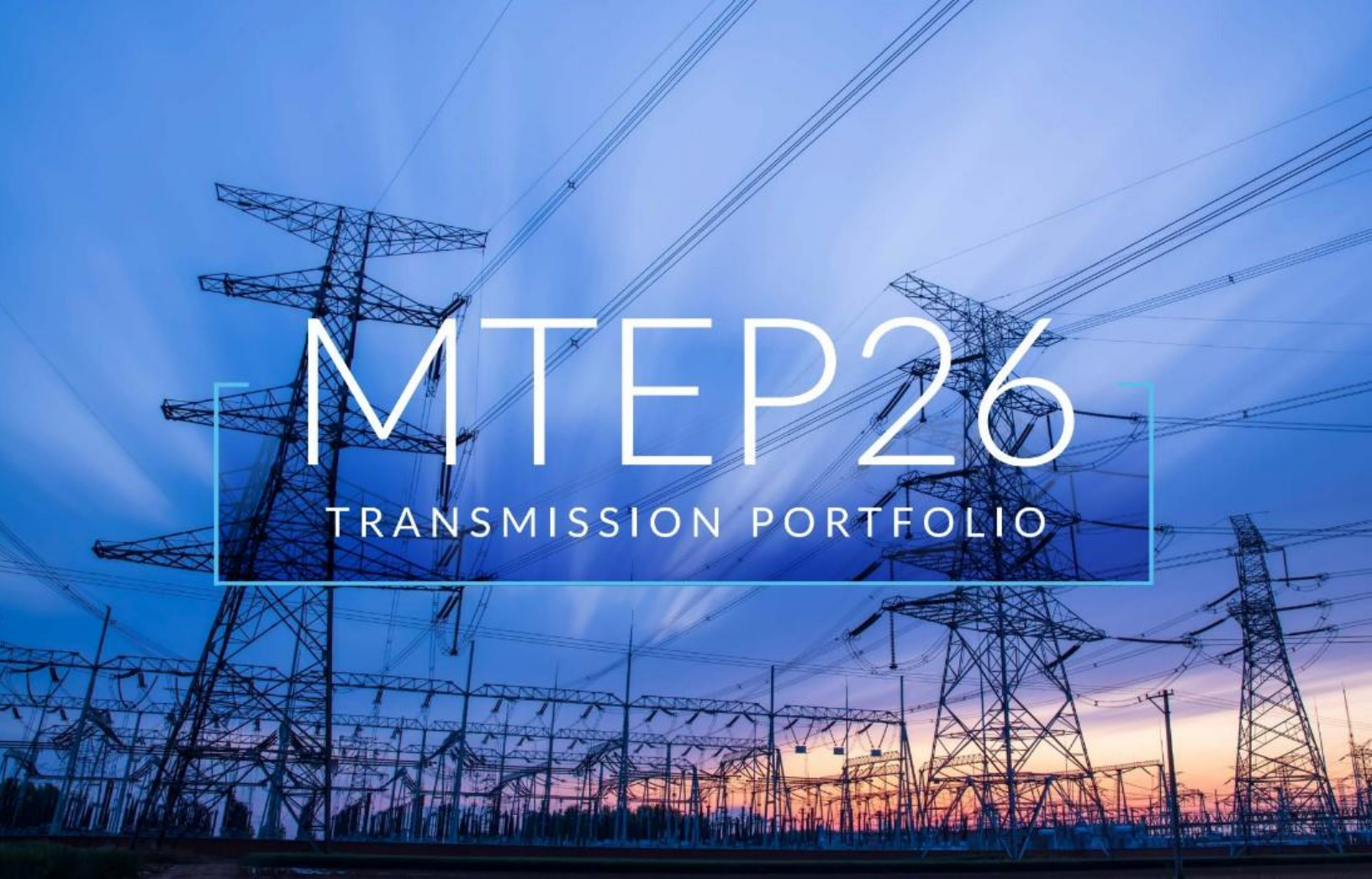




MTEP26

TRANSMISSION PORTFOLIO

SEPTEMBER 2026

Highlights

- 532 projects totaling 2,320 miles of transmission address local reliability needs
- Load growth is the largest driver, with transmission supporting 26.6 GW of load
- 89 urgent projects were approved through the Expedited Project Review process



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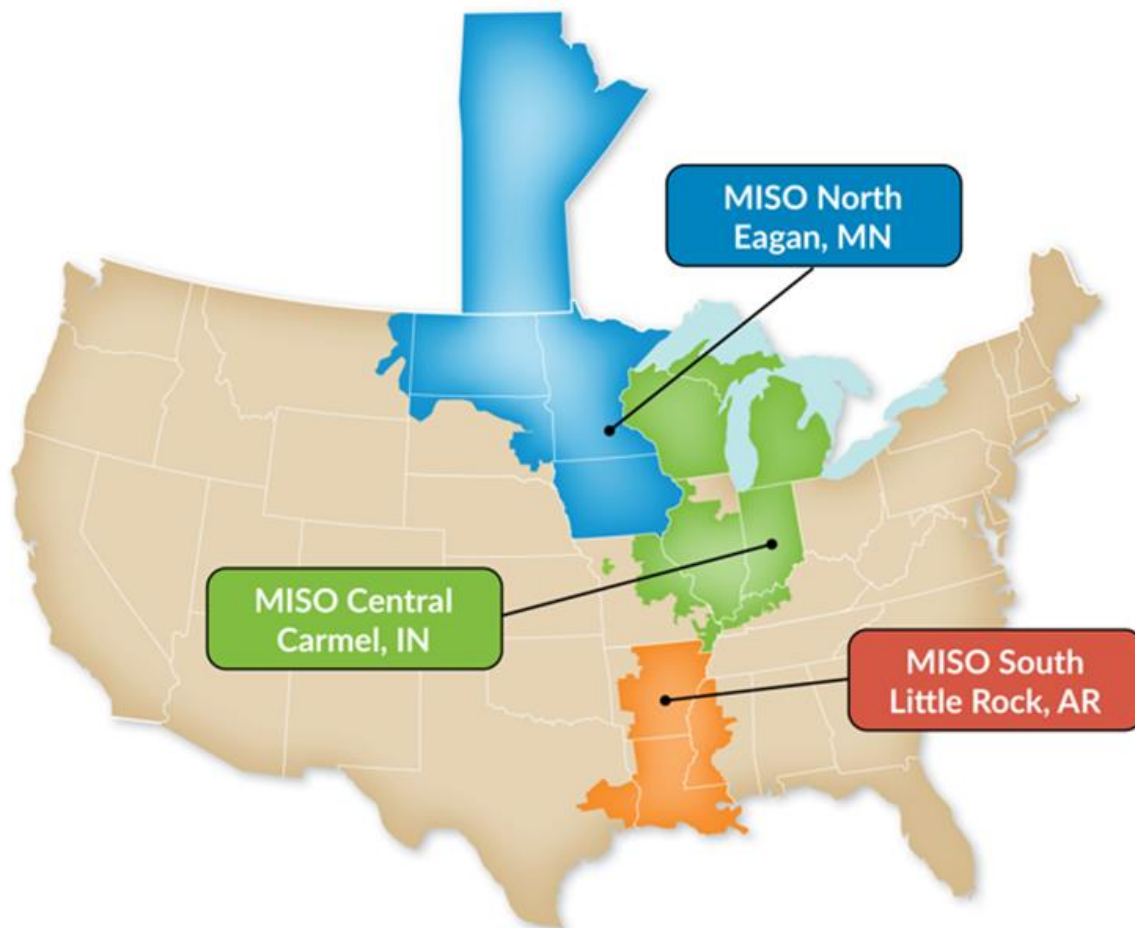
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About MISO

Midcontinent Independent System Operator (MISO) is an independent, 501(c)(4) not-for-profit, member-based organization approved as a Regional Transmission Organization (RTO) by the Federal Energy Regulatory Commission (FERC) in 2001. MISO is responsible for reliably and cost-effectively managing the flow of electricity across one of the largest geographic footprints in North America.

MISO Reliability Footprint and Regional Control Center Locations



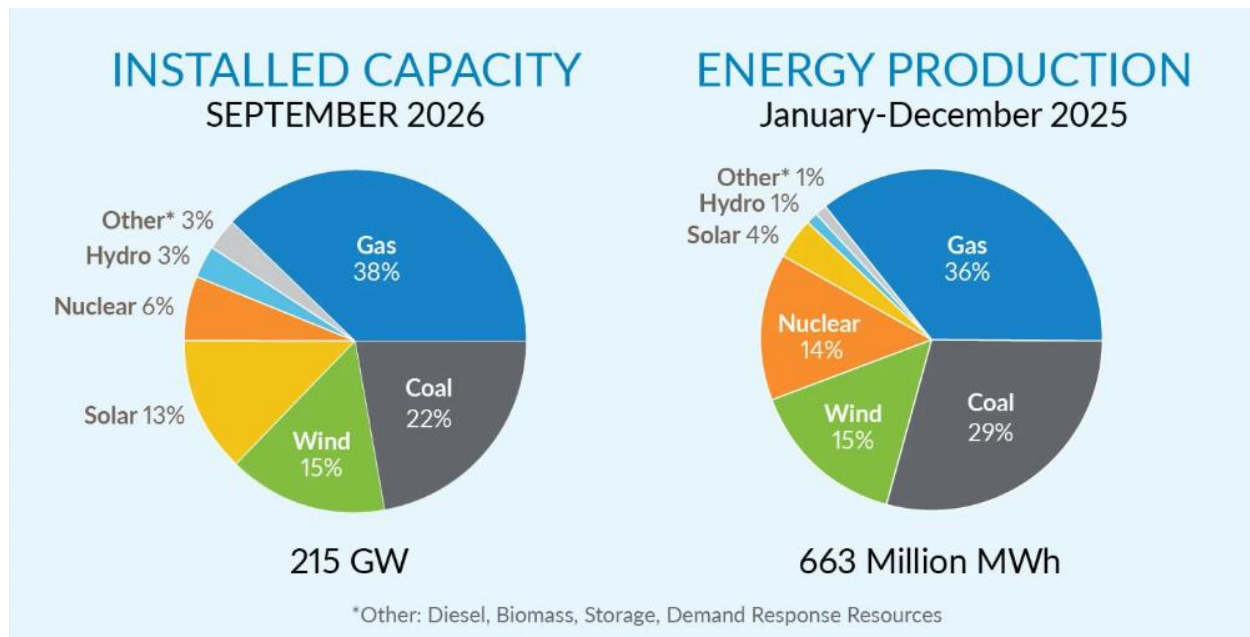


Today, MISO's region spans 15 U.S. states and the Canadian province of Manitoba, serving approximately 45 million people. The MISO system includes nearly 79,000 miles of high-voltage transmission and roughly 190,000 megawatts of electricity-generating capacity, all operated under functional control with the consent of asset-owning members.

MISO's membership continues to grow, now including over 550 market participants, reflecting a diverse set of utilities, independent developers, and other energy stakeholders. The organization's energy markets remain among the largest in the world, producing more than \$40 billion in annual gross market charges.

KEY FACTS

<i>Area Served</i>	15 U.S. States and Manitoba, Canada
<i>Population Served</i>	45 million
<i>Transmission Line</i>	79,000 miles
<i>Generating Units (Commercial Model)</i>	2,012
<i>Record Demand</i>	127.1 GW (7/20/2011)
<i>Wind Peak</i>	26.6 GW (1/03/2026)
<i>Solar Peak</i>	20.1 GW (07/30/2026)
<i>Members</i>	57 Transmission Owners 181 Non-transmission Owners
<i>Market Participants</i>	>550
<i>Carbon Reduction</i>	Approximately 32% since 2014



[Corporate data](#) as of September 2026

CHAPTER 1: TRANSMISSION PLANNING OVERVIEW

1.1 Planning Principles

MISO, as the FERC-approved regional transmission planner, uses the MISO Transmission Expansion Plan (MTEP) to identify and support the development of cost-effective transmission infrastructure that is sufficiently robust to meet reliability needs, enables a competitive energy market, supports policy goals, and allows for competition among transmission developers in the assignment of transmission projects. MTEP is created through a Tariff-driven, inclusive, and open process that provides opportunities for stakeholder participation and input. MISO also works with its stakeholders and Board of Directors to adopt MISO's Planning Guiding Principles (Figure 1.2-1), which are shaped by state and federal policy, stakeholder needs, and cost-efficiency goals.

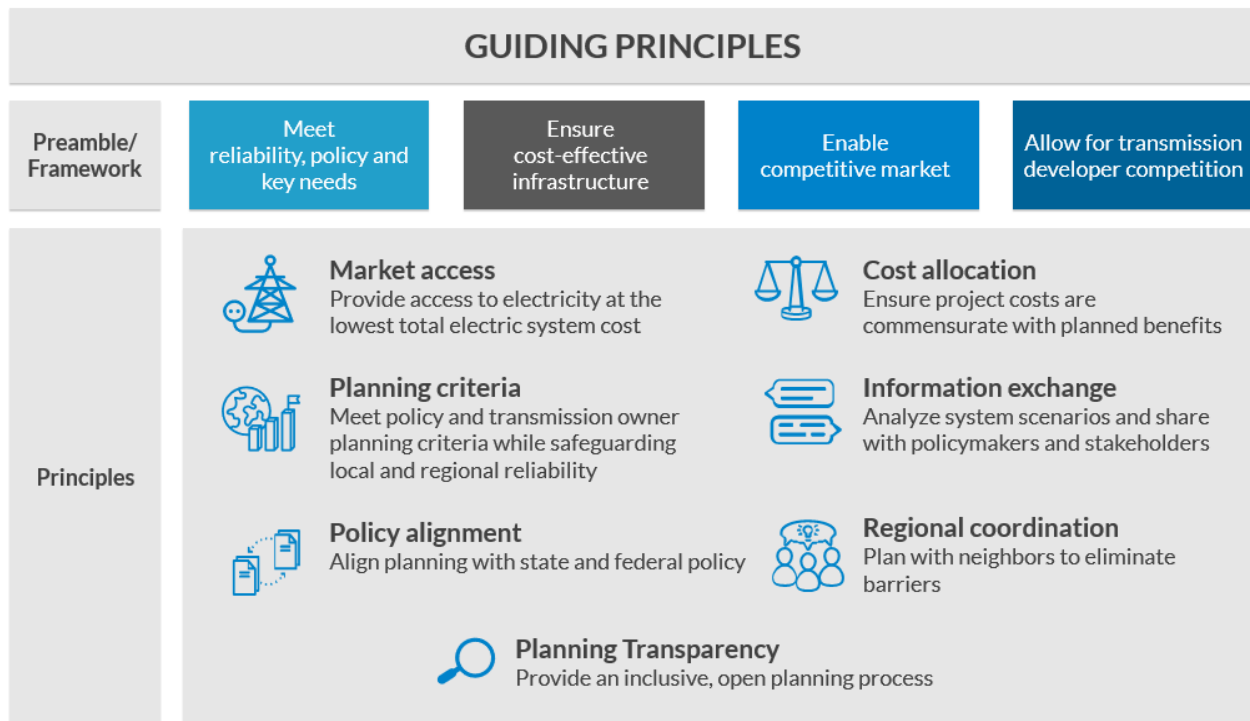


Figure 1.2-1: MISO's Planning Guiding Principles.

MISO's Planning Guiding Principles:

- Develop transmission plans that will ensure a reliable and resilient transmission system that can respond to the operational needs of the MISO region.
- Make the benefits of an economically efficient electricity market available to customers by identifying solutions to transmission issues that are informed by near-term and long-range needs and provide reliable access to electricity at the lowest total electric system cost.
- Support federal, state, and local energy policy and member plans and goals by incorporating them into planning assumptions.
- Provide an appropriate cost allocation mechanism that ensures that costs of transmission projects are allocated in a manner roughly commensurate with the projected benefits of those projects.
- Analyze an appropriate range of system scenarios and make sufficient details on the process and results available to federal, state, and local energy policy makers and other stakeholders to provide context and to inform choices.
- Coordinate planning processes with neighbors and work to eliminate barriers to reliable and efficient operations.
- Provide an inclusive, independent, open set of planning processes, which considers local and regional solutions and allows opportunities for stakeholders to participate and provide input on the transmission system.



1.2 Comprehensive Planning Processes

These principles are enacted through MISO's value-based planning approach (Figure 1.2-2), which ensures local needs are integrated with regional requirements. Its processes consider a range of issues and viewpoints:

- For **local planning**, review and provide transparency on member plans, evaluate the system against reliability standards, consider alternatives, and verify needs as applicable.
- Evaluate long-term, broader system needs through MISO's **regional planning** processes, including its Long Range Transmission Planning efforts.
- Discuss the impact of policies on the transmission system and resource mix in **policy assessment**.
- Define system changes needed to accommodate new resources in **resource integration**.
- Identify planning issues and potential solutions shared with MISO's neighbors in **interregional planning**.

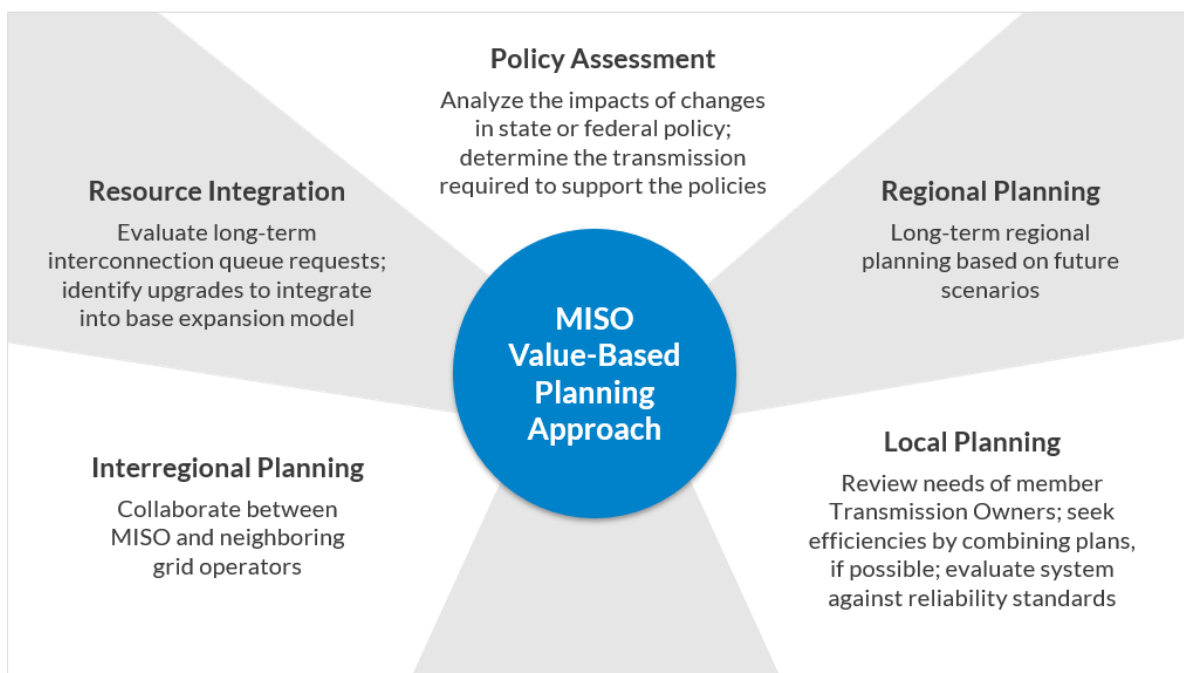


Figure 1.2-2: MISO's Value-Based Planning Approach.

MISO's various planning approaches cannot operate independently of each other. The goal of the transmission planning process is to identify a least-regrets outcome that meets its member plans, provides reliable power delivery, and appropriately balances local versus regional solutions to ensure a cost-effective outcome for customers. Each process informs the others to cover the entire planning horizon.



Using this comprehensive planning approach, the MTEP report is structured into three main planning areas: local, regional and interregional. Local reliability planning, sometimes referred to as near-term planning, is highlighted in Chapter 3. Regional or Long-Range Transmission Planning, including Futures, will be covered in the Executive Summary. Finally, interregional planning is highlighted in Chapter 2.

1.3 Process Timing and Stakeholder Coordination

MISO's Tariff-defined planning process – with stakeholder input from Subregional Planning Meetings – evaluates needs throughout the cycle to develop expansion plans that support a reliable and efficient system. This collaborative process allows for analysis of all projects for their combined effects on the transmission system. Moreover, the design of this collaborative process ensures that MTEP addresses transmission issues within the applicable planning horizon in an efficient and cost-effective manner, while considering the input of stakeholders.

These various planning functions occur at different times and begin the year before an MTEP report is finalized (see Figure 1.2-3). For example, assessments of generator interconnection and retirements occur on a continuous basis. Others repeat on a regular cycle, but the actual MTEP report is produced once every 12 months. Each MTEP cycle's scope definition begins in the summer of the prior year. The months of in-depth research and analysis, combined with many interactions between various work streams and stakeholders, culminates in Appendix A, the full list of projects approved by MISO's Board of Directors.

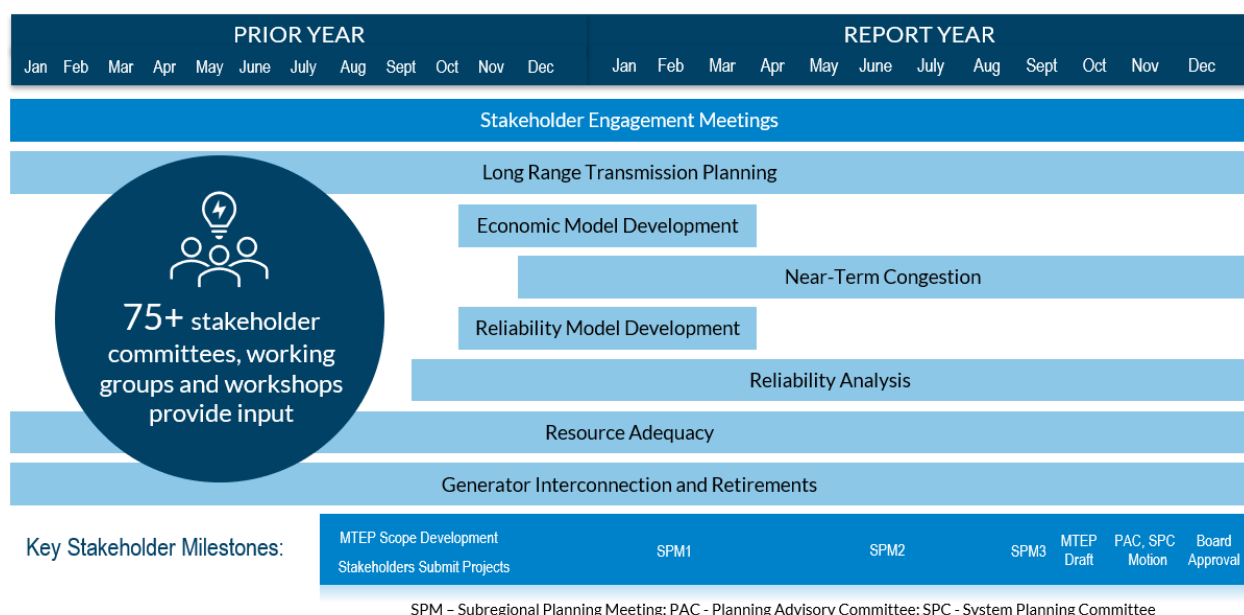


Figure 1.2-3: Typical MTEP cycle is developed in overlapping cycles and delivered annually.



1.4 Planning Analysis Methods and Modeling

Planning analyses performed by MISO test the transmission system under a wide variety of conditions using standard industry applications to model key items, such as steady state power flow, voltage stability, and economic parameters, as determined appropriate by MISO to be compliant with applicable criteria and the Tariff. MISO collaborates with Transmission Owners, other transmission providers, transmission customers, and stakeholders to develop appropriate planning models that reflect expected system conditions for the planning horizon. The local reliability planning process relies on known and committed inputs into the process, while the long-term planning process considers projected inputs (Figure 1.2-4).



Figure. 1.2-4: Summary of inputs into reliability and long-term planning processes.

1.5 Local Transmission Planning

[Models](#) are available to stakeholders with security measures as provided for in the Transmission Planning Business Practices Manual. MISO provides the opportunity for stakeholders to review and comment on the posted models before commencing planning studies.

MISO's review of projects varies depending on project drivers, system needs and opportunities for alternatives, among other factors. Specific to local planning, MISO may verify the need, complete a no-harm analysis, or post information for stakeholders:

- **Verify need:** Confirmation of system need, including consideration of applicable National Electric Reliability Organization reliability standards and reliability standards adopted by Regional Reliability Organizations, and applicable within the transmission provider region. MISO must also verify the need for alternatives to adequately examine their effectiveness.



- **No harm:** Ensure a submitted project does not create a system issue. This includes projects that create model changes, such as contingency definitions, line ratings or line impedances.
- **Post only:** Provided for FERC Order 890 transparency provisions. May include controls equipment to communicate remotely with the facility. This information is not able to be represented with model changes.

MISO considers alternatives in multiple forms, including like-for-like replacement, regional reliability projects, the combination of multiple local solutions, and other options identified through either MISO analysis or submitted by stakeholders. Alternative assessments for projects may be completed by Transmission Owners prior to project submission to MISO, proposed by MISO, or proposed through stakeholder submissions. Some of the criteria used to select an alternative consider cost comparisons; avoidance of known constraints from local, state and federal permitting; challenges due to the terrain of the proposed transmission right of way; and how reliability needs are resolved. Alternatives do not always result in one project replacing another, and may instead be additive to the original project, even when submitted with the thought that they would directly compete.

1.6 Long Range Transmission Planning

Long Range Transmission Planning (LRTP) is an essential element of planning the regional grid to be reliable and efficient, with a focus on the long-term (20-year) planning horizon. LRTP efforts are launched periodically, when needed, to understand and address significant changes to future conditions that the grid must be prepared to address. LRTP may result in regional backbone facilities needed to move bulk power reliably and efficiently within MISO, depending on identified needs. While it provides for a reliable and efficient grid based on forecast resource developments, LRTP is not intended to resolve all connection issues, and it avoids resolving anything associated with precise siting of future generation or load.

LRTP follows MISO's well-established seven-step value-based planning process and is part of MISO's overall MTEP process. The following provides high-level descriptions of each step:

- 1 **Develop Future Scenarios** – develop scenario-based Futures with resource forecast and siting
- 2 **Develop Resource Plan and Site Future Resources** – development of planning models utilizing Futures
- 3 **Identify Transmission Issues** – identify potential transmission issues
- 4 **Integrated Transmission Development** – proposals for solutions to issues
- 5 **Transmission Solution Evaluation** – evaluate the effectiveness of various solutions
- 6 **Project Recommendation and Justification** – recommend preferred solutions for MTEP implementation
- 7 **Project Cost Allocation** – apply appropriate cost allocation



Through this process, MISO works to identify potential grid needs in support of a range of potential resource and load scenarios, building from our members' resource plans. These scenarios are codified in the MISO Futures, which represent long-term load and generation scenarios that “bookend” potential 20-year-out conditions for use in transmission and resource planning. The LRTP process includes extensive stakeholder engagement, including regularly scheduled workshops and periodic discussions at the Planning Advisory Committee. Project recommendations resulting from this process are presented for Board of Director review and approval. MISO will continue its best practices of listening to stakeholder feedback, including feedback from previous LRTP initiatives, to continue to improve LRTP processes within the boundaries of the Tariff.

1.7 Interregional Coordination and Planning Studies

MISO works with the neighboring transmission planning regions, including Southwest Power Pool (SPP) and PJM Interconnection (PJM), to identify issues on the seams, perform studies, and jointly evaluate transmission solutions that may address newly identified interregional needs or be more efficient or cost effective than a corresponding regional solution. While MISO has a separate Joint Operating Agreement (JOA) with both SPP and PJM that details specific processes and criteria, the high-level interregional coordination activities are similar on each seam:

- Exchange modeling data and other system information
- Review identified historic issues or propose reliability, economic or transfer analysis to determine forward-looking issues on the seam
- Evaluate whether to perform an interregional study based on historic or forward-looking issues

MISO performs joint studies with SPP and PJM on a regular basis, in accordance with the timelines and frequencies dictated in their respective JOAs, or as needed. Studies may have a targeted or a more complex scope requiring a longer study period. They can include reliability, economic and public policy issues, along with analysis of interregional transfer capability and extreme weather events. Interregional issues and study efforts are coordinated through a public Interregional Planning Stakeholder Advisory Committee consisting of representatives and interested parties from each RTO community.

In addition to the joint study efforts with SPP and PJM, MISO performs studies, as needed, with neighboring entities of the Southeastern Regional Transmission Planning (SERTP) group and the Independent Electricity System Operator of Ontario (IESO). While the study process is less formal, MISO and these entities still meet regularly to review interregional issues and possible areas of collaboration.

Details on planning procedures, ongoing studies and stakeholder meetings can be found on the [Interregional Coordination](https://www.misoenergy.org/interregional-coordination) page of the MISO public website (misoenergy.org).



1.8 Project Types and Approval

MTEP Appendix A projects are vetted by MISO through the planning process, and project types are determined by criteria in MISO's Tariff. The following provides an overview of Tariff-defined project types:¹

- **Baseline Reliability Project (BRP):** Projects are network upgrades identified in the base case as required to ensure that the transmission system is in compliance with applicable North American Electric Reliability Corporation reliability standards and reliability standards adopted by Regional Reliability Organizations, and applicable within the transmission provider region. Baseline Reliability Project costs are allocated to the local Transmission Pricing Zone(s) and recovered through Attachment O by the Transmission Owner(s) developing the projects.
- **Generator Interconnection Project (GIP):** New transmission access projects that are associated with interconnection of new generation or the capacity modification of existing generation. Costs are primarily paid for by the interconnection customers, with certain exceptions as specified in Attachment FF. Costs of network upgrades rated at 345 kV and above are eligible for 10 percent cost recovery from load on a systemwide basis.
- **Market Efficiency Project (MEP):** Projects meet Attachment FF requirements for reduction in market congestion and are eligible for regional cost allocation. Projects qualify as Market Efficiency Projects based on cost and voltage thresholds and are developed to produce a benefit-to-cost ratio of 1.25 or greater. Costs are distributed to benefiting pricing zones, in accordance with Attachment FF of the Tariff.
- **Market Participant Funded Project (MPFP):** Projects are defined as Network Upgrades fully funded by one or more market participants, but they are owned and operated by a Transmission Owner.
- **Multi-Value Project (MVP):** Projects meet Attachment FF requirements to provide regional or subregional public policy, economic or reliability benefits. Costs are shared with loads and export transactions in proportion to energy withdrawals or export schedules. The LRTP Tranche 2.1 portfolio is an example of this type of project.
- **Other:** Projects to address local reliability issues and/or provide local economic benefit, which do not qualify as Baseline Reliability Projects, New Transmission Access Projects, Targeted Market Efficiency Projects, Market Efficiency Projects, or Multi-Value Projects. Project costs are allocated to the local Transmission Pricing Zone(s) and recovered through Attachment O by the Transmission Owner(s) developing the projects.

¹ Additional details on project types are in Section 2.3.1 of the Business Practices Manual.



- **Targeted Market Efficiency Project (TMEP):** Projects are designed to alleviate historical market-to-market congestion between MISO and PJM Interconnection, while meeting certain cost and construction requirements. The costs of Targeted Market Efficiency Projects are allocated first between MISO and PJM Interconnection by the ratio of each RTO's Day-Ahead and Excess Congestion Fund congestion, offset by historical market-to-market payments. The MISO share of costs for the project is then allocated to beneficiaries using historical nodal load congestion contribution data.
- **Transmission Delivery Service Project (TDSP):** Projects are required to satisfy a transmission service request. The costs are generally assigned to the requester.

MISO staff formally recommends a set of projects to the MISO Board of Directors for review and approval after all projects have been posted for transparency, MISO has completed its independent review of proposed projects for need or no-harm as applicable, and staff has addressed any stakeholder feedback received. These projects make up Appendix A of the MTEP report and represent the preferred solutions to the identified transmission needs of the MISO transmission planning process.