21\textsuperscript{st} Century Energy Plan

Energy Efficiency Workgroup
Active Demand Response & Price Response
Joint Meeting
Overall Objective

• Develop a proposal for a permanent and comprehensive energy-efficiency and load management program for the State of Michigan
Load Management Goal

• Through utility capital investment in technology – lower the cost of electric power to Michigan ratepayers
Key Objectives

• Develop a statewide *Smart Meter* implementation plan including milestone dates leading up to full implementation

• Develop a comprehensive plan for merging the *Smart Meter* program with new rate structures, i.e. *Smart Pricing*

• Develop a plan for merging the *Smart Meter* program with active demand control & interruption
Smart Meter Initiative

- Develop a plan for phased implementation
- Identify constrained areas for priority installation
- Project capital and O&M costs
- Policy recommendations for rate recovery of program costs
- Identify key issues and barriers to implementation
Smart Pricing Initiative

• Develop rate structures that would vary the energy price depending on how much electricity a customer uses during each hour of the day
  – Evaluate variations of real-time pricing
  – Evaluate critical period pricing
  – Evaluate active demand-control rates
Major Regulatory Issue

• Identify legal, regulatory, policy and other barriers to changing PSCR rates from an annual-average pricing method to a *Smart Pricing* rate structure
  – Increase the accuracy of retail price signals
  – Address apparent failure of current time-of-day pricing
Specific Issues

• Should a specific Smart Meter system be mandated
• Should the MPSC mandate minimum technical standards
• How should interconnection with ancillary devices be promoted; e.g. smart thermostats, load control devices
• Should an initial pilot program be implemented to gain information
Issues Continued

• Should the MPSC set statewide standards for:
  – timely availability of consumption data (next day?)
  – how data is displayed

• Should voluntary buying groups be formed by LDC’s so as to gain economies of scale

• Should rate structures be created that avoid subsidies for customers who do not conserve, by customers who do conserve

• Would MISO determine critical periods that would trigger critical peak pricing
Issues Continued

• How would customers be informed of the invocation of critical peak pricing
• Would PSCR peak-period rates be based on marginal costs or interval average costs
• Would customer data be available on the internet; how would customers without internet services obtain data
• Would residential or small commercial customers have demand or power factor based delivery charges
Additional Issues

• How can the MPSC mitigate rate impacts on customers with limited ability to shift demand
  – Energy efficiency/conservation programs
• Will large volume customers be able to opt out of Smart Pricing
  – How will special contracts be handled
• During the implementation phase-in period, will phase-in costs be charged to all customers
• How would stranded costs associated with existing meter and communication infrastructure be recovered
Additional Issues

• Will existing cycle billing periods be changed
• Should the metering function be opened to competition
• Is there a need for pre-approved list of exceptions to Smart Metering