Regional Transmission Plans: Delivering Lowest-Cost Energy

MISO's regional planning process provides greater benefits to the region while meeting local energy and reliability needs.

MISO's regional planning process ensures that the transmission system enables the utilization of lowest-cost generation while maintaining reliability.

Cost Allocation

MISO's cost allocation matches customer costs with customer benefits. The primary focus is to ensure costs are allocated at least roughly commensurate to benefits. MISO's open, stakeholder-driven forums developed several cost allocation methodologies, matching the business case with the appropriate allocation method based on cost-causation principles.

Benefits of Zonal Approach

MISO's energy zones are designed to optimize wind generation placement and to minimize distance to other fuel sources, such as natural gas. When connected to the overall grid by multi-value projects, the zones will enable access to low-cost energy for the entire MISO footprint.

Did you know?

- Regional planning ensures greater reliability throughout MISO, identifying areas of congestion and recommending transmission upgrades.
- MISO's transmission cost allocation approach matches the business case for a project with allocation method.
- MISO's Multi-Value Projects are part of a regionally planned portfolio of transmission projects and provide benefits beyond just meeting local energy and reliability needs.
- Every line on a planning map may not be built. States have significant input into what ultimately should be built.

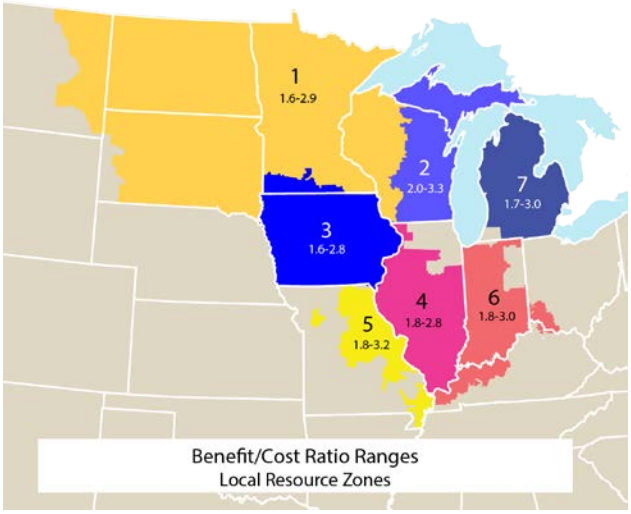
Multi-Value Projects (MVPs)

MISO's Multi-Value Projects are part of a regionally planned portfolio of transmission projects. They are the culmination of more than eight years of planning to find a regional transmission solution to drive value across the region while meeting local energy and reliability needs. Each MVP must:

1. Reliably or economically support state and federal energy policy mandates, or
2. Provide multiple types of economic value across multiple pricing zones, in which the portfolio's benefits exceed its costs, or
3. Mitigate reliability and economic issues, addressing economic issues in a manner that provides value over multiple pricing zones.

MISO projects the 2011 MVP Portfolio will realize the following benefits for the MISO Midwest footprint:

- Average residential customer's return on investment: $23 annual return on an $11 per year investment.
- Projected benefits: $15.6 billion - $49.3 billion (net present value)
- Proposed cost: $5.2 billion (2011 present value dollars)
- Cost/Benefit Ratio: Benefits 1.8 to 3.0 times the cost.
- Annual construction jobs created: 17,000 to 39,800.
- Total annual jobs created: 28,400 to 74,000.



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MVPs Save States Money

As a result of MVPs, consumers will see economic benefits ranging from 1.8 to 3.0 times the costs. These benefits* include:

- $12.4 billion to $40.9 billion from enabling low-cost generation to displace higher-cost generation.
- $28 million to $87 million from more efficient dispatch of operating reserves.
- $111 million to $396 million from reductions in energy wasted on transmission losses, reducing future generation investment required to serve those losses.
- $1,354 million to $2,503 million in benefits through supporting a regional wind integration methodology.
- $1,023 million to $5,093 million from reduced future Planning Reserve Margin Requirements, which reduces installation of future generation to meet this requirement.
- $226 million to $794 million in avoided costs for reliability projects that would otherwise need to be constructed.

*2011 present value dollars

Multi-Value Projects – Dashboard – as of June 30, 2013

No.	Project Name	State	Status
1	Big Stone-Brookings	SD	In State Regulatory Process
2	Brookings, SD-SE Twin Cities	MN/SD	Under Construction
3	Lakefield Jct. - Winnebago-Winco-Burt area & Sheldon-Burt Area-Webster	MN/IA	In State Regulatory Process
4	Winco-Lime Creek-Emery-Black Hawk-Hazelton	IA	In State Regulatory Process
5	N. LaCrosse-N. Madison-Cardinal & Dubuque Co.-Spring Green-Cardinal (a/k/a Badger-Coulee Project)	WI	MISO BOD Approved
6	Ellendale-Big Stone	ND/SD	In State Regulatory Process
7	Adair-Ottumwa	IA/MO	MISO BOD Approved
8	Adair-Palmyra Tap	MO/IL	MISO BOD Approved
9	Palmyra Tap-Quincy-Merdosia-Ipava & Meredosia-Pawnee	IL	In State Regulatory Process
10	Pawnee-Pana	IL	In State Regulatory Process
11	Pana-Mt. Zion-Kansas-Sugar Creek	IL/IN	In State Regulatory Process
12	Reynolds-Burr Oak-Hiple	IN	State Regulatory Process Complete
13	Michigan Thumb Loop Expansion	MI	Under Construction
14	Reynolds-Greentown	IN	State Regulatory Process Complete
15	Pleasant Prairie-Zion Energy Center	WI/IL	Under Construction
16	Fargo-Galesburg-Oak Grove	IL	MISO BOD Approved
17	Sidney-Rising	IL	In State Regulatory Process