

REVISED DECISION OPTIONS

Congestion Solutions

1. Require MTO to include a cost benefit analysis in its 2025 Biennial Transmission Report that compares any feasible battery storage solution to status quo conditions and to its performance under planned grid upgrades at the Nobles County Substation area. (DOC DER)
2. Require Xcel Energy to propose a pilot project plan for Commission approval no later than June 30, 2025, which utilizes any feasible dynamic line rating and/or dynamic transformer rating solution to mitigate grid congestion in the Nobles County Substation area. The pilot project shall report:
 - a. The cost to implement the solution;
 - b. The cost savings, including reduced curtailment payments;
 - c. The percent of reduced curtailments and increased power generation;
 - d. A comparison of C. to ambient adjusted ratings (AAR); and
 - e. The estimated lifetime NPV of the solution. (DOC DER)
3. Require Xcel Energy to propose a pilot project plan for Commission approval in the 2025 Biennial Transmission Project Report, which utilizes any power flow controller solution to mitigate grid congestion in the Nobles County Substation area. The pilot project shall report:
 - a. The cost to implement the solution;
 - b. The cost savings, including reduced curtailment payments;
 - c. The percent of reduced curtailments and increased power generation;
 - d. The observed ability of the solution to enhance grid stability; and
 - e. The estimated lifetime NPV of the solution. (DOC DER)
4. Require Xcel Energy to propose a pilot project plan for Commission approval in the 2025 Biennial Transmission Project Report, which utilizes topology optimization to mitigate grid congestion in the Nobles County Substation area. The pilot project shall report:
 - a. The cost to implement the solution;
 - b. The cost savings, including reduced curtailment payments;
 - c. The percent of reduced curtailments and increased power generation;
 - d. The observed ability of the solution to enhance grid stability; and
 - e. The estimated lifetime NPV of the solution. (DOC DER)

Tax Revenue Shortfalls

5. Require rate-regulated utilities to compensate host counties and municipalities for all lost tax revenue due to WECS curtailment starting in 2020, with no end date, using utility funding. (Staff interpretation of DOC DER decision)

6. **If the Commission determines it has authority to do so,** require utilities and independent power producers affected by the congestion/curtailment in southwest Minnesota to file a compliance letter within 30 days of the order detailing how much of the curtailment/lost revenue was due to the terms of the GIA with MISO versus the economic dispatch or to preserve the grid reliability. (Staff)
7. **If the Commission determines it has authority to do so,** require rate-regulated utilities to compensate host counties and municipalities for all lost tax revenue due to WECS curtailment starting in 2020, with no end date, using utility funding, less any lost tax revenue that was due to the operational limitations of the wind farms as detailed in their GIA. (Staff modification of 5)
8. **Do not adopt DOC DER's decision option 5.**
9. Revised DO 2: Require Xcel to provide a DLR/DTR pilot study for the Nobles County Substation, as recommended by the Department, as part of the 2025 Biennial Transmission Projects Report due on November 1, 2025. (Staff Option)

Staff Recommendation: 1, 3, 4, and 9.

Staff does not take a position on decision options: 5, 6, 7, and 8.