

# Order No. 1000 & Cost Allocation

**Federal Energy Regulatory Commission**

Washington D.C.



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**The Organization of MISO States  
Cost Allocation Principles Committee**

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# Disclaimer

The views expressed are my own, and not the views of the Commission, any Commissioner, or the Chairman.



# Presentation Format

- Slides provide language and findings from Order No. 1000 and 1000-A.
- Most of the language in slides comes directly from the rule – I will explain my view of what that language means.
- Will focus on particular areas of interest and relevance and may not cover all topics in detail.
- Questions welcome at any time, but please use raise hand feature.



# Order No. 1000

- Areas of Reform Include:
  - Regional Transmission Planning
    - Applying Order No. 890 Transmission Planning Principles
    - Requirement to Develop a Regional Transmission Plan
  - Consideration of Transmission Needs Driven By Public Policy Requirements
  - Non-Incumbent Transmission Developer Reforms
    - Elimination of Federal Rights of First Refusal for “Selected” Projects
    - Creation of Competitive Transmission Development Process
  - Interregional Transmission Coordination
  - Regional and Interregional *Ex Ante* Cost Allocation Methods
    - Must Meet Six Cost Allocation Principles



# Today's Focus: Regional Cost Allocation

Transmission providers must explain how the costs of new transmission facilities ***selected in a regional transmission plan for purposes of cost allocation*** are to be allocated, consistent with the cost allocation principles of Order No. 1000.

- A “transmission facility selected in a regional transmission plan for purposes of cost allocation” is one that has been selected, pursuant to a Commission-approved regional transmission planning process, as a more efficient or cost-effective solution to regional transmission needs.
- The term “selected in a regional transmission plan for purposes of cost allocation” excludes a new transmission facility if the costs of that facility are borne entirely by the public utility transmission provider in whose retail distribution service territory or footprint that new transmission facility is to be located.



# Six Cost Allocation Principles

1. Costs must be allocated to those within the transmission planning region that benefit from those facilities in a manner that is at least roughly commensurate with estimated benefits.
2. Those that receive no benefit, either at present or in a likely future scenario, must not be involuntarily allocated any of the costs of transmission facilities.
3. If a benefit to cost threshold is used, must not be so high that transmission facilities with significant positive net benefits are excluded from cost allocation (i.e., may not exceed 1.25-to-1 absent further justification).
4. Must allocate costs solely within the transmission planning region unless another entity voluntarily agrees to assume a portion of those costs.
5. The method and data requirements for determining benefits and identifying beneficiaries for a transmission facility must be transparent, with adequate documentation to allow a stakeholder to determine how they were applied to a proposed transmission facility.
6. May use a different cost allocation method for different types of transmission facilities, such as transmission facilities needed for reliability, economics, or to achieve Public Policy Requirements. May not designate a type of transmission facility that has no regional cost allocation.



# Cost Causation Principle

The Commission has recognized that the cost causation principle provides that costs should be allocated to those who cause them to be incurred and those that otherwise benefit from them.

Requiring a beneficiaries pay cost allocation method or methods is fully consistent with the cost causation principle as recognized by the Commission and the courts.

- *For More Insight – See, e.g., Order No. 1000, 1000-A, and DC Circuit Opinion Upholding Order No. 1000.*



# Benefits and Beneficiaries

Regional Flexibility: Order No. 1000 does not prescribe a particular definition of “benefits” or “beneficiaries.”

- Beneficiaries include those that cause costs to be incurred or that benefit from a new transmission facility;
- Must be definite about benefits and beneficiaries for purposes of cost allocation methods;
- Must specify clearly and definitively the benefits and the class of beneficiaries;
- Must have identifiable benefits, and allocate the transmission facility cost at least roughly commensurate with the benefits;
- Must provide entities who will receive a cost allocation an understanding of the identified benefits on which the cost allocation is based.



# Project-By-Project or Group?

- May propose a cost allocation method that considers the benefits and costs of a group of new transmission facilities, although there is no requirement to do so.
- Does not require a showing that every individual transmission facility in the group of transmission facilities provides benefits to every beneficiary allocated a share of costs of that group of transmission facilities. However, it is required that the aggregate cost of these transmission facilities be allocated at least roughly commensurate with aggregate benefits
- A postage stamp cost allocation method may be appropriate where all customers within a specified transmission planning region are found to benefit from the use or availability of a transmission facility or class or group of transmission facilities, especially if the distribution of benefits associated with a class or group of transmission facilities is likely to vary considerably over the long depreciation life of the transmission facilities amid changing power flows, fuel prices, population patterns, and local economic considerations. Similarly, other methods that would allocate costs to a narrower class of beneficiaries may be appropriate, provided that the methods reflect an evaluation of beneficiaries and is adequately defined and supported by the transmission planning region.



# Generators as Beneficiaries

- The generator interconnection process and interconnection cost recovery are outside the scope of Order No. 1000.
- Public utility transmission providers in each transmission planning region, in consultation with their stakeholders, may consider proposals to allocate costs directly to generators as beneficiaries that could be subject to regional or interregional cost allocation.
- Any effort to assign costs to generators as beneficiaries as part of a regional cost allocation method must not be inconsistent with the generator interconnection process under Order No. 2003.



## Odds & Ends

- Public Policy Requirements are requirements established by local, state or federal laws or regulations (i.e., enacted statutes passed by the legislature and signed by the executive and regulations promulgated by a relevant jurisdiction, whether within a state or at the federal level.)
- Consistent with Cost Allocation Principle 6, cost allocation method(s) must address reliability, economic and public policy requirement-related transmission facilities that are selected in the regional transmission plan for purposes of cost allocation.
- Participant funding cannot be the Order No. 1000 cost allocation method, but it is not otherwise prohibited.
- Cost allocation and cost recovery are distinct – Order No. 1000 does not address matters of cost recovery.



# Questions?



# Transmission Planning

OMS Cost Allocation Principles  
Committee (CAPCOM)

October 19, 2020

# Executive Summary



- The MISO Transmission Expansion Plan (MTEP) provides a reliable and efficient plan through multiple coordinated planning processes and with transparent stakeholder engagement
- The final projects submitted in MTEP are those determined to best address an identified issue. MISO then applies a tariff-prescribed project categorization hierarchy with associated cost allocations

MISO transmission planning is comprehensive and aligns with the guiding principles of the MISO Board of Directors which incorporate similar principles as those of the OMS



### **Market access**

Provide access to electricity at the lowest total electric system cost



### **Cost allocation**

Ensure project costs are commensurate with planned benefits



### **Planning criteria**

Meet policy and transmission owner planning criteria while safeguarding local and regional reliability



### **Information exchange**

Analyze system scenarios and share with policy makers and stakeholders



### **Policy alignment**

Align planning for changing resources with state and federal policy



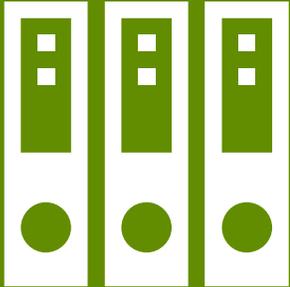
### **Regional coordination**

Plan with neighbors to eliminate barriers

# Certain conditions must be satisfied to implement a transmission plan

## Aligned Interests

Consensus on transmission required to address the footprint's collective needs



## Robust Business Case

Include an analysis of benefits and costs for each project



## Cost Allocation

Assign cost roughly commensurate with benefits

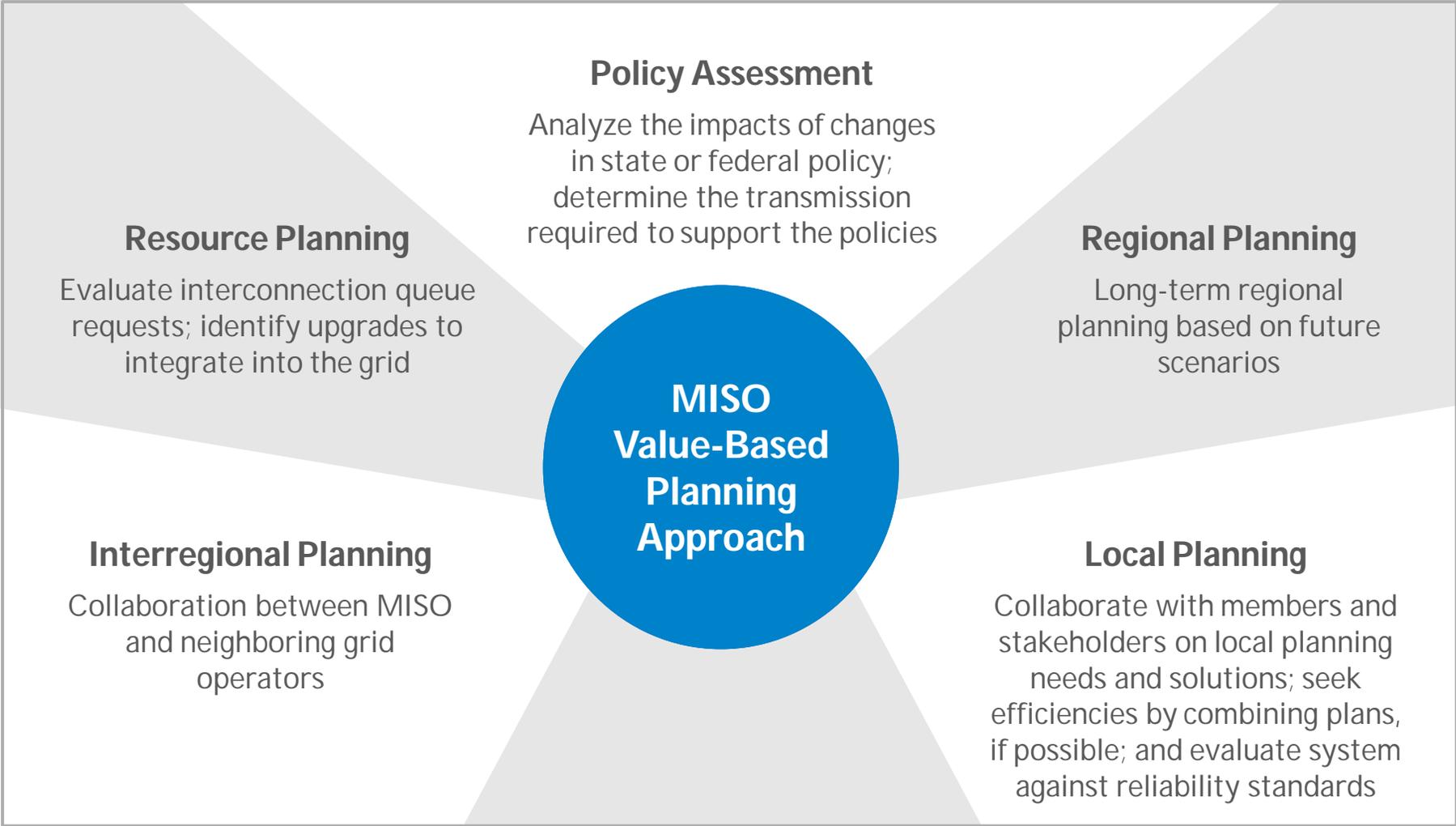


## Cost Recovery

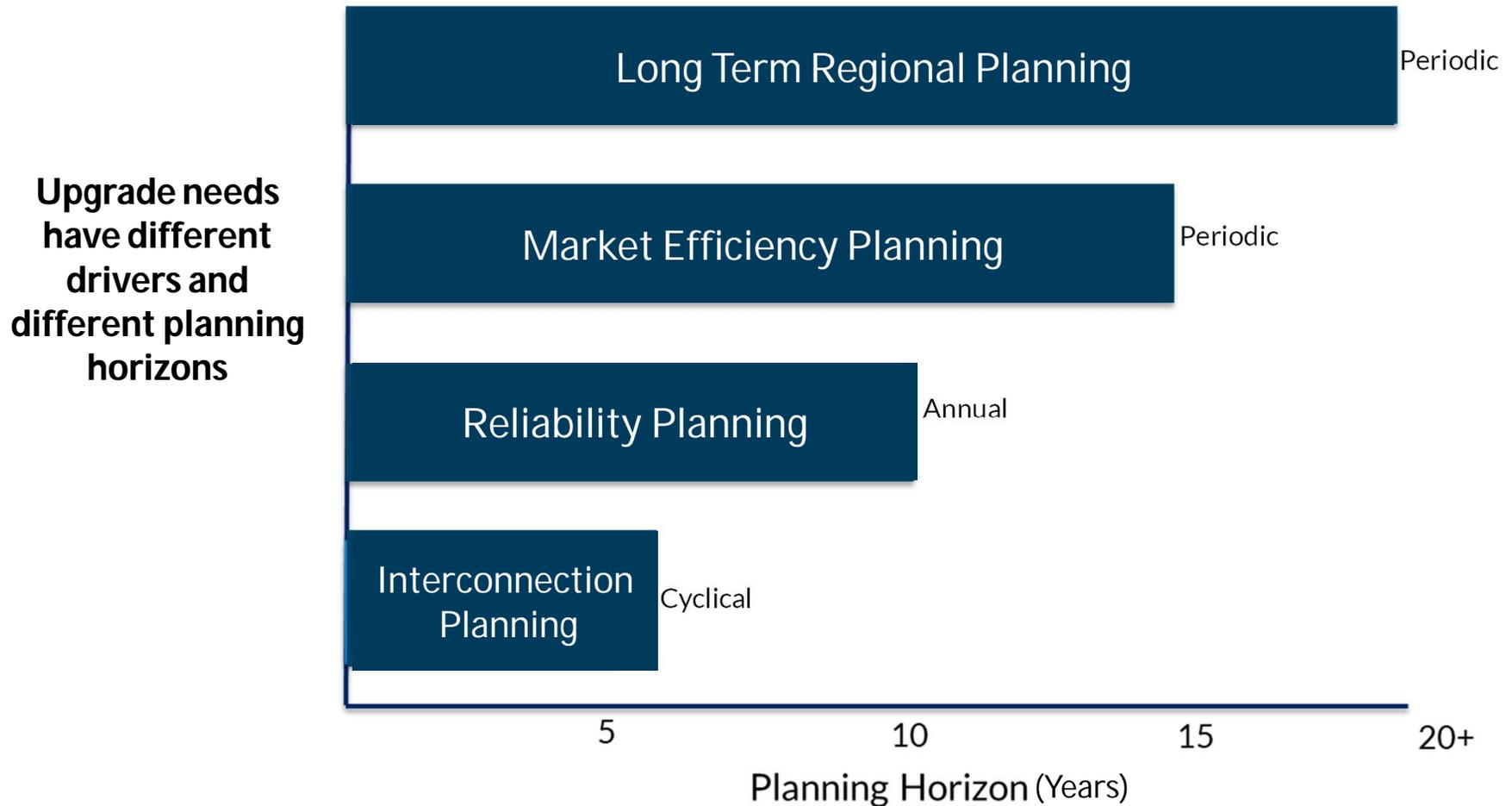
Reduce financial risk with recovery mechanisms



# MISO's planning process ensures local needs are integrated with regional requirements

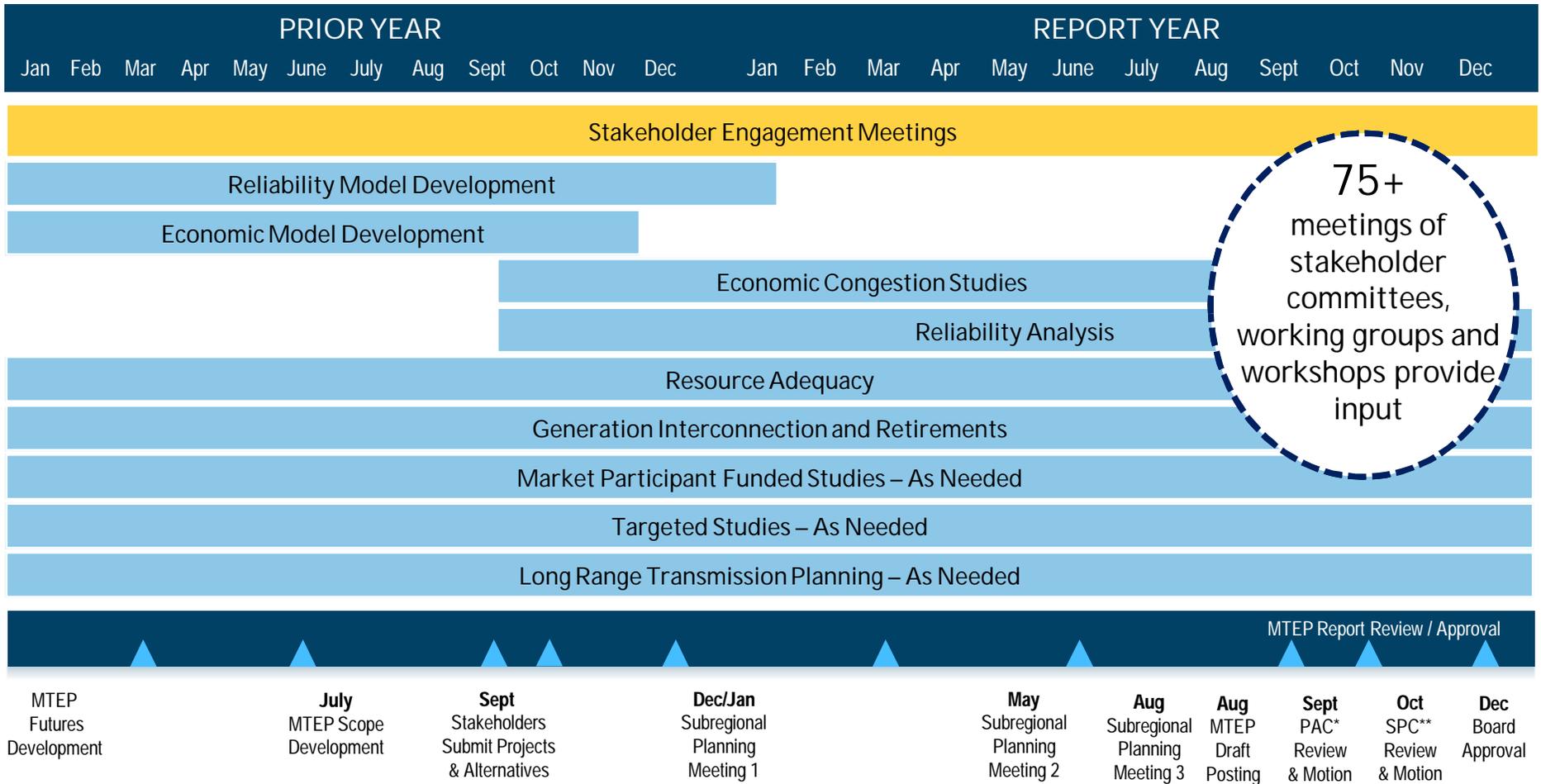


Transmission planning provides a comprehensive approach that covers short and long term needs to address generation additions, ongoing reliability, market efficiency and policy trends



# MTEP is developed in overlapping cycles and delivered annually

## Typical MTEP Cycle



75+ meetings of stakeholder committees, working groups and workshops provide input

▲ Board Meetings

\*Planning Advisory Committee; \*\*System Planning Committee



# Transmission planning activities culminate in the MISO Transmission Expansion Plan (MTEP)



In this MISO Transmission Expansion Plan, the Board of Directors recommends \$4.159 billion of new transmission expansion projects for construction, subject to Board of Directors' approval.

## Highlights

- 515 new projects for inclusion in Appendix A to address reliability and aging infrastructure
- \$24 billion in projects constructed in the MISO region since 2003
- Generator Interconnection queue grew to 720 projects totaling 109 GW



### Reliability through a Long-Range Lens

Our energy ecosystem is in a constant state of change shaped by established generation, as well as a technology renaissance centered around resources like battery storage, wind and solar power. Large business customer sustainability policies and member utility plans are driving this change. Furthermore, aging conventional units, and the addition of intermittent wind and solar resources, fundamentally change the characteristics of the resource base. While grid operators take strategic capability and uncertainty in the system for decision, MISO expects this to become more profound, making it more challenging to manage the region's energy supply, load and reserves. MISO has identified three key areas on which to focus: availability, flexibility and visibility.

It is imperative for MISO to evolve our market, operations and system planning to support investment and retirement decisions the states and utilities in our region are making today, while maintaining systemwide reliability and efficient operations going forward.

MISO received a clear message of urgency from its stakeholders, including resource owners, policy makers concerned with all customer classes, vendors and legal and account, asking MISO to move quickly to identify specific solutions enabling its diverse constituency to reach their goals during this fundamental industry transition.

MISO's energy risk has already changed considerably since 2005, and is expected to continue to do so.

It is critical to assess these events, evaluate the importance of resilient transmission system planning efforts in view of customer safety and inform both short-term and long-term decisions that will enable the resource portfolio shift. The fundamental planning includes a consensus that coordination is required to address sub-regional and collective needs, a deeper analysis of resource issues and solutions and ensuring allocation of cost that is roughly commensurate with benefits to each area.

By far, the biggest challenge is to build precisely what is needed for the future and avoid building too much or too little. Ultimately, transmission will play an important role in ensuring the deliverability of power to enable resources to work in concert with one another and provide grid stability and the increasingly regional flow of electricity. And, we must work more quickly towards best practices as impacts of the portfolio transition are already happening.

Traditional resources that have historically been used to balance the system are retiring.

Total Approved Substantive since 2005 (24.3 GW)

Resource Type	Percentage
Coal	2%
Nuclear	2%
Gas	2%
Hydro	2%
Wind	2%
Solar	2%
Other	2%
Unlabeled	70%

# Projects approved for MTEP are listed in Appendix A of the report and most typically consist of these project types

Transmission Studies | Resource Adequacy | Policy Landscape | Regional Energy Adequacy

## COMMON MTEP PROJECT CATEGORIES

Market Efficiency Projects	Baseline Reliability Projects	Generator Interconnection Projects	Transmission Deliverability Service Projects	Other Projects
Address market transmission congestion	Required to meet standards for both NERC and regional reliability	Needed to reliably connect new generation to the transmission grid	Enable transmission service	Address local reliability issues and/or provide local economic benefit

Stakeholder Input and Consideration

## Projects types are determined by criteria in MISO's Tariff

Project Type	Description	Allocation to Beneficiaries	Typical Process
<b>Multi-Value Project</b>	Above 100 kV and project cost of \$20 million or more, evaluated as part of a portfolio of projects and must meet one of three criteria	100% to load on a load-ratio share basis (postage stamp)	Longer-term, regional planning to accommodate policy, economics and reliability
<b>Market Efficiency Project</b>	230 kV and above and project cost of \$5 million or more, reduce market congestion when benefits are 1.25 in excess of costs	100% distributed to zones commensurate with expected benefit, based on the benefit metrics described in Attachment FF-7	Collaborative, regional study effort that identifies projects meeting a benefit cost ratio (typically via Market Congestion Planning Studies)
<b>Baseline Reliability Project</b>	NERC Reliability Criteria	100% allocated to local Transmission Pricing Zone	Local reliability studies to satisfy annual NERC requirements
<b>Generation Interconnection Project</b>	Interconnection Request	Primarily paid for by requestor; 345 kV and above 10% postage stamp to load	Externally driven as needed to interconnect specific projects
<b>Transmission Delivery Service Project</b>	Transmission Service Request	Directly assigned to Transmission Customer; (TO can elect to roll-in into local zone in some circumstances)	Externally driven, request based, as needed to provide requested service
<b>Participant Funded</b>	Projects that are funded by a Market Participant	The Market Participant funds the project. TO owns.	Projects requested and funded by a specific market participant and not already identified in MTEP processes. MISO does not verify need; simply confirms it will do no harm
<b>Other</b>	Project that does not qualify under other project categories	The costs of these projects are recovered in Transmission Pricing Zone	Part of MTEP general planning process and addresses either local reliability or economic efficiency need

# MISO's planning process works to identify the best project to solve an identified issue – then determine cost allocation

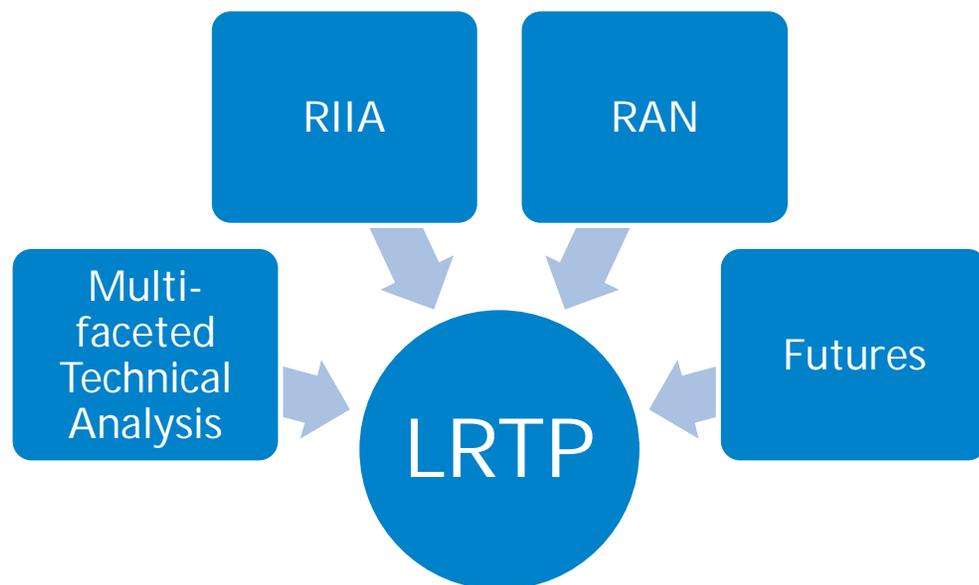
## Sample Projects from MTEP20 – no Market Efficiency Projects were identified in MTEP20

Geographic Location	Project ID	Project Name	Trigger/Process	Allocation Type	Qualify as MEP?
Ameren IL	19045	New Rivian Load Interconnection	<b>Local planning</b> - Provide 2 138kV lines to support customer load addition	<b>Other – Load Growth</b>	No
Duke Energy IN	18284	345kV 3-breaker ring bus substation	<b>GI process</b> - 300 MW wind farm interconnection studied in DPP	<b>GIP – 345kV Network</b> Upgrades qualify for 10% postage stamp based on load ratio share.	No
Entergy-MS	19287	Webb 115 kV: Substation Expansion (J908)	<b>GI process</b> - This project will expand the 115 kV Webb substation to facilitate the generation interconnection project J908.	<b>Generator Interconnection Project</b>	No
METC	19545	Grand Rapids Area Project	<b>Local planning</b> – Identified need to rebuild Tallmadge Wealthy 138 kV lines (1 and 2).	<b>Baseline Reliability Project</b>	No
Entergy-TX	13864 MTEP17	Hartburg – Sabine 500KV	<b>MCPS</b> – 500kV line resolves identified congestion with >1.25 benefit-to-cost ratio	<b>Market Efficiency Project</b>	Yes

# Long Range Transmission Plan (LRTP)

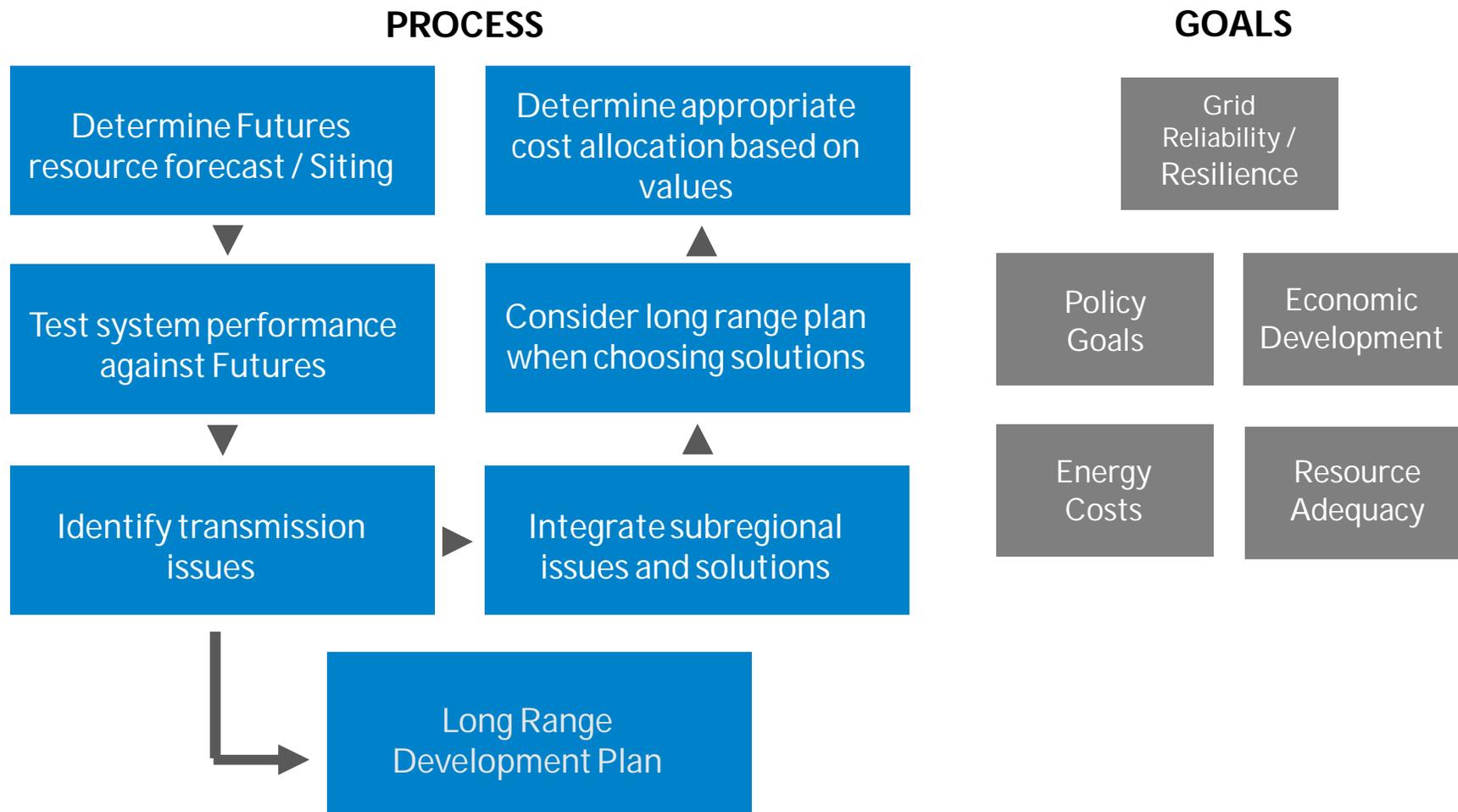
L RTP will be a comprehensive approach under MISO's Reliability Imperative to provide a transmission road map of grid evolution that will be the foundation to drive future investment decisions

L RTP will focus on several aspects of the grid – reliability, stability, robustness, resiliency, system diversity, economics, and challenges associated with operating the system with the changing fleet (as identified in RIIA and RAN)

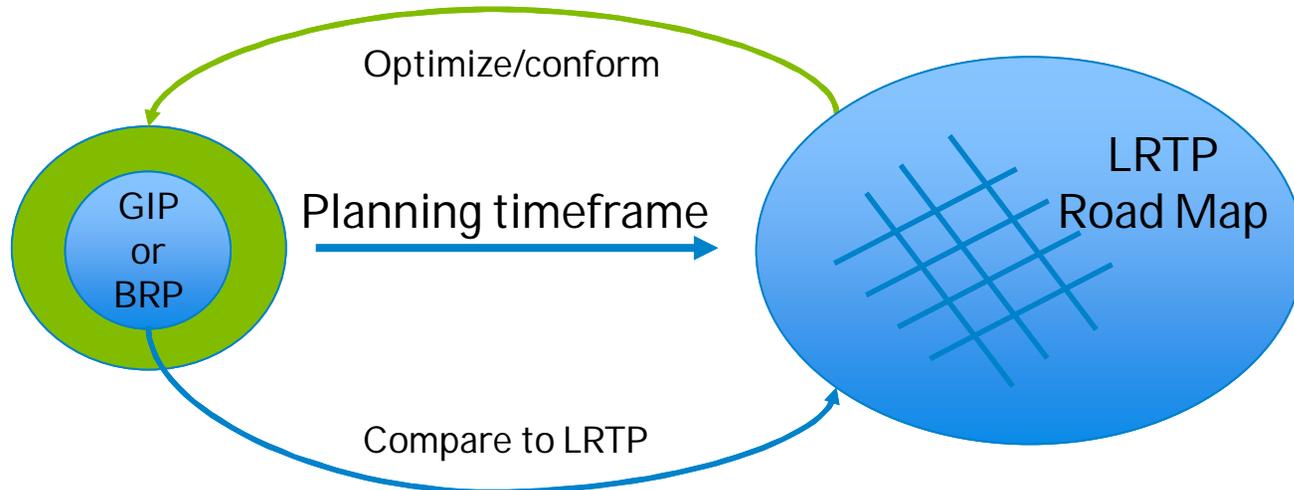


What is a Transmission Road Map?  
MISO envisions this to be a foundational set of regional, subregional and interregional transmission projects that provide insight and direction for future investment

L RTP will utilize MISO's planning process which identifies grid needs based upon Futures, is multi-step, and considers subregional needs and solutions



The LRTP transmission road map will be adaptive to future changes in policy, generation build-out, market shifts, and will guide the optimization of near term needs for compatibility with long term drivers



- The transmission road map will serve as a guide to inform future investment as transmission needs mature
- Periodic re-evaluation of the transmission road map will support alignment with fleet transition and policy changes
- As transmission needs may change over time, so to will the transmission road map