



Allen Anderson, President & CEO

925-929 North Main Street
Post Office Box 910
Somerset, KY 42502-0910
Telephone 606-678-4121
Toll Free 800-264-5112
Fax 606-679-8279
www.skrecc.com

June 1, 2010

Mr. Jeff Derouen:
Executive Director
Kentucky Public Service Commission
211 Sowder Blvd.
P.O. Box 615
Frankfort, KY 40602-0615

RE: Case No. 2010-00055

Dear Mr. Derouen:

Enclosed you will find an original and seven (7) copies of the response to the Commission Staff's Second Data Request on the Application of South KY RECC's Certificate of Convenience and Necessity to Construct Additional Lines and Facilities.

If I can be of any further assistance, please contact me at 606-678-4121.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stephen Johnson', written over a large, stylized flourish.

Stephen Johnson
Vice President of Finance
South KY RECC

jw Enclosures

RECEIVED

JUN 2 2010

PUBLIC SERVICE
COMMISSION

RESPONSE TO P.S.C SECOND DATA REQUEST

- Q 1. Refer to South Kentucky's Construction Work Plan ("CWP"), page 8. South Kentucky is proposing to install 12,000 new meters over the period of 2010 through 2013 at a total cost of \$798,000. In Case No. 2009-00489, South Kentucky was authorized to install an Advanced Metering Infrastructure ("AMI") System which would entail replacing all of its meters over the construction period.
- a. Provide a description of the planned uses for the 12,000 meters included in the CWP.
 - b. Provide a description of the types of meters.
 - c. If applicable, provide a description of the AMI module that would be installed in the new meters.
 - d. Refer to South Kentucky's response to Item 8 of the Commission Staff's First Data Request ("Staff's Initial Data Request") in Case No. 2009-00489. Explain in detail why the cost of meters in that response is different from the \$67 cited in the CWP. To the extent the \$67 amount is an average, provide an estimate of the costs for the proposed 12,000 meters by meter type (residential, commercial, industrial, etc).
- R 1.(a) The CWP was developed and approved by the RUS representative on June 30, 2009 and approved by South Kentucky RECC Board of Directors on August 27, 2009. At the time of the CWP development 3,000 meters annually were necessary for new additions and also replacement of older meters. South Kentucky received notification from the Department of Energy (DOE) that we were selected as a Smart Grid Investment Grant (SGIG) Recipient, subject to negotiations on October 27, 2009. After initial budgeting and deliverables we received final approval of the SGIG on March 14, 2010. With final approval from the DOE we do not anticipate purchasing the 12,000 meters in the CWP.
- R 1(b). The meters included are for electronic single phase self contained, electronic single phase transformer rated, electronic three phase self contained and electronic three phase transformer rated meters.
- R 1(c). Not Applicable

RESPONSE TO P.S.C SECOND DATA REQUEST

R 1(d) Item # 8 of the Commission Staff's First Data Request relates to the cost of single phase meters (without the AMI module) and three phase meters (without the AMI module). The \$67 is an average of all meter types. The cost of meters by type is as follows.

1. 120 volt Class 100 two wire self contained	\$84.80
2. 240 volt Class 200 three wire self contained	\$24.38
3. 240 volt Class 320 three wire self contained	\$68.90
4. 240 volt Class 320 three wire self contained with demand	\$185.50
5. Form 3-S Transformer Rated Single Phase Meter	\$78.44
6. Form 4-S Transformer Rated Single Phase Meter	\$75.26
7. Form 5-S Transformer Rated Three Phase Meter	\$259.70
8. Form 8-S Transformer Rated Three Phase Meter	\$222.60
9. Form 9-S Transformer Rated Three Phase Meter	\$222.60
10. Form 15-S Self Contained Three Phase Meter	\$227.90
11. Form 16-S Self Contained Three Phase Meter	\$227.90

RESPONSE TO P.S.C SECOND DATA REQUEST

Q 2. Identify any other costs in the CWP that may be associated with South Kentucky's AMI or Smart Grid activities.

R 2. No other items in the CWP are associated with AMI activities.

RESPONSE TO P.S.C SECOND DATA REQUEST

- Q 3. Refer to the response to Staff's initial Data Request, Item 6, which references the Historical Annual Energy Load and Consumer Data table in Section II, G, page 13, of the CWP ("the Energy Load Table"). The response to item 6 calculates the 2003 Load Factor as:

$$\begin{aligned}\text{Load Factor 2003} &= \text{kWh Sold 2003} / (\text{Peak kW 2003} \times 365 \times 24) \\ &= 1,037,801,000 / (312,000 \times 365 \times 24) \\ &= .3797 \text{ or } 38\%\end{aligned}$$

Using the same formula for Years 2001 and 2002 yields the following results:

$$\begin{aligned}\text{Load Factor 2001} &= \text{kWh Sold 2001} / (\text{Peak kW 2001} \times 365 \times 24) \\ &= 985,426,000 / (282,000 \times 365 \times 24) \\ &= .3989 \text{ or } 39.9\% \\ \text{Load Factor 2002} &= \text{kWh Sold 2002} / (\text{Peak kW 2002} \times 365 \times 24) \\ &= 1,024,676,000 / (265,400 \times 365 \times 24) \\ &= .4407 \text{ or } 44.1\%\end{aligned}$$

The Energy Load Table reports Load Factor 2001 = 41.5% and Load Factor 2002 = 47.0%. These results for 2001 and 2002 are reproducible if one uses kWh Purchased and not kWh Sold.

- a. Should the % Annual Load Factor column of the Energy Load Table use kWh Purchased or kWh Sold in the numerator of the Load Factor calculation? Explain the reasons supporting the answer.
 - b. Recalculate the Energy Load Table based on the response to Item 3.a.
- R 3(a). The % annual load factor should be calculated using the purchased KWH. The excel table mistakenly used the sold KWH in 2003, but the rest of the years were correct in using the purchased KWH. This was an incorrect formula and an oversight in looking at the table formulas.
- R 3(b). Updated table is included as Item No. 3 page 2 of 2.

F. SERVICE INTERRUPTIONS

AVERAGE ANNUAL HOURS/CONSUMER BY CAUSE

<u>Year</u>	<u>Power Supply</u>	<u>Storm</u>	<u>Pre-Arranged</u>	<u>Other</u>	<u>Total</u>
2004	.12	1.23	.01	2.81	4.17
2005	.09	.26	.12	2.06	2.53
2006	.19	.04	.8	2.79	3.82
2007	.12	1.39	.13	2.13	3.77
2008	.15	1.97	.36	2.83	5.31
<u>5 Year Average</u>	.13	.98	.28	2.52	3.92

G. HISTORICAL ANNUAL ENERGY, LOAD AND CONSUMER DATA

HISTORICAL ANNUAL ENERGY, LOAD AND CONSUMER DATA

<u>Year</u>	<u>Energy Purchased (mWh)</u>	<u>Energy Sold (mWh)</u>	<u>% Inc.</u>	<u>Energy Loss (mWh)</u>	<u>% Loss</u>	<u>non-coincident Peak (mW)</u>	<u>% Inc.</u>	<u>% Annual Load Factor</u>	<u># of Consumers Annual Avg.</u>	<u>% Inc.</u>
1997	836,252	774,808	1.2%	61,444	7.3%	237.3	-1.4%	40.2%	51,808	2.8%
1998	865,809	819,088	5.7%	46,721	5.4%	207.9	12.4%	47.5%	53,152	2.6%
1999	944,207	888,281	8.4%	55,926	5.9%	242.0	16.4%	44.5%	54,377	2.3%
2000	1,026,327	950,641	7.0%	75,686	7.4%	262.8	8.6%	44.6%	55,685	2.4%
2001	1,024,321	985,426	3.7%	38,895	3.8%	282.0	7.3%	41.5%	56,877	2.1%
2002	1,092,297	1,024,676	4.0%	67,621	6.2%	265.4	-5.9%	47.0%	58,058	2.1%
2003	1,106,010	1,037,801	1.3%	68,209	6.2%	312.0	17.6%	40.5%	59,081	1.8%
2004	1,142,493	1,076,755	3.8%	65,738	5.8%	316.3	1.4%	41.2%	60,128	1.8%
2005	1,207,092	1,133,474	5.3%	73,618	6.1%	314.5	-0.6%	43.8%	60,922	1.3%
2006	1,169,831	1,117,337	-1.4%	52,494	4.5%	337.6	7.3%	39.6%	61,869	1.6%
2007	1,232,718	1,161,833	4.0%	70,885	5.8%	354.7	5.1%	39.7%	62,408	0.9%
2008	1,347,309	1,266,216	9.0%	81,093	6.0%	371.9	4.8%	41.4%	66,276	6.2%

Notes: All data is from the Form 7.

PROJECTED ANNUAL ENERGY, LOAD AND CONSUMER DATA

<u>Year</u>	<u>Energy Purchased</u>	<u>Energy Sold</u>	<u>% Inc.</u>	<u>Energy Loss</u>	<u>% Loss</u>	<u>non-coincident Demand</u>	<u>% Inc.</u>	<u>% Annual Load Factor</u>	<u>Number of Consumers</u>	<u>% Inc.</u>
2010	1,459,164	1,378,090	-	81,074	5.6%	444.8	-	37.4%	68,515	-
2011	1,491,078	1,408,239	2.2%	82,839	5.6%	453.9	2.0%	37.5%	69,451	1.4%
2012	1,527,650	1,442,769	2.5%	84,881	5.6%	468.7	3.3%	37.2%	70,399	1.4%
2013	1,567,899	1,480,758	2.6%	87,141	5.6%	477.4	1.9%	37.5%	71,363	1.4%

Note: All of the projections above are from the 2008 Power Requirement Study. The increase in consumers, demand, and sales in 2008 was due to the addition of the MEPB system.