

**BEFORE THE MINNESOTA OFFICE OF
ADMINISTRATIVE HEARINGS**

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**FOR THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF MINNESOTA**

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In the Matter of the Review of the July 2018-
December 2019 Annual Automatic Adjustment
Reports

OAH Docket No. 82-2500-37082

PUC Docket No. E-999/AA-20-171

**POST-HEARING REPLY BRIEF OF THE
LARGE POWER INTERVENORS**

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TABLE OF CONTENTS

	PAGE
I. INTRODUCTION	1
II. ANALYSIS.....	2
A. Minnesota Power Bears a Heavy Burden to Justify Cost Recovery of the Replacement Power Costs Associated with the Forced Outages.....	2
B. Minnesota Power’s Maintenance on Boswell Unit 3 Was Unreasonable and Does Not Reflect Good Utility Practice.....	3
C. Minnesota Power Fails to Affirmatively Demonstrate Good Utility Practice Concerning the Boswell 4 Forced Outage	7
III. CONCLUSION.....	11

Blandin Paper Company; Boise Paper, a Packaging Corporation of America company, formerly known as Boise, Inc.; Cleveland-Cliffs Minorca Mine Inc.; Enbridge Energy Limited Partnership; Gerdau Ameristeel US Inc.; Hibbing Taconite Company; Northern Foundry, LLC; Sappi Cloquet, LLC; USG Interiors, Inc; United States Steel Corporation (Keetac and Minntac Mines); and United Taconite, LLC (collectively, the “Large Power Intervenors” or “LPI”) submit the following reply brief in the matter of the review of Minnesota Power’s (also the “Company” or “MP”) July 2018-December 2019 Annual Automatic Adjustment Report before Administrative Law Judge (“ALJ”) Case in Minnesota Public Utilities Commission (“Commission” or “MPUC”) Docket No. E-999/AA-20-171 and Minnesota Office of Administrative Hearings Docket No. 82-2500-37082.

I. INTRODUCTION

As described in LPI’s initial post-hearing brief, LPI respectfully requests that the ALJ find that Minnesota Power has not met its burden to show that its maintenance practices comport with the Good Utility Practice standard¹ and, therefore, ratepayers should receive a refund of the replacement power costs for the forced outages at issue in this proceeding. In short, with respect to the Boswell Unit 4 hot reheat (“HRH”) steam line outage (the “Boswell 4 Forced Outage”), the Boswell Unit 3 hydrogen leak outage, and the Boswell Unit 3 phase bushings failure outage (the “Boswell 3 Forced Outage” and collectively, the “Forced Outages”),² Minnesota Power, through testimony and briefing, fails to satisfy its affirmative burden to show that it exercised Good Utility Practice. To be sure, Minnesota Power bears a heavy burden to demonstrate that its recovery of the costs associated with the Forced Outages will result in just and reasonable rates. While LPI asserts that Minnesota Power has failed to meet its burden, as described further herein, any doubt as to the reasonableness of Minnesota Power’s cost recovery should be resolved in the favor of

¹ “Good Utility Practice” is defined as “the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition.” Ex. 10 at 6:19-7:2 (Polich Direct); *see* Ex. 14 at 8:10-13 (Undeland Rebuttal) (generally agreeing with the definition of the Good Utility Practice standard articulated by Mr. Polich).

² Additional Response Comment by the Minnesota Department of Commerce, Division of Energy Resources (“Department”) at 6-7 (July 24, 2020) (eDocket No. 20207-165268-01) (“Department Additional Response”).

ratepayers.³ Allowing Minnesota Power to recover the \$7 million in forced outage costs on top of the maintenance allowance already included in its base rates would not be just and reasonable.

LPI submits this reply brief in response to the initial brief filed by the Company. In particular, this reply brief addresses and clarifies (1) Minnesota Power’s burden of proof in this proceeding; (2) the relevant facts and circumstances applicable to the Forced Outages; and (3) the Company’s failure to adequately satisfy its burden to demonstrate that it exercised Good Utility Practice with respect to the Forced Outages.

II. ANALYSIS

A. **Minnesota Power Bears a Heavy Burden to Justify Cost Recovery of the Replacement Power Costs Associated with the Forced Outages**

There is no dispute that Minnesota Power bears the burden of proof in this proceeding.⁴ And while there is general agreement about the definition of Good Utility Practice,⁵ LPI reemphasizes the general burden placed on a utility when it seeks to change rates.⁶ In this case Minnesota Power

must...prove not only that the facts [it] present[s] are accurate, but that the costs [it] seek[s] to recover are rate-recoverable, that the rate recovery mechanisms [it] propose[s] are permissible, and that the rate design [it] advocate[s] is equitable, under the “just and reasonable” standard....^[7]

Minnesota Power only meets this burden when it can make an affirmative showing of proof by a preponderance of the evidence.⁸ While a showing of the preponderance of the evidence takes a certain meaning in a civil case, the Minnesota Supreme Court previously distinguished that definition in the context of a ratemaking proceeding, noting that

the MPUC is not so much concerned with the sufficiency and credibility of the evidence, as it is concerned with whether the

³ See Minn. Stat. § 216B.03.

⁴ See Minnesota Power Initial Br. at 11 (June 28, 2021) (eDocket No. 20216-175506-02) (“MP Initial Br.”).

⁵ *Supra* note 1.

⁶ LPI Post-Hearing Initial Br. at 5-6 (June 28, 2021) (eDocket No. 20216-175502-02) (“LPI Initial Br.”).

⁷ *In the Matter of the Application of CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Minnesota Gas for Authority to Increase Natural Gas Rates in Minnesota*, PUC Docket No. G-008/GR-15-424, Findings of Fact, Conclusions, and Order at 4 (June 3, 2016) (emphasis added).

⁸ *Id.* at 4-5 (citing *In re Minn. Power & Light Co.*, 435 N.W.2d 550, 554 (Minn. App. 1989)).

evidence submitted, even if true, justifies the conclusion sought by the petitioning utility when considered together with the Commission's statutory responsibility to enforce the state's public policy that retail consumers of utility services shall be furnished such services at reasonable rates.^[9]

As applied to this proceeding, Minnesota Power must affirmatively show that its relevant maintenance practices comport with the Good Utility Practice standard. And, once that showing is made, that it is also reasonable for ratepayers to bear the associated replacement power costs.¹⁰ As demonstrated below, the Company cannot satisfy this standard.

B. Minnesota Power's Maintenance on Boswell Unit 3 Was Unreasonable and Does Not Reflect Good Utility Practice

Despite Minnesota Power spending over 16 pages explaining and rationalizing the Boswell 3 Forced Outage,¹¹ the facts and issues concerning the Boswell 3 Forced Outage are narrow and straightforward. Minnesota Power's attempts to obscure, complicate, and confuse the issue should be ignored. The relevant facts needed to ascertain Good Utility Practice with respect to the Boswell 3 Forced Outage are as follows:

- In the spring of 2019, prior to the Boswell 3 Forced Outage, the phase bushings at Boswell Unit 3 were tested and passed inspection;¹²
- Minnesota Power also discovered a leak in the hydrogen cooling system at Boswell Unit 3, which was resolved around June 20, 2019;¹³
- As part of its testing and repair of the hydrogen cooling system, Minnesota Power poured "several barrels" of oil into the seal oil system and did not record the amount of oil that had been used in that process or check to ensure it had all been accounted for after testing;¹⁴
- Approximately 18 days later, on July 8, 2019, Minnesota Power discovered a phase bushing failure at Boswell 3, forcing the unit offline;¹⁵
- Minnesota Power contacted General Electric ("GE") to investigate the failure;¹⁶

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

¹⁰ See LPI Initial Br. at 5-6.

¹¹ See MP Initial Br. at 37-54.

¹² Evidentiary Hearing Transcript Volume 1 ("Hearing Tr.") at 54:23-55:2 (Polich); Ex. 10 at 46:16 (Polich Direct).

¹³ Ex. 10 at 43:20-21, 46:5-11 (Polich Direct).

¹⁴ *Id.* at 43:4-16.

¹⁵ *Id.* at 43:20-21, 46:7-11.

¹⁶ *Id.*

- GE, upon investigation and disassembly, found approximately five gallons of oil in each of the bushings, which MP admitted was from the hydrogen leak;¹⁷ and
- Oil in the bushings can cause the bushings to overheat and fail.¹⁸

A showing of Good Utility Practice may be demonstrated in two ways: (1) by demonstrating that the procedures conform to the “practices, methods, and acts engaged in or approved by a significant portion of the electric industry during the relevant time period,” or (2) proving that the actions in question are consistent with “the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition.”¹⁹

Minnesota Power explained that the hydrogen leak was a novel failure²⁰ and thus it did not introduce any evidence regarding the practices, methods, or acts, engaged in by a significant portion of the electric utility industry in addressing a seal oil float valve failure. Therefore, Minnesota Power can demonstrate that it exercised Good Utility Practice if its actions in addressing the hydrogen leak were consistent with “the practices, methods, and acts, which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition.”²¹ This inquiry should be resolved by a commonsense review of the following question: did Minnesota Power demonstrate it exercised reasonable judgment, in light of the facts known at the time, in introducing barrels of oil into the seal oil system without measuring the quantity or tracking the flow of oil, or can it affirmatively demonstrate that the leaked oil was not the cause of the Boswell 3 Forced Outage? As demonstrated by LPI’s initial brief and the Department’s briefing and expert testimony, Minnesota Power fails to meet its burden.

¹⁷ *Id.* at 47:4-8; Hearing Tr. at 54:18-21 (Polich). To be sure, under normal circumstances, there should be no seal oil in the bushings, and oil likely blocked proper cooling of the bushings. Ex. 10 at 47:5-6 (Polich Direct); Hearing Tr. at 54:21-23 (Polich); *see also*, LPI Initial Br. at 10-11.

¹⁸ *See* Hearing Tr. at 54:18-55:10 (Polich).

¹⁹ *Supra* note 1.

²⁰ MP Initial Br. at 43-44 (describing the “novelty” of the float valve defect).

²¹ *Supra* note 1.

Minnesota Power's actions in addressing the hydrogen leak were not reasonable and were therefore inconsistent with Good Utility Practice. It should be axiomatic that pouring unregulated amounts of oil into a machine, while failing to assess or track the flow and direction of that oil, is reckless and constitutes actions inconsistent with the Good Utility Practice standard. The Department's expert, Mr. Polich, testifies that

MP did not keep track of the amount of seal oil they used during the search for the hydrogen leak, nor did they check where that leaked seal oil may have ended up in the generator prior to the restart of the unit. MP should have monitored the amount of seal it used in the hydrogen seal oil system during its testing and thus where that leaked oil went and clean[ed] up any oil prior to clearing the generator for restart. Based upon my review...MP did not utilize good utility [practice] in their maintenance activities.^[22]

LPI concurs with Mr. Polich's assessment. Minnesota Power failed to exercise Good Utility Practice by failing to regulate the amount of seal oil used during its repair of the hydrogen leak.

Additionally, Minnesota Power cannot relieve itself from its failure to adhere to Good Utility Practice with regard to the hydrogen leak with speculation as to other possible causes of the bushings failure. Minnesota Power's failure to follow Good Utility Practice with respect to the hydrogen leak repairs is the most rational cause of the bushings failure and Minnesota Power cannot affirmatively point to a more likely cause of the Boswell 3 Forced Outage. As explained by Mr. Polich, "[i]n normal circumstances there is no seal oil in the phase bushings."²³ Yet, Minnesota Power admits that there was oil present in the phase bushings at Boswell Unit 3 that was not supposed to be there, as it was from the hydrogen testing.²⁴ And the amount of oil present was not insignificant. GE removed five gallons of the hydrogen leak oil from the bushings and advised Minnesota Power that the presence of oil can lead to overheating.²⁵ Mr. Polich testified that the oil blocked proper cooling of the bushings causing the failure.²⁶ Minnesota Power attempts to undercut the Department's evidence by stressing that neither it nor GE can definitively identify

²² Hearing Tr. at 55:2-13 (Polich). For further discussion of the Department's analysis of the Boswell 3 Forced Outage *see* Department Initial Br. at 20-24 (June 28, 2021) (eDocket No. 20216-175496-02) ("Department Initial Br."); LPI Initial Br. at 9-12; Ex. 10 at 41-48 (Polich Direct).

²³ Hearing Tr. at 54:21-55:13 (Polich).

²⁴ MP Initial Br. at 50-51 (*citing* Exs. 10 and 11, RAP-16 at 3, 5 (Polich Direct) (Public and Nonpublic)).

²⁵ *Id.* at 51 (*citing* Exs. 10 and 11, RAP-15 at 7-8 (Polich Direct) (Public and Nonpublic)).

²⁶ Hearing Tr. at 54:21-55:13 (Polich).

the cause of the Boswell 3 Forced Outage.²⁷ But, as noted by Mr. Polich, the bushings at Boswell Unit 3 were inspected just prior to the Boswell 3 Forced Outage, and were certified for service.²⁸ Given the recent inspection, the presence of oil found in the phase bushings, and the lack of a conclusive finding pointing to another cause of the Boswell 3 Forced Outage, the logical cause of the event is Minnesota Power's failure to adhere to Good Utility Practice during its repair of the hydrogen leak by pouring oil into the unit without regulating the amount of oil used or subsequently where it flowed.²⁹ Indeed, GE even advised Minnesota Power that the oil in the bushings could have caused the failure.³⁰ Minnesota Power has not presented any evidence that the oil was not the cause of the failure, and has not presented any credible evidence supporting a different cause for the failure. In short, Minnesota Power can speculate as to other possible causes, but that is insufficient to meet its affirmative burden of proof in this proceeding.

Notwithstanding its arguments above, Minnesota Power attempts to rescue its reckless handling of the Boswell Unit 3 hydrogen leak by arguing that its self-made solution, which was introducing unregulated amounts of oil into the unit and not tracking it, somehow mitigated a substantially longer outage period, thereby justifying the testing procedures it devised.³¹ There is no credible evidence to support this claim. Furthermore, the duration of the hydrogen leak outage and Minnesota Power's attempts to mitigate it are irrelevant and should be ignored. The determination of Good Utility Practice is narrowly focused on Minnesota Power's decision to pour significant uncontrolled quantities of oil into the unit during its attempts to resolve the hydrogen leak and subsequent failure to determine where the oil went to recover it. Though the Department bears no burden of proof in this matter, it introduced significant evidence that Minnesota Power's failure to track the quantity of seal oil used or where it leaked does not comport with Good Utility

²⁷ MP Initial Br. at 52.

²⁸ Hearing Tr. at 54:21-55:13 (Polich).

²⁹ It is also worth noting that Minnesota Power's alarm system that would have notified workers of an oil overflow "was not properly configured at the time," which further demonstrates the Company's oversights with regard to the hydrogen leak testing. *See* MP Initial Br. at 50.

³⁰ Ex. 10 RAP-16 at 3, 5 (Polich Direct).

³¹ MP Initial Br. at 43-44.

Practice, and Minnesota Power's attempts to rationalize that decision should be rejected.³² Therefore, LPI respectfully urges the ALJ to recommend a \$1,764,695 ratepayer refund of the replacement power costs associated with the Boswell 3 Forced Outage.

C. Minnesota Power Fails to Affirmatively Demonstrate Good Utility Practice Concerning the Boswell 4 Forced Outage

Minnesota Power solely bears the burden to demonstrate that the Boswell 4 Forced Outage costs were reasonably and prudently incurred, applying Good Utility Practice.³³ Notwithstanding Minnesota Power's burden of proof, the Department offers significant evidence indicating that the Boswell 4 Forced Outage resulted from Minnesota Power's failure to implement Good Utility Practice with respect to its maintenance practices at Boswell Unit 4. LPI generally agrees with the Department's analysis and will not fully summarize it herein; however, some of the key findings include:

- Minnesota Power last inspected the portions of the HRH line that failed in 2010;³⁴
- The HRH line was built in 1980³⁵ and the welds in the HRH line were at the end of their usable life;³⁶
- The cracks in the HRH line that led to the failure formed approximately 60,000 to 70,000 operating hours before the February 2019 failure, which is likely in the 2011-2012 timeframe;³⁷
- Minnesota Power's use of non-ultrasonic examination on a 10-year basis was both too infrequent and not thorough enough;³⁸

³² Minnesota Power also argues that its "innovative testing and repair" of the Boswell Unit 3 hydrogen leak "should not be punished by denying Company recovery of replacement energy expenses." MP Initial Br. at 54. Minnesota Power's arguments at equity should also be ignored as they fail to consider the larger equitable issue in this proceeding, namely: whether is it just and reasonable for Minnesota Power and its shareholders to receive a \$12.4 million windfall based on its underspend on its allotted maintenance budget during the period while simultaneously burdening ratepayers with approximately \$7 million in pass through replacement power costs. *See* LPI Initial Br. at 13-14.

³³ Order Accepting 2018-2019 Electric AAA Reports; Notice of and Order for Hearing at 4-5 (Sept. 16, 2020) (eDocket No. 20209-166630-01) ("Referral Order").

³⁴ Ex. 10 at 25:22 (Polich Direct).

³⁵ Ex. 7 at 14:5-9 (Undeland Direct).

³⁶ Ex. 10 at 33:25-34:12 (Polich Direct).

³⁷ Department Initial Br. at 9-10 (*citing* Ex. 10 at 32, RAP-6 at 7 (Polich Direct) (Feb. 20, 2019 Thielsch Report)).

³⁸ *See, e.g.*, Department Initial Br. at 10.

- Both the Electric Power Research Institute (“EPRI”) and American Society of Mechanical Engineers (“ASME”) recommend a five-year inspection schedule;³⁹
- EPRI recommends the use of phased-array ultrasonic testing;⁴⁰ and
- Had Minnesota Power conducted inspections more thoroughly or more frequently, the failure likely could have been prevented. Indeed, Structural Integrity Associates, Inc. noted that “it is difficult to understand how [the cracks] would not have been identified and reported previously.”⁴¹

As articulated in its initial brief, LPI agrees with the Department’s analysis, demonstrating that Minnesota Power failed to adhere to Good Utility Practice with regard to its maintenance practices at Boswell Unit 4.⁴² Regardless of LPI’s and the Department’s conclusions, it remains solely Minnesota Power’s burden to affirmatively demonstrate that it did exercise Good Utility Practice, which it fails to do.

The Department introduced evidence that a five-year 100% ultrasonic inspection schedule was industry standard for the HRH line.⁴³ Rather than offer an alternative showing of the relevant industry standard, Minnesota Power criticizes the Department’s reliance on specific guidance materials. For instance, Minnesota Power questions the Department’s reliance on EPRI by suggesting that it reflects “optimum” practice rather than practices widely adopted by the utility industry.⁴⁴ “Hence, EPRI recommendations are only one data point among many that must be taken into account in establishing the parameters of good utility practice.”⁴⁵ But, the evidence shows that almost 50% of respondents in an EPRI survey followed the EPRI Guidelines related to ultrasonic flaw detection, with some variation in the specific crack size used.⁴⁶ Though Minnesota Power criticizes the Department’s reliance on EPRI by essentially arguing that EPRI’s guidelines do not qualify as evidence of practices and methods that are used industry wide, it fails to offer its own example of an industry standard or baseline from which to compare. To be sure, it is solely

³⁹ *Id.* at 10-15; *see also* Ex. 10 at 24:1-25-13 (Polich Direct). LPI will not repeat the technical analysis provided by the Department; however, the Department’s briefing provides an analysis of both the applicable ASME and EPRI guidelines and the applicability of those guidelines.

⁴⁰ *Id.* at 13 (*citing* Ex. 14 at 20 (Undeland Rebuttal)). The Department’s witness, Mr. Polich, further clarified the applicability of the EPRI guidelines during the evidentiary hearing. *See* Hearing Tr. at 66:16-67:17 (Polich).

⁴¹ Ex. 10 at 34:5-6 (Polich Direct).

⁴² LPI Initial Br. at 6-9.

⁴³ *See* Ex. 10 at 24:1-25:13 (Polich Direct); *see generally id.* at 20-41 (citations omitted); Department Initial Br. at 8-15.

⁴⁴ MP Initial Br. at 68-69.

⁴⁵ *Id.* at 69.

⁴⁶ Ex. 14, PJU-1 at 33 (Undeland Rebuttal) (EPRI Guidelines).

Minnesota Power's burden to establish an industry standard for purposes of a Good Utility Practice determination.⁴⁷

Minnesota Power's reliance on Thielsch Engineering, Inc. ("Thielsch"), which is an engineering firm retained by Minnesota Power on high-energy piping matters, is insufficient to meet this burden. Minnesota Power's arguments are based on an undocumented statement from Thielsch indicating that a 10-year inspection schedule was consistent with other coal generation facilities.⁴⁸ This evidence should be ignored for at least two reasons. First, Thielsch did not testify in this proceeding and their undocumented and unconfirmed statement is not credible. Minnesota Power failed to proffer testimony, a declaration, or even a written report by Thielsch to support their commentary on their other customers' inspection schedules. Instead Minnesota Power offered testimony from its Thermal Business Operations Manager⁴⁹ that someone from Thielsch reported to him that their other customers' inspection schedules for their hot reheat lines are "consistent" with Minnesota Power's.⁵⁰ Though this hearsay is admissible, it must have probative value and be "the type of evidence on which reasonable, prudent persons are accustomed to rely in the conduct of their serious affairs."⁵¹ In this case, the hearsay amounts to little more than an offhand comment and has no probative value.⁵² LPI concurs with the Department's assessment that Thielsch's statement should be given limited weight.⁵³

Second, Minnesota Power's reliance on Thielsch is misplaced, because Thielsch's statements, even if they could be considered serious evidence in this proceeding, do not establish an industry standard, which is critical to a demonstration of Good Utility Practice. Here, it appears that the extent of Thielsch's advice was an oral comment to Minnesota Power that of their 50 "utility" customers, none performed phased array ultrasonic testing on 100% of their HEP system every five years.⁵⁴ Minnesota Power failed to provide a formal survey, information on the types of facilities those customers were operating, or any indication of what testing the customers did

⁴⁷ See Referral Order at 4-5.

⁴⁸ Ex. 7 at 18-19 (Undeland Direct); *see also* Department Initial Br. at 15.

⁴⁹ *Id.* at 1:6-9.

⁵⁰ *Id.* at 19:1-4.

⁵¹ Minn. R. 1400.7300, subp. 1.

⁵² The Department also questions the value of Minnesota Power's reliance of hearsay evidence. *See* Department Initial Br. at 15.

⁵³ Department Initial Br. at 15.

⁵⁴ Ex. 7 at 18-19 (Undeland Direct); MP Initial Br. at 69.

perform in lieu of 100% phased ultrasonic every five years. In short, there is no way to determine whether Thielsch's comment can be applied to the Boswell 4 system and there was no opportunity to question Thielsch or ascertain the answers to these questions. Therefore, Minnesota Power has not shown that Thielsch's recommendations can be treated as practices engaged in by a "significant portion of the electric utility industry" for purposes of determining Good Utility Practice. The Department put forth clear evidence of the appropriate industry standard, and Minnesota Power failed to meet its burden to show that its procedures were consistent with that standard or that a different standard should apply.

Minnesota Power also failed to show, under the second prong of the Good Utility Practice standard, that its decision to forego 100% ultrasonic inspection on a five-year schedule (and indeed not inspect this particular weld at all over the course of nine years) was a reasonable exercise of judgment in light of the facts known and other considerations such as safety, reliability, and cost.⁵⁵ First, Minnesota Power's failure to inspect the HRH line on a more regular basis was unreasonable in light of industry knowledge and Minnesota Power's knowledge of the safety and reliability consequences of HRH line failures throughout the industry. Mr. Polich testified that EPRI had more than 42 studies on seam-welded pipe failures by 2017, and high-energy piping failure was well known and preventable.⁵⁶ Mr. Polich further testified that HRH steam line failures can have dire consequences, including extensive facility damage and loss of life.⁵⁷ Minnesota Power was aware of this history.⁵⁸ In light of this extensive history of safety and reliability issues, Minnesota Power should have been adequately and frequently inspecting the HRH line.

Further, the HRH line system at Boswell 4 was approximately 39 years old,⁵⁹ and nearly all of the welds had exceeded their life fraction consumed values (meaning they had exceeded their usable life).⁶⁰ Indeed, Mr. Polich testified that Minnesota Power's piping did not guarantee a leak

⁵⁵ *Supra* n. 1. LPI is comprised of several large industrial companies who are intimately familiar with the operation of large facilities; however, members understand that crafting practices and procedures is a balancing act requiring consideration of safety, reliability, and cost. *See, e.g., In the Matter of a Rider for Large Power Demand Response*, PUC Docket No. E-015/M-18-735, LPI Initial Comment at 7-8 (Feb. 20, 2019) (describing the challenges and considerations industrial customers face when determining whether to make operational changes).

⁵⁶ Ex. 10 at 22:1-11(Polich Direct); Hearing Tr. at 53:22-25 (Polich).

⁵⁷ Ex. 10 at 22:7-9 (Polich Direct); LPI Initial Br. at 6.

⁵⁸ Hearing Tr. at 37:11-39:12 (Undeland).

⁵⁹ Ex. 7 at 14:5-9 (Undeland Direct).

⁶⁰ Ex. 10 at 33:25-34:12 (Polich Direct).

before burst, meaning that a far more catastrophic result was only narrowly avoided.⁶¹ Given the age and condition of the HRH line, Minnesota Power should have known that more frequent inspection was needed to ensure safety and reliability. Indeed, Structural Integrity Associates, Inc. noted that “it is difficult to understand how [the cracks] would not have been identified and reported previously.”⁶²

Finally, cost is a relevant factor in assessing whether Minnesota Power’s actions were reasonable. Minnesota Power maintains that adopting EPRI’s guidelines is cost-prohibitive.⁶³ However, Minnesota Power failed to weigh those costs against the important safety and reliability risks associated with its actions. In sum, in light of the facts described herein, Minnesota Power is unable to demonstrate that its inspection practices pertaining to the Boswell 4 Forced Outage are reasonable in light of the facts known to it, including considerations of safety, reliability, and cost.

Because Minnesota Power (1) fails to establish an industry standard or baseline; and (2) does not affirmatively demonstrate that its maintenance practices were reasonable, it cannot satisfactorily meet its burden to show that its actions comported with Good Utility Practice. As such, LPI urges the ALJ to recommend denial of the forced outage costs associated with the Boswell 4 Forced Outage.

III. CONCLUSION

Consistent with its initial brief, LPI urges the ALJ to recommend denial of cost recovery of the costs associated with the Forced Outages. Through testimony, examination, and briefing, Minnesota Power fails to affirmatively satisfy its burden to show that its maintenance practices comport with the Good Utility Practice standard. Further, the Company is unable to adequately demonstrate that recovery of the replacement power costs is consistent with the fundamental “just and reasonable” standard contained within Minn. Stat. § 216B.03. Therefore, based on the

⁶¹ *Id.* at 33:21-23 (Polich Direct).

⁶² *Id.* at 34:5-6 (Polich Direct).

⁶³ Minnesota Power Initial Br. at 72.

foregoing, the ALJ should recommend that Minnesota Power issue a refund to ratepayers based on its imprudently incurred replacement power costs.

Dated: July 12, 2021

Respectfully submitted,

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