



National Association of Energy Service Companies (NAESCO) Midwest Regional Meeting

"Evaluating Market Opportunities in the Midwest"

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Discussion Outline

- History of MEEA
 - Who we are, What we do, Why we care
- Energy Efficiency Trends Nationally and in the MW (State-by-State)
 - Current Usage (energy units & \$)
 - Potential Savings (energy units & \$)
 - Funding (past and future)
- Benefits of Energy Efficiency
- Midwest Natural Gas Initiative
- Other Policy Work

MEEA Mission

MEEA is a collaborative network whose purpose is to advance energy efficiency in the Midwest in order to support sustainable economic development and environmental preservation

Who We Are: MEEA Members

- Academic and Research Institutions
- Manufacturers and Retailers
- Utilities (IOUs, Munis and Coops)
- State and Local Governments
- Energy and Environmental Non-profits
- Energy Service Companies, Contractors and Consultants

This diversity is critical to the coordinated success of regional efficiency programs

Why We Care - Electric

- **Energy Efficiency is the first most basic step to:**

ENERGY BENEFITS

- *Avoid building more power plants or delay the need to build*
- *Reduce current energy usage to better manage load and improve grid reliability*
- *Reduce natural gas demand as it relates to on-peak electric use*

ENVIRO BENEFITS

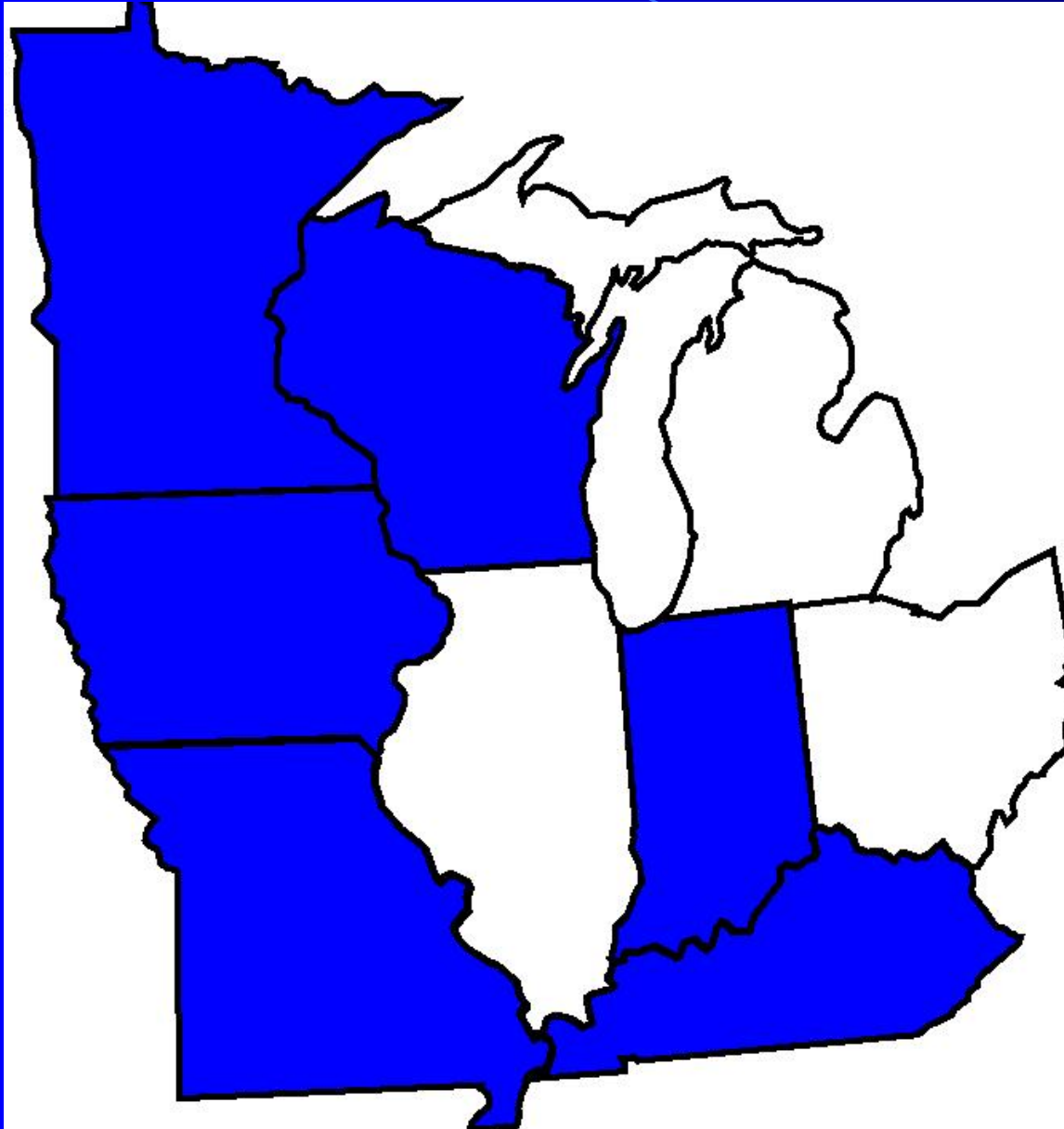
- *Reduce the introduction of pollutants into the environment*
- *Create a more sustainable future*

OTHER BENEFITS

- *Create better-informed, more aware and empowered consumers*
- *Help to revitalize the economy by investing in manufacturing of energy efficient products and energy efficient services*

**SUMMARY OF
ELECTRICITY
DEREGULATION IN
THE MIDWEST & ITS
RELATIONSHIP TO
ENERGY EFFICIENCY
FUNDING**

REG vs DEREG



Regulated States:

Minnesota
Iowa Missouri
Indiana
Kentucky

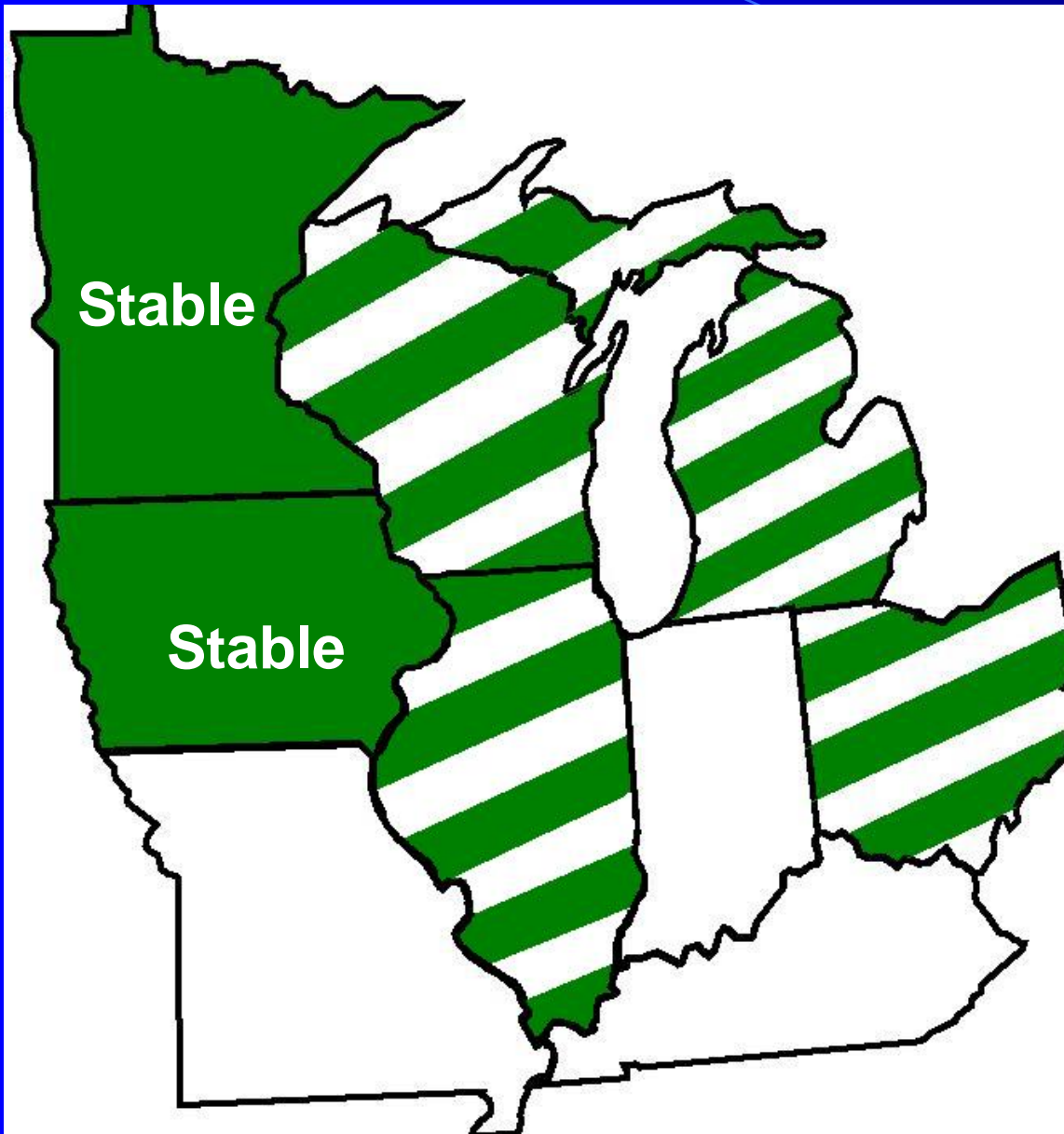
Deregulated States:

Illinois
Michigan
Ohio



**Regional Energy
Efficiency
Investments**

Midwest Funding Changes



WI Focus on Energy Program

NEVER FULLY FUNDED

WI: Lost at least \$18M 2004

WI: Lost \$29M 2005, 06, 07

OH Revolving Loan Fund

OH: Lost \$2.5 M 2003

OH: Lost \$10M 2004 – loan to PIP

OH: Potential loss of \$12M 2005

OH: 2006 Loss of \$5M and loss of authorization to spend interest on the fund

IL EE and Renewable Fund

IL: Lost \$4M PBF 2004

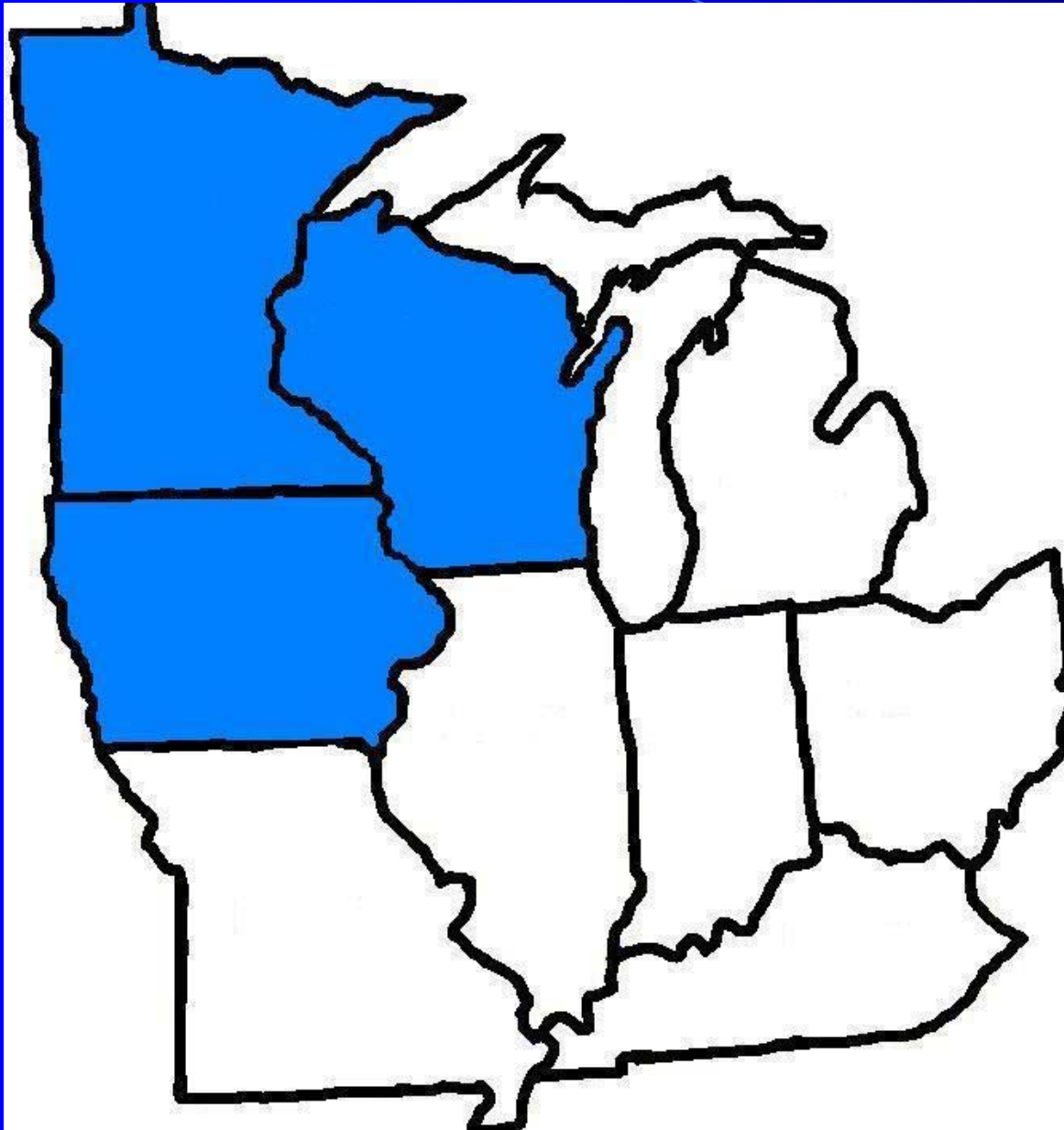
IL: Lost \$12M RE/EE 2005

IL: Lost several \$M thru error

**IN 2003, ROUGHLY \$230M
WAS INVESTED IN ENERGY
EFFICIENCY PROGRAMMING
IN THE MIDWEST
BY 2005, THAT NUMBER
DECLINED BY 1/3RD
2006 MIGHT GET BETTER**

**MI: funding is actually
increasing through PSC
approval & legislation**

Midwest EE Investments by Utilities



Minnesota

- Gas - \$12.2 million
- Electric - \$51.4 million

Iowa

- Gas - \$22 million
- Electric - \$62 million

Wisconsin

- Gas - \$13.9 million
- Electric - \$47.6 million

Illinois

- Electric - \$3 million
- Gas - 0

Michigan

- Electric - \$40 million
- Gas - 0

Ohio

- Electric - \$10 million
- Gas - 0

Programs

PROGRAM SUCCESSES

- **2001**
 - Illinois Residential Lighting Program
 - Change A Light, Change the World
- **2002**
 - Illinois Residential Lighting Program
 - Change A Light, Change the World 2002
 - Refrigerator Rebate and Recycling - Pilot Program
 - Building Operator Certification Program
 - Illinois Residential Market Assessment
- **2003 & 2004**
 - Illinois Residential Lighting Program
 - Change A Light, Change the World
 - Regional Refrigerator Rebate and Recycling Program
 - Building Operator Certification Program – Continued
 - Regional Market Assessment
 - Double Your Savings Campaign – ENERGY STAR Qualified Clothes Washers
- **2004**
 - All those listed above AND
 - Midwest Building Solutions Training

Change A Light, Change The World

- Program Length: Fall 2001 - 2005
- Total # of CFLs Rebated: 1.07 million*
- Energy Savings*:
 - Annual: 70.6 M kWh
 - Lifetime: 494.4 M kWh
- Lifetime Environmental Impact*:
 - CO₂: 1.07 billion pounds avoided
 - SO₂: 11 million pounds avoided
 - NOx: 5.7 million pounds avoided

* Included estimates from 2005 program

Illinois Residential Lighting Program

- Program Length: June 2001 – January 2005
- Total # of CFLs Rebated: 244,600
- Total # of Torchierees Rebated: 4,357
- Total # of Fixtures Rebated: 5,015
- Total # of Fans Rebated: 112
- Total # of Retail Visits and Trainings: Over 3,500
- Total # of Outreach Events: 54

Illinois Residential Lighting Program

- Energy Savings:
 - Annual: 15.9M kWh
 - Lifetime: 98.6M kWh
- Lifetime Environmental Impact:
 - CO₂: 241.2 million pounds avoided
 - SO₂: 1.2 million pounds avoided
 - NO_x: 627,000 pounds avoided

Northern Illinois Energy Project Residential Lighting Program

- Program Length: June 2004 – June 2007
- CFL Sales Goal: 700,000
- Program will be rolling out in the next few months
- Direct buy-down of CFLs

Double Your Savings with ENERGY STAR Clothes Washer Campaign

- Program Length: Spring 2003 and 2004
- Total # of Washers Rebated: over 6,000
- Energy Savings:
 - Annual: 1.8 M kWh
 - Lifetime: 21.6 M kWh
- Lifetime Environmental Impact*:
 - CO₂: 48.3 million pounds avoided
 - SO₂: 241,000 pounds avoided
 - NO_x: 125,400 pounds avoided

Refrigerator Rebates and Recycling

- Program Length: Spring 2002, Fall 2003
- Total # of Refrigerators Recycled: 6,886
- Energy Savings:
 - Annual: 8.8 M kWh
 - Lifetime: 54.8 M kWh
- Lifetime Environmental Impact:
 - CO₂: 131.5 million pounds avoided
 - SO₂: 641,000 pounds avoided
 - NO_x: 344,000 pounds avoided
- New Program Launching This Fall in Missouri

Pilot Room AC Program

- Program Length: Summer 2005
- Targeted to low-income customers in Northern Illinois
- Targeted consumers would turn-in older room AC unit and would receive a free ENERGY STAR qualified unit
- Recycled older units
- Total number of units and corresponding energy savings and environmental impact is still be ascertained

Building Operator Certification (BOC) Program

- Training and certification for more comfortable, energy efficient facilities
- MEEA offers BOC training in four states:
 - Ohio
 - Illinois
 - Minnesota
 - Missouri
- More than 350 building operators trained since 2003

Building Operator Certification (BOC) Program

- BOC trained building operators save, on an annual basis:
 - 0.35 kWhs of electricity per square foot
 - 0.40 MMBtu of fuel oil per square foot
 - 0.34 MMBtu of natural gas per square foot
 - 0.14 gallons of water per square foot

“Impact and Process Evaluation Building Operator Training and Certification (BOC) Program.” June 2005. Prepared by RLW Analytics.

<http://www.neep.org/boc/index.html>

Building Operator Certification (BOC) Program

- Energy Savings*:
 - Annual: 24.5 M kWh
 - Lifetime: 122.5 M kWh
- Lifetime Environmental Impact:
 - CO₂: 273.2 million pounds avoided
 - SO₂: 1.4 million pounds avoided
 - NO_x: 710,000 pounds avoided


* Assuming a conservative average facility size of 200,000 sf

Midwest Building Solutions Training Program

- MEEA's Newest Training Program
 - ◆ For home builders, ½ day training session
 - ◆ Beyond code building practices (IECC 2003)
- 2005 MBS Training Pilot
 - ◆ Offered in Cincinnati, Cleveland, and Columbus
 - ◆ Survey results: 96% said training provided “ideas useful for work or business”
- 2006 MBS Growth Potential
 - ◆ 10 training sessions planned in Ohio & Illinois
 - ◆ Evaluate, develop as turn-key training
 - ◆ HBA interest in training sponsorship

Cumulative Impacts for all of MEEA's Programs to Date

- Energy Savings:
 - Annual: 121.6 M kWh
 - Lifetime: 791.9 M kWh
- Lifetime Environmental Impact:
 - CO₂: 1.76 billion pounds avoided
 - SO₂: 14.5 million pounds avoided
 - NO_x: 7.5 million pounds avoided



POLICY

Policy

General Policy Issues:

- Increased awareness of EE by decision makers
 - All MEEA states
- Increased funding for EE in all MEEA states
 - \$900M or 2% of electric utility revenue by 2010
 - \$360M or 0.5% of natural gas utility revenue by 2010
- Increased adoption of energy codes
 - Michigan
 - Illinois
 - Indiana
 - Iowa

Midwest Natural Gas Initiative

About

The Midwest Natural Gas Initiative is a cooperative effort by 8 Midwest states to develop a multi-state energy efficiency initiative to decrease natural gas consumption by 1% per year for five years. This will cause wholesale natural gas prices to decrease by as much as 13%.

Midwest Natural Gas Initiative

- New Policy Initiative for the next 5 years
- Spearheaded by Commissioners Munns (IA) and Reha (MN)
- Framework is Regionally Coordinated Energy Efficiency
 - Coordinated by MEEA with support from RAP and ACEEE
- Based on ACEEE's Midwest Natural Gas Study released Jan 2005
- Goal is 1% per year reduction in natural gas consumption for a total of 5% reduction by 2011
- Result is expected to produce a 13% decrease in natural gas pricing
- Wisconsin Governor Jim Doyle and Iowa Governor Tom Vilsack, first to sign MOU and commit to savings: Joint letter from both encouraging other MW Governors to join on
- Other states are IL, IN, MI, MN, MO, OH and... KS and...CT

Materials

- Memorandum of Understanding
- 8 State Specific White Papers
- Longer EE Paper using all resources
- Educational Materials
- Website: www.mwnaturalgas.org
- Press Releases
- Other items as needed

**Regional Dollar Drain
\$29 billion per year**

Potential FUNDING: Electric

● STATE	% of Total	Funding
● IL	21%	\$167M
● IN	14%	\$113M
● IA	5%	\$40M
● MI	14%	\$109M
● MN	8%	\$66M
● MO	7%	\$55M
● OH	21%	\$166M
● WI	10%	\$83M

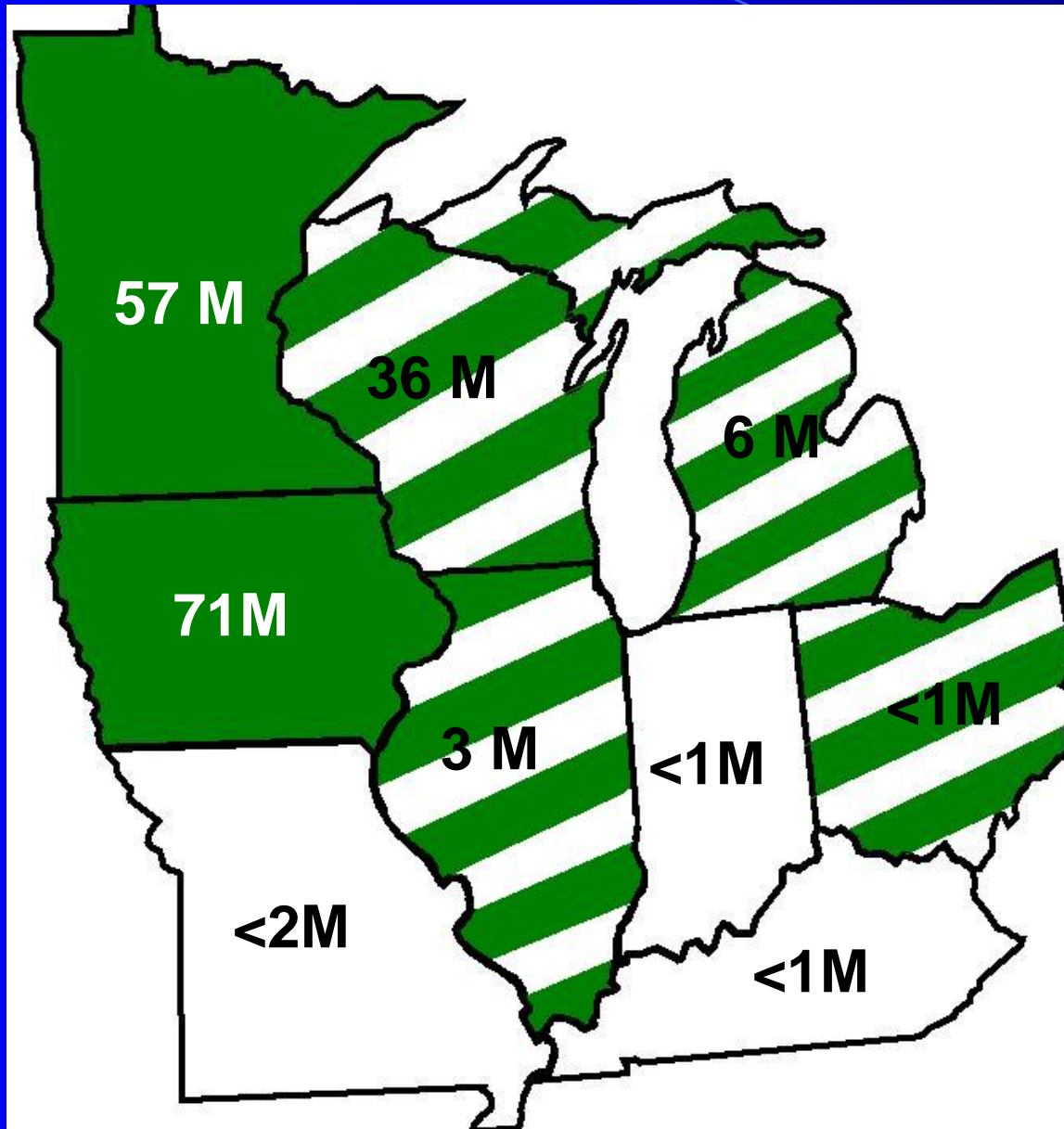
TOTAL \$799 M

Potential FUNDING: Gas

● STATE	% of Total	Funding
● IL	24%	\$75M
● IN	11%	\$35M
● IA	5%	\$16M
● MI	19%	\$59M
● MN	9%	\$27M
● MO	4%	\$12M
● OH	16%	\$51M
● WI	11%	\$34M

TOTAL \$309 M

Midwest Combined Funding



Roughly
\$177M in
both gas &
electric
investments

Minnesota

Gas - \$12.2 million

Iowa

Gas - \$12 million

Wisconsin

Gas - \$13.9 million

Funding Delta & ROI

Electric

\$622M

Nat Gas

\$271M

Direct ROI > 3:1

Societal ROI > 20:1

What could be the Regional NET of increased investment in EE?

- \$4B per year in direct utility bill savings
- 30,000 new jobs
- \$750M in additional employee compensation by 2010
- Avoided dollar drain as a region of \$30B + per year

Imagine what these resources could do at a time with MW governors are desperately using all possible funds (EE/RE or otherwise) to try to balance their budgets

More Information?

- Visit www.mwnaturalgas.org for more information
- Look for state fact sheets in the near future



**OTHER MIDWEST
POLICY
CONSIDERATIONS?**

Energy Codes

Illinois

- New statewide commercial code is IECC 2001
- No statewide residential code

Iowa

- Currently 1992 MEC and ASHRAE 90.1-1989
- Proposal to upgrade residential and commercial to the IECC 2004

Indiana

- Currently 1992 MEC and state-developed commercial code below the ASHRAE 90.1-1989
- Proposal to upgrade to the IECC 2004 is stalled

Energy Codes

Michigan

- Statewide commercial code is ASHRAE 90.1-1999
- Statewide residential code is the Michigan Uniform Energy Code (MUEC) – less stringent than 1992 MEC
- In 2004, state upgraded MUEC to be as effective as the 2001 IRC
- Michigan Association of Home Builders (MAHB) sued the state over the new rules
- MEEA, MEC and MCAAAA are intervener defendants
- Trial is October 31, 2005

Other Opportunities

- IL Lt Gov has taken the Energy Star Challenge to decrease consumption in state facilities by 10%
- MI Governor Granholm has issued a promising Executive Order and has focused on reducing energy consumption in state facilities in the first three years of her term
- MN is pursuing its B3 program to catalog state buildings and facilities, measure their performance and improve it.
- IA Gov issued an Executive Order supporting similar initiatives and activities
- Other states may be more likely to consider Performance Contracting enabling legislation

Conclusion

- For the first time EVER the Midwest region is attempting to coordinate energy efficiency regionally
 - With strong leadership from the policy makers who are in a position to actually do something about it
- The Midwest has the potential to be a leader nationally on this issue and is embracing that challenge seriously
- This year's winter heating crisis is precipitating a long-term commitment to reduce consumption

Contact Information

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