BEFORE THE MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS
600 North Robert Street
P.O. Box 64620
St. Paul, MN 55101

FOR THE PUBLIC UTILITIES COMMISSION OF THE STATE OF MINNESOTA
121 Seventh Place East, Suite 350
St. Paul, MN 55101-2147

Katie Sieben, Chair
Joseph Sullivan, Vice-Chair
Hwikwon Ham, Commissioner
Audrey Partridge, Commissioner
John Tuma, Commissioner

In the Matter of Xcel Energy's Petition for Approval of its 2023 Annual Fuel Forecast and Monthly Fuel Cost Charges	CAH No. 21-2500-40336 MPUC No. E-002/AA-22-179

XCEL LARGE INDUSTRIALS' PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATIONS

STOEL RIVES LLP
Amber S. Lee
Eden A. Fauré
33 South Sixth Street, Suite 4200
Minneapolis, MN 55402
Tele: (612) 373-8889
Fax: (612) 373-8881

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PROCEDURAL BACKGROUND AND APPEARANCES

The Minnesota Public Utilities Commission ("Commission") referred this matter to the Court of Administrative Hearings for a contested-case proceeding on November 15, 2024.[1] Administrative Law Judge Kimberly Middendorf was assigned to the matter.[2] The Commission directed the ALJ and parties to thoroughly develop a full record, addressing, at a minimum, the appropriate refund amount due to ratepayers stemming from the lack of prudence regarding the October 2023 outage at PINGP.

An evidentiary hearing was held September 30, 2025. Initial briefs were filed on November 25, 2025. Reply briefs and proposed findings were filed on January 8, 2026.

Eric F. Swanson, Elizabeth H. Schmiesing, and Christopher J. Cerny, Winthrop & Weinstine, P.A., appeared on behalf of Northern States Power Company, d/b/a Xcel Energy ("Xcel").

Katherine Arnold and Richard Dornfeld, Assistant Attorneys General, appeared on behalf of the Minnesota Department of Commerce ("Department").

Peter Schultz and Joey Cherney, Assistant Attorneys General, appeared on behalf of the Minnesota Office of the Attorney General, Residential Utilities Division ("OAG").

Brian Edstrom, Senior Regulatory Advocate, appeared on behalf of Citizens Utility Board of Minnesota ("CUB").

Amber Lee and Eden Fauré, Stoel Rives, LLP, appeared on behalf of Xcel Large Industrials ("XLI").

Ashley Marcus, Financial Analysis Supervisor, appeared on behalf of the Public Utilities Commission.

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[1] ORDER APPROVING 2023 FUEL CLAUSE TRUE-UP REPORT, REQUIRING ADDITIONAL FILINGS, FINDING IMPRUDENCE, & NOTICE OF & ORDER FOR HEARING at 3 (Nov. 15, 2024) ("Referral Order").

[2] Referral Order p. 9.

STATEMENT OF THE ISSUES

1. What is the appropriate refund amount due to ratepayers stemming from Xcel Energy's lack of prudence regarding the October 2023 outage at the plant.

2. Whether Xcel should be offset the cost of replacement power it purchased in October 2023 because
    a. the restoration work performed allegedly reduced future outage time that may occur in 2029 for anticipated repairs, which the parties refer to as the avoided 2029 costs;
    b. supplemental work performed during the outage reduced future outage time, which the refer to as the supplemental or pulled-forward work; or
    c. the historical performance of the plant, which is referred to as the performance adjustment.

SUMMARY OF RECOMMENDATIONS

1. Xcel Energy should refund $40.6 million to customers, based on the LMP methodology used to calculate the cost of replacement power incurred during the outage, including interest at the prime rate.
2. The cost of replacement power at $40.6 million should not be offset by any actions Xcel Energy took during the restoration of the outage it imprudently caused.
3. The cost of replacement power at $40.6 million should not be adjusted by PINGP's historical performance.
4. Xcel Energy should not recover the expenses it incurred in litigating this matter.

LEGAL STANDARD

1. It is the Company's burden to demonstrate its proposal is reasonable.[3] "Every rate made, demanded, or received by any public utility … shall be just and reasonable…. Any doubt as to reasonableness should be resolved in favor of the consumer."[4] The Minnesota Supreme Court described the Commission's role in determining just and reasonable rates in a rate proceeding by stating:

> [I]n the exercise of the statutorily imposed duty to determine whether the inclusion of the item generating the claimed cost is appropriate, or whether the ratepayers or the shareholders should sustain the burden generated by the claimed cost, the MPUC acts in both a quasi-judicial and a partially legislative capacity. To state it differently, in evaluating the ... case the accent is more on the inferences and conclusions to be drawn from the basic facts (i.e.,

[3] Minn. Stat. § 216B.16, subd. 4 ("The burden of proof to show that the rate change is just and reasonable shall be upon the public utility seeking the change.").
[4] Minn. Stat. § 216B.03.

> amount of claimed costs) rather than on the reliability of the facts themselves. Thus, by merely showing that it has incurred, or may hypothetically incur, expenses, the utility does not necessarily meet its burden of demonstrating that it is just and reasonable that the ratepayers bear the costs of those expenses.[5]

2. Expanding on the Minnesota Supreme Court's language set forth in the *Northern States Power* case and recognizing other Minnesota Supreme Court precedent, the Commission has further clarified that when prosecuting a rate case

> [u]tilities seeking rate changes must … prove not only that the facts they present are accurate, but that the costs they seek to recover are rate-recoverable, that the rate recovery mechanisms they propose are permissible, and that the rate design they advocate is equitable, under the "just and reasonable" standard set by statute.[6]

The CenterPoint Order also recognizes that this burden is only met when a utility can demonstrate reasonableness by a preponderance of the evidence.[7] This standard is a high burden that the utility always retains,[8] and one that is different from a civil case. The Minnesota Supreme Court has previously explained this distinction as follows:

> The "weighing" by [a] 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

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5 *In re Petition of N. States Power Co.*, 416 N.W.2d 719, 722–23 (Minn. 1987) (emphasis added).

6 *In the Matter of the Application of CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas for Authority to Increase Natural Gas Rates in Minnesota*, PUC Docket No. G-008/GR-15-424, Findings of Fact, Conclusions, and Order at 4–5 (June 3, 2016) (the "CenterPoint Order") (emphasis added); *see also St. Paul Area Chamber of Commerce*, 251 N.W.2d 350.

7 *In the Matter of the Application of CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas for Authority to Increase Natural Gas Rates in Minnesota*, PUC Docket No. G-008/GR-15-424, Findings of Fact, Conclusions, and Order at 5 (June 3, 2016) (citing *In re Minn. Power & Light Co.*, 435 N.W.2d 550, 554 (Minn. App. 1989)).

8 *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*, PUC Docket No. E-002/CI-13-754, Order Finding Imprudence, Denying Return on Cost Overruns, and Establishing LCM/EPU Allocation for Ratemaking Purposes, at 12–13, 13 n.20 (May 8, 2015) (citing Minn. Stat. § 216B.16, subd. 6).

policy that retail consumers of utility services shall be furnished such services at reasonable rates.[9]

3. Distilling the authority down to a rule, the Company's burden in this proceeding requires satisfaction of a two-part process. First, the Company must establish the amount of a given cost as a judicial fact.[10] Second, the Company must establish that it is just and reasonable for ratepayers (as opposed to the Company's shareholders) to bear those costs.[11] As is logically appropriate for a regulated monopoly imposing costs on captive ratepayers, the Company's burden in this case is heavy, but not insurmountable.

FINDINGS OF FACT

A. Forced Outage at PI and Commission Referral

1. Xcel's PINGP is a two-unit, nuclear-powered, electric generating station located in Red Wing, Minnesota, with a combined capacity of 1,100 megawatts, which began operating in 1973 and 1974.[12]

2. When functional, the plant provides baseload service and operates 24 hours a day, seven days a week to provide electric power to Xcel customers.[13]

3. In October 2023, Xcel Energy struck an underground cable bundle during work to replace certain power cables at PINGP.[14] 10 As a result, PINGP's Unit 1 shut down and endured an outage lasting 103 days.[15]

4. In its report on the outage to the Nuclear Regulatory Commission, Xcel cited weaknesses in its process for approving the excavation permit and inadequate oversight of the excavation work as direct causes of the outage.[16] Further, the report stated "due to inadequate oversight, work proceeded without all controls in place that would be expected for work at a nuclear plant. Specifically, approved work plans were not always available at the work site and approved construction drawings for the boring work were not updated when changes were made …."[17] In

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9 *In re Petition of N. States Power Co.*, 416 N.W.2d 719, 722 (Minn. 1987) (emphasis added).

10 *In re Petition of N. States Power Co.*, 416 N.W.2d at 722 (Minn. 1987).

11 *In re Petition of N. States Power Co.*, 416 N.W.2d at 723 (Minn. 1987) (finding that "by merely showing that it has incurred, or may hypothetically incur, expenses, the utility does not necessarily meet its burden of demonstrating that it is just and reasonable that the ratepayers bear the costs of those expenses").

12 Ex. Xcel-1 at 3:1-3 (Krug Direct).

13 Ex. Xcel-1 at 3:4-6 (Krug Direct).

14 In the Matter of Xcel Energy's Petition for Approval of its 2023 Annual Fuel Forecast and Monthly Fuel Cost Charges, Docket No. E-002/AA-22-179, Order Approving 2023 Fuel Clause True-Up Report, Requiring Additional Filings, Finding Imprudence, And Notice Of And Order For Hearing at 3 (Nov. 15, 2024) (eDocket No. 202411-211999-01) ("PINGP Order").

15 PINGP Order at 3.

16 PINGP Order at 3.

17 PINGP Order at 3.

its report, Xcel also admitted that it "inadvertently provided maps that did not fully depict all the other underground cables near the excavation path."[18]

5. The Commission has affirmatively determined Xcel Energy's imprudence caused the extended outage at issue.[19]

6. During the outage, Xcel was forced to purchase replacement power to cover for lost generation from PINGP.[20] Upon finding Xcel acted imprudently to cause the 103-day outage at PINGP, the Commission concluded it could not determine the appropriate ratepayer refund amount resulting from Xcel's imprudence, and thus referred the issue to the CAH for the issue of refund calculation to proceed as a contested case and allow for additional record development.[21]

7. Additionally, the Commission directed Xcel to "include interest … in any outage-related refund," stating such inclusion appropriate because ratepayers impacted by Xcel's imprudence and the ensuing outage should not pay for "costs incurred due to the Company's imprudence**."**[22]

B. Calculation of Replacement Power Costs

8. Xcel Energy used a software program called PLEXOS to estimate the replacement-power cost that resulted from the October 2023 outage.[23]

According to Witness Detmer, Xcel estimated the outage costs by creating two scenarios. First, the Company created a base case in PLEXOS representing actual operations without PINGP on-line. The Company then calibrated the base case, meaning "the model closely resembled actual operations."[24] Xcel then saved the outputs from this step. Second, Xcel modified the base case into a change case; the change being to make PINGP available.[25] Xcel then saved the outputs from this step as well. Xcel then calculated the difference in total system costs reported by PLEXOS in the two steps. The difference between the total cost of the base case and the change case is the estimated cost of the PINGP outage. Using this production cost modeling approach, Xcel "estimated the total incremental power cost for the NSP System during the PINGP outage (for both Units 1 and 2) to be approximately $48.5 million ($34.3 million for the Minnesota jurisdiction)."[26]

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18 PINGP Order at 3.

19 PINGP Order at 4-5.

20 PINGP Order at 3.

21 PINGP Order at 11.

22 PINGP Order at 5.

23 *See* Ex. Xcel-5 at 13, 16 (Detmer Direct).

24 Ex. DOC-3 at 2 (Rakow Surrebuttal) citing Ex. Xcel-5 at 16 (Detmer Direct).

25 Ex. DOC-3 at 3 (Rakow Surrebuttal) citing Ex. Xcel-5 at 16 (Detmer Direct).

26 Ex. DOC-3 at 3 (Rakow Surrebuttal) citing Ex. Xcel-5 at 16 (Detmer Direct).

C. LMP Data Does Not Support Xcel's Modeling

9. In Direct Testimony, XLI Witness Andrews critiqued Xcel Energy's analysis. First, Mr. Andrews stated: the outage at PINGP should not have had any major effect on the Locational Marginal Prices ("LMP") within the Midcontinent Independent System Operator ("MISO"). Therefore, generation output of Xcel's other resources should have been largely unchanged.[27]

10. In essence, Witness Andrews states that he would expect PINGP's loss would only cause small changes in the energy output of Xcel's units in MISO's actual dispatch. This is because most of the change in energy output to account for loss of PINGP would be spread across generating units throughout MISO (i.e., more broadly than just generating units controlled by Xcel). This expected "allocation" of the replacement energy throughout MISO is attributable to the assumption that there would be only small changes in LMPs.[28]

11. An LMP has three components: cost of energy, cost of congestion and the cost of losses.[29]

12. In Rebuttal Testimony, Xcel agreed that the loss of PINGP would not have a major impact on LMPs and that assuming the change to be zero is the most reasonable approach.[30]

13. Xcel also claimed in Rebuttal Testimony, however, that "the availability of PINGP would impact the output of its other NSP generators" because of congestion constraints in the MISO market.[31]

14. Department Witness Rakow opined that these two assertions, (1) that the LMPs would not change significantly, and (2) the availability of PINGP would impact the other generating units on Xcel Energy's system, are inconsistent:

> Mr. Detmer's assertions are internally inconsistent. It is unlikely to be the case that the loss of PINGP would simultaneously have minimal impact on LMPs and significantly impact the output of other NSP generators due to constraints, because all generators are dispatched based upon LMPs. If LMPs do not change meaningfully, then the output of the generators would not be expected to change to a meaningful degree either.
>
> On the other hand, if loss of PINGP is accompanied by constraints that force other NSP generators to increase output, then those NSP generators would only ramp up their output if LMPs at their locations increased to a level equal to or greater than those

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27 Ex. XLI-1 at 2-3 (Andrews Direct).

28 Ex. XLI-1 at 3-4 (Andrews Direct).

29 Ex. DOC-3 at 4 (Rakow Surrebuttal) citing Ex. Xcel-5 at 10-11 (Detmer Direct).

30 Ex. DOC-3 at 4 (Rakow Surrebuttal) citing Xcel-9 at 5 (Detmer Rebuttal).

31 Ex. DOC-3 at 5 (Rakow Surrebuttal) citing Xcel-9 at 10 (Detmer Rebuttal).

> generators' variable cost. That is, the constraints would change LMPs enough to trigger the incremental generation. [32]

15. These two statements contradict each other because generators are dispatched based upon LMPs. If Prairie Island's availability has little impact on LMPs, then its availability also would have little effect on the output of Xcel's other power generation facilities.

16. Witness Rakow further testified that he concluded of these two scenarios, that the no LMP change scenario was more probable, and as a result, he disagreed with Xcel's assumption that the loss of PINGP's energy would be replaced by its own generation as opposed to the MISO market.[33]

17. To check his conclusion, Witness Rakow reviewed the LMPs to evaluate whether MISO transmission constraints impeded the flow of energy in and out of MISO North, as Xcel alleges. Witness Rakow found that "while the Minnesota hub (MISO North) does experience congestion—triggering higher LMPs than other hubs—the Minnesota hub experiences more congestion than the other hubs only one-third of the time and it is very rare for that congestion to cause LMPs to diverge by a significant amount. The MISO LMP data does not support a contention of persistent, significant congestion."[34]

18. In summary, Witness Rakow testified that the data does "not support an assumption that loss of PINGP's energy would be replaced by Xcel's own generation due to congestion limiting MISO North's ability to import energy from the rest of MISO. Xcel's PLEXOS modeling should not be relied upon as the impact of increased generation from PINGP does not reflect conditions shown in the actual LMP data."[35]

D. Xcel Cannot Verify Its Model Calibration

19. XLI Witness Andrews criticized a second aspect of Xcel's PLEXOS modeling, testifying that "Xcel claims that it calibrated the model to match actual conditions, but it has provided no demonstration or analysis comparing the costs that are produced by the base case in PLEXOS to its actual costs incurred during the study period."[36]

20. In its base case, Xcel used PLEXOS to create a model that Xcel claims represents actual operations during the outage (i.e., without Prairie Island).[37] For the change case, Xcel modified the base case by making Prairie Island available.[38]

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32 Ex. DOC-3 at 5-6 (Rakow Surrebuttal).

33 Ex. DOC-3 at 6 (Rakow Surrebuttal).

34 Ex. DOC-3 at 9, 11.

35 Ex. DOC-3 at 13 (Rakow Surrebuttal).

36 Ex XLI- at 4 (Andrews Direct).

37 Ex. Xcel-5 at 16 (Detmer Direct).

38 Ex. Xcel-5 at 16 (Detmer Direct).

21. Total system costs with Prairie Island during the outage period – Total system costs without Prairie Island during the outage period[39] Importantly, the system costs Xcel Energy has purported to identify are not the actual costs Xcel Energy incurred.

22. Xcel Energy, however, provides no demonstration or analysis comparing costs produced by the base case to actual costs incurred during the study period.[40] In contrast, XLI Witness Andrews found that Xcel's calibration "essentially forced the base case run to make no dispatch decisions in the base case, but instead forced the model to run the generating units to align with their actual output," meaning there is no analysis to provide that the base case accurately represents Xcel's power costs during the extended outage.[41]

23. Not only is Xcel's base case unreasonable, but Xcel's change case is also flawed. In the PLEXOS change case, Xcel failed to allow for "any reduction of the MISO purchases and only a minimal amount of additional sales," a fatal flaw that precludes Xcel's PLEXOS modeling from isolating the PINGP outage and producing realistic replacement power cost estimates.[42] As explained by XLI Witness Andrews, "MISO market interaction is also a significant component of Xcel's overall power costs."[43] Witness Andrews observes that PINGP's loss would cause only small changes in the energy output of Xcel's units in MISO's actual dispatch because most of the change in output to account for the PINGP outage would be spread broadly across MISO, and not isolated only to Xcel's generation units.[44] As a result, Witness Andrews and the Department Witness Rakow do not agree with Xcel's assumption that the loss of PINGP's energy would be replaced by Xcel's own generation, as opposed to the MISO market.[45]

24. In response to XLI's request for Xcel Energy to verify its PLEXOS base case, Xcel Witness Detmer stated that Witness Andrews request for verification was excessively burdensome:

> […] the modeling process used to develop the base case relies on robust inputs that calibrate the model to represent actual conditions as closely as is possible. As a result, comparing the costs that are produced by the base case in PLEXOS to actual costs incurred during the study period represents an excessive requirement.[46]

25. Witness Rakow refuted Xcel's claim that verification of the model would be excessively burdensome, testifying that it was not clear "how producing a table with two columns for Xcel's generators, one showing model costs and the second showing actual costs, is an excessive

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39 Ex. Xcel-5 at 16 (Detmer Direct).

40 Andrews Direct at 4.

41 Ex XLI-1 at 4 (Andrews Direct).

42 Transcript Vol.1 at 107.

43 Ex XLI-3 at 3 (Andrews Surrebuttal).

44 Ex. XLI-1 at 2 (Andrews Direct).

45 Ex. DOC-3 at 6.

46 Ex Xcel- at 8 (Detmer Rebuttal).

requirement. Just because Xcel calibrated the energy output does not mean Xcel calibrated the costs as well."[47] As a result, Witness Rakow concurred with Witness Andrews' concern.[48]

26. In the Base Case, the excess or shortfall from actual generation to meet load was used to determine what the MISO sales and purchases were.[49] These sales and purchase volumes were held constant in the Change Case. In the Change Case, the generators were dispatched to the same RT-LMPs that were used in the Base Case. Xcel also allowed for excess sales. These excess sales totaled roughly 631,000 MWh.[50] These excess sales represent just 16% of the PINGP generation.[51] What concerns Witness Andrews the most is that Xcel did not allow for the change case to have any reduction of MISO purchases. It is reasonable to expect the availability of PINGP to result in more MISO sales, but significantly more than just 16% of its output. It would also follow that MISO purchases would be nearly eliminated. This is a fatal flaw in the PLEXOS modeling.[52]

27. The actual cost from MISO purchases and revenues from MISO sales are likely drastically different than what has been represented by the PLEXOS modeling.[53] Xcel has provided nothing demonstrating that net costs associated with MISO purchases and sales are representative of actual costs.[54]

28. In general, Witnesses Andrews and Rakow agreed that use a production cost model such as PLEXOS would normally be the best method to estimate the incremental cost of the PINGP outage. In this instance, however, Xcel Energy's model is too flawed to provide a reliable estimate.[55] Xcel Energy's PLEXOS outputs conflict with what is known about the real world. Xcel Energy's model reflects significant congestion, forcing the Company's units to do most of the reacting to changes, but Xcel Energy's congestion assumptions are not supported by real time LMP data. The Company's PLEXOS analysis should not be relied upon in this case.[56]

E. XLI's LMP Method Should Be Used for Estimating Incremental Costs

29. In lieu of Xcel Energy's production cost modeling method, XLI Witness Andrews recommends a LMP Calculation Method. Witness Andrews asserts this method provides "a more accurate representation of the replacement power costs [. . .] with a simpler approach."[57] The LMP Calculation Method assumes the generation output of Xcel's other resources would have been

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47 Ex. DOC-3 at 14 (Rakow Surrebuttal).

48 Ex. DOC-3 at 14 (Rakow Surrebuttal).

49 Ex. DOC-3 at 5 (Rakow Surrebuttal).

50 Ex. Xcel-5 at 6 (Detmer Rebuttal).

51 Ex. XLI-3 at 5 (Andrews Surrebuttal).

52 Ex. XLI-3 at 5 (Andrews Surrebuttal).

53 Ex. XLI-3 at 5 (Andrews Surrebuttal).

54 Ex. XLI-3 at 5 (Andrews Surrebuttal).

55 Ex. DOC-3 at 14 (Rakow Surrebuttal).

56 Ex. DOC-3 at 14 (Rakow Surrebuttal).

57 Ex. XLI at 15 (Andrews Direct).

largely unchanged regardless of PINGP's level of operation, and the replacement power costs can therefore be determined by calculating the net revenue that would have been earned had the PINGP been operating as usual.[58]

30. Department Witness Rakow agrees with XLI's LMP approach, testifying that in the absence of reliable PLEXOs modeling, the LMP calculation method recommended by Witness Andrews provides a sufficiently reasonable result for purposes of calculating a replacement power cost refund.[59]

31. The LMP method assumes that the output of Xcel's other generators would have been largely unchanged regardless of Prairie Island's availability.[60] The replacement-power costs can then be determined by calculating the net revenue that Xcel would have earned from Prairie Island had it been operating as usual during the October 2023 outage.[61]

32. Under the LMP method, the net revenue Xcel would have earned from Prairie Island is assumed to equal the product of its generation (in MWh) and the prevailing the market prices (or LMPs), less Prairie Island's fuel and operating costs.[62]

33. Using the LMP method, Mr. Andrews calculated a replacement-power cost for the October 2023 outage of $40.6 million (MN jurisdiction), a substantial increase from the $34.3 million (MN jurisdiction) Xcel had calculated using PLEXOS.[63]

34. Xcel acknowledges that the LMP method is a common method for estimating replacement power costs and that Xcel used the method to calculate an initial estimate in this case.[64]

35. Xcel argues, however, that the LMP method is appropriate only where the size of a facility is small, such that a change in its availability does not impact the output of other nearby resources.[65] Xcel contends that Prairie Island is a large resource relative to the MISO North region and that the availability of Prairie Island "would impact" the output of other Xcel generation resources.[66]

36. Recent experience in another Xcel forced-outage case suggests that, if anything, the LMP method may understate the October 2023 outage's costs.[67]

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58 *See* Rakow Sur p. 15.

59 *See* Rakow Sur p. 19.

60 Ex. DOC-3 at 14-15 (Rakow Surrebuttal).

61 Ex. DOC-3 at 15 (Rakow Surrebuttal).

62 Ex. XLI-2 at 8 (Andrews Direct).

63 Ex. XLI-2 at 12 (Andrews Direct).

64 Ex. Xcel-5 at 9 (Detmer Rebuttal).

65 Ex. Xcel-5 at 9 (Detmer Rebuttal).

66 Ex. Xcel-5 at 10 (Detmer Rebuttal).

67 *See* Ex. XLI-1 at 14 (Andrews Direct).

37. Xcel incurred replacement-power costs following a catastrophic failure of Unit 3 at its Sherburne County (Sherco) Generating Station.[68] Xcel's modeling in that case accounted for three categories of costs and revenues: (1) lost net revenue from Unit 3; (2) increased expense of making more purchases from the market; and (3) increased net revenue from other Xcel generators.[69]

38. The increased expense from market purchases and the increased net revenue from other Xcel generators largely canceled each other out, leaving lost net revenue from Sherco Unit 3 as the bulk of the replacement-power costs.[70]

39. The lost net revenue in Sherco is the equivalent of XLI's LMP-method calculation here.[71] And in Sherco, the increased market-purchase expenses exceeded the increased net revenue from other generators by more than five percent, meaning that the net impact of these two cost categories was to increase the refund.[72] In other words, looking at lost net revenues in isolation, as the LMP method does, may actually understate total replacement-power costs.[73]

40. XLI asserts that the LMP-method produces a reasonable estimate because the Prairie Island outage was too small to meaningfully impact the LMP market price set by MISO and, in turn, impact other generator output.[74] Using the LMP-method, customers are entitled to a replacement power cost refund of $40.6 million.[75]

41. Reviewing the competing Xcel and XLI models, the Department compared LMPs across the MISO region and with Minnesota's nearest MISO neighbor, Illinois.[76] The Department found based on this comparison that real world LMP data does not support Xcel's assumption that Prairie Island would have to be replaced by Xcel's own generation due to congestion limiting MISO energy imports.[77]

42. For these reasons, Xcel has failed to meet its burden to establish by a preponderance of the evidence that the Prairie Island replacement-power costs were $34.3 million (MN jurisdiction). Instead, the best available estimate of replacement-power costs stemming from the outage is the amount calculated using the LMP method.

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68 *See In re Application of N. States Power Co.,* MPUC Docket Nos. E-002/GR-12-961 et al., ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED, REQUIRING REFUND OF CERTAIN DISALLOWED REPLACEMENT POWER COSTS, AND REQUIRING FURTHER ACTION at 2 (Dec. 24, 2024).

69 *See* Ex. XLI-1 at 14 (Andrews Direct).

70 *See* Ex. XLI-1 at 14 (Andrews Direct).

71 Ex XLI-1 at 14 at 14 (Andrews Direct).

72 *See* Ex. XLI-1 at 14 (Andrews Direct).

73 Ex XLI-1 at 14 at 14 (Andrews Direct).

74 Ex. DOC-3 at 14-15 (Rakow Surrebuttal).

75 Ex. XLI-3 at 13 (Andrews Surrebuttal).

76 Ex. DOC-3 at 14-15 (Rakow Surrebuttal).

77 Ex. DOC-3 at 13 (Rakow Surrebuttal).

F. Xcel Energy's Purported Offsets

43. As explained below, Xcel has failed to establish that any of its proposed offsets should be applied to reduce the replacement power costs refund.

46. Xcel proposes three offsets to the refund due to customers: (1) "pull-forward" or "supplemental" work, (2) "avoided 2029 costs," and (3) a historical performance adjustment.

44. Xcel's supplemental work offset seeks to reduce the refund owed to customers on the basis that the Company "proactively completed various additional projects during the outage that were scheduled to be completed during future planned outages."[78]

45. XLI opposes these offsets because the Commission has found Xcel's imprudent actions directly caused the PINGP outage and thus all replacement power costs should be refunded to customers.

46. Not only is Xcel's proposed offset categorically disallowed under Commission precedent, but the benefits Xcel claims are speculative and not supported by reasonable evidence.[79]

47. Xcel's avoided cost offset seeks to reduce its refund to customers based on cable replacement work the Company performed during the outage, which it claims "enabled the Company to avoid or shorten total outage days" and avoid future replacement power costs.[80] Fundamentally impacting the integrity of the avoided cost offset, to determine the 2029 avoided cost offset, Xcel used the PLEXOS model, which failings have been documented above.

48. Xcel made significant assumptions to forecast costs out to 2029, including about hourly LMPs, hourly loads, monthly fuel prices, monthly Operations and Maintenance ("O&M") of each generator, unit heat rates, outage rates, start-up costs and fuel transportation costs.[81] For example, Xcel witness Krug explains the 2029 jurisdictional allocator, which increases the offset, assumes Xcel's system will add over 2,000 MW of data center load by 2029.[82]

49. The assumptions Xcel used to determine the 2029 avoided costs are speculative at best and cannot be relied upon.

50. Second, regulatory precedent does not support offsets of this nature. To the contrary, the Commission explicitly rejected this type of offset in Xcel's Sherco 3 outage proceeding, wherein the Commission disallowed Xcel from offsetting customer refunds based on other benefits that

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78 Ex Xcel-4 at 20.

79 Sherco Forced Outage Order at 36.

80 Ex. Xcel-4 at 17.

81 Ex. XLI-3 at 9 (Andrews Surrebuttal).

82 Ex. XLI-3 at 9 (Andrews Surrebuttal).

may have accrued as a result of resolving consequences stemming from Xcel's imprudent behavior.[83]

51. Additionally, there is no precedent to support, and Xcel should not be granted, a speculative historical performance adjustment for Xcel operating its nuclear generating plant properly. Any past performance does not offset the increased costs that were paid by ratepayers as a result of the PINGP outage—rather, customers expect Xcel will operate all of its assets prudently and well. The irony in Xcel's seeking an offset for historical good performance for a plant that experienced a forced outage caused by Xcel's admitted imprudence cannot be ignored.

52. Further, the Commission already rejected Xcel's historical performance argument in this very docket. The Company fails to acknowledge the Commission's finding that Xcel's actions were so egregiously imprudent, the Commission found itself "unpersuaded that a contested case is required to resolve any disputed material facts necessary to inform a prudence determination," relying on the fact that Xcel did not dispute its own imprudence "enabled workers at PINGP to unintentionally strike the buried cables and cause the outage at PINGP."[84]

53. Based on the foregoing Findings of Fact and the record in this proceeding, the Administrative Law Judge makes the following:

CONCLUSIONS OF LAW

1. Xcel Energy has failed to satisfy its burden of proof in this proceeding and as a result the LMP methodology should be used to calculate the refund due to customers.

2. Xcel Energy has failed to satisfy its burden of proof and its proposed offsets to the refund due to customers are speculative and unsupported and should not be adopted.

RECOMMENDATIONS

Based upon these Findings of Fact and Conclusions of Law, the Administrative Law Judge recommends:

1. Xcel should refund $40.6 million (MN jurisdiction) through the Fuel Clause Rider. THis refund should include interest using the U.S. Federal Reserve's Prime Rate.

2. Xcel Energy should bear its expenses in litigating this case and it should not be permitted to recover these costs from customers.

[83] Sherco Forced Outage Order at 36.

[84] PINGP Order at 5.

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Respectfully submitted,

STOEL RIVES LLP

/s/ Amber S. Lee

Amber S. Lee
Eden A. Fauré
33 South Sixth Street, Suite 4200
Minneapolis, MN 55402
Tele: 612-373-8800
Fax: 612-373-8881

ATTORNEYS FOR THE XCEL LARGE INDUSTRIALS