

January 22, 2011

**Comments of the Missouri Industrial Energy Consumers^{*}
on the January 15, 2011 Draft
“Missouri Statewide DSM Market Potential Study”**

MIEC has reviewed the January 15, 2011 draft report, and participated in the January 20, 2011 PSC sponsored roundtable. Based on our review of the material provided, plus the question and answer exchanges during the roundtable, MIEC is forced to conclude that this study is not a realistic or reliable indicator of the potential for DSM in Missouri.

Customer Issues

It was obvious from the questions asked, and the responses given by KEMA, that the amount of time allowed to complete this study was insufficient to produce a reliable product. There appear to be many unexplained discrepancies or differences between the Ameren Missouri service territory specific DSM potential study and the KEMA statewide study. Whereas the Ameren Missouri study was based on Ameren Missouri's primary (service territory specific) data, the KEMA study uses much broader inputs which do not necessarily correlate to or represent the characteristics of the customers in the Ameren Missouri service territory, or in the service territory of any of the other Missouri utilities for that matter.

Perhaps because of the shortness of the timeframe, there apparently was little interaction between KEMA and the individual electric utilities – interaction that could have been very helpful in making realistic adjustments to general data in an attempt to make that data more representative of Missouri service territories. This is a fundamental problem with study.

If such a study is to be of any value, it must have realistic, representative impacts and customer characterizations. At this point, the draft study does not meet that requirement. At the

^{*}MIEC consists of Anheuser-Busch, Bayer, BioKyowa, Doe Run, Enbridge, Ford, General Motors, GKN, Hussmann, JW Aluminum, MEMC, Monsanto, National Starch, Nestlé Purina, Noranda, Precoat Metals, Procter & Gamble, St. Gobain, and U.S. Silica.

very minimum, time should be taken to allow for further interaction between KEMA and the Missouri electric utilities to make sure that KEMA is proceeding with an accurate data set, an appreciation for the work that has already been done by the Missouri utilities, and can explain the differences in data and approach that remain after this further interaction has occurred.

In addition to the issues raised during the roundtable, our review has revealed a large potential problem with the baseline assumptions for the industrial sector. This subject is discussed in the KEMA study beginning on page 4-32. KEMA notes that it did not have available very detailed data on energy use by type of industry. KEMA decided to break out 16 different industries even though it did not have the data from the Missouri utilities. In order to develop the break out, KEMA says as follows:

“We adopted an approach based on employment data by industry. The Bureau of the Census’ 2007 Economic Census provides state-level employment by NAICS code, which we combined with energy use per employee by industry from the Department of Energy’s Manufacturing Energy Consumption Survey to estimate distributions of electricity and gas use by industry for Missouri. These were then normalized to the consumption estimates developed above.”

Page 4-33 of the KEMA study sets out the resulting breakdown. According to this break out that forms the basis for the industrial baseline profile, 4,162 GWh (or 23%) of the total is from the chemical industry, and 3,173 GWh (or 18%) is from the paper industry. Only 2,860 GWh is identified as being associated with primary metals. Based on our knowledge of industry in Missouri, the proportions attributable to the chemical and the paper industry are grossly overstated. At the same time, the GWh for the primary metals industry are at least 1,200 GWh (or 30%) low.

How these misspecifications would affect the outcome of the study is unknown – but what is known is that this characterization of the industrial sector in Missouri is seriously in error, so conclusions drawn from this data would be accurate only by chance.

Avoided Costs

A major component to the determination of whether or not particular energy efficiency measures are cost-effective is the utility's avoided cost. This information appears in Appendix C. For 2011, the avoided cost is stated to be \$113 per kW of summer on-peak demand plus avoided energy costs by time period. The summer on-peak energy avoided cost used in the study for 2011 is 10.22¢/kWh. This value is MORE THAN DOUBLE the current forward prices for on-peak summer energy for 2011 at the Cinergy hub. The KEMA values in other time periods are similarly much higher than market values. The 2011 avoided cost in Appendix C is approximately 5.1¢/kWh on an annual (8,760 hour) average basis. The current Cinergy 2011 forward prices on an around-the-clock basis are approximately 3¢/kWh. Accordingly, the avoided cost used in the study (energy alone before considering any demand component) appear to be 70%-100% greater than current market prices. Other participants in the roundtable indicated that similar relationships existed with respect to the Southwest Power Pool ("SPP") prices.

It was acknowledge during the roundtable that these inputs were directed by PSC Staff and that they were derived from the 2008 vintage integrated resource plan filings of the utilities. Those values were estimated at a time when natural gas prices, oil prices and electric wholesale market prices were at their peak. Subsequently, as is well known, the prices for all of these products have dropped materially, as evidenced by the electricity forward market prices referenced above. In addition, avoided cost calculations recently provided by at least some of the Missouri utilities suggest avoided costs that are much closer to the SPP and Cinergy forward market prices than to the exaggerated values used in the draft DSM potential study.

KEMA presented some sensitivity results around avoided cost values. However, as noted at page 5-10 of the draft report, the sensitivities range from a high value of 50% greater than the base number, to a low value of only 20% lower than the base number. This non-symmetrical bandwidth is not explained and certainly is not adequate in light of information

available at the time that the report was prepared. The statements by KEMA during the roundtable seemed to suggest that avoided cost numbers do not matter a whole lot, at least within this particular range. That, of course, is counter intuitive, and even if true in that range, actually may not hold true if avoided costs are examined at 50% of their baseline value.

As a quick example, if the avoided costs are reduced by 50%, the total resource cost ("TRC") value for the three-year payback scenario presented on page 1-9 of the draft report would drop from 2.2 to 1.1. Similarly, at the 75% incentive scenario, TRC would drop from 2.8 to about 1.4. Particularly given the other issues with the report, these are quite small margins above threshold cost effectiveness levels and should cause the reader to be very skeptical of the conclusions. At the very least, KEMA should be directed to revise the avoided costs, and other inputs that may be related to them, and re-run the studies.

MISSOURI INDUSTRIAL ENERGY CONSUMERS