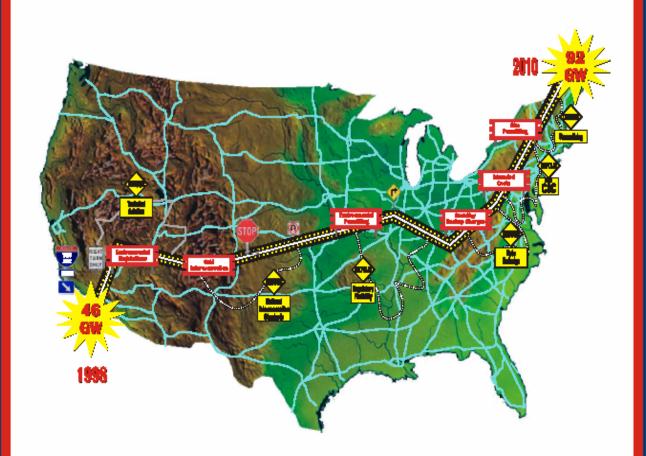
# CONSENSUS ACTION ITEMS FROM CHP ROADMAP PROCESS



**JUNE 2001** 



IN COOPERATION WITH

U.S. DEPARTMENT OF ENERGY
U.S. ENVIRONMENTAL PROTECTION AGENCY

FOR MORE INFORMATION PERTAINING TO CHP LEGISLATION, VISIT THE USCHPA WEBSITE AT WWW.NEMW.ORG/USCHPA

## **RAISING CHP AWARENESS**

#### **INDUSTRY**

- Formation of a formal "multi-trade group" CHP coalition to enable joint education and outreach initiatives, seminars, and conferences
- Expansion of the USCHPA product and service offerings to include more education and outreach materials targeted to state and local energy, environmental, and economic development officials
- Development of **unified points of view** on issues of common interest related to expanding the prospects for the development of deployment of CHP systems
- Continued active participation in and support for **industry-government RD&D partnership** for the development of "next generation" CHP systems, subsystems, and components (NEP Page 6-4)

#### FEDERAL GOVERNMENT

#### **Department of Energy**

- Expand RD&D programs in the EERE, OPT/DER, that affect CHP, including on-going efforts in advanced turbines, micro turbines, reciprocating engines, fuel cells, tats, grid interconnection systems, power electronics, advanced materials, and communications and controls systems (NEP Page 6-4)
- Continue **CHP education and outreach activities** including maintenance of the CHP website and the CHP Registry, support to the CHP EnergyStar Awards, and CHP assessments
- Through the Federal Energy Management Program, expand efforts to identify candidates for CHP installations in Federal facilities and obtain funding for accomplishing appropriate projects

#### **Environmental Protection Agency**

- Continue efforts to promote the use of output-based "Best Available Control Technology" (BACT) standards through development of guidance for the states
- Implement a stronger outreach program to facilitate CHP project development in a few key states by offering technical assistance, policy/permitting guidance, and public recognition
- Prepare, and disseminate widely, a white paper that provides objective information on the environmental benefits of CHP systems in relation to other energy supply alternatives
- Coordinate the 2<sup>nd</sup> Annual CHP EnergyStar Awards (NEP Page 4-12)

#### REGIONAL AND STATE GOVERNMENT

- Build state and regional **information exchange networks** to expand communications on CHP and related energy environmental, and economic development-related policy issues
- Obtain **financial assistance** from state and federal sources for local CHP education and awareness activities
- Address top priority regulatory and institutional barriers to the expanded deployment of CHP systems

## ELIMINATING REGULATORY AND INSTITUTIONAL BARRIERS

#### UNIFORM GRID INTERCONNECTION STANDARDS

- Support efforts by the states to include streamlined **interconnection procedures** in their utility restructuring implementation plans
- Propose **Federal legislation** for interconnection of distributed energy facilities and CHP for the next administration and the 107<sup>th</sup> Congress
- Support efforts by the IEEE to develop **uniform interconnection standards** that cover CHP systems and their implementation by the states and utilities

#### **UTILITY POLICIES AND PRACTICES**

- Develop and promulgate **standard commercial practices** and business terms for utilities in their dealing with distributed energy and CHP developers
- Develop and disseminate "model" utility regulatory principles, tariffs, and legislative provisions for distributed energy generation and CHP projects
- Develop analysis tools, data, and case studies for assessing the value and impacts of distributed energy systems and CHP on local electricity and natural gas distribution systems
- Establish dispute resolution processes and capabilities for expediting distributed energy and CHP project proposals

#### **OUTPUT-BASED EMISSIONS STANDARDS**

- Conduct and disseminate analysis of the relative merits of **alternative technical approaches** to output-based standards and their potential impacts on the use of CHP (NEP Page 4-9)
- Provide **technical assistance** and information to support continued efforts by the EPA to encourage the use of output-based standards for compliance with the Clean Air Act (NEP Page 4-9)
- Provide **technical assistance** and information to support efforts by the states to develop and use output-based standards in SIPs

#### STREAMLINED SITING AND PERMITTING PROCEDURES

- Develop CHP permitting guidance and protocols for state environmental officials including pre-certification of certain CHP equipment (NEP Page 4-9)
- Conduct national campaign to engage manufacturers, utilities, and others in developing code changes for adoption by the model code agencies
- Develop siting and permitting guidelines and tool kits for CHP designers, developers, and installers on a state-by-state basis (NEP Page 2-12)
- Develop pre-certification standards and permits-by-rule provisions for certain types of small scale facilities

#### **EOUITABLE TAX TREATMENT**

• Support efforts to **revise the U.S. tax code** and define an accelerated depreciation schedule for CHP systems that is closer in line with the expected 7-10 year engineering life of CHP equipment (NEP Page 4-9)

# DEVELOPING CHP MARKETS AND TECHNOLOGIES

#### INDUSTRY (Add 27 GW of new capacity by 2010)

- In raising CHP awareness, focus initially on demonstrating "best practices" with regard to industrial energy efficiency and CHP systems in the most promising industrial sub-sectors and "roll-out" to others to achieve broader acceptance
- In eliminating regulatory and institutional barriers, focus on developing "model" **output-based standards** for environmental siting and permitting is several of key states and "roll-out" to achieve broader acceptance
- Focus on developing "model" utility access and exit fees
- Conduct cost-shared RD&D projects with Federal and state governments in the areas of advanced industrial power generation, black liquor and biomass gasification, advanced materials and combustion processes, and advanced power electronics, sensors, and controls

#### BUILDINGS (Add 8 GW of new capacity by 2010)

- In raising CHP awareness, conduct an outreach campaign to educate architects, building designers and engineering firms on the relative merits of buildings CHP systems in buildings and to provide "SWAT" team technical assistance to answer questions and reduce uncertainties
- In eliminating regulatory and institutional barriers, address the information needs of state and local code officials to develop standards for buildings CHP that address zoning, fire, safety, and construction concerns
- Conduct cost-shared RD&D with Federal and state governments in the areas of packaged systems integration; interoperability, communications, and controls protocols; and cleaner, more efficient, and more affordable "prime movers," including fuel cells, microturbines, natural gas engines, and thermally activated cooling and humidity control equipment

### DISTRICT ENERGY (Add 8 GW of new district energy CHP by 2010)

- Launch an outreach campaign to educate municipal and community governments, colleges, universities, and military bases about district energy and CHP systems by providing a series of "how-to" guidebooks that aid in conceptualizing, designing, financing, installing, owning, and operating these systems
- Expand **technical assistance** through on-site training, "SWAT" teams, and other means for potential users of district energy systems to overcome technical, legal, financial, and institutional barriers to development of district energy systems and to implement CHP in existing district systems
- Conduct more **demonstration projects** of innovative CHP applications in communities and power parks, particularly for "brownfield" redevelopment and public housing applications (NEP Page 4-9)

#### FEDERAL FACILITIES (Add 5 GW of capacity by 2010)

- Develop **new sources of funding** for the installation and operation of CHP in Federal Facilities through the federal appropriations process, state public benefit funds, third parties such as energy services companies, utility companies, and foundations
- Compile a national **inventory of potential Federal CHP sites** that characterizes opportunities for expansion of existing systems and development of new CHP systems

- Require detailed **assessments of CHP opportunities** before significant changes are made in Federal facilities that may eliminate the potential for CHP
- ◆ Engage DOE's **Federal Energy Management Program** in providing technical assistance, information, and analysis tools to decision makers at federal facilities across the country
- Develop more **case studies** to demonstrate all forms of CHP in Federal facilities across a range of building types, agencies, and regions of the country