

The Michigan Electric Cooperative Association (MECA) appreciates the efforts of the Michigan Economic Development Corporation and Michigan Public Service Commission in developing the detailed draft report summarizing the public comments regarding Michigan's Energy Efficiency. MECA agrees with the joint response from DTE Energy, Consumers Energy, MEGA, and MMEA. However, MECA submits the following supplemental comments that are not a part of the joint response.

1. Energy Efficiency Draft Report

MECA believes that geothermal heating and cooling systems, also referred to as ground source heat pumps (GSHP) warrants greater mention in the report. The GSHP consumes less BTU's of energy than it produces which is the only technology to accomplish this. GSHPs are the most efficient heating and cooling system available, achieving equivalent efficiencies of 400% and higher by harvesting the sun's renewable energy that is absorbed in the earth every day.

Energy efficiency programs tend to put upward pressure on rates due to reducing kilowatt-hours (kWh) where utilities are then spreading fixed costs over fewer kWh. Yet other efficiency programs tend to increase peak demand as these programs tend to incentivize cooling systems on SEER ratings rather than EER ratings. Higher SEER rated equipment performs much worse during high peak periods (typically the hottest summer days). GSHP systems can be more than twice as efficient as high SEER air conditioners resulting in a reduction of peak demand when kWh are typically the most expensive. Additionally, GSHP systems fill in the winter valleys of an electric utility thereby placing downward pressure on rates by both reducing the most expensive peak demand kWh and replacing it with the least expensive kWh during the winter months.

GSHP systems save the average homeowner living in a 2,000 square foot home \$3,000 or more in energy costs annually when replacing propane or fuel oil furnaces and a standard air conditioner.

The Oak Ridge National Laboratory¹, EPA, and DOE have all performed studies that identify the measurable environmental and economic benefits of GSHPs. The complete report was submitted under MECA's answer to question 23 under the Renewable Energy section..

Historically GSHP systems have not enjoyed much recognition in renewable energy or energy efficiency programs due to regulatory rules restricting fuel switching or the omission of this technology in the definitions of eligible technologies or uses.

MECA recommends adding "including the thermal energy produced by a geothermal heat pump" under the definitions of renewable energy resources in subpart A of PA-295 of 2008 and adding "The term energy efficiency also includes measures such as geothermal that reduce the total BTUs of electricity and fossil fuels needed to meet the end use or uses" to the definitions of energy efficiency resources in subpart B of PA-295 of 2008.

2. Appendix B - Michigan Electric And Natural Gas Energy Efficiency Potential Study

Michigan's recent Energy Efficiency Potential Study may have overlooked the unique market and economic conditions in Michigan's Upper Peninsula and rural areas in the Lower Peninsula. It was difficult to determine if agriculture, Michigan's second largest industry was overlooked as the agricultural sector was not discussed in the report.

¹ Reference Oak Ridge National Laboratory "assessment of National Benefits from Retrofitting Existing Single-Family Homes with Ground Source Heat Pumps Systems" June 2010, Prepared by Xiaobing Liu, ORNL/TM-2010/122

Rural electric cooperatives in Michigan primarily serve residential members in rural areas, many of which are in economically depressed areas. The average energy consumption for Michigan's co-op member is 642 kWh per month compared to the national average of more than 1,100 kWh per month. Cooperatives serve many of Michigan's seasonal campgrounds which provide little if any, opportunity for energy optimization. Although campers, camper trailers, and motor homes can contribute to the co-ops' peak load during the summer, these campers provide no opportunity for energy optimization through the co-ops' energy efficiency programs as these customers are not eligible under the program.

Many of the businesses in Michigan's Upper Peninsula are seasonal, open during the short summer months and closed for most of the year. These businesses are finding it very difficult to participate in our energy efficiency programs as we cannot demonstrate an economic benefit to the member and the programs are not cost effective to the co-ops.

3. Appendix C - Alternative Michigan Energy Savings Goals to Promote Longer Term Savings And Address Small Utility Challenges

The report "Alternative Michigan Energy Savings Goals to Promote Longer Term Savings And Address Small Utility Challenges" comes to the conclusion that statewide savings goals are appropriate and attainable for Michigan's small utilities². The report fails to cite any references used to warrant the conclusion.

When looking at market conditions and saturation levels of certain types of equipment in Michigan's Upper Peninsula and rural areas in Michigan's Lower Peninsula, and considering spending caps, MECA believes that achieving energy efficiency goals in the future will become very challenging.

Michigan's Upper Peninsula continues to have a very high saturation of T-12 lighting in their commercial buildings. These businesses also have a very large supply of T-12 replacement bulbs in their storage rooms. Recently the change out of T-12 lighting to more efficient T-8 lighting was removed from the Michigan Efficient Measures Database (MEMD) as a qualifying measure for energy efficiency savings. As more changes are made to the MEMD that remove prevalent measures found in the Upper Peninsula and other rural areas in Michigan, the challenges for achieving measurable savings become greater.

Many of Michigan's Rural Electric Cooperatives do not serve any city, village, or marketing hub which prohibits them from participating in the very popular and successful retail markdown programs.

Many of the smaller municipals have very small footprints, often times one square mile or less. Over time, residents grow tired of the same messages and fail to become motivated. In very small communities, the utility is asking the same individual or business to repeatedly participate in the same programs.

The examples listed above are only a small sample of the challenges small utilities and rural electric cooperatives face moving forward. These challenges do not appear to have been considered when arriving at the conclusions and recommendations in Appendix B and Appendix C.

MECA appreciates the opportunity to participate in "Readying Michigan to Make Good Energy Decisions" and we are looking forward to helping Michigan achieve and retain safe, secure, affordable, and reliable energy for Michigan's future.

² Reference Appendix C to "Readying Michigan to Make Good Energy Decisions: Energy Efficiency", "Alternative Michigan Energy Savings Goals to Promote Longer Term Savings And Address Small Utility Challenges" page 30.