

Staff Briefing Papers

Meeting Date June 23, 2022 Agenda Item 4**

Company Northern States Power Company d/b/a Xcel Energy

Docket No. E-002/GR-12-961; E-002/GR-13-868; E-999/AA-13-599; E-999/AA-14-579; E-

999/AA-16-523; E-999/AA-17-492; E-999/AA-18-373

In the Matter of the Application of Northern States Power Company for

Authority to Increase Rates for Electric Service in the State of Minnesota, et al.

(Sherco 3 outage-related issues)

Issue How should the Commission proceed regarding the issue of prudency of Sherco

Unit 3 replacement power costs?

Staff Jorge Alonso <u>jorge.alonso@state.mn.us</u> 651-201-2258

Jason Bonnett jason.bonnett@state.mn.us 651-201-2235

Relevant Documents	Date	
Minnesota Public Utilities Commission - Order Authorizing Sherco Unit 3 Ratepayer Refund Amount and Method and Requiring Compliance Filing	April 11, 2019	
Xcel Energy – Litigation Update	March 10, 2020	
Xcel Energy – Litigation Update	March 27, 2020	
Xcel Energy - Litigation Update	May 26, 2020	
Xcel Energy - Litigation Update (Non-Public)	August 24, 2020	
Minnesota Public Utilities Commission – Notice of Comment Period	September 30, 2020	

To request this document in another format such as large print or audio, call 651.296.0406 (voice). Persons with a hearing or speech impairment may call using their preferred Telecommunications Relay Service or email consumer.puc@state.mn.us for assistance.

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

✓ Relevant Documents	Date
Department of Commerce - Comments (Non-Public)	January 15, 2021
Office of the Attorney General – Comments (Non-Public)	January 15, 2021
Xcel Energy – Reply Comments	January 27, 2021

Table of Contents

l.	S	Statement of the Issue	1
II.	В	Background	1
III.	Р	Parties' Comments	4
-	Α. L9,	Did Xcel Energy provide the required compliance information related to the Novembe 2011, accident at Sherco 3?	
	3. Ene	Are all of the issues related to the Sherco 3 outage resolved and, if so, should Xcel ergy be authorized to discontinue providing quarterly litigation updates?	4
r		How should the Commission proceed regarding the issue of Xcel Energy's prudency, overability of costs related to the accident, and ratemaking treatment of replacement wer and additional fuel costs?	4
	1	. Department	4
	2	2. OAG	13
	3	3. Xcel Energy	16
[٥.	Should the Matter be Referred to Office of Administrative Hearing for Contested Case	!
F	ro	ceeding?	19
IV.	S	staff Analysis	21
٧.	D	Decision Options	22

I. Statement of the Issue

How Should the Commission proceed regarding the issue of prudency of Sherco Unit 3 replacement power costs?

II. Background

On November 19, 2011, an accident at Northern States Power Company d/b/a Xcel Energy (Xcel Energy or the Company) Sherburne County Generating Station (Sherco), forced the shutdown of its Unit 3. It remained shut down from November 2011 to October 2013.

Sherco 3 is a 900 MW coal-fired generator first put into service in November 1987and is the largest generator in Xcel Energy's system. Xcel Energy owns the facility jointly with the Southern Minnesota Municipal Power Agency (SMMPA), with Xcel Energy owning 59 percent, or 531 MW.

To replace Sherco 3's output, Xcel Energy bought both replacement power and additional fuel for other Company-owned generators; these costs were passed on to ratepayers through the Company's fuel clause adjustment mechanism.

Xcel Energy, along with Sherco 3's joint owner and its insurers, filed a joint complaint against General Electric Company (GE).

In its May 8, 2015, FINDINGS OF FACT, CONCLUSIONS, AND ORDER, (Docket No. E-002/GR-13-868), the Minnesota Public Utilities Commission (Commission) referred the issues of prudency, recoverability and ratemaking treatment of replacement power and additional fuel costs to the annual fuel-clause adjustment dockets.

In its August 31, 2015, ORDER REOPENING, CLARIFYING, AND SUPPLEMENTING MAY 8, 2015 ORDER, (Docket No. E-002/GR-13-868), the Commission required Xcel Energy to include Sherco 3 insurance proceeds as an offset to its rate base.

In Ordering Paragraph (OP) 3 of its June 2, 2016, ORDER ACTING ON ELECTRIC UTILITIES' ANNUAL REPORTS AND REQUIRING ADDITIONAL FILINGS, (Docket No. E-999/AA-14-579), the Commission determined that, while the Company's litigation against GE was pending, it would be premature to render a decision regarding Xcel Energy's prudence in connection with this outage. Therefore, the Commission deferred any decision on the recovery of energy replacement costs until there is a sufficient record to determine if recovery is appropriate and clarified that it may act in the future to remedy any inequities for ratepayers.

On September 20, 2018, Xcel Energy reached a settlement with GE resulting in a payment to the Company, which Xcel Energy indicated would be credited in its entirety to ratepayers. On December 3, 2018, Xcel Energy submitted an update stating that it planned on returning the settlement payment as a credit to customers through the monthly fuel clause adjustment for the month beginning February 1, 2019.

On December 6, 2018, the Commission issued a Notice of Comment Period requesting comments on the following topics:

- Should the Commission authorize the refund amount and method proposed by Xcel for the GE settlement related to the 2011 2013 Sherco 3 outage?
- Are all the issues related to the Sherco 3 outage resolved and, if so, should Xcel be authorized to discontinue providing quarterly litigation updates?
- Are there any other issues or concerns related to this matter?

On January 14, 2019, the Minnesota Department of Commerce, Division of Energy Resources (Department) filed comments recommending that: (1) Xcel Energy's request to refund the settlement proceeds through the FCA be approved with a minor adjustment; (2) Xcel Energy be required to return a portion of replacement power costs to ratepayers; and (3) Xcel Energy be required to provide additional information in its upcoming general rate case.

The Minnesota Office of the Attorney General – Residential Utilities Division (OAG) agreed with the Department's recommendation that the Commission approve the settlement refund to ratepayers, but also recommended that the Commission withhold judgment on the prudency of the replacement power costs resulting from the Sherco 3 outage until the conclusion of the related civil litigation process. The OAG also recommended that the Company be required to submit a compliance filing reporting all costs and regulatory proceedings related to the litigation after the civil litigation is complete.

On January 29, 2019, Xcel Energy filed reply comments, again recommending that the Commission approve the Company's settlement refund proposal but concluding that no additional refunds or credits were necessary. Alternatively, Xcel Energy recommended that the Commission allow the pending civil litigation to reach its conclusion, including appeals, before conducting its own factual, legal, and regulatory analysis.

In reply, the OAG argued against Xcel Energy's assertion that no additional refunds or credits to ratepayers are necessary. Both the OAG and the Department recommended that the Commission withhold judgment on the prudency of replacement power costs resulting from the Sherco 3 outage until the conclusion of the related civil litigation process.

In its April 11, 2019 ORDER AUTHORIZING SHERCO UNIT 3 RATEPAYER REFUND AMOUNT AND METHOD AND REQUIRING COMPLIANCE FILING, (Docket No. E-999/AA-17-492, et. al.) the Commission authorized the refund amount and method proposed by Xcel Energy for the GE settlement related to the 2011 - 2013 Sherco Unit 3 outage.

Additionally, in OP 2 of its April 11, 2019, Order, the Commission required Xcel Energy to, at the conclusion of the civil litigation concerning the Sherco Unit 3 outage, submit a compliance filing with the following information:

Total cost to the Company (total company and Minnesota jurisdictional);

- Identification of which of those costs have been recovered or approved for recovery, including both the mechanisms of recovery and citations to the Commission orders approving those recoveries;
- Identification of any attempts to recover costs that the Commission denied, including citations to the Commission orders denying those recoveries;
- Identification of any costs that the Commission has deferred or delayed final decisions on, including citations to Commission orders deferring or delaying those recoveries; and
- Identification of any insurance proceeds or settlements with third parties, including description of how those proceeds have been returned to ratepayers.

On June 24, 2019, March 10, 2020, and May 26, 2020, Xcel Energy submitted compliance filings regarding the status of the ongoing civil litigation. In its May 26, 2020, filing, Xcel Energy noted that, on April 28, 2020, the Minnesota Supreme Court denied the Insurers' petition for further review and that the litigation between the Insurers and General Electric had concluded.

On August 24, 2020, Xcel Energy submitted a compliance filing pursuant to OP 2 of the Commission's April 11, 2019, Order, noted above.

On September 30, 2020, the Commission issued a Notice of Comment Period requesting comments on the following topics:

- Did Northern States Power Company d/b/a Xcel Energy (Xcel Energy) provide the required compliance information related to the November 19, 2011, accident at Sherco 3?
- Are all of the issues related to the Sherco 3 outage resolved and, if so, should Xcel Energy be authorized to discontinue providing quarterly litigation updates?
- How should the Commission proceed regarding the issue of Xcel Energy's prudency, recoverability of costs related to the accident, and ratemaking treatment of replacement power and additional fuel costs?
- What further procedural steps, if any, do the parties recommend?
- Are there other issues or concerns related to this matter?

On January 15, 2021, the Department and OAG filed comments recommending that the Commission require Xcel Energy to absorb the remaining \$17.0 million in costs associated with the Sherco 3 outage. Additionally, the OAG argued that, if the Commission declines to order an immediate ratepayer reimbursement, the Commission should refer the matter to the Minnesota Office of Administrative Hearings (OAH) for a contested case hearing.¹

¹ The OAG comments were inadvertently electronically filed only in Docket No. E-002/GR-13-868. The comments were refiled in the other relevant dockets on February 18, 2021, and are the same Comments that were previously filed pursuant to the deadline in the Public Utilities Commission's Notice of Extended Comment Period of November 10, 2020 and were resubmitted only to ensure that they are included in the electronic record for the other relevant dockets. The OAG noted that it informed counsel for Xcel Energy and the Department of this submission, and neither party objected. Additionally, the OAG noted that Xcel Energy's Reply Comments were filed on January 27, 2021, in the above matters and responded to the OAG's Comments.

On January 27, 2021, Xcel Energy filed reply comments, requesting that the Commission either reject the Department's and OAG's recommendations outright or, in the alternative, refer this matter to the Minnesota Office of Administrative Hearings for a contested case regarding the prudence and economic impact of the Company's actions.

III. Parties' Comments

A. Did Xcel Energy provide the required compliance information related to the November 19, 2011, accident at Sherco 3?

Both the Department and OAG agreed that Xcel Energy has fulfilled its compliance obligations under the Commission's 2019 Order. Specifically, the OAG stated:

While the OAG certainly disagrees with the conclusions drawn by Xcel in its compliance filing – as discussed more fully *infra* – the Commission should accept the Company's filing as complete and in compliance with past Commission Order.²

B. Are all of the issues related to the Sherco 3 outage resolved and, if so, should Xcel Energy be authorized to discontinue providing quarterly litigation updates?

Both the Department and OAG agreed that, although not all the issues pertaining to Sherco 3 have been resolved, Xcel Energy should be authorized to discontinue providing quarterly litigation updates. Specifically, the Department stated:

The Department believes that there are further issues related to the Sherco 3 outage for the Commission to address, as discussed below. However, Aegis Ins. Servs., LTD v. Gen. Elec. Co., Sher. Cty. 71-CV-13-1472, has been resolved and additional updates are unlikely to provide new and relevant information. Therefore, the Department concludes that Xcel should be authorized to discontinue providing quarterly litigation updates.³

C. How should the Commission proceed regarding the issue of Xcel Energy's prudency, recoverability of costs related to the accident, and ratemaking treatment of replacement power and additional fuel costs?

1. Department

The Department recommended that the Commission require Xcel Energy to absorb the remaining costs associated with the Sherco 3 outage for several reasons. First, the Department argued that fundamental utility regulation principles hold that Xcel Energy's investors accepted

² OAG Comments dated January 15, 2021, at 21.

³ Department Comments dated January 15, 2021 at 8.

the risks of providing utility service, including costs arising from an outage, in exchange for a "just and reasonable" rate of return on their investments.

Second, the Department noted that Xcel Energy's own employee testimony—provided under oath and penalty of perjury—demonstrated that the Company, in violation of both internal guidelines and manufacturer recommendations, knew that stress corrosion cracking was a significant risk and nonetheless delayed turbine inspections.

Third, the Department argued that, as a public policy matter, it creates a perverse incentive to require ratepayers to cover costs that Xcel Energy was not able to recover from insurers and equipment manufacturers. If utilities believe that ratepayers instead of investors will ultimately absorb unrecoverable expenses, they will have less incentive to recover all costs from third parties.

a. Investors assumed the risk of loss in exchange for a fair rate of return

The Department argued that utilities receive "just and reasonable rates" in exchange for the provision of service to all customers within the monopoly service territory. The Commission sets these rates, in part, by considering what is necessary for "the utility . . . to earn a fair rate of return." The Department noted that, in its last rate case, Xcel Energy testified that the U.S. Supreme Court's Hope decision "remains the guiding principle for rate making regulatory proceedings to this day." Hope explains what constitutes a fair rate of return:

[T]he return to the equity owner should be commensurate with returns on investment in other enterprises having commensurate risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and to attract capital.

Additionally, the Department noted that Xcel Energy further testified that an authorized return must consider "investors' expectations and requirements regarding both risks and returns." In the 2010 Rate Case, which set rates in effect when the Sherco 3 outage event occurred, Xcel Energy explained, "a utility's cost of capital . . . must be reflective of the returns achieved by other enterprises having comparable risks acting independently in the financial markets." The

⁴ Minn. Stat. §§ 216B.16, subd. 6, 216B.37-40 (2020)

⁵ Minn. Stat. § 216B.16, subd. 6.

⁶ In re Appl. of N. States Power Co. for Auth. to Increase Rates Elec. Serv. in the State of Minn., Docket No. E-002/GR-15-826 (2015 Rate Case), Coyne Direct Testimony at 5–6 (Nov. 2, 2015) (Coyne Direct).

⁷ Coyne Direct at 8.

⁸ In re Appl. of N. States Power Co. d/b/a Xcel Energy for Auth. to Increase Rates for Elec. Serv. in Minn., Docket No. E-002/GR-10-971 (2010 Rate Case), Reed Direct Testimony at 7 (May 14, 2012) (setting interim rates that were in effect when the outage occurred); see also In re Appl. of N. States Power Co. d/b/a Xcel Energy, for Auth. to Increase Rate for Elec. Serv. in Minn., Docket No. E-002/GR-08-1065 (2008 Rate Case), Reed Direct Testimony at 6 (Nov. 3, 2008) (providing the same testimony and setting the last final rates before the outage).

Department argued that Xcel Energy's own testimony makes clear that the rate of return approved by the Commission is intended to be commensurate with, and compensate investors for assuming, the risks of providing utility service.

The Department noted that, in recent years, Xcel Energy accepted Commission-set rates of return in the 2008, 2012, 2013, and 2015 rate cases. The Department stated it is unaware of any recent instance where Xcel Energy challenged a Commission rate case decision because the approved rate of return did not fairly compensate investors for accepting the risk of investing in its operations.

Finally, the Department argued that Xcel Energy's own testimony and actions, along with longstanding precedent, show that Commission-approved rates account for the risks of providing service to customers. Accordingly, utility investors are responsible for any hypothetical risk that is ultimately realized. In this proceeding, these fundamental utility regulation principles mean that investors—not Minnesota ratepayers—should absorb the remaining Sherco 3 outage costs.

 Employee testimony demonstrates Xcel Energy understood stress corrosion cracking risks, failed to timely inspect Sherco 3, or address potential contamination

The Department noted that the Commission considers both adjudicative and legislative facts when considering a matter before it. In the former capacity, it is appropriate for the Commission to rely on "all evidence on which reasonable, prudent persons are accustomed to rely in the conduct of their serious affairs." Here, the Department recommended that the Commission consider the trial testimony of Xcel Energy's employees, Dr. Timothy Patrick Murray and Mr. Matthew Kolb to make a determination in this proceeding.

At the time of the outage, Dr. Murray was a Principal Engineer with Xcel Energy's Turbine Overhaul Services Group and provided "technical support for planning and executing major steam turbine overhauls." Mr. Kolb was a Systems Engineer assigned to the Sherburne County Generating Station with a focus on "the main turbine and its auxiliary service." 12

The Department argued that Dr. Murray's and Mr. Kolb's testimony demonstrated that Xcel Energy knew that stress corrosion cracking—which the Company's own root cause analysis found to cause the Sherco 3 outage¹³—could occur in low pressure (LP) turbines without

⁹ Minn. Stat. § 216A.05, subd. 1.

¹⁰ Minn. R. 1400.7300, subp. 1.

¹¹ Department Comments Attachment C at p.4, Ln 6 – p.6, Ln. 7, Doc. 475 at 124:6-126.:7.

¹² Department Comments Attachment B at p.17, Ln. 19- p.19, Ln. 10, Doc. 474 at 434:19-436:10.

¹³ Root Cause Analysis Report at 1, "The fractures of the finger pinned blade attachments in the low pressure turbine L-1 turbine end disk were due to the presence of pre-existing caustic stress corrosion cracks at the pin holes, ledges and at the base of the finger pinned blade attachments."

adequate inspection and steam contaminant control practices. Additionally, the Department noted that Xcel Energy's testimony further shows the Company postponed a major turbine inspection scheduled for 2011—the same year as the outage—until 2014 without first conducting an engineering study assessing the merits of the delay or consulting the turbine manufacturer.

i. Turbine Inspection Delays

The Department noted that Mr. Kolb admitted that Xcel Energy postponed a major Sherco 3 turbine inspection by three years without following internal Company guidelines:14

Q: So this is December 7, 2010. Do you see that, Mr. Kolb?

Kolb: Yes.

Q: And we see down below that GE recommends a [time between overhauls (TBO)] of five years, right?

Kolb: Yes.

Q: This is – you wrote this [systems health report], right?

Kolb: Yes, sir. Um-hum.

Q: Okay. And you said increasing the inspection interval adds risk; is that right?

Kolb: Yes.

Q: And that you had currently scheduled it for eight-and-a-third time between overhauls in the cycle; is that right?

Kolb: Yes.

Q: And the turbine rating is still green, is it not?

Kolb: Yes.

Q: And you recall in 2005 you said the green rating was contingent on a six-year TBO, right? Kolb: Yes.

Q: Okay. And you pushed the TBO out and you left the rating green; is that right? Kolb: Yes. I mean, that's what's said -

Q: Risks associated with a yellow or red code is "wheels cracking involving wheel failure" and "buckets departing the rotor." Is that what happened in November 2011?

Kolb: Yes.

Q: And extending [the] GE recommended TBO increases risk of failures. Do you see that? Kolb: Yes.

Q: And that includes risk of an [stress corrosion cracking] failure with the buckets departing the rotor, right?

Kolb: I was referring to risks, in general.

Q: And one of the risks in general that you identified above, risks associated with a wheel cracking involve wheel failure and buckets departing the rotor. That's one of the risks, in general, right?

¹⁴ Department Comments dated January 15, 2021, at 13-14.

Kolb: Yes.

. . . .

Q: Yeah. So in connection with the 2011 outage, before you deferred the LP turbine major overhaul, you did not review the steam and water chemistry for Unit 3, correct?

Kolb: Personally, to the degree that you are implying, no.

Q: And you are not aware of anybody else who did so?

Kolb: I am not aware of anybody else.

Dr. Murray similarly admitted that Xcel knew that lengthening the turbine inspection interval increased the risk of turbine failure:¹⁵

Q: [This Xcel Energy systems health report states that] GE recommends a TBO of five years, [and that] increasing inspection interval adds risk. Do you see that there?

Murray: Yes.

Q: Currently scheduled for an eight-and-a-third-year TBO cycle. Do you see that there? Murray: Yes.

Q: So am I correct that according to this 2010 document, the LP major unit inspection that should have been conducted in 2011 has been pushed to 2014?

Murray: Yes, the plan was changed to move that to 2014.

Q: Okay. So you did not maintain a six-year inspection interval, correct?

Murray: Not on the low-pressure turbines.

Dr. Murray then admitted that Xcel Energy failed to conduct an engineering study to assess the merits of delaying the turbine inspection. Dr. Murray also admitted that Xcel internal documents recognized that an engineering study was needed before going ahead with the delay:¹⁶

Q: [The systems health report states], with the proper engineering study, the LP inspection interval could possibly be extended to nine years . . . if required, otherwise maintain six-year overhaul frequency, next major overhaul scheduled for 2014; do you see that there? Murray: Yes.

. . .

Q: Okay. And you're not aware of any engineering study to study the LP inspection interval to extend to nine years, right?

Murray: No, I am not.

¹⁵ *Id.* at 14.

¹⁶ *Id.* at 14-15.

ii. Stress Corrosion Cracking

Dr. Murray admitted that the Sherco 3 turbine stress corrosion cracking went undetected. He further admitted that the Company knew that stress corrosion cracking was a concern for the "finger dovetails" on the Sherco 3 turbine:¹⁷

Q: So do you recognize this as the depiction of the steam cycle diagram for a fossil steam turbine?

Murray: Yes.

Q: And this is a reasonably accurate picture – depiction of the system for Sherco Unit 3 with the exception of it has two LP turbines and it has multiple condensate polishers?

Murray: Yeah. I'd say it's reasonably accurate.

Q: Right. And so that we understand what we're talking about, . . . contaminants can enter through . . . the cooling water which is not pure through leaks . . . into the purer steam condensates cycle, right?

Murray: Yes.

Q: And that also if there's contaminants in the makeup water, that that can enter into the steam condensate cycle, right?

Murray: Correct.

Q: And then the condensate polisher as it existed at Sherco 3 doesn't take sodium out, so whatever would come in through any problems with the makeup water, or condenser, would then go right into the steam through the attemperators, right?

Murray: It would, yes.

Q: Right. Otherwise the contaminants can go into the boiler and you can use blow-down and other things to regulate the contaminants and keep them from getting into the steam, right? Murray: Correct.

Q: So you knew in the 1999 to 2000 timeframe that in order to minimize the risk of stress corrosion cracking in LP turbines it was important to limit the sodium compounds that entered the steam turbine?

Murray: Yes.

Q: Okay. And as a result of that, it was important to keep track of and evaluate any corrosive issues with respect to the LP turbines such as Unit 3?

Murray: Yes.

Q: Okay. To summarize, it's fair to say during the period 1999 to 2011 you knew, one, about the risk of stress corrosion cracking in LP turbines?

Murray: Yes.

Q: Two, what causes stress corrosion cracking in LP turbines?

Murray: Yes.

. . . .

Q: [Three,] you knew how to inspect for the presence of stress corrosion cracking? Murray: Yes, we did.

. . . .

¹⁷ Id. at 15-16.

Q: And where . . . is the susceptibility in the Sherco GE turbines to stress corrosion cracking? Murray: Generally, [stress corrosion cracking], as far as buckets and rotor, occurs around the – predominantly along the L-1 row and potentially L-2 and further upstream.

Q: And you understand that that's true regardless of the type of dovetail connection at the L-1 row?

Murray: Yes.

Q: So doesn't matter whether it's a finger dovetail or a tangential entry dovetail, they both have the same risk of stress corrosion cracking?

Murray: I don't agree that they have the same risk, but that's the predominant area in which [stress corrosion cracking] occurs.

Mr. Kolb separately admitted that he received an email in November 2005 from Sherco's chemistry supervisor, stating that the low-pressure turbine rotors had been "steam-cleaned with supply water from Sherco wells which [were] high in sulfate and chlorides." Mr. Kolb then admitted that he did not investigate whether this cleaning had contaminated the turbine or consult with the manufacturer about it:¹⁸

Q: And did you consider supply water with sulfate and chloride to be chemical contamination of the turbine?

Kolb: Contamination with those chemicals in a sufficient enough quantity could be.

Q: Did you contact GE and ask them whether or not that would qualify for [magnetic particle inspection] of the rotor dovetail under [the 1121-3AR1 technical information letter] because of the steam cleaning with supply water?

Kolb: No, I did not.

Q: Did you pull the buckets off as a result to inspect and test the dovetails?

Kolb: No.

iii. Manufacturer Inspection Recommendations

Dr. Murray admitted that Xcel Energy knew that the turbine manufacturer recommended consideration of bucket removal and finger inspection if the turbine had contamination, carryover from the boiler, or a leaking condenser heater tube:¹⁹

Q: Okay. This [1121-3A technical information letter] applies to all steam turbine rotors which have buckets attached with finger dovetails, right?

Murray: That's correct.

Q: Provides instructions [about] how to do the inspection that you described for us? Murray: Yes.

. . . .

¹⁸ *Id*. at 16.

¹⁹ *Id*. at 16-17

Q: And it has two recommendations of when to do it. Number one, whenever buckets are removed, and, number two, abnormal operation or unusual operating events that cause concern for long-term reliability may be reason to consider removal of the buckets, right? Murray: Correct.

. . . .

Q: But item two lists examples of events that may increase the risk of stress corrosion cracking. Is that how you read that?

Murray: Yes.

Q: And three events: A, is caustic or chemical ingestion or contamination[.] B, carryover from the boiler, and, C, leaking condenser heater tubes. And down at the bottom it says in there – can you read that for me?

Murray: If in doubt, GE will help evaluate the need for additional [magnetic particle inspection] of the rotor wheel finger dovetail area. Contact your local GE field service representative.

iv. Other Turbine Operator Best Practices

Dr. Murray admitted that Xcel knew about a similar turbine failure in Arizona and was aware of several tests that it could perform to help decide whether to pursue further stress corrosion cracking investigation:²⁰

Q: And you got involved in what came to be called the L-1 users group in [the] 1995 to 1996 timeframe, right?

Murray: Yes.

Q: And what that involved is a power company known as Navajo Generating Station, I believe that was in Utah?

Murray: Or Arizona.

Q: Arizona?

Murray: Arizona.

. . .

Q: Right. And they also had stress corrosion cracking in their L-1 LP finger dovetails on three units in that time period.

Murray: I believe that's correct.

Q: And those units were identical to Sherco Unit 3 except for they had once-through boilers.

Murray: I can't say for sure that they were identical, but they were very close, yes.

Q: Okay. They had finger dovetails on the L-1 rows.

Murray: Yes.

Q: And they were G3 units.

Murray: Yes.

Q: Okay. And you attended meetings where they discussed methods of how to detect stress corrosion cracking without removing all the buckets, right?

Murray: I believe there was a presentation made at one of the meetings.

. . . .

Q: This is a document that comes from NSP's files, right?

²⁰ Id. at 17-18.

Murray: Yes.

Q: And does this come from your personal files?

Murray: I believe so.

. . . .

Q: And it says: Replicated L-1 wheel circumferential indication, SCC. Do you know what that means?

Murray: So it would have been like a metallurgical examination where they try to basically replicate or copy the actual surface, and then they can examine that copy of the surface under a microscope and try to determine the mechanism involved.

Q: So they are doing an investigation trying to figure out the mechanism and this is the method they used and they found out it was [stress corrosion cracking]? Murray: Yes.

. . . .

Q: They then removed and inspected the entire L-1 generator and buckets and found crack indications, right?

Murray: Yes.

Q: And then they also removed and inspected one 5-bucket L-1 turbine end group and found crack indications, right?

Murray: Correct.

Q: So you knew from this particular presentation that it was possible to remove a bucket group, do an inspection of the wheel, and make a determination as to whether there's any crack indications if you didn't want to take all the buckets off, right?

Murray: That's what they suggest.

Q: Right. And you had the presentation, it was presented to you, it was in your file, and you knew it was done at Navajo Generating Station, right?

Murray: Correct.

The Department argued that this testimony by Xcel Energy employees demonstrates that the Company: (1) understood that stress corrosion cracking could occur in its LP turbines; (2) knew that stress corrosion cracking had occurred in a similar turbine; (3) was familiar with appropriate inspection and testing procedures; (4) delayed inspections scheduled in violation of internal practices and manufacturer guidance; (5) did not test relevant turbine components for stress corrosion cracking after possible contamination; and (6) did not inquire with the manufacturer about whether testing was necessary after possible contamination.

In addition to Xcel Energy's conduct, the Department noted that the turbine manufacturer might have contributed to the stress corrosion cracking that caused Sherco 3's failure. The manufacturer, however, is not a party to this proceeding and the Commission lacks jurisdiction over it. The question is then, whether investors or ratepayers should bear the expenses incurred as a result of the outage.

c. Remaining Ratepayer Harm

To determine the ratepayer harm, the Department examined the Sherco 3 outage costs and the counteracting payments; specifically, the reimbursements by insurers and the settlement with the turbine manufacturer. Further, the Department noted that Xcel Energy, in its Compliance Filing, stated that the Commission previously disallowed \$21.6 million in costs associated with the Sherco 3 outage in 2012, and that it would be unreasonable to count these costs again to determine the remaining replacement power costs. The Department agreed and, therefore, subtracted the previously denied costs from the total calculated damages to determine the remaining damage to ratepayers due to the outage. Trade Secret Table 4 from the Department Comments shows the Department's calculations.

The Department calculated that approximately \$17.0 million in remaining Sherco 3 outage costs are owed to ratepayers. The Department concluded that "it is unreasonable for ratepayers to absorb these costs resulting from risks that Xcel Energy's investors assumed in exchange for a Commission approved rate of return. Additionally, the Department argued that Xcel Energy's actions contributed to the outage, and it is not reasonable for ratepayers to absorb these costs, as they are the only party that is absolutely blameless."²¹

Therefore, so as to leave ratepayers unharmed from the Sherco 3 outage, the Department recommended that the Commission require Xcel Energy to refund \$17.0 million to ratepayers for replacement power costs that were recovered though the monthly fuel clause charge. The Department recommended that the refund should be distributed through the monthly fuel clause charge in the same manner as the replacement power costs were originally recovered by the Company.

2. OAG

The OAG recommended that the Commission order Xcel Energy to reimburse Minnesota ratepayers for all replacement power costs incurred as a result of the Sherco 3 forced outage for two main reasons. First, as a well-capitalized investor-owned utility (IOU), Xcel Energy and its investors take on operational risk in exchange for a guaranteed rate of return. The OAG argued that it is unreasonable to make ratepayers cover the costs of operational failures when they have already compensated the Company's investors for these and other risks to their investments. Second, the relevant factual and legal conclusions by Minnesota courts and fact finders demonstrate that Xcel Energy unreasonably and imprudently operated Sherco 3 and, therefore, is solely responsible for the outage.

a. Xcel Energy should bear operational risk

The OAG argued that Xcel Energy contracted with GE in such a way that the latter escaped any meaningful liability for the outage and, instead, all costs were shifted to ratepayers. The operative stipulations and conditions including a provision limiting GE's liability cited by the OAG is shown below:

²¹ Department Comments dated January 15, 2021, at 20.

Limitation of Liability. Except as provided in the clauses entitled Warranty, SC.36 and Patents, GC.12, [GE's] liability on any claim of any kind, including claims based on negligence, for any loss or damage arising out of, connected with, or resulting from this contract or from the performance or breach thereof, or from the manufacture, sale, delivery, installation, or technical direction of installation, repair or use of any equipment covered by or furnished under this contract shall in no case exceed the billing price of the equipment; provided, however, that in all cases where the claim involves defective or damaged equipment supplied under this contract the Company's exclusive remedy and [GE's] sole liability will be limited to the correction of such defect or damage, but not in excess of the billing price of the equipment. In any event, [GE's] liability for all of the aforesaid claims shall terminate four years after initial synchronization of the equipment.²²

Thus, the contract imposed a purchase-price cap on recoverable damages within four years of initial synchronization. After four years, the agreement entirely exculpates GE from liability for negligence arising from, among other things, its technical direction of repair or use of Sherco 3.

Additionally, the OAG argued that Xcel Energy failed to obtain sufficient business interruption insurance to cover the cost of replacement fuel costs in the event of an outage. The OAG argued that it is contrary to the public interest and patently unfair to require ratepayers to subsidize the unplanned outage due to Sherco 3. Unless the Commission orders Xcel Energy to reimburse Minnesota ratepayers for the net harm, after offsets, IOUs will be incentivized to carry insufficient business interruption insurance policies or take other protective measures and will continue to treat ratepayers as a "backstop." Additionally, ratepayers would bear the costs of the Company's operational risks.

In conclusion, the OAG argued that good regulatory public policy dictates that IOUs—not ratepayers—be responsible for the risks associated with an IOU's enterprise. Even if the Commission rejects this argument, the OAG argued that sufficient evidence and testimony by Xcel Energy employees taken under oath, and analyzed by Minnesota courts, support a Commission conclusion that the Company's imprudent and unreasonable Sherco 3 operation and maintenance caused the outage.

b. Reimbursement to Ratepayers

The OAG argued that Minnesota ratepayers did not directly or indirectly cause the forced outage and that ratepayers have been improperly charged for replacement power costs because of the forced outage. Accordingly, the Commission should order Xcel Energy to reimburse ratepayers for all replacement power costs less the corresponding offsets.

The OAG argued that the Commission has "sufficient factual evidence" to determine that Xcel Energy's unreasonable and imprudent behavior. Specifically, the OAG noted the following items from a civil case which was filed due to the forced outage:

²² OAG Comments dated January 15, 2021, at 5.

- Xcel imprudently and unreasonably deferred Sherco 3's LP inspection given the district court's conclusion that the "evidence establishes that [Xcel] chose not to involve GE in inspecting the turbine because it believed GE would recommend the expensive 'buckets off' inspection that was necessary to find SCC."²³
- The jurors that heard all the evidence submitted by Xcel and GE over a two-week trial concluded in the Special Verdict Form that "[Xcel] was negligent in the operation and maintenance of [Sherco] 3, and this negligence was a direct cause of property loss." ²⁴

c. Contested Case Proceeding

The OAG argued that the Commission has sufficient factual evidence at its disposal and is, therefore, opposed to a contested case. Specifically, the OAG stated:²⁵

- Xcel imprudently and unreasonably failed to monitor and maintain Sherco 3's steam chemistry within EPRI Guidelines—which Xcel adopted—and the Company knew impurities in the water/steam chemistry would cause SCC [stress corrosion cracking].
- Xcel imprudently and unreasonably postponed a major Sherco 3 LP inspection from 2011 to 2014—contrary to GE's TILs—without conducting an engineering study to determine whether such postponement was prudent.
- Xcel imprudently and unreasonably postponed a major Sherco 3 LP inspection from 2011 to 2014 despite its understanding that "extending GE recommend[ed] [time between major inspections] increases risk of failure."
- Xcel imprudently and unreasonably failed to undertake an MPI—contrary to GE's TIL—during its 2011 Sherco 3 inspection.
- Xcel imprudently and unreasonably ignored other third-party expert advice to test for SCC by failing to perform the bucket lift test or by removing a small group of buckets to inspect for SCC damage during its 2011 maintenance outage.
- Xcel imprudently and unreasonably deferred Sherco 3's LP inspection despite knowing that undetected SCC on Sherco 3's finger dovetails could "involve wheel failure and buckets departing the rotor" and that "[r]esulting collateral damage could be severe (i.e., due to mass imbalance)."

²³ OAG Comments dated January 15, 2021, at 28; Order Denying Plaintiffs' Motion for Judgment As A Matter of Law or Alternatively For A New Trial at 14-15.

²⁴ *Id.*; Order Denying Plaintiffs' Motion for Judgment As A Matter of Law or Alternatively For A New Trial at 6.

²⁵ OAG Comments dated January 15, 2021, at 26-28.

- Xcel imprudently and unreasonably deferred Sherco 3's LP inspection despite knowing that Sherco 3 sustained caustic or chemical ingestion or contamination, carryover from the boiler, and a leaking condenser heater tube from 1999-2011, which should have prompted Xcel to remove the buckets for dovetail inspection.
- Xcel imprudently and unreasonably failed to replace Sherco 3's LP turbines in 2011, even though replacement would have eliminated the risk of SCC failure, because new LP turbines would not increase output.
- Xcel imprudently and unreasonably failed to apply TIL 1277 during the Company's 2011 Sherco 3 inspection, which GE instructed as evidenced by contemporary internal GE records.
- Xcel imprudently and unreasonably deferred Sherco 3's LP inspection given the district court's conclusion that the "evidence establishes that [Xcel] chose not to involve GE in inspecting the turbine because it believed GE would recommend the expensive 'buckets off' inspection that was necessary to find SCC."
- The jurors that heard all the evidence submitted by Xcel and GE over a two-week trial concluded in the Special Verdict Form that "[Xcel] was negligent in the operation and maintenance of [Sherco] 3, and this negligence was a direct cause of property loss."

However, should the Commission decline to order Xcel Energy to reimburse ratepayers for Sherco 3 costs then the OAG recommends that the Commission refer the matter to the OAH for a contested case hearing.²⁶

3. Xcel Energy

a. Disallowance

In reply comments, Xcel Energy noted that, in its 2012 rate case, it was required to remove all direct Sherco 3 costs, except property taxes, from the test year and defer depreciation expense until its next case which amounted to a disallowance of approximately \$21.6 million and reflected the Commission's decision that the plant had not been "used and useful" during the extended outage and the test year of that case. In doing so, the Commission explicitly took into account "ratepayers' payment of substantial O&M and replacement-power costs during the outage. In other words, the Commission determined that because the plant was not used and useful during the outage period, it was not just and reasonable for customers to pay both the Sherco 3 revenue requirement and also the replacement power costs and the plant's operation and maintenance costs during that time.

²⁶ OAG Comments dated January 15, 2021, at 30

²⁷ Xcel Energy Reply Comments dated January 27, 2021, at 5.

²⁸ *Id*.

Xcel Energy argued that having imposed the substantial disallowance in its 2012 rate case, the Company does not believe it is appropriate for the Commission to impose an additional penalty in the form of reimbursed replacement power costs. Therefore, Xcel Energy recommended that the Commission reject the Department's and OAG's recommendations. However, should the Commission disagree, Xcel Energy recommended that the proceeding be referred to the Minnesota Office of Administrative Hearings for a contested case. Xcel Energy argued that additional fact-finding and legal analysis—in the form of a contested case—is critical.

b. Issues Remaining to Be Resolved

Xcel Energy argued that although the trial between GE and Aegis involved matters related to plant operations and maintenance, the record concerning prudence was not fully developed. Xcel Energy noted that the trial was between GE and Aegis, and the primary issues were whether GE was grossly negligent or committed fraud. Xcel Energy noted it was not a party to the litigation at the time of trial and did not have the opportunity to make arguments or present evidence. Specifically, Xcel Energy argued:²⁹

Here, the jury's determinations in the litigation between GE and Aegis are not a substitute for an investigation by the Commission. Courts have held that findings in one proceeding cannot form the basis of an imprudence finding in a cost-recovery proceeding. For example, in Florida Power Corp. v. Florida Pub. Service Comm'n, the Commission relied on safety investigation reports from the Nuclear Regulatory Commission as the basis for finding imprudence. On appeal, the Court reversed and remanded concluding that the NRC's reports "involved a very different risk and much higher standard of care than was applicable to the Commission's cost-recovery determination."

The same reasoning applies here with greater force. The Department and the OAG's use of the record in the litigation between GE and Aegis bolsters the need for further record development on prudence. Not only does the OAG rely primarily on GE's appellate advocacy as though it were findings of fact—citing to GE's appellate brief over 70 times, and relying on it almost exclusively as support for the alleged "factual determinations" of the litigation rather than recognizing the document for what it was: advocacy supporting GE's side of the story. In other words, both the OAG and the Department focus on arguments rather than conclusive findings of fact. For example, they both rely on the trial testimony of Company employees as evidence that Xcel Energy knew of certain risks that posed dangers to Sherco 3. But employees' knowledge of risks does not equate to a finding of imprudence on the part of the Company. Critically, it does not show that the Company failed to prudently manage the plant, follow industry standards, and appropriately balance both risks and costs. Those factual questions have not been addressed, much less resolved.

²⁹ Id. at 7-9.

Indeed, numerous questions remain unresolved regarding Xcel Energy's prudence. For example, the OAG argues that the Company should have purchased business interruption insurance to cover the cost of replacement fuel and, by not doing so, customers will be forced to subsidize the catastrophe. However, in 1977, when Xcel Energy executed the contract with GE, it made the business decision not to purchase business interruption insurance. That business decision—which is consistent with industry standards as well as the practices of other Minnesota-based utilities—was based on many factors including risk and cost. No analysis has been performed by the OAG or the Commission regarding whether Xcel Energy's decisions on balancing risks and costs were reasonable based on what the Company knew at the time. Similarly, no analysis has been performed on whether the Company's operational procedures, training, monitoring, controls, and quality assurance processes justified its decisions on how best to maintain the turbine, whether to defer an inspection, and how to handle water chemistry. Likewise, no evidence exists that satisfactorily resolves these issues.

The evidence admitted at trial, moreover, was limited by the rules of evidence for Minnesota Courts, as specifically applied to the dispute between GE and Aegis. These limitations, although appropriate for the civil trial, leave the record lacking for a determination of prudence. For example, in 2013, based on information it had learned in the industry about the turbines, GE modified its maintenance guidelines for plants like Sherco 3 to include multi-million-dollar inspections of its turbines every twenty years to inspect for stress corrosion cracking of the kind that resulted in the Sherco 3 outage. Never before 2013 had GE recommended the Company undertake such inspections. Yet GE's 2013 updated guidelines were not admissible in the trial as evidence against GE because, under Minn. R. Evid. 407, they were a "subsequent remedial measure." The reasons underlying GE's change to its guidelines, however, are critical to assessing whether the Company's decisions to maintain the plant were in line with industry standards, thus bearing on prudence.

Xcel Energy argued that prudence reviews undertaken by utilities commissions are some of the most complicated and technically challenging issues that come before them and it is imperative for the Commission to leverage its expertise and base a finding of prudence on facts and evidence bearing directly on that issue, rather than rely on the findings of a jury of laypersons from a trial that was focused on GE's liability.

c. If the Commission Finds Imprudence, a Careful Cost Analysis is Required

Xcel Energy argued that, only if the Commission determines the Company acted imprudently, should it consider what costs should be refunded to ratepayers. Specifically, Xcel Energy stated:³⁰

³⁰ Id. at 9-10.

Having themselves opined on the prudence determination, the Department and the OAG recommend that the Company refund the replacement power costs, less certain offsets. This calculation is premature and likely incorrect because it is not supported by a full record of the various costs and benefits associated with the Company's management of the unit, including those that are not directly tied to the catastrophic event.

For example, if an investigation into prudence reveals that the Company should have procured business interruption insurance, the costs of such insurance since 1977 would have been borne by customers. Because the insurance premiums were never charged to customers but would have been recoverable as a reasonable business expense, they must be deducted from the costs of replacement power incurred by the catastrophe. Additionally, the Department and OAG blame the Company for negotiating a contract with only a four-year warranty. This warranty, however, was notably longer than the typical warranties the Company obtains for generating equipment, which generally are limited to one year. Moreover, had the Company even been able to negotiate a contract with a longer warranty period, the price of the turbine likely would have been significantly higher and passed on to customers. These costs should offset the replacement power costs.

Xcel Energy argued that without further record development on both the Company's prudent management of Sherco 3, as well as the costs associated with the accident, the Commission will be limited in its ability to determine whether a refund is appropriate, and if so, the correct amount. The Company stated it should not be deprived of the opportunity to present additional witness testimony and documents on these critical questions, and the appropriate way to do so is through a referral of this matter to the OAH.

Additionally, Xcel Energy noted that contested case proceedings can be both complex and resource intensive, and that a standalone contested case on this matter may not be the most efficient course. Therefore, the Company offered to consolidate this matter with its (ongoing) electric rate case where the record on this issue could be developed before an administrative law judge.³¹

D. Should the Matter be Referred to Office of Administrative Hearing for Contested Case Proceeding?

Both the OAG and Xcel Energy argue that, if certain conditions are met, referral to the OAH is appropriate. The OAG argued that the Commission should find a sufficient factual record exists to order Xcel Energy to reimburse Minnesota ratepayers for all out-of-pocket costs stemming

³¹ Staff notes that Xcel Energy filed its electric rate case on October 25, 2021 (Docket No. E-002/GR-21-630). The case was referred to the OAH via the Notice of and Order for Hearing issued on December 23, 2021. Direct testimony is due on October 23, 2022.

from the Sherco 3 forced outage thus, a contested case proceeding is unnecessary. Specifically, the OAG stated:³²

It would be contrary to black letter law for Xcel to relitigate its dispute with GE after settlement. Instead, the Company seeks to relitigate using ratepayers as a proxy defendant. In other words, while Xcel settled with GE for less than the full harm of the Catastrophe, it now seeks to recover the remaining costs from ratepayers. Yet it argues that it is entitled to a whole new proceeding if it does not get what it wants. The Commission should not allow the Company to pass its own O&M failures on to ratepayers—the one party that objectively bears no responsibility for the Catastrophe. If the Commission denies a ratepayer reimbursement, such funds will be effectively taken from the pockets of ratepayers and put into the wallets of shareholders.

As a result of Xcel's imprudent and unreasonable O&M of Sherco 3, the Commission should reject the Company's urging to "conclude that no additional refunds or credits are necessary in connection with the Sherco outage." Instead, the Commission should take the Total Harm to Minnesota Ratepayers from the Catastrophe and reduce that amount by both the 2012 Rate Case Disallowance for Sherco 3 and the 2019 Sherco 3 Customer Refund from Xcel's Settlement with GE and refund the Net Harm to Minnesota Ratepayers from the Catastrophe after Offsets (with interest).

However, the OAG stated that, if the Commission declines to order an immediate ratepayer reimbursement, then the matter should be referred for a contested case proceeding.

Conversely, Xcel Energy argued for Commission rejection of the Department and OAG's proposals due to fact that the Commission has already disallowed \$21.6 million for the Company's 2012 rate case. However, should the Commission find imprudence, Xcel Energy argued for referring the matter to the OAH for a contested case proceeding. Specifically, Xcel Energy stated:³³

If, and only if, after considering a fully developed record, the Commission finds that the Company's management acted imprudently, then it should consider what costs the Company should refund to customers. Having themselves opined on the prudence determination, the Department and the OAG recommend that the Company refund the replacement power costs, less certain offsets. This calculation is premature and likely incorrect because it is not supported by a full record of the various costs and benefits associated with the Company's management of the unit, including those that are not directly tied to the catastrophic event.

³² OAG Comments dated January 15, 2021, at 29-30.

³³ Xcel Energy Reply Comments dated January 27, 2021, at 9-10.

. . .

Without further record development on both the Company's prudent management of Sherco 3, as well as the costs associated with the accident, the Commission will be limited in its ability to determine whether a refund is appropriate, and if so, the correct amount. The Company should not be deprived of the opportunity to present additional witness testimony and documents on these critical questions, and the appropriate way to do so is through a referral of this matter to the OAH.

IV. Staff Analysis

The threshold issue is for the Commission to determine if it has enough information to decide whether it has a fully developed record to determine whether costs were prudently incurred. The Department's Trade Secret Tables 2 and 3 set forth the replacement power costs and total Sherco 3 outage costs, respectively.³⁴ The Department concluded in its Trade Secret Table 4 that the remaining outage costs for Minnesota ratepayers was \$17 million.³⁵

As noted above, the Sherco 3 forced outage occurred on November 19, 2011, and the generating unit was out of service for nearly two years. Since that time there has been significant record development concluding in a jury trial with the jury finding Xcel Energy negligent in the operation and maintenance of Sherco 3 with the negligence being a direct cause of the property loss.³⁶ However, as discussed above, Xcel Energy did not participate in the jury trial. Xcel Energy noted the primary issues were whether GE was grossly negligent or committed fraud.³⁷

If the Commission orders a refund, then it may want to order Xcel Energy to add interest to the refund amount and determine what that interest rate should be. Also, since it is unknown when the Company will issue the refund, the Commission may want to instruct Xcel Energy to file a refund plan within 60 days of the order.

³⁴ Department Comments dated January 15, 2021, at 5-6.

³⁵ *Id*. at 20.

³⁶ OAG Comments dated January 15, 2021, Schedule 3 at 6.

³⁷ Xcel Energy separately settled with GE. Only its insurers as subrogees pursued the claims to trial.

V. Decision Options

Did Xcel Energy provide the required compliance information related to the November 19, 2011 accident at Sherco 3?

1. Find Xcel Energy's filing complete and in compliance with past Commission Order. (Department, OAG, Xcel Energy)

Are all of the issues related to the Sherco 3 outage resolved and, if so, should Xcel Energy be authorized to discontinue providing quarterly litigation updates?

- 2. Find that litigation regarding Sherco 3 has finished and authorize Xcel Energy to discontinue providing quarterly litigation updates. (Department, OAG, Xcel Energy)
- 3. Require Xcel Energy to notify the Commission of any future updates related to Sherco 3. (OAG)

How should the Commission proceed regarding the issue of Xcel Energy's prudency, recoverability of costs related to the accident, and ratemaking treatment of replacement power and additional fuel costs?

- 4. Conclude that no additional refunds or credits are necessary in connection with the Sherco 3 outage. (Xcel Energy)
- 5. Find that Xcel Energy acted imprudently regarding its actions related to the Sherco 3 forced outage and require Xcel Energy to refund \$17 million to ratepayers.

 (Department)
- 6. Find that a sufficient factual record exits regarding the prudency of Xcel Energy's O&M related to Sherco 3 and order Xcel Energy to reimburse Minnesota ratepayers for all out-of-pocket costs stemming from the Company's imprudent and unreasonable actions. (OAG)

If a refund is ordered (decision options 5 or 6), the Commission may also choose decision options 7, 8, or both.

- 7. If a refund is ordered, find that interest should be added and determine what the interest rate should be. (Staff)
- 8. If a refund is ordered, instruct Xcel Energy to make a compliance filing within 60 days detailing its refund plan. (Staff)

Should this matter be referred to the Office of Administrative Hearings for a contested case proceeding?

- 9. Find that material issues of fact that require additional record development are in dispute and refer this matter to the Office of Administrative Hearings. (Xcel Energy, DOC and OAG if a refund is not ordered)
- 10. Request that the ALJ consider addressing this issue in the Company's pending rate case in Docket No. E-002/GR-21-630. (Xcel Energy alternative)