

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

MAR 21 2013

PUBLIC SERVICE
COMMISSION

IN THE MATTER OF:

THE APPLICATION OF KENTUCKY POWER COMPANY FOR:)
(1) A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY)
AUTHORIZING THE TRANSFER TO THE COMPANY OF AN)
UNDIVIDED FIFTY PERCENT INTEREST IN THE MITCHELL)
GENERATING STATION AND ASSOCIATED ASSETS; (2) APPROVAL)
OF THE ASSUMPTION BY KENTUCKY POWER COMPANY OF)
CERTAIN LIABILITIES IN CONNECTION WITH THE TRANSFER OF)
THE MITCHELL GENERATING STATION; (3) DECLARATORY) CASE NO. 2012-00578
RULINGS; (4) DEFERRAL OF COSTS INCURRED IN CONNECTION)
WITH THE COMPANY'S EFFORTS TO MEET FEDERAL CLEAN AIR)
ACT AND RELATED REQUIREMENTS; 5) FOR ALL OTHER)
REQUIRED APPROVALS AND RELIEF)

KENTUCKY POWER COMPANY RESPONSES TO
ALEXANDER DESHA, TOM VIERHELLER, BEVERLY MAY, AND SIERRA CLUB'S
SUPPLEMENTAL SET OF DATA REQUESTS

March 21, 2013

VERIFICATION

The undersigned, Mark A. Becker, being duly sworn, deposes and says he is the Manager, Resource Planning for American Electric Power Company that he has personal knowledge of the matters set forth in the foregoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge and belief



Mark A. Becker

STATE OF OKLAHOMA

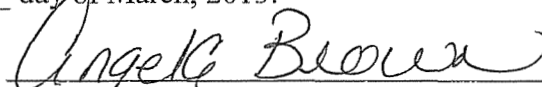
)

) CASE NO. 2012-00578

COUNTY OF TULSA

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Mark A. Becker, this the 19 day of March, 2013.



Notary Public

My Commission Expires:

2-27-14

VERIFICATION

The undersigned, Karl R. Bletzacker, being duly sworn, deposes and says he is Director, Fundamental Analysis for American Electric Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge, and belief.

Karl R Bletzacker

Karl R. Bletzacker

STATE OF OHIO

)

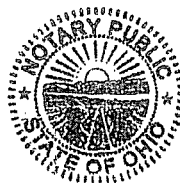
) CASE NO. 2012-00578

COUNTY OF FRANKLIN

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Karl R. Bletzacker, this the 14 day of March 2013.

Holly M. Charles
Notary Public



Holly M. Charles
Notary Public-State of Ohio
My Commission Expires
March 7, 2016

My Commission Expires: March 7, 2016

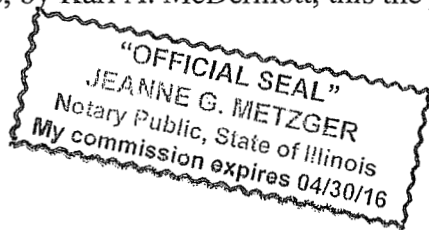
VERIFICATION

The undersigned, Karl A. McDermott, being duly sworn, deposes and says he is the Special Consultant with NERA that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge, and belief

Karl A. McDermott
Karl A. McDermott

STATE OF ILLINOIS)
) CASE NO. 2012-00578
COUNTY OF CHAMPAIGN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Karl A. McDermott, this the 14 day of March 2013.

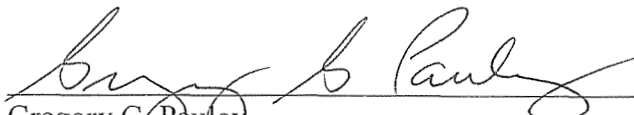


Jeanne G. Metzger
Notary Public

My Commission Expires: 4-30-2016

VERIFICATION

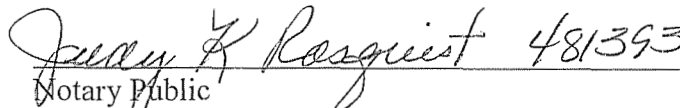
The undersigned, Gregory G. Pauley, being duly sworn, deposes and says he is the President and Chief Operating Officer for Kentucky Power Company, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge and belief



Gregory G. Pauley

COMMONWEALTH OF KENTUCKY)
) CASE NO. 2012-00578
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Gregory G. Pauley, this the 13th day of March 2013.

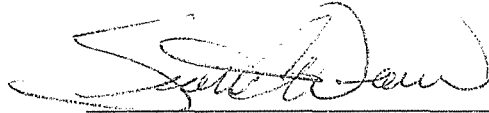


Notary Public 481393

My Commission Expires: January 23, 2017

VERIFICATION

The undersigned, Scott C. Weaver, being duly sworn, deposes and says he is Managing Director Resource Planning and Operation Analysis for American Electric Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge and belief



Scott C. Weaver

STATE OF OHIO

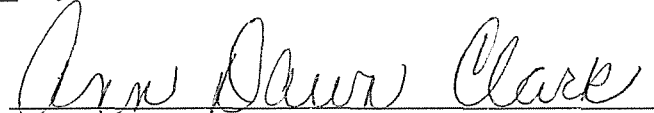
)

) CASE NO. 2012-00578

COUNTY OF FRANKLIN

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Scott C. Weaver, this the 14th day of March 2013.



Notary Public

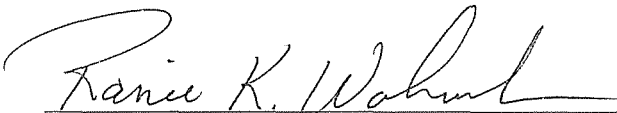


Ann Dawn Clark
Notary Public-State of Ohio
My Commission Expires
November 16, 2015

My Commission Expires, November 16, 2015

VERIFICATION

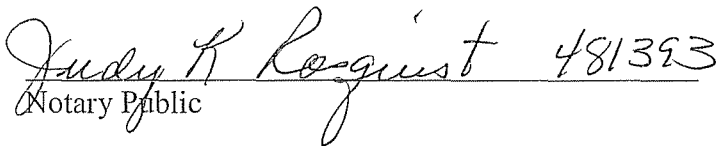
The undersigned, Ranie K. Wohnhas, being duly sworn, deposes and says he is the Managing Director Regulatory and Finance for Kentucky Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge, and belief



Ranie K. Wohnhas

COMMONWEALTH OF KENTUCKY)
) CASE NO. 2012-00578
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Ranie K. Wohnhas, this the 13th day of March 2013.



Notary Public

My Commission Expires: January 23, 2017

Kentucky Power Company

REQUEST

Refer to p. 9 of the Application, citing Case No. 2008-00408.

- a. Explain how KPCo has adopted policies establishing cost-effective energy efficiency resources with equal priority as other resource options.
- b. Provide the policies establishing cost-effective energy efficiency resources with equal priority as other resource options.
- c. Explain how the proposal to transfer 50% ownership of Mitchell to KPCo places equal priority on energy efficiency resources as other resource options.

RESPONSE

- a. As a matter of practice and policy, Kentucky regularly incorporates cost-effective energy efficiency resources in its planning. In doing so, and to the extent the energy efficiency resources are attainable, the Company accords them equal priority with other resources.
- b. The practice has not been committed to writing.
- c. As demonstrated on page 27 of Company witness Weaver's direct testimony, the Company included in its analyses the amount of reasonably attainable cost effective energy resources that were included in the Company's long-term load forecast and summarized on Exhibit SCW-1, Table 1-2.

WITNESS: Gregory G Pauley

Kentucky Power Company

REQUEST

Refer to p. 27 of the testimony of Scott C. Weaver. Explain whether additional investment in DSM resources could defer investment in capacity resources or otherwise reduce investment in capacity resources over the long term.

- a. If so, explain what level of DSM resources would be required to alter the resources needed over the planned horizon, and explain whether that level of DSM resources could be achieved by KPCo.
- b. If not, explain why DSM resources cannot materially alter the resources needed over the planned horizon. Provide supporting documentation for the conclusion.

RESPONSE

- a. Additional DSM could hypothetically defer investment in capacity resources once the Big Sandy Unit 1 Gas Conversion is retired in 2030 if DSM resources of approximately 200 MW could be obtained. Given the current size of KPCo's summer peak demand, as a practical matter, it is highly unlikely that this level of DSM reduction could be obtained by KPCo.
- b. n/a

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

Refer to the Company's response to KPSC 1-8(c). Explain why costs associated with energy efficiency programs are considered sunk costs. Further, explain how STRATEGIST analyzes cost associated with incremental or new energy efficiency resources.

RESPONSE

Energy Efficiency programs are considered sunk costs in the Strategist modeling because those costs are common across all scenarios modeled and analyzed, and therefore, those costs would not impact the outcome of the analysis. No incremental energy efficiency was modeled, because the load forecast already takes into account the reasonably achievable future energy efficiency resources.

WITNESS: Mark A Becker

Kentucky Power Company

REQUEST

Refer to p. 3 of Exhibit SCW-1, and to the Company's response to KIUC 1-17. Explain how the Company's load forecast accounts for declining load since the 2006/2007 time period.

RESPONSE

The Company's load forecast methodology utilizes factors that affect load- both growth and decline. The methodology is based on statistical models of the relationships between load, weather, economic activity, demographics and appliance saturations and efficiencies. The model parameters are based on historical data. The Company uses the economic data vendor Moody's Analytics to obtain historical data, including that from 2006 forward, and forecast economic information. These models account for the load trends through economic drivers such as coal production, population, income and economic output.

The Company's historical and forecast sales by FERC revenue class, is shown in the Company's response to SC 1-34, Attachment 3. These weather adjusted historical sales identify the change in load for each class since 2001. The response also identifies the Company's expectations by revenue class going forward.

The Company's response to KIUC 1-17 identified the fact that the Company load endured the impact of recent U.S. recession fairly well. However, the decline in the coal mining sector in recent years has had an impact on load. Coal production dropped sharply between 2007 and 2011 according to data from the Energy Information Administration (EIA). For Eastern Kentucky, February coal production dropped by 15.9% between that time period.

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

Refer to the Company's response to KPSC 1-8, and to the Company's response to Sierra Club 1-36. Confirm whether the Company expects to continue implementing the energy efficiency programs described in the Company's response to KPSC 1-8(a) through 2031.

RESPONSE

The Company expects to continue offering energy efficiency programs through 2031 and beyond. The programs could be those outlined in response to KPSC 1-8 or new offerings.

WITNESS: Ranie K. Wohnhas

Kentucky Power Company

REQUEST

Refer to p. 7 of Exhibit SCW-1.

- a. Identify and explain the bases for the projected year to year increase in both active and passive demand response savings on page 7 of Exhibit SCW-1.
- b. Explain how the Company intends to achieve the projected increase in both active and passive demand response savings each year.

RESPONSE

For the purposes of Exhibit SCW-1, "passive demand response" refers to demand reductions that result from the implementation of energy efficiency programs. "Active demand response" is what is more commonly referred to as "demand response".

- a. The Company intends to continue to invest in energy efficiency at the approximate level that is currently approved by the Kentucky Public Service Commission. These investments may result in incremental energy and demand savings each year. The Company also projects adding demand response capabilities during the forecast period.
- b. In addition to the continuation of energy efficiency programs, the Company is also considering demand response options and expects to offer programs subject to Commission review and appropriate cost recovery.

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

Refer to p. 7 of Exhibit SCW-1.

- a. For passive demand response programs implemented each year within the past five years, provide the budget, energy savings, capacity savings and results of cost-effectiveness screenings for each program.
- b. For passive demand response programs planned for implementation each year through 2031, provide the budget, energy savings, capacity savings and results of cost-effectiveness screenings for each program, with the total program savings matching the projected passive demand response savings for each year on page 7 of Exhibit SCW-1.

RESPONSE

For the purposes of Exhibit SCW-1, "passive demand response" refers to demand reductions that result from the implementation of energy efficiency programs.

- a. Please see SC 2-7 Attachment 1 and 2.
- b. Program costs are not budgeted past the programs currently approved by the Commission. It is assumed, for the sake of forecasting, that energy and capacity savings that are commensurate with current programs can be expected into the future.

WITNESS: Ranie K Wohnhas

KENTUCKY POWER COMPANY
 DSM/EE PROGRAMS 2008-2012
 COST/SAVINGS

Program	Year	Expense	Energy Savings - kWh	Capacity Savings - kW
Target Energy Efficiency	2008	\$256,242	293,256	106
High Efficiency Heat Pump - Mobile Home	2008	\$60,650	124,011	27
Mobile Home New Construction	2008	\$111,900	188,758	37
Modified Energy Fitness	2008	\$359,131	530,736	558
Target Energy Efficiency	2009	\$273,480	320,260	131
High Efficiency Heat Pump - Mobile Home	2009	\$71,900	142,048	210
Mobile Home New Construction	2009	\$104,700	192,229	282
Modified Energy Fitness	2009	\$302,864	430,530	447
High Efficiency Heat Pump	2009	\$138,450	229,846	360
Community Outreach Compact Fluorescent Lamp	2009	\$34,119	67,032	96
Energy Education for Students	2009	\$17,184	14,117	29
Target Energy Efficiency	2010	\$347,248	455,844	169
High Efficiency Heat Pump - Mobile Home	2010	\$104,800	226,299	312
Mobile Home New Construction	2010	\$127,200	221,335	345
Modified Energy Fitness	2010	\$418,693	551,073	669
High Efficiency Heat Pump	2010	\$340,200	762,091	1,062
Community Outreach Compact Fluorescent Lamp	2010	\$57,134	133,036	123
Energy Education for Students	2010	\$30,760	20,698	39
Residential HVAC Diagnostic and Tune-up	2010	\$2,850	1,019	7
Residential Load Management	2010	\$0	0	0
Residential Efficient Products	2010	\$0	0	0
Commercial HVAC Diagnostic and Tune-up	2010	\$125	225	0
Commercial Load Management	2010	\$0	0	0
Commercial High Efficiency Heat Pump/Air Conditioner	2010	0	0	0
Commercial Incentive	2010	0	0	0
Target Energy Efficiency	2011	\$280,994	263,978	147
High Efficiency Heat Pump - Mobile Home	2011	\$94,832	276,093	175
Mobile Home New Construction	2011	\$92,285	138,956	43
Modified Energy Fitness	2011	\$444,508	446,511	320
High Efficiency Heat Pump	2011	\$309,286	596,255	425
Community Outreach Compact Fluorescent Lamp	2011	\$59,515	626,392	266
Energy Education for Students	2011	\$23,995	195,610	57
Residential HVAC Diagnostic and Tune-up	2011	\$100,224	270,795	177
Residential Load Management	2011	\$103,498	0	\$0
Residential Efficient Products	2011	\$314,155	2,231,328	1,484
Commercial HVAC Diagnostic and Tune-up	2011	\$27,093	76,302	60
Commercial Load Management	2011	\$14,315	0	0
Commercial High Efficiency Heat Pump/Air Conditioner	2011	\$23,516	14,938	8
Commercial Incentive	2011	\$252,314	21,083	80
Target Energy Efficiency	2012	\$264,660	297,500	108
High Efficiency Heat Pump - Mobile Home	2012	\$102,600	343,103	187
Mobile Home New Construction	2012	\$85,500	155,055	17
Modified Energy Fitness	2012	\$432,225	472,218	320
High Efficiency Heat Pump	2012	\$264,600	520,296	372
Community Outreach Compact Fluorescent Lamp	2012	\$55,433	694,270	306
Energy Education for Students	2012	\$28,228	202,694	76
Residential HVAC Diagnostic and Tune-up	2012	\$113,437	173,435	176
Residential Load Management	2012	\$214,393	0	0
Residential Efficient Products	2012	\$355,006	2,570,970	756
Commercial HVAC Diagnostic and Tune-up	2012	\$30,576	38,944	34
Commercial Load Management	2012	\$32,364	0	0
Commercial High Efficiency Heat Pump/Air Conditioner	2012	\$31,410	11,464	12
Commercial Incentive	2012	\$1,092,272	542,952	767

KENTUCKY POWER COMPANY
 DSM/EE PROGRAMS 2008-2012
 EVALUATIONS

Program	Test	Data Source	Economic Test
Commercial High Efficiency HP/AC	PACT	Evaluation 2012	0.71
Commercial High Efficiency HP/AC	TRC	Evaluation 2012	0.72
Commercial High Efficiency HP/AC	RIM	Evaluation 2012	0.36
Commercial High Efficiency HP/AC	PCT	Evaluation 2012	3.01
Commercial High Efficiency HP/AC	PACT	original filing 2010	1.02
Commercial High Efficiency HP/AC	TRC	original filing 2010	1.24
Commercial High Efficiency HP/AC	RIM	original filing 2010	0.39
Commercial High Efficiency HP/AC	PCT	original filing 2010	1.68
Commercial Incentive (CI)	PACT	Evaluation 2012	0.56
Commercial Incentive (CI)	TRC	Evaluation 2012	0.59
Commercial Incentive (CI)	RIM	Evaluation 2012	0.29
Commercial Incentive (CI)	PCT	Evaluation 2012	15.52
Commercial Incentive (CI)	PACT	original filing 2010	2.39
Commercial Incentive (CI)	TRC	original filing 2010	3.41
Commercial Incentive (CI)	RIM	original filing 2010	0.71
Commercial Incentive (CI)	PCT	original filing 2010	8.50
Community Outreach (COCFL)	PACT	Evaluation 2009	2.37
Community Outreach (COCFL)	TRC	Evaluation 2009	3.13
Community Outreach (COCFL)	RIM	Evaluation 2009	0.44
Community Outreach (COCFL)	PCT	Evaluation 2009	n/a
Community Outreach (COCFL)	PACT	Evaluation 2011	3.47
Community Outreach (COCFL)	TRC	Evaluation 2011	4.17
Community Outreach (COCFL)	RIM	Evaluation 2011	0.52
Community Outreach (COCFL)	PCT	Evaluation 2011	n/a
Energy Education for Students (EEFS)	PACT	Evaluation 2009	1.49
Energy Education for Students (EEFS)	TRC	Evaluation 2009	1.85
Energy Education for Students (EEFS)	RIM	Evaluation 2009	0.41
Energy Education for Students (EEFS)	PCT	Evaluation 2009	n/a
Energy Education for Students (EEFS)	PACT	Evaluation 2011	1.79
Energy Education for Students (EEFS)	TRC	Evaluation 2011	2.04
Energy Education for Students (EEFS)	RIM	Evaluation 2011	0.44
Energy Education for Students (EEFS)	PCT	Evaluation 2011	n/a
High Efficiency Heat Pump (HEHP)	PACT	Evaluation 2011	2.27
High Efficiency Heat Pump (HEHP)	TRC	Evaluation 2011	1.74
High Efficiency Heat Pump (HEHP)	RIM	Evaluation 2011	0.65
High Efficiency Heat Pump (HEHP)	PCT	Evaluation 2011	2.21
HVAC Diagnostic and Tune-up (commercial)	PACT	Evaluation 2012	0.64
HVAC Diagnostic and Tune-up (commercial)	TRC	Evaluation 2012	0.64
HVAC Diagnostic and Tune-up (commercial)	RIM	Evaluation 2012	0.28
HVAC Diagnostic and Tune-up (commercial)	PCT	Evaluation 2012	3.57
HVAC Diagnostic and Tune-up (commercial)	PACT	original filing 2010	1.17
HVAC Diagnostic and Tune-up (commercial)	TRC	original filing 2010	1.51
HVAC Diagnostic and Tune-up (commercial)	RIM	original filing 2010	0.35
HVAC Diagnostic and Tune-up (commercial)	PCT	original filing 2010	7.97
HVAC Diagnostic and Tune-up (residential)	PACT	Evaluation 2012	0.78
HVAC Diagnostic and Tune-up (residential)	TRC	Evaluation 2012	0.64
HVAC Diagnostic and Tune-up (residential)	RIM	Evaluation 2012	0.31
HVAC Diagnostic and Tune-up (residential)	PCT	Evaluation 2012	2.44
HVAC Diagnostic and Tune-up (residential)	PACT	original filing 2010	1.00
HVAC Diagnostic and Tune-up (residential)	TRC	original filing 2010	1.15
HVAC Diagnostic and Tune-up (residential)	RIM	original filing 2010	0.29
HVAC Diagnostic and Tune-up (residential)	PCT	original filing 2010	6.07
Mobile Home Heat Pump (MHHP)	PACT	Evaluation 2008	6.02
Mobile Home Heat Pump (MHHP)	TRC	Evaluation 2008	9.79

KENTUCKY POWER COMPANY
 DSM/EE PROGRAMS 2008-2012
 EVALUATIONS

Program	Test	Data Source	Economic Test
Mobile Home Heat Pump (MHHP)	RIM	Evaluation 2008	3.45
Mobile Home Heat Pump (MHHP)	PCT	Evaluation 2008	9.07
Mobile Home Heat Pump (MHHP)	PACT	Evaluation 2011	3.72
Mobile Home Heat Pump (MHHP)	TRC	Evaluation 2011	5.23
Mobile Home Heat Pump (MHHP)	RIM	Evaluation 2011	0.74
Mobile Home Heat Pump (MHHP)	PCT	Evaluation 2011	8.00
Mobile Home New Construction (MHNC)	PACT	Evaluation 2008	3.75
Mobile Home New Construction (MHNC)	TRC	Evaluation 2008	3.66
Mobile Home New Construction (MHNC)	RIM	Evaluation 2008	2.59
Mobile Home New Construction (MHNC)	PCT	Evaluation 2008	3.46
Mobile Home New Construction (MHNC)	PACT	Evaluation 2011	1.67
Mobile Home New Construction (MHNC)	TRC	Evaluation 2011	2.25
Mobile Home New Construction (MHNC)	RIM	Evaluation 2011	0.53
Mobile Home New Construction (MHNC)	PCT	Evaluation 2011	3.66
Modified Energy Fitness (MEF)	PACT	Evaluation 2008	3.37
Modified Energy Fitness (MEF)	TRC	Evaluation 2008	3.37
Modified Energy Fitness (MEF)	RIM	Evaluation 2008	1.43
Modified Energy Fitness (MEF)	PCT	Evaluation 2008	n/a
Modified Energy Fitness (MEF)	PACT	Evaluation 2011	0.90
Modified Energy Fitness (MEF)	TRC	Evaluation 2011	1.15
Modified Energy Fitness (MEF)	RIM	Evaluation 2011	0.46
Modified Energy Fitness (MEF)	PCT	Evaluation 2011	n/a
Residential Efficient Products (REP)	PACT	Evaluation 2012	3.50
Residential Efficient Products (REP)	TRC	Evaluation 2012	1.98
Residential Efficient Products (REP)	RIM	Evaluation 2012	0.44
Residential Efficient Products (REP)	PCT	Evaluation 2012	5.12
Residential Efficient Products (REP)	PACT	original filing 2010	9.18
Residential Efficient Products (REP)	TRC	original filing 2010	1.48
Residential Efficient Products (REP)	RIM	original filing 2010	0.47
Residential Efficient Products (REP)	PCT	original filing 2010	2.08
Targeted Energy Efficiency (TEE)	PACT	Evaluation 2008	1.99
Targeted Energy Efficiency (TEE)	TRC	Evaluation 2008	1.99
Targeted Energy Efficiency (TEE)	RIM	Evaluation 2008	0.78
Targeted Energy Efficiency (TEE)	PCT	Evaluation 2008	n/a
Targeted Energy Efficiency (TEE)	PACT	Evaluation 2011	1.59
Targeted Energy Efficiency (TEE)	TRC	Evaluation 2011	1.59
Targeted Energy Efficiency (TEE)	RIM	Evaluation 2011	0.58
Targeted Energy Efficiency (TEE)	PCT	Evaluation 2011	n/a

Kentucky Power Company

REQUEST

Refer to p. 3 of Exhibit SCW-1.

- a. Provide the Company's retail sales for each year from the last five years.
- b. Confirm whether the Internal Load values provided on page 3 of Exhibit SCW-1 are the Company's retail sales planned for each year through 2031. If not, provide the Company's retail sales planned for each year through 2031.

RESPONSE

- a. Please refer to the response to Sierra Club's 1-34 part d, attachment 3. Total Ultimate GWh shown in the response is actual, weather normalized retail sales.
- b. The internal load provided on page 3 of Exhibit SCW-1 is the Company's retail and wholesale sales and losses. For retail sales planned for each year through 2031, please see the response to Sierra Club's first set of data requests, question number 34 part d, attachment 3. Total Ultimate GWh shown in the response is weather normalized retail sales.

WITNESS: Ranie K. Wohnhas

Kentucky Power Company

REQUEST

Refer to p. 7 of Exhibit SCW-1, and to Attachment 1 to the Company's response to KPSC 1-8. Explain how the current energy efficiency program savings provided in Attachment 1 to the Company's response to KPSC 1-8 are incorporated into the current PJM-approved interruptible demand response peak reductions provided on page 7 of Exhibit SCW-1.

- a. If the savings from Attachment 1 to the Company's response to KPSC 1-8 are not incorporated into the current active and passive demand response activities provided on page 7 of Exhibit SCW-1, explain why they are not incorporated into the current active and passive demand response activities.

RESPONSE

Current energy efficiency and demand response programs are not included in the "(Current) PJM-approved Interruptible Demand Response" column of Exhibit SCW-1.

- a. KPCo currently does not have any PJM-compliant interruptible contracts. Impacts from current and prospective energy efficiency and demand response programs are included as reductions to load in the forecast (energy efficiency) and as designated resources in Strategist (demand response).

WITNESS: Ranie K Wohnhas

Kentucky Power Company

REQUEST

Refer to p. 27 of the testimony of Scott C. Weaver. Provide a detailed description of each active demand response program implemented by the Company, including the prices offered, the technology used and the customers targeted for each program.

RESPONSE

In answering this data request, the Company defines active demand response in the fashion described in its response to SC 2-6.

Kentucky currently offers a demand response tariff. Please see SC 2-10 Attachment 1. The program targets industrial customers that can interrupt at least 1 MW. The method of interruption (technology) is determined by the participant.

The Company implemented a Pilot Load Management program in 2011. This program utilized two-way cellular technology via a gateway meter for customer utility billing and customized customer load profiles for operation of HVAC and water heating equipment. The Company has completed this Pilot program effective December 31, 2012 ending with fifty three residential customers.

The actual program expenses are included in the table below. There was no capacity savings or cost-effectiveness screening for the Pilot Load Management program.

There are no additional demand response programs currently planned.

WITNESS: Ranie K Wohnhas

KENTUCKY POWER COMPANY

Original Sheet No. 12-1
 Canceling _____ Sheet No. 12-1

P.S.C. ELECTRIC NO. 9

TARIFF C.S.-I.R.P.
 (Contract Service - Interruptible Power)

AVAILABILITY OF SERVICE.

Available for service to customers who contract for service under one of the Company's interruptible service options. The Company reserves the right to limit the total contract capacity for all customers served under this Tariff to 60,000 kW. (T)

Loads of new customers locating within the Company's service area or load expansions by existing customers may be offered interruptible service as part of an economic development incentive. Such interruptible service shall not be counted toward the limitation on total interruptible power contract capacity, as specified above, and will not result in a change to the limitation on total interruptible power contract capacity.

CONDITIONS OF SERVICE.

The Company will offer eligible customers the option to receive service from a menu of interruptible power options pursuant to a contract agreed to by the Company and the Customer.

Upon receipt of a request from the Customer for interruptible service, the Company will provide the Customer with a written offer containing the rates and related terms and conditions of service under which such service will be provided by the Company. If the parties reach an agreement based upon the offer provided to the Customer by the Company, such written contract will be filed with the Commission. The contract shall provide full disclosure of all rates, terms and conditions of service under this Tariff, and any and all agreements related thereto, subject to the designation of the terms and conditions of the contract as confidential, as set forth herein.

The Customer shall provide reasonable evidence to the Company that the Customer's electric service can be interrupted in accordance with the provisions of the written agreement including, but not limited to, the specific steps to be taken and equipment to be curtailed upon a request for interruption.

The Customer shall contract for capacity sufficient to meet normal maximum interruptible power requirements, but in no event will the interruptible amount contracted for be less than 1,000 KW at any delivery point. (T)

RATE. (Tariff Code 321)

Charges for service under this Tariff will be set forth in the written agreement between the Company and the Customer and will reflect a difference from the firm service rates otherwise available to the Customer.

FUEL ADJUSTMENT CLAUSE.

Bills computed according to the rates set forth herein will be increased or decreased by a Fuel Adjustment Factor per KWH calculated in compliance with the Fuel Adjustment Clause contained in Sheet Nos. 5-1 and 5-2 of this Tariff Schedule.

SYSTEM SALES CLAUSE.

Bills computed according to the rates set forth herein will be increased or decreased by a System Sales Factor per KWH calculated in compliance with the System Sales Clause contained in Sheet Nos. 19-1 and 19-2 of this Tariff Schedule.

(Cont'd on Sheet No. 12-2)

KENTUCKY PUBLIC SERVICE COMMISSION	
JEFF R. DEROUEN EXECUTIVE DIRECTOR	
TARIFF BRANCH	
DATE OF ISSUE <u>July 16, 2010</u>	DATE EFFECTIVE <u>Service rendered on and after June 26, 2010</u>
ISSUED BY <u>E.K. WAGNER</u> NAME	DIRECTOR OF REGULATORY SERVICES TITLE
FRANKFORT, KENTUCKY	
ADDRESS	
6/29/2010	
ISSUED BY AUTHORITY OF AN ORDER OF THE PUBLIC SERVICE COMMISSION IN CASE NO. 2009-00459 DATED JANUARY 26, 2010 PURSUANT TO KY KAR 5.011 SECTION 9 (1)	

DATE OF ISSUE July 16, 2010 DATE EFFECTIVE Service rendered on and after June 26, 2010
 ISSUED BY E.K. WAGNER DIRECTOR OF REGULATORY SERVICES FRANKFORT, KENTUCKY
 NAME TITLE ADDRESS
 Issued by authority of an Order of the Public Service Commission in Case No. 2009-00459 dated January 26, 2010 pursuant to KY KAR 5.011 SECTION 9 (1)

KENTUCKY POWER COMPANY

Original Sheet No. 12-2
Canceling _____ Sheet No. 12-2

P.S.C. ELECTRIC NO. 9

TARIFF C.S.-I.R.P.
(Contract Service - Interruptible Power) (Cont'd.)

DEMAND-SIDE MANAGEMENT ADJUSTMENT CLAUSE.

Bills computed according to the rates set forth herein will be increased or decreased by an Demand-Side Management Adjustment Clause Factor per KWH calculated in compliance with the Demand-Side Management Adjustment Clause contained in Sheet Nos. 22-1 and 22-2 of this Tariff Schedule, unless the Customer is an industrial who has elected to opt-out in accordance with the terms pursuant to the Commission's Order in Case No. 95-427.

ENVIRONMENTAL SURCHARGE.

Bills computed according to the rates set forth herein will be increased or decreased by an Environmental Surcharge Adjustment based on a percent of revenue in compliance with the Environmental Surcharge contained in Sheet Nos. 29-1 through 29-5 of this Tariff Schedule.

CAPACITY CHARGE.

Bills computed according to the rate set forth herein will be increased by a Capacity Charge Factor per KWH calculated in compliance with the Capacity Charge Tariff contained in Sheet No. 28-1 of this Tariff Schedule.

DELAYED PAYMENT CHARGE.

This tariff is due and payable in full on or before the due date stated on the bill. On all accounts not so paid, an additional charge of 5% of the unpaid balance will be made. (T)

TERM OF CONTRACT

The length of the agreement and the terms and conditions of service will be stated in the agreement between the Company and the Customer.

CONFIDENTIALITY

All terms and conditions of any written contract under this Tariff shall be protected from disclosure as confidential, proprietary trade secrets, if either the Customer or the Company requests a Commission determination of confidentiality pursuant to 807 KAR 5:001, Section 7 and the request is granted.

(Cont'd on Sheet No. 12-3)

KENTUCKY PUBLIC SERVICE COMMISSION	
JEFF R. DEROUEN EXECUTIVE DIRECTOR	
TARIFF BRANCH	
<i>Brent Kirtley</i>	
ISSUED BY <i>E.R. Wacker</i> E.R. WACKER NAME	DIRECTOR OF REGULATORY SERVICES TITLE
FRANKFORT, KENTUCKY ADDRESS	
6/29/2010	
PURSUANT TO 807 KAR 5:011 SECTION 9 (1) dated June 28, 2010	

DATE OF ISSUE July 16, 2010 DATE EFFECTIVE Service rendered on and after July 16, 2010
ISSUED BY E.R. WACKER DIRECTOR OF REGULATORY SERVICES FRANKFORT, KENTUCKY
NAME TITLE ADDRESS
Issued by authority of an Order of the Public Service Commission in Case No. 2009-00159 dated June 28, 2010

KENTUCKY POWER COMPANY

Original Sheet No. 12-3
 Canceling _____ Sheet No. 12-3

P.S.C. ELECTRIC NO. 9

TARIFF C.S.-I.R.P.
 (Contract Service - Interruptible Power) (Cont'd.)

SPECIAL TERMS AND CONDITIONS

Except as otherwise provided in the written agreement, this Tariff is subject to the Company's Terms and Conditions of Service.

A Customer's plant is considered as one or more buildings, which are served by a single electrical distribution system provided and operated by the Customer. When the size of the Customer's load necessitates the delivery of energy to the Customer's plant over more than one circuit, the Company may elect to connect its circuits to different points on the Customer's system irrespective of contrary provisions in Terms and Conditions of Service.

This tariff is also available to Customers having other sources of energy supply, but who desire to purchase standby or back-up electric service from the Company. Where such conditions exist, the Customer shall contract for the maximum amount of demand in KW, which the Company might be required to furnish, but not less than 1,000 KW. (T)

Customers with PURPA Section 210 qualifying cogeneration and/or small power production facilities shall take service under Tariff COGEN/SPP II or by special agreement with the Company.

KENTUCKY PUBLIC SERVICE COMMISSION	
JEFF R. DEROUEN EXECUTIVE DIRECTOR	
TARIFF BRANCH	
DATE OF ISSUE <u>July 16, 2010</u>	DATE EFFECTIVE <u>Service rendered on and after <i>Brent Kirtley</i></u>
ISSUED BY <u><i>E. K. Wagner</i></u> E.K. WAGNER	DIRECTOR OF REGULATORY SERVICES
NAME	TITLE
FRANKFORT, KENTUCKY	
ADDRESS	
6/29/2010	
PURSUANT TO KAR 5:011 SECTION 9 (1) dated June 25, 2010	

DATE OF ISSUE July 16, 2010 DATE EFFECTIVE Service rendered on and after

ISSUED BY *E. K. Wagner* E.K. WAGNER DIRECTOR OF REGULATORY SERVICES

NAME

TITLE

FRANKFORT, KENTUCKY

ADDRESS

6/29/2010

Issued by authority of an Order of the Public Service Commission in Case No. 2009-00459 dated June 25, 2010 PURSUANT TO KAR 5:011 SECTION 9 (1)

Kentucky Power Company

REQUEST

Refer to p. 7 of Exhibit SCW-1.

- a. For active demand response programs implemented each year within the past five years, provide the budget, capacity savings and results of cost-effectiveness screenings for each program.

For active demand response programs planned for implementation each year through 2031, provide the budget, capacity savings and results of cost-effectiveness screenings for each program, with the total program savings matching the projected savings for each year on page 7 of Exhibit SCW-1.

RESPONSE

- a. Please see response to SC 2-10.

WITNESS: Ranie K Wohnhas

Kentucky Power Company

REQUEST

Refer to p. 7 of Exhibit SCW-1. Provide the cost recovery rates that the Company expects will be required through 2031 to implement the programs that will achieve the savings on page 7 of Exhibit SCW-1.

RESPONSE

The Company has not developed any forecasted cost recovery rates through 2031.

WITNESS: Ranie K Wohnhas

Kentucky Power Company

REQUEST

Refer to p. 7 of Exhibit SCW-1, and to the Company's response to Sierra Club 1-34(f). Explain how the impacts of both active and passive demand response projected on page 7 of Exhibit SCW-1 are explicitly accounted for in the Company's analysis to replace Big Sandy capacity.

RESPONSE

The impacts of passive DSM were accounted for in KPCO's load forecast used in the Company's analysis to replace Big Sandy capacity. The impacts of the active demand response were accounted for in the Peak Adjustment inputs in Strategist.

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

Refer to p. 7 of Exhibit SCW-1, and to the Company's response to Sierra Club 1-39(a).

- a. List any and all active and/or passive demand response potential studies considered by the Company in determining both the projected active and passive demand response savings on page 7 of Exhibit SCW-1.
- b. Explain why KPCo chose the 2009 EPRI potential study as the basis for its active and passive demand response projections.

RESPONSE

- a. EPRI's 2009 "Assessment of Achievable Potential from Energy Efficiency and Demand Response Programs in the U.S."
- b. The Company believes the publicly available EPRI study provided a cost-effective way to determine a realistic level of energy efficiency and demand response capability in its service territory.

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

Refer to the Company's response to Sierra Club 1-39(d). Describe how the Company used the 2009 EPRI potential study to determine both the active and passive demand response savings projected on page 7 of Exhibit SCW-1. Provide all supporting documentation and workpapers in electronic format with formulas intact.

RESPONSE

The Company used the 2020 levels of efficiency achievement (realistically achievable relative to AEO 2008) for its residential and commercial sectors. See Sierra Club 2-15 Attachment 1.xls on the enclosed CD for the requested documentation.

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

Refer to the Company's response to Sierra Club 1-39(h).

- a. Provide a list of all the industrial customers that have opted out of the Company's energy efficiency programs over the past five years.
- b. Provide your best estimate of the number of industrial customers (and their energy and capacity demands) that the Company projects will opt out of its energy efficiency programs in each year through 2031.
- c. Identify all demand side management programs that KPCo has offered to its industrial customers over the past five years.
- d. Identify all demand side management programs that KPCo plans to offer to its industrial customers in each year through 2031.
- e. Identify all demand side management programs individual KPCo industrial customers have implemented in lieu of participating in KPCo's demand side management programs over the past five years.
- f. Identify all demand side management programs that KPCo expects its individual industrial customers to implement in lieu of participating in KPCo's demand side management programs in each year through 2031.

RESPONSE

- a. No industrial customers have opted out of the Company's energy efficiency programs within the last five years.
- b. Because the company does not currently offer energy efficiency programs to industrial customers it cannot prepare the requested estimate.
- c. No demand side management programs were offered to industrial customers over the last five years.

- d. There are no demand side management programs currently planned for industrial customers. The Company's current Commercial Incentive program could be modified to include industrial customers if the industrial customers would participate.
- e. The Company does not have the requested information on energy efficiency programs or measures sponsored by industrial customers.
- f. See response Part e.

WITNESS: Ranie K. Wohnhas

Kentucky Power Company

REQUEST

Refer to the Company's response to KPSC 1-5. Explain whether the Company conducted a benefit-cost test to support the statement that the transfer of 50 percent of the Mitchell facility is the most cost-effective means for the Company to comply with known and emerging environmental requirements.

- a. If yes, provide all documentation and workpapers in electronic format with formulas intact.
- b. If no, explain how the Company determined that the proposal is the most cost-effective means.

RESPONSE

The Strategist analyses provided in this filing serves as a proxy for a benefit-cost test to support the statement that the transfer of 50 percent of the Mitchell facility is the most cost-effective means for the Company to comply with known and emerging environmental requirements. As indicated in the direct testimony of Mr. Weaver, the purpose of these analyses was to offer the relative long-term, life-cycle economics of various, plausible Big Sandy unit disposition options --under varying commodity pricing scenarios-- to determine which of those alternatives would offer the lowest reasonable cost.

- a. See response to KPSC 1-1 for documentation of these analyses.
- b. n/a

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

For each of AEP's operating companies, provide:

- a. Documentation of the most recent active and passive demand response program plan approved or under investigation by the relevant state PUC;
- b. Energy and capacity savings from both active and passive demand response programs implemented over the past five years, and planned through 2031.
- c. The most recent DSM potential study carried out by or for the company.
- d. Retail sales from the past five years and planned through 2031.

RESPONSE

The Company objects to this request as seeking information that is neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. The only "AEP Operating Company" that is party to this proceeding is Kentucky Power. The other AEP Operating Companies are not utilities subject to the Commission's jurisdiction. The operating characteristics of other AEP Operating Companies, as well as the demographics of their customers, are different than that of Kentucky Power and its customer. Finally, the request is overly broad and burdensome.

WITNESS: Gregory G Pauley

Kentucky Power Company

REQUEST

Explain whether KPCo consider renewable resources as part of the alternative resource options analysis.

- a. If no, explain why the Company did not consider renewable resources an alternative resource when determining how to replace Big Sandy capacity.
- b. If yes, explain how renewables were considered and provide all supporting documentation.

RESPONSE

No.

- a. KPCo did not consider renewable resources as part of the analysis. Renewable resources can not provide the capacity and energy needed to replace Big Sandy 2.
- b. N/A

WITNESS: Ranie K Wohnhas

Kentucky Power Company

REQUEST

In the period between 2011 and 2024, explain whether KPCo forced STRATEGIST to meet any demand shortfall with market purchases.

RESPONSE

Yes. In Option #4b KPCO's capacity needs for the period between 2011 and 2024 were met with market purchases.

WITNESS: Mark A Becker

Kentucky Power Company

REQUEST

Explain whether STRATEGIST was allowed to select the optimal resource plan from a variety of options. State whether the variety of options included:

- a. construction of natural-gas fired generation
- b. construction of coal fired generation
- c. purchase of existing natural gas fired generation
- d. a purchase-power agreement for energy and capacity
- e. energy efficiency
- f. demand response
- g. renewable generating resources.

RESPONSE

Strategist was allowed to select from simple-cycle combustion turbines, (two) unique Big Sandy-sited combined-cycle units, and an unsited generic combined-cycle unit. Construction of new coal fired generation was not considered due to the uncertainty around the cost and operating feasibility of a new commercial scale coal unit equipped with carbon capture and sequestration equipment necessary to meet New Source Performance Standards. Due to the inability of incremental or 'new' DR/EE sources meeting KPCo's significant capacity and energy requirements if the 1,078 MW Big Sandy Units 1 and 2 were to be retired, additional energy efficiency and demand response activity, over-and-above the reasonably achievable future levels already incorporated into the Company's load forecast were not considered. Likewise, renewable generation, largely as a function of its intermittent capability, was also not considered for the same reason. Finally, the purchase of existing natural gas fired generation and a purchase power agreement were not modeled because of the unknown cost and operating characteristics of such a facilities, or contracts. In addition, the 'new-build' and '(PJM) market purchase' options that were modeled served as reasonable proxies for such market (asset) purchases.

WITNESS: Mark A Becker

Kentucky Power Company

REQUEST

Explain whether the STRATEGIST model was constrained in any way such that the model does not add additional capacity resources beyond what KPCo has pre-determined in any given year.

RESPONSE

KPCo has not pre-determined the amount of capacity in any given year that must be added. Instead, the model required that the prescribed PJM capacity margin be met in all years. If the resource added to meet that minimum requirement was larger than the amount of capacity needed to meet the minimum requirement, then additional capacity could have been added.

WITNESS: Mark A Becker

Kentucky Power Company

REQUEST

With regard to Witness McDermott testimony, page 11, line 6, please explain whether Ohio Power Company is selling the 50% share of the Mitchell generating station at less than the value of its output in the PJM market.

- a. If the answer is yes, please explain why, and please explain why this would make sense to Ohio Power Company and its customers.
- b. If the answer is no, please explain why the Company's purchase of 50% of the Mitchell station is preferable to purchasing power from other sources, including the PJM markets.

RESPONSE

The current output of Mitchell is being sold into the PJM market at the prevailing energy prices. A long-term valuation based on forecasted future cash flows has not been completed.

- a. The sale at net book value does not advantage or disadvantage Ohio Power Company in terms of it recording a gain or a loss. The state of Ohio has moved to full retail competition.
- b. The Mitchell transfer remains the most economic option for Kentucky Power. Please refer to the Company's response to the Company's response to SC 1-2.

WITNESS: Ranie K Wohnhas

Kentucky Power Company

REQUEST

With regard to Witness McDermott testimony, page 11, line 9, does the Company's contract to buy 50% of the Mitchell generating station include any risk premiums? If so, please describe them qualitatively, and present them qualitatively. Please include all documentation and workpapers in electronic format with formulas intact.

RESPONSE

The transfer of 50% of Mitchell Plant is proposed to be at the net book value recorded as of the date of transfer and thus excludes any risk premiums.

WITNESS: Gregory G Pauley

Kentucky Power Company

REQUEST

Refer to p. 11 of the testimony of Karl A. McDermott. Identify all of the benchmarks that Witness Weaver employs that would be used by potential bidders in a large base load RFP.

RESPONSE

Dr. McDermott discusses those benchmarks in his direct testimony (Page 11, lines 5-16). The specific factors can be found in Mr. Weaver's testimony.

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

Refer to p. 11 of the testimony of Karl A. McDermott. Explain how the proposal to transfer 50 percent of the Mitchell facility at net book value is the lower bound of the necessary bid prices that would potentially have been submitted as part of an RFP.

RESPONSE

Dr. McDermott did not testify that the transfer at net book value would be the lower bound of potential RFP bid prices. The testimony referenced in the question refers to the benchmarking process the Company used to proxy potential competitively procured power and energy. It is Dr. McDermott's testimony that these benchmarks are likely the lower bound of bid prices due to factors cited in his testimony (Page 11, lines 8-9, and Page 12 lines 1-4).

WITNESS: Gregory G Pauley

Kentucky Power Company

REQUEST

Refer to Exhibit SCW-1, page 9, Table 1-3. For the ‘Existing and Planned Capacity’ values in 2012, 2013, and 2014, please list all the generation resources that are included. Please specify by plant name and unit number, by capacity, by technology type and by fuel type.

RESPONSE

Plant Name	Unit Number	2012-2014 Capacity (MW)	Technology Type	Fuel Type
Big Sandy	1	278	Coal-fired Steam	Coal
Big Sandy	2	800	Coal-fired Steam	Coal
Rockport*	1	197	Coal-fired Steam	Coal
Rockport*	2	195	Coal-fired Steam	Coal
Total Capacity		1,470		

* Reflects KPCo's 15% Share

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

With regard to the Company's response to KPSC 1-37, did Witness McDermott or Witness Weaver analyze the option of buying power from the Riverside Generating assets? If not, why not? If yes, what was the conclusion of the analysis? Please provide all documentation and workpapers in electronic format with formulas intact.

RESPONSE

Neither Dr. McDermott nor Mr. Weaver specifically analyzed this option per the reasons discussed in the Company's response to SC 1-8.

WITNESS: Gregory G Pauley

Kentucky Power Company

REQUEST

With regard to the Company's response to KPSC 1-39(b), is it true that offers in response to an RFP would approach a projected PJM price under the conditions when the PJM energy and capacity markets are "long" on energy and capacity?

RESPONSE

While it is uncertain as to what price for capacity and energy may be offered in response to an RFP solicitation, the response to KPSC 1-39(b) merely indicated that the forecasted (PJM) market price of capacity and energy established by the Fundamental Analysis group served as a reasonable proxy for such prices.

Please see the response to KIUC 2-5 for an explanation of the supply-demand bases by which such fundamental capacity prices were established in the Aurora modeling.

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

With regard to the Company's response to Sierra Club 1-44(f), please describe all analyses that the Company conducted to determine that it needs only baseload energy. Please provide all documentation and workpapers in electronic format with formulas intact.

RESPONSE

The Company's response to Sierra Club 1-44(f) did not state that the Company only needs baseload energy. It stated that baseload energy is at issue for the Company. This statement refers to the need to replace the capacity and energy from Big Sandy Unit 2, which has operated as a baseload unit.

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

With regard to the Company's response to Sierra Club 1-5(a), please explain the basis for your contention that "net book value is a standard transfer price used between wholly owned affiliates," and provide all supporting documents, citations, or analyses.

RESPONSE

The use of net book value is consistent with the Company's filings at FERC which include references to other cases where net book value has been approved as the transfer price. See references on page 15 of the Company's filing in FERC Docket No. EC 13-26-000. In addition, net book value is consistent with the cost-based approach used in the Interconnection Agreement under which Kentucky Power has historically purchased capacity and energy.

WITNESS: Ranie K Wohnhas

Kentucky Power Company

REQUEST

With regard to the Company's response to Sierra Club 1-5(b), did the Company estimate the market value of 50% of the Mitchell Generation station based on its forecast of PJM market prices? If not, why not? If so, please provide any and all results of the analysis, including workpapers in electronic format with formulas intact.

RESPONSE

The Company did not estimate a market value of 50% of the Mitchell Generation Station based on the forecast of PJM market prices. Please see the Company's response to SC 1-2.

WITNESS: Ranie K Wohnhas

Kentucky Power Company

REQUEST

Refer to page 9 of Attachment 1 to your response to Sierra Club 1-3. Explain why the amount of KPCo capacity compared to the PJM Minimum Reserve Margin drops from plus 40MW in 2024/25 to negative 212MW in 2025/26.

RESPONSE

While the analysis provided by Company witness Weaver in Exhibit SCW-2 assumed a 15 year service life of the natural gas converted Big Sandy Unit 1, the attachment provided in Sierra Club 1-3, a presentation given to Staff, the Attorney General, and the Kentucky Industrial Utility Customers, assumed a 10 year life of the natural gas converted Big Sandy Unit 1. The Company believes that, should the RFP for Big Sandy Unit 1 show that natural gas conversion is the least cost option, a natural gas converted Big Sandy Unit 1 will be able to operate for 15 years.

WITNESS: Scott C Weaver

Kentucky Power Company

REQUEST

Refer to page 10 of Attachment 1 to your response to Sierra Club 1-3. Identify and explain each of the “multiple criteria” upon which the “Mitchell Plant’s transfers were selected,” and identify who made such selection.

RESPONSE

Please see the Company's response to KPSC 2-10.

WITNESS: Gregory G Pauley

Kentucky Power Company

REQUEST

Refer to your responses to Sierra Club 1-6b & c and 1-7b & c.

- a. Explain how “all of the assets of Ohio Power Company . . . were qualitatively screened to determine the generating units to be analyzed” for KPCo.
- b. Identify each factor evaluated in such qualitative screening.
- c. Explain how such qualitative screening led to the selection of the transfer of a 50% interest in the Mitchell Generating Station as an option for replacing Big Sandy Unit 2.
- d. Explain how such qualitative screening led to the exclusion of the Waterford and Lawrenceburg generating assets as options for replacing all or some of the capacity and energy from the retiring Big Sandy Unit 2.
- e. Identify each individual involved in such qualitative screening.
- f. Produce any reports, workpapers, or other documents reflecting or regarding the qualitative screening.

RESPONSE

- a, b, c, d and f - See the Company's response to KPSC 2-10.
- a. See the Company's response to SC 1-4.

WITNESS: Gregory G Pauley

Kentucky Power Company

REQUEST

Refer to page 6 of Attachment 1 to your response to Sierra Club 1-9b.

- a. Identify the basis for the “AEP GEN HUB Hub Cap.” projected capacity prices identified therein.
- b. Explain why the projected “AEP GEN HUB Hub Cap.” capacity price more than doubles from 2014 to 2015 and thereafter.
- c. Identify the basis for the “SPP Cap.” projected capacity prices identified therein.
- d. Explain why the projected “AEP GEN HUB Hub Cap.” capacity prices are more than eight times as high as the SPP Cap. projected capacity prices for the years 2015, 2016, and 2017.
- e. Explain why the projected “SPP Cap.” capacity prices increase more than fourteen-fold from 2017 to 2018 and beyond.
- f. Identify and produce any reports, studies, or other documents supporting the projected capacity prices identified therein.

RESPONSE

- a. Please refer to KIUC 2-5.
- b. Please refer to KIUC 2-5(d.).
- c. The projected capacity values for SPP are derived from the AuroraXMP Energy Market Model. Please refer to KIUC 2-5(b.).
- d. For the years 2015, 2016 and 2017, SPP's reserve margin is in excess of the required 13.6% rendering capacity values to the default minimum of \$25/MW-day. The same is not true for PJM.

- e. Generally, the AuroraXMP Electric Market Model recognized the necessity to build generation resources beginning in 2018. The combination of modest load growth, increasing wind resources and demand response in SPP which were responsible for excess reserve margins in the prior years were insufficient to maintain the minimum reserve margin.

- f. Capacity values for SPP are an output of the AuroraXMP Energy Market Model and no exogenous modifications are made by the Company. SPP's assessment of its future reserve margin can be found at http://www.spp.org/publications/2012_Long_Term_Reliability_Assess_Webinar_5-30-12.pdf

WITNESS: Karl R Bletzacker

Kentucky Power Company

REQUEST

Refer to page 5 of Attachment 2 to your response to Sierra Club 1-10. State whether, if the questions posed in Request 35 above were posed with regards to the capacity prices identified therein, your answers would be the same. If not, provide such different answer.

RESPONSE

The Company's answers would be the same. The response(s) to SC 2-35 are based upon capacity values provided by the Company's Fundamentals Group. Those values are also captured in the response to SC 1-10.

WITNESS: Karl R Bletzacker

Kentucky Power Company

REQUEST

Refer to your response to Sierra Club 1-11b. Explain the basis for your contention that a 10% increase in gas consumption could reasonably be expected to result in a 12% to 17% increase in price. Identify and produce any studies, reports, analyses, or other documents supporting that contention.

RESPONSE

The "price elasticity over time" ratio is determined using a long-term forecast of annual natural gas consumption and annual average natural gas prices. The ratio is the % change in consumption over the % change in price; that is, the % change in consumption divided by the % change in price for the same period. The fundamental premise of the ratio is that as consumption rises, so does price. The Company receives suitable forecasts from IHSCERA, PIRA and others. Pursuant to licensing provisions, the forecasts cannot be provided to non-licensees. No formal archive of this ratio or associated workpapers is maintained because of the ease of its calculation.

WITNESS: Karl R Bletzacker

Kentucky Power Company

REQUEST

Refer to Attachment 1 to your response to Sierra Club 1-15f.

- a. State whether the projected annual CO2 emissions identified therein are reported in thousands so that, for example, the 2014 CO2 emissions from Mitchell 1 in the Option 6 base case is 1,913,000 tons.
- b. State whether the projected annual CO2 emissions identified therein are for all of Mitchell 1 and 2, or only for the 50% ownership interest that KPCo would be acquiring.
 - i. If the projected annual CO2 emissions identified therein are for all of Mitchell 1 and 2, explain why the total CO2 emissions are significantly lower than they were in 2008 – 2012.

RESPONSE

- a. The projected annual CO2 emissions identified in Sierra Club's 1-15f Attachment 1 are reported in thousands of metric tonnes so that, for example, the 2014 CO2 emissions from Mitchell 1 in the Option 6 Base case is 1,913,000 Metric Tonnes.
- b. The projected annual CO2 emissions in Attachment 1 for Sierra Club 1-15f reflects Company's 50% ownership of Mitchell.

WITNESS: Mark A Becker

Kentucky Power Company

REQUEST

Refer to your response to Sierra Club 1-29f.

- a. For each of Options 1 through 6, identify:
 - i. The years in which you project actual OSS margins will fall below base level
 - ii. The years in which you project that the “adjusted KPCo OSS margin level” will exceed the base level
 - iii. The actual OSS margins and the “adjusted KPCo OSS margin levels” for each year of 2014 through 2040.
 - iv. For each year from 2014 through 2040 in which “adjusted KPCo OSS margin levels” are projected to exceed the base level, the amount of KPCo OSS revenues that is projected to accrue to customers and the amount that is projected to accrue to shareholders
 - v. For each year from 2014 through 2040 in which actual OSS margins are projected to fall below base level, the amount that customers are projected to incur in incremental charges.

- b. Confirm whether in each year that the “adjusted KPCo OSS margin level” exceeds the base level, 60% of the amount by which the adjusted KPCo OSS margin level exceeds the base level would accrue to customers while 40% would accrue to shareholders.
 - i. If not, then explain how the amount by which the adjusted KPCo OSS margin level exceeds the base level would accrue to customers versus the amount that would accrue to shareholders would be determined.

RESPONSE

- a. i-v & b. This cannot be determined. Strategist does not calculate the OSS margins, but calculates an overall revenue requirement where 100% of the off-system sales revenues are assigned to reducing KPCO's overall revenue requirement.

WITNESS: Mark A Becker

Kentucky Power Company

REQUEST

Refer to your response to Sierra Club 1-39k. Identify what level of KPCo's load is mining operations.

RESPONSE

Mining operations constitute nearly 12% of KPCo's retail load (approximately 25% of KPCo's industrial load). Additionally, another 40% of KPCO's industrial load (or approximately 20% of the Company's retail load) is chemical and petroleum refining, which is similarly incompatible with demand response.

WITNESS: Ranie K Wohnhas

Kentucky Power Company

REQUEST

Refer to your response to Sierra Club 1-46.

- a. Identify any generating assets that may be available for sale that Strategic Initiatives notified KPCo about.
- b. Produce any notification, report, or other document regarding generating assets that may be available for sale that Strategic Initiatives has provided to KPCo since 2008.

RESPONSE

- a. & b. Please see the Company's response to SC 1-8.

WITNESS: Gregory G Pauley

Kentucky Power Company

REQUEST

Refer to your response to KIUC 1-58.

- a. State whether you have received or reviewed any natural gas price forecasts from CERA, PIRA, or any other consultant that were developed since May 2011.
 - i. If so, identify the date of each such forecast and the projected natural gas price for each year of 2013 through 2040 in each such forecast.
- b. If not, state whether you requested a more recent natural gas price forecast from either CERA or PIRA.
- c. Explain why the graph on page 5 of Mr. Bletzacker's testimony used the Energy Information Administration ("EIA") base case natural gas price forecast from May 2011, rather than the base case natural gas price forecast from 2012 Annual Energy Outlook issued in June 2012, available at <http://www.eia.gov/forecasts/archive/aeo12/index.cfm>
- d. Explain why the graph on page 5 of Mr. Bletzacker's testimony used the EIA base case natural gas price forecast from May 2011, rather than the natural gas price forecast from the 2013 Early Release Annual Energy Outlook issued on December 5, 2012. available at <http://www.eia.gov/forecasts/aeo/er/index.cfm>

RESPONSE

- a. The Company receives and reviews, as a licensee, from IHSCERA, PIRA and others ongoing energy industry research at frequent intervals. Generally, the natural gas research does not extend to 2040.
- b. N/A
- c. Based on information available at the time, the Company determined that it was not necessary to update the base case natural gas forecast.
- d. See KIUC 2-3(a).

WITNESS: Karl R Bletzacker

Kentucky Power Company

REQUEST

Refer to your response to KIUC 1-72c.

- a. State whether Dr. McDermott “critically review[ed] the Company’s data and analysis to be sure that it was including the appropriate costs in its estimates.”
 - i. If so, identify each step that Dr. McDermott took to carry out such review, and any documents he relied on in such review.
 - ii. If not, explain why not.

RESPONSE

- i. Dr. McDermott’s role in this case did not include that task. *See* response to AG 1-27.
- ii. The review that Dr. McDermott is referring to is the process that is occurring in this case in which all interested parties are given the opportunity to critically review the Company’s methodology, data, inputs, assumptions, and outputs. *Also see* response to AG 1-27.

WITNESS: Karl McDermott

Kentucky Power Company

REQUEST

Refer to your response to KPSC 1-27b.

- a. Explain why “neither the Dresden nor Waterford plants were options made available to Kentucky Power.”
- b. Identify who made the decision to not make the Dresden or Waterford plants available to Kentucky Power.
- c. Produce any notes, reports, or other documents regarding the decision to not make the Dresden or Waterford plants available to Kentucky Power.

RESPONSE

- a.-c. See the Company's response to KPSC 2-10 and SC 1-6. Dresden is owned by Appalachian Power Company (APCo), not Ohio Power Company, and is required by APCo to meet its customers' needs.

WITNESS: Gregory G Pauley