

 920A East Broadway - Suite 203
 6267 Delmar Blvd. Ste. 2E

 Columbia, MO 65201
 St. Louis, MO 63130

 P: (417) 459-7468
 P: (314) 727-0600

 F: (314) 558-8450
 F: (314) 727-1665

MEMORANDUM

Kenew Missouri www.renewmo.org · info@renewmo.org

To: Natelle Dietrich, Missouri Public Service Commission

From: Chris Burnette, Regulatory Affairs Coordinator, Renew Missouri

Date: January 21st, 2011

RE: Additional Comments related to the 2011 Missouri DSM Potential Study Draft Workshop

INTRODUCTION

Renew Missouri, a project of the Missouri Coalition for the Environment, would first like to thank the PSC Staff for coordinating yesterday's workshop concerning the Missouri DSM Potential Study. We acknowledge the difficult position the Staff is in when dealing with the Commission, an outside consultant and multiple interested stakeholders. As such, we would also like to thank you for your diligence, concern, and attention to detail and publicly support your efforts. We would also like to thank the KEMA representatives for coming to answer questions about their work thus far.

GENERAL COMMENTS

Renew Missouri and the Missouri Coalition for the Environment are generally supportive of the Missouri DSM Potential Study. We would like to start by pointing out some of the reasons for this stance.

A. Throughout the process, both KEMA and the PSC have been open and transparent. When questions or concerns have arisen, whether it be about inputs or assumptions made by KEMA, either the PSC or KEMA have attempted to address them to the best of their ability. We applaud this transparent process and think that the steps taken by the PSC to ensure this type of open government are not only commendable but serve to make our State a better place for all its residents.

B. We feel that this Study is an accurate, although conservative, representation of the energy efficiency potential in our great State. As with any study, there is a margin of error, but we agree with KEMA that this Study is a conservative estimation of the achievable potential in Missouri. This achievable potential could be higher, as the saturation rate does not look at behavior, or other reasons beyond purely economic ones, for a ratepayer to take part in an energy efficiency program. We believe that, as the residents of the state become more educated about energy efficiency, this penetration rate will increase and the utilities will discover many more program opportunities. When residents see that pursuing energy efficiency is in there own economic self-interest, coupled with the myriad of other social, environmental and health related reasons for energy-efficiency, utilities will see a much higher penetration rate in their programs.

C. A study conducted outside the control and influence of an affected utility is a much more credible and legitimate product than one that is. Because of the transparent nature of the process and the outside expertise by a disinterested party such as KEMA, this study should be seen as beyond reproach. We applaud the PSC's decision to conduct a study in this way and believe that the final results will help Missouri reach its statutory goal of all cost-effective demand side savings. This Study, coupled with other studies provided by utilities, will help the PSC make better decisions regarding energy efficiency in the State of Missouri.

QUESTIONS

Renew Missouri has identified the following as issues we would like to see clarified. We ask that these issues, questions and concerns be forwarded to KEMA for consideration and clarification.

- 1- <u>Retrofit Measures , 1</u> Your achievability analysis is largely based on the incremental costs between standard and high efficiency technologies. This seems appropriate for scenarios which involve new construction or replacing failed equipment. However, I am not sure about how this would apply to savings associated the replacement of operating low efficiency equipment. Are the achievable savings for "retrofit" measures calculated on the basis of incremental costs or on the basis of the total cost of replacing operating equipment (inclusive of labor and the total equipment cost)? Such a scenario might entail, for example, the incremental costs for a 200 horsepower air compressor might be \$10,000 but the entire costs of replacing the existing <u>operating</u> compressor might be \$50,000.
- 2- <u>Retrofit Measures , 2</u> For the above air compressor retrofit scenario what costs would be used in your analysis (\$50K or \$10K)? What would the 75% scenario rebate be? What baseline would be used for the calculation of savings energy code or the efficiency of the existing chiller?
- 3- <u>Retrofit Measures , 3:</u> Does your analysis capture the full value of equipment replacements in the retrofit market? Would the use of existing equipment baselines and incentive levels based on full project costs result in a higher estimate of achievable savings?
- 4- <u>Technological Improvements</u>: Page 1-3 stated "technological improvements" to existing technologies were excluded from the analysis. Is it correct that this assumes that no progress will be made in improving the energy efficiency (or reducing the costs) of equipment during 2010-2020 period despite the fact that dramatic improvements have been made during the prior 10 years (eg increases in lumens per Watt etc)? Does KEMA always make this exclusion in other DSM potential analyses? If not, can you point to a specific potential study in which these elements were included, perhaps by extrapolating past trends in improved equipment efficiency? Did the PSC or other parties request such an exclusion?
- 5- Does Figure 1-1 estimates of net benefits include the lifetime 20 year benefits of all measures installed through 2020? For example, measures installed in 2020 would have benefit streams through 2040; are these post 2020 benefits included?
- 6- There is an apparent discrepancy in gross energy savings between Table 1-5 and Table 1-1. For example, Table 1-5 shows 6,406 GWh savings for the three year payback scenario while Table1-1 shows 6.601 GWh. Why the discrepancy?
- 7- <u>Net and Gross Savings, 1:</u> Table 1-5, listing net and gross savings, suggests very different implicit net to gross ratios for the three scenarios as follows:

3 year payback NTGR	1 year payback NTGR	75% Incentive
		NTGR
50%	70%	63%

Can you clarify what the net savings represent; does this signify the effects of free-ridership? Does this imply, for example, that the 75% scenario has an overall free-ridership rate of 37%?

- 8- <u>Net and Gross Savings, 2:</u> Presumably, the higher rebate levels of the 75% scenario would produce a lower level of free-ridership. However, the NTGR ratio for this scenario suggests that free-ridership is higher. Please clarify how the NTGR would be lower for this scenario than the one year payback scenario.
- 9- Spillover: The report suggests that some customers installing measures will not receive a rebate because the payback is less than a prescribed threshold and that such customers are presumed to make the installation unaided by the programs. However, the report also indicates that some of these customers will be motivated by the education and "awareness" produced by the EE programs.

Doesn't this represent "spillover" that should be included in the net savings attributed to the program since these specific savings would not have occurred without the promotional effects of the programs? However, aren't you counting these as gross, not net savings? Has the PSC or KEMA explicitly decided not to include program spillover effects in this analysis?

Again, we at Renew Missouri and the Missouri Coalition for the Environment would like to thank the PSC Staff for their diligence, dedication and attention to detail. With your guidance and support, we have confidence that the final study will be a work product that will positively impact energy efficiency, aid in the policy discussions within the State of Missouri, and help the PSC reach its goal of all cost effective demand side savings. Please feel free to contact me if you have any questions or concerns.

Sincerely,

Chris Burnette, Regulatory Affairs Coordinator Renew Missouri, *a Project of the Missouri Coalition for the Environment* 6267 Delmar Blvd, Suite 2E St. Louis, MO 63130 chris@renewmo.org Cell: 636.448.4046