

**BEFORE THE MINNESOTA COURT OF ADMINISTRATIVE HEARINGS
600 NORTH ROBERT STREET
ST. PAUL, MINNESOTA 55101**

**FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION
SUITE 350
121 SEVENTH PLACE EAST
ST. PAUL, MINNESOTA 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 File No. 21-2500-40336

MPUC Docket No. E-002/AA-22-179

**JOINT PROPOSED FINDINGS OF FACT,
CONCLUSIONS OF LAW, AND
RECOMMENDATIONS OF THE
DEPARTMENT OF COMMERCE,
OFFICE OF THE ATTORNEY GENERAL—
RESIDENTIAL UTILITIES DIVISION,
AND CITIZENS UTILITY BOARD
OF MINNESOTA**

TABLE OF CONTENTS

STATEMENT OF THE ISSUES	3
SUMMARY OF RECOMMENDATIONS.....	3
LEGAL STANDARD	4
FINDINGS OF FACT.....	5
I. BACKGROUND.....	5
A. MISO Energy Markets.....	5
B. Prairie Island Nuclear Power Plant.	6
C. The October 2023 Incident.	7

D.	The Condition of the Control Cables.....	9
E.	Control Cable Replacement.....	12
F.	Prior Commission Action.....	13
II.	REPLACEMENT POWER COSTS.....	15
A.	Xcel's PLEXOS Calculation.	15
B.	XLI's LMP-Method Calculation.....	16
C.	The Reliability of Xcel's PLEXOS and XLI's LMP Models.....	17
III.	REFUND OFFSETS.....	20
A.	Avoided 2029 Costs.....	20
B.	Supplemental Work.....	32
C.	Historic Performance Adjustment.	35
D.	Underspent Generation Expense.....	37
IV.	LITIGATION EXPENSES.....	37
V.	COMPUTATION OF REFUND	39
A.	Allocation Factor for Avoided 2029 Costs and Supplemental Work Offsets.	39
B.	Refund Interest.	41
	CONCLUSIONS OF LAW	41
A.	PLEXOS vs. LMP-Calculated Replacement Power Estimate.	42
B.	"Avoided 2029 Costs" Offset.....	42
C.	"Performance Adjustment" Offset.	43
D.	"Supplemental Work" Offset.....	44
	RECOMMENDATIONS	44

The Minnesota Public Utilities Commission (“Commission”) referred this matter to the Court of Administrative Hearings for a contested-case proceeding in October 2024. Administrative Law Judge Kimberly Middendorf (“ALJ”) was assigned to the matter. The Commission directed the ALJ to determine the appropriate refund amount after Xcel Energy imprudently drilled through a control cable at the Prairie Island nuclear generating plant in October 2023.

An evidentiary hearing was held on September 30, 2025. Initial briefs were filed on November 25, 2025. Reply briefs 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.

STATEMENT OF THE ISSUES

What was the approximate value of replacement power procured by Xcel Energy to serve its Minnesota customers after the utility imprudently drilled through a control cable at the Prairie Island nuclear generating plant in October 2023?

What, if any, offsets to the replacement power cost refund that Xcel would otherwise owe to customers should be applied?

SUMMARY OF RECOMMENDATIONS

1. The Commission should reject Xcel’s proposed offsets and should instead require Xcel to refund at least \$40.1 million plus interest, compounded monthly until fully paid. The Commission also should prohibit Xcel from recovering litigation costs from ratepayers and mandate a compliance filing detailing all expenses incurred in this

contested case. Finally, the Commission should require Xcel to exclude these litigation costs from any future rate cases or cost-recovery proceeding.¹

LEGAL STANDARD

2. Every rate “made, demanded, or received” by a public utility must be just and reasonable.² The burden to prove that a rate is just and reasonable is on the utility, and any doubt as to reasonableness will be resolved in favor of the consumer.³ As the party with the burden of proof, a utility has the burden of supporting its proposed action by a preponderance of the evidence.⁴

3. Automatic adjustments through a fuel clause rider are considered provisionally approved and are placed into effect without Commission action.⁵ Erroneous adjustments are subject to refund.⁶ Moreover, the Commission may after investigation, notice, and hearing issue an order to discontinue or modify an automatic adjustment.⁷ “When a utility proposes new or revised electric energy . . . adjustment provisions, the proposal is considered a change in rates and must be reviewed according to commission rules and practices relating to utility rate changes.”⁸

4. When a utility seeks to offset a replacement-power cost refund using benefits arising from a forced outage, such as avoiding future outages, the utility’s burden of proof requires it to do more than offer speculative estimates of future costs that were avoided.⁹ A utility may not offset a refund of imprudently incurred replacement-power

¹ The Minnesota Department of Commerce, Office of the Attorney General—Residential Utilities Division, and Citizens Utility Board of Minnesota submit these joint proposed findings for the Court’s convenience. The Department, OAG, and CUB largely take the same positions on each disputed issue. There are two small differences. First, the OAG recommends that all Xcel’s proposed offsets be rejected, including the “supplemental work” offset. *Infra* Sec. III(B). The Department and CUB do not object to consideration of the “supplemental work” offset but agrees the Commission could reject it as a matter of utility ratemaking policy. Second, the OAG offered testimony on the appropriate “allocation factor” for “avoided 2029 costs” and “supplemental work” offsets. *Infra* Sec. IV(A). The Department offered no testimony on the “allocation factor” issue and takes no position on it. The inclusion of these issues in these joint proposed findings should not be construed as a waiver of the Department’s position. CUB offered no testimony in this proceeding but filed briefs supporting the Department’s and OAG’s positions.

² Minn. Stat. § 216B.03.

³ See Minn. Stat. §§ 216B.03, .16, subd. 4.

⁴ Minn. R. 1400.8608.

⁵ Minn. R. 7825.2920, subp. 1.

⁶ Minn. R. 7825.2920, subp. 2.

⁷ Minn. R. 7825.2920, subp. 3.

⁸ Minn. R. 7825.2390.

⁹ See *In re Appl. 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

costs using benefits that accrued from the utility's prudent actions "responding to and resolving the consequences of" the prior imprudent conduct.¹⁰ Rather, a utility's "prudent management of the restoration process—including efforts to mitigate costs—[is] the expectation and does not offset or mitigate . . . prior imprudence."¹¹ Allowing a utility to offset a customer refund with benefits arising from its own imprudence is like "claiming that a homeowner actually benefits from their home burning down because insurance pays for a new kitchen floor."¹²

FINDINGS OF FACT

I. BACKGROUND

A. MISO Energy Markets.

5. The Midcontinent Independent System Operator ("MISO") manages and facilitates wholesale electricity markets across a geographical footprint spanning several states, including the service territory and transmission assets of Xcel Energy.¹³ MISO's primary objective is to minimize electricity costs throughout its managed region by using a "two-pass" market structure comprised of Day-Ahead and Real-Time markets.¹⁴ In this system, market participants submit offers to sell available generation and bids to purchase load. MISO then identifies the intersection of supply and demand to establish a wholesale price known as the Locational Marginal Price ("LMP"), which is the rate paid to all resources that clear the market. Each LMP is specific to generators on the transmission grid.¹⁵

6. Reflecting supply and demand, LMPs are based on marginal unit of production energy costs, transmission congestion at a particular location, and line-loss costs at a particular location.¹⁶ While MISO's Day-Ahead market essentially functions as

CERTAIN DISALLOWED REPLACEMENT POWER COSTS, AND REQUIRING FURTHER ACTION at 36 (Dec. 24, 2024) (eDocket No. [20245-206869-10](#)).

¹⁰ *In re Appl. 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 36 (Dec. 24, 2024) (eDocket No. [20245-206869-10](#)).

¹¹ *In re Appl. 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 36 (Dec. 24, 2024) (eDocket No. [20245-206869-10](#)).

¹² *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, CAH File No. 65-2500-38476, ALJ FINDINGS OF FACT, CONCLUSIONS OF LAW, & RECOMMENDATION at 82 (May 14, 2024).

¹³ Ex. XCEL-5 at 3 (Detmer Direct).

¹⁴ Ex. XCEL-5 at 3 (Detmer Direct).

¹⁵ Ex. XCEL-5 at 3 (Detmer Direct).

¹⁶ Ex. XCEL-5 at 10 (Detmer Direct). When the transmission system is nearing capacity, the market may disfavor generation located within the transmission constrained area. The

a forecast for the following day's needs, the Real-Time market uses updated information to balance differences between those forecasts and actual conditions, such as unexpected shifts in load or generator availability.¹⁷

B. Prairie Island Nuclear Power Plant.

7. Prairie Island Nuclear Generating Plant is a two-unit nuclear power plant located on an island in the Mississippi River near Red Wing, Minnesota.¹⁸ The plant has been in service for over 50 years, with Unit 1 commencing operation in 1973 and Unit 2 in 1974.¹⁹

8. Prairie Island's generating units are separately licensed by the federal Nuclear Regulatory Commission ("NRC").²⁰ The NRC renewed both licenses in 2011, and the current licenses expire in 2033 and 2034.²¹ Xcel plans to apply to the NRC next year for a subsequent license renewal ("SLR") that would allow the units to operate until 2053 and 2054.²²

9. Since 2005, Prairie Island's capacity factor, a measure of plant availability, shows that the plant has underperformed the industry average by nearly 5%:²³

Years	Prairie Island	Industry-Wide	Difference
2018-2022	94.94%	92.76%	2.18%
2013-2017	84.56%	91.88%	-7.32%
2008-2012	85.08%	89.64%	-4.56%
2005-2022	88.35%	91.23%	-2.88%
2005-2024	86.39%	91.37%	-4.98%

loss of energy during the transmission process, referred to as line loss, increases the further a generator is from the load it is serving. Put together, these two factors create differences in prices based on location while other variables are held constant. Ex. XCEL-5 at 10 (Detmer Direct).

¹⁷ Ex. XCEL-5 at 4 (Detmer Direct).

¹⁸ Ex. OAG-1 at 2 (Lee Direct).

¹⁹ Ex. XCEL-2 at 4 (Krug Direct).

²⁰ See Ex. XCEL-13, sched. 2 at 3 (Hiser Direct).

²¹ Ex. XCEL-13, sched. 2 at 3 (Hiser Direct).

²² Ex. XCEL-13, sched. 2 at 3 (Hiser Direct).

²³ Ex. DOC-2 at 5 (Golden Surrebuttal).

10. During the most recent 2018-2022 period, Xcel spent \$51.8 million less on maintenance of Prairie Island than budgeted.²⁴ When utilities, including Xcel, spend less on maintenance than budgeted, they keep the difference for shareholders.²⁵

C. The October 2023 Incident.

11. In October 2023, Xcel began a project to replace one of the power cables that connect Prairie Island to a nearby electrical substation.²⁶ The project, conducted by Xcel employees, involved horizontal directional drilling to create an underground path for the new cable.²⁷

12. On the morning of October 19, with Unit 1 operating at 100% power and Unit 2 offline for scheduled refueling, Xcel workers began to bore a hole in preparation for their fifth conduit pull.²⁸

13. The workers deviated from the planned drilling path, which had been surveyed with ground-penetrating radar to ensure it was clear of other infrastructure, and followed a new path that had not been surveyed.²⁹ They struck a bundle of buried cables, severing them and causing an outage.³⁰

14. The cables that the workers had severed were low-voltage direct-current cables, known as “control cables,” that supply control power to certain equipment essential to the operation of both Prairie Island generating units.³¹ The control cables were original to the plant and had been in service for approximately 50 years as of October 2023.³² They were buried in direct contact with the soil without a conduit or other protective enclosure, as was common practice in the early 1970s.³³

²⁴ Ex. DOC-2, ARG-S-2 at 1 (Golden Surrebuttal).

²⁵ *In re Review of the July 2018–December 2019 Annual Automatic Adjustment Reports (“Boswell 4 Forced Outage”)*, Docket No. E999/AA-20-171, FINDINGS OF FACT, CONCLUSIONS OF LAW, & RECOMMENDATION ¶¶ 48-50 (eDocket no. [20218-177011-01](https://www.puc.state.mn.us/eDocket/20218-177011-01)).

²⁶ Ex. OAG-7 at 5, 7 of 14 (Xcel Response to OAG IR 3) (eDocket No. [20259-223438-04](https://www.puc.state.mn.us/eDocket/20259-223438-04)).

²⁷ Ex. OAG-7 at 5, 7 of 14 (Xcel Response to OAG IR 3); Ex. OAG-2, SL-D-1 at 1 (Lee Direct Schedules).

²⁸ Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3).

²⁹ See PUC Agenda Meeting on 2024-09-19, <https://minnesotapuc.granicus.com/player/clip/2421> (statement begins at 2:18:00); see also Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3).

³⁰ Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3); Ex. XCEL-2 at 5 (Krug Direct).

³¹ Ex. OAG-2, SL-D-5 at 1–2 (Lee Direct Schedules).

³² See Ex. XCEL-14, sched. 1. at 3–4 (Hiser Rebuttal); Ex. DOC-6 at 2 (Xcel Response to Department Request 24).

³³ Ex. XCEL-10, sched. 2 at 3 (Bible Direct).

15. Severing the control cables caused multiple substation breakers to open, which in turn caused Unit 1's turbine and reactor to trip offline, all non-safety-related busses to lose power, and backup cooling systems to kick in.³⁴ This precipitated a months-long forced outage³⁵ of both Prairie Island units while Xcel worked to replace the severed cables.³⁶ Unit 1 would ultimately return to service at the end of January 2024 and Unit 2 at the beginning of March 2024.³⁷

16. In a March 2024 report to the NRC, Xcel described the root cause of the October 2023 incident as "weakness in the Excavation Permit approval process as well as the inadequate oversight of the non-nuclear supplemental workers performing HDD [horizontal directional drilling] work."³⁸

17. Xcel explained that "[s]ite personnel reviewing and approving the permit were not adequately intrusive to ensure that all interferences had been properly identified."³⁹ Xcel did not survey the drilling area using ground-penetrating radar.⁴⁰ Had it done so, it "would have identified the interference with the DC cables."⁴¹

18. Xcel also explained that "procedural weaknesses and poor communication between site departments allowed the HDD work to continue without a clear understanding of which site department was responsible for providing oversight to the HDD crew."⁴² As a result, the work progressed without "controls in place that would be expected for work at a nuclear plant."⁴³ And "approved work plans were not always available at the work site and approved construction drawings for HDD work were not updated when changes were made in the field."⁴⁴

³⁴ Ex. OAG-7 at 5 of 14 (Xcel Response to OAG IR 3).

³⁵ A forced or unplanned outage is a situation where an electrical generating unit is removed from service for emergency reasons, for example due to a component failure or other condition requiring removal outside of a planned maintenance or planned outage period. Forced outages may result in a utility incurring forced outage expenses when its own generation facilities are not available for service. These forced outage expenses might include higher replacement power costs. *In re Review of the July 2018–December 2019 Annual Automatic Adjustment Reports ("Boswell 4 Forced Outage")*, Docket No. E999/AA-20-171, FINDINGS OF FACT, CONCLUSIONS OF LAW, & RECOMMENDATION ¶ 37 (eDocket no. [20218-177011-01](#)).

³⁶ See Ex. OAG-1 at 3 (Lee Direct).

³⁷ Ex. DOC-1 at 3 (Golden Direct).

³⁸ Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3).

³⁹ Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3).

⁴⁰ Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3).

⁴¹ Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3).

⁴² Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3).

⁴³ Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3).

⁴⁴ Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3).

D. The Condition of the Control Cables.

19. In the immediate aftermath of the incident, Xcel inspected the control cables and found “evidence of corrosion, and degraded insulation.”⁴⁵ Xcel determined that the condition of the cables put them at risk of water intrusion and therefore opted to permanently replace the control cables rather than simply repairing the portion that it had damaged.⁴⁶ Xcel also asked the Electric Power Research Institute (“EPRI”) to conduct a forensic evaluation to determine the probable causes of the cable degradation.⁴⁷

20. Figure 1, below, displays the cross-section of one of the control cables. As the figure shows, a control cable comprises five twisted pairs of copper conductors enclosed in chlorinated polymer insulation of various colors.⁴⁸ The conductors are further separated by a fiber fill and surrounded by a tinned copper foil shield and a common neoprene jacket.⁴⁹

**Figure 1 –
Control Cable Cross-Section⁵⁰**



⁴⁵ Ex. XCEL-2 at 5 (Krug Direct).

⁴⁶ Ex. XCEL-2 at 5–6 (Krug Direct).

⁴⁷ Ex. OAG-5 at 10 of 16 (Xcel Response to DOC IR 38) (eDocket No. [20259-223438-02](#)).

⁴⁸ Ex. OAG-5 at 10 of 16 (Xcel Response to DOC IR 38).

⁴⁹ Ex. OAG-5 at 10 of 16 (Xcel Response to DOC IR 38).

⁵⁰ Ex. OAG-5 at 12 of 16 fig.2 (Xcel Response to DOC IR 38).

21. EPRI requested that Xcel provide “long continuous lengths of cable” to allow EPRI to perform electrical tests and observe the relative locations of the degradation.⁵¹ Xcel provided cable pieces cut to lengths of only three to four feet, making it impossible for EPRI to conduct meaningful electrical tests.⁵² Xcel did not mark the pieces to allow EPRI to establish the interrelationship between them.⁵³ The lack of markings made it impossible for EPRI to reassemble the full cable length or determine where on the cable the overheating occurred.⁵⁴

**Figure 2 –
Cable and Soil Samples Received by EPRI from Xcel⁵⁵**



22. There were also issues with the soil sample that Xcel provided to EPRI. EPRI had requested that the sample be “hermetically sealed in Tupperware-like containers” to preserve the compaction and moisture levels present in the soil.⁵⁶ Xcel provided the soil in an unsealed plastic bag.⁵⁷ Given the unsealed container and how long the sample was in transit, EPRI found it “unlikely that the local conditions could be

⁵¹ Ex. OAG-5 at 10 of 16 (Xcel Response to DOC IR 38).

⁵² Ex. OAG-5 at 10, 14–15 of 16 (Xcel Response to DOC IR 38).

⁵³ Ex. OAG-5 at 10 of 16 (Xcel Response to DOC IR 38).

⁵⁴ Ex. OAG-5 at 10, 16 of 16 (Xcel Response to DOC IR 38).

⁵⁵ Ex. OAG-5 at 11 of 16, fig.1 (Xcel Response to DOC IR 38).

⁵⁶ Ex. OAG-5 at 10 of 16 (Xcel Response to DOC IR 38).

⁵⁷ Ex. OAG-5 at 10 of 16 (Xcel Response to DOC IR 38).

reconstituted from this sample and, thereby, provide meaningful thermal resistance information.”⁵⁸

23. The information that EPRI was able to glean from the soil sample suggested that it was not well suited as a fill material for direct-buried cables. EPRI found that the soil was largely composed of “fine sand of similar particle size” and had a low moisture content.⁵⁹ This information suggested that the soil’s “thermal resistivity was higher than planned for buried cables.”⁶⁰ EPRI stated that a good thermal backfill for buried cables should include a range of particle sizes.⁶¹ EPRI also posited that the soil sample’s low moisture level could lead to higher-than-planned thermal resistivity.⁶²

24. EPRI’s inspection of the cable samples uncovered evidence of overheating and pyrolysis,⁶³ supporting its hypothesis that the soil’s thermal resistivity was higher than planned for buried cables. First, several of the cable pieces displayed copper oxide at the cut surfaces, indicating likely exposure of the conductor to moisture and chlorine.⁶⁴ Polymer insulation can release chlorine through pyrolysis if it reaches a high enough temperature, and since no other source of chlorine was present, this shows that the control cable overheated.⁶⁵ Second, the jackets of 5 out of the 56 cable pieces were cracked, and the jackets of another 6 displayed heat damage.⁶⁶ These defects in the cables jacket suggest, again, that the control cables were subjected to overheating.⁶⁷

⁵⁸ Ex. OAG-5 at 10 of 16 (Xcel Response to DOC IR 38).

⁵⁹ Ex. OAG-5 at 10–11 of 16 (Xcel Response to DOC IR 38).

⁶⁰ Ex. OAG-5 at 11 of 16 (Xcel Response to DOC IR 38).

⁶¹ Ex. OAG-5 at 11 of 16 (Xcel Response to DOC IR 38).

⁶² Ex. OAG-5 at 11 of 16 (Xcel Response to DOC IR 38).

⁶³ See Ex. OAG-5 at 11–16 of 16 (Xcel Response to DOC IR 38) (reviewing cable condition).

⁶⁴ Ex. OAG-5 at 11 of 16 (Xcel Response to DOC IR 38).

⁶⁵ Ex. OAG-5 at 11 of 16 (Xcel Response to DOC IR 38).

⁶⁶ Ex. OAG-5 at 12 of 16 (Xcel Response to DOC IR 38).

⁶⁷ Ex. OAG-5 at 14 of 16 (Xcel Response to DOC IR 38).

**Figure 3 –
Control Cable Jacket Defects⁶⁸**



25. EPRI noted that “soil resistivity can greatly impact cable longevity.”⁶⁹ If the soil around the control cables were dry and not compacted well, its thermal resistivity would be elevated and could lead to cable overheating and hardening of the jacket.⁷⁰ This in turn could cause cracks to form that would allow moisture to penetrate the jacket, further damaging the internal conductors.⁷¹

E. Control Cable Replacement.

26. Xcel completed its inspection of the damaged cables five days after the incident, on October 24. It concluded that the “identified damaged cables ... were beyond repair based on overall condition of the cable jackets, evidence of copper corrosion, and degraded insulation.”⁷² The cable inspection further concluded that “the cabling can not [sic] be repaired and needs to be replaced.”⁷³

27. Xcel performed a formal Operational Decision Making Issue (ODMI) Evaluation, which was completed on November 7-9.⁷⁴ Although the cable inspection concluded the cables could not be repaired, Xcel formally considered three options to remedy the damaged cable: use spare cable conductors within the same bundle, replace only the damaged sections of the cable, and full cable replacement.⁷⁵ On November 13, Xcel decided to proceed with a full cable replacement.⁷⁶

⁶⁸ Ex. OAG-5 at 14 of 16, fig.5 (Xcel Response to DOC IR 38).

⁶⁹ Ex. OAG-5 at 14 of 16 (Xcel Response to DOC IR 38).

⁷⁰ Ex. OAG-5 at 14 of 16 (Xcel Response to DOC IR 38).

⁷¹ Ex. OAG-5 at 14 of 16 (Xcel Response to DOC IR 38).

⁷² Ex. DOC-6 at 18 of 24 (Xcel Response to Department Request 24).

⁷³ Ex. DOC-6 at 5, 16 of 24 (Xcel Response to Department Request 24).

⁷⁴ Ex. DOC-6 at 5-16 of 24 (Xcel Response to Department Request 24).

⁷⁵ Ex. DOC-6 at 5-6 of 24 (Xcel Response to Department Request 24).

⁷⁶ Ex. DOC-6 at 2 (Xcel Response to Department Request 24).

28. On November 14, Xcel changed the classification of the outage from unplanned to planned.⁷⁷ On November 30, Xcel submitted a request to MISO to approve a planned outage for December 15 to January 19.⁷⁸ MISO approved the request on December 7.⁷⁹

29. The control cable replacement was completed, and Unit 1 returned to 100% power on January 30, 2024, for a total outage duration of 103 days.⁸⁰ The replacement work added 57.2 incremental outage days to the time that Unit 2 was offline.⁸¹

F. Prior Commission Action.

30. State law and Commission rules provide for an annual true-up mechanism for utilities' energy purchases and for the costs of fuel used in the generation of electricity.⁸² In the annual true-up, utilities quantify the total fuel and market energy costs collected from customers for the prior year and the actual costs incurred by the utility for that year. If the utility collected more in fuel and market energy costs than it spent, a refund must be provided to customers; if the utility collected less, a surcharge may be authorized. The current requirements for these annual true-up filings, frequently referred to by the Commission as Fuel Clause Adjustment (FCA) filings, are provided in various orders issued by the Commission in MPUC Docket No. E999/CI-03-802.⁸³

31. On March 1, 2024, Xcel filed its annual fuel-clause adjustment report for 2023 in compliance with these requirements.⁸⁴ The report stated that Xcel over-collected fuel costs by \$126.0 million for 2023, and described its plan to return this amount to customers.⁸⁵

32. The Department recommended that the non-nuclear aspects Xcel's 2023 FCA report be approved, and stated that it was investigating the 2023 nuclear outages identified in the report.⁸⁶

33. The Department and the OAG subsequently sent information requests to Xcel seeking additional information about the October 2023 incident.⁸⁷ Both the

⁷⁷ Ex. DOC-6 at 2 (Xcel Response to Department Request 24).

⁷⁸ Ex. DOC-6 at 17 of 24 (Xcel Response to Department Request 24).

⁷⁹ Ex. DOC-6 at 17 of 24 (Xcel Response to Department Request 24).

⁸⁰ Ex. XCEL-2 at 6.

⁸¹ Ex. XCEL-2, sched. 3 at 2.

⁸² Minn. Stat. § 216B.16, subd. 7; Minn. R. 7825.2800 through 7825.2840.

⁸³ See Annual True-Up Report at 1 (Mar. 1, 2024) (eDocket No. [20243-204018-02](#)).

⁸⁴ Annual True-Up Report at 1 (Mar. 1, 2024) (eDocket No. [20243-204018-02](#)).

⁸⁵ Annual True-Up Report at 1-2 (Mar. 1, 2024) (eDocket No. [20243-204018-02](#)).

⁸⁶ Comments of the Minnesota Department of Commerce at 13, 24 (Apr. 15, 2024) (eDocket No. [20244-205419-02](#)) (DOC April 15 Comments).

⁸⁷ DOC April 15 Comments at 13; Comments of the Office of the Attorney General at Attachment A (May 15, 2024) (eDocket No. [20245-206795-01](#)) (RUD Comments).

Department and the OAG filed supplemental comments on May 15 concluding that Xcel's imprudence was the cause of the outage and that ratepayers were owed a refund for replacement power costs arising from the outage.⁸⁸ Xcel filed reply comments on July 30, arguing that it was not imprudent in the conduct that led to the October 2023 incident.⁸⁹ Further comments were filed by the Department and the Citizens Utility Board (CUB), with both parties recommending that the Commission find that the October 2023 incident was caused by Xcel's imprudent conduct and order a ratepayer refund.⁹⁰

34. The Commission found that there were no "disputed material facts necessary to inform a prudence determination" related to the October 2023, and found that the incident was caused by Xcel's imprudent conduct.⁹¹ Although the Commission found that further information was not needed on a prudence determination, it concluded that "is unable to determine the appropriate ratepayer refund amount resulting from Xcel's imprudence" and referred the case to the Court of Administrative Hearings for a contested case proceeding solely to "determine the appropriate refund amount due to customers due to Xcel's lack of prudence regarding the October 2023 outage at Prairie Island."⁹²

35. Xcel filed a petition for reconsideration, arguing that it was entitled to a contested case hearing on the question of whether Xcel's actions related to the October 2023 incident were imprudent.⁹³ The Department filed a petition for clarification, requesting that the Commission modify the order to clarify the scope of the costs to be addressed in the contested case proceedings.⁹⁴

⁸⁸ Supplemental Response Comments of the Minnesota Department of Commerce at 6 (May 15, 2024) (eDocket No. [20245-206783-02](#)) (Department May 15 Comments); RUD Comments.

⁸⁹ Xcel Reply Comments (July 30, 2024) (eDockets No. [20247-209117-03](#)). These comments were filed after Xcel requested and received two extensions of time to file its reply. NOTICE OF EXTENDED REPLY COMMENT PERIOD at 1 (June 12, 2024) (eDockets No. [20246-207637-01](#)); SECOND NOTICE OF EXTENDED REPLY COMMENT PERIOD at 1 (July 12, 2024) (eDockets No. [20247-208530-01](#)).

⁹⁰ Response Comments of the Minnesota Department of Commerce (Aug. 23, 2024) (eDockets No. [20248-209745-01](#)); Reply Comments of the Citizens Utility Board of Minnesota (July 30, 2024) (eDocket No. [20247-209116-01](#)).

⁹¹ ORDER APPROVING 2023 FUEL-CLAUSE TRUE-UP REPORT, REQUIRING ADDITIONAL FILINGS, FINDING IMPRUDENCE, AND NOTICE OF AND ORDER FOR HEARING, Order Point 5 (Nov. 15, 2024) (eDocket No. [202411-211999-01](#)) (November 15 Order).

⁹² ORDER APPROVING 2023 FUEL-CLAUSE TRUE-UP REPORT, REQUIRING ADDITIONAL FILINGS, FINDING IMPRUDENCE, AND NOTICE OF AND ORDER FOR HEARING at 8, Order Point 6 (Nov. 15, 2024) (eDocket No. [202411-211999-01](#)) (November 15 Order).

⁹³ Petition for Reconsideration (Dec. 5, 2024) (eDocket No. [202412-212755-01](#)).

⁹⁴ Minnesota Department of Commerce's Request for Clarification (Dec. 5, 2024) (eDocket No. [202412-212749-01](#)).

36. The Commission denied Xcel's petition for reconsideration, and granted the Department's request for clarification.⁹⁵ The Commission amended its November 15 Order to clarify "that the contested case issues are limited to the refund owed to ratepayers for costs that flow through the fuel-clause adjustment report."⁹⁶ The Commission further clarified that "the contested case shall also consider any benefits and offsets in determining the appropriate refund and consider whether imprudence by Xcel Energy resulted in customers paying more for power than they otherwise would have paid such that a refund of power costs is appropriate."⁹⁷

II. REPLACEMENT POWER COSTS

37. Due to the outage, Prairie Island was shut down for 103 days.⁹⁸ Xcel purchased replacement power to serve customers during the outage.⁹⁹ It then charged customers for it.¹⁰⁰ The Commission found that Xcel's imprudence caused the outage.¹⁰¹ As a result, the Commission decided that Xcel must reimburse customers for the replacement power costs.¹⁰²

A. Xcel's PLEXOS Calculation.

38. To calculate the replacement-power refund, Xcel proposes that the Commission rely on the utility's PLEXOS modeling-derived estimate. PLEXOS is software that models production costs by attempting to match generation with demand in a way that minimizes the overall system cost.¹⁰³ PLEXOS accounts for variables such as operating costs, operating characteristics, renewable generation forecasts, and market price forecasts.¹⁰⁴

⁹⁵ ORDER DENYING PETITION FOR RECONSIDERATION AND GRANTING REQUEST FOR CLARIFICATION, Order Point 1, 2 (Jan. 31, 2025) (eDocket No. [20251-214793-01](#)) (January 31 Order).

⁹⁶ January 31 Order, Order Point 2.

⁹⁷ January 31 Order, Order Point 3.

⁹⁸ ORDER APPROVING 2023 FUEL CLAUSE TRUE-UP REPORT, REQUIRING ADDITIONAL FILINGS, FINDING IMPRUDENCE, & NOTICE OF & ORDER FOR HEARING at 3 (Nov. 15, 2024) (eDocket No. [202411-211999-01](#)).

⁹⁹ ORDER APPROVING 2023 FUEL CLAUSE TRUE-UP REPORT, REQUIRING ADDITIONAL FILINGS, FINDING IMPRUDENCE, & NOTICE OF & ORDER FOR HEARING at 3 (Nov. 15, 2024).

¹⁰⁰ ORDER APPROVING 2023 FUEL CLAUSE TRUE-UP REPORT, REQUIRING ADDITIONAL FILINGS, FINDING IMPRUDENCE, & NOTICE OF & ORDER FOR HEARING at 3 (Nov. 15, 2024).

¹⁰¹ ORDER APPROVING 2023 FUEL CLAUSE TRUE-UP REPORT, REQUIRING ADDITIONAL FILINGS, FINDING IMPRUDENCE, & NOTICE OF & ORDER FOR HEARING at 3 (Nov. 15, 2024).

¹⁰² ORDER APPROVING 2023 FUEL CLAUSE TRUE-UP REPORT, REQUIRING ADDITIONAL FILINGS, FINDING IMPRUDENCE, & NOTICE OF & ORDER FOR HEARING at 3 (Nov. 15, 2024).

¹⁰³ Ex. XCEL-5 at 11 (Detmer Direct).

¹⁰⁴ Ex. XCEL-5 at 12, 15 (Detmer Direct).

39. To develop its replacement power cost estimate, Xcel created two PLEXOS models. First, Xcel created a “base case” model that Xcel states represent actual operations during the outage (i.e., without Prairie Island).¹⁰⁵ Second, Xcel created a “change case” model by modifying the base case by making Prairie Island available.¹⁰⁶ According to Xcel, the replacement power costs attributable to the outage equals the difference in total system costs between the two cases:

$$\begin{array}{ccc} \text{Total system costs with Prairie} & & \text{Total system costs without} \\ \text{Island during the outage} & - & \text{Prairie Island during the outage} \\ \text{period} & & \text{period}^{107} \end{array}$$

According to Xcel, the difference between its base and change case scenarios equals about \$34.3 million.¹⁰⁸

40. In its analysis, Xcel made two assumptions. First, Xcel assumed Prairie Island’s unavailability would have little impact on LMP prices.¹⁰⁹ Xcel also assumed, even absent any spike in LMP prices, that Prairie Island’s unavailability would cause Xcel’s other generation facilities to increase output.¹¹⁰ Although these assumptions appear to conflict, Xcel explains that these assumptions reflect real-world transmission congestion that required Xcel to replace Prairie Island with its own generators despite being less economic than replacing Prairie Island with less costly market purchases.¹¹¹

B. XLI’s LMP-Method Calculation.

41. An intervening party, Xcel Large Industrials (“XLI”), recommended that the Commission instead rely on the LMP method to estimate replacement power costs. Rather than modeling Xcel’s system like Xcel’s PLEXOS method, the LMP method focuses on Prairie Island’s generation. The LMP method multiplies Prairie Island’s expected electricity generation by the wholesale market price minus Prairie Island’s expected costs as shown:

$$\begin{array}{ccccc} \text{Prairie Island's expected} & & & & \text{Prairie Island's expected fuel} \\ \text{generation absent the} & \times & \text{Actual LMPs paid} & - & \text{and operating costs during the} \\ \text{outage} & & \text{during the outage} & & \text{outage}^{112} \end{array}$$

42. Unlike Xcel’s PLEXOS model, the LMP method assumes that other generation facility outputs would have been largely unchanged regardless of Prairie

¹⁰⁵ Ex. XCEL-5 at 16 (Detmer Direct).

¹⁰⁶ Ex. XCEL-5 at 16 (Detmer Direct).

¹⁰⁷ Ex. XCEL-5 at 16 (Detmer Direct).

¹⁰⁸ Ex. XCEL-5 at 14-17 (Detmer Direct).

¹⁰⁹ Ex. XCEL-9 at 4 (Detmer Rebuttal) (eDocket no. [20258-222042-04](#)).

¹¹⁰ Ex. XCEL-9 at 5, 10 (Detmer Rebuttal).

¹¹¹ Evid. Hrg. Tr. at 54, 56-57 (Detmer).

¹¹² Ex. XLI-1 at 12-13 (Andrews Direct) (eDocket no. [20257-220621-02](#)).

Island's availability.¹¹³ Relying on this assumption, it determines replacement power costs by calculating the net revenue that Prairie Island would have earned had it been operating as usual.¹¹⁴

43. 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.¹¹⁵ Using the LMP method, customers are entitled to a replacement power cost refund of \$40.6 million.¹¹⁶

C. The Reliability of Xcel's PLEXOS and XLI's LMP Models.

1. Xcel's PLEXOS Model Relies on Unsupported Assumptions.

44. The Department and OAG assert that Xcel's PLEXOS model is unsound because it reflects two conflicting assumptions. First, Xcel assumes that Prairie Island's availability would have little impact on LMP prices. Second, Xcel assumes that Prairie Island's availability would meaningfully impact the output of Xcel's other generation facilities.¹¹⁷ But, according to the Department and OAG, these claims are internally inconsistent. Because generators are selected to run based on price signals, if LMPs do not change meaningfully, then the output of Xcel's other generators would also be largely unchanged. And as a result, Xcel's other generators would be unlikely to change production output in response to flat pricing signals.¹¹⁸

45. The Department and OAG also dispute Xcel's claim that transmission congestion would force Xcel's other generation facilities to increase output. Xcel claims that transmission congestion would prevent Xcel from importing low-cost energy from elsewhere in MISO to replace Prairie Island.¹¹⁹ As a result, even though it would be uneconomic, Xcel would be forced to rely on its own higher-cost generation units.¹²⁰

46. The Department evaluated the reasonableness of Xcel's assumption that transmission congestion precluded the Company from replacing Prairie Island with market purchases.¹²¹ The Department conducted this analysis by comparing LMPs across the MISO region and with Minnesota's nearest MISO neighbor, Illinois.¹²² The

¹¹³ Ex. DOC-3 at 14-15 (Rakow Surrebuttal) (eDocket no. [20259-223100-03](#)).

¹¹⁴ Ex. DOC-3 at 14-15 (Rakow Surrebuttal).

¹¹⁵ Ex. DOC-3 at 10-11 (Rakow Surrebuttal).

¹¹⁶ Ex. XLI-3 at 13 (Andrews Surrebuttal) (eDocket no. [20259-223127-02](#)). Although this figure is marked as trade secret in Mr. Andrews' testimony, counsel for XLI and Xcel respectively stipulated to make it public on November 13 and November 18, 2025.

¹¹⁷ Ex. XCEL-9 at 5, 10 (Detmer Rebuttal) (eDocket no. [20258-222042-04](#)).

¹¹⁸ Ex. DOC-3 at 5-6 (Rakow Surrebuttal).

¹¹⁹ Ex. XCEL-9 at 10 (Detmer Rebuttal).

¹²⁰ Ex. XCEL-9 at 10 (Detmer Rebuttal).

¹²¹ Ex. DOC-3 at 14-15 (Rakow Surrebuttal).

¹²² Ex. DOC-3 at 14-15 (Rakow Surrebuttal).

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.¹²³ The Department's found that Minnesota only experienced the highest LMPs indicative of congestion within MISO a fraction of the time. In any given month, Minnesota never accounted for more than half of the highest LMPs.¹²⁴ When Minnesota did have the highest LMPs, the Department stated it was rare for those LMPs to be materially higher than those experienced in other MISO states.¹²⁵

47. Given these findings, the ALJ concurs with the Department and OAG. Xcel's PLEXOS outputs conflict with MISO market data presented by the Department.¹²⁶ Although Xcel asserts its transmission congestion claims are supported by independent data, Xcel did not offer this evidence to corroborate its witness' claims. Although witness testimony can sustain a finding of fact, it is far less likely to be sufficient where there is contradictory evidence in the record.¹²⁷ This is particularly true here, where the witness is testifying in his expert capacity and not as a lay fact witness. Expert witnesses customarily identify the facts or data supporting their opinions and produce exhibits summarizing or supporting their claims.¹²⁸ Yet on the critical and disputed point of whether Xcel's PLEXOs model accurately reflects real-world transmission congestion, Xcel did not offer more than unsupported testimony. The ALJ finds that Xcel has not met its burden of proof to establish that its PLEXOs model results are reliable.

2. The LMP Method Produces a Reasonable Result.

48. The Department and OAG contend that the LMP-method replacement power costs estimate is reasonable. They assert the LMP method's assumption that the generation output of Xcel's other generators would have been largely unchanged regardless of Prairie Island's availability is supported by the record.¹²⁹ First, all parties agree that Prairie Island's availability had little impact on LMPs.¹³⁰ Reflecting that consensus, Prairie Island represented only 0.5% of MISO's 191 gigawatts of installed capacity during the outage period and, as a result, only impacted prices by about \$0.01 per megawatt-hour.¹³¹ Second, given that the LMPs should have been largely unchanged, the Department and OAG assert that the economic dispatch of Xcel's other

¹²³ Ex. DOC-3 at 13 (Rakow Surrebuttal).

¹²⁴ DOC-3 at 8 (Rakow Surrebuttal).

¹²⁵ DOC-3 at 9 (Rakow Surrebuttal).

¹²⁶ DOC-3 at 13 (Rakow Surrebuttal).

¹²⁷ See *Quinn v. LMC NE Minneapolis Holdings, LLC*, 972 N.W.2d 881, 889 (Minn. Ct. App. 2022).

¹²⁸ See Minn. R. Civ. P. 26.01(b)(2)(B), (C).

¹²⁹ Ex. DOC-3 at 14-15 (Rakow Surrebuttal).

¹³⁰ Ex. XLI-1 at 7 (Andrews Direct); Ex. XCEL-9 at 5 (Detmer Rebuttal); Ex. DOC-3 at 5 (Rakow Surrebuttal).

¹³¹ Ex. XLI-1 at 8, 10-11 (Andrews Direct).

power plants should not have changed.¹³² Third, given that Xcel's other plants would have run as normal, they contend the only real financial change is Prairie Island's lost sales revenue.¹³³ And this is what, they explain, the LMP method calculates—the market value of Prairie Island's generation minus its saved fuel and operating costs.¹³⁴

49. In response, Xcel raises two criticisms. First, Xcel asserts that the LMP method is unreasonable because XLI compared Prairie Island to the entire MISO market instead of the smaller MISO North region.¹³⁵ Compared to the smaller MISO North region, Xcel states Prairie Island would have impacted the output of other generation facilities.¹³⁶ Second, Xcel asserts that XLI improperly relies on the LMP method analysis from the *Sherco 3 Forced Outage* proceeding.¹³⁷

50. In response to Xcel's criticism, the Department explained that Minnesota rarely experiences persistent, material market congestion that impedes MISO energy imports.¹³⁸ And absent meaningful market congestion, the appropriate basis for comparison is the entire MISO market, not the smaller MISO North region.¹³⁹ The Department and OAG also argued that Xcel's criticism of references to the *Sherco 3 Forced Outage* proceeding was misplaced. They explained that this older analysis was used for a limited purpose: establishing that the lost net revenues typically represent most replacement power costs, consistent with the assumption underpinning the LMP method. In the *Sherco 3 Forced Outage*, for example, Xcel's analysis showed that lost revenues accounted for 88% of the total replacement cost, while the complex, offsetting impacts from other units were minimal.¹⁴⁰

51. The ALJ agrees with the Department and OAG that Xcel has failed to establish by a preponderance of evidence that its PLEXOS modeling results are reliable. The Department and OAG identified flaws with Xcel's modeling assumptions. In contrast, the Department and OAG established that the LMP method is a reasonable method to develop an estimate. Xcel's peripheral criticisms should not cause the Commission to question the reliability of the LMP-method results.

¹³² Ex. XLI-1 at 11 (Andrews Direct); Ex. DOC-3 at 5-6 (Rakow Surrebuttal).

¹³³ Ex. XLI-1 at 7-8, 11-12 (Andrews Direct).

¹³⁴ Ex. XLI-1 at 7-8, 11-12 (Andrews Direct).

¹³⁵ Ex. XCEL-9 at 9-10 (Detmer Rebuttal).

¹³⁶ Ex. XCEL-9 at 10 (Detmer Rebuttal).

¹³⁷ Ex. XCEL-9 at 10-11 (Detmer Rebuttal).

¹³⁸ Ex. DOC-3 at 16 (Rakow Surrebuttal).

¹³⁹ Ex. DOC-3 at 16 (Rakow Surrebuttal).

¹⁴⁰ Ex. XLI-1 at 13-14 (Andrews Direct).

III. REFUND OFFSETS

52. Xcel has advanced three offsets that, together, would reduce the replacement-power-cost refund by more than \$26 million.¹⁴¹ These offsets are (1) the “supplemental work” offset; (2) the “2029 avoided costs offset; and (3) a “historic performance adjustment”:

**Table 1 –
Xcel’s Proposed Customer Refund After
Offsets¹⁴²**

Replacement-Power Costs per Xcel	\$34.3 million
Less Avoided 2029 Costs Offset	\$21.0 million
Less Supplemental Work Offset	<u>\$1.8 million*</u>
Subtotal	<u>\$11.4 million</u>
Historic Performance Adjustment	51%
Total Customer Refund	<u>\$5.8 million†</u>

* In rebuttal testimony, Xcel witness Krug agreed to a reduced supplemental-work offset of \$500,000.¹⁴³

† In rebuttal testimony, witness Krug identified \$7.4 million as the appropriate refund amount, and in its initial brief, Xcel reaffirmed this as the amount it now supports.¹⁴⁴

53. The Department, OAG, XLI, and CUB (“Intervening Parties”) largely opposed these offsets.¹⁴⁵ Separately, if the Commission does not categorically reject Xcel’s proposed offsets, the Department recommended that the Commission also consider an “underspent generation expense” offset. For the reasons explained below, the ALJ recommends that the Commission deny each of the proposed offsets.

A. Avoided 2029 Costs.

54. Xcel argues that replacing the control cables during the October 2023 outage eliminated the need to do so later, avoiding replacement-power costs associated with a hypothetical 2029 cable-replacement outage.¹⁴⁶ Xcel contends that replacing the cables during the October 2023 outage saved ratepayers \$21.0 million and that the refund should be reduced by this amount.¹⁴⁷

¹⁴¹ Xcel calculated total replacement-power costs of \$34.3 million and recommended a refund of \$7.4 million. \$34.3 million – \$7.4 million = \$26.9 million.

¹⁴² Ex. XCEL-7 at 24 tbl.4 (Detmer Public Direct Errata). All amounts are Minnesota-jurisdictional.

¹⁴³ Ex. XCEL-3 at 6 (Krug Rebuttal).

¹⁴⁴ See Xcel Br. at 44–45 & n.196.

¹⁴⁵ The Department did not oppose a \$500,000 offset for the supplemental work. See Ex. DOC-1 at 14 (Golden Direct); Ex. DOC-2 at 2 (Golden Surrebuttal).

¹⁴⁶ Ex. XCEL-5 at 17, sched. 2 at 2–5 (Detmer Direct).

¹⁴⁷ See Ex. XCEL-7 at 24 tbl.4 (Detmer Public Direct Errata).

55. All Intervening Parties opposed the avoided 2029 costs offset, arguing that Xcel is not entitled to offset the refund based on prudent actions taken to resolve the consequences of its prior imprudence—i.e., replacing the control cables after having imprudently damaged them.¹⁴⁸ The Department, OAG, and XLI also argued that Xcel's proposed offset relied on numerous speculative or uncertain assumptions.¹⁴⁹

56. The ALJ finds the Intervening Parties' arguments persuasive. First, the Commission rejected a similar avoided-cost offset when Xcel proposed it after a catastrophic failure at Xcel's Sherco plant caused ratepayers to pay replacement-power costs. Second, even if this type of offset were permissible, it depends on too many uncertain assumptions, particularly given the statutory directive that all doubt be resolved in favor of consumers when setting rates.¹⁵⁰

1. Any Avoided 2029 Costs Result from Xcel Remedying Its Own Imprudence.

57. Xcel's avoided 2029 costs offset seeks credit for avoiding a future outage to replace the control cables. Replacing the cables, however, was Xcel's only option for fixing the October 2023 outage. In a November 2023 internal report, Xcel concluded that the cables could not be repaired and needed to be replaced to remedy the outage.¹⁵¹ And again, as part of this contested-case proceeding, Xcel's retained engineers conceded that repairing or using temporary cables would not have been appropriate, leaving full replacement as the only option.¹⁵² Xcel, in other words, is attempting to offset a customer refund arising from actions its internal records show, and its witnesses concede, were necessary to remediate the utility's own imprudence.

58. In the similar *Sherco 3 Forced Outage* case, Xcel's Sherco power plant experienced an extended outage caused by Xcel's imprudence.¹⁵³ There, Xcel purchased replacement power during the outage and recovered the costs of the replacement power from ratepayers via the Fuel Clause Rider.¹⁵⁴ As here, Xcel advanced several offsets,¹⁵⁵ including one for avoided future outage time.¹⁵⁶

¹⁴⁸ Department Br. at 14–15; OAG Br. at 21–22; XLI Br. at 10; CUB Br. at 7–8.

¹⁴⁹ Department Br. at 15–18; OAG Br. at 22–30; XLI Br. at 9.

¹⁵⁰ See Minn. Stat. § 216B.03; see also Minn. Stat. § 216B.16, subd. 4.

¹⁵¹ Ex. DOC-6 at 18 of 24 (Xcel Response to Department Request 24).

¹⁵² Evid. Hrg. Tr. at 96:23-97:8, 97:9-19 (Hiser).

¹⁵³ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 4 (Dec. 24, 2024).

¹⁵⁴ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 2 (Dec. 24, 2024).

¹⁵⁵ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 27 (Dec. 24, 2024).

¹⁵⁶ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 32–33 (Dec. 24, 2024); see also MPUC Docket No. E-002/GR-12-961, ALJ FINDINGS OF FACT, CONCLUSIONS OF LAW, AND

59. To justify the offset in *Sherco 3 Forced Outage*, one Xcel witness testified that the restoration of Sherco avoided approximately 10 to 11 weeks of outage time to conduct planned overhauls of this equipment in the future.¹⁵⁷ Another Xcel witness agreed that the work performed during the Sherco outage enabled Xcel to “avoid or shorten later planned outages, meaning the Company also avoided replacement power costs that otherwise would have been passed on to customers.”¹⁵⁸ This witness estimated that Xcel avoided “a total of 76 to 84 days of additional outage time after Unit 3 returned to service, with those avoided outage days occurring . . . between [the] 2015 and 2022 time frame” and further estimated the value of the associated replacement power to be approximately \$4.3 million to \$4.8 million (MN jurisdiction).¹⁵⁹

60. The Commission determined that it would not allow Xcel “to offset a refund of imprudently incurred costs by any benefits that accrued from Xcel’s prudent actions responding to and resolving the consequences of Xcel’s imprudent behavior.”¹⁶⁰ The Commission reasoned that prudently managing the restoration process, including mitigating future costs, was “the expectation and does not offset or mitigate Xcel’s prior imprudence.”¹⁶¹

61. The ALJ concludes that the Commission should deny Xcel’s avoided 2029 costs offset for the same reasons it denied Xcel’s avoided-replacement-power offset in the *Sherco 3 Forced Outage* order. As in that case, here Xcel seeks credit for future replacement-power costs it may have avoided by responding to and resolving the consequences of imprudently damaging the control cables. But, as in the *Sherco 3 Forced Outage* case, prudently responding to the October 2023 incident was the expectation and should not offset or mitigate Xcel’s prior imprudence.

2. The Avoided 2029 Costs Are Speculative and Unsupported.

62. In the *Sherco 3 Forced Outage* case, the Commission found Xcel’s avoided-cost estimates “too speculative and unsupported to justify the offsets sought by Xcel.”¹⁶²

RECOMMENDATIONS at 81–82 (May 17, 2024) (noting Xcel’s claim that ratepayers benefitted from the outage due, in part, to the reduction of future outage time).

¹⁵⁷ MPUC Docket No. E-002/GR-12-961, Direct Test. of Darin W. Schottler at 15 (June 16, 2023).

¹⁵⁸ MPUC Docket No. E-002/GR-12-961, Direct Test. of Nicholas J. Detmer at 19 (June 16, 2023).

¹⁵⁹ MPUC Docket No. E-002/GR-12-961, Direct Test. of Nicholas J. Detmer at 19 (June 16, 2023).

¹⁶⁰ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

¹⁶¹ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

¹⁶² *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

Likewise, here, the avoided 2029 costs offset depends on numerous assumptions for which Xcel has offered little or no support.

i. The avoided 2029 costs offset is based on an event that Xcel's own witness testified has a less-than-20-percent chance of occurring.

63. Xcel's avoided 2029 costs offset is based on a scenario it calls "Case 1."¹⁶³ Case 1 assumes that, absent the October 2023 incident, Xcel would have inspected the control cables as part of the SLR process, discovered their degraded condition, and replaced them in 2029 as part of a planned outage.¹⁶⁴

64. The engineer that Xcel engaged to evaluate the SLR process, Allen Hiser, determined that there was "less than a 20 percent probability" that the control cables would have been selected for inspection in the SLR process.¹⁶⁵ Hiser's assumption, moreover, relied on numerous assumptions:

- The commodity group would be subject to a particular aging management program;¹⁶⁶
- The particular aging-management program, including the 20 percent sampling requirement, would not change; and¹⁶⁷
- There are, in fact, no more than 125 cables in that commodity group.¹⁶⁸

If any of Hiser's assumptions are wrong in the coming decades, then his prediction will necessarily also be wrong.

65. Offsetting ratepayers' refund based on a scenario that has a one-in-five chance of occurring is not consistent with Xcel's burden to support its proposed action by a preponderance of the evidence¹⁶⁹ or with the requirement to resolve doubt in favor of consumers.¹⁷⁰

66. Xcel characterizes its use of Case 1 as "conservative" because the two other scenarios that Xcel modeled ("Case 2" and "Case 3") would have yielded even

¹⁶³ Ex. XCEL-2 at 14 (Krug Direct).

¹⁶⁴ Ex. XCEL-5 at 18 (Detmer Direct).

¹⁶⁵ Ex. XCEL-13, sched. 2 at 13 (Hiser Direct). Hiser also stated that there was an "unquantifiable chance" that the control cables would have been inspected as part of a sample expansion. Ex. XCEL-13, sched. 2 at 17 (Hiser Direct).

¹⁶⁶ Evid. Hrg. Tr. at 101:4-7 (Hiser).

¹⁶⁷ Evid. Hrg. Tr. at 101:8-11 (Hiser).

¹⁶⁸ Evid. Hrg. Tr. at 101:12-15 (Hiser).

¹⁶⁹ Minn. R. 1400.8608.

¹⁷⁰ Minn. Stat. § 216B.03.

larger avoided costs.¹⁷¹ But there are any number of other scenarios that Xcel did not consider,¹⁷² which could have yielded fewer avoided costs than Xcel assumes. For the reasons discussed in the next section, Xcel's Case 2 and Case 3 scenarios are also speculative and unreasonable to use as the basis for an offset.

ii. Xcel failed to prove whether or when the control cables would otherwise have failed.

67. Xcel's Case 2 and 3 scenarios assume that the control cables would spontaneously fail when either (a) both units are online (Case 2) or (b) one unit is in scheduled refueling (Case 3).¹⁷³ To quantify the avoided replacement-power costs for these hypothetical failures, Xcel assumed an outage in 2029 when Unit 2 is already scheduled to be refueled and modeled the avoided power costs at that time.¹⁷⁴ Cases 2 and 3, in other words, assume both that the control cables would inevitably have failed during the life of the plant and that this spontaneous failure would have occurred in 2029.

68. Xcel's basis for arguing that the cables would eventually have failed is the condition in which they were found after Xcel severed them.¹⁷⁵ The cables were direct-buried, parts of the outer jacketing were cracked, and the evidence showed that the cables had been exposed to moisture.¹⁷⁶

69. Xcel has not carried its burden to show that the control cables would have failed absent the October 2023 incident. While Xcel points to the evidence of degradation, the cables had been in service for 50 years without issue,¹⁷⁷ and Xcel's previous testing of equipment served by the cables had confirmed that all conductors were working normally.¹⁷⁸ Industry experience is that control cables fail either due to damage caused during installation or from long-term exposure to water.¹⁷⁹ Since there had been "no observations of water accumulation in manholes or ponding of water in the vicinity of these cables,"¹⁸⁰ it is likely that water intrusion into the cables would be a gradual process. Xcel presented no competent evidence that the degradation observed on the cable jackets would have continued at a rate that would have led to the cables' failure during Prairie Island's operating life.

70. Xcel's claim that the cables would have failed within the SLR operating period rests on the testimony of two outside engineers, Carl Bible and Allen Hiser. Bible's

¹⁷¹ See Ex. XCEL-5 at 18 (Detmer Direct).

¹⁷² See Ex. OAG-1 at 15 (Lee Direct).

¹⁷³ Ex. XCEL-5 at 18–19 (Detmer Direct).

¹⁷⁴ Ex. XCEL-5, sched. 2 at 3 (Detmer Public Direct).

¹⁷⁵ Ex. XCEL-10, sched. 2 at 3 (Bible Direct).

¹⁷⁶ Ex. OAG-5 at 11, 14 of 16 (Xcel Response to DOC IR 38).

¹⁷⁷ Ex. XCEL-12 at 4 (Bible Rebuttal).

¹⁷⁸ Ex. XCEL-14, sched. 1 at 3, attach. A (Hiser Rebuttal).

¹⁷⁹ Ex. XCEL-10, sched. 2 at 4 (Bible Direct).

¹⁸⁰ Ex. XCEL-10, sched. 2 at 4 (Bible Direct).

report, attached to his direct testimony, states that “[t]here was a high probability that cables in the direct buried section would have failed during future plant operation if not discovered during the boring activity.”¹⁸¹ Likewise, Hiser’s report states that the evidence of degradation found on the severed cables “indicat[ed] that failure was likely to occur within the intended SLR operating period.”¹⁸²

71. Neither Bible nor Hiser had personal knowledge of the condition of the control cables. Instead, their knowledge of the cables’ condition depended entirely on information provided by Xcel,¹⁸³ including the EPRI report.¹⁸⁴ The EPRI report, however, provides no insight into whether or when the cables would have failed from degradation. Instead, it concludes that the combination of excavation damage, cable-jacket degradation, and the soil’s likely thermal resistance meant that replacing the cables “represented best industry practice.”¹⁸⁵ The report does not say that in the absence of excavation damage, the cables would have failed. Rather than providing any definitive answers, most of the report’s conclusions are heavily caveated because Xcel mishandled the soil and cable samples.¹⁸⁶

72. Beyond citing EPRI’s findings, neither Bible nor Hiser provided a basis for their opinions that the cables would likely have failed within Prairie Island’s extended operating life. Hiser admitted to lacking experience with degraded control cables like those at Prairie Island.¹⁸⁷ He conceded that predicting what would have happened to the cables absent the October 2023 incident involves speculation.¹⁸⁸ And contrary to the idea that further degradation was inevitable, Hiser testified that a buried cable could last “a thousand years” without degrading.¹⁸⁹ Bible claimed experience with control cable failures but did not describe that experience.¹⁹⁰ Bible primarily cited his “decades of experience” working with Florida Light & Power’s (FPL) nuclear fleet as the basis for his opinions.¹⁹¹ Yet during Bible’s tenure at FPL, which included management roles, FPL’s nuclear fleet

¹⁸¹ Ex. XCEL-10, sched. 2 at 3 (Bible Direct); see *also* Evid. Hrg. Tr. at 69:3–5 (Bible) (claiming that the cables “were not going to last longer than a couple years in the future, if that”).

¹⁸² Ex. XCEL-13, sched. 2 at 15 (Hiser Direct).

¹⁸³ See Evid. Hrg. Tr. at 71:6–74:14 (Bible); see *generally* Ex. XCEL-10, sched. 2 (Bible Direct) (attaching report); Ex. XCEL-13, sched. 2 (Hiser Direct) (attaching report).

¹⁸⁴ See Ex. XCEL-10, sched. 2 at 3–4 (Bible Direct); Ex. XCEL-13, sched. 2 at 4–5 (Hiser Direct).

¹⁸⁵ Ex. OAG-5 at 16 of 16 (Xcel Response to DOC IR 38).

¹⁸⁶ Moreover, to the extent that the EPRI report supports a finding that the control cables would have eventually failed, it also supports a finding that Xcel’s imprudent installation of the cables contributed to this failure. See *infra* Section III.A.2.iv.

¹⁸⁷ Evid. Hrg. Tr. at 95:22–24 (Hiser).

¹⁸⁸ Evid. Hrg. Tr. at 103:13–16 (Hiser).

¹⁸⁹ Evid. Hrg. Tr. at 95:15–19 (Hiser).

¹⁹⁰ See Ex. XCEL-10, sched. 2 at 2 (Bible Direct).

¹⁹¹ See Ex. XCEL-10, sched. 2 at 2 (Bible Direct).

was plagued by imprudence, forced outages, and “integrity” issues.¹⁹² The ALJ gives no weight to these witnesses’ claims as they lack a reasonable basis and, in Bible’s case, credibility.

73. Even if Xcel had shown that the control cables would fail during the plant’s operating life, Xcel cannot reasonably predict when the cables would have failed or how much this failure would have cost.

74. Replacement-power costs can vary significantly on a day-to-day basis.¹⁹³ Xcel’s avoided-cost estimate required it to predict when the cables would fail and then predict what wholesale power costs would be at that time. Xcel had to make numerous assumptions to forecast costs out to 2029, including hourly LMPs, hourly loads, monthly fuel prices, monthly operation and maintenance costs for all of its generators, unit heat rates, outage rates, startup costs, and fuel-transportation costs.¹⁹⁴ Xcel asks the Commission to accept a series of uncertain assumptions about a hypothetical outage four years in the future and to apply the resulting avoided-cost estimate to reduce ratepayer’s refund. This would not resolve doubt in favor of ratepayers as required by law.¹⁹⁵

75. The avoided costs Xcel calculates in this case are even more uncertain than the avoided costs for the offset that the Commission rejected in the *Sherco 3 Forced Outage* case. The projects that Xcel avoided by repairing Sherco involved scheduled maintenance that the Company was already planning to do. Xcel identified rough timeframes for when it would otherwise have completed that maintenance.¹⁹⁶ Here, however, it is unknown if or when the control cables would have otherwise been replaced, since they had worked without issue for 50 years and Xcel had no plans to replace them.

iii. Xcel failed to prove how much, if any, outage time a future cable replacement would have driven.

76. In any outage, Xcel is expected to minimize costs,¹⁹⁷ as it did by adding supplemental work to the October 2023 outage.¹⁹⁸ Contrary to the duty of cost-minimization, however, Xcel’s 2029 outage scenarios assume that the cable replacement would not be scheduled to overlap with other major work.¹⁹⁹ This assumption favors Xcel and unjustly decreases ratepayers’ refund.

¹⁹² See Evid. Hrg. Tr. at 75–85 (Bible); Ex. DOC-9 (Fla. Pub. Serv. Comm’n Order No. PSC-09-0024-FOF-EI); Ex. DOC-10 (Fla. Pub. Serv. Comm’n Audit Report).

¹⁹³ Ex. XCEL-5 at 17 (Detmer Direct).

¹⁹⁴ Ex. XLI-3 at 9 (Andrews Surrebuttal).

¹⁹⁵ Minn. Stat. § 216B.03.

¹⁹⁶ MPUC Docket No. E-002/GR-12-961, Direct Test. of Nicholas J. Detmer at 20 (June 16, 2023).

¹⁹⁷ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

¹⁹⁸ See *infra* Section III.B.

¹⁹⁹ Ex. XCEL-5, sched. 2 at 3 (Detmer Direct).

77. Xcel assumes that the cable replacement would have been the critical-path project in a 2029 outage.²⁰⁰ A “critical path” project is simply the project that takes the longest and therefore drives an outage’s length.²⁰¹ If a project is not critical-path, it does not drive the outage’s overall length and thereby its overall replacement-power costs.²⁰²

78. Even if the cable-replacement project were the longest-duration project during the 2029 refueling outage, the cable replacement would only drive replacement-power costs to extent that it exceeded the length of any other concurrent work requiring an outage. The more concurrent work Xcel scheduled to occur during the cable-replacement outage—consistent with its duty to maximize cost savings for ratepayers²⁰³—the less the cable replacement would extend the outage.

79. While Xcel does assume it would have tried to minimize the 2029 outage length—specifically, trenching and laying cable before shutting the units down—Xcel also assumes that the only other work done during the outage would be refueling one of the two units.²⁰⁴ Xcel assumes this refueling work would be “planned for approximately 27 days without major work scope other than the cable replacement project.”²⁰⁵

80. Xcel’s assumption that the 2029 cable replacement would not be paired with any major projects other than 27 days of refueling is undermined by several facts in the record. First, most of Xcel’s planned outages since 2005 have been longer than 27 days and in some cases, substantially longer.²⁰⁶ According to information provided by Xcel, Prairie Island has had six planned outages exceeding 70 outage days since January 2005, and many others exceeding 30 outage days.²⁰⁷ Second, Xcel maintains a “dual unit forced outage list” of projects that can only be completed when both units are offline.²⁰⁸ Xcel has failed to explain why no projects from this list would be scheduled to be completed concurrently with a future cable replacement, as occurred during the October 2023 outage.²⁰⁹ Finally, a list of planned projects at Xcel’s nuclear facilities shows that

²⁰⁰ Ex. OAG-4 at 10 (Lee Surrebuttal).

²⁰¹ Ex. OAG-4 at 3 (Lee Surrebuttal).

²⁰² Ex. OAG-4 at 10 (Lee Surrebuttal).

²⁰³ See *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

²⁰⁴ Ex. XCEL-5, sched. 2 at 3 (Detmer Direct).

²⁰⁵ Ex. XCEL-5, sched. 2 at 3 (Detmer Direct).

²⁰⁶ See Ex. OAG-6 at 2–4 tbl.1 (listing planned outages at Prairie Island since January 2005).

²⁰⁷ See Ex. OAG-6 at 2–4 tbl.1 (listing planned outages at Prairie Island since January 2005).

²⁰⁸ Ex. OAG-4 at 4 (Lee Surrebuttal).

²⁰⁹ See *infra* Section III.B.

Xcel has millions of dollars of investment slated for Prairie Island in 2029.²¹⁰ Yet Xcel apparently assumes that none of these 2029 projects will occur during a refueling outage planned for the same year.

81. Xcel has not shown that a 2029 cable replacement would have been critical-path, much less that it is reasonable to assume no other major work would occur during the outage. Xcel argues that witness Bible provides a “thorough discussion” of how the 2029 outage would have been sequenced.²¹¹ Bible’s discussion comprises one page’s worth of text describing an illustrative timeline for the 2029 cable replacement.²¹² This illustrative timeline was prepared by Xcel, not Bible, and reflects Xcel’s assumption that the 2029 refueling would occur without major work scope other than the cable replacement project.²¹³ There is no discernable basis for this assumption, which Bible appears to have accepted uncritically, other than to maximize the size of Xcel’s offset. For reasons discussed below,²¹⁴ Bible’s testimony is not credible and is given no weight. In addition, on this point specifically, Bible’s testimony should be given no weight because he provides no explanation for why he accepted Xcel’s illustrative timeline, which itself included unsupported assumptions.

82. If the 2029 cable replacement were done concurrently with other work that required as much or more outage time, then replacing the cable during the October 2023 outage did not avoid any future outage time or replacement-power costs.²¹⁵ Xcel has not provided any specific evidence to rule out this possibility. Moreover, even if Xcel had shown that the cable replacement would likely be critical-path, its assumption that there would be no other overlapping work is unreasonable, rendering its avoided-cost estimates unreliable.

83. Xcel’s failure to account for overlapping outage tasks was one of the reasons the Commission found the Sherco avoided costs offset unsupported.²¹⁶ Likewise, Xcel’s unsupported and unreasonable assumption in this case that no major work would occur during the 2029 outage, other than 27 days of refueling, arbitrarily increases the offset and reduces ratepayers’ refund. The Commission should find that Xcel’s calculation of avoided 2029 costs is too unreliable to use as an offset against a ratepayer refund for Xcel’s imprudence.

²¹⁰ See Ex. OAG-4 at 10–11 & n.26 (Lee Surrebuttal) (citing MPUC Docket No. E-002/RP-24-67, Compliance Filing – Planned Investments – Monticello and Prairie Island Nuclear Generating Plants (July 18, 2025)).

²¹¹ Xcel Br. 36–37.

²¹² See Ex. XCEL-11 at 6–7, sched. 1 at 110 (Bible Trade Secret Rebuttal).

²¹³ See Ex. XCEL-11, sched. 1 at 2 (Bible Trade Secret Rebuttal).

²¹⁴ See *infra* Section III.A.3.

²¹⁵ Ex. OAG-1 at 13–14 (Lee Direct).

²¹⁶ See *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024) (finding that Xcel had failed to adequately explain “whether any outage tasks could have overlapped with other outage tasks” in future outage for which Xcel was claiming avoided costs).

iv. Xcel failed to prove that a future control-cable replacement would not be caused by Xcel's own imprudence.

84. Even if it were possible to know that the control cables would have been replaced in 2029 and how much in replacement-power costs this would have caused, for the avoided costs of that future replacement to offset the refund in this case, Xcel would have to establish that the future replacement would not have been caused by its imprudence.²¹⁷ The available evidence supports a contrary finding.

85. First, it is possible that Xcel could have imprudently damaged the control cables at some future time had it not done so in 2023.²¹⁸ The root causes of the October 2023 incident were weakness in Xcel's excavation-permit approval process and inadequate oversight of the nonnuclear supplemental workers.²¹⁹ After the October 2023 incident, Xcel implemented multiple procedure changes to address these oversight and permit-approval gaps.²²⁰ Yet had the incident not occurred, Xcel may not have made these procedural changes, leaving a meaningful possibility that a similar incident could occur in the future.²²¹

86. It is also possible that the cables could fail or need replacement due to Xcel's imprudent installation or maintenance, and the EPRI report suggests that Xcel's installation contributed to the cables' degradation. The control-cable bundle was direct buried, which was consistent with industry practice in the early 1970s.²²² Yet when burying electric cables, it is important to use the right type of fill material—composed of a range of particle sizes—to decrease thermal resistance and control moisture levels.²²³ According to EPRI's report, Xcel's control cables were buried in soil composed largely of fine sand of similar particle size with low moisture content, suggesting that its thermal resistivity was "higher than planned for buried cables."²²⁴

87. Since Xcel provided the soil sample in an unsealed container contrary to EPRI's instructions, EPRI was not able to draw definitive conclusions from it.²²⁵ Yet the evidence that portions of the cable had overheated suggests that the manner in which

²¹⁷ Ex. OAG-1 at 13 (Lee Direct).

²¹⁸ See Evid. Hrg. Tr. at 38 (Krug) (agreeing that Xcel could have cut through the control cables at a future time had it not done so in 2023).

²¹⁹ Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3).

²²⁰ Ex. OAG-7 at 7 of 14 (Xcel Response to OAG IR 3).

²²¹ Evid. Hrg. Tr. at 42 (Krug).

²²² Ex. XCEL-10, sched. 2 at 3 (Bible Direct).

²²³ Ex. OAG-5 at 11 of 16 (Xcel Response to DOC IR 38).

²²⁴ Ex. OAG-5 at 10–11 of 16 (Xcel Response to DOC IR 38).

²²⁵ Ex. OAG-5 at 10 of 16 (Xcel Response to DOC IR 38).

Xcel installed the cables contributed to their degradation.²²⁶ The conclusion that Xcel may have improperly installed the cables is also supported by the testimony of Allen Hiser. Hiser testified that it is possible for direct-buried cables to last essentially indefinitely in the ground, and that he was unaware of DC control cables at any other plant experiencing this level of degradation.²²⁷ These facts suggest that how Xcel installed the cable contributed to the degradation observed in October 2023.

88. Xcel has failed to show that the control cable's future failure would not have been caused by its own imprudence. And Xcel is not entitled to offset the refund owed to ratepayers for October 2023-outage replacement-power costs with hypothetical outage costs necessary to address a cable failure that it may have imprudently caused.

3. Xcel witness Bible was not credible.

89. To support the reasonableness of replacing, rather than repairing, the cut cables, and the assumptions needed to calculate its proposed offsets to the customer refund, Xcel offered expert testimony from Bible based on his 46 years of experience as an engineer working for the nuclear fleet of Florida Power & Light ("FPL").²²⁸

90. The Department raised numerous concerns about Bible's credibility.²²⁹ The Department noted that Bible's report included none of the customary components of expert reports and does not identify any facts or data that were relied upon in assessing the reasonableness of Xcel's scenarios.²³⁰ Bible testified that he did not develop the hypothetical scenarios, and did not perform any independent calculations to assess the reasonableness of Xcel's scenarios.²³¹ Instead, Bible's report reiterated that the scenarios developed by Xcel were reasonable "[b]ased on [his] decades of experience in the industry."²³²

91. Before becoming a consultant in 2024, Bible's entire professional career was spent working for the nuclear fleet of FPL.²³³ Bible was promoted to a supervisory role in the late 1980's, and held roles at the manager or director level for more than 30 years until his retirement in 2024.²³⁴ His 46-year career was focused on FPL's St. Lucie

²²⁶ See Ex. OAG-5 at 14 of 16 (Xcel Response to DOC IR 38) (discussing evidence that cables had been subject to overheating and explaining how improper fill material can contribute to overheating).

²²⁷ Evid. Hrg. Tr. at 95 (Hiser).

²²⁸ Ex. XCEL-10, 1, sched. 2 at 2 (Bible Direct); Xcel Br. at 14, 35.

²²⁹ DOC Initial Br. at 16-18.

²³⁰ See Minn. R. Civ. P. 26.02(b)(2)(A), (B) (requiring the report to contain the facts or data considered by the witness, and a complete statement of the witness's opinions and the basis and reasons for them); Evid. Hrg. Tr. at 73:2-9, 73:20-74:7, 74:8-14 (Bible).

²³¹ Evid. Hrg. Tr. at 71:20-21, 73:2-9, 73:20-74:14 (Bible).

²³² Ex. XCEL-10, CRB-D-2 at 5-6 (Bible Report).

²³³ Ex. Xcel-10, sched. 1 (Bible Direct).

²³⁴ Ex. Xcel-10, sched. 1 (Bible Direct).

and Turkey Point nuclear plants, other than his role from 2014–2021 when he had responsibility for all five plants in the fleet, including St. Lucie and Turkey Point.²³⁵

92. The Department reasoned that because Bible only cited his experience as the basis for his expert conclusions, the performance of FPL’s nuclear fleet in general, and St. Lucie and Turkey Point plants in particular, are relevant to assessing his credibility and fitness to opine on Xcel’s decision-making.²³⁶ Evidence demonstrated that FPL’s nuclear fleet repeatedly underperformed and violated regulatory requirements while Bible held leadership positions. Specifically:

- In 2006, FPL’s Turkey Point nuclear plant experienced an extended outage when a contractor drilled through a pressurized pipe.²³⁷ The Florida Public Service Commission held FPL responsible for the incident, concluding that the utility had failed to demonstrate that it had prudently managed and exercised oversight over its contractors.²³⁸ Bible testified he “was actually leading the team” involved in the incident.²³⁹
- The NRC imposed a \$232,000 civil penalty on FPL for firing a nuclear contractor who raised safety concerns in 2017.²⁴⁰ In 2019, the NRC fined FPL an additional \$150,000 after determining that FPL employees, including three supervisors, attempted to falsify nuclear maintenance records and then tried to cover up their actions.²⁴¹
- FPL’s Turkey Point and St. Lucie nuclear plants suffered 12 forced outages in 2019, 20 forced outages in 2020, and 22 forced outages in 2021.²⁴² In comparison, the industry average was 0.45 annual outages per unit between 2018 and 2022.²⁴³
- Given these deficiencies, an FPL internal review board concluded that, during the period Bible held nuclear leadership positions, the utility’s nuclear management was inadequately engaged, allowed standards to

²³⁵ Ex. Xcel-10, sched. 1 (Bible Direct); Evid. Hrg. Tr. at 79:3-11 (Bible).

²³⁶ DOC Initial Br. at 18.

²³⁷ Ex. DOC-9 at 17 (Fla. Pub. Serv. Comm’n Order No. PSC-09-0024-FOF-EI) (eDocket no. [202510-223480-07](#)).

²³⁸ Ex. DOC-9 at 17 (Fla. Pub. Serv. Comm’n Order No. PSC-09-0024-FOF-EI).

²³⁹ Evid. Hrg. Tr. at 76:21-22 (Bible).

²⁴⁰ Ex. DOC-10 at 3 (Fla. Pub. Serv. Comm’n Audit Report) (eDocket no. [202510-223480-08](#)).

²⁴¹ Ex. DOC-10 at 3 (Fla. Pub. Serv. Comm’n Audit Report).

²⁴² Ex. DOC-10 at 2 (Fla. Pub. Serv. Comm’n Audit Report).

²⁴³ Ex. XCEL-10, CRB-D-2 at 5-6 (Bible Report); Evid. Hrg. Tr. at 80:16-20 (Bible). During the relevant time period, Turkey Point and St. Lucie were each operating two units. Ex. DOC-10 at 1 (Fla. Pub. Serv. Comm’n Audit Report).

erode, failed to model adequate behavior, and failed to deliver acceptable operational results.²⁴⁴

93. The Department asserted that because of Bible's reliance solely on his experience as the basis for supporting his conclusions in his expert report, and the performance of the FPL nuclear fleet while he held leadership positions, Bible should be found to lack credibility as a witness, and no weight should be placed on his testimony.²⁴⁵

94. Xcel stated that none of the reports related to the performance of FPL's nuclear fleet are relevant to Bible's credibility.²⁴⁶

95. The ALJ is persuaded that Bible lacks credibility, and no weight should be placed on his testimony. Bible's expert report provides no basis for his conclusions other than his citations to his own experience. Bible, and Xcel, heavily emphasize the length of his experience in the nuclear industry to support his opinions. It is unreasonable to suggest that the performance of FPL's nuclear fleet during his career is irrelevant to the credibility of the opinions that he stated rest on that experience. Nor are the concerns raised by the Department isolated incidents. Instead, the fleet's underperformance and regulatory violations span decades. Xcel has provided no reason why the conclusions of Bible's own employer that the nuclear fleet's management, which included Bible, was largely responsible for these serious and persistent shortcomings should be ignored when considering whether the Commission should rely on Bible's judgment and experience.

B. Supplemental Work.

96. Xcel completed additional maintenance projects during the October 2023 outage concurrently with the control-cable replacement.²⁴⁷ Most of this work had been scheduled to be completed in the near term, either during future planned outages or while the plant was online.²⁴⁸ This Report will refer to these projects as either "supplemental work" or "supplemental projects." Parties have also referred to them as the "pulled forward" projects.

97. Xcel characterized its efforts to complete supplemental work during the October 2023 outage as "pulling-forward these projects from planned future outages" such that "customers received a measurable benefit by avoiding future incremental power costs associated with those future outages." Xcel initially sought credit for doing 8,505 labor hours of supplemental work, claiming that doing this work during the outage avoided

²⁴⁴ Ex. DOC-10 at 6 (Fla. Pub. Serv. Comm'n Audit Report).

²⁴⁵ DOC Initial Br. at 18.

²⁴⁶ Xcel Initial Br. at 14, fn 48.

²⁴⁷ Ex. XCEL-5 at 20 (Detmer Direct).

²⁴⁸ See Ex. XCEL-5 at 20 (Detmer Direct); Ex. OAG-2, sched. 2 at 3–4 tbl.1 (Lee Direct Schedules).

8.1 future outage days and associated replacement-power costs worth \$1.8 million (MN jurisdiction).²⁴⁹

98. A review of the supplemental work, however, suggests that some of these projects either were not slated for a particular timeframe or did not require an outage to complete at all. A list provided by Xcel with its direct testimony indicated that many were scheduled to be completed while the plant was “online.”²⁵⁰ In addition, one of the projects, which entailed replacing a pipe in the cooling-water system, was noted as being “[o]n dual-unit forced outage list.”²⁵¹ This reveals that the pipe-replacement project was not scheduled to occur during any particular outage but “was identified as needing to be added to the next available dual unit outage.”²⁵²

99. In discovery, the OAG inquired whether “pulling forward work from planned future outages shorten[ed] the planned future outages” and by how many days.²⁵³ In response, Xcel conceded that only 2,272 out of the original 8,505 labor hours would have had any impact on the length of future outages.²⁵⁴ Xcel further conceded that completing this subset of the supplemental work avoided only 2.2 future outage days, or approximately \$500,000 (MN jurisdiction) in replacement-power costs.²⁵⁵ The revised offset relates to just 2 of the 40-plus supplemental projects Xcel originally identified: (1) the above-mentioned cooling-water pipe replacement and (2) inspecting the “plant greenhouse stop log rail guide.”²⁵⁶ Xcel claims these projects both required a dual-unit shutdown and would be critical path in a future outage.²⁵⁷

100. The OAG identified further concerns with even this revised \$500,000 offset. First, the OAG argued that there was no basis to believe that either of these two projects, had Xcel not completed them in 2023–2024, would on their own have caused Xcel to schedule an outage.²⁵⁸ On the contrary, the rail-guide inspection was one of the projects with an “online” notation indicating that it did not require the plant to be shut down,²⁵⁹ and the cooling-water pipe replacement was on the dual-unit forced outage list, indicating that it was not urgent enough to prompt a dual-unit outage on its own. Second, the OAG asserted that there was no evidence that these projects would be critical-path in any future outage, noting that they were not critical-path during the October 2023 outage.²⁶⁰ According to the OAG, if the need to complete these projects, alone, were not enough to

²⁴⁹ Ex. OAG-1 at 6–7 (Lee Direct).

²⁵⁰ See Ex. XCEL-5, sched. 2 at 9–10 (Detmer Public Direct).

²⁵¹ See Ex. XCEL-5, sched. 2 at 9 (Detmer Public Direct).

²⁵² Ex. OAG-4 at 4 (Lee Surrebuttal).

²⁵³ Ex. OAG-2, sched. 2 at 1 (Lee Direct Schedules).

²⁵⁴ Ex. OAG-2, sched. 2 at 2 (Lee Direct Schedules).

²⁵⁵ Ex. OAG-2, sched. 2 at 2 (Lee Direct Schedules); Ex. XCEL-3 at 6 (Krug Rebuttal).

²⁵⁶ Ex. OAG-4, sched. 1 at 1 (Lee Surrebuttal).

²⁵⁷ Ex. OAG-2, sched. 2 at 2 (Lee Direct Schedules); Ex. XCEL-12 at 7–8 (Bible Rebuttal).

²⁵⁸ OAG Br. at 19.

²⁵⁹ See Ex. XCEL-5, sched. 2 at 9 (Detmer Public Direct).

²⁶⁰ OAG Br. at 20.

prompt an outage, or even if the projects did prompt an outage but they were not critical-path, then completing them in 2023 avoided no future replacement-power costs.²⁶¹

101. Xcel maintained that these two supplemental projects avoided future outage time. It clarified that although the rail-guide inspection was originally scheduled to be performed with the plant online, Xcel subsequently determined that the inspection should be done with both units shut down.²⁶² Xcel reasoned that if these two dual-unit projects had been done during a future planned outage to refuel one of the units, they would necessarily have caused an outage of the non-refueling unit.²⁶³ Xcel concluded that completing these projects in 2023–2024, when Prairie Island was already in a dual-unit outage, “avoided the non-refueling operating unit shutdown outage days” in a future refueling outage.²⁶⁴

102. Xcel’s conclusion depends on at least two assumptions. First, Xcel assumes that the need to complete these projects would have caused Xcel to convert a single-unit refueling outage into a dual-unit outage. Second, Xcel assumes that these projects would have driven the length of a future dual-unit outage (i.e., that they would have been critical-path in any future outage). Neither assumption is supported by the record.

103. Under Xcel’s chosen scenario of a single-unit refueling outage, completing a project that required both units to be offline would indeed drive outage time for the non-refueling unit (assuming there were no other reason to take the non-refueling unit offline). But Xcel’s claim that the supplemental projects would, on their own, have occasioned a dual-unit outage is contradicted by other evidence in the record. With regard to the rail-guide inspection, the initial data that Xcel presented suggested that this project did not require an outage at all, much less a dual-unit outage.²⁶⁵ But even assuming that the inspection could only be done during a dual-unit outage, there is no evidence that the need to complete this project, alone, would have caused Xcel to schedule a dual-unit outage. Second, as noted above, the pipe-replacement project was on Xcel’s “dual unit forced outage list” prior to the October 2023 outage.²⁶⁶ This means that the pipe-replacement project, had it not been completed in 2023–2024, would have happened the next time a dual-unit outage occurred.²⁶⁷ In other words, Xcel has the causation backwards: the decision to do the pipe-replacement project was driven by a dual-unit forced outage and not vice versa.

104. Xcel’s second unsupported assumption is that these projects would have driven the length of a future dual-unit outage. In other words, Xcel assumes that these projects would have been “critical path” in any future outage. Xcel admits that “whether

²⁶¹ OAG Reply Br. at 9.

²⁶² Ex. XCEL-12 at 8 (Bible Rebuttal).

²⁶³ Ex. XCEL-12 at 8 (Bible Rebuttal).

²⁶⁴ Ex. XCEL-12 at 8 (Bible Rebuttal).

²⁶⁵ Ex. OAG-4 at 5 (Lee Surrebuttal).

²⁶⁶ Ex. OAG-4 at 4 (Lee Surrebuttal).

²⁶⁷ Ex. OAG-4 at 4 (Lee Surrebuttal).

an item is critical path can depend on the other projects scheduled for the same outage” and that “[i]f a future dual unit outage were performed and included other work that was scheduled to take more time to perform than these two activities, then these activities would not be critical path.”²⁶⁸ It is unknown whether the supplemental work could or would have been done in parallel with a longer-duration project in a future outage and, therefore, whether completing them during the October 2023 outage avoided any future outage days.²⁶⁹ But the supplemental work did not drive the length of the October 2023 outage,²⁷⁰ and Xcel has given no reason, beyond conclusory assertions, to believe that these relatively small projects would drive the length of any other outage.

105. For all these reasons, Xcel has failed to carry its burden to prove that the supplemental projects saved any future outage time. Even if Xcel had established that completing the supplemental work avoided future outage time, Xcel has failed to establish how much future replacement-power cost was avoided. Accepting Xcel’s \$500,000 estimate requires accepting many if not most of the uncertain and unproven assumptions that apply to the “avoided 2029 costs” offset—that the supplemental projects would otherwise have been completed in 2029²⁷¹ and the many other assumptions required to model production costs in 2029.²⁷² The Commission should reject the “supplemental work” offset as too speculative to yield a just and reasonable refund.

C. Historic Performance Adjustment.

106. Xcel asserts that any refund to ratepayers should be reduced based on Prairie Island’s reliability compared to the industry median.²⁷³ From 2018 through 2022, Xcel claims Prairie Island’s capacity factor, a measure of plant availability, exceeded the industry median by 51%. As a result, Xcel recommended the Commission should reduce any refund by 49%.²⁷⁴

107. The Department and OAG argued that Xcel may not offset any portion of the refund owed to ratepayers on the basis of past “excess” prudence.²⁷⁵ Utilities have a duty to operate and maintain generation facilities “in a reasonable and prudent manner consistent with good utility practices.”²⁷⁶

²⁶⁸ Ex. OAG-4 at 3 (Lee Surrebuttal).

²⁶⁹ Ex. OAG-4 at 3 (Lee Surrebuttal).

²⁷⁰ Ex. OAG-4 at 3 (Lee Surrebuttal).

²⁷¹ See Ex. OAG-1 at 7 (Lee Direct) (noting that Xcel recycled the production-cost modeling used for the “avoided 2029 costs” offset to value avoided costs for the supplemental work even though the supplemental projects were not scheduled to occur in 2029).

²⁷² Ex. XLI-3 at 9 (Andrews Surrebuttal).

²⁷³ Ex. XCEL-5 at 21–22 (Detmer Direct).

²⁷⁴ Ex. XCEL-5 at 21–22 (Detmer Direct).

²⁷⁵ Department Br. at 19–21, OAG Br. at 32–35.

²⁷⁶ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 16 (Dec. 24, 2024).

108. The Department and OAG further argued that even if Xcel were allowed to “bank” prudence, it has not established that its proposed historic performance adjustment is reasonable. The Department noted that Xcel did not offer any testimony purporting to show that Prairie Island’s above industry-median performance from 2018 to 2022 was attributable to any decisions or actions taken by the Company, rather than luck.²⁷⁷

109. In contrast, Xcel’s own data demonstrated that Prairie Island generally performed notably below the industry-wide average. For example, while Xcel characterized Prairie Island’s performance from 2018 to 2022 as “exemplary” because its average capacity factor of 95% exceeded industry average by 2.18%, the plant only achieved average capacity factors of 77%, 86%, and 91% in the three years preceding that time frame.²⁷⁸ From 2013 to 2017, Prairie Island’s average capacity factor was 7.32% below the industry average.²⁷⁹

110. Xcel argued that Prairie Island’s “history of strong performance” resulted “substantial benefits” to its ratepayers in the form of generating more power than forecasted by the Company.²⁸⁰ Xcel stated that “[a]ll of the benefit of the Company’s performance redounded to customers.”²⁸¹ The Company calculated this benefit to customers as totaling over \$50 million from 2018 through 2022.²⁸² The Department, however, noted that Xcel shareholders receive substantial benefits from the Company’s operation of Prairie Island without regard to the plant’s performance. In 2023 alone, Xcel collected approximately \$174.14 million in returns purely for operating the plant.²⁸³

111. The Department also raised the concern that improvements in Prairie Island’s capacity factor during the Company’s proposed look-back period may be due to capital investments in the plant and COVID-19 related postponement of maintenance.²⁸⁴ Although those concerns were raised in direct testimony, and the Department requested that Xcel address the Department’s concerns with the selected lookback period timeframe, Xcel provided no response.²⁸⁵

112. The ALJ agrees that Xcel’s request to offset the refund owed to customers with a historic performance adjustment should be denied. Xcel is already compensated to operate Prairie Island, and is expected to do so prudently at all times. The timeframe chosen by Xcel is arbitrarily picked to provide an artificially high impression of Prairie Island’s performance. If the Commission chooses to apply a historic performance

²⁷⁷ Department Br. at 21.

²⁷⁸ Ex. DOC-2, ARG-S-1 (Golden Surrebuttal).

²⁷⁹ Ex. DOC-2, ARG-S-1 (Golden Surrebuttal).

²⁸⁰ Xcel Br. at 22.

²⁸¹ Xcel Br. at 22.

²⁸² Ex. XCEL-2 at 12 (Krug Direct).

²⁸³ Department Reply Br. at 5.

²⁸⁴ Ex. DOC-1 at 17 (Golden Direct).

²⁸⁵ Ex. DOC-2 at 5–6 (Golden Surrebuttal).

adjustment, it should consider using a timespan that more accurately reflects the performance customers have been provided by such a long-lived asset.

D. Underspent Generation Expense.

113. Although the Department generally recommended that the Commission refrain from considering refund offsets, the Department proposed that the Commission consider an “underspent generation maintenance” expense offset to the extent that it considered offsets at all. According to the Department, this offset would inflate the replacement power refund by \$51.8 million to reflect Xcel’s underspent nuclear generation maintenance expense between 2018 and 2022.²⁸⁶

114. The Department asserted that Xcel’s undisputed failures to adequately oversee its workers, use ground-penetrating radar to locate cables, provide up-to-date work plans and construction drawings, and provide accurate maps demonstrate substandard maintenance practices.²⁸⁷ The Department stated that Xcel tolerated these deficient practices to save time and money.

115. Utilities, including Xcel, have incentives to minimize actual maintenance costs because operations and maintenance budgets are set in rate cases and collected from customers regardless of the utility’s actual spending.²⁸⁸ Ratepayers also pay replacement power costs through a pass through fuel forecast and true-up process unless the utility is shown to be imprudent in a proceeding such as this one.²⁸⁹

116. An “underspent generation maintenance” expense offset penalizes Xcel for retaining funds rather than spending them on the intended purpose. The ALJ is persuaded that if the Commission chooses to consider Xcel’s proposed refund offsets, it should consider an “underspent generation maintenance” expense adjustment as well. This proposed adjustment is similar to Xcel’s proposals and there is not a clear or principled basis to apply Xcel’s proposed offsets without also imposing an “underspent generation maintenance” expense offset. To be clear, the ALJ’s primary recommendation, however, is to deny all offsets.

IV. LITIGATION EXPENSES

117. The Department and OAG also recommended that the Commission deny Xcel recovery of any litigation expenses incurred during this proceeding. They cite several bases for the denial.

²⁸⁶ Ex. DOC-2, ARG-S-2 at 1 (Golden Surrebuttal).

²⁸⁷ ORDER APPROVING 2023 FUEL CLAUSE TRUE-UP REPORT, REQUIRING ADDITIONAL FILINGS, FINDING IMPRUDENCE, & NOTICE OF & ORDER FOR HEARING at 3 (Nov. 15, 2024).

²⁸⁸ *In re Review of the July 2018–December 2019 Annual Automatic Adjustment Reports (“Boswell 4 Forced Outage”)*, Docket No. E999/AA-20-171, FINDINGS OF FACT, CONCLUSIONS OF LAW, & RECOMMENDATION ¶¶ 48-50 (eDocket no. [20218-177011-01](#)).

²⁸⁹ *Boswell 4 Forced Outage*, Docket No. E999/AA-20-171, FINDINGS OF FACT, CONCLUSIONS OF LAW, & RECOMMENDATION ¶¶ 49-50.

118. First, they assert that denying Xcel cost recovery of its litigation expense is consistent with the common law “American rule.”²⁹⁰ This rule creates a presumption that parties pay their own litigation costs. Minnesota follows the American rule and bars parties from shifting attorney fees to an adversary unless there is specific statutory or contractual authorization.²⁹¹

119. Second, the OAG and Department assert denying recovery of Xcel’s litigation expenses is consistent with “cost-of-service” ratemaking. Utilities are only permitted to recover from customers the costs of furnishing service.²⁹² The costs of furnishing utility service typically include labor, materials and supplies, taxes, insurance, and depreciation.²⁹³ Even when a utility establishes it has incurred an expense, the supreme court had held that does not necessarily make that cost a “cost of service.”²⁹⁴ The Commission must first determine, in its quasi-legislative authority, that it “is just and reasonable that the ratepayers bear the costs of those expenses.”²⁹⁵

120. The OAG and Department further assert that there is no constitutional requirement that states permit utilities to recover regulatory expenses from customers and some states deny recovery entirely or in part.²⁹⁶ And rate cases and permitting proceedings are distinguishable from this matter. Those proceedings are often necessary

²⁹⁰ DOC Initial Br. at 25; OAG Initial Br. at 35.

²⁹¹ See *Roach v. County of Becker*, 962 N.W.2d 313, 322–23 (Minn. 2021) (stating American common-law rule that civil litigants ordinarily bear their own attorney fees).

²⁹² Minn. Stat. § 216B.16, subd. 6; *Minnegasco v. Minn. Pub. Utils. Comm’n*, 549 N.W.2d 904, 909 (Minn. 1996).

²⁹³ Minn. Stat. § 216B.16, subd. 6; *Minnegasco v. Minn. Pub. Utils. Comm’n*, 549 N.W.2d 904, 909 (Minn. 1996).

²⁹⁴ *In re Pet. of N. States Power Co. for Auth. to Change its Sch. of Rates for Elec. Serv. in Minn.*, 416 N.W.2d 719, 722-723 (Minn. 1987); see also *In re Xcel Energy’s Appl. for Auth. to Increase Elec. Serv. Rates in Minn.*, Docket No. E-002/GR-21-630, Findings of Fact, Conclusions, & Order at 4 (July 17, 2023) (eDocket no. [20237-197559-01](#)).

²⁹⁵ *In re Pet. of N. States Power Co. for Auth. to Change its Sch. of Rates for Elec. Serv. in Minn.*, 416 N.W.2d 719, 722-723 (Minn. 1987); see also *In re Xcel Energy’s Appl. for Auth. to Increase Elec. Serv. Rates in Minn.*, Docket No. E-002/GR-21-630, Findings of Fact, Conclusions, & Order at 4 (July 17, 2023).

²⁹⁶ See, e.g., Conn. Gen. Stat. § 16-243p(b) (“[N]o electric distribution company . . . shall recover through rates its direct or indirect costs associated with . . . [any] rate proceeding.”); Colo. Rev. Stat. § 40-3-102.5 (requiring the Colorado commission to establish rules limiting rate case expense recovery); *In re Jersey Central Power and Light Co.*, BPU Docket No. 841-55, 1985 WL 1213309, Order § II(H) (N.J. B.P.U. Feb. 11, 1985) (noting that “[t]he 50 /50 sharing of rate case expense remains accepted board policy.”).

to ensure that utility has sufficient resources to provide service or to permit the utility to construct facilities needed to serve customers.²⁹⁷

121. Given these considerations, the Department and OAG explain that allowing Xcel an opportunity to justify why customers should pay costs that Xcel imprudently incurred is not a cost of providing utility service. Xcel's litigation expenses in this matter, they assert, have no bearing on Xcel's core obligations to provide "adequate, efficient, and reasonable service"²⁹⁸ nor would it be "just and reasonable" for customers to bear these expenses.²⁹⁹ The ALJ concurs that there is no legal or policy reason to require customers to fund Xcel's continued litigation here. Neither traditional litigation rules nor utility ratemaking principles warrant it. The Commission should require Xcel to make compliance filings demonstrating that it has excluded its litigation expenses for this proceeding from all applicable rate case and cost recovery proceedings.

V. COMPUTATION OF REFUND

122. Once the Commission has identified the appropriate amount of replacement-power costs to refund, it will need to address two more issues to effectuate the refund. First, if the Commission adopts either the avoided-2029-costs offset or the supplemental-work offset, it will need to determine how much of the "total company" amount to assign to Xcel's Minnesota ratepayers. Second, the Commission will need to determine how Xcel should apply interest to the refund.

A. Allocation Factor for Avoided 2029 Costs and Supplemental Work Offsets.

123. If the Commission adopts either the avoided-2029-costs offset or the supplemental-work offset, it will need to address the allocation factor used for the offset.

124. Xcel calculates each offset based on avoided costs for its entire system and then converts this overall "NSP" or "Total Company" offset to a Minnesota-specific offset. Xcel accomplishes this conversion by applying a percentage, called an "allocator," to the Total Company amount.³⁰⁰ These calculations are shown on the last page of Schedule 2 to the direct testimony of Nicholas Detmer.³⁰¹ Figure 4 below reproduces a portion of the public redacted version of that schedule:

²⁹⁷ See, e.g., Minn. Stat. §§ 216B.16 (rate proceedings), .243 (certificates of need), 216I.06-.08 (energy facility permitting).

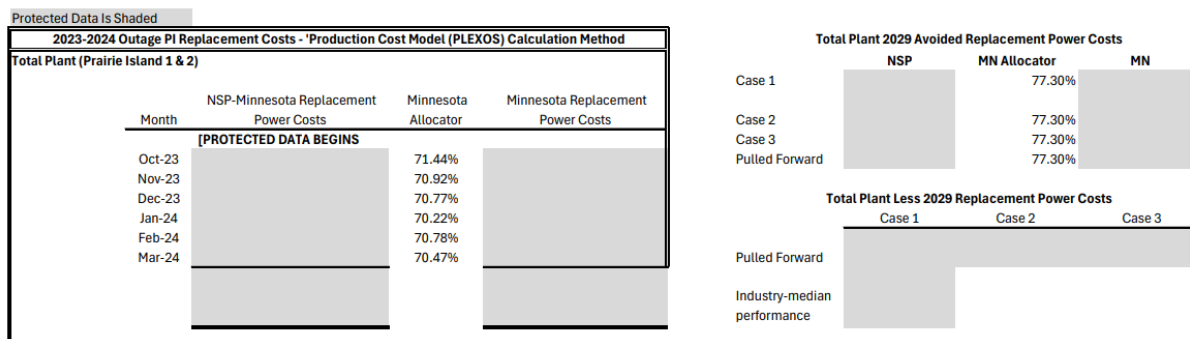
²⁹⁸ Minn. Stat. § 216B.16, subd. 6.

²⁹⁹ *In re Pet. of N. States Power Co.*, 416 N.W.2d at 722-23.

³⁰⁰ See Ex. XCEL-5 at 18, sched. 2 at 12 (Detmer Public Direct).

³⁰¹ See Ex. XCEL-4, sched. 2 at 990 (Detmer Trade Secret Direct); Ex. XCEL-5, sched. 2 at 12 (Detmer Public Direct).

**Figure 4 –
Detmer Direct, Schedule 2: Jurisdictional Allocation**



125. On the left side, Xcel uses allocators ranging from 70.22% to 71.44% to determine the Minnesota share of the replacement-power costs incurred during the October 2023 outage.³⁰² On the right side, Xcel uses a larger allocator, 77.30%, to determine Minnesota's share of both the Case 1 costs (which are the basis for the avoided 2029 costs offset) and the costs avoided by the supplemental work.³⁰³

126. Xcel states that the allocators for the October 2023 replacement-power costs reflect Minnesota's sales relative to North and South Dakota during those months.³⁰⁴ The larger allocator used for the offsets is based on Xcel's forecasted sales for 2029.³⁰⁵ Xcel explains that the 2029 allocator is higher because Xcel is projecting a significant increase in Minnesota load, relative to North and South Dakota, largely due to data centers.³⁰⁶

127. The OAG argued that Xcel's proposal to allocate the offsets differently than the replacement-power costs for the October 2023 outage unreasonably resolved doubt about the future in Xcel's favor.³⁰⁷ The OAG argued that the Commission should instead require Xcel to calculate Minnesota-jurisdictional offsets using a weighted average of the allocators used for the October 2023 outage replacement-power costs, or 70.57%.³⁰⁸

128. The ALJ is persuaded that the OAG's approach is the more reasonable one. Allocating the offsets using known allocators that applied during the October 2023 outage is a more reasonable approach, particularly where Xcel's alternative would assign more costs to Minnesota ratepayers based on uncertain assumptions about how much new

³⁰² See Ex. OAG-1 at 14 (Lee Direct) (citing Ex. XCEL-5, sched. 2 at 12 (Detmer Public Direct)).

³⁰³ See Ex. OAG-1 at 14 & n.2 (Lee Direct) (citing Ex. XCEL-5, sched. 2 at 12 (Detmer Public Direct)).

³⁰⁴ Ex. XCEL-3 at 5 (Krug Rebuttal).

³⁰⁵ Ex. XCEL-3 at 5 (Krug Rebuttal).

³⁰⁶ See Ex. XCEL-3 at 5 (Krug Rebuttal).

³⁰⁷ Ex. OAG-4 at 13 (Lee Surrebuttal). The Department offered no testimony and takes no position on the appropriate allocator factor.

³⁰⁸ See Ex. OAG-4 at 13 & tbl.1 (Lee Surrebuttal).

load will materialize in each jurisdiction over the next four years. Accordingly, the ALJ recommends that the Commission require Xcel to use a weighted average of the allocators that applied during the October 2023 outage to determine the Minnesota share of the avoided-2029 costs offset or the supplemental-work offset if it adopts either offset. As described in the OAG's testimony, that allocator would be 70.57%.³⁰⁹

B. Refund Interest.

129. Finally, the Commission will need to determine how interest is computed. All parties recommended that the refund include interest.³¹⁰ Moreover, the Commission has determined that Xcel should use the U.S. Federal Reserve Prime Rate as the interest rate.³¹¹ Accordingly, and consistent with the refund methodology used in the *Sherco 3 Forced Outage* matter,³¹² the Commission should require Xcel to calculate interest monthly at the prime rate until the refund is fully paid.

130. Any Finding of Fact more appropriately designated a Conclusion of Law is hereby adopted as such.

CONCLUSIONS OF LAW

1. The Commission and the Administrative Law Judge have jurisdiction over the subject of this proceeding under Minn. Stat. § 216B.03 (2024), Minn. R. 7825.2390-.2920 (2023), and Minn. Stat. §§ 14.57–.62 (2024).

2. Automatic adjustments through a fuel clause rider, such as the costs at issue here, are considered provisionally approved and are placed into effect without Commission action.³¹³ Erroneous adjustments are subject to refund.³¹⁴ The Commission may after investigation, notice, and hearing issue an order to discontinue or modify an automatic adjustment.³¹⁵

3. In evaluating Xcel's automatic adjustments, state law requires that every rate "made, demanded, or received" be just and reasonable.³¹⁶ The burden to prove that a rate is just and reasonable is on the utility, and any doubt as to reasonableness will be

³⁰⁹ See Ex. OAG-4 at 13 & tbl.1 (Lee Surrebuttal).

³¹⁰ See Xcel Br. at 45; Department Br. at 1; OAG Br. at 37; CUB Br. at 10; XLI Br. at 4.

³¹¹ ORDER APPROVING 2023 FUEL-CLAUSE TRUE-UP REPORT, REQUIRING ADDITIONAL FILINGS, FINDING IMPRUDENCE, AND NOTICE OF AND ORDER FOR HEARING at 11 (Nov. 15, 2024).

³¹² See MPUC Docket Nos. E-002/GR-12-961 et al., Compliance Filing – Refund, attach. A (Jan. 23, 2025).

³¹³ Minn. R. 7825.2920, subp. 1.

³¹⁴ Minn. R. 7825.2920, subp. 2.

³¹⁵ Minn. R. 7825.2920, subp. 3.

³¹⁶ Minn. Stat. § 216B.03.

resolved in favor of the consumer.³¹⁷ As the party with the burden of proof, Xcel has the burden of supporting its proposed action by a preponderance of the evidence.³¹⁸ The preponderance of the evidence standard requires that to establish a fact, it must be more likely than not that it exists.³¹⁹

4. A utility may not offset a refund of imprudently incurred replacement-power costs using benefits that accrued from the utility's prudent actions "responding to and resolving the consequences of" the prior imprudent conduct.³²⁰ Rather, a utility's "prudent management of the restoration process—including efforts to mitigate costs—[is] the expectation and does not offset or mitigate . . . prior imprudence."³²¹

5. For any other offset, when a utility seeks to offset a replacement-power cost refund using benefits arising from a forced outage, such as avoiding future outages, the utility must establish the offset's reasonableness by a preponderance of the evidence, including a demonstration that the offset is not "too speculative or unsupported to justify."³²²

A. PLEXOS vs. LMP-Calculated Replacement Power Estimate.

6. For the reasons set forth in Section II above, Xcel failed to establish by a preponderance of evidence that its PLEXOS modeling results are reliable. The ALJ further finds for the reasons discussed above that a preponderance of the evidence establishes that the LMP-method produces a reliable result for purposes of calculating the refund in this matter.

B. "Avoided 2029 Costs" Offset.

7. Consistent with recent Commission decisions and the prudence standard, Xcel is not entitled to its "avoided 2029 costs" offset as a matter of law. The record establishes that Xcel's offset arises from actions its internal records show and its witnesses concede were necessary to remediate the utility's own imprudence. Because

³¹⁷ Minn. Stat. §§ 216B.03, .16, subd. 4.

³¹⁸ Minn. R. 1400.8608.

³¹⁹ Minn. R. 1400.7300, subp. 5; *City of Lake Elmo v. Metro. Council*, 685 N.W.2d 1, 4 (Minn. 2004).

³²⁰ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

³²¹ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

³²² *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

the claimed benefit – the avoided outage days in 2029 – accrues from resolving its own imprudent behavior, Xcel may not use it to offset the customer refund.

8. Assuming for argument that Xcel’s “avoided 2029 costs” offset was not remedial, Xcel failed to establish by a preponderance of the evidence that its “avoided 2029 costs” offset is not “too speculative or unsupported.”³²³ As discussed above, Xcel relies on unreliable and speculative expert reports that the Commission should place little or no weight upon.

C. “Performance Adjustment” Offset.

9. The prudence standard requires that Xcel take “reasonable action . . . in good faith based on knowledge available at the time of the action or decision. Actions taken in good faith are those taken . . . exercising the care that a reasonable person would exercise under the same circumstances at the time the decision was made.”³²⁴ Any action that falls within a “range of reasonable is by definition considered prudent.”³²⁵

10. The prudence standard sets a floor for utility conduct. “Excess” prudence may not be banked to mitigate future imprudent conduct. And, in similar situations, the Commission has rejected utilities’ attempts to bank and redistribute regulatory compliance, explaining that meeting regulatory standards for one action does not grant the utility authority to violate those standards for another action.³²⁶

11. Other states have also rejected prudence “banking.” Applying a similar standard, the Texas commission rejected a utility’s attempt to offset imprudently incurred costs with savings achieved by superior performance elsewhere. That commission explained that “any activity that exceeded [the] standard would fit within it. The prudence standard contains a floor but not a ceiling.”³²⁷ Noting the perverse incentives the arrangement would create, the New Hampshire commission commented that “such a mechanism . . . would send distorted economic signals by negating any financial disallowance imposed upon a utility whose actions are found imprudent.”³²⁸ Put

³²³ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36.

³²⁴ Ex. XCEL-2 at 10 (Krug Direct) (eDocket no. [20255-218509-05](#)); see also *In re Review of the July 2018–December 2019 Annual Automatic Adjustment Reports*, Docket No. E-999/AA-20-171, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED & REQUIRING REFUND at 5 (Feb. 25, 2022) (eDocket no. [20222-183172-01](#)).

³²⁵ Evid. Hrg. Tr. at 47:15-18 (Krug).

³²⁶ *Cf. In re Peoples Nat. Gas Co.*, Docket No. G-007/GR-00-951, 2001 WL 797465, at *12, ORDER MODIFYING & ACCEPTING SETTLEMENT (May 11, 2001) (rejecting an attempt to offset noncompliance and compliance with an applicable standard in the aggregate).

³²⁷ *In re Appl. of El Paso Elec. Co. for Auth. to Change Rates*, Docket No. 9945, 1991 WL 426626, Final Order (Tex. P.U.C. Nov. 12, 1991).

³²⁸ *In re Pub. Serv. Co. of New Hampshire*, DR 96-077, 1996 WL 1068496, at *2, Order No. 22,399 (N.H. P.U.C. Nov. 5, 1996).

differently, once a utility achieves the prudence standard, its conduct is simply prudent. It cannot claim excess prudence to offset deficiencies elsewhere.

12. Assuming prudence could be “banked,” Xcel’s offset is inconsistent with the Commission’s *Sherco 3 Forced Outage* decision.³²⁹ In that case, Xcel claimed that future prudence should compensate for its imprudent actions.³³⁰ Here, Xcel is functionally seeking the opposite – claiming that alleged past prudence should compensate for its imprudent actions.³³¹ But applied in either direction, “banking” prudence violates the prudence standard.³³²

13. The ALJ finds that Xcel’s “performance adjustment” offset violates the prudence standard as a matter of law and is otherwise inconsistent with the Commission’s recent *Sherco 3 Forced Outage* decision.

D. “Supplemental Work” Offset.

14. The ALJ finds, as discussed in Section III(B), Xcel failed to establish by a preponderance of the evidence that pulling forward these “supplemental work” projects saved any future outage time. The supplemental work did not drive the length of the October 2023 outage, and Xcel has given no reason, beyond conclusory assertions, to believe that these relatively small projects would drive the length of any future outage.

15. Any of the forgoing Conclusions of Law more properly designated as Findings of Fact are hereby adopted as such.

RECOMMENDATIONS

1. The Commission should order Xcel to refund at least \$40.1 million plus interest at the prime rate, compounded monthly until the refund is fully paid.

2. The Commission should bar Xcel from recovering from ratepayers the costs of this contested-case litigation.

3. The Commission should order Xcel to make a compliance filing listing all costs that Xcel incurred in litigating this contested case, including internal employee labor and overhead.

³²⁹ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

³³⁰ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

³³¹ *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

³³² *Sherco 3 Forced Outage*, Docket No. E-002/GR-12-961, ORDER ADOPTING ADMINISTRATIVE LAW JUDGE REPORT AS MODIFIED at 36 (Dec. 24, 2024).

4. The Commission should order Xcel, in any future rate case or cost-recovery proceeding that relies on actual cost data to show that the internal and external costs for this contested case have been adjusted out of the test year(s) or otherwise removed.

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