

March 2, 2026

VIA E-FILING

Ms. Sasha Bergman
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
Saint Paul, MN 55101-2147

**Re: In the Matter of the 2025 Biennial Transmission Projects Report.
Minnesota Transmission Owners Reply Comments on GETs Report
MPUC Docket No. E999/M-25-99**

Dear Ms. Bergman:


The Minnesota Transmission Owners (“MTO”) respectfully submits these Reply Comments on GETs Report in the above referenced docket.

As requested by the MPUC, these reply comments have been e-filed through www.edocket.state.mn.us. A copy of this filing is also being served upon the persons on the Official Service List of record.

Please let me know if you have any questions regarding this filing.

Sincerely,

FREDRIKSON & BYRON, P.A.



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

Katie Sieben
Joseph Sullivan
John Tuma
Hwikwon Ham
Audrey Partridge

Chair
Vice-Chair
Commissioner
Commissioner
Commissioner

**In the Matter of the 2025 Biennial
Transmission Projects Report**

MPUC Docket No. E999/M-25-99

**MINNESOTA TRANSMISSION OWNERS
REPLY COMMENTS ON GETS REPORT**

INTRODUCTION

The Minnesota Transmission Owners (MTO) provide these Reply Comments in response to initial comments submitted on February 2, 2026 by the Minnesota Department of Commerce (Department) and the WATT Coalition regarding the Grid Enhancing Technologies (GETs) Report. The GETs Report was submitted as Appendix B to the 2025 Biennial Transmission Plan Report (2025 BTPR) and in accordance with Minnesota GETs legislation,¹ and the Minnesota Public Utilities Commission's (Commission) March 24, 2025 Order in Docket No. E-999/CI-24-316, and the September 10, 2025 Order in this Docket. The MTO appreciate the comments provided by the Department and the WATT Coalition and look forward to continuing to collaborate in future iterations of the GETs Report.

In its September 10, 2025 Order, the Commission recognized that analyzing GETs and establishing cost-effectiveness is an iterative process that will continue to develop over time:

Recognizing that differences among the parties remain, the Commission appreciates their efforts to coalesce around a methodology for calculating the cost-effectiveness of grid

¹ 2024 Minn. Laws Ch. 127, Article 42, Section 52.

*enhancing technologies and the usefulness of providing as much guidance as possible prior to the November 2025 filing deadline. But as the Department observed, the statute presents a relatively new approach to cost analysis with complexities that would benefit from continued record development.*²

The MTO's GETs Report provided the Commission and stakeholders with a structured process to evaluate whether GETs offer a cost-effective solution to address the 66 identified constraints that meet or exceed the congestion threshold of 168 hours. The GETs Report's purpose was not to mandate deployment of GETs or traditional transmission solutions, but to support planning for a transmission system that is affordable and economically efficient for all Minnesota customers. The MTO members are already incorporating GETs into their planning processes and working to alleviate congestion on the Minnesota transmission system where feasible and cost-effective. The MTO's approach is in line with the directives of both the Minnesota Legislature and the Commission. Contrary to the Department's statement regarding investor-owned utilities' incentives to build capital-intensive infrastructure,³ the MTO members have an obligation to ensure reliability in the most affordable manner—regardless of technology. This evaluation looks across multiple time horizons and a variety of approaches, including GETs.

The MTO are concerned that the Department's analysis and recommendations for addressing cost-effectiveness and future GETs reports extend well beyond the scope of both the GETs legislation and the Commission's directives. For example, the Department's request that "the MTO to provide in reply comments any information they have about PPAs or curtailment payments to generators on transmission lines where the MTO also holds FTRs"⁴ falls outside the

² Order at 4.

³ Department Initial Comments at 8.

⁴ Department Initial Comments at 17.

bounds of the GETs Report prepared by transmission owning utilities.⁵

Similarly, the Department's recommendations concerning each company's overall hedging strategy well exceeds the scope of the GETs Report and the Commission's limited directive in the September 10 Order to net Auction Revenue Rights (ARR) and Financial Transmission Rights (FTR) revenues against historical congestion costs. The purpose of this netting is narrow: to avoid overstating customer congestion exposure and to reflect the economic benefits that MTO customers and members would realize economic from a project.

ARR allocations are based on historical transmission usage and may not align with current or future resource portfolios, load patterns, or congestion drivers. ARR nominations and subsequent FTR awards are not guaranteed and depend on annual MISO allocation and auction outcomes. As a result, FTR revenues can be uncertain, non-durable, and not repeatable in the same way as physical congestion relief provided by GETs. Because each transmission owner, that is also a market participant, manages its FTR portfolio individually—and not through the MTO—any concerns regarding the relationship between an individual owner's FTR revenues and congestion should be addressed with each owner through separate dockets.

With respect to the WATT Coalition's comments, the MTO provide the following responses. Both the WATT Coalition and the Department offered comments on the advanced powerflow controllers currently under evaluation. The MTO's analysis is ongoing and the MTO commit to providing bimonthly updates to the Commission until the evaluation is complete. The WATT Coalition also notes that transmission topology optimizations (TTO) that have already been implemented are not mentioned in the GETs report. The MTO agree that TTOs are already in use

⁵ The Commission has been clear that congestion and GETs dockets are not an avenue to address local government tax impacts as discussed during the Commission's March 6, 2025 agenda hearing in Docket No. E999/CI-24-316.

and note that, in addition to the GETs Report, MTO members have implemented numerous GETs and other congestion-relief measures, including to the Grid North Partners' near-term congestion projects⁶ and Great River Energy's Heimdall Dynamic Line Rating (DLR)⁷ deployment, which was discussed at the Commission's recent February 3, 2026 Planning Meeting.⁸

The WATT Coalition further asserts that the 2025 BTPR and GETs Report are incomplete because they focus too narrowly on congestion. As noted above, the GETs Report legislation specifically applies to constraints with 168 hours or more of congestion during each of the last three years.⁹ The MTO acknowledge that GETs have benefits beyond congestion relief. As required by Minn. Stat. § 216B.243, subd. 3(9), applicants for a Certificate of Need for a transmission line must demonstrate "the benefits of enhanced regional reliability, access, or deliverability to the extent those factors improve the robustness of the transmission system or lower costs for electric consumers in Minnesota." Likewise, the MTO consider all technologies when evaluating system needs and solutions.

Finally, both the WATT Coalition and the Department recommend evaluating new and emerging technologies. The MTO agree that GETs continue to rapidly evolve. The MTO both collectively and individually continue to meet with vendors and actively participate in industry forums including EPRI and ESIG, as noted by the WATT Coalition.

⁶ 2025 BTPR at Section 9.3.

⁷ https://mn.gov/puc-stat/documents/pdf_files/GRE%20Presentation.pdf

⁸ https://minnesotapuc.granicus.com/player/clip/2631?view_id=2&redirect=true

⁹ 2024 Minn. Laws Ch. 127, Article 42, Section 52, subd. 2(1).

DISCUSSION

The MTO provide the following responses to the Department's recommendations.

I. D.1. COMPLETENESS

The Department recommends that future GETs Reports include working papers that include derivations of all calculations as a separate appendix attached to the GETs Report.

Response: The MTO are committed to enhancing transparency and have been working with the Department throughout this process, to support its review. While the MTO embedded workpapers within the GETs Report and provided additional details in responses to requests from the Department, the MTO will include a separate appendix of all workpapers in future GETs Reports.

The Department requests MTO provide the workpapers or other information on the payback period of these seven projects that do not yet have payback period determined in their reply comments.

Response: To the extent information is available, MTO will provide information on the payback period for the seven projects. The MTO's evaluation remains underway and the MTO commit to providing bimonthly updates to the Commission until the evaluation is complete.

II. D.2. PAYBACK PERIOD CALCULATION

The Department recommends the Commission require the MTO to provide any cases where they have paid curtailment payments to generators on transmission lines where they also hold FTRs.

Response: As discussed above, the MTO assert this Department recommendation is outside the scope of the GETs Report and Minnesota legislation.

The Department recommends the Commission order the MTO to calculate the benefits of GET implementation that include the range of outcomes that would result from physical solutions to congestion rather than the outcomes that result from the application of financial instruments.

Response: The MTO understand this recommendation as a request to calculate the benefits of GETs and other potential congestion relief solutions both with and without adjustments for FTR/ARR revenue. In the 2025 BTPR, the MTO calculated the benefits of GETs consistent with the Commission's September 10, 2025 Order. The MTO do not object to including additional calculations for informational purposes, to the extent they are practical and in line with the scope of the study. In future reports the MTO will work with the Department to identify the appropriate calculations.

III. D.3. ACCOUNTING FOR FINANCIAL TRANSMISSION RIGHTS (FTRS)

The Department recommends that the Commission order the MTO to include separate reports of both FTRs held by the MTO and FTRs held by all MISO market participants.

Response: As discussed above, the MTO maintain that the Department's recommendation exceeds the scope of the GETs Report and the Commission's September 10 Order, which directed only that ARR/FTR revenues to be netted against historical congestion costs when evaluating the cost and benefits of GETs. This netting serves a narrow and specific purpose: to ensure that customers and members of MTO utilities who will bear the cost for each project also receive the associated economic benefits.

With respect to reporting FTR positions held by all MISO market participants, the MTO acknowledge that such data is publicly available through MISO. However, including it within the GETs Report would dilute the relevance of the analysis. FTR positions across the broader MISO market reflect diverse commercial strategies unrelated to Minnesota transmission planning or

Minnesota customer congestion exposure. Incorporating this information would introduce substantial noise without improving insight into the physical performance of the current and future Minnesota transmission system.

IV. D.4. PAYBACK PERIOD THRESHOLDS

The Department recommends the Commission require the MTO put forth cost estimates and schedules for GETS solutions for any constraints that do not currently meet the five-year payback and instead apply a payback period threshold appropriate to that specific technology.

OR

The Department recommends the Commission create payback period thresholds for each specific GET, including, but not limited to, dynamic line rating, power flow control, topology optimization, and advanced reconductoring.

AND

The Department recommends that the Commission order the MTO to provide cost estimates and implementation timelines for solutions using appropriate payback period.

Response: The MTO do not support either Department recommendation. At this stage in the Docket, replacing the uniform five-year payback standard with technology, or constraint-specific thresholds would reduce transparency, complicate comparisons across projects, and invite disputes over how individual thresholds should be set. The five-year horizon is intentional: it is shorter than the MISO regional planning horizon and thus focuses on near-term congestion relief opportunities that may not be addressed through MTEP, Long-Range Transmission Plan (LRTP), or Market Efficiency Project (MEP) projects. This approach enables identification of cost-effective local solutions while maintaining a consistent, technology-neutral screen. In addition, requiring cost estimates and schedules for solutions that fail the five-year payback screen

would divert MTO resources toward uneconomic options and undermine the purpose of the payback test. As demonstrated in the GETs Report, the five-year payback standard strikes a reasonable balance between encouraging innovation and protecting customers from imprudent expenditures. It should not be modified through a series of technology-specific piecemeal exceptions. Rather than modifying payback thresholds, the MTO recommend that the Commission direct the MTO to develop a generic cost estimating guide for GETs. Such a guide would improve consistency, transparency, and planning efficiency in future evaluations without weakening the established economic screens.

V. D.5. COMBINATIONS OF GETS AND TRADITIONAL UPGRADES

The Department recommends that GETs are considered during the construction of transmission lines and any planned outages from MISO's Tranche 1 and Tranche 2.1 LRTP.

Response: The MISO Tranche 1 and Tranche 2.1 transmission owners are already considering congestion impacts and potential mitigation measures—including GETs—as part of overall transmission planning and coordination of construction and planned outages. For Tranche 2.1 projects, the Certificate of Need applications were recently submitted and until routes are proposed to and approved by the Commission, it is premature to identify specific construction, or outage-related mitigations. However, GETs and all the other transmission planning tools will be considered as Tranche 2.1 project details progress.

The Department recommends that, where feasible and where costs would not significantly increase, the MTO consider adding GETs to any proposed traditional upgrades.

Response: The MTO agree with this recommendation. Considering GETs alongside traditional upgrades is appropriate and should be incorporated when evaluating system alternatives and costs as part of individual high voltage transmission line Certificate of Need

dockets under Minn. Stat. § 216B.243. This evaluation is most appropriately conducted in those project-specific dockets rather than this proceeding.

The Department recommends the Commission order that ARR¹⁰ are ineligible to be included for in implementation plans for future GET reports.

Response: The MTO disagree with the Department's recommendation to exclude Ambient-Adjusted Ratings (AAR) from future GETs implementation plans. Federal Energy Commission Order 881 and the associated compliance requirements do not preclude AAR from being considered a GET or from being used in combination with other GETs or traditional technologies. Including AARs as part of overall suite of transmission planning tools is beneficial. For example, a seasonally adjusted AAR result may show that there is no need for a GET, such as DLR, allowing limited resources to be deployed more effectively elsewhere on the transmission system.

Furthermore, including AARs is also consistent with the Commission's September 10, 2025 Order, which required that the MTO to evaluate and compare:

- I. combinations of grid enhancing technologies,*
- II. combinations of grid enhancing technologies with traditional upgrades,*
- III. traditional upgrades such as transformer or substation upgrades; and*
- IV. learnings from this effort that may inform future grid enhancing technologies evaluations;*

Excluding AAR would conflict with this directive and unnecessarily limit the range of solutions considered in transmission planning.

VI. D6. NEW OR EMERGING GETS

The Department recommends that future GETs Reports include a section that discusses new or emerging GETs and the possibility of developing GET pilot projects.

¹⁰ This abbreviation should be AAR for Ambient-Adjusted Ratings.

Response: *The MTO are willing to include a high-level discussion of observed trends and general developments in GETs technologies as they relate to system planning and operations. This approach is in line with Minnesota legislation and the Commission's September 10, 2025 Order.*

However, the MTO do not support requiring detailed analysis of emerging technologies or extensive discussions of potential pilot projects within future GETs Reports. Such requirements would expand the scope of the GETs Report beyond its intended purpose and impose unnecessary resource burdens on MTO member utilities. At this stage, focusing on pilot projects is premature and risks diverting attention away from commercially viable, near-term solutions, as identified in the GETs Report.

CONCLUSION

The MTO remain committed to finding the best transmission solutions that provide cost-effective reliability benefits for all Minnesota customers. GETs are an important part of transmission planning and as demonstrated in the GETs Report, MTO members have already implemented cost-effective GETs and continue to evaluate additional opportunities to address constraints on the transmission system.

The MTO respectfully requests that the Commission: (1) accept the GETs Report as being compliant with Minnesota legislation and the Commission's orders, (2) address issues outside the scope of this Docket in the appropriate separate proceedings, and (3) continue to utilize the cost-benefit framework developed in this Docket when evaluating GETs proposals brought forward by individual utilities.

Dated: March 2, 2026

Respectfully submitted,



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**Attorneys for the Minnesota Transmission
Owners**

CERTIFICATE OF SERVICE

Michael Latana certifies that on the 2nd day of March, 2026, he e-filed true and correct copy the following document on behalf of Minnesota Transmission Owners via eDockets (www.edockets.state.mn.us):

1. Reply Comments.

Said document was also served as designated on the Official Service Lists on file with the Minnesota Public Utilities Commission and as attached hereto.

Executed on: March 2, 2026

Signed: /s/ Michael Latana

Fredrikson & Byron, P.A.

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| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|----|----------------|--------------------------------|--------------------------------------|--------------------------------------|---|---|--------------------|---------------------------|-------------------|-------------------|
| 1 | Sasha | Bergman | sasha.bergman@state.mn.us | | Public Utilities Commission | 121 7th Pl E Ste 350 St. Paul MN, 55101 United States | Electronic Service | | Yes | Official 25-99 |
| 2 | Christina | Brusven | cbrusven@fredlaw.com | Fredrikson Byron | | 60 S 6th St Ste 1500 Minneapolis MN, 55402-4400 United States | Electronic Service | | No | Official 25-99 |
| 3 | Mike | Bull | mike.bull@state.mn.us | | Public Utilities Commission | 121 7th Place East, Suite 350 St. Paul MN, 55101 United States | Electronic Service | | Yes | Official 25-99 |
| 4 | Generic | Commerce Attorneys | commerce.attorneys@ag.state.mn.us | | Office of the Attorney General - Department of Commerce | 445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States | Electronic Service | | Yes | Official 25-99 |
| 5 | Ian M. | Dobson | ian.m.dobson@xcelenergy.com | Xcel Energy | | 414 Nicollet Mall, 401-8 Minneapolis MN, 55401 United States | Electronic Service | | No | Official 25-99 |
| 6 | Sharon | Ferguson | sharon.ferguson@state.mn.us | | Department of Commerce | 85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States | Electronic Service | | No | Official 25-99 |
| 7 | Christine | Marquis | regulatory.records@xcelenergy.com | Xcel Energy | | 414 Nicollet Mall MN1180-07-MCA Minneapolis MN, 55401 United States | Electronic Service | | No | Official 25-99 |
| 8 | David R. | Moeller | drmoeller@fredlaw.com | Fredrikson & Byron, P.A. | | 60 S 6th St Ste 1500 Minneapolis MN, 55402-4400 United States | Electronic Service | | No | Official 25-99 |
| 9 | Generic Notice | Residential Utilities Division | residential.utilities@ag.state.mn.us | | Office of the Attorney General - Residential Utilities Division | 1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States | Electronic Service | | Yes | Official 25-99 |
| 10 | Julia | Selker | jselker@gridstrategiesllc.com | WATT Coalition | | 110 Allen St Suite A&B Cumming GA, 30040 United States | Electronic Service | | No | Official 25-99 |
| 11 | Adam | Sokolski | adam.sokolski@edf-re.com | EDF Renewable Energy | | 10 Second Street NE Ste 400 Minneapolis MN, 55410 United States | Electronic Service | | No | Official 25-99 |
| 12 | Dennis | Welgraven | dwelgraven@co.murray.mn.us | Murray County Board of Commissioners | | 2848 Broadway Ave PO Box 57 Slayton MN, 56172 United States | Electronic Service | | No | Official 25-99 |