs fails to acknowledge that the Department's need to hire a highly educated and experienced nuclear engineer to determine a reasonable cost split for total estimated project costs is due solely to Xcel's unreasonable choice ***not to track costs separately*** for these two separate projects despite the Company's separate presentation of such costs to the Commission in two different CNs.[117]

Further, Xcel's repeated use of the term "hindsight" to describe Dr. Jacobs' cost split is incorrect. The Commission expressly requested a determination of what percentage of total costs were EPU-only. These total estimated costs are the costs that Xcel currently seeks to recover from ratepayers in 2015. It is not irregular or prohibited "hindsight" for the Commission to

[115] Xcel Initial Br. at 110-111.
[116] DOC Initial Br. at 49-61; Tr. Vol. 3 at 88 (Jacobs); Tr. Vol. 4 at 61-74, 81-84 (Jacobs).
[117] DOC Ex. 315 at 17 (Campbell Surrebuttal).

evaluate in the present rate proceeding the extent to which Xcel exceeded its 2008 CN-approved EPU-related cost estimate. The latter exercise is a routine part of ratemaking and cost recovery in Minnesota.

2. The record does not support a finding that Dr. Jacobs' testimony was inconsistent or motivated by bad intent

Xcel stated that Dr. Jacobs' criterion for determining EPU-related costs in this case was inconsistent with his 2008 testimony on behalf of Florida ratepayers before the Florida Public Service Commission (Florida Commission), where he used an incremental cost method.[118] The Company concluded that in this case Dr. Jacobs was unreasonable, and that he was motived by an incentive to maximize costs attributed to the EPU while in the 2008 Florida proceeding he was similarly unreasonable and had an incentive to minimize EPU-related costs.[119]

The record does not support Xcel's assertion. First, counsel for Xcel spent considerable time introducing into evidence documents from annual Florida proceedings concerning the combined 4-turbine St.Lucie/Turkey Point EPU-only project.[120] Yet, Xcel's attorney *chose not to ask Dr. Jacobs* to explain the very Florida testimony that Xcel claims in this proceeding is unreasonable. Dr. Jacobs was available throughout the proceeding to respond to interrogatories and appeared over the course of two days of trial and certainly was available to answer such a straightforward question, had the Company allowed the record to reflect his response rather than merely making untested assertions. Xcel's choice to attribute inconsistency and unfair motive to Dr. Jacobs without first seeking his explanation is unfortunate, at least for an adequate development of the record for the ALJ and Commission.

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[118] Xcel Initial Br. at 117-119.
[119] *Id.* at 119.
[120] Tr. Vol. 3 at 105-113 (Jacobs); Tr. Vol. 4 at 24-32 (Jacobs).

Second, the Florida proceedings involved circumstances not before the Minnesota Commission and laws not applicable to Minnesota. The Department's review of the Florida's Nuclear Cost Recovery Clause, Florida Statutes § 366.93 at issue in the Florida proceedings, suggests that an incremental cost methodology was *required* to be used in Florida since annual cost recovery, prior to commercial operation, related only to costs of incremental increased capacity. Following the plant's commercial operation, the utility could seek recovery of its total project costs as part of its total revenue requirement. That said, the Department does not hold itself out as an expert in Florida law or Florida annual nuclear cost recovery proceedings – two matters not applicable to Minnesota.

Third, the record is insufficient in this proceeding to determine the extent of related or unrelated cost factors existing between the Florida proceedings and this Minnesota case.[121] For example, the record does not show the extent to which the Florida projects were fast-tracked (a factor which may have led the exceedingly high costs of those projects), or the extent to which repair and maintenance was part of those EPU projects to the degree Xcel claims to have integrated its LCM and EPU projects at Monticello. Additionally, in Minnesota no cost recovery mechanism exists for a utility to receive annually pre-construction nuclear generation costs like scoping and design work or to receive construction costs prior to the nuclear generation plant becoming fully operational and used and useful to Minnesota ratepayers.[122] Differences in law between the two states may affect cost drivers between the Florida projects and the Monticello LCM/EPU project..

[121] Dr. Jacobs testified that there were similarities and differences between the Minnesota and Florida projects. Tr. Vol. 4 at 58, 74 (Jacobs).
[122] *See* Minn. Stat. § 216B.16, subd. 6.

Moreover, Dr. Jacob's 2013 Direct Testimony in Florida[123] set forth a chronology of annual ratepayer requests to the Florida Commission beginning as earlier as 2008, for procedures going forward to assist with future identification of costs that were and were not appropriate for annual recovery as well as methods designed to limit the amount of costs incurred. The requests appear to be facially reasonable, such as:[124]

- Requested use of competitive bids rather than Florida Power and Light's (FPL's) "sole source" and "single source" contracts;
- Asked that FPL be directed to improve its procedures for when departing from competitive bidding would be acceptable;
- Proposed a "separate and apart" cost methodology to ensure that only eligible costs would be recovered through the Nuclear Cost Recovery Clause;
- Proposed a risk-sharing mechanism to ensure that FPL had "skin in the game", and opposed FPL's methodology for showing economic feasibility; and
- To ensure that one less-than-cost-effective project not be subsidized by a cost-effective project, asked that the two Turkey Point EPU uprates be analyzed separately from the two St. Lucie Point EPU uprates.

The Florida commission denied each of the above requests.[125] These denials alone raise questions as to the relevance of the Florida proceedings to this Minnesota case. It is difficult to conceive of the Minnesota Public Utilities Commission, acting on behalf of the public interest, denying ratepayers' requests for greater transparency and cost discipline on a going forward basis, as the Florida commission apparently did, repeatedly. Perhaps facts existed in Florida, not

[123] Xcel Ex. 432 (Jacobs Florida Direct).
[124] *Id.* at 7-9.
[125] *Id.*

provided in this record, that might shine a positive light on those many regulatory decisions. Instead, the Florida documents in this record leave a strong impression that Florida has ratemaking standards that are far different from those in Minnesota. For example, it appears that Florida ratepayers, not the regulated utility, must demonstrate imprudence and unreasonableness rather than the utility bearing the full burden, as required under Minnesota law, of demonstrating the prudency and reasonableness of the costs it proposes to charge to ratepayers. Because Florida's standards are apparently far different from Minnesota's standards, the decision by the Florida Commission should not be given weight in this proceeding.

In any event, and for the reasons discussed, Xcel has not shown that the reasonableness of Dr. Jacobs' testimony in the present case is called into question by his testimony in the Florida proceedings.

3. Dr. Jacobs did not rely on only one document to determine his cost split

Xcel claimed incorrectly that Dr. Jacobs relied on a "single document" for his determination that 85% of total project costs likely were EPU-related. Xcel repeats this "single" document representation many times in its Initial Brief regarding Xcel's sworn 2008 letter to the NRC with its Enclosure 8 that listed modifications Xcel planned only for the EPU, as opposed to routine repair and maintenance projects. [126]

Dr. Jacobs did give great weight to Enclosure 8 in part for identification of EPU-related projects and LCM-related projects, and as a basis for projects to which he then assigned costs between the EPU and LCM (based on the costs identified in Mr. O'Connor's Schedule 30).[127] His reasons for considering Enclosure 8 to be a reliable indicator of Xcel's determination of the

[126] Xcel Initial Br. at 3, 17, 81, 111, 112, 113, and 115.
[127] DOC Ex. 305 at 9-10 (Jacobs Public Direct).

need for each modification or project are that: 1) Enclosure 8 was created contemporaneously with Xcel's NRC request in 2008 rather than at a later time such as in preparation for providing testimony in the present matter, and 2) the document was a sworn representation of Xcel's plans in 2008.[128] Dr. Jacobs applied his basic criterion (being needed solely to support the higher EPU capacity) to the modifications listed in Enclosure 8 as EPU-related work, and also confirmed through discussions with Xcel employees his classification as EPU work of two modifications not listed in Enclosure 8 as EPU-related work: the 13.8 kV distribution system and the condensate demineralizer replacement.[129] Thus, while very important to Dr. Jacobs' determination of a reasonable cost split, he did not rely solely on Enclosure 8 to Xcel's 2008 NRC letter.

4. Xcel's Cost Split of 58.4% (LCM) to 41.6% (EPU) is contested

Remarkably, Xcel stated in its Initial Brief that its 2008 estimated cost split of 58.4% (LCM) vs. 41.6% (EPU) is uncontested in this record.[130] A record basis for such a mistaken assertion is not evident. The Department supports Dr. Jacobs' 85% EPU-related cost split, as discussed above and in its Initial Brief.

Xcel's cost split is no more than a proration of its very poor initial 2008 estimate of EPU project costs, over the sum of EPU costs in the 2008 CN and LCM costs that Xcel provided in the 2005 CN. Xcel in 2008 projected EPU-related costs to total only about 41.6% of the total costs. Apparently, this "high level" estimate did not take into account facts that Xcel should have known, such as the small footprint, or the Xcel Board's decision to fast-track the project without ensuring that there would be time to produce highly detailed plans for its complex,

[128] DOC Initial Br. at 51-52.
[129] DOC Initial Br. at 57; DOC Ex. 307 at 14-15 (Jacobs Surrebuttal).
[130] Xcel Initial Br. at 79.

combined LCM/EPU project. As Dr. Jacobs' testified, the record shows that Xcel lacked understanding as to the true scope of work and the amount of uncertainty,[131] which resulted in inadequate and unreasonable estimates of the cost to implement the projects. Xcel's 2008 estimated cost split reflected that lack of understanding. The record does not support a determination that only 41.6% of total costs were and are likely due to the EPU work when it was that capacity-expanding construction work that the Xcel Board chose to fast-track without first ensuring highly detailed pre-planning and, thus, likely drove costs to levels higher than they otherwise would have been.

Xcel is not entitled to a presumption for ratemaking purposes that its flawed 2008 cost split estimate is a reasonable basis for cost recovery in 2015 of total estimated project costs.

E. Xcel Continued To Overstate The Benefits Of The LCM And EPU Project

In its Initial Brief Xcel cited Mr. Sparby's incorrect overstatement of benefits of the LCM and EPU projects by failing to acknowledge that the EPU still is not operating such that it cannot possibly operate for more than 15.8 years out of the 20 year license extension.[132] The Department acknowledges that the LCM and EPU are expected to provide benefits to Minnesota, but *those benefits are already incorporated in the Strategist analyses in this proceeding*. Thus, while it is important to consider both costs and benefits, such costs and benefits should be considered only once and not double-counted.

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[131] *See* DOC Ex. 305 at 16 (Jacobs Public Direct).

[132] Xcel Initial Brief at 13. Xcel also claimed that the LCM/EPU total estimated project costs translate to a ***combined*** baseload generation cost of about ***$1,000/kW installed***. *Id.* The baseload generation cost for the 71MW EPU capacity addition ***alone***, assuming Xcel were to recover every dollar of its $402 million cost overrun from ratepayers, and based on Dr. Jacobs' cost split determination, would equal about ***$8,026/kW installed*** ($569,836,000/71,000kW=$8,026/kW). DOC Ex. 309 at 32 (Shaw Direct) (Table 20: 87.5% of total EPU = $569,836,000).

In its Initial Brief, the Department addressed Xcel's overstatement of benefits, based on Ms. Campbell's Direct Testimony, as follows:[133]

> First, ***the Monticello Plant continues to operate at the 600 MW pre-EPU level, not at 671 MW.*** As I noted in my Opening Hearing Statement on page 3 in the current Xcel Rate Case (Docket No. E002/GR-13-868), Xcel did not show that the Monticello EPU (approximately 71 MW) would likely be available in 2014. As a result, the Department recommended a January 2015 assumed in-service date for purposes of ratemaking, since: 1) the EPU will likely not be available for customers in 2014 and 2) customers are already paying replacement power costs in 2014.
>
> Second, as noted in my Direct Testimony in the current Xcel Rate Case and attached to my Direct Testimony in this proceeding as Attachment NAC-13 (specifically page marked NAC-9), ***for purposes of depreciation, the remaining life of the Monticello Plant is 16.8 years as of January 1, 2014. This fact means that the Monticello EPU Project (71 MW) will likely only be available for 15.8 years*** assuming a January 1, 2015 in-service date for purposes of rates as recommended by the Department.
>
> [Third] [r]egarding the benefits of carbon-free generation, Mr. Shaw noted in his Direct Testimony that those benefit were incorporated in the analysis conducted in the 2008 CN by applying a $17 per ton cost of CO2 emissions. DOC Ex. [309] at 5 (Shaw Direct) Further, while ***I agree that a nuclear plant provides carbon free benefits,*** for the more limited timeframe and MWs as corrected above, . . . ***nuclear plants creates [sic] nuclear spent fuel that the Department of Energy still is not taking and likely will not take for years to come.*** As a result, this nuclear spent fuel will need to remain in interim casks, which clearly has some environmental impacts.

It is important that Xcel's continued and incorrect suggestion that the EPU will provide generation for 20 years be rejected.

F. Accounting Standards Are Not At Issue

Xcel emphasized that its "accounting followed the FERC uniform system of accounts and correctly accounted for the work by unit of property modified or installed, not by function."[134] The Company's accounting for financial reporting purposes is not at issue.

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[133] DOC Initial Br. at 86; DOC Ex. 9-10 (Campbell Direct) (emphasis added).
[134] Xcel Initial Br. at 31.

At issue is ***whether Xcel demonstrated for ratemaking purposes*** that the cost overruns that it seeks to charge to ratepayers (i.e., the costs that exceed the EPU-related costs approved in the 2008 CN) were prudently and reasonably incurred. Department witnesses identified many actions of Xcel that raise serious doubt as to the prudency and reasonableness of such costs. For example, Xcel chose not to track costs in separate work orders for the separate LCM and EPU projects presented to the Commission in separate CNs. The Company is not prohibited from separately tracking costs, and by failing to do so the Company created its own difficulty to show for cost recovery purposes that particular costs were reasonable.[135] For example, Ms. Campbell provided an example of Xcel's separate tracking of costs for several projects in different work orders related to a spring 2012 outage for Xcel's King Plant.[136]

Under no circumstances should Xcel be allowed the benefit of any doubt as to whether costs were LCM- or EPU-related, where separate cost tracking would have avoided the uncertainty.

G. Xcel's Statements of Public Agencies' Concerns Are False

Xcel listed four concerns that it mischaracterized and that it claimed were those of the Department and OAG-AUD.[137] However, the listed concerns are far from complete or accurately stated. The Department's Initial Brief addresses the Department's many concerns at length.[138] For a short-hand summary, Ms. Campbell provided a non-exclusive list on pages 25-26 of her Surrebuttal Testimony, which is reproduced in a previous section of this Reply Brief.

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[135] DOC Initial Br. at 74-80.
[136] *Id.* at 78; DOC Ex. 315 at NAC-S-3 (Campbell Surrebuttal).
[137] *Id.*
[138] DOC Initial Br. at 9-11, 22-42, 49, 55-56, 62-64, 72-73, and 74-87.

H. The Company Misapplied The Burden of Proof By Shifting It to Ratepayers

There can be no reasonable dispute that a public utility may be allowed to recover from ratepayers only those costs it demonstrates were prudently and reasonably incurred.[139] It is troubling, therefore, that Xcel made the following assertion to the ALJ and Commission:[140]

> We appreciate that the parties have found it difficult to isolate imprudence that caused ratepayer harm. We disagree that this difficulty is because of the Company's accounting or the Company's documentation. Higher costs are not a reason to impose a remedy without factual support or establishing causation.

Again, the Company got it all wrong. It mischaracterized the Department's testimony in the first two sentences (the Department raised significant doubt as to the reasonableness of Xcel's claim of prudence and its proposal to charge ratepayers for the entire $402 million cost overrun), and misstated Minnesota's legal standard in the third sentence quoted above. An accurate legal standard shown below with underlined additions and strike-outs that takes into account Xcel's required burden of proof would be as follows:

> Higher costs ~~are not a reason to impose a remedy~~ cannot be recovered from ratepayers without ~~factual support or establishing causation~~ the utility's demonstration that its actions, and the costs resulting from such actions, were prudent and reasonable. Any doubt as to reasonableness must be given to the ratepayer.

Xcel then lists its view of factors "rather than imprudence" that drove its high costs, but concluded again with an inaccurate legal standard, as follows: [141]

> The parties' criticisms do not support a finding of causation or ratepayer harm from these cost increases. These criticisms revolve around (i) low cost estimates; (ii) the need for "better" project management; and (iii) a number of extraneous and unrelated criticism that do not relate to the costs we incurred in the Program.

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[139] *See, e.g.,* Minn. Stat. §§ 216B.03, 216B.16, subd. 4 and 6.
[140] Xcel Br. at 130.
[141] Xcel Initial Br. at 130-131. The Department does not agree with the Xcel's list of factors that caused its high costs; Department witnesses raised significant doubt as to the reasonableness of Xcel's actions and did not agree that Xcel had demonstrated the prudence and reasonableness of Xcel's $402 million cost overrun.

In order to recover costs in rates from ratepayers in 2015, as Xcel seeks to do through this case and the related rate-case proceeding (Docket No. E002/GR-13-868), Xcel bears the burden of demonstrating that its costs were prudently and reasonably incurred. Ratepayers bear no burden to prove causation or ratepayer harm ***as a means to avoid*** the imposition of cost overruns in rates.

Finally, Xcel's claim that it is entitled to every penny of the $402 million in cost overruns unless those costs were shown to cause ratepayer harm[142] is distorted and fundamentally inaccurate. Ratepayers are clearly harmed if they are required to pay costs that a utility has failed to demonstrate to the Commission's satisfaction were prudent and reasonable. Moreover, the Department's testimony shows that ratepayers would have been better off had Xcel provided a reasonable cost estimate in the 2008 CN proceeding, based on information the Company knew or should have known at that time, to allow the Commission to choose a better resource to provide electric service to Xcel's ratepayers.

Xcel's proposed misapplication of Minnesota law must be rejected.

I. Xcel Chose Not To Allow The Commission To Analyze and Determine If It Was Prudent To Proceed With The Project In 2011

The Department discussed at length Xcel's inadequate communications to the Commission regarding the Monticello LCM/EPU project's skyrocketing costs – ***to the extent Xcel wished assurance from the Commission of future full recovery of such costs.***[143] Xcel chose not to mention to the Commission, in Xcel's 2011 Notice of Changed Circumstances (NOCC), the Company's incurred and likely higher cost overruns let alone provide a rigorous economic analysis of whether it likely was prudent to proceed with the project. By not providing

[142] Xcel Initial Br. at 8, 128, 130, 131, 132, 133, 138, 141, and 142.
[143] DOC Initial Br. at 79-80, 82-85.

the Commission with such an economic analysis, the Company chose not to allow the Commission to analyze at that time whether it was prudent to proceed.

In its Initial Brief, Xcel argued that its own decision to proceed with the LCM/EPU project was prudent.[144] That internal assessment does not bind the Commission or justify imposition of those costs on ratepayers. Now, the Company has spent a vast sum of money, and claimed incorrectly that parties other than Xcel must demonstrate harm to justify disallowance of any amount of the $402 cost overrun. Missing in Xcel's claim that its actions were prudent is recognition that its own decision to fast-track this complex, combined project (combined without Commission approval, that is), together with only conceptual-level pre-planning, likely contributed to the project not going well. Missing also is any acknowledgement that its many *costly and time consuming* scoping and re-design changes made during the course of construction *obviously could have been reduced to some extent* by detailed pre-planning.

Xcel expressly stated that its communications regarding escalating project costs were sufficient.[145] The Department disagrees. The point is not that a utility must keep the Commission apprised of a running tab of increasing costs, but that if a public utility wishes to seek assurance from the Commission of future cost recovery it is well-advised to provide the Commission with the type of rigorous economic analysis Xcel provided in its early 2012 NOCC for the Prairie Island EPU, but which Xcel chose not to provide in its late 2011 NOCC for the Monticello EPU.[146] For Monticello, Xcel crafted a strategy of spending first, and seeking full cost recovery later, which the law allows it to do. But ratepayers bear absolutely no burden to pay for full cost recovery, except to the extent that Xcel shows the costs to be reasonable. Xcel

[144] Xcel Initial Br. at 82-90.
[145] Xcel Initial Br. at 100-102.
[146] DOC Initial Br. at 79-80, 82-85.

alone must demonstrate reasonableness as to all of the costs it seeks to recover from ratepayers, here, the entire $402 million in cost overruns.

The plant still is not up and running at the full 671 MW level. Xcel's discussion did not resolve the many significant doubts raised by Department witnesses Mr. Crisp and Dr. Jacobs as to the reasonableness of Xcel's actions when made, and their conclusions that such actions likely caused delay and contributed to costs being higher than they otherwise would have been.[147]

J. Project Estimation Inaccuracy Ranks Near The Top

The Company stated that the accuracy of its 2008 cost estimate was consistent with that of other EPU projects and, in particular, with respect to the Florida St. Lucie/Turkey Point EPUs.[148] According to the chart on page 94 of Xcel's Initial Brief, however, Xcel's estimated costs of the Monticello combined LCM/EPU project ***ranks near the near the top (i.e. worst) initial cost estimate inaccuracy*** relative to final costs as compared to each of the projects listed. Xcel's performance in estimating the costs of Monticello is just slightly more accurate than the St. Lucie/Turkey Point 4-turbine EPU-only project.[149] However, Ms. Campbell pointed out that, with the addition of Allowance for Funds Used During Construction (AFUDC), which Xcel seeks to recover from ratepayers in this case, Xcel's ratio of its initial cost estimate to final estimated costs takes worst place.[150]

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[147] *See* DOC Initial Br. 9-11, 22-42, 49, 55-56, 62-64; DOC Ex. 419 (Crisp Opening Statement); DOC Ex. 421 (Jacobs Opening Statement).
[148] Xcel Initial Br. at 93-94.
[149] *See also,* DOC Ex. 315 at 20-21 (Campbell Surrebuttal) (discussion of the extent of Xcel's initial cost estimate to final costs as listed in the chart that is reproduced in Xcel's Initial Brief at page 94).
[150] DOC Ex. 315 at 20 (Campbell Surrebuttal).

K. Human Performance Errors Contributed To Delay Of The Project

Xcel stated incorrectly that ***none*** of the Department's concerns about the Monticello LCM/EPU project caused delays or caused costs to increase.[151] The Department disagrees, but will not repeat here its lengthy discussion in its Initial Brief regarding Mr. Crisp's and Dr. Jacobs' concerns and their conclusions that Xcel's conduct – which was unreasonable at the time – likely caused delay and caused costs to be higher than they otherwise would be.[152] However, comment below is appropriate with respect to the recent wiring problems at Monticello that Ms. Campbell identified.

On pages 80-82 of its Initial Brief, the Department discussed various human performance errors identified by the NRC that appear to have led to higher costs[153] and may have contributed to EPU delay.[154] On page 8 of her Surrebuttal Testimony, together with attachment NAC-S-1 (NRC September 2, 2014, letter), NAC-S-2 (Campbell Direct Testimony pages 51-53, and Campbell Surrebuttal Testimony pages 46-51 in MPUC Docket E/002/CN-13-868), Ms. Campbell identified Xcel's data collection and wiring errors of concern to the NRC. Moreover, the NRC scheduled a series of non-routine inspections of the plant through 2015 to ensure that human performance errors were resolved. She also noted that such wiring concerns were among the factors that appear to have contributed to NRC's decision not to allow Xcel to resume EPU power ascension testing (testing the plant at the higher EPU capacity levels) for the Monticello plant such that, in part, the wiring errors appear to have contributed to the EPU likely

[151] Xcel Initial Br. at 133-137.
[152] DOC Initial Br. at 9-11, 22-42, 49, 55-56, 62-64.
[153] DOC Ex. 313 at 3-6 (Campbell Direct); DOC Ex. 315 at 3-9 (Campbell Surrebuttal).
[154] The issue of whether or not the Monticello EPU is used and useful to ratepayers is an issue to be analyzed in MPUC Docket No. E002/GR-13-868.

not being available in 2014.[155] Additionally, the extra NRC inspections of Monticello due in part to the human errors clearly will increase Xcel's regulatory costs.

For these reasons, Xcel has not demonstrated the reasonableness or accuracy of its claim that none of the many concerns raised by Department witnesses contributed to delay or to increased costs.

L. A Remedy Based On Cost-Effectiveness Should Not Exclude Sunk Costs

Xcel has not demonstrated the prudence and reasonableness of the entire $402 million in cost overruns. If, as a remedy, the Commission chooses to disallow the amount of cost over which the LCM/EPU would not be cost-effective as the Department recommends, it should reject Xcel's argument to exclude the $97 million in 2008 CN-related "sunk costs" in the consideration of cost-effectiveness.[156]

Specifically, Xcel claimed in its Initial Brief that "any consideration of cost-effectiveness should exclude the $97 million in sunk costs that we had spent in furtherance of the Program prior to issuance of the Certificate of Need."[157] This proposal is not reasonable. Excluding sunk costs, or any project costs, from a cost-effectiveness analysis is unreasonable as it would not accurately or adequately reflect the costs that the utility proposes to charge to ratepayers. Thus, such an approach would provide biased results.[158] Moreover, such an approach could not meet the requirement in Minnesota statutes that any doubt as to

[155] *See, e.g.,* DOC Ex. 315 at NAC-S-2 at pages 51-53 (Campbell Direct in 13-868).
[156] DOC Ex. 311 at 8-9 (Shaw Surrebuttal).
[157] Xcel Initial Br. at 139-141. Xcel also suggests incorrectly that the Department's proposed remedy in this case, "is not tied to prudence." *Id.* at 138. Again, the Company's statement implies that the Department and Commission have the burden of proof, rather than Xcel. Moreover, Department witnesses raised significant doubt as to the Company's showing that the costs it incurred were prudently and reasonably incurred. Thus, the Department's proposed remedy is just that, a remedy that provides a method of quantifying a reasonable cost disallowance. DOC Initial Br. at 65.
[158] DOC Ex. 311 at 8 (Shaw Surrebuttal).

reasonableness must go to ratepayers. Because Xcel is asking ratepayers to pay for all of the costs of the projects at Monticello, including significant cost overruns, total costs of resources must be used to determine cost-effectiveness.[159]

Further, if prudency is determined by excluding "sunk" costs and considering only "costs to complete," the incentive would be for utilities to spend as much capital as possible early on with a project, since spending as much money as possible upfront would ensure that any remaining capital to be spent could be shown to be cost-effective, regardless of the total costs of the project.[160] Thus, the utility would no longer have a reasonable incentive to minimize costs, nor to provide accurate estimates of total costs in CN proceedings.[161] If Xcel wishes to exclude costs incurred prior to a CN filing, or any costs, for the cost-effectiveness analysis conducted in a CN, then Xcel should not expect to recover any of the excluded costs from ratepayers.[162]

V. THE DEPARTMENT'S RECOMMENDATIONS

The Department continues to respectfully request a recommendation from the Administrative Law Judge and an Order from the Commission determining that Xcel failed to demonstrate the prudency and reasonableness of recovering the entire $402 million in cost overruns, based on what the Company knew or reasonably should have known at the time of its decisions and actions. Department witnesses raised significant doubt that all of the $402 million in cost overruns were prudently and reasonably incurred. Any doubt as to reasonableness must be given to ratepayers. It would be unreasonable for the Company to recover from ratepayers the entire $402 million in excess of initial cost estimates.

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[159] DOC Ex. 311 at 19 (Shaw Surrebuttal).
[160] DOC Ex. 309 at 19-20 (Shaw Direct).
[161] *Id.*
[162] DOC Ex. 311 at 9 (Shaw Surrebuttal).

The Department continues to recommend that the Commission order disallowance of the portion of EPU-related costs that render the Monticello plant not cost-effective based on information that was known or should have been known in 2008, when Xcel petitioned for a certificate of need for the EPU. Specifically, the Department recommends a $71.42 million reduction to the capital costs of the Monticello EPU resulting in a $10.237 million revenue requirement downward adjustment for 2015 on a Minnesota jurisdictional basis, and ongoing adjustment for the life of the plant stepped down for accumulated depreciation.163 The record includes other disallowance methods for the Commission to consider if it chooses to do so.164

The Department further requests that the Commission establish rates consistent with the principles, analyses and recommendations as addressed in the Department's testimony, its Initial and Reply Briefs, and its Proposed Findings.

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Respectfully submitted,

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[163] DOC Ex. 315 at 38-39 (Campbell Surrebuttal).
[164] DOC Initial Br. 90-91; OAG-AUD Initial Br. at 38-46; XLI Initial Br. at 2, 8.