

▶ **Regional CHP Activities:
Midwest Initiative and
Application Center for CHP**

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**Distributed Energy Resources
The Power to Choose
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Overview

- **Role of Regional Initiatives in Advancing CHP and DER**
- **History of MW CHP Initiative**
- **MW CHP Initiative Current Actions**
- **The Midwest CHP for Buildings Application Center**
- **Future Needs for Regional Efforts**
- **Summary**

Role of Regional Initiatives

- **Organize regional stakeholders into powerful coalitions**
- **Bridge the Gap between National Policies and Regional Reality**
- **Influence policy makers and legislatures**
- **Lead efforts to streamline processes**
 - **Interconnect**
 - **Permitting**
- **Provide Education and Outreach**
 - **Architects and Engineers**
 - **Project Developers**

Midwest CHP Initiative: History

- **Established after two DOE workshops**
 - November, 1999, Great Lakes CHP Roadmap
 - October, 2000 National Roadmap
- **Set Initial Game Plan**
 - Individuals involved in USCHPA Roadmap Meetings
 - Consolidated list of Regional Actions from Roadmap workshops
 - Permitting, Interconnection, Education, Market Development, and Policy
- **Expanded Membership**
- **Meet Bi-Monthly: ACTION ORIENTED**

Lake Michigan Regional CHP Roadmap Workshop Participants (Nov '99)

USEPA	City of Chicago, Dept. of Environment	Energetics, Inc
Rolls-Royce Company	Sonnenschien Nath & Rosenthal	Johnson Boiler
ABN-AMRO	Onsite Sycom Energy Corporation	Institute of Gas Tech.
Delta Institute	Missouri Dept. of Natural Resources	Energy Masters Int'l
AED	Argonne National Laboratory	Encorp
ACEEE	Richard Oliver International	Turthill Energy Systems
ComEd	Intl. Union of Oper. Engineers, Local 99	Sieben Energy
Primary Energy	Indiana Office of Air Management	Energy Center of Wisc.
U.S DOE OIT	Indiana Dept. of Commerce	NiSource
WI DNR	Midwest Cogeneration Association	GRI
US EPA Region V	IL Dept. of Commerce & Comm. Affairs	Illinois EPA
Wisconsin Electric	Northern Indiana Public Service Company	Peoples Energy Corp.
Baker & McKenzie	Jenbacher Energiesysteme	O'Shea and Associates
Wisconsin Energy Bureau	DOE Chicago Regional Office	
Ballard Engineering Inc	Environmental Law and Policy Center	
Michigan Public Service Commission	South Cook Environmental Action	

National CHP Roadmap Workshop Participants (Oct '00)

Solar Turbines

Dow Chemical Company

ACEEE

Alliance to Save Energy

Oak Ridge National Laboratory

Energy Recovery International

Weyerhaeuser

Mississippi Valley Gas

Onsite Energy

Northeast Midwest Institute

American Gas Cooling Center

Keyspan

Cascade Associates

EXERGY Partners Corp.

Southern California Gas Co.

Comfort Link

Delta Institute

Rutgers University

NiSource

Gas Technology Institute

Michigan Consolidated Gas Company

Trigen Energy Corporation

Environmental Law and Policy Center

U.S. EPA

Trigen Energy Corporation

NYSERDA

Battelle-Pacific Northwest National Laboratory

University of Illinois at Chicago Energy Resources Center

National Park Service, Gateway National Recreation Area

International District Energy Association

Council of Industrial Boiler Owners

Honeywell Power Systems Inc.

U.S. Department of Energy – FEMP

Pace University Energy Project

NRDC

The Energy Network, Inc.

Northwind Boston

ACEEE

Midwest CHP Initiative: Membership

Industry

Gas Technology Institute
Peoples Energy

NiSource
BOMA, Chicago

Environmental

Environmental Law and Policy Center
Delta Institute

Northeast-Midwest Institute

Educational

University of Illinois at Chicago, Energy Resources Center

Government Organizations

U.S DOE, Chicago Regional Office
Indiana Department of Commerce

Michigan Department of Commerce
Minnesota Department of Commerce
Wisconsin Energy Center

U.S. EPA (Headquarters and Region 5)
Illinois Department of Commerce and
Community Affairs
Michigan Public Service Commission
Wisconsin Bureau of Energy
Wisconsin Public Service
Commission

Midwest CHP Initiative

■ Mission:

- Lead the Region in encouraging the use of and in implementation of CHP technologies;
- Drive CHP roadmap actions items for the MW Region in support of DOE's goal of doubling CHP use by 2010, and;
- Provide a central point for coordination and communications among the various stakeholder organizations in the region (BCHP AC; RP MW,etc)

Midwest CHP Initiative

- **Subcommittees and Action Plans for 5 elements of CHP market transformation**
 - Policy Transformation - John Moore, ELPC
 - Market Development - Gary Nowakowski, DOE CRO
 - Interconnection - Art Smith, NiSource
 - Education and Outreach - John Cuttica, UIC ERC
 - Environmental Permitting and Standards - John J. Kelly, US EPA, R5
- **Focusing on Implementation in WI, IL, IN, MI:
Expanding to Minnesota and Ohio**

Midwest CHP Initiative

- **Actions - 2002**
 - **Organizing 8 State Interconnection Workshop**
 - State presentations
 - Industry Experts (Galdo, DeBlasio, Ethridge)
 - **Engaging State PUCs**
 - Create new thinking / overcome myths
 - Policy Platform Development
 - **Permitting Guideline**
 - **Baseline Study**
 - **Marketing Plan**
 - **Input to Illinois Energy Policy and Michigan Interconnection Proposals**
 - **Working closely with MW CHP Application Center**

Midwest CHP for Buildings Application Center

■ Mission:

Develop Technology Application Knowledge and the Educational Infrastructure Necessary to:

- Reduce Any Perceived Risks
- Foster BCHP as a Viable Option
 - Technical and Financial
 - Energy and Environmental

■ Focus:

- Education
- Information
- Project Assistance

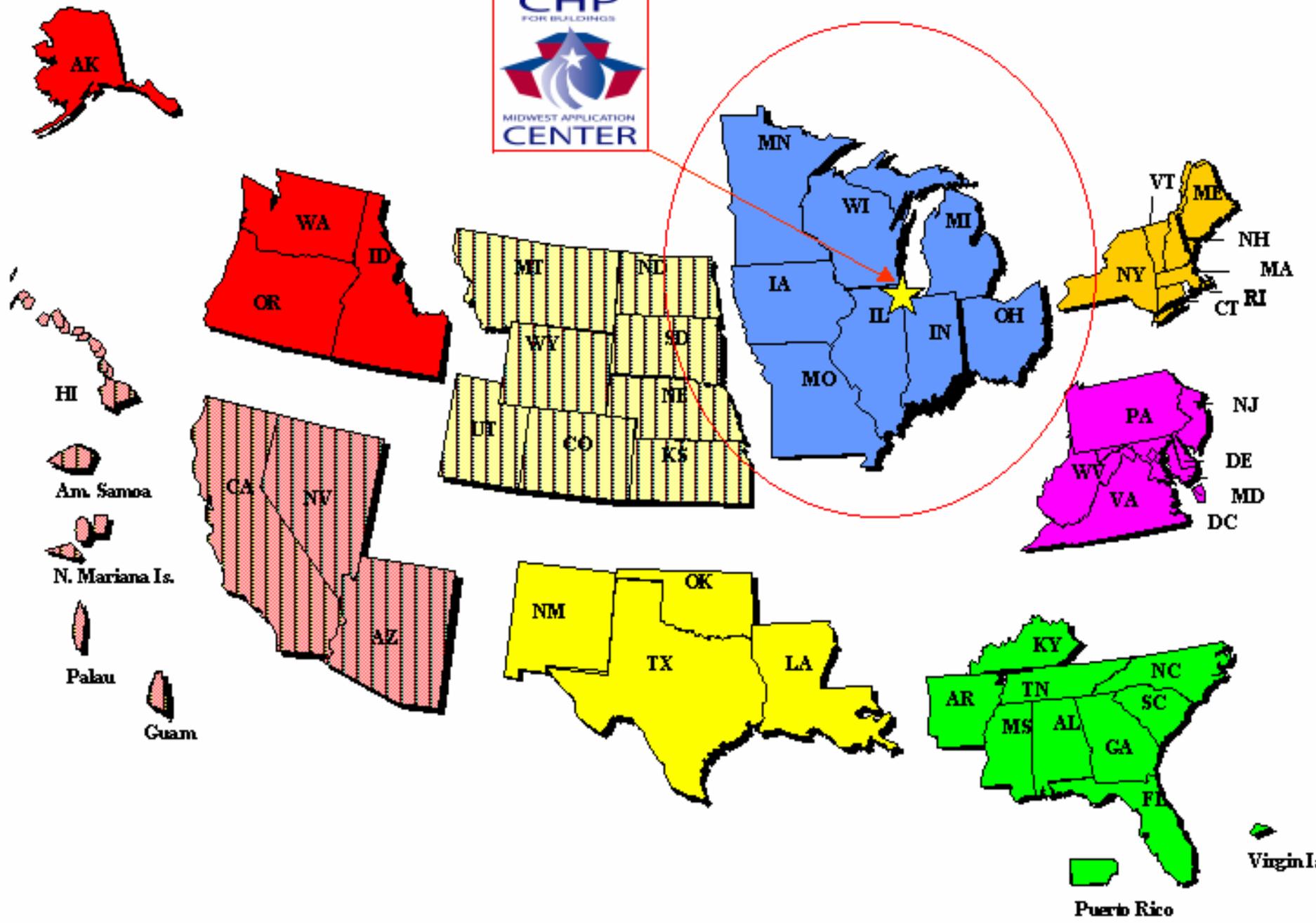
Midwest CHP for Buildings Application Center

Partnership:

- University of Illinois at Chicago
Energy Resources Center --- UIC/ERC
- and*
- Gas Technology Institute --- GTI

Sponsorship:

- DOE Office of Power Technologies
- Oak Ridge National Laboratory --- ORNL



Midwest CHP for Buildings Application Center

■ Project Elements

- **Baseline Assessment / Characterization**
 - Plan Development
- **Case Studies**
- **Information Repository**
- **Project Support – SWAT TEAMS**
 - Provide Expert Assistance to “Close the Deal”
 - Provide Expert Assistance to “Provide Technical Solutions”

Future Needs of Regional Efforts

- **Creation of a National CHP Guidebook**
 - Generic Tariff Guidance
 - Interconnection Guideline elements
 - Define “reasonable and just standby charges and exit fees”
 - Examples of Best Practices Legislation (i.e. Texas, New York)
 - Easy access to educational presentations to Utility Commissions, A/Es, Developers and prospective end users
 - Model Letters to PUCs and other stakeholders
- **Centralized, coordinated communication strategy**
- **Funding for Regional Activities**
 - To Manage and Execute Regional Coalitions
 - Expansion and Continued Support of Application Centers

Summary

- **Regional ‘Action Oriented’ Coalitions & ACs required to change DER market**
- **Regulatory and Policy Changes need to be made on State Level**
- **Coordinating Actions of all Stakeholders can build power on regional levels**
- **Education and Outreach to Regional firms to increase awareness**
- **Midwest positioned well to expand market in next 2-3 years**

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