

Missouri Energy Task Force:

National Action Plan for Energy

Efficiency (NAPEE) and

Additional Opportunities for

Missouri

Alecia Ward Friday, August 25<sup>th</sup>, 2006



#### WHO IS MEEA?

#### Regional Organization

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

#### Cross-section of membership

- Academic/Research Orgs
- Manufacturers/Retailers
- State and Local Governments
- Utilities (IOUs/Munis/RECs)
- Consultants/ESCOs
- Non-Profits
- General Interest/Professionals



#### WHAT DOES MEEA DO?

- Serve as a regional networking forum focused on energy efficiency
- Act as the regional clearinghouse for energy efficiency issues
- Facilitate and administer region-wide energy efficiency programs
- Advocate for effective regional energy policy



## But first, a QUESTION:

# How many of you have a retirement plan?



# National Action Plan for Energy Efficiency (NAPEE)



#### Rationale

- Complex Energy Challenges
  - Increased demand stresses the current system
  - High fuel prices negatively affect the economy
  - Generating fuel mix has environmental and public health consequences
  - Questions about the cost effectiveness of generation investments vs efficiency
  - Vulnerable to disruptions in supply and delivery



# Infrastructure: Buildings

 Homes businesses, schools, govt and industry (the built infrastructure) represents 70% of the natural gas and electricity used in this country

• WHAT DOES THIS MEAN: That there is great potential to capture savings in the existing building stock



### Infrastructure: The Grid

- Electricity demand across the region continues to grow at roughly 2% per year
- WHAT DOES THIS MEAN: Our regional grid (serviced by MISO and PJM) already struggles to move energy from where it is generated to where the load exists, if we continue to grow at this rate and build new generating capacity, we still have real transmission issues to address how to move it to where it is needed.



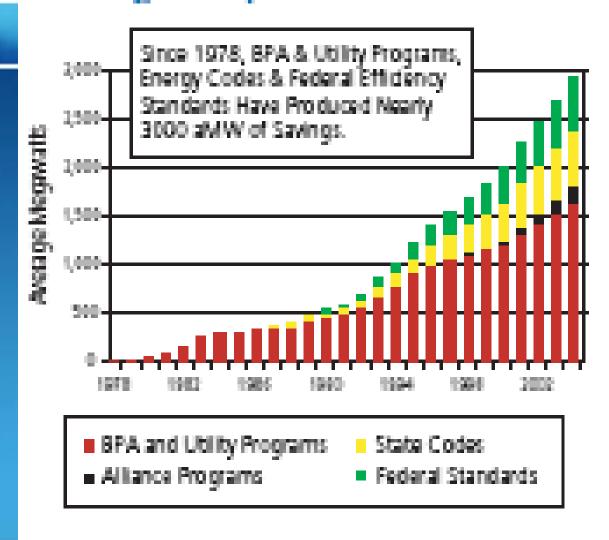
## Infrastructure: Generating Capacity

- Across the region, there are 27 coal fired power plants that are planned and in the process of permitting
- WHAT DOES THIS MEAN: There are significant environmental consequences to this level of continued investment almost exclusively in generation without balancing out the portfolio



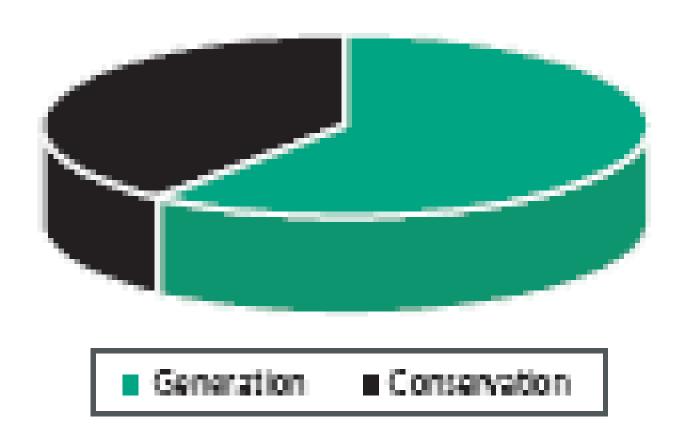
#### Since 1978 steady investment in energy efficiency has saved 3000 aMW

#### PNW Energy Efficiency Achievements 1978 - 2004



Source Edman, 2005

#### Energy Efficiency Met Nearly 40 Percent of Pacific Northwest Regional Firm Sales Growth Between 1980 to 2003





# GIVEN ALL OF THESE FACTORS



## **Purpose of NAPEE**

- Identify key barriers to greater investment in energy efficiency
- Review sound business practices for removing these barriers and improving acceptance and use of energy efficiency compared to supply options
- Outlines recommendations and options for overcoming those barriers



#### National Action Plan for Energy Efficiency

- Joint EPA and DOE Initiative
- Chaired by Jim Rogers, Duke and Diane Munns, NARUC
- Developed by more than 50 leading organizations
- Five recommendations for creating sustainable, aggressive commitment to energy efficiency



#### **NAPEE Recommendations**

- 1. Recognize energy efficiency as a high-priority energy resource
- 2. Make a strong, long-term commitment to implement cost-effective energy efficiency as a resource
- 3. Broadly communicate the benefits of and opportunities for energy efficiency
- 4. Promote sufficient, timely and stable program funding to deliver energy efficiency where cost-effective
- 5. Modify policies to align utility incentives with the delivery of cost-effective energy efficiency and modify ratemaking practices to promote energy efficiency investments



- Recognize Energy Efficiency As A High Priority Energy Resource
  - Establish policies to make energy efficiency a priority resource
  - Integrate energy efficiency into utility, state and regional resource planning activities
  - Quantify and establish the value of energy efficiency, considering energy savings, and environmental benefits, as appropriate



- Make strong, long-term commitments to costeffective energy efficiency as a resource
  - Establish a portfolio of programs
  - Establish appropriate cost-effectiveness tests for those programs
  - Establish potential by customer class
  - Develop long-term savings goals
  - Develop robust MV&E
  - Assign responsibility
  - Allow for frequent updates



- Broadly communicate the benefits of and opportunities for energy efficiency
  - Establish and educate stakeholders on the business case for energy efficiency
  - Communicate the role of energy efficiency in lowering consumer energy bills and system costs and risk over time
  - Communicate the role of building codes, appliance standards and tax and other incentives



- Provide sufficient, timely and stable program funding to deliver energy efficiency where cost effective
  - Develop consistent method for program administrators to recover costs
  - Establish funding mechanisms for efficiency such as:
    - Revenue requirement or resource procurement funding, systems benefit charge, rate-based sharedsavings, incentive mechanisms, etc
  - Establish multi-year funding periods



- Align utility incentives with energy efficiency and modify rate making appropriately
  - Address through-put incentive and remove regulatory dis-incentives
  - Provide utility incentives for successful energy efficiency program management
  - Include energy efficiency as a goal of retail rate design – recognizing balance
  - Eliminate rate designs that don't encourage energy efficiency



# Regional Dollar Drain \$40 billion per year



# Missouri's Dollar Drain \$11.7 billion per year



#### **Missouri Action Items: Commission**

- Continue to fund EE through utility dockets
  - Increase investment requirements
- Establish mechanism/framework for longerterm investments
  - Public Benefit Fund
  - Resource Planning that include efficiency
  - Energy Efficiency Portfolio Standard
- Ensure cost-recovery



## Missouri Action Items: Admin & Leg

- Adopt, implement and enforce an improved building energy code
- Adopt, implement and enforce appliance standards efficiency improvements
- Provide sales tax abatements for Energy Star qualified products produced in or imported to the state
- Encourage matching income tax credits and deductions similar to the federal energy bill



#### **MISSOURI ACTION ITEMS: Utilities**

- Continue to encourage IOUS in the state to file efficiency plans and increase investments
  - Ameren
  - KCPL
  - Empire
  - Support and learn from these programs in addition to the ones operated by your munis
  - Springfield & Columbia



#### **Missouri Action Items: DNR**

Continue to support the Missouri Energy
 Center as DNR's voice in these discussions



#### Resources

- NAPEE Report
  - http://www.epa.gov/cleanenergy/actionplan/ee actionplan.htm
- Clean Energy-Environment Guide to action
  - http://www.epa.gov/cleanenergy/stateandlocal/ guidetoaction.htm
- Energy Efficiency Policy Toolkit
  - http://www.raponline.org/showpdf.asp?PDF\_U RL=%22Pubs/General/EfficiencyPolicyToolkit.p df%22



# Regional Energy Efficiency to Address the Natural Gas Crisis



tments on the RISE



- •Electric \$77 million **TOTAL \$91 million**



- •Gas \$22 million
- •Electric \$66 million **TOTAL \$88 million**

#### **Wisconsin**

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

**TOTAL \$62 million** 

\*\$85 million beginning in 2007

#### Illinois

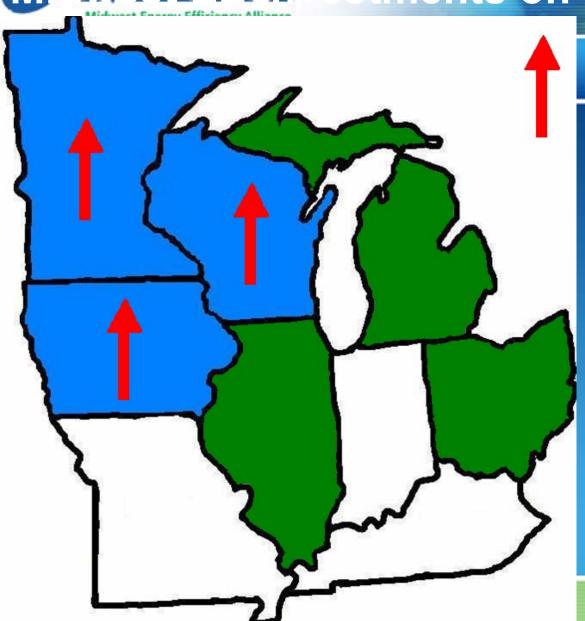
- •Electric \$3 million
- •Gas \$0

#### **Michigan**

- •Electric \$67 million
- •Gas \$0

#### Ohio

- •Electric \$5 million
- •Gas \$0





#### **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%.



#### ural 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



# NDING: 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** 



# UNDING: Gas

CTATE	0/ of Total	— Eurodina
STATE	% of Total	<b>Funding</b>
• 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**



#### Regional NET Benefits by 2011

- \$4.5 billion in direct natural gas savings
- \$6.8 billion in direct electricity savings
- \$4.2 billion in price savings due to natural gas price reduction
- 30,000 new jobs
- \$750M in additional employee compensation

Imagine what these resources could do at a time with MW governors are challenged to balance their budgets



#### Missouri NET Benefits by 2011

- \$175 million in direct natural gas savings
- \$457 million in direct electricity savings
- \$230 million in price savings due to natural gas price reduction



#### **Missouri Investment**

- \$55 million/year for electric
- \$12 million/year for natural gas
- Approximately 1% of utility revenue

Benefit/Cost Ratio = 1.9

\$632 million direct bill savings/\$335 million invested



## **Benefits of Energy Efficiency**

- Lower energy bills, greater customer comfort, and greater customer satisfaction
- More cost-effective to save energy than to build new generation to meet continuing load growth
- Modular and quick to deploy
- Significant energy savings
- Environmental benefts
- Economic development
- Energy Security



#### PLEASE JOIN US FOR MORE MEEA EVENTS

- 2006 Midwest Energy Solutions
   Empowerment Conference (Sept 27<sup>th</sup> & 28<sup>th</sup>)
- Inspiring Efficiency Awards (Sept 28<sup>th</sup>)
- MEEA Tax Incentives Workshops
  - Chicago, IL May 9<sup>th</sup>
  - Twin Cities, MN (TBD)
  - Des Moines, IA (TBD)
  - Cleveland & Columbus, OH (October 23<sup>rd</sup> &24th)



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