MINNESOTA
PUBLIC UTILITIES COMMISSION

Staff Briefing Papers

Meeting Date	**June 4,2026**		**Agenda Item 1***
Company	Minnesota Power		
Docket No.	E-015/M-25-433		
	In the Matter of Minnesota Power's Petition for approval of its 2026 rate adjustment mechanism under its Rider for Transmission Cost Recovery.		
Issues	Should the Commission approve Minnesota Power's request of its 2026 rate adjustment mechanism under its Rider for Transmission Cost Recovery?		
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✓ **Relevant Documents**	**Date**
Minnesota Power – Petition	December 22, 2025
Legalectric - NoCapX 2020 – Overland – Comments	December 30, 2025
Department of Commerce – Comments	March 18, 2026
Minnesota Power – Letter	March 25, 2026
Minnesota Power – Reply Comments	April 3, 2026
Department of Commerce – Reply Comments	April 10, 2026
Minnesota Power – Reply Comments	April 21, 2026

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

I. Background

In 2005, the Minnesota Legislature enacted Minn. Stat. § 216B.16, subd. 7b, allowing the Commission to approve a tariff mechanism for the timely recovery through automatic annual adjustments of cost associated with new transmission facilities that have been approved by the Commission under Minn. Stat. §§ 216B.243 or 216B.2425. Additionally, Minn. Stat. § 216B.16, subd. 7b(d) specifically provides for the Commission to approve the annual rate adjustments upon receipt of a filing for a rate adjustment pursuant to the tariff established in Minn. Stat. § 216B.16, subd. 7b(b), and thorough review of the associated costs and achieved transmission system improvements.

In 2008, Minn. Stat. § 216B.16, subd. 7b was amended to allow utilities timely recovery of charges for new transmission facilities from other utilities through MISO and for new transmission facilities that are exempt from the requirements of Minn. Stat. § 216B.243. The MISO charges must be reduced or offset by any MISO revenues received by the utility and by amounts the utility charges to other regional transmission owners for the new transmission facilities, to the extent those revenues and charges have not been otherwise offset. Minn. Stat. §216B.16, subd 7b(b)(2).

On December 22, 2025, Minnesota Power (MP or the Company) filed its Petition requesting approval of its forecasted 2026 annual revenue requirements, 2025 Tracker Balance, and resulting 2026 Transmission Factors under the TCR to recover certain Minnesota jurisdictional transmission costs.

On December 30, 2025, Legalectric – NoCapX 2020 filed its comments, with concerns on raising costs in materials for transmission projects.

On March 18, 2026, the Department of Commerce, Division of Energy Resources (Department) filed its Comments, and requested that Minnesota Power file additional information in Reply Comments, and would provide recommendations after reviewing MP's Reply Comments.

On March 25, 2026, Minnesota Power filed a letter that the Company was notified that the Department of Energy (DOE) has reinstated a $50 million Grid Resilience and Innovation Partnerships (GRIP) Program grant for the HVDC1 Terminal Expansion Capability Project, which supports the 900 MW to 1500 MW capacity expansion capability portion of the HVDC Modernization Project as approved by the Commission on October 25, 2024. On March 19, 2026, the DOE issued an agreement modification which rescinded the termination and reinstated the Award.

On April 3, 2026, Minnesota Power filed its Reply Comments, and provided the additional information requested by the Department of Commerce.

On April 10, 2026, the Department filed its Response to MP's April 3, 2026 Reply Comments,

and recommended approval of the Company's Petition.

On April 21, 2026, Minnesota Power filed Reply Comments stating it supports the Departments recommendation.

II. Discussion

A. Minnesota Power – Petition

In Minnesota Power's 2025 Transmission Factor, the Company specifically requested approval for the following:[1]

- Recover costs related to its High Voltage Direct Current (HVDC) Modernization Project (HVDC Modernization Project or HVDC Project) for which the Commission issued a Certificate of Need (CoN) and a route permit on October 25, 2024.

- Recover costs net of revenues of transmission facilities that the Commission has approved under Minnesota Statute Section (Minn. Stat. §) 216B.243 or has certified or deemed to be certified under Minn. Stat. § 216B.2425; and

- Recover charges incurred under a federally approved Midcontinent Independent System Operator (MISO) tariff for other transmission owners' regionally planned transmission facilities to be constructed that have been determined to benefit Minnesota Power and the integrated transmission system; and new transmission facilities approved by the regulatory commission of the state in which the facilities are being constructed that MISO has determined to benefit Minnesota Power or the integrated transmission system.

Additionally, this Petition also serves as the Company's annual filing requirement per Ordering Paragraph 7 of the Commission's December 3, 2020 Order (Docket No. E-015/M-19-440). The costs included in MP's 2026 Transmission Factor are:

- Costs associated with the MVD Modernization Project and Duluth Loop Reliability Project.[2]

- MISO new transmission facility net revenues or expenses that stem from the MISO Transmission Expansion Plan (MTEP)[3] and are derived from MISO's Regional Expansion

[1] Minnesota Power's Petition; at 3.

[2] Docket Nos. E-015/CN-21-140 and E-015/TL-21-141.

[3] MTEP is an annual regional expansion plan issued by MISO with three primary objectives: 1) to perform a reliability assessment of the MISO integrated transmission system; 2) to review transmission owning members transmission plans and make sure that appropriate projects are reviewed and recommended to MISO Board of Directors for approval; and 3) to develop transmission upgrades to improve market performance.

and Cost Benefit (RECB) allocation methodology.

- MISO Auction Revenue Rights (ARR) revenues4 for the MVP that the Company is not an owner of but is allocated a portion of any revenues as a MISO member. The MVP ARR revenues the Company receives are being credited to retail customers in Minnesota Power's TCR Tracker.

1. TCR Factors

The proposed 2026 TCR factors will increase the average Residential customer rate by 4.32 percent, or about $4.51 per month, and about an 8.49 percent increase for Large Power customers, compared to the proposed 2025 TCR Factors.[5] MP commited to making the required adjustments to the 2026 TCR factors resulting from the Commission's decisions in the 2025 TCR Petition Docket.

2. Future Potentially Eligible TCR Projects

Ordering Paragraph 7 of the December 3, 2020 Order requires Minnesota Power to include in its TCR factor filing, descriptions of all potentially eligible projects that the Company will seek recovery for in the future, and the impact those projects will have on the TCR factor.

On February 7, 2025, Notice of Intent to Construct, Own, and Maintain" filings were submitted to the Commission pursuant to Minnesota Statute § 216B.246, subdivision3(a), for the following Tranche 2 LRTP transmission projects that Minnesota Power will have an ownership share of:

- Minnesota Power, Great River Energy, and Otter Tail Power Company intend to construct, own, and maintain the Maple River – Cuyuna 345 kV Transmission Project;[6]

- Northern States Power Company, doing business as Xcel Energy, Great River Energy, Minnesota Power, Otter Tail Power Company, and Western Minnesota Municipal Power Agency intend to construct, own, and maintain the Bison-Alexandria 345 kV Transmission Project;[7] and

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[4] ARR is a Market Participant's entitlement to a share of revenue generated in annual Financial Transmission Rights ("FTR") auctions. A Market Participant's firm historical usage of MISO's transmission system determines its share and depending upon the FTR auction clearing price of an ARR path, the share could result in revenue or a charge.

[5] Minnesota Power's Petition; at 4.

[6] Docket No. E015, ET2, E017/CN-25-109.

[7] Docket Nos. E015/CN-25-111 and E015/TL-25-112.

- Northern States Power Company, doing business as Xcel Energy, Great River Energy, Minnesota Power, Otter Tail Power Company, and Western Minnesota Municipal Power Agency intend to construct, own, and maintain the Bison-Alexandria 345 kV Transmission Project.[8]

3. Description and Context for Facilities

Minnesota Power is seeking cost recovery of incurred charges, excluding internal capitalized costs and Allowance for Funds Used During Construction (AFUDC) on internal capitalized costs, related to ongoing transmission projects as identified in this section. The Company also seeks cost recovery for investments and expenditures related to the HVDC Modernization, and Duluth Loop projects. Similarly, the Company is seeking recovery of its previously requested share of allocated cost of MTEP projects as a load serving entity within MISO.

a. HVDC Modernization Project

Minnesota Power is modernizing the converter stations for its 465-mile-HVDC transmission line that connects the plains of North Dakota to Northeastern Minnesota. With a planned completion by 2030, the HVDC modernization project accomplishes much needed updates for the nearly 50-year-old HVDC terminals. The project involves modernizing and upgrading both HVDC terminals for the 465-mile-long HVDC Line and interconnecting the upgraded HVDC terminals to the existing alternating-current (AC) transmission system.

In addition to the replacement of the existing HVDC terminals, the new Voltage Source Converter (VSC) HVDC technology implemented for the HVDC Project will be designed to provide voltage regulation, frequency response, blackstart capability, and bidirectional power transfer capability, all of which will enable Minnesota Power to continue providing reliable power within its service territory, position the HVDC transmission line for the future with expandable, modular technology, and establish the transmission corridor as a building block for a resilient grid across the Upper Midwest.[9]

b. Substation and Terminal Facilities

The substations and terminals are the primary facilities and the short transmission line segments are ancillary facilities for interconnecting the HVDC terminal with the substation facilities. The Project will require a new HVDC terminal, a new St. Louis County 345 kV/230 kV substation, and upgrades to the existing Arrowhead Substation 230 kV bus. The HVDC terminal will convert the DC electricity into AC and will interconnect to the AC transmission system at

[8] Docket No. E002, ET2, E015, E017, ET6135/CN-25-116.

[9] MP's Petition; at 12.

345 kV via a short 345 kV transmission line to the St. Louis County Substation.

c. Transmission Structure and Conductor Design

The transmission structures for the HVDC Project are anticipated to be tubular steel pole structures; however, steel lattice or wood pole structures could be used as necessary. Actual span lengths and structure heights may vary outside typical values as necessary. The new ±250 kV HVDC, 230 kV, and 345 kV steel pole structures will be approximately 60 to 180 feet tall with spans of approximately 200 to 1,000 feet.

The specific conductors for the 230 kV and 345 kV transmission lines will consist of aluminum conductor steel reinforced (ACSR) or possibly aluminum conductor steel supported (ACSS) wire and are likely to use bundled configurations (e.g., two subconductors per phase). MP noted that the conductors are selected according to the near-term and long-term capacity needs of the proposed transmission lines while also considering electrical performance characteristics.

d. Design Options to Accommodate Future Expansion

Design options to accommodate future expansion are a major consideration for the Project, due to the long-term significance of the HVDC Line for Minnesota Power and the region. The new VSC HVDC Converter Stations will be designed with a flexible, scalable approach that will enable their future expansion to accommodate bulk regional transfers of renewable energy. The Company is working with the HVDC supplier to procure the most current capacity and technology for the new VSC Converter Stations,[10] as well as additional expandability features to enable staged development of additional HVDC capacity to meet future regional needs.

The new St Louis County 345 kV/230 kV Substation will be designed with room for several future 345 kV line additions to accommodate regional transmission development in conjunction with increasing capacity and utilization of the HVDC line. The new substation will also include space to accommodate a second 345 kV/230 kV transformer to facilitate expanded delivery of power to the local transmission system in northeastern Minnesota. New 345 kV and 230 kV transmission lines constructed for the Project will be designed with sufficient capacity to accommodate reasonably foreseeable long-term needs, and Minnesota Power will consider making new transmission structures double-circuit capable where appropriate.

e. Duluth Loop Project

The Duluth Loop Project is needed to (1) resolve severe voltage stability concerns; (2) relieve transmission line overloads; and (3) enhance the reliability of Duluth area transmission sources. The transmission system in the Duluth area has historically been supported by several coal-fired

[10] Minnesota Power Petition; at 15.

baseload generators located along Minnesota's North Shore.

To maintain a continuous supply of safe and reliable electricity while replacing the support once provided by these local coal-fired generators, the Duluth area transmission system must be upgraded. To accomplish this, transmission lines in an area known as the Duluth Loop are being constructed, reconfigured, and improved to enhance system stability and reliability.

The Duluth Loop Project used a multi-stage, interactive routing process to identify route options for the proposed 115 kV line and the 230 kV line. The iterative process is designed to narrow the initial Study Area into Study Corridors, then into Route Alternatives, and finally into a Proposed Route. Through this process, Minnesota Power requested feedback from both stakeholders and the public through two public meetings, landowner mailings, stakeholder specific meetings, print and social media engagement and a project website.[11] It is through the information acquired, coupled with applicable Minnesota Statutes and Rules, potential state, federal, and local permits or approvals necessary for the Project that the Company identified the Proposed Route that was approved by the Commission in its Order dated April 3, 2023. The Duluth Loop Project includes:

- Construction of about 14 miles of new 115 kV transmission line between Minnesota Power's Ridgeview, Haines Road, and Hilltop substations;
- Construction of a new approximate one-mile extension connecting an existing 230 kV transmission line to the Minnesota Power's Arrowhead substation;
- Upgrades to the Ridgeview, Hilltop, and Arrowhead substations; and
- Reconfiguration, rebuild, and upgrades to existing 115 kV and 230 kV transmission lines and communications infrastructure in the Project area.

f. Required Substation Modification

Arrowhead Substation

A new 230 kV transmission line entrance will be added within the existing Arrowhead Substation located in Hermantown, Minnesota to accommodate the proposed 230kV reconfiguration establishing the Arrowhead to Hilltop 230kV line (108 Line). This new 230kV transmission line entrance will include a substation dead-end structure, circuit breaker, two switches and bus work. Existing wave traps, switches, instrument transformers, 115kV control house battery and numerous line panels will be replaced as asset renewal.

Hilltop Substation

The existing Hilltop Substation in Duluth, Minnesota will be expanded by approximately 0.06 acres on existing Minnesota Power property to accommodate the construction of a new 115kV

[11] Minnesota Power Petition; at 16.

transmission line entrance. This new line entrance will include a substation dead-end structure, circuit breaker, two switches and bus work. An existing 230/115kV transformer will be replaced with a higher MVA-rated transformer. Furthermore, existing substation equipment including 115kV circuit breaker, two switches and various substation conductors will be replaced with higher ampacity equipment. A new 230kV circuit breaker will be added, and three existing 115kV transmission line circuit breakers will be replaced as asset renewal components.

Ridgeview Substation

The existing Ridgeview Substation in Duluth, Minnesota will be expanded by approximately 0.74 acres on existing Minnesota Power property to accommodate a new 115kV transmission line entrance, a future 115kV transmission line entrance, and a future capacitor bank in a ring bus configuration. The existing substation bus will be reconfigured and expanded to a six-position 115kV ring bus with three 115kV transmission line positions, two 115/14kV transformer positions, and a future 115kV transmission line position. An aging 115/14kV transformer will be replaced and relocated to a shared ring bus position with the future capacitor bank.[12]

g. Required Transmission Line Modification

The following reconfiguration, rebuild, and upgrades are required for existing transmission lines for the Duluth Loop Project: 230kV Transmission Line Work and 115kV Transmission Line Work. Related ancillary work to support the sequencing and phasing of construction includes removing distribution line crossings, relocation of distribution lines to new corridors, installation of alternative fiber communications paths to maintain communication while lines are being constructed, and relay protection panel upgrades at all three substations named above and at multiple remote ends.[13]

h. MISO Transmission Projects

Minnesota Power noted that MISO is legally required to plan, develop and ensure construction of improvements to the regional transmission infrastructure. To achieve this, MISO developed STEP, a stakeholder-driven expansion planning process. Minnesota Power, and other members/participants, participate in this planning process and submits transmission projects which Minnesota Power believes will enhance the network to MISO. MISO studies all submitted projects. The ones MISO determine enhanced reliability or relieve transmission congestion are included in the next annual MTEP. The Company asserted that there are three FERC-approved processes, each with separate inclusion criteria and cost allocation methods, which allow MISO to allocate costs:

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[12] Minnesota Power Petition; at 18.

[13] *Id* at 19-20.

- Process for Baseline Reliability Projects (BRP) as well as generator interconnection projects.
- Process for economic projects with regional benefits identified as Market Efficiency Projects (MEPs).
- Process for projects assigned the MVP designation are allocated across the entire MISO footprint based on a megawatt hour charge.[14]

i. Project Schedules

Below in Table 1 and Table 2 shows the project schedules for HVDC and Duluth Loop.

Table 1. HVDC Modernization Project Schedule[15]

Activity	Timeline
Land Acquisition *Completed	Apr-22
Secure Manufacturing Slot Reservation with Preferred Supplier *Completed	Jan-23
Kick off technical coordination and engagement with Preferred Supplier *Completed	Mar-23
Begin Front End Studies & Engineering Design (FEED) with Preferred Supplier *Completed	Jan-24
Certificate of Need and Route Permit Issued *Completed	Oct-24
Other Federal, State, and Local Permits Issued July *In Progress	Jul 2024-Apr 2026
Order Long Lead Time Equipment for AC Substations *Completed	Nov-24
Clearing Begins *In Progress	Jan-25
Construction of AC Interconnection Facilities Begins	May-26
Receive Firm Proposal for HVDC converters from Preferred Supplier *Completed	Jan 2025-Apr 2025
Execute Firm EPC Contract and Give Final Notice to Proceed with HVDC Manufacturing & Delivery *Completed	May-25
Construction of HVDC Converter Stations Begins	Feb-26-Oct-26
Project In-Service	Dec-28-Apr-30

[14] Minnesota Power Petition; at 20-21.

[15] *Id* at 22.

Table 2. Duluth Loop Project Schedule[16]

Activity	Timeframe
Certificate of Need and Route Permit Application Filed *Completed	Fall 2021
Certificate of Need and Route Permit Issued *Completed	Spring 2023
Land Acquisition Begins *Completed	Spring 2023
Arrowhead Substation Construction Begins *In progress	Sep-23
ACOE Wetland (404) Permit Issued *Completed	Dec-24
Hilltop Substation Construction Begins *In progress	Summer 2024
Alternative fiber path for 230kV system constructed *Completed	Summer 2024
Right-of-Way Clearing Begins *Completed	Jan-25
Ridgeview Substation Construction Begins *In progress	Spring 2025
230kV Transmission Line Construction Begins *Completed	Spring 2025
115kV Transmission Line Construction Begins (2025 / 2026 construction seasons) *In progress	Summer 2025
Project In-Service	Dec-26

j. Operations & Maintenance

Operations and Maintenance (O&M) Costs for the Project consist of three components: the new transmission lines, new AC substations, and new HVDC Converter Stations. The O&M costs for the HVDC Converter Stations are expected to be the most significant. Over the life of the AC substation facilities, inspections will be performed regularly to maintain equipment and make necessary repairs. Minnesota Power's substation maintenance costs typically range from $50k to $100K, annually. The HVDC Converter Station is expected to be staffed during normal business hours and will also be supported by dedicated engineering staff to support normal operations. During scheduled outages, additional staff will be needed to support operations. The annual HVDC O&M costs are anticipated to be approximately $4-5 million annually.

[16] Minnesota Power Petition; at 23.

4. Revenue Requirements

The total recoverable retail revenue requirements proposed to be collected through 2026 Transmission Factor for twelve-month period ending December 31, 2026, are estimated at $69.8 million. Table 3 below shows Jurisdictional Revenue Requirement by component.

Table 3. 2026 MN Jurisdictional Revenue Requirement[17]

Component	
Projected Tracker Balance as of Dec. 31, 2025	$20,358,701
Duluth Loop	$5,996,790
HVDC Modernization	$29,627,587
Net RECB Revenue & Expenses	$14,239,149
ARR Credit	($237,868)
Total	**$69,984,359**

The estimated 2025 ending tracker balance of $20.4 million indicates a tracker balance for Large Power class of $12.7 million and a tracker balance of $7.7 million for all other classes. The projected year-ending 2025 tracker balance was determined and added to the projected 2026 revenue requirements to arrive at the total revenue requirements for “Large Power” and “All Other Classes” to be recovered by the 2026 billing factors.

5. Customer Impacts

Table 4 below summarizes the rate impacts by customer class compared to current rates. Note that the current rates reflect the assumption that the proposed 2025 TCR Factors currently under review are approved. The information provided in Table 6 reflects the final general base rates without riders in the Company’s most recent completed rate case adjusted to include current rider rates.

[17] Minnesota Power Petition; at 36.

Table 4. Customer Impact

Rate Class Impacts	SES-Paying Customers	SES-Exempt Customers
Residential		
Average Rate (¢/kWh)	15.196	
Increase (¢/kWh)	0.0656	
Increase (%)	4.32%	
Average Impact ($/month)	$4.51	
General Service		
Average Rate (¢/kWh)	15.114	15.054
Increase (¢/kWh)	0.656	0.656
Increase (%)	4.32%	4.32%
Average Impact ($/month)	$16.56	$52.20
Large Light & Power		
Average Rate (¢/kWh)	11.642	11.593
Increase (¢/kWh)	0.656	0.656
Increase (%)	5.63%	5.66%
Average Impact ($/month)	$1,532.40	$2,376.22
Large Power		
Average Rate (¢/kWh)		8.970
Increase (¢/kWh)		0.762
Increase (%)		8.49%
Average Impact ($/month)		$329,509
Lighting		
Average Rate (¢/kWh)	45.739	
Increase (¢/kWh)	0.656	
Increase (%)	1.43%	
Average Impact ($/month)	$0.85	

B. Legalectric - NoCapX 2020 – Overland – Comments

Legalectric is concerned by project costs increasing as materials costs increase as a result of new Tariffs. Ratepayers typically bear infrastructure cost increases, and the Commission should address whether investments in projects with large cost increases are justified, whether infrastructure proposed makes economic sense, and whether costs should be borne by ratepayers.

C. Department of Commerce – Comments

The Department requested that Minnesota Power file additional information in Reply Comments to be reviewed before providing its recommendations. The Department noted that MP's Petition requested approval of its forecasted 2026 annual revenue requirements, 2025 Tracker Balance, and resulting 2026 Transmission Factors under the TCR to recover certain Minnesota jurisdictional transmission costs. The Department provided Table 5, a summary of the Company's 2026 MN Revenue Requirements.

Table 5. Summary of Proposed 2026 MN Revenue Requirements

Item		2026 MN Revenue Requirements
Tracker Balance as of Dec. 31, 2025		**$20,358,701**
Duluth Loop		**$5,996,790**
	ID# 113305 Duluth Loop Reliability Project	1,964,131
	ID# 113316 Ridgeview Sub - Duluth Loop	1,133,238
	ID# 113317 Arrowhead Sub - Duluth Loop	510,328
	ID# 113318 Hilltop Sub - Duluth Loop	1,312,469
	ID# 113539 230kV Projects	1,080,398
	Prorata ADIT[18]	(3,775)
HDVC Modernization		**$29,627,587**
	ID# 113372 HVDC Modernization - ND	13,374,747
	ID# 113373 HVDC Modernization - MN	12,567,585
	D# 114425 HTEC Project – MN	997,277
	ID# 114426 HTEC Project – ND	1,051,517
	ID# 114067 St Louis Cty	822,087
	ID# 114374 ND HVDC Mod 345kV	821,990
	Prorata ADIT[19]	(7,614)
Net RECB Revenue & Expenses		**$14,239,149**
Auction Revenue Rights (ARR) Credit for MVP		($237,868)
total		**$69,984,359**

1. Project Eligibility

The Department observed that an in-state transmission project is eligible for recovery under

[18] Exhibit B-4 at pg. 3 of 30. Prorata ADIT x MN Jurisdictional Allocator. (2,285) x 0.82593 = (3,775).

[19] Exhibit B-5 at pg. 3 of 36. Prorata ADIT x MN Jurisdictional Allocator. (9,219) x 0.82593 = (7,614).

the TCR statute if the project is 1) approved under the certificate of need statute, 2) exempt from the certificate of need statute, 3) certified as or deemed to be a priority project under the state transmission plan, or 4) determined to benefit the utility or transmission system by the Midcontinent Independent System Operator (MISO). For the 2026 TCR Rider, MP requested approval to recover costs for the following projects and categories:

- Duluth Loop
- HVDC Modernization Project
- MISO Charges & Credits–This includes the Net RECB Revenue & Expenses, and
- Auction Revenue Rights (ARR) Credit for MVP in the Revenue Requirements table above (Table 5).[20]

2. TCR Costs

The Commission set a standard for evaluating TCR project costs going forward in Xcel Energy's TCR filing in Docket No. 09-1048. In its April 7, 2010, Order for the assignment of project costs, the Commission stated:

> […] the Commission finds that TCR project cost recovery through the rider should be limited to the amount of the initial cost estimates at the time the projects are approved as eligible projects, with the opportunity for the Company to seek recovery of excluded costs on a prospective basis in a subsequent rate case. A request to allow cost recovery for project costs above the amount of the initial estimate may be brought for Commission review only if unforeseen or extraordinary circumstances arise on a project.

3. Duluth Loop

The Department noted in the current petition, MP's proposed 2026 revenue requirements for Duluth Loop are based on net plant costs of approximately $73 million and construction work in progress (CWIP) costs of approximately $40 million, for a total of approximately $113 million through 2026.[21] Thus, the Department concluded the Company's current Duluth Loop capital project costs exceed the capital cost range established in the Certificate of Need and Route Permit proceeding by $4 million, as calculated below.

Table 6. Duluth Loop Capital Spend Compared to Cost Cap

CWIP	$39,942,048
Net Plant	$72,731,507
Proposed Capital Spend for Recovery	$112,673,555
Capital Cost Cap in 2026 Dollars	$108,953,301
Capital Spend Over/(Under) Cap	$3,720,254

[20] Minnesota Power Petition; at 4.

[21] Minnesota Power Petition, Exhibit B-4 at 3.

As noted above, the Commission continues to believe that project costs included in the TCR rider should be capped at certificate of need levels. MP's total proposed capital spend recovery of $112.7 million is above $109 million (in 2026 dollars). The Department therefore recommended the Commission require MP to adjust its proposed rate recovery to cap the Duluth Loop total capital spending at the $109 million required figure. The remaining $3.7 million in capital expenditures can be requested for recovery with justification to support cost overrun in the Company's next rate case.

4. HVDC Modernization

The Department noted in current Petition that MP's proposed 2026 revenue requirements for HVDC Modernization project are based on CWIP costs of approximately $523 million. The Department concluded that the Company's HVDC Modernization capital project costs are under the initial cost estimates established in Certificate of Need proceeding. The project in-service date is now scheduled for April 2030.[22] The in-service date has changed from December 2028 to April 2030 based on supplier response on the HVDC terminals.

5. MISO Transmission Projects

The Department reviewed MP's calculations and proposal to recover its net RECB charges in the TCR Rider and concluded that the Company's calculation is reasonable.

6. MVP Auction Revenue Rights (ARR)

The Department reviewed MP's proposed treatment of MVP ARR revenues and agreed with its approach.

7. Tracker Balance

MP proposed to recover its 2025 tracker balance of $20,358,701 to reflect prior under-recoveries. MP's tracker balance calculations are shown in Exhibit B-2. In addition, MP's Petition noted that the tracker balance for the Large Power Class is $12.6 million and that the balance for all other classes is $7.7 million.[23] The Department reviewed MP's tracker calculations as shown in Petition Exhibit B-2 and recommended the Commission approve MP's 2025 tracker balance for recovery in the 2026 revenue requirements.

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[22] MP Petition, at 22.

[23] MP Petition, at 26.

8. Recommendation

Department has prepared recommendations, which are provided below:

- The Department recommended the Commission approve MP's Petition with the modification to require MP to adjust its proposed rate recovery to cap the Duluth Loop total capital spending at $108,953,301, reducing capital expenditures by $3,720,254.

- The Department recommended MP explain in reply comments whether it will receive MISO Schedule 9 revenues from MISO for the Duluth Loop Project once the project goes into service (expected in December 2026).

- The Department noted that the ALLETE Acquisition in Docket E015/PA-24-198 required the Return on Equity (ROE) to be decreased from 9.78% to 9.65%. The Department asked MP to provide an analysis of the financial impact of the ALLETE Acquisition ROE requirement on the current Petition in their Reply Comments.

- The Department recommended the Commission require MP to file updated proposed tariff revisions to reflect the above modifications.

D. Minnesota Power – Letter

On October 18, 2023, the DOE awarded a $50 million grant to Minnesota Power to modernize its HVDC transmission system. On September 30, 2024, the DOE issued the Award under an assistance agreement authorizing use of the federal funds beginning October 1, 2024, through September 30, 2029. On October 2, 2025, and October 17, 2025, the Company received notice from the DOE stating that the DOE had terminated the $50 million grant. Minnesota Power received about $9.76 million from the DOE for its expenses and investment in the Company's HVDC Modernization Project through the date of the termination. On November 4, 2025, Minnesota Power submitted to DOE an informal dispute of the termination of the Award. Additionally, the Company worked with the congressional delegations in Minnesota and North Dakota to bring to the attention of the DOE the importance and benefits of modernizing the Company's HVDC transmission system. Minnesota Power maintained regular communication with its assigned Federal Project Officer and Contract Specialist at the DOE while it actively contested the termination of the Award.

On March 16, 2026, the Company was notified that the Department of Energy (DOE) reinstated a $50 million Grid Resilience and Innovation Partnerships (GRIP) program grant for HVDC Terminal Expansion Capacity Project, which supports the 900 MW to 1500 MW capacity expansion capability of the HVDC Modernization Project as approved by the Commission. On March 19, 2026, the DOE issued an agreement modification which rescinded the termination and reinstated the Award.

E. Minnesota Power – Reply Comments

1. Duluth Loop Capital Spending

MP stated that the CWIP amount in Table 6, above, is correct for the period ending December 31, 2026, and for the adjacent Total column in Exhibit B-4 shown in Figure 1. However, the Duluth Loop Project is projected to be placed in service by December 31, 2026; therefore, as of that date, the CWIP amount ($39,942,048) will be transferred into Plant in Service reducing CWIP to $0. Minnesota Power's proposed capital spend for recovery is calculated by adding the $33,983,132 Plant in Service as of November 30, 2026, and the transferred amount of $39,942,048 for a total Plant in Service of $73,925,180 (2026 dollars).[24]

Figure 1. Duluth Loop Capital Spending[25]

Minnesota Power
Transmission Cost Recovery Rider
2026 Tracker - Duluth Loop Projects

Exhibit B-4
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2026 Projected Tracker - Duluth Loop Projects 2/

Section	Line	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Total
A	Book Basis of Property														
	0 CWIP		12,770,225	14,139,762	17,029,366	19,918,970	22,908,574	25,898,178	28,338,823	30,779,468	33,220,113	35,360,758	37,501,403	39,942,048	39,942,048
	1 Plant in Service		33,983,132	33,983,132	33,983,132	33,983,132	33,983,132	33,983,132	33,983,132	33,983,132	33,983,132	33,983,132	33,983,132	73,925,180	73,925,180
	2 Total Accumulated Depreciation		469,430	531,931	594,432	656,934	719,435	781,936	844,437	906,938	969,439	1,031,941	1,094,442	1,193,673	1,193,673
	3 Net Plant		33,513,701	33,451,200	33,388,699	33,326,198	33,263,697	33,201,196	33,138,695	33,076,193	33,013,692	32,951,191	32,888,690	72,731,507	72,731,507

Table 7. Duluth Loop Plant in Service

Period	CWIP	Plant In Service
Nov. 2026	$35,501,403	$33,983,132[26]
Dec. 2026	$2,440,645[27]	
Dec. 2026	$39,942,048	
Dec. 31 2026	($39,942,048)	$39,942,048
Total		$73,925,180[28]

[24] MP's Reply Comments at 3.

[25] MP's Petition Exhibit B-4 at 3.

[26] MP's Petition at Exhibit B-4 page 3. Nov 30, 2026, 2026 Tracker

[27] MP's Petition at Exhibit B-4 page 26. Dec CWIP Accrual

[28] MP's Petition at Exhibit B-4 page 26 and 2026 Tracker Exhibit B-3 at3.

2. Decreased ROE

Minnesota Power has complied with Docket E015/PA-24-198 by lowering the ROE to 9.65% in this filing which is shown in Figure 2 below:

Figure 2. Minnesota Power's Rate of Return[29]

Minnesota Power
MPUC Docket E015/PA-24-198
Rate of Return / Cost of Capital Summary
Executed Settlement Agreement, July 11, 2025 1/
Applied to Riders Beginning 1/1/2026

	Capital Structure	Component Cost	Weighted Cost	Pre-tax Rate	After-Tax Rate
Long Term Debt	47.000%	4.4035%	2.0696%	2.0696%	1.4700%
Common Equity	53.000%	9.650%	5.1145%	7.1772%	5.1145%
	100.000%		7.1841%	9.2468%	6.5845%

Federal & State Income Tax Rate	28.74%
Pretax "Gross-up" Factor	1.40330
After Tax Return on Equity	5.1145% 2/
Income Tax Component	2.0627% 3/
Interest Expense Component	2.0696%
Pre-tax Return	9.2468%

3. MISO Schedule 9 Revenue

Minnesota Power will not receive MISO Schedule 9 revenues directly associated with other utilities' use of the Duluth Loop Project transmission lines once the Duluth Loop Project goes in-service. The Duluth Loop Project is located entirely within the Company's local balancing authority area and is also a baseline reliability project that does not qualify for cost allocation under the MISO Tariff. For this reason, no Schedule 9 revenue for the Duluth Loop Project will be reflected in the monthly Transmission Settlement files the Company receives from MISO.[30]

4. Net Credits from MISO

The Company has no objections to this reporting requirement.

[29] MP's Petition Exhibit B-3 at 1.

[30] MP's Reply Comments at 6.

5. Tariff Revisions

There is no modification to the 2026 TCR capital expenditures and the associated tariff sheet is required. The Company applied the Handy-Whitman factors to $76,669,836 amount in 2026 dollars to deflate the annual nominal dollars to 2021 dollars results in a total of $52,871,314 which is well within the Commission's approved estimated capital costs range.

F. Department of Commerce – Response to Reply Comments

- The Department reviewed the additional information that was provided by Minnesota Power and recommended the following:

- The Department recommended the Commission approve MP's Petition.

- The Department withdraw its recommendation to the Commission to require MP to file updated proposed tariff revisions.

- The Department recommended the Commission approve MP's proposed tariff revisions.

- The Department recommended the Commission require MP to report in future TCR riders any net credits it received from MISO for other utilities use of the Duluth Loop and HVDC Modernization projects once they are in service, as well as any other applicable future projects.

G. Staff Comments

Staff notes that MP provided responses to the requests filed by the Department. Upon its review of the responses, the Department concluded that MP's responses were reasonable. Consequently, the Department recommended approval of the Company's Petition. Staff also observed that MP provided reasonable and adequate responses to the Department's requests. As a result, staff concurs with the Department that MP's Petition be approved.

III. Decision Options

1. Approve Minnesota Power's TCR rider as filed. (MP, Department)

2. Reject Minnesota Power's TCR rider.

3. Require MP to report in future TCR riders any net credits it received from MISO for other utilities use of the Duluth Loop and HVDC Modernization projects once they are in service, as well as any other applicable future projects. (Department)