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***2010 ISO/RTO Metrics Report***  
***Midwest ISO***

**January 20, 2011**  
**Federal Energy Regulatory Commission**  
**Washington, D.C.**

# The Midwest ISO has implemented the RTO principles and exceeded the U.S. Government Accountability Office (GAO) principles

## RTO Principles<sup>1</sup>

- ▶ Open access to transmission
- ▶ Broad wholesale power competition
- ▶ Voluntary membership
- ▶ Independence
- ▶ Scope and regional configuration
- ▶ Operational authority
- ▶ Reliability
- ▶ Transparency

## U.S. GAO Principles<sup>2</sup>

- ▶ Track value creation using standard methods
- ▶ Provide broad transparency of RTO operations and performance

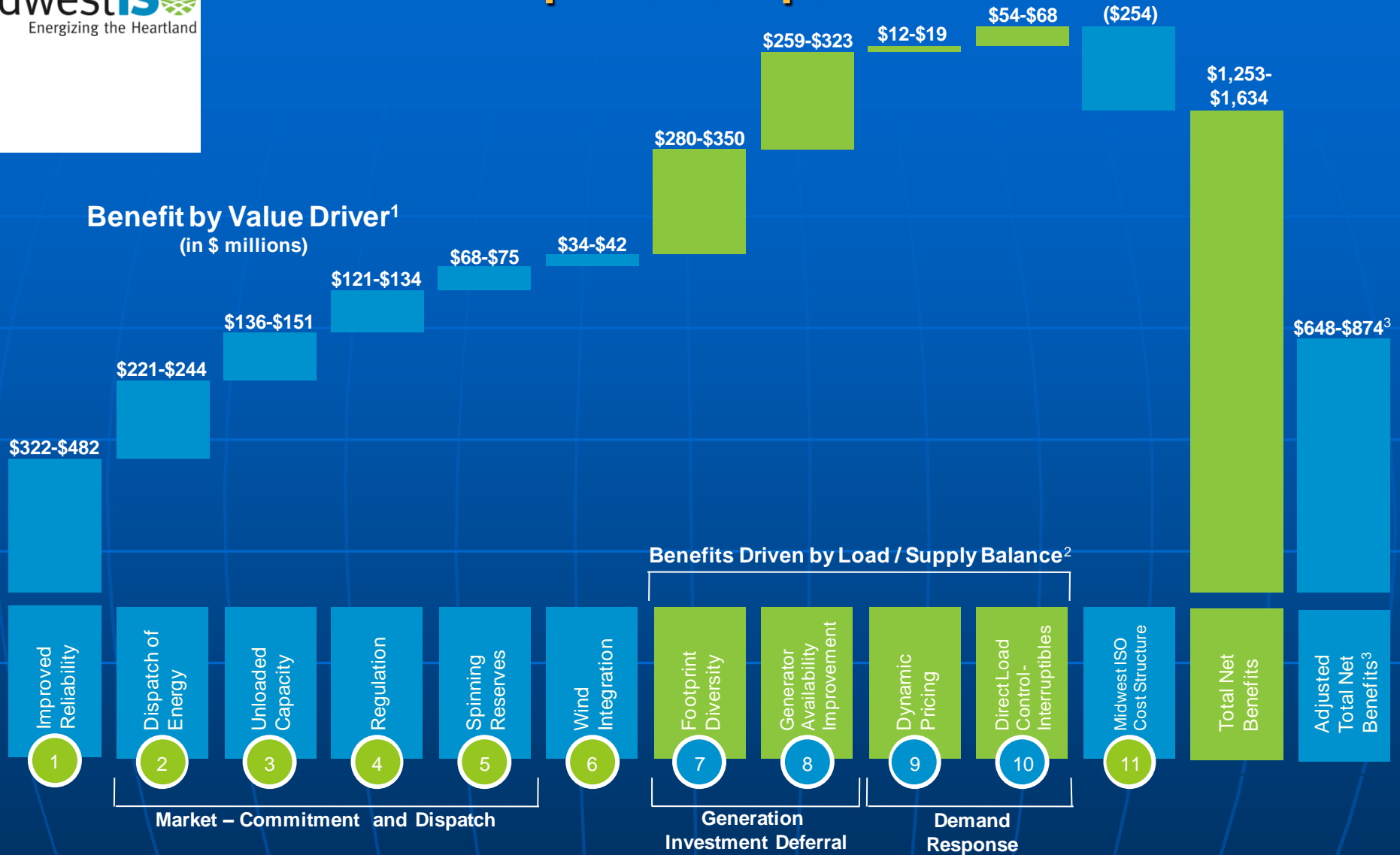
## Midwest ISO Principles

- ▶ Vision – Drive value creation through efficient reliability / market operations, planning and innovation
- ▶ Value Proposition
  - ▶ Annually measures value creation
  - ▶ Open and transparent process
- ▶ Broad market reporting
  - ▶ Process & procedures
  - ▶ Performance
  - ▶ Frequent granular pricing

<sup>1</sup>FERC Orders 888/889, 2000 and 890

<sup>2</sup>Electricity Restructuring: FERC Could Take Additional Steps to Analyze Regional Transmission Organizations' Benefits and Performance, United States Government Accountability Office, Report to the Committee on Homeland Security and Governmental Affairs, U.S. Senate (September 22, 2008), GAO-08-987 (<http://www.gao.gov/new.items/d08987.pdf>).

# The Midwest ISO's Value Proposition is an effective tool to monitor and report on our performance



<sup>1</sup>Figures shown reflect annual benefits and costs that can be expected in 2010

<sup>2</sup>These benefits will be realized when the load / supply balance narrows

<sup>3</sup>Adjusted total net benefits exclude benefits driven by load / supply balance

## Stakeholder input shaped the initial development of the Midwest ISO's Value Proposition and continues to do so

- Stakeholder input is requested and received throughout the study process
- Multiple stakeholder review meetings are conducted to confirm facts/assumptions
- Process is open to all stakeholder groups including regulators, transmission owners, market participants and the general public
- The initial Value Proposition was published in 2008 and is updated annually

# The Value Proposition, calculations, assumptions and supporting information are publicly available on Midwest ISO's website

\$322-\$482

Improved Reliability

1

2010 Value Proposition Improved Reliability Benefit - NERC Database						
In RTO Region?	In MISO Region?	Disturbance Type	Customers Interrupted	Disturbance Size (MW)	Disturbance Cause	Event Description
Y	N	INT	60,000	326	Weather	During a period of high winds and freezing rain system protection removed from serv transmission circuit at 2248 EST. At 2250, system protection removed from service
N	N	INT	133,000	450	Weather - Snow and Ice storm	

2010 Value Proposition Improved Reliability Benefit				
	Year 1	Years 1-5 (Average)	Years 6-10 (Average)	10-Year NPV
Low Estimate (\$ in Mils.)	\$322	\$337	\$377	\$2,506
High Estimate (\$ in Mils.)	\$482	\$505	\$566	\$3,760

**Assumptions**

Discount Rate	8.47% [1]
Annual Inflation Rate	2.30% [2]

**MidwestIS**  
Energizing the Heartland

## 2010 Value Proposition Improved Reliability Benefit Calculation Walkthrough

**Note:** This document does not intend to provide a detailed step-by-step approach to calculating the benefit, but serves to provide a high-level overview of the benefit calculation.

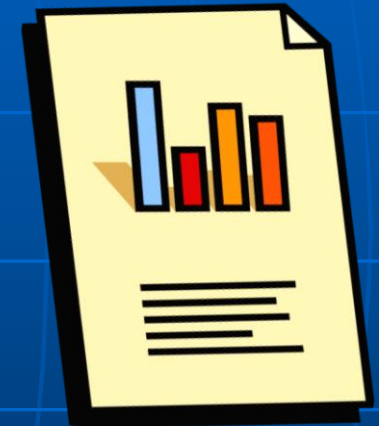
- Original disturbance data is from 2000 to 2007 including 2009 (2008 data was not available at the time of the analysis). The data was provided directly by NERC. The data contains more detailed information than the public version available on NERC's website. The public version can be found at: <http://www.nerc.com/page.php?cid=5j66>. See modified NERC database called "NERC Database-Midwest ISO 2010 Value Proposition.pdf" in the benefit calculation detail section.
- Each disturbance was analyzed to identify/calculate the following attributes:
  - Identified if disturbance occurred in a RTO region vs. a non-RTO region based on the provided "Associated Utilities" and "Region ID" data in the NERC database. See the classifications in the "In RTO Region?" field of the "NERC Database-Midwest ISO 2010 Value Proposition.pdf" file.

F	G	H	I	J		
Non-RTO TSAI 1-[D+(D+E)]	TSAI Difference C - F	Midwest ISO Load Served (MWh) [9]	Economic Cost of Outage - Low [6]	Economic Cost of Outage - High [9]	Benefit Low Estimate G X H X I	Benefit High Estimate G X H X J
99.991244%	0.006195%	582,797,440	\$8,909	\$13,364	\$322	\$482
99.991244%	0.006195%	582,797,440	\$9,114	\$13,672	\$329	\$494
99.991244%	0.006195%	582,797,440	\$9,324	\$13,986	\$337	\$505
99.991244%	0.006195%	582,797,440	\$9,538	\$14,308	\$344	\$517
99.991244%	0.006195%	582,797,440	\$9,758	\$14,637	\$352	\$528
99.991244%	0.006195%	582,797,440	\$9,982	\$14,973	\$360	\$541
99.991244%	0.006195%	582,797,440	\$10,212	\$15,318	\$369	\$553
99.991244%	0.006195%	582,797,440	\$10,447	\$15,670	\$377	\$566
99.991244%	0.006195%	582,797,440	\$10,687	\$16,030	\$386	\$579
99.991244%	0.006195%	582,797,440	\$10,933	\$16,399	\$395	\$592

**The 2010 ISO/RTO Metrics Report provides only a high-level summary of data from reports that Midwest ISO regularly makes available to all stakeholders and the public**



## 2010 ISO/RTO Metrics Report



Reports provided hourly, daily, monthly, annually

# The Midwest ISO has fulfilled the recommendations of the U.S. GAO study

## U.S. GAO Principles

- 1) Track value creation using standard methods
- 2) Provide broad transparency of RTO operations and performance



## Midwest ISO Practices

- Value Proposition framework, methodology and quantification on public website
- Annually tracked, revised and reviewed with stakeholders
- Market Operations Report reviewed with stakeholders and Board of Directors in open meetings
- Markets Operations and other reports posted to public website