

21ST Century Energy Plan

Energy Efficiency and Load
Management Work Group Meeting

May 9, 2006

21st Century Energy Plan Goals

- Develop a plan to meet Michigan's future electric energy needs
 - Confirm or modify CNF results
 - Further investigate resource options
- Develop a robust set of policy recommendations designed to implement Michigan's resource needs

Executive Directive 2006-2

- reducing reliance on fossil fuels through energy efficiency, alternative energy, and renewable energy technologies consistent with the goal of assuring reliable, safe, clean and affordable energy;

Work Groups

- CNF Update
- Renewable Energy
- Alternative Technology
- Energy Efficiency/Load Management

Work Group Assignments

- Update CNF data where needed
- Provide additional information
- Identify policy issues
- Make recommendations

Energy Efficiency and Load Management Work Group Objective

- Develop a proposal for a permanent and comprehensive energy efficiency and load-management program for the State of Michigan as part of the 21st Century Energy Plan

Work Group Objectives

- Develop a “bottom up” analysis of potential energy and demand savings in Michigan
- Develop estimates of energy efficiency and load-management capital and operating costs along with energy cost savings
- Develop appropriate benefit/cost tests to evaluate specific measures
- Develop policy recommendations to implement energy efficiency and load management programs
- Encourage economic development, including robust energy efficiency industry in Michigan

Capacity Need Forum Treatment

- Used a “top down” approach to estimate the cost and energy saving impacts
- Peaking need could be satisfied by combustion turbines or load management

Energy Efficiency Subgroups

- Utility efficiency/conservation programs (Rob Ozar)
- Non-utility efficiency/conservation programs (John Sarver)
- Active demand response programs (Dave Jirikovic)
- Price responsive/rate structure program (Mike Collins)

Utility Efficiency/Conservation Programs

- Determine input data requirement
 - Specific measures for each rate class
 - Customer load shapes
 - Energy efficiency measure performance characteristics
 - Measure/program costs
 - Value of conserved energy
 - End-use saturation levels
 - Estimate program penetration rates

Utility Efficiency/Conservation Programs (Continued)

- Develop appropriate benefit/cost tests
 - RIM
 - Utility
 - Total Resource
 - Societal
- Evaluate available software options for analysis

Utility Efficiency/Conservation Programs Policy Issues

- Voluntary vs. mandatory utility programming
- Interface between permanent energy efficiency programs and Act 304
- Third party program administration
- Cost recovery of program expenses and investment
- Consumer education programs
- Low-income program
- Targeted energy efficiency programs
- Revenue decoupling

Non-utility Energy Efficiency Work Group

- State standards for appliance energy use
- Requirement to post life-cycle operating costs
- Michigan building standards
- Sub-metering and master metering issues
- New non-utility energy efficiency programs aimed at commercial and industrial energy use
- Develop policy recommendations to implement standards

Active Demand Response Work Group

- Develop Smart Meter implementation plan
 - Multi-phase implementation
 - Priority installation in constrained areas
 - Plan to merge Smart Metering technology with active demand response and interruption
 - Develop policy recommendations for rate recovery

Price Response Work Group

- Develop Smart Pricing program for Michigan
- Comprehensive plan to merge Smart Metering technology with rate structures
- Develop rate structures to modify consumption behavior
 - Move consumption to off-peak periods
 - Encourage lower use during critical peak periods
 - Encourage active demand control and interruption programs
- Explore modifications to power supply cost recovery to support new rate structures

Price Response Work Group

- Perform inventory of existing time-of-day rate and load management programs
- Estimate generation/purchased power savings associated with new rate structures

Work Group Schedule

- May 15, 9:30-12:00 noon and 1:30-4:00 utility energy efficiency programs subgroup and presentation by George Edgar, Director of Energy Policy and Janet Brandt, Executive Director, Wisconsin Energy Conservation Corporation
- May 16, 9:30-12:00 noon, non-utility programs work group
- May 16, 1:30-4:00, Active Demand and Price Responsive Demand work groups