

Rebuttal Testimony and Schedules
Daniel W. Gunderson

Before the Minnesota Public Utilities Commission

State of Minnesota

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

OAH Docket No. 5-2500-39600
MPUC Docket Nos. E015/CN-22-607
and E015/TL-22-611

PROJECT OVERVIEW AND RISKS OF ALTERNATIVE PROPOSAL

March 11, 2024

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1 I. INTRODUCTION

2 Q. Please state your name and business address.

3 A. My name is Daniel (“Dan”) W. Gunderson, and my business address is 30 West
4 Superior Street, Duluth, Minnesota 55802.

5
6 Q. By whom are you employed and in what position?

7 A. I am employed by ALLETE, Inc., doing business as Minnesota Power (“Minnesota
8 Power” or the “Company”) as the Vice President of Transmission and Distribution.

9
10 Q. Did you previously provide testimony in this proceeding?

11 A. Yes. On February 14, 2024, I provided Direct Testimony supporting Minnesota Power’s
12 proposed configuration of its high-voltage direct-current (“HVDC”) Modernization
13 Project (“HVDC Modernization Project”).
14

15 Q. What is the purpose of your Rebuttal Testimony?

16 A. I am providing responses to certain Direct Testimony filed by the Department of
17 Commerce, Division of Energy Resources (“DOC-DER”) and the Large Power
18 Intervenors (“LPI”), and American Transmission Company LLC, by and through its
19 corporate manager ATC Management Inc. (“ATC”). More specifically, I provide the
20 following responses in my Rebuttal Testimony:

- 21 • In response to questions from DOC-DER witness Michael Zajicek, I provide
22 Rebuttal Testimony on the Company’s available and pending grants for the
23 HVDC Modernization Project and the potential impact on continuity of funding
24 if the ATC alternative configuration (the “ATC Arrowhead Alternative”) is
25 ordered to be constructed by the Minnesota Public Utilities Commission
26 (“Commission”). I also provide a revised Minnesota Power customer rate impact
27 table to include the costs for the ATC Arrowhead Alternative in the
28 configuration proposed by ATC (no phase shifting transformer (“PST”)).
29 • In response to testimony from LPI witness Kavita Maini, I provide Rebuttal
30 Testimony regarding the Midcontinent Independent System Operator, Inc.’s

1 (“MISO”) cost allocation process and why neither Minnesota Power nor the
2 Commission can modify cost allocation determinations made by MISO for the
3 HVDC Modernization Project. I also discuss Minnesota Power’s ability to
4 maximize the financial benefit to our customers of the HVDC Modernization
5 Project’s additional 350 megawatts (“MW”) of capacity either for Minnesota
6 Power’s use or assignment to others with a financial benefit to Minnesota Power
7 customers. Finally, I discuss Minnesota Power’s intent to pursue cost allocation
8 opportunities in the event the expandability portions of the HVDC
9 Modernization Project (from 900 MW to 1,500 MW) are identified by MISO for
10 regional reliability.

- 11 • In response to testimony from ATC witness Dustin Johaneck, I discuss potential
12 impact of grant funding if the ATC Arrowhead Alternative is ordered to be
13 constructed by the Commission. I also discuss the importance of comparing the
14 estimated cost of the HVDC Modernization Project and ATC Arrowhead
15 Alternative on the same baseline assumptions.

16
17 **Q. Who are the other Company witnesses filing Rebuttal Testimony?**

18 A. The other Company witnesses providing Rebuttal Testimony on behalf of Minnesota
19 Power are:

- 20 • Daniel McCourtney, Manager Strategic Environmental Initiatives – provides
21 Rebuttal Testimony responding to the evaluation of Minnesota Power’s HVDC
22 Modernization Project configuration and the ATC Arrowhead Alternative in the
23 Environmental Assessment, filed on February 29, 2024. Mr. McCourtney also
24 responds to Direct Testimony submitted by ATC regarding potential impacts to
25 the natural and socioeconomic environment associated with the ATC Arrowhead
26 Alternative
- 27 • Christian Winter, Manager Regional Transmission Planning – provides Rebuttal
28 Testimony in response to DOC-DER Direct Testimony regarding alternatives to
29 the HVDC Modernization Project and to Large Power Intervenors’ (“LPI”)
30 Direct Testimony regarding possible alternate HVDC Modernization Project

1 configurations. Mr. Winter also provides Rebuttal Testimony in response to the
2 Direct Testimony of ATC witnesses Robert McKee, Thomas Dagenais, Tobin
3 Larsen, and Mr. Johanek regarding planning and conversations with ATC that
4 occurred prior to Minnesota Power filing the combined Certificate of Need and
5 Route Permit Application for the HVDC Modernization Project on June 1, 2023
6 (“Application”), system configuration and power flow analysis prepared by
7 ATC, ATC Arrowhead 345 kV/230 kV Substation work that would be necessary
8 to implement the ATC Arrowhead Alternative, ATC Arrowhead Alternative
9 cost estimates, and ATC’s proposed ATC Arrowhead Alternative
10 implementation and in-service schedule.
11

12 **Q. Are you sponsoring any exhibits in this proceeding?**

13 A. Yes. I am sponsoring the following schedules to my Direct Testimony:

- 14 • MP Exhibit ____ (Gunderson), Rebuttal Schedule 1 – Minnesota Power Response
15 to ATC Information Request (“ATC IR”) 041;
- 16 • MP Exhibit ____ (Gunderson), Rebuttal Schedule 2– Minnesota Power Response
17 to DOC-DER Information Request (“DOC IR”) 016;
- 18 • MP Exhibit ____ (Gunderson), Rebuttal Schedule 3 – ATC Response to
19 Minnesota Power Information Request (“MP IR”) 019;
- 20 • MP Exhibit ____ (Gunderson), Rebuttal Schedule 4 – Minnesota Power Response
21 to ATC IR 042;
- 22 • MP Exhibit ____ (Gunderson), Rebuttal Schedule 5 – Minnesota Power Response
23 to LPI Information Request (“LPI IR”) 012 Second Supplement;
- 24 • MP Exhibit ____ (Gunderson), Rebuttal Schedule 6 – ATC Response to MP IR
25 004;
- 26 • MP Exhibit ____ (Gunderson), Rebuttal Schedule 7 – Minnesota Power Response
27 to LPI IR 039;
- 28 • MP Exhibit ____ (Gunderson), Rebuttal Schedule 8 – Minnesota Power Response
29 to LPI IR 035;

- MP Exhibit ____ (Gunderson), Rebuttal Schedule 9 – Minnesota Power Response to DOC IR 018;
- MP Exhibit ____ (Gunderson), Rebuttal Schedule 10 – Minnesota Power Response to LPI IR 036; and
- MP Exhibit ____ (Gunderson), Rebuttal Schedule 11 – Minnesota Power Response to ATC IR 038;
- MP Exhibit ____ (Gunderson), Rebuttal Schedule 12 – Minnesota Power Response to DOC IR 022.

II. GRANT FUNDING AND PROJECT COST

Q. Please summarize the grant funding that would apply to the HVDC Modernization Project.

A. There are currently three sources of grant funding for the HVDC Modernization Project: The Department of Energy (“DOE”) Grid Resilience and Innovation Partnerships (“GRIP”) Program first round funding opportunity, the Minnesota Legislature, and the Department of Commerce (“DOC”) State Competitiveness Fund Match Program. The amounts of these grants total \$75 million, and are itemized as follows:

- \$50 million – DOE GRIP;
- \$15 million – Minnesota Legislature (2023 Minn. Session Law Ch. 60, Art. 10, sec. 2, Subd. 2(h)); and
- \$10 million – DOC State Competitiveness Fund Match Program.

Q. Is this federal and state funding at risk if the Commission orders the construction of the ATC Arrowhead Alternative?

A. As I explained in my Direct Testimony, Minnesota Power believes that there is a high probability that the DOE GRIP funding will remain available for the HVDC Modernization Project for the HVDC Terminal Expandability Concept (“HTEC”) even if the Commission orders the construction of the ATC Arrowhead Alternative as long as the ATC Arrowhead Alternative can be implemented to meet the necessary grant funding timelines and federal funding compliance requirements. However, as I

1 discussed in my Direct Testimony, there is a real risk that the ATC Arrowhead
2 Alternative will not be able to meet the necessary timelines to facilitate Minnesota
3 Power receiving the federal and state grant funding. Minnesota Power has been working
4 towards implementing its proposed configuration for the HVDC Modernization Project
5 since 2020, while ATC only just proposed the ATC Arrowhead Alternative in
6 September 2023. Given the planning and procurement work that still needs to occur,
7 Minnesota Power is concerned about the ability to achieve a 2030 in-service date for
8 the ATC Arrowhead Alternative, as well as achieving an earlier in-service date in 2028
9 or 2029.

10
11 **Q. What timelines must be met to receive the federal and state funding that have been**
12 **awarded to the HVDC Modernization Project to date?**

13 A. The federal DOE GRIP round one award of \$50 million must be spent for the HTEC
14 portion of the HVDC Modernization Project on a specific timeline – and no later than
15 the second quarter of 2029. Because the DOC State Competitiveness Fund Match
16 Program grant of \$10 million is a matching grant to the federal DOE GRIP round one
17 funding, that \$10 million match must also be spent on the HTEC portion of the project
18 on the same timeline. The innovative HTEC components that allowed Minnesota Power
19 to apply for this unique funding opportunity – the expandability of the HVDC converter
20 stations – would remain the same under either configuration of the HVDC
21 Modernization Project.

22
23 **Q. Why is Minnesota Power concerned about implementing the HVDC**
24 **Modernization Project on these timelines if the Commission orders construction of**
25 **the ATC Arrowhead Alternative?**

26 A. As I discussed in my Direct Testimony, and ATC confirmed in its Direct Testimony,
27 ATC has only committed to being able to deliver the ATC Arrowhead Alternative by
28 2030.¹ This timeline does not align with the Company's intention to deliver the HVDC

¹ Johaneck Direct at 8:10-12 ("ATC has prepared a high-level schedule for construction of the Arrowhead Substation Alternative, attached as Schedule 2, to confirm that it can meet the April 2030 ISD for the Project.")

1 Modernization Project on an accelerated timeline. As discussed in Mr. Winter's direct
2 and rebuttal testimonies, the Company continues to have discussions with the supplier
3 of the HVDC equipment to obtain an earlier delivery date for the HVDC Modernization
4 Project. ATC does not appear ready to achieve an earlier in-service date based on the
5 testimony and information request responses provided to date that all indicate a 2030
6 in-service date.

7
8 **Q. Do you have any concerns regarding the potential second round DOE GRIP**
9 **funding opportunity if the Commission orders construction of the ATC**
10 **Arrowhead Alternative?**

11 A. Yes. If the Commission orders construction of the ATC Arrowhead Alternative for the
12 HVDC Modernization Project, Minnesota Power would no longer qualify for the second
13 round DOE GRIP funding of up to \$50 million. The second round funding opportunity
14 is dependent on the construction of the St. Louis County 345 kV/230 kV Substation and
15 is explicitly for the assets designed to support the long-range planning concepts,
16 including the St. Louis County 345 kV/230 kV Substation, a facility which would not
17 be constructed if the Commission orders construction of the ATC Arrowhead
18 Alternative.

19
20 **Q. What is the current status of the Company's request for the second round of DOE**
21 **GRIP funding?**

22 A. On February 29, 2024, the Company was notified by the DOE that based on the GRIP
23 round two funding opportunity concept paper Minnesota Power submitted on January
24 12, 2024, to support the interconnection assets required for its proposed configuration
25 of the HVDC Modernization Project, the Company has been encouraged by the DOE to
26 submit a full application for up to a \$50 million GRIP round two award which, if
27 received, would be applied to reduce the total project cost of the HVDC Modernization
28 Project, as proposed by Minnesota Power. A copy of the DOE's letter to Minnesota
29 Power was provided as ATC IR 41.09 Attach to the Company's response to ATC IR
30 041. A copy of the Company's response and attachments to ATC IR 041 is provided as

1 Rebuttal Schedule 1 to my Rebuttal Testimony. The full application is due May 22,
2 2024.

3
4 Given the amount of time and resources required to prepare and submit a full application
5 for the GRIP funding, Minnesota Power began preparing the full application based on
6 the concept paper almost immediately after it was submitted on January 12, 2024. Based
7 on the application prepared and submitted during the GRIP round one funding
8 opportunity, Minnesota Power estimates that it takes the Company approximately 2,000
9 to 2,500 hours and approximately 20 subject matter experts to prepare and submit a
10 competitive application. Minnesota Power expects that the DOE will decide which
11 projects receive funding by the fall of 2024.

12
13 **Q. Please explain why the second round of DOE GRIP funding of up to \$50 million is**
14 **only available if the Commission approves Minnesota Power's proposed**
15 **configuration of the HVDC Modernization Project.**

16 **A.** As explained in the Company's response to DOC IR 016, attached to my Rebuttal
17 Testimony as Rebuttal Schedule 2, the concept paper that was submitted by Minnesota
18 Power was premised on Minnesota Power's proposed configuration for the HVDC
19 Modernization Project. The concept paper included the St. Louis County 345 kV/230
20 kV Substation and discussed the innovative technologies that would be incorporated
21 into this new substation such as online monitoring for equipment and advanced
22 communication protocols to align the substation design with the grid enhancing needs
23 of the future. The full application, due in May 2024 (which is before the outcome of this
24 proceeding will be decided), is currently being prepared by Minnesota Power based on
25 the submitted concept paper. If the Commission were to order construction of the ATC
26 Arrowhead Alternative, the technical details provided in the full application, which are
27 based on the concept paper submitted and dependent on the construction of the St. Louis
28 County 345 kV/230 kV Substation, will no longer be applicable. A copy of Minnesota
29 Power's concept paper was provided as ATC IR 041.08 Attach to the Company's

1 response to ATC IR 041 which is provided as Rebuttal Schedule 1 to my Rebuttal
2 Testimony.

3
4 **Q. Has ATC applied for any grant funding to defray the costs of its proposed ATC**
5 **Arrowhead Alternative in the event the Commission orders its construction?**

6 A. No. In response to MP IR 019, ATC stated it has not applied for any grant funding for
7 the ATC Arrowhead Alternative. A copy of this response is attached to my Rebuttal
8 Testimony as Rebuttal Schedule 3. ATC is now foreclosed from seeking federal GRIP
9 funding in either round one or round two for the ATC Arrowhead Alternative. The DOE
10 has already selected projects for the GRIP round one funding and only applicants who
11 submitted an eligible concept paper by January 12, 2024 are eligible to submit a full
12 application for the GRIP round two funding.

13
14 **Q. Has Minnesota Power applied for any grant funding for the ATC Arrowhead**
15 **Alternative in the event the Commission orders its construction?**

16 A. No. Minnesota Power is not in a position to apply for grant funds on behalf of another
17 utility and ATC has not asked Minnesota Power to assist them in preparing any grant
18 applications for the ATC Arrowhead Alternative. Minnesota Power does not know what
19 ATC's position is on certain application requirements and ATC is the utility that is in
20 the best position to evaluate its own proposed project and whether any of the aspects of
21 the ATC Arrowhead Alternative, including the substation design and construction,
22 which ATC will be responsible for, meet the DOE funding criteria. Minnesota Power
23 addressed these and other concerns with ATC's unwillingness to apply for grant funding
24 for the ATC Arrowhead Alternative in the Company's response to DOC IR 016 and
25 ATC IR 042 attached to my Rebuttal Testimony as Rebuttal Schedule 2 and Rebuttal
26 Schedule 4, respectively.

1 **III. PROJECT COST AND RATE IMPACT**

2 **Q. After reviewing the Direct Testimony in this proceeding, do you have any**
3 **additional thoughts on the cost of the HVDC Modernization Project and how that**
4 **information should be evaluated by the Commission as it makes its decision?**

5 A. Yes. There are two key issues that the Commission should ultimately keep in mind
6 related to costs as it makes a decision in this proceeding. The first is that all costs for
7 both Minnesota Power's HVDC Modernization Project and the ATC Arrowhead
8 Alternative must be included and compared on the same basis where all known costs
9 related to the project are included. The second is whether the minimal potential financial
10 "savings" on overall HVDC Modernization Project cost, if the ATC Arrowhead
11 Alternative is ordered to be constructed, will actually benefit Minnesota customers
12 given that this alternative will result in increased power flow from the HVDC System
13 to Wisconsin, providing substantial benefits to Wisconsin customers, while being
14 funded entirely by customers in Minnesota, specifically Minnesota Power's customers.²

15
16 **Q. What concerns does Minnesota Power have with the cost estimates prepared by**
17 **ATC for the ATC Arrowhead Alternative?**

18 A. Generally speaking, Minnesota Power is concerned that ATC's cost estimates for the
19 ATC Arrowhead Alternative do not include all of the necessary components required to
20 construct this alternative such as the PST at ATC's Arrowhead 345 kV/230 kV
21 Substation. This is discussed in greater detail in the direct and rebuttal testimonies of
22 Company witness Mr. Winter.

23
24 **Q. Is ATC's cost estimate for the ATC Arrowhead Alternative missing any essential**
25 **costs related to the federal grant funding?**

26 A. Yes, ATC has not addressed, nor has it reached out to the Company, for the
27 administrative costs related to compliance with the DOE GRIP round one funding.
28 There are material administrative costs associated with compliance that Minnesota

² In Section III of my Rebuttal Testimony, I discuss that even without the PST, the ATC Arrowhead Alternative is more costly on a per-customer rate basis than the HVDC Modernization Project because of ATC's proposed reimbursement mechanism and tax gross-up.

1 Power already has planned and incorporated as part of its cost estimates for the HTEC
2 project which includes in its scope the full construction HVDC facilities including the
3 interconnection facilities. If the Commission orders the construction of the ATC
4 Arrowhead Alternative, ATC would be responsible for compliance with all aspects of
5 administrative support to ensure compliance with all federal grant requirements
6 associated with its construction of the portions of the ATC Arrowhead Alternative that
7 it will construct, own, and operate. This would be an additional cost to Minnesota Power
8 customers and would be additive to both configuration costs and rate impacts discussed
9 in this testimony.

10
11 **Q. Would grant compliance costs associated with the ATC Arrowhead Alternative be**
12 **largely duplicative?**

13 A. Yes, ATC would be subject to grant reporting requirements and would likely need to
14 duplicate nearly all of the compliance steps for the ATC Arrowhead Alternative,
15 because it is within the scope of the HTEC project, and would need to ensure that ATC
16 is meeting the requirements of the federal grant on behalf of Minnesota Power for the
17 portions of the ATC Arrowhead Alternative that it will construct, own, and operate.

18
19 **Q. Has Minnesota Power prepared cost estimates for the ATC Arrowhead Alternative**
20 **and its proposed configuration of the HVDC Modernization Project?**

21 A. As discussed in the Rebuttal Testimony of Mr. Winter, Minnesota Power requested that
22 Burns & McDonnell, a well-known and well-respected engineering design firm,
23 independently prepare cost estimates for equivalent Minnesota AC Interconnection
24 Facilities for the HVDC Modernization Project with Minnesota Power's configuration
25 and the ATC Arrowhead Alternative. These cost estimates prepared by Burns &
26 McDonnell are attached to Mr. Winter's Rebuttal Testimony as Rebuttal Schedules 19,
27 22, 23, and 24.

1 **Q. Why should Burns & McDonnell's cost estimates for both its configuration of the**
2 **HVDC Modernization Project and the ATC Arrowhead Alternative be used when**
3 **comparing these configurations in this proceeding?**

4 A. The independent cost estimates prepared by Burns & McDonnell, that provide a
5 common set of assumptions and cost basis for comparison of both configurations, are
6 the most accurate and thorough evaluation to date of the cost of both configurations
7 from a technical design perspective and provide an evaluation of both configurations at
8 the component-level.

9
10 **Q. Please explain your second concern regarding evaluation of cost and benefits of**
11 **Minnesota Power's proposed configuration of the HVDC Modernization Project**
12 **and the ATC Arrowhead Alternative.**

13 A. Based on the independent cost estimates prepared by Burns & McDonnell, the Company
14 acknowledges the potential that the ATC Arrowhead Alternative could be delivered at
15 a cost approximately \$4 million less, on a direct capital cost basis, than Minnesota
16 Power's configuration of the HVDC Modernization Project. This cost estimate assumes
17 that the phase shifting transformer is not needed to manage system impacts or maintain
18 power flow with regulatory limits for the ATC Arrowhead Alternative. However, this
19 potential lower cost does not take into account the actual rate impact for Minnesota
20 Power customers, as I discuss further in my Rebuttal Testimony in Section III, or the
21 fact that Minnesota Power customers would not receive as much of a direct benefit from
22 the HVDC System and its North Dakota wind resources if the ATC Arrowhead
23 Alternative is selected.

24
25 **Q. Has Minnesota Power attempted to quantify the value of the benefits transferred**
26 **from its customers to the ATC Wisconsin transmission system as a result of the**
27 **ATC Arrowhead Alternative?**

28 A. Yes. After Direct Testimony was filed, Minnesota Power received an information
29 request from DOC-DER requesting that Minnesota Power attempt to quantify the dollar
30 impact on Minnesota ratepayers over the prospective life of the HVDC System from

1 losing an additional seven to ten percent of the power, as discussed in the Direct
2 Testimony of Company witness Mr. Winter, delivered by the HVDC System to the
3 Wisconsin transmission system if the ATC Arrowhead Alternative is implemented.
4 Minnesota Power's response to DOC IR 022 is attached as Rebuttal Schedule 12 to my
5 Rebuttal Testimony. While the Minnesota Power customer impact of this feature of the
6 ATC Arrowhead Alternative is inherently difficult to put a direct value to, Minnesota
7 Power provided DOC-DER with an illustrative methodology that provides a sense of
8 the cost of the replacement energy required to replace the energy from the HVDC
9 System that would be routed away from Minnesota Power's customers and into the
10 Wisconsin transmission system if the ATC Arrowhead Alternative is constructed. Based
11 on this methodology, Minnesota Power's customers could pay up to approximately
12 \$150 million to \$210 million (net present value, 30 years) in replacement fuel costs over
13 the 30-year expected life of the HVDC System due to the additional energy flowing into
14 Wisconsin and away from Minnesota Power's customers as a result of the construction
15 of the ATC Arrowhead Alternative.

16
17 **Q. What is your third concern when evaluating the cost and benefits of Minnesota**
18 **Power's proposed configuration of the HVDC Modernization Project and the ATC**
19 **Arrowhead Alternative?**

20 A. Minnesota Power has worked diligently to accelerate the in-service date for the HVDC
21 Modernization project, which will result in significant cost savings due to the earlier in-
22 service date and additional customer reliability benefits. Given all the risks and
23 uncertainties related to the ATC Arrowhead Alternative,³ it is not worth a potential
24 slightly lower cost to select that alternative.

25

³ Winter Rebuttal at Section IV.D.

1 **Q. Do you have any other concerns when you consider the cost and benefits evaluation**
2 **of the Minnesota Power proposed configuration of the HVDC Modernization**
3 **Project and the ATC Arrowhead Alternative?**

4 A. Yes. As I discussed, Minnesota Power has a strong probability of securing additional
5 federal grant money to directly offset the cost of constructing the St. Louis County 345
6 kV/230 kV Substation. This second round of federal grant money would not be available
7 to the ATC Arrowhead Alternative and, therefore, render the overall cost of the ATC
8 Arrowhead Alternative higher than Minnesota Power's configuration of the HVDC
9 Modernization Project if Minnesota Power's full application is selected for the GRIP
10 round two award.

11
12 **Q. Did the Company prepare an updated customer rate impact analysis?**

13 A. Yes. In light of ATC's insistence that it does not need a phase shifting transformer for
14 the ATC Arrowhead Alternative, Minnesota Power prepared another scenario to
15 evaluate Minnesota Power customer rate impacts. I have attached this update to my
16 Rebuttal Testimony as Rebuttal Schedule 5. Company witness Mr. Winter discusses
17 Minnesota Power's concerns with ATC's assumption that no PST is necessary for the
18 ATC Arrowhead Alternative in his direct and rebuttal testimonies. The Burns &
19 McDonnell cost estimates were not available for the two configurations in time to be
20 incorporated into the rate impact assessment, so Minnesota Power used its original mid-
21 range cost estimate from the Application, which includes \$55 million for Minnesota
22 alternating current ("AC") interconnection facilities, and ATC's proposed cost estimate

1 for the ATC Arrowhead Alternative.⁴ With common components omitted by ATC
2 restored to its estimate,⁵ the cost estimate for Minnesota AC interconnection facilities
3 with the ATC Arrowhead Alternative is approximately \$51 million when rounded
4 down. Minnesota Power assumed that the \$75 million in state and federal grant money
5 would be applied to the HVDC Modernization Project regardless of which configuration
6 is evaluated.

7
8 **Q. Assuming a PST is not needed, how does the rate impact of Minnesota Power's**
9 **configuration of the HVDC Modernization Project compare to the ATC**
10 **Arrowhead Alternative?**

11 A. Even though the ATC Arrowhead Alternative (without the PST) is estimated by ATC
12 to cost approximately \$4 million less on a direct capital cost basis than Minnesota
13 Power's configuration of the HVDC Modernization Project, the rate impact of the ATC
14 Arrowhead Alternative on a per-customer basis is greater than that for Minnesota
15 Power's HVDC Modernization Project. The individual customer impacts for the ATC
16 Arrowhead Alternative (without the PST and with \$75 million in grant funds) and the
17 HVDC Modernization Project (with \$75 million in grant funds) are summarized in
18 **Table 1.**

19

⁴ As discussed further in Company witness Mr. Winter's Rebuttal Testimony, Section IV.C, it is important to recognize that the assumptions behind ATC's cost estimates in this proceeding have not been clearly stated. This has made a direct comparison between the ATC Arrowhead Alternative and the HVDC Modernization Project challenging when using ATC's cost estimates. This has required Minnesota Power to prepare cost estimates for the ATC Arrowhead Alternative on the same basis as the cost estimates for the HVDC Modernization Project. The \$4 million cost difference between the Minnesota Power configuration of the HVDC Modernization Project at the ATC Arrowhead Alternative evaluated in the rate impact analysis is the same difference that Burns & McDonnell identified in its detailed cost estimate analysis attached to Mr. Winter's Rebuttal Testimony. So, the resulting impact of a more costly ATC Arrowhead Alternative than the HVDC Modernization Project on a per-customer basis identified in the rate impact analysis would not be expected to change if the rate impact analysis were performed using the Burns & McDonnell estimates.

⁵ For further discussion the significance of this omission, see Mr. Winter's Rebuttal Testimony, Section IV.C.

Table 1. Summary of Customer Rate Impacts

	ATC Arrowhead¹ (\$/month)	Minnesota Power HVDC² (\$/month)
Residential	\$7.67	\$7.64
General Service	\$30.20	\$30.09
Large Light & Power	\$2,658.09	\$2,648.19
Large Power	\$493,197	\$491,361
Lighting	\$1.78	\$1.77

¹ Assumes no PST, as originally proposed by ATC. Also assumes \$75 million in state and federal grant offset.

² Assumes \$75 million in state and federal grant offset.

Q. Why would Minnesota Power customers experience a higher monthly bill impact if the Commission orders the construction of the ATC Arrowhead Alternative instead of the Minnesota Power configuration of the HVDC Modernization Project?

A. This is because ATC has stated that its expectation is that Minnesota Power would reimburse ATC for construction of the substation components on a lump-sum basis with a tax gross-up. This information was provided by ATC in its response to MP IR 004, a copy of which is attached to my Rebuttal Testimony as Rebuttal Schedule 6. The tax gross-up means that the actual cost of the ATC Arrowhead Alternative (without the PST) is approximately \$7.6 million more than the Minnesota Power proposed HVDC Modernization Project configuration, when the costs of the two configurations are compared on a same-assumption basis.

Q. How should the Commission consider all of this information as it evaluates the two options presented in this proceeding?

A. ATC has not demonstrated a superior solution to Minnesota Power's proposed HVDC Modernization Project configuration. Additionally, ATC's proposed ATC Arrowhead Alternative has unaddressed cost and power flow concerns that take benefits away from Minnesota Power customers. Minnesota Power's goal from the initiation of the HVDC Modernization Project was to meet the immediate and urgent needs of Minnesota Power customers to replace a critical transmission asset experiencing increased outages and

1 limited availability of replacement components, continue its advancement of
2 Minnesota's energy policy goals, and align the significant long-term infrastructure
3 investments in the HVDC Modernization Project with long-range regional transmission
4 planning concepts provided by MISO. Minnesota Power has presented a project that has
5 been fully and thoughtfully developed that meets these goals.

6
7 Minnesota Power has done all of this while also seeking as much customer cost relief
8 as possible through federal and state grants for the aspects that address the long range
9 and regional planning considerations. In addition, Minnesota Power has created
10 significant potential for additional customer cost savings with a pending additional \$50
11 million in grant funding specifically supporting the interconnection facilities proposed
12 by Minnesota Power, including the St. Louis County 354 kV/230 kV Substation, a
13 concept for which the DOE has encouraged the Company to submit a full application
14 for GRIP round two funding.

15 16 IV. COST ALLOCATION

17 **Q. How will the costs for the HVDC Modernization Project be paid?**

18 A. Minnesota Power has proposed that Minnesota Power customers pay for the entire cost
19 of the HVDC Modernization Project. This is appropriate given that, under the
20 Company's proposed configuration of the HVDC Modernization Project, Minnesota
21 Power's customers retain the vast majority (if not all) of the benefits from the HVDC
22 System, including its transfer capability, generator interconnection capacity, congestion
23 relief impacts, and reliability support for Minnesota Power's local 230 kV network, as
24 discussed in Minnesota Power's response to LPI IR 039, attached to my Rebuttal
25 Testimony as Rebuttal Schedule 7. As explained in my Rebuttal Schedule 7, nothing
26 about ATC's proposal of the ATC Arrowhead Alternative would grant Minnesota
27 Power the ability to seek compulsory cost-sharing from ATC or MISO for the HVDC
28 Modernization Project. Instead, as proposed by ATC in ATC's response to MP IR 004,
29 attached to my Rebuttal Testimony as Rebuttal Schedule 6, and reaffirmed by ATC in
30 its response to LPI IR 003, attached to Mr. Winter's Rebuttal Testimony as Rebuttal

1 Schedule 1, if the Commission ordered the construction of the ATC Arrowhead
2 Alternative, Minnesota Power would reimburse ATC for the portions of the ATC
3 Arrowhead Alternative that ATC would construct itself as a lump sum payment with a
4 tax gross-up. This reimbursement (including the tax gross-up) would be included in the
5 amounts paid by Minnesota Power customers and ultimately result in the ATC
6 Arrowhead Alternative being more costly for Minnesota Power customers than the
7 Company's proposed HVDC Modernization Project configuration.

8
9 **Q. Who is responsible for making a decision on how costs for a transmission project,**
10 **like the HVDC Modernization Project, are allocated?**

11 A. The MISO Tariff dictates how costs are allocated for various types of transmission
12 projects. The allocation of costs is dependent on the type of project, including the needs
13 it addresses, the process by which it originates, and the benefits it achieves. For most
14 project types, the costs are assigned directly to the customers of the transmission owner
15 who proposes and constructs the project, like the HVDC Modernization Project as
16 proposed by Minnesota Power. For certain types of projects originated through specific
17 MISO processes, like Multi-Value Projects ("MVPs") and Market Efficiency Project
18 ("MEPs"), MISO could determine, based on the criteria established in the MISO Tariff,
19 that the costs should be allocated more broadly as described in Attachment FF of the
20 MISO Tariff.

21
22 **Q. How does MISO determine which cost allocation method applies to a specific**
23 **project?**

24 A. MISO looks at the process by which a project or suite of projects is developed as well
25 as the benefits of a given project or suite of projects to determine eligibility for cost
26 allocation and the appropriate allocation of those costs under the MISO Tariff. The
27 MISO Tariff is designed to allocate the costs of such regionally beneficial transmission
28 projects in a manner that is roughly commensurate with their projected benefits. If a
29 project meets the criteria outlined in the MISO Tariff to be classified as an MVP or an
30 MEP, then the costs of the project are regionally allocated. Most other types of projects,

1 including Baseline Reliability Projects, Transmission Delivery Service Projects, and
2 transmission owner-proposed asset renewal (MISO “Other” or “bottom-up”) projects,
3 are not eligible for regional cost allocation under the provisions of the MISO Tariff.
4

5 **Q. If the HVDC Modernization Project is being constructed with expandability and**
6 **flexibility features, why are those costs not allocated more broadly to the region?**

7 A. To be eligible for cost allocation, the HVDC Modernization Project would need to meet
8 the cost allocation criteria outlined in the MISO Tariff to be classified as an MVP or an
9 MEP, which generally focus on regional and market benefits. The HVDC
10 Modernization Project is essential for Minnesota Power customers to replace aging
11 Minnesota Power assets and continue to deliver low-cost renewable energy to
12 Minnesota Power’s customers and, as such, at this time it has not been determined by
13 MISO to meet the criteria for regional cost allocation. The incorporation of these
14 expandability and flexibility features into the HVDC Modernization Project is a prudent
15 and reasonable planning approach to long-term infrastructure development which
16 accounts for only approximately \$100 million of incremental HVDC Modernization
17 Project costs.⁶ This is why Minnesota Power has worked so diligently to maximize the
18 amount of funding from state and federal grants to cover as much of the cost for future
19 expandability as possible. Were it not for these features of the HVDC Modernization
20 Project, Minnesota Power would not have been able to submit a competitive DOE grant
21 first round funding application that supports projects that are expected to provide
22 broadly-beneficial long-term expandability options.
23

24 In the near-term, the entirety of the capacity of the HVDC System will be utilized for
25 the benefit of Minnesota Power customers. The Company’s plan is to construct the
26 HVDC Modernization Project to meet the urgent near-term needs of Minnesota Power’s
27 customers while preserving the future potential for expandability to benefit Minnesota
28 Power’s customers and the region, establishing important building blocks for the future
29 of the transmission system in Minnesota, creating the potential for future regional cost

⁶ Winter Rebuttal, Section II.

1 allocation for the future increased capacity, and aligning with the current MISO
2 concepts for Long Range Transmission Planning (“LRTP”).⁷

3
4 **Q. What is the status of the Facilities Construction Agreements (“FCAs”) for the**
5 **HVDC Modernization Project capacity discussed in Minnesota Power’s Direct**
6 **Testimony ?**

7 A. Minnesota Power signed the FCAs on February 23, 2024. MISO executed the FCAs on
8 February 28, 2024. The FCAs were filed with FERC on March 5, 2024 in FERC Docket
9 No. ER24-1409-000. Minnesota Power provided this information to the parties in this
10 proceeding on March 4 and 6, 2024 in response to ATC IR 038, which is included with
11 my Rebuttal Testimony as Rebuttal Schedule 11. Under the provisions of the MISO
12 Tariff, it is Minnesota Power’s understanding that MISO will now move the HVDC
13 Modernization Project to “Recommended” status and that the HVDC Modernization
14 Project will ultimately be approved by the MISO Board of Directors in the current
15 MTEP cycle (“MTEP24”) which will conclude in December 2024.

16
17 **Q. Will costs associated with potential future expansion be regionally cost allocated?**

18 A. As described in Minnesota Power’s response to DOC IR 18, attached as Rebuttal
19 Schedule 9 and LPI IR 035, attached as Rebuttal Schedule 8, if a future expansion of
20 the HVDC Line beyond the 900 MW currently held by Minnesota Power was
21 determined by MISO to meet the definition of a MVP or MEP under the MISO Tariff,
22 then the incremental cost of increasing the HVDC capacity would be allocated by MISO
23 according to the applicable tariff provisions for regional cost allocation. Minnesota
24 Power does not have control over the outcomes of future MISO planning efforts for
25 regionally-beneficial projects, but proposed design for the HVDC Modernization
26 Project provides for future upgradability to both align the project with future regional
27 plans as well as the potential for regional cost allocation for this future expansion, in

⁷ These concepts are also discussed in Minnesota Power’s response to LPI IR 035, attached to my Rebuttal Testimony as Rebuttal Schedule 8.

1 addition to addressing the immediate modernization needs for the continued reliable
2 performance of the HVDC system.

3
4 **Q. What is Minnesota Power doing to ensure potential future expansion will be**
5 **evaluated for cost allocation?**

6 A. As discussed in the Rebuttal Testimony of Mr. Winter, the Company will continue to
7 engage with MISO and other stakeholders as practicable to urge further consideration
8 of voltage source converter HVDC and complementary regional 345 kV solutions with
9 the initial LRTP Tranche 2 package and future MISO LRTP analysis, including actively
10 participating in the LRTP Tranche 2 alternative solution submittal period that is
11 currently open until April 5, 2024. Should such expandability be identified by MISO as
12 necessary to provide regional benefits, the Company would advocate for appropriate
13 cost allocation considerations by MISO.

14
15 **Q. How has Minnesota Power proposed to mitigate cost impacts related to these**
16 **future expandability options to address LPI witness Ms. Maini's concerns?**

17 A. As an initial matter, and as discussed in the Direct Testimony of Mr. Winter and
18 previously in my Rebuttal Testimony, the cost to incorporate future expandability
19 opportunities into the HVDC equipment is only about \$100 million of the overall HVDC
20 Modernization Project cost.⁸ Minnesota Power has diligently identified and applied for
21 funding opportunities to ensure that this incremental cost difference is largely covered
22 by the federal and state grants. As I discussed, to date, Minnesota Power has been
23 awarded \$75 million to offset these costs. Minnesota Power continues to identify
24 opportunities for additional cost offset opportunities and will be submitting a full
25 application to the DOE Group Round 2 funding opportunity for the proposed St. Louis
26 County 345 kV/230 kV Substation and other components of the AC interconnections
27 proposed for Minnesota Power's configuration of the HVDC Modernization Project.

28

⁸ Winter Direct at 50 at n.18.

1 **Q. Please respond to LPI witness Ms. Maini’s proposal to find more partners to share**
2 **in the overall costs of the HVDC Modernization Project.**

3 A. Minnesota Power has an immediate need for 550 MW of the HVDC System capacity.
4 Minnesota Power has secured the rights to the next 350 MW of capacity that would be
5 available after the construction of the HVDC Modernization Project and certain HVDC
6 transmission line modifications discussed in Section II of the Rebuttal Testimony of
7 Company witness Mr. Winter. If Minnesota Power has a need for this 350 MW of
8 capacity, then it will be used for the benefit of Minnesota Power customers. If Minnesota
9 Power does not have an immediate use for the entire 350 MW of capacity, Minnesota
10 Power can assign all or a portion of its rights for this capacity on a limited basis to other
11 entities at a financial benefit to Minnesota Power customers. Minnesota Power
12 described these potential scenarios in response to DOC IR 018 and LPI IR 036, attached
13 to my Rebuttal Testimony as Rebuttal Schedule 9 and Rebuttal Schedule 10,
14 respectively.

15
16 **V. CONCLUSION**

17 **Q. What do you conclude after your review of Minnesota Power’s HVDC**
18 **Modernization Project configuration and the ATC Arrowhead Alternative?**

19 A. Minnesota Power has worked for a decade on its evaluation of the HVDC System and
20 modernizing the equipment. Through active studies since 2020, Minnesota Power
21 carefully and methodically developed the HVDC Modernization Project, completed in-
22 depth studies for its own review and by MISO. When the opportunity presented itself to
23 position the HVDC Modernization Project for future expandability, while offsetting
24 most of that incremental cost by leveraging state and federal grant funds, Minnesota
25 Power incorporated those plans into the HVDC Modernization Project. Minnesota
26 Power’s configuration of the HVDC Modernization Project will position the HVDC
27 System to meet the current needs of Minnesota Power and its customers and provide
28 future optionality to be leveraged when conditions warrant that expansion.

1 The ATC Arrowhead Alternative is not a more reasonable or prudent alternative to
2 Minnesota Power's Proposed HVDC Modernization Project configuration. In addition
3 to the power flow and various transmission system concerns raised by Company witness
4 Mr. Winter, the ATC Arrowhead Alternative is inferior to Minnesota Power's proposed
5 configuration of the HVDC Modernization Project in that it is more expensive for
6 Minnesota Power's customers (even with ATC's preferred configuration and assuming
7 a PST is not necessary); it has similar potential socioeconomic and natural resources
8 impacts, as discuss by Company witness Mr. McCourtney and, as Mr. McCourtney
9 notes, the future expandability of the ATC Arrowhead 345 kV/230 kV Substation is
10 challenging due to a variety of environmental factors; the schedule for the ATC
11 Arrowhead Alternative does not allow Minnesota Power to leverage a potential earlier,
12 2028, in-service date; along with other individual ATC Arrowhead Alternative
13 deficiencies. While the ATC Arrowhead Alternative is inferior to Minnesota Power's
14 proposed configuration of the HVDC Modernization Project and should therefore be
15 rejected by the Commission in this proceeding, Minnesota Power will continue to work
16 with ATC on transmission planning in northeastern Minnesota, as it has for two decades
17 prior to this proceeding.

18
19 **Q. Does this complete your testimony?**

20 **A.** Yes.

**AMERICAN TRANSMISSION COMPANY LLC AND ATC
MANAGEMENT INC.**

UTILITY INFORMATION REQUEST

Docket Numbers: OAH 5-2500-39600; Date of Request: February 21, 2024
MPUC E-015/CN-22-607;
MPUC E-015/TL-22-611

Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

Information Request No. 41.

Reference pages 13-17 of the direct testimony of MP witness Dan Gunderson.

- a. Please provide a copy of the concept paper that You submitted to the United States Department of Energy (DOE) for the first round of DOE GRIP funding.
- b. Please provide a copy of the full application that You submitted to DOE for the first round of DOE GRIP funding.
- c. Please provide a copy of the notification that You received on October 17, 2023, informing You that “the HTEC project had been recommended by the GDO for negotiation of a financial award.”
- d. Please provide copies of the “pre-award information sheet, Davis Bacon Assurances, a cybersecurity plan, a community benefits plan, and other information and documents” that You submitted to DOE as part of the “pre-award process” for the first round of DOE GRIP funding.
- e. Please provide the current draft of the “first round federal grant and the cooperative agreement with DOE [that] is anticipated to be executed in the second quarter of 2024.”
- f. Please provide a copy of the “HVDC Interconnection Facilities concept paper for the U.S. Department of Energy (‘DOE’) second round funding opportunity of the Grid Resilience and Innovation Partnerships (‘GRIP’) Program for Fiscal Years 2024 and 2025” that You submitted on January 12, 2024.

Response by: Jennifer Kuklenski
Title: Senior Public Policy Advisor
Department: Regulatory and Legislative Affairs
Telephone: 218-355-3297

**AMERICAN TRANSMISSION COMPANY LLC AND ATC
MANAGEMENT INC.**

UTILITY INFORMATION REQUEST

Docket Numbers: OAH 5-2500-39600; Date of Request: February 21, 2024
MPUC E-015/CN-22-607;
MPUC E-015/TL-22-611

Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

Response:

Minnesota Power provides the following attachments in response to parts (a) through (d) and (f). In response to part (e), Minnesota Power does not yet have a draft cooperative agreement for the first round DOE GRIP funding. On February 20, 2024, Minnesota Power was notified by the Company's Federal Project Officer that the technical package had been submitted to the Contract Specialist. The Company is in negotiations with the DOE and still expects the cooperative agreement to be executed in the second quarter of 2024. In response to part (f), Minnesota Power also provides the Concept Paper Notification provided by the DOE on February 29, 2024, which states that based on the DOE's review of the GRIP round two concept paper, Minnesota Power is encouraged to submit a full application for the "HVDC 345/230kV Interconnection" project.

In response to part (d), Minnesota Power objects to providing the cybersecurity plan given the sensitive nature of the plans contents which includes detailed processes and controls required to protect against cyber threats and risk. This project requires what DOE refers to as a "High Risk" plan and a [copy of the template is accessible here](#). In response to part (d), Minnesota Power also provides the Statement of Project Objectives (SOPO) as an attachment.

Attachment	Description
ATC IR 041.01 Attach	HTEC Project Concept Paper (GRIP Round One Federal Funding Application)
ATC IR 041.02 Attach	HTEC Project Application - Technical Volume (Trade Secret in its entirety)
ATC IR 041.03 Attach	HTEC Project Community Benefits Plan (Trade Secret in its entirety)
ATC IR 041.04 Attach	HTEC Project Selection Notification

Response by: Jennifer Kuklenski
Title: Senior Public Policy Advisor
Department: Regulatory and Legislative Affairs
Telephone: 218-355-3297

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Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

ATC IR 041.05 Attach	HTEC Pre-Award Information Sheet
ATC IR 041.06 Attach	HTEC Davis Bacon Assurances Letter
ATC IR 041.07 Attach	Statement of Project Objectives (SOPO)
ATC IR 041.08 Attach	MP HVDC Interconnection Facilities Concept Paper (GRIP Round Two Federal Funding Application)
ATC IR 041.09 Attach	DOE GRIP Round 2 Concept Paper Notification Letter

The information assigned a trade secret designation herein includes project-specific information and has been marked as trade secret as defined by Minn. Stat. § 13.37, subd. 1(b). The information derives an independent economic value from not being generally known or readily ascertainable by others who could obtain a financial advantage from their use. Because the Company has classified this entire document as trade secret information, the Company provides the following description of the excised material as required by Minn. Rule 7829.0500, subp. 3:

Item/Location	Justification
ATC IR 041.02 Attach	Nature of the Material: HTEC Project Application - Technical Volume detailing HTEC project description as required by the DOE.

Response by: Jennifer Kuklenski
Title: Senior Public Policy Advisor
Department: Regulatory and Legislative Affairs
Telephone: 218-355-3297

**AMERICAN TRANSMISSION COMPANY LLC AND ATC
MANAGEMENT INC.**

UTILITY INFORMATION REQUEST

Docket Numbers: OAH 5-2500-39600; Date of Request: February 21, 2024
MPUC E-015/CN-22-607;
MPUC E-015/TL-22-611

Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

	Author: Minnesota Power General Import: The Technical Volume was submitted as part of a highly competitive grant application to secure federal funding for the HVDC Modernization Project. Date Prepared: October 19, 2023
ATC IR 041.03 Attach	Nature of the Material: HTEC Project Community Benefits Plan detailing the community engagement plan for the HTEC project as required by the DOE. Author: Minnesota Power General Import: The Community Benefits Plan was submitted as part of a highly competitive grant application to secure federal funding for the HVDC Modernization Project. Date Prepared: October 19, 2023

Response by: Jennifer Kuklenski
Title: Senior Public Policy Advisor
Department: Regulatory and Legislative Affairs
Telephone: 218-355-3297

MINNESOTA POWER HVDC MODERNIZATION PROJECT

TOPIC AREA 2: SMART GRID - DE-FOA-0002740

Entity Type: Electric Utility

Minnesota Power, a division of ALLETE, Inc., provides electricity in a 26,000-square-mile region of northern Minnesota

Technical Points of Contact:

Dan Gunderson, Vice President – Transmission & Distribution

218-348-3133 (mobile)

218-355-2014 (office)

dwgunderson@mnpower.com

Christian Winter, Supervising Engineer

507-530-0472 (mobile)

218-355-2908 (office)

cwinter@mnpower.com

Business Points of Contacts:

David Chura, Manager – Emerging Initiatives

218-348-0787 (mobile)

218-355-3280 (office)

dchura@mnpower.com

David Moeller, Senior Regulatory Counsel

218-591-1076 (mobile)

218-723-3963 (office)

dmoeller@allete.com

Project Locations:

Center, North Dakota to Hermantown, Minnesota

Project/Technology Descriptions (12-page limit)

Project Background/Description

Minnesota Power is seeking the maximum funding level under Topic Area 2 (Smart Grid Program) for its HVDC Modernization Project. Federal funding would be used to increase facility capacity and make the project future-ready, support the increased transfer from one of highest efficiency renewable energy areas in North America, provide greater flexibility, and enhance resiliency of the system as intermittent generation continues to be added to the grid. Federal funding is critical now to enable the project to increase its capacity from 900 MW to 1500 MW in the future. This would represent a more than 66% increase in the capability of the terminal assets to allow for more renewable transfer today, while enabling the assets to be ready when the line is upgraded to allow for the full capacity transfer, a unique way to leverage existing assets to achieve carbon dioxide (CO₂) reduction goals. As Minnesota Power and other energy companies across the nation add more renewable energy sources to our energy mix to achieve decarbonization goals, the value of increased transmission capacity will only grow.

Without federal funding, capacity upgrades of this scale would not be feasible and this once-in-40-year opportunity to design for and provide future renewable transfer capability and resiliency could be challenged. Minnesota Power owns and operates an existing 465 mile long High Voltage Direct Current (HVDC) Transmission Line (HVDC Line) and two HVDC terminals located in Center, North Dakota and Hermantown, Minnesota (together the HVDC System). The HVDC System was originally commissioned in 1977 and operated to deliver 500 MW of coal-fired power from the Young 2 power plant to Northeastern Minnesota. Minnesota Power's purchase of the HVDC Line in 2010 cleared the way for the line to be repurposed to deliver wind power generated in the plains of North Dakota to Northeastern Minnesota.

The HVDC terminals have served Minnesota Power well, but given their age (approximately 45 years old) they have exceeded their design life. Minnesota Power's HVDC Line Modernization project (the Project), will modernize and upgrade the existing HVDC Terminals near Hermantown, MN and Center, ND, replacing the original 1970s HVDC technology with the newest generation of flexible, scalable, grid-supporting voltage source converter (VSC) HVDC technology.

Minnesota Power has the unique opportunity to modernize the HVDC terminals and implement the latest technology. Because of the opportunity for a cost-share from the DOE, at this important design juncture MP is able to consider redesigning the system for not only its needs, but the need of the future regional grid, where additional system expansion can be incorporated to allow the system to efficiently bring the transfer capability from 900MW to 1500MW. This addition will be a catalyst for new renewable and low-carbon clean electricity additions, connections to other high voltage transmission projects being considered in the region, enabling new renewable power transfers, and preparing for the future needs of the broader regional grid.

In order to modernize the HVDC terminals and implement the latest technology, new buildings and electrical infrastructure need to be constructed near the existing HVDC terminals. The project to increase the future transfer capability does not change the planned physical footprint. In Minnesota, to connect the new HVDC terminal to the existing AC system, the Project would require the construction of a new St Louis County 345 kilovolt (kV)/230 kV substation located less than one mile west of the current Arrowhead Substation. The new HVDC terminal would be connected to the St Louis County Substation by an approximately 0.5 mile long section of 345 kV large high-voltage transmission line (LHVTL) and the new St Louis County Substation would be connected to the existing Arrowhead Substation by two less than one mile long parallel 230 kV LHVTLs. Additionally, a less than one mile long portion of the existing ± 250 kV HVDC Line in Minnesota will need to be reconfigured to terminate at the new HVDC terminal. In North Dakota, the Project would require the construction of a new Nelson Lake 345 kilovolt (kV)/230 kV substation located to the northwest of the existing Square Butte substation. The new HVDC terminal would be connected to the Nelson Lake Substation by a 345 kV large high-voltage transmission line (LHVTL) and the new Nelson Lake Substation would be connected to the existing 230 kV LHVTLs in the area. Also, the existing ± 250 kV HVDC Line in North Dakota will be extended approximately 2 miles to terminate at the new HVDC terminal.

This HVDC project is critical to ensure a reliable grid that can be expanded to deliver renewable energy to where it's needed by Minnesota Power's customers and the broader region. It also continues the safe delivery of electricity across an existing corridor to meet the growing demand for energy in an increasingly electrified economy. Project benefits include:

- Adding modern energy control and conversion equipment which will improve the reliability of the existing transmission line, provide more support to the grid, and prepare for the renewable energy future.
- Providing cost-effective, expandable technology upgrades that allow for the future transfer of additional clean energy.
- Incorporating bi-directional line capability allowing energy to flow in either direction to where it is needed as the system resources require.
- Optimizing assets by transporting some of the highest capacity wind resources efficiently to customers, including Minnesota Powers substantial industrial loads, reducing reliance on fossil fuels.

The Project is presently anticipated to be in-service in the 2027-2030 timeframe. Minnesota Power will own all of the facilities proposed and will acquire all land rights needed for operation of the facilities.



Figure: HVDC Transmission Line Location

Company Background

Minnesota Power, a division of ALLETE, Inc., is an investor-owned public utility headquartered in Duluth, Minnesota. Minnesota Power supplies retail electric service to 145,000 retail customers and wholesale electric service to 14 municipalities in a 26,000-square-mile electric service territory located in northeastern Minnesota. Minnesota Power generates and delivers electric energy through a network of transmission and distribution lines and substations throughout northeastern Minnesota. Minnesota Power's transmission network is interconnected with the regional transmission grid to promote reliability and Minnesota Power is a member of the Midcontinent Independent System Operator (MISO) and the Midwest Reliability Organization (MRO).

Minnesota Power owns approximately 2000 MW of electric power generation in the form of renewable wind, solar, and hydropower generation facilities as well as coal, biomass and natural gas-fired power plants in Minnesota and North Dakota. As a leader in the renewable transition for the Upper Midwest, Minnesota Power currently provides a power supply that is 50% renewable and will increase to over 70% by 2030. Minnesota Power accomplished this in the last decade by transitioning or retiring 7 of its 9 coal fired facilities reducing its system from 95% coal fired energy to less than 50%. Much of the renewable electricity consumed by Minnesota Power's retail and municipal customers is delivered to its service area by its 465-mile-long HVDC Line. Notably, along with a robust wind area and adjacent to the HVDC line, a coal-fired generating station at Center, North Dakota has nearly completed its Front End Engineering and Design study to add equipment that would capture 90+% of its CO₂ emissions. Electricity from this plant could utilize the upgraded HVDC line.

Eligible Uses and Technical Approaches

Increasing transmission capacity and operational transfer capacity through grid enhancing technologies such as dynamic line rating, flow control devices, advanced conductors, and network topology optimization, to improve system efficiency and reliability.

Two fundamentally different types of HVDC converter technology are available: line commutated converters (LCC), which rely on the AC system voltage for commutating current from the outgoing valves to the incoming valves, and voltage source converters (VSC) which are force-commutated using electronic gating signals. This Project will replace the two existing 1970s-era LCC HVDC converter stations, which are limited to 550MW of capacity, with two new VSC HVDC terminals with the capability of facilitating the transfer of up to 1500MW. Benefits of this technology include:

- Allows for bi-directional flows, bringing the power to where it's needed most based on market and reliability signals, thereby optimizing the system.
- Supports the AC system and is practically immune to weak system conditions and AC system faults, unlike LCC converter technology.
- Flows can be increased/decreased quickly based on MISO market and regional needs. It's extremely nimble and flexible in its response to system needs.
- Provides voltage and reactive power support to the Grid along with other ancillary services such as frequency response and blackstart capability. LCC HVDC technology can't do this without the installation of additional equipment (static synchronous compensators (e.g. STATCOMs), synchronous condensers, etc.).

Improving the visibility of the electrical system to grid operators, to help quickly rebalance the electrical system with autonomous controls, through data analytics, software, and sensors.

New HVDC system technology now has tools built into the software to help operate them more effectively and reliably. Upon commissioning, the Project will have the capability to be operated and optimized by a regional grid operator and will automatically provide voltage support to the grid as it monitors and reacts to the surrounding system for inadequacies. Also included will be monitoring capability of specific individual components to assist the operators on a real-time basis. These components include: transformers, valves, valve cooling systems, control system, and building systems (HVDC, fire detection, security systems, etc.). For example, transformers can be monitored for: online dissolved gas, bushing power factor, pump vibration and temperature readings. This information can be pulled into data analytic tools along with information on other discrete components to give the operators a real-time view of what's happening on the system. This will help inform them of the capability of the system at any given time, particularly if called upon to respond to a system event. The data will tell the operators if the system is available to respond, by how much and whether there is margin if a second event were to occur.

Enhance secure communication and data flow between distribution components, through investments in optical ground wire, dark fiber, operational fiber, and wireless broadband communications networks.

These distribution system attributes are not applicable to this project as it is at the transmission level.

Aggregation and integration of distributed energy resources and other “gridedge” devices to provide system benefits, such as renewable energy resources, electric vehicle charging infrastructure, vehicle-to-grid technologies and capabilities, and smart building technologies.

This project enables the transfer of increased amounts of renewable energy, but not at the distribution level.

Enhancing interoperability and data architecture of systems that support two-way flow of both electric power and localized analytics to provide information between electricity system operators and consumers.

The HVDC technology being applied in this Project inherently supports the two-way flow of electric power. In addition, it will be able to be scheduled to flow in a specific direction if needed to support system reliability, regardless of market signals. Its schedule can be changed frequently resulting in a nimble, flexible asset that can be maximized to support reliability, resilience, and the delivery of affordable clean energy to customers.

Anticipate and mitigate the impacts of extreme weather or natural disaster on grid resiliency, including investments to increase the ability to redirect or shut of power to minimize blackouts, prevent wildfires, and avoid further damage.

VSC HVDC technology is capable of functioning in grid-forming mode to support blackstart capability on one end of the line, when the system is still functional on the other end of the line. This technology enhancement will create new opportunities for system restoration following extreme events. Because of this, the Project will have the capability to support system restoration needs in the upper Midwest. The long distance line (465 miles) is also able to link two distinct regions of the grid to directly support interregional support in the case of extreme events in either area.

How the project supports State, local, Tribal, community and regional resilience, reducing likelihood and consequences of disruptive events, decarbonization, or other energy strategies

Minnesota Power supplies electric service to 145,000 retail customers and wholesale electric service to 14 municipalities in a 26,000-square-mile electric service territory throughout northeastern Minnesota. Minnesota Power also provides retail electric service to portions of the Fond du Lac Band of Lake Superior Chippewa and the Leech Lake Band of Ojibwe reservations, as well as tribally owned businesses located outside of the reservation and within ceded lands of the 1854 Treaty Territory. The communities served by Minnesota Power currently rely on the HVDC Line to transfer the 600 MW of wind power located in North Dakota to Minnesota, which helps ensure reliable, affordable energy for our customers.

As a Transmission Owning member of MISO Minnesota Power’s transmission network is interconnected with the regional transmission grid to promote reliability and affordability beyond our service territory. Minnesota Power therefore recognizes the HVDC Line as an

important part of the clean energy transformation in Minnesota and regionally. However, to thwart disruptive events and ensure the line is able to continue transferring clean energy, the converter stations must be modernized. The Center and Arrowhead HVDC converter stations were designed by General Electric for a 30 year operating lifetime, but they have now been operating for approximately 45 years. Minimizing outages is not only essential to transferring clean energy to Northeastern Minnesota, but also vitally important to ensuring the communities we serve have access to affordable energy.

Experts have also recognized that modernization of existing HVDC infrastructure is one of the fastest and lowest-cost ways to add substantial capacity to the grid. Technology upgrades like those planned for this project therefore present a cost-effective opportunity to substantially increase the operating capacity of the HVDC terminals to allow the future efficient transfer of additional renewable and low-carbon energy. Once the HVDC Modernization Project is complete, the HVDC Line will be expandable to transfer additional clean energy when needed. Additionally, the increased HVDC capacity will help fill the energy void as fossil fuel facilities transition to low-carbon operations or retirement, which will be essential to maintaining a reliable and resilient energy grid.

In addition to achieving CO₂ reduction goals, increased wind power transfer is particularly important to the communities served by Minnesota Power since the region experiences very high energy demand during winter months due to extreme cold. The regional energy grid can become highly congested during disruptive weather events and the HVDC Line helps to ensure resiliency and reliability during times of high congestion. The financial impact when the HVDC Line experiences outages is difficult for everyone in Minnesota Power's service territory, but is worst for low-income communities. Since Minnesota Power's service territory consists of many rural communities, modernizing the HVDC Line will continue to allow the Company to offer a reliable, low-carbon, affordable electricity source to these communities. The blackstart capability, as discussed above, also play a key role in supporting regional grid resiliency.

Modern HVDC technology at the converter stations would also enhance HVDC dispatch capability and allow energy to flow in both west to east and east to west directions, adding new flexibility and optionality for the regional transmission system supporting ND, MN, WI and beyond. Ultimately, through this project Minnesota Power is creating power supply optionality and managing energy costs for the communities we serve while enhancing the broader regional grid.

How the project delivers grid-benefitting outcomes

The HVDC Modernization Project will add significant new transfer capability and optionality to the regional system and at the same time it will become a grid supporting asset rather than consumer of grid services. The ability to add the expandable design will make the system a foundational building block for the future grid.

At the time of the original Square Butte project in the 1970's, VSC technology was not available, but the project was one of the first to adopt LCC thyristor technology. When Square Butte was installed, reactive support needed by the LCC system was provided by local North Dakota thermal generation. This type of support will become less available as more coal units retire or cannot be relied upon to provide this additional service.

The proposed VSC technology is now becoming the favored HVDC technology due to its inherent ability to provide voltage and reactive power ("VAR") support to the grid as well as transfer of real power. VSC is viewed by many as the DC technology of the future, as our Square Butte LCC technology was viewed 45 years ago. VSC is ideally suited for and is being used for offshore wind farms and in weak grids. However the same benefits for those applications also make VSC attractive for land based systems such as this HVDC Modernization project. Worldwide, a majority of HVDC projects being built today are VSC.

Contrasted against the original LCC system, which is a VAR consumer, VSC generates its own reactive support and can operate as a voltage regulating device to support the surrounding system even if the HVDC line isn't transmitting power. VAR support is necessary for the grid to operate and move power reliably, especially as the traditional steam units historically providing VAR support to the system are retired. While variable renewable energy resources do provide some VAR support, they cannot by themselves provide a one-for-one replacement for traditional baseload units either in terms of the magnitude or the location of support. This is the underlying reason that renewable integration studies like MISO's Renewable Integration Impact Assessment (RIIA) continue to find that other devices on the system, such as VSC HVDC, are necessary to achieve higher levels of renewable penetration in the future grid.

Besides voltage support, VSC HVDC can provide dynamic reactive response that supports transient stability. For example, if a heavily loaded AC line trips out of service it has potential to cause wild power and frequency swings that can create an unstable grid. The HVDC control system can be programmed to recognize these conditions and modulate real and reactive power output to compensate, helping to alleviate a number of conditions such as low voltages, tripping of large electric motors or generators, widespread outages, islanding, and generator damage from sub-synchronous torsional interaction.

The new HVDC system will create flexibility by being able to respond to market and reliability signals more frequently in real time. The existing system is limited to changing real power dispatch once per hour due to the age and condition of the equipment. The new system will be able to follow current market dispatch schedules for MISO and will be prepared for even more frequent dispatch adjustments. This will benefit the system by creating efficiency, being able to more closely match wind output with power flow in near real time, and following market signals more closely to facilitate optimal power dispatch. The upgrade in the transfer capability of the HVDC terminals means the system will be able to provide these grid benefits well into the future as significantly larger amounts of renewable and low-carbon electricity come on the grid.

As the power system continues to evolve around the clean energy transition, the value-added technical attributes of VSC technology make it the most flexible and future-proof option for HVDC development.

The impact of the project to reduce innovative technology risk; achieve further deployment at-scale; and lead to additional private sector investments

HVDC VSC Technology has not yet been used for bulk transfer of energy in the United States over long distances, as will be demonstrated with this project. This project provides the opportunity for a unique, scalable project that provides future expandability to access some of the highest quality wind resources in North America and move them further east towards additional load centers. This technology has been utilized for several decades at smaller scale, and has most recently been the transformative technology throughout the European grid to manage the increased amount of energy from renewable resources.

The VSC technology provides optimal bi-directional scheduling of energy transfer, instantaneous reactive support (replacing the stability feature currently provided by baseload coal facilities in this region), and maximum flexibility for grid with increasing intermittent energy. This particular modular project design will also enable for further private sector capacity and clean energy additions. The connection to other transmission corridors under development will promote and be a catalyst for broader interregional transfer options establishing expandable energy hubs that will optimize land use in both ND and MN creating future project options for the modern grid including renewable energy additions and storage.

Impact of DOE funding on Minnesota Power's HVDC Modernization Project

A \$50M grant from the DOE would cover a portion of the estimated \$150 million investment needed to allow Minnesota Power to invest in larger, expandable terminal design that are capable of transferring up to 1500 MW (instead of 900 MW) of energy, bi-directionally. Building the terminals at this expanded capability requires additional investment that may not be recoverable from customers in the near term. Minnesota Power's vision for the future is to be a partner in a broader HVDC transformation in the upper Midwest and beyond. Given the age of the existing HVDC system and the planned HVDC Modernization Project the time is right to make the first incremental investment to facilitate a broader expansion in the future. Adding the expanded design into this HVDC Modernization project is a historical opportunity for the transmission grid.

Minnesota Power firmly believes that the VSC HVDC technology is the right choice for the region and building for the future needs of the clean energy grid. This was validated by the Midcontinent Independent System Operator (MISO) in their February 2021 Renewable Integration Impact Assessment (RIIA) Report. The purpose of RIIA was to "better understand

the impacts of renewable energy growth in MISO over the long term.”¹ Through a technically rigorous analysis process MISO found that “[t]o import power from wind-rich zones located in weak-areas, building a VSC-HVDC line into those weak areas may be more economical than incrementally installing a combination of AC transmission lines with many synchronous condensers.”²

Readiness, Viability, and Expected Timing the Project

Minnesota Power is currently in the final stages of redesigning its aging, end of life HVDC system for in service in the 2027-2030 timeframe. The HVDC system is a critical element to continue the Company’s EnergyForward strategy implementation to be more than 70% renewable by 2030, cease all coal operations by 2035 and vision to be 100% carbon-free by 2050. This request for support to add the expandable features to the HVDC re-design is both timely and critical to ensure the unique and once in a 40 year opportunity of expanding this existing system can be maximized.

Minnesota Power has spent significant time investigating options and alternatives for a modernization and upgrade of its existing HVDC System. A robust analysis has gone into determining the right path forward and this innovative project has many unique characteristics, including:

- 1) Low impact, cost effective transfer capability compared to new build options
- 2) Use and optimization of the existing transmission line and right-of-way, minimizing land use and owner impact,
- 3) Proximity to other planned regional HVDC Transmission projects from the Northwest to North Dakota, and MN to Michigan projects
- 4) Existing, internal expertise and experience, owning and operating a HVDC System in a regional market environment.

The plans for modernization have been presented to investors during quarterly earning calls and have broad Board of Director support to move forward upon receipt of funding to cover the cost of expandability. Given the age of the HVDC System, the time to act is now. Minnesota Power has requested and received bids from the top HVDC vendors in the worldwide market and those proposals are under evaluation. With supply chain issues, labor shortages and increased demand for HVDC in the European markets, Minnesota Power has positioned itself to secure the earliest production slot that’s available. The project is expected to take a minimum of 5 years, with in-service presently anticipated in the 2027-2030 timeframe.

Minnesota Power is poised and ready to invest in its existing system to prepare it for the near-term needs. With DOE’s support we can ensure that the system is flexible and ready to meet the needs of the future regional grid.

¹ <https://www.misoenergy.org/planning/policy-studies/Renewable-integration-impact-assessment/#nt=%2Fria%20Summary%20Report520051.pdf>

² Page 118: <https://cdn.misoenergy.org/RIIA%20Summary%20Report520051.pdf>

Community Benefits Plan (5-page limit)

Community and labor engagement leading to negotiated agreements

A Community and Stakeholder Engagement Plan (CSEP) will be developed during the project and will describe how organizations representing and including a variety of stakeholders from residents, unions, government, tribal communities and disadvantaged communities (DACs) will be engaged. Minnesota Power has a strong commitment and reputation for actively engaging stakeholders in our projects and resource planning. This is accomplished through regular engagement with tribal nations and communities on a number of initiatives and projects, including large energy infrastructure projects like transmission projects. Through this regular engagement, the Company has been able to identify opportunities to better serve and partner with tribal communities to ensure the benefits associated with our commitment to safe, reliable, and affordable energy are shared equitably among the communities within our service territory.

One recent example is the stakeholder engagement process Minnesota Power initiated for the development of the Company's 2021 Integrated Resource Plan. Given the weight of the issues at hand, Minnesota Power determined it was important to bring in third-party, neutral consultants to facilitate productive and open communication between its diverse stakeholders and the utility, and to identify stakeholder concerns and priorities that could inform development of the IRP. A series of meetings were conducted to share information and gain stakeholder feedback. The meetings included approximately 60 individuals representing a broad range of perspectives, including residents, small businesses, large commercial and industrial consumers, economic development organizations, labor unions, clean energy and environmental advocates, consumer advocates, local governments, tribes, schools and colleges, and state government agencies. In approving the 2021 Integrated Resource Plan, the Company received high accolades for this collaborative process from the Minnesota Public Utilities Commission, its communities and stakeholders alike.

Since 2011, Minnesota Power has also conducted Community Advisory Panels (CAPs), which meet eight times a year, in our host communities. These panels are based on the national CAP models. The CAP meetings provide community updates and bring in speakers on topics of immediate relevance to the respective communities. Topics include updates on major local projects, overviews of regional industries, and feature updates from sponsors and local staff. Participants represent diverse interests. The objectives of the CAPs include: establishing trust and credibility through long-term relationship building; educating the community regarding company plans, operations and corporate goals; listening and soliciting community feedback about plans, operations, and concerns; identifying ways to improve communications and relationship building; and collaborating to address challenges and leverage new opportunities.

In support of the full application, Minnesota Power will include letters of support from a variety of stakeholders representing residents, unions, government, tribal communities and

disadvantaged communities (DACs) whom the Company has well established working relationships and partnerships with.

Investing in job quality and workforce continuity

Minnesota Power has an established, long standing commitment to its communities and workforce. Working with local colleges and apprenticeship programs, a workforce readiness plan related this effort will be developed as we have done with all of our large project implementations. The Plan will describe the skillset and availability of the workforce needed for the successful implementation of this project. Minnesota Power is also advancing diversity in hiring and collaborating with local leaders and colleges to identify partnerships and share internships, as well as with workforce development and diversity groups to expand hiring reach. Out of Minnesota Power's approximately 1,000 full-time employees, over 400 are represented by unions. The Company has collective bargaining agreements with the International Brotherhood of Electrical Workers ("IBEW") Local 31 and IBEW 17 Local 1593. Additionally, the Company has a strong working relationship with the trades and union labor is a part of all of our projects.

As an example of Minnesota Power's commitment and leadership in this area, in 2022 Minnesota Power completed two community solar projects which utilized local union labor and contractors for construction. A third community solar project using local labor is sustainably complete and will be energized the spring of 2023. The solar modules were locally made in our service territory (Minnesota). In addition, Bidder Questionnaires were issued with all requests for bids in an effort to identify local and diverse suppliers. For all three projects combined, Minnesota Power executed 60 contracts with local suppliers and contractors totaling \$29.6 million worth of work.

During the summer of 2022, Minnesota Power provided seven White Earth Tribal and Community College (WETCC) solar training certificate program graduates an internship opportunity to spend three days on the Sylvan solar job site. The students worked with Hunt Electric, the contractor in charge of the job site, and were paid to assist with all parts of the ongoing work from racking to placing panels.

Advancing diversity, equity, inclusion, and accessibility

Minnesota Power is committed to promoting Diversity, equity, and inclusion (DEI) and is expanding the diversity of its suppliers. The Company is committed and taking action for a more equitable society, expanding hiring and supplier diversity and engaging stakeholders in advisory panels, tribal liaisons, and government and community contacts to build relationships, solicit feedback, and collaborate.

Minnesota Power advances diversity, equity and inclusion through five main focus areas: workforce, supply chain, customer, corporate citizenship and communication. The Company's DE&I initiatives are led by a DEI Steering Committee. In 2022, the Company created an

employee-led DEI Engagement Subcommittee to raise awareness and identify, organize and communicate educational and engagement opportunities related to diversity, equity, inclusion, and access.

Minnesota Power's commitment to DEI also extends to attracting and retaining employees who value diverse backgrounds, ideas, and opinions DEI will be incorporated via participation from underserved groups, seeking diverse suppliers, developing Justice40 (J40) and stakeholder engagement plans, tracking impacts to disadvantaged communities (DACs), and increasing stakeholder participation to improve project outcomes. The Company continues to work to expand and partner with diverse suppliers including minority-owned, women-owned, veteran-owned, LGBT-owned, disability-owned, small economically disadvantaged businesses, and HUBZone businesses so that our suppliers reflect the diversity of the communities we serve.

Minnesota Power provides equal access for all qualified businesses, including both direct Tier 1 diverse suppliers and also Tier 2 suppliers that report on diverse spend. The Company continues to partner with multiple organizations to build and support diverse suppliers, such as: MN Tribal Contractors Council, North Central Minority Supplier Development Council, Women's Business Development Center, and the Small and Disadvantaged Business Opportunity Council.

On March 26, 2021, Moody's Investors Service recognized ALLETE/Minnesota Power as having the most gender diverse board among 45 publicly traded utilities. The board of directors includes five directors who are women, which constitutes a majority of the board. ALLETE is committed to actively seeking candidates who will further enhance the board's diversity. Minnesota Power makes diversity, equity and inclusion part of everything we do – from how we deliver energy and build our workforce to creating opportunities for communities to thrive.

Contributing to the Justice40 Initiative goal that 40% of the overall benefits of certain climate and clean energy investments flow to disadvantaged communities

The Justice 40 (J40) plan will be developed during the project and will describe how benefits will be identified and flow to DACs, how impacts will be identified, and how negative impacts and risks will be mitigated. This will include investigating the considerations surrounding limited resources, remediation of legacy environmental impacts, ancillary benefits, waste management strategy, and community and stakeholder engagement from underserved communities.

Tribal relations have been a long standing important part of Minnesota Power's external engagement efforts and part of the company's government relations efforts. The Company has two designated tribal liaisons who work directly with and are a key point of contact for the tribal nations served by Minnesota Power.

Minnesota Power has also hosted tribal relations training for employees and customers as well to provide more information about Native American tribes, past and current federal and state policies regarding American Indian nations, the fundamentals of the political status and functions of tribal governance, effective approaches to tribal interactions and communications,

and some of the existing tribal priorities. The training was conducted by presenters Tadd Johnson, director of graduate studies and professor of American Indian Studies at the University of Minnesota Duluth (UMD) and a tribal attorney, and Joseph Bauerkemper, associate professor of American Indian Studies at UMD and affiliate faculty member at the University of Minnesota Humphrey School of Public Affairs.

Addendum A: Qualifications, experience, and capabilities of the proposed Project Team (5-page limit)

- o Whether the Project Manager and Project Team have the skill and expertise needed to successfully execute the project plan.

Minnesota Power has a long history of large capital project implementation and management as it has been responsible for its regional transmission, distribution and generation assets to deliver reliable electric service to its customers for over 116 years. Minnesota Power takes an active role in the design, engineering, procurement and construction of its large capital projects.

In particular for the HVDC technology application being discussed with this project the Company has supported operation of the Square Butte HVDC project for over 45 years and has experienced staff for daily operations. Between 1977-2009, MP operated the HVDC line jointly with Minnkota Power Cooperative (MPC) under the Square Butte Electric Cooperative. Each company supported the project with engineering and technical staff. When MP purchased the HVDC line in 2010, MP hired more engineers and technicians to replace the positions staffed by MPC. The HVDC system is unique to the transmission system in the way it requires periodic maintenance. The major outages are scheduled every third year with a large amount of work needing coordination. Although maintenance activities, these major outages are treated as small projects and are run as such. In that respect the staff is prepared for intense project work which keeps talents sharp for the large capital projects. In addition to the 3 year major outages there are also 2-4 shorter outages each year based on need and which typically revolve around one certain aspect of the system.

Throughout the life of the system there have been major upgrades including control replacement (2004), bushing replacement (2007-2013), valve cooling upgrades (2010), a 50MW upgrade (2013) and AC protection replacements (2016 and 2018). Each of these covered multiple years for engineering, procurement, and construction activities. The experience gained through those projects has given the project team the skill to successfully execute this project plan. Each of these projects was run by a team who has developed their skillset within HVDC and will contribute to the success of this HVDC Modernization project.

- o Whether the applicant has prior experience which demonstrates an ability to perform tasks of similar risk and complexity.

Minnesota Power has a long history of executing large projects with similar risk and complexity of this project as the utility's infrastructure has been built up over the past 116 years. The most recently completed project is the Great Northern Transmission Line (GNTL), a 360 mile 500kV AC transmission line between Manitoba, Canada and Minnesota. The GNTL took 10 years from planning to completion and had a project scope of approximately \$700M. It included several years of public outreach, permitting and engineering followed by 5 years of construction. Key note on this critical infrastructure project was the Company's commitment to stakeholder

participation and outreach which created an environment where there was not a single intervention or stakeholder complaint on the project route. Along with the GNTL line, the Iron Range 500/230kV substation was built, one of the largest in MP's territory. GNTL went into service in June 2020.

Another project with GNTL was the Warroad River Series Compensation station (WRSC). Series compensation is a device used on very long AC transmission lines to increase capacity and is typically located at the midpoint or ends of the line. In this case MP chose a location near Warroad, MN at the midpoint of the line. The series compensation is a set of capacitor banks and ancillary equipment operated by a dedicated control system. It is also considered a type of Flexible AC Transmission Systems (FACTS) device which has a lot of similarities to HVDC. The typical delivery mechanism for this type of device is an Engineering, Procurement, Construction (EPC) contract with one of the limited number of suppliers. Throughout the stages of that process the MP team remained engaged to review, comment, learn, and prepare to operate the system independently upon completion. The WRSC was placed into service in late 2020.

In 2019 MP added another FACTS device, a STATCOM, after several years of development, engineering, and construction. A STATCOM provides dynamic reactive support to the system which was needed due to retirement of coal fired generating units. Similar to HVDC and Series compensation, a STATCOM is a set of power electronics with a dedicated control system. This project used an EPC structure like the series compensation and was successfully completed on schedule.

Directly related to the existing HVDC system was a 50MW upgrade that enabled MP to increase investment in renewable generation opportunities in North Dakota. The project consisted of raising approximately 120 structures along the line for additional ground clearance and replacing 48 transformer cooling units. The work required outages on the operating system and was managed over a 3 year period so the completion would coincide with wind generation coming online and AC system upgrades that were identified at the time the HVDC line was purchased by MP. This work was completed in 2013.

- o Whether the applicant has worked together with its teaming partners on prior projects or programs.

Minnesota Power has long standing relationships with partners who will be also working on this HVDC project. RBJ Engineering has worked with MP for over 20 years in a variety of capacities. They have performed system studies for new lines, helped with evaluation of HVDC technologies and the STATCOM project, and provided guidance on many other HVDC operational questions. Minnesota Power has hired RBJ Engineering as the engineering consultant for the HVDC Modernization Project.

MP also has relationships with several engineering consultants who will design the 345/230kV substations on each end of the line. MP has been using these consultants for many years and

they work within MP standards and preferences to deliver projects that are consistent for field crews and meet all applicable codes.

Importantly, MP has a working relationship with the main suppliers of HVDC systems. One supplier performed a control upgrade in 2004 to the existing HVDC system and has supported MP in many different way throughout the years including other smaller projects, operational support and emergency support. MP engaged another supplier for one of the aforementioned FACTS devices and several large generation project.

In summary MP has worked with all currently anticipated partners for the project during previous projects to deliver them successfully.

- o Whether the applicant has adequate access to equipment and facilities necessary to accomplish the effort and/or clearly explain how it intends to obtain access to the necessary equipment and facilities.

MP is currently reviewing bids from a Request for Proposal sent to multiple suppliers of HVDC systems. Upon review MP will execute a contract to begin design and will also secure the best available production slot. In addition to the converter stations, there are new substations and small sections of transmission line that must be built. MP coordinates closely with suppliers for updated lead times as part of our normal course of business.

**PUBLIC DOCUMENT
TRADE SECRET DATA
EXCISED IN ITS ENTIRETY**

ATC IR 041.02 Attach TS: HTEC Technical Volume

**PUBLIC DOCUMENT
TRADE SECRET DATA
EXCISED IN ITS ENTIRETY**

ATC IR 041.03 Attach TS: HTEC Community Benefits Plan

October 17, 2023

SENT VIA ELECTRONIC MAIL

David Chura
ALLETE, Inc. d/b/a Minnesota Power
30 West Superior Street, Solway Township, MN 55802-2093
dchura@mnpower.com

SUBJECT: Selection of Application for Negotiation Under Funding Opportunity
Announcement Number DE-FOA-0002740, BIL – Grid Resilience and Innovation
Partnerships (GRIP), Topic Area 2

Dear David Chura:

We are pleased to provide this update on your application. The Grid Deployment Office (GDO) within the Department of Energy (DOE) has completed its evaluation of your application submitted in response to the subject Funding Opportunity Announcement (FOA). The application below has been recommended by the GDO for negotiation of a financial award (Note: This notification does not guarantee Federal Government funding, as funding will only be obligated upon completion of successful negotiations.):

Application/Project Title: Minnesota Power HVDC Terminal Expansion Capability (HTEC) Project;
Principal Investigator: Peter Schommer;
Grants.Gov Application Number: GRANT13833343.

PLEASE NOTE:

The DOE is planning to issue a formal media release regarding this, and other GRIP financial assistance awards, in the near future. Accordingly, the GDO requests that selectees do not make any public announcements before this DOE announcement. The GDO communications team will provide a promotional toolkit to support you in amplifying your award status, should you choose to do so once the public announcement is made and a link to the DOE press release is available. If you have any questions about this, please reach out to: GDO_Comms@hq.doe.gov.

Receipt of this letter does not authorize you to commence with performance of the project. DOE makes no commitment to issue an award and assumes no financial obligation with the issuance of this letter. Applicants do not receive an award until award negotiations are complete and the Contracting Officer executes the funding agreement. Only an award document signed by the Contracting Officer obligates DOE to support a project.

The usual award negotiation process can take approximately 120 days. You must be responsive during award negotiations (i.e., provide requested documentation) and meet the stated

negotiation deadlines. Failure to submit the requested information and forms by the stated due date, or any failure to conduct award negotiations in a timely and responsive manner, may cause DOE to cancel award negotiations and rescind this selection. DOE reserves the right to terminate award negotiations at any time for any reason.

Please complete the following items in accordance with the instructions below and submit to the DOE Project Manager and Specialist identified in this letter, unless otherwise instructed.

Requirement	Instructions	Business Days Due (from Receipt of Letter)
Pre-Award Information Sheet (and all information requested within the document).	Prepare and submit. Available at https://www.netl.doe.gov/business/business-forms/financial-assistance .	10
Indirect Rate Agreement(s) for the Awardee and all Subrecipients	Submit, if applicable.	10
Davis Bacon Assurances (if applicable)	For all projects that include construction, submit Assurances (see FOA Section IV.I.viii).	10
Participants and Collaborating Organizations	Prepare and submit (see FOA Section VI.B.xviii).	30
Cybersecurity Plan	In accordance with Section VI.B.xxiii and Appendix E of the subject FOA, a Cybersecurity Plan must be submitted during award negotiations. Cybersecurity Plan Template: You can obtain the Cybersecurity Plan Template at https://www.energy.gov/ceser/bipartisan-infrastructure-law-implementation under the provision titled, CYBERSECURITY PLAN (SEC 40126). Please select the High Risk Cybersecurity Plan Template, which applies to the majority of projects selected under Topic Areas 2 & 3 of the subject FOA. Though unlikely, if the low or medium risk Cybersecurity Plan Template applies to your project, your DOE Project Manager will inform you in follow up correspondence. Webinars: Two webinars will be held to assist you with the preparation of your Cybersecurity Plan. Both webinars will provide the same information, so you will only need to attend one. Once available, webinar registration information will be	45

	provided on the Grid Resilience and Innovation Partnerships (GRIP) Program web page at: https://www.energy.gov/gdo/grid-resilience-innovation-partnership-programs. Webinar Agenda: • Welcome and Introductions • FOA Cybersecurity Plan Requirements • Submission and Review Process • Review of the Cybersecurity Plan Template - o walk-thru of each of the ten sections within the templates - o discussion of lessons learned from plans submitted to other FOAs • Cybersecurity Resources and Technical Assistance • Questions and Answers Submittal: Applicants will submit the final completed Cybersecurity Plan to the DOE Project Manager and to the following email address: CR-IJACybersecurityplans@hq.doe.gov. Submission of the Cybersecurity Plan is required prior to award.	

If your organization, including any subrecipient or contractor, anticipates involving foreign nationals (FNs) in the performance of the award, your organization is required to provide a list of all FNs planned to participate on the award along with basic information about each. You must download and complete the “Foreign National Participation Document” located at <https://www.netl.doe.gov/business/business-forms/financial-assistance> under Post Selection Forms/Information and submit the completed document to basicinfo@netl.doe.gov with a courtesy copy to the assigned Project Manager (PM) and Specialist.

Upon receipt of the completed “Foreign National Participation Document,” we will create a secured file sharing drop box folder(s) for **FNs in Principal Investigator (PI)/Co-PI roles, for FNs from countries of risk (i.e., China, Iran, North Korea and Russia), and for FNs from countries identified on the U.S. Department of State’s list of State Sponsors of Terrorism** located at <https://www.state.gov/state-sponsors-of-terrorism/> for submission of additional information. The additional information will NOT be required for any of the other FNs planned to participate on the award, and therefore, a folder(s) will not be created.

As part of the requirement to submit additional information for PIs/Co-PIs, for FNs from countries at risk, and for FNs from countries identified as State Sponsors of Terrorism, your organization must ensure completion of the "Foreign National Participation **Data** Document" also located at <https://www.netl.doe.gov/business/business-forms/financial-assistance>. The document and all required attachments must be uploaded to the secured file sharing drop box folder(s) provided by DOE's FN Request Coordinator. The assigned PM will contact the appropriate FN Data Entry POC in the event there are issues with the submission.

Please note that all FNs in PI/Co-PI roles, FNs from countries of risk, and FNs from countries identified on the U.S. Department of State's list of State Sponsors of Terrorism are **NOT** permitted to participate on the award until written authorization is received from the Contracting Officer.

The Contracting Officer will notify your organization of DOE's decision regarding the participation of FNs in PI/Co-PI roles, from countries of risk (i.e., China, Iran, North Korea and Russia), and from countries identified on the U.S. Department of State's list of State Sponsors of Terrorism. The DOE reserves the right to request additional information or deny participation of any FN at any time.

Please provide the requested documents to the attention of Evan Barton, who is the Specialist from the Finance and Acquisition Center handling the administrative portion of your application. Evan Barton can be reached at (412) 386-9414 or evan.barton@netl.doe.gov. Cody Panos is the DOE Project Manager from the Project Management Division handling the technical portion of your application and can be reached at (412) 386-9300 or cody.panos@netl.doe.gov.

Sincerely,



Jacquelyn M. Wilson
Contracting Officer
Finance and Acquisition Center

cc: FOA File
Basicinfo@netl.doe.gov
GDO_Comms@hq.doe.gov
arudeck@allete.com
pschommer@mnpower.com
cody.panos@netl.doe.gov
evan.barton@netl.doe.gov
jacquelyn.wilson@netl.doe.gov
janet.laukaitis@netl.doe.gov
carol.painter@netl.doe.gov

Last Updated July 25, 2023



NATIONAL ENERGY TECHNOLOGY LABORATORY
Albany, OR • Morgantown, WV • Pittsburgh, PA



PRE-AWARD INFORMATION SHEET

THE USE OF THE PRE-AWARD INFORMATION SHEET TEMPLATE IS OPTIONAL, BUT ALL DATA ELEMENTS WITHIN THE PRE-AWARD INFORMATION SHEET ARE MANDATORY.

Name of Organization Street Address City and County State and Zip + 4 (matches the USPS database)	Name and address must match SAM registration. ALLETE, INC 30 West Superior Street, Duluth MN 55802-2191
FOA Number: Award Number:	FOA: DE-FOA-0002740 Award #: GRANT13833343
Project Title:	Minnesota Power HVDC Terminal Expansion Capability (HTEC) Project
Business Officer and contact information:	Please provide complete contact information including telephone number and email address and physical street address (if different than above) for the person who will be responsible for administering this award. David Chura, 218-355-3280 (office), 218-348-0787 (cell), dchura@mnpower.com
Project Director/Principal Investigator(s) and contact information:	Please provide complete contact information including telephone number and email address and physical street address (if different than above) for the person who will be responsible for the technical aspects of this award. Peter Schommer, 218-355-2639 (office), 651-253-0661 (cell), pschommer@mnpower.com
Unique Entity Identifier (UEI):	PU1SE6QEDFJ9
Congressional District	MN-8 and ND-AL
Organization's Fiscal Year End Date	December 31

A. TYPE OF ORGANIZATION – Please indicate the type of organization of the Recipient by selecting one of the following:

For-Profit Business:

- ☐ Small Business (A “Small Business” is defined by the SBA Size Standards at <http://www.sba.gov/content/table-small-business-size-standards>)
- ☒ Other than a Small Business (e.g., large business)

Non-Profit Organization:

- ☐ A university or other institution of higher education or an organization of the type described in Section 501(c)(3) of the Internal Revenue Code of 1954 (26 USC 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 USC 501(a))
- ☐ An organization of the type described in Section 501(c)(4) of the Internal Revenue Code of 1954 (26 USC 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 USC 501(a))
- ☐ An organization of the type described in Section 501(c)(6) of the Internal Revenue Code of 1954 (26 USC 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code (26 USC 501(a))

- ☐ A nonprofit scientific or educational organization qualified under a State nonprofit organization statute. (Please identify the statute.)

Other (specify type):

- ☐ State or Local Government
☐ Indian Tribal Government
☐ Individual
☐ Other not listed (specify type):

B. INTELLECTUAL PROPERTY

1. Inventions/Patents

- a. Ownership Rights: For invention/patents made by the Recipient or a Subrecipient under the award, ownership rights differ by organization type, as follows:
- i. **Recipient or Subrecipient** retains ownership (see the Bayh-Dole Act, 35 U.S.C. § 200 et seq.) if the inventing organization is a:
 - domestic small business;
 - domestic educational institution; or
 - other domestic 501(c)(3) nonprofit.
 - ii. Unless DOE grants a patent waiver, **U.S. Government** retains ownership (see the Federal Non-Nuclear Energy Act of 1974, 42 U.S.C. § 5908) if the inventing organization is a:
 - large business;
 - foreign organization;
 - state or local government; or
 - any other organization type that is not a domestic small business, educational institution, or 501(c)(3) nonprofit.
- b. Types Of Patent Waivers
- i. **Class Patent Waiver:** DOE may grant a class patent waiver that applies to a class of organizations. For example, there may be a class patent waiver that applies to domestic large businesses.
 - ii. **Advance Patent Waiver:** For an organization not covered by the Bayh-Dole Act or a class patent waiver, the organization may request an advance patent waiver that will cover all inventions that may be made by the organization under the award. Recipients and Subrecipients must request this waiver in advance of or within 30 days after the effective date of the award.
 - iii. **Identified-Invention Patent Waiver:** Any organization not covered by the Bayh-Dole Act or a class or advance patent waiver may request an identified invention patent waiver once an invention has been made and disclosed under the award. This type of patent waiver would apply only to the invention identified in the patent waiver request.
- c. Patent Waiver Requests (**not applicable to Bayh-Dole Act organizations in Section 1.a.i. above**)

In the text box below, please identify each organization, including the Recipient and any Subrecipient, that wants to request one of the patent waivers identified in Section 1.b. above. **If a class patent waiver applies, further information may be found in the Funding Opportunity Announcement (FOA).** For each Subrecipient, please identify the type of organization using the categories above in section A of this Pre-Award Information Sheet.

Recipient/Subrecipient Name	Organization Type	Type of Waiver Requested
ALLETE, Inc. (Recipient)	For-Profit Business, Other than a Small Business	Advance Patent Waiver

2. IDENTIFICATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE

Definitions:

- **Limited Rights Data:** confidential or trade secret-type data developed solely at private expense outside of any government contract or award.
- **Restricted Computer Software:** proprietary computer software developed solely at private expense outside of any government contract or award, including modifications to such computer software.

Please describe below any Limited Rights Data or Restricted Computer Software that will be used by the Recipient or any Subrecipient to carry out the work under the award. Describe it in a few sentences or bullets with sufficient detail so that DOE can understand how it relates to the award work. Published patent applications and patents should NOT be listed because those are public documents. Limited Rights Data and Restricted Computer Software are privately funded confidential data and software.

While DOE reserves the right to inspect Limited Rights Data and Restricted Computer Software, it normally does not require it be delivered to DOE except as necessary to evaluate the award work. Based on the description below, DOE will determine whether delivery is necessary. In such cases, the award will provide instructions on how to mark the data and software in order to protect it from public disclosure and limit the use of the data and software by DOE for evaluation purposes only. It is important to provide a sufficient description of the Limited Rights Data and Restricted Computer Software. If the description is insufficient, DOE may require the Limited Rights Data and Restricted Computer Software to be delivered to DOE to ensure the award work can be evaluated properly.

Based on the above, please check the option that applies and provide the descriptions when applicable:

- ☐ No Limited Rights Data will be utilized in the performance of this award.
- ☒ Limited Rights Data as described in the box below will be utilized in the performance of this award.

Use this block to list **limited rights data** or provide an attachment.
The Project involves an upgrade to a system that is being designed and implemented solely at private expense.

Based on the above, please check the option that applies and provide the descriptions when applicable:

- ☐ Restricted Computer Software will NOT be utilized in the performance of this award.
- ☒ Restricted Computer Software as described in the box below will be utilized in the performance of this award.

Use this block to list **restricted computer software** or provide an attachment.
The Project involves an upgrade to a system that is being designed and implemented solely at private expense.
The Project will employ the same control system that is used by the underlying system.

3. TECHNICAL DATA PRODUCED UNDER THE AWARD

Definitions:

- **Protected Data:** technical data or commercial or financial data first produced in the performance of the award which, if it had been obtained from and first produced by a non-Federal party, would be a trade secret or commercial or financial information that is privileged or confidential under the meaning of 5 U.S.C. 552(b)(4) and which data is marked as being protected data by a party to the award.

The U.S. Government retains unlimited rights in all technical data produced under the award, including the right to distribute to the public. An exception is that DOE, pursuant to special authority, may agree to protect certain categories of data produced under an award (“Protected Data”). See the “Rights in Technical Data” section of the FOA under which the award was selected to determine whether Protected Data is available for this award.

If data protection is authorized, the FOA will indicate the maximum length of the protection period. If data protection is available under the resulting award, the Recipient is not obligated to accept it. If such protection is accepted, the provision titled “Rights in Data – Programs Covered Under Special Protected Data Statutes” (2 CFR 910.362€) will be included in an award made under this announcement. This provision will identify data or categories of data first produced in the performance of the award that will be unlimited rights data (as defined in the above referenced Rights in Data clause), and will also identify data that DOE agrees can be treated as protected data.

If data protection is offered under the FOA, please indicate whether the Recipient wants it to be included in a resulting award. In order for a Subrecipient to be able to mark data as Protected Data, Protected Data must be authorized in the prime award with the Recipient.

☐ No, the Recipient does not want the ability to mark certain data as Protected Data.

☒ Yes, the Recipient wants the ability to mark certain data as Protected Data under the award. If this option is selected, include a listing of Protected Data below for consideration by DOE.

Use this block to propose a list of **Protected Data** or provide it as an attachment.

The Project will involve Critical Energy Infrastructure Information.

The Recipient’s ability to contract with an Engineering, Procurement, and Construction contractor will depend upon the contractor’s ability to protect its confidential and trade secret information.

Even when Protected Data is not available or used, DOE will protect invention disclosures from public disclosure for a reasonable time in order to allow for the filing of a patent application.

4. IDENTIFICATION OF UNLIMITED RIGHTS DATA

Definitions:

- **Unlimited Rights** - The right of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose whatsoever, and to have or permit others to do so.

The U.S. Government retains unlimited rights in all technical data produced under the award, including the right to distribute it to the public. An exception is that DOE, pursuant to special statutory authority, may agree to protect certain categories of data produced under an award (“Protected Data”). See the “Rights in Technical Data” section of the FOA under which the award was selected to determine whether Protected Data is available for this award.

If either Limited Rights Data or Protected Data are utilized in the award, please provide a listing of Unlimited Rights Data.

Use this block to propose a list of **unlimited rights data** or provide it as an attachment.

5. **SMALL BUSINESS INNOVATION RESEARCH (SBIR) PROGRAM**

Has your organization received any prior SBIR awards for development of the technology that will be further developed under any resulting financial assistance agreement?

☐ Yes, please list the SBIR award number(s): _____

☐ No

C. **PROJECT PERFORMANCE SITE AND CONGRESSIONAL DISTRICT**

List the address and congressional district for the primary site where the project will be performed:

Street Address:	Township 142N-Range 83W Oliver County
City:	
State:	ND
Zip:	
Congressional District:	ND-AL

Street Address:	Solway Township, St. Louis County
City:	
State:	MN
Zip:	
Congressional District:	MN-8

D. **BUSINESS ASSURANCES AND PAYMENT INFORMATION**

1. **DISCLOSURE OF POTENTIAL IMPROPRIETIES**

Below, please disclose if any of the following conditions exist. If the answer to any question (a) through (g) below is yes, provide a detailed explanation in an attachment to this document.

a. Is the proposed Recipient, Subrecipient(s), or any of the Recipient's or Subrecipient's principals¹ under

¹ For this form, "principal" means: (1) An officer, director, owner, partner, principal investigator (PI), or other person (as defined in 2 C.F.R. 180.95) within the project team with management or supervisory responsibilities related to this project and any resulting transaction; or (2) A consultant or other person, whether or not employed by the Recipient, Subrecipient, or their principals, or paid with Federal funds, who (a) is in a position to handle Federal funds, (b) is in a position to influence or control the use of those funds, or (c) occupies a technical or professional position capable of substantially influencing the development or outcome of an activity required to perform the transaction, including but not limited to, any Co-PIs.

investigation for or charged with a covered offense²?

☐ Yes
☒ No

- b. Has the proposed Recipient, Subrecipient(s), or any of the Recipient's or Subrecipient's principals been convicted of a covered offense in the last five-years or had a civil judgment rendered against them for one of those offenses in that time period?

☐ Yes
☒ No

- c. Is the proposed Recipient, Subrecipient(s), or any of the Recipient's or Subrecipient's principals under investigation for potential violation of U.S. export control laws and regulations, or has the proposed Recipient, Subrecipient(s), or any of the Recipient's or Subrecipient's principals been convicted of any violations of U.S. export control laws and regulations?

☐ Yes
☒ No

- d. Is the proposed Recipient or Subrecipient(s) under investigation for potential violations of the Drug-Free Workplace Act of 1988, or has the proposed Recipient or Subrecipient(s) been convicted of any violations of the Drug-Free Workplace Act of 1988?

☐ Yes
☒ No

- e. Is the proposed Recipient, Subrecipient(s), or any of the Recipient's or Subrecipient's principals under investigation for research misconduct, or has the proposed Recipient, Subrecipient(s), or any of the Recipient's or Subrecipient's principals been convicted of research misconduct?

☐ Yes
☒ No

- f. Has any Federal agency recommended or initiated proceedings against the proposed Recipient, Subrecipient(s), or any of the Recipient's or Subrecipient's principals for suspension or debarment, or is the proposed Recipient, Subrecipient(s), or any of the Recipient's or Subrecipient's principals debarred, suspended, publicly banned from doing business with the Federal government, or otherwise declared ineligible from receiving Federal contracts, subcontracts or financial assistance?

☐ Yes
☒ No

- g. Is the proposed Recipient or Subrecipient(s) delinquent on federal debt or insolvent or at risk of insolvency or have the proposed Recipient or Subrecipient(s) filed for bankruptcy in any domestic or foreign jurisdiction?

☐ Yes
☒ No

² For this form, "covered offenses" include: (1) Commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public or private agreement or transaction; (2) Violation of Federal or State antitrust statutes, including those proscribing price fixing between competitors, allocation of customers between competitors, and bid rigging; (3) Commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, receiving stolen property, making false claims, or obstruction of justice; or (4) Commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects the Recipient's present responsibility.

2. POTENTIAL CONFLICTS OF INTEREST

- a. **Financial Conflicts of Interest:** The Recipient must disclose in writing any managed or unmanageable financial conflicts of interest involving a member of the project team (i.e. investigators) and include sufficient information to enable DOE to understand the nature and extent of the financial conflict, and to assess the appropriateness of the non-Federal entity's management plan. See Section V(b)(3) of the [DOE Interim Conflict of Interest Policy](#). As part of this DOE funded project, does the recipient or any subrecipients have any managed or unmanageable financial conflicts of interest involving a member of the project team?

☒ No

☐ Yes. If yes, in a separate attachment, the Recipient must provide relevant disclosures/supporting documentation as required by the [DOE Interim Conflict of Interest Policy](#) Section V(b)(3).

- b. **Organizational Conflicts of Interest**³: The Recipient must disclose in writing any potential or actual organizational conflict of interest to DOE. See [DOE Interim Conflict of Interest Policy](#) Section VI and [2 CFR 200.318](#) for more information. As part of this DOE funded project, does the recipient or any subrecipients intend to engage in a procurement with a parent, affiliate, or subsidiary organization that is not a state, local government, or Indian tribe?

☒ No

☐ Yes. If yes, in a separate attachment, the Recipient must provide relevant disclosures/supporting documentation as required by the [DOE Interim Conflict of Interest Policy](#) Section VI.

3. PENDING AND CURRENT SOURCES OF FUNDING

Current and Pending support is intended to allow the identification of potential duplication, overcommitment, potential conflicts of interest or commitment, and all other sources of support. In a separate attachment, the PI and each senior/key person at the recipient and subrecipient level must each provide a list of all sponsored activities, awards, and appointments, whether paid or unpaid; provided as a gift with terms or conditions or provided as a gift without terms or conditions; full-time, part-time, or voluntary; faculty, visiting, adjunct, or honorary; cash or in-kind; foreign or domestic; governmental or private-sector; directly supporting the individual's research or indirectly supporting the individual by supporting students, research staff, space, equipment, or other research expenses. All foreign government-sponsored talent recruitment programs must be identified in current and pending support.

For every activity, list the following items:

- The sponsor of the activity or the source of funding.
- The award or other identifying number.
- The title of the award or activity. If the title of the award or activity is not descriptive, add a brief description of the research being performed that would identify any overlaps or synergies with the proposed research.
- The total cost or value of the award or activity, including direct and indirect costs and cost share. For pending proposals, provide the total amount of requested funding.
- The award period (start date – end date).
- The person-months of effort per year being dedicated to the award or activity.
- If required to identify overlap, duplication of effort, or synergistic efforts, append a description of the other award or activity to the current and pending support.
- Details of any obligations, contractual or otherwise, to any program, entity, or organization sponsored by a foreign government must be provided on request to either the applicant institution or DOE.

³ Organizational Conflict of Interest means a situation where because of relationships with a parent company, affiliate, or subsidiary organization, the non-Federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization. [2 CFR 200.318\(c\)\(2\)](#).

Each PI and senior/key personnel must provide a separate disclosure statement listing the required information regarding current and pending support, even if no support is currently received or pending. The individual must sign and date their respective disclosure statement and include the following certification statement:

I, [Full Name and Title], certify to the best of my knowledge and belief that the information contained in this Current and Pending Support Disclosure Statement is true, complete and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-3730 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE's funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.

The information may be provided in the format approved by the National Science Foundation (NSF), which may be generated by the Science Experts Network Curriculum Vita (SciENCv), a cooperative venture maintained at <https://www.ncbi.nlm.nih.gov/sciencv/>, and is also available at <https://www.nsf.gov/bfa/dias/policy/nsfapprovedformats/cps.pdf>. The use of a format required by another agency is intended to reduce the administrative burden to researchers by promoting the use of common formats. If the NSF format is used, the individual must still include a signature, date, and a certification statement using the language included in the paragraph above.

4. PAYMENT INFORMATION AND ASSURANCES

a. Has your organization received any prior DOE awards administered by NETL?

☒ If yes, please list the most recent award number: Award No. DE-OE0000288

☐ No

Questions b through d are reserved for institutions of higher education, hospitals, other non-profit organizations and state and local governments that are not considered for-profit entities.

b. Is the Awardee currently enrolled with the U.S. Department of Treasury/ASAP system (Automated Standard Application for Payment System)?

☐ Yes, please enter Awardee Seven-digit ASAP ID Number: _____

☐ No

c. Please provide the following contact information for ASAP and/or Payments:

Important: If not currently enrolled in the ASAP system, the person identified below will be contacted by the U.S. Department of Treasury with further instruction on completing the ASAP enrollment process.

ASAP / Payments Contact Person: _____

Phone No.: _____ Extension: _____ E-mail: _____

d. Indicate preferred payment method below: ***(NOTE: this section is reserved for universities, hospitals, other non-profit organizations and state and local governments that are authorized to receive advance payments, unless a specific need is supported).***

- ☐ Payment by Advance is preferred.
☐ Payment by Reimbursement is preferred.

e. Total Estimated Project Cost is the sum of the Federal Government share and Recipient share of the estimated project costs. The Recipient's cost share or matching must come from non-Federal sources unless otherwise allowed by law (Please reference 2 CFR 200.1 and 2 CFR 200.306). By accepting Federal funds under this award, you agree that you are liable for your percentage share of allowable project costs, on a budget period basis, even if the project is terminated early or is not funded to its completion.

- ☒ Yes, the percentage share of allowable project costs (cost share) will be provided on a budget period basis.
- ☐ If cost share is not provided on a budget period basis, please explain.

Use this block to provide a detailed explanation for not providing cost share on a budget period basis or provide an attachment.

f. Indicate the name, phone number, and email address of the Designated Responsible Employee for complying with national policies prohibiting discrimination (see 10 CFR 1040.5 and the Certifications and Assurances SF-424B Assurances for Non-Construction Programs or SF-424D Assurances for Construction Programs found at: <http://www.grants.gov/web/grants/forms/sf-424-family.html>).

Name/Title Laura Krollman, Director - Human Resources

Phone No/Email 218-723-7536; lkrollman@mnpower.com

E. ACCOUNTING SYSTEM

Your organization should have an accounting system that meets government standards for recording and collecting costs in accordance with 2 CFR 200.302(b)(1). If you have not had prior government awards or a recent accounting system review, the DOE may request the Defense Contract Audit Agency (DCAA) or an independent auditor to verify that the accounting system is acceptable.

Indirect costs are an acceptable cost component of an approved budget if they are adequately supported and properly allocated. Organizations proposing indirect costs will need to demonstrate that the proposed indirect (e.g., overhead, G&A) rates were developed using a methodology acceptable for Government contracting, and in accordance with applicable Federal cost principles. If a current provisional indirect rate agreement has been issued by a Federal agency then that agreement should have been provided with the initial application. If it has not been, or a more current provisional indirect rate agreement has been executed, it needs to be provided as an attachment. In the absence of a provisional indirect rate agreement, the most current final indirect rate agreement should be provided as an attachment to this document.

1. Information for Determining Cognizant Agency/Office

Cognizance related duties (i.e.; negotiating provisional/final indirect rates) are the responsibility of the Cognizant Federal Agency (CFA). The CFA is the Federal agency (e.g., Department of Defense, Department of Energy, etc.) that provided the preponderance (largest amount) of funding for your awards, across all federal agencies. Once a Federal agency assumes cognizance for an organization, it should remain cognizant for at least 5 years to ensure continuity and ease of administration. **It is extremely important to confirm that you work with the correct cognizant federal agency/office.**

As a rule of thumb, Department of Health & Human Services (DHHS) or the Office of Naval Research (ONR) is usually the CFA for Universities, Cities, States, and Counties. DHHS/ONR cognizance is not usually transferred.

Please identify the CFA by providing the following information:

Agency: Department of Energy
Point-of-Contact: Evan Barton
Phone No.: 412-386-9414
E-mail: evan.barton@netl.doe.gov

To assist our office in validating the CFA, please provide the following information for the five (5) highest dollar award values for current Federal contracts, grants or awards for which the organization receives funding (either as a prime or subcontract) directly from a Governmental agency. **(State and Local Governments, Institutions of Higher Education, and Tribal organizations can skip this section if DHHS/ONR is the cognizant agency).** The total federal contract/award dollars should include the full project period, not just the incremental funding.

Contract/Award #	Awarding Agency (e.g. DOE)	Awarding Office (e.g. NETL)	Agency Contact Name/Phone/E-mail	Start Date	End Date	Total Value of Contract or Subcontract
21-DG-11094200-097 Sub-Award #D009167701	USDA	US Forest Service	Patrick Rappold patrick.rappold@usda.gov	8/1/2021	7/30/2024	\$187,081
Contract Pending (Sub)	USDA	US Forest Service	Lew R. McCreery Lew.McCreery@usda.gov	6/9/2023	TBD	\$271,480

If awardee has current DOE awards, identify Cognizant DOE Office (CDO) (office providing the preponderance of DOE funding), and provide DOE office name, a point-of-contact, phone number, and e-mail (**If same as above**, proceed to Section F, Financial Management System-Accounting System Survey).

DOE Office:
Point-of-Contact (Contracting Officer):
Phone No.:
E-mail:

To assist our office in validating the CDO, please provide the following information for the 5 highest dollar value awards for current DOE contracts, grants or awards for which the organization receives funding (either as a prime or subcontract) directly from a DOE office. **(State and Local Governments, Institutions of Higher Education, and Tribal organizations can skip this section if DHHS/ONR is the cognizant agency).** The total DOE contract/award dollars should include the full project period, not just the incremental funding.

DOE Contract/Award #	DOE Awarding Office	DOE Contact Name/Phone/E-mail	Start Date	End Date	Total Value of Contract or Subcontract
DE-OE0000288	DOE ⁴	NETL?	2010?	2011?	\$3.1M
DE-EE0004039	DOE ⁵ EERE – Wind and Waters Technology Office (EE-4W)		2010	2013	\$815,995

4 Minnesota Power Electricity Delivery and Energy Reliability, Research, Development and Analysis Program; ARRA – Electricity Delivery and Energy Reliability Research, Development and Analysis

5 Minnesota Power Renewable Energy Research and Development Program; ARRA – Renewable Energy Research and Development

2. Information on Annual Incurred Cost Proposal

If it is determined that NETL is the CDO, your organization will be responsible for submitting an **ANNUAL** Incurred Cost Proposal (ICP) using the actual, allowable costs incurred by your organization during each fiscal year period.

Important: The ICP is not a project specific proposal, but rather, a proposal that encompasses the organization's entire business base (i.e.; government and commercial), and it must incorporate the total direct and indirect costs incurred to develop the actual indirect rates for each fiscal year.

The ICP is due 180 days after your fiscal year end (i.e.; if fiscal year ends December 31st, the ICP is due June 30th). For an example of the ICE Model, please visit <http://www.dcaa.mil>. Under "Checklists and Tools", click on ICE (Incurred Cost Electronically) Model and download the ICE model. As an alternative to the DCAA ICE Model, please visit NETL's website at https://www.netl.doe.gov/business/business-forms#POST_AWARD_FA for a sample of a completed incurred cost proposal. Once the information is received, NETL will have the responsibility of providing your organization with an annual indirect rate agreement. This indirect rate must be used on all Federal awards. If it is determined that NETL is not the CDO, you should contact the CFA for guidance.

F. FINANCIAL MANAGEMENT SYSTEM – ACCOUNTING SYSTEM SURVEY

To qualify for a financial assistance award, compliance with 2 CFR 200 as amended by 2 CFR 910 is required. This includes assurance of an adequate accounting system for estimating, accounting and billing for governmental funding received.

For additional information, please visit <https://www.dcaa.mil>. Under "CUSTOMERS->checklists and Tools," click on "Pre-award Accounting System Adequacy Checklist".

Please complete the checklist below as assurance of this requirement.

	<u>Yes</u>	<u>No</u>	<u>NA</u>
1. Has your organization's accounting system ever been audited by DCAA?	☐	☒	☐
a. If yes, please provide a copy of the audit report as an attachment to this document.			
b. If yes, did DCAA determine the accounting system acceptable for Federal awards?	☐	☐	☐
c. If yes, have there been any changes to the accounting system since the DCAA audit?	☐	☐	☐
If the answer is "yes", please provide a detailed explanation of the changes.			

Use this block to **explain the changes** or provide an attachment.

2. Has your organization's accounting system been audited by an outside Certified Public Accountant/consultant or other Cognizant Federal Agency other than DCAA? <i>Important: Annual Financial Audits should be excluded.</i>	☐	☒	☐
3. Is the Accounting System in accordance with Generally Accepted Accounting Principles applicable to the circumstances and associated applicable Federal regulations?	☒	☐	☐
4. Accounting System provides for:	<u>Yes</u>	<u>No</u>	<u>NA</u>
a. Segregation of direct costs from indirect costs.	☒	☐	☐

b. Identification and accumulation of direct costs by project.	☒	☐	☐
c. A logical and consistent method for the allocation of indirect costs to intermediate and final cost objectives. (Project line items are final cost objective)	☒	☐	☐
d. Accumulation of costs under general ledger control.	☒	☐	☐
e. A timekeeping system that identifies employees' labor by intermediate and final cost objective (i.e., project level, division level).	☒	☐	☐
f. A labor distribution system that charges direct and indirect labor to appropriate cost objectives.	☒	☐	☐
g. Interim (at least monthly) determination of costs charged to a project through routine posting of books of account.	☒	☐	☐
h. Excluding costs charged to Government projects which are not allowable in terms of 2 CFR 200, Subpart E, or 48 CFR 31.2 (FAR Part 31), Contract Cost Principles and Procedures, or other provisions, as applicable.	☒	☐	☐
i. Identification of costs by project line item and by units (as if each unit or line item were a separate project) if required by the proposed award.	☒	☐	☐
5. Is the Accounting System designed, and are the records maintained in such a manner that adequate, reliable data are developed for use in developing cost proposals?	☒	☐	☐
6. Is the Accounting System currently in full operation?	☒	☐	☐
7. Is your organization's accounting system ready for a DCAA or independent Certified Public Accountant audit?	☒	☐	☐

Please provide the type of accounting system utilized (manual or electronic) and if electronic, provide the software system implemented. In addition, if you checked "No" to any of the boxes above, please provide a detailed explanation here or as an attachment.

The accounting system utilized by Minnesota Power is electronic and the Company uses several sub-ledger software applications which interface with Oracle General Ledger.

G. ANNUAL AUDIT REQUIREMENTS (SINGLE & COMPLIANCE)

1. Single Audit – A non-Federal entity that expends \$750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single audit conducted in accordance with 2 CFR 200.514.
2. Compliance Audit – If a for-profit entity has one or more DOE awards with expenditures totaling \$750,000 or more during the for-profit entity's fiscal year, they must have a compliance audit, performed by an independent auditor, for each of the awards with \$750,000 or more in expenditures in accordance with 2 CFR 910.514. If the entity has multiple awards, the auditor can issue one consolidated report. All audits must be conducted in accordance with Generally Accepted Accounting Standards and the associated audit costs are allowable under the award. The audit must be completed and submitted within the earlier of 30 calendar days after receipt of the auditor's report, or nine months after the end of entity's fiscal year end date.
 - a. Has your organization had an independent compliance audit or single audit performed?

☒ Yes – Smart Grid in 2010, 2011, Renewable Energy in 2011
☐ No
 - b. Has your organization undergone a financial audit within the last 3 years?

☒ Yes – ALLETE, as a consolidated entity, has a financial audit every year performed by PWC. ALLETE is a publicly traded corporation NYSE: ALE.

☐ No

If Yes to either a or b, please include a copy of the audit.

c. Was an electronic copy of the audit provided with the application package?

☒ Yes – see attached financial audit report from PWC (taken from our 10K report) for ALLETE for the year 2022. Also see Smart Grid 2010, Smart Grid 2011, and Renewable Energy 2011.

☐ No

Use this block to **explain why a financial audit was not completed or performed** or provide an attachment.

H. REPRESENTATION/CERTIFICATION

Important: Certification of the information is required by the organization's authorized representative.

- ☒ I certify that I have an active System for Award Management (SAM) registration.
- ☒ I certify that I have registered in FedConnect.net to receive award documentation.
- ☒ I certify that all cost information contained in the budget justification has been reviewed and that all costs are reasonable, allowable and allocable subrecipient/contractor cost information, and that all subrecipient/contractor costs are reasonable, allowable and allocable in accordance with the applicable cost principles. Any additional supporting budget documents should be available upon DOE request.
- ☒ I certify that all direct costs proposed in the application (under the personnel, travel, equipment, supplies, contractual, construction, and/or other direct costs categories) are direct to the project and are not duplicated in the proposed indirect costs.
- ☒ I certify that the processes undertaken to solicit any subrecipients, subawards, subcontracts and vendors comply with our organization's written procurement procedures as outlined in "Procurement Standards" 2 CFR 200.317 through 2 CFR 200.328 inclusive.
- ☒ I certify the Recipient:
 - (1) Has in effect an up-to-date, written, and enforced administrative process to identify and manage conflicts of interest with respect to all projects for which financial assistance funding is sought or received from DOE;
 - (2) Shall promote and enforce Investigator compliance with the [DOE Interim Conflict of Interest Policy](#) requirements including those pertaining to disclosure of significant financial interests;
 - (3) Shall manage financial conflicts of interest and provide initial and ongoing financial conflicts of interest reports to DOE;
 - (4) Agrees to make information available, promptly upon request, to DOE relating to any Investigator disclosure of financial interests and the Recipient's review of, and response to, such disclosure, whether or not the disclosure resulted in the Recipient's determination of a financial conflict of interest; and
 - (5) Shall fully comply with the requirements of the [DOE Interim Conflict of Interest Policy](#).

I. SIGNATURES

☒ I, the Authorization Official named below, represent by my signature that I am authorized to certify this information on behalf of the Recipient. I certify under penalty of perjury that the information contained in this Pre-Award Information Sheet is true, accurate and complete. I understand that false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil, or administrative penalties for fraud, false statements, false claims or others. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-.730 and

3801-.3812). I further understand and agree that (1) the statements and representations made herein are material to DOE's funding decisions, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.

Name: Patrick Cutshall

Title: ALLETE Vice President & Corporate Treasurer

Signature of Authorized Official: 

Date: October 31, 2023

☒ I, the Principal Investigator named below, certify to the best of my knowledge and belief that the information contained in this Pre-Award Information Sheet is true, complete, and accurate. I understand that false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact may subject me to criminal, civil, or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. 1001 §§ 1001 and 287, and 31 U.S.C. 3729-3730 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE's funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.

Name: Peter Schommer

Title: Manager, Power Delivery

Signature of Principal Investigator: 

Date: October 31, 2023

J. MISCELLANEOUS INFORMATION

1. Does your organization anticipate utilizing any Government Furnished Equipment (GFE) for this project?
☐ Yes (If yes, please attach a list of proposed GFE)
☒ No
2. Are there any changes to the proposed work that will impact the information provided on the Environmental Questionnaire (NETL F 451.1-1/3), (particularly the proposed work locations)?
☐ Yes (If yes, please attach an updated Environmental Questionnaire - NETL F 451.1-1/3 at http://www.netl.doe.gov/File%20Library/Business/forms/451_1-1-3.pdf.)
☒ No
3. Are there any changes to your proposed share of the estimated project costs?
☐ Yes (If yes, please provide a detailed explanation of the changes.)
☒ No



Patrick Cutshall, ALLETE Vice President & Corporate Treasurer

30 West Superior Street, MN 55802 218-355-3529 pcutshall@allete.com

Re: DE-FOA-0002740 Minnesota Power HVDC Terminal Expansion Capability (HTEC) Project (TA2-210-E)

To Whom it May Concern:

Please accept this as Minnesota Power's written assurance acknowledging that the Minnesota Power HVDC Terminal Expansion Capability (HTEC) Project will be funded under Division D of the Bipartisan Infrastructure Law. Accordingly, per section 41101 of that law, all laborers and mechanics employed by Minnesota Power, its contractors or subcontractors in the performance of construction, alteration, or repair work funded in whole or in part under this grant shall be paid wages at rates not less than those prevailing on similar projects in the locality, as determined by the Secretary of Labor in accordance with subchapter IV of chapter 144 of title 29, United States Code commonly referred to as the "Davis-Bacon Act" (DBA).

Minnesota Power confirms that the laborers and mechanics performing construction, alteration, or repair work on the HTEC Project will be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Davis-Bacon Act.

Minnesota Power acknowledges it will comply with all of the Davis-Bacon Act requirements, including but not limited to:

- 1) ensuring that the wage determination(s) and appropriate Davis-Bacon clauses and requirements are flowed down to and incorporated into any applicable subcontracts or subrecipient awards.
- 2) ensuring that if wage determination(s) and appropriate Davis-Bacon clauses and requirements are improperly omitted from contracts and subrecipient awards, the applicable wage determination(s) and clauses are retroactively incorporated to the start of performance.
- 3) being responsible for compliance by any subcontractor or subrecipient with the Davis-Bacon labor standards.
- 4) receiving and reviewing certified weekly payrolls submitted by all subcontractors and subrecipients for accuracy and to identify potential compliance issues.
- 5) maintaining original certified weekly payrolls for 3 years after the completion of the project and must make those payrolls available to the DOE or the Department of Labor upon request, as required by 29 CFR 5.6(a)(2).
- 6) conducting payroll and job-site reviews for construction work, including interviews with employees, with such frequency as may be necessary to assure compliance by its subcontractors and subrecipients and as requested or directed by the DOE.
- 7) cooperating with any authorized representative of the Department of Labor in their inspection of records, interviews with employees, and other actions undertaken as part of a Department of Labor investigation.
- 8) posting in a prominent and accessible place the wage determination(s) and Department of Labor Publication: WH-1321, Notice to Employees Working on Federal or Federally Assisted Construction Projects.
- 9) notifying the Contracting Officer of all labor standards issues, including all complaints regarding incorrect payment of prevailing wages and/or fringe benefits, received from the recipient,

subrecipient, contractor, or subcontractor employees; significant labor standards violations, as defined in 29 CFR 5.7; disputes concerning labor standards pursuant to 29 CFR parts 4, 6, and 8 and as defined in FAR 52.222-14; disputed labor standards determinations; Department of Labor investigations; or legal or judicial proceedings related to the labor standards under this Contract, a subcontract, or subrecipient award.

- 10) preparing and submitting to the Contracting Officer, the Office of Management and Budget Control Number 1910-5165, Davis Bacon Semi-Annual Labor Compliance Report, by April 21 and October 21 of each year. Form submittal will be administered through the iBenefits system (<https://doeibenefits2.energy.gov>) or its successor system.

Additionally, Minnesota Power acknowledges it will also be required to undergo Davis-Bacon Act compliance training and to maintain competency in Davis-Bacon Act compliance and understands the Contracting Officer will notify the Minnesota Power of any DOE sponsored Davis-Bacon Act compliance trainings.

As DOE anticipates contracting with a third party for a Davis-Bacon Act electronic payroll compliance software application, following notification of selection of such software application, Minnesota Power anticipates that it will agree to ensure the timely electronic submission of weekly certified payrolls through this software as part of its compliance with the Davis-Bacon Act; however, Minnesota Power reserves the right to request a waiver from this requirement if necessary after reviewing the software application.

Signature:

A handwritten signature in blue ink that reads "Patrick Cutshall". The signature is written in a cursive style with a horizontal line underneath the name.

Patrick Cutshall
ALLETE Vice President & Corporate Treasurer

STATEMENT OF PROJECT OBJECTIVES (SOPO)

Minnesota Power (MP) HVDC Terminal Expansion Capability (HTEC) Project

A. OBJECTIVES

The recipient will implement the HVDC Transmission Expansion Capability Project (HTEC Project) by building on the foundation of an existing modernization effort to increase the design capacity of the HVDC converter terminals from 900 MW to 1500 MW with a target in-service date of December 31, 2028. The additional capacity from the HTEC Project will make the HVDC System future-ready for further expansion to support the increased transfer of clean energy from one of the highest efficiency renewable energy areas in North America, provide greater grid support and operating flexibility, and enhance resiliency of the system as intermittent generation continues to be added to the grid.

B. SCOPE OF WORK

The recipient will work with an HVDC supplier to design and build two voltage source converter (VSC) HVDC terminal stations capable of delivering 1500 MW, ensuring that they are sized and configured for future local and regional grid expansion. HVDC terminal stations are designed and equipment is manufactured by a limited number of suppliers globally. Due to their specialized nature, the recipient will enter into an engineer, procure, construct (EPC) contract with a selected supplier for this project. The supplier will help define the project by performing front-end engineering and design (FEED) studies. The supplier will then develop a firm price bid, complete detailed engineering, manufacture the equipment, conduct acceptance testing, and will work with a contractor to install, test, and commission the terminals under a known schedule in line with the grant period. The recipient will own and operate all of the facilities proposed.

PHASE 1 – Preliminary Design and Permitting

The recipient will engage in preliminary engineering design for equipment and supplies and receive certificate of need from the MN Public Utilities.

During the preliminary design and permitting phase the recipient's team will work with our supplier to develop a design sufficient to produce a firm price proposal for the project. The recipient will also work with state regulatory bodies to secure permits to construct the project. By the end of this phase the recipient will have the required permits and will have an EPC contract with the supplier.

PHASE 2 – Detailed Design and Procurement

The recipient will procure the necessary hardware for the terminal station.

During this phase the supplier will perform detailed design engineering for all the parts, control system operation, and operational performance. The equipment will also be manufactured and tested.

PHASE 3 – Installation

The recipient will install all the AC/DC equipment needed.

The installation phase will involve installing all the equipment into the buildings and the HVDC yard for the new system.

PHASE 4 – Testing and Commissioning

The recipient will perform testing and commissioning of the HVDC converter upgrades.

During the last phase the recipient will work with the supplier's team to test and commission all equipment and verify that it performs correctly on the Bulk Electric System. This will include a series of tests culminating in the Power Transmission Tests where the HVDC system will transmit energy for the first time. After that the recipient will enter into the trial operations and declare substantial completion.

C. TASKS TO BE PERFORMED

Task 1.0: Project Management and Planning

Subtask 1.1: Project Management Plan (PMP):

Within 30 days of award, the Recipient shall provide the Project Management Plan (PMP) to the designated Federal Project Officer (FPO). The Recipient shall not proceed beyond Task 1.0 until the PMP has been accepted by the FPO.

The PMP shall be revised and resubmitted as often as necessary, during the course of the project, to capture any major/significant changes to the planned approach, budget, key personnel, major resources, etc.

The Recipient shall manage and direct the project in accordance with the accepted PMP to meet all technical, schedule and budget objectives and requirements. The Recipient will coordinate activities to effectively accomplish the work. The Recipient will ensure that project plans, results, and decisions are appropriately documented, and that project reporting and briefing requirements are satisfied.

Subtask 1.2: Community Benefits Plan

Within 30 days of award, the Recipient shall revise the Community Benefits Plan (CBP) and submit to the designated Federal Project Officer (FPO). The Recipient shall not proceed beyond Task 1.0 until the CBP has been accepted by the FPO.

The CBP shall be revised and resubmitted as often as necessary, during the project execution, to capture any major/significant changes to the CBP with regard to the four priority goals; Community and Labor Engagement; Investing in the American Workforce; Diversity, Equity, Inclusion, and Accessibility; and Justice 40 Initiative.

The Recipient will coordinate activities to effectively implement the CBP goals. The Recipient will ensure that metrics, SMART community benefits plan commitments, and outcomes are appropriately documented, and that reporting and briefing requirements to stakeholders are satisfied.

Subtask 1.3: National Environmental Policy Act (NEPA) Compliance

As required, the Recipient shall provide the documentation necessary for NEPA compliance.

Subtask 1.4: Cybersecurity Plan (CSP)*

The CSP shall be revised and resubmitted as often as necessary, during the course of the project, to capture any major/significant changes.

The CSP explains how basic cybersecurity practices throughout the life of the proposed the project will be maintained.

- Subtask 1.4.1 Determine and assign NERC CIP impact rating
- Subtask 1.4.2 Determine Vendor Support Model and requirements
- Subtask 1.4.3 Determine secure equipment delivery of control system
- Subtask 1.4.4 Define network architecture to utilize security zones
- Subtask 1.4.5 Create/Update device management documentation
- Subtask 1.4.6 Implement network architecture and security zones
- Subtask 1.4.7 Onboard and apply NERC CIP processes and controls
- Subtask 1.4.8 Determine best practice to monitor network/system
- Subtask 1.4.9 Implement and tune security monitoring
- Subtask 1.4.10 Conduct third party cyber vulnerability assessments
- Subtask 1.4.11 Implement remediation wherever possible
- Subtask 1.4.12 Review/Update incident reporting and response plan

PHASE 1 – Preliminary Design and Permitting

Task 2.0 - Technical Specification Development

During the technical specification development, the recipient will work closely with the vendor and Owner's Engineer to develop and execute a series of preliminary studies and develop models of the HVDC system. The studies will give the vendor enough details about the needed equipment to provide a quote. This task will also identify any environmental parameters such as noise, water use, lighting, etc. to develop a full specification. Once complete the vendor will use these details to develop and provide a firm price quote for the project.

Subtask 2.1 - Preliminary Engineering

Subtask 2.1.1 – Develop Main Circuit Parameter Study

Subtask 2.1.2 – Perform Transients & Insulation Coordination Study

Subtask 2.1.3 – PSCAD Model Development to be used for control system simulations

Subtask 2.1.4 – Develop AC System Equivalents for Power System Models

Subtask 2.1.5 – Draft DC Switchyard Concept

Subtask 2.1.6 – Determine Civil and Building Requirements

Subtask 2.1.7 – Conduct route survey for transformers

Subtask 2.1.8 – Define Electrical and Mechanical Building Services requirements

Subtask 2.1.9 – Perform Preliminary Dynamic Performance Study

Subtask 2.1.10 – PSS/E Model Development

Subtask 2.1.11 – Create Single Line Diagram

Subtask 2.2 – Completed Technical Specification

Subtask 2.3 – Deliver Firm Pricing based on technical specification *Go/No-Go*

Subtask 2.4 – Engineer, Procure, Construct Contract negotiation and execution

Subtask 2.5 – Final Notice to Proceed/Invoice to secure equipment *Go/No-Go*

*Go/No-Go Decision Point: Work shall not proceed beyond this point until all the requirements as described in **Section E, Pre-Continuation Briefing(s)** of this SOPO have been completed.*

PHASE 2 – Detailed Design and Procurement

Task 3.0 – System Studies

The System Studies task performs all the detailed studies required for final design of the converter and control equipment. The studies will also include performance and network studies to show how the system will interact with the BES using special control features such as frequency control. When complete the vendor and the recipient will know how the HVDC system will respond in all studies situations and how to build the control system.

Subtask 3.1 – Design Studies

Subtask 3.1.1 – External Insulation and Air Clearance including approval

Subtask 3.1.2 – Main Circuit Parameters finalized including approval

Subtask 3.1.3 – Prepare Power Line Carrier requirement

Subtask 3.1.4 – Electromagnetic Fields study including approval

Subtask 3.1.5 – Low Frequency Characteristic including approval

Subtask 3.2 – Performance Studies

Subtask 3.2.1 - Reliability Availability Maintenance – Performance Study including approval

Subtask 3.2.2 - Electromagnetic Compatibility Plan

Subtask 3.2.3 – Prepare Electromagnetic coupling

Subtask 3.2.4 – Prepare Radio Interference including approval

Subtask 3.2.5 – Dynamic Performance Study including approval

Subtask 3.3 – Network Studies

Subtask 3.3.1 – Digital Stability Preliminary Program Model

Subtask 3.3.2 – AC System Equivalents including approval

Subtask 3.3.3 – Network Study including Sub synchronous Torsional Interaction

Subtask 3.3.4 – Stability Modulation/Frequency Control including approval

Subtask 3.3.5 – Digital Stability final Program Model

Subtask 3.4 – Performance Verification

Subtask 3.4.1 – Radio Interference Measurements modeled

Subtask 3.4.2 – Prepare Electrical Interference report

Subtask 3.4.3 – Performance Verification Study including approval (loss and overload calcs)

Subtask 3.5 – Engineering Converter Modules

Subtask 3.5.1 – Procurement and PO for converter modules

Subtask 3.5.2 – Supplier Design and manufacturing

Subtask 3.5.3 – Converter Module factory acceptance testing *Go/No-Go decision*

Task 4.0 – Main Component Design and Manufacture

The main component design and manufacture task will apply all the previous work to the specific pieces of equipment for design and manufacture. The converter transformer ratings, voltages, and all other requirements are fully determined so the vendor can proceed with final design. Similar will occur for DC equipment and measuring devices. At the end of the task all equipment will be tested and ready for shipment.

Subtask 4.1 – AC Equipment

Subtask 4.1.1 – Converter Transformer Design and Manufacture

Subtask 4.1.2 – Converter Transformer factory acceptance testing

Subtask 4.1.3 – Design and manufacture balance of AC equipment

Subtask 4.1.4 – Transport balance of AC equipment

Subtask 4.2 – DC Equipment

Subtask 4.2.1 – Design and manufacture DC Equipment

Subtask 4.3 – Measuring Devices

Subtask 4.3.1 – Engineer DC Voltage and Current Measurement devices

Subtask 4.3.2 – Manufacture measurement devices

Task 5.0 – Control and Protection System

During this task, all the information from the studies task is used to develop the control system. The vendor will determine the exact pieces needed for build the control system. The vendor will also program all the devices so they operate as intended and consistent with the models. The

control system will be tested on a system simulator that uses an equivalent model of the Minnesota Power and regional electric system to confirm control and protection functions operate as intended.

Subtask 5.1 – Control and Protection Cubicles

Subtask 5.1.1 – Design specification for control and protection cubicles

Subtask 5.1.2 – Manufacture control and protection cubicles

Subtask 5.1.3 – Transport control and protection cubicles

Subtask 5.2 – Functional and Dynamic performance test without replica

Subtask 5.2.1 – Setup test area and simulator

Subtask 5.2.2 – Pre-communication test

Subtask 5.2.3 – Integration Functional Performance Test

Subtask 5.2.4 – Integration Dynamic Performance Test

Subtask 5.2.5 – Official Functional Performance Test – Factory acceptance testing*Go/No-Go decision*

Subtask 5.2.6 – Official Dynamic Performance Test – Factory acceptance testing*Go/No-Go decision*

Subtask 5.3 – Software Engineering and simulation

Subtask 5.3.1 – Simulator setup and implementation

Subtask 5.3.2 – Control Parameter Study

Subtask 5.3.3 – DC Protection Study

Subtask 5.3.4 – AC Protection Study

*Go/No-Go Decision Point: Work shall not proceed beyond this point until all the requirements as described in **Section E, Pre-Continuation Briefing(s)** of this SOPO have been completed.*

PHASE 3 – Installation

Task 6.0 – Installation

Installation of the HVDC and support equipment occurs during this task. When complete the HVDC system will be ready for testing and commissioning.

Subtask 6.1 – Auxiliary power supply including pre-commissioning

Subtask 6.2 – Converter Transformers

Subtask 6.3 – AC Switchyard equipment

Subtask 6.4 – Control and protection equipment in control building

Subtask 6.5 – converter modules into converter hall

Subtask 6.6 – DC balance of equipment into DC Hall

Subtask 6.7 – Converter Water cooling equipment

Go/No-Go Decision Point – The recipient will request authorization to continue the project upon completion of installation.

PHASE 4 – Testing and Commissioning

Task 7.0 – Commissioning

The recipient and the vendor will work together to develop a comprehensive commissioning plan to confirm that all equipment operates as designed. Commissioning will start at the component level and build towards first energization of the converters and power transmission tests. When complete the HVDC system will be complete and ready for operation.

Subtask 7.1 – Pre-commissioning

Subtask 7.2 – Sub system tests

Subtask 7.3 – High Voltage AC Energization

Subtask 7.4 – Station tests

Subtask 7.5 – DC Overhead Line ready for energization

Subtask 7.6 – Start First Power Transmission

Subtask 7.7 – Power Transmission Tests

Task 8.0 – Trial Operation and Substantial completion

When all testing and commissioning is complete the project enters a trial operations period. The vendor will staff the HVDC converters until the end of that period and the recipient will take over operation once complete.

Subtask 8.1 – Trial period operational track begins

*Go/No-Go Decision Point: Work shall not proceed beyond this point until all the requirements as described in **Section E, Pre-Continuation Briefing(s)** of this SOPO have been completed.*

D. DELIVERABLES

The Recipient shall provide a list of deliverables to be submitted during the project, including:

Subtask 1.1 – Project Management Plan

Subtask 1.2 – Community Benefits Plan

Subtask 1.3 – NEPA Compliance (if applicable) (AS REQUIRED)

Subtask 1.4 – Cybersecurity Plan (AS REQUIRED)

Subtask 2.1.10 – PSSE Models for use in regional planning models

Subtask 3.1.2 – Main Circuit Parameters document

Subtask 3.3.5 – Final digital stability program model

Subtask 4.1.2 – Results of converter transformer factory acceptance testing

Subtask 5.2.5 – Results of functional performance test

Subtask 5.2.6 – Results dynamic performance test

Task 7.0 – Commissioning reports for in scope equipment

In addition to the deliverables listed above, the Recipient shall submit all periodic, topical, final, and other reports in accordance with the Federal Assistance Reporting Checklist and accompanying instructions.

E. BRIEFINGS/TECHNICAL PRESENTATIONS

The Recipient shall prepare, and present periodic briefings, technical presentations and demonstrations as requested by the Federal Project Officer, which may be held at a DOE or the Recipient's facility, other mutually agreeable location, or via webinar. Such meetings may include all or a combination of the following:

Kickoff Briefing - Not more than 60 days after submission of the Project Management Plan, the Recipient shall prepare and present a project summary briefing as part of a Project Kickoff Meeting.

Pre-Continuation Briefing(s) – Not less than 90 days prior to the planned start of a phase relative to an established go/no go decision point, the Recipient shall brief the DOE on the performance relative to project success criteria, milestones, Go/No-Go Decision point metrics that are documented in the Project Management Plan (PMP), and their plans for the subsequent periods of work. The Go/No-Go Decision will be based on the successful completion of both the work relative to the milestones and metrics as defined in the PMP (including approval of associated deliverables) as well as meeting the established requirements of the Community Benefits Outcomes and Objectives (CBOO) as detailed in the CBP for the given performance period. The Recipient will not begin the next phase of work (or a subsequent task/subtask) until receiving written authorization from the DOE Contracting Officer (CO) to proceed in accordance with the award terms and conditions. The DOE will consider the information from this briefing, as well as the content of deliverables submitted to date, prior to authorizing continuing the project.

Final Project Briefing - Not less than 30 days prior to the end of the project, the Recipient shall prepare and present a Final Project Briefing on the results and accomplishments of the entire project.

Other Briefings – The Recipient shall prepare and present technical, financial, and/or administrative briefings as requested by the DOE. A project technical review briefing will be conducted no less than annually. Additionally, the DOE may require Recipients to make technical presentations at national and/or industry conferences.

Grid Resilience and Innovation Partnerships Program (GRIP)

FOA 3195

Concept Paper Form



The following form is to be completely filled out and submitted on <https://infrastructure-exchange.energy.gov/>. Ensure that the form is saved using the provided button on the bottom of the form. This will ensure that your file is properly submitted. If the button is not used, submission of application cannot be guaranteed.

Project Overview

Applicant Name:	<u>Minnesota Power, a division of ALLETE, Inc.</u>		
Project Partner(s):	<u></u>		
Project Name:	<u>HVDC 345/230kV Interconnection</u>		
Project Location(s):	Applicable GRIP Topic Area:	Topic Area 2: Smart Grid	
<i>If selecting</i>	MA	Transmission	
<i>multiple items,</i>	MI		
<i>hold down "Ctrl"</i>	MN	Applicant Cost Share:	
<i>button when</i>	MS	\$ 75,000,000.00	
<i>clicking.</i>	MO	Federal Funds Requested:	
	MT	\$ 50,000,000.00	
	NE	Anticipated Total Project Budget:	
		\$ 125,000,000.00	

Project Details

Brief description of the project, including outcomes that would result from the successful completion of the project that align with the strategic goals and objectives of the GRIP program and the applicable GRIP Topic Area. *2,000 character limit.*

The HVDC 345/230kV Interconnection is needed to connect Minnesota Power's (MP) upgraded HVDC converter stations to the AC grid. The connection of the existing HVDC system is directly to the 230kV substation which is adequate for today's need but does not meet the long term needs of our customers or the region. The project will consist of building a 345/230kV substation and 345kV lines near each converter station for the HVDC line. One near Center, ND and one near Hermantown, MN. Both ends will then connect to existing 230kV substations immediately but will provide options for future 345kV connections. This interconnection will

Brief description of the impact of DOE funding on the project. *2,000 character limit.*

The DOE funding will help ensure that the HVDC Modernization Project, including the increased capacity enabled by the HVDC Terminal Expansion Capability (HTEC) Project, is able to be delivered on time by mitigating regulatory risk associated with the 345kV expandability considerations in the AC transmission system, as well as make a great difference for Minnesota Power customers by reducing cost of the new 345kV interconnections. DOE funding will be treated as a contribution to capital and therefore reduce Minnesota Power's total capital costs, thus permanently reducing rate base and lowering customer costs while delivering a

Select the type(s) of technology(ies): Multiple

List the primary technologies and/or tools that will be deployed in the project. *2,000 character limit.*

The project is needed to support the new Voltage Source Converter (VSC) HVDC Converter stations and the additional capacity up to 1500MW and other grid benefits included in that project. The project will use typical substation equipment and line materials for the substations and interconnecting lines. However, the transformers will include a suite of online monitoring capable of indicating the health of the units to operators, engineers, and maintenance staff. This level of monitoring will allow diagnosis of impending failures, cost-efficient condition-based maintenance and optimal loading decisions.

If the project will be deploying hardware, describe the role and impact of hardware deployment as part of the proposed project scope and identify any elements of this deployment that represent a significant innovation for the industry and/or project. Enter "N/A" if no hardware will be deployed. *2,000 character limit.*

This project will utilize online transformer health monitoring hardware. This hardware allows monitoring gas accumulation levels within the transformers as well as moisture detection. Many of the substations outlined in this project are in rural locations. Due to this it may take significant time for a specialized technician to arrive on site and troubleshoot equipment. With real time online transformer monitoring data, outage durations can be reduced for nuisance trips and system reliability can be increased by performing condition-based maintenance. This data gives real time visibility to engineers and system operators, which drastically

If the project will be deploying software, describe the role and impact of software deployment as part of the proposed project scope and identify any elements of this deployment that represent a significant innovation for the industry and/or the project. Enter "N/A" if no software will be deployed. *2,000 character limit.*

New software will be required to utilize online transformer and circuit breaker health monitoring. One potential software is doublePRIME ANALYTICS. This software allows us to remotely measure, collect and analyze data for online condition assessments. This software is scalable and would facilitate future integration of IEDs.

In addition, we can implement IEC 61850 communication protocol within the substation. This is the next step in digitalizing our

If the project will include development of a new business/regulatory/financing approach, describe the approach and the potential for and path to replicability or broader adoption. *2,000 character limit.*

N/A

Describe the readiness, viability, and expected timing of the project (include the impact of DOE funding in the response). *2,000 character limit.*

The project has been scoped, land has been identified and purchased for all interconnection locations, and permitting activities are underway. The Minnesota Public Utilities Commission is currently reviewing the Certificate of Need/Route Permit and is expected to make a decision Q3 2024. The DOE grant demonstrates Minnesota Power is being thoughtful about the costs of the clean energy transition and is sensitive to the impact on customers. The grant will help ensure the project is approved as submitted, without a reduction/modification in capacity or change in scope to limit expandability. The project is expected to be in service ahead of the

Identify risks and challenges (e.g. technical, labor, financial, market, environmental, regulatory, security) to project success, and outline mitigation strategies for each risk. *2,000 character limit.*

Regulatory - The project is currently in front of the State of Minnesota Public Utilities Commission (MNPUC) for a Certificate of Need/Route Permit included with the HVDC Modernization Project. Evidence is currently being gathered by the ALJ and interveners and a ruling is expected in Q3 2024.

Labor - The company has been working with construction partners over the past 2 years to form partnerships to ensure all our capital work can be completed. This project is included and the constructors are prepared to support these interconnections.

Briefly describe the Project Management Team and any key personnel and project partners, including vendors and suppliers (if identified; if not yet identified, address how the project will secure vendors/suppliers). Indicate whether the Team has the required skills, any prior applicable experience, prior projects with partners, and access to equipment /facilities to successfully execute the proposed project. If those are not met, explain how the Team will obtain knowledge/access for successful execution. *2,000 character limit.*

Minnesota Power (MP) has been designing, building, owning, and operating the electric system in NE MN for over 100 years. The substation & transmission line project management and engineering teams successfully design & build new infrastructure every year. The Project Management Team will consist of a project manager, assistant project manager, scheduler and cost analyst. MP has bolstered our Project Management organization over the past several years by creating a dedicated department for transmission projects. Additionally, within the past year MP established a Project Management organization dedicated solely to the

Project Impacts

How will this project reduce innovative technology risk, achieve further deployment at-scale, and lead to additional private sector investments? *2,000 character limit.*

When the project is complete it will have multiple benefits. First, the online monitoring and condition assessment included in the project will lead to a more predictive asset management approach. The operational support staff will be able to see what's happening to the equipment in real time and make informed decisions about the equipment. Once verified, this solution can be used across the fleet to help ensure more timely maintenance, reduced downtime, and ultimately enable more reliable, efficient, and cost-effective energy delivery. Second, the interconnections built at 345kV will enable future opportunities to develop the Describe how the project supports State, local, Tribal, community and regional resilience, in reducing the likelihood and consequences of disruptive events, decarbonization, or other energy strategies and plans. *2,000 character limit.*

Minnesota Power supplies electric service to 150,000 retail customers and wholesale electric service to 14 municipalities in a 26,000-square-mile electric service territory throughout northeastern Minnesota. Minnesota Power also provides retail electric service to portions of the Fond du Lac Band of Lake Superior Chippewa and the Leech Lake Band of Ojibwe reservations, as well as tribally owned businesses located outside of the reservation and within ceded lands of the 1854 Treaty Territory. The communities served by Minnesota Power currently rely on the HVDC Line to transfer the 600 MW of wind power located in North Dakota

What will be the grid-benefitting outcomes to be delivered by the project (e.g. number of customers impacted, unlocked clean energy generation, improvement in reliability metrics). List 1-3 outcomes maximum. *2,000 character limit.*

The improved monitoring and condition assessment capabilities included in the project will lead to more predictive asset management as the operations staff will be able to see equipment conditions in real time and make appropriate decisions to improve reliability of service for customers. Once these capabilities are verified, this solution can be replicated across the MN Power fleet to help ensure more timely maintenance, reduced downtime, and ultimately enable more reliable, efficient, and cost-effective energy delivery. The interconnections built at 345kV will also enable future opportunities to develop the regional grid

Community Benefits Plan

Demonstrate how this Community Benefits Plan will address community and labor engagement, and how feedback from specific and relevant community stakeholders will be incorporated into the Community Benefits Plan. *4,000 character limit.*

Minnesota Power (MP) has a strong commitment and reputation for actively engaging stakeholders in our projects and resource planning. This is accomplished through regular engagement with Tribal Nations and communities on a number of initiatives and projects, which has in turn allowed MP to identify opportunities to better serve our customers and ensure the benefits associated with our commitment to safe, reliable, and affordable energy are shared equitably among the communities within our service territory. MP has an established history of stakeholder engagement, as recently demonstrated by the process used in the Company's latest Integrated Resources Plan (IRP). Given the weight of the issues at hand, Minnesota Power determined it was important to bring in third-party, neutral consultants to facilitate productive and open communication between its diverse stakeholders and the utility, and to identify stakeholder concerns and priorities that could inform development of the IRP. A series of meetings were conducted to share information and gain stakeholder feedback. The meetings included approximately 60 individuals representing a broad range of perspectives, including residents, small businesses, large commercial and industrial consumers, economic development organizations, labor unions, clean energy and environmental advocates, consumer advocates, local governments, Tribes, schools and colleges, and state government agencies. The Company received high accolades for this collaborative process from regulators, local communities and stakeholders alike.

MP intends to apply best practices established through the IRP stakeholder engagement process to this project. MP has a long history of partnering with community and labor organizations to complete projects, including the International Union of Operating Engineers Local 49, the Laborers' International Union of North America (LIUNA), the International Brotherhood of Electrical Workers (IBEW) and the North Central States Regional Council of Carpenters; the Duluth Area Chamber of Commerce and the Greater North Dakota Chamber; the Area Partnership for Economic Expansion (APEX); the MN Tribal Contractors Council; and clean

Provide expected number of jobs or workforce development opportunities that the project will create. Describe how these positions are the result of community engagement or agreement. Explain how your project will generate quality jobs and that workforce development opportunities provided are relevant to impacted communities. *4,000 character limit.*

MP expects this project will create a peak of 40 construction jobs at each of the two locations. Wages for these types of projects are typically at or above prevailing wage, with construction careers providing family-sustaining wage and benefit opportunities in the trades. This project will also enable the creation of new wind and solar jobs on each end of the HVDC Line for generation build-out. This is particularly important in Center, which ranks in the 95% national percentile for coal employment and in the 86% percentile for fossil energy employment. Reinvestment in the renewable energy sector would support an area that is economically reliant on the coal and fossil fuel industries for employment and create new construction and permanent jobs in clean energy. MP has a strong working relationship with the trades, and union labor is a part of our projects as much as possible. MP has collective bargaining agreements with the International Brotherhood of Electrical Workers (IBEW) Local 31 and Local 1593. Out of MP's approximately 1,000 full-time employees, over 400 are represented by unions.

MP has standard language in construction contracts requiring contractors and subcontractors to pay prevailing wage commensurate with the base labor rates and fringe benefits established and evidenced in collective bargaining agreements for the applicable locality. The work for this project is intended to be awarded to union contractors and subcontractors wherever possible. The company uses a variety of labor agreements with contractors, including Project Labor Agreements, National Maintenance Agreements, Presidents Agreements, and Alliance Agreements. If DOE funding is awarded, MP will ensure compliance with wages at rates not less than those prevailing on similar projects in the locality, as determined by the Secretary of Labor in accordance with Subchapter IV of Chapter 31 of Title 40, United States Code commonly referred to as the Davis-Bacon Act.

Under the Company's union structure, MP is also committed to providing the necessary training to perform the jobs anticipated for

Identify Community Benefits Plan elements that will support Diversity, Equity Inclusion, and Accessibility, including methods to ensure accountability to specific goals throughout the project. *4,000 character limit.*

MP is committed to promoting DEIA and taking action for a more equitable society, expanding hiring and supplier diversity, and engaging stakeholders in advisory panels, Tribal liaisons, and government and community contacts to build relationships, solicit feedback, and collaborate. MP advances DEIA through five main focus areas: workforce, supply chain, customer, corporate citizenship and communication. A Steering Committee leads strategic DEIA initiatives and a Subcommittee helps facilitate employee engagement through continued learning and training, volunteer opportunities, and attendance at community events. MP's commitment to DEIA also extends to attracting and retaining employees who value diverse backgrounds, ideas, and perspectives. Training for hiring without bias is required of all supervisors with every job posting; 83 employees were trained in 2023. The Company continues to be recognized for gender diversity in its top leadership ranks, named as an Honor Roll company with Special Distinction for the last four consecutive years in the Minnesota Census of Women in Corporate Leadership, produced by St. Catherine University's School of Business. The Company was among only 6 of 78 that achieved gender parity on their board of directors, among their executive officer positions, or both, in the latest report.

MP leverages diversity recruitment efforts to engage those underrepresented in the workforce, including those facing barriers to employment. MP also notifies 39 external partners about job openings, including: Tribal organizations, community colleges, universities, chambers of commerce, and community workforce organizations. Additionally, MP posts open positions on its website, applicable state CareerForce websites, and a variety of other online job boards such as the Veterans Job Listings board. The MN Department of Military Affairs has designated MP as a Yellow Ribbon Company. To retain this designation MP builds relationships with local military leaders, identifies which employees have military connections, and commits to hiring, supporting and retaining veterans – a commitment extending to the recruitment of workers needed for this project. MP updates affirmative action plans,

Identify how this project will contribute to the Justice40 Initiative goal that 40% of overall benefits flow to disadvantaged communities. *4,000 character limit.*

MP's service territory consists of 31 DACs and 13 partial DACs. Many households in DACs served by MP still may not be able to access home-sited renewable energy technology, either because residents do not have a site that is well-suited for renewable capital installation or because they do not have the upfront capital required to purchase renewable infrastructure for their homes. Moreover, many of the residents in the identified DACs are renters and do not have an option to install clean energy sources. This project would support the increased, future transfer of wind energy to communities in MP's service territory by approximately 60%, significantly increasing access to clean energy adoption throughout DACs served by MP. A grant will help reduce the costs to customers in DACs identified as low-income to deliver a large increase in renewables-generated electricity.

The project location in Solway Township is part of a partially disadvantaged census tract due to the presence of federally recognized Tribal lands. If awarded the DOE funding, MP will work with Five Skies Training, a Native-owned consulting business, to offer scholarships for apprenticeship training that prepares Tribal members for a career in the construction industry. The program offers individuals the opportunity to receive union-endorsed training, exposure, and a "foot in the door" to a career in the trades. Program graduates have an opportunity to interview with participating Construction Trade Unions and Contractors. MP will work with unions to support diverse hiring for the construction jobs supporting this project and job training for individuals in DACs as well.

MP recognizes that residents of DACs have not always had equitable access to energy planning discussions. Accordingly, in addition to the stakeholder meetings discussed above, MP commits to holding at least one stakeholder event in each of these cities located in DACs served by MP during the project timeframe: Long Prairie, Walker, Bigfork, and Duluth. These additional stakeholder events

Ensure that the form has been fully and correctly completed.

*Once you have verified that all the information is accurate click the button below. You will **not** be able to make changes to this form afterwards.*

Submit the completed form to <https://infrastructure-exchange.energy.gov/>.

Finalize Form



NATIONAL ENERGY TECHNOLOGY LABORATORY
Albany, OR • Morgantown, WV • Pittsburgh, PA



February 29, 2024

SENT VIA ELECTRONIC MAIL

Minnesota Power, a division of ALLETE, Inc.
David Chura
dchura@allete.com

SUBJECT: Funding Opportunity Announcement (FOA) no. DE-FOA-0003195, titled “Bipartisan Infrastructure Law (BIL) – Grid Resilience and Innovation Partnerships (GRIP)” – Concept Paper Notification

Concept Paper Control Number: 3195-1906

Dear David Chura:

Thank you for submitting a Concept Paper under Topic Area 2 in response to the subject FOA. The Concept Paper for proposed project titled “HVDC 345/230kV Interconnection” was carefully reviewed in accordance with the evaluation criteria in the FOA.

Based on the results of the Concept Paper review, your organization is hereby **encouraged to submit a full application** in accordance with the instructions and requirements contained within the FOA by the due date/time specified on the FOA cover page. Please be advised that receiving a letter of encouragement does not guarantee that an application will be selected for negotiations leading to award.

If the Department of Energy (DOE) has identified potential area(s) for improvement based on the concept paper merit review criteria identified in the FOA, it is marked with an “X” (see below). DOE will not provide any additional feedback or guidance beyond what is provided below.

☐ The Concept Paper did not propose or thoroughly describe how the proposed work, if successfully accomplished, would clearly meet the objectives as stated in the FOA for the specific topic area.

☐ The Concept Paper does not clearly describe how the proposed work aligns with and supports State, local, Tribal, and/or regional resilience, decarbonization, or other energy strategies and plans.

☐ The Concept Paper does not adequately identify risks (e.g. technical, financial, market, environmental, regulatory) and challenges, including possible mitigation strategies, to project success.

☐ The Concept Paper has not adequately identified, including possible mitigation strategies, technical, operational, and administrative risks to the security of the applicant’s assets.

☐ The Concept Paper has not adequately explained the impact of DOE funding.

☐ The Concept Paper does not adequately propose strategies and accountability mechanisms to ensure:

- a. Meaningful community and labor engagement,
- b. Quality jobs and workforce development,
- c. Support for Diversity, equity, inclusion, accessibility,
- d. Supporting the goals of the Justice40 Initiative.

___ The proposed project team does not appear to have adequate qualifications, experience, capabilities, and other resources necessary to complete the proposed project.

___ The applicant has not adequately provided an estimated total project cost, and/or characterized the project's economic viability, and/or demonstrated that the project provides enhanced system value and/or provides improved current and future system cost-effectiveness and delivers economic benefit.

This letter comprises the sole debriefing the DOE will provide with regard to your Concept Paper.

Please also ensure you have carefully read the Registrations Requirements located in the FOA document. There are several one-time actions that must be completed before submitting an application in response to this FOA (e.g., register with the System for Award Management (SAM), obtain a Unique Entity Identifier (UEI) number, etc.). It is vital that applicants address these items as soon as possible. Some may take several weeks, and failure to complete them could interfere with an applicant's ability to apply to this FOA.

The DOE will conduct two webinars in the coming weeks:

- On March 5, 2024, 1:00 PM – 2:00 PM EST DOE will conduct a Community Benefits Plan training webinar for applicants that will include important program update information. To register for the webinar, please copy and paste the following link into your browser:
<https://doe.webex.com/web link/register/rf943977a9b8d61037c9bacc55cacdb73>
- On March 12, 2024, 3:30 PM – 4:30 PM EST DOE will conduct a Program Update webinar that will include more detail on program updates as well as broad guidance to applicants based on our findings from the Concept Paper review process. To register for the webinar, please copy and paste the following link into your browser: <https://doe.webex.com/web link/register/ra5824dcfd55a545813f140b54474b8af>
- The purpose of these webinars is to discuss and emphasize FOA requirements within the FOA document that applicants may need to focus on in the full application. Attendance is not mandatory and will not positively or negatively impact the overall review of any applicant submissions. Questions will not be taken as part of these webinars.

The DOE did not make an applicant eligibility determination as part of the concept paper review. Applicant eligibility determinations will be considered at the full application stage of the FOA process. To be considered for substantive evaluation, an applicant's submission must meet the criteria set forth in Section III.A of the FOA (Eligible Applicants). If the full application does not meet the eligibility requirements, it will be considered ineligible and removed from further evaluation.

The DOE recognizes the significant effort your organization expended to prepare a concept paper in response to this FOA. On behalf of the DOE, the FOA team would like to express our appreciation for your interest in the Grid Deployment Office and this FOA.

Sincerely,

DE-FOA-0003195 Team

Email CC:
pschommer@mnpower.com
lhoyum@mnpower.com



Minnesota Department of Commerce
85 7th Place East | Suite 280 | St. Paul, MN 55101
Information Request

Docket Number: E015/CN-22-607
Requested From: Minnesota Power
Type of Inquiry: General

☐ Nonpublic ☒ Public
Date of Request: 2/22/2024
Response Due: 3/4/2024

SEND RESPONSE VIA EMAIL TO: Utility.Discovery@state.mn.us as well as the assigned analyst(s).

Assigned Analyst(s): Michael N. Zajicek
Email Address(es): michael.zajicek@state.mn.us
Phone Number(s): 651-539-1830

ADDITIONAL INSTRUCTIONS:

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

Request Number:	16
Topic:	DOE GRIP Round 2 Funding Selection
Reference(s):	Gunderson Direct Testimony Page 21

Request:

On Page 21 of Mr. Gunderson's Direct Testimony he states:

"Additionally, if Minnesota Power is encouraged to submit a full application for the DOE GRIP round two funding and selected for an award for the HVDC Interconnection Facilities concept, up to \$50 million in additional federal funding would be lost if the Commission orders construction of the ATC Arrowhead Alternative. This is because Minnesota Power's DOE GRIP round two application will only support interconnection components of Minnesota Power's Project configuration, including the St. Louis County 345 kV/230 kV Substation."

Please provide further discussion on the specific interconnection components of Minnesota Power's Project configuration that allows it to be potentially eligible for DOE GRIP Round 2 Funding. Please also discuss in detail why ATC's proposal does not include and could not be altered to include components that would make it eligible for DOE GRIP Round 2 Funding.

Response:

The interconnection components of Minnesota Power's Project include a 345 kV line from the new HVDC converter station to the new St. Louis County 345 kV/230 kV Substation, the new St. Louis County 345 kV/230 kV Substation, and the double-circuit 230 kV line from the St. Louis County 345 kV/230 kV Substation to the existing

To be completed by responder

Response Date: 3/4/2024
Response by: Jennifer Kuklenski
Email Address: jkuklenski@mnpower.com
Phone Number: 218-355-3297



Minnesota Department of Commerce
85 7th Place East | Suite 280 | St. Paul, MN 55101
Information Request

Docket Number: E015/CN-22-607
Requested From: Minnesota Power
Type of Inquiry: General

☐ Nonpublic ☒ Public
Date of Request: 2/22/2024
Response Due: 3/4/2024

SEND RESPONSE VIA EMAIL TO: Utility.Discovery@state.mn.us as well as the assigned analyst(s).

Assigned Analyst(s): Michael N. Zajicek
Email Address(es): michael.zajicek@state.mn.us
Phone Number(s): 651-539-1830

ADDITIONAL INSTRUCTIONS:

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

point of interconnection. This also includes both ends of the HVDC Line, near Center, ND and Hermantown, MN. The Project is eligible for DOE GRIP Round 2 Funding because it will support the VSC HVDC system up to 1500MW capacity, which is being funded in part by DOE GRIP Round 1. Other innovative technologies for the new substation will include online monitoring for equipment such as transformers and advanced communication protocols to digitize the substations. The GRIP funding is meant to support innovative projects that contribute to enhancing grid flexibility and improve the resilience of the broader regional power system. The concept paper is provided as ATC IR 041.07 Attach.

Minnesota Power was notified by the DOE on February 29, 2024, that the Company is encouraged to submit a full application for the GRIP Round 2 funding based on the concept paper submitted on January 12, 2024. If the HVDC Interconnection Facilities concept is selected for a DOE GRIP Round 2 award, and the ATC Arrowhead Alternative is ordered by the Commission to be constructed, the HVDC Interconnection Facilities concept scope would no longer be applicable to the HVDC Modernization Project and this award would no longer be available to reduce Project costs. The GRIP Round 2 concept paper submitted includes a specific configuration (the configuration proposed by Minnesota Power for the HVDC Modernization Project). The full application, due in May, must also be consistent with the configuration proposed in the concept paper. Therefore, the accepted configuration cannot be altered prior to full application from what was submitted in the concept paper (i.e. from the Minnesota Power proposed configuration of the HVDC Modernization Project to the ATC Arrowhead Alternative). Further, ATC cannot submit a DOE GRIP Round 2 funding application for the ATC Arrowhead Alternative because ATC did not submit a concept paper for DOE GRIP Round 2 funding (see ATC's response to Minnesota Power IR 019 included as DOC IR 016.01 Attach).

To be completed by responder

Response Date: 3/4/2024
Response by: Jennifer Kuklenski
Email Address: jkuklenski@mnpower.com
Phone Number: 218-355-3297

MINNESOTA POWER

Utility Information Request

☐ Nonpublic ☒ Public

Docket No.: **E015/CN-22-607**
E015/CN-22-611

Date of Request: February 16, 2024

Requested From: American Transmission Company
LLC

Response Due: February 26, 2024

SEND RESPONSE VIA EMAIL TO: discoverymanager@mnpower.com

Request by: David Moeller
Email Address(es): dmoeller@allete.com
Phone Number(s): (218)723-3963

Request Number: 019
Topic: Information Requests
Reference:

If your response includes any executable files or spreadsheets, please provide those attachments in both searchable PDF and original form with all formulas and links intact.

REFERENCE:

ATC Response to MP IR 009.

REQUEST:

Has ATC submitted a concept paper or taken other steps to apply for any funding from the Department of Energy, Grid Resilience and Innovation Partnerships Program second round funding opportunity for Fiscal Years 2024 and 2025 that would offset costs of the ATC Arrowhead Alternative or any other portion of the HVDC Modernization Project? If so, please describe the project, how it relates to the ATC Arrowhead Alternative or the HVDC Modernization Project, and the amount of funding requested in or associated with any concept paper.

RESPONSE:

ATC has not applied for funding from the Department of Energy Grid Resilience and Innovation Partnerships Program to offset the costs of the Arrowhead Substation Alternative or any other portion of the HVDC Modernization Project.

To be completed by responder

Response Date: February 26, 2024
Response by: Robert McKee, Strategic Projects & Execution Director
Email Address: rmckee@atcllc.com
Phone Number: (608) 877-7052

MINNESOTA POWER

Utility Information Request

☐ Nonpublic ☒ Public

Docket No.: **E015/CN-22-607**
E015/CN-22-611

Date of Request: February 16, 2024

Requested From: American Transmission Company
LLC

Response Due: February 26, 2024

SEND RESPONSE VIA EMAIL TO: discoverymanager@mnpower.com

Request by: David Moeller
Email Address(es): dmoeller@allete.com
Phone Number(s): (218)723-3963

Request Number: 019
Topic: Information Requests
Reference:

If your response includes any executable files or spreadsheets, please provide those attachments in both searchable PDF and original form with all formulas and links intact.

REFERENCE:

ATC Response to MP IR 009.

REQUEST:

Has ATC submitted a concept paper or taken other steps to apply for any funding from the Department of Energy, Grid Resilience and Innovation Partnerships Program second round funding opportunity for Fiscal Years 2024 and 2025 that would offset costs of the ATC Arrowhead Alternative or any other portion of the HVDC Modernization Project? If so, please describe the project, how it relates to the ATC Arrowhead Alternative or the HVDC Modernization Project, and the amount of funding requested in or associated with any concept paper.

RESPONSE:

ATC has not applied for funding from the Department of Energy Grid Resilience and Innovation Partnerships Program to offset the costs of the Arrowhead Substation Alternative or any other portion of the HVDC Modernization Project.

To be completed by responder

Response Date: February 26, 2024
Response by: Robert McKee, Strategic Projects & Execution Director
Email Address: rmckee@atcllc.com
Phone Number: (608) 877-7052

**AMERICAN TRANSMISSION COMPANY LLC AND ATC
MANAGEMENT INC.**

UTILITY INFORMATION REQUEST

Docket Numbers: OAH 5-2500-39600; Date of Request: February 21, 2024
MPUC E-015/CN-22-607;
MPUC E-015/TL-22-611

Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

Information Request No. 42.

Reference page 21 of the direct testimony of MP witness Dan Gunderson, wherein You state “if Minnesota Power is encouraged to submit a full application for the DOE GRIP round two funding and selected for an award for the HVDC Interconnection Facilities concept, up to \$50 million in additional federal funding would be lost if the Commission orders construction of the ATC Arrowhead Alternative. This is because Minnesota Power’s DOE GRIP round two application will only support interconnection components of Minnesota Power’s Project configuration, including the St. Louis County 345 kV/230 kV Substation.”

- a. Have You had any discussions or Communications with DOE concerning the impact that implementation of ATC’s Arrowhead Substation Alternative would have on MP’s eligibility or ability to receive an award for rounds one or two of DOE GRIP funding? Please produce any such Communications.
- b. Please provide a detailed explanation for Your assertion that “up to \$50 million in additional federal funding would be lost if the Commission orders construction of the ATC Arrowhead Alternative.” As part of Your response, please identify the specific statutes, rules, regulations, or terms or conditions of the DOE GRIP funding process that would prevent or preclude Minnesota Power from receiving an award for round two of the DOE GRIP funding process if the Commission orders construction of the Arrowhead Substation Alternative.
- c. Please provide a detailed explanation for why Your “DOE GRIP round two application will only support interconnection components of Minnesota Power’s proposed Project configuration, including the St. Louis County 345/230 kV Substation.”

Response by: Jennifer Kuklenski
Title: Senior Public Policy Advisor
Department: Regulatory and Legislative Affairs
Telephone: 218-355-3297

As to Objection: David Moeller
Title: Senior Regulatory Counsel
Department: Legal
Telephone: (218) 723-3963

**AMERICAN TRANSMISSION COMPANY LLC AND ATC
MANAGEMENT INC.**

UTILITY INFORMATION REQUEST

Docket Numbers: OAH 5-2500-39600; Date of Request: February 21, 2024
 MPUC E-015/CN-22-607;
 MPUC E-015/TL-22-611

Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

- d. Please provide a detailed explanation of what (if any) steps or measures You have taken to preserve Your ability to receive DOE GRIP round two funding if the Minnesota Public Utilities Commission orders implementation of the Arrowhead Substation Alternative.

Objection:

Minnesota Power objects to the request in subpart b. to the extent it seeks legal analysis and/or conclusions.

Subject to and without waiving this objection, Minnesota Power provides the following response:

Response:

- a. Yes, Minnesota Power has met with the U.S. Department of Energy (“DOE”) multiple times regarding the Grid Resilience and Innovation Partnerships (“GRIP”) round one grant requirements for the HVDC Terminal Expansion Capability (“HTEC”) Project, which as stated by Company witness Daniel W. Gunderson includes elements of interconnection components of the HVDC converter stations included within the scope of the HVDC Modernization Project (“Project”), and the DOE has been made aware that Minnesota Power is currently moving through a contested case, for which the outcome may affect the scope of the HTEC Project if the Minnesota Public Utilities Commission (“Commission”) selects the ATC Arrowhead Alternative. These meetings between the Company and DOE were virtual calls, so there are no communications documents to produce regarding those communications. That said, one of the primary issues in these discussions is related to the scheduling difference provided by ATC to construct and in service the ATC Arrowhead Alternative and the performance period requirement of 60 months for the DOE GRIP round one funding. The other outstanding item with the DOE is what impact the change of project

Response by: Jennifer Kuklenski
Title: Senior Public Policy Advisor
Department: Regulatory and Legislative Affairs
Telephone: 218-355-3297

As to Objection: David Moeller
Title: Senior Regulatory Counsel
Department: Legal
Telephone: (218) 723-3963

**AMERICAN TRANSMISSION COMPANY LLC AND ATC
MANAGEMENT INC.**

UTILITY INFORMATION REQUEST

Docket Numbers: OAH 5-2500-39600; Date of Request: February 21, 2024
MPUC E-015/CN-22-607;
MPUC E-015/TL-22-611

Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

scope due to the Minnesota regulatory process might have on eligibility if the HTEC Project is not executed as submitted to the DOE. Minnesota Power received the encouragement letter to submit a full application for GRIP round two funding on February 29, 2024. This is the extent of communications with DOE for the round two GRIP funding opportunity to date.

- b. If the HVDC Interconnection Facilities concept is selected for a DOE GRIP round two award, and the ATC Arrowhead Alternative is ordered by the Commission to be constructed, the HVDC Interconnection Facilities concept scope would no longer be applicable to the HVDC Modernization Project. For additional information relevant to this response, please see the explanation below in response to part (c). For more information about the GRIP funding requirements, please reference the DOE's GRIP Program website: [Grid Resilience and Innovation Partnerships \(GRIP\) Program | Department of Energy](#).
- c. The concept paper submitted includes a specific project configuration. The full application due in May 2024 must also present the same specific project configuration. Minnesota Power has been developing the full application based on the configuration detailed in the concept paper Minnesota Power submitted in January 2024, which is based on Minnesota Power's proposed configuration of the HVDC Modernization Project. Minnesota Power does not believe the DOE will provide funding for a project that differs from that submitted in the full application (which must be consistent with the project submitted in the concept paper). From the beginning of the evaluation of the GRIP federal funding opportunities, Minnesota Power has focused on the opportunities it believes will have the best chance of being selected by the DOE for funding, which will help lower overall Project costs for Minnesota Power's customers. The GRIP funding is meant to support innovative projects that contribute to enhancing grid flexibility and improve the resilience of the broader regional power system. The GRIP funding is highly selective, and Minnesota Power is developing a competitive application that supports Project configuration, which it believes

Response by: Jennifer Kuklenski
Title: Senior Public Policy Advisor
Department: Regulatory and Legislative Affairs
Telephone: 218-355-3297

As to Objection: David Moeller
Title: Senior Regulatory Counsel
Department: Legal
Telephone: (218) 723-3963

**AMERICAN TRANSMISSION COMPANY LLC AND ATC
MANAGEMENT INC.**

UTILITY INFORMATION REQUEST

Docket Numbers: OAH 5-2500-39600; Date of Request: February 21, 2024
 MPUC E-015/CN-22-607;
 MPUC E-015/TL-22-611

Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

is the most optimal configuration for Minnesota Power's customers and the regional grid more broadly. If awarded by the DOE, the GRIP round two funding will directly reduce the costs associated with the interconnection assets needed for Minnesota Power's Project configuration.

- d. Minnesota Power has not taken any steps to secure DOE round two funding for the ATC Arrowhead Alternative. Rather, Minnesota Power contends that ATC should have taken its own steps to apply for federal funding for its own concept.

Response by: Jennifer Kuklenski
Title: Senior Public Policy Advisor
Department: Regulatory and Legislative Affairs
Telephone: 218-355-3297

As to Objection: David Moeller
Title: Senior Regulatory Counsel
Department: Legal
Telephone: (218) 723-3963

LARGE POWER INTERVENORS

Utility Information Request

Docket Numbers: E015/CN-22-607; E015/TL-22-611

Date of Request: November 7, 2023

Requested From: Minnesota Power

Response Due: November 17, 2023
Extension Granted to: December 8, 2023

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

Information Request No. 12

Please provide the rate impact of implementing American Transmission Company's proposed alternative using the same format as shown in page 15 of the Application and Table 2.2.3-1 – Estimated Retail Customer Impacts.

Response:

To calculate the rate impacts of the concept proposed by American Transmission Company LLC ("ATC"), Minnesota Power first needed to develop a cost estimate for the Arrowhead Alternative that is comparable in assumptions to the Company's cost estimate for the proposed HVDC Modernization Project scope as included in the Application. A detailed analysis of the Company's estimated cost for the individual components of ATC's Arrowhead Alternative, is shown in the table below, along with the anticipated owner of each component. The dollars in Table LPI IR 012-1 are provided in millions in 2022 nominal dollars generally based on the MISO MTEP22 Cost Estimation Guide workbook for substations and transmission lines. Because MISO's workbook does not appear to account for phase shifting transformers, the Company developed an assumption based on indicative pricing obtained from a phase shifting transformer manufacturer in August 2023.

Response by: Stewart Shimmin

Title: Revenue Requirements Lead

Department: Rates Department

Telephone: 218-355-3562

LARGE POWER INTERVENORS

Utility Information Request

Docket Numbers: E015/CN-22-607; E015/TL-22-611

Date of Request: November 7, 2023

Requested From: Minnesota Power

Response Due: November 17, 2023
Extension Granted to: December 8, 2023

By: Large Power Intervenors (Andrew P. Moratzka, Amber S. Lee)

Table LPI IR 012-1

Minnesota Interconnection Facilities	Low	Med	High	Owner
Minnesota Land Acquisition	7	10	13	MP
HVDC Line Entrance	1.4	2	2.6	MP
HVDC 345kV Line Entrance for Ckt #2	2.2	3.1	4	MP
HVDC - Arrowhead 345kV Double Ckt	4.7	6.7	8.7	MP
Arrowhead 345kV Line Reconfiguration	1	1.4	1.8	ATC
Arrowhead 345/230kV Substation Expansion	15.4	22	28.6	ATC
Arrowhead 230kV Phase Shifting Transformer	23.5	33.5	43.6	ATC
Arrowhead 230kV Bus Reconfigurations	3.4	4.9	6.4	MP
Rounding allocated to ATC	1.1	1.1	1	ATC
Rounding allocated to MP	0.3	0.3	0.3	MP
Total	60	85	110	

The rows of Table LPI IR 012-1 labeled “Rounding” refer to the amounts that needed to be added or subtracted from the sum of the amounts for the various components to ensure the total amounts rounded to the nearest five (i.e., 5 or 0).

After developing the cost estimate and ownership assumptions, it was also necessary for the Company to determine how ATC would recover the costs associated with the Arrowhead Alternative facilities it would own from the Company. Table LPI IR 012-2 provides the detail of Arrowhead Alternative costs by owner. Notably, Minnesota Power would be responsible to compensate ATC for \$41-\$75 million of the total cost of the ATC Arrowhead Alternative.

Table LPI IR 012-2

	Low	Med	High
Subtotal: ATC Ownership	41	58	75
Subtotal: MP Ownership	19	27	35

Response by: Stewart Shimmin

Title: Revenue Requirements Lead

Department: Rates Department

Telephone: 218-355-3562

LARGE POWER INTERVENORS

Utility Information Request

Docket Numbers: E015/CN-22-607; E015/TL-22-611

Date of Request: November 7, 2023

Requested From: Minnesota Power

Response Due: November 17, 2023
Extension Granted to: December 8, 2023

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

According to MISO's publicly-posted list of TO's non-binding general self-fund indications¹https://word-edit.officeapps.live.com/we/wordeditorframe.aspx?ui=en-US&rs=en-US&wopisrc=https://alle.sharepoint.com/sites/TMHVDCModernizationProject-LegalandRegulatoryTeam/_vti_bin/wopi.ashx/files/ec105e2534114ecb8c74cfa198375a35&wdenableroaming=1&mssc=1&hid=0BB6F0A0-E041-4000-73BC-8EA3C55712BF&wdorigin=ItemsView&wdhostclicktime=1700693006748&jsapi=1&jsapiver=v1&newsession=1&corrid=855b64dd-bf02-4927-a004-09cefeffedb3&usid=855b64dd-bf02-4927-a004-09cefeffedb3&sftc=1&cac=1&mtf=1&sfp=1&instantedit=1&wopicomplete=1&wdredirectionreason=Unified_SingleFlush&rct=Normal&ctp=LeastProtected ATC intends to use the self-funding mechanism for network upgrades identified in generation interconnection and affected systems studies. It is therefore assumed that ATC would propose using self-funding for its costs associated with the Arrowhead Alternative. The implementation of the self-funding mechanism is described in the MISO Tariff, Attachment X: Appendix 14, which is MISO's pro-forma Facilities Service Agreement² for interconnection facilities and network upgrades. According to the pro-forma Facilities Service Agreement ("FSA"), the interconnection customer (in this case, Minnesota Power) will pay the transmission owner (in this case, ATC) a monthly revenue requirement for the interconnection facilities, starting on the month following notification from the owner to the customer that the interconnection facilities have been placed in service. The methodology for calculating the monthly revenue requirements is provided in the pro-forma FSA and is based on a payback period of 240 months (20 years). Accordingly, when determining the rate impacts of the Arrowhead Alternative, the above assumptions regarding the self-funding mechanism were applied to the portion of cost associated with ATC-owned facilities.

The estimated Minnesota jurisdictional revenue requirements and rate impacts by customer class for the first expected in-service year beginning May 1, 2030, for the proposed ATC Arrowhead Alternative are shown below, along with a comparison of the estimated retail customer rate impacts

¹ Available at <https://www.misoenergy.org/legal/tariff/>

² Available at <https://www.misoenergy.org/planning/generator-interconnection/>

Response by: Stewart Shimmin

Title: Revenue Requirements Lead

Department: Rates Department

Telephone: 218-355-3562

LARGE POWER INTERVENORS

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of Minnesota Power's Proposed Project with and without the \$65 million in state and federal funding awards the Company expects to be able to apply to its Proposed Project.

Similar to Table 2.2.3-1 of the Application, the estimated impacts are provided using the mid-range and upper-range capital costs. The capital costs were adjusted for the net change in Minnesota Power's capital costs as discussed above and this change was also incorporated into the property tax estimate. Lastly, the estimated revenue requirements that Minnesota Power would pay to ATC were added to arrive at the total revenue requirements for the estimated rate impacts. The calculation of the amount Minnesota Power would pay ATC for their self-funded portion of the project follows MISO's Attachment X, Appendix 14, FSA. As shown below, for the average residential customer, the rate impact for the first twelve months following in-service would range from approximately \$8.51 to \$10.06 per month. For Large Power customers, the estimated rate impact for the first twelve months following in-service would range from approximately 1.138¢ to 1.346¢ per kWh of energy.

Table LPI IR 012-3
Estimated Retail Customer Impacts of the Proposed ATC Arrowhead Alternative
Compared with Minnesota Power's Proposed Project, With & Without \$65M in DOE & State Awards

	Arrowhead Alternative	Arrowhead Alternative	Minnesota Power Proposed Project Without DOE & State Awards		Minnesota Power Proposed Project With DOE & State Awards	
For the twelve months ending	4/30/31	4/30/31	4/30/31	4/30/31	4/30/31	4/30/31
	Mid-Range	Upper- Range	Mid- Range	Upper- Range	Mid- Range	Upper- Range
MN Jurisdictional Revenue Requirements	\$88,394,837	\$104,539,874	\$86,423,884	\$101,860,375	\$80,322,690	\$95,759,190
Rate Class Impacts ^{1/}						
Residential						

Response by: Stewart Shimmin

Title: Revenue Requirements Lead

Department: Rates Department

Telephone: 218-355-3562

LARGE POWER INTERVENORS

Utility Information Request

Docket Numbers: E015/CN-22-607; E015/TL-22-611

Date of Request: November 7, 2023

Requested From: Minnesota Power

Response Due: November 17, 2023
Extension Granted to: December 8, 2023

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

	Arrowhead Alternative	Arrowhead Alternative	Minnesota Power Proposed Project Without DOE & State Awards		Minnesota Power Proposed Project With DOE & State Awards	
For the twelve months ending	4/30/31	4/30/31	4/30/31	4/30/31	4/30/31	4/30/31
Average Current Rate (¢/kWh)	14.894	14.894	14.894	14.894	14.894	14.894
Increase (¢/kWh)	1.201	1.421	1.175	1.384	1.092	1.301
Increase (%)	8.07%	9.54%	7.89%	9.29%	7.33%	8.74%
Average Impact (\$/month)	\$8.51	\$10.06	\$8.32	\$9.80	\$7.73	\$9.22
General Service						
Average Current Rate (¢/kWh)	14.943	14.943	14.943	14.943	14.943	14.943
Increase (¢/kWh)	1.201	1.421	1.175	1.384	1.092	1.301
Increase (%)	8.04%	9.51%	7.86%	9.26%	7.31%	8.71%
Average Impact (\$/month)	\$33.50	\$38.61	\$32.76	\$38.61	\$30.44	\$36.29
Large Light & Power						
Average Current Rate (¢/kWh)	11.960	11.960	11.960	11.960	11.960	11.960
Increase (¢/kWh)	1.201	1.421	1.175	1.384	1.092	1.301
Increase (%)	10.04%	11.88%	9.82%	11.58%	9.13%	10.88%
Average Impact (\$/month)	\$2,948.79	\$3,487.37	\$2,883.04	\$3,397.99	\$2,680	\$3,194
Large Power						
Average Current Rate (¢/kWh)	9.361	9.361	9.361	9.361	9.361	9.361
Increase (demand + energy combined) (¢/kWh)	1.138	1.346	1.112	1.311	1.034	1.233
Increase (%)	12.16%	14.38%	11.88%	14.01%	11.05%	13.17%
Average Impact (\$/month)	\$547,135	\$647,067	\$534,935	\$630,482	\$497,171	\$592,718
Lighting						
Average Rate (¢/kWh)	31.964	31.964	31.964	31.964	31.964	31.964

Response by: Stewart Shimmin

Title: Revenue Requirements Lead

Department: Rates Department

Telephone: 218-355-3562

LARGE POWER INTERVENORS

Utility Information Request

Docket Numbers: E015/CN-22-607; E015/TL-22-611

Date of Request: November 7, 2023

Requested From: Minnesota Power

Response Due: November 17, 2023
Extension Granted to: December 8, 2023

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

	Arrowhead Alternative	Arrowhead Alternative	Minnesota Power Proposed Project Without DOE & State Awards		Minnesota Power Proposed Project With DOE & State Awards	
For the twelve months ending	4/30/31	4/30/31	4/30/31	4/30/31	4/30/31	4/30/31
Increase (¢/kWh)	1.201	1.421	1.175	1.384	1.092	1.301
Increase (%)	3.76%	4.44%	3.67%	4.33%	3.42%	4.07%
Average Impact (\$/month)	\$1.97	\$2.33	\$1.93	\$2.27	\$1.79	\$2.14

Notes:

1/ Average current rate based on 2022 Final General Rates based on the 2023 MPUC decision (E015/GR-21-335) without riders adjusted to include current rider rates. Current rider rates include the Transmission Cost Recovery Rider rates, Renewable Resources Rider rates, Solar Renewable rates, Conservation Program Adjustment rates, and the 2022 Fuel and Purchased Energy Adjustment with True-Up. The increase (¢/kWh) shown above is the increase from the new project with the proposed ATC Arrowhead Alternative.

Supplemental Response (February 2, 2024):

On January 8, 2024, Minnesota Power was notified by the Minnesota Department of Commerce (“the Department”) that the Company had been selected for a \$10 million award from the State Competitiveness Match Fund as cost-share (or match) for the Company’s U.S. Department of Energy (“DOE”) grant application. The Department is reserving these funds and they may only be expended upon receipt of written notice from the federal (DOE) grantor to the commissioner of the Department stating that Minnesota Power will receive DOE funding for the project.

LPI IR 012.01 Attach updates Table LPI IR 012-3 with estimated retail customer impacts with \$75 million in DOE and state awards applied to the project, compared to the ATC Arrowhead Alternative that assume ATC’s recovery would be through MISO Attachment X as discussed above. Additionally, Minnesota Power is providing rate impacts for a new alternative as proposed by ATC in response to MP IR 004 to ATC. Instead of recovery through MISO Attachment X, ATC’s response to MP IR 004 indicates recovery by a lump sum payment grossed up for tax. Based on ATC’s MISO Attachment O, Minnesota Power calculated the tax gross-up as (1 –

Response by: Stewart Shimmin

Title: Revenue Requirements Lead

Department: Rates Department

Telephone: 218-355-3562

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LARGE POWER INTERVENORS

Utility Information Request

Docket Numbers: E015/CN-22-607; E015/TL-22-611

Date of Request: November 7, 2023

Requested From: Minnesota Power

Response Due: November 17, 2023
Extension Granted to: December 8, 2023

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

0.2436) = 0.75640. This was applied to ATC's base mid-range and high-range costs estimated above at \$58 million and \$75 million to estimate the lump sum payment amounts of \$76.6 million and \$99.2 million that were utilized in the rate impacts estimations presented in LPI IR 012.01 Attach.

The Company is providing this update for completeness.

Second Supplemental Response (March 6, 2024):

LPI IR 012.02 Attach SUPP updates LPI IR 012.01 Attach with estimated retail customer impacts of the ATC Arrowhead Alternative with and without U.S. Department of Energy ("DOE") and State of Minnesota financial awards without the phase shifting transformer. In addition, this supplemental response provides estimated retail customer impacts of Minnesota Power's HVDC Modernization Project if Minnesota Power ends up being awarded a grant in the second round of DOE funding discussed in the Direct Testimony of Company witness Mr. Gunderson (totaling \$125 million in DOE and State of Minnesota financial awards for the Minnesota Power configuration of the HVDC Modernization Project).

The Company is providing this update for completeness.

Response by: Stewart Shimmin

Title: Revenue Requirements Lead

Department: Rates Department

Telephone: 218-355-3562

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Estimated Retail Customer Impacts of the ATC Arrowhead Alternatives Compared with Minnesota Power's Proposed Project, With & Without DOE & State Awards

	Minnesota Power Proposed Project Without DOE & State Awards		Minnesota Power Proposed Project With \$75M DOE & State Awards		Minnesota Power Proposed Project With \$125M DOE & State Awards	
	4/30/31 Mid-Range	4/30/31 Upper-Range	4/30/31 Mid-Range	4/30/31 Upper-Range	4/30/31 Mid-Range	4/30/31 Upper-Range
For the twelve months ending						
MN Jurisdictional Revenue Requirements	\$ 86,423,884	\$ 101,860,375	\$ 79,384,055	\$ 94,820,546	\$ 74,690,835	\$ 90,127,326
<u>Rate Class Impacts /1</u>						
Residential (average current rate, cents/kWh)	14.894	14.894	14.894	14.894	14.894	14.894
Increase (cents/kWh) /2	1.175	1.384	1.079	1.289	1.015	1.225
Increase (%)	7.89%	9.29%	7.24%	8.65%	6.82%	8.22%
Average Impact (\$ / month)	\$8.32	\$9.80	\$7.64	\$9.13	\$7.19	\$8.67
General Service (average current rate, cents/kWh)	14.943	14.943	14.943	14.943	14.943	14.943
Increase (cents/kWh) /2	1.175	1.384	1.079	1.289	1.015	1.225
Increase (%)	7.86%	9.26%	7.22%	8.62%	6.79%	8.20%
Average Impact (\$ / month)	\$32.76	\$38.61	\$30.09	\$35.94	\$28.31	\$34.16
Large Light & Power (average current rate, cents/kWh)	11.960	11.960	11.960	11.960	11.960	11.960
Increase (cents/kWh) /2	1.175	1.384	1.079	1.289	1.015	1.225
Increase (%)	9.82%	11.58%	9.02%	10.78%	8.49%	10.24%
Average Impact (\$ / month)	\$2,883.04	\$3,397.99	\$2,648.19	\$3,163.14	\$2,491.63	\$3,006.58
Large Power (average current rate, cents/kWh)	9.361	9.361	9.361	9.361	9.361	9.361
Increase (Demand & Energy Combined) (cents/kWh) /2	1.112	1.311	1.022	1.221	0.961	1.160
Increase (%)	11.88%	14.01%	10.92%	13.04%	10.27%	12.39%
Average Impact (\$ / month)	\$534,935	\$630,482	\$491,361	\$586,908	\$462,312	\$557,858
Lighting (average current rate, cents/kWh)	31.964	31.964	31.964	31.964	31.964	31.964
Increase (cents/kWh) /2	1.175	1.384	1.079	1.289	1.015	1.225
Increase (%)	3.67%	4.33%	3.38%	4.03%	3.18%	3.83%
Average Impact (\$ / month)	\$1.93	\$2.27	\$1.77	\$2.12	\$1.67	\$2.01

Notes:

1/ Average current rates are 2022 Final General rates based on 2023 MPUC decision (E-015/GR-21-335) without riders adjusted to include current rider rates. Current rider rates included Renewable Resources Rider rates, Transmission Cost Recovery Rider rates, Solar Adjustment rates, Conservation Program Adjustment rates, and 2022 Fuel and Purchased Energy with True-Up. Average \$/month impact based on 2023 budgeted billing units.

2/ Increase shown is the rate increase of proposed HVDC Project in first year after in-service.

Estimated Retail Customer Impacts of the ATC Arrowhead Alternatives Compared with Minnesota Power's Proposed Project, With & Without DOE & State Awards

	ATC Arrowhead Alternative Without DOE & State Awards, Without Phase Shifting Transformer (Lump Sum Recovery)		ATC Arrowhead Alternative With \$75M DOE & State Awards, Without Phase Shifting Transformer (Lump Sum Recovery)	
For the twelve months ending	4/30/31 Mid-Range	4/30/31 Upper-Range	4/30/31 Mid-Range	4/30/31 Upper-Range
MN Jurisdictional Revenue Requirements	\$ 86,720,453	\$ 101,902,164	\$ 79,680,624	\$ 94,862,335
<u>Rate Class Impacts /1</u>				
Residential (average current rate, cents/kWh)	14.894	14.894	14.894	14.894
Increase (cents/kWh) /2	1.179	1.385	1.083	1.289
Increase (%)	7.91%	9.30%	7.27%	8.66%
Average Impact (\$ / month)	\$8.35	\$9.81	\$7.67	\$9.13
General Service (average current rate, cents/kWh)	14.943	14.943	14.943	14.943
Increase (cents/kWh) /2	1.179	1.385	1.083	1.289
Increase (%)	7.89%	9.27%	7.25%	8.63%
Average Impact (\$ / month)	\$32.87	\$38.62	\$30.20	\$35.95
Large Light & Power (average current rate, cents/kWh)	11.960	11.960	11.960	11.960
Increase (cents/kWh) /2	1.179	1.385	1.083	1.289
Increase (%)	9.85%	11.58%	9.05%	10.78%
Average Impact (\$ / month)	\$2,892.93	\$3,399.38	\$2,658.09	\$3,164.54
Large Power (average current rate, cents/kWh)	9.361	9.361	9.361	9.361
Increase (Demand & Energy Combined) (cents/kWh) /2	1.116	1.312	1.026	1.221
Increase (%)	11.93%	14.01%	10.96%	13.04%
Average Impact (\$ / month)	\$536,771	\$630,741	\$493,197	\$587,166
Lighting (average current rate, cents/kWh)	31.964	31.964	31.964	31.964
Increase (cents/kWh) /2	1.179	1.385	1.083	1.289
Increase (%)	3.69%	4.33%	3.39%	4.03%
Average Impact (\$ / month)	\$1.93	\$2.27	\$1.78	\$2.12

Notes:

1/ Average current rates are 2022 Final General rates based on 2023 MPUC decision (E-015/GR-21-335) without riders adjusted to include current rider rates. Current rider rates included Renewable Resources Rider rates, Transmission Cost Recovery Rider rates, Solar Adjustment rates, Conservation Program Adjustment rates, and 2022 Fuel and Purchased Energy with True-Up. Average \$/month impact based on 2023 budgeted billing units.

2/ Increase shown is the rate increase of proposed HVDC Project in first year after in-service.

Estimated Retail Customer Impacts of the ATC Arrowhead Alternatives Compared with Minnesota Power's Proposed Project, With & Without DOE & State Awards

	ATC Arrowhead Alternative Without DOE & State Awards (Lump Sum Recovery)		ATC Arrowhead Alternative With \$75M DOE & State Awards (Lump Sum Recovery)		ATC Arrowhead Alternative Without DOE & State Awards (MISO Attachment X Recovery)		ATC Arrowhead Alternative With \$75M DOE & State Awards (MISO Attachment X Recovery)	
	4/30/31 Mid-Range	4/30/31 Upper-Range	4/30/31 Mid-Range	4/30/31 Upper-Range	4/30/31 Mid-Range	4/30/31 Upper-Range	4/30/31 Mid-Range	4/30/31 Upper-Range
For the twelve months ending								
MN Jurisdictional Revenue Requirements	\$ 90,568,893	\$ 107,365,072	\$ 83,529,064	\$ 100,325,242	\$ 88,394,837	\$ 104,539,874	\$ 81,355,007	\$ 97,500,045
<u>Rate Class Impacts /1</u>								
Residential (average current rate, cents/kWh)	14.894	14.894	14.894	14.894	14.894	14.894	14.894	14.894
Increase (cents/kWh) /2	1.231	1.459	1.135	1.363	1.201	1.421	1.106	1.325
Increase (%)	8.26%	9.80%	7.62%	9.15%	8.07%	9.54%	7.42%	8.90%
Average Impact (\$ / month)	\$8.72	\$10.33	\$8.04	\$9.66	\$8.51	\$10.06	\$7.83	\$9.38
General Service (average current rate, cents/kWh)	14.943	14.943	14.943	14.943	14.943	14.943	14.943	14.943
Increase (cents/kWh) /2	1.231	1.459	1.135	1.363	1.201	1.421	1.106	1.325
Increase (%)	8.24%	9.76%	7.60%	9.12%	8.04%	9.51%	7.40%	8.87%
Average Impact (\$ / month)	\$34.33	\$40.69	\$31.66	\$38.03	\$33.50	\$39.62	\$30.84	\$36.95
Large Light & Power (average current rate, cents/kWh)	11.960	11.960	11.960	11.960	11.960	11.960	11.960	11.960
Increase (cents/kWh) /2	1.231	1.459	1.135	1.363	1.201	1.421	1.106	1.325
Increase (%)	10.29%	12.20%	9.49%	11.40%	10.04%	11.88%	9.24%	11.08%
Average Impact (\$ / month)	\$3,021.31	\$3,581.62	\$2,786.47	\$3,346.78	\$2,948.79	\$3,487.37	\$2,713.94	\$3,252.53
Large Power (average current rate, cents/kWh)	9.361	9.361	9.361	9.361	9.361	9.361	9.361	9.361
Increase (Demand & Energy Combined) (cents/kWh) /2	1.166	1.382	1.075	1.291	1.138	1.346	1.047	1.255
Increase (%)	12.45%	14.76%	11.49%	13.80%	12.16%	14.38%	11.19%	13.41%
Average Impact (\$ / month)	\$560,591	\$664,554	\$517,017	\$620,980	\$547,135	\$647,067	\$503,561	\$603,493
Lighting (average current rate, cents/kWh)	31.964	31.964	31.964	31.964	31.964	31.964	31.964	31.964
Increase (cents/kWh) /2	1.231	1.459	1.135	1.363	1.201	1.421	1.106	1.325
Increase (%)	3.85%	4.56%	3.55%	4.27%	3.76%	4.44%	3.46%	4.15%
Average Impact (\$ / month)	\$2.02	\$2.40	\$1.86	\$2.24	\$1.97	\$2.33	\$1.81	\$2.17

Notes:

1/ Average current rates are 2022 Final General rates based on 2023 MPUC decision (E-015/GR-21-335) without riders adjusted to include current rider rates. Current rider rates included Renewable Resources Rider rates, Transmission Cost Recovery Rider rates, Solar Adjustment rates, Conservation Program Adjustment rates, and 2022 Fuel and Purchased Energy with True-Up. Average \$/month impact based on 2023 budgeted billing units.

2/ Increase shown is the rate increase of proposed HVDC Project in first year after in-service.

MINNESOTA POWER

Utility Information Request

☐ Nonpublic ☒ Public

Docket No.: **E015/CN-22-607**
E015/CN-22-611

Date of Request: December 22, 2023

Requested From: American Transmission Company
LLC

Response Due: January 2, 2024
Extension To: January 5, 2024

SEND RESPONSE VIA EMAIL TO: discoverymanager@mnpower.com

Request by: David Moeller
Email Address(es): dmoeller@allete.com
Phone Number(s): (218)723-3963

Request Number: 004
Topic: Information Requests
Reference:

If your response includes any executable files or spreadsheets, please provide those attachments in both searchable PDF and original form with all formulas and links intact.

REQUEST: Please explain how ATC would recover any of its costs to construct the ATC Arrowhead Alternative and who would be responsible for any costs that exceed ATC's current estimates for the ATC Arrowhead Alternative. Please include ATC's currently authorized FERC Return on Equity (ROE) and any other FERC incentive rates authorized for ATC.

RESPONSE: ATC objects to this request as compound and to the extent that it calls for a legal conclusion. Subject to these objections, ATC responds as follows:

If the Minnesota Public Utilities Commission ("MPUC") were to order implementation of the Arrowhead Substation Alternative, it would be considered a transmission-to-transmission interconnection arrangement under Attachment FF – ATCLLC Local Planning Process of the MISO Tariff ("Attachment FF – ATCLLC") and ATC's Transmission Interconnection Guide. This is because ATC would be connecting Minnesota Power's upgraded HVDC converter station to the alternating current bulk electric system via ATC's 345/230 kV Arrowhead Substation. The double-circuit 345 kV line would be considered Minnesota Power's "Network Upgrade" and the work within ATC's Arrowhead 345/230 kV Substation would be considered ATC's "Network Upgrades" and "Interconnection Facilities" that are required due to the interconnection of Minnesota Power's new converter station. ATC would own its Network Upgrades and Interconnection Facilities associated with its existing Arrowhead 345/230 kV Substation. While ATC believes it would be eligible to a 50 percent ownership share in Minnesota Power's 345 kV Network Upgrade per Minn. Stat. § 216B.246, ATC's general practice is for the interconnecting transmission owner (in this case, Minnesota Power) to own those facilities, and ATC would follow that practice here.

Per Article 7.4 of ATC and Minnesota Power's Transmission Interconnection Agreement (dated January 22, 2008), Minnesota Power will pay the costs associated with both the Interconnection Facilities and the Network Upgrades to ATC's system. ATC's general practice for facilities needed to accommodate a transmission-to-transmission interconnection is that ATC will recover the cost of those facilities via a

MINNESOTA POWER

Utility Information Request

☐ Nonpublic ☒ Public

Docket No.: **E015/CN-22-607**

Date of Request: December 22, 2023

E015/CN-22-611

Requested From: American Transmission Company
LLC

Response Due: January 2, 2023

IR Number 004

lump sum payment with a tax gross-up. ATC would not recover a return at its authorized return on equity (10.52%, which includes a 0.5% adder for participating in a regional transmission organization) on this amount over time.

If actual costs for ATC's Network Upgrades and Interconnection Facilities, including tax gross-up, exceed or are less than ATC's estimate, ATC would true-up with Minnesota Power the difference between the estimated costs and actuals from the initial payment received from Minnesota Power.

To be completed by responder

Response Date: January 5, 2025

Response by: Robert McKee, Director – Strategic Projects and Execution

Email Address: bmckee@atcllc.com

Phone Number: (608) 877-7052

LARGE POWER INTERVENORS

Utility Information Request

Docket Numbers: E015/CN-22-607; E015/TL-22-611 Date of Request: March 1, 2024

Requested From: Minnesota Power

Response Due: March 11, 2024

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

Information Request No. 39

On page 37 of Winters' testimony he describes three major benefits to ATC and concludes that "Each of these benefits to ATC is at the detriment to Minnesota Power's customers, even though Minnesota Power customers will pay the full cost of the Project." Please respond to the following:

Since Minnesota Power appears to recognize that its ratepayers would unfairly bear the costs while ATC benefits, please explain what steps it will take to ensure that the cost assignments are appropriately assigned to others that benefit from its Modernization Project that is aimed at enabling regional benefits.

Response:

As presented in the Application and utilizing the interconnection configuration proposed by Minnesota Power, the HVDC Modernization Project ("Project") maximizes benefits to Minnesota Power's customers. While Minnesota Power continues to seek opportunities for mitigation of rate impacts, the Project at this time has not been determined by MISO to meet any criteria for regional cost sharing and there is currently no other MISO tariff mechanism to recover costs from others through MISO. Therefore, the costs for the Project will be borne wholly by Minnesota Power's customers who, under the current proposal, retain the vast majority (if not all) of the benefits from the HVDC Line, including its transfer capability, generator interconnection capacity, congestion relief impacts, and reliability support for Minnesota Power's local 230 kV network. Minnesota Power's efforts to mitigate rate impacts from the future expandability options that are part of the Project through leveraging federal and state grant opportunities have also been discussed in many places, most recently in response to LPI IR 036. To that end, Minnesota Power has taken reasonable steps to ensure that its customers are responsible for the cost associated with customer needs of the Project but not paying for potential future regional benefits that may be leveraged in the future for future expandability.

The reference to the Direct Testimony of Mr. Winter, in its proper context, demonstrates that the ATC Arrowhead Alternative would reduce the direct benefits to Minnesota Power's customers by shifting benefits to ATC's Wisconsin transmission system, even though it is Minnesota Power's

Response by: Christian Winter
Title: Manager-Regional Transmission Planning
Department: Delivery Support Operations
Telephone: 218-355-2908

LARGE POWER INTERVENORS

Utility Information Request

Docket Number: E015/CN-22-607; E015/TL-22-611 Date of Request: March 1, 2024

Requested From: Minnesota Power Response Due: March 11, 2024

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

customers who are paying for the Project. While the ATC Arrowhead Alternative would shift these benefits away from Minnesota Power's customers, there is no obvious path for the selection of the ATC Arrowhead Alternative to also change the cost recovery mechanism for the Project to align with the shift in Project benefits. Put another way, if the ATC Arrowhead Alternative is ordered by the Commission to be constructed, Minnesota Power's customers will receive less benefits for basically the same total project cost.¹ Nothing about ATC's proposal of the ATC Arrowhead Alternative would grant Minnesota Power the ability to seek compulsory cost-sharing from ATC or MISO for the Project.

¹ Please see the individual rate impacts on a per-customer basis included in the Second Supplemental Response to LPI IR 012 for the ATC Arrowhead Alternative (without the phase shifting transformer). While the ATC Arrowhead Alternative would cost approximately \$4 million less than Minnesota Power's proposed Project configuration, once the tax gross-up proposed by ATC is included, the cost of the ATC Arrowhead Alternative is higher than that of Minnesota Power's proposed configuration.

Response by: Christian Winter
Title: Manager-Regional Transmission Planning
Department: Delivery Support Operations
Telephone: 218-355-2908

LARGE POWER INTERVENORS

Utility Information Request

Docket Numbers: E015/CN-22-607; E015/TL-22-611 Date of Request: February 28, 2024

Requested From: Minnesota Power

Response Due: March 11, 2024

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

Information Request No. 35

Refer to response to LPI-9 where Minnesota Power stated the following in response to whether as currently proposed in the Application, if Minnesota Power anticipates that its preferred and proposed Project will include cost sharing with others:

“No, at this time Minnesota Power does not anticipate its proposed Project will include cost sharing with others. Currently, the only clear way for costs to be assigned to others would be if the project meets cost allocation criteria outlined in the MISO Tariff, for example as an MVP or MEP.”

Please respond to the following:

1. Please explain why there would not be cost sharing associated with the HVDC Modernization Project given that this project “is designed to accommodate future expansion of the HVDC system and the interconnected AC transmission system, to support the future regional transmission development that is necessary to successfully navigate the clean energy transition” (see page 32 of the Company’s Application).
2. If MISO utilizes the Company’s proposed capability of the convertor stations up to 1500 MW in Tranche 2, please explain Minnesota Power’s assumptions about the cost sharing methodology and provide the cost sharing breakdown or expected revenue offsets from MISO.
3. If there is no cost sharing, please explain Minnesota Power’s justification for building the proposed capability for regional benefits while asking Minnesota ratepayers to be solely responsible for the costs.

Response:

Response by: Randi Nyholm

Title: RTO Coordination Manager

Department: Strategy & Planning

Telephone: 218-461-2472

LARGE POWER INTERVENORS

Utility Information Request

Docket Number: E015/CN-22-607; E015/TL-22-611 Date of Request: February 28, 2024

Requested From: Minnesota Power Response Due: March 11, 2024

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

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1. In order to be eligible for cost allocation, the HVDC Modernization Project would need to meet the cost allocation criteria outlined in the MISO Tariff to be classified as a Multi-Value Project (“MVP”) or a Market Efficiency Project (“MEP”), which generally focus on regional and market benefits. The HVDC Modernization Project is essential for Minnesota Power customers to replace aging Minnesota Power assets and continue to deliver low-cost renewable energy to Minnesota Power’s customers. As such the HVDC Modernization Project is not eligible for cost allocation under MISO’s Tariff. Minnesota Power has developed an HVDC Modernization Project configuration that meet its customers’ near-term needs for continued reliable delivery of renewable energy while preserving optionality for future expandability to benefit both Minnesota Power customers and the region if/when conditions support expansion. To ensure maximum flexibility for use of the increased capacity above 550 MW, Minnesota Power secured Transmission Service Requests for 350 MW of capacity that will be available once the HVDC Modernization Project is in-service. This ensures that Minnesota Power maintains the flexibility to utilize this portion of the HVDC Line to meet its customers’ needs or assign use of portions of the HVDC Line capacity to others, which would create optionality to offset costs for Minnesota Power customers. To be clear, the Project is intended at its core to provide benefits to Minnesota Power customers. The future expansion capabilities of the HVDC Modernization Project are intended to preserve the ability to efficiently and effectively increase capacity of the HVDC System in the future, but not as part of this proposed, nearer term project that is essential for Minnesota Power. The designed optionality for future expandability is a prudent and appropriate step that aligns with good utility practice for a large-scale transmission infrastructure project with a multi-decade operating life.¹ The overall

¹ *In the Matter of the Application of Great River Energy, Northern States Power Company (d/b/a Xcel Energy) and Others for Certificates of Need for the CapX 345-kV Transmission Projects; Docket No. ET2/E002, et al./CN-06-1115,*

Response by: Randi Nyholm

Title: RTO Coordination Manager

Department: Strategy & Planning

Telephone: 218-461-2472

LARGE POWER INTERVENORS

Utility Information Request

Docket Number: E015/CN-22-607; E015/TL-22-611 Date of Request: February 28, 2024

Requested From: Minnesota Power Response Due: March 11, 2024

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

reasonableness of this configuration is further supported when combined with Minnesota Power's efforts to obtain grant funding to mitigate near-term rate impacts of these incremental costs to retain the optionality.

2. As described in response to DOC IR 018, if a future expansion of the HVDC Line beyond the 900 MW currently held by Minnesota Power (up to 1,500 MW or more) was determined by MISO to meet the definition of a MVP or MEP under the MISO Tariff, then the incremental cost of increasing the HVDC capacity would be allocated by MISO according to the applicable tariff provisions for regional cost allocation. Presently, the available 900 MW of capacity of the HVDC Line with the proposed Project is intended to be utilized by Minnesota Power and therefore the costs of the Project will be borne wholly by Minnesota Power's customers. This includes the existing 550 MW of Transmission Service Requests and the additional 350 MW of transmission service requests that were recently acquired. At any point in the future Minnesota Power may choose to assign all or a portion of its existing rights to another party. If Minnesota Power were to assign any of the 350 MW in transmission service requests to another party, Minnesota Power customers would receive the financial benefit of any such transaction. Assignment of Transmission Rights is the only viable path for cost sharing of the 900 MW HVDC Modernization Project under current MISO Tariff rules.

ORDER GRANTING CERTIFICATES OF NEED WITH CONDITIONS at Order Point 3 (May 22, 2009) (Commission ordered construction of the Upsized Alternative, which leveraged the needed 345 kV transmission structures by ordering that they be constructed to 345 kV/345 kV double circuit compatible, with the second circuit positions available for future needs. Fifteen years later, projects are currently being planned or evaluated to install the second circuit on the majority of these lines, including some which are part of the MISO LRTP).

Response by: Randi Nyholm

Title: RTO Coordination Manager

Department: Strategy & Planning

Telephone: 218-461-2472

LARGE POWER INTERVENORS

Utility Information Request

Docket Number: E015/CN-22-607; E015/TL-22-611 Date of Request: February 28, 2024

Requested From: Minnesota Power Response Due: March 11, 2024

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

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3. Minnesota Power has leveraged federal and state grant funding opportunities to protect its customers from much of the incremental cost associated with the future expandability options incorporated into the design of the Project. Minnesota Power also continues to work with MISO to assess opportunities for recognition of the regionally-beneficial attributes of its VSC HVDC converters, either through LRTP cost allocation or through new Tariff mechanisms. In that respect, the Company has taken reasonable steps to ensure that its customers are responsible for the costs associated with customer needs of the Project but not paying for potential future regional benefits that may be leveraged for future expandability. Minnesota Power also continues to explore additional means to further lower the cost of the project.

Response by: Randi Nyholm

Title: RTO Coordination Manager

Department: Strategy & Planning

Telephone: 218-461-2472



Minnesota Department of Commerce
85 7th Place East | Suite 280 | St. Paul, MN 55101
Information Request

Docket Number: E015/CN-22-607
Requested From: Minnesota Power
Type of Inquiry: General

☐ Nonpublic ☒ Public
Date of Request: 2/22/2024
Response Due: 3/4/2024

SEND RESPONSE VIA EMAIL TO: Utility.Discovery@state.mn.us as well as the assigned analyst(s).

Assigned Analyst(s): Michael N. Zajicek
Email Address(es): michael.zajicek@state.mn.us
Phone Number(s): 651-539-1830

ADDITIONAL INSTRUCTIONS:

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

Request Number: 18
Topic: Future Expansion
Reference(s): [Click or tap here to enter text.](#)

Request:

To the extent that future expansion of the HVDC line or interconnections to Minnesota Powers proposed St. Louise County Substation allow for other parties to use the HVDC line or power transported by the HVDC line, what options for cost sharing will be available for Minnesota Power?

Response:

If the HVDC Line were expanded beyond the capacity proposed in the Certificate of Need filing (beyond the 900 MW held by Minnesota Power, up to 1500 MW), cost allocation and access to the additional capacity would be governed by the MISO Tariff. Presently, the available 900 MW of capacity of the HVDC Line with the proposed project is fully subscribed by Minnesota Power. This includes the 550 MW currently used by Minnesota Power and the additional 350 MW of transmission service requests held by Minnesota Power that may be used by Minnesota Power as necessary or assigned by Minnesota Power to another party. If Minnesota Power were to assign any of the 350 MW in transmission service requests to another party, Minnesota Power customers would receive the financial benefit of any such transaction.

Any other party seeking to use the capacity of the HVDC Line under the current framework would need to procure capacity rights from Minnesota Power through its tariff and would be charged Minnesota Power's HVDC tariff rates. Any party seeking to expand the capacity of the HVDC Line above 900 MW would need to fund the additional system upgrades that are incremental and necessary to increase the capacity of the HVDC Line . The

To be completed by responder

Response Date: March 4, 2024
Response by: Randi Nyholm
Email Address: rnyholm@mnpower.com
Phone Number: 218-723-7466



Minnesota Department of Commerce
85 7th Place East | Suite 280 | St. Paul, MN 55101
Information Request

Docket Number: E015/CN-22-607
Requested From: Minnesota Power
Type of Inquiry: General

☐ Nonpublic ☒ Public
Date of Request: 2/22/2024
Response Due: 3/4/2024

SEND RESPONSE VIA EMAIL TO: Utility.Discovery@state.mn.us as well as the assigned analyst(s).

Assigned Analyst(s): Michael N. Zajicek
Email Address(es): michael.zajicek@state.mn.us
Phone Number(s): 651-539-1830

ADDITIONAL INSTRUCTIONS:

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

entity would then also pay Minnesota Power's annual operating HVDC tariff rates based on the applicable pro-rata share.

If a future expansion of the HVDC Line was determined by MISO to meet the definition of a multi-value project ("MVP") or market efficiency project ("MEP") under the MISO tariff, then the incremental cost of increasing the HVDC capacity would be allocated by MISO according to the applicable tariff provisions for regional cost allocation. The actual application of cost sharing with other parties is highly dependent on facts and circumstances pertaining to future expansion.

This discussion is limited to an overview of two potential approaches to cost sharing and is not intended be a comprehensive assessment of all possible avenues for cost sharing of potential future expansion or related projects impacting the HVDC line.

Interconnection at the St. Louis County substation is governed by Minnesota Power's Transmission Interconnection Requirements which are published at www.mnpower.com.

To be completed by responder

Response Date: March 4, 2024
Response by: Randi Nyholm
Email Address: rnyholm@mnpower.com
Phone Number: 218-723-7466

LARGE POWER INTERVENORS

Utility Information Request

Docket Numbers: E015/CN-22-607; E015/TL-22-611 Date of Request: February 28, 2024

Requested From: Minnesota Power

Response Due: March 11, 2024

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

Information Request No. 36

If MISO does not utilize the proposed capability of the convertor stations, please respond to the following:

1. Please explain Minnesota Power's efforts to partner with other utilities in implementing the Project. To the extent there were not any efforts made, please explain why not.
2. Please describe how the Project would be scaled back and provide related justification associated with the sizing of the project.

Response:

1. Minnesota Power has not sought partners for the HVDC Modernization Project ("Project") as the Company is the sole owner of the Transmission Service Requests for 900 MW of Project capacity. This ensures that Minnesota Power maintains the flexibility to utilize the full capacity of the HVDC Line exclusively to meet its customers' needs or "rent" it to others, which would create optionality to offset costs for Minnesota Power customers. Minnesota Power has analyzed the cost effectiveness of the Project and determined that 900 MW is highly efficient and will benefit Minnesota Power customers (see the Company's response to LPI IR 027 and LPI IR 036).
 2. The asset renewal of the Project has identified a unique opportunity to design additional flexibility into the project for a relatively low incremental cost (see the Company's response to LPI IR 023). Further, to support the incremental Project cost, Minnesota Power has secured \$75 million (to cover a significant portion of the \$100 million incremental cost for the expandability) in federal and state grant opportunities to decrease the cost of the
-

Response by: Randi Nyholm

Title: RTO Coordination Manager

Department: Strategy & Planning

Telephone: 218-461-2472

LARGE POWER INTERVENORS

Utility Information Request

Docket Number: E015/CN-22-607; E015/TL-22-611 Date of Request: February 28, 2024

Requested From: Minnesota Power Response Due: March 11, 2024

By: Large Power Intervenor (Andrew P. Moratzka, Amber S. Lee)

project for customers, while preserving future expansion capabilities. Minnesota Power must meet all milestones outlined by the state and federal governments to secure the grants and is working diligently to ensure that the HVDC Modernization Project continues to meet the requirements for funding. In addition, Minnesota Power recently received another letter of encouragement to submit a full application for a portion of the costs for the construction of the St. Louis County 345 kV/230 kV Substation (a copy of that letter is included with the Company's response to ATC IR 041). Minnesota Power intends to continue to look for additional opportunities to further reduce the costs of the Project for customers. If these expandability options were removed (if the "Project would be scaled back"), these grant opportunities would no longer be available to the Project, and the funding would be lost.

Response by: Randi Nyholm

Title: RTO Coordination Manager

Department: Strategy & Planning

Telephone: 218-461-2472

**AMERICAN TRANSMISSION COMPANY LLC AND ATC
MANAGEMENT INC.**

UTILITY INFORMATION REQUEST

Docket Numbers: OAH 5-2500-39600; Date of Request: February 21, 2024
MPUC E-015/CN-22-607;
MPUC E-015/TL-22-611

Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

Information Request No. 38.

Reference pages 30-31 of the direct testimony of MP witness Christian Winter

- a. Please provide the System Impact Study that MISO has completed in connection with the Transmission Service Requests that You submitted to increase the capacity of the HVDC Line from 550 MW to 900 MW.
- b. Please provide the execution copy of Your Facilities Construction Agreement (FCA) with MISO “outlining the terms and obligations associated with constructing the upgrades necessary to accommodate the TSRs.” If the FCA has not yet been executed, provide the most recent draft of the agreement.
- c. If You have not yet executed the FCA with MISO, please identify the approximate date at which You expect to execute that agreement.
- d. Please identify those provisions of the MISO tariff and/or MISO business practice manuals that You contend authorize the MISO Board of Directors to approve the HVDC Modernization Project “for approval in the current MTEP cycle.”

Response:

- a. The System Impact Studies are posted on MISO’s OASIS page and can be accessed via the following links, which ATC has full access to:
 - System Impact Study for 150 MW of transmission service, issued July 23, 2020: http://www.oasis.oati.com/woa/docs/MISO/MISOdocs/A746_Final_Report.pdf
 - System Impact Study for 200 MW of transmission service, issued December 13, 2019:

Response by: Randi Nyholm
Title: RTO Coordination Manager
Department: Strategy & Planning
Telephone: 218-723-7466

**AMERICAN TRANSMISSION COMPANY LLC AND ATC
MANAGEMENT INC.**

UTILITY INFORMATION REQUEST

Docket Numbers: OAH 5-2500-39600; Date of Request: February 21, 2024
MPUC E-015/CN-22-607;
MPUC E-015/TL-22-611

Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

http://www.oasis.oati.com/woa/docs/MISO/MISOdocs/A727_Revised_Final_Report_V2.pdf

- It should be noted that MISO did update its analysis to evaluate the Project in its currently-proposed configuration including the St. Louis County 345/230 kV Substation in 2023, but because the results summarized in the System Impact Study reports did not materially change from the topology originally considered in 2019, MISO has not issued updated reports
- b. See ATC IR 038.01 Attach and ATC IR 038.02 Attach.
- c. Minnesota Power signed the FCAs on February 23, 2024. MISO executed the FCAs on February 28, 2024 and the FERC filing is scheduled for March 5, 2024.
- d. The provisions are described in MISO BPM-020-r30, of which ATC has full access to, as follows:
 - BPM-020-r30, Section 2.3.2.6 (Page 28) defines *Transmission Delivery Service Projects* as: “Network Upgrades required to facilitate long-term firm point-to-point transmission service requests.” The HVDC Modernization Project (“Project”) was identified as a Network Upgrade required to facilitate long-term firm point-to-point transmission service requests (“TSRs”) and therefore it meets the definition of a Transmission Delivery Service Project.
 - BPM-020-r30, Section 2.3.1.3 (Page 25) defines *Externally Driven Projects* as “projects driven by needs identified outside of the MISO Transmission Expansion Plan (“MTEP”) planning process.” This section further states: “Externally driven projects include . . . Transmission Delivery Service Projects . . .” The Project, as a Transmission Delivery Service Project, also falls under the more general category of an Externally Driven Project

Response by: Randi Nyholm
Title: RTO Coordination Manager
Department: Strategy & Planning
Telephone: 218-723-7466

**AMERICAN TRANSMISSION COMPANY LLC AND ATC
MANAGEMENT INC.**

UTILITY INFORMATION REQUEST

Docket Numbers: OAH 5-2500-39600; Date of Request: February 21, 2024
MPUC E-015/CN-22-607;
MPUC E-015/TL-22-611

Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

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- BPM-020-r30, Section 2.4.7 (Page 39) describes the process for Externally Driven Projects to be submitted into the MTEP project database. This section states “MISO staff or Transmission Owner(s) will submit externally driven projects into the MTEP project database at such time when all conditions, including but not limited to *execution of applicable agreements*, have been satisfied for formal recommendation of the project for approval by the MISO board of directors. All externally driven projects will be submitted to the MTEP project database with a Planning Review Status of *Recommended*.” (emphasis added) Upon execution of the FCA, it is Minnesota Power’s understanding that the Project, as an Externally Driven Project, will have met all such conditions for submission into the MTEP project database with Planning Review Status of Recommended. In this case, because there is already an existing database entry representing the Project in MTEP Appendix B, it is Minnesota Power’s expectation that MISO will move that existing project to “Recommended” status rather than creating a new project database entry.
 - BPM-020-r30, Section 2.4.3 (Page 36) describes the process for a project to be moved into Appendix A, which is MISO’s list of all approved projects. This section states, “the draft MTEP Appendix A prior to MTEP report approval contains all projects within the transmission project database that have a Planning Review Status of either *Recommended* or *Approved*. . . . Upon approval of a specific MTEP report and associated recommendations, all projects in MTEP Appendix A of that MTEP report are considered approved and the Planning Review Status will be set to Approved.” Since the HVDC Modernization Project will be moved to “Recommended” status upon execution of the FCA, it is Minnesota Power’s expectation that it will be considered for approval by the MISO Board of Directors in the current MTEP cycle (MTEP24) anticipated December 2024.

Response by: Randi Nyholm
Title: RTO Coordination Manager
Department: Strategy & Planning
Telephone: 218-723-7466

**AMERICAN TRANSMISSION COMPANY LLC AND ATC
MANAGEMENT INC.**

UTILITY INFORMATION REQUEST

Docket Numbers: OAH 5-2500-39600; Date of Request: February 21, 2024
MPUC E-015/CN-22-607;
MPUC E-015/TL-22-611

Requested From: Minnesota Power Response Due: March 4, 2024

By: American Transmission Company LLC

Attachments to this information request contain confidential security data that the Company considers to be trade secret data as defined by Minn. Stat. § 13.37(1)(a). Due to security information policies and concerns, the information provided in this response has been marked **HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION**. The public disclosure or use of this information creates an unacceptable risk because those who want to disrupt the electric system for political or other reasons may learn which facilities to target to create the greatest disruption. Thus, Minnesota Power maintains this information as trade secret pursuant to Minn. Rule 7829.0500, subp. 3.

Supplemental Response (March 6, 2024):

- b. For executed copies of FCAs as filed with FERC on March 5, 2024, please see ATC IR 038.03 Attach.
- c. See response to subpart b.

Attachments to this information request contain confidential security data that the Company considers to be trade secret data as defined by Minn. Stat. § 13.37(1)(a). Due to security information policies and concerns, the information provided in this response has been marked **HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION**. The public disclosure or use of this information creates an unacceptable risk because those who want to disrupt the electric system for political or other reasons may learn which facilities to target to create the greatest disruption. Thus, Minnesota Power maintains this information as trade secret pursuant to Minn. Rule 7829.0500, subp. 3.

Response by: Randi Nyholm
Title: RTO Coordination Manager
Department: Strategy & Planning
Telephone: 218-723-7466

FACILITIES CONSTRUCTION AGREEMENT

entered into by the

Midcontinent Independent System Operator, Inc.,

And

Minnesota Power, a division of ALLETE, INC.

And

Minnesota Power, a division of ALLETE, INC.

entered into on the ____ day of _____, 2024

FACILITIES CONSTRUCTION AGREEMENT

THIS FACILITIES CONSTRUCTION AGREEMENT (sometimes hereinafter referred to as “Agreement”) is made and entered into this ____ day of _____, 2024, by and among the merchant function of **Minnesota Power**, a division of **ALLETE, INC.**, a corporation , organized and existing under the laws , of the State of Minnesota (“Customer”), the **Midcontinent Independent System Operator, Inc.**, a non-profit, non-stock corporation organized and existing under the laws of the State of Delaware (“Transmission Provider”) and the transmission function of **Minnesota Power**, a division of **ALLETE, INC.**, a corporation organized under the laws of the State of Minnesota (“Transmission Owner”). Customer, Transmission Owner, or Transmission Provider each may be referred to as a “Party” or collectively as the “Parties.”

RECITALS

WHEREAS, Transmission Owner owns electric facilities and is engaged in generation, transmission, distribution and/or sale of electric power and energy; and

WHEREAS, Transmission Provider has functional control of the operations of the Transmission System, as defined herein, and is responsible for providing transmission and interconnection service on the transmission facilities under its control; and

WHEREAS, Customer intends to reserve Firm Point to Point Transmission Service via Transmission Provider’s Reservation Request Nos. **90481026 and 95418167**; and

WHEREAS, the Transmission System is affected by the firm transmission service request of the Facility and additions, modifications and upgrades must be made to certain existing facilities of the Transmission System to accommodate such transmission service and

WHEREAS, Customer has requested, and Transmission Provider and Transmission Owner have agreed, to enter into this Agreement with Customer for the purpose of facilitating the transmission service of the Facility by the construction of necessary Network Upgrades to the Transmission System;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

ARTICLE 1 DEFINITIONS

Wherever used in this Agreement with initial capitalization, the following terms shall have the meanings specified or referred to in this Article 1. Terms used in this Agreement with initial capitalization not defined in this Article 1 shall have the meanings specified in the Tariff:

- 1.1 “Applicable Laws and Regulations” shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the Parties, their respective facilities and/or the respective services they provide.
- 1.2 “Applicable Reliability Council” shall mean the reliability council of NERC applicable to the Local Balancing Authority of the Transmission System to which the Facility is directly interconnected.
- 1.3 “Applicable Reliability Standards” shall mean Reliability Standards approved by the Federal Energy Regulatory Commission (FERC) under Section 215 of the Federal Power Act, as applicable.
- 1.4 “Breach” shall mean the failure of a Party to perform or observe any material term or condition of this Agreement and shall include, but not be limited to, the events described in Article 9.1.
- 1.5 “Breaching Party” shall mean a Party that is in Breach of this Agreement.
- 1.6 “Confidential Information” shall mean any proprietary or commercially or competitively sensitive information, trade secret or information regarding a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, or any other information as specified in Article 12, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, that is received by another Party.
- 1.7 “Customer” shall mean, for purposes of this Agreement, a Transmission Customer as defined in the Tariff.
- 1.8 “Default” shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 9 of this Agreement.
- 1.9 “Direct Assignment Facilities” shall mean those facilities or portions of facilities that are constructed by any Transmission Owner(s), ITC, or ITC Participant(s) for the sole use/benefit of a particular Transmission Customer requesting service under this Tariff. Direct Assignment Facilities shall be specified in the Service Agreement that governs service to the Transmission Customer and shall be subject to Commission approval.

- 1.10** “Effective Date” shall mean the date on which this Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.
- 1.11** “FERC” shall mean the Federal Energy Regulatory Commission, also known as Commission, or its successor.
- 1.12** “Force Majeure” shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party’s control. A Force Majeure event does not include an act of negligence or intentional wrongdoing by the Party claiming Force Majeure.
- 1.13** “Good Utility Practice” shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric 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 to 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. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- 1.14** “Governmental Authority” shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Customer, Transmission Provider, Transmission Owner, or any Affiliate thereof.
- 1.15** “In-Service Date” shall mean the date upon which Customer reasonably expects it will be ready to begin use of the Network Upgrades and/or Direct Assignment Facilities.
- 1.16** “Local Balancing Authority” shall mean an operational entity or a Joint Registration Organization which is (i) responsible for compliance with the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement for their local area within the MISO Balancing Authority Area, (ii) a Party to Balancing Authority Agreement, excluding MISO, and (iii) shown in Appendix A to the Balancing Authority Agreement.
- 1.17** “Loss” shall mean any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party’s performance, or non-

performance of its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing, by the indemnified Party.

- 1.18** “Material Modification” shall mean: (1) modification to a Transmission Service Request in the queue that has a material adverse impact on the cost or timing or constraint identification of Transmission Service Request; or (2) planned modification to proposed network upgrades that is undergoing evaluation and has a material adverse impact on the Transmission System prior to the modification.
- 1.19** “NERC” shall mean the North American Electric Reliability Corporation, or its successor organization.
- 1.20** “Network Upgrades” shall mean the additions, modifications, and upgrades to the Transmission System required to accommodate the transmission service requests.
- 1.2** “Non-Breaching Party” shall mean a Party that is not in Breach of this Agreement with regard to a specific event of Breach by another Party.
- 1.22** “Reasonable Efforts” shall mean, with respect to an action required to be attempted or taken by a Party under this Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.
- 1.23** “Tariff” shall mean the Transmission Provider’s Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.
- 1.24** “Transmission Service” shall mean Point-to-Point Transmission Service provided under Module B of the Tariff on a firm and non-firm basis and the Network Integration Transmission Service under Module B of the Tariff.
- 1.25** “Transmission System” shall mean the facilities owned by Transmission Owner and controlled or operated by Transmission Provider or Transmission Owner that are used to provide Transmission Service or Wholesale Distribution Service under the Tariff.

ARTICLE 2 TERM OF AGREEMENT

- 2.1** **Effective Date.** Subject to required regulatory authorizations, including, without limitation, acceptance by FERC under Section 205 of the Federal Power Act, this Agreement shall become effective on the date on which this Agreement is made and entered into by the Parties.
- 2.2** **Term.**

- 2.2.1 General.** This Agreement shall become effective as provided in Article 2.1 and shall continue in full force and effect until the earlier of (i) the final repayment, where applicable, by Transmission Owner of the amount funded by Customer for Transmission Owner's design, procurement, construction and installation of the Network Upgrades and Direct Assignment Facilities provided in Appendix A; (ii) the Parties agree to mutually terminate this Agreement; (iii) earlier termination is permitted or provided for under Appendix A of this Agreement; or (iv) Customer terminates this Agreement after providing Transmission Provider and Transmission Owner with written notice at least sixty (60) Calendar Days prior to the proposed termination date, provided that Customer has no outstanding contractual obligations to Transmission Provider or Transmission Owner under this Agreement. No termination of this Agreement shall be effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination. The term of this Agreement may be adjusted upon mutual agreement of the Parties, if the In-Service Date for the Network Upgrades and Direct Assignment Facilities is adjusted in accordance with the rules and procedures established by Transmission Provider.
- 2.2.2 Termination Upon Default.** In the event of a Default by a Party, the Non-Breaching Party or Parties shall have the termination rights described in Articles 9 and 10; provided, however, if an event described in part (c) of Article 9.1 has not occurred, and provided the Default does not pose a threat to the reliability of the Transmission System, neither Transmission Provider nor Transmission Owner may terminate this Agreement if Customer is the Breaching Party and Customer (i) has undertaken, in accordance with Article 9.2, to cure the Breach that led to the Default and has failed to cure the Breach for reasons other than Customer's failure to diligently commence reasonable and appropriate steps to cure the Breach within the thirty (30) Calendar Days allowed by Article 9.2, and (ii) compensates Transmission Provider or Transmission Owner within thirty (30) Calendar Days for the amount of damage billed to Customer by Transmission Provider or Transmission Owner for any damages, including costs and expenses, incurred by Transmission Provider or Transmission Owner as a result of such Default. In the event of an occurrence described in part (c) of Article 9.1, and providing the Default does not pose a threat to the reliability of the Transmission System, the Non-Breaching Party or Parties shall not terminate this Agreement provided that the Breaching Party provided an assurance of payment acceptable to the Non-Breaching Party, and pays any applicable damages.
- 2.2.3 Consequences of Termination.** In the event of a termination by any Party, other than a termination by Customer due to a Breach by Transmission Owner, Customer must pay Transmission Owner all amounts still due and payable for construction and installation of the Network Upgrades and Direct Assignment Facilities (including, without limitation, any equipment ordered related to such construction), plus all out-of-pocket expenses incurred by Transmission Owner in connection with the construction and installation of the Network Upgrades and Direct Assignment Facilities, through the date of termination, plus any actual

costs which Transmission Owner (A) reasonably incurs in winding up work and construction demobilization and (B) reasonably incurs to ensure the safety of persons and property and the integrity and safe and reliable operation of the Transmission System. Transmission Owner agrees to use Reasonable Efforts to minimize such costs.

2.2.4 Material Adverse Change. In the event of a material change in law or regulation that adversely affects, or may reasonably be expected to adversely affect a Party's rights and/or obligations under this Agreement, the Parties shall negotiate in good faith any amendments to this Agreement necessary to adapt the terms of this Agreement to such change in law or regulation, and Transmission Provider shall file such amendments with FERC. If, within sixty (60) Calendar Days after the occurrence of any event described in this Article 2.2.4, the Parties are unable to reach agreement as to any necessary amendments, the Parties may proceed under Article 14 to resolve any disputes related thereto; Transmission Provider and/or Transmission Owner shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that a Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. If a Party is unable to fully perform this Agreement due to the occurrence of an event described in this Article 2.2.4 and such inability is not based on economic reasons, such Party shall not be deemed to be in Default of its obligations under this Agreement, provided that such Party is seeking dispute resolution under Article 14 or before FERC, to the extent that (i) such Party is unable to perform as a result of such an event and (ii) such Party acts in accordance with its obligations under this Article 2.2.4.

2.3 Regulatory Filing. In accordance with Applicable Laws and Regulations, Transmission Provider shall file this Agreement, and any amendment to this Agreement with FERC as a service agreement under the Tariff. If Customer has executed this Agreement or any amendment to this Agreement, Customer shall not protest this Agreement or the amendment, shall reasonably cooperate with Transmission Provider with respect to such filing and shall provide any information, including the rendering of testimony or pleadings, as applicable, reasonably requested by Transmission Provider to the extent reasonably needed to comply with applicable regulatory requirements.

2.4 Survival. The applicable provisions of this Agreement shall continue in effect after expiration, cancellation, or termination hereof to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect.

- 2.5 Termination Obligations.** Upon any termination pursuant to this Agreement, Customer shall be responsible for the payment of all costs or other contractual obligations incurred prior to the termination date including previously incurred capital costs, penalties for early termination, costs of removal and site restoration.

ARTICLE 3

CONSTRUCTION OF NETWORK UPGRADES AND DIRECT ASSIGNMENT FACILITIES

3.1 Construction.

- 3.1.1 Transmission Owner Obligations.** Transmission Owner shall (or shall cause such action to) design, procure, construct and install, and Customer shall pay, consistent with Article 3.2, the cost of, all Network Upgrades and Direct Assignment Facilities identified in Appendix A. All Network Upgrades and Direct Assignment Facilities designed, procured, constructed and installed by Transmission Owner pursuant to this Agreement shall satisfy all requirements of applicable safety and/or engineering codes, including those requirements of Transmission Owner and Transmission Provider, and comply with Good Utility Practice, and further, shall satisfy all Applicable Laws and Regulations.

3.1.2 Suspension of Work.

- 3.1.2.1 Right to Suspend for Force Majeure Event.** Provided that such suspension is permissible under the authorizations, permits or approvals granted for the construction of the Network Upgrades and Direct Assignment Facilities Customer will not suspend unless a Force Majeure event occurs. Customer must provide written notice of its request for suspension to Transmission Provider and Transmission Owner, and provide a description of the Force Majeure event that is acceptable to Transmission Provider. Suspension will only apply to Customer milestones and Interconnection Facilities described in the Appendices of this Agreement. Prior to suspension, Customer must also provide security acceptable to Transmission Owner, equivalent to the higher of \$5 million or the total cost of all Network Upgrades, Transmission Owner's Direct Assignment Facilities, and Distribution Upgrades listed in Appendix A of this Agreement. Network Upgrades, Direct Assignment Facilities will be constructed on the schedule described in the Appendices of this Agreement unless: (1) construction is prevented by the order of a Governmental Authority; (2) the Network Upgrades and Direct Assignment Facilities are not needed by any other project; or (3) Transmission Owner or Transmission Provider determines that a Force Majeure event prevents construction. In the event of (1), (2), or (3) security shall be released upon the determination that the Network Upgrades and Direct Assignment Facilities will no longer be constructed.

If suspension occurs, Customer shall be responsible for the costs which Transmission Owner incurs (i) in accordance with this Agreement prior to the suspension, (ii) in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System and, if applicable, any costs incurred in connection with the cancellation of contracts and orders for material which Transmission Owner cannot reasonably avoid, and (iii) reasonably incurs in winding up work and construction demobilization; provided, however, that, prior to canceling any such contracts or orders, Transmission Owner shall obtain Customer's authorization. Customer shall be responsible for all costs incurred in connection with Customer's denial of authorization to cancel such contracts or orders. Interest as provided in

Article 3.2.2.2 on amounts paid by Customer to Transmission Owner for the design, procurement, construction and installation of the Network Upgrades and Direct Assignment Facilities, shall not accrue during periods in which Customer has suspended construction under this Article 3.1.2. Transmission Owner shall invoice Customer pursuant to Article 6 and use Reasonable Efforts to minimize its costs. In the event that Customer suspends work pursuant to this Article, no construction duration, timelines and schedules set forth in Appendix A shall be suspended during the period of suspension unless ordered by a Governmental Authority, with such order being the Force Majeure event causing the suspension.

3.1.2.2 Recommencing of Work. If Customer requests Transmission Owner to recommence such work, Transmission Owner shall have no obligation to afford such work the priority it would have had but for the prior actions of Customer to suspend the work. In such event, Customer shall be responsible for any costs incurred in recommencing the work. All recommenced work shall be completed pursuant to an amended schedule for the transmission service as agreed to by the Parties. Transmission Provider and Transmission Owner have the right to request a System Impact Study if conditions have materially changed subsequent to the request to suspend. Customer shall be responsible for the costs of any studies required.

3.1.2.3 Termination in the Event of a Material Modification. In the event Customer suspends the performance of work by Transmission Owner pursuant to this Article 3.1.2 and modifies its In-Service Date, this Agreement shall be deemed terminated unless Customer demonstrates that the change is not a Material Modification under FERC precedent.

3.1.2.4 Right to Suspend Due to Default. Transmission Owner reserves the right, upon written notice to Customer, to suspend, at any time, work by

Transmission Owner and the incurrence of additional expenses associated with the construction and installation of the Network Upgrades and Direct Assignment Facilities upon the occurrence of either a Breach that Customer is unable to cure pursuant to Article 9 or an Event of Default pursuant to Article 9. Any form of suspension by Transmission Owner shall not be barred by Articles 2.2.2, 2.2.3 or 9.2.2, nor shall it affect Transmission Owner's right to terminate the work or this Agreement pursuant to Article 10. In such events, Customer shall be responsible for costs which Transmission Owner incurs as set forth in Article 2.2.3.

3.1.3 Construction Status. Transmission Owner shall keep Customer and Transmission Provider advised periodically as to the progress of its respective design, procurement and construction efforts as described in Appendix A. Customer may, at any time, request a progress report from Transmission Owner, with a copy to be provided to Transmission Provider. If, at any time, Customer determines that the completion of the Network Upgrades and Direct Assignment Facilities will not be required until after the specified In-Service Date, Customer will provide written notice to Transmission Owner and Transmission Provider of such later date upon which the completion of the Network Upgrades and Direct Assignment Facilities would be required. Transmission Owner may delay the In-Service Date of the Network Upgrades accordingly.

3.1.4 Timely Completion. Transmission Owner shall use Reasonable Efforts to design, procure, construct, install, and test the Network Upgrades and Direct Assignment Facilities in accordance with the schedule set forth in Appendix A, which schedule may be revised from time to time by mutual agreement of the Parties. If any event occurs that will affect the time for completion of the Network Upgrades and Direct Assignment Facilities, or the ability to complete any of them, Transmission Owner and/or Transmission Provider shall promptly notify Customer, with a copy to the other Party. In such circumstances, Transmission Provider shall, within fifteen (15) Calendar Days of such notice, convene a technical meeting with Customer and Transmission Owner to evaluate the alternatives available to Customer. Transmission Owner and/or Transmission Provider shall also make available to Customer all studies and work papers related to the event and corresponding delay, including all information that is in the possession of Transmission Provider or Transmission Owner that is reasonably needed by Customer to evaluate alternatives. Transmission Owner shall, at Customer's request and expense, use Reasonable Efforts to accelerate its work under this Agreement to meet the schedule set forth in Appendix A, provided that Customer authorizes such actions and the costs associated therewith in advance.

3.2 Network Upgrade Costs and Credits.

3.2.1 Costs. Customer shall pay to Transmission Owner costs (including taxes and financing costs) associated with seeking and obtaining all necessary approvals and of designing, engineering, constructing, and testing the Network Upgrades and

Direct Assignment Facilities, as identified in Appendix A, in accordance with the cost recovery method provided herein;

Customer shall pay for Direct Assignment Facilities and Network Upgrades in accordance with Attachment N of the Tariff. The cost assignment provisions shall apply to facilities constructed by Transmission Owner until such time as Transmission Owner is able to fully recover its revenue requirements as calculated in Attachment N, Section C. If the Transmission Service Request is discontinued or suspended, the Transmission Customer shall pay the Transmission Owner for the remaining applicable amounts that must be paid pursuant to Attachment N of the Tariff.

Transmission Owner shall install, at Customer's expense, any Transmission Owner's Direct Assignment Facilities that may be required on the Transmission Owner's Interconnection Facilities or the Transmission Owner's transmission or distribution facilities as a result of the Network Upgrades required by Customer's request.

3.2.1.1 Lands of Other Property Owners. If any part of the Transmission Owner's Network Upgrades, Direct Assignment Facilities, and/or Distribution Upgrades is to be installed on property owned by persons other than Customer or Transmission Owner, Transmission Owner shall at Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority to the extent permitted and consistent with Applicable Laws and Regulations and, to the extent consistent with such Applicable Laws and Regulations, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Transmission Owner's Interconnection Facilities, Network Upgrades, Direct Assignment Facilities, and/or Distribution Upgrades upon such property.

3.2.2 Credits.

3.2.2.1 Repayment. Customer shall be entitled to a cash repayment by Transmission Owner(s) that owns the Network Upgrades, of the amount paid respectively to Transmission Owner, if any, for the Network Upgrades, as provided under the Tariff, and including any tax gross-up or other tax-related payments associated with the repayable portion of the Network Upgrades, and not repaid to Customer pursuant to Article 3.3.1 or otherwise, to be paid to Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Tariff for Transmission Service with respect to the Facility. Any repayment shall include interest calculated in accordance with the

methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this subparagraph. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1 or the Network Upgrades have been determined not to be needed pursuant to this Article 3.2.2.1. Customer may assign such repayment rights to any person.

3.2.2.2 Amount. Transmission credits will be based on the final, actual cost of completing the Network Upgrades as provided by the final invoice prepared by Transmission Owner pursuant to Article 6.4 of this Agreement. Any repayment made pursuant to Article 3.2.2.1 shall include (i) the final, actual cost after any true-up amounts have been paid pursuant to Article 6.4, and (ii) interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this Article 3.2 until fully reimbursed. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1.

3.2.2.3 Alternative Payment Schedule. Notwithstanding the foregoing, as applicable and consistent with the Tariff, Customer, Transmission Provider, and Transmission Owner, may adopt any alternative payment schedule that is mutually agreeable.

3.2.2.4 RESERVED

3.2.2.5 Rights not Relinquished. Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that Customer, shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain refunds or transmission credits for Transmission Service that is not associated with the Facility.

3.3 Taxes.

3.3.1 Indemnification for Contributions in Aid of Construction. The Parties intend that all payments made by Customer to Transmission Owner for the installation of the Network Upgrades and Direct Assignment Facilities shall be non-taxable contributions to capital in accordance with the Internal Revenue Code and any

applicable state tax laws and shall not be taxable as contributions in aid of construction under the Internal Revenue Code and any applicable state tax laws. With regard only to such contributions, Transmission Owner shall not include a gross-up for income taxes in the amounts it charges Customer for the installation of the Network Upgrades and Direct Assignment Facilities unless (i) Transmission Owner has determined, in good faith, that the payments or property transfers made by Customer to Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Transmission Owner to report payments or property as income subject to taxation; provided, however, that Transmission Owner may require Customer to provide security for Network Upgrades, in a form reasonably acceptable to Transmission Owner (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences or any current tax liability under this Article. Customer shall reimburse Transmission Owner for such costs on a fully grossed-up basis, in accordance with this Article, within thirty (30) Calendar Days of receiving written notification from Transmission Owner of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten-year testing period and the applicable statute of limitation, as it may be extended by Transmission Owner upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article. Notwithstanding the foregoing provisions of this Article 3.3.1, and to the extent permitted by law, to the extent that the receipt of such payments by Transmission Owner is determined by any Governmental Authority to constitute income by Transmission Owner subject to taxation, Customer shall protect, indemnify and hold harmless Transmission Owner and its Affiliates, from all claims by any such Governmental Authority for any tax, interest and/or penalties associated with such determination. Upon receiving written notification of such determination from the Governmental Authority, Transmission Owner shall provide Customer with written notification within thirty (30) Calendar Days of such determination and notification. Transmission Owner, upon the timely written request by Customer and at Customer's expense, shall appeal, protest, seek abatement of, or otherwise oppose such determination. Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the compromise or settlement of the claim; provided that Transmission Owner shall cooperate and consult in good faith with Customer regarding the conduct of such contest. Customer shall advance to Transmission Owner on a periodic basis as requested by Transmission Owner the estimated cost of prosecuting such appeal, protest, abatement or other contest. Customer shall not be required to pay Transmission Owner for the tax, interest and/or penalties prior to the seventh (7th) Calendar Day before the date on which Transmission Owner (i) is required to pay the tax, interest and/or penalties or other amount in lieu thereof pursuant to a compromise or settlement of the appeal, protest, abatement or other contest; (ii) is required to

pay the tax, interest and/or penalties as the result of a final, non-appealable order by a Governmental Authority; or (iii) is required to pay the tax, interest and/or penalties as a prerequisite to an appeal, protest, abatement or other contest. In the event such appeal, protest, abatement or other contest results in a determination that Transmission Owner is not liable for any portion of any tax, interest and/or penalties for which Customer has already made payment to Transmission Owner, Transmission Owner shall promptly refund to Customer any payment attributable to the amount determined to be non-taxable, plus any interest or other payments Transmission Owner receives or which Transmission Owner may be entitled with respect to such payment. In accordance with Article 6, Customer shall provide Transmission Owner with credit assurances sufficient to meet Customer's estimated liability for reimbursement of Transmission Owner for taxes, interest and/or penalties under this Section 3.3.1. Such estimated liability shall be stated in Appendix A.

To the extent that Transmission Owner is a limited liability company and not a corporation, and has elected to be taxed as a partnership, then the following shall apply: Transmission Owner represents, and the Parties acknowledge, that Transmission Owner is a limited liability company and is treated as a partnership for federal income tax purposes. Any payment made by Customer to Transmission Owner for Network Upgrades and Direct Assignment Facilities is to be treated as an upfront payment in accordance with Rev Proc 2005-35. It is anticipated by the Parties that any amounts paid by Customer to Transmission Owner for Network Upgrades and Direct Assignment Facilities will be reimbursed to Customer in accordance with the terms of this Agreement, provided Customer fulfills its obligations under this Agreement.

3.3.2 Private Letter Ruling. At Customer's request and expense, Transmission Owner shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Customer to Transmission Owner under this Agreement are subject to federal income taxation. Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Customer's knowledge. Transmission Owner and Customer shall cooperate in good faith with respect to the submission of such request.

3.3.3 Other Taxes. Upon the timely request by Customer, and at Customer's sole expense, Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Transmission Owner for which Customer may be required to reimburse Transmission Owner under the terms of this Agreement. Customer shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Customer and Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the

payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Customer to Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Transmission Owner. Each Party shall cooperate with the other Parties to maintain each Party's tax status. Nothing in this Agreement is intended to adversely affect any Party's tax-exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

ARTICLE 4 FORCE MAJEURE

- 4.1 Notice.** The Party unable to carry out an obligation imposed on it by this Agreement due to a Force Majeure event shall notify the other Parties in writing or verbally with subsequent notice in writing within a reasonable time after the occurrence of the cause relied on.
- 4.2 Duration of Force Majeure.** Except as set forth in Article 4.3, no Party will be considered in Default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure. A Party shall not be responsible for any non-performance or be considered in Breach or Default under this Agreement due to Force Majeure. A Party shall be excused from whatever performance is affected for only the duration of the Force Majeure event and while the Party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing Party is able to resume performance of its obligations excused as a result of the occurrence of Force Majeure, such Party shall give prompt notice thereof to the other Parties.
- 4.3 Obligation to Make Payments.** Any Party's obligation to make payments for services incurred shall not be suspended by Force Majeure.

ARTICLE 5 INFORMATION REPORTING

- 5.1 Information Reporting Obligations.** Each Party shall, in accordance with Good Utility Practice, promptly provide to the other Parties all relevant information, documents, or data regarding the Party's facilities and equipment which may reasonably be expected to pertain to the reliability of the other Party's facilities and equipment and which has been reasonably requested by the other Party.
- 5.2 Non-Force Majeure Reporting.** A Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this Agreement for a reason other than Force Majeure. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or

planned to be taken with respect to such inability to comply. In the event of Force Majeure, a Party unable to comply with the provisions of this Agreement shall notify the other Parties in accordance with the provisions of Article 4.

ARTICLE 6 CREDITWORTHINESS, BILLING AND PAYMENTS

- 6.1 Creditworthiness.** By the earlier of (i) thirty (30) Calendar Days prior to the due date for Customer's first payment under the payment schedule specified in Appendix A or (ii) the first date specified in Appendix A for the ordering of equipment by Transmission Owner for installing the Network Upgrades and Direct Assignment Facilities, Customer shall provide Transmission Owner, at Transmission Owner's option, with a form of adequate assurance of creditworthiness reasonably acceptable to Transmission Owner. If the adequate assurance is a parental guarantee or surety bond, it must be made by an entity that meets the creditworthiness requirements of Transmission Owner, have terms and conditions reasonably acceptable to Transmission Owner and guarantee payment of the amount specified in the next paragraph of this Article 6.1. If the adequate assurance is a letter of credit, it must be issued by a bank reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount available to be drawn under the letter shall reduce on a monthly basis in accordance with the monthly payment schedule. The surety bond must be issued by an insurer reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount assured under the bond shall reduce on a monthly basis in accordance with the monthly payment schedule. After the Network Upgrades and Direct Assignment Facilities have been placed in service and until Customer fully compensates Transmission Owner for construction of the Network Upgrades and Direct Assignment Facilities, Customer shall, subject to the standards of this Article 6.1, maintain a parental guarantee, surety bond, letter of credit, or some other credit assurance sufficient to meet its monthly payment obligation under Article 3.2.1, as specified in the following paragraph. Customer's estimated liability under Article 3.2.1 is stated in Appendix A.

Customer shall maintain as of the first day of each month beginning on the due date for Customer's first payment under the payment schedule specified in Appendix A, and continuing through to the In-Service Date, a parental guarantee, surety bond or letter of credit in an amount sufficient to cover the applicable costs and cost commitments required of the Party responsible for building the facilities pursuant to the construction schedule developed in this Agreement for designing, engineering, seeking regulatory approval from any Governmental Authority, constructing, procuring and installing the facilities and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Owner for these purposes as defined and established under Appendix A.

- 6.2 Invoice.** Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due, if any, for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other

Party under this Agreement, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.

- 6.3 Payment.** Invoices shall be rendered to the paying Party at the address specified by the Parties. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by a Party will not constitute a waiver of any rights or claims that Party may have under this Agreement.
- 6.4 Final Invoice.** Within six (6) months after completion of the construction of the Network Upgrades and Direct Assignment Facilities, Transmission Owner shall provide an invoice of the final cost of the construction of the Network Upgrades and Direct Assignment Facilities and shall set forth such costs in sufficient detail to enable Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Owner shall refund, with interest (calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii)), to Customer any amount by which the actual payment by Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.
- 6.5 Interest.** Interest on any unpaid amounts shall be calculated in accordance with 18 C.F.R. § 35.19a(a)(2)(iii).
- 6.6 Payment During Dispute.** In the event of a billing dispute among the Parties, Transmission Owner shall continue to construct the Network Upgrades and Direct Assignment Facilities under this Agreement as long as Customer: (i) continues to make all payments not in dispute; and (ii) pays to Transmission Provider or Transmission Owner or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Customer fails to meet these two requirements, then Transmission Provider may or, at Transmission Owner's request upon Customer's failure to pay Transmission Owner, shall provide notice to Customer of a Default pursuant to Article 9. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to another Party shall pay the amount due with interest calculated in accord with the methodology set forth in 18 C.F.R. § 35.19a(a)(2)(iii).

ARTICLE 7 ASSIGNMENT

- 7.1 Assignment.** This Agreement may be assigned by any Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that Customer shall have the right to assign this Agreement, without the consent of either Transmission Provider or Transmission Owner, for collateral security purposes to aid in providing

financing for the Facility, provided that Customer will promptly notify Transmission Provider and Transmission Owner of any such assignment. Any financing arrangement entered into by Customer pursuant to this Article will provide that prior to or upon the exercise of the secured Party's, trustee's or assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider and Transmission Owner of the date and particulars of any such exercise of assignment right(s), including providing Transmission Provider and Transmission Owner with proof that it meets the requirements of Article 6.1. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

ARTICLE 8 INDEMNITY

8.1 General. To the extent permitted by law, a Party (the "Indemnifying Party") shall at all times indemnify, defend, and hold the other Parties (each an "Indemnified Party") harmless from Loss, only as provided in the Tariff.

8.1.1 Indemnified Party. If an Indemnified Party is entitled to indemnification under this Article 8 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 8.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

8.1.2 Indemnifying Party. If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 8, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.

8.1.3 Indemnity Procedures. Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 8.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the

Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be reasonably withheld, conditioned or delayed.

- 8.2 Consequential Damages.** In no event shall any Party be liable to any other Party under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

ARTICLE 9 BREACH, CURE AND DEFAULT

- 9.1 Events of Breach.** A Breach of this Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Agreement, including but not limited to any material Breach of a representation, warranty or covenant made in this Agreement;
- (c) If a Party (i) is adjudicated bankrupt; (ii) files a voluntary petition in bankruptcy under any provision of any federal or state bankruptcy law or shall consent to the filing of any bankruptcy or reorganization petition against it under any similar law; (iii) makes a general assignment for the benefit of its creditors; or (iv) consents to the appointment of a receiver, trustee or liquidator;

- (d) Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;
- (e) Failure of a Party to provide such access rights, or a Party's attempt to revoke access or terminate such access rights, as provided under this Agreement or any related agreements.
- (f) Failure of a Party to provide information or data to another Party as required under this Agreement, provided the Party entitled to the information or data under this Agreement requires such information or data to satisfy its obligations under this Agreement.

9.2 Notice of Breach, Cure and Default. Upon the occurrence of an event of Breach, the Party not in Breach, when it becomes aware of the Breach, shall give written notice of the Breach to the Breaching Party and to any other person representing a Party to this Agreement identified in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach.

9.2.1 Upon the occurrence described in part (c) of Article 9.1, the Party experiencing such occurrence shall notify the other Party in writing within seven (7) Calendar Days after the commencement of such occurrence. Upon receiving written notice of the Breach hereunder, the Breaching Party shall have a period to cure such Breach (sometimes hereinafter referred as ("Cure Period") which shall be thirty (30) Calendar Days unless such Breach is due to an occurrence under Article 9.1(a) or (c) in which case the cure period will be five (5) Business Days.

9.2.2 If the Breach is such that it cannot be cured within the Cure Period, the Breaching Party will commence in good faith all steps as are reasonable and appropriate to cure the Breach within such Cure Period and thereafter diligently pursue such action to completion. In the event the Breaching Party fails to:

- (a) cure the Breach, or to commence reasonable and appropriate steps to cure the Breach, within the Cure Period; or,
- (b) completely cure the Breach within sixty (60) Calendar Days if the Breach occurs pursuant to Article 9.1(b), (d), (e) or (f),

the Breaching Party will be in Default of this Agreement and the non-Breaching Parties may, at their option, either in concert or individually, (1) act to terminate this Agreement for cause by notifying the other Parties in writing, or (2) take whatever action at law or in equity as may appear necessary or desirable to enforce the performance or observance of any rights, remedies, obligations, agreement, or covenants under this Agreement.

- 9.3 Rights in the Event of Default.** Notwithstanding the foregoing, upon the occurrence of an event of Default, any non-Defaulting Party shall be entitled to exercise all rights and remedies it may have in equity or at law.

ARTICLE 10 TERMINATION OF AGREEMENT

- 10.1 Expiration of Term.** Except as otherwise specified in this Article 10, the Parties' obligations under this Agreement shall terminate at the conclusion of the term of this Agreement.
- 10.2 Termination.** In addition to the termination provisions set forth in Article 2.2, a Party may terminate this Agreement upon the Default of another Party in accordance with this Agreement. Subject to the limitations set forth in Article 10.3, in the event of a Default, a non-Defaulting Party may terminate this Agreement only upon the later of (i) its giving of written notice of termination to the other Parties; and (ii) unless no longer required by FERC, the filing at FERC of a notice of termination for this Agreement, which filing must be accepted for filing by FERC.
- 10.3 Disposition of Facilities Upon Termination of Agreement.**

10.3.1 Transmission Provider and Transmission Owner Obligations. Upon termination of this Agreement, unless otherwise agreed by the Parties in writing, Transmission Owner:

- (a) shall, prior to the construction and installation of any portion of the Network Upgrades and Direct Assignment Facilities and to the extent possible, cancel any pending orders of, or return, such equipment or material for such Network Upgrades and Direct Assignment Facilities;
- (b) may keep in place any portion of the Network Upgrades and Direct Assignment Facilities already constructed and installed; and,
- (c) shall perform such work as may be necessary to ensure the safety of persons and property and to preserve the integrity of the Transmission System (*e.g.*, construction demobilization to return the system to its original state, wind-up work).

10.3.2 Customer Obligations. Upon billing by Transmission Owner, Customer shall reimburse Transmission Owner for any costs incurred by Transmission Owner in performance of the actions required or permitted by Article 10.3.1 and for the cost of any Network Upgrades and Direct Assignment Facilities described in Appendix A. Transmission Owner and Transmission Provider shall use Reasonable Efforts to minimize costs and shall offset the amounts owed by any salvage value of facilities, if applicable. Customer shall pay these costs pursuant to Article 6.3 of this Agreement.

10.3.3 Pre-construction or Installation. Upon termination of this Agreement and prior to the construction and installation of any portion of the Network Upgrades and Direct Assignment Facilities, Transmission Owner may, at its option, retain any portion of such Network Upgrades and Direct Assignment Facilities not cancelled or returned in accordance with Article 10.3.1(a), in which case Transmission Owner shall be responsible for all costs associated with procuring such Network Upgrades and Direct Assignment Facilities. To the extent that Customer has already paid Transmission Owner for any or all of such costs, Transmission Owner shall transfer such amounts to the Customer. If Transmission Owner elects to not retain any portion of such facilities, Transmission Owner shall convey and make available to Customer such facilities as soon as practicable after Customer's payment for such facilities.

10.4 Survival of Rights. Termination or expiration of this Agreement shall not relieve any Party of any of its liabilities and obligations arising hereunder prior to the date termination becomes effective, and each Party may take whatever judicial or administrative actions as appear necessary or desirable to enforce its rights hereunder. The applicable provisions of this Agreement will continue in effect after expiration, or early termination hereof to the extent necessary to provide for (A) final billings, billing adjustments and other billing procedures set forth in this Agreement; (B) the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect; and (C) the confidentiality provisions set forth in Article 12.

ARTICLE 11 SUBCONTRACTORS

11.1 Subcontractors. Nothing in this Agreement shall prevent a Party from utilizing the services of subcontractors, as it deems appropriate, to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

11.1.1 Responsibility of Principal. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. In accordance with the provisions of this Agreement, each Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor it hires as if no subcontract had been made. Any applicable obligation imposed by this Agreement upon a Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

11.1.2 No Third-Party Beneficiary. Except as may be specifically set forth to the contrary herein, no subcontractor or any other party is intended to be, nor will it be deemed to be, a third-party beneficiary of this Agreement.

11.1.3 No Limitation by Insurance. The obligations under this Article 11 will not be limited in any way by any limitation of any insurance policies or coverages, including any subcontractor's insurance.

ARTICLE 12 CONFIDENTIALITY

12.1 Confidentiality. Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by a Party to another Party prior to the execution of this Agreement.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential. The Parties shall maintain as confidential any information that is provided and identified by a Party as Critical Energy Infrastructure Information (CEII), as that term is defined in 18 C.F.R. Section 388.113(c).

Such confidentiality will be maintained in accordance with this Article 12. If requested by the receiving Party, the disclosing Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

12.1.1 Term. During the term of this Agreement, and for a period of three (3) years after the expiration or termination of this Agreement, except as otherwise provided in this Article 12 or with regard to CEII, each Party shall hold in confidence and shall not disclose to any person Confidential Information. CEII shall be treated in accordance with Commission policies and regulations.

12.1.2 Scope. Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a non-Party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this Agreement; or (6) is required, in accordance with Article 12.1.7 of this Agreement, to be disclosed by any Governmental Authority or is otherwise

required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Agreement. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the receiving Party that it no longer is confidential.

- 12.1.3 Release of Confidential Information.** No Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), subcontractors, employees, agents, consultants, or to non-Parties who may be or are considering providing financing to or equity participation with Customer, or to potential purchasers or assignees of Customer, on a need-to-know basis in connection with this Agreement, unless such person has first been advised of the confidentiality provisions of this Article 12 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 12.
- 12.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that it discloses to the receiving Party. The disclosure by a Party to the receiving Party of Confidential Information shall not be deemed a waiver by the disclosing Party or any other person or entity of the right to protect the Confidential Information from public disclosure.
- 12.1.5 No Warranties.** By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to another Party nor to enter into any further agreements or proceed with any other relationship or joint venture.
- 12.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to another Party under this Agreement or its regulatory requirements.
- 12.1.7 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the disclosing Party with prompt notice of such request(s) or requirement(s) so that the disclosing Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally

compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

12.1.8 Termination of Agreement. Upon termination of this Agreement for any reason, each Party shall, within ten (10) Business Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting Party) or return to the requesting Party any and all written or electronic Confidential Information received from the requesting Party, except that each Party may keep one copy for archival purposes, provided that the obligation to treat it as Confidential Information in accordance with this Article 12 shall survive such termination.

12.1.9 Remedies. The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 12. Each Party accordingly agrees that the disclosing Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving Party Breaches or threatens to Breach its obligations under this Article 12, which equitable relief shall be granted without bond or proof of damages, and the breaching Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 12, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 12.

12.1.10 Disclosure to FERC, its Staff or a State. Notwithstanding anything in this Article 12 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from a Party that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this Agreement prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the Agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112. Requests from a state regulatory body conducting a confidential

investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

- 12.1.11** Subject to the exception in Article 12.1.10, any information that a disclosing Party claims is competitively sensitive, commercial or financial information under this Agreement shall not be disclosed by the receiving Party to any person not employed or retained by the receiving Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the disclosing Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Agreement or as the Regional Transmission Organization or a Local Balancing Authority operator including disclosing the Confidential Information to a regional or national reliability organization. The Party asserting confidentiality shall notify the receiving Party in writing of the information that Party claims is confidential. Prior to any disclosures of that Party's Confidential Information under this subparagraph, or if any non-Party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the Party who received the Confidential Information from the disclosing Party agrees to promptly notify the disclosing Party in writing and agrees to assert confidentiality and cooperate with the disclosing Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

ARTICLE 13 INFORMATION ACCESS AND AUDIT RIGHTS

- 13.1 Information Access.** Each Party shall make available to the other Parties information necessary to verify the costs incurred by the other Parties for which the requesting Party is responsible under this Agreement and carry out obligations and responsibilities under this Agreement, provided that the Parties shall not use such information for purposes other than those set forth in this Article 13.1 and to enforce their rights under this Agreement.
- 13.2 Audit Rights.** Subject to the requirements of confidentiality under Article 12 of this Agreement, the accounts and records related to the design, engineering, procurement, and construction of the Network Upgrades and Direct Assignment Facilities shall be subject to audit during the period of this Agreement and for a period of twenty-four (24) months following the Transmission Owner's issuance of a final invoice in accordance with Article 6.4. Customer at its expense shall have the right, during normal business hours, and upon prior reasonable notice to the other Parties, to audit such accounts and records. Any audit authorized by this Article 13.2 shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Agreement.

ARTICLE 14 DISPUTES

- 14.1 Submission.** Any claim or dispute, which a Party may have against another Party, arising out of this Agreement shall be submitted for resolution in accordance with the dispute resolution provisions of the Tariff.
- 14.2 Rights under the Federal Power Act.** Nothing in this Article 14 shall restrict the rights of any Party to file a complaint or a petition with FERC under relevant provisions of the Federal Power Act.
- 14.3 Equitable Remedies.** Nothing in this Article shall prevent a Party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations, at any time, before a Governmental Authority.

ARTICLE 15 NOTICES

- 15.1 General.** Any notice, demand or request required or permitted to be given by a Party to another Party and any instrument required or permitted to be tendered or delivered by a Party in writing to another Party may be so given, tendered or delivered, as the case may be, by depositing the same with the United States Postal Service with postage prepaid, for transmission by certified or registered mail, addressed to the Parties, or personally delivered to the Parties, at the address set out below:

To Transmission Provider:

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

To Transmission Owner:

Minnesota Power

Vice President, Transmission & Distribution
30 West Superior Street
Duluth, MN 55802

To Customer:

Minnesota Power

Vice President, Strategy and Planning
30 West Superior Street
Duluth, MN 55802

- 15.2 Billings and Payments.** Billings and payments shall be sent to the addresses shown in Article 15.1 unless otherwise agreed to by the Parties.

- 15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another Party and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out below:

To Transmission Provider:

MISO

Voice telephone – (317) 249-5700

Facsimile telephone – (317) 249-5358

Email address – misotap@misoenergy.org or

MISOTransmissionAccessPlanning@misoenergy.org

To Transmission Owner:

Minnesota Power

Director – System Operations, Performance & Compliance

Voice telephone – (218) 723-7414

Email address-lfrisk@mnpower.com or

MPTransmissioninformationNotifications@mnpower.com

To Customer:

Minnesota Power

RTO Coordination Manager

Voice telephone – (218) 723-7466

Email address – rnyholm@mnpower.com

- 15.4 DUNS #.** If Transmission Owner and Customer have not obtained DUNS numbers by the time this Agreement is executed, Transmission Owner and Customer will forward their DUNS numbers within five (5) Business Days of having obtained such numbers to Transmission Provider by facsimile telephone or email to the fax number or email set out below:

Transmission Owner

DUNS Number: 617232889

Customer

DUNS Number: 617232889

- 15.5 Notification of In-Service Date.** Transmission Owner will serve to Transmission Provider a copy of Appendix B as forwarded to Customer on the same day to the address shown in Article 15.1, and by facsimile telephone to the numbers set out below:

To Transmission Provider:

MISO

Facsimile telephone – (317) 249-5703

And copy to

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

**ARTICLE 16
MISCELLANEOUS**

- 16.1 Waiver.** Except as otherwise provided for in this Agreement, the failure of any Party to comply with any obligation, covenant, agreement, or condition herein may be waived by the Parties entitled to the benefits thereof only by a written instrument signed by the Parties granting such waiver. Any waiver at any time by a Party of its rights with respect to a Default under this Agreement, or with respect to any other matters arising in connection with this Agreement, shall not be deemed a waiver or continuing waiver with respect to any subsequent Default or other matter.
- 16.2 Governing Law.** The validity, interpretation and performance of this Agreement and each of its provisions shall be governed by the laws of the state of Minnesota where approximately 50 percent of the Network Upgrades and/or Direct Assignment Facilities referenced in Appendix A are located without regard to its conflicts of law principles.
- 16.3 Headings Not to Affect Meaning.** The descriptive headings of the various Sections and Articles of this Agreement have been inserted for convenience of reference only and shall in no way modify or restrict any of the terms and provisions hereof.
- 16.4 Amendments and Rights Under the Federal Power Act.** Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Transmission Owner and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided, however, that each Party shall have the right to protest any such filing and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 16.5 Entire Agreement.** This Agreement, together with all the exhibits, constitutes the final and entire written agreement among the Parties hereto with reference to the subject matter hereof, and is a complete and exclusive statement of those terms and conditions and supersedes all prior negotiations, representations or agreements, either written or oral, with respect to the specific subject matter of this Agreement. No change or modification as to any of the provisions hereof shall be binding on any Party unless reduced to writing and approved by the duly authorized officer or agent of Customer, Transmission Owner, and Transmission Provider.
- 16.6 Counterparts.** This Agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument.

- 16.7 Binding Effect.** This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the Parties hereto and their successors and assigns. No person or party shall have any rights, benefits or interests, direct or indirect, arising from this Agreement except the Parties hereto, their successors and authorized assigns. The Parties expressly disclaim any intent to create any rights in any person or party as a third party beneficiary to this Agreement.
- 16.8 Conflicts.** In the event of a conflict between the body of this Agreement and any attachment, appendix or exhibit hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed to be the final intent of the Parties.
- 16.9 Regulatory Requirements.** Each Party's obligations under this Agreement shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek these other approvals as soon as is reasonably practicable.

ARTICLE 17 REPRESENTATIONS AND WARRANTIES

- 17.1 General.** Each Party hereby represents, warrants and covenants as follows with these representations, warranties, and covenants effective as to the Party during the full time this Agreement is effective:
- 17.1.1. Good Standing.** Such Party is duly organized or formed, as applicable, validity existing and in good standing under the laws of its state of organization or formation, and is in good standing under the laws of the respective state(s) of its organization as stated in the preamble of this Agreement.
- 17.1.2 Authority.** Such Party has the right, power and authority to enter into this Agreement, to become a party hereto and to perform its obligations hereunder, and this Agreement is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms.
- 17.1.3 No Conflict.** The execution, delivery and performance of this Agreement does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit or order or material agreement or instrument applicable to or binding upon such Party or any of its assets.
- 17.1.4 Consent and Approval.** That it has sought or obtained, or, in accordance with this Agreement will seek or obtain, each consent, approval, authorization or order of, or acceptance of a filing with, or notice to, any Governmental Authority with jurisdiction concerning this Agreement, in connection with the execution, delivery and performance of this Agreement.

17.1.5 Solvency. That such Party is financially solvent.

IN WITNESS WHEREOF, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original Agreement among the Parties.

Transmission Provider
Midcontinent Independent System Operator, Inc.

By: _____
Name: _____
Title: _____

Transmission Owner
Minnesota Power

By: _____
Name: _____
Title: _____

Customer
Minnesota Power

By: _____
Name: _____
Title: _____

Square Butte 90481026 95418167 FCA

Facilities Construction Agreement
APPENDIX A
NETWORK UPGRADES, COST ESTIMATES AND RESPONSIBILITY,
TRANSMISSION CREDITS, CONSTRUCTION SCHEDULE AND MONTHLY
PAYMENT SCHEDULE

This Appendix A is a part of the Facilities Construction Agreement between Customer, Transmission Owner, and Transmission Provider. Terms used in this Appendix A with initial capitalization not defined in this Appendix A shall have the meaning set out in the Agreement

The upgrades required to be made by the Transmission Owner under this Agreement because of the Transmission Service Request include Direct Assignment Facilities and Network Upgrades, as defined in Module B and Attachment N of the Tariff. The Network Upgrades under this Agreement are governed by Module B and Attachment N of the Tariff.

1.1 Network Upgrades to be installed by Transmission Owner.

1.1.1 Transmission Owner Substation Network Upgrades: To modernize the terminals of the existing Square Butte HVDC Line and implement the latest voltage source converter (“VSC”) HVDC technology, new buildings and electrical infrastructure need to be constructed on a new site near the existing Center and Arrowhead HVDC terminals. Due to the specialized nature of the technology, the new VSC HVDC converter stations will be delivered as turnkey projects by the original equipment manufacturer (“OEM”). The scope of supply for the HVDC OEM will include the relocated converter stations, including valves, converter transformers, smoothing reactors, DC equipment, AC circuit breakers, control & protection, and all associated facilities. The new VSC HVDC converter stations will be designed to interconnect at 345 kV on the AC system side. To accommodate interconnection of the new VSC HVDC converter stations, new AC interconnection facilities will be constructed including new 345/230 kV substations, 345 kV transmission lines, and 230 kV transmission lines. New AC interconnection facilities are listed below.

In Minnesota:

- Construction of a new St. Louis County 345/230 kV Substation located less than one mile west of the Arrowhead Substation
- Construction of a new 345 kV transmission line from the HVDC converter station to the St. Louis County Substation
- Construction of two parallel 230 kV lines from the St. Louis County Substation to the existing Arrowhead Substation
- At Arrowhead Substation, the two new 230 kV lines will be interconnected to the existing HVDC Pole 1 and Pole 2 bus positions, which will be rebuilt with higher-capacity bus and electrical equipment to accommodate the increased HVDC capacity.
- A short portion of the existing ± 250 kV HVDC Line in Minnesota will be reconfigured to terminate at the new HVDC converter station.

In North Dakota:

- Establishment of a new Nelson Lake 230 kV Switching Station to tie together the existing Minnesota Power Square Butte East – Bison 230 kV Line with the existing Great River Energy Square Butte – Stanton 230 kV Line.
- Construction of a second 230 kV circuit between Nelson Lake and Square Butte East using existing double-circuit capable structures.
- Addition of a 230 kV breaker at the Square Butte East Substation to accommodate the second Nelson Lake – Square Butte East 230 kV circuit
- Expansion of the Nelson Lake 230 kV Switching Station to add a 345/230 kV transformer and 345 kV line entrance.
- Construction of a new 345 kV line from Nelson Lake to the new HVDC converter station
- Construction of a new 345 kV substation at the new HVDC converter station site
- A portion of the existing ± 250 kV HVDC Line in North Dakota will need to be reconfigured to terminate at the new HVDC converter station.

Additional equipment upgrades may be deemed necessary by the Transmission Owner or the HVDC OEM during the specification, detailed design, and engineering phase of the project.

1.1.2 Transmission Owner Transmission Line Network Upgrades: The upgrades necessary to increase the capacity of the HVDC transmission line from 550 MW to 900 MW are likely to consist primarily of replacing existing structures with taller structures to increase conductor-to-ground clearance at the higher operating temperature. A short segment of the transmission line with a smaller conductor will need to be rebuilt with a larger conductor.

1.1.3 Transmission Owner Transmission Line Permitting: Due to the relocation of the converter stations and the length of new AC interconnection facilities required to re-connect to the existing system, the HVDC Modernization Project will require state-level permits in both Minnesota and North Dakota. In Minnesota, a Certificate of Need and Route Permit will be required from the State of Minnesota. In North Dakota, a Certificate of Corridor Compatibility and a Route Permit will be required. Minnesota Power will obtain the necessary permits in both states

1.1.4 Cost Estimates and Responsibility. The estimated total cost for the Network Upgrades is \$878,000,000. These costs are shared by the Transmission Owner and Customer. **The estimated cost to be paid by the Customer for Transmission Service Requests 90481026 & 95418167 is \$205,000,000.** The Customer(s) hereby acknowledge and agree that the costs, expenses, and charges set out in Table 1 are only an estimate and that the Customer(s) shall pay the Transmission Owner for their allocated amounts for all costs, expenses, and charges. Updated estimates will be provided annually by the Transmission Owners on request from the Customer.

This is detailed below in Table 1 and is subject to applicable Tax Gross.

Table 1: Network Upgrades Cost Details

HVDC Modernization Project	Total Estimated Cost	Directly Assigned Cost Assigned to Transmission Service Requests #90481026 & #95418167
Converter Station Replacement	\$705,000,000	\$165,000,000
Interconnections to AC System	\$115,000,000	\$15,000,000
Transmission Line Modification	\$58,000,000	\$25,000,000
Internal & Professional Services	Included	Included
Total (in 2022 dollars)	\$878,000,000	\$205,000,000

1.1.4.1 Major Material List of Transmission Owner's Network Upgrades –
See Exhibit C2

1.2 Direct Assignment Facilities – None.

1.3 First Equipment Order (including permitting). See Table 2 below.

1.3.1. Permitting And Land Rights – Transmission Owner Network Upgrades –
See Section 1.8.

1.4 Transmission Credits. See Article 3.2.2 of the Agreement.

1.5 Construction Schedule. Where applicable, construction of the Transmission Owner Network Upgrades and Special Protection Facilities is scheduled as follows and will be periodically updated as necessary:

Table 2: Transmission Owner Construction Activities

Milestone Number	Milestone Description	Start Date
1.	Facilities Construction Agreement Executed.	Aug/Sep-2023
2.	Minnesota Certificate of Need & Route Permit Applications Filed.	Jun-2023

3.	North Dakota Certificate of Corridor Compatibility and Route Permit Applications Filed.	Oct-2023
4.	Begin Front End Engineering & Design with HVDC OEM.	Jan-2024
5.	Major Permits Received in Minnesota & North Dakota.	Jul-2024
6.	Order Long Leadtime Equipment for AC Substations.	Nov-2024
7.	Clearing Begins.	Jan-2025
8.	Construction of AC Interconnection Facilities Begins.	May-2025
9.	Construction of HVDC Transmission Line Upgrades Begins.	Aug-2025
10.	Receive Firm Proposal from HVDC OEM.	Aug-2026
11.	Execute Firm EPC Contract with HVDC OEM.	Oct-2026
12.	Construction of HVDC Converter Stations Begins.	Oct-2027
13.	In-Service Date.	Apr-2030

Note: The construction schedule assumes that the Transmission Owner has obtained final authorizations and security from Customer and all necessary permits from Governmental Authorities as necessary prerequisites to commence construction of any of the Network Upgrades and Special Protection Facilities.

1.6 Payment Schedule.

1.6.1 Timing of and Adjustments to Customer's Payments and Security.

1.6.2 Monthly Payment Schedule. Following approval of the state permits set forth in Section 1.2.3, in accordance with Attachment N, the Customer will begin paying a monthly dollar assessment. Monthly payments by the Customer will continue until Transmission Owner has recovered the cost of all Directly Assigned Facilities and Transmission Owner Network Upgrades.

A Customer that fails to make payments when due will be given a Breach notice. Unless the Breach is cured in accordance with Article 9 of this agreement, the Transmission Owner is relieved from performing under this Agreement. Failure by any Customer to comply with Article 9.2.2(A) or 9.2.2(B) relative to such Breach may, pursuant to Article 9.2.2 of the Agreement, result in termination of the Agreement as to that Customer.

1.6.3 Security Amount. Not later than thirty (30) Days after Transmission Owner has received all Certificate of Need approvals, Customer shall provide MP security in the amount of Two Hundred Five Million Dollars (\$205,000,000) consisting of either or a combination of a letter of credit and/or cash escrow as set forth under

Section 1.7.4 (“Initial Development Security”). Sixty (60) Days after termination of this Agreement, except as set forth in Section 1.7.5, Transmission Owner shall promptly return the Initial Development Security to Customer.

1.6.4 Security Characteristics and Draw

1.6.4.1 Except as set forth under Section 1.7.3.1, Security shall be composed of either a Guaranty, a letter of credit as described in Section 1.7.4 or a cash escrow as described in Section 1.7.4.2, at Customer’s option, or a combination of these options as long as the total amount of Security is not less than the amount then required. Notwithstanding the foregoing, the Guaranty amount may not comprise more than fifty percent (50%) of the overall total amount of Security, provided that if Customer has delivered a notice reducing the amount of Security required pursuant to Section 1.7.7, then the Guaranty may comprise up to 100% of the overall total amount of Security at the Guarantor’s option. Customer shall be (i) permitted from time to time to change the form and combination of such posted Security provided that no Event of Default with respect to Customer then exists so long as Transmission Owner is provided timely Notice of the change, and (ii) required, if Customer has provided Security, or any portion thereof, in the form of a Guaranty, if the entity or entities providing a Guaranty no longer qualify as a Guarantor, Customer shall within ten (10) Business Days of Transmission Owner’s Notice to do so (A) replace such Guaranty with either a Guaranty from an entity or entities meeting the requirements as a Guarantor and/or (B) deliver a letter of credit or performance bond as described in Section 1.7.4.3 and/or (C) supply a cash escrow as described in Section 1.7.4.2, at Customer’s option, in any case, in the aggregate amount of the then applicable Security, less the aggregate amount of any prior draws on such Security. Upon receipt of such substitute Security, any such Guaranty shall be deemed cancelled.

1.6.4.2 If Customer elects to utilize a cash escrow as Security, it shall establish an interest-bearing escrow account with a commercial bank or other mutually acceptable escrow agent as escrow agent, and the account shall name Transmission Owner as the beneficiary for the duration of the existence of the escrow account. The escrow account shall be in United States currency, and funds in the account may be invested in a money-market fund, short-term treasury obligations, investment-grade commercial paper or other investment-grade investments with maturities of three (3) months or less. All income and interest earned on the accounts held in the escrow account shall accrue for the benefit of the Customer, and Customer may withdraw the income and interest earned at any time as long as the balance in the account after the withdrawal meets the minimum funding requirements of this Section 1.7.4.2. The escrow agreement shall require the escrow agent to notify Transmission Owner of the balance in the escrow account from time to time. The escrow agreement governing the account shall include terms that (i) prohibit

termination of the account prior to establishment of alternative Security that satisfies all the requirements of this FCA; (ii) require Notice of no less than sixty (60) Days by the escrow agent to Transmission Owner prior to any termination of the account; and (iii) allow Transmission Owner to draw the entire balance in the escrow account up to the amount of the Security if Security has not been replaced in accordance with this Agreement at least five (5) Business Days prior to the expiration or termination of the escrow account, and Transmission Owner shall hold such amounts in lieu of escrow until such time as the Security has been replaced, at which time the funds shall be returned to Customer. At the end of the Term, any balance remaining in the escrow account shall be returned or released to Customer.

1.6.4.3 In conjunction with or instead of a Guaranty or cash security as provided in Section 1.7.4.2, Customer may provide Security in the form of an irrevocable letter of credit in a commercially reasonable form and otherwise in compliance with the requirements of this Section 1.7.4 and in form and substance acceptable to the Issuer (as defined below) (the "LOC"). The LOC shall be issued by a state or federally chartered commercial bank which issues similar letters of credit in the ordinary course of its business and that (i) has an unsecured bond rating or long-term senior unsecured debt rating equivalent to A- or better as determined by at least two (2) rating agencies, one of which must be either S&P or Moody's, or, if these are not available, CAMEL ratings from the FDIC or OCC used in the banking industry no less than a 3 and (ii) has a minimum of One Hundred Million Dollars (\$100,000,000) in capital (the "Issuer"). The LOC must: (i) be issued for a minimum term of three hundred and sixty (360) Days, and, where permitted by the Issuer, shall be automatically extended for a period of one (1) year on each successive expiration date unless, at least ninety (90) Days before the current expiration date, the Issuer notifies Customer and Transmission Owner by certified mail that the Issuer has decided not to extend the letter of credit; (ii) provide that draws shall be payable upon presentation of a sight draft executed by an officer of Transmission Owner substantially in the form approved by Transmission Owner; and (iii) expressly permit partial and multiple draws. Any unused portion of the letter of credit shall be available, regardless of renewal, through the then current expiration date. Customer may replace the letter of credit with another Issuer which includes a provision for at least ninety (90) Days advance Notice to Transmission Owner and shall cause the renewal or extension of the LOC meeting the criteria set forth in this Section 1.7.4.3 within thirty (30) days prior to the expiration or cancellation of the then current LOC, and failure to do so shall authorize Transmission Owner to draw immediately upon the then current LOC. Transmission Owner shall then, at Customer's cost and with Customer's funds, place the amounts so drawn in an interest bearing escrow account in accordance with Section 1.7.4.2 above, until

and unless Customer provides a substitute form of such security meeting the requirements of this Section 1.7.4. Security in the form of an irrevocable standby letter of credit shall be governed by the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Brochure No. 500 or as otherwise required by the Issuer of the LOC.

1.6.4.4 Customer shall provide Guarantor's annual audited financial statements to Transmission Owner within one hundred twenty (120) days after the end of each calendar year. Transmission Owner shall have the right to monitor the financial condition of Customer, Guarantor, and the Issuer to the extent set forth herein, and Customer shall provide written Notice to Transmission Owner within five (5) Business Days of becoming aware that (i) the Issuer does not satisfy the requirements of the second sentence of Section 1.7.4.3, (ii) ALLETE, Inc. or an affiliate is the Guarantor, such entity does not, collectively, have a tangible net worth of at least Five Hundred Million Dollars (\$500,000,000), or (iii) if the Guarantor is not ALLETE, Inc. or an affiliate such Person does not have an Investment Grade Credit Rating, and in such event Customer shall provide alternative Security as soon as practicable that complies with this Section 1.7.4.4 and in no event later than thirty (30) Days after becoming aware of the Issuer's or a Guarantor's failure to meet the requirements of this Section 1.7.

1.6.5 Release of Security. Promptly following the termination of this FCA and the completion of all Customer's obligations under this FCA, Transmission Owner shall release the Security (including any accumulated interest, if applicable) to Customer.

1.6.6 Permitted Draws; Effects of Draws. In addition to any other remedy available to it, Transmission Owner may, before or after termination of this FCA, draw against the Security to satisfy any undisputed obligations of Customer to Transmission Owner arising under this Agreement (including, without limitation, the payment of Availability Liquidated Damages, if any, or any indemnification obligations) which Customer has not otherwise paid or performed when due, after any required Notice and opportunity to cure. If Transmission Owner draws against the Security and Customer subsequently disputes Transmission Owner's entitlement to any portion of the funds drawn, neither Transmission Owner's draw, the Issuer's payment under the LOC, nor Customer's replenishment of the Security or reimbursement of the Issuer or escrow agent shall constitute a waiver of Customer's rights to seek recovery of any amount disputed. To the extent Transmission Owner elects to draw upon the Security to satisfy obligations that otherwise constitute, or might constitute, an Event of Default by Customer and entitle Transmission Owner to terminate this Agreement, Transmission Owner's draw against the Security shall be deemed a cure of such Event of Default and shall waive Transmission Owner's right to terminate in that respect. With respect to any Event of Default by Seller that remains uncured and which could be cured

by payment of an undisputed amount to Transmission Owner, Transmission Owner shall first draw upon the Security to cure the Event of Default, and only if such Security is insufficient to cure the Event of Default shall any right of termination which Transmission Owner may otherwise have be exercised by Transmission Owner.

- 1.6.7** Reduction in Security. Transmission Owner may, by Notice from time to time to Customer, waive or reduce the amount of security required to be posted hereunder in consideration of an Affiliate of Transmission Owner having a minority ownership interest in Customer.

1.7 Permits, Licenses and Authorizations.

Transmission Owner will be responsible for all permits, licenses and authorizations.

Facilities Construction Agreement
APPENDIX B
NOTIFICATION OF COMPLETED CONSTRUCTION

This Appendix B is a part of the Facilities Construction Agreement among Customer, Transmission Owner, and Transmission Provider. Where applicable, when Transmission Owner has completed construction of the Transmission Owner Network Upgrades and/or Direct Assignment Facilities, Transmission Owner shall send notice to Customer and Transmission Provider, in substantially the form following:

[Date]

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

Customer Address

Phone:

Fax:

Email:

Re: Completion of Network Upgrade/Direct Assignment Facilities

Dear [Name or Title]:

This letter is sent pursuant to the Facilities Construction Agreement among [Transmission Owner], [Customer], and MISO, dated _____, 20__.

On [Date], Transmission Owner completed to its satisfaction all work on the Network Upgrades and/or System Protection Facilities required to facilitate the safe and reliable operation of Customer's Facility. Transmission Owner confirms that the Network Upgrade and/or System Protection Facilities are in place.

Thank you.

[Signature]

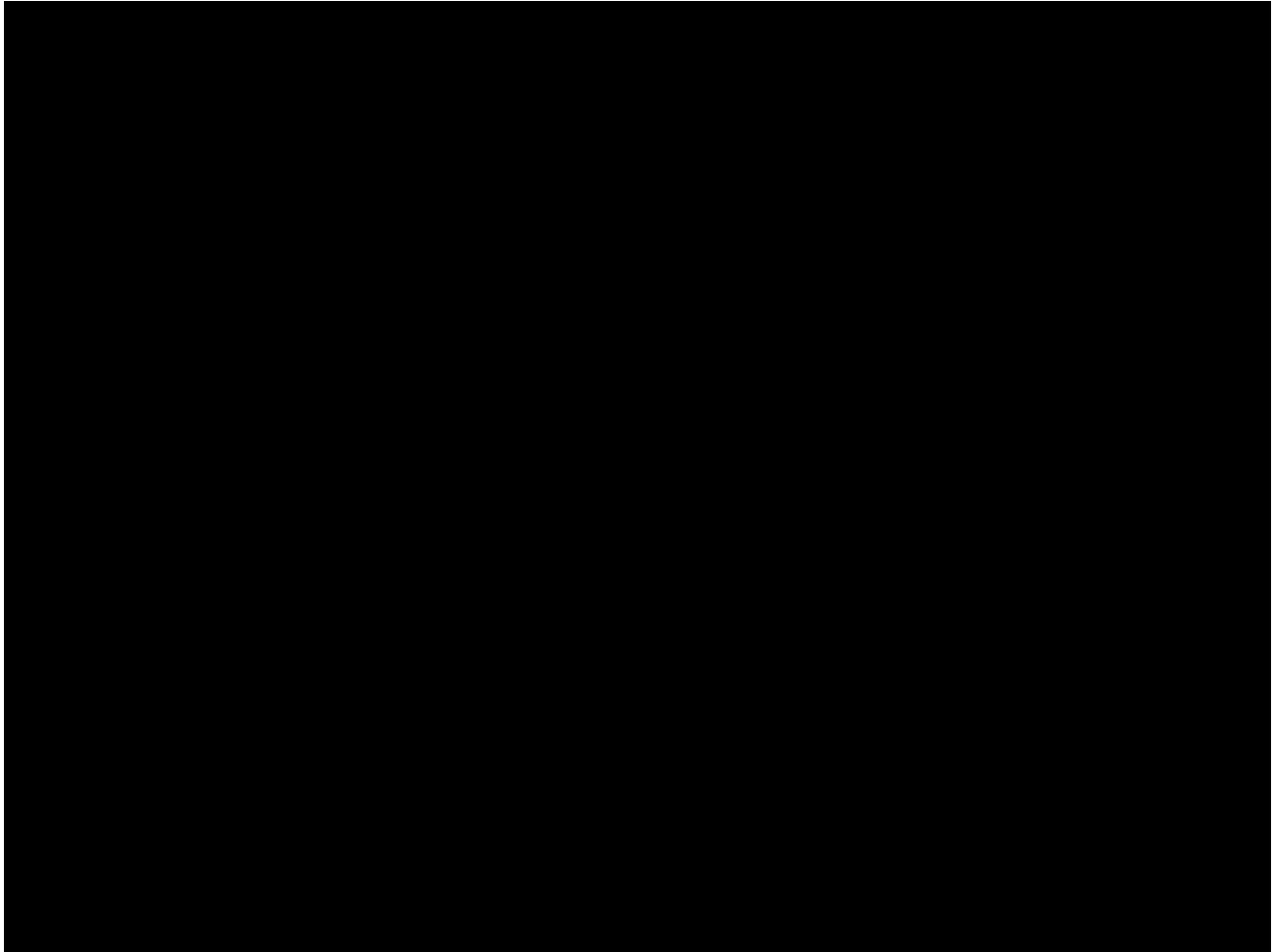
[Transmission Owner Representative]

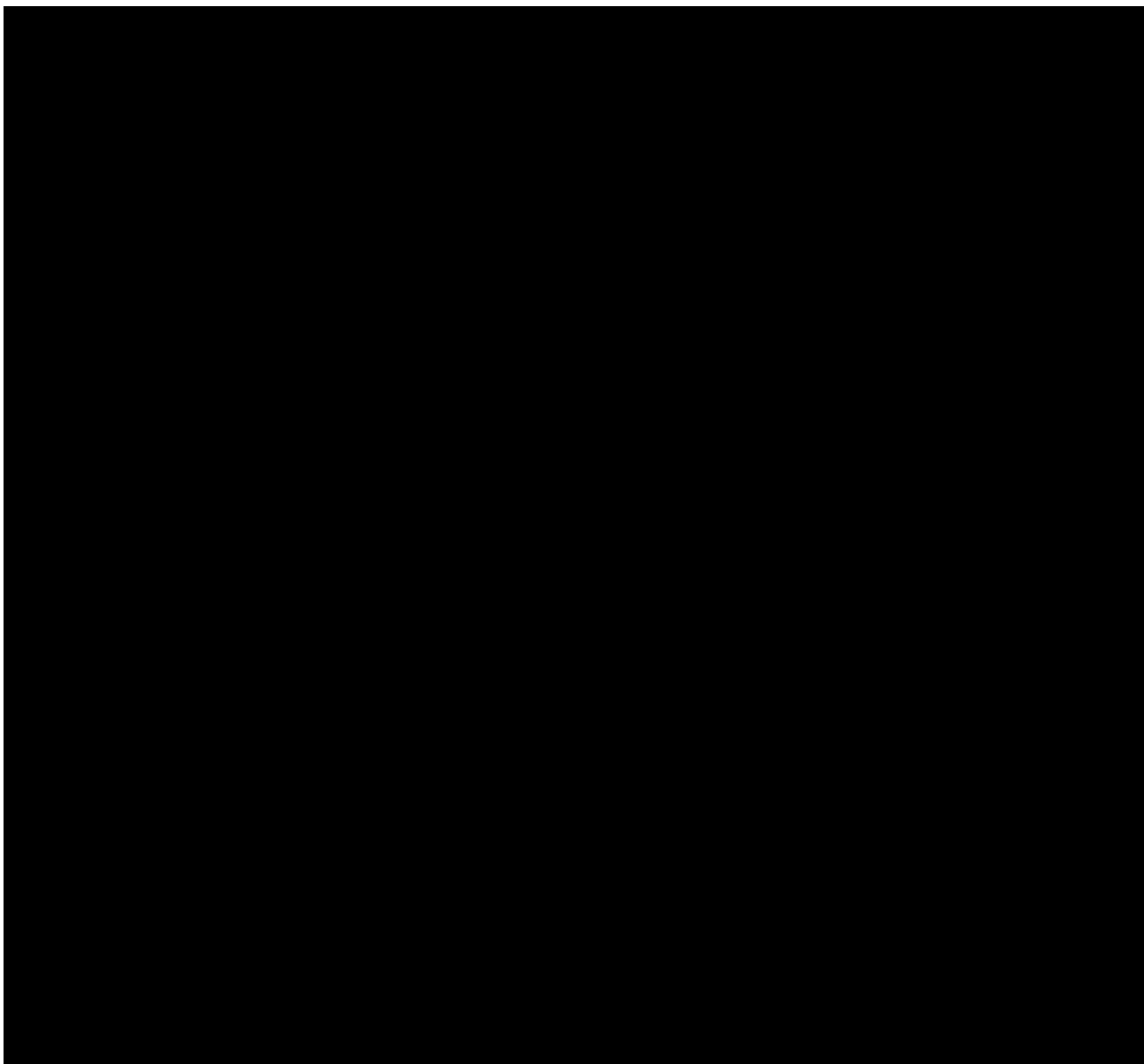
Facilities Construction Agreement
APPENDIX C Exhibits

This Appendix C is a part of the Facilities Construction Agreement among Customers,
Transmission Owner, and Transmission Provider.

Exhibit C1.
Transmission Owner Network Upgrade One Line
CUI//CEII MATERIAL – DO NOT RELEASE

[HIGHLY CONFIDENTIAL TRADE SECRET DATA BEGINS





HIGHLY CONFIDENTIAL TRADE SECRET DATA ENDS]

Exhibit C2.
Estimated Cost of Transmission line and/or Substation Network Upgrades and Direct Assignment Facilities

The total estimated cost for the Network Upgrades for HVDC Converter Station, connections to AC System, Transmission Line Modifications is \$878,000,000.

The details of the cost assigned for customer with Transmission Service Requests **#90481026 & #95418167** is shown below in Table 1, Table 2, Table 3.

Detailed Cost Estimate of Facilities to be Constructed by Transmission Owner

The anticipated costs of modernizing and upgrading the HVDC converter stations are shown in Table 1. The initial estimated converter station replacement base cost was provided by the HVDC OEM. If design assumptions change significantly during the development of the project, the base cost shown in Table 1 may change.

Table 1: Converter Station Replacement Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests #90481026 & #95418167
Converter Station Base Cost	\$705,000,000	\$165,000,000
Internal & Professional Services	(Included)	(Included)
Contingency - Converter Station	(Included)	(Included)
AFUDC - Converter Station	(Included)	(Included)
Total (in 2022 dollars)	\$705,000,000	\$165,000,000

The anticipated costs of AC Interconnection Facilities necessary to connect the relocated VSC HVDC converter stations to the existing AC transmission system are shown in Table 2. If design assumptions change significantly during the development of the project, the base costs shown in Table 2 may change.

Table 2: AC Interconnection Facilities Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests #90481026 & #95418167
Minnesota AC Interconnections	\$55,000,000	\$7,000,000
North Dakota AC Interconnections	\$40,000,000	\$4,000,000
Nelson Lake 230 kV Substation	\$20,000,000	\$4,000,000
Total (in 2022dollars)	\$115,000,000	\$15,000,000

The anticipated costs of Transmission Line Modifications are shown in Table 3. The upgrade cost estimate is based on preliminary transmission structural engineering evaluations. If additional HVDC transmission line modifications or scope changes are found to be necessary during the development of the project, the costs presented in Table 3 may be impacted.

Table 3: Transmission Line Modifications Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests #90481026 & #95418167
HVDC T-Line 900 MW Upgrade	\$58,000,000	\$25,000,000
HVDC T-Line AFUDC	(Included)	(Included)
HVDC T-Line Contingency	(Included)	(Included)
Total (in 2022dollars)	\$58,000,000	\$25,000,000

FACILITIES CONSTRUCTION AGREEMENT

entered into by the

Midcontinent Independent System Operator, Inc.,

And

Minnesota Power, a division of ALLETE, INC.

And

Minnesota Power, a division of ALLETE, INC.

entered into on the ____ day of _____, 2024

FACILITIES CONSTRUCTION AGREEMENT

THIS FACILITIES CONSTRUCTION AGREEMENT (sometimes hereinafter referred to as “Agreement”) is made and entered into this ____ day of _____, 2024, by and among the merchant function of **Minnesota Power**, a division of **ALLETE, INC.**, a corporation, organized and existing under the laws, of the State of Minnesota (“Customer”), the **Midcontinent Independent System Operator, Inc.**, a non-profit, non-stock corporation organized and existing under the laws of the State of Delaware (“Transmission Provider”) and the transmission function of **Minnesota Power**, a division of **ALLETE, INC.**, a corporation organized under the laws of the State of Minnesota (“Transmission Owner”). Customer, Transmission Owner, or Transmission Provider each may be referred to as a “Party” or collectively as the “Parties.”

RECITALS

WHEREAS, Transmission Owner each owns electric facilities and is engaged in generation, transmission, distribution and/or sale of electric power and energy; and

WHEREAS, Transmission Provider has functional control of the operations of the Transmission System, as defined herein, and is responsible for providing transmission and interconnection service on the transmission facilities under its control; and

WHEREAS, Customer intends to reserve firm point to point Transmission Service via Transmission Provider’s Reservation Request No 91365462; and

WHEREAS, the Transmission System is affected by the firm transmission service request of the Facility and additions, modifications and upgrades must be made to certain existing facilities of the Transmission System to accommodate such transmission service; and

WHEREAS, Customer has requested, and Transmission Provider and Transmission Owner have agreed, to enter into this Agreement with Customer for the purpose of facilitating the transmission service of the Facility by the construction of necessary Network Upgrades to the Transmission System;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

ARTICLE 1 DEFINITIONS

Wherever used in this Agreement with initial capitalization, the following terms shall have the meanings specified or referred to in this Article 1. Terms used in this Agreement with initial capitalization not defined in this Article 1 shall have the meanings specified in the Tariff:

- 1.1 “Applicable Laws and Regulations” shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the Parties, their respective facilities and/or the respective services they provide.
- 1.2 “Applicable Reliability Council” shall mean the reliability council of NERC applicable to the Local Balancing Authority of the Transmission System to which the Facility is directly interconnected.
- 1.3 “Applicable Reliability Standards” shall mean Reliability Standards approved by the Federal Energy Regulatory Commission (FERC) under Section 215 of the Federal Power Act, as applicable.
- 1.4 “Breach” shall mean the failure of a Party to perform or observe any material term or condition of this Agreement and shall include, but not be limited to, the events described in Article 9.1.
- 1.5 “Breaching Party” shall mean a Party that is in Breach of this Agreement.
- 1.6 “Confidential Information” shall mean any proprietary or commercially or competitively sensitive information, trade secret or information regarding a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, or any other information as specified in Article 12, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, that is received by another Party.
- 1.7 “Customer” shall mean, for purposes of this Agreement, a Transmission Customer as defined in the Tariff.
- 1.8 “Default” shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 9 of this Agreement.
- 1.9 “Direct Assignment Facilities” shall mean those facilities or portions of facilities that are constructed by any Transmission Owner(s), ITC, or ITC Participant(s) for the sole use/benefit of a particular Transmission Customer requesting service under this Tariff. Direct Assignment Facilities shall be specified in the Service Agreement that governs service to the Transmission Customer and shall be subject to Commission approval.

- 1.10** “Effective Date” shall mean the date on which this Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.
- 1.11** “FERC” shall mean the Federal Energy Regulatory Commission, also known as Commission, or its successor.
- 1.12** “Force Majeure” shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party’s control. A Force Majeure event does not include an act of negligence or intentional wrongdoing by the Party claiming Force Majeure.
- 1.13** “Good Utility Practice” shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric 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 to 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. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- 1.14** “Governmental Authority” shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Customer, Transmission Provider, Transmission Owner, or any Affiliate thereof.
- 1.15** “In-Service Date” shall mean the date upon which Customer reasonably expects it will be ready to begin use of the Network Upgrades and/or Direct Assignment Facilities.
- 1.16** “Local Balancing Authority” shall mean an operational entity or a Joint Registration Organization which is (i) responsible for compliance with the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement for their local area within the MISO Balancing Authority Area, (ii) a Party to Balancing Authority Agreement, excluding MISO, and (iii) shown in Appendix A to the Balancing Authority Agreement.
- 1.17** “Loss” shall mean any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or

to third parties, arising out of or resulting from the other Party's performance, or non-performance of its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing, by the indemnified Party.

- 1.18** "Material Modification" shall mean: (1) modification to a Transmission Service Request in the queue that has a material adverse impact on the cost or timing or constraint identification of Transmission Service Request; or (2) planned modification to proposed network upgrades that is undergoing evaluation and has a material adverse impact on the Transmission System prior to the modification.
- 1.19** "NERC" shall mean the North American Electric Reliability Corporation, or its successor organization.
- 1.20** "Network Upgrades" shall mean the additions, modifications, and upgrades to the Transmission System required to accommodate the transmission service requests.
- 1.21** "Non-Breaching Party" shall mean a Party that is not in Breach of this Agreement with regard to a specific event of Breach by another Party.
- 1.22** "Reasonable Efforts" shall mean, with respect to an action required to be attempted or taken by a Party under this Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Direct Assignment Facilities

- 1.23** "Tariff" shall mean the Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.
- 1.24** "Transmission Service" shall mean Point-to-Point Transmission Service provided under Module B of the Tariff on a firm and non-firm basis and the Network Integration Transmission Service under Module B of the Tariff.
- 1.25** "Transmission System" shall mean the facilities owned by Transmission Owner and controlled or operated by Transmission Provider or Transmission Owner that are used to provide Transmission Service or Wholesale Distribution Service under the Tariff.

ARTICLE 2 TERM OF AGREEMENT

- 2.1** **Effective Date.** Subject to required regulatory authorizations, including, without limitation, acceptance by FERC under Section 205 of the Federal Power Act, this Agreement shall become effective on the date on which this Agreement is made and entered into by the Parties.
- 2.2** **Term.**

- 2.2.1 General.** This Agreement shall become effective as provided in Article 2.1 and shall continue in full force and effect until the earlier of (i) the final repayment, where applicable, by Transmission Owner of the amount funded by Customer for Transmission Owner's design, procurement, construction and installation of the Network Upgrades and Direct Assignment Facilities provided in Appendix A; (ii) the Parties agree to mutually terminate this Agreement; (iii) earlier termination is permitted or provided for under Appendix A of this Agreement; or (iv) Customer terminates this Agreement after providing Transmission Provider and Transmission Owner with written notice at least sixty (60) Calendar Days prior to the proposed termination date, provided that Customer has no outstanding contractual obligations to Transmission Provider or Transmission Owner under this Agreement. No termination of this Agreement shall be effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination. The term of this Agreement may be adjusted upon mutual agreement of the Parties, if the In-Service Date for the Network Upgrades and Direct Assignment Facilities is adjusted in accordance with the rules and procedures established by Transmission Provider.
- 2.2.2 Termination Upon Default.** In the event of a Default by a Party, the Non-Breaching Party or Parties shall have the termination rights described in Articles 9 and 10; provided, however, if an event described in part (c) of Article 9.1 has not occurred, and provided the Default does not pose a threat to the reliability of the Transmission System, neither Transmission Provider nor Transmission Owner may terminate this Agreement if Customer is the Breaching Party and Customer (i) has undertaken, in accordance with Article 9.2, to cure the Breach that led to the Default and has failed to cure the Breach for reasons other than Customer's failure to diligently commence reasonable and appropriate steps to cure the Breach within the thirty (30) Calendar Days allowed by Article 9.2, and (ii) compensates Transmission Provider or Transmission Owner within thirty (30) Calendar Days for the amount of damage billed to Customer by Transmission Provider or Transmission Owner for any damages, including costs and expenses, incurred by Transmission Provider or Transmission Owner as a result of such Default. In the event of an occurrence described in part (c) of Article 9.1, and providing the Default does not pose a threat to the reliability of the Transmission System, the Non-Breaching Party or Parties shall not terminate this Agreement provided that the Breaching Party provided an assurance of payment acceptable to the Non-Breaching Party, and pays any applicable damages.
- 2.2.3 Consequences of Termination.** In the event of a termination by any Party, other than a termination by Customer due to a Breach by Transmission Owner, Customer must pay Transmission Owner all amounts still due and payable for construction and installation of the Network Upgrades and Direct Assignment Facilities (including, without limitation, any equipment ordered related to such construction), plus all out-of-pocket expenses incurred by Transmission Owner in connection with the construction and installation of the Network Upgrades and

Direct Assignment Facilities, through the date of termination, plus any actual costs which Transmission Owner (A) reasonably incurs in winding up work and construction demobilization and (B) reasonably incurs to ensure the safety of persons and property and the integrity and safe and reliable operation of the Transmission System. Transmission Owner agrees to use Reasonable Efforts to minimize such costs.

2.2.4 Material Adverse Change. In the event of a material change in law or regulation that adversely affects, or may reasonably be expected to adversely affect a Party's rights and/or obligations under this Agreement, the Parties shall negotiate in good faith any amendments to this Agreement necessary to adapt the terms of this Agreement to such change in law or regulation, and Transmission Provider shall file such amendments with FERC. If, within sixty (60) Calendar Days after the occurrence of any event described in this Article 2.2.4, the Parties are unable to reach agreement as to any necessary amendments, the Parties may proceed under Article 14 to resolve any disputes related thereto; Transmission Provider and/or Transmission Owner shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that a Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. If a Party is unable to fully perform this Agreement due to the occurrence of an event described in this Article 2.2.4 and such inability is not based on economic reasons, such Party shall not be deemed to be in Default of its obligations under this Agreement, provided that such Party is seeking dispute resolution under Article 14 or before FERC, to the extent that (i) such Party is unable to perform as a result of such an event and (ii) such Party acts in accordance with its obligations under this Article 2.2.4.

2.3 Regulatory Filing. In accordance with Applicable Laws and Regulations, Transmission Provider shall file this Agreement, and any amendment to this Agreement with FERC as a service agreement under the Tariff. If Customer has executed this Agreement or any amendment to this Agreement, Customer shall not protest this Agreement or the amendment, shall reasonably cooperate with Transmission Provider with respect to such filing and shall provide any information, including the rendering of testimony or pleadings, as applicable, reasonably requested by Transmission Provider to the extent reasonably needed to comply with applicable regulatory requirements.

2.4 Survival. The applicable provisions of this Agreement shall continue in effect after expiration, cancellation, or termination hereof to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect.

- 2.5 Termination Obligations.** Upon any termination pursuant to this Agreement, Customer shall be responsible for the payment of all costs or other contractual obligations incurred prior to the termination date including previously incurred capital costs, penalties for early termination, costs of removal and site restoration.

ARTICLE 3

CONSTRUCTION OF NETWORK UPGRADES AND DIRECT ASSIGNMENT FACILITIES

3.1 Construction.

- 3.1.1 Transmission Owner Obligations.** Transmission Owner shall (or shall cause such action to) design, procure, construct and install, and Customer shall pay, consistent with Article 3.2, the cost of, all Network Upgrades and Direct Assignment Facilities identified in Appendix A. All Network Upgrades and Direct Assignment Facilities designed, procured, constructed and installed by Transmission Owner pursuant to this Agreement shall satisfy all requirements of applicable safety and/or engineering codes, including those requirements of Transmission Owner and Transmission Provider, and comply with Good Utility Practice, and further, shall satisfy all Applicable Laws and Regulations.

3.1.2 Suspension of Work.

- 3.1.2.1 Right to Suspend for Force Majeure Event.** Provided that such suspension is permissible under the authorizations, permits or approvals granted for the construction of the Network Upgrades and Direct Assignment Facilities Customer will not suspend unless a Force Majeure event occurs. Customer must provide written notice of its request for suspension to Transmission Provider and Transmission Owner, and provide a description of the Force Majeure event that is acceptable to Transmission Provider. Suspension will only apply to Customer milestones and Interconnection Facilities described in the Appendices of this Agreement. Prior to suspension, Customer must also provide security acceptable to Transmission Owner, equivalent to the higher of \$5 million or the total cost of all Network Upgrades, Transmission Owner's Direct Assignment Facilities, and Distribution Upgrades listed in Appendix A of this Agreement. Network Upgrades, Direct Assignment Facilities will be constructed on the schedule described in the Appendices of this Agreement unless: (1) construction is prevented by the order of a Governmental Authority; (2) the Network Upgrades and Direct Assignment Facilities are not needed by any other project; or (3) Transmission Owner or Transmission Provider determines that a Force Majeure event prevents construction. In the event of (1), (2), or (3) security shall be released upon the determination that the Network

Upgrades and Direct Assignment Facilities will no longer be constructed. If suspension occurs, Customer shall be responsible for the costs which Transmission Owner incurs (i) in accordance with this Agreement prior to the suspension, (ii) in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System and, if applicable, any costs incurred in connection with the cancellation of contracts and orders for material which Transmission Owner cannot reasonably avoid, and (iii) reasonably incurs in winding up work and construction demobilization; provided, however, that, prior to canceling any such contracts or orders, Transmission Owner shall obtain Customer's authorization. Customer shall be responsible for all costs incurred in connection with Customer's denial of authorization to cancel such contracts or orders. Interest as provided in

Article 3.2.2.2 on amounts paid by Customer to Transmission Owner for the design, procurement, construction and installation of the Network Upgrades and Direct Assignment Facilities, shall not accrue during periods in which Customer has suspended construction under this Article 3.1.2. Transmission Owner shall invoice Customer pursuant to Article 6 and use Reasonable Efforts to minimize its costs. In the event that Customer suspends work pursuant to this Article, no construction duration, timelines and schedules set forth in Appendix A shall be suspended during the period of suspension unless ordered by a Governmental Authority, with such order being the Force Majeure event causing the suspension.

3.1.2.2 Recommencing of Work. If Customer requests Transmission Owner to recommence such work, Transmission Owner shall have no obligation to afford such work the priority it would have had but for the prior actions of Customer to suspend the work. In such event, Customer shall be responsible for any costs incurred in recommencing the work. All recommenced work shall be completed pursuant to an amended schedule for the transmission service agreed to by the Parties. Transmission Provider and Transmission Owner have the right to request a System Impact Study if conditions have materially changed subsequent to the request to suspend. Customer shall be responsible for the costs of any studies required.

3.1.2.3 Termination in the Event of a Material Modification. In the event Customer suspends the performance of work by Transmission Owner pursuant to this Article 3.1.2 and modifies its In-Service Date, this Agreement shall be deemed terminated unless Customer demonstrates that the change is not a Material Modification under FERC precedent.

3.1.2.4 Right to Suspend Due to Default. Transmission Owner reserves the right, upon written notice to Customer, to suspend, at any time, work by Transmission Owner and the incurrence of additional expenses associated with the construction and installation of the Network Upgrades and Direct Assignment Facilities upon the occurrence of either a Breach that Customer is unable to cure pursuant to Article 9 or an Event of Default pursuant to Article 9. Any form of suspension by Transmission Owner shall not be barred by Articles 2.2.2, 2.2.3 or 9.2.2, nor shall it affect Transmission Owner's right to terminate the work or this Agreement pursuant to Article 10. In such events, Customer shall be responsible for costs which Transmission Owner incurs as set forth in Article 2.2.3.

3.1.3 Construction Status. Transmission Owner shall keep Customer and Transmission Provider advised periodically as to the progress of its respective design, procurement and construction efforts as described in Appendix A. Customer may, at any time, request a progress report from Transmission Owner, with a copy to be provided to Transmission Provider. If, at any time, Customer determines that the completion of the Network Upgrades and Direct Assignment Facilities will not be required until after the specified In-Service Date, Customer will provide written notice to Transmission Owner and Transmission Provider of such later date upon which the completion of the Network Upgrades and Direct Assignment Facilities would be required. Transmission Owner may delay the In-Service Date of the Network Upgrades accordingly.

3.1.4 Timely Completion. Transmission Owner shall use Reasonable Efforts to design, procure, construct, install, and test the Network Upgrades and Direct Assignment Facilities in accordance with the schedule set forth in Appendix A, which schedule may be revised from time to time by mutual agreement of the Parties. If any event occurs that will affect the time for completion of the Network Upgrades and Direct Assignment Facilities, or the ability to complete any of them, Transmission Owner and/or Transmission Provider shall promptly notify Customer, with a copy to the other Party. In such circumstances, Transmission Provider shall, within fifteen (15) Calendar Days of such notice, convene a technical meeting with Customer and Transmission Owner to evaluate the alternatives available to Customer. Transmission Owner and/or Transmission Provider shall also make available to Customer all studies and work papers related to the event and corresponding delay, including all information that is in the possession of Transmission Provider or Transmission Owner that is reasonably needed by Customer to evaluate alternatives. Transmission Owner shall, at Customer's request and expense, use Reasonable Efforts to accelerate its work under this Agreement to meet the schedule set forth in Appendix A, provided that Customer authorizes such actions and the costs associated therewith in advance.

3.2 Network Upgrade Costs and Credits.

- 3.2.1 Costs.** Customer shall pay to Transmission Owner costs (including taxes and financing costs) associated with seeking and obtaining all necessary approvals and of designing, engineering, constructing, and testing the Network Upgrades and Direct Assignment Facilities, as identified in Appendix A, in accordance with the cost recovery method provided herein;

Customer shall pay for Direct Assignment Facilities and Network Upgrades in accordance with Attachment N of the Tariff. The cost assignment provisions shall apply to facilities constructed by Transmission Owner until such time as Transmission Owner is able to fully recover its revenue requirements as calculated in Attachment N, Section C. If the Transmission Service Request is discontinued or suspended, the Transmission Customer shall pay the Transmission Owner for the remaining applicable amounts that must be paid pursuant to Attachment N of the Tariff.

Transmission Owner shall install, at Customer's expense, any Transmission Owner's Direct Assignment Facilities that may be required on the Transmission Owner's Interconnection Facilities or the Transmission Owner's transmission or distribution facilities as a result of the Network Upgrades required by Customer's request.

3.2.1.1 Lands of Other Property Owners. If any part of the Transmission Owner's Network Upgrades, Direct Assignment Facilities, and/or Distribution Upgrades is to be installed on property owned by persons other than Customer or Transmission Owner, Transmission Owner shall at Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority to the extent permitted and consistent with Applicable Laws and Regulations and, to the extent consistent with such Applicable Laws and Regulations, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Transmission Owner's Interconnection Facilities, Network Upgrades, Direct Assignment Facilities, and/or Distribution Upgrades upon such property.

3.2.2 Credits.

3.2.2.1 Repayment. Customer shall be entitled to a cash repayment by Transmission Owner(s) that owns the Network Upgrades, of the amount paid respectively to Transmission Owner, if any, for the Network Upgrades, as provided under the Tariff, and including any tax gross-up or other tax-related payments associated with the repayable portion of the Network Upgrades, and not repaid to Customer pursuant to Article 3.3.1 or otherwise, to be paid to Customer on a dollar-for-dollar basis for the

non-usage sensitive portion of transmission charges, as payments are made under the Tariff for Transmission Service with respect to the Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this subparagraph. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1 or the Network Upgrades have been determined not to be needed pursuant to this Article 3.2.2.1. Customer may assign such repayment rights to any person.

3.2.2.2 Amount. Transmission credits will be based on the final, actual cost of completing the Network Upgrades as provided by the final invoice prepared by Transmission Owner pursuant to Article 6.4 of this Agreement. Any repayment made pursuant to Article 3.2.2.1 shall include (i) the final, actual cost after any true-up amounts have been paid pursuant to Article 6.4, and (ii) interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this Article 3.2 until fully reimbursed. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1.

3.2.2.3 Alternative Payment Schedule. Notwithstanding the foregoing, as applicable and consistent with the Tariff, Customer, Transmission Provider, and Transmission Owner, may adopt any alternative payment schedule that is mutually agreeable.

3.2.2.4 RESERVED

3.2.2.5 Rights not Relinquished. Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that Customer, shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain refunds or transmission credits for Transmission Service that is not associated with the Facility.

3.3 Taxes.

3.3.1 Indemnification for Contributions in Aid of Construction. The Parties intend that all payments made by Customer to Transmission Owner for the installation of the Network Upgrades and Direct Assignment Facilities shall be non-taxable contributions to capital in accordance with the Internal Revenue Code and any applicable state tax laws and shall not be taxable as contributions in aid of construction under the Internal Revenue Code and any applicable state tax laws. With regard only to such contributions, Transmission Owner shall not include a gross-up for income taxes in the amounts it charges Customer for the installation of the Network Upgrades and Direct Assignment Facilities unless (i) Transmission Owner has determined, in good faith, that the payments or property transfers made by Customer to Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Transmission Owner to report payments or property as income subject to taxation; provided, however, that Transmission Owner may require Customer to provide security for Network Upgrades, in a form reasonably acceptable to Transmission Owner (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences or any current tax liability under this Article. Customer shall reimburse Transmission Owner for such costs on a fully grossed-up basis, in accordance with this Article, within thirty (30) Calendar Days of receiving written notification from Transmission Owner of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten-year testing period and the applicable statute of limitation, as it may be extended by Transmission Owner upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article. Notwithstanding the foregoing provisions of this Article 3.3.1, and to the extent permitted by law, to the extent that the receipt of such payments by Transmission Owner is determined by any Governmental Authority to constitute income by Transmission Owner subject to taxation, Customer shall protect, indemnify and hold harmless Transmission Owner and its Affiliates, from all claims by any such Governmental Authority for any tax, interest and/or penalties associated with such determination. Upon receiving written notification of such determination from the Governmental Authority, Transmission Owner shall provide Customer with written notification within thirty (30) Calendar Days of such determination and notification. Transmission Owner, upon the timely written request by Customer and at Customer's expense, shall appeal, protest, seek abatement of, or otherwise oppose such determination. Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the compromise or settlement of the claim; provided that Transmission Owner shall cooperate and consult in good faith with Customer regarding the conduct of such contest. Customer shall advance to Transmission Owner on a periodic basis as requested by Transmission Owner the estimated cost of prosecuting such appeal, protest, abatement or other contest. Customer shall not be required to pay Transmission

Owner for the tax, interest and/or penalties prior to the seventh (7th) Calendar Day before the date on which Transmission Owner (i) is required to pay the tax, interest and/or penalties or other amount in lieu thereof pursuant to a compromise or settlement of the appeal, protest, abatement or other contest; (ii) is required to pay the tax, interest and/or penalties as the result of a final, non-appealable order by a Governmental Authority; or (iii) is required to pay the tax, interest and/or penalties as a prerequisite to an appeal, protest, abatement or other contest. In the event such appeal, protest, abatement or other contest results in a determination that Transmission Owner is not liable for any portion of any tax, interest and/or penalties for which Customer has already made payment to Transmission Owner, Transmission Owner shall promptly refund to Customer any payment attributable to the amount determined to be non-taxable, plus any interest or other payments Transmission Owner receives or which Transmission Owner may be entitled with respect to such payment. In accordance with Article 6, Customer shall provide Transmission Owner with credit assurances sufficient to meet Customer's estimated liability for reimbursement of Transmission Owner for taxes, interest and/or penalties under this Section 3.3.1. Such estimated liability shall be stated in Appendix A.

To the extent that Transmission Owner is a limited liability company and not a corporation, and has elected to be taxed as a partnership, then the following shall apply: Transmission Owner represents, and the Parties acknowledge, that Transmission Owner is a limited liability company and is treated as a partnership for federal income tax purposes. Any payment made by Customer to Transmission Owner for Network Upgrades and Direct Assignment Facilities is to be treated as an upfront payment in accordance with Rev Proc 2005-35. It is anticipated by the Parties that any amounts paid by Customer to Transmission Owner for Network Upgrades and Direct Assignment Facilities will be reimbursed to Customer in accordance with the terms of this Agreement, provided Customer fulfills its obligations under this Agreement.

3.3.2 Private Letter Ruling. At Customer's request and expense, Transmission Owner shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Customer to Transmission Owner under this Agreement are subject to federal income taxation. Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Customer's knowledge. Transmission Owner and Customer shall cooperate in good faith with respect to the submission of such request.

3.3.3 Other Taxes. Upon the timely request by Customer, and at Customer's sole expense, Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Transmission Owner for which Customer may be required to reimburse Transmission Owner under the terms of this Agreement. Customer

shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Customer and Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Customer to Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Transmission Owner. Each Party shall cooperate with the other Parties to maintain each Party's tax status. Nothing in this Agreement is intended to adversely affect any Party's tax-exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

ARTICLE 4 FORCE MAJEURE

- 4.1 Notice.** The Party unable to carry out an obligation imposed on it by this Agreement due to a Force Majeure event shall notify the other Parties in writing or verbally with subsequent notice in writing within a reasonable time after the occurrence of the cause relied on.
- 4.2 Duration of Force Majeure.** Except as set forth in Article 4.3, no Party will be considered in Default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure. A Party shall not be responsible for any non-performance or be considered in Breach or Default under this Agreement due to Force Majeure. A Party shall be excused from whatever performance is affected for only the duration of the Force Majeure event and while the Party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing Party is able to resume performance of its obligations excused as a result of the occurrence of Force Majeure, such Party shall give prompt notice thereof to the other Parties.
- 4.3 Obligation to Make Payments.** Any Party's obligation to make payments for services incurred shall not be suspended by Force Majeure.

ARTICLE 5 INFORMATION REPORTING

- 5.1 Information Reporting Obligations.** Each Party shall, in accordance with Good Utility Practice, promptly provide to the other Parties all relevant information, documents, or data regarding the Party's facilities and equipment which may reasonably be expected to pertain to the reliability of the other Party's facilities and equipment and which has been reasonably requested by the other Party.

- 5.2 Non-Force Majeure Reporting.** A Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this Agreement for a reason other than Force Majeure. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. In the event of Force Majeure, a Party unable to comply with the provisions of this Agreement shall notify the other Parties in accordance with the provisions of Article 4.

ARTICLE 6 CREDITWORTHINESS, BILLING AND PAYMENTS

- 6.1 Creditworthiness.** By the earlier of (i) thirty (30) Calendar Days prior to the due date for Customer's first payment under the payment schedule specified in Appendix A or (ii) the first date specified in Appendix A for the ordering of equipment by Transmission Owner for installing the Network Upgrades and Direct Assignment Facilities, Customer shall provide Transmission Owner, at Transmission Owner's option, with a form of adequate assurance of creditworthiness reasonably acceptable to Transmission Owner. If the adequate assurance is a parental guarantee or surety bond, it must be made by an entity that meets the creditworthiness requirements of Transmission Owner, have terms and conditions reasonably acceptable to Transmission Owner and guarantee payment of the amount specified in the next paragraph of this Article 6.1. If the adequate assurance is a letter of credit, it must be issued by a bank reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount available to be drawn under the letter shall reduce on a monthly basis in accordance with the monthly payment schedule. The surety bond must be issued by an insurer reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount assured under the bond shall reduce on a monthly basis in accordance with the monthly payment schedule. After the Network Upgrades and Direct Assignment Facilities have been placed in service and until Customer fully compensates Transmission Owner for construction of the Network Upgrades and Direct Assignment Facilities, Customer shall, subject to the standards of this Article 6.1, maintain a parental guarantee, surety bond, letter of credit, or some other credit assurance sufficient to meet its monthly payment obligation under Article 3.2.1, as specified in the following paragraph. Customer's estimated liability under Article 3.2.1 is stated in Appendix A.

Customer shall maintain as of the first day of each month beginning on the due date for Customer's first payment under the payment schedule specified in Appendix A, and continuing through to the In-Service Date, a parental guarantee, surety bond or letter of credit in an amount sufficient to cover the applicable costs and cost commitments required of the Party responsible for building the facilities pursuant to the construction schedule developed in this Agreement for designing, engineering, seeking regulatory approval from any Governmental Authority, constructing, procuring and installing the facilities and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Owner for these purposes as defined and established under Appendix A.

- 6.2 Invoice.** Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due, if any, for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this Agreement, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.
- 6.3 Payment.** Invoices shall be rendered to the paying Party at the address specified by the Parties. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by a Party will not constitute a waiver of any rights or claims that Party may have under this Agreement.
- 6.4 Final Invoice.** Within six (6) months after completion of the construction of the Network Upgrades and Direct Assignment Facilities, Transmission Owner shall provide an invoice of the final cost of the construction of the Network Upgrades and Direct Assignment Facilities and shall set forth such costs in sufficient detail to enable Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Owner shall refund, with interest (calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii)), to Customer any amount by which the actual payment by Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.
- 6.5 Interest.** Interest on any unpaid amounts shall be calculated in accordance with 18 C.F.R. § 35.19a(a)(2)(iii).
- 6.6 Payment During Dispute.** In the event of a billing dispute among the Parties, Transmission Owner shall continue to construct the Network Upgrades and Direct Assignment Facilities under this Agreement as long as Customer: (i) continues to make all payments not in dispute; and (ii) pays to Transmission Provider or Transmission Owner or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Customer fails to meet these two requirements, then Transmission Provider may or, at Transmission Owner's request upon Customer's failure to pay Transmission Owner, shall provide notice to Customer of a Default pursuant to Article 9. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to another Party shall pay the amount due with interest calculated in accord with the methodology set forth in 18 C.F.R. § 35.19a(a)(2)(iii).

ARTICLE 7 ASSIGNMENT

- 7.1 Assignment.** This Agreement may be assigned by any Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the

consent of the other Parties to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that Customer shall have the right to assign this Agreement, without the consent of either Transmission Provider or Transmission Owner, for collateral security purposes to aid in providing financing for the Facility, provided that Customer will promptly notify Transmission Provider and Transmission Owner of any such assignment. Any financing arrangement entered into by Customer pursuant to this Article will provide that prior to or upon the exercise of the secured Party's, trustee's or assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider and Transmission Owner of the date and particulars of any such exercise of assignment right(s), including providing Transmission Provider and Transmission Owner with proof that it meets the requirements of Article 6.1. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

ARTICLE 8 INDEMNITY

- 8.1 General.** To the extent permitted by law, a Party (the "Indemnifying Party") shall at all times indemnify, defend, and hold the other Parties (each an "Indemnified Party") harmless from Loss, only as provided in the Tariff.
- 8.1.1 Indemnified Party.** If an Indemnified Party is entitled to indemnification under this Article 8 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 8.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 8.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 8, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.
- 8.1.3 Indemnity Procedures.** Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 8.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be reasonably withheld, conditioned or delayed.

- 8.2 Consequential Damages.** In no event shall any Party be liable to any other Party under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

ARTICLE 9 BREACH, CURE AND DEFAULT

- 9.1 Events of Breach.** A Breach of this Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Agreement, including but not limited to any material Breach of a representation, warranty or covenant made in this Agreement;

- (c) If a Party (i) is adjudicated bankrupt; (ii) files a voluntary petition in bankruptcy under any provision of any federal or state bankruptcy law or shall consent to the filing of any bankruptcy or reorganization petition against it under any similar law; (iii) makes a general assignment for the benefit of its creditors; or (iv) consents to the appointment of a receiver, trustee or liquidator;
- (d) Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;
- (e) Failure of a Party to provide such access rights, or a Party's attempt to revoke access or terminate such access rights, as provided under this Agreement or any related agreements.
- (f) Failure of a Party to provide information or data to another Party as required under this Agreement, provided the Party entitled to the information or data under this Agreement requires such information or data to satisfy its obligations under this Agreement.

9.2 Notice of Breach, Cure and Default. Upon the occurrence of an event of Breach, the Party not in Breach, when it becomes aware of the Breach, shall give written notice of the Breach to the Breaching Party and to any other person representing a Party to this Agreement identified in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach.

9.2.1 Upon the occurrence described in part (c) of Article 9.1, the Party experiencing such occurrence shall notify the other Party in writing within seven (7) Calendar Days after the commencement of such occurrence. Upon receiving written notice of the Breach hereunder, the Breaching Party shall have a period to cure such Breach (sometimes hereinafter referred as ("Cure Period") which shall be thirty (30) Calendar Days unless such Breach is due to an occurrence under Article 9.1(a) or (c) in which case the cure period will be five (5) Business Days.

9.2.2 If the Breach is such that it cannot be cured within the Cure Period, the Breaching Party will commence in good faith all steps as are reasonable and appropriate to cure the Breach within such Cure Period and thereafter diligently pursue such action to completion. In the event the Breaching Party fails to:

- (a) cure the Breach, or to commence reasonable and appropriate steps to cure the Breach, within the Cure Period; or,
- (b) completely cure the Breach within sixty (60) Calendar Days if the Breach occurs pursuant to Article 9.1(b), (d), (e) or (f),

the Breaching Party will be in Default of this Agreement and the non-Breaching Parties may, at their option, either in concert or individually, (1) act to terminate

this Agreement for cause by notifying the other Parties in writing, or (2) take whatever action at law or in equity as may appear necessary or desirable to enforce the performance or observance of any rights, remedies, obligations, agreement, or covenants under this Agreement.

- 9.3 Rights in the Event of Default.** Notwithstanding the foregoing, upon the occurrence of an event of Default, any non-Defaulting Party shall be entitled to exercise all rights and remedies it may have in equity or at law.

ARTICLE 10 TERMINATION OF AGREEMENT

- 10.1 Expiration of Term.** Except as otherwise specified in this Article 10, the Parties' obligations under this Agreement shall terminate at the conclusion of the term of this Agreement.
- 10.2 Termination.** In addition to the termination provisions set forth in Article 2.2, a Party may terminate this Agreement upon the Default of another Party in accordance with this Agreement. Subject to the limitations set forth in Article 10.3, in the event of a Default, a non-Defaulting Party may terminate this Agreement only upon the later of (i) its giving of written notice of termination to the other Parties; and (ii) unless no longer required by FERC, the filing at FERC of a notice of termination for this Agreement, which filing must be accepted for filing by FERC.
- 10.3 Disposition of Facilities Upon Termination of Agreement.**
- 10.3.1 Transmission Provider and Transmission Owner Obligations.** Upon termination of this Agreement, unless otherwise agreed by the Parties in writing, Transmission Owner:
- (a) shall, prior to the construction and installation of any portion of the Network Upgrades and Direct Assignment Facilities and to the extent possible, cancel any pending orders of, or return, such equipment or material for such Network Upgrades and Direct Assignment Facilities;
 - (b) may keep in place any portion of the Network Upgrades and Direct Assignment Facilities already constructed and installed; and,
 - (c) shall perform such work as may be necessary to ensure the safety of persons and property and to preserve the integrity of the Transmission System (*e.g.*, construction demobilization to return the system to its original state, wind-up work).
- 10.3.2 Customer Obligations.** Upon billing by Transmission Owner, Customer shall reimburse Transmission Owner for any costs incurred by Transmission Owner in performance of the actions required or permitted by Article 10.3.1 and for the cost

of any Network Upgrades and Direct Assignment Facilities described in Appendix A. Transmission Owner and Transmission Provider shall use Reasonable Efforts to minimize costs and shall offset the amounts owed by any salvage value of facilities, if applicable. Customer shall pay these costs pursuant to Article 6.3 of this Agreement.

10.3.3 Pre-construction or Installation. Upon termination of this Agreement and prior to the construction and installation of any portion of the Network Upgrades and Direct Assignment Facilities, Transmission Owner may, at its option, retain any portion of such Network Upgrades and Direct Assignment Facilities not cancelled or returned in accordance with Article 10.3.1(a), in which case Transmission Owner shall be responsible for all costs associated with procuring such Network Upgrades and Direct Assignment Facilities. To the extent that Customer has already paid Transmission Owner for any or all of such costs, Transmission Owner shall transfer such amounts to the Customer. If Transmission Owner elects to not retain any portion of such facilities, Transmission Owner shall convey and make available to Customer such facilities as soon as practicable after Customer's payment for such facilities.

10.4 Survival of Rights. Termination or expiration of this Agreement shall not relieve any Party of any of its liabilities and obligations arising hereunder prior to the date termination becomes effective, and each Party may take whatever judicial or administrative actions as appear necessary or desirable to enforce its rights hereunder. The applicable provisions of this Agreement will continue in effect after expiration, or early termination hereof to the extent necessary to provide for (A) final billings, billing adjustments and other billing procedures set forth in this Agreement; (B) the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect; and (C) the confidentiality provisions set forth in Article 12.

ARTICLE 11 SUBCONTRACTORS

11.1 Subcontractors. Nothing in this Agreement shall prevent a Party from utilizing the services of subcontractors, as it deems appropriate, to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

11.1.1 Responsibility of Principal. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. In accordance with the provisions of this Agreement, each Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor it hires as if no subcontract had been made. Any applicable obligation imposed by

this Agreement upon a Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

11.1.2 No Third-Party Beneficiary. Except as may be specifically set forth to the contrary herein, no subcontractor or any other party is intended to be, nor will it be deemed to be, a third-party beneficiary of this Agreement.

11.1.3 No Limitation by Insurance. The obligations under this Article 11 will not be limited in any way by any limitation of any insurance policies or coverages, including any subcontractor's insurance.

ARTICLE 12 CONFIDENTIALITY

12.1 Confidentiality. Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by a Party to another Party prior to the execution of this Agreement.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential. The Parties shall maintain as confidential any information that is provided and identified by a Party as Critical Energy Infrastructure Information (CEII), as that term is defined in 18 C.F.R. Section 388.113(c).

Such confidentiality will be maintained in accordance with this Article 12. If requested by the receiving Party, the disclosing Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

12.1.1 Term. During the term of this Agreement, and for a period of three (3) years after the expiration or termination of this Agreement, except as otherwise provided in this Article 12 or with regard to CEII, each Party shall hold in confidence and shall not disclose to any person Confidential Information. CEII shall be treated in accordance with Commission policies and regulations.

12.1.2 Scope. Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a non-Party, who, to the knowledge of the receiving Party after due inquiry, was

under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this Agreement; or (6) is required, in accordance with Article 12.1.7 of this Agreement, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Agreement. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the receiving Party that it no longer is confidential.

12.1.3 Release of Confidential Information. No Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), subcontractors, employees, agents, consultants, or to non-Parties who may be or are considering providing financing to or equity participation with Customer, or to potential purchasers or assignees of Customer, on a need-to-know basis in connection with this Agreement, unless such person has first been advised of the confidentiality provisions of this Article 12 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 12.

12.1.4 Rights. Each Party retains all rights, title, and interest in the Confidential Information that it discloses to the receiving Party. The disclosure by a Party to the receiving Party of Confidential Information shall not be deemed a waiver by the disclosing Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

12.1.5 No Warranties. By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to another Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

12.1.6 Standard of Care. Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to another Party under this Agreement or its regulatory requirements.

12.1.7 Order of Disclosure. If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents,

administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the disclosing Party with prompt notice of such request(s) or requirement(s) so that the disclosing Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

12.1.8 Termination of Agreement. Upon termination of this Agreement for any reason, each Party shall, within ten (10) Business Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting Party) or return to the requesting Party any and all written or electronic Confidential Information received from the requesting Party, except that each Party may keep one copy for archival purposes, provided that the obligation to treat it as Confidential Information in accordance with this Article 12 shall survive such termination.

12.1.9 Remedies. The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 12. Each Party accordingly agrees that the disclosing Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving Party Breaches or threatens to Breach its obligations under this Article 12, which equitable relief shall be granted without bond or proof of damages, and the breaching Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 12, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 12.

12.1.10 Disclosure to FERC, its Staff or a State. Notwithstanding anything in this Article 12 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from a Party that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this Agreement prior to the release of the Confidential Information to FERC or its

staff. The Party shall notify the other Parties to the Agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

- 12.1.11** Subject to the exception in Article 12.1.10, any information that a disclosing Party claims is competitively sensitive, commercial or financial information under this Agreement shall not be disclosed by the receiving Party to any person not employed or retained by the receiving Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the disclosing Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Agreement or as the Regional Transmission Organization or a Local Balancing Authority operator including disclosing the Confidential Information to a regional or national reliability organization. The Party asserting confidentiality shall notify the receiving Party in writing of the information that Party claims is confidential. Prior to any disclosures of that Party's Confidential Information under this subparagraph, or if any non-Party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the Party who received the Confidential Information from the disclosing Party agrees to promptly notify the disclosing Party in writing and agrees to assert confidentiality and cooperate with the disclosing Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

ARTICLE 13 INFORMATION ACCESS AND AUDIT RIGHTS

- 13.1 Information Access.** Each Party shall make available to the other Parties information necessary to verify the costs incurred by the other Parties for which the requesting Party is responsible under this Agreement and carry out obligations and responsibilities under this Agreement, provided that the Parties shall not use such information for purposes other than those set forth in this Article 13.1 and to enforce their rights under this Agreement.
- 13.2 Audit Rights.** Subject to the requirements of confidentiality under Article 12 of this Agreement, the accounts and records related to the design, engineering, procurement, and construction of the Network Upgrades and Direct Assignment Facilities shall be subject to audit during the period of this Agreement and for a period of twenty-four (24) months following the Transmission Owner's issuance of a final invoice in accordance with Article 6.4. Customer at its expense shall have the right, during normal business hours,

and upon prior reasonable notice to the other Parties, to audit such accounts and records. Any audit authorized by this Article 13.2 shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Agreement.

ARTICLE 14 DISPUTES

- 14.1 Submission.** Any claim or dispute, which a Party may have against another Party, arising out of this Agreement shall be submitted for resolution in accordance with the dispute resolution provisions of the Tariff.
- 14.2 Rights under the Federal Power Act.** Nothing in this Article 14 shall restrict the rights of any Party to file a complaint or a petition with FERC under relevant provisions of the Federal Power Act.
- 14.3 Equitable Remedies.** Nothing in this Article shall prevent a Party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations, at any time, before a Governmental Authority.

ARTICLE 15 NOTICES

- 15.1 General.** Any notice, demand or request required or permitted to be given by a Party to another Party and any instrument required or permitted to be tendered or delivered by a Party in writing to another Party may be so given, tendered or delivered, as the case may be, by depositing the same with the United States Postal Service with postage prepaid, for transmission by certified or registered mail, addressed to the Parties, or personally delivered to the Parties, at the address set out below:

To Transmission Provider:

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

To Transmission Owner:

Minnesota Power

Vice President, Transmission & Distribution
30 West Superior Street
Duluth, MN 55802

To Customer:

Minnesota Power

Vice President, Strategy and Planning

30 West Superior Street
Duluth, MN 55802

15.2 Billings and Payments. Billings and payments shall be sent to the addresses shown in Article 15.1 unless otherwise agreed to by the Parties.

15.3 Alternative Forms of Notice. Any notice or request required or permitted to be given by a Party to another Party and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out below:

To Transmission Provider:

MISO

Voice telephone – (317) 249-5700

Facsimile telephone – (317) 249-5358

Email address – misotap@misoenergy.org or

MISOTransmissionAccessPlanning@misoenergy.org

To Transmission Owner:

Minnesota Power

Director – System Operations, Performance & Compliance

Voice telephone – (218) 723-7414

Email address – lfrisk@mnpower.com or

MPTransmissionInformationNotifications@mnpower.com

To Customer:

Minnesota Power

RTO Coordination Manager

Voice telephone – (218) 723-7466

Email address – rnyholm@mnpower.com

15.4 DUNS #. If Transmission Owner and Customer have not obtained DUNS numbers by the time this Agreement is executed, Transmission Owner and Customer will forward their DUNS numbers within five (5) Business Days of having obtained such numbers to Transmission Provider by facsimile telephone or email to the fax number or email set out below:

Transmission Owner

DUNS Number: 617232889

Customer

DUNS Number: 617232889

- 15.5 Notification of In-Service Date.** Transmission Owner will serve to Transmission Provider a copy of Appendix B as forwarded to Customer on the same day to the address shown in Article 15.1, and by facsimile telephone to the numbers set out below:

To Transmission Provider:

MISO

Facsimile telephone – (317) 249-5703

And copy to

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

ARTICLE 16
MISCELLANEOUS

- 16.1 Waiver.** Except as otherwise provided for in this Agreement, the failure of any Party to comply with any obligation, covenant, agreement, or condition herein may be waived by the Parties entitled to the benefits thereof only by a written instrument signed by the Parties granting such waiver. Any waiver at any time by a Party of its rights with respect to a Default under this Agreement, or with respect to any other matters arising in connection with this Agreement, shall not be deemed a waiver or continuing waiver with respect to any subsequent Default or other matter.
- 16.2 Governing Law.** The validity, interpretation and performance of this Agreement and each of its provisions shall be governed by the laws of the state of Minnesota where approximately 50 percent of the Network Upgrades and/or Direct Assignment Facilities referenced in Appendix A are located without regard to its conflicts of law principles.
- 16.3 Headings Not to Affect Meaning.** The descriptive headings of the various Sections and Articles of this Agreement have been inserted for convenience of reference only and shall in no way modify or restrict any of the terms and provisions hereof.
- 16.4 Amendments and Rights Under the Federal Power Act.** Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Transmission Owner and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided, however, that each Party shall have the right to protest any such filing and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 16.5 Entire Agreement.** This Agreement, together with all the exhibits, constitutes the final and entire written agreement among the Parties hereto with reference to the subject matter hereof, and is a complete and exclusive statement of those terms and conditions and supersedes all prior negotiations, representations or agreements, either written or oral, with respect to the specific subject matter of this Agreement. No change or modification as to any of the provisions hereof shall be binding on any Party unless reduced to writing and approved by the duly authorized officer or agent of Customer, Transmission Owner, and Transmission Provider.
- 16.6 Counterparts.** This Agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument.

- 16.7 Binding Effect.** This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the Parties hereto and their successors and assigns. No person or party shall have any rights, benefits or interests, direct or indirect, arising from this Agreement except the Parties hereto, their successors and authorized assigns. The Parties expressly disclaim any intent to create any rights in any person or party as a third party beneficiary to this Agreement.
- 16.8 Conflicts.** In the event of a conflict between the body of this Agreement and any attachment, appendix or exhibit hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed to be the final intent of the Parties.
- 16.9 Regulatory Requirements.** Each Party's obligations under this Agreement shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek these other approvals as soon as is reasonably practicable.

ARTICLE 17 REPRESENTATIONS AND WARRANTIES

- 17.1 General.** Each Party hereby represents, warrants and covenants as follows with these representations, warranties, and covenants effective as to the Party during the full time this Agreement is effective:
- 17.1.1. Good Standing.** Such Party is duly organized or formed, as applicable, validity existing and in good standing under the laws of its state of organization or formation, and is in good standing under the laws of the respective state(s) of its organization as stated in the preamble of this Agreement.
- 17.1.2 Authority.** Such Party has the right, power and authority to enter into this Agreement, to become a party hereto and to perform its obligations hereunder, and this Agreement is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms.
- 17.1.3 No Conflict.** The execution, delivery and performance of this Agreement does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit or order or material agreement or instrument applicable to or binding upon such Party or any of its assets.
- 17.1.4 Consent and Approval.** That it has sought or obtained, or, in accordance with this Agreement will seek or obtain, each consent, approval, authorization or order of, or acceptance of a filing with, or notice to, any Governmental Authority with jurisdiction concerning this Agreement, in connection with the execution, delivery and performance of this Agreement.

17.1.5 Solvency. That such Party is financially solvent.

IN WITNESS WHEREOF, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original Agreement among the Parties.

Transmission Provider
Midcontinent Independent System Operator, Inc.

By: _____
Name: _____
Title: _____

Transmission Owner
Minnesota Power

By: _____
Name: _____
Title: _____

Customer
Minnesota Power

By: _____
Name: _____
Title: _____

Square Butte 91365462 FCA

Facilities Construction Agreement
APPENDIX A
NETWORK UPGRADES, COST ESTIMATES AND RESPONSIBILITY,
TRANSMISSION CREDITS, CONSTRUCTION SCHEDULE AND MONTHLY
PAYMENT SCHEDULE

This Appendix A is a part of the Facilities Construction Agreement between Customer, Transmission Owner, and Transmission Provider. Terms used in this Appendix A with initial capitalization not defined in this Appendix A shall have the meaning set out in the Agreement

The upgrades required to be made by the Transmission Owner under this Agreement because of the Transmission Service Request include Direct Assignment Facilities and Network Upgrades, as defined in Module B and Attachment N of the Tariff. The Network Upgrades under this Agreement are governed by Module B and Attachment N of the Tariff.

1.1 Network Upgrades to be installed by Transmission Owner.

1.1.1 Transmission Owner Substation Network Upgrades:

To modernize the terminals of the existing Square Butte HVDC Line and implement the latest voltage source converter ("VSC") HVDC technology, new buildings and electrical infrastructure need to be constructed on a new site near the existing Center and Arrowhead HVDC terminals. Due to the specialized nature of the technology, the new VSC HVDC converter stations will be delivered as turnkey projects by the original equipment manufacturer ("OEM"). The scope of supply for the HVDC OEM will include the relocated converter stations, including valves, converter transformers, smoothing reactors, DC equipment, AC circuit breakers, control & protection, and all associated facilities. The new VSC HVDC converter stations will be designed to interconnect at 345 kV on the AC system side. To accommodate interconnection of the new VSC HVDC converter stations, new AC interconnection facilities will be constructed including new 345/230 kV substations, 345 kV transmission lines, and 230 kV transmission lines. New AC interconnection facilities are listed below.

In Minnesota:

- Construction of a new St. Louis County 345/230 kV Substation located less than one mile west of the Arrowhead Substation
- Construction of a new 345 kV transmission line from the HVDC converter station to the St. Louis County Substation
- Construction of two parallel 230 kV lines from the St. Louis County Substation to the existing Arrowhead Substation
- At Arrowhead Substation, the two new 230 kV lines will be interconnected to the existing HVDC Pole 1 and Pole 2 bus positions, which will be rebuilt with higher-capacity bus and electrical equipment to accommodate the increased HVDC capacity.
- A short portion of the existing ± 250 kV HVDC Line in Minnesota will be reconfigured to terminate at the new HVDC converter station.

In North Dakota:

- Establishment of a new Nelson Lake 230 kV Switching Station to tie together the existing Minnesota Power Square Butte East – Bison 230 kV Line with the existing Great River Energy Square Butte – Stanton 230 kV Line.
- Construction of a second 230 kV circuit between Nelson Lake and Square Butte East using existing double-circuit capable structures.
- Addition of a 230 kV breaker at the Square Butte East Substation to accommodate the second Nelson Lake – Square Butte East 230 kV circuit
- Expansion of the Nelson Lake 230 kV Switching Station to add a 345/230 kV transformer and 345 kV line entrance.
- Construction of a new 345 kV line from Nelson Lake to the new HVDC converter station
- Construction of a new 345 kV substation at the new HVDC converter station site
- A portion of the existing ± 250 kV HVDC Line in North Dakota will need to be reconfigured to terminate at the new HVDC converter station.

Additional equipment upgrades may be deemed necessary by the Transmission Owner or the HVDC OEM during the specification, detailed design, and engineering phase of the project.

1.1.2 Transmission Owner Transmission Line Network Upgrades:

The upgrades necessary to increase the capacity of the HVDC transmission line from 550 MW to 900 MW are likely to consist primarily of replacing existing structures with taller structures to increase conductor-to-ground clearance at the higher operating temperature. A short segment of the transmission line with a smaller conductor will need to be rebuilt with a larger conductor.

1.1.3 Transmission Owner Transmission Line Permitting:

Due to the relocation of the converter stations and the length of new AC interconnection facilities required to re-connect to the existing system, the HVDC Modernization Project will require state-level permits in both Minnesota and North Dakota. In Minnesota, a Certificate of Need and Route Permit will be required from the State of Minnesota. In North Dakota, a Certificate of Corridor Compatibility and a Route Permit will be required. Minnesota Power will obtain the necessary permits in both states

1.1.4 Cost Estimates and Responsibility.

The estimated cost for these network upgrades is \$878,000,000. These costs of upgrades are shared by the Transmission Owner and Customer. **The estimated cost from Customer with Transmission Service Request 91365462 to Transmission Owner is \$167,000,000.** The Customer(s) hereby acknowledge and agree that the costs, expenses, and charges set out in Table 1 are only an estimate and that the Customer(s) shall pay the Transmission Owner for their allocated amounts for all costs, expenses, and charges. Updated estimates will be provided annually by the Transmission Owners on request from the Customer.

This is detailed below in Table 1 and is subject to applicable Tax Gross.

Table 1: Network Upgrades Cost Details

HVDC 900 MW Upgrade	Total Estimated Cost	Cost Assigned to Transmission Service Requests #91365462
Converter Station Replacement	\$705,000,000	\$123,000,000
Interconnections to AC System	\$115,000,000	\$11,000,000
Transmission Line Modification	\$58,000,000	\$33,000,000
Internal & Professional Services	Included	Included
Total (in 2022 dollars)	\$878,000,000	\$167,000,000

1.2.4.1 Major Material List of Transmission Owner's Network Upgrades See Exhibit C2

1.2 Direct Assignment Facilities - None.

1.3 First Equipment Order (including permitting). See Table 2 below.

1.3.1. Permitting And Land Rights – Transmission Owner Network Upgrades See Section 1.8.

1.4 Transmission Credits. See Article 3.2.2 of the Agreement.

1.5 Construction Schedule. Where applicable, construction of the Transmission Owner Network Upgrades and Special Protection Facilities is scheduled as follows and will be periodically updated as necessary:

Table 2: Transmission Owner Construction Activities

Milestone Number	Milestone Description	Start Date
1.	Facilities Construction Agreement Executed.	Aug/Sep-2023
2.	Minnesota Certificate of Need & Route Permit Applications Filed.	Jun-2023
3.	North Dakota Corridor Compatibility and Route Permit Applications Filed.	Oct-2023

4.	Begin Front End Engineering & Design with HVDC OEM.	Jan-2024
5.	Major Permits Received in Minnesota & North Dakota.	Jul-2024
6.	Order Long Leadtime Equipment for AC Substations.	Nov-2024
7.	Clearing Begins.	Jan-2025
8.	Construction of AC Interconnection Facilities Begins.	May-2025
9.	Construction of HVDC Transmission Line Upgrades Begins.	Aug-2025
10.	Receive Firm Proposal from HVDC OEM.	Aug-2026
11.	Execute Firm EPC Contract with HVDC OEM.	Oct-2026
12.	Construction of HVDC Converter Stations Begins.	Oct-2027
13.	In-Service Date.	Apr-2030

Note:

The construction schedule assumes that the Transmission Owner has obtained final authorizations and security from Customer and all necessary permits from Governmental Authorities as necessary prerequisites to commence construction of any of the Network Upgrades and Special Protection Facilities.

1.6 Payment Schedule.

1.6.1 Timing of and Adjustments to Customer's Payments and Security.

1.6.2 Monthly Payment Schedule. Following approval of the state permits set forth in Section 1.2.3, in accordance with Attachment N, the Customer will begin paying a monthly dollar assessment. Monthly payments by the Customer will continue until Transmission Owner has recovered the cost of all Directly Assigned Facilities and Transmission Owner Network Upgrades.

A Customer that fails to make payments when due will be given a Breach notice. Unless the Breach is cured in accordance with Article 9 of this agreement, the Transmission Owner is relieved from performing under this Agreement. Failure by any Customer to comply with Article 9.2.2(A) or 9.2.2(B) relative to such Breach may, pursuant to Article 9.2.2 of the Agreement, result in termination of the Agreement as to that Customer.

1.6.3 Security Amount.

1.6.4.1 Except as set forth under Section 1.7.3.1, Security shall be composed of either a Guaranty, a letter of credit as described in Section 1.7.4 or a cash escrow as described in Section 1.7.4.2, at Customer's option, or a combination of these options as long as the total amount of Security is

not less than the amount then required. Notwithstanding the foregoing, the Guaranty amount may not comprise more than fifty percent (50%) of the overall total amount of Security, provided that if Customer has delivered a notice reducing the amount of Security required pursuant to Section 1.7.7, then the Guaranty may comprise up to 100% of the overall total amount of Security at the Guarantor's option. Customer shall be (i) permitted from time to time to change the form and combination of such posted Security provided that no Event of Default with respect to Customer then exists so long as Transmission Owner is provided timely Notice of the change, and (ii) required, if Customer has provided Security, or any portion thereof, in the form of a Guaranty, if the entity or entities providing a Guaranty no longer qualify as a Guarantor, Customer shall within ten (10) Business Days of Transmission Owner's Notice to do so (A) replace such Guaranty with either a Guaranty from an entity or entities meeting the requirements as a Guarantor and/or (B) deliver a letter of credit or performance bond as described in Section 1.7.4.3 and/or (C) supply a cash escrow as described in Section 1.7.4.2, at Customer's option, in any case, in the aggregate amount of the then applicable Security, less the aggregate amount of any prior draws on such Security. Upon receipt of such substitute Security, any such Guaranty shall be deemed cancelled.

- 1.6.4.2** If Customer elects to utilize a cash escrow as Security, it shall establish an interest-bearing escrow account with a commercial bank or other mutually acceptable escrow agent as escrow agent, and the account shall name Transmission Owner as the beneficiary for the duration of the existence of the escrow account. The escrow account shall be in United States currency, and funds in the account may be invested in a money-market fund, short-term treasury obligations, investment-grade commercial paper or other investment-grade investments with maturities of three (3) months or less. All income and interest earned on the accounts held in the escrow account shall accrue for the benefit of the Customer, and Customer may withdraw the income and interest earned at any time as long as the balance in the account after the withdrawal meets the minimum funding requirements of this Section 1.7.4.2. The escrow agreement shall require the escrow agent to notify Transmission Owner of the balance in the escrow account from time to time. The escrow agreement governing the account shall include terms that (i) prohibit termination of the account prior to establishment of alternative Security that satisfies all the requirements of this FCA; (ii) require Notice of no less than sixty (60) Days by the escrow agent to Transmission Owner prior to any termination of the account; and (iii) allow Transmission Owner to draw the entire balance in the escrow account up to the amount of the Security if Security has not been replaced in accordance with this Agreement at least five (5) Business Days prior to the expiration or termination of the escrow account, and

Transmission Owner shall hold such amounts in lieu of escrow until such time as the Security has been replaced, at which time the funds shall be returned to Customer. At the end of the Term, any balance remaining in the escrow account shall be returned or released to Customer.

- 1.6.4.3** In conjunction with or instead of a Guaranty or cash security as provided in Section 1.7.4.2, Customer may provide Security in the form of an irrevocable letter of credit in a commercially reasonable form and otherwise in compliance with the requirements of this Section 1.7.4 and in form and substance acceptable to the Issuer (as defined below) (the “LOC”). The LOC shall be issued by a state or federally chartered commercial bank which issues similar letters of credit in the ordinary course of its business and that (i) has an unsecured bond rating or long-term senior unsecured debt rating equivalent to A- or better as determined by at least two (2) rating agencies, one of which must be either S&P or Moody’s, or, if these are not available, CAMEL ratings from the FDIC or OCC used in the banking industry no less than a 3 and (ii) has a minimum of One Hundred Million Dollars (\$100,000,000) in capital (the “Issuer”). The LOC must: (i) be issued for a minimum term of three hundred and sixty (360) Days, and, where permitted by the Issuer, shall be automatically extended for a period of one (1) year on each successive expiration date unless, at least ninety (90) Days before the current expiration date, the Issuer notifies Customer and Transmission Owner by certified mail that the Issuer has decided not to extend the letter of credit; (ii) provide that draws shall be payable upon presentation of a sight draft executed by an officer of Transmission Owner substantially in the form approved by Transmission Owner; and (iii) expressly permit partial and multiple draws. Any unused portion of the letter of credit shall be available, regardless of renewal, through the then current expiration date. Customer may replace the letter of credit with another Issuer which includes a provision for at least ninety (90) Days advance Notice to Transmission Owner and shall cause the renewal or extension of the LOC meeting the criteria set forth in this Section 1.7.4.3 within thirty (30) days prior to the expiration or cancellation of the then current LOC, and failure to do so shall authorize Transmission Owner to draw immediately upon the then current LOC. Transmission Owner shall then, at Customer’s cost and with Customer’s funds, place the amounts so drawn in an interest bearing escrow account in accordance with Section 1.7.4.2 above, until and unless Customer provides a substitute form of such security meeting the requirements of this Section 1.7.4. Security in the form of an irrevocable standby letter of credit shall be governed by the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Brochure No. 500 or as otherwise required by the Issuer of the LOC.

- 1.6.4.4** Customer shall provide Guarantor's annual audited financial statements to Transmission Owner within one hundred twenty (120) days after the end of each calendar year. Transmission Owner shall have the right to monitor the financial condition of Customer, Guarantor, and the Issuer to the extent set forth herein, and Customer shall provide written Notice to Transmission Owner within five (5) Business Days of becoming aware that (i) the Issuer does not satisfy the requirements of the second sentence of Section 1.7.4.3, (ii) ALLETE, Inc. or an affiliate is the Guarantor, such entity does not, collectively, have a tangible net worth of at least Five Hundred Million Dollars (\$500,000,000), or (iii) if the Guarantor is not ALLETE, Inc. or an affiliate such Person does not have an Investment Grade Credit Rating, and in such event Customer shall provide alternative Security as soon as practicable that complies with this Section 1.7.4.4 and in no event later than thirty (30) Days after becoming aware of the Issuer's or a Guarantor's failure to meet the requirements of this Section 1.7.
- 1.6.5** Release of Security. Promptly following the termination of this FCA and the completion of all Customer's obligations under this FCA, Transmission Owner shall release the Security (including any accumulated interest, if applicable) to Customer.
- 1.6.6** Permitted Draws; Effects of Draws. In addition to any other remedy available to it, Transmission Owner may, before or after termination of this FCA, draw against the Security to satisfy any undisputed obligations of Customer to Transmission Owner arising under this Agreement (including, without limitation, the payment of Availability Liquidated Damages, if any, or any indemnification obligations) which Customer has not otherwise paid or performed when due, after any required Notice and opportunity to cure. If Transmission Owner draws against the Security and Customer subsequently disputes Transmission Owner's entitlement to any portion of the funds drawn, neither Transmission Owner's draw, the Issuer's payment under the LOC, nor Customer's replenishment of the Security or reimbursement of the Issuer or escrow agent shall constitute a waiver of Customer's rights to seek recovery of any amount disputed. To the extent Transmission Owner elects to draw upon the Security to satisfy obligations that otherwise constitute, or might constitute, an Event of Default by Customer and entitle Transmission Owner to terminate this Agreement, Transmission Owner's draw against the Security shall be deemed a cure of such Event of Default and shall waive Transmission Owner's right to terminate in that respect. With respect to any Event of Default by Seller that remains uncured and which could be cured by payment of an undisputed amount to Transmission Owner, Transmission Owner shall first draw upon the Security to cure the Event of Default, and only if such Security is insufficient to cure the Event of Default shall any right of termination which Transmission Owner may otherwise have be exercised by Transmission Owner.

1.6.7 Reduction in Security. Transmission Owner may, by Notice from time to time to Customer, waive or reduce the amount of security required to be posted hereunder in consideration of an Affiliate of Transmission Owner having a minority ownership interest in Customer.

1.7 Permits, Licenses and Authorizations.

Transmission Owner will be responsible for all permits, licenses and authorizations.

Facilities Construction Agreement
APPENDIX B
NOTIFICATION OF COMPLETED CONSTRUCTION

This Appendix B is a part of the Facilities Construction Agreement among Customer, Transmission Owner, and Transmission Provider. Where applicable, when Transmission Owner has completed construction of the Transmission Owner Network Upgrades and/or Direct Assignment Facilities, Transmission Owner shall send notice to Customer and Transmission Provider, in substantially the form following:

[Date]

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

Customer Address

Phone:

Fax:

Email:

Re: Completion of Network Upgrade/Direct Assignment Facilities

Dear [Name or Title]:

This letter is sent pursuant to the Facilities Construction Agreement among [Transmission Owner], [Customer], and MISO, dated _____, 20__.

On [Date], Transmission Owner completed to its satisfaction all work on the Network Upgrades and/or Direct Assignment Facilities required to facilitate the safe and reliable operation of Customer's Facility. Transmission Owner confirms that the Network Upgrade and/or Direct Assignment Facilities are in place.

Thank you.

[Signature]

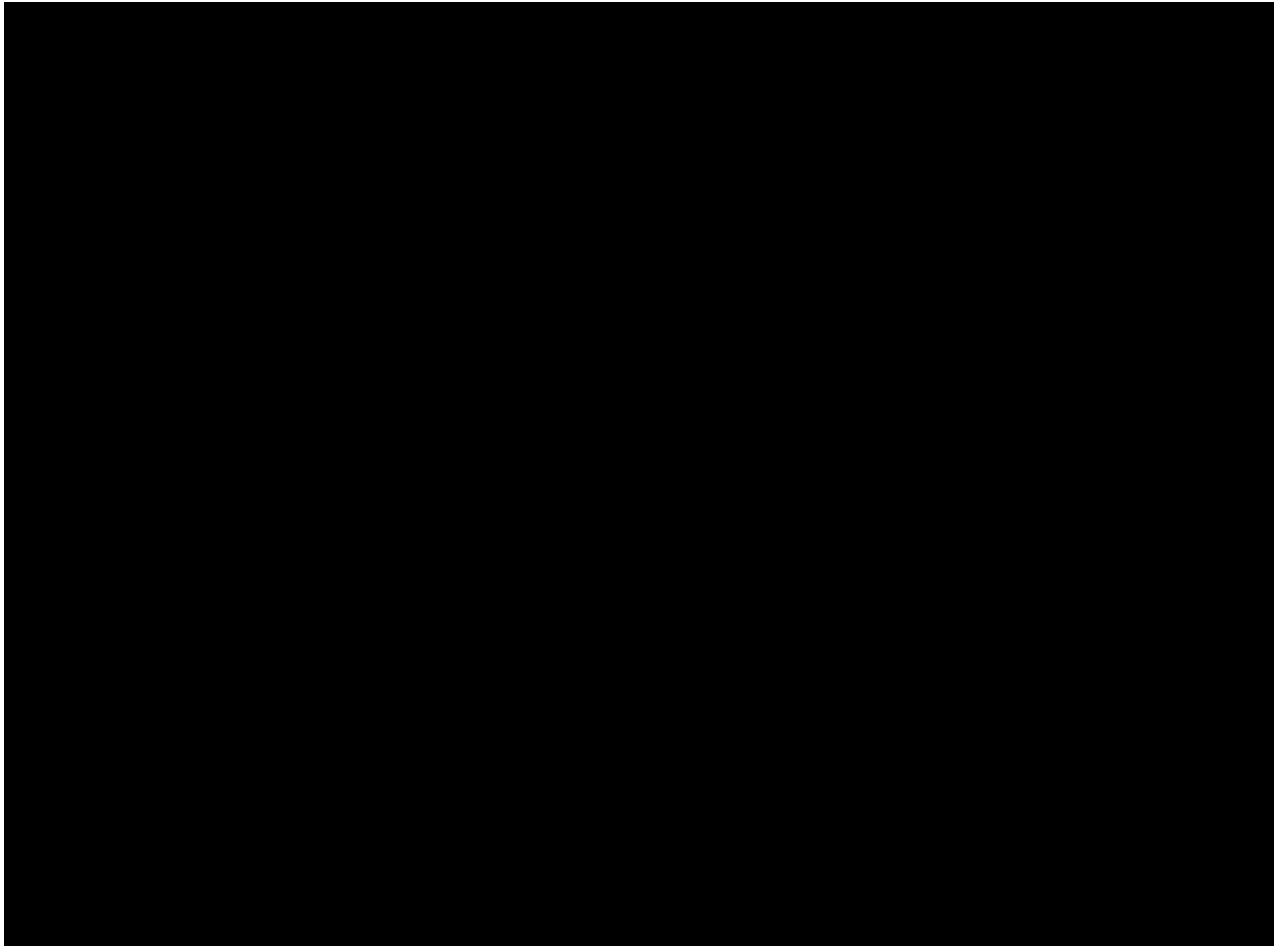
[Transmission Owner Representative]

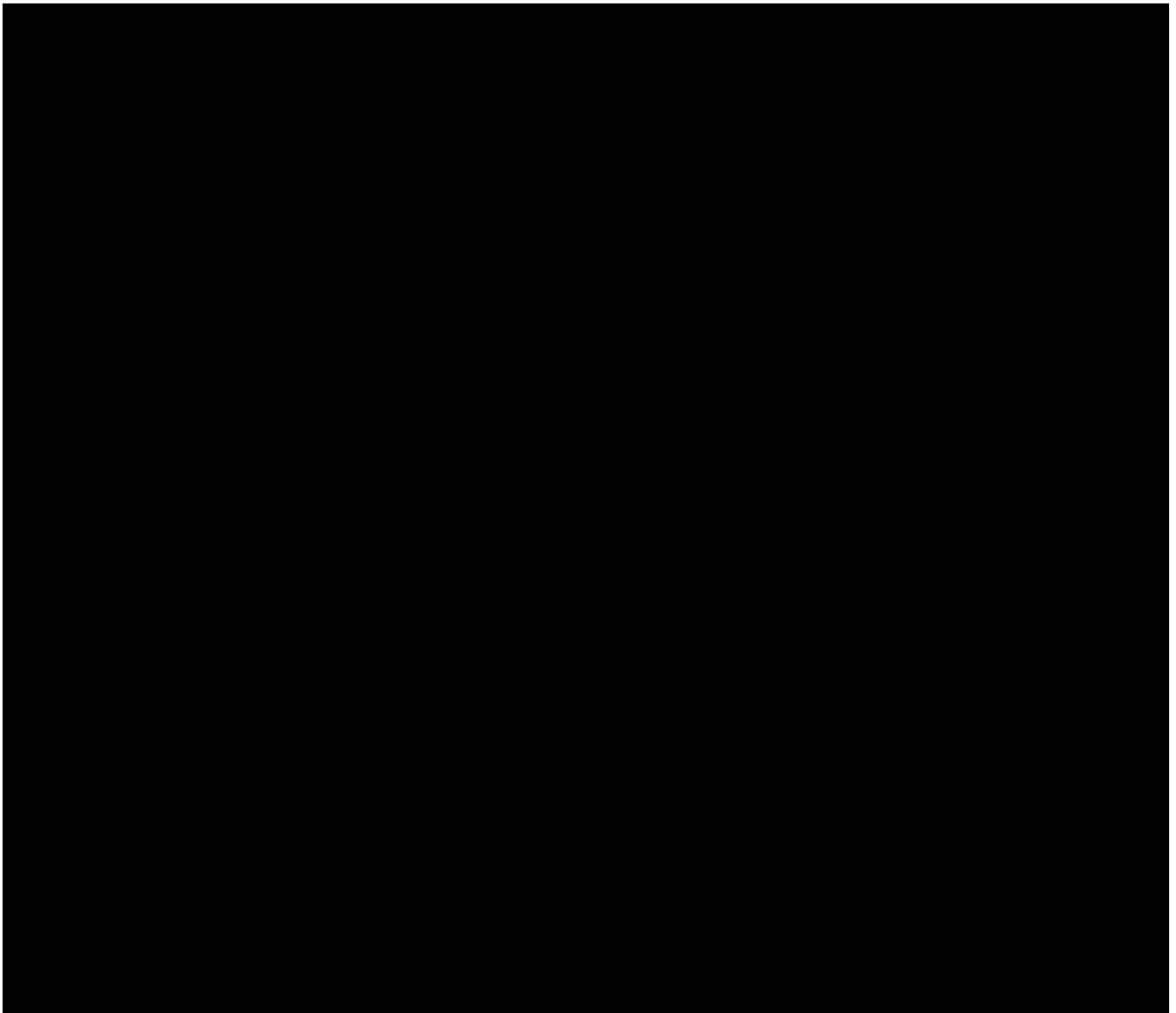
Facilities Construction Agreement
APPENDIX C Exhibits

This Appendix C is a part of the Facilities Construction Agreement among Customers,
Transmission Owner, and Transmission Provider.

Exhibit C1.
Transmission Owner Network Upgrade One Line
CUI//CEII MATERIAL – DO NOT RELEASE

[HIGHLY CONFIDENTIAL TRADE SECRET DATA BEGINS





HIGHLY CONFIDENTIAL TRADE SECRET DATA ENDS]

Exhibit C2 Estimated Cost of Transmission line and/or Substation Network Upgrades and Direct Assignment Facilities

The total estimated cost for the Network Upgrades for HVDC Converter Station, connections to AC System, Transmission Line Modifications is \$878,000,000.

The details of the cost for customer with Transmission Service Request #91365462 is shown below in Table 1, Table 2, Table 3

Detailed Cost Estimate of Facilities to be Constructed by Transmission Owner

The anticipated costs of modernizing and upgrading the HVDC converter stations are shown in Table 1. The initial estimated converter station replacement base cost was provided by the HVDC OEM. If design assumptions change significantly during the development of the project, the base cost shown in Table 1 may change.

Table 1: Converter Station Replacement Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests ##91365462
Converter Station Base Cost	\$705,000,000	\$123,000,000
Internal & Professional Services	(Included)	(Included)
Contingency - Converter Station	(Included)	(Included)
AFUDC - Converter Station	(Included)	(Included)
Total (in 2022dollars)	\$705,000,000	\$123,000,000

The anticipated costs of AC Interconnection Facilities necessary to connect the relocated VSC HVDC converter stations to the existing AC transmission system are shown in Table 2. If design assumptions change significantly during the development of the project, the base costs shown in Table 2 may change.

Table 2: AC Interconnection Facilities Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests #91365462
Minnesota AC Interconnections	\$55,000,000	\$5,000,000
North Dakota AC Interconnections	\$40,000,000	\$3,000,000
Nelson Lake 230 kV Substation	\$20,000,000	\$3,000,000
Total (in 2022dollars)	\$115,000,000	\$11,000,000

Table 3: Transmission Line Modifications Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests #91365462
HVDC T-Line 900 MW Upgrade	\$58,000,000	\$33,000,000
HVDC T-Line AFUDC	(Included)	(Included)
HVDC T-Line Contingency	(Included)	(Included)
Total (in 2022dollars)	\$58,000,000	\$33,000,000

The anticipated costs of Transmission Line Modifications are shown in Table 3. The upgrade cost estimate is based on preliminary transmission structural engineering evaluations. If additional HVDC transmission line modifications or scope changes are found to be necessary during the development of the project, the costs presented in Table 3 may be impacted.



Madison Pitts
Associate Corporate Counsel
Direct Dial: 317-316-7911
Email: mpitts@misoenergy.org

March 5, 2024

VIA ELECTRONIC FILING

The Honorable Debbie-Anne Reese
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Midcontinent Independent System Operator, Inc.
FERC Docket No. ER24-____-000

Dear Secretary Reese:

The Midcontinent Independent System Operator, Inc. ("MISO") hereby submits¹ these Facilities Construction Agreements ("FCAs") among the merchant function of Minnesota Power, a division of ALLETE, INC., a corporation organized and existing under the laws of the State of Minnesota ("Customer"), the transmission function of Minnesota Power, a division of ALLETE, INC., a corporation organized under the laws of the State of Minnesota ("Transmission Owner") ("Transmission Owner"), and MISO, a non-profit, non-stock corporation organized and existing under the laws of the State of Delaware, (collectively, the "Parties"). MISO has designated the FCAs as Original Service Agreement Nos. 4208 and 4209 under MISO's Tariff.² The Parties request waiver of the Commission's 60-day prior notice requirement and request an effective date of February 28, 2024, as discussed below.

I. OVERVIEW OF FILING

The FCAs provides for the construction of upgrades on an affected system to support a Transmission Service Request ("TSR") pursuant to Attachment N of the Tariff.³ MISO does not have a *pro forma* facilities construction agreement for upgrades built to accommodate a TSR. Accordingly, the FCA is based-upon, but differs from, the *pro forma* generator interconnection facilities construction agreement accepted by the Commission for the construction of upgrades on affected systems to support generator interconnections pursuant to the Generator Interconnection

¹ See Section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824d, and Section 35.12 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") regulations, 18 C.F.R. § 35.12 (2022).

² MISO's FERC Electric Tariff, Fifth Revised Vol. No. 1 ("Tariff").

³ See Attachment N, Recovery of Costs with New Facilities.

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Procedures (“GIP”) in Attachment X of the Tariff.⁴ A redline comparison of the FCA and the *pro forma* FCA are attached hereto. MISO used the Attachment X *pro forma* FCA as a base document because it has been accepted for use with generator interconnection upgrades under Attachment X of the Tariff. However, because the upgrades for F109 will be built for a TSR, pursuant to Attachment N, the differences shown in the redline should not be reviewed as deviations from the Attachment X *pro forma* FCA but are provided solely for the Commission’s convenience.⁵ These differences are discussed in Part II, below.

A. Relationship between Minnesota Power and ALLETE

ALLETE is an energy services company headquartered in Duluth, Minnesota. Through its operating division, Minnesota Power, ALLETE generates, transmits and distributes electricity in a 26,000-square-mile region of northern Minnesota, servicing 150,000 retail customers and providing wholesale electric service to 14 municipalities. Minnesota Power has approximately 2,500 MW of electric generation capacity through its ownership of generation facilities and third-party Power Purchase Agreements (“PPAs”). Minnesota Power owns 11 hydroelectric generating stations totaling approximately 114 MW throughout northern and central Minnesota. Minnesota Power currently owns and operates approximately 506 MW of wind generation located in northern Minnesota and North Dakota. The Commission originally granted ALLETE market-based rate authority on July 15, 1996, in Docket No. ER96-1823-000.⁶

Minnesota Power owns electric transmission and distribution lines of 500-kilovolt (“kV”) (232 miles), 345-kV (241 miles), 250-kV (466 miles), 230-kV (715 miles), 161-kV (43 miles), 138-kV (130 miles), 115-kV (1,248 miles), and less than 115-kV (6,390 miles). Minnesota Power owns and operates 159 substations with a total capacity of 10,086 megavolt amperes. All of Minnesota Power’s alternating current (“AC”) facilities are located in Northern Minnesota. In 2001, Minnesota Power transferred functional control of its AC transmission facilities to MISO for administration pursuant to the MISO Open Access Transmission Tariff.

ALLETE is a member of MISO and has transferred functional control of its alternating-current transmission facilities to MISO for administration pursuant to MISO’s Tariff.⁷ ALLETE serves as the Local Balancing Authority (“LBA”) for the Local Balancing Authority Area

⁴ See Attachment X, Appendix 8 *pro forma* Facilities Construction Agreement.

⁵ This is not a case-specific deviation from a *pro forma* agreement and need not meet the standards used to review such filings. See *Midwest Independent Transmission System Operator, Inc.*, 112 FERC ¶ 61,067 at P 9-10 (2005) (finding that non-conforming provisions in particular interconnection agreements that deviate from the related Commission-approved *pro forma* agreement need to be justified as operationally necessary by the unique circumstances of a given situation).

⁶ *Minn. Power & Light Co.*, 76 FERC ¶ 61,033 (1996); *ALLETE, Inc.*, Letter Order, Docket No. ER10-2819-000 (Dec. 9, 2010); *ALLETE, Inc.*, Letter Order, Docket No. ER10-2819-002 (June 6, 2014) (accepting change in status); *ALLETE, Inc.*, Letter Order, Docket No. ER10-2819-003 (Mar. 31, 2017) (accepting updated market power analysis and continuing market-based rate authorization).

⁷ *Minnesota Power, Inc. and Superior Water, Light and Power Co.*, 96 FERC ¶ 61,153 (2001).

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(“LBAA”) in which its transmission facilities are located. As the transmission-owner and LBA, ALLETE physically operates transmission facilities in its LBAA, subject to MISO’s direction. ALLETE’s LBA-related responsibilities include SCADA services.⁸

B. Square Butte HVDC System

The Square Butte HVDC System has been delivering energy from the Center Converter Station in Center, North Dakota to the Arrowhead Converter Station in Duluth, Minnesota for over 45 years. These converter stations are connected by a 465-mile HVDC transmission line operating at ± 250 kV. This HVDC line is capable of transferring up to 550 MW (1100 Amps) during bipole operation and up to 275 MW (1100 Amps) during single-pole operation utilizing metallic return or – in case of emergency – ground return.

Much of the existing equipment associated with the Square Butte HVDC converter stations is past its design life and Minnesota Power is beginning to see an impact on the reliability of the facility. Because of this impact, Minnesota Power had previously identified a need to modernize the Square Butte HVDC converter stations. This project has been reported for several years under MISO MTEP Project #4295.

The purpose of these FCAs is to identify the scope, estimated cost, and timing of upgrades necessary on the existing Square Butte HVDC System to accommodate MISO Projects F118, which is associated with Transmission Service Requests #90481026 & 95418167 (Project A727) and F119 associated with Transmission Service Request #91365462 (Project A746). To facilitate these Transmission Service Requests (TSRs), the existing Square Butte HVDC System would need to be modernized and its capacity would need to be increased by up to 350 MW to a total capability of 900 MW (the “HVDC Upgrade Project”). While FCAs are generally used for Network Upgrades associated with Generator Interconnection, the Commission has previously approved a construction agreement associated with Network Upgrades on the transmission system.⁹

⁸ See Framework For Operational Responsibilities, Appendix E, Agreement of Transmission Facilities Owners to Organize the Midcontinent Independent System Operator, Inc., A Delaware Non-Stock Corporation, (“MISO Transmission Owners’ Agreement”) Pursuant to the terms of the MISO Transmission Owners’ Agreement, LBAs are required to operate their LBAs for local generation control, and the LBAs are also responsible for the balancing authority area functions assigned to them by the Agreement Between Midwest ISO and Midwest ISO Balancing Authorities Relating to Implementation of TEMT (Open Access Transmission and Energy Markets Tariff), as amended on March 14, 2008. As the operator of the ALLETE LBAA, ALLETE actually operates the transmission facilities physically located within its LBAA, including third-parties’ facilities that interconnect with ALLETE’s transmission system. ALLETE notes that its LBAA includes Minnesota Power’s transmission facilities in Minnesota and Superior Water Light & Power’s (“Superior”) transmission facilities in Wisconsin. Superior is a wholly-owned subsidiary of ALLETE.

⁹ *Midcontinent Indep. Sys. Operator, Inc.*, ER18-2424 (October 31, 2018) (Letter Order accepting MISO’s filing of a Construction and Payment Agreement for Network Upgrades on the transmission system) and *Midcontinent Indep. Sys. Operator, Inc.*, ER16-149-001 (December 21, 2015) (Letter order accepting an FCA for a TSR).

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II. REVISIONS TO APPLY THE RELEVANT PROVISIONS FORM THE *PRO FORMA* FACILITITES CONSTRUCTION AGREEMENT TO AN FCA FOR A TSR

Recitals

MISO updated these paragraphs to reflect the specific TSRs at issue here and to reflect that this agreement is pursuant to Tariff Attachment N, and not Attachment X.

Definitions Sections:

MISO updated the numbering of various Articles to reflect deletions.

[Former Article 1.6] (“Commercial Operation”) – MISO deleted this definition because it is not relevant to TSRs.

[Former Article 1.7] (“Commercial Operation Date”) – MISO deleted this definition because it is not relevant to TSRs.

Article 1.9 (“Direct Assignment Facilities”) MISO added this definition from the Tariff to track the use of the terms “Network Upgrades” and “Direct Assignment Facilities” in Attachment N.¹⁰ The term replaces the term “System Protection Facilities” that was used in the *pro forma* facilities construction agreement for generator interconnections under Attachment X.

[Former Article 1.14] (“Generator Interconnection Procedures (GIP)”) – MISO deleted this definition of the GIP in Attachment X because the FCA relates to upgrades under Attachment N.

[Former Article 1.16] (“In-Service Date”) – MISO deleted this definition because there is no In-Service Date addressed in this FCA.

[Former Article 1.18] (“Interconnection Agreement”) – MISO deleted this definition because there is no interconnection agreement related to the transmission service request addressed in this FCA.

Article 1.20 (“Network Upgrades”) – MISO updated this definition to include the language used in Module A of the Tariff, rather than a definition based on the Point of Interconnection of a Generating Facility that does not apply to this FCA. Use of the Module A definition will avoid confusion as to the application of these provisions. Specifically, the definition in the *pro forma* facilities construction agreement tracked the definition in MISO’s *pro forma* Generator Interconnection Agreement (“GIA”) in Attachment X of the Tariff. Attachment X addresses the interconnection of new Generating Facilities and relates the term “Network Upgrade” to the Point of Interconnection for a related Generating Facility.

¹⁰ See Attachment N, Recovery of Costs with New Facilities.

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In contrast, for this FCA a TSR, rather than a Generating Facility, triggers the need for the Network Upgrades. Accordingly, the Network Upgrades built under this agreement will be subject to cost allocation under Attachment N of the Tariff. This revision clarifies that facilities will be built at the expense of the Transmission Customer in order to accommodate requests for Firm Point-to-Point or Network Integration Transmission Service, or the new designation of a Network Resource.

Article 1.24 (“Transmission Service”) – MISO added this definition to track the language used in Module A of the Tariff so that it is consistent with the use of Transmission Service in Attachment N of the Tariff.¹¹ MISO requests that the Commission accept this definition in order to avoid confusion as to the application of these provisions by keeping the terms of this FCA consistent with their use in Attachment N.

[Former Article 1.24] (“Shared Network Upgrades”) – MISO deleted this definition because the term does not appear in the FCA.

Global Revisions to the Body of the FCA for TSRs

MISO made certain revisions throughout the entire FCA, specifically: 1) replaced “Interconnection Customer” with “Transmission Customer” to reflect the language used in Attachment N of the Tariff; 2) deleted references to generating facilities,¹² and 3) replaced “System Protection Facilities” with “Direct Assignment Facilities.” These revisions appropriately update the FCA because a TSR, rather than the interconnection of a new Generating Facility, has caused the need for the construction of Network Upgrades.¹³

Specific Revisions to the Body of FCA for TSRs

Article 2.2.1 (“General”) – MISO deleted the language regarding repayment by the Transmission Owner to refund the Transmission Customer because it is inconsistent with the reimbursement provisions in Attachment N of the Tariff. MISO also deleted the references to the commercial operation date for the facility and the in service date of the network upgrades since they are not relevant here.

Article 3.1.2.3 (“Termination in the Event of a Material Modification”) – MISO replaced the reference to Commercial Operation Date with In-Service Date because a Commercial Operation Date is not relevant to TSRs.

¹¹ See 1.T Transmission Service: (defining “Transmission Service” as “Point-To-Point Transmission Service provided under Module B of this Tariff on a firm and non-firm basis, including HVDC Service, and the Network Integration Transmission Service under Module B of this Tariff.”) (emphasis added). The FCA was negotiated prior to the addition of the concept of “HVDC Service” into this definition and HVDC Service is not relevant to this FCA. Therefore, the underlined text above referencing HVDC Service is not included in the definition in the FCA.

¹² MISO deleted references to generating facilities in the Recitals and Sections 1.2 and 1.16.

¹³ As noted in Section 3.1.2 of the FCA, there is a related new Generating Facility that is the cause of the TSR. However, the TSR, and not the interconnection of the underlying Generating Facility, drives the need for these upgrades. Accordingly, these upgrades are processed under Attachment N.

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III. DOCUMENTS SUBMITTED IN THIS FILING

The documents submitted with this filing include this transmittal letter and a public and non-public version of the FCAs in accordance with the Parties' designation of the diagrams contained in this filing as Controlled Unclassified Information ("CUI") and Critical Energy Infrastructure Information ("CEII") under the Commission's rules. 18 C.F.R. § 388.113 (2022). Pursuant to the Commission's Notice Announcing New Combined Notice of Filings, issued on May 13, 2005, and the Commission's subsequent listing on its website, no form of notice is required under 18 C.F.R. § 35.11 (2022).¹⁴ The Parties have designated Exhibit C1 of each Agreement as CUI//CEII.

MISO hereby requests confidential treatment of the CEII contained in Exhibit C1 of the non-public version of the FCAs enclosed pursuant to 18 C.F.R. § 388.113. The Parties assert that the information contained in Exhibit C1 qualifies as CEII pursuant to 18 C.F.R. § 388.113(c)(1) for the following reasons: the diagrams attached to the FCAs are system maps that provide specific detailed design information about existing critical transmission system infrastructure. The Exhibit is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. § 552. Members of the public can obtain access to the Exhibits by complying with the Commission's procedures per 18 C.F.R. § 388.113.

The CEII information submitted with this filing will continue to be CEII while the facilities reported upon continue in operation. Due to the long-lived nature of utility facilities and their operation, this period is expected to be greater than the five-year period set out in 18 C.F.R. § 388.113(e)(1). Upon any expiration of the CEII designation, the critical infrastructure information should therefore be treated as CEII and re-designated as such while the facilities remain in operation.

The non-public version of the Interconnection Agreement containing CEII information has been marked CUI//CEII according to the Commission's instructions.

The documents submitted with this filing include this transmittal letter;

Tab A: Clean copy of the Non-Public FCA for Square Butte TSR 90481026 & 95418167 ;

Tab A: Clean copy of the Public FCA for Square Butte TSR 90481026 & 95418167;

Tab B: Redlined copy of the Public FCA for Square Butte TSR 90481026 & 95418167 reflecting changes as compared to the *pro forma* FCA;

Tab C: Clean copy of the Non-Public FCA for Square Butte TSR 91365462;

¹⁴ See Documents and Filings, Notice Formats, available at <http://www.ferc.gov/docs-filing/not-form.asp>.

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Tab C: Clean copy of the Public FCA for Square Butte TSR 91365462;

Tab D: Redlined copy of the Public FCA for Square Butte TSR 91365462 reflecting changes as compared to the *pro forma* FCA; and

Tab E: Protective Agreement.

IV. PROPOSED EFFECTIVE DATE

MISO respectfully requests that the Commission make these FCAs effective as of February 28, 2024. The Parties have indicated their intention for and support of an effective date of February 28, 2024. MISO requests that the February 28, 2024 date be used to provide certainty to the Parties as to the status of the agreement. To the extent that the Commission determines that any requirements of 18 C.F.R. § 35 apply that have not been specifically addressed herein, the MISO respectfully requests waiver of such requirements.

V. COMMUNICATIONS

All correspondence and communications in this matter should be addressed to:

Madison Pitts*
Midcontinent Independent
System Operator, Inc.
1700 Centerview Drive
Little Rock, AR 72211
Telephone (317) 316-7911
mpitts@misoenergy.org
agreements@misoenergy.org

*Persons authorized to receive service.

VI. NOTICE AND SERVICE

MISO notes that it has served a copy of this filing electronically, including attachments, upon all Tariff Customers under the Tariff, MISO Members, Member representatives of Transmission Owners and Non-Transmission Owners, as well as all state commissions within the Region. The filing has been posted electronically on MISO's website at <https://www.misoenergy.org/legal/ferc-filings/> for other interested parties in this matter. In addition, MISO has served a copy of this filing electronically on all parties to these agreements.

VII. CONCLUSION

For the foregoing reasons, MISO requests that the Commission accept these FCAs for filing and grant the proposed effective date of February 28, 2024, and grant waiver of any

The Honorable Debbie-Anne Reese

March 5, 2024

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Commission regulations not addressed herein that the Commission may deem applicable to this filing.

Respectfully submitted,

/s/ Madison Pitts

Madison Pitts

Midcontinent Independent

System Operator, Inc.

1700 Centerview Drive

Little Rock, AR 72211

Telephone (317) 316-7911

mpitts@misoenergy.org

*Attorney for the Midcontinent Independent
System Operator, Inc.*

Attachments

TAB A
PUBLIC

SA 4208 MINNESOTA POWER-MINNESOTA POWER FCA VERSION 31.0.0

EFFECTIVE 2/28/2024

ORIGINAL SERVICE AGREEMENT NO. 4208

PUBLIC VERSION

FACILITIES CONSTRUCTION AGREEMENT

entered into by the

Midcontinent Independent System Operator, Inc.,

And

Minnesota Power, a division of ALLETE, INC.

And

Minnesota Power, a division of ALLETE, INC.

For

Square Butte TSR 90481026 & 95418167

FACILITIES CONSTRUCTION AGREEMENT

entered into by the

Midcontinent Independent System Operator, Inc.,

And

Minnesota Power, a division of ALLETE, INC.

And

Minnesota Power, a division of ALLETE, INC.

entered into on the 28th day of February, 2024

FACILITIES CONSTRUCTION AGREEMENT

THIS FACILITIES CONSTRUCTION AGREEMENT (sometimes hereinafter referred to as “Agreement”) is made and entered into this 28th day of February, 2024, by and among the merchant function of **Minnesota Power**, a division of **ALLETE, INC.**, a corporation, organized and existing under the laws, of the State of Minnesota (“Customer”), the **Midcontinent Independent System Operator, Inc.**, a non-profit, non-stock corporation organized and existing under the laws of the State of Delaware (“Transmission Provider”) and the transmission function of **Minnesota Power**, a division of **ALLETE, INC.**, a corporation organized under the laws of the State of Minnesota (“Transmission Owner”). Customer, Transmission Owner, or Transmission Provider each may be referred to as a “Party” or collectively as the “Parties.”

RECITALS

WHEREAS, Transmission Owner owns electric facilities and is engaged in generation, transmission, distribution and/or sale of electric power and energy; and

WHEREAS, Transmission Provider has functional control of the operations of the Transmission System, as defined herein, and is responsible for providing transmission and interconnection service on the transmission facilities under its control; and

WHEREAS, Customer intends to reserve Firm Point to Point Transmission Service via Transmission Provider’s Reservation Request Nos. **90481026 and 95418167**; and

WHEREAS, the Transmission System is affected by the firm transmission service request of the Facility and additions, modifications and upgrades must be made to certain existing facilities of the Transmission System to accommodate such transmission service and

WHEREAS, Customer has requested, and Transmission Provider and Transmission Owner have agreed, to enter into this Agreement with Customer for the purpose of facilitating the transmission service of the Facility by the construction of necessary Network Upgrades to the Transmission System;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

ARTICLE 1 DEFINITIONS

Wherever used in this Agreement with initial capitalization, the following terms shall have the meanings specified or referred to in this Article 1. Terms used in this Agreement with initial capitalization not defined in this Article 1 shall have the meanings specified in the Tariff:

- 1.1 “Applicable Laws and Regulations” shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the Parties, their respective facilities and/or the respective services they provide.
- 1.2 “Applicable Reliability Council” shall mean the reliability council of NERC applicable to the Local Balancing Authority of the Transmission System to which the Facility is directly interconnected.
- 1.3 “Applicable Reliability Standards” shall mean Reliability Standards approved by the Federal Energy Regulatory Commission (FERC) under Section 215 of the Federal Power Act, as applicable.
- 1.4 “Breach” shall mean the failure of a Party to perform or observe any material term or condition of this Agreement and shall include, but not be limited to, the events described in Article 9.1.
- 1.5 “Breaching Party” shall mean a Party that is in Breach of this Agreement.
- 1.6 “Confidential Information” shall mean any proprietary or commercially or competitively sensitive information, trade secret or information regarding a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, or any other information as specified in Article 12, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, that is received by another Party.
- 1.7 “Customer” shall mean, for purposes of this Agreement, a Transmission Customer as defined in the Tariff.
- 1.8 “Default” shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 9 of this Agreement.
- 1.9 “Direct Assignment Facilities” shall mean those facilities or portions of facilities that are constructed by any Transmission Owner(s), ITC, or ITC Participant(s) for the sole use/benefit of a particular Transmission Customer requesting service under this Tariff. Direct Assignment Facilities shall be specified in the Service Agreement that governs service to the Transmission Customer and shall be subject to Commission approval.

- 1.10** “Effective Date” shall mean the date on which this Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.
- 1.11** “FERC” shall mean the Federal Energy Regulatory Commission, also known as Commission, or its successor.
- 1.12** “Force Majeure” shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party’s control. A Force Majeure event does not include an act of negligence or intentional wrongdoing by the Party claiming Force Majeure.
- 1.13** “Good Utility Practice” shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric 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 to 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. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- 1.14** “Governmental Authority” shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Customer, Transmission Provider, Transmission Owner, or any Affiliate thereof.
- 1.15** “In-Service Date” shall mean the date upon which Customer reasonably expects it will be ready to begin use of the Network Upgrades and/or Direct Assignment Facilities.
- 1.16** “Local Balancing Authority” shall mean an operational entity or a Joint Registration Organization which is (i) responsible for compliance with the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement for their local area within the MISO Balancing Authority Area, (ii) a Party to Balancing Authority Agreement, excluding MISO, and (iii) shown in Appendix A to the Balancing Authority Agreement.
- 1.17** “Loss” shall mean any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party’s performance, or non-

performance of its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing, by the indemnified Party.

- 1.18** “Material Modification” shall mean: (1) modification to a Transmission Service Request in the queue that has a material adverse impact on the cost or timing or constraint identification of Transmission Service Request; or (2) planned modification to proposed network upgrades that is undergoing evaluation and has a material adverse impact on the Transmission System prior to the modification.
- 1.19** “NERC” shall mean the North American Electric Reliability Corporation, or its successor organization.
- 1.20** “Network Upgrades” shall mean the additions, modifications, and upgrades to the Transmission System required to accommodate the transmission service requests.
- 1.2** “Non-Breaching Party” shall mean a Party that is not in Breach of this Agreement with regard to a specific event of Breach by another Party.
- 1.22** “Reasonable Efforts” shall mean, with respect to an action required to be attempted or taken by a Party under this Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.
- 1.23** “Tariff” shall mean the Transmission Provider’s Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.
- 1.24** “Transmission Service” shall mean Point-to-Point Transmission Service provided under Module B of the Tariff on a firm and non-firm basis and the Network Integration Transmission Service under Module B of the Tariff.
- 1.25** “Transmission System” shall mean the facilities owned by Transmission Owner and controlled or operated by Transmission Provider or Transmission Owner that are used to provide Transmission Service or Wholesale Distribution Service under the Tariff.

ARTICLE 2 TERM OF AGREEMENT

- 2.1** **Effective Date.** Subject to required regulatory authorizations, including, without limitation, acceptance by FERC under Section 205 of the Federal Power Act, this Agreement shall become effective on the date on which this Agreement is made and entered into by the Parties.
- 2.2** **Term.**

- 2.2.1 General.** This Agreement shall become effective as provided in Article 2.1 and shall continue in full force and effect until the earlier of (i) the final repayment, where applicable, by Transmission Owner of the amount funded by Customer for Transmission Owner's design, procurement, construction and installation of the Network Upgrades and Direct Assignment Facilities provided in Appendix A; (ii) the Parties agree to mutually terminate this Agreement; (iii) earlier termination is permitted or provided for under Appendix A of this Agreement; or (iv) Customer terminates this Agreement after providing Transmission Provider and Transmission Owner with written notice at least sixty (60) Calendar Days prior to the proposed termination date, provided that Customer has no outstanding contractual obligations to Transmission Provider or Transmission Owner under this Agreement. No termination of this Agreement shall be effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination. The term of this Agreement may be adjusted upon mutual agreement of the Parties, if the In-Service Date for the Network Upgrades and Direct Assignment Facilities is adjusted in accordance with the rules and procedures established by Transmission Provider.
- 2.2.2 Termination Upon Default.** In the event of a Default by a Party, the Non-Breaching Party or Parties shall have the termination rights described in Articles 9 and 10; provided, however, if an event described in part (c) of Article 9.1 has not occurred, and provided the Default does not pose a threat to the reliability of the Transmission System, neither Transmission Provider nor Transmission Owner may terminate this Agreement if Customer is the Breaching Party and Customer (i) has undertaken, in accordance with Article 9.2, to cure the Breach that led to the Default and has failed to cure the Breach for reasons other than Customer's failure to diligently commence reasonable and appropriate steps to cure the Breach within the thirty (30) Calendar Days allowed by Article 9.2, and (ii) compensates Transmission Provider or Transmission Owner within thirty (30) Calendar Days for the amount of damage billed to Customer by Transmission Provider or Transmission Owner for any damages, including costs and expenses, incurred by Transmission Provider or Transmission Owner as a result of such Default. In the event of an occurrence described in part (c) of Article 9.1, and providing the Default does not pose a threat to the reliability of the Transmission System, the Non-Breaching Party or Parties shall not terminate this Agreement provided that the Breaching Party provided an assurance of payment acceptable to the Non-Breaching Party, and pays any applicable damages.
- 2.2.3 Consequences of Termination.** In the event of a termination by any Party, other than a termination by Customer due to a Breach by Transmission Owner, Customer must pay Transmission Owner all amounts still due and payable for construction and installation of the Network Upgrades and Direct Assignment Facilities (including, without limitation, any equipment ordered related to such construction), plus all out-of-pocket expenses incurred by Transmission Owner in connection with the construction and installation of the Network Upgrades and Direct Assignment Facilities, through the date of termination, plus any actual

costs which Transmission Owner (A) reasonably incurs in winding up work and construction demobilization and (B) reasonably incurs to ensure the safety of persons and property and the integrity and safe and reliable operation of the Transmission System. Transmission Owner agrees to use Reasonable Efforts to minimize such costs.

2.2.4 Material Adverse Change. In the event of a material change in law or regulation that adversely affects, or may reasonably be expected to adversely affect a Party's rights and/or obligations under this Agreement, the Parties shall negotiate in good faith any amendments to this Agreement necessary to adapt the terms of this Agreement to such change in law or regulation, and Transmission Provider shall file such amendments with FERC. If, within sixty (60) Calendar Days after the occurrence of any event described in this Article 2.2.4, the Parties are unable to reach agreement as to any necessary amendments, the Parties may proceed under Article 14 to resolve any disputes related thereto; Transmission Provider and/or Transmission Owner shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that a Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. If a Party is unable to fully perform this Agreement due to the occurrence of an event described in this Article 2.2.4 and such inability is not based on economic reasons, such Party shall not be deemed to be in Default of its obligations under this Agreement, provided that such Party is seeking dispute resolution under Article 14 or before FERC, to the extent that (i) such Party is unable to perform as a result of such an event and (ii) such Party acts in accordance with its obligations under this Article 2.2.4.

2.3 Regulatory Filing. In accordance with Applicable Laws and Regulations, Transmission Provider shall file this Agreement, and any amendment to this Agreement with FERC as a service agreement under the Tariff. If Customer has executed this Agreement or any amendment to this Agreement, Customer shall not protest this Agreement or the amendment, shall reasonably cooperate with Transmission Provider with respect to such filing and shall provide any information, including the rendering of testimony or pleadings, as applicable, reasonably requested by Transmission Provider to the extent reasonably needed to comply with applicable regulatory requirements.

2.4 Survival. The applicable provisions of this Agreement shall continue in effect after expiration, cancellation, or termination hereof to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect.

- 2.5 Termination Obligations.** Upon any termination pursuant to this Agreement, Customer shall be responsible for the payment of all costs or other contractual obligations incurred prior to the termination date including previously incurred capital costs, penalties for early termination, costs of removal and site restoration.

ARTICLE 3 CONSTRUCTION OF NETWORK UPGRADES AND DIRECT ASSIGNMENT FACILITIES

3.1 Construction.

3.1.1 Transmission Owner Obligations. Transmission Owner shall (or shall cause such action to) design, procure, construct and install, and Customer shall pay, consistent with Article 3.2, the cost of, all Network Upgrades and Direct Assignment Facilities identified in Appendix A. All Network Upgrades and Direct Assignment Facilities designed, procured, constructed and installed by Transmission Owner pursuant to this Agreement shall satisfy all requirements of applicable safety and/or engineering codes, including those requirements of Transmission Owner and Transmission Provider, and comply with Good Utility Practice, and further, shall satisfy all Applicable Laws and Regulations.

3.1.2 Suspension of Work.

3.1.2.1 Right to Suspend for Force Majeure Event. Provided that such suspension is permissible under the authorizations, permits or approvals granted for the construction of the Network Upgrades and Direct Assignment Facilities Customer will not suspend unless a Force Majeure event occurs. Customer must provide written notice of its request for suspension to Transmission Provider and Transmission Owner, and provide a description of the Force Majeure event that is acceptable to Transmission Provider. Suspension will only apply to Customer milestones and Interconnection Facilities described in the Appendices of this Agreement. Prior to suspension, Customer must also provide security acceptable to Transmission Owner, equivalent to the higher of \$5 million or the total cost of all Network Upgrades, Transmission Owner's Direct Assignment Facilities, and Distribution Upgrades listed in Appendix A of this Agreement. Network Upgrades, Direct Assignment Facilities will be constructed on the schedule described in the Appendices of this Agreement unless: (1) construction is prevented by the order of a Governmental Authority; (2) the Network Upgrades and Direct Assignment Facilities are not needed by any other project; or (3) Transmission Owner or Transmission Provider determines that a Force Majeure event prevents construction. In the event of (1), (2), or (3) security shall be released upon the determination that the Network Upgrades and Direct Assignment Facilities will no longer be constructed.

If suspension occurs, Customer shall be responsible for the costs which Transmission Owner incurs (i) in accordance with this Agreement prior to the suspension, (ii) in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System and, if applicable, any costs incurred in connection with the cancellation of contracts and orders for material which Transmission Owner cannot reasonably avoid, and (iii) reasonably incurs in winding up work and construction demobilization; provided, however, that, prior to canceling any such contracts or orders, Transmission Owner shall obtain Customer's authorization. Customer shall be responsible for all costs incurred in connection with Customer's denial of authorization to cancel such contracts or orders. Interest as provided in

Article 3.2.2.2 on amounts paid by Customer to Transmission Owner for the design, procurement, construction and installation of the Network Upgrades and Direct Assignment Facilities, shall not accrue during periods in which Customer has suspended construction under this Article 3.1.2. Transmission Owner shall invoice Customer pursuant to Article 6 and use Reasonable Efforts to minimize its costs. In the event that Customer suspends work pursuant to this Article, no construction duration, timelines and schedules set forth in Appendix A shall be suspended during the period of suspension unless ordered by a Governmental Authority, with such order being the Force Majeure event causing the suspension.

3.1.2.2 Recommencing of Work. If Customer requests Transmission Owner to recommence such work, Transmission Owner shall have no obligation to afford such work the priority it would have had but for the prior actions of Customer to suspend the work. In such event, Customer shall be responsible for any costs incurred in recommencing the work. All recommenced work shall be completed pursuant to an amended schedule for the transmission service as agreed to by the Parties. Transmission Provider and Transmission Owner have the right to request a System Impact Study if conditions have materially changed subsequent to the request to suspend. Customer shall be responsible for the costs of any studies required.

3.1.2.3 Termination in the Event of a Material Modification. In the event Customer suspends the performance of work by Transmission Owner pursuant to this Article 3.1.2 and modifies its In-Service Date, this Agreement shall be deemed terminated unless Customer demonstrates that the change is not a Material Modification under FERC precedent.

3.1.2.4 Right to Suspend Due to Default. Transmission Owner reserves the right, upon written notice to Customer, to suspend, at any time, work by

Transmission Owner and the incurrence of additional expenses associated with the construction and installation of the Network Upgrades and Direct Assignment Facilities upon the occurrence of either a Breach that Customer is unable to cure pursuant to Article 9 or an Event of Default pursuant to Article 9. Any form of suspension by Transmission Owner shall not be barred by Articles 2.2.2, 2.2.3 or 9.2.2, nor shall it affect Transmission Owner's right to terminate the work or this Agreement pursuant to Article 10. In such events, Customer shall be responsible for costs which Transmission Owner incurs as set forth in Article 2.2.3.

- 3.1.3 Construction Status.** Transmission Owner shall keep Customer and Transmission Provider advised periodically as to the progress of its respective design, procurement and construction efforts as described in Appendix A. Customer may, at any time, request a progress report from Transmission Owner, with a copy to be provided to Transmission Provider. If, at any time, Customer determines that the completion of the Network Upgrades and Direct Assignment Facilities will not be required until after the specified In-Service Date, Customer will provide written notice to Transmission Owner and Transmission Provider of such later date upon which the completion of the Network Upgrades and Direct Assignment Facilities would be required. Transmission Owner may delay the In-Service Date of the Network Upgrades accordingly.
- 3.1.4 Timely Completion.** Transmission Owner shall use Reasonable Efforts to design, procure, construct, install, and test the Network Upgrades and Direct Assignment Facilities in accordance with the schedule set forth in Appendix A, which schedule may be revised from time to time by mutual agreement of the Parties. If any event occurs that will affect the time for completion of the Network Upgrades and Direct Assignment Facilities, or the ability to complete any of them, Transmission Owner and/or Transmission Provider shall promptly notify Customer, with a copy to the other Party. In such circumstances, Transmission Provider shall, within fifteen (15) Calendar Days of such notice, convene a technical meeting with Customer and Transmission Owner to evaluate the alternatives available to Customer. Transmission Owner and/or Transmission Provider shall also make available to Customer all studies and work papers related to the event and corresponding delay, including all information that is in the possession of Transmission Provider or Transmission Owner that is reasonably needed by Customer to evaluate alternatives. Transmission Owner shall, at Customer's request and expense, use Reasonable Efforts to accelerate its work under this Agreement to meet the schedule set forth in Appendix A, provided that Customer authorizes such actions and the costs associated therewith in advance.

3.2 Network Upgrade Costs and Credits.

- 3.2.1 Costs.** Customer shall pay to Transmission Owner costs (including taxes and financing costs) associated with seeking and obtaining all necessary approvals and of designing, engineering, constructing, and testing the Network Upgrades and

Direct Assignment Facilities, as identified in Appendix A, in accordance with the cost recovery method provided herein;

Customer shall pay for Direct Assignment Facilities and Network Upgrades in accordance with Attachment N of the Tariff. The cost assignment provisions shall apply to facilities constructed by Transmission Owner until such time as Transmission Owner is able to fully recover its revenue requirements as calculated in Attachment N, Section C. If the Transmission Service Request is discontinued or suspended, the Transmission Customer shall pay the Transmission Owner for the remaining applicable amounts that must be paid pursuant to Attachment N of the Tariff.

Transmission Owner shall install, at Customer's expense, any Transmission Owner's Direct Assignment Facilities that may be required on the Transmission Owner's Interconnection Facilities or the Transmission Owner's transmission or distribution facilities as a result of the Network Upgrades required by Customer's request.

3.2.1.1 Lands of Other Property Owners. If any part of the Transmission Owner's Network Upgrades, Direct Assignment Facilities, and/or Distribution Upgrades is to be installed on property owned by persons other than Customer or Transmission Owner, Transmission Owner shall at Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority to the extent permitted and consistent with Applicable Laws and Regulations and, to the extent consistent with such Applicable Laws and Regulations, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Transmission Owner's Interconnection Facilities, Network Upgrades, Direct Assignment Facilities, and/or Distribution Upgrades upon such property.

3.2.2 Credits.

3.2.2.1 Repayment. Customer shall be entitled to a cash repayment by Transmission Owner(s) that owns the Network Upgrades, of the amount paid respectively to Transmission Owner, if any, for the Network Upgrades, as provided under the Tariff, and including any tax gross-up or other tax-related payments associated with the repayable portion of the Network Upgrades, and not repaid to Customer pursuant to Article 3.3.1 or otherwise, to be paid to Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Tariff for Transmission Service with respect to the Facility. Any repayment shall include interest calculated in accordance with the

methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this subparagraph. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1 or the Network Upgrades have been determined not to be needed pursuant to this Article 3.2.2.1. Customer may assign such repayment rights to any person.

3.2.2.2 Amount. Transmission credits will be based on the final, actual cost of completing the Network Upgrades as provided by the final invoice prepared by Transmission Owner pursuant to Article 6.4 of this Agreement. Any repayment made pursuant to Article 3.2.2.1 shall include (i) the final, actual cost after any true-up amounts have been paid pursuant to Article 6.4, and (ii) interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this Article 3.2 until fully reimbursed. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1.

3.2.2.3 Alternative Payment Schedule. Notwithstanding the foregoing, as applicable and consistent with the Tariff, Customer, Transmission Provider, and Transmission Owner, may adopt any alternative payment schedule that is mutually agreeable.

3.2.2.4 RESERVED

3.2.2.5 Rights not Relinquished. Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that Customer, shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain refunds or transmission credits for Transmission Service that is not associated with the Facility.

3.3 Taxes.

3.3.1 Indemnification for Contributions in Aid of Construction. The Parties intend that all payments made by Customer to Transmission Owner for the installation of the Network Upgrades and Direct Assignment Facilities shall be non-taxable contributions to capital in accordance with the Internal Revenue Code and any

applicable state tax laws and shall not be taxable as contributions in aid of construction under the Internal Revenue Code and any applicable state tax laws. With regard only to such contributions, Transmission Owner shall not include a gross-up for income taxes in the amounts it charges Customer for the installation of the Network Upgrades and Direct Assignment Facilities unless (i) Transmission Owner has determined, in good faith, that the payments or property transfers made by Customer to Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Transmission Owner to report payments or property as income subject to taxation; provided, however, that Transmission Owner may require Customer to provide security for Network Upgrades, in a form reasonably acceptable to Transmission Owner (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences or any current tax liability under this Article. Customer shall reimburse Transmission Owner for such costs on a fully grossed-up basis, in accordance with this Article, within thirty (30) Calendar Days of receiving written notification from Transmission Owner of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten-year testing period and the applicable statute of limitation, as it may be extended by Transmission Owner upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article. Notwithstanding the foregoing provisions of this Article 3.3.1, and to the extent permitted by law, to the extent that the receipt of such payments by Transmission Owner is determined by any Governmental Authority to constitute income by Transmission Owner subject to taxation, Customer shall protect, indemnify and hold harmless Transmission Owner and its Affiliates, from all claims by any such Governmental Authority for any tax, interest and/or penalties associated with such determination. Upon receiving written notification of such determination from the Governmental Authority, Transmission Owner shall provide Customer with written notification within thirty (30) Calendar Days of such determination and notification. Transmission Owner, upon the timely written request by Customer and at Customer's expense, shall appeal, protest, seek abatement of, or otherwise oppose such determination. Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the compromise or settlement of the claim; provided that Transmission Owner shall cooperate and consult in good faith with Customer regarding the conduct of such contest. Customer shall advance to Transmission Owner on a periodic basis as requested by Transmission Owner the estimated cost of prosecuting such appeal, protest, abatement or other contest. Customer shall not be required to pay Transmission Owner for the tax, interest and/or penalties prior to the seventh (7th) Calendar Day before the date on which Transmission Owner (i) is required to pay the tax, interest and/or penalties or other amount in lieu thereof pursuant to a compromise or settlement of the appeal, protest, abatement or other contest; (ii) is required to

pay the tax, interest and/or penalties as the result of a final, non-appealable order by a Governmental Authority; or (iii) is required to pay the tax, interest and/or penalties as a prerequisite to an appeal, protest, abatement or other contest. In the event such appeal, protest, abatement or other contest results in a determination that Transmission Owner is not liable for any portion of any tax, interest and/or penalties for which Customer has already made payment to Transmission Owner, Transmission Owner shall promptly refund to Customer any payment attributable to the amount determined to be non-taxable, plus any interest or other payments Transmission Owner receives or which Transmission Owner may be entitled with respect to such payment. In accordance with Article 6, Customer shall provide Transmission Owner with credit assurances sufficient to meet Customer's estimated liability for reimbursement of Transmission Owner for taxes, interest and/or penalties under this Section 3.3.1. Such estimated liability shall be stated in Appendix A.

To the extent that Transmission Owner is a limited liability company and not a corporation, and has elected to be taxed as a partnership, then the following shall apply: Transmission Owner represents, and the Parties acknowledge, that Transmission Owner is a limited liability company and is treated as a partnership for federal income tax purposes. Any payment made by Customer to Transmission Owner for Network Upgrades and Direct Assignment Facilities is to be treated as an upfront payment in accordance with Rev Proc 2005-35. It is anticipated by the Parties that any amounts paid by Customer to Transmission Owner for Network Upgrades and Direct Assignment Facilities will be reimbursed to Customer in accordance with the terms of this Agreement, provided Customer fulfills its obligations under this Agreement.

- 3.3.2 Private Letter Ruling.** At Customer's request and expense, Transmission Owner shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Customer to Transmission Owner under this Agreement are subject to federal income taxation. Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Customer's knowledge. Transmission Owner and Customer shall cooperate in good faith with respect to the submission of such request.
- 3.3.3 Other Taxes.** Upon the timely request by Customer, and at Customer's sole expense, Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Transmission Owner for which Customer may be required to reimburse Transmission Owner under the terms of this Agreement. Customer shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Customer and Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the

payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Customer to Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Transmission Owner. Each Party shall cooperate with the other Parties to maintain each Party's tax status. Nothing in this Agreement is intended to adversely affect any Party's tax-exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

ARTICLE 4 FORCE MAJEURE

- 4.1 Notice.** The Party unable to carry out an obligation imposed on it by this Agreement due to a Force Majeure event shall notify the other Parties in writing or verbally with subsequent notice in writing within a reasonable time after the occurrence of the cause relied on.
- 4.2 Duration of Force Majeure.** Except as set forth in Article 4.3, no Party will be considered in Default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure. A Party shall not be responsible for any non-performance or be considered in Breach or Default under this Agreement due to Force Majeure. A Party shall be excused from whatever performance is affected for only the duration of the Force Majeure event and while the Party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing Party is able to resume performance of its obligations excused as a result of the occurrence of Force Majeure, such Party shall give prompt notice thereof to the other Parties.
- 4.3 Obligation to Make Payments.** Any Party's obligation to make payments for services incurred shall not be suspended by Force Majeure.

ARTICLE 5 INFORMATION REPORTING

- 5.1 Information Reporting Obligations.** Each Party shall, in accordance with Good Utility Practice, promptly provide to the other Parties all relevant information, documents, or data regarding the Party's facilities and equipment which may reasonably be expected to pertain to the reliability of the other Party's facilities and equipment and which has been reasonably requested by the other Party.
- 5.2 Non-Force Majeure Reporting.** A Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this Agreement for a reason other than Force Majeure. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or

planned to be taken with respect to such inability to comply. In the event of Force Majeure, a Party unable to comply with the provisions of this Agreement shall notify the other Parties in accordance with the provisions of Article 4.

ARTICLE 6 CREDITWORTHINESS, BILLING AND PAYMENTS

- 6.1 Creditworthiness.** By the earlier of (i) thirty (30) Calendar Days prior to the due date for Customer's first payment under the payment schedule specified in Appendix A or (ii) the first date specified in Appendix A for the ordering of equipment by Transmission Owner for installing the Network Upgrades and Direct Assignment Facilities, Customer shall provide Transmission Owner, at Transmission Owner's option, with a form of adequate assurance of creditworthiness reasonably acceptable to Transmission Owner. If the adequate assurance is a parental guarantee or surety bond, it must be made by an entity that meets the creditworthiness requirements of Transmission Owner, have terms and conditions reasonably acceptable to Transmission Owner and guarantee payment of the amount specified in the next paragraph of this Article 6.1. If the adequate assurance is a letter of credit, it must be issued by a bank reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount available to be drawn under the letter shall reduce on a monthly basis in accordance with the monthly payment schedule. The surety bond must be issued by an insurer reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount assured under the bond shall reduce on a monthly basis in accordance with the monthly payment schedule. After the Network Upgrades and Direct Assignment Facilities have been placed in service and until Customer fully compensates Transmission Owner for construction of the Network Upgrades and Direct Assignment Facilities, Customer shall, subject to the standards of this Article 6.1, maintain a parental guarantee, surety bond, letter of credit, or some other credit assurance sufficient to meet its monthly payment obligation under Article 3.2.1, as specified in the following paragraph. Customer's estimated liability under Article 3.2.1 is stated in Appendix A.

Customer shall maintain as of the first day of each month beginning on the due date for Customer's first payment under the payment schedule specified in Appendix A, and continuing through to the In-Service Date, a parental guarantee, surety bond or letter of credit in an amount sufficient to cover the applicable costs and cost commitments required of the Party responsible for building the facilities pursuant to the construction schedule developed in this Agreement for designing, engineering, seeking regulatory approval from any Governmental Authority, constructing, procuring and installing the facilities and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Owner for these purposes as defined and established under Appendix A.

- 6.2 Invoice.** Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due, if any, for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other

Party under this Agreement, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.

- 6.3 Payment.** Invoices shall be rendered to the paying Party at the address specified by the Parties. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by a Party will not constitute a waiver of any rights or claims that Party may have under this Agreement.
- 6.4 Final Invoice.** Within six (6) months after completion of the construction of the Network Upgrades and Direct Assignment Facilities, Transmission Owner shall provide an invoice of the final cost of the construction of the Network Upgrades and Direct Assignment Facilities and shall set forth such costs in sufficient detail to enable Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Owner shall refund, with interest (calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii)), to Customer any amount by which the actual payment by Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.
- 6.5 Interest.** Interest on any unpaid amounts shall be calculated in accordance with 18 C.F.R. § 35.19a(a)(2)(iii).
- 6.6 Payment During Dispute.** In the event of a billing dispute among the Parties, Transmission Owner shall continue to construct the Network Upgrades and Direct Assignment Facilities under this Agreement as long as Customer: (i) continues to make all payments not in dispute; and (ii) pays to Transmission Provider or Transmission Owner or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Customer fails to meet these two requirements, then Transmission Provider may or, at Transmission Owner's request upon Customer's failure to pay Transmission Owner, shall provide notice to Customer of a Default pursuant to Article 9. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to another Party shall pay the amount due with interest calculated in accord with the methodology set forth in 18 C.F.R. § 35.19a(a)(2)(iii).

ARTICLE 7 ASSIGNMENT

- 7.1 Assignment.** This Agreement may be assigned by any Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that Customer shall have the right to assign this Agreement, without the consent of either Transmission Provider or Transmission Owner, for collateral security purposes to aid in providing

financing for the Facility, provided that Customer will promptly notify Transmission Provider and Transmission Owner of any such assignment. Any financing arrangement entered into by Customer pursuant to this Article will provide that prior to or upon the exercise of the secured Party's, trustee's or assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider and Transmission Owner of the date and particulars of any such exercise of assignment right(s), including providing Transmission Provider and Transmission Owner with proof that it meets the requirements of Article 6.1. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

ARTICLE 8 INDEMNITY

8.1 General. To the extent permitted by law, a Party (the "Indemnifying Party") shall at all times indemnify, defend, and hold the other Parties (each an "Indemnified Party") harmless from Loss, only as provided in the Tariff.

8.1.1 Indemnified Party. If an Indemnified Party is entitled to indemnification under this Article 8 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 8.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

8.1.2 Indemnifying Party. If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 8, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.

8.1.3 Indemnity Procedures. Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 8.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the

Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be reasonably withheld, conditioned or delayed.

- 8.2 Consequential Damages.** In no event shall any Party be liable to any other Party under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

ARTICLE 9 BREACH, CURE AND DEFAULT

- 9.1 Events of Breach.** A Breach of this Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Agreement, including but not limited to any material Breach of a representation, warranty or covenant made in this Agreement;
- (c) If a Party (i) is adjudicated bankrupt; (ii) files a voluntary petition in bankruptcy under any provision of any federal or state bankruptcy law or shall consent to the filing of any bankruptcy or reorganization petition against it under any similar law; (iii) makes a general assignment for the benefit of its creditors; or (iv) consents to the appointment of a receiver, trustee or liquidator;

- (d) Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;
- (e) Failure of a Party to provide such access rights, or a Party's attempt to revoke access or terminate such access rights, as provided under this Agreement or any related agreements.
- (f) Failure of a Party to provide information or data to another Party as required under this Agreement, provided the Party entitled to the information or data under this Agreement requires such information or data to satisfy its obligations under this Agreement.

9.2 Notice of Breach, Cure and Default. Upon the occurrence of an event of Breach, the Party not in Breach, when it becomes aware of the Breach, shall give written notice of the Breach to the Breaching Party and to any other person representing a Party to this Agreement identified in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach.

9.2.1 Upon the occurrence described in part (c) of Article 9.1, the Party experiencing such occurrence shall notify the other Party in writing within seven (7) Calendar Days after the commencement of such occurrence. Upon receiving written notice of the Breach hereunder, the Breaching Party shall have a period to cure such Breach (sometimes hereinafter referred as ("Cure Period") which shall be thirty (30) Calendar Days unless such Breach is due to an occurrence under Article 9.1(a) or (c) in which case the cure period will be five (5) Business Days.

9.2.2 If the Breach is such that it cannot be cured within the Cure Period, the Breaching Party will commence in good faith all steps as are reasonable and appropriate to cure the Breach within such Cure Period and thereafter diligently pursue such action to completion. In the event the Breaching Party fails to:

- (a) cure the Breach, or to commence reasonable and appropriate steps to cure the Breach, within the Cure Period; or,
- (b) completely cure the Breach within sixty (60) Calendar Days if the Breach occurs pursuant to Article 9.1(b), (d), (e) or (f),

the Breaching Party will be in Default of this Agreement and the non-Breaching Parties may, at their option, either in concert or individually, (1) act to terminate this Agreement for cause by notifying the other Parties in writing, or (2) take whatever action at law or in equity as may appear necessary or desirable to enforce the performance or observance of any rights, remedies, obligations, agreement, or covenants under this Agreement.

- 9.3 Rights in the Event of Default.** Notwithstanding the foregoing, upon the occurrence of an event of Default, any non-Defaulting Party shall be entitled to exercise all rights and remedies it may have in equity or at law.

ARTICLE 10 TERMINATION OF AGREEMENT

- 10.1 Expiration of Term.** Except as otherwise specified in this Article 10, the Parties' obligations under this Agreement shall terminate at the conclusion of the term of this Agreement.
- 10.2 Termination.** In addition to the termination provisions set forth in Article 2.2, a Party may terminate this Agreement upon the Default of another Party in accordance with this Agreement. Subject to the limitations set forth in Article 10.3, in the event of a Default, a non-Defaulting Party may terminate this Agreement only upon the later of (i) its giving of written notice of termination to the other Parties; and (ii) unless no longer required by FERC, the filing at FERC of a notice of termination for this Agreement, which filing must be accepted for filing by FERC.
- 10.3 Disposition of Facilities Upon Termination of Agreement.**

10.3.1 Transmission Provider and Transmission Owner Obligations. Upon termination of this Agreement, unless otherwise agreed by the Parties in writing, Transmission Owner:

- (a) shall, prior to the construction and installation of any portion of the Network Upgrades and Direct Assignment Facilities and to the extent possible, cancel any pending orders of, or return, such equipment or material for such Network Upgrades and Direct Assignment Facilities;
- (b) may keep in place any portion of the Network Upgrades and Direct Assignment Facilities already constructed and installed; and,
- (c) shall perform such work as may be necessary to ensure the safety of persons and property and to preserve the integrity of the Transmission System (*e.g.*, construction demobilization to return the system to its original state, wind-up work).

10.3.2 Customer Obligations. Upon billing by Transmission Owner, Customer shall reimburse Transmission Owner for any costs incurred by Transmission Owner in performance of the actions required or permitted by Article 10.3.1 and for the cost of any Network Upgrades and Direct Assignment Facilities described in Appendix A. Transmission Owner and Transmission Provider shall use Reasonable Efforts to minimize costs and shall offset the amounts owed by any salvage value of facilities, if applicable. Customer shall pay these costs pursuant to Article 6.3 of this Agreement.

10.3.3 Pre-construction or Installation. Upon termination of this Agreement and prior to the construction and installation of any portion of the Network Upgrades and Direct Assignment Facilities, Transmission Owner may, at its option, retain any portion of such Network Upgrades and Direct Assignment Facilities not cancelled or returned in accordance with Article 10.3.1(a), in which case Transmission Owner shall be responsible for all costs associated with procuring such Network Upgrades and Direct Assignment Facilities. To the extent that Customer has already paid Transmission Owner for any or all of such costs, Transmission Owner shall transfer such amounts to the Customer. If Transmission Owner elects to not retain any portion of such facilities, Transmission Owner shall convey and make available to Customer such facilities as soon as practicable after Customer's payment for such facilities.

10.4 Survival of Rights. Termination or expiration of this Agreement shall not relieve any Party of any of its liabilities and obligations arising hereunder prior to the date termination becomes effective, and each Party may take whatever judicial or administrative actions as appear necessary or desirable to enforce its rights hereunder. The applicable provisions of this Agreement will continue in effect after expiration, or early termination hereof to the extent necessary to provide for (A) final billings, billing adjustments and other billing procedures set forth in this Agreement; (B) the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect; and (C) the confidentiality provisions set forth in Article 12.

ARTICLE 11 SUBCONTRACTORS

11.1 Subcontractors. Nothing in this Agreement shall prevent a Party from utilizing the services of subcontractors, as it deems appropriate, to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

11.1.1 Responsibility of Principal. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. In accordance with the provisions of this Agreement, each Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor it hires as if no subcontract had been made. Any applicable obligation imposed by this Agreement upon a Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

11.1.2 No Third-Party Beneficiary. Except as may be specifically set forth to the contrary herein, no subcontractor or any other party is intended to be, nor will it be deemed to be, a third-party beneficiary of this Agreement.

11.1.3 No Limitation by Insurance. The obligations under this Article 11 will not be limited in any way by any limitation of any insurance policies or coverages, including any subcontractor's insurance.

ARTICLE 12 CONFIDENTIALITY

12.1 Confidentiality. Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by a Party to another Party prior to the execution of this Agreement.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential. The Parties shall maintain as confidential any information that is provided and identified by a Party as Critical Energy Infrastructure Information (CEII), as that term is defined in 18 C.F.R. Section 388.113(c).

Such confidentiality will be maintained in accordance with this Article 12. If requested by the receiving Party, the disclosing Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

12.1.1 Term. During the term of this Agreement, and for a period of three (3) years after the expiration or termination of this Agreement, except as otherwise provided in this Article 12 or with regard to CEII, each Party shall hold in confidence and shall not disclose to any person Confidential Information. CEII shall be treated in accordance with Commission policies and regulations.

12.1.2 Scope. Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a non-Party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this Agreement; or (6) is required, in accordance with Article 12.1.7 of this Agreement, to be disclosed by any Governmental Authority or is otherwise

required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Agreement. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the receiving Party that it no longer is confidential.

- 12.1.3 Release of Confidential Information.** No Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), subcontractors, employees, agents, consultants, or to non-Parties who may be or are considering providing financing to or equity participation with Customer, or to potential purchasers or assignees of Customer, on a need-to-know basis in connection with this Agreement, unless such person has first been advised of the confidentiality provisions of this Article 12 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 12.
- 12.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that it discloses to the receiving Party. The disclosure by a Party to the receiving Party of Confidential Information shall not be deemed a waiver by the disclosing Party or any other person or entity of the right to protect the Confidential Information from public disclosure.
- 12.1.5 No Warranties.** By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to another Party nor to enter into any further agreements or proceed with any other relationship or joint venture.
- 12.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to another Party under this Agreement or its regulatory requirements.
- 12.1.7 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the disclosing Party with prompt notice of such request(s) or requirement(s) so that the disclosing Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally

compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

12.1.8 Termination of Agreement. Upon termination of this Agreement for any reason, each Party shall, within ten (10) Business Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting Party) or return to the requesting Party any and all written or electronic Confidential Information received from the requesting Party, except that each Party may keep one copy for archival purposes, provided that the obligation to treat it as Confidential Information in accordance with this Article 12 shall survive such termination.

12.1.9 Remedies. The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 12. Each Party accordingly agrees that the disclosing Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving Party Breaches or threatens to Breach its obligations under this Article 12, which equitable relief shall be granted without bond or proof of damages, and the breaching Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 12, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 12.

12.1.10 Disclosure to FERC, its Staff or a State. Notwithstanding anything in this Article 12 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from a Party that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this Agreement prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the Agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112. Requests from a state regulatory body conducting a confidential

investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

- 12.1.11** Subject to the exception in Article 12.1.10, any information that a disclosing Party claims is competitively sensitive, commercial or financial information under this Agreement shall not be disclosed by the receiving Party to any person not employed or retained by the receiving Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the disclosing Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Agreement or as the Regional Transmission Organization or a Local Balancing Authority operator including disclosing the Confidential Information to a regional or national reliability organization. The Party asserting confidentiality shall notify the receiving Party in writing of the information that Party claims is confidential. Prior to any disclosures of that Party's Confidential Information under this subparagraph, or if any non-Party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the Party who received the Confidential Information from the disclosing Party agrees to promptly notify the disclosing Party in writing and agrees to assert confidentiality and cooperate with the disclosing Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

ARTICLE 13 INFORMATION ACCESS AND AUDIT RIGHTS

- 13.1 Information Access.** Each Party shall make available to the other Parties information necessary to verify the costs incurred by the other Parties for which the requesting Party is responsible under this Agreement and carry out obligations and responsibilities under this Agreement, provided that the Parties shall not use such information for purposes other than those set forth in this Article 13.1 and to enforce their rights under this Agreement.
- 13.2 Audit Rights.** Subject to the requirements of confidentiality under Article 12 of this Agreement, the accounts and records related to the design, engineering, procurement, and construction of the Network Upgrades and Direct Assignment Facilities shall be subject to audit during the period of this Agreement and for a period of twenty-four (24) months following the Transmission Owner's issuance of a final invoice in accordance with Article 6.4. Customer at its expense shall have the right, during normal business hours, and upon prior reasonable notice to the other Parties, to audit such accounts and records. Any audit authorized by this Article 13.2 shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Agreement.

ARTICLE 14 DISPUTES

- 14.1 Submission.** Any claim or dispute, which a Party may have against another Party, arising out of this Agreement shall be submitted for resolution in accordance with the dispute resolution provisions of the Tariff.
- 14.2 Rights under the Federal Power Act.** Nothing in this Article 14 shall restrict the rights of any Party to file a complaint or a petition with FERC under relevant provisions of the Federal Power Act.
- 14.3 Equitable Remedies.** Nothing in this Article shall prevent a Party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations, at any time, before a Governmental Authority.

ARTICLE 15 NOTICES

- 15.1 General.** Any notice, demand or request required or permitted to be given by a Party to another Party and any instrument required or permitted to be tendered or delivered by a Party in writing to another Party may be so given, tendered or delivered, as the case may be, by depositing the same with the United States Postal Service with postage prepaid, for transmission by certified or registered mail, addressed to the Parties, or personally delivered to the Parties, at the address set out below:

To Transmission Provider:

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

To Transmission Owner:

Minnesota Power

Vice President, Transmission & Distribution
30 West Superior Street
Duluth, MN 55802

To Customer:

Minnesota Power

Vice President, Strategy and Planning
30 West Superior Street
Duluth, MN 55802

- 15.2 Billings and Payments.** Billings and payments shall be sent to the addresses shown in Article 15.1 unless otherwise agreed to by the Parties.

- 15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another Party and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out below:

To Transmission Provider:

MISO

Voice telephone – (317) 249-5700

Facsimile telephone – (317) 249-5358

Email address – misotap@misoenergy.org or

MISOTransmissionAccessPlanning@misoenergy.org

To Transmission Owner:

Minnesota Power

Director – System Operations, Performance & Compliance

Voice telephone – (218) 723-7414

Email address-lfrisk@mnpower.com or

MPTransmissioninformationNotifications@mnpower.com

To Customer:

Minnesota Power

RTO Coordination Manager

Voice telephone – (218) 723-7466

Email address – rnyholm@mnpower.com

- 15.4 DUNS #.** If Transmission Owner and Customer have not obtained DUNS numbers by the time this Agreement is executed, Transmission Owner and Customer will forward their DUNS numbers within five (5) Business Days of having obtained such numbers to Transmission Provider by facsimile telephone or email to the fax number or email set out below:

Transmission Owner

DUNS Number: 617232889

Customer

DUNS Number: 617232889

- 15.5 Notification of In-Service Date.** Transmission Owner will serve to Transmission Provider a copy of Appendix B as forwarded to Customer on the same day to the address shown in Article 15.1, and by facsimile telephone to the numbers set out below:

To Transmission Provider:

MISO

Facsimile telephone – (317) 249-5703

And copy to

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

ARTICLE 16
MISCELLANEOUS

- 16.1 Waiver.** Except as otherwise provided for in this Agreement, the failure of any Party to comply with any obligation, covenant, agreement, or condition herein may be waived by the Parties entitled to the benefits thereof only by a written instrument signed by the Parties granting such waiver. Any waiver at any time by a Party of its rights with respect to a Default under this Agreement, or with respect to any other matters arising in connection with this Agreement, shall not be deemed a waiver or continuing waiver with respect to any subsequent Default or other matter.
- 16.2 Governing Law.** The validity, interpretation and performance of this Agreement and each of its provisions shall be governed by the laws of the state of Minnesota where approximately 50 percent of the Network Upgrades and/or Direct Assignment Facilities referenced in Appendix A are located without regard to its conflicts of law principles.
- 16.3 Headings Not to Affect Meaning.** The descriptive headings of the various Sections and Articles of this Agreement have been inserted for convenience of reference only and shall in no way modify or restrict any of the terms and provisions hereof.
- 16.4 Amendments and Rights Under the Federal Power Act.** Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Transmission Owner and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided, however, that each Party shall have the right to protest any such filing and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 16.5 Entire Agreement.** This Agreement, together with all the exhibits, constitutes the final and entire written agreement among the Parties hereto with reference to the subject matter hereof, and is a complete and exclusive statement of those terms and conditions and supersedes all prior negotiations, representations or agreements, either written or oral, with respect to the specific subject matter of this Agreement. No change or modification as to any of the provisions hereof shall be binding on any Party unless reduced to writing and approved by the duly authorized officer or agent of Customer, Transmission Owner, and Transmission Provider.
- 16.6 Counterparts.** This Agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument.

- 16.7 Binding Effect.** This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the Parties hereto and their successors and assigns. No person or party shall have any rights, benefits or interests, direct or indirect, arising from this Agreement except the Parties hereto, their successors and authorized assigns. The Parties expressly disclaim any intent to create any rights in any person or party as a third party beneficiary to this Agreement.
- 16.8 Conflicts.** In the event of a conflict between the body of this Agreement and any attachment, appendix or exhibit hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed to be the final intent of the Parties.
- 16.9 Regulatory Requirements.** Each Party's obligations under this Agreement shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek these other approvals as soon as is reasonably practicable.

ARTICLE 17 REPRESENTATIONS AND WARRANTIES

- 17.1 General.** Each Party hereby represents, warrants and covenants as follows with these representations, warranties, and covenants effective as to the Party during the full time this Agreement is effective:
- 17.1.1. Good Standing.** Such Party is duly organized or formed, as applicable, validity existing and in good standing under the laws of its state of organization or formation, and is in good standing under the laws of the respective state(s) of its organization as stated in the preamble of this Agreement.
- 17.1.2 Authority.** Such Party has the right, power and authority to enter into this Agreement, to become a party hereto and to perform its obligations hereunder, and this Agreement is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms.
- 17.1.3 No Conflict.** The execution, delivery and performance of this Agreement does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit or order or material agreement or instrument applicable to or binding upon such Party or any of its assets.
- 17.1.4 Consent and Approval.** That it has sought or obtained, or, in accordance with this Agreement will seek or obtain, each consent, approval, authorization or order of, or acceptance of a filing with, or notice to, any Governmental Authority with jurisdiction concerning this Agreement, in connection with the execution, delivery and performance of this Agreement.

17.1.5 Solvency. That such Party is financially solvent.

IN WITNESS WHEREOF, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original Agreement among the Parties.

Transmission Provider

Midcontinent Independent System Operator, Inc.

By: 

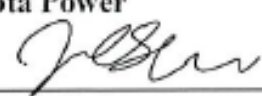
February 28, 2024 kkh

Name: Aubrey Johnson

Title: VP, System Planning & Competitive Development

Transmission Owner

Minnesota Power

By: 

Name: Josh Skelton

Title: Chief Operating Officer - MP

Customer

Minnesota Power

By: 

Name: Bethany M. Owen

Title: Chief Executive Officer

Square Butte 90481026 95418167 FCA

Facilities Construction Agreement
APPENDIX A
NETWORK UPGRADES, COST ESTIMATES AND RESPONSIBILITY,
TRANSMISSION CREDITS, CONSTRUCTION SCHEDULE AND MONTHLY
PAYMENT SCHEDULE

This Appendix A is a part of the Facilities Construction Agreement between Customer, Transmission Owner, and Transmission Provider. Terms used in this Appendix A with initial capitalization not defined in this Appendix A shall have the meaning set out in the Agreement

The upgrades required to be made by the Transmission Owner under this Agreement because of the Transmission Service Request include Direct Assignment Facilities and Network Upgrades, as defined in Module B and Attachment N of the Tariff. The Network Upgrades under this Agreement are governed by Module B and Attachment N of the Tariff.

1.1 Network Upgrades to be installed by Transmission Owner.

1.1.1 Transmission Owner Substation Network Upgrades: To modernize the terminals of the existing Square Butte HVDC Line and implement the latest voltage source converter (“VSC”) HVDC technology, new buildings and electrical infrastructure need to be constructed on a new site near the existing Center and Arrowhead HVDC terminals. Due to the specialized nature of the technology, the new VSC HVDC converter stations will be delivered as turnkey projects by the original equipment manufacturer (“OEM”). The scope of supply for the HVDC OEM will include the relocated converter stations, including valves, converter transformers, smoothing reactors, DC equipment, AC circuit breakers, control & protection, and all associated facilities. The new VSC HVDC converter stations will be designed to interconnect at 345 kV on the AC system side. To accommodate interconnection of the new VSC HVDC converter stations, new AC interconnection facilities will be constructed including new 345/230 kV substations, 345 kV transmission lines, and 230 kV transmission lines. New AC interconnection facilities are listed below.

In Minnesota:

- Construction of a new St. Louis County 345/230 kV Substation located less than one mile west of the Arrowhead Substation
- Construction of a new 345 kV transmission line from the HVDC converter station to the St. Louis County Substation
- Construction of two parallel 230 kV lines from the St. Louis County Substation to the existing Arrowhead Substation
- At Arrowhead Substation, the two new 230 kV lines will be interconnected to the existing HVDC Pole 1 and Pole 2 bus positions, which will be rebuilt with higher-capacity bus and electrical equipment to accommodate the increased HVDC capacity.
- A short portion of the existing ± 250 kV HVDC Line in Minnesota will be reconfigured to terminate at the new HVDC converter station.

In North Dakota:

- Establishment of a new Nelson Lake 230 kV Switching Station to tie together the existing Minnesota Power Square Butte East – Bison 230 kV Line with the existing Great River Energy Square Butte – Stanton 230 kV Line.
- Construction of a second 230 kV circuit between Nelson Lake and Square Butte East using existing double-circuit capable structures.
- Addition of a 230 kV breaker at the Square Butte East Substation to accommodate the second Nelson Lake – Square Butte East 230 kV circuit
- Expansion of the Nelson Lake 230 kV Switching Station to add a 345/230 kV transformer and 345 kV line entrance.
- Construction of a new 345 kV line from Nelson Lake to the new HVDC converter station
- Construction of a new 345 kV substation at the new HVDC converter station site
- A portion of the existing ± 250 kV HVDC Line in North Dakota will need to be reconfigured to terminate at the new HVDC converter station.

Additional equipment upgrades may be deemed necessary by the Transmission Owner or the HVDC OEM during the specification, detailed design, and engineering phase of the project.

1.1.2 Transmission Owner Transmission Line Network Upgrades: The upgrades necessary to increase the capacity of the HVDC transmission line from 550 MW to 900 MW are likely to consist primarily of replacing existing structures with taller structures to increase conductor-to-ground clearance at the higher operating temperature. A short segment of the transmission line with a smaller conductor will need to be rebuilt with a larger conductor.

1.1.3 Transmission Owner Transmission Line Permitting: Due to the relocation of the converter stations and the length of new AC interconnection facilities required to re-connect to the existing system, the HVDC Modernization Project will require state-level permits in both Minnesota and North Dakota. In Minnesota, a Certificate of Need and Route Permit will be required from the State of Minnesota. In North Dakota, a Certificate of Corridor Compatibility and a Route Permit will be required. Minnesota Power will obtain the necessary permits in both states

1.1.4 Cost Estimates and Responsibility. The estimated total cost for the Network Upgrades is \$878,000,000. These costs are shared by the Transmission Owner and Customer. **The estimated cost to be paid by the Customer for Transmission Service Requests 90481026 & 95418167 is \$205,000,000.** The Customer(s) hereby acknowledge and agree that the costs, expenses, and charges set out in Table 1 are only an estimate and that the Customer(s) shall pay the Transmission Owner for their allocated amounts for all costs, expenses, and charges. Updated estimates will be provided annually by the Transmission Owners on request from the Customer.

This is detailed below in Table 1 and is subject to applicable Tax Gross.

Table 1: Network Upgrades Cost Details

HVDC Modernization Project	Total Estimated Cost	Directly Assigned Cost Assigned to Transmission Service Requests #90481026 & #95418167
Converter Station Replacement	\$705,000,000	\$165,000,000
Interconnections to AC System	\$115,000,000	\$15,000,000
Transmission Line Modification	\$58,000,000	\$25,000,000
Internal & Professional Services	Included	Included
Total (in 2022 dollars)	\$878,000,000	\$205,000,000

1.1.4.1 Major Material List of Transmission Owner's Network Upgrades –
See Exhibit C2

1.2 Direct Assignment Facilities – None.

1.3 First Equipment Order (including permitting). See Table 2 below.

1.3.1. Permitting And Land Rights – Transmission Owner Network Upgrades –
See Section 1.8.

1.4 Transmission Credits. See Article 3.2.2 of the Agreement.

1.5 Construction Schedule. Where applicable, construction of the Transmission Owner Network Upgrades and Special Protection Facilities is scheduled as follows and will be periodically updated as necessary:

Table 2: Transmission Owner Construction Activities

Milestone Number	Milestone Description	Start Date
1.	Facilities Construction Agreement Executed.	Aug/Sep-2023
2.	Minnesota Certificate of Need & Route Permit Applications Filed.	Jun-2023

3.	North Dakota Certificate of Corridor Compatibility and Route Permit Applications Filed.	Oct-2023
4.	Begin Front End Engineering & Design with HVDC OEM.	Jan-2024
5.	Major Permits Received in Minnesota & North Dakota.	Jul-2024
6.	Order Long Leadtime Equipment for AC Substations.	Nov-2024
7.	Clearing Begins.	Jan-2025
8.	Construction of AC Interconnection Facilities Begins.	May-2025
9.	Construction of HVDC Transmission Line Upgrades Begins.	Aug-2025
10.	Receive Firm Proposal from HVDC OEM.	Aug-2026
11.	Execute Firm EPC Contract with HVDC OEM.	Oct-2026
12.	Construction of HVDC Converter Stations Begins.	Oct-2027
13.	In-Service Date.	Apr-2030

Note: The construction schedule assumes that the Transmission Owner has obtained final authorizations and security from Customer and all necessary permits from Governmental Authorities as necessary prerequisites to commence construction of any of the Network Upgrades and Special Protection Facilities.

1.6 Payment Schedule.

1.6.1 Timing of and Adjustments to Customer's Payments and Security.

1.6.2 Monthly Payment Schedule. Following approval of the state permits set forth in Section 1.2.3, in accordance with Attachment N, the Customer will begin paying a monthly dollar assessment. Monthly payments by the Customer will continue until Transmission Owner has recovered the cost of all Directly Assigned Facilities and Transmission Owner Network Upgrades.

A Customer that fails to make payments when due will be given a Breach notice. Unless the Breach is cured in accordance with Article 9 of this agreement, the Transmission Owner is relieved from performing under this Agreement. Failure by any Customer to comply with Article 9.2.2(A) or 9.2.2(B) relative to such Breach may, pursuant to Article 9.2.2 of the Agreement, result in termination of the Agreement as to that Customer.

1.6.3 Security Amount. Not later than thirty (30) Days after Transmission Owner has received all Certificate of Need approvals, Customer shall provide MP security in the amount of Two Hundred Five Million Dollars (\$205,000,000) consisting of either or a combination of a letter of credit and/or cash escrow as set forth under

Section 1.7.4 (“Initial Development Security”). Sixty (60) Days after termination of this Agreement, except as set forth in Section 1.7.5, Transmission Owner shall promptly return the Initial Development Security to Customer.

1.6.4 Security Characteristics and Draw

1.6.4.1 Except as set forth under Section 1.7.3.1, Security shall be composed of either a Guaranty, a letter of credit as described in Section 1.7.4 or a cash escrow as described in Section 1.7.4.2, at Customer’s option, or a combination of these options as long as the total amount of Security is not less than the amount then required. Notwithstanding the foregoing, the Guaranty amount may not comprise more than fifty percent (50%) of the overall total amount of Security, provided that if Customer has delivered a notice reducing the amount of Security required pursuant to Section 1.7.7, then the Guaranty may comprise up to 100% of the overall total amount of Security at the Guarantor’s option. Customer shall be (i) permitted from time to time to change the form and combination of such posted Security provided that no Event of Default with respect to Customer then exists so long as Transmission Owner is provided timely Notice of the change, and (ii) required, if Customer has provided Security, or any portion thereof, in the form of a Guaranty, if the entity or entities providing a Guaranty no longer qualify as a Guarantor, Customer shall within ten (10) Business Days of Transmission Owner’s Notice to do so (A) replace such Guaranty with either a Guaranty from an entity or entities meeting the requirements as a Guarantor and/or (B) deliver a letter of credit or performance bond as described in Section 1.7.4.3 and/or (C) supply a cash escrow as described in Section 1.7.4.2, at Customer’s option, in any case, in the aggregate amount of the then applicable Security, less the aggregate amount of any prior draws on such Security. Upon receipt of such substitute Security, any such Guaranty shall be deemed cancelled.

1.6.4.2 If Customer elects to utilize a cash escrow as Security, it shall establish an interest-bearing escrow account with a commercial bank or other mutually acceptable escrow agent as escrow agent, and the account shall name Transmission Owner as the beneficiary for the duration of the existence of the escrow account. The escrow account shall be in United States currency, and funds in the account may be invested in a money-market fund, short-term treasury obligations, investment-grade commercial paper or other investment-grade investments with maturities of three (3) months or less. All income and interest earned on the accounts held in the escrow account shall accrue for the benefit of the Customer, and Customer may withdraw the income and interest earned at any time as long as the balance in the account after the withdrawal meets the minimum funding requirements of this Section 1.7.4.2. The escrow agreement shall require the escrow agent to notify Transmission Owner of the balance in the escrow account from time to time. The escrow agreement governing the account shall include terms that (i) prohibit

termination of the account prior to establishment of alternative Security that satisfies all the requirements of this FCA; (ii) require Notice of no less than sixty (60) Days by the escrow agent to Transmission Owner prior to any termination of the account; and (iii) allow Transmission Owner to draw the entire balance in the escrow account up to the amount of the Security if Security has not been replaced in accordance with this Agreement at least five (5) Business Days prior to the expiration or termination of the escrow account, and Transmission Owner shall hold such amounts in lieu of escrow until such time as the Security has been replaced, at which time the funds shall be returned to Customer. At the end of the Term, any balance remaining in the escrow account shall be returned or released to Customer.

1.6.4.3 In conjunction with or instead of a Guaranty or cash security as provided in Section 1.7.4.2, Customer may provide Security in the form of an irrevocable letter of credit in a commercially reasonable form and otherwise in compliance with the requirements of this Section 1.7.4 and in form and substance acceptable to the Issuer (as defined below) (the "LOC"). The LOC shall be issued by a state or federally chartered commercial bank which issues similar letters of credit in the ordinary course of its business and that (i) has an unsecured bond rating or long-term senior unsecured debt rating equivalent to A- or better as determined by at least two (2) rating agencies, one of which must be either S&P or Moody's, or, if these are not available, CAMEL ratings from the FDIC or OCC used in the banking industry no less than a 3 and (ii) has a minimum of One Hundred Million Dollars (\$100,000,000) in capital (the "Issuer"). The LOC must: (i) be issued for a minimum term of three hundred and sixty (360) Days, and, where permitted by the Issuer, shall be automatically extended for a period of one (1) year on each successive expiration date unless, at least ninety (90) Days before the current expiration date, the Issuer notifies Customer and Transmission Owner by certified mail that the Issuer has decided not to extend the letter of credit; (ii) provide that draws shall be payable upon presentation of a sight draft executed by an officer of Transmission Owner substantially in the form approved by Transmission Owner; and (iii) expressly permit partial and multiple draws. Any unused portion of the letter of credit shall be available, regardless of renewal, through the then current expiration date. Customer may replace the letter of credit with another Issuer which includes a provision for at least ninety (90) Days advance Notice to Transmission Owner and shall cause the renewal or extension of the LOC meeting the criteria set forth in this Section 1.7.4.3 within thirty (30) days prior to the expiration or cancellation of the then current LOC, and failure to do so shall authorize Transmission Owner to draw immediately upon the then current LOC. Transmission Owner shall then, at Customer's cost and with Customer's funds, place the amounts so drawn in an interest bearing escrow account in accordance with Section 1.7.4.2 above, until

and unless Customer provides a substitute form of such security meeting the requirements of this Section 1.7.4. Security in the form of an irrevocable standby letter of credit shall be governed by the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Brochure No. 500 or as otherwise required by the Issuer of the LOC.

1.6.4.4 Customer shall provide Guarantor's annual audited financial statements to Transmission Owner within one hundred twenty (120) days after the end of each calendar year. Transmission Owner shall have the right to monitor the financial condition of Customer, Guarantor, and the Issuer to the extent set forth herein, and Customer shall provide written Notice to Transmission Owner within five (5) Business Days of becoming aware that (i) the Issuer does not satisfy the requirements of the second sentence of Section 1.7.4.3, (ii) ALLETE, Inc. or an affiliate is the Guarantor, such entity does not, collectively, have a tangible net worth of at least Five Hundred Million Dollars (\$500,000,000), or (iii) if the Guarantor is not ALLETE, Inc. or an affiliate such Person does not have an Investment Grade Credit Rating, and in such event Customer shall provide alternative Security as soon as practicable that complies with this Section 1.7.4.4 and in no event later than thirty (30) Days after becoming aware of the Issuer's or a Guarantor's failure to meet the requirements of this Section 1.7.

1.6.5 Release of Security. Promptly following the termination of this FCA and the completion of all Customer's obligations under this FCA, Transmission Owner shall release the Security (including any accumulated interest, if applicable) to Customer.

1.6.6 Permitted Draws; Effects of Draws. In addition to any other remedy available to it, Transmission Owner may, before or after termination of this FCA, draw against the Security to satisfy any undisputed obligations of Customer to Transmission Owner arising under this Agreement (including, without limitation, the payment of Availability Liquidated Damages, if any, or any indemnification obligations) which Customer has not otherwise paid or performed when due, after any required Notice and opportunity to cure. If Transmission Owner draws against the Security and Customer subsequently disputes Transmission Owner's entitlement to any portion of the funds drawn, neither Transmission Owner's draw, the Issuer's payment under the LOC, nor Customer's replenishment of the Security or reimbursement of the Issuer or escrow agent shall constitute a waiver of Customer's rights to seek recovery of any amount disputed. To the extent Transmission Owner elects to draw upon the Security to satisfy obligations that otherwise constitute, or might constitute, an Event of Default by Customer and entitle Transmission Owner to terminate this Agreement, Transmission Owner's draw against the Security shall be deemed a cure of such Event of Default and shall waive Transmission Owner's right to terminate in that respect. With respect to any Event of Default by Seller that remains uncured and which could be cured

by payment of an undisputed amount to Transmission Owner, Transmission Owner shall first draw upon the Security to cure the Event of Default, and only if such Security is insufficient to cure the Event of Default shall any right of termination which Transmission Owner may otherwise have be exercised by Transmission Owner.

- 1.6.7** Reduction in Security. Transmission Owner may, by Notice from time to time to Customer, waive or reduce the amount of security required to be posted hereunder in consideration of an Affiliate of Transmission Owner having a minority ownership interest in Customer.

1.7 Permits, Licenses and Authorizations.

Transmission Owner will be responsible for all permits, licenses and authorizations.

Facilities Construction Agreement
APPENDIX B
NOTIFICATION OF COMPLETED CONSTRUCTION

This Appendix B is a part of the Facilities Construction Agreement among Customer, Transmission Owner, and Transmission Provider. Where applicable, when Transmission Owner has completed construction of the Transmission Owner Network Upgrades and/or Direct Assignment Facilities, Transmission Owner shall send notice to Customer and Transmission Provider, in substantially the form following:

[Date]

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

Customer Address

Phone:

Fax:

Email:

Re: Completion of Network Upgrade/Direct Assignment Facilities

Dear [Name or Title]:

This letter is sent pursuant to the Facilities Construction Agreement among [Transmission Owner], [Customer], and MISO, dated _____, 20__.

On [Date], Transmission Owner completed to its satisfaction all work on the Network Upgrades and/or System Protection Facilities required to facilitate the safe and reliable operation of Customer's Facility. Transmission Owner confirms that the Network Upgrade and/or System Protection Facilities are in place.

Thank you.

[Signature]

[Transmission Owner Representative]

Facilities Construction Agreement
APPENDIX C Exhibits

This Appendix C is a part of the Facilities Construction Agreement among Customers,
Transmission Owner, and Transmission Provider.

Exhibit C1.
Transmission Owner Network Upgrade One Line

CUI//CEII MATERIAL – DO NOT RELEASE

[HIGHLY CONFIDENTIAL TRADE SECRET DATA BEGINS

CUI//CEII MATERIAL – DO NOT RELEASE

HIGHLY CONFIDENTIAL TRADE SECRET DATA ENDS]

Exhibit C2.
Estimated Cost of Transmission line and/or Substation Network Upgrades and Direct Assignment Facilities

The total estimated cost for the Network Upgrades for HVDC Converter Station, connections to AC System, Transmission Line Modifications is \$878,000,000.

The details of the cost assigned for customer with Transmission Service Requests **#90481026 & #95418167** is shown below in Table 1, Table 2, Table 3.

Detailed Cost Estimate of Facilities to be Constructed by Transmission Owner

The anticipated costs of modernizing and upgrading the HVDC converter stations are shown in Table 1. The initial estimated converter station replacement base cost was provided by the HVDC OEM. If design assumptions change significantly during the development of the project, the base cost shown in Table 1 may change.

Table 1: Converter Station Replacement Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests #90481026 & #95418167
Converter Station Base Cost	\$705,000,000	\$165,000,000
Internal & Professional Services	(Included)	(Included)
Contingency - Converter Station	(Included)	(Included)
AFUDC - Converter Station	(Included)	(Included)
Total (in 2022 dollars)	\$705,000,000	\$165,000,000

The anticipated costs of AC Interconnection Facilities necessary to connect the relocated VSC HVDC converter stations to the existing AC transmission system are shown in Table 2. If design assumptions change significantly during the development of the project, the base costs shown in Table 2 may change.

Table 2: AC Interconnection Facilities Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests #90481026 & #95418167
Minnesota AC Interconnections	\$55,000,000	\$7,000,000
North Dakota AC Interconnections	\$40,000,000	\$4,000,000
Nelson Lake 230 kV Substation	\$20,000,000	\$4,000,000
Total (in 2022dollars)	\$115,000,000	\$15,000,000

The anticipated costs of Transmission Line Modifications are shown in Table 3. The upgrade cost estimate is based on preliminary transmission structural engineering evaluations. If additional HVDC transmission line modifications or scope changes are found to be necessary during the development of the project, the costs presented in Table 3 may be impacted.

Table 3: Transmission Line Modifications Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests #90481026 & #95418167
HVDC T-Line 900 MW Upgrade	\$58,000,000	\$25,000,000
HVDC T-Line AFUDC	(Included)	(Included)
HVDC T-Line Contingency	(Included)	(Included)
Total (in 2022dollars)	\$58,000,000	\$25,000,000

TAB B

PUBLIC

FACILITIES CONSTRUCTION AGREEMENT

entered into by the

Midcontinent Independent System Operator, Inc.,

And

~~{Customer}~~

Minnesota Power, a division of ALLETE, INC.

And

~~{Transmission Owner}~~

Minnesota Power, a division of ALLETE, INC.

entered into on the 28th day of February, 2024

FACILITIES CONSTRUCTION AGREEMENT

THIS FACILITIES CONSTRUCTION AGREEMENT (sometimes hereinafter referred to as “Agreement”) is made and entered into this 28th day of February, 2024, by and among the merchant function of Minnesota Power, a division of ALLETE, INC., a corporation, organized and existing under the laws 20 of the State of Minnesota (“Customer”), the **Midcontinent Independent System Operator, Inc.**, a non-profit, non-stock corporation organized and existing under the laws of the State of Delaware (“Transmission Provider”) and the transmission function of Minnesota Power, a division of ALLETE, INC., a corporation organized under the laws of the State of Minnesota (“Transmission Owner”). Customer, Transmission Owner, or Transmission Provider each may be referred to as a “Party” or collectively as the “Parties.”

RECITALS

WHEREAS, Transmission Owner ~~and Customer each~~ owns electric facilities and is engaged in generation, transmission, distribution and/or sale of electric power and energy; and

WHEREAS, Transmission Provider has functional control of the operations of the Transmission System, as defined herein, and is responsible for providing transmission and interconnection service on the transmission facilities under its control; and

~~**WHEREAS**, Customer intends to own, and operate, or manage [Interconnection Customer Interconnection Facilities relating to the MW generating facility] [MHVDC Connection Customer Connection Facilities relating to the MW MHVDC Transmission Line] located in County, (“Facility”) with an expected Commercial Operation Date of pursuant to the [GIA] [TCA] and will interconnect to the transmission system of , which system is either adjacent to or part of the Transmission System; and~~

WHEREAS, Customer intends to reserve Firm Point to Point Transmission Service via Transmission Provider’s Reservation Request Nos. 90481026 and 95418167; and

WHEREAS, the Transmission System is affected by the interconnection firm transmission service request of the Facility ~~to the transmission system~~ and additions, modifications and upgrades must be made to certain existing facilities of the Transmission System to accommodate such ~~interconnection;~~ transmission service and

WHEREAS, Customer has requested, and Transmission Provider and Transmission Owner have agreed, to enter into this Agreement with Customer for the purpose of facilitating the ~~interconnection~~ transmission service of the Facility by the construction of necessary Network Upgrades to the Transmission System;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

ARTICLE 1 DEFINITIONS

Wherever used in this Agreement with initial capitalization, the following terms shall have the meanings specified or referred to in this Article 1. Terms used in this Agreement with initial capitalization not defined in this Article 1 shall have the meanings specified in the Tariff:

- 1.1 “Applicable Laws and Regulations” shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the Parties, their respective facilities and/or the respective services they provide.
- 1.2 “Applicable Reliability Council” shall mean the reliability council of NERC applicable to the Local Balancing Authority of the Transmission System to which the Facility is directly interconnected.
- 1.3 “Applicable Reliability Standards” shall mean Reliability Standards approved by the Federal Energy Regulatory Commission (FERC) under Section 215 of the Federal Power Act, as applicable.
- 1.4 “Breach” shall mean the failure of a Party to perform or observe any material term or condition of this Agreement and shall include, but not be limited to, the events described in Article 9.1.
- 1.5 “Breaching Party” shall mean a Party that is in Breach of this Agreement.
- ~~1.6 “Commercial Operation” shall mean the status of a [Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation] [MHVDC Transmission Line that has commenced transmitting electricity for sale, excluding electricity transmitted during Trial Operation].~~
- ~~1.7 “Commercial Operation Date” or “COD” of a Facility shall mean the date on which the Facility commences Commercial Operation pursuant to [Appendix E to the Generator Interconnection Agreement] [Appendix C to the Transmission Connection Agreement].~~
- ~~1.8~~1.6 “Confidential Information” shall mean any proprietary or commercially or competitively sensitive information, trade secret or information regarding a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, or any other information as specified in Article 12, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, that is received by another Party.

- 1.97 “Customer” shall mean, for purposes of this Agreement, ~~an Interconnection~~
Transmission Customer as defined in the ~~GIP set forth in Attachment X or an MHVDC~~
~~Connection Customer as defined in the MHCP set forth in Attachment GGG~~ Tariff.
- 1.108 “Default” shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 9 of this Agreement.
- ~~1.11~~1.9 “Direct Assignment Facilities” shall mean those facilities or portions of facilities that are constructed by any Transmission Owner(s), ITC, or ITC Participant(s) for the sole use/benefit of a particular Transmission Customer requesting service under this Tariff. Direct Assignment Facilities shall be specified in the Service Agreement that governs service to the Transmission Customer and shall be subject to Commission approval.
- 1.10 “Effective Date” shall mean the date on which this Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.
- 1.1211 “FERC” shall mean the Federal Energy Regulatory Commission, also known as Commission, or its successor.
- 1.1312 “Force Majeure” shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party’s control. A Force Majeure event does not include an act of negligence or intentional wrongdoing by the Party claiming Force Majeure.
- ~~1.14 “Generator Interconnection Procedures or “GIP” shall mean the interconnection procedures that are included in the Transmission Provider Tariff.~~
- ~~1.15~~1.13 “Good Utility Practice” shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric 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 to 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. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- 1.1614 “Governmental Authority” shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive,

police, or taxing authority or power; provided, however, that such term does not include Customer, Transmission Provider, Transmission Owner, or any Affiliate thereof.

~~1.17~~¹⁵ “In-Service Date” shall mean the date upon which Customer reasonably expects it will be ready to begin use of the Network Upgrades and/or ~~System Protection~~Direct Assignment Facilities.

~~1.18~~ “~~Interconnection Agreement~~” or “~~GIA~~” shall mean that ~~Generator Interconnection Agreement by and between Transmission Provider, _____ and Interconnection Customer and reported in MISO’s Electronic Quarterly Reports.~~

^{1.16}
~~1.19~~ “Local Balancing Authority” shall mean an operational entity or a Joint Registration Organization which is (i) responsible for compliance with the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement for their local area within the MISO Balancing Authority Area, (ii) a Party to Balancing Authority Agreement, excluding MISO, and (iii) shown in Appendix A to the Balancing Authority Agreement.

~~1.20~~¹⁷ “Loss” shall mean any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party’s performance, or non-performance of its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing, by the indemnified Party.

^{1.18} “Material Modification” shall mean: (1) modification to a Transmission Service Request in the queue that has a material adverse impact on the cost or timing or constraint identification of Transmission Service Request; or (2) planned modification to proposed network upgrades that is undergoing evaluation and has a material adverse impact on the Transmission System prior to the modification.

~~1.19~~^{1.21} “NERC” shall mean the North American Electric Reliability Corporation, or its successor organization.

~~1.22~~²⁰ “Network Upgrades” shall mean the additions, modifications, and upgrades to the Transmission System required ~~at or beyond the point at which the [Interconnection Facilities] [Connection Facilities] connect to the Transmission System or Distribution System, as applicable, to accommodate the interconnection of the Facility to the Transmission System~~to accommodate the transmission service requests.

~~1.23~~² “Non-Breaching Party” shall mean a Party that is not in Breach of this Agreement with regard to a specific event of Breach by another Party.

~~1.24~~²² “Reasonable Efforts” shall mean, with respect to an action required to be attempted or taken by a Party under this Agreement, efforts that are timely and consistent with Good

Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

~~1.25 “Shared Network Upgrade” shall mean a Network Upgrade or Common Use Upgrade that is funded by a Customer(s), including when the Transmission Owner elects to fund the capital cost of such a Network Upgrade or Common Use Upgrade under Section 11.3 of the GIA, and also benefits other Customer(s) that are later identified as beneficiaries.~~

~~1.26 “System Protection Facilities” shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission System or other delivery systems or other generating systems from faults or other electrical disturbances occurring at the Facility and (2) the Facility from faults or other electrical system disturbances occurring on the Transmission System or on other delivery systems or other generating systems to which the Transmission System is directly connected.~~

~~1.27~~

1.23 “Tariff” shall mean the Transmission Provider’s Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.

~~1.28~~1.24 “Transmission Service” shall mean Point-to-Point Transmission Service provided under Module B of the Tariff on a firm and non-firm basis and the Network Integration Transmission Service under Module B of the Tariff.

1.25 “Transmission System” shall mean the facilities owned by Transmission Owner and controlled or operated by Transmission Provider or Transmission Owner that are used to provide Transmission Service or Wholesale Distribution Service under the Tariff.

ARTICLE 2 TERM OF AGREEMENT

2.1 Effective Date. Subject to required regulatory authorizations, including, without limitation, acceptance by FERC under Section 205 of the Federal Power Act, this Agreement shall become effective on the date on which this Agreement is made and entered into by the Parties.

2.2 Term.

2.2.1 General. This Agreement shall become effective as provided in Article 2.1 and shall continue in full force and effect until the earlier of (i) the final repayment, where applicable, by Transmission Owner of the amount funded by Customer for Transmission Owner’s design, procurement, construction and installation of the Network Upgrades and ~~System Protection~~Direct Assignment Facilities provided in Appendix A; (ii) the Parties agree to mutually terminate this Agreement; (iii) earlier termination is permitted or provided for under Appendix A of this Agreement; or (iv) Customer terminates this Agreement after providing

Transmission Provider and Transmission Owner with written notice at least sixty (60) Calendar Days prior to the proposed termination date, provided that Customer has no outstanding contractual obligations to Transmission Provider or Transmission Owner under this Agreement. No termination of this Agreement shall be effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination. The term of this Agreement may be adjusted upon mutual agreement of the Parties, if the ~~Commercial Operation Date for the Facility or the~~ In-Service Date for the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities is adjusted in accordance with the rules and procedures established by Transmission Provider.

2.2.2 Termination Upon Default. In the event of a Default by a Party, the Non-Breaching Party or Parties shall have the termination rights described in Articles 9 and 10; provided, however, if an event described in part (c) of Article 9.1 has not occurred, and provided the Default does not pose a threat to the reliability of the Transmission System, neither Transmission Provider nor Transmission Owner may terminate this Agreement if Customer is the Breaching Party and Customer (i) has undertaken, in accordance with Article 9.2, to cure the Breach that led to the Default and has failed to cure the Breach for reasons other than Customer's failure to diligently commence reasonable and appropriate steps to cure the Breach within the thirty (30) Calendar Days allowed by Article 9.2, and (ii) compensates Transmission Provider or Transmission Owner within thirty (30) Calendar Days for the amount of damage billed to Customer by Transmission Provider or Transmission Owner for any damages, including costs and expenses, incurred by Transmission Provider or Transmission Owner as a result of such Default. In the event of an occurrence described in part (c) of Article 9.1, and providing the Default does not pose a threat to the reliability of the Transmission System, the Non-Breaching Party or Parties shall not terminate this Agreement provided that the Breaching Party provided an assurance of payment acceptable to the Non-Breaching Party, and pays any applicable damages.

2.2.3 Consequences of Termination. In the event of a termination by any Party, other than a termination by Customer due to a Breach by Transmission Owner, Customer must pay Transmission Owner all amounts still due and payable for construction and installation of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities (including, without limitation, any equipment ordered related to such construction), plus all out-of-pocket expenses incurred by Transmission Owner in connection with the construction and installation of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, through the date of termination, plus any actual costs which Transmission Owner (A) reasonably incurs in winding up work and construction demobilization and (B) reasonably incurs to ensure the safety of persons and property and the integrity and safe and reliable operation of the Transmission System. Transmission Owner agrees to use Reasonable Efforts to minimize such costs.

~~Customer is responsible for the financial impact that is caused to another Interconnection Customer as a result of the termination of this Agreement, Customer's GIA, or any of Customer's other FCA(s) or MPFCA(s); financial impact as defined by Section 7.8 of Attachment X. To the extent that the Customer has already paid Transmission Owner for any or all such costs of materials or equipment not taken by Customer or upgrades not yet constructed, Transmission Owner shall promptly transfer such remaining amounts to Transmission Provider, less any costs, including penalties incurred by Transmission Owner to cancel any pending orders of or return such materials, equipment, or contracts. Transmission Provider will perform a financial impact analysis in accordance with Section 7.8 of Attachment X to determine the amount that should be refunded to Interconnection Customer. Transmission Provider shall refund such remaining amounts to Interconnection Customer, less any financial impact caused by the termination of this Agreement or Interconnection Customer's GIA, MPFCA(s), or other FCA(s), as determined through the analysis performed in accordance with Section 7.8 of Attachment X. If Interconnection Customer made its payment(s) through a letter of credit, surety bond, or parental guarantee, Transmission Owner will draw against that letter of credit, surety bond, or parental guarantee in an amount determined through the analysis performed in accordance with Section 7.8 of Attachment X and transfer that amount to Transmission Provider, unless Interconnection Customer funds the financial impact through another means.~~

2.2.4 Material Adverse Change. In the event of a material change in law or regulation that adversely affects, or may reasonably be expected to adversely affect a Party's rights and/or obligations under this Agreement, the Parties shall negotiate in good faith any amendments to this Agreement necessary to adapt the terms of this Agreement to such change in law or regulation, and Transmission Provider shall file such amendments with FERC. If, within sixty (60) Calendar Days after the occurrence of any event described in this Article 2.2.4, the Parties are unable to reach agreement as to any necessary amendments, the Parties may proceed under Article 14 to resolve any disputes related thereto; Transmission Provider and/or Transmission Owner shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that a Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. If a Party is unable to fully perform this Agreement due to the occurrence of an event described in this Article 2.2.4 and such inability is not based on economic reasons, such Party shall not be deemed to be in Default of its obligations under this Agreement, provided that such Party is seeking dispute resolution under Article 14 or before FERC, to the extent that (i) such Party is unable to perform as a result of such an event and (ii) such Party acts in accordance with its obligations under this Article 2.2.4.

- 2.3 Regulatory Filing.** In accordance with Applicable Laws and Regulations, Transmission Provider shall file this Agreement, and any amendment to this Agreement with FERC as a service agreement under the Tariff. If Customer has executed this Agreement or any amendment to this Agreement, Customer shall not protest this Agreement or the amendment, shall reasonably cooperate with Transmission Provider with respect to such filing and shall provide any information, including the rendering of testimony or pleadings, as applicable, reasonably requested by Transmission Provider to the extent reasonably needed to comply with applicable regulatory requirements.
- 2.4 Survival.** The applicable provisions of this Agreement shall continue in effect after expiration, cancellation, or termination hereof to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect.
- 2.5 Termination Obligations.** Upon any termination pursuant to this Agreement, Customer shall be responsible for the payment of all costs or other contractual obligations incurred prior to the termination date including previously incurred capital costs, penalties for early termination, costs of removal and site restoration.

ARTICLE 3
CONSTRUCTION OF NETWORK UPGRADES AND ~~SYSTEM PROTECTION~~DIRECT
ASSIGNMENT FACILITIES

3.1 Construction.

3.1.1 Transmission Owner Obligations. Transmission Owner shall (or shall cause such action to) design, procure, construct and install, and Customer shall pay, consistent with Article 3.2, the cost of, all Network Upgrades and ~~System Protection~~Direct Assignment Facilities identified in Appendix A. All Network Upgrades and ~~System Protection~~Direct Assignment Facilities designed, procured, constructed and installed by Transmission Owner pursuant to this Agreement shall satisfy all requirements of applicable safety and/or engineering codes, including those requirements of Transmission Owner and Transmission Provider, and comply with Good Utility Practice, and further, shall satisfy all Applicable Laws and Regulations.

3.1.2 Suspension of Work.

3.1.2.1 Right to Suspend for Force Majeure Event. Provided that such suspension is permissible under the authorizations, permits or approvals granted for the construction of the Network Upgrades and ~~System Protection~~Direct Assignment Facilities Customer will not suspend unless a Force Majeure event occurs. Customer must provide written notice of its

request for suspension to Transmission Provider and Transmission Owner, and provide a description of the Force Majeure event that is acceptable to Transmission Provider. Suspension will only apply to Customer milestones and ~~[Interconnection Facilities]~~~~[Connection Facilities]~~ described in the Appendices of this Agreement. Prior to suspension, Customer must also provide security acceptable to Transmission Owner, equivalent to the higher of \$5 million or the total cost of all Network Upgrades, Transmission Owner's ~~System Protection~~Direct Assignment Facilities, and Distribution Upgrades listed in Appendix A of this Agreement. Network Upgrades, ~~System Protection~~Direct Assignment Facilities, ~~and Transmission Owner [Interconnection Facilities]~~ ~~[Connection Facilities]~~ will be constructed on the schedule described in the Appendices of this Agreement unless: (1) construction is prevented by the order of a Governmental Authority; (2) the Network Upgrades and ~~System Protection~~Direct Assignment Facilities are not needed by any other project; or (3) Transmission Owner or Transmission Provider determines that a Force Majeure event prevents construction. In the event of (1), (2), or (3) security shall be released upon the determination that the Network Upgrades and ~~System Protection~~Direct Assignment Facilities will no longer be constructed. If suspension occurs, Customer shall be responsible for the costs which Transmission Owner incurs (i) in accordance with this Agreement prior to the suspension, (ii) in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System and, if applicable, any costs incurred in connection with the cancellation of contracts and orders for material which Transmission Owner cannot reasonably avoid, and (iii) reasonably incurs in winding up work and construction demobilization; provided, however, that, prior to canceling any such contracts or orders, Transmission Owner shall obtain Customer's authorization. Customer shall be responsible for all costs incurred in connection with Customer's denial of authorization to cancel such contracts or orders. Interest as provided in

Article 3.2.2.2 on amounts paid by Customer to Transmission Owner for the design, procurement, construction and installation of the Network Upgrades and ~~System Protection~~Direct Assignment Facilities, shall not accrue during periods in which Customer has suspended construction under this Article 3.1.2. Transmission Owner shall invoice Customer pursuant to Article 6 and use Reasonable Efforts to minimize its costs. In the event that Customer suspends work pursuant to this Article, no construction duration, timelines and schedules set forth in Appendix A shall be suspended during the period of suspension unless ordered by a Governmental Authority, with such order being the Force Majeure event causing the suspension.

3.1.2.2 Recommencing of Work. If Customer requests Transmission Owner to recommence such work, Transmission Owner shall have no obligation to afford such work the priority it would have had but for the prior actions of Customer to suspend the work. In such event, Customer shall be responsible for any costs incurred in recommencing the work. All recommenced work shall be completed pursuant to an amended schedule for the ~~interconnection~~ transmission service as agreed to by the Parties. Transmission Provider and Transmission Owner have the right to request ~~an Interconnection~~ a System Impact Study if conditions have materially changed subsequent to the request to suspend. Customer shall be responsible for the costs of any studies required.

3.1.2.3 Termination in the Event of a Material Modification. In the event Customer suspends the performance of work by Transmission Owner pursuant to this Article 3.1.2 and modifies its ~~Commercial Operation Date by three (3) years or more~~ In-Service Date, this Agreement shall be deemed terminated unless Customer demonstrates that the change is not a Material Modification under FERC precedent.

3.1.2.4 Right to Suspend Due to Default. Transmission Owner reserves the right, upon written notice to Customer, to suspend, at any time, work by Transmission Owner and the incurrence of additional expenses associated with the construction and installation of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities upon the occurrence of either a Breach that Customer is unable to cure pursuant to Article 9 or an Event of Default pursuant to Article 9. Any form of suspension by Transmission Owner shall not be barred by Articles 2.2.2, 2.2.3 or 9.2.2, nor shall it affect Transmission Owner's right to terminate the work or this Agreement pursuant to Article 10. In such events, Customer shall be responsible for costs which Transmission Owner incurs as set forth in Article 2.2.3.

3.1.3 Construction Status. Transmission Owner shall keep Customer and Transmission Provider advised periodically as to the progress of its respective design, procurement and construction efforts as described in Appendix A. Customer may, at any time, request a progress report from Transmission Owner, with a copy to be provided to Transmission Provider. If, at any time, Customer determines that the completion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities will not be required until after the specified In-Service Date, Customer will provide written notice to Transmission Owner and Transmission Provider of such later date upon which the completion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities would be required. Transmission Owner may delay the In-Service Date of the Network Upgrades accordingly.

3.1.4 Timely Completion. Transmission Owner shall use Reasonable Efforts to design, procure, construct, install, and test the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities in accordance with the schedule set forth in Appendix A, which schedule may be revised from time to time by mutual agreement of the Parties. If any event occurs that will affect the time for completion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, or the ability to complete any of them, Transmission Owner and/or Transmission Provider shall promptly notify Customer, with a copy to the other Party. In such circumstances, Transmission Provider shall, within fifteen (15) Calendar Days of such notice, convene a technical meeting with Customer and Transmission Owner to evaluate the alternatives available to Customer. Transmission Owner and/or Transmission Provider shall also make available to Customer all studies and work papers related to the event and corresponding delay, including all information that is in the possession of Transmission Provider or Transmission Owner that is reasonably needed by Customer to evaluate alternatives. Transmission Owner shall, at Customer's request and expense, use Reasonable Efforts to accelerate its work under this Agreement to meet the schedule set forth in Appendix A, provided that Customer authorizes such actions and the costs associated therewith in advance.

3.2 ~~Interconnection~~ Network Upgrade Costs and Credits.

3.2.1 Costs. Customer shall pay to Transmission Owner costs (including taxes and financing costs) associated with seeking and obtaining all necessary approvals and of designing, engineering, constructing, and testing the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, as identified in Appendix A, in accordance with the cost recovery method provided herein. ~~As required by Section 7.3.2.1 and 7.3.3.1 of Attachment X, Transmission Owner shall have provided Transmission Provider with written notice if Transmission Owner elects to fund the capital for the Network Upgrades and Transmission Owner's System Protection Facilities; otherwise, such facilities, if any, shall be solely funded by Customer.~~

Customer shall pay for Direct Assignment Facilities and Network Upgrades in accordance with Attachment N of the Tariff. The cost assignment provisions shall apply to facilities constructed by Transmission Owner until such time as Transmission Owner is able to fully recover its revenue requirements as calculated in Attachment N, Section C. If the Transmission Service Request is discontinued or suspended, the Transmission Customer shall pay the Transmission Owner for the remaining applicable amounts that must be paid pursuant to Attachment N of the Tariff.

Transmission Owner shall install, at Customer's expense, any Transmission Owner's ~~System Protection~~ Direct Assignment Facilities that may be required on the Transmission Owner's ~~[Interconnection Facilities]~~ [Connection Facilities] or the Transmission Owner's transmission or distribution facilities as a result of the

~~interconnection of the Facility and the~~ Network Upgrades required by Customer's
~~[Interconnection Facilities] [Connection Facilities]~~ request.

~~In the event the Network Upgrade(s) are determined to be Shared Network Upgrade(s), Transmission Owner and Transmission Provider shall not be responsible for funding obligations related to the Shared Network Upgrade(s) under separate GIAs and/or TCAs. Transmission Provider shall only be responsible to reimburse those funds to Customer that Transmission Provider receives pursuant to separate GIAs and/or TCAs.~~

3.2.1.1 Lands of Other Property Owners. If any part of the Transmission Owner's ~~[Interconnection Facilities] [Connection Facilities]~~, Network Upgrades, ~~System Protection~~ Direct Assignment Facilities, and/or Distribution Upgrades is to be installed on property owned by persons other than Customer or Transmission Owner, Transmission Owner shall at Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority to the extent permitted and consistent with Applicable Laws and Regulations and, to the extent consistent with such Applicable Laws and Regulations, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Transmission Owner's ~~[Interconnection Facilities] [Connection Facilities]~~, Network Upgrades, ~~System Protection~~ Direct Assignment Facilities, and/or Distribution Upgrades upon such property.

3.2.2 Credits.

3.2.2.1 Repayment. Customer shall be entitled to a cash repayment by Transmission Owner(s) that owns the Network Upgrades, of the amount paid respectively to Transmission Owner, if any, for the Network Upgrades, as provided under ~~Attachment FF of~~ the Tariff, and including any tax gross-up or other tax-related payments associated with the repayable portion of the Network Upgrades, and not repaid to Customer pursuant to Article 3.3.1 or otherwise, to be paid to Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Tariff for Transmission Service with respect to the Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this subparagraph. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1 or the Network Upgrades have been determined not to be needed pursuant to this Article 3.2.2.1. Customer may assign such repayment rights to any person.

~~If the Facility is designated a Network Resource under the Tariff, or if there are otherwise no incremental payments for Transmission Service resulting from the use of the Facility by Transmission Customer, and in the absence of another mutually agreeable payment schedule any repayments provided under Attachment FF shall be established equal to the applicable rate for Firm Point To Point Transmission Service for the pricing zone where the Network Load is located multiplied by the portion of the demonstrated output of the Facility designated as a Network Resource by the Network Customer(s) or in the absence of such designation, equal to the monthly firm single system wide rate defined under Schedule 7 of the Tariff multiplied by the portion of the demonstrated output of the Facility under contract to Network Customer(s) and consistent with studies pursuant to Section 3.2.2.2 of the GIP.~~

3.2.2.2 Amount. Transmission credits will be based on the final, actual cost of completing the Network Upgrades as provided by the final invoice prepared by Transmission Owner pursuant to Article 6.4 of this Agreement. Any repayment made pursuant to Article 3.2.2.1 shall include (i) the final, actual cost after any true-up amounts have been paid pursuant to Article 6.4, and (ii) interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this Article 3.2 until fully reimbursed. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1.

3.2.2.3 Alternative Payment Schedule. Notwithstanding the foregoing, as applicable and consistent with the ~~provisions of Attachment FF of the~~ Tariff, Customer, Transmission Provider, and Transmission Owner, may adopt any alternative payment schedule that is mutually agreeable ~~so long as Transmission Owner takes one of the following actions no later than five (5) years from the Commercial Operation Date: (1) Return to Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that Transmission Owner will continue to provide payments to Customer on a dollar for dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the Commercial Operation Date.~~

3.2.2.4 Impact of Failure to Achieve Commercial Operation. ~~If the Facility fails to achieve Commercial Operation, but it or another generating~~

~~facility is later constructed and makes use of the Network Upgrades, Transmission Owner shall at that time reimburse Customer for the remaining applicable amounts that may be refundable pursuant to Attachment FF of the Tariff, that were advanced for the Network Upgrades on their respective systems as described above. Before any such reimbursement can occur, Customer, or the entity that ultimately constructs the Facility, if different, is responsible for identifying the entity to which the reimbursement must be made.~~ 3.2.2.4

RESERVED

3.2.2.5 Rights not Relinquished. Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that Customer, shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain refunds or transmission credits for Transmission Service that is not associated with the Facility.

3.3 Taxes.

3.3.1 Indemnification for Contributions in Aid of Construction. The Parties intend that all payments made by Customer to Transmission Owner for the installation of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities shall be non-taxable contributions to capital in accordance with the Internal Revenue Code and any applicable state tax laws and shall not be taxable as contributions in aid of construction under the Internal Revenue Code and any applicable state tax laws. With regard only to such contributions, Transmission Owner shall not include a gross-up for income taxes in the amounts it charges Customer for the installation of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities unless (i) Transmission Owner has determined, in good faith, that the payments or property transfers made by Customer to Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Transmission Owner to report payments or property as income subject to taxation; provided, however, that Transmission Owner may require Customer to provide security for ~~[Interconnection Facilities]~~ ~~[Connection Facilities]~~, Network Upgrades, in a form reasonably acceptable to Transmission Owner (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences or any current tax liability under this Article. Customer shall reimburse Transmission Owner for such costs on a fully grossed-up basis, in accordance with this Article, within thirty (30) Calendar Days of receiving written notification from Transmission Owner of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten-year testing period and the applicable statute of limitation, as it may be extended by Transmission Owner upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article. Notwithstanding the foregoing provisions of this Article 3.3.1, and to the extent permitted by law, to the extent that the receipt of such payments by Transmission Owner is determined by any Governmental Authority to constitute income by Transmission Owner subject to taxation, Customer shall protect, indemnify and hold harmless Transmission Owner and its Affiliates, from all claims by any such Governmental Authority for any tax, interest and/or penalties associated with such determination. Upon receiving written notification of such determination from the Governmental Authority, Transmission Owner shall provide Customer with written notification within thirty (30) Calendar Days of such determination and notification. Transmission Owner, upon the timely written request by Customer and at Customer's expense, shall appeal, protest, seek abatement of, or otherwise oppose such determination. Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the compromise or settlement of the claim; provided that Transmission Owner shall cooperate and consult in good faith with Customer regarding the conduct of such contest. Customer shall advance to Transmission Owner on a periodic basis as requested by Transmission Owner the estimated cost of prosecuting such appeal, protest, abatement or other contest. Customer shall not be required to pay Transmission Owner for the tax, interest and/or penalties prior to the seventh (7th) Calendar Day before the date on which Transmission Owner (i) is required to pay the tax, interest and/or penalties or other amount in lieu thereof pursuant to a compromise or settlement of the appeal, protest, abatement or other contest; (ii) is required to pay the tax, interest and/or penalties as the result of a final, non-appealable order by a Governmental Authority; or (iii) is required to pay the tax, interest and/or penalties as a prerequisite to an appeal, protest, abatement or other contest. In the event such appeal, protest, abatement or other contest results in a determination that Transmission Owner is not liable for any portion of any tax, interest and/or penalties for which Customer has already made payment to Transmission Owner, Transmission Owner shall promptly refund to Customer any payment attributable to the amount determined to be non-taxable, plus any interest or other payments Transmission Owner receives or which Transmission Owner may be entitled with respect to such payment. In accordance with Article 6, Customer shall provide Transmission Owner with credit assurances sufficient to meet Customer's estimated liability for reimbursement of Transmission Owner for taxes, interest and/or penalties under this Section 3.3.1. Such estimated liability shall be stated in Appendix A.

To the extent that Transmission Owner is a limited liability company and not a corporation, and has elected to be taxed as a partnership, then the following shall apply: Transmission Owner represents, and the Parties acknowledge, that

Transmission Owner is a limited liability company and is treated as a partnership for federal income tax purposes. Any payment made by Customer to Transmission Owner for Network Upgrades and ~~System Protection~~ Direct Assignment Facilities is to be treated as an upfront payment in accordance with Rev Proc 2005-35. It is anticipated by the Parties that any amounts paid by Customer to Transmission Owner for Network Upgrades and ~~System Protection~~ Direct Assignment Facilities will be reimbursed to Customer in accordance with the terms of this Agreement, provided Customer fulfills its obligations under this Agreement.

3.3.2 Private Letter Ruling. At Customer's request and expense, Transmission Owner shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Customer to Transmission Owner under this Agreement are subject to federal income taxation. Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Customer's knowledge. Transmission Owner and Customer shall cooperate in good faith with respect to the submission of such request.

3.3.3 Other Taxes. Upon the timely request by Customer, and at Customer's sole expense, Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Transmission Owner for which Customer may be required to reimburse Transmission Owner under the terms of this Agreement. Customer shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Customer and Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Customer to Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Transmission Owner. Each Party shall cooperate with the other Parties to maintain each Party's tax status. Nothing in this Agreement is intended to adversely affect any Party's tax-exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

ARTICLE 4 FORCE MAJEURE

4.1 Notice. The Party unable to carry out an obligation imposed on it by this Agreement due to a Force Majeure event shall notify the other Parties in writing or verbally with

subsequent notice in writing within a reasonable time after the occurrence of the cause relied on.

- 4.2 Duration of Force Majeure.** Except as set forth in Article 4.3, no Party will be considered in Default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure. A Party shall not be responsible for any non-performance or be considered in Breach or Default under this Agreement due to Force Majeure. A Party shall be excused from whatever performance is affected for only the duration of the Force Majeure event and while the Party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing Party is able to resume performance of its obligations excused as a result of the occurrence of Force Majeure, such Party shall give prompt notice thereof to the other Parties.
- 4.3 Obligation to Make Payments.** Any Party's obligation to make payments for services incurred shall not be suspended by Force Majeure.

ARTICLE 5 INFORMATION REPORTING

- 5.1 Information Reporting Obligations.** Each Party shall, in accordance with Good Utility Practice, promptly provide to the other Parties all relevant information, documents, or data regarding the Party's facilities and equipment which may reasonably be expected to pertain to the reliability of the other Party's facilities and equipment and which has been reasonably requested by the other Party.
- 5.2 Non-Force Majeure Reporting.** A Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this Agreement for a reason other than Force Majeure. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. In the event of Force Majeure, a Party unable to comply with the provisions of this Agreement shall notify the other Parties in accordance with the provisions of Article 4.

ARTICLE 6 CREDITWORTHINESS, BILLING AND PAYMENTS

- 6.1 Creditworthiness.** By the earlier of (i) thirty (30) Calendar Days prior to the due date for Customer's first payment under the payment schedule specified in Appendix A or (ii) the first date specified in Appendix A for the ordering of equipment by Transmission Owner for installing the Network Upgrades and ~~System Protection~~[Direct Assignment](#) Facilities, Customer shall provide Transmission Owner, at Transmission Owner's option, with a form of adequate assurance of creditworthiness reasonably acceptable to Transmission Owner. If the adequate assurance is a parental guarantee or surety bond, it must be made by an entity that meets the creditworthiness requirements of Transmission Owner, have terms and conditions reasonably acceptable to Transmission Owner and

guarantee payment of the amount specified in the next paragraph of this Article 6.1. If the adequate assurance is a letter of credit, it must be issued by a bank reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount available to be drawn under the letter shall reduce on a monthly basis in accordance with the monthly payment schedule. The surety bond must be issued by an insurer reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount assured under the bond shall reduce on a monthly basis in accordance with the monthly payment schedule. After the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities have been placed in service and until Customer fully compensates Transmission Owner for construction of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, Customer shall, subject to the standards of this Article 6.1, maintain a parental guarantee, surety bond, letter of credit, or some other credit assurance sufficient to meet its monthly payment obligation under Article 3.2.1, as specified in the following paragraph. Customer's estimated liability under Article 3.2.1 is stated in Appendix A.

Customer shall maintain as of the first day of each month beginning on the due date for Customer's first payment under the payment schedule specified in Appendix A, and continuing through to the ~~Commercial Operation~~ In-Service Date, a parental guarantee, surety bond or letter of credit in an amount sufficient to cover the applicable costs and cost commitments required of the Party responsible for building the facilities pursuant to the construction schedule developed in this Agreement for designing, engineering, seeking regulatory approval from any Governmental Authority, constructing, procuring and installing the facilities and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Owner for these purposes as defined and established under Appendix A.

- 6.2 Invoice.** Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due, if any, for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this Agreement, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.
- 6.3 Payment.** Invoices shall be rendered to the paying Party at the address specified by the Parties. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by a Party will not constitute a waiver of any rights or claims that Party may have under this Agreement.
- 6.4 Final Invoice.** Within six (6) months after completion of the construction of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, Transmission Owner shall provide an invoice of the final cost of the construction of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities and shall set forth such

costs in sufficient detail to enable Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Owner shall refund, with interest (calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii)), to Customer any amount by which the actual payment by Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.

6.5 Interest. Interest on any unpaid amounts shall be calculated in accordance with 18 C.F.R. § 35.19a(a)(2)(iii).

6.6 Payment During Dispute. In the event of a billing dispute among the Parties, Transmission Owner shall continue to construct the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities under this Agreement as long as Customer: (i) continues to make all payments not in dispute; and (ii) pays to Transmission Provider or Transmission Owner or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Customer fails to meet these two requirements, then Transmission Provider may or, at Transmission Owner's request upon Customer's failure to pay Transmission Owner, shall provide notice to Customer of a Default pursuant to Article 9. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to another Party shall pay the amount due with interest calculated in accord with the methodology set forth in 18 C.F.R. § 35.19a(a)(2)(iii).

ARTICLE 7 ASSIGNMENT

7.1 Assignment. This Agreement may be assigned by any Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that Customer shall have the right to assign this Agreement, without the consent of either Transmission Provider or Transmission Owner, for collateral security purposes to aid in providing financing for the Facility, provided that Customer will promptly notify Transmission Provider and Transmission Owner of any such assignment. Any financing arrangement entered into by Customer pursuant to this Article will provide that prior to or upon the exercise of the secured Party's, trustee's or assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider and Transmission Owner of the date and particulars of any such exercise of assignment right(s), including providing Transmission Provider and Transmission Owner with proof that it meets the requirements of Article 6.1. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

ARTICLE 8 INDEMNITY

8.1 General. To the extent permitted by law, a Party (the “Indemnifying Party”) shall at all times indemnify, defend, and hold the other Parties (each an “Indemnified Party”) harmless from Loss, only as provided in the Tariff.

8.1.1 Indemnified Party. If an Indemnified Party is entitled to indemnification under this Article 8 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 8.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

8.1.2 Indemnifying Party. If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 8, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party’s actual Loss, net of any insurance or other recovery.

8.1.3 Indemnity Procedures. Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 8.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party’s indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of

criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be reasonably withheld, conditioned or delayed.

- 8.2 Consequential Damages.** In no event shall any Party be liable to any other Party under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

ARTICLE 9 BREACH, CURE AND DEFAULT

- 9.1 Events of Breach.** A Breach of this Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Agreement, including but not limited to any material Breach of a representation, warranty or covenant made in this Agreement;
- (c) If a Party (i) is adjudicated bankrupt; (ii) files a voluntary petition in bankruptcy under any provision of any federal or state bankruptcy law or shall consent to the filing of any bankruptcy or reorganization petition against it under any similar law; (iii) makes a general assignment for the benefit of its creditors; or (iv) consents to the appointment of a receiver, trustee or liquidator;
- (d) Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;
- (e) Failure of a Party to provide such access rights, or a Party's attempt to revoke access or terminate such access rights, as provided under this Agreement or ~~the any~~ related ~~GIA; or~~ agreements.
- (f) Failure of a Party to provide information or data to another Party as required under this Agreement, provided the Party entitled to the information or data under this Agreement requires such information or data to satisfy its obligations under this Agreement.

9.2 Notice of Breach, Cure and Default. Upon the occurrence of an event of Breach, the Party not in Breach, when it becomes aware of the Breach, shall give written notice of the Breach to the Breaching Party and to any other person representing a Party to this Agreement identified in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach.

9.2.1 Upon the occurrence described in part (c) of Article 9.1, the Party experiencing such occurrence shall notify the other Party in writing within seven (7) Calendar Days after the commencement of such occurrence. Upon receiving written notice of the Breach hereunder, the Breaching Party shall have a period to cure such Breach (sometimes hereinafter referred as (“Cure Period”) which shall be thirty (30) Calendar Days unless such Breach is due to an occurrence under Article 9.1(a) or (c) in which case the cure period will be five (5) Business Days.

9.2.2 If the Breach is such that it cannot be cured within the Cure Period, the Breaching Party will commence in good faith all steps as are reasonable and appropriate to cure the Breach within such Cure Period and thereafter diligently pursue such action to completion. In the event the Breaching Party fails to:

- (a) cure the Breach, or to commence reasonable and appropriate steps to cure the Breach, within the Cure Period; or,
- (b) completely cure the Breach within sixty (60) Calendar Days if the Breach occurs pursuant to Article 9.1(b), (d), (e) or (f),

the Breaching Party will be in Default of this Agreement and the non-Breaching Parties may, at their option, either in concert or individually, (1) act to terminate this Agreement for cause by notifying the other Parties in writing, or (2) take whatever action at law or in equity as may appear necessary or desirable to enforce the performance or observance of any rights, remedies, obligations, agreement, or covenants under this Agreement.

9.3 Rights in the Event of Default. Notwithstanding the foregoing, upon the occurrence of an event of Default, any non-Defaulting Party shall be entitled to exercise all rights and remedies it may have in equity or at law.

ARTICLE 10 TERMINATION OF AGREEMENT

10.1 Expiration of Term. Except as otherwise specified in this Article 10, the Parties’ obligations under this Agreement shall terminate at the conclusion of the term of this Agreement.

10.2 Termination. In addition to the termination provisions set forth in Article 2.2, a Party may terminate this Agreement upon the Default of another Party in accordance with this

Agreement. Subject to the limitations set forth in Article 10.3, in the event of a Default, a non-Defaulting Party may terminate this Agreement only upon the later of (i) its giving of written notice of termination to the other Parties; and (ii) unless no longer required by FERC, the filing at FERC of a notice of termination for this Agreement, which filing must be accepted for filing by FERC.

10.3 Disposition of Facilities Upon Termination of Agreement.

10.3.1 Transmission Provider and Transmission Owner Obligations. Upon termination of this Agreement, unless otherwise agreed by the Parties in writing, Transmission Owner:

- (a) shall, prior to the construction and installation of any portion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities and to the extent possible, cancel any pending orders of, or return, such equipment or material for such Network Upgrades and ~~System Protection~~ Direct Assignment Facilities;
- (b) may keep in place any portion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities already constructed and installed; and,
- (c) shall perform such work as may be necessary to ensure the safety of persons and property and to preserve the integrity of the Transmission System (e.g., construction demobilization to return the system to its original state, wind-up work).

10.3.2 Customer Obligations. Upon billing by Transmission Owner, Customer shall reimburse Transmission Owner for any costs incurred by Transmission Owner in performance of the actions required or permitted by Article 10.3.1 and for the cost of any Network Upgrades and ~~System Protection~~ Direct Assignment Facilities described in Appendix A. Transmission Owner and Transmission Provider shall use Reasonable Efforts to minimize costs and shall offset the amounts owed by any salvage value of facilities, if applicable. Customer shall pay these costs pursuant to Article 6.3 of this Agreement.

10.3.3 Pre-construction or Installation. Upon termination of this Agreement and prior to the construction and installation of any portion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, Transmission Owner may, at its option, retain any portion of such Network Upgrades and ~~System Protection~~ Direct Assignment Facilities not cancelled or returned in accordance with Article 10.3.1(a), in which case Transmission Owner shall be responsible for all costs associated with procuring such Network Upgrades and ~~System Protection~~ Direct Assignment Facilities. To the extent that Customer has already paid Transmission Owner for any or all of such costs, Transmission Owner shall transfer such amounts to ~~Transmission Provider who then shall assess the~~

~~financial impact as defined by Section 7.8 of Attachment X.~~ the Customer. If Transmission Owner elects to not retain any portion of such facilities, Transmission Owner shall convey and make available to Customer such facilities as soon as practicable after Customer's payment for such facilities.

- 10.4 Survival of Rights.** Termination or expiration of this Agreement shall not relieve any Party of any of its liabilities and obligations arising hereunder prior to the date termination becomes effective, and each Party may take whatever judicial or administrative actions as appear necessary or desirable to enforce its rights hereunder. The applicable provisions of this Agreement will continue in effect after expiration, or early termination hereof to the extent necessary to provide for (A) final billings, billing adjustments and other billing procedures set forth in this Agreement; (B) the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect; and (C) the confidentiality provisions set forth in Article 12.

ARTICLE 11 SUBCONTRACTORS

- 11.1 Subcontractors.** Nothing in this Agreement shall prevent a Party from utilizing the services of subcontractors, as it deems appropriate, to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

11.1.1 Responsibility of Principal. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. In accordance with the provisions of this Agreement, each Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor it hires as if no subcontract had been made. Any applicable obligation imposed by this Agreement upon a Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

11.1.2 No Third-Party Beneficiary. Except as may be specifically set forth to the contrary herein, no subcontractor or any other party is intended to be, nor will it be deemed to be, a third-party beneficiary of this Agreement.

11.1.3 No Limitation by Insurance. The obligations under this Article 11 will not be limited in any way by any limitation of any insurance policies or coverages, including any subcontractor's insurance.

ARTICLE 12 CONFIDENTIALITY

- 12.1 Confidentiality.** Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by a Party to another Party prior to the execution of this Agreement.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential. The Parties shall maintain as confidential any information that is provided and identified by a Party as Critical Energy Infrastructure Information (CEII), as that term is defined in 18 C.F.R. Section 388.113(c).

Such confidentiality will be maintained in accordance with this Article 12. If requested by the receiving Party, the disclosing Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

- 12.1.1 Term.** During the term of this Agreement, and for a period of three (3) years after the expiration or termination of this Agreement, except as otherwise provided in this Article 12 or with regard to CEII, each Party shall hold in confidence and shall not disclose to any person Confidential Information. CEII shall be treated in accordance with Commission policies and regulations.

- 12.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a non-Party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this Agreement; or (6) is required, in accordance with Article 12.1.7 of this Agreement, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Agreement. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the receiving Party that it no longer is confidential.

- 12.1.3 Release of Confidential Information.** No Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by

the Standards of Conduct requirements), subcontractors, employees, agents, consultants, or to non-Parties who may be or are considering providing financing to or equity participation with Customer, or to potential purchasers or assignees of Customer, on a need-to-know basis in connection with this Agreement, unless such person has first been advised of the confidentiality provisions of this Article 12 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 12.

12.1.4 Rights. Each Party retains all rights, title, and interest in the Confidential Information that it discloses to the receiving Party. The disclosure by a Party to the receiving Party of Confidential Information shall not be deemed a waiver by the disclosing Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

12.1.5 No Warranties. By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to another Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

12.1.6 Standard of Care. Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to another Party under this Agreement or its regulatory requirements.

12.1.7 Order of Disclosure. If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the disclosing Party with prompt notice of such request(s) or requirement(s) so that the disclosing Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

12.1.8 Termination of Agreement. Upon termination of this Agreement for any reason, each Party shall, within ten (10) Business Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting Party) or

return to the requesting Party any and all written or electronic Confidential Information received from the requesting Party, except that each Party may keep one copy for archival purposes, provided that the obligation to treat it as Confidential Information in accordance with this Article 12 shall survive such termination.

12.1.9 Remedies. The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 12. Each Party accordingly agrees that the disclosing Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving Party Breaches or threatens to Breach its obligations under this Article 12, which equitable relief shall be granted without bond or proof of damages, and the breaching Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 12, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 12.

12.1.10 Disclosure to FERC, its Staff or a State. Notwithstanding anything in this Article 12 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from a Party that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this Agreement prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the Agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

12.1.11 Subject to the exception in Article 12.1.10, any information that a disclosing Party claims is competitively sensitive, commercial or financial information under this Agreement shall not be disclosed by the receiving Party to any person not employed or retained by the receiving Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the

Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the disclosing Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Agreement or as the Regional Transmission Organization or a Local Balancing Authority operator including disclosing the Confidential Information to a regional or national reliability organization. The Party asserting confidentiality shall notify the receiving Party in writing of the information that Party claims is confidential. Prior to any disclosures of that Party's Confidential Information under this subparagraph, or if any non-Party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the Party who received the Confidential Information from the disclosing Party agrees to promptly notify the disclosing Party in writing and agrees to assert confidentiality and cooperate with the disclosing Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

ARTICLE 13 INFORMATION ACCESS AND AUDIT RIGHTS

- 13.1 Information Access.** Each Party shall make available to the other Parties information necessary to verify the costs incurred by the other Parties for which the requesting Party is responsible under this Agreement and carry out obligations and responsibilities under this Agreement, provided that the Parties shall not use such information for purposes other than those set forth in this Article 13.1 and to enforce their rights under this Agreement.
- 13.2 Audit Rights.** Subject to the requirements of confidentiality under Article 12 of this Agreement, the accounts and records related to the design, engineering, procurement, and construction of the Network Upgrades and ~~System Protection~~[Direct Assignment](#) Facilities shall be subject to audit during the period of this Agreement and for a period of twenty-four (24) months following the Transmission Owner's issuance of a final invoice in accordance with Article 6.4. Customer at its expense shall have the right, during normal business hours, and upon prior reasonable notice to the other Parties, to audit such accounts and records. Any audit authorized by this Article 13.2 shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Agreement.

ARTICLE 14 DISPUTES

- 14.1 Submission.** Any claim or dispute, which a Party may have against another Party, arising out of this Agreement shall be submitted for resolution in accordance with the dispute resolution provisions of the Tariff.

- 14.2 Rights under the Federal Power Act.** Nothing in this Article 14 shall restrict the rights of any Party to file a complaint [or a petition](#) with FERC under relevant provisions of the Federal Power Act.
- 14.3 Equitable Remedies.** Nothing in this Article shall prevent a Party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations, at any time, before a Governmental Authority.

ARTICLE 15 NOTICES

- 15.1 General.** Any notice, demand or request required or permitted to be given by a Party to another Party and any instrument required or permitted to be tendered or delivered by a Party in writing to another Party may be so given, tendered or delivered, as the case may be, by depositing the same with the United States Postal Service with postage prepaid, for transmission by certified or registered mail, addressed to the Parties, or personally delivered to the Parties, at the address set out below:

To Transmission Provider:

MISO

Attn: Director, ~~Transmission Access Planning~~ [Resource Utilization](#)
720 City Center Drive
Carmel, IN 46032

To Transmission Owner:

[Minnesota Power](#)
[Vice President, Transmission & Distribution](#)
[30 West Superior Street](#)
[Duluth, MN 55802](#)

To Customer:

[Minnesota Power](#)
[Vice President, Strategy and Planning](#)
[30 West Superior Street](#)
[Duluth, MN 55802](#)

- 15.2 Billings and Payments.** Billings and payments shall be sent to the addresses shown in Article 15.1 unless otherwise agreed to by the Parties.
- 15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another Party and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out below:

To Transmission Provider:

MISO

Voice telephone – (317) 249-5700
Facsimile telephone – (317) 249-5358
Email address – misotap@misoenergy.org or
MISOTransmissionAccessPlanning@misoenergy.org

To Transmission Owner:

Minnesota Power

Director – System Operations, Performance & Compliance
Voice telephone – (218) 723-7414
Email address-lfrisk@mnpower.com or
MPTransmissioninformationNotifications@mnpower.com

To Customer:

Minnesota Power

RTO Coordination Manager
Voice telephone – (218) 723-7466
Email address – rnyholm@mnpower.com

- 15.4 DUNS #.** If Transmission Owner and Customer have not obtained DUNS numbers by the time this Agreement is executed, Transmission Owner and Customer will forward their DUNS numbers within five (5) Business Days of having obtained such numbers to Transmission Provider by facsimile telephone or email to the fax number or email set out below:

Transmission Owner

DUNS Number: 617232889

Customer

DUNS Number: 617232889

- 15.5 Notification of In-Service Date.** Transmission Owner will serve to Transmission Provider a copy of Appendix B as forwarded to Customer on the same day to the address shown in Article 15.1, and by facsimile telephone to the numbers set out below:

To Transmission Provider:

MISO

Facsimile telephone – (317) 249-5703

And copy to

MISO

Attn: Director, ~~Transmission Access Planning~~ [Resource Utilization](#)

720 City Center Drive

Carmel, IN 46032

ARTICLE 16 MISCELLANEOUS

- 16.1 Waiver.** Except as otherwise provided for in this Agreement, the failure of any Party to comply with any obligation, covenant, agreement, or condition herein may be waived by the Parties entitled to the benefits thereof only by a written instrument signed by the Parties granting such waiver. Any waiver at any time by a Party of its rights with respect to a Default under this Agreement, or with respect to any other matters arising in connection with this Agreement, shall not be deemed a waiver or continuing waiver with respect to any subsequent Default or other matter.
- 16.2 Governing Law.** The validity, interpretation and performance of this Agreement and each of its provisions shall be governed by the laws of the state of [Minnesota](#) where [approximately 50 percent of](#) the Network Upgrades and/or ~~System Protection~~[Direct Assignment](#) Facilities referenced in Appendix A are located without regard to its conflicts of law principles.
- 16.3 Headings Not to Affect Meaning.** The descriptive headings of the various Sections and Articles of this Agreement have been inserted for convenience of reference only and shall in no way modify or restrict any of the terms and provisions hereof.
- 16.4 Amendments and Rights Under the Federal Power Act.** Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Transmission Owner and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided, however, that each Party shall have the right to protest any such filing and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 16.5 Entire Agreement.** This Agreement, together with all the exhibits, constitutes the final and entire written agreement among the Parties hereto with reference to the subject matter hereof, and is a complete and exclusive statement of those terms and conditions and supersedes all prior negotiations, representations or agreements, either written or oral, with respect to the specific subject matter of this Agreement. No change or modification as to any of the provisions hereof shall be binding on any Party unless reduced to writing and approved by the duly authorized officer or agent of Customer, Transmission Owner, and Transmission Provider.
- 16.6 Counterparts.** This Agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument.

- 16.7 Binding Effect.** This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the Parties hereto and their successors and assigns. No person or party shall have any rights, benefits or interests, direct or indirect, arising from this Agreement except the Parties hereto, their successors and authorized assigns. The Parties expressly disclaim any intent to create any rights in any person or party as a third party beneficiary to this Agreement.
- 16.8 Conflicts.** In the event of a conflict between the body of this Agreement and any attachment, appendix or exhibit hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed to be the final intent of the Parties.
- 16.9 Regulatory Requirements.** Each Party's obligations under this Agreement shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek these other approvals as soon as is reasonably practicable.

ARTICLE 17 REPRESENTATIONS AND WARRANTIES

- 17.1 General.** Each Party hereby represents, warrants and covenants as follows with these representations, warranties, and covenants effective as to the Party during the full time this Agreement is effective:
- 17.1.1 Good Standing.** Such Party is duly organized or formed, as applicable, validity existing and in good standing under the laws of its state of organization or formation, and is in good standing under the laws of the respective state(s) of its organization as stated in the preamble of this Agreement.
- 17.1.2 Authority.** Such Party has the right, power and authority to enter into this Agreement, to become a party hereto and to perform its obligations hereunder, and this Agreement is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms.
- 17.1.3 No Conflict.** The execution, delivery and performance of this Agreement does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit or order or material agreement or instrument applicable to or binding upon such Party or any of its assets.
- 17.1.4 Consent and Approval.** That it has sought or obtained, or, in accordance with this Agreement will seek or obtain, each consent, approval, authorization or order of, or acceptance of a filing with, or notice to, any Governmental Authority with

jurisdiction concerning this Agreement, in connection with the execution, delivery and performance of this Agreement.

17.1.5 Solvency. That such Party is financially solvent.

IN WITNESS WHEREOF, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original Agreement among the Parties.

Transmission Provider

Midcontinent Independent System Operator, Inc.

By: _____
Name: _____
Title: _____

Transmission Owner

~~{Transmission Owner}~~

Minnesota Power

By: _____
Name: _____
Title: _____

Customer

~~{Customer}~~

Minnesota Power

By: _____
Name: _____
Title: _____

Project No. _____

[Square Butte 90481026 95418167 FCA](#)

Facilities Construction Agreement
APPENDIX A
NETWORK UPGRADES, COST ESTIMATES AND RESPONSIBILITY,
TRANSMISSION CREDITS, CONSTRUCTION SCHEDULE AND MONTHLY
PAYMENT SCHEDULE

This Appendix A is a part of the Facilities Construction Agreement between Customer, Transmission Owner, and Transmission Provider. Terms used in this Appendix A with initial capitalization not defined in this Appendix A shall have the meaning set out in the Agreement

~~1.1 — Transmission Owner's [Interconnection Facilities] [Connection Facilities]~~

~~1.2~~ The upgrades required to be made by the Transmission Owner under this Agreement because of the Transmission Service Request include Direct Assignment Facilities and Network Upgrades, as defined in Module B and Attachment N of the Tariff. The Network Upgrades under this Agreement are governed by Module B and Attachment N of the Tariff.

1.1 Network Upgrades to be installed by Transmission Owner.

~~1.2.1 — Transmission Owner Substation Network Upgrades~~

~~1.2.2 — Transmission Owner Transmission Line Network Upgrades:~~

~~1.2.3 — Transmission Owner Transmission Line Permitting~~

~~1.2.4 — Cost Estimates and Responsibility.~~

~~1.2.1.1~~ **Transmission Owner Substation Network Upgrades:** To modernize the terminals of the existing Square Butte HVDC Line and implement the latest voltage source converter ("VSC") HVDC technology, new buildings and electrical infrastructure need to be constructed on a new site near the existing Center and Arrowhead HVDC terminals. Due to the specialized nature of the technology, the new VSC HVDC converter stations will be delivered as turnkey projects by the original equipment manufacturer ("OEM"). The scope of supply for the HVDC OEM will include the relocated converter stations, including valves, converter transformers, smoothing reactors, DC equipment, AC circuit breakers, control & protection, and all associated facilities. The new VSC HVDC converter stations will be designed to interconnect at 345 kV on the AC system side. To accommodate interconnection of the new VSC HVDC converter stations, new AC interconnection facilities will be constructed including new 345/230 kV substations, 345 kV transmission lines, and 230 kV transmission lines. New AC interconnection facilities are listed below.

In Minnesota:

- Construction of a new St. Louis County 345/230 kV Substation located less than one mile west of the Arrowhead Substation
- Construction of a new 345 kV transmission line from the HVDC converter station to the St. Louis County Substation

- Construction of two parallel 230 kV lines from the St. Louis County Substation to the existing Arrowhead Substation
- At Arrowhead Substation, the two new 230 kV lines will be interconnected to the existing HVDC Pole 1 and Pole 2 bus positions, which will be rebuilt with higher-capacity bus and electrical equipment to accommodate the increased HVDC capacity.
- A short portion of the existing ± 250 kV HVDC Line in Minnesota will be reconfigured to terminate at the new HVDC converter station.

In North Dakota:

- Establishment of a new Nelson Lake 230 kV Switching Station to tie together the existing Minnesota Power Square Butte East – Bison 230 kV Line with the existing Great River Energy Square Butte – Stanton 230 kV Line.
- Construction of a second 230 kV circuit between Nelson Lake and Square Butte East using existing double-circuit capable structures.
- Addition of a 230 kV breaker at the Square Butte East Substation to accommodate the second Nelson Lake – Square Butte East 230 kV circuit
- Expansion of the Nelson Lake 230 kV Switching Station to add a 345/230 kV transformer and 345 kV line entrance.
- Construction of a new 345 kV line from Nelson Lake to the new HVDC converter station
- Construction of a new 345 kV substation at the new HVDC converter station site
- A portion of the existing ± 250 kV HVDC Line in North Dakota will need to be reconfigured to terminate at the new HVDC converter station.

Additional equipment upgrades may be deemed necessary by the Transmission Owner or the HVDC OEM during the specification, detailed design, and engineering phase of the project.

1.1.2 Transmission Owner Transmission Line Network Upgrades: The upgrades necessary to increase the capacity of the HVDC transmission line from 550 MW to 900 MW are likely to consist primarily of replacing existing structures with taller structures to increase conductor-to-ground clearance at the higher operating temperature. A short segment of the transmission line with a smaller conductor will need to be rebuilt with a larger conductor.

1.1.3 Transmission Owner Transmission Line Permitting: Due to the relocation of the converter stations and the length of new AC interconnection facilities required to re-connect to the existing system, the HVDC Modernization Project will require state-level permits in both Minnesota and North Dakota. In Minnesota, a Certificate of Need and Route Permit will be required from the State of Minnesota. In North Dakota, a Certificate of Corridor Compatibility and a Route Permit will be required. Minnesota Power will obtain the necessary permits in both states

1.1.4 Cost Estimates and Responsibility. The estimated total cost for the Network Upgrades is \$878,000,000. These costs are shared by the Transmission Owner and Customer. The estimated cost to be paid by the Customer for Transmission Service

Requests 90481026 & 95418167 is \$205,000,000. The Customer(s) hereby acknowledge and agree that the costs, expenses, and charges set out in Table 1 are only an estimate and that the Customer(s) shall pay the Transmission Owner for their allocated amounts for all costs, expenses, and charges. Updated estimates will be provided annually by the Transmission Owners on request from the Customer.

This is detailed below in Table 1 and is subject to applicable Tax Gross.

Table 1: Network Upgrades Cost Details

<u>HVDC Modernization Project</u>	<u>Total Estimated Cost</u>	<u>Directly Assigned Cost Assigned to Transmission Service Requests #90481026 & #95418167</u>
<u>Converter Station Replacement</u>	<u>\$705,000,000</u>	<u>\$165,000,000</u>
<u>Interconnections to AC System</u>	<u>\$115,000,000</u>	<u>\$15,000,000</u>
<u>Transmission Line Modification</u>	<u>\$58,000,000</u>	<u>\$25,000,000</u>
<u>Internal & Professional Services</u>	<u>Included</u>	<u>Included</u>
<u>Total (in 2022 dollars)</u>	<u>\$878,000,000</u>	<u>\$205,000,000</u>

1.1.4.1 Major Material List of Transmission Owner's Network Upgrades – See Exhibit C2

~~1.3 — System Protection~~ **1.2 Direct Assignment** Facilities – None.

1.43 First Equipment Order (including permitting). See Table 2 below.

1.43.1. Permitting And Land Rights – Transmission Owner Network Upgrades – See Section 1.8.

1.54 Transmission Credits. See Article 3.2.2 of the Agreement.

1.65 Construction Schedule. Where applicable, construction of the Transmission Owner ~~[Interconnection Facilities]~~ ~~[Connection Facilities]~~, Network Upgrades and Special

Protection Facilities is scheduled as follows and will be periodically updated as necessary:

Table ~~1~~ 2: Transmission Owner Construction Activities

~~MILESTONE~~ ~~NUMBER~~ <u>Milest</u> ~~one Number~~	<u>Milestone Description</u>	~~START~~ ~~DATE~~ <u>Start</u> ~~Date~~	~~END~~ ~~DATE~~ ~~E~~
<u>1.</u>	<u>Facilities Construction Agreement Executed.</u>	<u>Aug/Sep-2023</u>	
<u>2.</u>	<u>Minnesota Certificate of Need & Route Permit Applications Filed.</u>	<u>Jun-2023</u>	
<u>3.</u>	<u>North Dakota Certificate of Corridor Compatibility and Route Permit Applications Filed.</u>	<u>Oct-2023</u>	
<u>4.</u>	<u>Begin Front End Engineering & Design with HVDC OEM.</u>	<u>Jan-2024</u>	
<u>5.</u>	<u>Major Permits Received in Minnesota & North Dakota.</u>	<u>Jul-2024</u>	
<u>6.</u>	<u>Order Long Leadtime Equipment for AC Substations.</u>	<u>Nov-2024</u>	
<u>7.</u>	~~Initial Synchronization~~ <u>Clearing Begins.</u>	<u>Jan-2025</u>	
<u>8.</u>	<u>Construction of AC Interconnection Facilities Begins.</u>	<u>May-2025</u>	
<u>9.</u>	<u>Construction of HVDC Transmission Line Upgrades Begins.</u>	<u>Aug-2025</u>	
<u>10.</u>	<u>Receive Firm Proposal from HVDC OEM.</u>	<u>Aug-2026</u>	
<u>11.</u>	<u>Execute Firm EPC Contract with HVDC OEM.</u>	<u>Oct-2026</u>	
<u>12.</u>	<u>Construction of HVDC Converter Stations Begins.</u>	<u>Oct-2027</u>	
<u>13.</u>	~~Commercial Operation~~ <u>In-Service Date.</u>	<u>Apr-2030</u>	

Note: ~~Construction~~The construction schedule assumes that the Transmission Owner has obtained final authorizations and security from Customer and all necessary permits from Governmental Authorities as necessary prerequisites to commence construction of any of the Network Upgrades and Special Protection Facilities ~~or Transmission Owner~~ ~~[Interconnection Facilities]~~ ~~[Connection Facilities]~~.

1.76 Payment Schedule.

1.76.1 Timing of and Adjustments to Customer's Payments and Security.

1.76.2 Monthly Payment Schedule. ~~The Customer's payment schedule is as follows.~~

Table ___: Customer's Payment/Security Obligations for Following approval of the state permits set forth in Section 1.2.3, in accordance with Attachment N, the Customer will begin paying a monthly dollar assessment. Monthly payments by the Customer will continue until Transmission Owner has recovered the cost of all Directly Assigned Facilities and Transmission Owner Network Upgrades and System Protection Facilities.

MILESTONE NUMBER	DESCRIPTION	DATE
*		
	~~Initial Synchronization Date~~	
	~~Commercial Operation Date~~	

~~Note: Customer's payment or provision of security as provided in this Agreement operates as a condition precedent to Transmission Owner's obligations to construct any Network Upgrades or System Protection Facilities, and failure to meet this schedule will constitute a Breach pursuant to Article 9.1 of this Agreement.~~

1.8

A Customer that fails to make payments when due will be given a Breach notice. Unless the Breach is cured in accordance with Article 9 of this agreement, the Transmission Owner is relieved from performing under this Agreement. Failure by any Customer to comply with Article 9.2.2(A) or 9.2.2(B) relative to such Breach may, pursuant to Article 9.2.2 of the Agreement, result in termination of the Agreement as to that Customer.

1.6.3 Security Amount. Not later than thirty (30) Days after Transmission Owner has received all Certificate of Need approvals, Customer shall provide MP security in the amount of Two Hundred Five Million Dollars (\$205,000,000) consisting of either or a combination of a letter of credit and/or cash escrow as set forth under Section 1.7.4 ("Initial Development Security"). Sixty (60) Days after termination of this Agreement, except as set forth in Section 1.7.5, Transmission Owner shall promptly return the Initial Development Security to Customer.

1.6.4 Security Characteristics and Draw

1.6.4.1 Except as set forth under Section 1.7.3.1, Security shall be composed of either a Guaranty, a letter of credit as described in Section 1.7.4 or a cash escrow as described in Section 1.7.4.2, at Customer's option, or a combination of these options as long as the total amount of Security is not less than the amount then required. Notwithstanding the foregoing, the Guaranty amount may not comprise more than fifty percent (50%) of the overall total amount of Security, provided that if Customer has delivered a notice reducing the amount of Security required pursuant to Section 1.7.7, then the Guaranty may comprise up to 100% of the overall total amount of Security at the Guarantor's option. Customer shall be (i) permitted from time to time to change the form and combination of such posted Security provided that no Event of Default with respect to Customer then exists so long as Transmission Owner is provided timely Notice of the change, and (ii) required, if Customer has provided Security, or any portion thereof, in the form of a Guaranty, if the entity or entities providing a Guaranty no longer qualify as a Guarantor, Customer shall within ten (10) Business Days of Transmission Owner's Notice to do so (A) replace such Guaranty with either a Guaranty from an entity or entities meeting the requirements as a Guarantor and/or (B) deliver a letter of credit or performance bond as described in Section 1.7.4.3 and/or (C) supply a cash escrow as described in Section 1.7.4.2, at Customer's option, in any case, in the aggregate amount of the then applicable Security, less the aggregate amount of any prior draws on such Security. Upon receipt of such substitute Security, any such Guaranty shall be deemed cancelled.

1.6.4.2 If Customer elects to utilize a cash escrow as Security, it shall establish an interest-bearing escrow account with a commercial bank or other mutually acceptable escrow agent as escrow agent, and the account shall name Transmission Owner as the beneficiary for the duration of the existence of the escrow account. The escrow account shall be in United States currency, and funds in the account may be invested in a money-market fund, short-term treasury obligations, investment-grade commercial paper or other investment-grade investments with maturities of three (3) months or less. All income and interest earned on the accounts held in the escrow account shall accrue for the benefit of the Customer, and Customer may withdraw the income and interest earned at any time as long as the balance in the account after the withdrawal meets the minimum funding requirements of this Section 1.7.4.2. The escrow agreement shall require the escrow agent to notify Transmission Owner of the balance in the escrow account from time to time. The escrow agreement governing the account shall include terms that (i) prohibit termination of the account prior to establishment of alternative Security that satisfies all the requirements of this FCA; (ii) require Notice of no less than sixty (60) Days by the escrow agent to Transmission Owner prior to any termination of the account; and (iii) allow Transmission Owner to draw the entire balance in the escrow account up to the amount

of the Security if Security has not been replaced in accordance with this Agreement at least five (5) Business Days prior to the expiration or termination of the escrow account, and Transmission Owner shall hold such amounts in lieu of escrow until such time as the Security has been replaced, at which time the funds shall be returned to Customer. At the end of the Term, any balance remaining in the escrow account shall be returned or released to Customer.

1.6.4.3 In conjunction with or instead of a Guaranty or cash security as provided in Section 1.7.4.2, Customer may provide Security in the form of an irrevocable letter of credit in a commercially reasonable form and otherwise in compliance with the requirements of this Section 1.7.4 and in form and substance acceptable to the Issuer (as defined below) (the "LOC"). The LOC shall be issued by a state or federally chartered commercial bank which issues similar letters of credit in the ordinary course of its business and that (i) has an unsecured bond rating or long-term senior unsecured debt rating equivalent to A- or better as determined by at least two (2) rating agencies, one of which must be either S&P or Moody's, or, if these are not available, CAMEL ratings from the FDIC or OCC used in the banking industry no less than a 3 and (ii) has a minimum of One Hundred Million Dollars (\$100,000,000) in capital (the "Issuer"). The LOC must: (i) be issued for a minimum term of three hundred and sixty (360) Days, and, where permitted by the Issuer, shall be automatically extended for a period of one (1) year on each successive expiration date unless, at least ninety (90) Days before the current expiration date, the Issuer notifies Customer and Transmission Owner by certified mail that the Issuer has decided not to extend the letter of credit; (ii) provide that draws shall be payable upon presentation of a sight draft executed by an officer of Transmission Owner substantially in the form approved by Transmission Owner; and (iii) expressly permit partial and multiple draws. Any unused portion of the letter of credit shall be available, regardless of renewal, through the then current expiration date. Customer may replace the letter of credit with another Issuer which includes a provision for at least ninety (90) Days advance Notice to Transmission Owner and shall cause the renewal or extension of the LOC meeting the criteria set forth in this Section 1.7.4.3 within thirty (30) days prior to the expiration or cancellation of the then current LOC, and failure to do so shall authorize Transmission Owner to draw immediately upon the then current LOC. Transmission Owner shall then, at Customer's cost and with Customer's funds, place the amounts so drawn in an interest bearing escrow account in accordance with Section 1.7.4.2 above, until and unless Customer provides a substitute form of such security meeting the requirements of this Section 1.7.4. Security in the form of an irrevocable standby letter of credit shall be governed by the Uniform Customs and Practice for Documentary Credits (1993 Revision),

International Chamber of Commerce Brochure No. 500 or as otherwise required by the Issuer of the LOC.

1.6.4.4 Customer shall provide Guarantor's annual audited financial statements to Transmission Owner within one hundred twenty (120) days after the end of each calendar year. Transmission Owner shall have the right to monitor the financial condition of Customer, Guarantor, and the Issuer to the extent set forth herein, and Customer shall provide written Notice to Transmission Owner within five (5) Business Days of becoming aware that (i) the Issuer does not satisfy the requirements of the second sentence of Section 1.7.4.3, (ii) ALLETE, Inc. or an affiliate is the Guarantor, such entity does not, collectively, have a tangible net worth of at least Five Hundred Million Dollars (\$500,000,000), or (iii) if the Guarantor is not ALLETE, Inc. or an affiliate such Person does not have an Investment Grade Credit Rating, and in such event Customer shall provide alternative Security as soon as practicable that complies with this Section 1.7.4.4 and in no event later than thirty (30) Days after becoming aware of the Issuer's or a Guarantor's failure to meet the requirements of this Section 1.7.

1.6.5 Release of Security. Promptly following the termination of this FCA and the completion of all Customer's obligations under this FCA, Transmission Owner shall release the Security (including any accumulated interest, if applicable) to Customer.

1.6.6 Permitted Draws; Effects of Draws. In addition to any other remedy available to it, Transmission Owner may, before or after termination of this FCA, draw against the Security to satisfy any undisputed obligations of Customer to Transmission Owner arising under this Agreement (including, without limitation, the payment of Availability Liquidated Damages, if any, or any indemnification obligations) which Customer has not otherwise paid or performed when due, after any required Notice and opportunity to cure. If Transmission Owner draws against the Security and Customer subsequently disputes Transmission Owner's entitlement to any portion of the funds drawn, neither Transmission Owner's draw, the Issuer's payment under the LOC, nor Customer's replenishment of the Security or reimbursement of the Issuer or escrow agent shall constitute a waiver of Customer's rights to seek recovery of any amount disputed. To the extent Transmission Owner elects to draw upon the Security to satisfy obligations that otherwise constitute, or might constitute, an Event of Default by Customer and entitle Transmission Owner to terminate this Agreement, Transmission Owner's draw against the Security shall be deemed a cure of such Event of Default and shall waive Transmission Owner's right to terminate in that respect. With respect to any Event of Default by Seller that remains uncured and which could be cured by payment of an undisputed amount to Transmission Owner, Transmission Owner shall first draw upon the Security to cure the Event of Default, and only if such Security is insufficient to cure the Event of Default shall any right of termination

which Transmission Owner may otherwise have be exercised by Transmission Owner.

1.6.7 Reduction in Security. Transmission Owner may, by Notice from time to time to Customer, waive or reduce the amount of security required to be posted hereunder in consideration of an Affiliate of Transmission Owner having a minority ownership interest in Customer.

1.7 **Permits, Licenses and Authorizations.**
Transmission Owner will be responsible for all permits, licenses and authorizations.

Facilities Construction Agreement
APPENDIX B
NOTIFICATION OF COMPLETED CONSTRUCTION

This Appendix B is a part of the Facilities Construction Agreement among Customer, Transmission Owner, and Transmission Provider. Where applicable, when Transmission Owner has completed construction of the Transmission Owner ~~Interconnection Facilities~~ ~~Connection Facilities~~, Network Upgrades and/or ~~System Protection~~ Direct Assignment Facilities, Transmission Owner shall send notice to Customer and Transmission Provider, in substantially the form following:

[Date]

MISO

Attn: Director, ~~Transmission Access Planning~~ Resource Utilization
720 City Center Drive
Carmel, IN 46032

Customer Address

Phone:

Fax:

Email:

Re: Completion of Network Upgrade/~~System Protection~~ Direct Assignment Facilities

Dear [Name or Title]:

This letter is sent pursuant to the Facilities Construction Agreement among [Transmission Owner], [Customer], and MISO, dated _____, 20__.

On [Date], Transmission Owner completed to its satisfaction all work on the Network Upgrades and/or System Protection Facilities required to facilitate the safe and reliable ~~interconnection and~~ operation of Customer's Facility. Transmission Owner confirms that the Network Upgrade and/or System Protection Facilities are in place.

Thank you.

[Signature]

[Transmission Owner Representative]

**Facilities Construction Agreement
APPENDIX C Exhibits**

This Appendix C is a part of the Facilities Construction Agreement among Customers,
Transmission Owner, and Transmission Provider.

Exhibit C1.

Transmission Owner ~~Site Map~~ Network Upgrade One Line

CUI//CEII MATERIAL – DO NOT RELEASE

CUI//CEH MATERIAL – DO NOT RELEASE

Exhibit C2.
Site Plan

Exhibit C3
Transmission Line and/or Substation Network Upgrades and System Protection Facilities
Plan & Profile

Exhibit C4
Estimated Cost of Transmission line and/or Substation Network Upgrades and System
Protection**Direct Assignment Facilities**

The total estimated cost for the Network Upgrades for HVDC Converter Station, connections to AC System, Transmission Line Modifications is \$878,000,000.

The details of the cost assigned for customer with Transmission Service Requests #90481026 & #95418167 is shown below in Table 1, Table 2, Table 3.

Detailed Cost Estimate of Facilities to be Constructed by Transmission Owner

The anticipated costs of modernizing and upgrading the HVDC converter stations are shown in Table 1. The initial estimated converter station replacement base cost was provided by the HVDC OEM. If design assumptions change significantly during the development of the project, the base cost shown in Table 1 may change.

Table 1: Converter Station Replacement Cost Breakdown

<u>HVDC 900 MW Upgrade</u>	<u>Location Estimated Cost</u>	<u>Facilities Cost Assigned to be Constructed by Transmission Owner Service Requests #90481026 & #95418167</u>	<u>Estimate in Dollars</u>
<u>Converter Station Base Cost</u>	<u>\$705,000,000</u>	<u>\$165,000,000</u>	
<u>Internal & Professional Services</u>	<u>(Included)</u>	<u>(Included)</u>	
<u>Contingency - Converter Station</u>	<u>(Included)</u>	<u>(Included)</u>	
<u>AFUDC - Converter Station</u>	<u>(Included)</u>	<u>(Included)</u>	
	<u>Total (in</u>	<u>\$705,000,000</u>	<u>\$165,000,000</u>

		<u>2022</u> <u>dollars)</u>		

The anticipated costs of AC Interconnection Facilities necessary to connect the relocated VSC HVDC converter stations to the existing AC transmission system are shown in Table 2. If design assumptions change significantly during the development of the project, the base costs shown in Table 2 may change.

Table 2: AC Interconnection Facilities Cost Breakdown

<u>HVDC 900 MW Upgrade</u>	<u>Estimated Cost</u>	<u>Cost Assigned to Transmission Service Requests #90481026 & #95418167</u>
<u>Minnesota AC Interconnections</u>	<u>\$55,000,000</u>	<u>\$7,000,000</u>
<u>North Dakota AC Interconnections</u>	<u>\$40,000,000</u>	<u>\$4,000,000</u>
<u>Nelson Lake 230 kV Substation</u>	<u>\$20,000,000</u>	<u>\$4,000,000</u>
<u>Total (in 2022dollars)</u>	<u>\$115,000,000</u>	<u>\$15,000,000</u>

The anticipated costs of Transmission Line Modifications are shown in Table 3. The upgrade cost estimate is based on preliminary transmission structural engineering evaluations. If additional HVDC transmission line modifications or scope changes are found to be necessary during the development of the project, the costs presented in Table 3 may be impacted.

Table 3: Transmission Line Modifications Cost Breakdown

<u>HVDC 900 MW Upgrade</u>	<u>Estimated Cost</u>	<u>Cost Assigned to Transmission Service Requests #90481026 & #95418167</u>
<u>HVDC T-Line 900 MW Upgrade</u>	<u>\$58,000,000</u>	<u>\$25,000,000</u>
<u>HVDC T-Line AFUDC</u>	<u>(Included)</u>	<u>(Included)</u>
<u>HVDC T-Line Contingency</u>	<u>(Included)</u>	<u>(Included)</u>
<u>Total (in 2022dollars)</u>	<u>\$58,000,000</u>	<u>\$25,000,000</u>

TAB C

PUBLIC

SA 4209 MINNESOTA POWER-MINNESOTA POWER FCA VERSION 31.0.0

EFFECTIVE 2/28/2024

ORIGINAL SERVICE AGREEMENT NO. 4209

PUBLIC VERSION

FACILITIES CONSTRUCTION AGREEMENT

entered into by the

Midcontinent Independent System Operator, Inc.,

And

Minnesota Power, a division of ALLETE, INC.

And

Minnesota Power, a division of ALLETE, INC.

For

Square Butte TSR 91365462

FACILITIES CONSTRUCTION AGREEMENT

entered into by the

Midcontinent Independent System Operator, Inc.,

And

Minnesota Power, a division of ALLETE, INC.

And

Minnesota Power, a division of ALLETE, INC.

entered into on the 28th day of February, 2024

FACILITIES CONSTRUCTION AGREEMENT

THIS FACILITIES CONSTRUCTION AGREEMENT (sometimes hereinafter referred to as “Agreement”) is made and entered into this 28th day of February, 2024, by and among the merchant function of **Minnesota Power**, a division of **ALLETE, INC.**, a corporation, organized and existing under the laws , of the State of Minnesota (“Customer”), the **Midcontinent Independent System Operator, Inc.**, a non-profit, non-stock corporation organized and existing under the laws of the State of Delaware (“Transmission Provider”) and the transmission function of **Minnesota Power**, a division of **ALLETE, INC.**, a corporation organized under the laws of the State of Minnesota (“Transmission Owner”). Customer, Transmission Owner, or Transmission Provider each may be referred to as a “Party” or collectively as the “Parties.”

RECITALS

WHEREAS, Transmission Owner each owns electric facilities and is engaged in generation, transmission, distribution and/or sale of electric power and energy; and

WHEREAS, Transmission Provider has functional control of the operations of the Transmission System, as defined herein, and is responsible for providing transmission and interconnection service on the transmission facilities under its control; and

WHEREAS, Customer intends to reserve firm point to point Transmission Service via Transmission Provider’s Reservation Request No 91365462; and

WHEREAS, the Transmission System is affected by the firm transmission service request of the Facility and additions, modifications and upgrades must be made to certain existing facilities of the Transmission System to accommodate such transmission service; and

WHEREAS, Customer has requested, and Transmission Provider and Transmission Owner have agreed, to enter into this Agreement with Customer for the purpose of facilitating the transmission service of the Facility by the construction of necessary Network Upgrades to the Transmission System;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

ARTICLE 1 DEFINITIONS

Wherever used in this Agreement with initial capitalization, the following terms shall have the meanings specified or referred to in this Article 1. Terms used in this Agreement with initial capitalization not defined in this Article 1 shall have the meanings specified in the Tariff:

- 1.1 “Applicable Laws and Regulations” shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the Parties, their respective facilities and/or the respective services they provide.
- 1.2 “Applicable Reliability Council” shall mean the reliability council of NERC applicable to the Local Balancing Authority of the Transmission System to which the Facility is directly interconnected.
- 1.3 “Applicable Reliability Standards” shall mean Reliability Standards approved by the Federal Energy Regulatory Commission (FERC) under Section 215 of the Federal Power Act, as applicable.
- 1.4 “Breach” shall mean the failure of a Party to perform or observe any material term or condition of this Agreement and shall include, but not be limited to, the events described in Article 9.1.
- 1.5 “Breaching Party” shall mean a Party that is in Breach of this Agreement.
- 1.6 “Confidential Information” shall mean any proprietary or commercially or competitively sensitive information, trade secret or information regarding a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, or any other information as specified in Article 12, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, that is received by another Party.
- 1.7 “Customer” shall mean, for purposes of this Agreement, a Transmission Customer as defined in the Tariff.
- 1.8 “Default” shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 9 of this Agreement.
- 1.9 “Direct Assignment Facilities” shall mean those facilities or portions of facilities that are constructed by any Transmission Owner(s), ITC, or ITC Participant(s) for the sole use/benefit of a particular Transmission Customer requesting service under this Tariff. Direct Assignment Facilities shall be specified in the Service Agreement that governs service to the Transmission Customer and shall be subject to Commission approval.

- 1.10** “Effective Date” shall mean the date on which this Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.
- 1.11** “FERC” shall mean the Federal Energy Regulatory Commission, also known as Commission, or its successor.
- 1.12** “Force Majeure” shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party’s control. A Force Majeure event does not include an act of negligence or intentional wrongdoing by the Party claiming Force Majeure.
- 1.13** “Good Utility Practice” shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric 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 to 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. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- 1.14** “Governmental Authority” shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Customer, Transmission Provider, Transmission Owner, or any Affiliate thereof.
- 1.15** “In-Service Date” shall mean the date upon which Customer reasonably expects it will be ready to begin use of the Network Upgrades and/or Direct Assignment Facilities.
- 1.16** “Local Balancing Authority” shall mean an operational entity or a Joint Registration Organization which is (i) responsible for compliance with the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement for their local area within the MISO Balancing Authority Area, (ii) a Party to Balancing Authority Agreement, excluding MISO, and (iii) shown in Appendix A to the Balancing Authority Agreement.
- 1.17** “Loss” shall mean any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or

to third parties, arising out of or resulting from the other Party's performance, or non-performance of its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing, by the indemnified Party.

- 1.18** "Material Modification" shall mean: (1) modification to a Transmission Service Request in the queue that has a material adverse impact on the cost or timing or constraint identification of Transmission Service Request; or (2) planned modification to proposed network upgrades that is undergoing evaluation and has a material adverse impact on the Transmission System prior to the modification.
- 1.19** "NERC" shall mean the North American Electric Reliability Corporation, or its successor organization.
- 1.20** "Network Upgrades" shall mean the additions, modifications, and upgrades to the Transmission System required to accommodate the transmission service requests.
- 1.21** "Non-Breaching Party" shall mean a Party that is not in Breach of this Agreement with regard to a specific event of Breach by another Party.
- 1.22** "Reasonable Efforts" shall mean, with respect to an action required to be attempted or taken by a Party under this Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Direct Assignment Facilities

- 1.23** "Tariff" shall mean the Transmission Provider's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.
- 1.24** "Transmission Service" shall mean Point-to-Point Transmission Service provided under Module B of the Tariff on a firm and non-firm basis and the Network Integration Transmission Service under Module B of the Tariff.
- 1.25** "Transmission System" shall mean the facilities owned by Transmission Owner and controlled or operated by Transmission Provider or Transmission Owner that are used to provide Transmission Service or Wholesale Distribution Service under the Tariff.

ARTICLE 2 TERM OF AGREEMENT

- 2.1 Effective Date.** Subject to required regulatory authorizations, including, without limitation, acceptance by FERC under Section 205 of the Federal Power Act, this Agreement shall become effective on the date on which this Agreement is made and entered into by the Parties.
- 2.2 Term.**

- 2.2.1 General.** This Agreement shall become effective as provided in Article 2.1 and shall continue in full force and effect until the earlier of (i) the final repayment, where applicable, by Transmission Owner of the amount funded by Customer for Transmission Owner's design, procurement, construction and installation of the Network Upgrades and Direct Assignment Facilities provided in Appendix A; (ii) the Parties agree to mutually terminate this Agreement; (iii) earlier termination is permitted or provided for under Appendix A of this Agreement; or (iv) Customer terminates this Agreement after providing Transmission Provider and Transmission Owner with written notice at least sixty (60) Calendar Days prior to the proposed termination date, provided that Customer has no outstanding contractual obligations to Transmission Provider or Transmission Owner under this Agreement. No termination of this Agreement shall be effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination. The term of this Agreement may be adjusted upon mutual agreement of the Parties, if the In-Service Date for the Network Upgrades and Direct Assignment Facilities is adjusted in accordance with the rules and procedures established by Transmission Provider.
- 2.2.2 Termination Upon Default.** In the event of a Default by a Party, the Non-Breaching Party or Parties shall have the termination rights described in Articles 9 and 10; provided, however, if an event described in part (c) of Article 9.1 has not occurred, and provided the Default does not pose a threat to the reliability of the Transmission System, neither Transmission Provider nor Transmission Owner may terminate this Agreement if Customer is the Breaching Party and Customer (i) has undertaken, in accordance with Article 9.2, to cure the Breach that led to the Default and has failed to cure the Breach for reasons other than Customer's failure to diligently commence reasonable and appropriate steps to cure the Breach within the thirty (30) Calendar Days allowed by Article 9.2, and (ii) compensates Transmission Provider or Transmission Owner within thirty (30) Calendar Days for the amount of damage billed to Customer by Transmission Provider or Transmission Owner for any damages, including costs and expenses, incurred by Transmission Provider or Transmission Owner as a result of such Default. In the event of an occurrence described in part (c) of Article 9.1, and providing the Default does not pose a threat to the reliability of the Transmission System, the Non-Breaching Party or Parties shall not terminate this Agreement provided that the Breaching Party provided an assurance of payment acceptable to the Non-Breaching Party, and pays any applicable damages.
- 2.2.3 Consequences of Termination.** In the event of a termination by any Party, other than a termination by Customer due to a Breach by Transmission Owner, Customer must pay Transmission Owner all amounts still due and payable for construction and installation of the Network Upgrades and Direct Assignment Facilities (including, without limitation, any equipment ordered related to such construction), plus all out-of-pocket expenses incurred by Transmission Owner in connection with the construction and installation of the Network Upgrades and

Direct Assignment Facilities, through the date of termination, plus any actual costs which Transmission Owner (A) reasonably incurs in winding up work and construction demobilization and (B) reasonably incurs to ensure the safety of persons and property and the integrity and safe and reliable operation of the Transmission System. Transmission Owner agrees to use Reasonable Efforts to minimize such costs.

2.2.4 Material Adverse Change. In the event of a material change in law or regulation that adversely affects, or may reasonably be expected to adversely affect a Party's rights and/or obligations under this Agreement, the Parties shall negotiate in good faith any amendments to this Agreement necessary to adapt the terms of this Agreement to such change in law or regulation, and Transmission Provider shall file such amendments with FERC. If, within sixty (60) Calendar Days after the occurrence of any event described in this Article 2.2.4, the Parties are unable to reach agreement as to any necessary amendments, the Parties may proceed under Article 14 to resolve any disputes related thereto; Transmission Provider and/or Transmission Owner shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that a Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. If a Party is unable to fully perform this Agreement due to the occurrence of an event described in this Article 2.2.4 and such inability is not based on economic reasons, such Party shall not be deemed to be in Default of its obligations under this Agreement, provided that such Party is seeking dispute resolution under Article 14 or before FERC, to the extent that (i) such Party is unable to perform as a result of such an event and (ii) such Party acts in accordance with its obligations under this Article 2.2.4.

2.3 Regulatory Filing. In accordance with Applicable Laws and Regulations, Transmission Provider shall file this Agreement, and any amendment to this Agreement with FERC as a service agreement under the Tariff. If Customer has executed this Agreement or any amendment to this Agreement, Customer shall not protest this Agreement or the amendment, shall reasonably cooperate with Transmission Provider with respect to such filing and shall provide any information, including the rendering of testimony or pleadings, as applicable, reasonably requested by Transmission Provider to the extent reasonably needed to comply with applicable regulatory requirements.

2.4 Survival. The applicable provisions of this Agreement shall continue in effect after expiration, cancellation, or termination hereof to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect.

- 2.5 Termination Obligations.** Upon any termination pursuant to this Agreement, Customer shall be responsible for the payment of all costs or other contractual obligations incurred prior to the termination date including previously incurred capital costs, penalties for early termination, costs of removal and site restoration.

ARTICLE 3 CONSTRUCTION OF NETWORK UPGRADES AND DIRECT ASSIGNMENT FACILITIES

3.1 Construction.

- 3.1.1 Transmission Owner Obligations.** Transmission Owner shall (or shall cause such action to) design, procure, construct and install, and Customer shall pay, consistent with Article 3.2, the cost of, all Network Upgrades and Direct Assignment Facilities identified in Appendix A. All Network Upgrades and Direct Assignment Facilities designed, procured, constructed and installed by Transmission Owner pursuant to this Agreement shall satisfy all requirements of applicable safety and/or engineering codes, including those requirements of Transmission Owner and Transmission Provider, and comply with Good Utility Practice, and further, shall satisfy all Applicable Laws and Regulations.

3.1.2 Suspension of Work.

- 3.1.2.1 Right to Suspend for Force Majeure Event.** Provided that such suspension is permissible under the authorizations, permits or approvals granted for the construction of the Network Upgrades and Direct Assignment Facilities Customer will not suspend unless a Force Majeure event occurs. Customer must provide written notice of its request for suspension to Transmission Provider and Transmission Owner, and provide a description of the Force Majeure event that is acceptable to Transmission Provider. Suspension will only apply to Customer milestones and Interconnection Facilities described in the Appendices of this Agreement. Prior to suspension, Customer must also provide security acceptable to Transmission Owner, equivalent to the higher of \$5 million or the total cost of all Network Upgrades, Transmission Owner's Direct Assignment Facilities, and Distribution Upgrades listed in Appendix A of this Agreement. Network Upgrades, Direct Assignment Facilities will be constructed on the schedule described in the Appendices of this Agreement unless: (1) construction is prevented by the order of a Governmental Authority; (2) the Network Upgrades and Direct Assignment Facilities are not needed by any other project; or (3) Transmission Owner or Transmission Provider determines that a Force Majeure event prevents construction. In the event of (1), (2), or (3) security shall be released upon the determination that the Network

Upgrades and Direct Assignment Facilities will no longer be constructed. If suspension occurs, Customer shall be responsible for the costs which Transmission Owner incurs (i) in accordance with this Agreement prior to the suspension, (ii) in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System and, if applicable, any costs incurred in connection with the cancellation of contracts and orders for material which Transmission Owner cannot reasonably avoid, and (iii) reasonably incurs in winding up work and construction demobilization; provided, however, that, prior to canceling any such contracts or orders, Transmission Owner shall obtain Customer's authorization. Customer shall be responsible for all costs incurred in connection with Customer's denial of authorization to cancel such contracts or orders. Interest as provided in

Article 3.2.2.2 on amounts paid by Customer to Transmission Owner for the design, procurement, construction and installation of the Network Upgrades and Direct Assignment Facilities, shall not accrue during periods in which Customer has suspended construction under this Article 3.1.2. Transmission Owner shall invoice Customer pursuant to Article 6 and use Reasonable Efforts to minimize its costs. In the event that Customer suspends work pursuant to this Article, no construction duration, timelines and schedules set forth in Appendix A shall be suspended during the period of suspension unless ordered by a Governmental Authority, with such order being the Force Majeure event causing the suspension.

3.1.2.2 Recommencing of Work. If Customer requests Transmission Owner to recommence such work, Transmission Owner shall have no obligation to afford such work the priority it would have had but for the prior actions of Customer to suspend the work. In such event, Customer shall be responsible for any costs incurred in recommencing the work. All recommenced work shall be completed pursuant to an amended schedule for the transmission service agreed to by the Parties. Transmission Provider and Transmission Owner have the right to request a System Impact Study if conditions have materially changed subsequent to the request to suspend. Customer shall be responsible for the costs of any studies required.

3.1.2.3 Termination in the Event of a Material Modification. In the event Customer suspends the performance of work by Transmission Owner pursuant to this Article 3.1.2 and modifies its In-Service Date, this Agreement shall be deemed terminated unless Customer demonstrates that the change is not a Material Modification under FERC precedent.

3.1.2.4 Right to Suspend Due to Default. Transmission Owner reserves the right, upon written notice to Customer, to suspend, at any time, work by Transmission Owner and the incurrence of additional expenses associated with the construction and installation of the Network Upgrades and Direct Assignment Facilities upon the occurrence of either a Breach that Customer is unable to cure pursuant to Article 9 or an Event of Default pursuant to Article 9. Any form of suspension by Transmission Owner shall not be barred by Articles 2.2.2, 2.2.3 or 9.2.2, nor shall it affect Transmission Owner's right to terminate the work or this Agreement pursuant to Article 10. In such events, Customer shall be responsible for costs which Transmission Owner incurs as set forth in Article 2.2.3.

3.1.3 Construction Status. Transmission Owner shall keep Customer and Transmission Provider advised periodically as to the progress of its respective design, procurement and construction efforts as described in Appendix A. Customer may, at any time, request a progress report from Transmission Owner, with a copy to be provided to Transmission Provider. If, at any time, Customer determines that the completion of the Network Upgrades and Direct Assignment Facilities will not be required until after the specified In-Service Date, Customer will provide written notice to Transmission Owner and Transmission Provider of such later date upon which the completion of the Network Upgrades and Direct Assignment Facilities would be required. Transmission Owner may delay the In-Service Date of the Network Upgrades accordingly.

3.1.4 Timely Completion. Transmission Owner shall use Reasonable Efforts to design, procure, construct, install, and test the Network Upgrades and Direct Assignment Facilities in accordance with the schedule set forth in Appendix A, which schedule may be revised from time to time by mutual agreement of the Parties. If any event occurs that will affect the time for completion of the Network Upgrades and Direct Assignment Facilities, or the ability to complete any of them, Transmission Owner and/or Transmission Provider shall promptly notify Customer, with a copy to the other Party. In such circumstances, Transmission Provider shall, within fifteen (15) Calendar Days of such notice, convene a technical meeting with Customer and Transmission Owner to evaluate the alternatives available to Customer. Transmission Owner and/or Transmission Provider shall also make available to Customer all studies and work papers related to the event and corresponding delay, including all information that is in the possession of Transmission Provider or Transmission Owner that is reasonably needed by Customer to evaluate alternatives. Transmission Owner shall, at Customer's request and expense, use Reasonable Efforts to accelerate its work under this Agreement to meet the schedule set forth in Appendix A, provided that Customer authorizes such actions and the costs associated therewith in advance.

3.2 Network Upgrade Costs and Credits.

- 3.2.1 Costs.** Customer shall pay to Transmission Owner costs (including taxes and financing costs) associated with seeking and obtaining all necessary approvals and of designing, engineering, constructing, and testing the Network Upgrades and Direct Assignment Facilities, as identified in Appendix A, in accordance with the cost recovery method provided herein;

Customer shall pay for Direct Assignment Facilities and Network Upgrades in accordance with Attachment N of the Tariff. The cost assignment provisions shall apply to facilities constructed by Transmission Owner until such time as Transmission Owner is able to fully recover its revenue requirements as calculated in Attachment N, Section C. If the Transmission Service Request is discontinued or suspended, the Transmission Customer shall pay the Transmission Owner for the remaining applicable amounts that must be paid pursuant to Attachment N of the Tariff.

Transmission Owner shall install, at Customer's expense, any Transmission Owner's Direct Assignment Facilities that may be required on the Transmission Owner's Interconnection Facilities or the Transmission Owner's transmission or distribution facilities as a result of the Network Upgrades required by Customer's request.

3.2.1.1 Lands of Other Property Owners. If any part of the Transmission Owner's Network Upgrades, Direct Assignment Facilities, and/or Distribution Upgrades is to be installed on property owned by persons other than Customer or Transmission Owner, Transmission Owner shall at Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority to the extent permitted and consistent with Applicable Laws and Regulations and, to the extent consistent with such Applicable Laws and Regulations, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Transmission Owner's Interconnection Facilities, Network Upgrades, Direct Assignment Facilities, and/or Distribution Upgrades upon such property.

3.2.2 Credits.

3.2.2.1 Repayment. Customer shall be entitled to a cash repayment by Transmission Owner(s) that owns the Network Upgrades, of the amount paid respectively to Transmission Owner, if any, for the Network Upgrades, as provided under the Tariff, and including any tax gross-up or other tax-related payments associated with the repayable portion of the Network Upgrades, and not repaid to Customer pursuant to Article 3.3.1 or otherwise, to be paid to Customer on a dollar-for-dollar basis for the

non-usage sensitive portion of transmission charges, as payments are made under the Tariff for Transmission Service with respect to the Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this subparagraph. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1 or the Network Upgrades have been determined not to be needed pursuant to this Article 3.2.2.1. Customer may assign such repayment rights to any person.

3.2.2.2 Amount. Transmission credits will be based on the final, actual cost of completing the Network Upgrades as provided by the final invoice prepared by Transmission Owner pursuant to Article 6.4 of this Agreement. Any repayment made pursuant to Article 3.2.2.1 shall include (i) the final, actual cost after any true-up amounts have been paid pursuant to Article 6.4, and (ii) interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this Article 3.2 until fully reimbursed. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1.

3.2.2.3 Alternative Payment Schedule. Notwithstanding the foregoing, as applicable and consistent with the Tariff, Customer, Transmission Provider, and Transmission Owner, may adopt any alternative payment schedule that is mutually agreeable.

3.2.2.4 RESERVED

3.2.2.5 Rights not Relinquished. Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that Customer, shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain refunds or transmission credits for Transmission Service that is not associated with the Facility.

3.3 Taxes.

3.3.1 Indemnification for Contributions in Aid of Construction. The Parties intend that all payments made by Customer to Transmission Owner for the installation of the Network Upgrades and Direct Assignment Facilities shall be non-taxable contributions to capital in accordance with the Internal Revenue Code and any applicable state tax laws and shall not be taxable as contributions in aid of construction under the Internal Revenue Code and any applicable state tax laws. With regard only to such contributions, Transmission Owner shall not include a gross-up for income taxes in the amounts it charges Customer for the installation of the Network Upgrades and Direct Assignment Facilities unless (i) Transmission Owner has determined, in good faith, that the payments or property transfers made by Customer to Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Transmission Owner to report payments or property as income subject to taxation; provided, however, that Transmission Owner may require Customer to provide security for Network Upgrades, in a form reasonably acceptable to Transmission Owner (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences or any current tax liability under this Article. Customer shall reimburse Transmission Owner for such costs on a fully grossed-up basis, in accordance with this Article, within thirty (30) Calendar Days of receiving written notification from Transmission Owner of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten-year testing period and the applicable statute of limitation, as it may be extended by Transmission Owner upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article. Notwithstanding the foregoing provisions of this Article 3.3.1, and to the extent permitted by law, to the extent that the receipt of such payments by Transmission Owner is determined by any Governmental Authority to constitute income by Transmission Owner subject to taxation, Customer shall protect, indemnify and hold harmless Transmission Owner and its Affiliates, from all claims by any such Governmental Authority for any tax, interest and/or penalties associated with such determination. Upon receiving written notification of such determination from the Governmental Authority, Transmission Owner shall provide Customer with written notification within thirty (30) Calendar Days of such determination and notification. Transmission Owner, upon the timely written request by Customer and at Customer's expense, shall appeal, protest, seek abatement of, or otherwise oppose such determination. Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the compromise or settlement of the claim; provided that Transmission Owner shall cooperate and consult in good faith with Customer regarding the conduct of such contest. Customer shall advance to Transmission Owner on a periodic basis as requested by Transmission Owner the estimated cost of prosecuting such appeal, protest, abatement or other contest. Customer shall not be required to pay Transmission

Owner for the tax, interest and/or penalties prior to the seventh (7th) Calendar Day before the date on which Transmission Owner (i) is required to pay the tax, interest and/or penalties or other amount in lieu thereof pursuant to a compromise or settlement of the appeal, protest, abatement or other contest; (ii) is required to pay the tax, interest and/or penalties as the result of a final, non-appealable order by a Governmental Authority; or (iii) is required to pay the tax, interest and/or penalties as a prerequisite to an appeal, protest, abatement or other contest. In the event such appeal, protest, abatement or other contest results in a determination that Transmission Owner is not liable for any portion of any tax, interest and/or penalties for which Customer has already made payment to Transmission Owner, Transmission Owner shall promptly refund to Customer any payment attributable to the amount determined to be non-taxable, plus any interest or other payments Transmission Owner receives or which Transmission Owner may be entitled with respect to such payment. In accordance with Article 6, Customer shall provide Transmission Owner with credit assurances sufficient to meet Customer's estimated liability for reimbursement of Transmission Owner for taxes, interest and/or penalties under this Section 3.3.1. Such estimated liability shall be stated in Appendix A.

To the extent that Transmission Owner is a limited liability company and not a corporation, and has elected to be taxed as a partnership, then the following shall apply: Transmission Owner represents, and the Parties acknowledge, that Transmission Owner is a limited liability company and is treated as a partnership for federal income tax purposes. Any payment made by Customer to Transmission Owner for Network Upgrades and Direct Assignment Facilities is to be treated as an upfront payment in accordance with Rev Proc 2005-35. It is anticipated by the Parties that any amounts paid by Customer to Transmission Owner for Network Upgrades and Direct Assignment Facilities will be reimbursed to Customer in accordance with the terms of this Agreement, provided Customer fulfills its obligations under this Agreement.

3.3.2 Private Letter Ruling. At Customer's request and expense, Transmission Owner shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Customer to Transmission Owner under this Agreement are subject to federal income taxation. Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Customer's knowledge. Transmission Owner and Customer shall cooperate in good faith with respect to the submission of such request.

3.3.3 Other Taxes. Upon the timely request by Customer, and at Customer's sole expense, Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Transmission Owner for which Customer may be required to reimburse Transmission Owner under the terms of this Agreement. Customer

shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Customer and Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Customer to Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Transmission Owner. Each Party shall cooperate with the other Parties to maintain each Party's tax status. Nothing in this Agreement is intended to adversely affect any Party's tax-exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

ARTICLE 4 FORCE MAJEURE

- 4.1 Notice.** The Party unable to carry out an obligation imposed on it by this Agreement due to a Force Majeure event shall notify the other Parties in writing or verbally with subsequent notice in writing within a reasonable time after the occurrence of the cause relied on.
- 4.2 Duration of Force Majeure.** Except as set forth in Article 4.3, no Party will be considered in Default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure. A Party shall not be responsible for any non-performance or be considered in Breach or Default under this Agreement due to Force Majeure. A Party shall be excused from whatever performance is affected for only the duration of the Force Majeure event and while the Party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing Party is able to resume performance of its obligations excused as a result of the occurrence of Force Majeure, such Party shall give prompt notice thereof to the other Parties.
- 4.3 Obligation to Make Payments.** Any Party's obligation to make payments for services incurred shall not be suspended by Force Majeure.

ARTICLE 5 INFORMATION REPORTING

- 5.1 Information Reporting Obligations.** Each Party shall, in accordance with Good Utility Practice, promptly provide to the other Parties all relevant information, documents, or data regarding the Party's facilities and equipment which may reasonably be expected to pertain to the reliability of the other Party's facilities and equipment and which has been reasonably requested by the other Party.

- 5.2 Non-Force Majeure Reporting.** A Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this Agreement for a reason other than Force Majeure. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. In the event of Force Majeure, a Party unable to comply with the provisions of this Agreement shall notify the other Parties in accordance with the provisions of Article 4.

ARTICLE 6 CREDITWORTHINESS, BILLING AND PAYMENTS

- 6.1 Creditworthiness.** By the earlier of (i) thirty (30) Calendar Days prior to the due date for Customer's first payment under the payment schedule specified in Appendix A or (ii) the first date specified in Appendix A for the ordering of equipment by Transmission Owner for installing the Network Upgrades and Direct Assignment Facilities, Customer shall provide Transmission Owner, at Transmission Owner's option, with a form of adequate assurance of creditworthiness reasonably acceptable to Transmission Owner. If the adequate assurance is a parental guarantee or surety bond, it must be made by an entity that meets the creditworthiness requirements of Transmission Owner, have terms and conditions reasonably acceptable to Transmission Owner and guarantee payment of the amount specified in the next paragraph of this Article 6.1. If the adequate assurance is a letter of credit, it must be issued by a bank reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount available to be drawn under the letter shall reduce on a monthly basis in accordance with the monthly payment schedule. The surety bond must be issued by an insurer reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount assured under the bond shall reduce on a monthly basis in accordance with the monthly payment schedule. After the Network Upgrades and Direct Assignment Facilities have been placed in service and until Customer fully compensates Transmission Owner for construction of the Network Upgrades and Direct Assignment Facilities, Customer shall, subject to the standards of this Article 6.1, maintain a parental guarantee, surety bond, letter of credit, or some other credit assurance sufficient to meet its monthly payment obligation under Article 3.2.1, as specified in the following paragraph. Customer's estimated liability under Article 3.2.1 is stated in Appendix A.

Customer shall maintain as of the first day of each month beginning on the due date for Customer's first payment under the payment schedule specified in Appendix A, and continuing through to the In-Service Date, a parental guarantee, surety bond or letter of credit in an amount sufficient to cover the applicable costs and cost commitments required of the Party responsible for building the facilities pursuant to the construction schedule developed in this Agreement for designing, engineering, seeking regulatory approval from any Governmental Authority, constructing, procuring and installing the facilities and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Owner for these purposes as defined and established under Appendix A.

- 6.2 Invoice.** Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due, if any, for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this Agreement, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.
- 6.3 Payment.** Invoices shall be rendered to the paying Party at the address specified by the Parties. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by a Party will not constitute a waiver of any rights or claims that Party may have under this Agreement.
- 6.4 Final Invoice.** Within six (6) months after completion of the construction of the Network Upgrades and Direct Assignment Facilities, Transmission Owner shall provide an invoice of the final cost of the construction of the Network Upgrades and Direct Assignment Facilities and shall set forth such costs in sufficient detail to enable Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Owner shall refund, with interest (calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii)), to Customer any amount by which the actual payment by Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.
- 6.5 Interest.** Interest on any unpaid amounts shall be calculated in accordance with 18 C.F.R. § 35.19a(a)(2)(iii).
- 6.6 Payment During Dispute.** In the event of a billing dispute among the Parties, Transmission Owner shall continue to construct the Network Upgrades and Direct Assignment Facilities under this Agreement as long as Customer: (i) continues to make all payments not in dispute; and (ii) pays to Transmission Provider or Transmission Owner or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Customer fails to meet these two requirements, then Transmission Provider may or, at Transmission Owner's request upon Customer's failure to pay Transmission Owner, shall provide notice to Customer of a Default pursuant to Article 9. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to another Party shall pay the amount due with interest calculated in accord with the methodology set forth in 18 C.F.R. § 35.19a(a)(2)(iii).

ARTICLE 7 ASSIGNMENT

- 7.1 Assignment.** This Agreement may be assigned by any Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the

consent of the other Parties to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that Customer shall have the right to assign this Agreement, without the consent of either Transmission Provider or Transmission Owner, for collateral security purposes to aid in providing financing for the Facility, provided that Customer will promptly notify Transmission Provider and Transmission Owner of any such assignment. Any financing arrangement entered into by Customer pursuant to this Article will provide that prior to or upon the exercise of the secured Party's, trustee's or assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider and Transmission Owner of the date and particulars of any such exercise of assignment right(s), including providing Transmission Provider and Transmission Owner with proof that it meets the requirements of Article 6.1. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

ARTICLE 8 INDEMNITY

8.1 General. To the extent permitted by law, a Party (the "Indemnifying Party") shall at all times indemnify, defend, and hold the other Parties (each an "Indemnified Party") harmless from Loss, only as provided in the Tariff.

8.1.1 Indemnified Party. If an Indemnified Party is entitled to indemnification under this Article 8 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 8.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

8.1.2 Indemnifying Party. If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 8, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.

8.1.3 Indemnity Procedures. Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 8.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be reasonably withheld, conditioned or delayed.

- 8.2 Consequential Damages.** In no event shall any Party be liable to any other Party under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

ARTICLE 9 BREACH, CURE AND DEFAULT

- 9.1 Events of Breach.** A Breach of this Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Agreement, including but not limited to any material Breach of a representation, warranty or covenant made in this Agreement;

- (c) If a Party (i) is adjudicated bankrupt; (ii) files a voluntary petition in bankruptcy under any provision of any federal or state bankruptcy law or shall consent to the filing of any bankruptcy or reorganization petition against it under any similar law; (iii) makes a general assignment for the benefit of its creditors; or (iv) consents to the appointment of a receiver, trustee or liquidator;
- (d) Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;
- (e) Failure of a Party to provide such access rights, or a Party's attempt to revoke access or terminate such access rights, as provided under this Agreement or any related agreements.
- (f) Failure of a Party to provide information or data to another Party as required under this Agreement, provided the Party entitled to the information or data under this Agreement requires such information or data to satisfy its obligations under this Agreement.

9.2 Notice of Breach, Cure and Default. Upon the occurrence of an event of Breach, the Party not in Breach, when it becomes aware of the Breach, shall give written notice of the Breach to the Breaching Party and to any other person representing a Party to this Agreement identified in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach.

9.2.1 Upon the occurrence described in part (c) of Article 9.1, the Party experiencing such occurrence shall notify the other Party in writing within seven (7) Calendar Days after the commencement of such occurrence. Upon receiving written notice of the Breach hereunder, the Breaching Party shall have a period to cure such Breach (sometimes hereinafter referred as ("Cure Period") which shall be thirty (30) Calendar Days unless such Breach is due to an occurrence under Article 9.1(a) or (c) in which case the cure period will be five (5) Business Days.

9.2.2 If the Breach is such that it cannot be cured within the Cure Period, the Breaching Party will commence in good faith all steps as are reasonable and appropriate to cure the Breach within such Cure Period and thereafter diligently pursue such action to completion. In the event the Breaching Party fails to:

- (a) cure the Breach, or to commence reasonable and appropriate steps to cure the Breach, within the Cure Period; or,
- (b) completely cure the Breach within sixty (60) Calendar Days if the Breach occurs pursuant to Article 9.1(b), (d), (e) or (f),

the Breaching Party will be in Default of this Agreement and the non-Breaching Parties may, at their option, either in concert or individually, (1) act to terminate

this Agreement for cause by notifying the other Parties in writing, or (2) take whatever action at law or in equity as may appear necessary or desirable to enforce the performance or observance of any rights, remedies, obligations, agreement, or covenants under this Agreement.

- 9.3 Rights in the Event of Default.** Notwithstanding the foregoing, upon the occurrence of an event of Default, any non-Defaulting Party shall be entitled to exercise all rights and remedies it may have in equity or at law.

ARTICLE 10 TERMINATION OF AGREEMENT

- 10.1 Expiration of Term.** Except as otherwise specified in this Article 10, the Parties' obligations under this Agreement shall terminate at the conclusion of the term of this Agreement.
- 10.2 Termination.** In addition to the termination provisions set forth in Article 2.2, a Party may terminate this Agreement upon the Default of another Party in accordance with this Agreement. Subject to the limitations set forth in Article 10.3, in the event of a Default, a non-Defaulting Party may terminate this Agreement only upon the later of (i) its giving of written notice of termination to the other Parties; and (ii) unless no longer required by FERC, the filing at FERC of a notice of termination for this Agreement, which filing must be accepted for filing by FERC.
- 10.3 Disposition of Facilities Upon Termination of Agreement.**
- 10.3.1 Transmission Provider and Transmission Owner Obligations.** Upon termination of this Agreement, unless otherwise agreed by the Parties in writing, Transmission Owner:
- (a) shall, prior to the construction and installation of any portion of the Network Upgrades and Direct Assignment Facilities and to the extent possible, cancel any pending orders of, or return, such equipment or material for such Network Upgrades and Direct Assignment Facilities;
 - (b) may keep in place any portion of the Network Upgrades and Direct Assignment Facilities already constructed and installed; and,
 - (c) shall perform such work as may be necessary to ensure the safety of persons and property and to preserve the integrity of the Transmission System (*e.g.*, construction demobilization to return the system to its original state, wind-up work).
- 10.3.2 Customer Obligations.** Upon billing by Transmission Owner, Customer shall reimburse Transmission Owner for any costs incurred by Transmission Owner in performance of the actions required or permitted by Article 10.3.1 and for the cost

of any Network Upgrades and Direct Assignment Facilities described in Appendix A. Transmission Owner and Transmission Provider shall use Reasonable Efforts to minimize costs and shall offset the amounts owed by any salvage value of facilities, if applicable. Customer shall pay these costs pursuant to Article 6.3 of this Agreement.

10.3.3 Pre-construction or Installation. Upon termination of this Agreement and prior to the construction and installation of any portion of the Network Upgrades and Direct Assignment Facilities, Transmission Owner may, at its option, retain any portion of such Network Upgrades and Direct Assignment Facilities not cancelled or returned in accordance with Article 10.3.1(a), in which case Transmission Owner shall be responsible for all costs associated with procuring such Network Upgrades and Direct Assignment Facilities. To the extent that Customer has already paid Transmission Owner for any or all of such costs, Transmission Owner shall transfer such amounts to the Customer. If Transmission Owner elects to not retain any portion of such facilities, Transmission Owner shall convey and make available to Customer such facilities as soon as practicable after Customer's payment for such facilities.

10.4 Survival of Rights. Termination or expiration of this Agreement shall not relieve any Party of any of its liabilities and obligations arising hereunder prior to the date termination becomes effective, and each Party may take whatever judicial or administrative actions as appear necessary or desirable to enforce its rights hereunder. The applicable provisions of this Agreement will continue in effect after expiration, or early termination hereof to the extent necessary to provide for (A) final billings, billing adjustments and other billing procedures set forth in this Agreement; (B) the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect; and (C) the confidentiality provisions set forth in Article 12.

ARTICLE 11 SUBCONTRACTORS

11.1 Subcontractors. Nothing in this Agreement shall prevent a Party from utilizing the services of subcontractors, as it deems appropriate, to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

11.1.1 Responsibility of Principal. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. In accordance with the provisions of this Agreement, each Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor it hires as if no subcontract had been made. Any applicable obligation imposed by

this Agreement upon a Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

11.1.2 No Third-Party Beneficiary. Except as may be specifically set forth to the contrary herein, no subcontractor or any other party is intended to be, nor will it be deemed to be, a third-party beneficiary of this Agreement.

11.1.3 No Limitation by Insurance. The obligations under this Article 11 will not be limited in any way by any limitation of any insurance policies or coverages, including any subcontractor's insurance.

ARTICLE 12 CONFIDENTIALITY

12.1 Confidentiality. Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by a Party to another Party prior to the execution of this Agreement.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential. The Parties shall maintain as confidential any information that is provided and identified by a Party as Critical Energy Infrastructure Information (CEII), as that term is defined in 18 C.F.R. Section 388.113(c).

Such confidentiality will be maintained in accordance with this Article 12. If requested by the receiving Party, the disclosing Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

12.1.1 Term. During the term of this Agreement, and for a period of three (3) years after the expiration or termination of this Agreement, except as otherwise provided in this Article 12 or with regard to CEII, each Party shall hold in confidence and shall not disclose to any person Confidential Information. CEII shall be treated in accordance with Commission policies and regulations.

12.1.2 Scope. Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a non-Party, who, to the knowledge of the receiving Party after due inquiry, was

under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this Agreement; or (6) is required, in accordance with Article 12.1.7 of this Agreement, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Agreement. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the receiving Party that it no longer is confidential.

12.1.3 Release of Confidential Information. No Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), subcontractors, employees, agents, consultants, or to non-Parties who may be or are considering providing financing to or equity participation with Customer, or to potential purchasers or assignees of Customer, on a need-to-know basis in connection with this Agreement, unless such person has first been advised of the confidentiality provisions of this Article 12 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 12.

12.1.4 Rights. Each Party retains all rights, title, and interest in the Confidential Information that it discloses to the receiving Party. The disclosure by a Party to the receiving Party of Confidential Information shall not be deemed a waiver by the disclosing Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

12.1.5 No Warranties. By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to another Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

12.1.6 Standard of Care. Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to another Party under this Agreement or its regulatory requirements.

12.1.7 Order of Disclosure. If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents,

administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the disclosing Party with prompt notice of such request(s) or requirement(s) so that the disclosing Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

12.1.8 Termination of Agreement. Upon termination of this Agreement for any reason, each Party shall, within ten (10) Business Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting Party) or return to the requesting Party any and all written or electronic Confidential Information received from the requesting Party, except that each Party may keep one copy for archival purposes, provided that the obligation to treat it as Confidential Information in accordance with this Article 12 shall survive such termination.

12.1.9 Remedies. The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 12. Each Party accordingly agrees that the disclosing Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving Party Breaches or threatens to Breach its obligations under this Article 12, which equitable relief shall be granted without bond or proof of damages, and the breaching Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 12, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 12.

12.1.10 Disclosure to FERC, its Staff or a State. Notwithstanding anything in this Article 12 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from a Party that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this Agreement prior to the release of the Confidential Information to FERC or its

staff. The Party shall notify the other Parties to the Agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

- 12.1.11** Subject to the exception in Article 12.1.10, any information that a disclosing Party claims is competitively sensitive, commercial or financial information under this Agreement shall not be disclosed by the receiving Party to any person not employed or retained by the receiving Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the disclosing Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Agreement or as the Regional Transmission Organization or a Local Balancing Authority operator including disclosing the Confidential Information to a regional or national reliability organization. The Party asserting confidentiality shall notify the receiving Party in writing of the information that Party claims is confidential. Prior to any disclosures of that Party's Confidential Information under this subparagraph, or if any non-Party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the Party who received the Confidential Information from the disclosing Party agrees to promptly notify the disclosing Party in writing and agrees to assert confidentiality and cooperate with the disclosing Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

ARTICLE 13 INFORMATION ACCESS AND AUDIT RIGHTS

- 13.1 Information Access.** Each Party shall make available to the other Parties information necessary to verify the costs incurred by the other Parties for which the requesting Party is responsible under this Agreement and carry out obligations and responsibilities under this Agreement, provided that the Parties shall not use such information for purposes other than those set forth in this Article 13.1 and to enforce their rights under this Agreement.
- 13.2 Audit Rights.** Subject to the requirements of confidentiality under Article 12 of this Agreement, the accounts and records related to the design, engineering, procurement, and construction of the Network Upgrades and Direct Assignment Facilities shall be subject to audit during the period of this Agreement and for a period of twenty-four (24) months following the Transmission Owner's issuance of a final invoice in accordance with Article 6.4. Customer at its expense shall have the right, during normal business hours,

and upon prior reasonable notice to the other Parties, to audit such accounts and records. Any audit authorized by this Article 13.2 shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Agreement.

ARTICLE 14 DISPUTES

- 14.1 Submission.** Any claim or dispute, which a Party may have against another Party, arising out of this Agreement shall be submitted for resolution in accordance with the dispute resolution provisions of the Tariff.
- 14.2 Rights under the Federal Power Act.** Nothing in this Article 14 shall restrict the rights of any Party to file a complaint or a petition with FERC under relevant provisions of the Federal Power Act.
- 14.3 Equitable Remedies.** Nothing in this Article shall prevent a Party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations, at any time, before a Governmental Authority.

ARTICLE 15 NOTICES

- 15.1 General.** Any notice, demand or request required or permitted to be given by a Party to another Party and any instrument required or permitted to be tendered or delivered by a Party in writing to another Party may be so given, tendered or delivered, as the case may be, by depositing the same with the United States Postal Service with postage prepaid, for transmission by certified or registered mail, addressed to the Parties, or personally delivered to the Parties, at the address set out below:

To Transmission Provider:

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

To Transmission Owner:

Minnesota Power

Vice President, Transmission & Distribution
30 West Superior Street
Duluth, MN 55802

To Customer:

Minnesota Power

Vice President, Strategy and Planning

30 West Superior Street
Duluth, MN 55802

15.2 Billings and Payments. Billings and payments shall be sent to the addresses shown in Article 15.1 unless otherwise agreed to by the Parties.

15.3 Alternative Forms of Notice. Any notice or request required or permitted to be given by a Party to another Party and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out below:

To Transmission Provider:

MISO

Voice telephone – (317) 249-5700

Facsimile telephone – (317) 249-5358

Email address – misotap@misoenergy.org or

MISOTransmissionAccessPlanning@misoenergy.org

To Transmission Owner:

Minnesota Power

Director – System Operations, Performance & Compliance

Voice telephone – (218) 723-7414

Email address – lfrisk@mnpower.com or

MPTransmissionInformationNotifications@mnpower.com

To Customer:

Minnesota Power

RTO Coordination Manager

Voice telephone – (218) 723-7466

Email address – rnyholm@mnpower.com

15.4 DUNS #. If Transmission Owner and Customer have not obtained DUNS numbers by the time this Agreement is executed, Transmission Owner and Customer will forward their DUNS numbers within five (5) Business Days of having obtained such numbers to Transmission Provider by facsimile telephone or email to the fax number or email set out below:

Transmission Owner

DUNS Number: 617232889

Customer

DUNS Number: 617232889

- 15.5 Notification of In-Service Date.** Transmission Owner will serve to Transmission Provider a copy of Appendix B as forwarded to Customer on the same day to the address shown in Article 15.1, and by facsimile telephone to the numbers set out below:

To Transmission Provider:

MISO

Facsimile telephone – (317) 249-5703

And copy to

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

ARTICLE 16
MISCELLANEOUS

- 16.1 Waiver.** Except as otherwise provided for in this Agreement, the failure of any Party to comply with any obligation, covenant, agreement, or condition herein may be waived by the Parties entitled to the benefits thereof only by a written instrument signed by the Parties granting such waiver. Any waiver at any time by a Party of its rights with respect to a Default under this Agreement, or with respect to any other matters arising in connection with this Agreement, shall not be deemed a waiver or continuing waiver with respect to any subsequent Default or other matter.
- 16.2 Governing Law.** The validity, interpretation and performance of this Agreement and each of its provisions shall be governed by the laws of the state of Minnesota where approximately 50 percent of the Network Upgrades and/or Direct Assignment Facilities referenced in Appendix A are located without regard to its conflicts of law principles.
- 16.3 Headings Not to Affect Meaning.** The descriptive headings of the various Sections and Articles of this Agreement have been inserted for convenience of reference only and shall in no way modify or restrict any of the terms and provisions hereof.
- 16.4 Amendments and Rights Under the Federal Power Act.** Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Transmission Owner and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided, however, that each Party shall have the right to protest any such filing and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 16.5 Entire Agreement.** This Agreement, together with all the exhibits, constitutes the final and entire written agreement among the Parties hereto with reference to the subject matter hereof, and is a complete and exclusive statement of those terms and conditions and supersedes all prior negotiations, representations or agreements, either written or oral, with respect to the specific subject matter of this Agreement. No change or modification as to any of the provisions hereof shall be binding on any Party unless reduced to writing and approved by the duly authorized officer or agent of Customer, Transmission Owner, and Transmission Provider.
- 16.6 Counterparts.** This Agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument.

- 16.7 Binding Effect.** This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the Parties hereto and their successors and assigns. No person or party shall have any rights, benefits or interests, direct or indirect, arising from this Agreement except the Parties hereto, their successors and authorized assigns. The Parties expressly disclaim any intent to create any rights in any person or party as a third party beneficiary to this Agreement.
- 16.8 Conflicts.** In the event of a conflict between the body of this Agreement and any attachment, appendix or exhibit hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed to be the final intent of the Parties.
- 16.9 Regulatory Requirements.** Each Party's obligations under this Agreement shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek these other approvals as soon as is reasonably practicable.

ARTICLE 17 REPRESENTATIONS AND WARRANTIES

- 17.1 General.** Each Party hereby represents, warrants and covenants as follows with these representations, warranties, and covenants effective as to the Party during the full time this Agreement is effective:
- 17.1.1. Good Standing.** Such Party is duly organized or formed, as applicable, validity existing and in good standing under the laws of its state of organization or formation, and is in good standing under the laws of the respective state(s) of its organization as stated in the preamble of this Agreement.
- 17.1.2 Authority.** Such Party has the right, power and authority to enter into this Agreement, to become a party hereto and to perform its obligations hereunder, and this Agreement is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms.
- 17.1.3 No Conflict.** The execution, delivery and performance of this Agreement does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit or order or material agreement or instrument applicable to or binding upon such Party or any of its assets.
- 17.1.4 Consent and Approval.** That it has sought or obtained, or, in accordance with this Agreement will seek or obtain, each consent, approval, authorization or order of, or acceptance of a filing with, or notice to, any Governmental Authority with jurisdiction concerning this Agreement, in connection with the execution, delivery and performance of this Agreement.

17.1.5 Solvency. That such Party is financially solvent.

IN WITNESS WHEREOF, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original Agreement among the Parties.

Transmission Provider

Midcontinent Independent System Operator, Inc.

By: 

February 28, 2024 kkh

Name: Aubrey Johnson

Title: VP, System Planning & Competitive Development

Transmission Owner

Minnesota Power

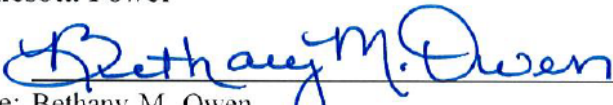
By: 

Name: Josh Skelton

Title: Chief Operating Officer - MP

Customer

Minnesota Power

By: 

Name: Bethany M. Owen

Title: Chief Executive Officer

Square Butte 91365462 FCA

Facilities Construction Agreement
APPENDIX A
NETWORK UPGRADES, COST ESTIMATES AND RESPONSIBILITY,
TRANSMISSION CREDITS, CONSTRUCTION SCHEDULE AND MONTHLY
PAYMENT SCHEDULE

This Appendix A is a part of the Facilities Construction Agreement between Customer, Transmission Owner, and Transmission Provider. Terms used in this Appendix A with initial capitalization not defined in this Appendix A shall have the meaning set out in the Agreement

The upgrades required to be made by the Transmission Owner under this Agreement because of the Transmission Service Request include Direct Assignment Facilities and Network Upgrades, as defined in Module B and Attachment N of the Tariff. The Network Upgrades under this Agreement are governed by Module B and Attachment N of the Tariff.

1.1 Network Upgrades to be installed by Transmission Owner.

1.1.1 Transmission Owner Substation Network Upgrades:

To modernize the terminals of the existing Square Butte HVDC Line and implement the latest voltage source converter ("VSC") HVDC technology, new buildings and electrical infrastructure need to be constructed on a new site near the existing Center and Arrowhead HVDC terminals. Due to the specialized nature of the technology, the new VSC HVDC converter stations will be delivered as turnkey projects by the original equipment manufacturer ("OEM"). The scope of supply for the HVDC OEM will include the relocated converter stations, including valves, converter transformers, smoothing reactors, DC equipment, AC circuit breakers, control & protection, and all associated facilities. The new VSC HVDC converter stations will be designed to interconnect at 345 kV on the AC system side. To accommodate interconnection of the new VSC HVDC converter stations, new AC interconnection facilities will be constructed including new 345/230 kV substations, 345 kV transmission lines, and 230 kV transmission lines. New AC interconnection facilities are listed below.

In Minnesota:

- Construction of a new St. Louis County 345/230 kV Substation located less than one mile west of the Arrowhead Substation
- Construction of a new 345 kV transmission line from the HVDC converter station to the St. Louis County Substation
- Construction of two parallel 230 kV lines from the St. Louis County Substation to the existing Arrowhead Substation
- At Arrowhead Substation, the two new 230 kV lines will be interconnected to the existing HVDC Pole 1 and Pole 2 bus positions, which will be rebuilt with higher-capacity bus and electrical equipment to accommodate the increased HVDC capacity.
- A short portion of the existing ± 250 kV HVDC Line in Minnesota will be reconfigured to terminate at the new HVDC converter station.

In North Dakota:

- Establishment of a new Nelson Lake 230 kV Switching Station to tie together the existing Minnesota Power Square Butte East – Bison 230 kV Line with the existing Great River Energy Square Butte – Stanton 230 kV Line.
- Construction of a second 230 kV circuit between Nelson Lake and Square Butte East using existing double-circuit capable structures.
- Addition of a 230 kV breaker at the Square Butte East Substation to accommodate the second Nelson Lake – Square Butte East 230 kV circuit
- Expansion of the Nelson Lake 230 kV Switching Station to add a 345/230 kV transformer and 345 kV line entrance.
- Construction of a new 345 kV line from Nelson Lake to the new HVDC converter station
- Construction of a new 345 kV substation at the new HVDC converter station site
- A portion of the existing ± 250 kV HVDC Line in North Dakota will need to be reconfigured to terminate at the new HVDC converter station.

Additional equipment upgrades may be deemed necessary by the Transmission Owner or the HVDC OEM during the specification, detailed design, and engineering phase of the project.

1.1.2 Transmission Owner Transmission Line Network Upgrades:

The upgrades necessary to increase the capacity of the HVDC transmission line from 550 MW to 900 MW are likely to consist primarily of replacing existing structures with taller structures to increase conductor-to-ground clearance at the higher operating temperature. A short segment of the transmission line with a smaller conductor will need to be rebuilt with a larger conductor.

1.1.3 Transmission Owner Transmission Line Permitting:

Due to the relocation of the converter stations and the length of new AC interconnection facilities required to re-connect to the existing system, the HVDC Modernization Project will require state-level permits in both Minnesota and North Dakota. In Minnesota, a Certificate of Need and Route Permit will be required from the State of Minnesota. In North Dakota, a Certificate of Corridor Compatibility and a Route Permit will be required. Minnesota Power will obtain the necessary permits in both states

1.1.4 Cost Estimates and Responsibility.

The estimated cost for these network upgrades is \$878,000,000. These costs of upgrades are shared by the Transmission Owner and Customer. **The estimated cost from Customer with Transmission Service Request 91365462 to Transmission Owner is \$167,000,000.** The Customer(s) hereby acknowledge and agree that the costs, expenses, and charges set out in Table 1 are only an estimate and that the Customer(s) shall pay the Transmission Owner for their allocated amounts for all costs, expenses, and charges. Updated estimates will be provided annually by the Transmission Owners on request from the Customer.

This is detailed below in Table 1 and is subject to applicable Tax Gross.

Table 1: Network Upgrades Cost Details

HVDC 900 MW Upgrade	Total Estimated Cost	Cost Assigned to Transmission Service Requests #91365462
Converter Station Replacement	\$705,000,000	\$123,000,000
Interconnections to AC System	\$115,000,000	\$11,000,000
Transmission Line Modification	\$58,000,000	\$33,000,000
Internal & Professional Services	Included	Included
Total (in 2022 dollars)	\$878,000,000	\$167,000,000

1.2.4.1 Major Material List of Transmission Owner's Network Upgrades See Exhibit C2

1.2 Direct Assignment Facilities - None.

1.3 First Equipment Order (including permitting). See Table 2 below.

1.3.1. Permitting And Land Rights – Transmission Owner Network Upgrades See Section 1.8.

1.4 Transmission Credits. See Article 3.2.2 of the Agreement.

1.5 Construction Schedule. Where applicable, construction of the Transmission Owner Network Upgrades and Special Protection Facilities is scheduled as follows and will be periodically updated as necessary:

Table 2: Transmission Owner Construction Activities

Milestone Number	Milestone Description	Start Date
1.	Facilities Construction Agreement Executed.	Aug/Sep-2023
2.	Minnesota Certificate of Need & Route Permit Applications Filed.	Jun-2023
3.	North Dakota Corridor Compatibility and Route Permit Applications Filed.	Oct-2023

4.	Begin Front End Engineering & Design with HVDC OEM.	Jan-2024
5.	Major Permits Received in Minnesota & North Dakota.	Jul-2024
6.	Order Long Leadtime Equipment for AC Substations.	Nov-2024
7.	Clearing Begins.	Jan-2025
8.	Construction of AC Interconnection Facilities Begins.	May-2025
9.	Construction of HVDC Transmission Line Upgrades Begins.	Aug-2025
10.	Receive Firm Proposal from HVDC OEM.	Aug-2026
11.	Execute Firm EPC Contract with HVDC OEM.	Oct-2026
12.	Construction of HVDC Converter Stations Begins.	Oct-2027
13.	In-Service Date.	Apr-2030

Note:

The construction schedule assumes that the Transmission Owner has obtained final authorizations and security from Customer and all necessary permits from Governmental Authorities as necessary prerequisites to commence construction of any of the Network Upgrades and Special Protection Facilities.

1.6 Payment Schedule.

1.6.1 Timing of and Adjustments to Customer's Payments and Security.

1.6.2 Monthly Payment Schedule. Following approval of the state permits set forth in Section 1.2.3, in accordance with Attachment N, the Customer will begin paying a monthly dollar assessment. Monthly payments by the Customer will continue until Transmission Owner has recovered the cost of all Directly Assigned Facilities and Transmission Owner Network Upgrades.

A Customer that fails to make payments when due will be given a Breach notice. Unless the Breach is cured in accordance with Article 9 of this agreement, the Transmission Owner is relieved from performing under this Agreement. Failure by any Customer to comply with Article 9.2.2(A) or 9.2.2(B) relative to such Breach may, pursuant to Article 9.2.2 of the Agreement, result in termination of the Agreement as to that Customer.

1.6.3 Security Amount.

1.6.4.1 Except as set forth under Section 1.7.3.1, Security shall be composed of either a Guaranty, a letter of credit as described in Section 1.7.4 or a cash escrow as described in Section 1.7.4.2, at Customer's option, or a combination of these options as long as the total amount of Security is

not less than the amount then required. Notwithstanding the foregoing, the Guaranty amount may not comprise more than fifty percent (50%) of the overall total amount of Security, provided that if Customer has delivered a notice reducing the amount of Security required pursuant to Section 1.7.7, then the Guaranty may comprise up to 100% of the overall total amount of Security at the Guarantor's option. Customer shall be (i) permitted from time to time to change the form and combination of such posted Security provided that no Event of Default with respect to Customer then exists so long as Transmission Owner is provided timely Notice of the change, and (ii) required, if Customer has provided Security, or any portion thereof, in the form of a Guaranty, if the entity or entities providing a Guaranty no longer qualify as a Guarantor, Customer shall within ten (10) Business Days of Transmission Owner's Notice to do so (A) replace such Guaranty with either a Guaranty from an entity or entities meeting the requirements as a Guarantor and/or (B) deliver a letter of credit or performance bond as described in Section 1.7.4.3 and/or (C) supply a cash escrow as described in Section 1.7.4.2, at Customer's option, in any case, in the aggregate amount of the then applicable Security, less the aggregate amount of any prior draws on such Security. Upon receipt of such substitute Security, any such Guaranty shall be deemed cancelled.

- 1.6.4.2** If Customer elects to utilize a cash escrow as Security, it shall establish an interest-bearing escrow account with a commercial bank or other mutually acceptable escrow agent as escrow agent, and the account shall name Transmission Owner as the beneficiary for the duration of the existence of the escrow account. The escrow account shall be in United States currency, and funds in the account may be invested in a money-market fund, short-term treasury obligations, investment-grade commercial paper or other investment-grade investments with maturities of three (3) months or less. All income and interest earned on the accounts held in the escrow account shall accrue for the benefit of the Customer, and Customer may withdraw the income and interest earned at any time as long as the balance in the account after the withdrawal meets the minimum funding requirements of this Section 1.7.4.2. The escrow agreement shall require the escrow agent to notify Transmission Owner of the balance in the escrow account from time to time. The escrow agreement governing the account shall include terms that (i) prohibit termination of the account prior to establishment of alternative Security that satisfies all the requirements of this FCA; (ii) require Notice of no less than sixty (60) Days by the escrow agent to Transmission Owner prior to any termination of the account; and (iii) allow Transmission Owner to draw the entire balance in the escrow account up to the amount of the Security if Security has not been replaced in accordance with this Agreement at least five (5) Business Days prior to the expiration or termination of the escrow account, and

Transmission Owner shall hold such amounts in lieu of escrow until such time as the Security has been replaced, at which time the funds shall be returned to Customer. At the end of the Term, any balance remaining in the escrow account shall be returned or released to Customer.

- 1.6.4.3** In conjunction with or instead of a Guaranty or cash security as provided in Section 1.7.4.2, Customer may provide Security in the form of an irrevocable letter of credit in a commercially reasonable form and otherwise in compliance with the requirements of this Section 1.7.4 and in form and substance acceptable to the Issuer (as defined below) (the “LOC”). The LOC shall be issued by a state or federally chartered commercial bank which issues similar letters of credit in the ordinary course of its business and that (i) has an unsecured bond rating or long-term senior unsecured debt rating equivalent to A- or better as determined by at least two (2) rating agencies, one of which must be either S&P or Moody’s, or, if these are not available, CAMEL ratings from the FDIC or OCC used in the banking industry no less than a 3 and (ii) has a minimum of One Hundred Million Dollars (\$100,000,000) in capital (the “Issuer”). The LOC must: (i) be issued for a minimum term of three hundred and sixty (360) Days, and, where permitted by the Issuer, shall be automatically extended for a period of one (1) year on each successive expiration date unless, at least ninety (90) Days before the current expiration date, the Issuer notifies Customer and Transmission Owner by certified mail that the Issuer has decided not to extend the letter of credit; (ii) provide that draws shall be payable upon presentation of a sight draft executed by an officer of Transmission Owner substantially in the form approved by Transmission Owner; and (iii) expressly permit partial and multiple draws. Any unused portion of the letter of credit shall be available, regardless of renewal, through the then current expiration date. Customer may replace the letter of credit with another Issuer which includes a provision for at least ninety (90) Days advance Notice to Transmission Owner and shall cause the renewal or extension of the LOC meeting the criteria set forth in this Section 1.7.4.3 within thirty (30) days prior to the expiration or cancellation of the then current LOC, and failure to do so shall authorize Transmission Owner to draw immediately upon the then current LOC. Transmission Owner shall then, at Customer’s cost and with Customer’s funds, place the amounts so drawn in an interest bearing escrow account in accordance with Section 1.7.4.2 above, until and unless Customer provides a substitute form of such security meeting the requirements of this Section 1.7.4. Security in the form of an irrevocable standby letter of credit shall be governed by the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Brochure No. 500 or as otherwise required by the Issuer of the LOC.

- 1.6.4.4** Customer shall provide Guarantor's annual audited financial statements to Transmission Owner within one hundred twenty (120) days after the end of each calendar year. Transmission Owner shall have the right to monitor the financial condition of Customer, Guarantor, and the Issuer to the extent set forth herein, and Customer shall provide written Notice to Transmission Owner within five (5) Business Days of becoming aware that (i) the Issuer does not satisfy the requirements of the second sentence of Section 1.7.4.3, (ii) ALLETE, Inc. or an affiliate is the Guarantor, such entity does not, collectively, have a tangible net worth of at least Five Hundred Million Dollars (\$500,000,000), or (iii) if the Guarantor is not ALLETE, Inc. or an affiliate such Person does not have an Investment Grade Credit Rating, and in such event Customer shall provide alternative Security as soon as practicable that complies with this Section 1.7.4.4 and in no event later than thirty (30) Days after becoming aware of the Issuer's or a Guarantor's failure to meet the requirements of this Section 1.7.
- 1.6.5** Release of Security. Promptly following the termination of this FCA and the completion of all Customer's obligations under this FCA, Transmission Owner shall release the Security (including any accumulated interest, if applicable) to Customer.
- 1.6.6** Permitted Draws; Effects of Draws. In addition to any other remedy available to it, Transmission Owner may, before or after termination of this FCA, draw against the Security to satisfy any undisputed obligations of Customer to Transmission Owner arising under this Agreement (including, without limitation, the payment of Availability Liquidated Damages, if any, or any indemnification obligations) which Customer has not otherwise paid or performed when due, after any required Notice and opportunity to cure. If Transmission Owner draws against the Security and Customer subsequently disputes Transmission Owner's entitlement to any portion of the funds drawn, neither Transmission Owner's draw, the Issuer's payment under the LOC, nor Customer's replenishment of the Security or reimbursement of the Issuer or escrow agent shall constitute a waiver of Customer's rights to seek recovery of any amount disputed. To the extent Transmission Owner elects to draw upon the Security to satisfy obligations that otherwise constitute, or might constitute, an Event of Default by Customer and entitle Transmission Owner to terminate this Agreement, Transmission Owner's draw against the Security shall be deemed a cure of such Event of Default and shall waive Transmission Owner's right to terminate in that respect. With respect to any Event of Default by Seller that remains uncured and which could be cured by payment of an undisputed amount to Transmission Owner, Transmission Owner shall first draw upon the Security to cure the Event of Default, and only if such Security is insufficient to cure the Event of Default shall any right of termination which Transmission Owner may otherwise have be exercised by Transmission Owner.

1.6.7 Reduction in Security. Transmission Owner may, by Notice from time to time to Customer, waive or reduce the amount of security required to be posted hereunder in consideration of an Affiliate of Transmission Owner having a minority ownership interest in Customer.

1.7 Permits, Licenses and Authorizations.

Transmission Owner will be responsible for all permits, licenses and authorizations.

Facilities Construction Agreement
APPENDIX B
NOTIFICATION OF COMPLETED CONSTRUCTION

This Appendix B is a part of the Facilities Construction Agreement among Customer, Transmission Owner, and Transmission Provider. Where applicable, when Transmission Owner has completed construction of the Transmission Owner Network Upgrades and/or Direct Assignment Facilities, Transmission Owner shall send notice to Customer and Transmission Provider, in substantially the form following:

[Date]

MISO

Attn: Director, Resource Utilization
720 City Center Drive
Carmel, IN 46032

Customer Address

Phone:

Fax:

Email:

Re: Completion of Network Upgrade/Direct Assignment Facilities

Dear [Name or Title]:

This letter is sent pursuant to the Facilities Construction Agreement among [Transmission Owner], [Customer], and MISO, dated _____, 20__.

On [Date], Transmission Owner completed to its satisfaction all work on the Network Upgrades and/or Direct Assignment Facilities required to facilitate the safe and reliable operation of Customer's Facility. Transmission Owner confirms that the Network Upgrade and/or Direct Assignment Facilities are in place.

Thank you.

[Signature]

[Transmission Owner Representative]

Facilities Construction Agreement
APPENDIX C Exhibits

This Appendix C is a part of the Facilities Construction Agreement among Customers,
Transmission Owner, and Transmission Provider.

Exhibit C1.
Transmission Owner Network Upgrade One Line

CUI//CEII MATERIAL – DO NOT RELEASE

CUI//CEII MATERIAL – DO NOT RELEASE

Exhibit C2

Estimated Cost of Transmission line and/or Substation Network Upgrades and Direct Assignment Facilities

The total estimated cost for the Network Upgrades for HVDC Converter Station, connections to AC System, Transmission Line Modifications is \$878,000,000.

The details of the cost for customer with Transmission Service Request #91365462 is shown below in Table 1, Table 2, Table 3.

Detailed Cost Estimate of Facilities to be Constructed by Transmission Owner

The anticipated costs of modernizing and upgrading the HVDC converter stations are shown in Table 1. The initial estimated converter station replacement base cost was provided by the HVDC OEM. If design assumptions change significantly during the development of the project, the base cost shown in Table 1 may change.

Table 1: Converter Station Replacement Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests ##91365462
Converter Station Base Cost	\$705,000,000	\$123,000,000
Internal & Professional Services	(Included)	(Included)
Contingency - Converter Station	(Included)	(Included)
AFUDC - Converter Station	(Included)	(Included)
Total (in 2022dollars)	\$705,000,000	\$123,000,000

The anticipated costs of AC Interconnection Facilities necessary to connect the relocated VSC HVDC converter stations to the existing AC transmission system are shown in Table 2. If design assumptions change significantly during the development of the project, the base costs shown in Table 2 may change.

Table 2: AC Interconnection Facilities Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests #91365462
Minnesota AC Interconnections	\$55,000,000	\$5,000,000
North Dakota AC Interconnections	\$40,000,000	\$3,000,000
Nelson Lake 230 kV Substation	\$20,000,000	\$3,000,000
Total (in 2022dollars)	\$115,000,000	\$11,000,000

Table 3: Transmission Line Modifications Cost Breakdown

HVDC 900 MW Upgrade	Estimated Cost	Cost Assigned to Transmission Service Requests #91365462
HVDC T-Line 900 MW Upgrade	\$58,000,000	\$33,000,000
HVDC T-Line AFUDC	(Included)	(Included)
HVDC T-Line Contingency	(Included)	(Included)
Total (in 2022dollars)	\$58,000,000	\$33,000,000

The anticipated costs of Transmission Line Modifications are shown in Table 3. The upgrade cost estimate is based on preliminary transmission structural engineering evaluations. If additional HVDC transmission line modifications or scope changes are found to be necessary during the development of the project, the costs presented in Table 3 may be impacted.

TAB D

PUBLIC

FACILITIES CONSTRUCTION AGREEMENT

entered into by the

Midcontinent Independent System Operator, Inc.,

And

~~{Customer}~~

Minnesota Power, a division of ALLETE, INC.

And

~~{Transmission Owner}~~

Minnesota Power, a division of ALLETE, INC.

entered into on the 28th day of February, 2024

FACILITIES CONSTRUCTION AGREEMENT

THIS FACILITIES CONSTRUCTION AGREEMENT (sometimes hereinafter referred to as “Agreement”) is made and entered into this 28th day of February, 2024, by and among the merchant function of Minnesota Power, a division of ALLETE, INC., a corporation, organized and existing under the laws 20 of the State of Minnesota (“Customer”), the **Midcontinent Independent System Operator, Inc.**, a non-profit, non-stock corporation organized and existing under the laws of the State of Delaware (“Transmission Provider”) and the transmission function of Minnesota Power, a division of ALLETE, INC., a corporation organized under the laws of the State of Minnesota (“Transmission Owner”). Customer, Transmission Owner, or Transmission Provider each may be referred to as a “Party” or collectively as the “Parties.”

RECITALS

WHEREAS, Transmission Owner ~~and Customer~~ each owns electric facilities and is engaged in generation, transmission, distribution and/or sale of electric power and energy; and

WHEREAS, Transmission Provider has functional control of the operations of the Transmission System, as defined herein, and is responsible for providing transmission and interconnection service on the transmission facilities under its control; and

~~**WHEREAS**, Customer intends to own, and operate, or manage [Interconnection Customer Interconnection Facilities relating to the MW generating facility] [MHVDC Connection Customer Connection Facilities relating to the MW MHVDC Transmission Line] located in County, (“Facility”) with an expected Commercial Operation Date of pursuant to the [GIA] [TCA] and will interconnect to the transmission system of , which system is either adjacent to or part of the Transmission System; and~~

WHEREAS, Customer intends to reserve firm point to point Transmission Service via Transmission Provider’s Reservation Request No 91365462; and

WHEREAS, the Transmission System is affected by the interconnection firm transmission service request of the Facility ~~to the transmission system~~ and additions, modifications and upgrades must be made to certain existing facilities of the Transmission System to accommodate such ~~interconnection~~ transmission service; and

WHEREAS, Customer has requested, and Transmission Provider and Transmission Owner have agreed, to enter into this Agreement with Customer for the purpose of facilitating the ~~interconnection~~ transmission service of the Facility by the construction of necessary Network Upgrades to the Transmission System;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

ARTICLE 1 DEFINITIONS

Wherever used in this Agreement with initial capitalization, the following terms shall have the meanings specified or referred to in this Article 1. Terms used in this Agreement with initial capitalization not defined in this Article 1 shall have the meanings specified in the Tariff:

- 1.1 “Applicable Laws and Regulations” shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the Parties, their respective facilities and/or the respective services they provide.
- 1.2 “Applicable Reliability Council” shall mean the reliability council of NERC applicable to the Local Balancing Authority of the Transmission System to which the Facility is directly interconnected.
- 1.3 “Applicable Reliability Standards” shall mean Reliability Standards approved by the Federal Energy Regulatory Commission (FERC) under Section 215 of the Federal Power Act, as applicable.
- 1.4 “Breach” shall mean the failure of a Party to perform or observe any material term or condition of this Agreement and shall include, but not be limited to, the events described in Article 9.1.
- 1.5 “Breaching Party” shall mean a Party that is in Breach of this Agreement.
- ~~1.6 “Commercial Operation” shall mean the status of a [Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation] [MHVDC Transmission Line that has commenced transmitting electricity for sale, excluding electricity transmitted during Trial Operation].~~
- ~~1.7 “Commercial Operation Date” or “COD” of a Facility shall mean the date on which the Facility commences Commercial Operation pursuant to [Appendix E to the Generator Interconnection Agreement] [Appendix C to the Transmission Connection Agreement].~~
- ~~1.8~~1.6 “Confidential Information” shall mean any proprietary or commercially or competitively sensitive information, trade secret or information regarding a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, or any other information as specified in Article 12, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, that is received by another Party.

- 1.97 “Customer” shall mean, for purposes of this Agreement, ~~an Interconnection~~
Transmission Customer as defined in the ~~GIP set forth in Attachment X or an MHVDC~~
~~Connection Customer as defined in the MHCP set forth in Attachment GGG~~ Tariff.
- 1.108 “Default” shall mean the failure of a Breaching Party to cure its Breach in accordance
with Article 9 of this Agreement.
- ~~1.14~~ 1.9 “Direct Assignment Facilities” shall mean those facilities or portions of facilities
that are constructed by any Transmission Owner(s), ITC, or ITC Participant(s) for the
sole use/benefit of a particular Transmission Customer requesting service under this
Tariff. Direct Assignment Facilities shall be specified in the Service Agreement that
governs service to the Transmission Customer and shall be subject to Commission
approval.
- 1.10 “Effective Date” shall mean the date on which this Agreement becomes effective upon
execution by the Parties subject to acceptance by the Commission, or if filed unexecuted,
upon the date specified by the Commission.
- 1.1211 “FERC” shall mean the Federal Energy Regulatory Commission, also known as
Commission, or its successor.
- 1.1312 “Force Majeure” shall mean any act of God, labor disturbance, act of the public enemy,
war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery
or equipment, any order, regulation or restriction imposed by governmental, military or
lawfully established civilian authorities, or any other cause beyond a Party’s control. A
Force Majeure event does not include an act of negligence or intentional wrongdoing by
the Party claiming Force Majeure.
- ~~1.14 “Generator Interconnection Procedures or “GIP” shall mean the interconnection~~
~~procedures that are included in the Transmission Provider Tariff.~~
- ~~1.15~~ 1.13 “Good Utility Practice” shall mean any of the practices, methods and acts
engaged in or approved by a significant portion of the electric 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 to 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. Good Utility Practice is not
intended to be limited to the optimum practice, method, or act to the exclusion of all
others, but rather to be acceptable practices, methods, or acts generally accepted in the
region.
- 1.1614 “Governmental Authority” shall mean any federal, state, local or other governmental
regulatory or administrative agency, court, commission, department, board, or other
governmental subdivision, legislature, rulemaking board, tribunal, or other governmental
authority having jurisdiction over the Parties, their respective facilities, or the respective

services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Customer, Transmission Provider, Transmission Owner, or any Affiliate thereof.

1.17¹⁵ “In-Service Date” shall mean the date upon which Customer reasonably expects it will be ready to begin use of the Network Upgrades and/or ~~System Protection~~ Direct Assignment Facilities.

~~1.18~~ “~~Interconnection Agreement~~” or “~~GIA~~” shall mean that ~~Generator Interconnection Agreement by and between Transmission Provider, _____ and Interconnection Customer and reported in MISO’s Electronic Quarterly Reports.~~

1.16

~~1.19~~ “Local Balancing Authority” shall mean an operational entity or a Joint Registration Organization which is (i) responsible for compliance with the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement for their local area within the MISO Balancing Authority Area, (ii) a Party to Balancing Authority Agreement, excluding MISO, and (iii) shown in Appendix A to the Balancing Authority Agreement.

1.20¹⁷ “Loss” shall mean any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party’s performance, or non-performance of its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing, by the indemnified Party.

1.18 “Material Modification” shall mean: (1) modification to a Transmission Service Request in the queue that has a material adverse impact on the cost or timing or constraint identification of Transmission Service Request; or (2) planned modification to proposed network upgrades that is undergoing evaluation and has a material adverse impact on the Transmission System prior to the modification.

~~1.19~~^{1.21} “NERC” shall mean the North American Electric Reliability Corporation, or its successor organization.

1.22²⁰ “Network Upgrades” shall mean the additions, modifications, and upgrades to the Transmission System required ~~at or beyond the point at which the [Interconnection Facilities] [Connection Facilities] connect to the Transmission System or Distribution System, as applicable, to accommodate the interconnection of the Facility to the Transmission System~~ to accommodate the transmission service requests.

1.23²¹ “Non-Breaching Party” shall mean a Party that is not in Breach of this Agreement with regard to a specific event of Breach by another Party.

1.24²² “Reasonable Efforts” shall mean, with respect to an action required to be attempted or taken by a Party under this Agreement, efforts that are timely and consistent with Good

Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

~~1.25 “Shared Network Upgrade” shall mean a Network Upgrade or Common Use Upgrade that is funded by a Customer(s), including when the Transmission Owner elects to fund the capital cost of such a Network Upgrade or Common Use Upgrade under Section 11.3 of the GIA, and also benefits other Customer(s) that are later identified as beneficiaries.~~

~~1.26 “System Protection Facilities” shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission System or other delivery systems or other generating systems from faults or other electrical disturbances occurring at the Facility and (2) the Facility from faults or other electrical system disturbances occurring on the Transmission System or on other delivery systems or other generating systems to which the Transmission System is directly connected.~~

1.27 Direct Assignment Facilities

1.23 “Tariff” shall mean the Transmission Provider’s Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.

~~1.28~~1.24 “Transmission Service” shall mean Point-to-Point Transmission Service provided under Module B of the Tariff on a firm and non-firm basis and the Network Integration Transmission Service under Module B of the Tariff.

1.25 “Transmission System” shall mean the facilities owned by Transmission Owner and controlled or operated by Transmission Provider or Transmission Owner that are used to provide Transmission Service or Wholesale Distribution Service under the Tariff.

ARTICLE 2 TERM OF AGREEMENT

2.1 Effective Date. Subject to required regulatory authorizations, including, without limitation, acceptance by FERC under Section 205 of the Federal Power Act, this Agreement shall become effective on the date on which this Agreement is made and entered into by the Parties.

2.2 Term.

2.2.1 General. This Agreement shall become effective as provided in Article 2.1 and shall continue in full force and effect until the earlier of (i) the final repayment, where applicable, by Transmission Owner of the amount funded by Customer for Transmission Owner’s design, procurement, construction and installation of the Network Upgrades and ~~System Protection~~Direct Assignment Facilities provided in Appendix A; (ii) the Parties agree to mutually terminate this Agreement; (iii) earlier termination is permitted or provided for under Appendix A of this Agreement; or (iv) Customer terminates this Agreement after providing

Transmission Provider and Transmission Owner with written notice at least sixty (60) Calendar Days prior to the proposed termination date, provided that Customer has no outstanding contractual obligations to Transmission Provider or Transmission Owner under this Agreement. No termination of this Agreement shall be effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination. The term of this Agreement may be adjusted upon mutual agreement of the Parties, if the ~~Commercial Operation Date for the Facility or the~~ In-Service Date for the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities is adjusted in accordance with the rules and procedures established by Transmission Provider.

2.2.2 Termination Upon Default. In the event of a Default by a Party, the Non-Breaching Party or Parties shall have the termination rights described in Articles 9 and 10; provided, however, if an event described in part (c) of Article 9.1 has not occurred, and provided the Default does not pose a threat to the reliability of the Transmission System, neither Transmission Provider nor Transmission Owner may terminate this Agreement if Customer is the Breaching Party and Customer (i) has undertaken, in accordance with Article 9.2, to cure the Breach that led to the Default and has failed to cure the Breach for reasons other than Customer's failure to diligently commence reasonable and appropriate steps to cure the Breach within the thirty (30) Calendar Days allowed by Article 9.2, and (ii) compensates Transmission Provider or Transmission Owner within thirty (30) Calendar Days for the amount of damage billed to Customer by Transmission Provider or Transmission Owner for any damages, including costs and expenses, incurred by Transmission Provider or Transmission Owner as a result of such Default. In the event of an occurrence described in part (c) of Article 9.1, and providing the Default does not pose a threat to the reliability of the Transmission System, the Non-Breaching Party or Parties shall not terminate this Agreement provided that the Breaching Party provided an assurance of payment acceptable to the Non-Breaching Party, and pays any applicable damages.

2.2.3 Consequences of Termination. In the event of a termination by any Party, other than a termination by Customer due to a Breach by Transmission Owner, Customer must pay Transmission Owner all amounts still due and payable for construction and installation of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities (including, without limitation, any equipment ordered related to such construction), plus all out-of-pocket expenses incurred by Transmission Owner in connection with the construction and installation of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, through the date of termination, plus any actual costs which Transmission Owner (A) reasonably incurs in winding up work and construction demobilization and (B) reasonably incurs to ensure the safety of persons and property and the integrity and safe and reliable operation of the Transmission System. Transmission Owner agrees to use Reasonable Efforts to minimize such costs.

~~Customer is responsible for the financial impact that is caused to another Interconnection Customer as a result of the termination of this Agreement, Customer's GIA, or any of Customer's other FCA(s) or MPFCA(s); financial impact as defined by Section 7.8 of Attachment X. To the extent that the Customer has already paid Transmission Owner for any or all such costs of materials or equipment not taken by Customer or upgrades not yet constructed, Transmission Owner shall promptly transfer such remaining amounts to Transmission Provider, less any costs, including penalties incurred by Transmission Owner to cancel any pending orders of or return such materials, equipment, or contracts. Transmission Provider will perform a financial impact analysis in accordance with Section 7.8 of Attachment X to determine the amount that should be refunded to Interconnection Customer. Transmission Provider shall refund such remaining amounts to Interconnection Customer, less any financial impact caused by the termination of this Agreement or Interconnection Customer's GIA, MPFCA(s), or other FCA(s), as determined through the analysis performed in accordance with Section 7.8 of Attachment X. If Interconnection Customer made its payment(s) through a letter of credit, surety bond, or parental guarantee, Transmission Owner will draw against that letter of credit, surety bond, or parental guarantee in an amount determined through the analysis performed in accordance with Section 7.8 of Attachment X and transfer that amount to Transmission Provider, unless Interconnection Customer funds the financial impact through another means.~~

2.2.4 Material Adverse Change. In the event of a material change in law or regulation that adversely affects, or may reasonably be expected to adversely affect a Party's rights and/or obligations under this Agreement, the Parties shall negotiate in good faith any amendments to this Agreement necessary to adapt the terms of this Agreement to such change in law or regulation, and Transmission Provider shall file such amendments with FERC. If, within sixty (60) Calendar Days after the occurrence of any event described in this Article 2.2.4, the Parties are unable to reach agreement as to any necessary amendments, the Parties may proceed under Article 14 to resolve any disputes related thereto; Transmission Provider and/or Transmission Owner shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that a Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. If a Party is unable to fully perform this Agreement due to the occurrence of an event described in this Article 2.2.4 and such inability is not based on economic reasons, such Party shall not be deemed to be in Default of its obligations under this Agreement, provided that such Party is seeking dispute resolution under Article 14 or before FERC, to the extent that (i) such Party is unable to perform as a result of such an event and (ii) such Party acts in accordance with its obligations under this Article 2.2.4.

- 2.3 Regulatory Filing.** In accordance with Applicable Laws and Regulations, Transmission Provider shall file this Agreement, and any amendment to this Agreement with FERC as a service agreement under the Tariff. If Customer has executed this Agreement or any amendment to this Agreement, Customer shall not protest this Agreement or the amendment, shall reasonably cooperate with Transmission Provider with respect to such filing and shall provide any information, including the rendering of testimony or pleadings, as applicable, reasonably requested by Transmission Provider to the extent reasonably needed to comply with applicable regulatory requirements.
- 2.4 Survival.** The applicable provisions of this Agreement shall continue in effect after expiration, cancellation, or termination hereof to the extent necessary to provide for final billings, billing adjustments, and the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect.
- 2.5 Termination Obligations.** Upon any termination pursuant to this Agreement, Customer shall be responsible for the payment of all costs or other contractual obligations incurred prior to the termination date including previously incurred capital costs, penalties for early termination, costs of removal and site restoration.

ARTICLE 3
CONSTRUCTION OF NETWORK UPGRADES AND ~~SYSTEM PROTECTION~~DIRECT
ASSIGNMENT FACILITIES

3.1 Construction.

3.1.1 Transmission Owner Obligations. Transmission Owner shall (or shall cause such action to) design, procure, construct and install, and Customer shall pay, consistent with Article 3.2, the cost of, all Network Upgrades and ~~System Protection~~Direct Assignment Facilities identified in Appendix A. All Network Upgrades and ~~System Protection~~Direct Assignment Facilities designed, procured, constructed and installed by Transmission Owner pursuant to this Agreement shall satisfy all requirements of applicable safety and/or engineering codes, including those requirements of Transmission Owner and Transmission Provider, and comply with Good Utility Practice, and further, shall satisfy all Applicable Laws and Regulations.

3.1.2 Suspension of Work.

3.1.2.1 Right to Suspend for Force Majeure Event. Provided that such suspension is permissible under the authorizations, permits or approvals granted for the construction of the Network Upgrades and ~~System Protection~~Direct Assignment Facilities Customer will not suspend unless a Force Majeure event occurs. Customer must provide written notice of its

request for suspension to Transmission Provider and Transmission Owner, and provide a description of the Force Majeure event that is acceptable to Transmission Provider. Suspension will only apply to Customer milestones and ~~[Interconnection Facilities]~~ ~~[Connection Facilities]~~ described in the Appendices of this Agreement. Prior to suspension, Customer must also provide security acceptable to Transmission Owner, equivalent to the higher of \$5 million or the total cost of all Network Upgrades, Transmission Owner's ~~System Protection~~ Direct Assignment Facilities, and Distribution Upgrades listed in Appendix A of this Agreement. Network Upgrades, ~~System Protection~~ Direct Assignment Facilities, ~~and Transmission Owner [Interconnection Facilities]~~ ~~[Connection Facilities]~~ will be constructed on the schedule described in the Appendices of this Agreement unless: (1) construction is prevented by the order of a Governmental Authority; (2) the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities are not needed by any other project; or (3) Transmission Owner or Transmission Provider determines that a Force Majeure event prevents construction. In the event of (1), (2), or (3) security shall be released upon the determination that the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities will no longer be constructed. If suspension occurs, Customer shall be responsible for the costs which Transmission Owner incurs (i) in accordance with this Agreement prior to the suspension, (ii) in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Transmission System and, if applicable, any costs incurred in connection with the cancellation of contracts and orders for material which Transmission Owner cannot reasonably avoid, and (iii) reasonably incurs in winding up work and construction demobilization; provided, however, that, prior to canceling any such contracts or orders, Transmission Owner shall obtain Customer's authorization. Customer shall be responsible for all costs incurred in connection with Customer's denial of authorization to cancel such contracts or orders. Interest as provided in

Article 3.2.2.2 on amounts paid by Customer to Transmission Owner for the design, procurement, construction and installation of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, shall not accrue during periods in which Customer has suspended construction under this Article 3.1.2. Transmission Owner shall invoice Customer pursuant to Article 6 and use Reasonable Efforts to minimize its costs. In the event that Customer suspends work pursuant to this Article, no construction duration, timelines and schedules set forth in Appendix A shall be suspended during the period of suspension unless ordered by a Governmental Authority, with such order being the Force Majeure event causing the suspension.

3.1.2.2 Recommencing of Work. If Customer requests Transmission Owner to recommence such work, Transmission Owner shall have no obligation to afford such work the priority it would have had but for the prior actions of Customer to suspend the work. In such event, Customer shall be responsible for any costs incurred in recommencing the work. All recommenced work shall be completed pursuant to an amended schedule for the ~~interconnection~~ transmission service agreed to by the Parties. Transmission Provider and Transmission Owner have the right to request ~~an Interconnection~~ a System Impact Study if conditions have materially changed subsequent to the request to suspend. Customer shall be responsible for the costs of any studies required.

3.1.2.3 Termination in the Event of a Material Modification. In the event Customer suspends the performance of work by Transmission Owner pursuant to this Article 3.1.2 and modifies its ~~Commercial Operation Date by three (3) years or more~~ In-Service Date, this Agreement shall be deemed terminated unless Customer demonstrates that the change is not a Material Modification under FERC precedent.

3.1.2.4 Right to Suspend Due to Default. Transmission Owner reserves the right, upon written notice to Customer, to suspend, at any time, work by Transmission Owner and the incurrence of additional expenses associated with the construction and installation of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities upon the occurrence of either a Breach that Customer is unable to cure pursuant to Article 9 or an Event of Default pursuant to Article 9. Any form of suspension by Transmission Owner shall not be barred by Articles 2.2.2, 2.2.3 or 9.2.2, nor shall it affect Transmission Owner's right to terminate the work or this Agreement pursuant to Article 10. In such events, Customer shall be responsible for costs which Transmission Owner incurs as set forth in Article 2.2.3.

3.1.3 Construction Status. Transmission Owner shall keep Customer and Transmission Provider advised periodically as to the progress of its respective design, procurement and construction efforts as described in Appendix A. Customer may, at any time, request a progress report from Transmission Owner, with a copy to be provided to Transmission Provider. If, at any time, Customer determines that the completion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities will not be required until after the specified In-Service Date, Customer will provide written notice to Transmission Owner and Transmission Provider of such later date upon which the completion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities would be required. Transmission Owner may delay the In-Service Date of the Network Upgrades accordingly.

3.1.4 Timely Completion. Transmission Owner shall use Reasonable Efforts to design, procure, construct, install, and test the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities in accordance with the schedule set forth in Appendix A, which schedule may be revised from time to time by mutual agreement of the Parties. If any event occurs that will affect the time for completion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, or the ability to complete any of them, Transmission Owner and/or Transmission Provider shall promptly notify Customer, with a copy to the other Party. In such circumstances, Transmission Provider shall, within fifteen (15) Calendar Days of such notice, convene a technical meeting with Customer and Transmission Owner to evaluate the alternatives available to Customer. Transmission Owner and/or Transmission Provider shall also make available to Customer all studies and work papers related to the event and corresponding delay, including all information that is in the possession of Transmission Provider or Transmission Owner that is reasonably needed by Customer to evaluate alternatives. Transmission Owner shall, at Customer's request and expense, use Reasonable Efforts to accelerate its work under this Agreement to meet the schedule set forth in Appendix A, provided that Customer authorizes such actions and the costs associated therewith in advance.

3.2 ~~Interconnection~~ Network Upgrade Costs and Credits.

3.2.1 Costs. Customer shall pay to Transmission Owner costs (including taxes and financing costs) associated with seeking and obtaining all necessary approvals and of designing, engineering, constructing, and testing the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, as identified in Appendix A, in accordance with the cost recovery method provided herein. ~~As required by Section 7.3.2.1 and 7.3.3.1 of Attachment X, Transmission Owner shall have provided Transmission Provider with written notice if Transmission Owner elects to fund the capital for the Network Upgrades and Transmission Owner's System Protection Facilities; otherwise, such facilities, if any, shall be solely funded by Customer.~~

Customer shall pay for Direct Assignment Facilities and Network Upgrades in accordance with Attachment N of the Tariff. The cost assignment provisions shall apply to facilities constructed by Transmission Owner until such time as Transmission Owner is able to fully recover its revenue requirements as calculated in Attachment N, Section C. If the Transmission Service Request is discontinued or suspended, the Transmission Customer shall pay the Transmission Owner for the remaining applicable amounts that must be paid pursuant to Attachment N of the Tariff.

Transmission Owner shall install, at Customer's expense, any Transmission Owner's ~~System Protection~~ Direct Assignment Facilities that may be required on the Transmission Owner's ~~[Interconnection Facilities]~~ [Connection Facilities] or the Transmission Owner's transmission or distribution facilities as a result of the

~~interconnection of the Facility and the~~ Network Upgrades required by Customer's
~~[Interconnection Facilities] [Connection Facilities]~~ request.

~~In the event the Network Upgrade(s) are determined to be Shared Network Upgrade(s), Transmission Owner and Transmission Provider shall not be responsible for funding obligations related to the Shared Network Upgrade(s) under separate GIAs and/or TCAs. Transmission Provider shall only be responsible to reimburse those funds to Customer that Transmission Provider receives pursuant to separate GIAs and/or TCAs.~~

3.2.1.1 Lands of Other Property Owners. If any part of the Transmission Owner's ~~[Interconnection Facilities] [Connection Facilities]~~, Network Upgrades, ~~System Protection~~ Direct Assignment Facilities, and/or Distribution Upgrades is to be installed on property owned by persons other than Customer or Transmission Owner, Transmission Owner shall at Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority to the extent permitted and consistent with Applicable Laws and Regulations and, to the extent consistent with such Applicable Laws and Regulations, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Transmission Owner's ~~[Interconnection Facilities] [Connection Facilities]~~, Network Upgrades, ~~System Protection~~ Direct Assignment Facilities, and/or Distribution Upgrades upon such property.

3.2.2 Credits.

3.2.2.1 Repayment. Customer shall be entitled to a cash repayment by Transmission Owner(s) that owns the Network Upgrades, of the amount paid respectively to Transmission Owner, if any, for the Network Upgrades, as provided under ~~Attachment FF of~~ the Tariff, and including any tax gross-up or other tax-related payments associated with the repayable portion of the Network Upgrades, and not repaid to Customer pursuant to Article 3.3.1 or otherwise, to be paid to Customer on a dollar-for-dollar basis for the non-usage sensitive portion of transmission charges, as payments are made under the Tariff for Transmission Service with respect to the Facility. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. § 35.19 a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this subparagraph. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1 or the Network Upgrades have been determined not to be needed pursuant to this Article 3.2.2.1. Customer may assign such repayment rights to any person.

~~If the Facility is designated a Network Resource under the Tariff, or if there are otherwise no incremental payments for Transmission Service resulting from the use of the Facility by Transmission Customer, and in the absence of another mutually agreeable payment schedule any repayments provided under Attachment FF shall be established equal to the applicable rate for Firm Point To Point Transmission Service for the pricing zone where the Network Load is located multiplied by the portion of the demonstrated output of the Facility designated as a Network Resource by the Network Customer(s) or in the absence of such designation, equal to the monthly firm single system wide rate defined under Schedule 7 of the Tariff multiplied by the portion of the demonstrated output of the Facility under contract to Network Customer(s) and consistent with studies pursuant to Section 3.2.2.2 of the GIP.~~

3.2.2.2 Amount. Transmission credits will be based on the final, actual cost of completing the Network Upgrades as provided by the final invoice prepared by Transmission Owner pursuant to Article 6.4 of this Agreement. Any repayment made pursuant to Article 3.2.2.1 shall include (i) the final, actual cost after any true-up amounts have been paid pursuant to Article 6.4, and (ii) interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which Customer receives a repayment of such payment pursuant to this Article 3.2 until fully reimbursed. Interest shall not accrue during periods in which Customer has suspended construction pursuant to Article 3.1.2.1.

3.2.2.3 Alternative Payment Schedule. Notwithstanding the foregoing, as applicable and consistent ~~with the provisions of Attachment FF of~~ with the Tariff, Customer, Transmission Provider, and Transmission Owner, may adopt any alternative payment schedule that is mutually agreeable ~~so long as Transmission Owner takes one of the following actions no later than five (5) years from the Commercial Operation Date: (1) Return to Customer any amounts advanced for Network Upgrades not previously repaid, or (2) declare in writing that Transmission Owner will continue to provide payments to Customer on a dollar for dollar basis for the non-usage sensitive portion of transmission charges, or develop an alternative schedule that is mutually agreeable and provides for the return of all amounts advanced for Network Upgrades not previously repaid; however, full reimbursement shall not extend beyond twenty (20) years from the Commercial Operation Date.~~

3.2.2.4 Impact of Failure to Achieve Commercial Operation. ~~If the Facility fails to achieve Commercial Operation, but it or another generating~~

~~facility is later constructed and makes use of the Network Upgrades, Transmission Owner shall at that time reimburse Customer for the remaining applicable amounts that may be refundable pursuant to Attachment FF of the Tariff, that were advanced for the Network Upgrades on their respective systems as described above. Before any such reimbursement can occur, Customer, or the entity that ultimately constructs the Facility, if different, is responsible for identifying the entity to which the reimbursement must be made.~~ 3.2.2.4

RESERVED

3.2.2.5 Rights not Relinquished. Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that Customer, shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain refunds or transmission credits for Transmission Service that is not associated with the Facility.

3.3 Taxes.

3.3.1 Indemnification for Contributions in Aid of Construction. The Parties intend that all payments made by Customer to Transmission Owner for the installation of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities shall be non-taxable contributions to capital in accordance with the Internal Revenue Code and any applicable state tax laws and shall not be taxable as contributions in aid of construction under the Internal Revenue Code and any applicable state tax laws. With regard only to such contributions, Transmission Owner shall not include a gross-up for income taxes in the amounts it charges Customer for the installation of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities unless (i) Transmission Owner has determined, in good faith, that the payments or property transfers made by Customer to Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Transmission Owner to report payments or property as income subject to taxation; provided, however, that Transmission Owner may require Customer to provide security for ~~[Interconnection Facilities]~~ ~~[Connection Facilities]~~, Network Upgrades, in a form reasonably acceptable to Transmission Owner (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences or any current tax liability under this Article. Customer shall reimburse Transmission Owner for such costs on a fully grossed-up basis, in accordance with this Article, within thirty (30) Calendar Days of receiving written notification from Transmission Owner of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten-year testing period and the applicable statute of limitation, as it may be extended by Transmission Owner upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article. Notwithstanding the foregoing provisions of this Article 3.3.1, and to the extent permitted by law, to the extent that the receipt of such payments by Transmission Owner is determined by any Governmental Authority to constitute income by Transmission Owner subject to taxation, Customer shall protect, indemnify and hold harmless Transmission Owner and its Affiliates, from all claims by any such Governmental Authority for any tax, interest and/or penalties associated with such determination. Upon receiving written notification of such determination from the Governmental Authority, Transmission Owner shall provide Customer with written notification within thirty (30) Calendar Days of such determination and notification. Transmission Owner, upon the timely written request by Customer and at Customer's expense, shall appeal, protest, seek abatement of, or otherwise oppose such determination. Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the compromise or settlement of the claim; provided that Transmission Owner shall cooperate and consult in good faith with Customer regarding the conduct of such contest. Customer shall advance to Transmission Owner on a periodic basis as requested by Transmission Owner the estimated cost of prosecuting such appeal, protest, abatement or other contest. Customer shall not be required to pay Transmission Owner for the tax, interest and/or penalties prior to the seventh (7th) Calendar Day before the date on which Transmission Owner (i) is required to pay the tax, interest and/or penalties or other amount in lieu thereof pursuant to a compromise or settlement of the appeal, protest, abatement or other contest; (ii) is required to pay the tax, interest and/or penalties as the result of a final, non-appealable order by a Governmental Authority; or (iii) is required to pay the tax, interest and/or penalties as a prerequisite to an appeal, protest, abatement or other contest. In the event such appeal, protest, abatement or other contest results in a determination that Transmission Owner is not liable for any portion of any tax, interest and/or penalties for which Customer has already made payment to Transmission Owner, Transmission Owner shall promptly refund to Customer any payment attributable to the amount determined to be non-taxable, plus any interest or other payments Transmission Owner receives or which Transmission Owner may be entitled with respect to such payment. In accordance with Article 6, Customer shall provide Transmission Owner with credit assurances sufficient to meet Customer's estimated liability for reimbursement of Transmission Owner for taxes, interest and/or penalties under this Section 3.3.1. Such estimated liability shall be stated in Appendix A.

To the extent that Transmission Owner is a limited liability company and not a corporation, and has elected to be taxed as a partnership, then the following shall apply: Transmission Owner represents, and the Parties acknowledge, that

Transmission Owner is a limited liability company and is treated as a partnership for federal income tax purposes. Any payment made by Customer to Transmission Owner for Network Upgrades and ~~System Protection~~ Direct Assignment Facilities is to be treated as an upfront payment in accordance with Rev Proc 2005-35. It is anticipated by the Parties that any amounts paid by Customer to Transmission Owner for Network Upgrades and ~~System Protection~~ Direct Assignment Facilities will be reimbursed to Customer in accordance with the terms of this Agreement, provided Customer fulfills its obligations under this Agreement.

3.3.2 Private Letter Ruling. At Customer's request and expense, Transmission Owner shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Customer to Transmission Owner under this Agreement are subject to federal income taxation. Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Customer's knowledge. Transmission Owner and Customer shall cooperate in good faith with respect to the submission of such request.

3.3.3 Other Taxes. Upon the timely request by Customer, and at Customer's sole expense, Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Transmission Owner for which Customer may be required to reimburse Transmission Owner under the terms of this Agreement. Customer shall pay to Transmission Owner on a periodic basis, as invoiced by Transmission Owner, Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Customer and Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Customer to Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Transmission Owner. Each Party shall cooperate with the other Parties to maintain each Party's tax status. Nothing in this Agreement is intended to adversely affect any Party's tax-exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

ARTICLE 4 FORCE MAJEURE

4.1 Notice. The Party unable to carry out an obligation imposed on it by this Agreement due to a Force Majeure event shall notify the other Parties in writing or verbally with

subsequent notice in writing within a reasonable time after the occurrence of the cause relied on.

- 4.2 Duration of Force Majeure.** Except as set forth in Article 4.3, no Party will be considered in Default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure. A Party shall not be responsible for any non-performance or be considered in Breach or Default under this Agreement due to Force Majeure. A Party shall be excused from whatever performance is affected for only the duration of the Force Majeure event and while the Party exercises Reasonable Efforts to alleviate such situation. As soon as the non-performing Party is able to resume performance of its obligations excused as a result of the occurrence of Force Majeure, such Party shall give prompt notice thereof to the other Parties.
- 4.3 Obligation to Make Payments.** Any Party's obligation to make payments for services incurred shall not be suspended by Force Majeure.

ARTICLE 5 INFORMATION REPORTING

- 5.1 Information Reporting Obligations.** Each Party shall, in accordance with Good Utility Practice, promptly provide to the other Parties all relevant information, documents, or data regarding the Party's facilities and equipment which may reasonably be expected to pertain to the reliability of the other Party's facilities and equipment and which has been reasonably requested by the other Party.
- 5.2 Non-Force Majeure Reporting.** A Party shall notify the other Parties when it becomes aware of its inability to comply with the provisions of this Agreement for a reason other than Force Majeure. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including, but not limited to, the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. In the event of Force Majeure, a Party unable to comply with the provisions of this Agreement shall notify the other Parties in accordance with the provisions of Article 4.

ARTICLE 6 CREDITWORTHINESS, BILLING AND PAYMENTS

- 6.1 Creditworthiness.** By the earlier of (i) thirty (30) Calendar Days prior to the due date for Customer's first payment under the payment schedule specified in Appendix A or (ii) the first date specified in Appendix A for the ordering of equipment by Transmission Owner for installing the Network Upgrades and ~~System Protection~~ [Direct Assignment](#) Facilities, Customer shall provide Transmission Owner, at Transmission Owner's option, with a form of adequate assurance of creditworthiness reasonably acceptable to Transmission Owner. If the adequate assurance is a parental guarantee or surety bond, it must be made by an entity that meets the creditworthiness requirements of Transmission Owner, have terms and conditions reasonably acceptable to Transmission Owner and

guarantee payment of the amount specified in the next paragraph of this Article 6.1. If the adequate assurance is a letter of credit, it must be issued by a bank reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount available to be drawn under the letter shall reduce on a monthly basis in accordance with the monthly payment schedule. The surety bond must be issued by an insurer reasonably acceptable to Transmission Owner, specify a reasonable expiration date and may provide that the maximum amount assured under the bond shall reduce on a monthly basis in accordance with the monthly payment schedule. After the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities have been placed in service and until Customer fully compensates Transmission Owner for construction of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, Customer shall, subject to the standards of this Article 6.1, maintain a parental guarantee, surety bond, letter of credit, or some other credit assurance sufficient to meet its monthly payment obligation under Article 3.2.1, as specified in the following paragraph. Customer's estimated liability under Article 3.2.1 is stated in Appendix A.

Customer shall maintain as of the first day of each month beginning on the due date for Customer's first payment under the payment schedule specified in Appendix A, and continuing through to the ~~Commercial Operation~~ In-Service Date, a parental guarantee, surety bond or letter of credit in an amount sufficient to cover the applicable costs and cost commitments required of the Party responsible for building the facilities pursuant to the construction schedule developed in this Agreement for designing, engineering, seeking regulatory approval from any Governmental Authority, constructing, procuring and installing the facilities and shall be reduced on a dollar-for-dollar basis for payments made to Transmission Owner for these purposes as defined and established under Appendix A.

- 6.2 Invoice.** Each Party shall submit to the other Party, on a monthly basis, invoices of amounts due, if any, for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this Agreement, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.
- 6.3 Payment.** Invoices shall be rendered to the paying Party at the address specified by the Parties. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by a Party will not constitute a waiver of any rights or claims that Party may have under this Agreement.
- 6.4 Final Invoice.** Within six (6) months after completion of the construction of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, Transmission Owner shall provide an invoice of the final cost of the construction of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities and shall set forth such

costs in sufficient detail to enable Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. Transmission Owner shall refund, with interest (calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii)), to Customer any amount by which the actual payment by Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.

6.5 Interest. Interest on any unpaid amounts shall be calculated in accordance with 18 C.F.R. § 35.19a(a)(2)(iii).

6.6 Payment During Dispute. In the event of a billing dispute among the Parties, Transmission Owner shall continue to construct the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities under this Agreement as long as Customer: (i) continues to make all payments not in dispute; and (ii) pays to Transmission Provider or Transmission Owner or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Customer fails to meet these two requirements, then Transmission Provider may or, at Transmission Owner's request upon Customer's failure to pay Transmission Owner, shall provide notice to Customer of a Default pursuant to Article 9. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to another Party shall pay the amount due with interest calculated in accord with the methodology set forth in 18 C.F.R. § 35.19a(a)(2)(iii).

ARTICLE 7 ASSIGNMENT

7.1 Assignment. This Agreement may be assigned by any Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that Customer shall have the right to assign this Agreement, without the consent of either Transmission Provider or Transmission Owner, for collateral security purposes to aid in providing financing for the Facility, provided that Customer will promptly notify Transmission Provider and Transmission Owner of any such assignment. Any financing arrangement entered into by Customer pursuant to this Article will provide that prior to or upon the exercise of the secured Party's, trustee's or assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify Transmission Provider and Transmission Owner of the date and particulars of any such exercise of assignment right(s), including providing Transmission Provider and Transmission Owner with proof that it meets the requirements of Article 6.1. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

ARTICLE 8 INDEMNITY

8.1 General. To the extent permitted by law, a Party (the “Indemnifying Party”) shall at all times indemnify, defend, and hold the other Parties (each an “Indemnified Party”) harmless from Loss, only as provided in the Tariff.

8.1.1 Indemnified Party. If an Indemnified Party is entitled to indemnification under this Article 8 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 8.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

8.1.2 Indemnifying Party. If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 8, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party’s actual Loss, net of any insurance or other recovery.

8.1.3 Indemnity Procedures. Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 8.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party’s indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of

criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be reasonably withheld, conditioned or delayed.

- 8.2 Consequential Damages.** In no event shall any Party be liable to any other Party under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

ARTICLE 9 BREACH, CURE AND DEFAULT

- 9.1 Events of Breach.** A Breach of this Agreement shall include:

- (a) The failure to pay any amount when due;
- (b) The failure to comply with any material term or condition of this Agreement, including but not limited to any material Breach of a representation, warranty or covenant made in this Agreement;
- (c) If a Party (i) is adjudicated bankrupt; (ii) files a voluntary petition in bankruptcy under any provision of any federal or state bankruptcy law or shall consent to the filing of any bankruptcy or reorganization petition against it under any similar law; (iii) makes a general assignment for the benefit of its creditors; or (iv) consents to the appointment of a receiver, trustee or liquidator;
- (d) Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;
- (e) Failure of a Party to provide such access rights, or a Party's attempt to revoke access or terminate such access rights, as provided under this Agreement or ~~the any~~ related ~~GIA; or~~ agreements.
- (f) Failure of a Party to provide information or data to another Party as required under this Agreement, provided the Party entitled to the information or data under this Agreement requires such information or data to satisfy its obligations under this Agreement.

9.2 Notice of Breach, Cure and Default. Upon the occurrence of an event of Breach, the Party not in Breach, when it becomes aware of the Breach, shall give written notice of the Breach to the Breaching Party and to any other person representing a Party to this Agreement identified in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breach.

9.2.1 Upon the occurrence described in part (c) of Article 9.1, the Party experiencing such occurrence shall notify the other Party in writing within seven (7) Calendar Days after the commencement of such occurrence. Upon receiving written notice of the Breach hereunder, the Breaching Party shall have a period to cure such Breach (sometimes hereinafter referred as (“Cure Period”) which shall be thirty (30) Calendar Days unless such Breach is due to an occurrence under Article 9.1(a) or (c) in which case the cure period will be five (5) Business Days.

9.2.2 If the Breach is such that it cannot be cured within the Cure Period, the Breaching Party will commence in good faith all steps as are reasonable and appropriate to cure the Breach within such Cure Period and thereafter diligently pursue such action to completion. In the event the Breaching Party fails to:

- (a) cure the Breach, or to commence reasonable and appropriate steps to cure the Breach, within the Cure Period; or,
- (b) completely cure the Breach within sixty (60) Calendar Days if the Breach occurs pursuant to Article 9.1(b), (d), (e) or (f),

the Breaching Party will be in Default of this Agreement and the non-Breaching Parties may, at their option, either in concert or individually, (1) act to terminate this Agreement for cause by notifying the other Parties in writing, or (2) take whatever action at law or in equity as may appear necessary or desirable to enforce the performance or observance of any rights, remedies, obligations, agreement, or covenants under this Agreement.

9.3 Rights in the Event of Default. Notwithstanding the foregoing, upon the occurrence of an event of Default, any non-Defaulting Party shall be entitled to exercise all rights and remedies it may have in equity or at law.

ARTICLE 10 TERMINATION OF AGREEMENT

10.1 Expiration of Term. Except as otherwise specified in this Article 10, the Parties’ obligations under this Agreement shall terminate at the conclusion of the term of this Agreement.

10.2 Termination. In addition to the termination provisions set forth in Article 2.2, a Party may terminate this Agreement upon the Default of another Party in accordance with this

Agreement. Subject to the limitations set forth in Article 10.3, in the event of a Default, a non-Defaulting Party may terminate this Agreement only upon the later of (i) its giving of written notice of termination to the other Parties; and (ii) unless no longer required by FERC, the filing at FERC of a notice of termination for this Agreement, which filing must be accepted for filing by FERC.

10.3 Disposition of Facilities Upon Termination of Agreement.

10.3.1 Transmission Provider and Transmission Owner Obligations. Upon termination of this Agreement, unless otherwise agreed by the Parties in writing, Transmission Owner:

- (a) shall, prior to the construction and installation of any portion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities and to the extent possible, cancel any pending orders of, or return, such equipment or material for such Network Upgrades and ~~System Protection~~ Direct Assignment Facilities;
- (b) may keep in place any portion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities already constructed and installed; and,
- (c) shall perform such work as may be necessary to ensure the safety of persons and property and to preserve the integrity of the Transmission System (e.g., construction demobilization to return the system to its original state, wind-up work).

10.3.2 Customer Obligations. Upon billing by Transmission Owner, Customer shall reimburse Transmission Owner for any costs incurred by Transmission Owner in performance of the actions required or permitted by Article 10.3.1 and for the cost of any Network Upgrades and ~~System Protection~~ Direct Assignment Facilities described in Appendix A. Transmission Owner and Transmission Provider shall use Reasonable Efforts to minimize costs and shall offset the amounts owed by any salvage value of facilities, if applicable. Customer shall pay these costs pursuant to Article 6.3 of this Agreement.

10.3.3 Pre-construction or Installation. Upon termination of this Agreement and prior to the construction and installation of any portion of the Network Upgrades and ~~System Protection~~ Direct Assignment Facilities, Transmission Owner may, at its option, retain any portion of such Network Upgrades and ~~System Protection~~ Direct Assignment Facilities not cancelled or returned in accordance with Article 10.3.1(a), in which case Transmission Owner shall be responsible for all costs associated with procuring such Network Upgrades and ~~System Protection~~ Direct Assignment Facilities. To the extent that Customer has already paid Transmission Owner for any or all of such costs, Transmission Owner shall transfer such amounts to ~~Transmission Provider who then shall assess the~~

~~financial impact as defined by Section 7.8 of Attachment X.~~ the Customer. If Transmission Owner elects to not retain any portion of such facilities, Transmission Owner shall convey and make available to Customer such facilities as soon as practicable after Customer's payment for such facilities.

- 10.4 Survival of Rights.** Termination or expiration of this Agreement shall not relieve any Party of any of its liabilities and obligations arising hereunder prior to the date termination becomes effective, and each Party may take whatever judicial or administrative actions as appear necessary or desirable to enforce its rights hereunder. The applicable provisions of this Agreement will continue in effect after expiration, or early termination hereof to the extent necessary to provide for (A) final billings, billing adjustments and other billing procedures set forth in this Agreement; (B) the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this Agreement was in effect; and (C) the confidentiality provisions set forth in Article 12.

ARTICLE 11 SUBCONTRACTORS

- 11.1 Subcontractors.** Nothing in this Agreement shall prevent a Party from utilizing the services of subcontractors, as it deems appropriate, to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

11.1.1 Responsibility of Principal. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. In accordance with the provisions of this Agreement, each Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor it hires as if no subcontract had been made. Any applicable obligation imposed by this Agreement upon a Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

11.1.2 No Third-Party Beneficiary. Except as may be specifically set forth to the contrary herein, no subcontractor or any other party is intended to be, nor will it be deemed to be, a third-party beneficiary of this Agreement.

11.1.3 No Limitation by Insurance. The obligations under this Article 11 will not be limited in any way by any limitation of any insurance policies or coverages, including any subcontractor's insurance.

ARTICLE 12 CONFIDENTIALITY

- 12.1 Confidentiality.** Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by a Party to another Party prior to the execution of this Agreement.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential. The Parties shall maintain as confidential any information that is provided and identified by a Party as Critical Energy Infrastructure Information (CEII), as that term is defined in 18 C.F.R. Section 388.113(c).

Such confidentiality will be maintained in accordance with this Article 12. If requested by the receiving Party, the disclosing Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

- 12.1.1 Term.** During the term of this Agreement, and for a period of three (3) years after the expiration or termination of this Agreement, except as otherwise provided in this Article 12 or with regard to CEII, each Party shall hold in confidence and shall not disclose to any person Confidential Information. CEII shall be treated in accordance with Commission policies and regulations.

- 12.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a non-Party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this Agreement; or (6) is required, in accordance with Article 12.1.7 of this Agreement, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this Agreement. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the receiving Party that it no longer is confidential.

- 12.1.3 Release of Confidential Information.** No Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by

the Standards of Conduct requirements), subcontractors, employees, agents, consultants, or to non-Parties who may be or are considering providing financing to or equity participation with Customer, or to potential purchasers or assignees of Customer, on a need-to-know basis in connection with this Agreement, unless such person has first been advised of the confidentiality provisions of this Article 12 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 12.

12.1.4 Rights. Each Party retains all rights, title, and interest in the Confidential Information that it discloses to the receiving Party. The disclosure by a Party to the receiving Party of Confidential Information shall not be deemed a waiver by the disclosing Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

12.1.5 No Warranties. By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to another Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

12.1.6 Standard of Care. Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to another Party under this Agreement or its regulatory requirements.

12.1.7 Order of Disclosure. If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the disclosing Party with prompt notice of such request(s) or requirement(s) so that the disclosing Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

12.1.8 Termination of Agreement. Upon termination of this Agreement for any reason, each Party shall, within ten (10) Business Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the requesting Party) or

return to the requesting Party any and all written or electronic Confidential Information received from the requesting Party, except that each Party may keep one copy for archival purposes, provided that the obligation to treat it as Confidential Information in accordance with this Article 12 shall survive such termination.

12.1.9 Remedies. The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 12. Each Party accordingly agrees that the disclosing Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving Party Breaches or threatens to Breach its obligations under this Article 12, which equitable relief shall be granted without bond or proof of damages, and the breaching Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 12, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 12.

12.1.10 Disclosure to FERC, its Staff or a State. Notwithstanding anything in this Article 12 to the contrary, and pursuant to 18 C.F.R. § 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from a Party that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. § 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this Agreement prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the Agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

12.1.11 Subject to the exception in Article 12.1.10, any information that a disclosing Party claims is competitively sensitive, commercial or financial information under this Agreement shall not be disclosed by the receiving Party to any person not employed or retained by the receiving Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the

Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the disclosing Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this Agreement or as the Regional Transmission Organization or a Local Balancing Authority operator including disclosing the Confidential Information to a regional or national reliability organization. The Party asserting confidentiality shall notify the receiving Party in writing of the information that Party claims is confidential. Prior to any disclosures of that Party's Confidential Information under this subparagraph, or if any non-Party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the Party who received the Confidential Information from the disclosing Party agrees to promptly notify the disclosing Party in writing and agrees to assert confidentiality and cooperate with the disclosing Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

ARTICLE 13 INFORMATION ACCESS AND AUDIT RIGHTS

- 13.1 Information Access.** Each Party shall make available to the other Parties information necessary to verify the costs incurred by the other Parties for which the requesting Party is responsible under this Agreement and carry out obligations and responsibilities under this Agreement, provided that the Parties shall not use such information for purposes other than those set forth in this Article 13.1 and to enforce their rights under this Agreement.
- 13.2 Audit Rights.** Subject to the requirements of confidentiality under Article 12 of this Agreement, the accounts and records related to the design, engineering, procurement, and construction of the Network Upgrades and ~~System Protection~~[Direct Assignment](#) Facilities shall be subject to audit during the period of this Agreement and for a period of twenty-four (24) months following the Transmission Owner's issuance of a final invoice in accordance with Article 6.4. Customer at its expense shall have the right, during normal business hours, and upon prior reasonable notice to the other Parties, to audit such accounts and records. Any audit authorized by this Article 13.2 shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to obligations under this Agreement.

ARTICLE 14 DISPUTES

- 14.1 Submission.** Any claim or dispute, which a Party may have against another Party, arising out of this Agreement shall be submitted for resolution in accordance with the dispute resolution provisions of the Tariff.

- 14.2 Rights under the Federal Power Act.** Nothing in this Article 14 shall restrict the rights of any Party to file a complaint [or a petition](#) with FERC under relevant provisions of the Federal Power Act.
- 14.3 Equitable Remedies.** Nothing in this Article shall prevent a Party from pursuing or seeking any equitable remedy available to it under Applicable Laws and Regulations, at any time, before a Governmental Authority.

ARTICLE 15 NOTICES

- 15.1 General.** Any notice, demand or request required or permitted to be given by a Party to another Party and any instrument required or permitted to be tendered or delivered by a Party in writing to another Party may be so given, tendered or delivered, as the case may be, by depositing the same with the United States Postal Service with postage prepaid, for transmission by certified or registered mail, addressed to the Parties, or personally delivered to the Parties, at the address set out below:

To Transmission Provider:

MISO

Attn: Director, ~~Transmission Access Planning~~ [Resource Utilization](#)
720 City Center Drive
Carmel, IN 46032

To Transmission Owner:

[Minnesota Power](#)
[Vice President, Transmission & Distribution](#)
[30 West Superior Street](#)
[Duluth, MN 55802](#)

To Customer:

[Minnesota Power](#)
[Vice President, Strategy and Planning](#)
[30 West Superior Street](#)
[Duluth, MN 55802](#)

- 15.2 Billings and Payments.** Billings and payments shall be sent to the addresses shown in Article 15.1 unless otherwise agreed to by the Parties.
- 15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another Party and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out below:

To Transmission Provider:

[MISO](#)

Voice telephone – (317) 249-5700
Facsimile telephone – (317) 249-5358
Email address – misotap@misoenergy.org or
MISOTransmissionAccessPlanning@misoenergy.org

To Transmission Owner:

[Minnesota Power](#)

[Director – System Operations, Performance & Compliance](#)
[Voice telephone – \(218\) 723-7414](#)
[Email address-lfrisk@mnpower.com or](#)
[MPTransmissioninformationNotifications@mnpower.com](#)

To Customer:

[Minnesota Power](#)

[RTO Coordination Manager](#)
[Voice telephone – \(218\) 723-7466](#)
[Email address – rnyholm@mnpower.com](#)

- 15.4 DUNS #.** If Transmission Owner and Customer have not obtained DUNS numbers by the time this Agreement is executed, Transmission Owner and Customer will forward their DUNS numbers within five (5) Business Days of having obtained such numbers to Transmission Provider by facsimile telephone or email to the fax number or email set out below:

Transmission Owner

DUNS Number: [617232889](#)

Customer

DUNS Number: [617232889](#)

- 15.5 Notification of In-Service Date.** Transmission Owner will serve to Transmission Provider a copy of Appendix B as forwarded to Customer on the same day to the address shown in Article 15.1, and by facsimile telephone to the numbers set out below:

To Transmission Provider:

[MISO](#)

Facsimile telephone – (317) 249-5703

And copy to

MISO

Attn: Director, ~~Transmission Access Planning~~ [Resource Utilization](#)

720 City Center Drive

Carmel, IN 46032

ARTICLE 16 MISCELLANEOUS

- 16.1 Waiver.** Except as otherwise provided for in this Agreement, the failure of any Party to comply with any obligation, covenant, agreement, or condition herein may be waived by the Parties entitled to the benefits thereof only by a written instrument signed by the Parties granting such waiver. Any waiver at any time by a Party of its rights with respect to a Default under this Agreement, or with respect to any other matters arising in connection with this Agreement, shall not be deemed a waiver or continuing waiver with respect to any subsequent Default or other matter.
- 16.2 Governing Law.** The validity, interpretation and performance of this Agreement and each of its provisions shall be governed by the laws of the state of [Minnesota](#) where [approximately 50 percent of](#) the Network Upgrades and/or ~~System Protection~~[Direct Assignment](#) Facilities referenced in Appendix A are located without regard to its conflicts of law principles.
- 16.3 Headings Not to Affect Meaning.** The descriptive headings of the various Sections and Articles of this Agreement have been inserted for convenience of reference only and shall in no way modify or restrict any of the terms and provisions hereof.
- 16.4 Amendments and Rights Under the Federal Power Act.** Transmission Provider shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under Section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Transmission Owner and Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided, however, that each Party shall have the right to protest any such filing and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 16.5 Entire Agreement.** This Agreement, together with all the exhibits, constitutes the final and entire written agreement among the Parties hereto with reference to the subject matter hereof, and is a complete and exclusive statement of those terms and conditions and supersedes all prior negotiations, representations or agreements, either written or oral, with respect to the specific subject matter of this Agreement. No change or modification as to any of the provisions hereof shall be binding on any Party unless reduced to writing and approved by the duly authorized officer or agent of Customer, Transmission Owner, and Transmission Provider.
- 16.6 Counterparts.** This Agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument.

- 16.7 Binding Effect.** This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the Parties hereto and their successors and assigns. No person or party shall have any rights, benefits or interests, direct or indirect, arising from this Agreement except the Parties hereto, their successors and authorized assigns. The Parties expressly disclaim any intent to create any rights in any person or party as a third party beneficiary to this Agreement.
- 16.8 Conflicts.** In the event of a conflict between the body of this Agreement and any attachment, appendix or exhibit hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed to be the final intent of the Parties.
- 16.9 Regulatory Requirements.** Each Party's obligations under this Agreement shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the receiving Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek these other approvals as soon as is reasonably practicable.

ARTICLE 17 REPRESENTATIONS AND WARRANTIES

- 17.1 General.** Each Party hereby represents, warrants and covenants as follows with these representations, warranties, and covenants effective as to the Party during the full time this Agreement is effective:
- 17.1.1 Good Standing.** Such Party is duly organized or formed, as applicable, validity existing and in good standing under the laws of its state of organization or formation, and is in good standing under the laws of the respective state(s) of its organization as stated in the preamble of this Agreement.
- 17.1.2 Authority.** Such Party has the right, power and authority to enter into this Agreement, to become a party hereto and to perform its obligations hereunder, and this Agreement is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms.
- 17.1.3 No Conflict.** The execution, delivery and performance of this Agreement does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit or order or material agreement or instrument applicable to or binding upon such Party or any of its assets.
- 17.1.4 Consent and Approval.** That it has sought or obtained, or, in accordance with this Agreement will seek or obtain, each consent, approval, authorization or order of, or acceptance of a filing with, or notice to, any Governmental Authority with

jurisdiction concerning this Agreement, in connection with the execution, delivery and performance of this Agreement.

17.1.5 Solvency. That such Party is financially solvent.

IN WITNESS WHEREOF, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original Agreement among the Parties.

Transmission Provider
Midcontinent Independent System Operator, Inc.

By: _____
Name: _____
Title: _____

Transmission Owner
~~{Transmission Owner}~~

Minnesota Power

By: _____
Name: _____
Title: _____

Customer
~~{Customer}~~

Minnesota Power

By: _____
Name: _____
Title: _____

Project No. _____

[Square Butte 91365462 FCA](#)

Facilities Construction Agreement
APPENDIX A
NETWORK UPGRADES, COST ESTIMATES AND RESPONSIBILITY,
TRANSMISSION CREDITS, CONSTRUCTION SCHEDULE AND MONTHLY
PAYMENT SCHEDULE

This Appendix A is a part of the Facilities Construction Agreement between Customer, Transmission Owner, and Transmission Provider. Terms used in this Appendix A with initial capitalization not defined in this Appendix A shall have the meaning set out in the Agreement

~~1.1 — Transmission Owner's [Interconnection Facilities] [Connection Facilities]~~

~~1.2~~ The upgrades required to be made by the Transmission Owner under this Agreement because of the Transmission Service Request include Direct Assignment Facilities and Network Upgrades, as defined in Module B and Attachment N of the Tariff. The Network Upgrades under this Agreement are governed by Module B and Attachment N of the Tariff.

1.1 Network Upgrades to be installed by Transmission Owner.

1.21.1 Transmission Owner Substation Network Upgrades:

~~1.2.2 — Transmission Owner Transmission Line Network Upgrades:~~

To modernize the terminals of the existing Square Butte HVDC Line and implement the latest voltage source converter ("VSC") HVDC technology, new buildings and electrical infrastructure need to be constructed on a new site near the existing Center and Arrowhead HVDC terminals. Due to the specialized nature of the technology, the new VSC HVDC converter stations will be delivered as turnkey projects by the original equipment manufacturer ("OEM"). The scope of supply for the HVDC OEM will include the relocated converter stations, including valves, converter transformers, smoothing reactors, DC equipment, AC circuit breakers, control & protection, and all associated facilities. The new VSC HVDC converter stations will be designed to interconnect at 345 kV on the AC system side. To accommodate interconnection of the new VSC HVDC converter stations, new AC interconnection facilities will be constructed including new 345/230 kV substations, 345 kV transmission lines, and 230 kV transmission lines. New AC interconnection facilities are listed below.

In Minnesota:

- Construction of a new St. Louis County 345/230 kV Substation located less than one mile west of the Arrowhead Substation
- Construction of a new 345 kV transmission line from the HVDC converter station to the St. Louis County Substation
- Construction of two parallel 230 kV lines from the St. Louis County Substation to the existing Arrowhead Substation
- At Arrowhead Substation, the two new 230 kV lines will be interconnected to the existing HVDC Pole 1 and Pole 2 bus positions, which will be rebuilt with higher-

capacity bus and electrical equipment to accommodate the increased HVDC capacity.

- A short portion of the existing ± 250 kV HVDC Line in Minnesota will be reconfigured to terminate at the new HVDC converter station.

In North Dakota:

- Establishment of a new Nelson Lake 230 kV Switching Station to tie together the existing Minnesota Power Square Butte East – Bison 230 kV Line with the existing Great River Energy Square Butte – Stanton 230 kV Line.
- Construction of a second 230 kV circuit between Nelson Lake and Square Butte East using existing double-circuit capable structures.
- Addition of a 230 kV breaker at the Square Butte East Substation to accommodate the second Nelson Lake – Square Butte East 230 kV circuit
- Expansion of the Nelson Lake 230 kV Switching Station to add a 345/230 kV transformer and 345 kV line entrance.
- Construction of a new 345 kV line from Nelson Lake to the new HVDC converter station
- Construction of a new 345 kV substation at the new HVDC converter station site
- A portion of the existing ± 250 kV HVDC Line in North Dakota will need to be reconfigured to terminate at the new HVDC converter station.

Additional equipment upgrades may be deemed necessary by the Transmission Owner or the HVDC OEM during the specification, detailed design, and engineering phase of the project.

1.2.1.2 Transmission Owner Transmission Line Network Upgrades:

The upgrades necessary to increase the capacity of the HVDC transmission line from 550 MW to 900 MW are likely to consist primarily of replacing existing structures with taller structures to increase conductor-to-ground clearance at the higher operating temperature. A short segment of the transmission line with a smaller conductor will need to be rebuilt with a larger conductor.

1.1.3 Transmission Owner Transmission Line Permitting:

Due to the relocation of the converter stations and the length of new AC interconnection facilities required to re-connect to the existing system, the HVDC Modernization Project will require state-level permits in both Minnesota and North Dakota. In Minnesota, a Certificate of Need and Route Permit will be required from the State of Minnesota. In North Dakota, a Certificate of Corridor Compatibility and a Route Permit will be required. Minnesota Power will obtain the necessary permits in both states

1.2.1.4 Cost Estimates and Responsibility.

The estimated cost for these network upgrades is \$878,000,000. These costs of upgrades are shared by the Transmission Owner and Customer. **The estimated cost from Customer with Transmission Service Request 91365462 to Transmission Owner is \$167,000,000.** The Customer(s) hereby acknowledge and agree that the costs, expenses, and charges set out in Table 1 are only an estimate and that the Customer(s) shall pay the

Transmission Owner for their allocated amounts for all costs, expenses, and charges. Updated estimates will be provided annually by the Transmission Owners on request from the Customer.

This is detailed below in Table 1 and is subject to applicable Tax Gross.

Table 1: Network Upgrades Cost Details

<u>HVDC 900 MW Upgrade</u>	<u>Total Estimated Cost</u>	<u>Cost Assigned to Transmission Service Requests #91365462</u>
<u>Converter Station Replacement</u>	<u>\$705,000,000</u>	<u>\$123,000,000</u>
<u>Interconnections to AC System</u>	<u>\$115,000,000</u>	<u>\$11,000,000</u>
<u>Transmission Line Modification</u>	<u>\$58,000,000</u>	<u>\$33,000,000</u>
<u>Internal & Professional Services</u>	<u>Included</u>	<u>Included</u>
<u>Total (in 2022 dollars)</u>	<u>\$878,000,000</u>	<u>\$167,000,000</u>

1.2.4.1 Major Material List of Transmission Owner's Network Upgrades See Exhibit C2

~~1.3~~ **System Protection** 1.2 Direct Assignment Facilities - None.

1.43 First Equipment Order (including permitting). See Table 2 below.

1.43.1. Permitting And Land Rights – Transmission Owner Network Upgrades See Section 1.8.

1.54 Transmission Credits. See Article 3.2.2 of the Agreement.

1.65 Construction Schedule. Where applicable, construction of the Transmission Owner ~~[Interconnection Facilities]~~ ~~[Connection Facilities]~~, Network Upgrades and Special Protection Facilities is scheduled as follows and will be periodically updated as necessary:

Table ~~1~~ 2: Transmission Owner Construction Activities

~~MILESTONE~~ ~~NUMBER~~ <u>Milestone Number</u>	<u>Milestone Description</u>	~~START~~ ~~DATE~~ <u>Start Date</u>	~~END~~ ~~DATE~~ <u>End</u>

1.	<u>Facilities Construction Agreement Executed.</u>	<u>Aug/Sep-2023</u>
2.	<u>Minnesota Certificate of Need & Route Permit Applications Filed.</u>	<u>Jun-2023</u>
3.	<u>North Dakota Corridor Compatibility and Route Permit Applications Filed.</u>	<u>Oct-2023</u>
4.	<u>Begin Front End Engineering & Design with HVDC OEM.</u>	<u>Jan-2024</u>
5.	<u>Major Permits Received in Minnesota & North Dakota.</u>	<u>Jul-2024</u>
6.	<u>Order Long Leadtime Equipment for AC Substations.</u>	<u>Nov-2024</u>
7.	~~Initial Synchronization~~ <u>Date Clearing Begins.</u>	<u>Jan-2025</u>
8.	<u>Construction of AC Interconnection Facilities Begins.</u>	<u>May-2025</u>
9.	<u>Construction of HVDC Transmission Line Upgrades Begins.</u>	<u>Aug-2025</u>
10.	<u>Receive Firm Proposal from HVDC OEM.</u>	<u>Aug-2026</u>
11.	<u>Execute Firm EPC Contract with HVDC OEM.</u>	<u>Oct-2026</u>
12.	<u>Construction of HVDC Converter Stations Begins.</u>	<u>Oct-2027</u>
13.	~~Commercial Operation~~ <u>In-Service Date.</u>	<u>Apr-2030</u>

Note: ~~Construction~~

The construction schedule assumes that the Transmission Owner has obtained final authorizations and security from Customer and all necessary permits from Governmental Authorities as necessary prerequisites to commence construction of any of the Network Upgrades and Special Protection Facilities ~~or Transmission Owner [Interconnection Facilities] [Connection Facilities].~~

1.76 Payment Schedule.

1.76.1 Timing of and Adjustments to Customer's Payments and Security.

1.76.2 Monthly Payment Schedule. ~~The Customer's payment schedule is as follows.~~

~~Table __: Customer's Payment/Security Obligations for~~ Following approval of the state permits set forth in Section 1.2.3, in accordance with Attachment N, the Customer will begin paying a monthly dollar assessment. Monthly payments by the Customer will continue until Transmission Owner has recovered the cost of all Directly Assigned Facilities and Transmission Owner Network Upgrades ~~and System Protection Facilities.~~

MILESTONE NUMBER	DESCRIPTION	DATE
*		
	~~Initial Synchronization Date~~	
	~~Commercial Operation Date~~	

~~Note: Customer's payment or provision of security as provided in this Agreement operates as a condition precedent to Transmission Owner's obligations to construct any Network Upgrades or System Protection Facilities, and failure to meet this schedule will constitute a Breach pursuant to Article 9.1 of this Agreement.~~

A Customer that fails to make payments when due will be given a Breach notice. Unless the Breach is cured in accordance with Article 9 of this agreement, the Transmission Owner is relieved from performing under this Agreement. Failure by any Customer to comply with Article 9.2.2(A) or 9.2.2(B) relative to such Breach may, pursuant to Article 9.2.2 of the Agreement, result in termination of the Agreement as to that Customer.

1.86.3 Security Amount.

1.6.4.1 Except as set forth under Section 1.7.3.1, Security shall be composed of either a Guaranty, a letter of credit as described in Section 1.7.4 or a cash escrow as described in Section 1.7.4.2, at Customer's option, or a combination of these options as long as the total amount of Security is not less than the amount then required. Notwithstanding the foregoing, the Guaranty amount may not comprise more than fifty percent (50%) of the overall total amount of Security, provided that if Customer has delivered a notice reducing the amount of Security required pursuant to Section 1.7.7, then the Guaranty may comprise up to 100% of the overall total amount of Security at the Guarantor's option. Customer shall be (i) permitted from time to time to change the form and combination of such posted Security provided that no Event of Default with respect to Customer then exists so long as Transmission Owner is provided timely Notice of the change, and (ii) required, if Customer has provided Security, or any portion thereof, in the form of a Guaranty, if the entity or entities providing a Guaranty no longer qualify as a

Guarantor, Customer shall within ten (10) Business Days of Transmission Owner's Notice to do so (A) replace such Guaranty with either a Guaranty from an entity or entities meeting the requirements as a Guarantor and/or (B) deliver a letter of credit or performance bond as described in Section 1.7.4.3 and/or (C) supply a cash escrow as described in Section 1.7.4.2, at Customer's option, in any case, in the aggregate amount of the then applicable Security, less the aggregate amount of any prior draws on such Security. Upon receipt of such substitute Security, any such Guaranty shall be deemed cancelled.

1.6.4.2 If Customer elects to utilize a cash escrow as Security, it shall establish an interest-bearing escrow account with a commercial bank or other mutually acceptable escrow agent as escrow agent, and the account shall name Transmission Owner as the beneficiary for the duration of the existence of the escrow account. The escrow account shall be in United States currency, and funds in the account may be invested in a money-market fund, short-term treasury obligations, investment-grade commercial paper or other investment-grade investments with maturities of three (3) months or less. All income and interest earned on the accounts held in the escrow account shall accrue for the benefit of the Customer, and Customer may withdraw the income and interest earned at any time as long as the balance in the account after the withdrawal meets the minimum funding requirements of this Section 1.7.4.2. The escrow agreement shall require the escrow agent to notify Transmission Owner of the balance in the escrow account from time to time. The escrow agreement governing the account shall include terms that (i) prohibit termination of the account prior to establishment of alternative Security that satisfies all the requirements of this FCA; (ii) require Notice of no less than sixty (60) Days by the escrow agent to Transmission Owner prior to any termination of the account; and (iii) allow Transmission Owner to draw the entire balance in the escrow account up to the amount of the Security if Security has not been replaced in accordance with this Agreement at least five (5) Business Days prior to the expiration or termination of the escrow account, and Transmission Owner shall hold such amounts in lieu of escrow until such time as the Security has been replaced, at which time the funds shall be returned to Customer. At the end of the Term, any balance remaining in the escrow account shall be returned or released to Customer.

1.6.4.3 In conjunction with or instead of a Guaranty or cash security as provided in Section 1.7.4.2, Customer may provide Security in the form of an irrevocable letter of credit in a commercially reasonable form and otherwise in compliance with the requirements of this Section 1.7.4 and in form and substance acceptable to the Issuer (as defined below) (the "LOC"). The LOC shall be issued by a state or federally chartered

commercial bank which issues similar letters of credit in the ordinary course of its business and that (i) has an unsecured bond rating or long-term senior unsecured debt rating equivalent to A- or better as determined by at least two (2) rating agencies, one of which must be either S&P or Moody's, or, if these are not available, CAMEL ratings from the FDIC or OCC used in the banking industry no less than a 3 and (ii) has a minimum of One Hundred Million Dollars (\$100,000,000) in capital (the "Issuer"). The LOC must: (i) be issued for a minimum term of three hundred and sixty (360) Days, and, where permitted by the Issuer, shall be automatically extended for a period of one (1) year on each successive expiration date unless, at least ninety (90) Days before the current expiration date, the Issuer notifies Customer and Transmission Owner by certified mail that the Issuer has decided not to extend the letter of credit; (ii) provide that draws shall be payable upon presentation of a sight draft executed by an officer of Transmission Owner substantially in the form approved by Transmission Owner; and (iii) expressly permit partial and multiple draws. Any unused portion of the letter of credit shall be available, regardless of renewal, through the then current expiration date. Customer may replace the letter of credit with another Issuer which includes a provision for at least ninety (90) Days advance Notice to Transmission Owner and shall cause the renewal or extension of the LOC meeting the criteria set forth in this Section 1.7.4.3 within thirty (30) days prior to the expiration or cancellation of the then current LOC, and failure to do so shall authorize Transmission Owner to draw immediately upon the then current LOC. Transmission Owner shall then, at Customer's cost and with Customer's funds, place the amounts so drawn in an interest bearing escrow account in accordance with Section 1.7.4.2 above, until and unless Customer provides a substitute form of such security meeting the requirements of this Section 1.7.4. Security in the form of an irrevocable standby letter of credit shall be governed by the Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Brochure No. 500 or as otherwise required by the Issuer of the LOC.

1.6.4.4 Customer shall provide Guarantor's annual audited financial statements to Transmission Owner within one hundred twenty (120) days after the end of each calendar year. Transmission Owner shall have the right to monitor the financial condition of Customer, Guarantor, and the Issuer to the extent set forth herein, and Customer shall provide written Notice to Transmission Owner within five (5) Business Days of becoming aware that (i) the Issuer does not satisfy the requirements of the second sentence of Section 1.7.4.3, (ii) ALLETE, Inc. or an affiliate is the Guarantor, such entity does not, collectively, have a tangible net worth of at least Five Hundred Million Dollars \$500,000,000), or (iii) if the Guarantor is not ALLETE, Inc. or an affiliate such Person does not have

an Investment Grade Credit Rating, and in such event Customer shall provide alternative Security as soon as practicable that complies with this Section 1.7.4.4 and in no event later than thirty (30) Days after becoming aware of the Issuer's or a Guarantor's failure to meet the requirements of this Section 1.7.

1.6.5 Release of Security. Promptly following the termination of this FCA and the completion of all Customer's obligations under this FCA, Transmission Owner shall release the Security (including any accumulated interest, if applicable) to Customer.

1.6.6 Permitted Draws; Effects of Draws. In addition to any other remedy available to it, Transmission Owner may, before or after termination of this FCA, draw against the Security to satisfy any undisputed obligations of Customer to Transmission Owner arising under this Agreement (including, without limitation, the payment of Availability Liquidated Damages, if any, or any indemnification obligations) which Customer has not otherwise paid or performed when due, after any required Notice and opportunity to cure. If Transmission Owner draws against the Security and Customer subsequently disputes Transmission Owner's entitlement to any portion of the funds drawn, neither Transmission Owner's draw, the Issuer's payment under the LOC, nor Customer's replenishment of the Security or reimbursement of the Issuer or escrow agent shall constitute a waiver of Customer's rights to seek recovery of any amount disputed. To the extent Transmission Owner elects to draw upon the Security to satisfy obligations that otherwise constitute, or might constitute, an Event of Default by Customer and entitle Transmission Owner to terminate this Agreement, Transmission Owner's draw against the Security shall be deemed a cure of such Event of Default and shall waive Transmission Owner's right to terminate in that respect. With respect to any Event of Default by Seller that remains uncured and which could be cured by payment of an undisputed amount to Transmission Owner, Transmission Owner shall first draw upon the Security to cure the Event of Default, and only if such Security is insufficient to cure the Event of Default shall any right of termination which Transmission Owner may otherwise have be exercised by Transmission Owner.

1.6.7 Reduction in Security. Transmission Owner may, by Notice from time to time to Customer, waive or reduce the amount of security required to be posted hereunder in consideration of an Affiliate of Transmission Owner having a minority ownership interest in Customer.

1.7 **Permits, Licenses and Authorizations.**

Transmission Owner will be responsible for all permits, licenses and authorizations.

Facilities Construction Agreement
APPENDIX B
NOTIFICATION OF COMPLETED CONSTRUCTION

This Appendix B is a part of the Facilities Construction Agreement among Customer, Transmission Owner, and Transmission Provider. Where applicable, when Transmission Owner has completed construction of the Transmission Owner ~~[Interconnection Facilities]~~ ~~[Connection Facilities]~~, Network Upgrades and/or ~~System Protection~~ Direct Assignment Facilities, Transmission Owner shall send notice to Customer and Transmission Provider, in substantially the form following:

[Date]

MISO

Attn: Director, ~~Transmission Access Planning~~ Resource Utilization
720 City Center Drive
Carmel, IN 46032

Customer Address

Phone:

Fax:

Email:

Re: Completion of Network Upgrade/~~System Protection~~ Direct Assignment Facilities

Dear [Name or Title]:

This letter is sent pursuant to the Facilities Construction Agreement among [Transmission Owner], [Customer], and MISO, dated _____, 20__.

On [Date], Transmission Owner completed to its satisfaction all work on the Network Upgrades and/or ~~System Protection~~ Direct Assignment Facilities required to facilitate the safe and reliable ~~interconnection and~~ operation of Customer's Facility. Transmission Owner confirms that the Network Upgrade and/or ~~System Protection~~ Direct Assignment Facilities are in place.

Thank you.

[Signature]

[Transmission Owner Representative]

**Facilities Construction Agreement
APPENDIX C Exhibits**

This Appendix C is a part of the Facilities Construction Agreement among Customers,
Transmission Owner, and Transmission Provider.

Exhibit C1.

Transmission Owner ~~Site Map~~ Network Upgrade One Line

CUI//CEII MATERIAL – DO NOT RELEASE

CUI//CEH MATERIAL – DO NOT RELEASE

Exhibit C2
Site Plan

Exhibit C3
Transmission Line and/or Substation Network Upgrades and System Protection Facilities Plan & Profile

Exhibit C4
Estimated Cost of Transmission line and/or Substation Network Upgrades and System Protection Direct Assignment Facilities

The total estimated cost for the Network Upgrades for HVDC Converter Station, connections to AC System, Transmission Line Modifications is \$878,000,000.

The details of the cost for customer with Transmission Service Request #91365462 is shown below in Table 1, Table 2, Table 3.

Detailed Cost Estimate of Facilities to be Constructed by Transmission Owner

The anticipated costs of modernizing and upgrading the HVDC converter stations are shown in Table 1. The initial estimated converter station replacement base cost was provided by the HVDC OEM. If design assumptions change significantly during the development of the project, the base cost shown in Table 1 may change.

Table 1: Converter Station Replacement Cost Breakdown

<u>HVDC 900 MW Upgrade</u>	<u>Location Estimated Cost</u>	<u>Facilities Cost Assigned to be Constructed by Transmission Owner Service Requests ##91365462</u>	<u>Estimate in Dollars</u>
<u>Converter Station Base Cost</u>	<u>\$705,000,000</u>	<u>\$123,000,000</u>	
<u>Internal & Professional Services</u>	<u>(Included)</u>	<u>(Included)</u>	
<u>Contingency - Converter Station</u>	<u>(Included)</u>	<u>(Included)</u>	
<u>AFUDC - Converter Station</u>	<u>(Included)</u>	<u>(Included)</u>	
<u>Total: (in 2022dollars)</u>	<u>\$705,000,000</u>	<u>\$123,000,000</u>	

The anticipated costs of AC Interconnection Facilities necessary to connect the relocated VSC HVDC converter stations to the existing AC transmission system are shown in Table 2. If design

assumptions change significantly during the development of the project, the base costs shown in Table 2 may change.

Table 2: AC Interconnection Facilities Cost Breakdown

<u>HVDC 900 MW Upgrade</u>	<u>Estimated Cost</u>	<u>Cost Assigned to Transmission Service Requests #91365462</u>
<u>Minnesota AC Interconnections</u>	<u>\$55,000,000</u>	<u>\$5,000,000</u>
<u>North Dakota AC Interconnections</u>	<u>\$40,000,000</u>	<u>\$3,000,000</u>
<u>Nelson Lake 230 kV Substation</u>	<u>\$20,000,000</u>	<u>\$3,000,000</u>
<u>Total (in 2022dollars)</u>	<u>\$115,000,000</u>	<u>\$11,000,000</u>

Table 3: Transmission Line Modifications Cost Breakdown

<u>HVDC 900 MW Upgrade</u>	<u>Estimated Cost</u>	<u>Cost Assigned to Transmission Service Requests #91365462</u>
<u>HVDC T-Line 900 MW Upgrade</u>	<u>\$58,000,000</u>	<u>\$33,000,000</u>
<u>HVDC T-Line AFUDC</u>	<u>(Included)</u>	<u>(Included)</u>
<u>HVDC T-Line Contingency</u>	<u>(Included)</u>	<u>(Included)</u>
<u>Total (in 2022dollars)</u>	<u>\$58,000,000</u>	<u>\$33,000,000</u>

The anticipated costs of Transmission Line Modifications are shown in Table 3. The upgrade cost estimate is based on preliminary transmission structural engineering evaluations. If additional HVDC transmission line modifications or scope changes are found to be necessary during the development of the project, the costs presented in Table 3 may be impacted.

TAB E

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Case Name) Docket No.

PROTECTIVE AGREEMENT

1. This Protective Agreement shall govern the access to, and use of all Privileged Materials and Critical Energy Infrastructure Information (“CEII”) produced by, or on behalf of, any Participant.
2. Notwithstanding any order terminating this proceeding, this Protective Agreement shall become effective as of the date the attached Non-Disclosure Certificate is executed and shall remain in effect until specifically modified or terminated by the Federal Energy Regulatory Commission (“Commission”).
3. Definitions – For purposes of this Protective Agreement:
 - (a) The meaning of the term “Participant” shall be as defined at 18 C.F.R. § 385.102(b).
 - (b) The term "Privileged Materials" includes those materials, and information contained therein, which customarily are treated as sensitive or proprietary, which are not available to the public, and which, if disclosed publicly, would subject the Participant or its customers to risk of competitive disadvantage or other business injury. Privileged Materials may include: (A) materials designated by a Participant as “Privileged Materials”; (B) any information contained in or obtained from such designated materials in (A); (C) any other materials which are made subject to this Protective Agreement by the Presiding Judge or the Chief Judge, by the Commission, by any court or other body having appropriate authority, or by agreement of the Participants; (D) notes of Privileged Materials (notes means memorandum, summaries, or other documents produced by a Participant or Reviewing Representative as a part of their review of the Privileged Materials) (“Notes of Privileged Materials”); and (E) copies of Privileged Materials. The Participant producing the Privileged Materials shall physically mark them on each page as "PRIVILEGED MATERIALS" or with words of similar import as long as the term "Privileged" is included in that designation to indicate that they are Privileged Materials.

- (c) The meaning of the term “CEII” shall be as defined at 18 C.F.R. § 388.113(c). In producing a document that contains CEII, a Participant shall label the document in conformance with the requirements of this Protective Agreement, including but not limited to the requirements of Paragraphs 12 and 20 hereof. For the purposes of this Protective Agreement, documents that are labeled in conformance with the requirements of Paragraphs 12 and 20 are defined as “Designated CEII.”
 - (d) The term “Non-Disclosure Certificate” shall mean the certificate annexed hereto by which Reviewing Representatives who have been granted access to Designated CEII or Privileged Materials shall certify their understanding that such access is provided pursuant to the terms and restrictions of this Protective Agreement, and that such Reviewing Representatives have read the Protective Agreement and agree to be bound by it. All executed Non-Disclosure Certificates shall be served on all Participants on the official service list maintained by the Secretary of the Commission in this proceeding.
 - (e) The term “Reviewing Representative” shall mean a person who has signed a Non-Disclosure Certificate and who is:
 - (1) a member of the Commission Trial Staff;
 - (2) an attorney who has made an appearance in this proceeding for a Participant;
 - (3) attorneys, paralegals, and other employees associated for purposes of this proceeding with an attorney who has made an appearance in this proceeding for a Participant;
 - (4) an expert or an employee of an expert retained by a Participant for the purpose of advising, preparing for, submitting evidence, or testifying in this proceeding;
 - (5) a person designated as a Reviewing Representative by order of the Presiding Judge or the Chief Judge or the Commission; or
 - (6) employees or other representatives of Participants with significant responsibility for this docket.
4. All Privileged Materials and Designated CEII shall be made available under the terms of this Protective Agreement only to Participants and only through their Reviewing Representatives as provided in Paragraphs 6–10.
5. All Privileged Materials and Designated CEII shall remain available to Participants until an order terminating this proceeding becomes no longer subject to judicial review, or

another date specifically designated by the Commission or the Presiding Judge. If requested to do so in writing after that date, the Participants shall, within fifteen (15) days of such request, return the Privileged Materials and the Designated CEII to the Participant that produced them, or shall destroy the materials, except that copies of filings, official transcripts and exhibits in this proceeding that contain Privileged Materials or Designated CEII, and Notes of Privileged Material may be retained, if they are maintained in accordance with Paragraph 6 below. Within such time period each Participant, if requested to do so, shall also submit to the producing Participant an affidavit stating that, to the best of its knowledge, all Privileged Materials, Designated CEII and all Notes of Privileged Materials have been returned or have been destroyed or will be maintained in accordance with Paragraphs 6-7. To the extent Privileged Materials and Designated CEII are not returned or destroyed, they shall remain subject to the Protective Agreement or any superseding protective agreement or protective order.

6. All Privileged Materials and Designated CEII shall be maintained by the receiving Participant or Reviewing Representatives in a secure place. Access to those materials shall be limited to those Reviewing Representatives specifically authorized pursuant to Paragraphs 8–9. The Secretary shall place any Privileged Materials and Designated CEII filed with the Commission in a non-public file. By placing such documents in a non-public file, the Commission is not making a determination of any claim of privilege or whether the materials actually meet the definition of CEII. The Commission retains the right to make determinations regarding any claim of privilege and the discretion to release information necessary to carry out its jurisdictional responsibilities. For documents submitted to Commission Trial Staff (“Staff”), Staff shall follow the notification procedures of 18 C.F.R. § 388.112 before making public any Privileged Materials or Designated CEII.

7. All Privileged Materials and Designated CEII shall be treated as confidential by each Participant and by the Reviewing Representative in accordance with the Non-Disclosure Certificate executed pursuant to Paragraph 9 and shall be afforded the same protections that the Participant or Reviewing Representative affords to its own similarly situated confidential information. A Participant or Reviewing Representative shall promptly notify the other Participants if it has cause to believe that the Privileged Materials or Designated CEII have been disclosed, including if that disclosure was inadvertent or the result of a breach. All Privileged Materials and Designated CEII shall not be used except as necessary for the conduct of this proceeding, nor shall they be disclosed in any manner to any person except a Reviewing Representative who is engaged in the conduct of this proceeding and who needs to know the information in order to carry out that person's responsibilities in this proceeding.

8. (a) If a Reviewing Representative’s scope of employment includes the marketing of energy, the direct supervision of any employee(s) whose duties include the marketing of energy, or the provision of consulting services to any person whose duties include the marketing of energy, such Reviewing Representative may not use information contained in any Privileged Materials or Designated CEII to give any Participant or any

competitor of any Participant a commercial advantage.

(b) In the event that a Participant wishes to designate as a Reviewing Representative a person not described in Paragraph 3(e) above, the Participant shall seek agreement from the Participant providing the Privileged Materials or Designated CEII. If an agreement is reached, that person shall be a Reviewing Representative pursuant to Paragraph 3(e) above with respect to those materials. If no agreement is reached, the Participant shall submit the disputed designation to the Presiding Judge for resolution.

9. (a) A Reviewing Representative shall not be permitted to inspect, participate in discussions regarding, or otherwise be permitted access to Privileged Materials or Designated CEII pursuant to this Protective Agreement unless that person has first executed a Non-Disclosure Certificate; provided, that if an attorney is a Reviewing Representative, the paralegals, secretarial and clerical personnel under the attorney's instruction, supervision or control need not execute a Non-Disclosure Certificate. A copy of each Non-Disclosure Certificate shall be provided to counsel for the Participant 3 days prior to disclosure of any Privileged Material or Designated CEII to that Reviewing Representative, thus providing an opportunity to object to the disclosure.

(b) Attorneys qualified as Reviewing Representatives shall be responsible for ensuring that persons under their supervision or control comply with this Protective Agreement.

10. Any Reviewing Representative may disclose Privileged Materials or Designated CEII to any other such person as long as the disclosing person and the receiving person both have executed a Non-Disclosure Certificate. In the event that any Reviewing Representative to whom the Privileged Materials or Designated CEII is disclosed ceases to be engaged in this matter or is employed or retained for a position whose occupant is not qualified to be a Reviewing Representative under Paragraph 3(e), access to Privileged Materials or Designated CEII by that person shall be terminated. Even if no longer engaged in this proceeding, every person who has executed a Non-Disclosure Certificate shall continue to be bound by the provisions of this Protective Agreement and the certification.

11. Subject to Paragraphs 17-19, the Presiding Judge or the Chief Judge or the Commission shall resolve any disputes arising under this Protective Agreement. Prior to presenting any dispute under this Protective Agreement to the Presiding Judge or the Chief Judge or the Commission, the parties to the dispute shall use their best efforts to resolve it. Any Participant that contests the designation of materials as Privileged shall notify the Participant that provided the Privileged Materials by specifying in writing the basis for its objection. This Protective Agreement shall automatically cease to apply to such materials five (5) business days after the notification is made unless the designator, within said 5-day period, files a motion with the Presiding Judge or the Chief Judge or the Commission, with supporting affidavits, demonstrating that the materials should continue to be privileged. In any challenge to the designation of materials as Privileged, the burden of proof shall be on the Participant seeking protection. If the Presiding Judge or the Chief

Judge or the Commission finds that the materials at issue are not entitled to privilege, the procedures of Paragraphs 17-19 shall apply. The procedures described in this Paragraph shall not apply to materials designated by a Participant as CEII. Materials so designated shall remain privileged and subject to the provisions of this Protective Agreement, unless a Participant requests and obtains a determination from the Commission's Critical Energy Infrastructure Information Coordinator that such materials need not remain as Designated CEII.

12. All copies of all documents reflecting Privileged Materials, including the portion of the hearing testimony, exhibits, transcripts, briefs and other documents, which refer to Privileged Materials, shall be filed and served in sealed envelopes or other appropriate containers endorsed to the effect that they are sealed pursuant to this Protective Agreement. Such documents shall be marked "PRIVILEGED MATERIALS" and shall be filed under seal and served under seal upon the Presiding Judge and all Reviewing Representatives who are on the service list. Such documents containing CEII shall be additionally marked "CONTAINS CUI//CEII MATERIAL – DO NOT RELEASE." For anything filed under seal, redacted versions or, where an entire document is privileged or confidential, a letter indicating such, will also be filed with the Commission and served on all Participants on the service list and the Presiding Judge. Counsel for the producing Participant shall provide to all Participants who request the same, a list of Reviewing Representatives who are entitled to receive such materials. Counsel shall take all reasonable precautions necessary to assure that Privileged Materials and Designated CEII are not distributed to unauthorized persons.

13. If any Participant desires to include, utilize or refer to any Privileged Materials or Designated CEII or information derived therefrom in testimony or exhibits during the hearing in these proceedings in such a manner that might require disclosure of such material to persons other than Reviewing Representatives, such Participant shall first notify both counsel for the disclosing Participant and the Presiding Judge of such desire, identifying with particularity each of the Privileged Materials or Designated CEII. Thereafter, use of such Privileged Material or Designated CEII will be governed by procedures determined by the Presiding Judge.

14. Nothing in this Protective Agreement shall be construed as precluding any Participant from objecting to the use of Privileged Materials or Designated CEII on any legal grounds.

15. Nothing in this Protective Agreement shall preclude any Participant from requesting the Presiding Judge, the Chief Judge, the Commission, or any other body having appropriate authority, to find that this Protective Agreement should not apply to all or any materials previously designated as Privileged Materials or CEII pursuant to this Protective Agreement.

16. This Protective Agreement may be modified only by mutual agreement among Participants that have signed Non-Disclosure Certificates. This Protective Agreement may be replaced and superseded by a protective order issued by the Presiding Judge, the Chief

Judge, or the Commission.

17. Nothing in this Protective Agreement shall be deemed to preclude any Participant from independently seeking, through discovery in any other administrative or judicial proceeding, Privileged Materials or Designated CEII produced by any Participant under this Protective Agreement.

18. None of the Participants waives the right to pursue any other legal or equitable remedies that may be available in the event of actual or anticipated disclosure of Privileged Materials or Designated CEII.

19. The contents of Privileged Materials or Designated CEII or any other form of information that copies or discloses Privileged Materials or Designated CEII shall not be disclosed to anyone other than in accordance with this Protective Agreement and shall be used only in connection with the Participants' review of these proceedings. Any violation of this Protective Agreement and of any Non-Disclosure Certificate executed hereunder shall constitute a violation of an order of the Commission.

20. All Privileged Material or Designated CEII provided by Participants that is filed with the Commission, submitted to a Presiding Judge, or submitted to any Commission personnel or any other judicial or administrative body, must comply with the Commission's *Notice of Document Labelling Guidance for Documents Submitted to or Filed with the Commission or Commission Staff*, as issued on April 14, 2017 (82 Fed. Reg. 18632 (April 20, 2017)).

21. The provisions of 18 C.F.R. § 388.112 and 18 C.F.R. § 388.113 shall apply to any requests under the Freedom of Information Act (5 U.S.C. § 552) for Privileged Materials or Designated CEII in the files of the Commission.

IN WITNESS WHEREOF, Midcontinent Independent System Operator, Inc. has caused its authorized representative to execute this Protective Agreement.

Midcontinent Independent System Operator, Inc.

By: _____

Printed Name: _____

Title: _____

Date: _____

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Case Name) *Docket No.* _____

NON-DISCLOSURE CERTIFICATE

I hereby certify my understanding that access to Privileged Materials or Designated CEII is provided to me pursuant to the terms and restrictions of the Protective Agreement in this proceeding, that I have been given a copy of and have read the Protective Agreement, and that I agree to be bound by it. I understand that the contents of the Privileged Materials or Designated CEII, any notes or other memoranda, or any other form of information that copies or discloses Privileged Materials or Designated CEII shall not be disclosed to anyone other than in accordance with that Protective Agreement. I acknowledge that a violation of this certificate constitutes a violation of an order of the Federal Energy Regulatory Commission.

By: _____
Printed Name: _____
Title: _____
Representing: _____
Date: _____



Minnesota Department of Commerce
85 7th Place East | Suite 280 | St. Paul, MN 55101
Information Request

Docket Number: E015/CN-22-607
Requested From: Minnesota Power
Type of Inquiry: General

☐ Nonpublic ☒ Public
Date of Request: 3/4/2024
Response Due: 3/14/2024

SEND RESPONSE VIA EMAIL TO: Utility.Discovery@state.mn.us as well as the assigned analyst(s).

Assigned Analyst(s): Michael N. Zajicek
Email Address(es): michael.zajicek@state.mn.us
Phone Number(s): 651-539-1830

ADDITIONAL INSTRUCTIONS:

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

Request Number: 22
Topic: Increased power flows into Wisconsin under Arrowhead Alternative
Reference(s): Winter Direct Testimony Page 38

Request:

In Mr. Winter's Direct Testimony he states:

"Minnesota Power's analysis indicates that for every 100 MW of power delivered to Minnesota by the HVDC System an additional seven to ten MW of that power would flow into the Wisconsin 345 kV network (and away from Minnesota Power's customers) when compared to Minnesota Power's proposed Project configuration. This means that, just due to this operational concern, Minnesota Power customers would lose seven to ten percent of the benefit from delivery of their North Dakota wind generation resources on the HVDC System."

1. Please provide the results of any attempt to quantify the dollar impact on Minnesota ratepayers over the prospective life of the HVDC system of losing 7 to 10 percent of MWs under the Arrowhead Alternative as compared to MP's proposal that Minnesota Power has produced.
2. If Minnesota Power has not attempted to quantify the dollar impact, please provide an estimate and a discussion of the impacts.
3. If MP is not able to produce such an estimate, please provide an explanation.

To be completed by responder

Response Date: March 8, 2024
Response by: Christian Winter
Email Address: cwinter@mnpower.com
Phone Number: 218-355-2908



Minnesota Department of Commerce
85 7th Place East | Suite 280 | St. Paul, MN 55101
Information Request

Docket Number: E015/CN-22-607
Requested From: Minnesota Power
Type of Inquiry: General

☐ Nonpublic ☒ Public
Date of Request: 3/4/2024
Response Due: 3/14/2024

SEND RESPONSE VIA EMAIL TO: Utility.Discovery@state.mn.us as well as the assigned analyst(s).

Assigned Analyst(s): Michael N. Zajicek
Email Address(es): michael.zajicek@state.mn.us
Phone Number(s): 651-539-1830

ADDITIONAL INSTRUCTIONS:

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

Response:

The additional 7-10 percent of HVDC power flowing away from Minnesota Power's customers and into the Wisconsin transmission system anticipated if the Commission orders construction of the ATC Arrowhead Alternative instead of Minnesota Power's proposed configuration of the HVDC Modernization Project is inherently difficult to put a direct value to and, prior to this response, Minnesota Power has not attempted to quantify the dollar impact.

To provide a sense of the value for the energy flowing from the HVDC System to Wisconsin and leaving Minnesota Power's service area, the Company calculated an estimate for the additional fuel cost MN Power customers would be subject to for the lost energy to Wisconsin if the Commission were to order construction of the ATC Arrowhead Alternative. The level of energy corresponds to the additional seven to ten percent of HVDC power flowing into Wisconsin, which is approximately 375,000 to 550,000 MWh annually. The energy flowing into Wisconsin will need to be replaced by local generation to balance the system, resulting in Minnesota Power generation to replace the renewable energy that would have been delivered to Minnesota Power customers via the HVDC project as proposed by Minnesota Power. This estimate utilized the fuel cost of Boswell Energy Center as a proxy. The annualized value of HVDC System energy flowing into Wisconsin as a result of the ATC Arrowhead Alternative was then utilized to calculate the present value of fuel cost over a 30-year expected life for the HVDC System. Calculation tables in MS Excel format with formulas intact are attached as DOC IR 022.01 Attach.

Based on this methodology, Minnesota Power's customers could be subject to approximately \$150 million to \$210 million (NPV, 30 years) in additional fuel cost over the 30-year expected life of the HVDC System to balance the lost energy from its service area (note this does not include additional ancillary services that may also be required to balance the area). Effectively, the ATC Arrowhead Alternative results in WI customers receiving direct energy benefits from the HVDC line upgrade while Minnesota Power customers pay for 100% of the project cost.

To be completed by responder

Response Date: March 8, 2024
Response by: Christian Winter
Email Address: cwinter@mnpower.com
Phone Number: 218-355-2908



Minnesota Department of Commerce
85 7th Place East | Suite 280 | St. Paul, MN 55101
Information Request

Docket Number: E015/CN-22-607
Requested From: Minnesota Power
Type of Inquiry: General

☐ Nonpublic ☒ Public
Date of Request: 3/4/2024
Response Due: 3/14/2024

SEND RESPONSE VIA EMAIL TO: Utility.Discovery@state.mn.us as well as the assigned analyst(s).

Assigned Analyst(s): Michael N. Zajicek
Email Address(es): michael.zajicek@state.mn.us
Phone Number(s): 651-539-1830

ADDITIONAL INSTRUCTIONS:

Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

Minnesota Power's proposed configuration at Arrowhead ensures that the customers paying for the project receive the benefits to the greatest extent practicable.

Please note that there are many factors that impact the valuation of energy delivered from the HVDC System directly to Minnesota Power's customers. The information provided in this response is illustrative and does not represent a firm outlook, but represents the material value of the power and energy flows in question.

To be completed by responder

Response Date: March 8, 2024
Response by: Christian Winter
Email Address: cwinter@mnpower.com
Phone Number: 218-355-2908

TABLE 3

Line	Attribute	Qty	Units	Reference
1	Boswell Fuel Cost Proxy	\$	24.50 \$/MWh	Proxy for BEC Current Fuel Cost
2	HVDC System Load Factor		70% percent	CON Application, Pg 36, Section 3.7
3	HVDC Capacity (Upgraded)		900 MW	Potential Future Capacity
4	HVDC Average Hourly Loading		630 MW	[Line 2] x [Line 3]
5	HVDC Annualized Energy	5,518,800	MWh	[Line 2] x [Line 3] x 8760 hours
6	Impact of ATC Alternative		7% percent	Winter Direct at 38:13-17
7	Annual Energy to Wisconsin (WI)	386,316	MWh	[Line 5] x [Line 6]
8	Value of Fuel Required to Replace Energy Sent to WI	\$ 9,464,742	dollars	[Line 7] x [Line 1]
9	HVDC System Expected Life (Low End)		30 years	DOC IR 013
10	Estimated Annual Inflation for Fuel		2.25% percent	Assumption
11	MP Discount Rate		7.1% percent	Rate Case
Present Value of Fuel Required to Replace Energy Sent to WI				
12	Over Life of HVDC System	\$ 146,223,810	dollars	=NPV([Line 11], [Cells: B20:B49])

NPV Calculation

Year	Annual Fuel Cost Impact
1	\$9,464,742
2	\$9,677,699
3	\$9,895,447
4	\$10,118,094
5	\$10,345,752
6	\$10,578,531
7	\$10,816,548
8	\$11,059,920
9	\$11,308,768
10	\$11,563,216
11	\$11,823,388
12	\$12,089,414
13	\$12,361,426
14	\$12,639,558
15	\$12,923,948
16	\$13,214,737
17	\$13,512,069
18	\$13,816,090
19	\$14,126,952
20	\$14,444,809
21	\$14,769,817
22	\$15,102,138
23	\$15,441,936
24	\$15,789,380
25	\$16,144,641
26	\$16,507,895
27	\$16,879,323
28	\$17,259,107
29	\$17,647,437
30	\$18,044,505

TABLE 3

Line	Attribute	Qty	Units	Reference
1	Boswell Fuel Cost Proxy	\$	24.50 \$/MWh	Proxy for BEC Current Fuel Cost
2	HVDC System Load Factor		70% percent	CON Application, Pg 36, Section 3.7
3	HVDC Capacity (Upgraded)		900 MW	Potential Future Capacity
4	HVDC Average Hourly Loading		630 MW	[Line 2] x [Line 3]
5	HVDC Annualized Energy	5,518,800	MWh	[Line 2] x [Line 3] x 8760 hours
6	Impact of ATC Alternative		10% percent	Winter Direct at 38:13-17
7	Annual Energy to Wisconsin (WI)	551,880	MWh	[Line 5] x [Line 6]
8	Value of Fuel Required to Replace Energy Sent to WI	\$ 13,521,060	dollars	[Line 7] x [Line 1]
9	HVDC System Expected Life (Low End)		30 years	DOC IR 013
10	Estimated Annual Inflation for Fuel		2.25% percent	Assumption
11	MP Discount Rate		7.1% percent	Rate Case
Present Value of Fuel Required to Replace Energy Sent to WI				
12	Over Life of HVDC System	\$ 208,891,157	dollars	=NPV([Line 11], [Cells: B20:B49])

NPV Calculation

Year	Annual Fuel Cost Impact
1	\$13,521,060
2	\$13,825,284
3	\$14,136,353
4	\$14,454,421
5	\$14,779,645
6	\$15,112,187
7	\$15,452,211
8	\$15,799,886
9	\$16,155,384
10	\$16,518,880
11	\$16,890,554
12	\$17,270,592
13	\$17,659,180
14	\$18,056,512
15	\$18,462,783
16	\$18,878,196
17	\$19,302,955
18	\$19,737,272
19	\$20,181,360
20	\$20,635,441
21	\$21,099,739
22	\$21,574,483
23	\$22,059,909
24	\$22,556,256
25	\$23,063,772
26	\$23,582,707
27	\$24,113,318
28	\$24,655,868
29	\$25,210,625
30	\$25,777,864