



2025 MISO VALUE PROPOSITION

ANNUAL AND FORWARD VIEW



SEPTEMBER 2026

Highlights

- MISO's market efficiencies and regional coordination delivered an estimated \$7.6 billion in 2025 annual benefits, with cumulative benefits surpassing \$57 billion since 2007. For every dollar spent on MISO membership, participants realize \$21 in benefits. The Forward View shows value could increase \$4 billion every 5 years leading to a \$24 billion benefit in 2045.
- MISO updated the framework used to calculate benefits to strengthen the alignment between MISO's core services and member value by evolving metrics to reflect real system conditions and actual market outcomes.
- The Value Proposition reflects the benefits created by centralized functions no individual member or state could replicate alone, including coordinated commitment and dispatch, shared reserves and capacity, and regional transmission planning across 15 U.S. states and Manitoba.



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MESSAGE FROM THE PRESIDENT & CEO

MISO's vision is to be the most value-creating, reliable Regional Transmission Organization (RTO). Our ultimate responsibility is reliability, but we also have a proud history of creating value for our region during our 25 years of being the nation's first FERC-approved Regional Transmission Organization. MISO's Value Proposition has served as the "scorecard" to measure and communicate the benefits of MISO membership, enabled by MISO and member coordination and the optimization of grid assets across the region.



For most of that time, the grid operated under relatively stable conditions: demand grew slowly, reliability risk was concentrated in summer peaks, and the resource mix shifted gradually. But over the last several years, the world has changed dramatically, and those assumptions no longer hold. Demand is growing rapidly, driven by data centers, manufacturing expansion, and electrification. Reserve margins have tightened, and the resource mix is evolving quickly as the system integrates a growing share of renewable resources whose contributions are weather-dependent. The variability of these resources poses new and evolving operational risks, which now extend across all seasons, particularly winter cold-weather events.

Together, these dynamics significantly increase uncertainty and operational complexity in the region. MISO's role as the regional grid operator is to manage and navigate these growing risks. Our work to coordinate the design and implementation of the market, operations, and technological solutions required to enable diverse member plans creates additional value for the region compared to the more stable and much less challenging past. This has necessitated a refresh of our Value Proposition methodology to ensure the results more fully capture and reflect how value is created today.

Between 2007 and 2024, over \$50 billion in value was created in the region, using the historical calculation methodology. An additional \$7.6 billion in benefits were calculated for 2025. This is significant, especially at a time when cost pressures are elevated. Collectively, through our partnership and coordination, MISO and members continue to make a positive impact on the region, and I very much appreciate the strong partnerships and tight coordination with our members and states that make this possible.

A handwritten signature in blue ink, reading "JRB", with a stylized flourish extending from the end.

John R. Bear
President and Chief Executive Officer



EXECUTIVE SUMMARY

The energy landscape has rapidly and fundamentally changed. The resource fleet has evolved to include significantly more variable, weather-dependent resources, a trend that is expected to continue. The frequency and scale of extreme weather events have increased. Uncertainty is present across a larger number of variables. Operational complexity has grown significantly. Longstanding risks are evolving, and new risks are emerging. And the return of load growth, driven by large digital and manufacturing loads, will require faster, bigger solutions to these challenges going forward.

MISO's Value Proposition quantifies the benefits of MISO's planning and operations functions for the 45 million customers in our footprint. While the grid has evolved over the years, our methodology to measure MISO's value has remained largely consistent. This consistency has supported stakeholder familiarity with the process and simplified comparison of results year-over-year. However, the magnitude of recent changes to the grid now requires a change in our approach. Over the last few months, MISO tested assumptions, reviewed best practices from other regions, and incorporated stakeholder feedback to ensure we are communicating a clear and comprehensive picture of the value of MISO membership in the current energy landscape.

The updated Value Proposition includes a new benefit category reflecting the impact of the collaborative regional transmission planning process that MISO enables, estimated at \$1.6 billion in 2025. While the Regional Transmission Planning benefit category is new to the Value Proposition, the benefits themselves are already vetted. The Value Proposition aggregates benefits from MISO's business cases for the Multi-Value Project (MVP) and Long-Range Transmission Planning (LRTP) Tranche 1 and 2.1 portfolios. The 2025 benefits reflect facilities that were energized in 2025, and as additional projects enter service, the benefits will evolve.

MISO's approach to the Managing Efficient and Reliable Operations benefit category has been updated to better reflect the realities of operating an increasingly tight system. The revised methodology, inspired by the Western Energy Imbalance Market, leverages real market data to better capture the impact of time-varying fuel prices and offers, generator and transmission outages, extreme weather, and forecast uncertainty. Compared to our past approach that assumed normal system conditions, accounting for these factors substantially increases the estimated benefits of MISO's centralized commitment, dispatch, and ancillary services to \$3.1 billion in 2025.

The Supporting Cost-Effective Resource Investments benefit category has been updated to reflect the evolution of MISO's Resource Adequacy construct. The benefit calculation now reflects capacity savings during each zone's tight season under the seasonal Resource Adequacy construct. The calculation has also been updated to consistently reflect the cost of capacity imports to MISO given tighter reserve margins across the Eastern Interconnection. And, to improve alignment across different MISO assessments, benefits in this category now reflect the Gross Cost of New Entry parameter reviewed through MISO's stakeholder process and used in the Planning Resource Auction each year. The combined impact of these changes is to reduce the capacity benefit to \$3.3 billion in 2025.



We have also made some small changes to the naming of our benefits categories to better align them with the core services that MISO provides. The Supporting Cost-Effective Resource Investments benefits category includes the benefits previously captured as Reduced Need for Assets. The Managing Efficient and Reliable Operations category includes the benefits previously captured as Optimization of Existing Assets and System Management. And the Regional Transmission Planning benefit category is new this year.

Under the new framework and calculation methodologies, participation in MISO yielded nearly \$8 billion in value for the region in 2025 across all benefit categories. Adjusting for MISO's costs to deliver that value results in \$7.6 billion in net benefits to the region. The redesigned Value Proposition also describes categories of value that are not currently amenable to robust, transparent estimation. These include integration of large loads and emerging technologies, coordination with neighboring regions, enabling state policies and member goals, and broader economic effects, including employment and tax revenue.

The report also includes projections of future value as the energy landscape continues to shift, referred to as the Forward View. MISO last included forward projections in the 2021 Value Proposition. This update revises the forward methodology to align it with the new framework, ensuring both components of the Value Proposition rest on a consistent basis. Estimated net benefits in 2035 are \$16 billion, increasing to \$23.8 billion in 2045.



OVERVIEW

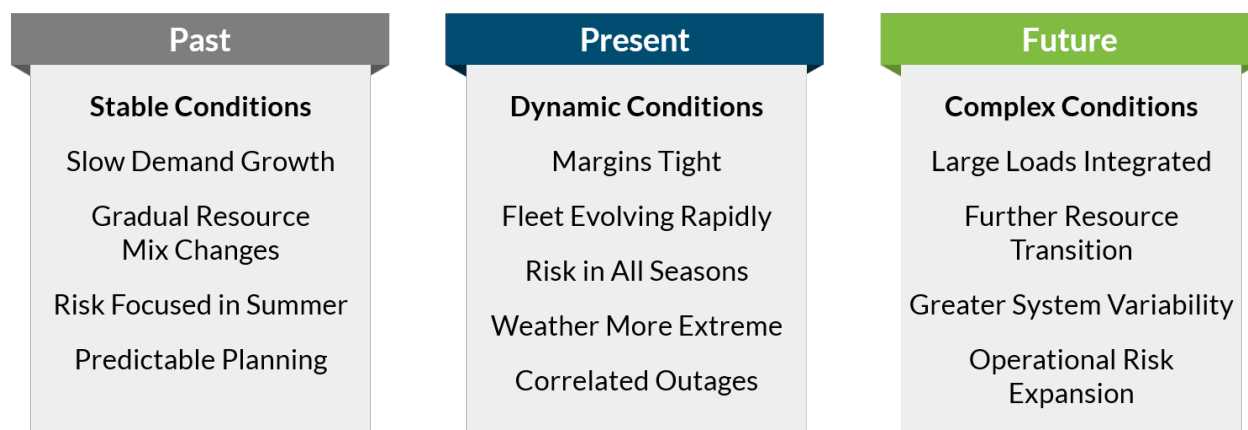
Purpose of MISO Value Proposition

The Value Proposition measures the financial benefits MISO's regional planning and operations provide to its members and the 45 million people they serve. It compares the cost of operating the grid under MISO's centralized markets, planning, and operations against a "without MISO" counterfactual in which utilities operate independently and at a smaller scale; the difference, net of MISO's costs to deliver its services, is the annual value created by MISO and member coordination. MISO has calculated the Value Proposition annually since 2007, and the measured benefit has grown over that period as MISO's footprint, services, and innovative solutions have expanded.

The Value Proposition is a practical reference for members and states within MISO's footprint: a measure of the value of MISO participation that supports their own decision-making. It reflects the benefits created by centralized functions no individual member or state could replicate alone, coordinating commitment and dispatch across 15 U.S. states and the Canadian province of Manitoba, sharing reserves and capacity across a diverse region, and planning transmission at a regional scale. It does not set energy policy or direct particular resource choices; it measures the benefits that result when members and states execute their own plans through MISO's markets and planning processes.

Evolving the Value Proposition to Capture the Impacts of the Changing Energy Landscape

The conditions in which MISO operates have changed materially, and the pace of change is accelerating.



The Value Proposition framework was built for the grid and landscape of the past, not the challenges being faced today or the significantly higher complexity of tomorrow. Since 2007, the Value Proposition has received incremental updates while the fleet has evolved significantly, risks have expanded, and



operating complexity has increased. Meanwhile, MISO's response to the changing landscape under its Reliability Imperative has created new sources of value through market redefinition, transmission planning, and operational enhancements. Left unrevised, the framework would include assumptions that no longer reflect how the system operates, ignore new value drivers that have emerged, and communicate an incomplete picture of the benefits created through MISO and member collaboration and coordination.

MISO therefore undertook the most significant update to the Value Proposition since 2007 to develop a framework that we feel more accurately measures MISO's benefits and remains a credible, durable tool.

Overview of Redesign

The most visible change is structural: the updated framework organizes benefits around MISO's three core services rather than the categories used in prior years, connecting each measured benefit directly to the function that produces it. While prior versions of the Value Proposition reported benefits in categories such as system management, optimization of existing assets, and reduced need for assets, the updated framework organizes these benefits around MISO's three core services. The specific benefits within each, what changed in how they are measured, and the reasoning are detailed in the Benefits sections that follow.

- **Managing Efficient and Reliable Operations** captures the value of MISO's competitive energy and ancillary services markets, which lower production costs by coordinating mutually beneficial trade, scheduling the grid efficiently, and managing reliability events across the footprint. This category also reflects the value of consolidated compliance.
- **Supporting Cost-Effective Resource Investments** captures the value members and states realize by drawing on resource and load diversity across a large region. Coordinated reliability assistance allows members to carry lower planning reserves, reduce capacity investments, and procure a more cost-effective supply mix while maintaining reliability. This category includes resource capacity sharing, renewable siting, and demand response.
- **Regional Transmission Planning** captures the value of transmission planned and built at the regional scale, which provides access to lower-cost power, enhances reliability, and reduces the need for localized investment. This is a new benefit category not accounted for in prior versions of the Value Proposition.

Two further features of the redesign apply across these categories. First, because the framework now measures a broader set of benefits, particularly by adding transmission planning alongside an enhanced energy and ancillary services calculation, the Value Proposition and transmission planning studies were reviewed together to identify and remove any overlapping benefits. A limited overlap was identified between the renewable siting benefit and the Multi-Value Project wind benefit, and an adjustment was made to avoid double-counting; no other overlapping benefits were identified. The two analyses measure distinct effects and are therefore additive: the Value Proposition measures the incremental benefit of moving from a non-RTO to an RTO structure while holding transmission constant, while the transmission planning studies measure the value of adding transmission while holding the market structure constant.

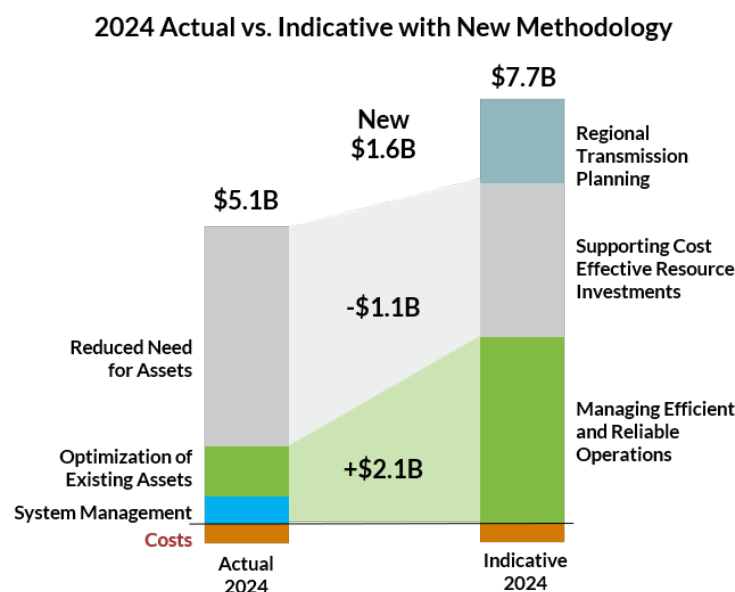


Second, the redesign also identifies categories of value that are not yet quantified because robust, transparent methods for measuring them are still being developed. These include coordination with neighboring regions, the open-access interconnection queue, integration of large loads and emerging technologies, enhanced reliability sharing, public health benefits from lower emissions, and broader economic effects, including employment and tax revenue. These are discussed qualitatively in this report and may be incorporated into future updates as methods mature.

Previously, an Improved Reliability value was reported in the Value Proposition, but has been removed. It was determined that these benefits are better captured in both the Transmission Planning benefit and in Managing Efficient and Reliable Operations; to separately calculate a value would introduce double counting of the benefits MISO brings to enhance reliability.

Reference to 2024 Benchmark

Because the updated methodology changes how several benefits are measured, the 2025 result cannot be compared directly to figures reported in prior years. A higher or lower number could reflect the change in method rather than any change in the value MISO delivered. To separate those two effects, MISO recalculated the 2024 benefit using the updated methods. This provides a like-for-like reference point with the same year, measured two ways. Applied to 2024, the updated methodology results in net benefits of approximately \$7.7 billion, compared to approximately \$5.1 billion under the prior methodology, an increase of about \$2.6 billion. This increase reflects the consolidation of value measures that were previously communicated separately and the more comprehensive and holistic nature of the refreshed methodology, and it is the net result of several changes that move in different directions.



Three changes drive the difference. The move to a market-informed energy and ancillary services approach that reflects real-world conditions such as extreme weather, forecast uncertainty, outages, and real-time rebalancing raises measured market value by about \$2.1 billion. These figures are indicative at



this stage, informed by peer RTO studies, and are partly offset by a production cost adjustment tied to MISO's capacity construct. The new regional transmission planning category adds about \$1.6 billion of value that the prior framework did not measure. And aligning the capacity benefit with MISO's Gross Cost of New Entry and the binding season, with improved firm-import accounting, lowers it by about \$1.1 billion to a more defensible estimate.

Interpretation Considerations and Normalization Guide

The Value Proposition is a useful reference, but it is an estimate built on a counterfactual, and its figures are most informative when read with an understanding of what they do and do not represent. This section sets out the considerations that should accompany any use of the results.

The result depends on the "without MISO" counterfactual

Every benefit is measured against an estimate of how the region would reasonably operate today without MISO, not a return to pre-MISO conditions. That counterfactual already assumes meaningful coordination: economic trade between utilities; capacity reserve sharing at the Local Resource Zone rather than at the individual balancing-authority level; existing regional reliability structures for ancillary reserves; and continued construction of local and reliability-driven transmission, with Multi-Value Projects attributed only to MISO's regional planning. Because the result compares against an estimate rather than an observed alternative, its assumptions matter, and reasonable parties may weigh them differently.

Benefits are measured on a production cost basis, not market prices

The energy and ancillary services benefit is the reduction in total systemwide production cost, not market price times volume. This matters when interpreting high-price periods: scarcity and inframarginal rents during tight conditions are transfers between participants, not net system benefits. High prices during an extreme event, therefore, do not by themselves indicate a large benefit; the benefit lies in the lower actual cost of serving the load.

Greenhouse gas benefits are reported separately

Avoided greenhouse gas emissions are reported in both metric tons and dollars but excluded from the net benefit total, reflecting that members and states place different value on emissions outcomes. Readers should weigh these figures according to their own priorities rather than as part of the headline number.

Some categories are quantified; others are described qualitatively

The total includes only benefits MISO can quantify with a defensible methodology. Other real sources of value, including seam coordination with other ISOs/RTOs, the open-access queue, large-load and emerging-technology integration, public health, and broader economic effects, are described qualitatively. The quantified total is therefore a conservative measure that omits benefits not yet captured, not a complete accounting of MISO's value.



Comparing across years requires a consistent basis

Results under the prior methodology are not directly comparable to those under the updated one. The appropriate baseline for year-over-year comparison is the 2024 figure recalculated under the updated methodology; comparisons that mix methods reflect changes in measurement, not in delivered value.

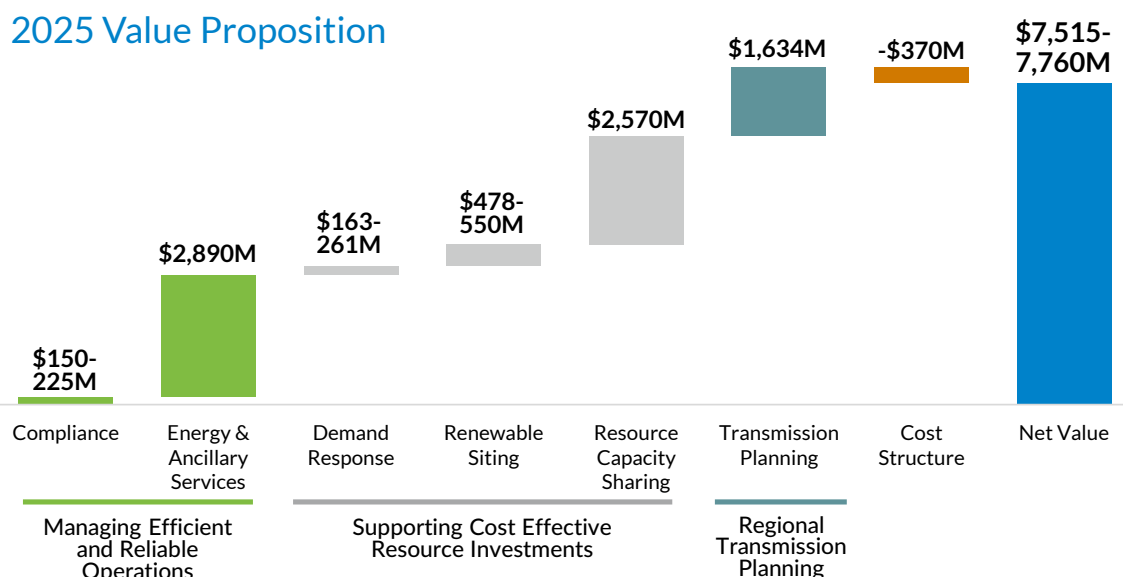
Normalizing for comparison across systems

Absolute totals reflect system size, so comparing MISO's figure directly to another region can mislead; normalizing to system size (for example, dollars per megawatt-hour) improves comparability. On that basis, MISO's benefits are broadly comparable to peer operators across most categories, with the largest difference in energy and ancillary services. Normalization does not remove the caveat that categories' measurement approaches differ meaningfully; differences in methodology, market design, and regional circumstances still affect what each figure represents.



2025 VALUE PROPOSITION RESULTS

The updated Value Proposition calculation methodology finds that approximately \$8 billion in value was created in the MISO Region. Subtracting MISO's costs to deliver that value results in \$7.6 billion in net benefits. This corresponds to a benefit-to-cost ratio of approximately 21:1, meaning members received \$21 in value for every dollar spent on MISO. These benefits are distributed as follows:

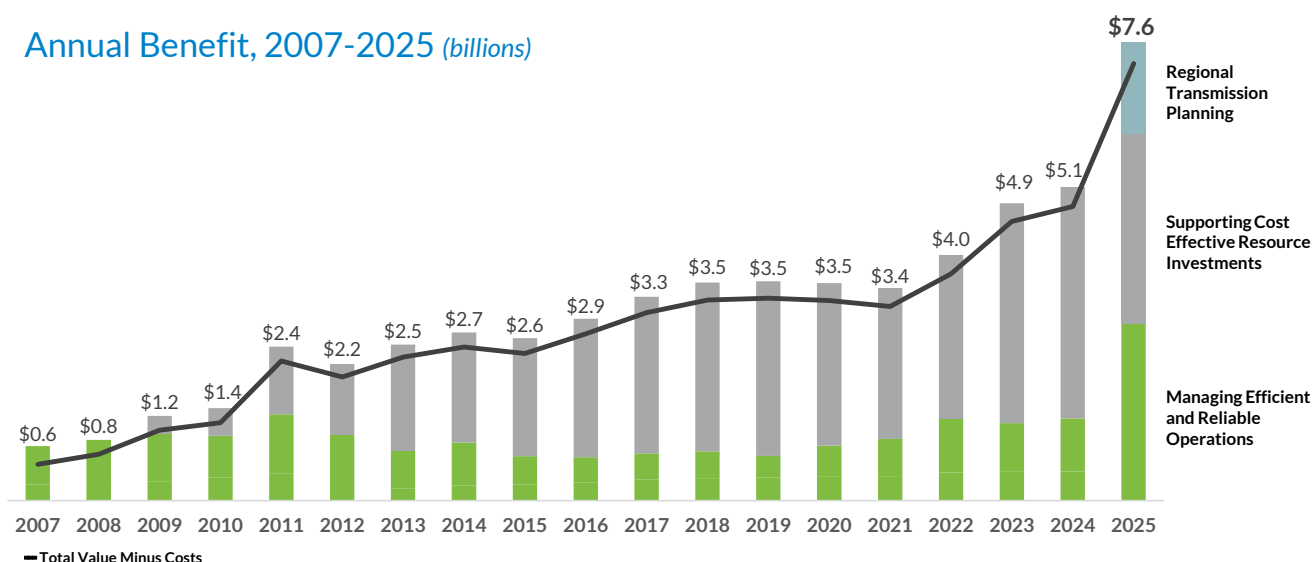


In addition to these benefits, MISO's market operations are estimated to have produced approximately \$611-\$744 million in avoided greenhouse gas emissions, valued at \$32 per metric ton and equivalent to roughly 19.1-24.2 million metric tons. Consistent with the treatment described elsewhere in this report, these emissions benefits are reported separately and are not included in the net benefit total above, recognizing that members and states across the footprint place different value on them. For more information on MISO emissions, explore the new [Grid Emissions Dashboard](#).

This is the first full application of the updated framework. Because the methodology changes move in different directions, raising the measured value of some services while reducing or reclassifying others, the 2025 metric breakdown is not directly comparable to results reported in prior years. While the methods are not directly comparable, the figure below illustrates the annual value MISO brings over time. Summing up the historical benefits with the new 2025 results yields a \$57.6 billion cumulative evaluation.



Annual Benefit, 2007-2025 (billions)



Managing Efficient & Reliable Operations

This category measures the value MISO's competitive energy and ancillary services markets create by lowering the cost of serving load. Through centralized day-ahead and real-time commitment and dispatch across a very large region, MISO coordinates trade so that lower-cost resources serve demand wherever they sit in the footprint; the benefit is the reduction in the region's total production cost relative to a "without MISO" case in which utilities largely commit and dispatch on their own.

The category also reflects the value of consolidated compliance, which represents efficiencies gained through consolidating and coordinating compliance efforts. These efficiencies include reductions in full-time employees (FTEs) involved with standards development and compliance with FERC, NERC, the Tariff, and system planning and operations.

2025 Value

MISO estimates the value of Managing Efficient & Reliable Operations in 2025 at approximately \$3.1 billion, reflecting the updated market data methodology described above.

Managing Efficient and Reliable Operations			
\$Millions	Low	Value	High
Compliance	\$150	\$187	\$225
Energy and Ancillary Services	\$2,890	\$2,890	\$2,890
Total Annual Benefit	\$3,040	\$3,077	\$3,115

What changed?

The prior approach to Energy and Ancillary Services relied on production cost modeling built on weather-normal, perfect-foresight conditions, which understated the value created under the conditions hardest



for individual utilities to manage — extreme weather, forecast uncertainty, unexpected outages, fuel price variability, and real-time rebalancing. The updated methodology instead uses historical market data, so the value reflects how the system actually behaved, including under stress. The "without MISO" case is built in three steps: 1) independent unit commitment on day-ahead forecasts (with a hurdle rate for self-supply), 2) optimized inter-area trade (with a hurdle rate for point-to-point transaction costs), and 3) independent real-time balancing against MISO's actual centralized dispatch. It also adds a production cost offset for MISO's capacity construct. Because the MISO-enabled capacity savings leave the system operating tighter, the method accounts for the associated higher production costs, so the energy benefit is not overstated.

MISO's energy and ancillary services benefit is also reduced by an adjustment that keeps it consistent with the capacity savings reported in the next category, so the two are not counted twice. In the without MISO comparison, a lack of added capacity would drive up production costs. To accurately reflect that the capacity additions calculated in the Capacity Sharing benefit were allocated to each Local Resource Zone to account for the additional units available in a without MISO scenario. This adjustment lowers the measured benefit by approximately \$172 million, and the value reported here is net of it.

Supporting Cost-Effective Resource Investments

This category measures the value that members and states realize by drawing on resource and demand diversity across a large region to meet reliability obligations with less investment than they would need to do so alone. Because demand peaks and resource availability do not perfectly coincide across a 15-state footprint, the region has less capacity than the sum of what each member would need in isolation; the benefit is the avoided cost of that capacity.

It comprises three benefits: resource capacity sharing (lower planning reserves through regional reliability assistance), renewable siting (lower investment when resources are sited where they perform best across the region), and demand response (the value of auction price signals that inform demand-response investment and operation). Avoided capacity equals the reduction in required capacity — the difference between the reserves the region must carry with MISO, and the larger amount individual zones would need without it, valued at the cost of new entry for a reference resource.

2025 Value

MISO estimates the value of Supporting Cost-Effective Resource Investments in 2025 at approximately \$3.3 billion, reflecting the updated valuation and the reclassification of the transmission-enabled portion of the renewable siting benefit.

Supporting Cost Effective Resource Investments			
<i>\$Millions</i>	Low	Value	High
Demand Response	\$163	\$212	\$261
Resource Capacity Sharing	\$2,570	\$2,570	\$2,570
Renewable Siting	\$478	\$514	\$550
Total Annual Benefit	\$3,211	\$3,296	\$3,381



What changed?

Demand Response has been refined to better isolate the incremental value of MISO-enabled demand response, using PRA-cleared demand response relative to a historical baseline and applying 25% and 40% enablement scenarios. The updated approach also focuses on each Local Resource Zone's tightest season, converts deferred UCAP to ICAP, and compares the resulting avoided capacity costs against the estimated cost of MISO-enabled DR to calculate net benefits.

Three changes align Resource Capacity Sharing benefits with MISO's business practices and current conditions. It is now valued using the Gross Cost of New Entry from MISO's Planning Resource Auction, updated annually through the stakeholder process, rather than an external technology database, the largest single driver of the change. The calculation is now based on the season that drives investment needs rather than a four-season average, since the binding period is no longer always the summer peak. And firm-import accounting was improved so that the capacity already available to a zone is reflected correctly in the counterfactual. Separately, the portion of the renewable siting benefit attributable to regional transmission was reclassified under Regional Transmission Planning to avoid double-counting.

Regional Transmission Planning

This category measures the value of transmission planned and built at the regional scale. Value that would not arise without MISO, where transmission is planned by individual utilities on a smaller scale. A more robust regional system gives members and states access to lower-cost power, captures more of the gains from trade and resource diversity, enhances reliability, and reduces localized investment. It is a new benefit category that the prior Value Proposition did not measure.

Benefits are drawn directly from MISO's existing business cases, including the Multi-Value Project portfolio and Long Range Transmission Planning Tranches 1 and 2.1. They are translated into annual values by allocating the share of each portfolio's benefits and revenue requirements attributable to projects in service that year, using actual in-service dates for completed projects and estimates for the rest; year-specific costs are taken from MISO's Schedule 26-A. The counterfactual assumes local and reliability-driven transmission would still be built without MISO, so only MISO-enabled regional projects are counted.

2025 Value

MISO estimates the value of Regional Transmission Planning in 2025 at approximately \$1.6 billion, reflecting the share of the Multi-Value Project and Long Range Transmission Planning portfolios in service during the year. This benefit is expected to grow as additional projects come online, and revenue requirements decline.

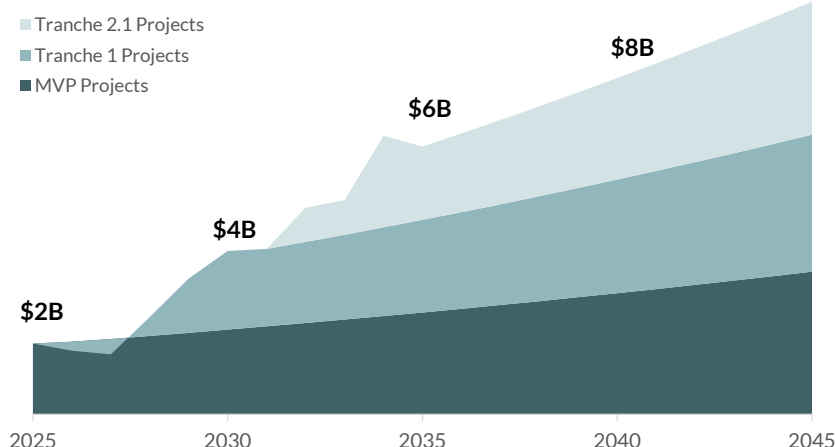
Regional Transmission Planning	
<i>\$Millions</i>	Value
Total Annual Benefit	\$1,634



What changed?

This category is itself the principal change. Transmission planning was not previously counted, and adding it recognizes the value that MISO's planning process already delivers. The benefits are adopted without modification from the transmission studies, so they reflect values already vetted through MISO's stakeholder-driven planning process rather than a separate calculation.

Net Benefits of Transmission



The categories were also reconciled to remove overlap, meaning the renewable siting and Multi-Value Project wind benefits were adjusted, and the transmission-enabled portion of renewable siting moved here. Otherwise, the Value Proposition and transmission studies measure distinct, additive effects: the value of an RTO with transmission held constant, versus the value of adding transmission with market structure held constant.

Cost Structure

MISO's cost structure component of the Value Proposition consists of four categories, totaling \$370 million in 2025. Membership costs are expected to rise, particularly in the near term, as MISO adapts to the changing resource mix. Growing complexity in supporting member plans and maintaining reliable operations are driving the need to expand MISO's capabilities through additional staffing, concentrated efforts to reduce vacancies, and increased reliance on external services to deliver the Reliability Imperative. Despite rising costs, MISO anticipates that the benefits-to-cost ratio will continue to rise as states and members leverage market and planning efficiencies. The benefits-to-cost ratio for MISO membership for 2025 is 21:1.

2025 Adjustments and Drivers

Annual costs were \$370 million in 2025, up from \$340 million in 2024, driven by greater complexity, expanded scope, inflation and labor market pressures. Scope and complexity are expected to continue rising to meet evolving member plans and maintain reliable operations. Additionally, external environmental factors – such as inflation, tightening labor markets influencing merit and promotion increases, federal interest rate changes, supply chain challenges, and vendor pricing pressures also significantly influence MISO's budget.

2025 Cost Structure

\$Thousands

Schedule 10	\$233,865
Schedule 16	\$14,785
Schedule 17	\$121,977
Schedule 31	\$156

Annual Cost	\$369,783
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Qualitative Benefits

Beyond the quantified benefits, MISO provides value that is meaningful but difficult to measure. The review identified several such categories that are not assigned a dollar value here because robust, transparent methods are still being developed; consistent with stakeholder feedback, they are described qualitatively and may be quantified in future updates. Their exclusion is one reason the net total is a conservative measure of MISO's value.

- **Integration of Large Loads and Emerging Technologies**
As our members seek to integrate large new loads and as new generation and storage technologies enter the system, MISO's regional frameworks help integrate them while reducing the associated reliability risk across the footprint. This provides value that no single utility could capture on its own.
- **Seams Coordination**
MISO coordinates operations and planning with neighboring regions, including through its joint operating agreements with PJM and SPP. Coordinating at the boundaries between systems, rather than relying on individual agreements between utilities or balancing authorities, helps manage congestion, converge prices across regional borders, and dispatch the most cost-effective generation available. This coordination is especially valuable during unexpected outages and severe weather, when the ability to move power across the footprint and the broader interconnection supports reliability for MISO members and neighboring systems alike.
- **Enabling State Policies and Member Goals**
MISO's markets and planning processes provide the infrastructure that members and states use to carry out their own resource and policy decisions. MISO does not set energy policy or direct resource choices; it enables those choices to be executed reliably and at a regional scale, allowing members and states to pursue their individual goals while drawing on the benefits of regional coordination.
- **Broader Economic Effects**
Regional coordination and the investment it supports contribute to employment, tax revenue, and economic activity across the footprint. These wider economic effects are real but fall outside the production-cost and investment framework used to quantify benefits.

MISO intends to continue working with stakeholders to determine which of these categories can be credibly quantified and to incorporate them into the Value Proposition as transparent methodologies become available.

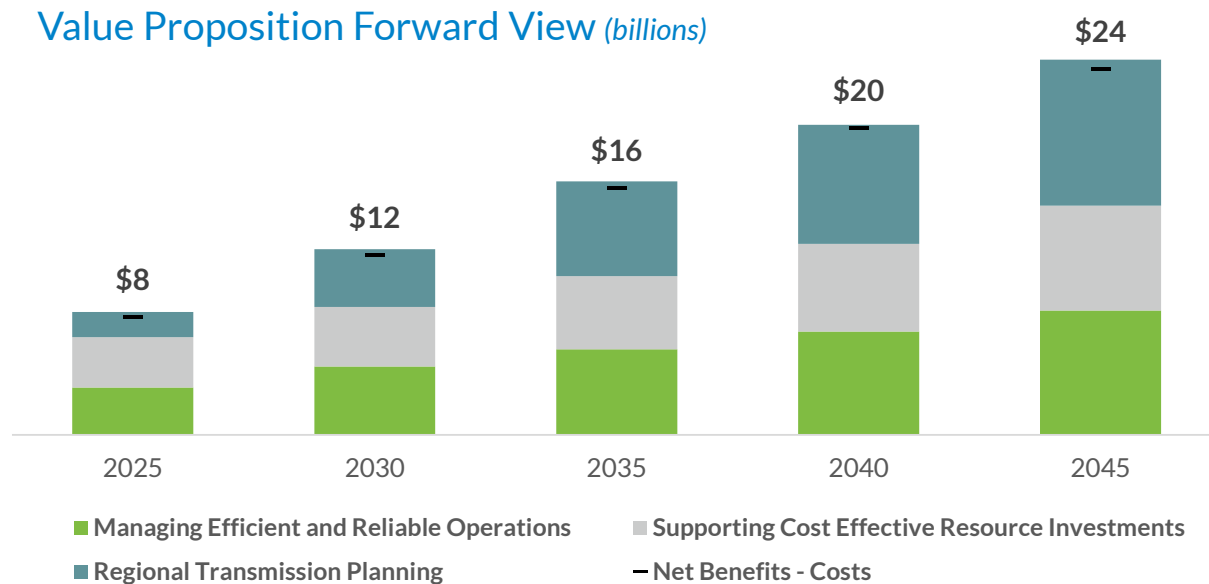


VALUE PROPOSITION FORWARD VIEW

The Value Proposition also looks forward, projecting how MISO's value is expected to develop as the landscape changes. This update revises the forward methodology to align with the retrospective framework, ensuring both rest on a consistent basis. The projection gives members and states a view of the trajectory to inform their own planning, recognizing that any forecast of future conditions carries greater uncertainty than a measure of a year that has already occurred.

Two features stand out. First, direction: net benefits are projected to grow over the horizon as load increases and regional transmission projects enter service. Second, composition: the updated framework projects a different distribution than the prior Forward View, which was primarily driven by benefits in Supporting Cost Effective Resource Investments, and is now more evenly distributed among each benefit category. Additionally, the benefits of Regional Transmission Planning have been added, significantly increasing projected benefit values compared to the prior method. This reflects the same methodology changes carried forward: capacity realignment, the new transmission category, and the reclassification of regionally enabled resource value into transmission.

Value Proposition Forward View (*billions*)





TECHNICAL APPENDIX

Third Party Advisory

MISO contracted with The Brattle Group to provide an independent economic framework and valuation methodology that quantifies the long-term economic value of transmission and market improvements. As the economic consultant responsible for developing the methodology used to monetize system benefits, The Brattle Group helped MISO decide:

- Which categories of benefits should be included
- How those benefits should be measured
- How engineering outputs are converted into dollar values
- How these benefits should be projected over time and presented in the Value Proposition

Calculation Summary

Compliance

This methodology quantifies the annual compliance-related labor savings that MISO provides to its members. The calculation recognizes that many compliance functions—historically performed individually by Transmission Owners (TOs) and Local Balancing Authorities (LBAs)—are centralized within MISO. By consolidating these activities, members avoid dedicating their own staff time to compliance tasks, resulting in measurable labor-hour and cost savings.

The methodology accounts for compliance activities that MISO performs centrally on behalf of its members, including tasks related to:

- Tariff compliance (e.g., Order 1000)
- NERC compliance
- System operations compliance
- Forward markets compliance

These activities historically required substantial labor allocations at the individual-member level. By shifting responsibility for these activities to MISO, each TO and LBA experiences a reduction in internal Full-Time Equivalent (FTE) labor requirements.

Key Inputs and Data Sources

1. **Number of Affected Members (TOs and LBAs):** Annual counts of TOs and LBAs within the MISO footprint are sourced from publicly available attachments (Attachment FF-3 and Attachment VV) and entered as annual snapshots. In 2025, there are:

61 TOs



39 BAs

2. **FTE Savings per TO and per LBA:** A simplified FTE assumption—developed in the 2025 Value Proposition redesign—estimates the number of FTEs saved annually due to MISO’s centralized compliance activities. The simplified assumption replaces historical size-modifier adjustments with fixed TO and LBA values derived from multi-year averages (2018–2024). For 2025:

TOs: 6–8 FTEs saved annually

LBAs: 8–10 FTEs saved annually

Annual Hours per FTE: Hours per FTE are standardized at:

40 hours/week × 52 weeks/year = 2,080 hours/year.

3. **Cost of Labor (\$/hour):** Labor cost assumptions are reviewed annually by the Finance department and incorporate internal labor rates plus weighted external engineering and compliance contractor rates. For 2025, the weighted hourly cost ranges from:

Low: \$106.47/hour

High: \$123.10/hour

Calculation Framework

The methodology first estimates the annual compliance hours saved for TOs and LBAs separately. For TOs, total hours saved are calculated by multiplying the number of TOs by the estimated full-time equivalent (FTE) savings per TO and then converting the FTE savings to hours using 2,080 hours per FTE per year. The same approach is applied to LBAs by multiplying the number of LBAs by the estimated FTE savings per LBA and converting those savings to annual hours. Under the 2025 assumptions, this results in approximately 761,280–1,015,040 annual hours saved for TOs and 648,960–811,200 annual hours saved for LBAs.

The total annual compliance hours saved are determined by combining the TO and LBA savings, providing the basis for estimating the overall compliance benefit. To monetize these savings, the total hours saved are multiplied by the assumed hourly labor cost, producing estimated annual labor cost savings for each stakeholder group and for the combined total. Based on the 2025 assumptions, the aggregate compliance benefit is estimated to range from approximately \$150.14 million to \$224.82 million.

Demand Response

This methodology describes the framework used to quantify the benefits that MISO provides to its members through demand response (DR) programs. The approach is structured to estimate the



incremental capacity value, cost savings, and net benefits attributable to MISO's market mechanisms that enable DR resources.

Key Inputs and Data Sources

The analysis relies on the following datasets and assumptions:

1. **Demand Response (DR) Cleared in the Planning Resource Auction (PRA):** Seasonal DR capacity cleared for each Local Resource Zone (LRZ), representing the amount of demand response recognized for resource adequacy.
2. **Baseline Demand Response:** Historical estimates of DR that would have existed in the absence of MISO's market, derived from resource adequacy plans and transitional planning auctions.
3. **MISO Enablement Factors:** Assumed percentages of incremental DR attributable to MISO's market, evaluated under two scenarios:
 1. **Low Case:** 25% enablement
 2. **High Case:** 40% enablement
3. **Demand Response Supply Costs:** Estimated using a hierarchy of PRA offer prices, conduct thresholds (typically 10% of Gross CONE), and auction clearing prices (ACP) to provide a conservative estimate of actual DR program costs.
4. **Gross Cost of New Entry (CONE):** LRZ-specific annualized capital cost of new generation capacity used to monetize deferred capacity.
5. **ICAP/UCAP Ratios:** LRZ-specific Installed Capacity (ICAP) to Unforced Capacity (UCAP) conversion factors used to convert deferred UCAP into an equivalent ICAP value.
6. **Tight Season Identification:** The season in each LRZ with the highest Loss of Load Expectation (LOLE), or, when necessary, the highest non-coincident peak load, representing the period when deferred capacity provides the greatest reliability value.

Calculation Framework

The methodology evaluates the value of demand response by estimating the amount of capacity that can be deferred due to MISO-enabled DR and comparing that value against the cost of procuring the DR resource. For each LRZ and season, the incremental DR enabled by MISO is calculated as the difference between the DR cleared in the PRA and the baseline DR level, multiplied by the assumed enablement factor. The analysis focuses on the identified tight season for each LRZ because this is when additional capacity provides the greatest reliability benefit.

The annual cost of DR is estimated by annualizing the daily supply cost and allocating only the portion associated with MISO-enabled DR during the tight season. The deferred DR capacity is then converted from UCAP to ICAP using the applicable ICAP/UCAP ratio and monetized using the corresponding Gross CONE value, representing the avoided annual cost of constructing new generation capacity. Finally, the annual DR supply cost attributable to the MISO-enabled portion is subtracted from the monetized value of deferred capacity to estimate the net benefit. This process is performed under both the Low (25%) and High (40%) enablement scenarios to capture a reasonable range of potential benefits.



Additional Notes

The methodology is designed to be conservative, ensuring that only the incremental value directly attributable to MISO's market is credited.

All assumptions regarding enablement percentages, cost floors/ceilings, and seasonal tightness are based on industry best practices and regulatory filings.

Resource Capacity Sharing

This appendix documents the analytical framework used to quantify the resource capacity sharing benefits that MISO provides to its members. The methodology evaluates how participation in a larger, coordinated footprint reduces the amount of generating capacity each LRZ would otherwise need to meet reliability requirements on a standalone basis.

Key Inputs and Data Sources

The analysis uses the following datasets, assumptions, and planning parameters to estimate the capacity benefits of regional resource sharing under MISO.

1. **Zonal Coincident Peak Forecast (ZCPF):** Forecasted demand coincident with each LRZ's peak load, used to calculate stand-alone Local Reliability Requirements (LRRs).
2. **Coincident Peak Forecast (CPF):** Forecasted zonal demand coincident with the MISO system peak, used to calculate Planning Reserve Margin Requirements (PRMRs).
3. **Transmission Losses (TL):** Seasonal transmission losses associated with both the ZCPF and CPF forecasts.
4. **Local Reliability Requirement (LRR) Factors:** LRZ-specific reserve margin factors, expressed on a UCAP basis, representing the capacity required above forecasted demand to satisfy the applicable Loss of Load Expectation (LOLE) reliability criterion.
5. **Planning Reserve Margin (PRM):** The MISO-wide planning reserve margin, expressed on a UCAP basis, used to determine coordinated reserve requirements.
6. **Loss of Load Expectation (LOLE) Studies:** Seasonal reliability studies used to establish LRR factors, identify binding reliability seasons, and validate seasonal consistency.
7. **ICAP/UCAP Ratios:** Seasonal conversion factors derived from forced outage rate studies that convert avoided Unforced Capacity (UCAP) into equivalent Installed Capacity (ICAP).
8. **Gross Cost of New Entry (Gross CONE):** LRZ-specific annualized capital cost of constructing a reference combustion turbine, used to monetize avoided capacity.
9. **Peak Demand and Transmission Data:** Seasonal peak load forecasts and transmission characteristics used to validate tight season selection and account for regional transmission diversity.



Calculation Framework

The methodology estimates the value of regional resource sharing by comparing the capacity that each LRZ would be required to maintain independently with the capacity requirement under coordinated MISO planning. First, seasonal stand-alone Local Reliability Requirements (LRRs) are calculated using zonal coincident peak forecasts, associated transmission losses, and LRZ-specific reliability margin factors. Separately, seasonal Planning Reserve Margin Requirements (PRMRs) are calculated using coincident peak forecasts at the time of the MISO system peak, transmission losses, and the MISO-wide planning reserve margin.

For each LRZ, the analysis identifies the binding tight season, defined as the season in which the difference between the stand-alone LRR and the coordinated PRMR is greatest. Tight season selection is informed primarily by seasonal LOLE results and supplemented with engineering judgment when peak demand or transmission constraints indicate a different binding season. The avoided capacity attributable to MISO participation is then calculated as the difference between the stand-alone LRR and coordinated PRMR during the identified tight season.

The avoided UCAP is converted to an equivalent ICAP value using seasonal ICAP/UCAP ratios, ensuring consistency with capacity cost metrics. The ICAP reduction is then monetized using LRZ-specific Gross CONE values to estimate the annual avoided cost of new generation capacity. Finally, benefits are aggregated across all LRZs to estimate the footprint-wide value of coordinated capacity planning under MISO.

Additional Notes

To ensure robust results, the methodology incorporates several quality assurance checks, including validation of seasonal LRR and PRMR patterns against LOLE studies, conservative treatment of seasons with very low reliability risk, consideration of transmission constraints that may alter the binding season, and cross-checks against seasonal peak demand patterns. These checks help ensure that estimated benefits are driven by underlying reliability conditions rather than anomalies in the input data.

Renewable Siting

This appendix documents the methodology used to quantify the renewable siting benefits attributable to MISO. These benefits arise from the ability of MISO's regional transmission planning and market coordination to support renewable resource development across a broader geographic footprint than would be possible under state-by-state or purely local planning. The following sections describe the analytical framework, key data inputs, calculation steps, and assumptions used to estimate annual and cumulative wind and solar capacity savings, avoided capital investment, and associated revenue-requirement reductions.



Key Inputs and Data Sources

The renewable siting analysis uses the following datasets, assumptions, and economic parameters to estimate the benefits of regional renewable development within the MISO footprint.

1. **Renewable Build Forecasts:** Annual wind and solar capacity additions under both the local siting scenario and the MISO-enabled regional siting scenario.
2. **Technology Cost Parameters:** Technology-specific capital costs (\$/MW) and annual revenue requirement percentages used to convert avoided capital investments into annualized benefits. Low and high cost trajectories are included to capture uncertainty in future technology costs.
3. **Regional Allocation Factors:** Fixed allocation factors used to distribute benefits between MISO North/Central and MISO South based on historical renewable development patterns.
4. **Transmission Cost Offsets:** Annual estimates of avoided transmission investments associated with regionally optimized renewable development, included for the years in which these offsets apply.
5. **Discount Rate Assumptions:** Base, low, and high discount rates, including real discount rate adjustments, used to convert future annual benefits into present value terms.
6. **Multi Value Project (MVP) Data:** Estimates of incremental wind capacity enabled by the MVP transmission portfolio, together with associated capital costs, annual revenue requirement assumptions, and transmission cost offsets.
7. **Solar Siting Assumptions:** Fixed percentage reductions used to estimate the portion of solar capacity savings attributable to regional siting, reflecting the lower geographic variability of solar resources relative to wind.

Calculation Framework

The methodology estimates the benefits of regional renewable siting by comparing two development scenarios. The local siting scenario assumes each state satisfies its renewable energy requirements using resources developed solely within its own boundaries, while the MISO-enabled regional siting scenario allows renewable resources to be developed anywhere within the MISO footprint. Regional optimization enables higher-quality wind and solar resources to be selected and increases geographic diversity, thereby reducing the total installed renewable capacity required to achieve equivalent energy and policy objectives.

Annual renewable capacity savings are calculated as the difference between the installed capacity required under the local and regional siting scenarios for both wind and solar resources. Because these avoided capacity additions persist over time, annual savings are accumulated to determine cumulative avoided capacity. The cumulative capacity savings are then monetized by applying technology-specific capital costs to estimate avoided capital investments, which are subsequently converted into annual benefits using the applicable annual revenue requirement percentages. Where applicable, avoided transmission investment offsets are incorporated into the annual benefit calculation, and all future benefits are discounted to the selected base year to estimate their present value.



The methodology also allocates benefits between MISO North/Central and MISO South using fixed regional allocation factors that reflect historical renewable development patterns. A separate component evaluates the incremental wind development enabled by the Multi Value Project (MVP) transmission portfolio by estimating additional wind capacity, associated avoided capital investments, annual carrying costs, and transmission cost offsets. Solar benefits are calculated using the same general approach but incorporate simplified allocation assumptions that recognize the lower geographic variability of solar resources.

To account for uncertainty in future economic conditions, the analysis evaluates both low and high scenarios using alternative assumptions for technology capital costs, annual revenue requirement percentages, and discount rates. Quality assurance procedures are incorporated throughout the analysis to verify the consistency of renewable build forecasts, annual revenue requirement calculations, cumulative capacity savings, and regional benefit allocations. The resulting estimates quantify the reduction in renewable capacity requirements, avoided capital expenditures, annual carrying cost savings, and long-term present value benefits attributable to regional renewable siting under MISO coordination.

Additional Notes

The methodology quantifies how MISO's regional coordination reduces the amount of renewable capacity needed to meet policy goals and load requirements. These capacity savings yield measurable reductions in capital spending and annual carrying costs for wind and solar projects. Additional benefits arise from MVP-enabled wind development and selected transmission cost offsets. Final reported values include both annual and cumulative effects and incorporate economic discounting to support long-term comparison.

Energy and Ancillary Services

This appendix summarizes the analytical framework used to estimate the Energy & Ancillary Services (E&AS) benefits attributable to MISO operations. It provides a high-level description of the counterfactual simulation design, required data inputs, optimization framework, and benefit calculation logic.

The E&AS Benefit metric quantifies how MISO's centralized coordination of unit commitment, dispatch, ancillary services, and transmission access reduces production costs relative to a modeled "Without MISO" counterfactual.

The metric is calculated as the difference in Adjusted Production Cost between:

With MISO Actual (WA): Market-based dispatch using actual historical commitments, flows, and settlements.

With MISO Simulated (WS-RT): Modeled real-time balancing case using MISO-wide coordination.



Without MISO (WO-UC / WO-RT): Counterfactual redispatch and AS procurement performed independently by each LBA under transmission constraints.

The counterfactual removes MISO-wide coordination and instead simulates independent dispatch for each LBA. This is implemented through a structured redispatch and ancillary service adjustment process:

1. Redispatch Logic

Each LBA executes local redispatch driven by:

- Local load and historical generator offers.
- Locally assigned ancillary service requirements, typically set ~10% higher than MISO-wide levels in the counterfactual.
- Transmission limits using TTC and hurdle rate-based trade constraints based on actual flows.
- Redispatch is performed in both Day-Ahead (DA) and Real-Time (RT), with hourly commitment checks and 5-minute redispatch in RT.

2. Ancillary Services

- **With MISO:** AS are centrally cleared.
- **Without MISO:** AS requirements are computed locally per LBA (Regulation, Spin, Supplemental, Short-Term), usually higher than coordinated values.

Key Inputs and Data Sources

The Energy and Ancillary Services benefit analysis uses historical market data, operational parameters, and simulated counterfactual market results to estimate the production cost savings attributable to MISO's centralized market operations.

1. **Historical Market Data:** Actual day-ahead and real-time market outcomes, including unit commitments, dispatch schedules, imports, exports, transmission losses, and market settlements.
2. **Generator Offer Data:** Historical energy offer prices and operating characteristics for each generating resource used in production cost and redispatch modeling.
3. **Ancillary Service Requirements:** Regulation, Spinning Reserve, Supplemental Reserve, and Short-Term Reserve requirements under both coordinated MISO operations and the counterfactual local balancing authority (LBA) scenarios.
4. **Transmission System Data:** Total Transfer Capability (TTC), transmission limits, historical power flows, import/export capabilities, and hurdle rate assumptions used to constrain energy transfers between balancing areas.
5. **Locational Marginal Prices (LMPs):** Load-weighted, generation-weighted, importing, and exporting LMPs used to calculate production costs, trade benefits, congestion impacts, and wheeling charges.
6. **Counterfactual Market Scenarios:** Simulated "Without MISO" market cases in which each LBA independently commits generation, procures ancillary services, and dispatches resources under local operating constraints.



Calculation Framework

The Energy and Ancillary Services benefit methodology quantifies the value of MISO's centralized market operations by comparing coordinated system dispatch with a modeled counterfactual in which each LBA operates independently. The analysis evaluates differences in Adjusted Production Cost (APC) between historical and simulated MISO operations and corresponding "Without MISO" scenarios. Under the counterfactual, each LBA independently commits generation, procures ancillary services, and dispatches resources using local reserve requirements and transmission constraints rather than regionally optimized market operations.

The counterfactual simulation performs redispatch in both the day-ahead and real-time markets using historical generator offers, local load forecasts, transmission transfer capabilities, and independently determined ancillary service requirements, which are generally higher than those under coordinated MISO operations. Energy balance, generator operating limits, reserve requirements, transmission constraints, import and export limits, wheeling charges, and hurdle rate rules are incorporated within a constrained unit commitment and economic dispatch model to represent realistic operating conditions under each scenario.

For each simulation interval, Adjusted Production Cost is calculated by combining production costs, import costs, export revenues, congestion refunds, trade benefits, and wheeling charges. The production cost savings attributable to MISO are determined as the difference between the counterfactual APC and the coordinated MISO APC. Benefits are calculated at five-minute intervals and aggregated to daily and annual values for each balancing area and across the MISO footprint. The analysis is implemented through a reproducible modeling framework that integrates historical market data, programmatic redispatch and production cost calculations, and validation against representative operating conditions such as periods of market volatility, low system load, and high renewable generation.

With MISO (WA):

APC = Production Cost
+ Import Cost
– Export Revenue
– Congestion Refunds

Without MISO (WO):

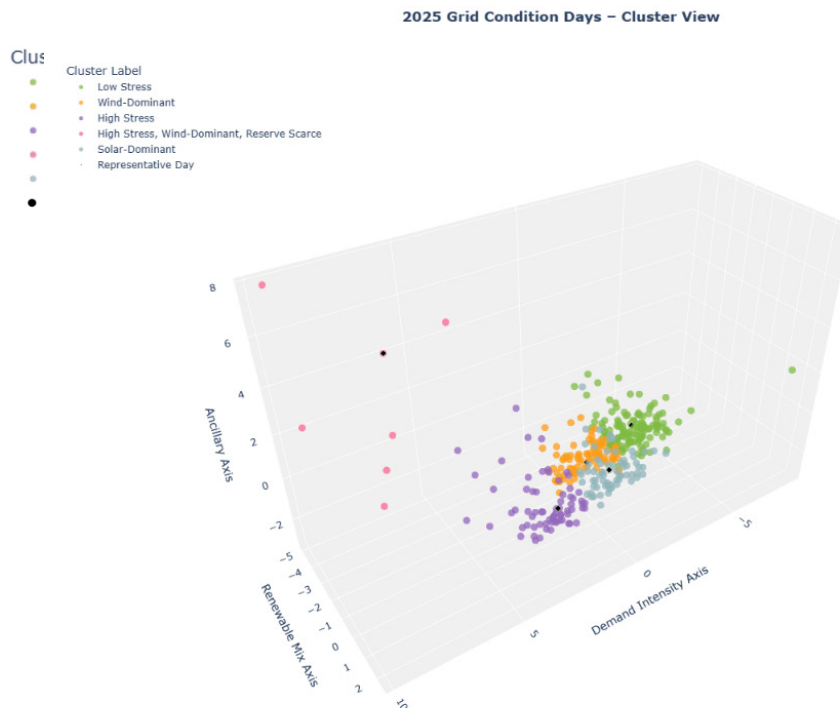
APC = Production Cost
+ Import Cost
– Export Revenue
– Benefits of Trade*
– Wheeling Charges*

*Trade benefits and wheeling charges are computed at the line and LBA level, using LMP differentials between importing and exporting LBAs.

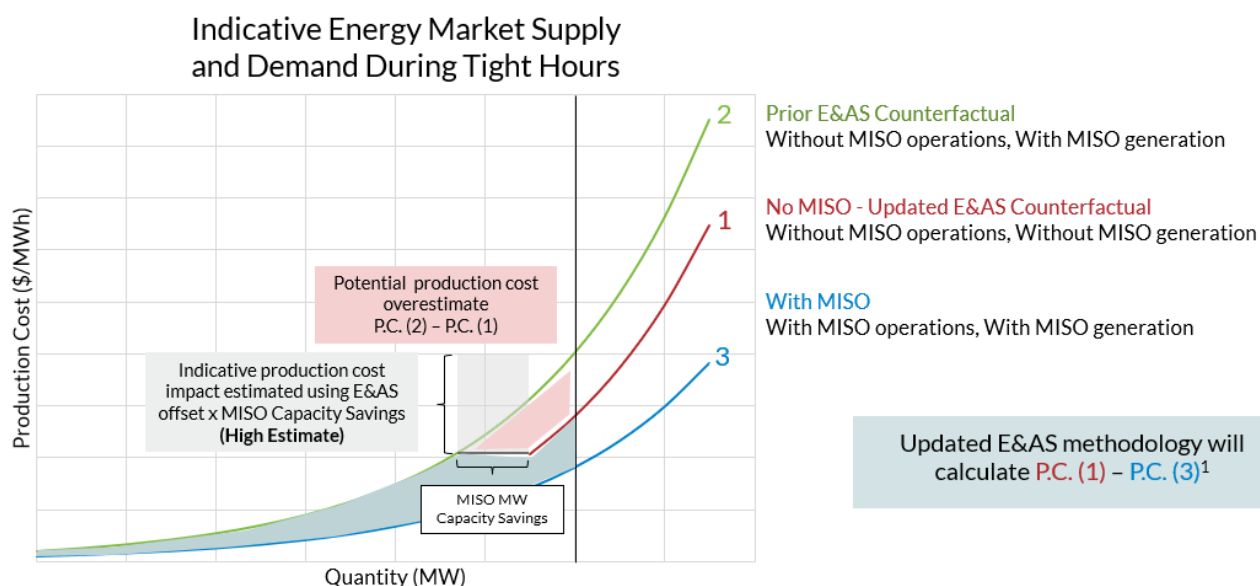


Additional Notes

To ensure robust results and reduce the likelihood of anomalous values, a method to categorize and simulate representative days was used. Under this methodology, only one average day per category (i.e., a max generation day, high renewable penetration day, etc.) was simulated. Using a subset of the market input data, dimension reduction, and a clustering technique, the day closest to the centroid of each cluster was evaluated. To obtain the annual value, the value of each day was multiplied by the size of its representative cluster.



Additionally, to account for the added capacity that exists in a without MISO world it was determined to allocate proxy units to each LRZ based on the capacity savings calculated in the Resource Capacity Sharing benefit metric. Each proxy unit was added to the without MISO simulation, and mimics the behavior of the average Combustion Turbine unit in that zone. This is illustrated in the graphic below, this graphic is illustrative of the offset however values along the axis are not precise.



Regional Transmission Planning

This methodology outlines the process used to quantify the annual benefits that MISO provides to its members through transmission planning initiatives. The approach is grounded in the Long-Range Transmission Planning (LRTP) and Multi-Value Project (MVP) benefit cases, which are designed to capture the value of transmission investments across multiple categories and phases.

Key Inputs and Data Sources

The transmission planning benefit analysis uses the following datasets, assumptions, and economic parameters to estimate the annual value of MISO's regional transmission investments.

- 1. Benefit Categories:** Annual estimates of congestion and fuel savings, avoided transmission investments, reliability improvements, environmental benefits, and avoided capacity or resource costs. Each benefit category is quantified in nominal dollars by year.
- 2. Project Tranches:** Transmission projects grouped into portfolios (e.g., MVP, LRTP Tranche 1, and Tranche 2.1), each with its own implementation schedule, benefit profile, and cost profile.
- 3. Project Phasing Information:** Annual in-service schedules and project completion percentages used to determine the portion of project benefits recognized each year.
- 4. Transmission Cost Recovery:** Annual revenue requirements for each project calculated using MISO's Schedule 26-A methodology, including applicable return on equity and depreciation assumptions.
- 5. Economic Assumptions:** Inflation indices, discount rates, and base-year conversion factors used to express benefits and costs in constant-dollar terms.



6. **Planning Study Results:** Benefit estimates derived from MISO's LRTP and MVP business cases, which incorporate standardized assumptions regarding fuel prices, congestion, system reliability, and environmental impacts.

Calculation Framework

The transmission planning methodology estimates the annual value of regional transmission investments by comparing the economic benefits provided by transmission projects against their associated annual revenue requirements. For each project tranche, annual gross benefits are calculated by summing the applicable benefit categories, including congestion and fuel savings, avoided transmission investments, reliability improvements, environmental benefits, and avoided capacity costs.

Because transmission projects are placed into service over multiple years, annual benefits are phased according to each project's construction schedule and percentage of facilities in service. This ensures that only the benefits attributable to operational assets are recognized during a given year and prevents benefits from being overstated before project completion. Annual transmission cost recovery is calculated using MISO's Schedule 26-A methodology and aligned with the same analysis period. Net annual benefits are then determined by subtracting annual transmission revenue requirements from the phased gross benefits.

To enable consistent comparisons across projects and years, all benefits and costs are converted to a common base-year dollar value using established inflation and discount rate assumptions. Annual net benefits are aggregated across all transmission projects and portfolios to estimate the system-wide value of MISO's transmission planning efforts while also supporting reporting by project tranche, benefit category, and analysis year. This framework provides a consistent approach for evaluating the incremental value of regional transmission investments as projects are placed into service.

Forward View Methodology

The Forward View develops a multi-year forecast of benefit values beginning with the 2025 baseline established in the updated Value Proposition methodology. This forecast extends projected benefits through future study years by applying two primary growth drivers: annual inflation and projected load growth. Each benefit category is assigned the scaling approach that best reflects the underlying driver of that benefit, ensuring that the projections remain consistent with expected system conditions.

All forward-year projections begin with the nominal 2025 benefit values, which serve as the anchor year for the analysis. These baseline values represent the expected benefits in 2025 before any adjustments for future economic or system growth are applied. From this starting point, benefits are escalated annually using either inflation, load growth, or a combination of both, depending on the benefit category.



Inflation Application

A constant annual inflation rate of **2.5%**, beginning in 2023, is incorporated throughout the methodology where appropriate. For categories that are directly inflation-sensitive, the 2025 baseline values are escalated using compounded annual inflation. For other benefit categories, inflation is already embedded within the underlying load forecasts or calculations, eliminating the need for a separate inflation adjustment. This approach ensures that future benefit values are represented in nominal dollars while avoiding double counting of inflation effects. MISO's costs are scaled using this same inflation rate.

Load Growth Application

Load growth is incorporated using one of two scaling factors: an Energy Load Growth Scaler or a Peak Load Growth Scaler. The Energy Load Growth Scaler is applied to benefits that vary primarily with annual energy consumption, such as Compliance, Energy and Ancillary Services, and Operations. These scaling factors are based on projected changes in MISO annual energy demand (MWh) and are used to proportionally increase benefit values over time. In contrast, the Peak Load Growth Scaler is applied to benefits that are driven by system peak demand rather than total energy consumption. Categories such as Resource Sharing and Demand Response rely on projected coincident peak demand (MW), making peak load growth the appropriate scaling metric for these benefits. For more information on current load growth assumptions, please refer to the [Long-Term Load Forecasting Workshop materials](#).

Category Mapping and Scaling Logic

Each benefit category is mapped to the scaling methodology that best reflects its underlying physical or economic driver. Benefits associated with energy production, market activity, or system utilization—including Compliance, Energy and Ancillary Services (excluding greenhouse gas impacts), Operations, and the base transmission benefit components—are scaled using energy load growth together with the applicable inflation assumptions. Benefits tied to reliability and capacity requirements, including Resource Sharing and Demand Response, are scaled using peak load growth. Renewable Siting is also categorized as a peak-driven benefit, although its projected values are offset to zero within the analysis. This mapping ensures that each benefit evolves in a manner consistent with the factors that influence its long-term value.

Additional Transmission Benefit Scaling Details

Transmission benefits are developed separately and consist of multiple components. Expected transmission benefits identified through the LRTP process are phased into the forecast based on the anticipated annual project costs and implementation schedule. Beginning in 2030, explicit greenhouse gas (GHG) benefit calculations are incorporated into the transmission benefit totals. Together, these components produce the annual transmission benefit estimates used in the Forward View.



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