Organization of MISO States

ORGANIZATION OF MISO STATES, INC.
Special Board of Directors Meeting in Little Rock, AR
Minutes
June 12, 2013

Approved July 18, 2013

Kari Bennett, President of the Organization of MISO States, Inc. (OMS), called the June 12, 2013 special meeting of the OMS Board of Directors to order in Little Rock, AR at approximately 12:20 p.m. (CDT). The following board members or their proxies participated in the meeting:

Collette Honorable, Arkansas
John Colgan, Illinois
Kari Bennett, Indiana
Libby Jacobs, Iowa
Melissa Watson, proxy for Eric Skrmetta, Louisiana (participated by phone)
Orjiakor Isiogu, Michigan
David Boyd, Minnesota
Chad Allen, proxy for Brandon Presley, Mississippi
Robert Kenney, Missouri
Kim Moran, proxy for Kirk Bushman, Montana (participated by phone)
Phil Movish, proxy for Cynthia Hedge-Morrell, City of New Orleans (participated by phone)
Jerry Lein, proxy for Brian Kalk, North Dakota (participated by phone)
Greg Rislov, proxy for Gary Hanson, South Dakota (participated by phone)
Richard Greffe, proxy for Ken Anderson, Texas
Eric Callisto, Wisconsin

Absent
Kentucky
Manitoba

Agency members participating
Linda Wagner - Illinois
Tia Elliott - Indiana
Chris Devon – Michigan (participated by phone)
Beverly Jones Heydinger - Minnesota
Don Neumeyer, Julie Urban – Wisconsin (participated by phone)

Others participating
Bill Smith – OMS Staff
Julie Mitchell - (participated by phone)
Clair Moeller – MISO
Steve Frenkel, Sam Gomberg – Union of Concerned Scientists
Kwafa Adarkwa – ITC

Laura Chappelle – Chappelle Consulting
Beth Soholt – Wind on the Wires
David Svanda – Svanda and Coy Consulting
Marya White - MISO

The directors and proxies listed above established the necessary quorum for the meeting of at least nine directors being present.

Approval of Minutes from the May 16 Board Meeting

There were no corrections to the minutes. They were accepted as distributed.

Treasurer's Report of May 2013

There were no questions regarding the May 2013 Treasurer's report. It was accepted as distributed.

BUSINESS

1. Comments on OMS 10th Anniversary

- The Board and OMS Staff are considering a formal recognition of OMS' 10th Anniversary at the Annual Meeting in October.
- Bill Smith shared his thoughts on OMS, from its beginnings in Omaha, Nebraska, on June 11, 2003 and its growth over the past 10 years.

2. Reflection on OMS Planning for 2013

The current status of 2013 planning issues was discussed:

- Commissioner Isiogu of Michigan is retiring after 24 years of public service;
- Chad Allen of the Mississippi PSC is leaving public service to work for MISO;
- Entergy and Entergy Regional State Committee Coordination;
- MISO Advisory Committee changes related to ERSC;
- Implementation of Enhanced Regional Planning and Section 205 issues;
- MTEP 14;
- FERC Order 1000;
- Regional Resource Assessment;
- Ongoing MISO Issues: seams issues, resources, FERC rate issues, cost control, continued monitoring of the first MVP portfolio;
- OMS Administrative Issues related to executive staff;

3. Action Item: OMS/OPSI Presentation at June 20 FERC Meeting on Capacity Deliverability

- Kari Bennett provided background on this opportunity to present at FERC and the presentation materials. OPSI has agreed to accept the materials as proposed by the joint staff process, contingent upon OMS agreeing to them as well.

  Kari Bennett moved that OMS approve the materials distributed for the for the OMS/OPSI presentation at FERC. Orjiakor Isiogu seconded. The motion passed by voice vote with Louisiana abstaining.

- Phil Montgomery and Greg White will present the materials at FERC's regular meeting on June 20th. Kari Bennett, Chris Devon, Tia Elliott will attend the meeting.

4. OMS Resources Assessment Project

- Kari Bennett presented the project and introduced Clair Moeller, who spoke about the details of the survey and the information MISO's trying to collect.
- Eric Callisto provided his thoughts on the initial draft and Clair Moeller took questions.
- There was robust discussion about coordinating efforts to encourage participation, thoughts behind the design of the survey, and preferences for methods of collecting and distributing the data.
- John Colgan also spoke about the specific concerns related to Illinois; and Don Neumeyer talked about discussions the Resources Work Group has had on the survey process.

5. Union of Concerned Scientists presentation on activities concerning climate change and clean energy solutions in regional electricity markets

- Kari Bennett and Bill Smith introduced Steve Frenkel from the Union of Concerned Scientists who gave the UCS's presentation with the assistance of Sam Gomberg. They then entertained questions from the Board and staff.

Updates and Work Group Status Reports

Demand Response WG

- No report;

Transmission Cost Allocation WG

- Written report;

Markets and Tariffs WG

- Written report; Kari Bennett briefly spoke about the Market Vision workshop and what should be expected from MISO in the future on that issue.

Resources WG

- Written report;

Regional Planning WG

- Written report; Julie Urban provided an update that included an upcoming special PAC meeting where MISO will discuss its proposal for FERC Order 1000 compliance.

Governance and Budget

- No report;

Modeling WG

- No report;

Seams WG

- No report; Chris Devon provided a verbal update, noting the work done on the OMS/OPSI joint comments and an upcoming work group meeting.

ADJOURNMENT

The OMS Board of Directors meeting adjourned at 3:20 pm CDT.

OMS

Organization of MISO States
Report of the Treasurer
Dr. David C. Boyd, Minnesota Public Utilities Commission
to the
Board of Directors
Report for May 2013

CASH ON HAND

The beginning balance for the Wells Fargo Business Performance Savings Account on May 1 was $25,171.99. Interest earned for this month totaled $1.07 and there was no other account activity. The May 31, 2013 ending balance was $25,173.06.

The beginning book balance for the Chase Bank One Checking account on May 1 was $48,063.86. The total disbursements from the checking account for May 2013 amounted to $45,984.31. Deposits, interest and adjustments were $60,035.17. As of May 31, 2013, the checking account bank balance was $66,044.01 (with 6 check payments outstanding) and the book balance was $62,114.72.

The total savings and checking account (book) balances as of May 31, 2013 is $87,287.78.

OMS Treasurer Report for Month of May 2013

Wells Fargo Business Performance Savings Account

Beginning Balance	25,171.99	
Interest Earned this Month	1.07	
Ending Balance		25,173.06

Chase Bank One Checking Account

Beginning Balance	48,063.86	
Total Disbursements	(45,984.31)	
Deposits/Interest/Adjustments	60,035.17	
Ending Book Balance		62,114.72
Bank Balance	66,044.01	
Outstanding Deposits	0.00	
Outstanding Checks	(3,929.29)	
Book Balance	62,114.72	

Total Savings & Checking Balances as of May 31, 2013 **87,287.78**

6 checks outstanding at 5/31/13

Organization of MISO States

2013 GOALS and WORK PLAN

OMS Commissioners and Staff met on October 16 and December 12, 2012, to discuss our priority goals and objectives for 2013. This document memorializes our discussions and follow-ups, and will serve as a roadmap to our activities in 2013.

Entergy and Entergy Regional State Committee (E-RSC) Coordination

On December 13, 2012, the MISO Board of Directors approved the addition of the Entergy operating companies and South Mississippi Electric Power Association into MISO. Those companies operate in five utility regulatory jurisdictions that were previously not in MISO's footprint – Arkansas, Louisiana, Mississippi, New Orleans and Texas. OMS has invited each of these utility regulatory entities to join OMS, and we anticipate several joint discussions regarding coordination and integration issues.

- **Next Step**: Joint OMS/E-RSC meeting – half-day, possibly during the February New Orleans MISO board week. Agenda to include:
  - Advisory Committee representation
  - Budgets
  - Website and meeting management
  - Meeting schedules
  - Further work on filing rights
  - Other governance and administrative issues
  - OMS 101

Implementation of Enhanced Regional Planning Process

On August 16, 2012, OMS adopted a proposal for enhanced planning authority. MISO made the OMS proposal part of its Order 1000 compliance filing to FERC. We need to implement this proposal within the processes and schedules of OMS and the MISO MTEP.

- OMS Proposal for Enhanced Planning Authority can be found at http://www.misostates.org/images/stories/Filings/August_16-2012_OMS_Proposal_for_Enhanced_Planning_Authority.pdf
- **Next Step**: Regional Planning Work Group to prepare a draft document, looking at the planning cycle and at which steps OMS needs to provide input.
- Commissioner Callisto is heading up an OMS Ad Hoc Order 1000 BPM Review Team to review Business Practices Manual language being drafted by MISO to implement OMS's new planning responsibilities associated with MISO's recent Order 1000 compliance filing.

Implementation of OMS 205 Rights on Cost Allocation

On January 4, 2013, MISO and the Transmission Owners filed changes to the Transmission Owners Agreement and the MISO tariff providing limited section 205 filing rights to OMS in relation to certain cost allocation decisions. With an anticipated effective date of December 2013, OMS should continue to engage with MISO and the Transmission Owners to implement these rights by the end of the year.

Organization of MISO States

FERC Order 1000

OMS will continue to participate and provide input on various compliance filings and new processes resulting from the Regional and Interregional aspects of Order 1000. Key issues will include:

- State/OMS role in developer selection
- Interregional Planning Stakeholder Advisory Committee (IPSAC) representation
- Ensuring robust interregional planning and cost allocation processes

Regional Resource Assessment

During recent discussions between OMS and MISO, we have determined a mutual interest in developing a better understanding of adequate capacity throughout the MISO footprint in future years when reserve margins are expected to constrict due to aging infrastructure, environmental regulations, and other factors. We recognize there are information gaps and have an interest in making links between state resource planning processes and the MISO planning and market constructs. The MISO Board of Directors identified this as a priority, and the Advisory Committee will address it as the Hot Topic on February 20, 2013.

- **Next Steps**:
  - The Resources Work Group is developing a survey to send to OMS and E-RSC members to gather baseline information regarding states' current resource planning processes.
  - Prepare materials for February 20, 2013 Advisory Committee Hot Topic on Coordinated Regional Resource Planning.
  - Work with MISO to prepare a questionnaire regarding resource needs and available resources looking approximately four years forward.

Ongoing MISO Issues

- Seams – continued involvement in the MISO-PJM Joint and Common Market activities and be ready to respond to a FERC filing; involvement in the development of a MISO-SPP Joint Operating Agreement as SPP develops its market products.
- Resource shifts – EPA regulations, gas/electric interdependency, demand curve, capacity tools
- FERC rate issues – formula rates, incentive returns
- Cost control – fixed charge rate, construction costs, Attachment O oversight, true-ups
- Continued monitoring of the first MVP portfolio - cost-tracking, federal and state regulatory progress, engineering and construction progress
- Implementation of Extended Locational Marginal Pricing

OMS Administrative Issues

Order 1000 contemplates enhanced roles for state regulators in RTO planning processes, and OMS has discussed the need for additional resources to be able to properly engage in our enhanced responsibilities. Additionally, OMS is at a point as an organization that it needs to develop a succession plan, which also includes discussions about budget levels and office issues.

- **Next Step**: Personnel and Compensation Committee to survey OMS members to determine priority needs.

OMS Education

- Continue our effort to educate OMS members, MISO stakeholders, and other interested parties about OMS, MISO, RTO and FERC issues and practices.

Resources:

- OMS Goals for 2008-09, 2010, and 2011-12 can be found at http://www.misostates.org/index.php/about-us-2/strategic-goals
- OMS Bylaws can be found at http://www.misostates.org/images/stories/OMSBYLAWSfinalAmended13Sept2012.pdf

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Capacity Deliverability Across the Midwest Independent Transmission System Operator, Inc./PJM Interconnection, L.L.C., Seam	)))	Docket No. AD12-16-000

JOINT COMMENTS OF THE ORGANIZATION OF PJM STATES, INC. AND THE ORGANIZATION OF MISO STATES

The Organization of PJM States Inc. (OPSI) and Organization of MISO States (OMS) appreciate the invitation to address the issue of capacity deliverability between MISO and PJM before the Federal Energy Regulatory Commission (Commission) today. OPSI and OMS will provide our perspective on the most important aspects of the capacity deliverability issue.

Two of the nation's leading regional transmission organizations (RTOs) are the PJM Interconnection (PJM) and the Midcontinent Independent System Operator (MISO). The Commission is familiar with the arduous process that initially led to the complicated PJM/MISO seam and with the ongoing processes to manage that seam. Defining processes to effectively manage this seam has long been an issue. For over a decade, seams issues have been addressed on a case-by-case basis by PJM, MISO, and the other stakeholders in a somewhat limited process, often resulting in markets and policy outcomes that some stakeholders find disappointing.

Within the last 18 months, and with much stakeholder urging, PJM and MISO renewed their combined efforts to confront the many challenges along their shared seam by renewing the Joint and Common Market (JCM) initiative. State regulators, as well as all PJM and MISO stakeholders, now have an opportunity to participate in the more comprehensive and collaborative JCM initiative. OPSI and OMS have been active participants in this much-welcomed process.

A flashpoint JCM issue is capacity deliverability between the two regions. MISO identified its concerns regarding efficient delivery of capacity between the two RTOs and circulated a capacity deliverability White Paper in support. Many JCM participants from both RTO stakeholder groups and including PJM did not agree with the conclusions. This

disagreement evolved over time and eventually became this FERC Docket, No. AD12-16-000, which was opened prior to the reinstatement of the JCM.

The Commission has identified the following issues in this proceeding: (1) identifying the progress of efforts to address whether existing market rules and operating protocols concerning the transfer of capacity between MISO and PJM act as barriers to the delivery of capacity between those markets; (2) identifying any unaddressed barriers to the transfer of capacity between those markets; and (3), identifying the measures that the Commission may take to address those barriers that may result in unjust and unreasonable rates.

In order to inform the Commission and stakeholders on potential barriers and alternatives, OPSI and OMS believe that additional fact finding within the JCM process is necessary. After an initial fact finding has been accurately completed it will finally be possible to determine if any additional work within the JCM process would be necessary. If it is determined in the JCM process that the RTOs cannot work together to accurately identify the facts surrounding capacity deliverability, OPSI and OMS suggest bringing an independent consultant into the JCM process, to appropriately gather the necessary information, with input from the RTOs and stakeholders.

Steps in this comprehensive initial joint fact finding should include: (1) identifying an agreed upon methodology for determining transfer capability between MISO and PJM, in both directions; (2) identifying a methodology for determining the magnitude of capacity that can reliably bid into PJM's capacity market from MISO and vice versa; (3) identifying and studying the reliability impacts and the feasibility of potential revisions to existing market rules and operating protocols concerning the transfer of capacity between MISO and PJM; and (4) identifying a methodology for determining a cost/benefit analysis of implementing any necessary solutions.

OPSI and OMS agree that potential barriers to participation in the MISO and PJM capacity markets may exist, but the paramount question in this proceeding should be the appropriateness or reasonableness of those potential barriers. The framework of each RTO's capacity market entrance requirements was developed through their respective Stakeholder processes. Those requirements, and any barriers that they impose, are based upon each RTO's individual economic market designs and electrical engineering considerations for reliability purposes. With this in mind OPSI and OMS would like to present specific questions that the

Commission may wish to consider, and believe all JCM stakeholders should be informed of, before any solutions to this issue are implemented:

- Are any of the asserted barriers to participation in the capacity markets unjust or unreasonable? May some of these barriers be characteristics of each RTO's capacity market necessary to maintain the reliability and economics of each or both capacity markets?
- Would the use of any remaining transmission capability between MISO and PJM for long term capacity transfers be discriminatory to other parties' ability to otherwise utilize the transmission capability that currently remains?
- Is there potential discrimination against either internal RTO generation or other generators external to MISO and PJM that would also desire a similar ability to provide capacity to MISO or PJM, or otherwise participate in their capacity markets in the same manner as RTO generation?

OPSI and OMS believe the initial fact finding must be utilized to evaluate and analyze the following critical issues: (1) the possibility and significance of any cost shifts between the two involved RTOs; (2) the reliability impact of any proposed revised deliverability schemes; (3) whether further work on capacity deliverability is cost effective; (4) the overall additional incremental joint deliverability benefit over that currently occurring; (5) whether any proposals can be cost-effectively and realistically implemented, and; (6) the long-term rate impact on each RTO's retail customers.

An accurate fact finding that provides RTOs and all stakeholders with the requisite information to take well informed positions is necessary to advance vital coordination, while still allowing RTOs to maintain their unique characteristics. RTOs and stakeholders need to fully understand the facts surrounding the issue and to identify the necessity and impact of any capacity deliverability proposals on RTOs' energy and capacity markets, generator owners, transmission owners, state regulation, other stakeholders, and energy consumers. It is not helpful for either RTO to insist upon an end-result or outcome without having supportive documentation and analysis. Without collaborative involvement from both RTOs the output of any fact finding and subsequent analysis would likely be unreliable.

In its February 5, 2013 Joint Comments in this docket OMS and OPSI described the role that state regulators proposed to serve in the JCM process.[1] Since February, the productivity of the JCM process has improved. OMS and OPSI expect the JCM process to continue to be productive, and to include progress on the issue of capacity deliverability in this expectation. State regulators do not want to actively direct or moderate fact finding or the particular technical efforts described herein. Instead, it is expected that State regulators will continue to be active JCM participants and provide feedback, suggestions, and information for the assessment of the capacity deliverability issue and on the most effective implementation of any necessary solutions to issues identified, as it is expected of all other participants in the JCM.

All JCM participants should be confident that a proper identification of the facts surrounding this issue will finally allow the JCM stakeholders to determine the need, appropriateness, and timing of the implementation of any proposed capacity deliverability solutions that might need to be developed.

OPSI and OMS appreciate this opportunity to discuss these issues with the Commission and we look forward to working with PJM and MISO in a cooperative examination of capacity deliverability.

Respectfully Submitted,

Gregory V. Carmean
Gregory V. Carmean
Executive Director
Organization of PJM States, Inc.
249 East Main Street – Suite 1
Newark, Delaware 19711
Tel: 302-266-0914

William H. Smith, Jr.
William H. Smith, Jr.
Executive Director
Organization of MISO States, Inc.
100 Court Avenue, Suite 315
Des Moines, Iowa 50309
Tel: 515-243-0742

Dated: June 13, 2013

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.
Dated at Des Moines, Iowa, this 13th day of June, 2013.

William H. Smith, Jr.
William H. Smith, Jr.

[1] Joint OMS/OPSI Comments at 4-6

Climate Change, Coal Retirement, Reliability & Clean Energy in MISO

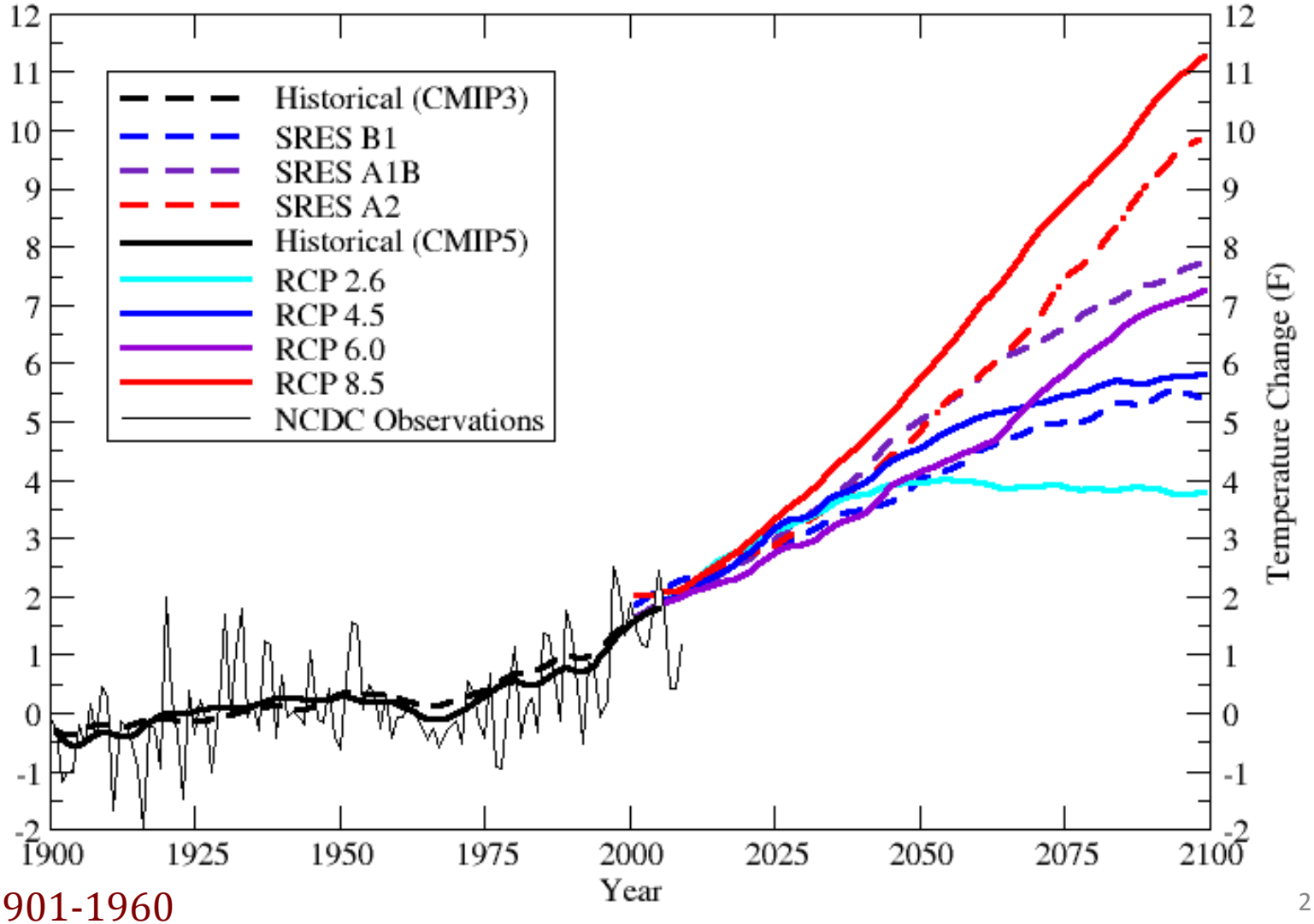
Organization of MISO States

June 12, 2013

Union of Concerned Scientists

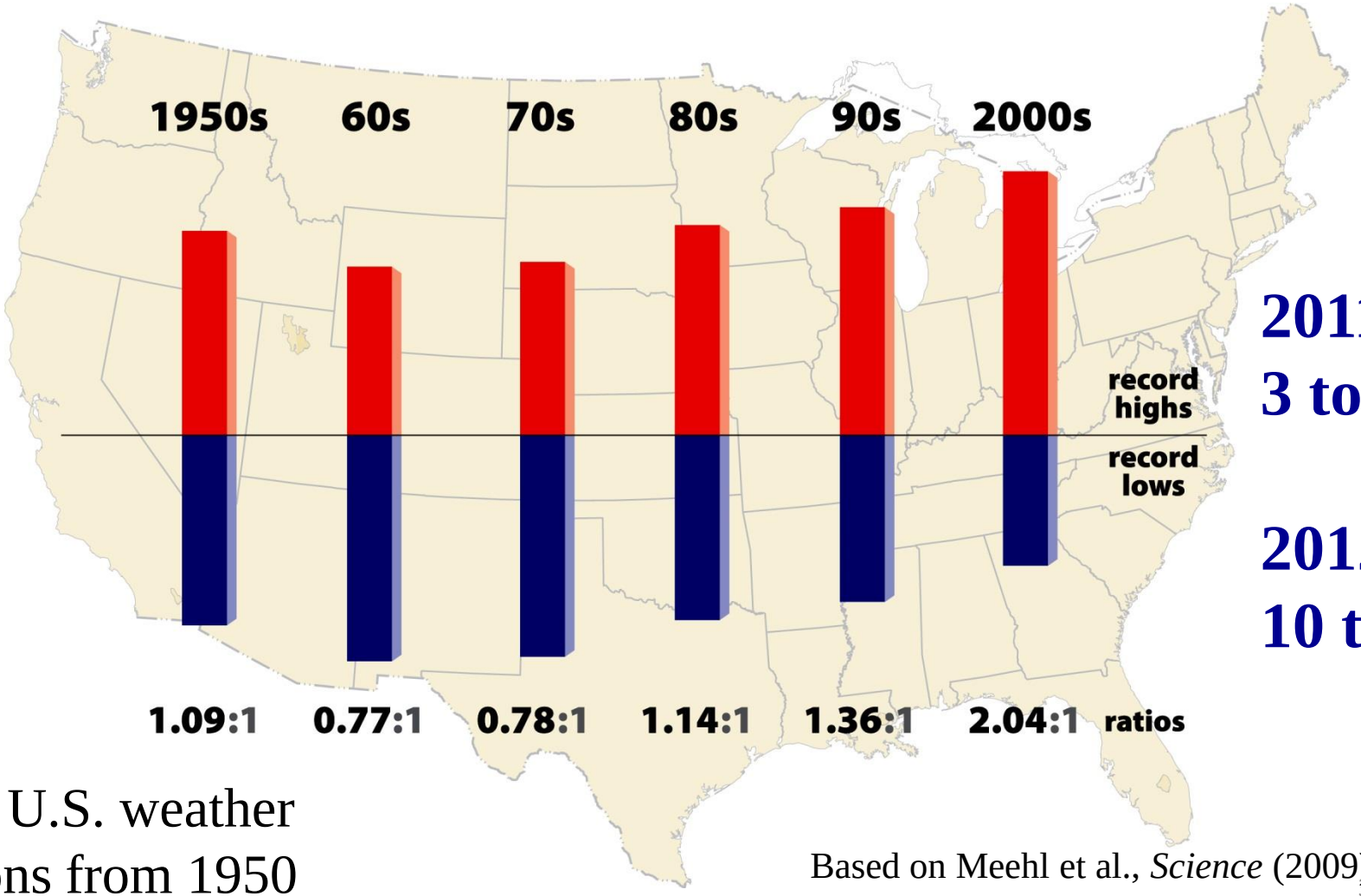
Citizens and Scientists for Environmental Solutions

Temperature is Expected to Continue to Increase over the U.S.



Relative to 1901-1960

Increasing Trend: U.S. Breaking Many More Heat Records than Cold Records



2011
3 to 1

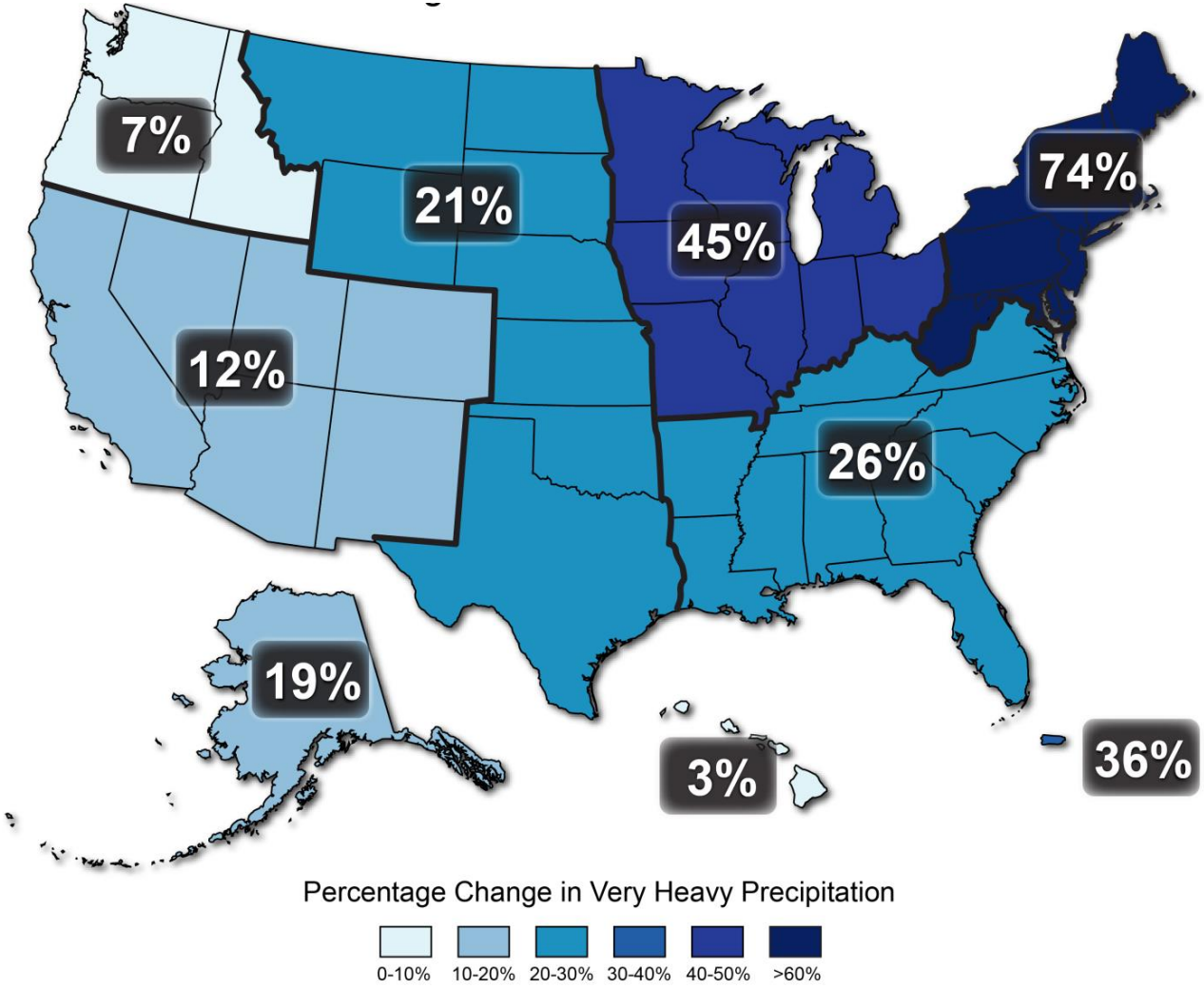
2012:
10 to 1

1800 U.S. weather stations from 1950

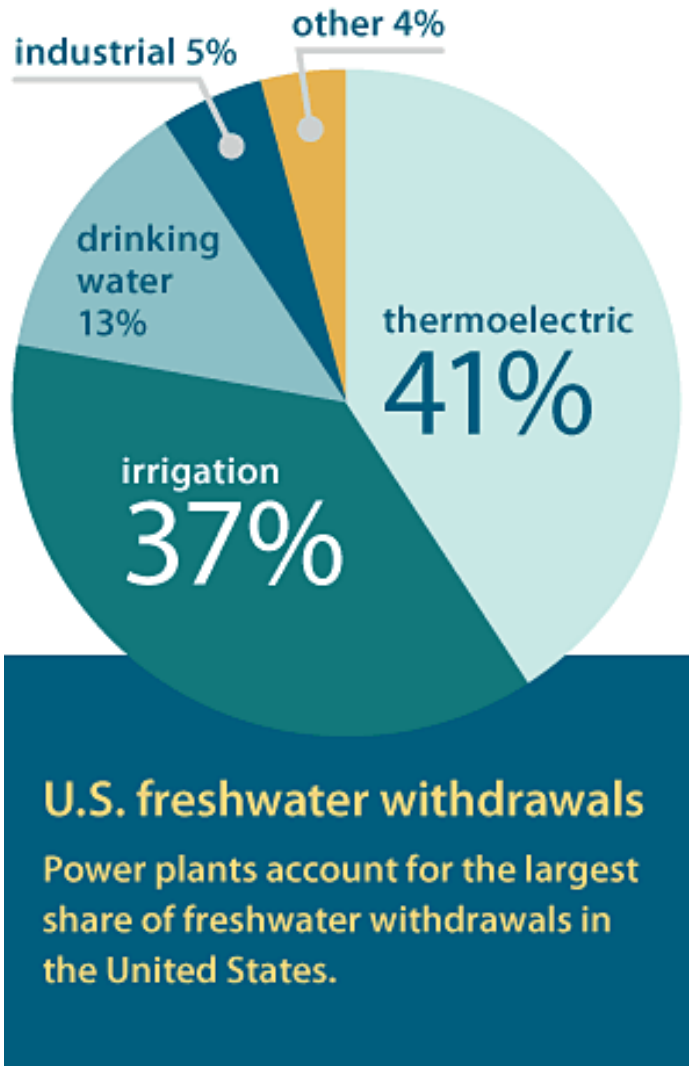
Based on Meehl et al., *Science* (2009)

Major Increase in Very Heavy Precipitation Events Over Last 50 Years

Defined as the heaviest 1 percent of all daily events from 1958 to 2010

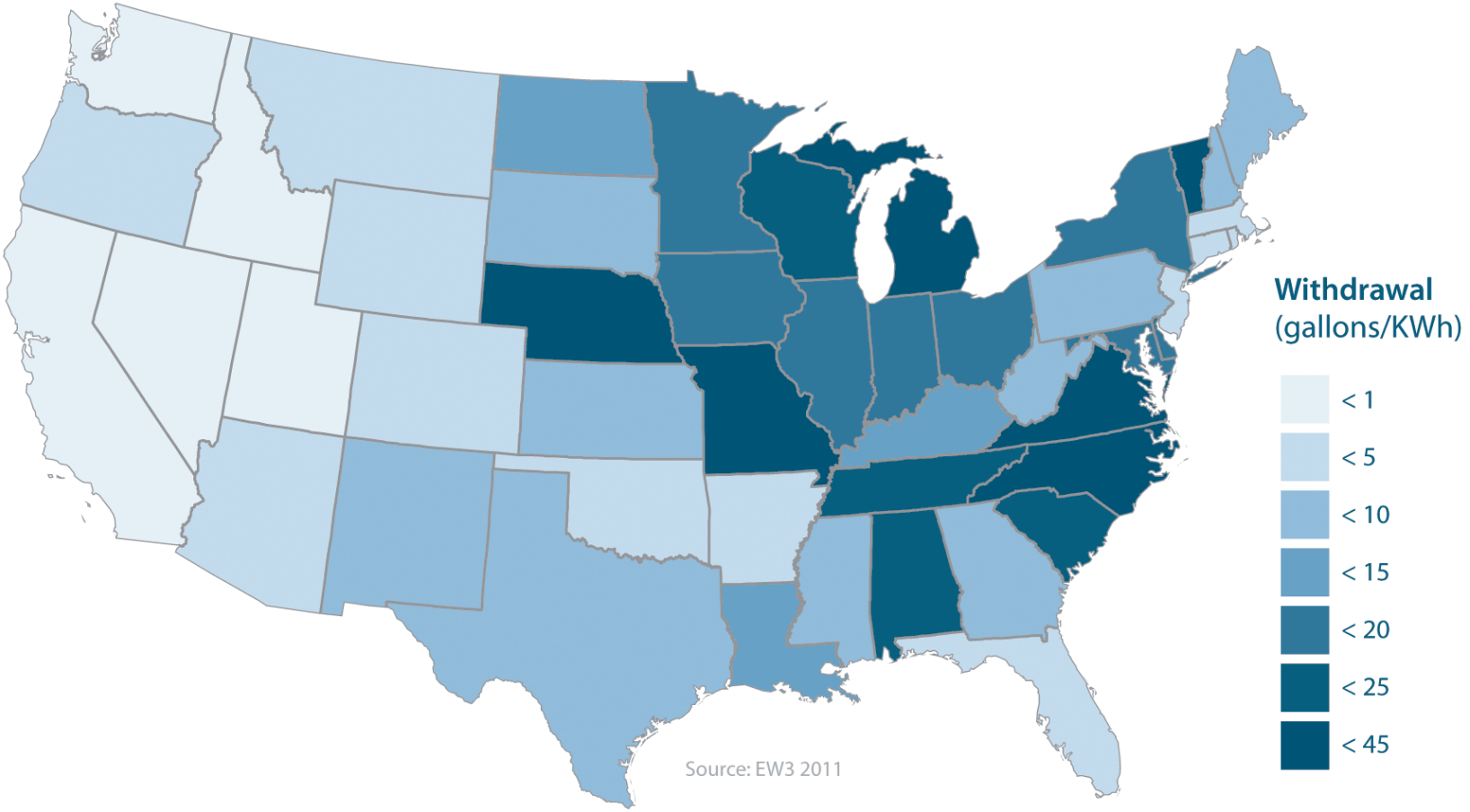


Power Plants Depend on Large Amounts of Freshwater for Cooling



- Withdrawals:
  60–170 billion gal/day
- Consumption (evaporation):
  3–6 billion gal/day
- Consumption (fracking):
  0.2-0.4 billion gal/day

Freshwater Withdrawal Intensity for Electricity Generation



Heat and Drought-related Electricity-Water Collisions

(2006-2012)

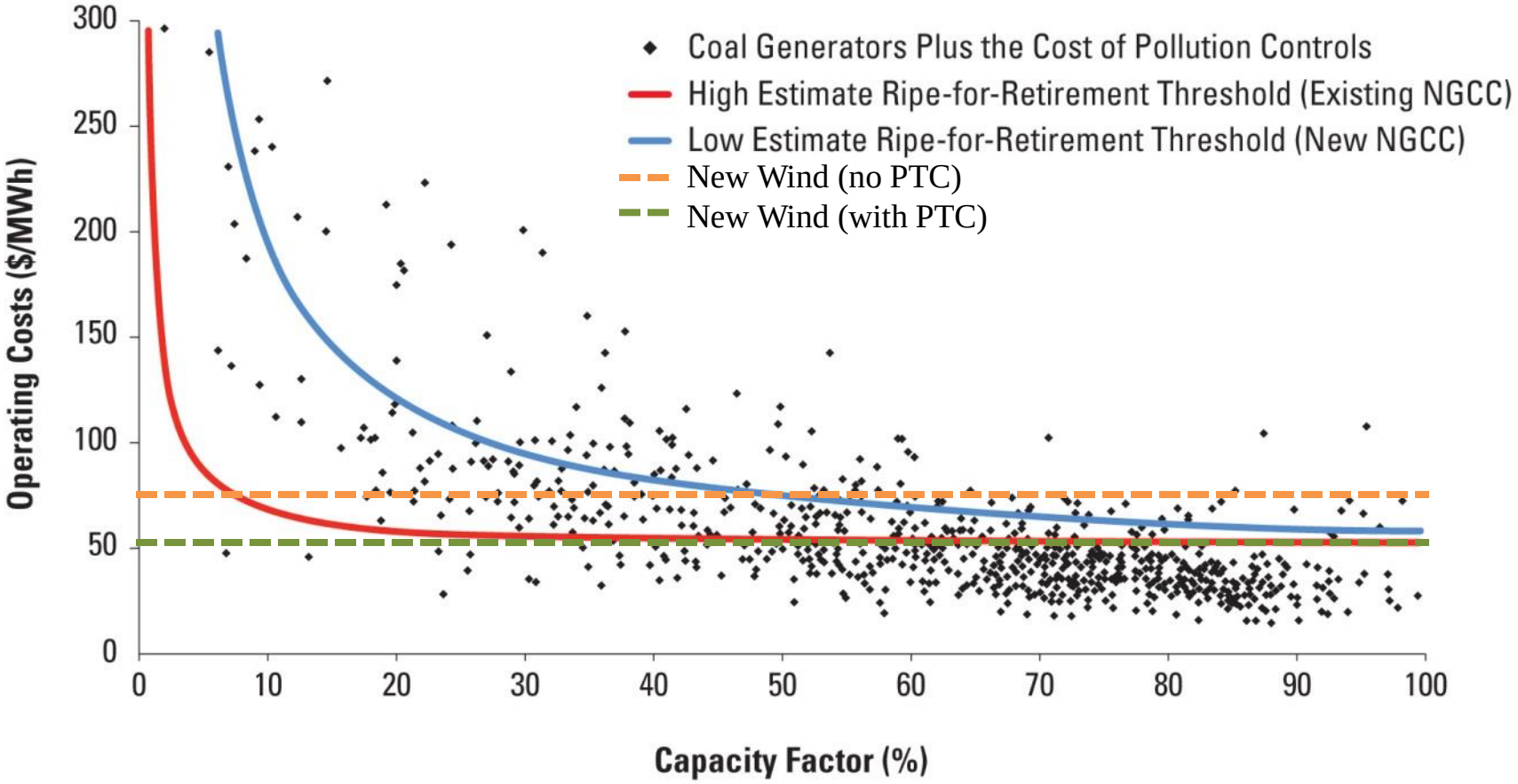
Trade-offs/Synergies Between Mitigation & Adaptation: Electricity-Water-Climate Nexus

Possible Action	Impact on Carbon Emissions	Impact on Water Dependence	
		Withdrawal	Consumption
Switch a Coal Plant from Once-Through to Recirculating Cooling	↑	↓	↑
Switch to Natural Gas	↓ *	↓ *	↓ *
Adopt Carbon Capture and Storage	↓	↑	↑
⇩ Energy Demand/ ⇧ Energy Efficiency	↓	↓	↓
Switch to Wind/ Solar PV	↓	↓	↓

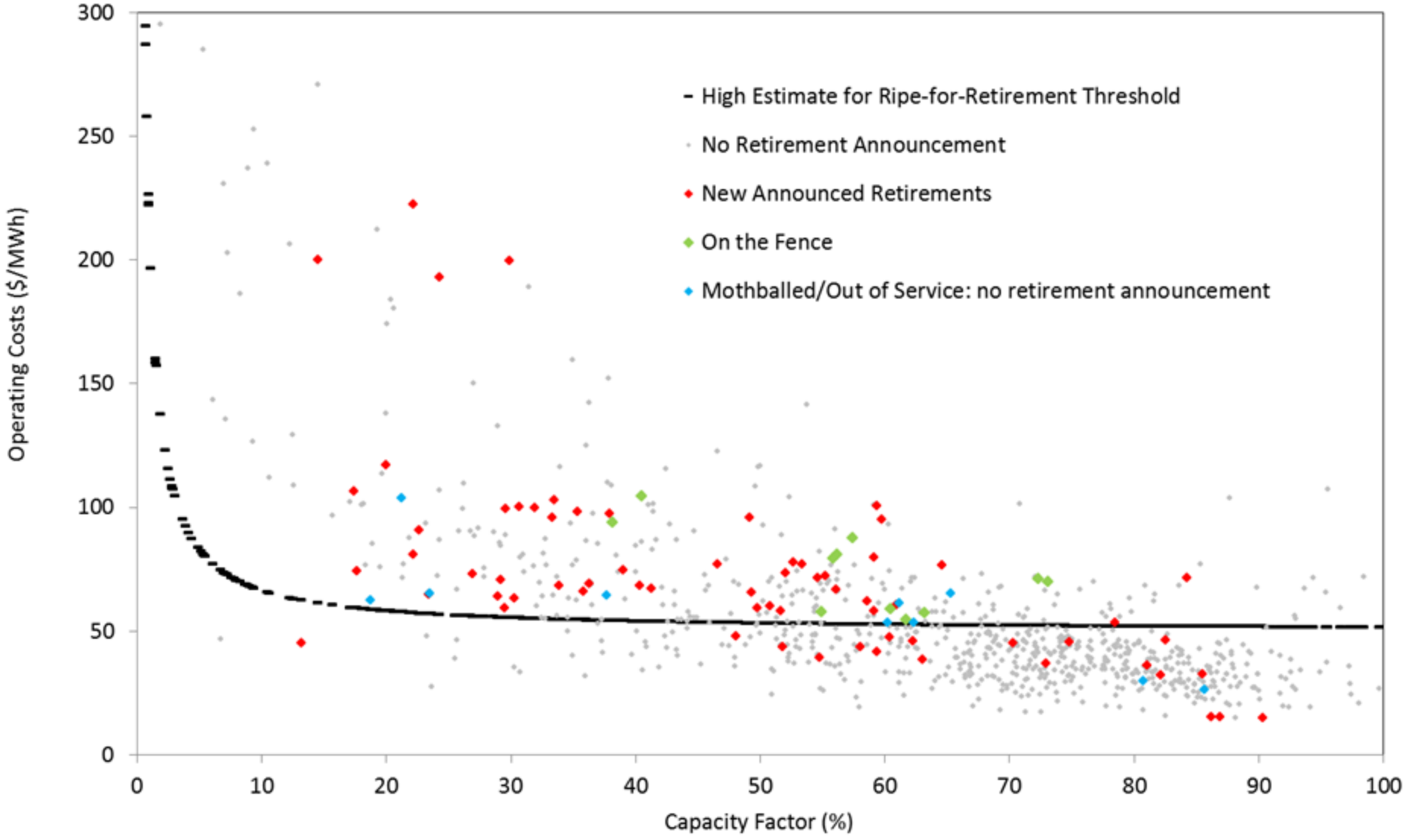
UCS's *Ripe for Retirement* Report Main Findings:

59GW of uneconomic coal generation vs. natural gas

57GW of uneconomic coal generation vs. wind power

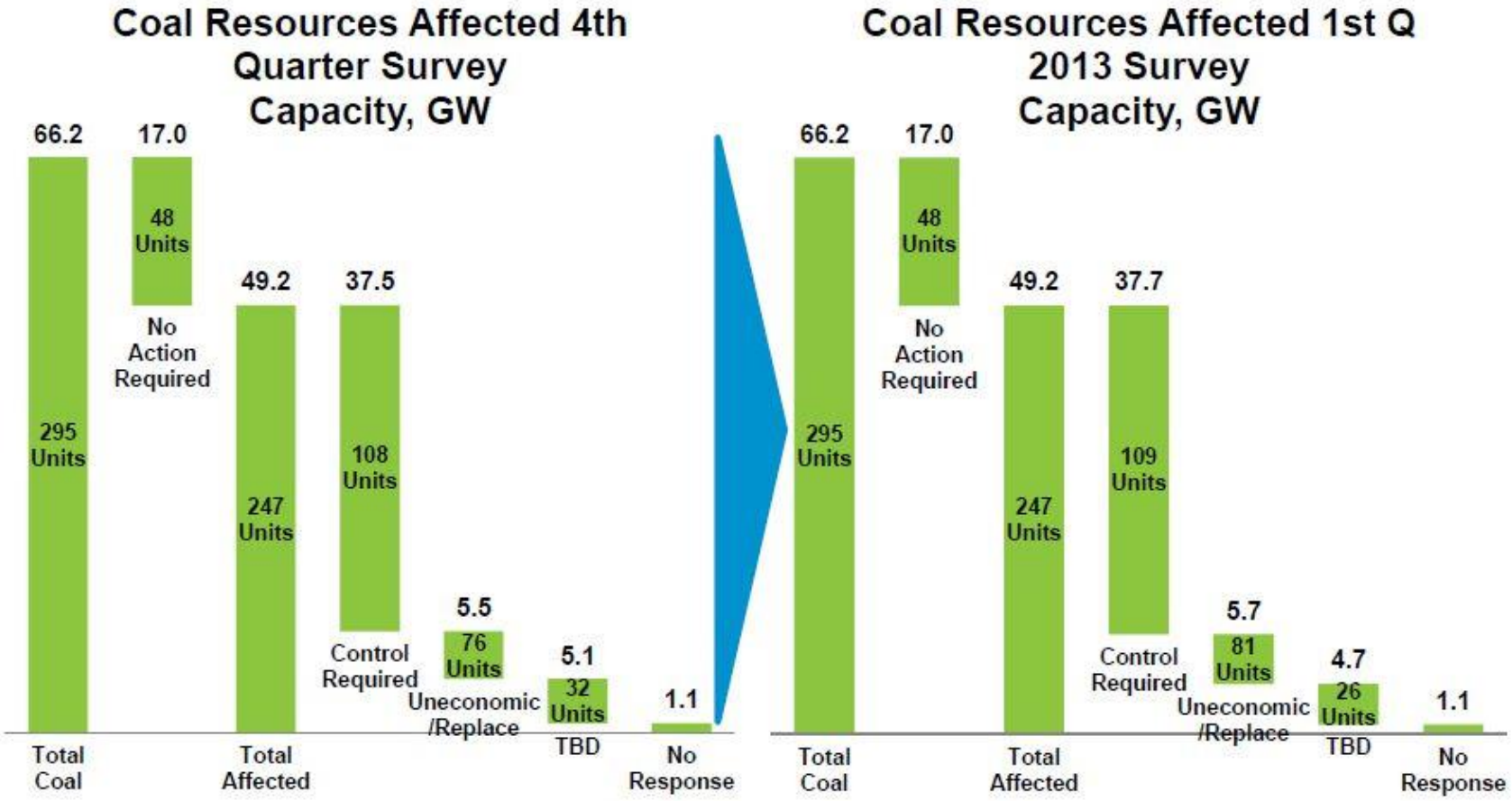


Recent Coal Unit Retirements Since R4R Release



MISO Outlook on Coal Unit Retirement

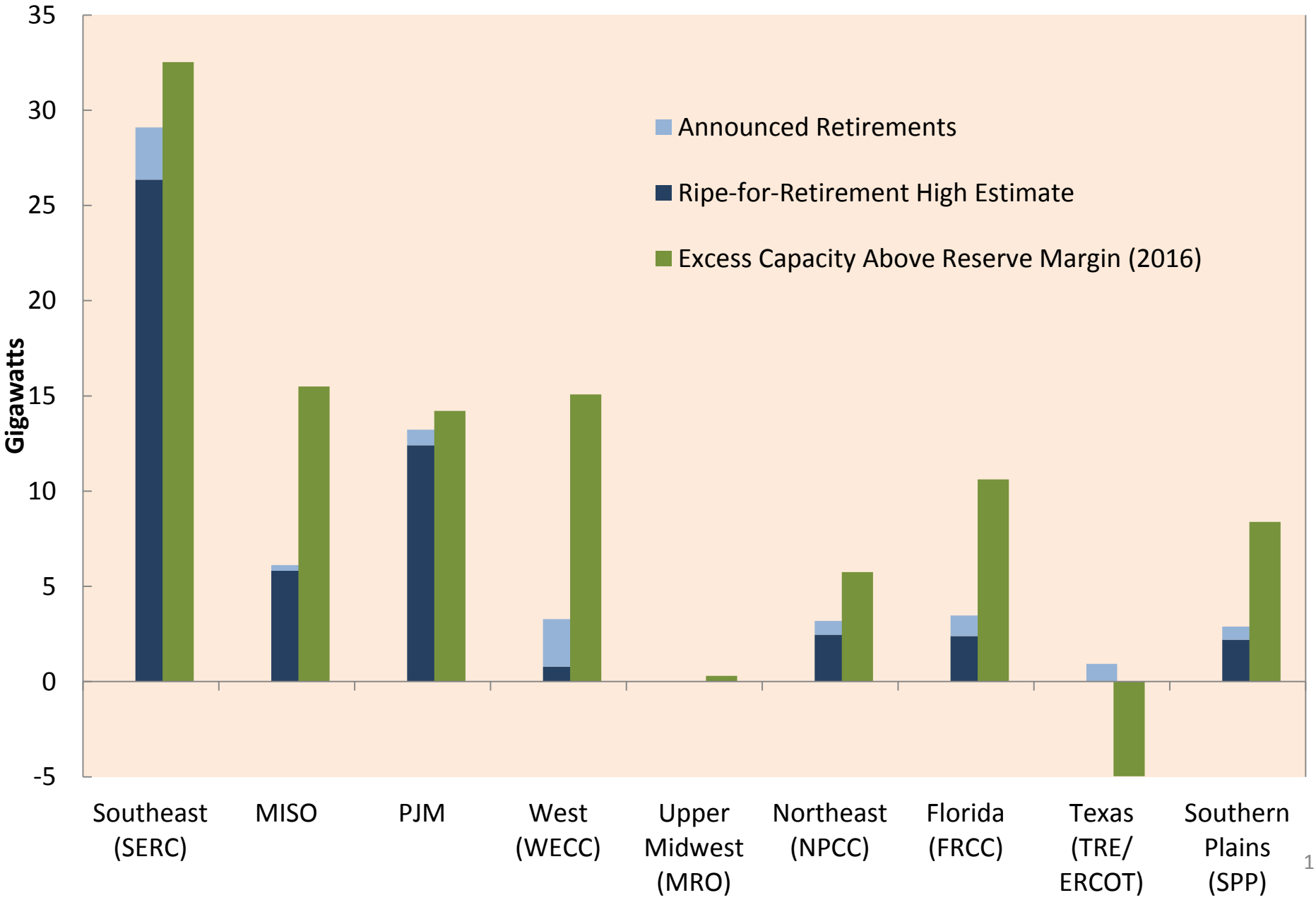
4th Q 2012 Survey to 1st Q 2013 Survey



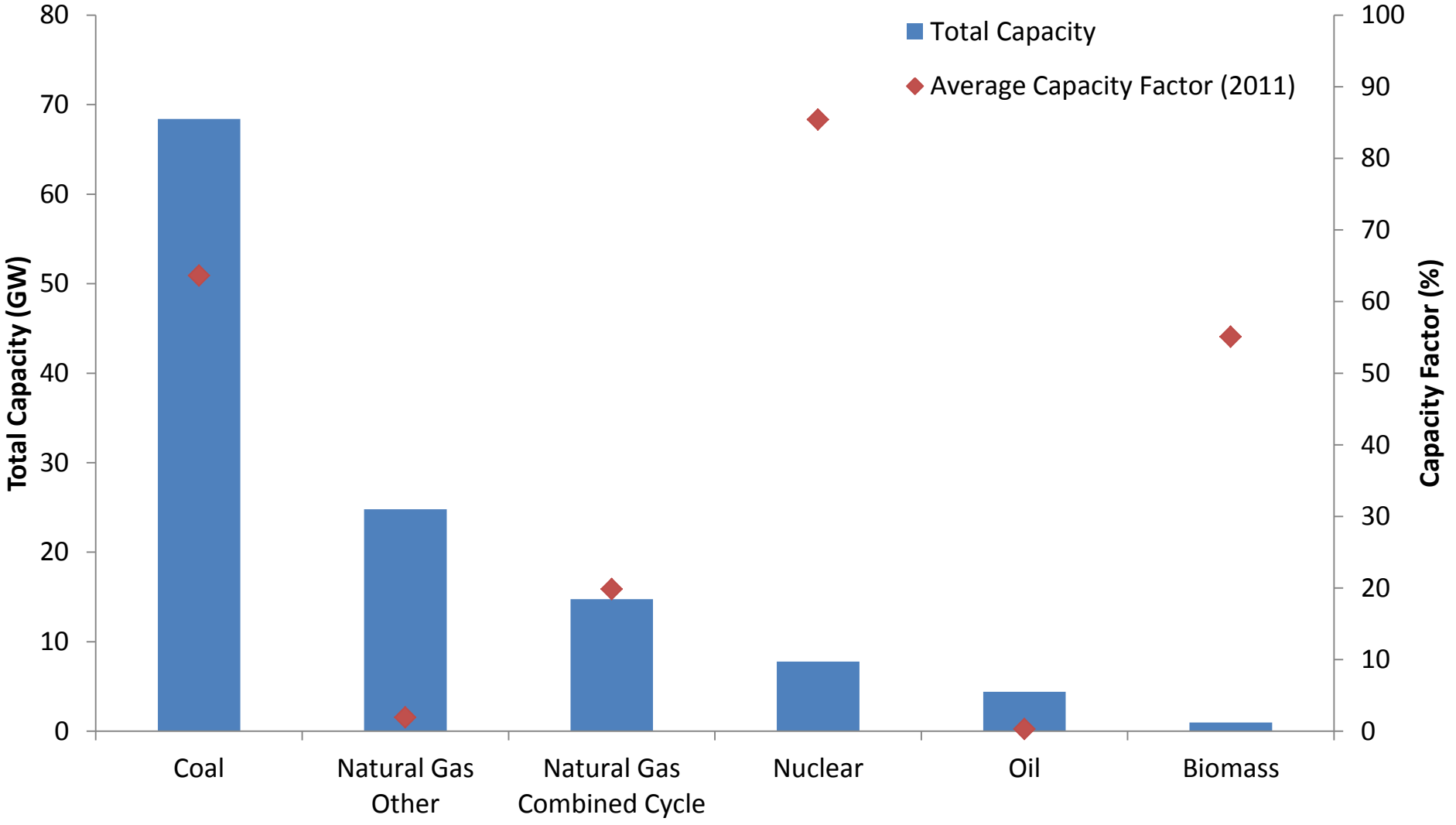
Source: MISO PAC meeting 3/20/2013

Excess Capacity Above NERC-Required Electricity Reserve Margin

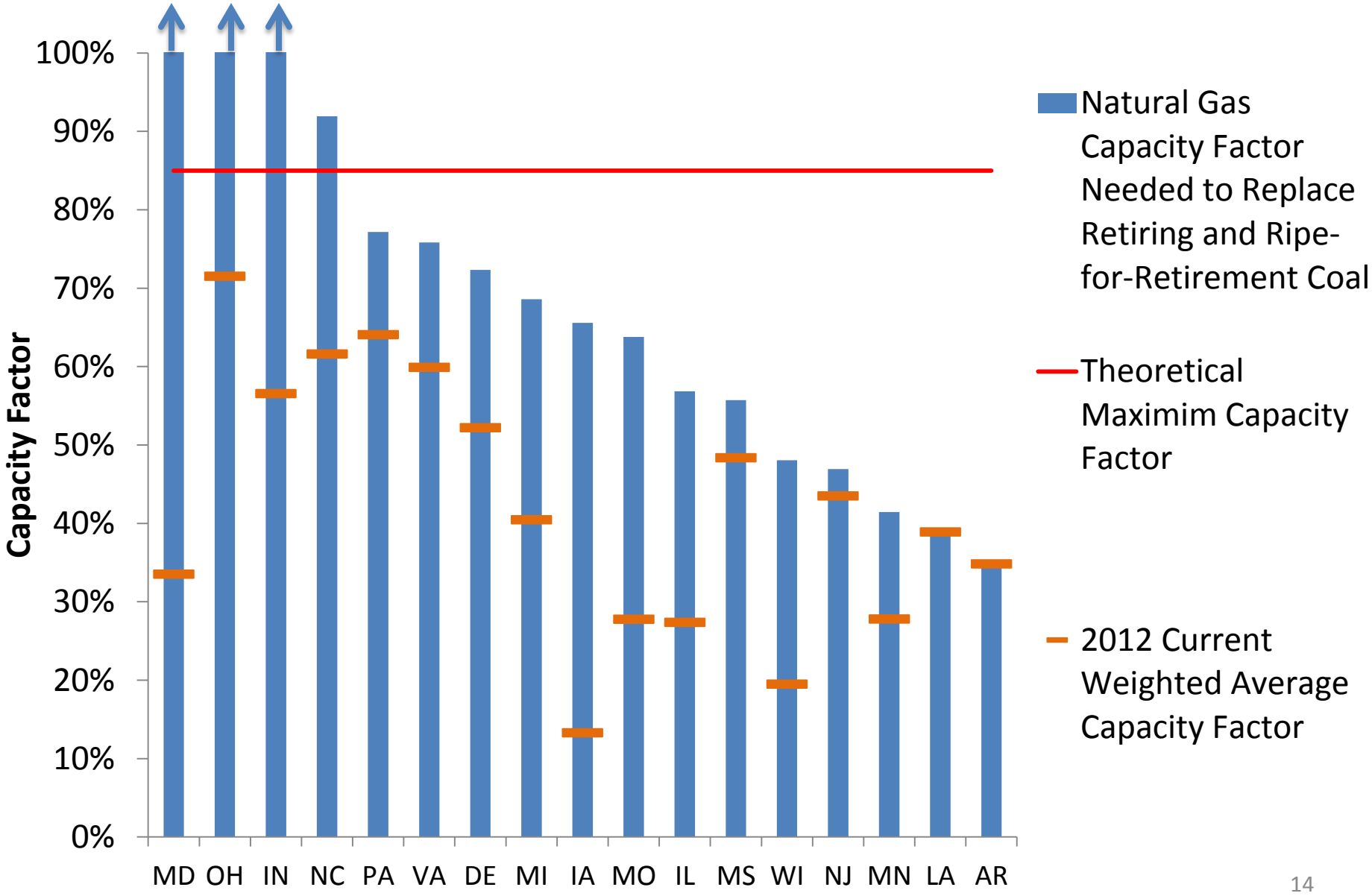
(Summer 2016 data from 2012 Reliability Report)



MISO Generation by Type & Capacity

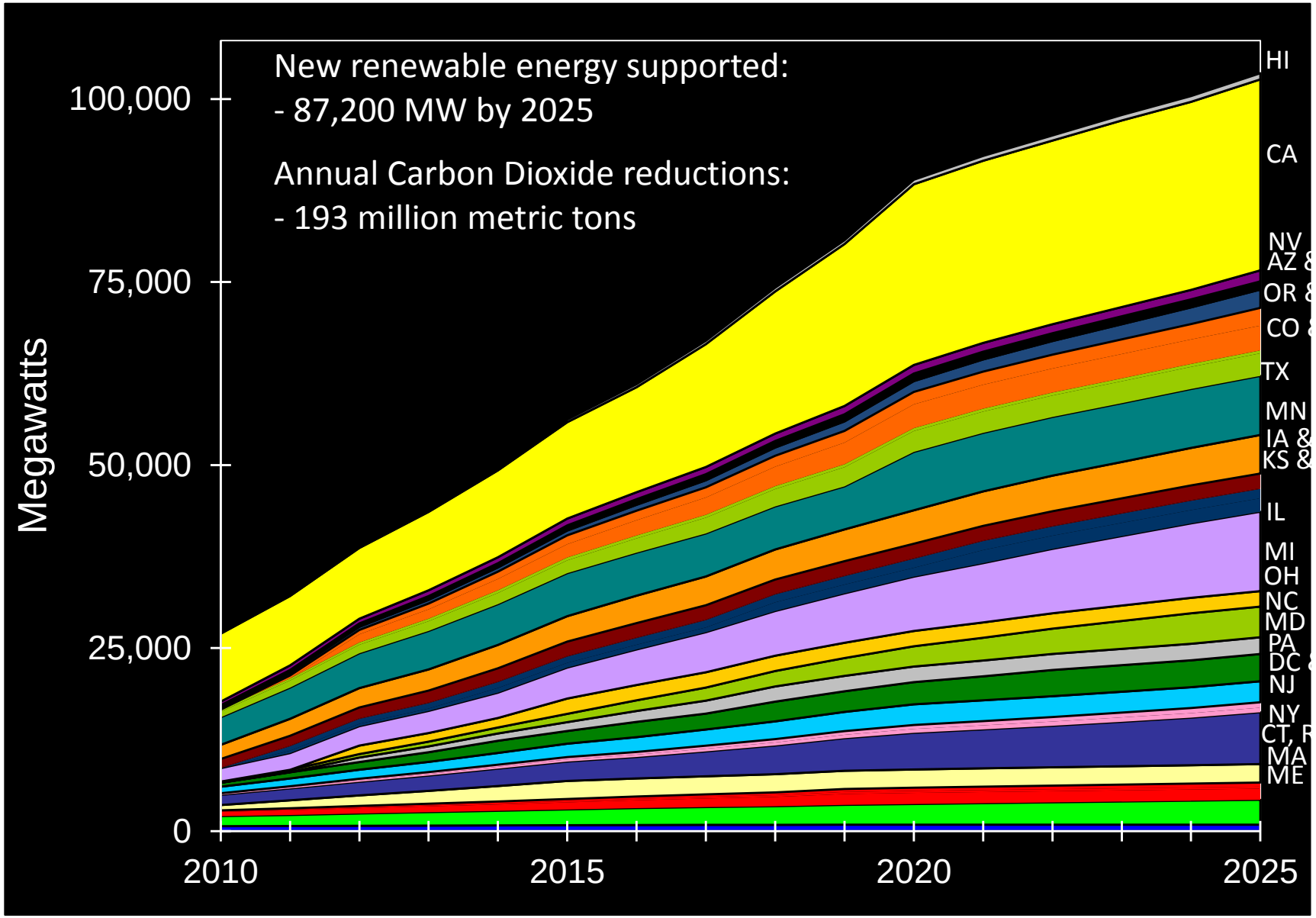


Excess Natural Gas Capacity, by State

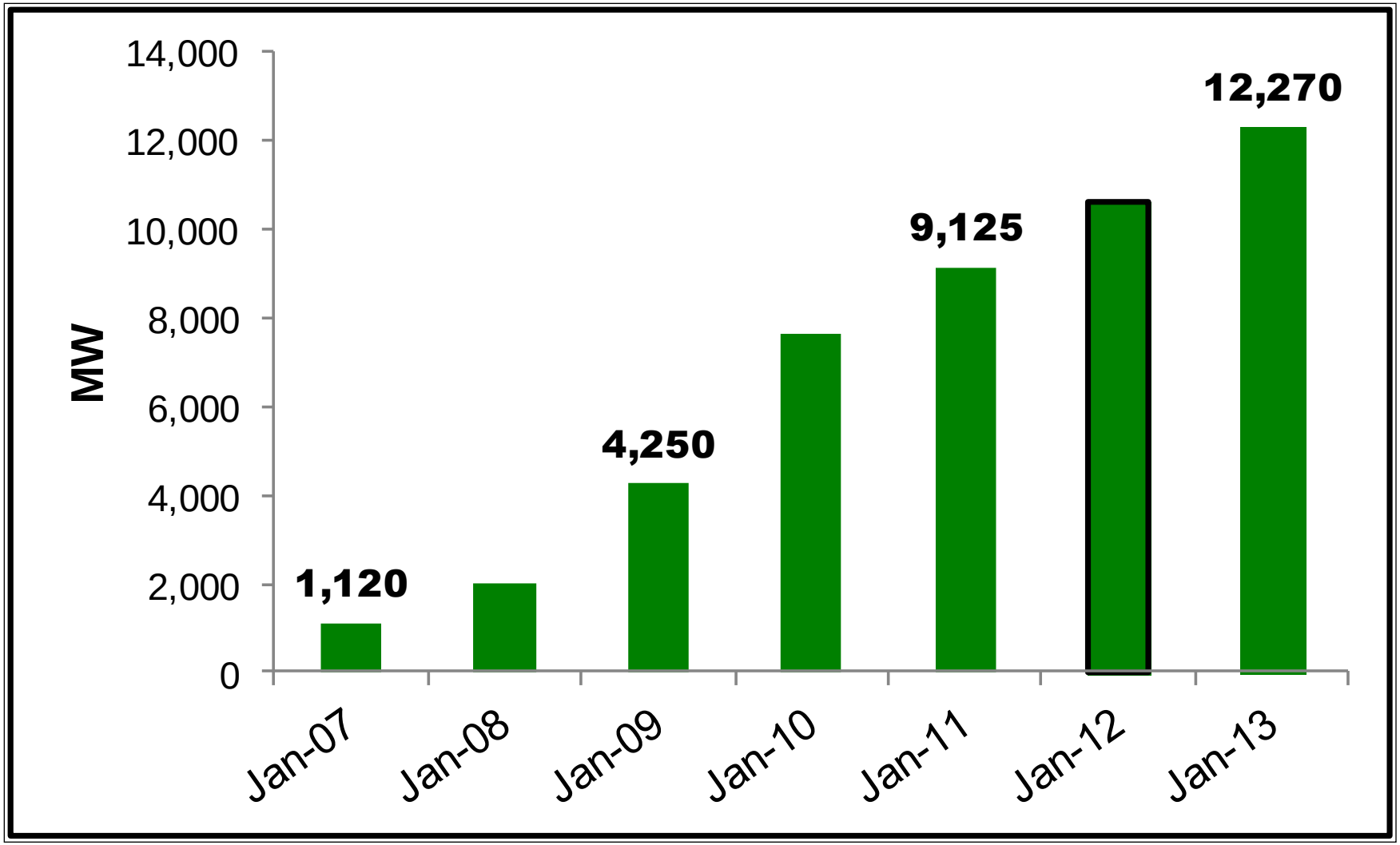


Renewable Energy Expected From State Standards

(Projected development assuming states achieve annual renewable energy targets)

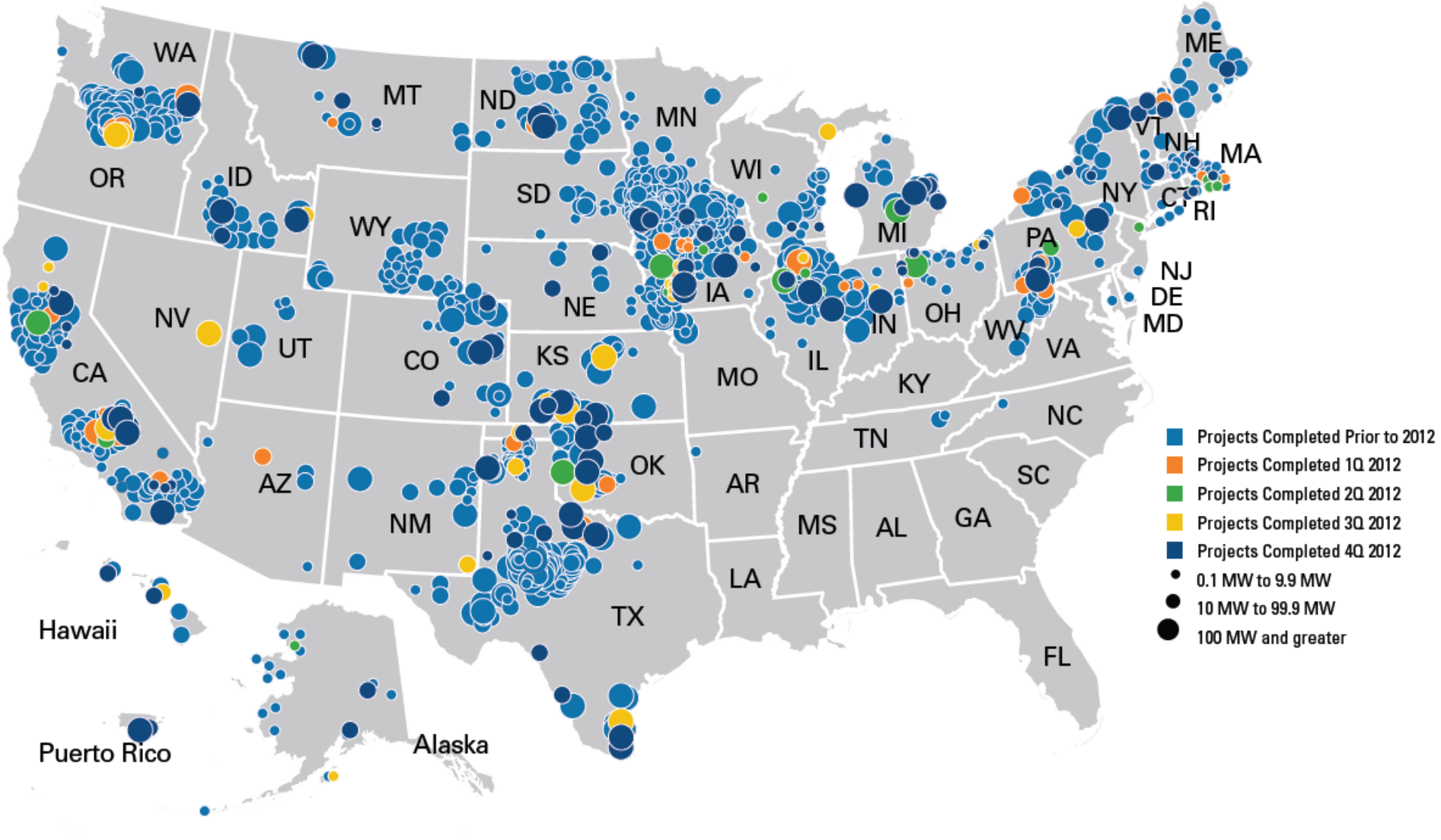


Wind Generation in MISO



Wind Power Projects are Distributed Across Most of the U.S.

(Source: AWEA 2012)



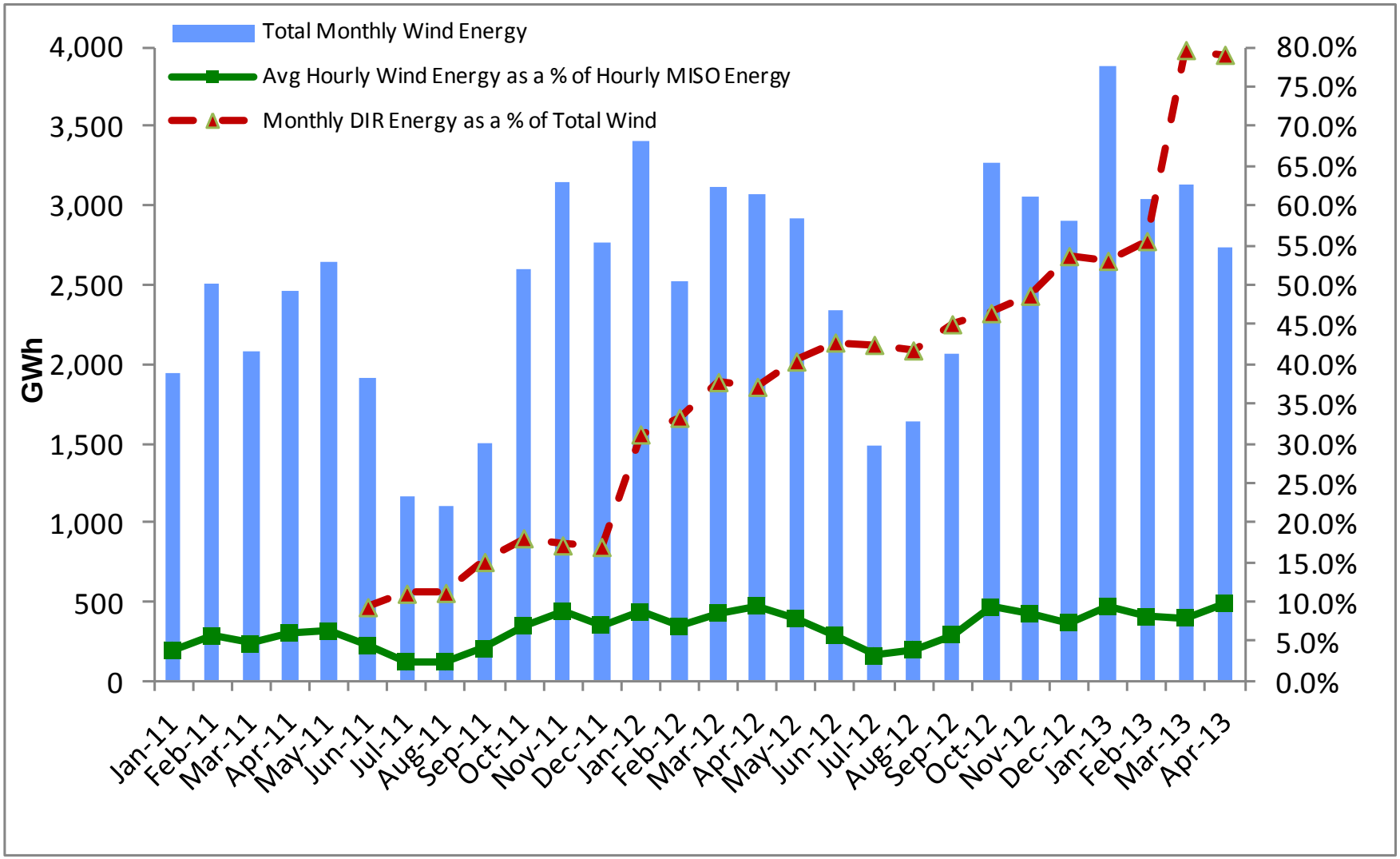
MISO is Now Experienced at Integrating Wind

"MISO does not currently anticipate significant operational management issues in the next several years."

- Output variability mitigated by geographic diversity
- Wind forecasting continues to improve
- Wind power does not trigger need for additional generation capacity:
  - Wind only minimally impacts need for more regulation reserves
  - Contingency reserves never deployed due to drop in wind output
- Wind contributes to peak load (2013 capacity value: 13.3%)
- Market rules are evolving to support fuller wind participation (i.e. DIR; Ramp Management, etc.)

Sources: MISO Management Presentation to BOD (Markets Committee) 2/15/12; MISO 11/27/12; MISO BOD Markets Committee discussion 2/20/13; MISO Informational Forum 5/21/13

Dispatchable Wind Generation in MISO



Source: MISO, Informational Forum, 5/21/13

DIR Designation + Experience = More Economic and Efficient Curtailment

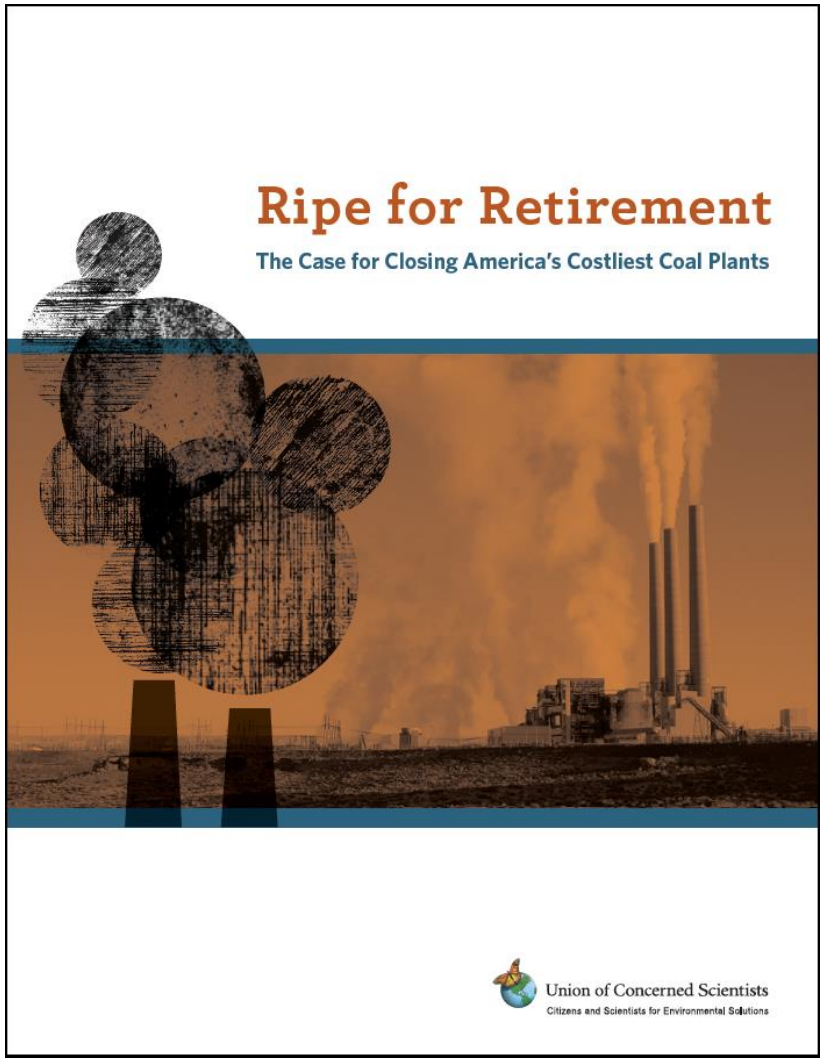
Annual Summary

	Total 2010	Total 2011	Total 2012	Total 2013 YTD
No of Wind Curtailments	2,117	2,034	889	148
Estimated MWHR Curtailed	824,399	720,190	266,383	60,875
Duration (Hours)	19,951	20,365	10,430	2,057
DIR Dispatch Down	N/A	130,296	582,653	390,420

Source: MISO RSC meeting 5/15/2013

Valuing Non-Transmission Alternatives

- Order 1000 requires greater consideration of NTAs
- How to explore value of NTAs and establish a process for greater NTA consideration as input into MTEP planning?
  - Develop a screening process to identify which prospective transmission investments could be instead met with NTAs (and screen out projects where NTAs are not applicable).
- Evaluate if an NTA is more cost-effective than transmission
  - Ask utilities to report data on EE program investments (only 3 of 27 provided useful data)
  - Tell states how much EE is needed to offset specific transmission project
  - UCS analysis : quantifying transmission value of state policy-driven EE/PV
  - Identify areas of congestion where additional DG or DR is needed
- What can OMS do: use expanded authority to ask MISO to review specific transmission planning decisions or cost allocation changes to ensure consideration of NTAs.



Questions?

For more information, contact:

Steve Frenkel
Director, Midwest Office
sfrenkel@ucsusa.org

Sam Gomberg,
Energy Analyst
sgomberg@ucsusa.org

www.ucsusa.org/ripeforretirement

5/15/13 PAC Summary

- **What to expect at upcoming Planning meetings:**
  - June 14th PAC:
    - Order 1000 compliance discussion
  - June 26th PAC:
    - Potential Motion on Critical Asset Identification BPM Language
    - Order 1000 compliance discussion
    - MTEP 13 progress update
    - Continued work on Top Down Regional BPM language.

For meeting materials, click here. **Next full PAC meeting 6/28. Special PAC call 6/14.**

- **Motions:**
  - Project Status Update BPM Language – MISO's proposed Project Status Update BPM language passed, in PAC email vote. There were initially two motions posted for the meeting (one MISO's and the other Entergy's), however neither were seconded to move to the floor. At that point, OMS raised a motion, which had 2/3 majority vote to move and was seconded, passing with 4 (yes), 0 (no), and 1 (abstain). OMS voted in support of the motion.

- **MTEP 13 Update:**
  - MISO presented the MTEP 13 resource siting results for all five MTEP 13 futures, as well as capacity expansions for MISO, MRO, Entergy, and several other neighboring planning regions. They also provided an overview of their general generation siting methodology. MISO requested feedback on these results. Please see the MTEP 13 EGEAS Results presentation for more details. Below are the notable remarks for each future:
    - Robust Economy – High coal and CT resources being sited throughout the footprint, with some CC and renewables.
    - BAU – Only two coal plants sited within MISO; higher CT, CC, and renewables.
    - Limited Growth – Majority of resources sited are wind, with few CC and CT. No coal in the footprint.
    - Generation Shift – High CT, with more renewables and only a few CC located within MISO.
    - Environmental – Relatively equal CC and CT being sited, as well as renewables. No coal within the footprint.

  - One Out of Cycle project (MidAmerican Energy NE 56th St Substation – a new customer load) was presented and voted on at this PAC meeting. This is the first OOC project to be applicable under MISO's updated OOC process. Under this new process, since there were no negative votes for this project, the project is implicitly approved and moved into MTEP, not requiring that it be brought in front of the MISO BOD for review and approval.

- **Top Down Regional Planning:**
  - MISO continues to discuss stakeholder feedback on their Top Down Regional Planning process. This top down process would apply to economic and multi-value projects, while the ongoing bottom-up process will continue for reliability projects. There is ongoing concern around the approach MISO proposes; a "portfolio" approach for economic projects. Some question if the Tariff allows economic projects to be planned in a portfolio; MISO claims it does indirectly, but stakeholders shouldn't call it a portfolio. MISO has not provided ample responses or justification for their claim that this would be acceptable, no matter how many stakeholders request this.

Prepared by J Govindan

Others worry that under this approach MISO will combine projects that would not by themselves pass the B/C criterion for economic projects (MEP). MISO requested feedback, which the OMS Executive Committee submitted questions to on May 31st, further supporting many of the concerns addressed above. Next steps include discussing the necessary change to the MTEP appendices and the process for submitting projects.

- **Project Status Update BPM language:**
  - MISO had final discussion about the updated project status proposal. Of particular interest to OMS has been the inclusion of a "backstop" milestone to make sure that under this new update process there will be at least one status update required each year. Currently, this approach follows specific milestones, which could occur months or years apart in some cases. OMS's motion amended the BPM language to incorporate specific "backstop" language, as well as a clarifying footnote to make sure that some of the data provided for the updates is still available, upon request, for those states that have the required confidentiality documents on file with MISO.

- **Order 1000 Regional Planning Update:**
  - MISO's amended compliance filing is due: **July 22, 2013.** MISO provided a summary of their intended approach for complying with FERC's Order. They covered only a few of the more significant issues, such as removal of the provisions retaining to a State ROFR, upgrade definitions, aspects in need of updates for their proposed developer selection evaluation process, and others. MISO requested feedback, which the OMS Executive Committee has responded to on May 31st. In short the OMS Executive Committee comments highlight concerns with four of MISO's approaches for complying with FERC's requested amendments:
    - *State Commission and OMS Participation in MISO's Competitive Process for Transmission Developer Selection*
    - *Deletion of Proposed Section VIII.A of Attachment FF of the Tariff (State ROFR)*
    - *Weighting of Cost Factors in Project Evaluation*
    - *Upgrade Definition (Twenty Contiguous Mile Threshold Issue)*
  - MISO has scheduled a PAC call on June 14th to discuss stakeholder comments.
  - MISO also clarified that the BRP cost allocation (100% local), per FERC's ruling on ER13-186 takes effect June 1, 2013. Meaning that all BRP projects targeted for MTEP 13 and beyond will no longer be eligible for any regional cost sharing.

- **Order 1000 Interregional Planning Update:**
  - *MISO – MAPP* → FERC rejected MAPP's regional proposal for using only avoided project cost benefit metric for regional cost allocation. This leaves MISO and MAPP considering next steps as MAPP works to re-file amendments to their regional filing, due after the Interregional filing is due. MISO & MAPP may seek extension of this July 10th deadline.
  - *MISO – SPP* → No change since the last update. SPP and MISO are discussing how to structure the filing and how to address the items both sides differ on (i.e., reliability project cost sharing). MISO and SPP may be submitting separate compliance filings and letting FERC pick one.
  - *MISO – PJM* → Still facing challenge of what to do in light of disagreement on the incorporation of reliability projects for cost sharing purposes. MISO still would like only economic projects to be included in the JOA, while PJM would like both economic and reliability projects. MISO and PJM may be submitting separate compliance filings and letting FERC pick one.
  - *MISO – SERTP* → MISO faces challenges with SERTP, in light of fact that FERC has yet to rule on SERTP's regional compliance filing. SERTP, like MAPP proposed using only avoided project costs benefits metric for their regional cost allocation methodology, which FERC rejected

in MAPPs filing. MISO and SERTP may file interregional compliance proposal before FERC ruling on SERTP's regional proposal, or they may try and seek an extension.

- **Additional Topics –** please refer to the PAC meeting materials for more information on the following:
  - Project/Solution Idea Submission Process: This was the first presentation MISO made regarding their proposed changes to the project submission process and MTEP appendices. Basically, MISO suggests that the current MTEP A, B, and C appendices remain as is for BRP and Other projects that come through the bottom-up planning process. However, for externally driven projects (i.e., GIPs, Market participant funded, etc.), only once the necessary studies and agreements have been completed will they be placed into MTEP Appendix A, not Appendix B. For cost shared projects (MEP and MVP) MISO will create a "Regional Solutions Idea" repository which would collect these solutions and attach them to one or more identified transmission issues to be studied. Once projects are developed and studied in their respective top down planning approach (i.e., depending on if MEP or MVP), then based on the findings they will be placed into either Appendix A or B.
  - CIP-002-4 Discussion: MISO has continued to discuss amendments they would like to make to the Critical Asset Identification methodology and associated BPM language. Expect a vote on BPM language at the June or July PAC meeting.

1. MISO Market Enhancement Development Project

Status: MISO workshop held on June 5th. Sent e-mail 6/6 asking for feedback on concerns and possible comments to MISO and Brattle, and may hold a WG meeting. Feedback is due by June 28th.

At the June 5 workshop, MISO's Renuka Chatterjee open and closed the meeting with presentations on goals and a suggested timeline. The timeline provides for two more workshops in July and August, then a daft vision in November, with a final vision document in December, but it is an initial proposal that, after discussion, will likely take longer. Samuel Newell and Kathleen Spees present the Brattle Group presentation. They presented an initial vision made up of objectives, core services, and principles. This includes characteristics of well-functioning markets, classical market functions, a list of other industries to review, an initial list of possible MISO "core services," some possible principles for enhancing those core services, and a process for prioritizing objectives.

Some things to think about are: What are MISO's core services? What items are principles that guide a vision versus tasks that result from a vision? What are the attributes of a well-functioning market as applies to MISO? Is this plan what should be done to "Enhance products and performance" under MISO's 2012-2016 Strategic Plan? Are there objectives that are missing or that MISO does not need to include?

For reference, OMS has developed principles for resource adequacy (approved 3/12/04, 5/17/07 and 8/12/10) and demand response (approved 12/8/07). See the OMS web site navigation bar, Filings and Comments, Resolutions and Principles.

2. MISO Ramp Enhancement Workshop

Status: MISO workshop June 10th. The OMS M&TWG is monitoring.

MISO has scheduled a Ramp Enhancement Technical Workshop June 10 to present the conceptual design of the ramp capability products, as well as the results of the comprehensive cost / benefit analysis of these products and their economic impacts in the Real Time market. A note was sent to WG on April 25.

3. OMS May 30 Bi-monthly call with IMM

Status: Provided summary of May 30 meeting to WG. Next meeting is tentatively August 1st. We are looking for volunteer to gather questions and lead next call.

During the May 30th call we discussed the April 1 scarcity event and MISO-PJM exchanges, the Entergy Weekly Procurement Process, the effects to two new large generators on operations and markets, and imports into PJM cleared in their most recent Base Residual Auction.

M&TWG members provide questions for the IMM, participate on the bi-monthly calls (that are for all in OMS) and provide a meeting summary after via e-mail. We request volunteers to gather questions and run a meeting, with the result that others get the opportunity to gain experience and get better acquainted with the IMM.

4. MISO June 4 MSC Meeting

Status: The OMS M&TWG is monitoring.

Items covered include the Low Voltage Study Results further discussion, SSR cost allocation, weekly versus quarterly operating limits for conditional interconnection agreements, RSG distribution market-wide netting changes, and approval of a motion to add an issue of cleared regulation not qualifying to the MSC issue list.

Regarding the low voltage study, MISO said (as it did at the 4/16-17 RSC and 4/30 MSC meetings) that it intends to identify lower voltage facilities carrying bulk electric flows to determine those facilities where thermal overloads and subsequent outages may result in cascading impacts on the BES, and then seek to bring these facilities under MISO Functional Control and monitor in real time. MISO is still in the process of talking to facility owners (including TDUs) and expects to manage those faculties. MISO also expects to develop how it will manage those facilities and would not do so without a policy. MISO would not dispatch around the lower voltage facilities. MISO has no timeline in mind. Interested OMS members have been discussing this with MISO in the OMS closed work group quarterly meetings.

Regarding System Support Resources cost allocation, participants discussed MISO's decision to assess "all market participants" though transmission charges (instead of market charges), the change in cost allocation from a demand based allocation for the Escanaba SSR to an energy based allocation for the Harbor Beach SSR, and that charges are assessed to both network and firm point to point transmission service.

For items that MISO expects to work on and seek input on during 2013, see MISO's Market Enhancement Development Project.

5. MISO June 5 FTRWG Meeting

Status: The OMS M&TWG is monitoring.

Items covered include a Reserve Source Point (RSP) additions priority and process improvement proposal by Xcel Energy to better grant feasible RSPs up to the cap. MISO agreed to the changes.

6. M&T WG leadership

Status: Looking for volunteers.
We are looking for a volunteer to co-chair the M&TWG. We are also looking for volunteers to gather questions and help run one of the future quarterly OMS calls with the IMM.

For those interested, please note the following MISO meetings:
MISO Board of Dirs Markets Committee – bi-monthly meetings (6/19 next mtg)
MISO Market Subcommittee - monthly meetings (7/9 next mtg)
MISO FTR Working Group – monthly meetings (7/10 next mtg)

The **OMS Markets and Tariffs Work Group** covers: Energy and Operating Reserve markets, Market Monitoring and Mitigation. See
http://www.misostates.org/index.php/work-groups-2/workscopereference/63-markets-a-tariffs-workscopereference
http://www.misostates.org//images/stories/work_groups/2013OMSworkgroupOvervie_28_February2013.pdf
Bill Bokram, Markets and Tariffs Work Group chair

OMS Resources WG Report to OMS Board – June 12, 2013

OMS LSE Resource Adequacy Survey

MISO supplied to OMS a draft survey for LSE's to fill out to help make a resource assessment of the possible risk to capacity planning reserve levels for the next 10 years. The survey includes detailed unit status (retire, add compliance technology, new, etc.) and forecast load data with the concept of adding some level of "certainty" or "uncertainty to load forecast. And with the generator unit status add some kind level of certainty.

The draft survey was sent out Wed. June 5, by Commissioner Bennett under Julie Mitchell email. Commissioner Bennett has asked for comments. The Resources WG Co-Chairs will collect staff comments for a combined presentation at the June 12 OMS Board meeting.

MISO SAWG

The two day June 6 & 7 SAWG meeting is still being conducted as of this writing. Please read the CES report for a summary of the meeting. MISO changed some of the procedures on call for LMRs to just a general MW level for the area of concern. The voting item on LMR automation possibly interfering with state jurisdiction was stopped and will be brought back next month. There seems to be a misinterpretation of LMR registration requirements.

The materials for the June 6 & 7
meeting: https://www.misoenergy.org/Events/Pages/SAWG20130606.aspx

LOLE

The next MISO LOLE WG meeting is June 12th:

https://www.misoenergy.org/Events/Pages/LOLEWG20130612.aspx

Joint Meeting of 3 MISO groups July 18

A joint meeting of the Electric and Natural Gas Coordination Task Force (ENGCTF), Supply Adequacy Working Group (SAWG), and Loss of Load Expectation Working Group (LOLEWG) has been scheduled for July 18. This meeting will be held at MISO Carmel facilities as well as by dial-in and webcast, and will focus on issues related to forward resource assessment.

https://www.misoenergy.org/Events/Pages/JointMeeting20130718.aspx

Stakeholder Center > Calendar > July 18 > ENGCTF – SAWG – LOLEWG Joint Meeting

Note: If you previously registered for the July 18 ENGCTF meeting, you do not need to register for this meeting.

By: Don Neumeyer, Co-Chair Resources Work Group.

OMS Regional Planning Work Group
Report to OMS Board of Directors – June 12, 2013
(Co-Chairs Jessica Govindan and Julie Urban)

PAC Update

At the May 15th PAC meeting MISO provided updates on MTEP 13 EGEAS siting results and out of cycle project reviews. MISO also presented a new project/solution idea submission process they would like to implement, as well as voted on the Project Status Update BPM language. Lastly, they provided an overview of just how MISO plans to comply with FERC's additional compliance requirements from the March 22 Order 1000 decision.

Note that the Project Status Update language discussion was intense and ended in an OMS motion (with inclusion of amendments to include a footnote and a "backstop milestone") being presented and passed. Please see the separate PAC summary for more details.

MISO requested feedback from stakeholders on some PAC issues, including Top Down Regional Planning and Order 1000 Compliance issues. The OMS Executive Committee provided additional comments on these two issues:

- Top Down Regional Planning – This was the 3rd round of comments. The RPWG drafted a list of additional concerns and questions and sought OMS Executive Committee endorsement in hopes that MISO would consider our concerns. MISO continues to discuss this process and is working on draft BPM language.
- Order 1000 Compliance Issues–RPWG members drafted initial comments for OMS Executive Committee endorsement that reiterated previously filed concerns related to parts of MISO's new developer selection process. Specifically, the comments covered four issues all relating to MISO's developer selection process:
    - *State Commission and OMS Participation in MISO's Competitive Process for Transmission Developer Selection*
    - *Deletion of Proposed Section VIII.A of Attachment FF of the Tariff (State ROFR)*
    - *Weighting of Cost Factors in Project Evaluation*
    - *Upgrade Definition (Twenty Contiguous Mile Threshold Issue)*

FERC Order 1000 Compliance – Regional Planning and Cost Allocation

MISO presented proposed actions to be taken for some of the 24 action items FERC required MISO to correct from the Order 1000 Regional Compliance filing. They have scheduled a PAC call on June 14th to discuss stakeholder comments. Final compliance amendments are due at FERC on July 22nd.

FERC Order 1000 Compliance – Interregional Planning and Cost Allocation

Reminder: Order 1000 Interregional Compliance filings due July 10, 2013.

MISO is continuing to wrap up work with most of its neighbors on establishing or improving interregional planning and cost allocation methodologies. Compliance filings may be filed jointly or separately with some of MISO's neighbors, depending on the level of agreement that can be reached in the next several weeks. This would specifically relate to PJM and SPP. MISO faces challenges with SERTP, in light of fact that SERTP's regional compliance decision is still unknown. Please see the separate PAC summary for more details.

OMS Transmission Cost Allocation Work Group

June 2013 Monthly Report

This report focuses on a summary of the recent FERC order on its investigation into MISO Transmission Owners' formula rate protocols. On June 6, MISO and the MISO Transmission Owners filed a request for a 60 day extension (to September 16) to make their compliance filing.

We also note that FERC issued an order on May 23 in ER13-708-000, the case involving the extension of Section 205 filing rights to the OMS. The new authority provides for support from MISO and concurrent cost allocation filings on non-baseline reliability filings.

FERC Order on Investigation into MISO Transmission Owners' Formula Rates

EL12-35-000

Issued May 16, 2013

On May 17, 2012, FERC opened an investigation into the whether the MISO Transmission Owners (TO or TOs) formula rate protocols were just and reasonable. This action followed filings in previous FERC cases by the Illinois and Indiana Commissions which argued that the protocols were insufficient to ensure just and reasonable rates.

The investigation was a paper hearing, and interventions and/or pleadings were made by OMS and individually by the following state commissions: Illinois, Indiana, and Iowa.

The current rate protocols were approved in 1998 when MISO was being set up as a new ISO. Since then, FERC explained that other rate protocols have been developed and approved to the benefit of transmission customers and other stakeholders. In this order, FERC found that the existing MISO TO rate protocols have become insufficient to ensure just and reasonable rates.

Part of the reason for the finding was the argument that prior to the advent of the MISO Multi-Value Projects (MVPs), very few costs from transmission projects were spread across the states. With more regional cost sharing, it becomes even more important to allow all stakeholders the ability to review and challenge transmission project costs.

FERC ordered the following:

Transparency:

"…MISO's protocols for both historical and forward-looking formula rates must require transmission owners to post their revenue requirements and relevant information, on both MISO's website and OASIS, and then hold an annual meeting open to all interested parties, where the transmission owners can explain and those parties can review and discuss the transmission owner's calculations." (Paragraph 86)

"…the protocols must require utilities to provide the underlying data and calculations supporting all inputs that are not supported in the FERC Form No. 1 or in other Tariff schedules in formula rate annual updates and, where applicable, the true-ups." (Paragraph 86)

"…the annual update must provide interested parties information about the transmission owners' implementation of the formula rate in sufficient detail and with sufficient explanation to demonstrate that each input to the formula rate is consistent with the requirements of the formula rate, without forcing interested parties to make extensive information requests to understand the transmission owner's implementation of the formula rate and to verify the correctness." (Paragraph 86)

FERC imposed requirements for the TOs to disclose changes in accounting methods, corrections of errors, implementation of new estimation methods or policies that change prior estimates, changes to income tax elections, and any non-historical items affecting the formula rate. (Paragraph 87)

FERC noted that it will continue to conduct audits of FERC Form No. 1 and formula rates, but declined to begin conducting annual audits for every TO, as was suggested by the OMS. (Paragraph 88)

FERC declined to impose more stringent requirements to provide accounting methodology information beyond what is already in FERC Form No. 1, reasoning that all public utilities are required to follow the Uniform System of Accounts. (Paragraph 89)

FERC did not require five-year projections of costs, or an annual analysis of reliability data. However, in response to the Indiana Commission's concerns, FERC did find that during the review period, interested parties must be allowed to obtain upon request information on procurement methods and cost control methodologies used by TOs in order to facilitate analysis of whether the costs were prudently incurred. (Paragraph 90)

FERC requires MISO to specify an adequate time period for interested parties to review information following its posting on OASIS and MISO's website. During the review period, parties have the right to request relevant information and document requests on the TO. If a dispute arises that cannot be resolved during the review period, parties can initiate challenge procedures. (Paragraph 91)

After the review period, each TO must make an informational filing of their formula rate update at FERC.

Challenge Procedures:

FERC found that the existing challenge procedures in the MISO formula rate protocols are insufficient to ensure just and reasonable rates. (Paragraph 113)

FERC ordered that the formula rate protocols must have a procedure through which interested parties can informally challenge TOs' proposed inputs. The procedures must allow a challenge during a reasonable time period after the TOs initially propose their annual updates. FERC did not specify what a "reasonable time period" means. FERC requires MISO and the TOs to appoint a senior representative to work with the interested party toward the resolution of the dispute. The language could be unclear as to whether this means one representative satisfies this requirement for both MISO and the TO, or does there need to be a representative from each? (Paragraph 119)

If the parties are unable to resolve the dispute, interested parties must be permitted to raise a formal challenge with FERC, in which the TO would bear the burden of demonstrating the correctness of its update or true-up. (Paragraph 120). However, stated that parties making a challenge must first create a serious doubt as to the prudence of those expenditures before the burden of proof shifts to the transmission owner. (Paragraph 121).