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STATE OF MINNESOTA
BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of the Application of
Minnesota Power for a Certificate of Need for
the HVDC Modernization Project in
Hermantown, Saint Louis County;

In the Matter of the Application of
Minnesota Power for a Route Permit for a
High Voltage Transmission Line for the
HVDC Modernization Project in
Hermantown, Saint Louis County.

OAH 5-2500-39600
MPUC E-015/CN-22-607
MPUC E-015/TL-22-611

REBUTTAL TESTIMONY OF ROBERT MCKEE

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name, employer, title, and business address.

A. My name is Robert McKee. I am employed by ATC Management, Inc., the corporate manager of American Transmission Company LLC (collectively, ATC). My job title is Strategic Projects and Execution Director and my business address is 2485 Rinden Road, Cottage Grove, WI 53527.

Q. Are you the same Robert McKee who filed direct testimony in this proceeding on behalf of ATC in support of its Arrowhead Substation Alternative?

A. Yes.

Q. What is the purpose of your rebuttal testimony?

A. My rebuttal testimony responds to the direct testimony filed by Minnesota Power (MP), the Minnesota Department of Commerce – Division of Energy Resources (DOC-DER), and the Large Power Intervenors (LPI).¹ My rebuttal testimony:

- Corrects certain statements made by MP regarding ATC, the history of discussions between ATC and MP regarding the Project and the Arrowhead Substation Alternative, and the Midcontinent Independent System Operator (MISO) planning process;
- Responds to certain of the concerns raised by MP regarding the Arrowhead Substation Alternative; and
- Addresses the requirements MP asks the Commission to place on ATC if it approves the Arrowhead Substation Alternative.

I also introduce ATC's other rebuttal witnesses and identify the issues they address in their testimonies.

Q. Are you sponsoring any exhibits in support of your testimony?

A. Yes. I attach the following Rebuttal Schedule:

- Rebuttal Schedule 1 – E-mail correspondence between ATC and MP, August 2023.

II. OVERALL RESPONSE TO MINNESOTA POWER TESTIMONY

Q. Before addressing specific issues raised in the other parties' testimonies, do you have any general concerns or observations regarding the direct testimony provided by Minnesota Power?

¹ While LPI, a consortium of MP's largest industrial customers, provided direct testimony that raised concerns regarding MP's proposed overall Project, LPI did not directly address the Arrowhead Substation Alternative. Should LPI raise new issues with respect to ATC or the Arrowhead Substation Alternative in its Rebuttal Testimony, ATC may seek the opportunity to respond.

1 A. Yes. I am concerned that Minnesota Power has not painted a full or accurate picture
2 regarding several important matters, including regarding ATC, our discussions with MP,
3 ATC's and MP's interactions with MISO, and the MISO planning process. I am
4 particularly concerned that the testimony filed by MP witnesses Dan Gunderson and
5 Christian Winter distorts the history of ATC's advocacy of the Arrowhead Substation
6 Alternative since October of 2022; at times, it appears designed to blame ATC for problems
7 of MP's creation because of the overall approach it chose to implement to connect the
8 upgraded Square Butte HVDC converter station in Minnesota to the AC system. For
9 example, Mr. Gunderson characterizes ATC as not working cooperatively with MP and
10 bringing the Arrowhead Substation Alternative forward late in the game, thereby
11 purportedly threatening both the in-service date of the Project and potential state and
12 federal funding. Specifically, Mr. Gunderson claims "ATC has only just proposed its
13 alternative for the 345 kV interconnection infrastructure as of September 2023."² Similarly,
14 he states "ATC has not engaged meaningfully with Minnesota Power to coordinate or plan
15 for the [Arrowhead Substation Alternative]. The communication and minimal planning
16 information that ATC has shared with Minnesota Power has primarily taken place through
17 the regulatory process."³ While I understand that Mr. Gunderson might not have been as
18 involved in the ongoing communications between ATC and MP as others at Minnesota
19 Power, including Vice President of Strategy and Planning Julie Pierce, Mr. Gunderson's
20 testimony is misleading.

² Gunderson Direct, p. 20.

³ Gunderson Direct, pp. 22-23.

1 As I discussed at pages 10-12 of my direct testimony and in Schedule 1, ATC and
2 MP discussed the Arrowhead Substation Alternative multiple times between September
3 2022 and September 2023. Moreover, along with Ms. Pierce, Mr. Gunderson himself
4 participated in a February 7, 2023 conversation with Tom Dagenais and me on behalf of
5 ATC, concerning the HVDC Modernization Project and development at ATC's Arrowhead
6 345/230 kV Substation. During that discussion, MP discussed its plans for the HVDC Line
7 and the need to upgrade the converter stations. ATC again conveyed that its Arrowhead
8 345/230 kV Substation should be utilized to support this Project, but agreed, at MP's
9 request, to further discussions with MP and MISO concerning overall HVDC development.
10 Both MP and ATC also expressed the desire to work together, and MP indicated that it
11 notified the Commission that it would file a certificate of need application for the Project
12 in the future. However, MP at that time did not mention that on November 30, 2022, it had
13 stated in its Request for Exemptions from Certain Certificate of Need Application
14 Requirements ("Request for Exemptions") that "the Project would *require the construction*
15 *of a new St Louis County 345 kilovolt ("kV")/230 kV substation* located less than one mile
16 west of the current Arrowhead Substation"⁴ – i.e., at that time, and from MP's perspective,
17 it was a foregone conclusion that MP was constructing the St. Louis County substation and
18 interconnecting the upgraded Square Butte converter station to it.

19 Mr. Winter also presents an incomplete summary of the interactions between ATC
20 and MP. Referring to the September 23, 2022 meeting I discuss in my direct testimony at
21 page 10, Mr. Winter states that, at that time, MP "was still considering options to

⁴ Request for Exemptions at 1 (Nov. 30, 2022) (eDocket No. 202211-190996-01) (Emphasis added).

1 interconnect the HVDC System to the local or regional transmission system: either the MP
2 Arrowhead 230 kV/115 kV Substation or the ATC Arrowhead 345 kV/230 kV
3 Substation.”⁵ In fact, regarding this interconnection, MP indicated [NON-PUBLIC

4 **INFORMATION BEGINS**

8 **NON-PUBLIC**

9 **INFORMATION ENDS].**⁶ At that time, ATC had no reason to anticipate immediate
10 development of the duplicative St. Louis County Substation, and ATC expected to work
11 collaboratively with MP to determine the best course forward. That kind of collaborative
12 effort would have been consistent with the past course of business between ATC and fellow
13 transmission owners, including MP. However, by October 10, 2022, MP indicated it was
14 considering an entirely new substation. By October 14, 2022, MP informed ATC that it
15 intended to pursue this new substation and, by October 17, MP was asking MISO to
16 evaluate how this proposed new substation could be further interconnected with the
17 surrounding transmission system in the process to identify the Tranche 2 regional portfolio
18 of the Long-Range Transmission Planning effort.

19 As Mr. Winter acknowledged, this marked a dramatic change of course in the span
20 of just a couple of weeks. In email correspondence dated August 28, 2023, Mr. Winter
21 stated:

⁵ Winter Direct, p. 54, citing Winter Direct, Schedule 24.

⁶ Winter Direct, Schedule 24, pp. 6-7 (marked by MP as “NON-PUBLIC DOCUMENT TRADE SECRET IN ITS ENTIRETY”).

1 I recognize that MP shifted gears a bit abruptly last fall as we were
2 having discussions with you about the interconnection configuration
3 of our HVDC Modernization Project, so I have compiled some of
4 the technical rationale behind that decision-making in order to share
5 it with you. Admittedly, we probably should have been more
6 straightforward about that at the time.⁷

7 So, while Mr. Winter now chides ATC for not being forthcoming with information
8 regarding the Arrowhead Substation Alternative,⁸ MP was certainly not forthcoming with
9 its rationale for reversing course and abandoning the idea of leveraging the existing ATC
10 Arrowhead Substation. In fact, MP did not fully describe its rationale for proposing the St.
11 Louis County substation until after ATC intervened in this docket—in a September 23,
12 2023 call. Had MP been more forthcoming with its plan, rationale and analysis earlier,
13 ATC would have been in a position to respond and further demonstrate the benefits of the
14 Arrowhead Substation Alternative, potentially avoiding the need to intervene in this
15 proceeding. Moreover, in his criticisms of ATC, Mr. Winter ignores the discussions
16 between ATC and MP in both February and August of 2023 and discussions involving
17 ATC, MP and MISO in October of 2022 and July of 2023 regarding the ability of the ATC
18 Arrowhead Substation to provide the necessary interconnection for the Project.

19 Finally, I would note that it appears MP has not been transparent about its plans
20 with other key stakeholders either. As LPI witness Kavita Maini testifies:

21 Minnesota Power has not been transparent to its customers about its
22 intentions to propose such a large project as this one. ... It is worth
23 noting that there has been little to no dialogue on this Project
24 between Minnesota Power and its large customers, yet Minnesota
25 Power previously engaged stakeholders in advance of its last

⁷ See Rebuttal Schedule 1, attached.

⁸ Winter Direct, p. 58 (“It was only after ATC’s proposal of the ATC Arrowhead Alternative on September 15, 2023, by filing comments in this proceeding, that Minnesota Power was able to get a meeting with ATC representatives to elaborate on its technical and practical concerns with moving the point of interconnection for its HVDC System to the ATC Arrowhead 345 kV/230 kV Substation.”)

1 resource plan and is on the verge of restarting that stakeholder
2 process for its next resource plan to be filed in 2025.⁹

3 MP may be frustrated that others are now raising concerns or offering alternatives
4 to MP's proposal in this regulatory setting. However, it is MP that decided to push this
5 docket and the proposal to build the St. Louis County substation forward, putting ATC and
6 others such as LPI in the unfortunate position of intervening in this proceeding, rather than
7 working through these issues in a collaborative stakeholder process.

8 Overall, I am concerned that Minnesota Power presents an incomplete and
9 inaccurate picture regarding several important matters, including in its description of ATC,
10 our discussions with MP, ATC's and MP's interactions with MISO and the MISO planning
11 process, the comparative costs and other impacts of MP's and ATC's proposals, the alleged
12 risk of delay, including Mr. Gunderson's concerns about the need for a new transmission-
13 to-transmission interconnection agreement, alleged risks of the loss of funding and the
14 alleged benefits to Wisconsin if the Arrowhead Substation Alternative is chosen by the
15 Commission. To clarify the record, I address the issues related to ATC, our discussions
16 with MP, our interactions with MISO and the MISO planning process, and the
17 transmission-to-transmission interconnection agreement. I will also introduce the other
18 ATC witnesses who will address the remaining issues and concerns raised by MP. As these
19 witnesses demonstrate, MP's concerns with the Arrowhead Substation Alternative lack
20 merit. The record developed in this proceeding demonstrates that the Arrowhead
21 Substation Alternative: (1) avoids the need to build a new substation less than one mile
22 from the existing ATC Arrowhead Substation; (2) meets the purpose and need of the

⁹ Maini Direct, p. 23.

1 Project, while also providing efficiency and reliability benefits when compared to MP's
2 proposal; and (3) imposes fewer costs and environmental and human impacts than MP's
3 proposal. Therefore, ATC continues to request that the Commission grant MP a certificate
4 of need for the Project, modified to include the Arrowhead Substation Alternative.

5 **III. ATC AND ITS MINNESOTA TRANSMISSION ASSETS**

6 **Q. In his direct testimony at page 7, MP witness Mr. Gunderson suggests that ATC was**
7 **created some time after WEC Energy Group's acquisition of Wisconsin Public**
8 **Service, stating that "Wisconsin Public Service . . . was acquired by what is now WEC**
9 **Energy Group in 2007, eventually creating ATC." Is that correct?**

10 A. No. ATC was formed in 2001, following a 1999 act of the Wisconsin legislature. ATC's
11 creation had no relationship to the acquisition of Wisconsin Public Service by WE Energies
12 (now WEC Energy Group), which occurred in 2015.

13 **Q. Can you further explain the creation of ATC, its current business and ownership**
14 **structure and its transmission assets?**

15 A. ATC was officially formed in January 2001 as a limited liability corporation (LLC) under
16 Wisconsin law. As an LLC, ATC is not a traditional vertically integrated "investor-owned
17 utility" (IOU), such as MP, but is a stand-alone transmission only company with member
18 owners that have varying business models. ATC has grown from having five member
19 owners at its inception to now having 26 member-owners, including several IOUs,
20 municipal electric utilities, and electric cooperatives. MP's parent company, ALLETE, Inc.
21 ("ALLETE"), became a partial owner in 2006 and has an approximately eight percent
22 ownership interest in ATC. ATC's assets now include more than 10,000 miles of

1 transmission lines and more than 580 substations in Minnesota, Wisconsin, Michigan and
2 Illinois.

3 **Q. Has MP accurately characterized ATC's Minnesota assets?**

4 A. No. MP errs in at least two respects. First, Mr. Gunderson fails to recognize the full extent
5 of ATC's Minnesota assets when he testifies that MP's Arrowhead 230kV/115kV
6 substation is "wholly-owned by Minnesota Power."¹⁰ That is not correct. As ATC witness
7 Mr. Larsen explained in both his direct and rebuttal testimonies, ATC owns certain
8 facilities within the footprint of MP's Arrowhead substation.

9 Second, Mr. Gunderson claims that "the ATC Arrowhead Substation was built to
10 benefit the Wisconsin AC transmission system and Wisconsin electrical users."¹¹ In fact,
11 Mr. Gunderson attempts to portray the ATC Arrowhead Substation and the Arrowhead
12 Substation Alternative as providing benefits only to Wisconsin customers. Again, this is
13 simply incorrect. ATC witness Mr. Dagenais addresses the overall system benefits of the
14 Arrowhead Substation Alternative. As for the ATC Arrowhead Substation itself, in the
15 original proceeding regarding the Arrowhead-Weston Project, the Administrative Law
16 Judge found:

17 The Arrowhead Project will improve the electrical system reliability for
18 consumers in *both* Minnesota and Wisconsin. The existing system of
19 distribution has only one major source of electricity for western Wisconsin
20 from Minnesota, the 345 kV King-Eau Claire-Arpin HVTL (K-EC-A
21 HVTL). The K-EC-A HVTL experienced a significant failure on June 25,
22 1998 that adversely affected electricity consumers in *both* Wisconsin and
23 Minnesota. Other situations have arisen over the past few years that could
24 have resulted in failures similar to that on June 25, 1998. Adding a second
25 345 kV connection to the Wisconsin transmission and distribution systems

¹⁰ Gunderson Direct, p. 6.

¹¹ Gunderson Direct, p. 7.

1 will reduce the likelihood of such failures and *improve the reliability of the*
2 *electrical system for both Minnesota and Wisconsin consumers.*¹²

3 All customers benefit from sound and collaborative transmission planning and
4 expansion and ATC is proud to own assets that provide benefits to customers in Minnesota,
5 Wisconsin, and the region.

6 **Q. Does ATC exercise functional control over its transmission facilities?**

7 A. No. Effective February 1, 2002, ATC transferred functional control of its transmission
8 facilities to MISO. MISO now provides transmission service over ATC-owned
9 transmission facilities subject to the terms and conditions of the MISO Open Access
10 Transmission, Energy, and Operating Reserve Markets Tariff (Tariff). ATC operates
11 transmission facilities that it owns at MISO's direction.

12 **Q. For what purpose was ATC formed?**

13 A. Under Wisconsin Statutes, ATC "has as its sole purpose the planning, constructing,
14 operating, maintaining and expanding of transmission facilities, and the providing of
15 transmission service, to provide for *an adequate and reliable transmission system that*
16 *meets the needs of all users* that are dependent on the transmission system and that supports
17 effective competition in energy markets *without favoring any market participant.*"¹³
18 Given this sole purpose, Wisconsin Statutes also specify that ATC may not "bypass the
19 distribution facilities of an electric utility or provide service directly to a retail customer or

¹² *In the Matter of the Exemption Application by Minnesota Power for a 345/230 kV High Voltage Transmission Line Known as the Arrowhead Project*, OAH Docket No. 10-2901-12620-2, MEQB Docket No. MP-HVTL-EA-1-99 (January 29, 2001) at Finding 50 (attached to the Direct Testimony of MP witness Christain Winter at Schedule 32) (emphasis added).

¹³ Wis. Stats. 196.485(1)(ge) (emphasis added), accessible at <https://docs.legis.wisconsin.gov/statutes/statutes/196/485>

1 member.”¹⁴ ATC fulfills its purpose by working to ensure and support an adequate,
2 efficient and reliable transmission system and believes this goal is best achieved through a
3 thoughtful and collaborative transmission planning and development process.

4 **Q. How is ATC’s purpose advanced by intervening in this proceeding?**

5 A. Bringing the Arrowhead Substation Alternative forward is consistent with ATC’s statutory
6 purpose. As ATC has maintained since its first discussions with MP regarding the Project,
7 ATC supports responsible and collaborative transmission planning and development that
8 leverages existing facilities as appropriate, to most efficiently and cost-effectively provide
9 adequate and reliable transmission service, reducing costs to customers. In contrast,
10 building a St. Louis County 345/230 kV substation in such close proximity to ATC’s
11 Arrowhead 345/230 kV substation would fail to minimize costs, create greater
12 environmental and associated impacts, and result in a duplicative, unnecessary substation
13 facility.

14
15 **IV. ATC AND MP DISCUSSIONS REGARDING THE PROJECT AND THE**
16 **ARROWHEAD SUBSTATION ALTERNATIVE**
17

18 **Q. In his Direct Testimony, Mr. Gunderson frames the Arrowhead Substation**
19 **Alternative as “an electrical system alternative” proposed by ATC.¹⁵ Has MP always**
20 **viewed it this way?**

21 A. No. In fact, as I discussed in my direct testimony and as discussed above, until changing
22 course over an approximately two-week period in 2022, MP had proposed to interconnect

¹⁴ Wis. Stats. 196.485(3m)(a)2.b., accessible at <https://docs.legis.wisconsin.gov/statutes/statutes/196/485>
[https://docs.legis.wisconsin.gov/document/statutes/196.485\(3m\)\(a\)2.b](https://docs.legis.wisconsin.gov/document/statutes/196.485(3m)(a)2.b)

¹⁵ Gunderson Direct, p. 5.

1 the Project at the ATC Arrowhead Substation in a very similar way as ATC proposes in
2 this proceeding. Mr. Dagenais discusses this matter from a technical perspective, but I find
3 it odd that MP now describes a modification of the Project consistent with its own initial
4 proposal as an “electrical system alternative” that does not meet the purpose and need of
5 the Project.

6 **Q. Mr Gunderson and Mr. Winter also discuss the history of discussions between MP**
7 **and ATC regarding the Project and the potential inclusion of the Arrowhead**
8 **Substation Alternative in the Project. Have they accurately summarized that history?**

9 A. No. Throughout their testimonies Mr. Gunderson and Mr. Winter present a limited and
10 therefore inaccurate summary of the discussions regarding the Project and the Arrowhead
11 Substation Alternative, as I mentioned above and demonstrate in more detail below.

12 **Q. Mr. Gunderson specifically alleges that “ATC has not engaged meaningfully with**
13 **Minnesota Power to coordinate or plan for the ATC Arrowhead [Substation]**
14 **Alternative.”¹⁶ How do you respond?**

15 A. First, I would again note that the Arrowhead Substation Alternative is very similar to what
16 MP and ATC discussed in September 2022, so this is not a new concept. Second, on
17 multiple occasions ATC indicated its concerns with MP’s direction and its view that the
18 ATC Arrowhead Substation should be leveraged, including as early as October 2022 in a
19 meeting with MISO that both MP and ATC attended, which included a visual showing the
20 ability of the ATC Arrowhead Substation to accommodate the Project. Third, while MP
21 has ignored our concerns about Arrowhead since announcing its intention to build a new

¹⁶ Gunderson Direct, p. 22.

1 St. Louis County Substation in October 2022, MP has sought ATC’s collaboration with it
2 to make the case to MISO about the value of the inclusion of HVDC in the LRTP Tranche
3 2 portfolio, in which we have been actively engaged. Finally, ATC continues to collaborate
4 with MP on planning issues, including a meeting in February 2024 to discuss the status of
5 Tranche 2 and the possibility of suggesting project ideas together.

6 **Q. Mr. Winter makes a similar allegation, stating that “ATC did not make any**
7 **meaningful effort to further engage with Minnesota Power [after October 2022] . . .**
8 **prior to MP’s filing of the Application on June 1, 2023.”¹⁷ How do you respond?**

9 A. For the reasons I discussed above and in my direct testimony, including Schedule 1 to that
10 testimony, I do not believe this accurately reflects ATC’s efforts. Moreover, “meaningful
11 effort to further engage” requires two parties putting forth that effort. In my view, once
12 MP determined to build its own new substation, as Mr. Winter himself testifies, it
13 “dismiss[ed] what has become the [Arrowhead Substation Alternative] without the need to
14 complete detailed studies or analytical modeling. Instead, Minnesota Power focused its
15 resources on analyzing and developing the Project in preparation for its submittal,”
16 including planning to build the proposed new St. Louis County Substation.¹⁸

17 **IV. HVDC MODERNIZATION PROJECT AND MISO’S PLANNING PROCESS**

18 **Q. How do Mr. Gunderson and Mr. Winter discuss the Project and the Arrowhead**
19 **Substation Alternative as it relates to MISO and the overall transmission planning**
20 **process?**

¹⁷ Winter Direct, p. 56.

¹⁸ Winter Direct, pp. 56-57.

1 A. Mr. Gunderson states that “Minnesota Power has been engaged with MISO throughout the
2 planning process and has paced with MISO on our current plan filed with the Commission”
3 and that MP has coordinated with MISO on long-term planning, particularly regarding the
4 HVDC system.¹⁹ Mr. Winter testifies that MP’s proposed new St. Louis County substation
5 “is MISO’s original idea”²⁰ and that, rather than ATC participating in this proceeding “a
6 better approach would be for ATC to submit its ideas to MISO for consideration in the
7 ongoing LRTP Tranche 2 analysis.”²¹

8 **Q. How do you respond?**

9 A. I find MP’s testimony on the MISO process, as it relates to either the Project as proposed
10 or the Arrowhead Substation Alternative, confusing at best. MP’s testimony suggests that
11 its proposal has been fully vetted through the MISO process, while the Arrowhead
12 Substation alternative has not. Mr. Winter even goes so far as to accuse ATC of having
13 “bypassed” the MISO process by proposing the Arrowhead Substation Alternative in this
14 docket. ATC witness Mr. Dagenais discusses this issue in greater detail in his rebuttal
15 testimony. However, I feel compelled to respond as well given my long history of working
16 collaboratively with other transmission owners and MISO representatives in the MISO
17 planning process, including serving as Chair of the MISO Planning Advisory Committee
18 for seven years.

19 First, to my knowledge, MP’s HVDC Modernization Project has not been fully
20 vetted through the collaborative MISO process. The Project is currently listed in Appendix
21 B of the MISO Transmission Expansion Plan (MTEP), meaning that it has not been

¹⁹ Gunderson Direct, p. 10.

²⁰ Winter Direct, p. 46.

²¹ Winter Direct, p. 40.

1 formally approved by MISO. The Project is also not included on MISO's list of MP-
2 sponsored projects being reviewed as part of the current MTEP cycle and, as Mr. Dagenais
3 discusses further, it still does not appear that MP has submitted the Project for review and
4 approval through the MTEP process.

5 Second, MP's suggestion that ATC should have taken the Arrowhead Substation
6 Alternative to MISO and not intervened here is simply incorrect. As the Project proposer,
7 MP has the responsibility for bringing the Project to MISO through the MTEP process. In
8 that process, ATC and other stakeholders could have provided feedback and input,
9 including presenting the Arrowhead Substation Alternative.

10 Third, to degree that our company had the ability to do so, ATC properly and
11 actively participated in planning processes identified in the MISO tariff in which the
12 Project proposed by MP was addressed, namely (1) the transmission-to-transmission
13 Interconnection process set forth in Attachment FF – ATCLLC Local Planning Process in
14 the MISO Tariff, and (2) MISO's Long Range Transmission Planning (LRTP) effort (see
15 Attachment FF Sec. I.C regarding one of the inputs to the development of the MTEP being
16 "analyses developed by the Transmission Provider to provide for a reliable Transmission
17 System ..."). First, ATC was receptive and sought to collaborate with a neighboring
18 transmission owner's (MP's) request to adjust the interconnection between our facilities,
19 as is routinely done as part of transmission-to-transmission planning efforts between
20 neighboring utilities. Secondly, ATC actively participated in MISO's LRTP Tranche 2
21 study process and shared with MISO, MP, and other transmission owners our concerns
22 with the proposed Saint Louis County substation, our rationale for those concerns, and our
23 alternative. As indicated in the testimony of both ATC's and MP's witnesses, MP raised

1 the proposed Saint Louis County substation in these two planning forums and ATC actively
2 engaged MP in both of them. ATC will continue to participate in the MISO planning
3 process and submit the upgrades to MISO for evaluation and inclusion in MTEP.

4 Overall, given MP's approach, ATC unfortunately had no realistic alternative to
5 intervening here, to present our view that the Arrowhead Substation Alternative makes the
6 most efficient use of existing transmission facilities, meets the purpose and need of the
7 Project, brings efficiency and reliability benefits to the state and region, and does so at
8 lower cost and with lower environmental and socioeconomic impact than MP's proposal.

9 **IV. OTHER MP CONCERNS AND ATC'S RESPONSE**

10 **Q. Please summarize the additional concerns or issues MP raises regarding the**
11 **Arrowhead Substation Alternative.**

12 A. MP witness Mr. Gunderson discusses the following "risks" MP believes are associated
13 with the Arrowhead Substation Alternative: (1) the potential loss of state and federal
14 funding; (2) deliverability and procurement (i.e., meeting the desired in-service date); (3)
15 performance concerns (namely MP's allegation that "ATC has a strong probability of
16 providing a tremendous benefit to Wisconsin ratepayers through increased flows onto their
17 constrained Wisconsin AC transmission system"); (4) the need for a new transmission-to-
18 transmission interconnection agreement; and (5) costs and cost recovery. Mr. Gunderson
19 then proposes a series of requirements that he recommends the Commission place on the
20 ATC and the Arrowhead Substation Alternative, if it is approved, to address these alleged
21 "risks." Other MP witness raise certain specific issues that can broadly fall within one of
22 these categories.

23 **Q. Do you believe any of MP's concerns are valid?**

1 A. No. ATC has already addressed most of MP's concerns in our direct testimony but will
2 provide further discussion, as necessary, in our rebuttal testimony. I would also note that
3 some of these "risks," such as any risk of delay, are risks MP created by approaching this
4 Project in the manner it did, by not fully engaging with stakeholders prior to filing.

5 **Q. Which of these concerns do you address in your rebuttal testimony?**

6 A. I address the issue of a new transmission-to-transmission interconnection agreement. I also
7 address the requirements Mr. Gunderson asks the Commission to place on ATC if it
8 approves the Arrowhead Substation Alternative. As I discuss below, other ATC witnesses
9 address the remaining matters.

10 **Q. MP witness Mr. Gunderson raises concerns that a new transmission-to-transmission**
11 **interconnection agreement between ATC and MP could "take more than a year to**
12 **negotiate."**²² **Do you see that as a realistic timeline?**

13 A. No. As I explained in my direct testimony, ATC, MP and MISO do not need to develop a
14 "new" agreement. Rather, if the Commission approves the Arrowhead Substation
15 Alternative, ATC, MP, and MISO would need to amend that agreement by editing
16 Appendix A, "Points of Interconnection," which is a two-page document appended to the
17 existing agreement that describes the various facilities owned, operated, and maintained by
18 either utility at their respective Arrowhead substations. This appendix would be edited to
19 describe the facilities approved by the Commission in this proceeding, which utility is
20 responsible for owning, operating, and maintaining those facilities, and a "one-line"
21 diagram depicting the updated facilities. This is a straightforward process that can be

²² Gunderson Direct, p. 28.

1 completed in far less time than Mr. Gunderson suggests, and the regulatory review process
2 is similarly straightforward. For example, in FERC Docket No. ER19-2409, ATC and
3 Dairyland Power filed a change in their transmission-to-transmission interconnection
4 agreement in mid-July 2019 and received a letter order approving that change less than one
5 month later. Similarly, the transmission-to-transmission interconnection agreement
6 between ATC, Xcel Energy, Dairyland Power, SMMPA and WPPI for the Badger-Coulee
7 line (Briggs Road to North Madison) was filed in mid-November, 2015 in FERC Docket
8 No. ER16-340 and the order was received the first week of January, 2016. It is ATC's
9 experience that the time it takes for parties to negotiate an interconnection agreement
10 depends on such factors as the complexity of the matter and the priority the parties place
11 on it. As ATC has conveyed throughout our testimony and I have previously stated, this is
12 a relatively straightforward interconnection, so I see no impediment to quickly revising the
13 agreement. To ensure that the parties place the adequate level of focus on the negotiations,
14 ATC proposes that the Commission include a condition in its order requiring MP and ATC
15 to file the necessary revisions to the transmission-to-transmission interconnection
16 agreement with the Federal Energy Regulatory Commission ("FERC") within 90 days of
17 the order, or once updated one-line diagrams are available.

18 **Q. Mr. Gunderson also asks the Commission to place several requirements on ATC if it**
19 **approves the Arrowhead Substation Alternative.²³ How does ATC respond to these**
20 **proposed requirements?**

²³ Gunderson Direct, pp. 34-36.

1 A. With respect to certain of its requests, MP appears to ask the Commission to hold ATC
2 more accountable, for a relatively small portion of the overall HVDC Project, than MP
3 offers to hold itself. If the Arrowhead Substation Alternative is selected, ATC would adhere
4 to the Commission's order points and Minnesota statutes and regulations. However, certain
5 of MP's requests are inappropriate and, if the Commission orders implementation of the
6 Arrowhead Substation Alternative, can be incorporated into the construction agreement the
7 parties will need to execute to construct the necessary upgrades. I discuss each of Mr.
8 Gunderson's recommended order points in turn, as set forth in Mr. Gunderson's direct
9 testimony.

10 1. "Affirming the ownership of the various equipment necessary" for the Project.²⁴
11 As mentioned, if the Commission modifies the Project to include the Arrowhead Substation
12 Alternative, ATC and MP would enter into a construction agreement for the network
13 upgrades and amend the interconnection agreement and both of these would address this
14 issue.

15 2. "Affirming that ATC is subject to all Certificate of Need and Route Permit standard
16 and project-specific conditions."

17 ATC will adhere to the Commission's order. I also note that, if the Arrowhead Substation
18 Alternative is implemented, ATC will own the network upgrades to its Arrowhead
19 Substation, while MP will own the double-circuit 345 kV transmission line that is included
20 in the Arrowhead Substation Alternative and will determine who constructs that line.

²⁴ Gunderson Direct, p. 34-35

1 Therefore, MP would be responsible for ensuring compliance with any related project-
2 specific conditions.

3 3. “ATC must comply with all compliance requirements set forth in the Cooperative
4 Agreement for the federal grant from the DOC” and, in the event any ATC action
5 or inaction causes a loss in funding, ATC must provide the financial support
6 necessary to make up for that loss.

7 ATC objects to this proposed condition. Should MP ultimately be awarded any federal
8 grant money, the agreement memorializing that award will be executed between the
9 Department of Energy (DOE) and MP, not ATC; as such, ATC will not have the
10 opportunity to propose changes or revisions to potentially objectionable or problematic
11 terms. Moreover, to ATC’s knowledge, no such award document exists at this time; it
12 makes little sense to require ATC to adhere to an agreement over which it will have no
13 negotiating power and that it has not yet even been able to review.²⁵ As Mr. Gunderson
14 acknowledges, to date, the Project has simply “been *recommended . . . for negotiation* of a
15 financial award. The notification letter further stated the notification *does not guarantee*
16 *federal funding*, as funding will only be obligated upon completion of successful
17 negotiations. Receipt of the notification letter does not authorize the Company to
18 commence with performance of the concept. Only an award document signed by the
19 Contracting Officer obligates DOE to provide the awarded reimbursements under the grant
20 program.”²⁶ While it will not be a party to any award document, if signed, ATC would

²⁵ ATC requested that MP provide a copy of the current draft of the cooperative agreement between it and the Department of Energy for the first round of DOE GRIP funding, but MP indicated that it does not yet have a copy of that agreement.

²⁶ Gunderson Direct, p. 16 (emphasis added).

1 cooperate with MP to the degree to which we are involved in the project—i.e., completion
2 of the network upgrades to our Arrowhead Substation—to ensure compliance with all
3 relevant terms and compliance requirements.

4 MP’s suggestion that ATC be required to “provide the financial support to make up
5 for any loss of funding” that results from any “ATC action or inaction” is also nonsensical.
6 The language proposed by MP for this condition is too vague to be practically
7 implemented. In any event, MP is the entity that will ultimately be responsible for
8 complying with the terms of its agreement with DOE to ensure it receives the requested
9 funding.

10 4. “ATC [must] agree that Minnesota Power be granted any and all independent audit
11 right’s related to ATC’s construction, procurement and contracting activities.”
12 ATC objects to this proposed condition. ATC is unaware of any regulatory proceeding
13 where one business entity has been required to grant “independent audit rights” to another
14 business entity, essentially putting that entity in the position of being a regulator, and does
15 not believe such a novel requirement is appropriate here. In any order approving the
16 Arrowhead Substation Alternative, ATC will provide any compliance filings to the
17 Commission, if the Commission so specifies.

18 5. “ATC shall be responsible for any replacement power costs incurred in the event
19 ATC requires outages of any [MP] DC or AC transmission facilities longer than
20 the estimates provided by ATC in this proceeding.”

21 ATC objects to this condition. In ATC’s experience, the construction of new transmission
22 assets often requires crossings of—and therefore, outages to—other utility transmission or
23 distribution lines to ensure that the new asset can be safely constructed. To ATC’s

1 knowledge, no regulatory body has required ATC to essentially indemnify another utility
2 for replacement power costs resulting from an outage to their existing facilities. It would
3 be unprecedented if the Commission were to impose such a condition here. Moreover,
4 MP's proposed condition is too vague and would be very difficult, if not impossible, to
5 implement at a practical level. MP does not specify how these "replacement power costs"
6 would be calculated, and in any event, any such "replacement power costs" must be
7 analyzed once the facts surrounding those costs, and the causal factors behind them, are
8 known. As such, this condition—essentially a pre-determination of causality—is not
9 appropriate. Moreover, MP offers no similar condition that its shareholders will be
10 responsible for any replacement power costs in the event of longer than estimated outages
11 times should its proposal be approved.

12 6. "ATC shall provide monthly project status and cost updates to Minnesota Power
13 with the first update to be provided no later than fourteen days after the date of the
14 Commission order."

15 ATC objects to this condition because MP appears to seek to position itself—rather than
16 the Commission—as ATC's regulator. ATC will provide any compliance filings to the
17 Commission as required, and will coordinate with MP as needed to ensure safe and timely
18 development and construction of the Arrowhead Substation Alternative.

19 7. A condition that "any cost overruns from estimates provided in the proceeding for
20 the 345 kV interconnection be recoverable in the TCR and when the Company
21 moves the HVDC Modernization Project to base rates." In the event the
22 Commission approves the Arrowhead Substation Alternative, MP asks the
23 Commission to prohibit MP from paying ATC (or ATC charging MP) any amount

1 related to the ATC Arrowhead Substation Alternative in excess of the estimate ATC
2 provided in this proceeding.

3 ATC objects to this condition. It appears that MP seeks to assure itself of full recovery of
4 the costs associated with the Arrowhead Substation Alternative, regardless of the size of
5 any cost overrun, while prohibiting any such recovery by ATC. Again, should the
6 Arrowhead Substation Alternative be approved, MP and ATC will work cooperatively to
7 construct the alternative as efficiently and cost-effectively as possible, in order to minimize
8 costs to customers. Also, MP will be directly engaged in much of this work, given its
9 ownership of both the 345 kV transmission line included in the Arrowhead Substation
10 Alternative, and its ownership of the Arrowhead 230 kV/115 kV Substation. Moreover,
11 MP ignores that amendments to the transmission-to-transmission interconnection
12 agreement and the facilities construction agreement—including the cost recovery related
13 to ATC's Network Upgrades at the Arrowhead Substation—must be filed with and
14 approved by FERC and MP's obligation to ATC is a product of those agreements and the
15 MISO Tariff, also within FERC's exclusive jurisdiction.²⁷ For these reasons, MP's
16 requested requirement is neither appropriate nor necessary.

17 **IV. ATC'S REBUTTAL WITNESSES**

18 **Q. Please identify the other rebuttal ATC witnesses and the issues they address.**

19 A. In addition to my testimony, ATC is providing Rebuttal Testimony from the same
20 witnesses who filed Direct Testimony in this proceeding. Those witnesses, and the topics
21 they address, are:

²⁷ In fact, because these agreements must be approved by FERC, MP's proposal may raise jurisdictional issues that the attorneys may address in briefing.

- 1 • Thomas Dagenais, Director – System Planning, discusses the MISO planning
2 process in greater detail and addresses MP’s claims of “performance” risks
3 associated with the Arrowhead Substation Alternative, demonstrating the lack of
4 merit behind any such claims;
- 5 • Tobin Larsen, Team Leader – Contracted Engineering Services, corrects MP’s
6 testimony regarding ownership of the current assets at MP’s Arrowhead substation,
7 and addresses the ability of ATC’s Arrowhead Substation to accommodate the
8 Project and future long-term transmission additions, should they come to fruition;
- 9 • Dustin Johaneck, Consultant Project Manager, addresses ATC’s ability to procure
10 the necessary equipment in a timely manner, to meet the Project’s in-service date
11 and also addresses the reasonableness of ATC’s cost estimate and the excessive
12 costs MP alleges would be associated with the Arrowhead Substation Alternative;
- 13 • Amy Lee, Principal Environmental and Regulatory Advisor, addresses the
14 environmental impacts associated with MP’s proposal and the Arrowhead
15 Substation Alternative; and.
- 16 • Michael Bradley, Consultant Transmission Line Engineer, discusses the route
17 selection process associated with the transmission line portion of the Arrowhead
18 Substation Alternative.

19 Again, these witnesses demonstrate that ATC’s proposed modification of the Project to
20 include the Arrowhead Substation Alternative meets the Project’s purpose and need and
21 will do so in a timely manner and at lower cost and with fewer impacts than the MP
22 proposal to build an entirely new 345/230 kV substation. Therefore, we ask that the
23 Commission grant MP’s request for a Certificate of Need and Route Permit, modified to

1 incorporate the Arrowhead Substation Alternative, including the approval of the route as
2 proposed by ATC.

3 **Q. Does that conclude your testimony?**

4 A. Yes, it does.