

KEMA MO Statewide DSM Market Potential Study Comments

Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company 01-24-2011

AVOIDED COSTS

The Avoided Costs in the “MO Statewide DSM Market Potential Study” (“Study”) are too high. Avoided costs are an important factor in determining the cost-effectiveness of an energy efficiency measure. Table 1 below lists the SouthWest Power Pool (SPP) historical average locational imbalance energy prices at the Kansas City Power & Light Company node. Table 2 below lists the avoided energy costs used by KEMA in the Study.

1. The near term summer on-peak prices in the Study are more than twice current SPP market energy prices (shown in Table 1) which could overstate the value of avoided energy benefits.

Table 1

Historical Avg. Price: SPP-RTH @ KCPL LA node				
	\$/kWh	\$/kWh	\$/kWh	\$/kWh
Year	SON	SOFF	WON	WOFF
2007	0.0600	0.0358	-	-
2008	0.0783	0.0412	0.0569	0.0411
2009	0.0315	0.0214	0.0307	0.0253
2010	0.0472	0.0282	-	-

Table 2

KEMA Avoided Cost				
	\$/kWh	\$/kWh	\$/kWh	\$/kWh
Year	SON	SOFF	WON	WOFF
2011	0.1022	0.03888	0.05897	0.03982
2012	0.10715	0.04046	0.0589	0.04143
2013	0.10915	0.04058	0.05675	0.04108
2014	0.10832	0.04113	0.05629	0.04181
2015	0.11045	0.04125	0.05409	0.04106
2016	0.11337	0.04265	0.05547	0.04255
2017	0.12261	0.04632	0.05924	0.04614
2018	0.13017	0.04749	0.05978	0.04726
2019	0.13485	0.04978	0.06039	0.04866
2020	0.13124	0.05052	0.06246	0.05126

MEMO dated Nov 10, 2010

2. There are no electricity Rates, Avoided Energy Costs (\$/kWh), or Avoided Demand Costs (\$/kW) shown for the Residential or Commercial Segments in Appendix C. For the Industrial Segment, there are no Demand Rates: stated as \$0.00/kW in the Study.

Q: Were the Industrial Avoided Costs applied to all other sectors / measures equally (i.e. Residential and Commercial)? If this is true, it is inappropriate.

MEASURE DATA

It is not possible to replicate the KEMA results due to a lack of information. For example:

The number of units in each measure is not stated.

The individual Annual Energy Savings per measure in kW, and KWh is not stated.

Q: What are the energy uses for the Baselines for each Measure including kWh/year, Peak kW? The KEMA Report is not explicit.

Q: What are the Incremental Energy Savings per Measure in kWh/year, kW savings, and dollars/year?

Q: What were the assumptions on Participation Rates within the Segments.

OTHER DATA

Some of the TRC values (~10%) are very high, e.g. from 15 to 99,999. As an example, the TRC at a value of 26.42 for Measure Number 341-Second Refrigerator Recycling- in Appendix F, Residential Existing Construction (Non-Additive Measure Level Results), page F – 3, seems unusually high.

Please provide the input data and show the calculations for TRC with kW, and with kWh for Measure #341.

Q: Were the customer incentives included in the Program Costs? If not, why not? What are the Actual Savings per unit?

Other issues:

What are the Measure Life (service life) unit values? These are not defined.

Please be specific (Hours vs. Years vs. Months, etc). And, what are the reference sources of the Service Life information?