## COMMONWEALTH OF KENTUCKY <br> BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:
Electronic Application Of Kentucky Power ) Company For (1) A General Adjustment Of Its ) Rates For Electric Service; (2) An Order ) Approving Its 2017 Environmental Compliance ) Plan; (3) An Order Approving Its Tariffs And )

Case No. 2017-00179
Riders; (4) An Order Approving Accounting
Practices To Establish Regulatory Assets And Liabilities; And (5) An Order Granting All Other ) Required Approvals And Relief

# KENTUCKY POWER RESPONSES TO 

ATTORNEY GENERAL'S

SECOND SET OF DATA REQUESTS

## VERIFICATION

The undersigned, Andrew R. Carlin, being duly sworn, deposes and says he is the Director, Compensation and Executive Benefits for American Electric Power Service Corporation and that he has personal knowledge of the matters set forth in the forgoing responses for which he is identified as the witness and the information contained therein is true and correct to the best of his information, knowledge and belief.


Andrew R. Carlin

STATE OF OHIO
COUNTY OF FRANKLIN

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Andrew R. Carlin, this the $/ 4$ thday of September 2017.


## VERIFICATION

The undersigned, Amy J. Elliott, being duly sworn, deposes and says she is a Regulatory Consultant Principal for Kentucky Power Company, that she has personal knowledge of the matters set forth in the forgoing data responses and that the information contained therein is true and correct to the best of her information, knowledge, and belief

## Amy g. Eliot

## Amy J. Elliott <br> ) Case No. 2017-00179 <br> )

COMMONWEALTH OF KENTUCKY COUNTY OF FRANKLIN

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Amy J. Elliott, this 18 day of September 2017.


Notary ID Number: 571144
My Commission Expires: January 23, 2021

## VERIFICATION

The undersigned, Brad N. Hall, being duly sworn, deposes and says he is the External Affairs Manager for Kentucky Power Company, that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.


Brad N. Hall

## COMMONWEALTH OF KENTUCKY <br> )

) CASE NO. 2017-00179
COUNTY OF BOYD )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Brad N. Hall, this the $\qquad$ day of September, 2017.


Notary ID: 530202
My Commission Expires: 3-18-19


## VERIFICATION

The undersigned, Mark A Pyle, being duly sworn, deposes and says he is the Tax Administrator for American Electric Power, that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief


## STATE OF OHIO

COUNTY OF FRANKLIN


Subscribed and sworn to before me, a Notary Public in and before said County and State, by Mark A. Pyle, this the $\qquad$ day of September 2017.



Notary Public

My Commission Expires: $4 / 29 / 18$

## VERIFICATION

The undersigned, Tyler H Ross being duly sworn, deposes and says he is the Director Regulatory Accounting Services 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

Isle ARon
Tyler H Ross

STATE OF OHIO COUNTY OF FRANKLIN
)
) Case No. 2017-00179
)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Tyler H Ross, this the $14^{\text {th }}$ day of September 2017.


My Commission Expires:


## VERIFICATION

The undersigned, Matthew J. Satterwhite, 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 and the information contained therein is true and correct to the best of his information, knowledge, and belief.


Matthew J. Satterwhite

## COMMONWEALTH OF KENTUCKY

) CASE NO. 2017-00179
COUNTY OF BOYD

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Matthew J. Satterwhite, this the $\qquad$ day of September, 2017.


Notary ID:
530202
My Commission Expires: $3-18-19$

## VERIFICATION

The undersigned, Stephen L. Sharp, being duly sworn, deposes and says he is a Regulatory Consultant, for Kentucky Power Company and that he has personal knowledge of the matters set forth in the data responses and the information contained therein is true and correct to the best of his information, knowledge and belief


COMMONWEALTH OF KENTUCKY )
) 2017-00179
COUNTY OF FRANKLIN

Subscribed and sworn to before me a Notary Public in and before said County and State, by Stephen L Sharp, this the 184 day of September 2017.


Notary ID Number: 571144
My Commission Expires: January 23, 2021

## VERIFICATION

The undersigned, Alex E. Vaughan, being duly sworn, deposes and says he is the Manager, Regulatory Pricing and Analysis that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief.


STATE OF OHIO
COUNTY OF FRANKLIN
)
Case No. 2017-00179
)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Alex E. Vaughan, this the $\qquad$ day of September 2017.


## 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


COMMONWEALTH OF KENTUCKY )

## COUNTY OF BOYD



Subscribed and sworn to before me, a Notary Public in and before said County and State, by Ranie K. Wohnhas, this the $\alpha$ day of September 2017.


My Commission


Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_001 Please list the counties in which KPCo operates and the current number of residential customers in each. If possible, provide this data in the form of an Excel spreadsheet.

## RESPONSE

Please refer to KPCO_R_AG_2_1_Attachment1.xls for the requested information.

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_002
Please list the Zip Codes in which KPCo operates and the current number of residential customers in each. If possible, provide this data in the form of an Excel spreadsheet.

## RESPONSE

Please refer to the Company's response to AG 2-1 and KPCO_R_AG_2_1_Attachment1.xls for the requested information.

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_003
Please provide the number of KPCo residential customers who made at least one late payment in each of the years 2017, 2016, 2015, 2014, and 2013.
a. Please additionally provide the information requested above for: (i) each county in which KPCo operates; and (ii) each zip code in which KPCo operates. If possible, provide this data in the form of an Excel spreadsheet.

## RESPONSE

Please refer to KPCO_R_AG_2_3_Attachment1.xlsx for the requested information.

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_004 How many KPCo residential accounts were shut-off for nonpayment in each year 2013, 2014, 2015, 2016, and 2017?
a. Of the accounts in the answer above, how many of those were shut-off more than once for non-payment?

## RESPONSE

Please refer to KPCO_R_AG_2_4_Attachment1.xls for the requested information.

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_005
How many KPCo residential accounts were shut-off for nonpayment in each year 2013, 2014, 2015, 2016, and 2017 in each county in which KPCo operates? If possible, provide this data in the form of an Excel spreadsheet.
a. How many KPCo residential accounts were shut-off for non-payment in each year 2013, 2014, 2015, 2016, and 2017 in each zip code in which KPCo operates?

## RESPONSE

Please refer to the Company's response to AG 2-4 and KPCO_R_AG_2_4_Attachment1.xls for the requested information.

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_006
Please provide the average monthly bill amount (in dollars, not usage) for KPCo residential customers (as a whole) each year 2012, 2013, 2014, 2015, and 2016.

## RESPONSE

2012-\$118.81

2013-\$125.39

2014-\$146.09

2015-\$129.48

2016-\$148.04

Witness: Stephen L. Sharp

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 

## DATA REQUEST

AG_2_007
How many KPCo customers paid a reconnect fee in the past 12 months?

## RESPONSE

From August 1, 2016 to July 31, 2017, 8,464 customers paid a reconnect fee.

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_008
Please provide the average KPCo residential bill amount (in dollars, not usage) for each of the past 12 months.

## RESPONSE

August 2016-\$158.93
September 2016-\$148.01
October 2016-\$114.96
November 2016-\$110.94
December 2016-\$184.80
January 2017-\$210.76
February 2017-\$167.21
March 2017-\$178.34

April 2017-\$104.63
May 2017-\$118.57
June 2017-\$112.60
July 2017-\$152.98

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_009
Please provide the monthly fixed customer charge in effect for KPCo residential customers for each year 2012, 2013, 2014, 2015, 2016, and 2017.

## RESPONSE

Please refer to KPCO_R_AG_2_9_Attachment1.xls for the requested information.

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_010
How many KPCo residential customers received disconnect notices in each year 2013, 2014, 2015, 2016, and 2017?
a. How many KPCo residential customers received disconnect notices in each of the years 2013, 2014, 2015, 2016, and 2017: (i) in each county in which KPCo operates; and (ii) in each zip code in which KPCo operates?

## RESPONSE

Please refer to KPCO_R_AG_2_10_Attachment1.xlsx for the requested information.

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_011
How many KPCo residential customers received bill paying assistance from a third party agency in each of the years 2013, 2014, 2015, 2016, and 2017?
a. Please provide the number of residential customers by counties in the KPCo service area who received bill paying assistance from a third party agency, in each of the years 2013, 2014, 2015, 2016, and 2017. If possible, please provide this data in the form of an Excel spreadsheet.

## RESPONSE

Please refer to KPCO_R_AG_2_11_Attachment1.xls for the requested information.

Witness: Stephen L. Sharp

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 

## DATA REQUEST

AG_2_012
Please provide the average annual usage for KPCo residential customers (as a whole) for each of the following years: 2013, 2014, 2015, 2016, and 2017.

## RESPONSE

2013-16,420
2014-16,817
2015-15,972

2016-15,124
2017-8,246 (through July 2017)

Witness: Stephen L. Sharp

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 

## DATA REQUEST

AG_2_013
Please provide the average annual usage for KPCo residential customers who received bill paying assistance from a third party agency (as a whole) in the years 2013, 2014, 2015, 2016, and 2017.

## RESPONSE

Please refer to the Company's response to AG 2-39 for the requested information.

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 1 of 2

## DATA REQUEST

AG_2_014
Reference the KPCo filing in Case No. 2017-00328, "Electronic Application of Kentucky Power Co. for a Certificate of Public Convenience and Necessity to Construct a 161 kV Transmission Line In Perry And Leslie Counties, Kentucky and Associated Facilities (HazardWooton Line)."
a. State whether any of the costs of this proposed project are in the test year of Case No. 2017-00179.
b. State whether KPCo ratepayers will be responsible for all or any portion of the costs associated with the Hazard-Wooton Line.
c. State the amount of costs that PJM will provide for the construction of the Hazard-Wooton Line.
(i) Provide copies of all documents KPCo and/or any of its affiliates submitted to PJM associated with the Hazard-Wooton Project.
d. Reference the article at the link below, in which KPCo announced a \$30 million "Eastern Kentucky Transmission Project," to "strengthen and upgrade the regional power grid over five to seven years to better service customer." Provide complete details regarding this project.

## RESPONSE

a. There is $\$ 272,240$ of costs related to this project incurred during the test year that is in account 107 (Construction Work in Progress).
b. Once the project is placed in service, Kentucky Power will incur costs associated with the project based on its load share in the AEP zone. Currently that is approximately $5 \%$ based upon Kentucky Power's 2017 load share. Annually, Kentucky Power's load share in the AEP Zone is recalculated and thus the percentage applied to Kentucky Power ratepayers could change.
c. PJM does not provide funding for the construction of any transmission project. Instead, the transmission owner funds the construction of a transmission project and is reimbursed for a portion of those costs by the other LSEs within PJM via the PJM LSE OATT charges that they pay. The estimated cost of the project is approximately $\$ 30 \mathrm{M}$.
i. Please refer to KPCO_R_AG_2_14_Attachment1_Redacted.pdf and KPCO_R_AG_2_14_Attachment2.pdf for the requested information.

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 <br> Page 2 of 2 

d. Please see the response to part c.(i) and the Company's Notice of Intent in Case No. 201700328.

Witness: Ranie K. Wohnhas/Alex E. Vaughan

KPCO_R_AG_2_14_Attachment1.pdf has been redacted in its entirety.
Hazard-Wooton Project Location


## Broadford Project Location



PJM Submission: 08/28/2017
SRRTEP Date: 09/11/2017
TEAC Date:
Revision Date: 08/28/2017
Revision Number: 0

Alternate \#1
Implement sag remediation measures to increase the thermal operating temperature and address thermal violations. This does
not address the deteriorated physical condition of the 1943 vintage line.
System Electrical Diagram (Existing)

System Electrical Diagram (Proposed)


Line Characteristics and Scoring Detail


| Performance Totals |
| :---: |
| CMI: 0 |
| CI: 0 |
| 3 Yr-SAID: $0(0 \%)$ |
| 3 Yr-SAIFI: $0(0 \%)$ |
| 3 Yr-CAIDI: $0(0 \%)$ |
| Peak Load Impact: $0(0 \%)$ |

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_015 Identify any and all transmission projects within Kentucky’s geographic borders which any AEP affiliate either undertook in the historic test year, or will undertake in the next three calendar years.
a. Of those projects identified above, state the amount for which KPCo ratepayers will become financially responsible.

## RESPONSE

Please refer to "KPCO_R_AG_2_015_Attachment1.pdf" for the requested information.
a. Once the projects are placed in service, Kentucky Power will incur costs associated with the projects based on its load share in the AEP zone. Currently that is approximately $5 \%$ based upon Kentucky Power's 2017 load share. Annually, Kentucky Power's load share in the AEP Zone is recalculated and thus the percentage applied to Kentucky Power ratepayers could change.

Witness: Ranie K. Wohnhas

KPSC Case No. 2017-00179
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Dated: September 8, 2017
Item No. \#15
Attachment 1
Page 1 of 2

## Test Year Capital Construction (Actuals)

\$ in 000s

| KPCo Projects |
| :--- |
| Asset Replacement \& Refurbishment Program March 2016 - <br> February 2017  |
| Chadwick Station Improvements |
| Physical Security |
| Telecom Modernization |
| Elkhorn Area Improvements |
| Forestry Program |
| Big Sandy Station Improvements |
| Distribution Related Transmission Work |
| Stanville Area Improvements |
| Cedar Creek Station Improvements |
| Hazard \& Vicco Area Improvements |
| Circuit Breaker Replacement Program |
| Hazard-Wooton 161kV Rebuild |
| Hazard Area Improvements |
| Wooton-Stinnett 161kV Rebuild |
| Transmission Operations Enhancements |
| Baker 765/345kV Transformer |
| Major Storm Capital Work |
| Jackson-Helechawa 69kV |
| KPCo Spare Equipment Program |
| Bellefonte Station Improvements |
| Johns Creek, Stone and Inez Station Improvements |
| Fremont Station Improvements |
| Cannonsburg- South Neal 69kV Rebuild |
| Baker Station Improvements |

## Test Year Capital Construction (Actuals)

 $\$$ in 000s| KY Transco Projects |
| :--- |
| Chadwick Station Improvements March 2016 - <br> February 2017  |
| Baker Station 765kV Transformer |
| KY Transco Spare Equipment Program |
| Stanville Area Improvements |
| Cedar Creek Station Improvements |
| Elkhorn Rebuild |
| Transmission IT Enhancements |
| Bellefonte Station Improvements |
| Hazard-Wooton 161kV Rebuild |
| Wooton-Stinnett 161kV Rebuild |
| Cannonsburg- South Neal 69kV Rebuild |
| Telecom Modernization Program |
| Johns Creek, Stone and Inez Station Improvements |
| Baker Station Improvements |
| Hazard \& Vicco Area Improvements |
| Beckham Station Improvements |
| Circuit Breaker Replacement Program |
| Total |

KPSC Case No. 2017-00179
Attorney General's Second Set of Data Requests
Dated: September 8, 2017
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Attachment 1
Page 2 of 2

Capital Construction Budget
\$ in 000s

| KPCo Projects* |
| :--- |
|        <br> Station Asset Replacement \& Refurbishment 2017     2018 <br> KPCo Spare Equipment Program 1,918 1,949 17,698 21,565   <br> Wooton-Stinnett 161kV Rebuild 571 8,448 8,217 17,236   <br> Stanville Area Improvements 10,178 254  10,432   <br> KPCo System Rehab 979 2,380 36 3,396   <br> Asset Health 1,316 1,828 20 3,165   <br> Hazard \& Vicco Area Improvements 1,200 1,197 8 2,405   <br> Major Equipment Program 448 1,823  2,271   <br> Forestry Program 891 1,190 1 2,081   <br> Inez-Logan 138kV Improvements 855 723 84 1,662   <br> Hazard-Wooton 161kV Rebuild 534 767  1,301   <br> Telecom Modernization 315 871  1,186   <br> Johns Creek, Stone and Inez Station Improvements 1,116   1,116   <br> Transmission Operations Enhancements  407 335 742   <br> Line Asset Replacement \& Refurbishment 231 412 13 657   <br> Bellefonte Station Improvements  595 1 596   <br> Slemp \& Daisy Station Improvements 231   231   <br> Transmission IT Enhancements  92 83 174   <br> Chadwick Station Improvements 37 68 67 173   <br> Physical Security 142   142   <br> Jackson-Helechawa 69kV 59 2  61   <br> Total 11   11   |

*The Company is currently evaluating its budgeted level of transmission spending as reflected in its most recent capital construction budget.

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_016
Identify where in the application the total dollar impact of the proposed rate increases on KPCo's average residential class customer can be located.
a. State whether the total impact identified above included KPCo's all-in rates (Fuel Adjustment Charge, ECR, and all other trackers).

## RESPONSE

Refer to Section II, Exhibit J, of the Application.
a. Yes, the referenced analysis is based on a residential customer's total bill.

Witness: Alex E. Vaughan

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 <br> Page 1 of 2 

## DATA REQUEST

AG_2_017 Provide the annual electricity consumption for KPCo's average residential customer.
a. Provide the amount of the total bill for KPCo's average residential customer: (i) averaged for the 12 months of the historic test period; and (ii) averaged for the four-month period November of 2016 through and including February of 2017.
b. Provide the amount of the Fuel Adjustment Charge that KPCo's average residential customer paid for each month of the historic test year.
c. Provide the amount of the Environmental Surcharge that KPCo's average residential customer paid for each month of the historic test year.
d. Provide the amount of the Demand Side Management Adjustment Factor that KPCo's average residential customer paid for each month of the historic test year.
e. Provide the amount of the Capacity Charge that KPCo's average residential customer paid for each month of the historic test year.
f. Provide the amount of the Big Sandy 1 Operation Rider charge that KPCo's average residential customer paid for each month of the historic test year.
g. Provide the amount of the Big Sandy Retirement Rider charge that KPCo's average residential customer paid for each month of the historic test year.
h. Provide the amount of the Purchase Power Adjustment charge that KPCo's average residential customer paid for each month of the historic test year.

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 2 of 2

## RESPONSE

a. Refer to the Company's response to AG 2-40. The monthly tariff summary files include total monthly residential revenues and usage.
b.-h. Refer to KPCO_R_AG_2_17_Attachment1.xlsx for the requested information. Specifically refer to the tabs labeled for the riders and surcharge revenues identified in the request. The " $\mathrm{B} \& \mathrm{~A} \mathrm{kWh}$ " tab contains the monthly residential class kWh for computation of the average paid for each rider/surcharge in the historic test year.

Witness: Alex E. Vaughan

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 1 of 2

## DATA REQUEST

AG_2_018
Reference the update KPCo filed in Case No. 2011-00179 on May 16, 2017, regarding Call Center Performance Measures for calls from KPCo customers.
a. In addition to the three metrics provided in that update, provide the following for the historic test year, and for calendar year 2016:
(i) Number of calls received;
(ii) The percentage of the total number of KPCo customers reporting complaints;
(iii) Particulars of complaints (i.e., billing issues, disconnects, cost of service, service issues, vegetation management, etc.); and (iv) Percentage of complaint calls that were resolved to the customer's satisfaction.
b. Provide the total number of complaints for calendar years 2015, 2016 and 2017 to date.

## RESPONSE

a. The Company's May 16, 2017 update provided call center metrics for calendar year 2016. The metrics provided in the May 16, 2017 update for the test year are as follows:

Average Speed of Answer (ASA): 79.69 seconds,
Abandonment Rate: 10.08\%, and
Call Blockage: 4.82\%
(i) Test Year - 880,365; 2016-875,322
(ii)-(iv) - The Company's call centers do not track the requested information.

Accordingly, the requested information is not available.

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 2 of 2

b. The Company's call centers do not track the requested information. Accordingly, the requested information is not available. During the years requested, the Company was the subject of the following number of informal complaints to the Commission:

2015-146

2016-146
2017-200

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 1 of 2

## DATA REQUEST

AG_2_019
Refer to the September 1, 2017 Supplemental Response to Commission Staff's Data Request 1-56, and the corresponding attachment, KPCO_1SR_KPSC_1_56_Attachment1.
a. Does the $\$ 663,050$ amount represent the entire cost of the notice required for the Application?
(i) If not, what additional costs does the Company expect to incur?
(ii) If so, provide the estimated amount.
b. Of the actual Publication expense of $\$ 663,050$, how much will the Company request recovery of from customers? How did the Company determine this amount?
c. Will the Company commit to limit the amount designated as Publication Notices expenses to be recovered from customers to the \$640,000 estimate?
(i) If not, why not?
(ii) If the Company will so commit, how much does it expect to spend on Publication Notices that it will not recover from customers?
d. In addition to Publication Notice expense, will the Company commit to not request recovery of any associated Legal or Consultant expense stemming from KPCO's errant public notice?
(i) If not, why not?

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 <br> Page 2 of 2 

## RESPONSE

a. The $\$ 663,050$ represents the invoiced amount for the notice required by $807 \mathrm{KAR} 5: 001$, Section 17(2) and 807 KAR 5:011, Section 8(2), that was published weekly beginning June 21, 2017 for three weeks in newspapers of record in each of the newspapers of record in the twenty counties in Kentucky Power's service territory in connection with the Company's June 28, 2017 application. Kentucky Power believes the $\$ 663,050$ represents the full cost of the legally required notice and that there will not be any additional billings in connection with the notice.

The $\$ 663,050$ does not include any costs associated with the earlier notice that was published beginning May 16, 2017, or the supplemental notice that was published beginning July 14, 2017. Kentucky Power is not seeking to recover the costs associated with the May 16, 2017 or the July 14, 2017 notices.
(i) Not Applicable.
(ii) Not Applicable.
b. Kentucky Power is seeking recovery of the entire $\$ 663,050$ invoiced cost for the legally required notice.
c. No.
(i) The Company is entitled to recover the full reasonable cost of the legally required notice.
(ii) Not applicable.
d. Kentucky Power agrees to exclude all legal or consultant expense incurred in connection with the Company's response to the July 6, 2017 deficiency notice and the preparation of the supplemental notice.

Witness: Ranie K. Wohnhas

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_020
Refer to the September 1, 2017 Supplemental Response to Commission Staff's Data Request 1-56, and the corresponding attachment, KPCO_1SR_KPSC_1_56_Attachment2.
a. Confirm that the Company has included receipts for food $/$ meals in response to this data requests, including, but not limited to a receipt from Panera Bread on page 53 and 54.
b. Confirm that the Company has included food/meal expenses details in the summary tab of PCO_1SR_KPSC_1_56_Attachment1.
c. Is the Company requesting recovery of these expenses in this matter? If so, on what basis does KPCO believe recovery of these costs is reasonable? Provide a complete, detailed response explaining your answer.
d. If the Company is not requesting recovery of expenses for food/meals in this matter, provide a complete, detailed response explain why the receipt were included in response to Commission Staff 1-56. If recovery is not requested, this response should also include an explanation as to why meal expenses were detailed in the Summary tab of KPCO_1SR_KPSC_1_56_Attachment1.

## RESPONSE

$\mathrm{a} \& \mathrm{~b}$. Confirmed.
c. The Company includes costs of meetings relating to the preparation of materials for this case in its rate case expenses. Occasionally, due to the length of the meeting, lunch is a part of the cost of the meeting. This is especially true during periods when Company personnel work extended hours preparing responses to the hundreds of data requests filed by intervenors in this case.

Witness: Amy J. Elliott

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_021
Refer to the Company's Tariff Economic Development Rider ("EDR")
a. Provide the total number of customers that are currently receiving service under the Company's Tariff EDR.
b. For each customer identified in (a) provide the date service began and the date service under the Tariff EDR ends.
c. Provide the annual cost savings realized by each of the customers identified in (a) for each year since the inception of Tariff EDR.
d. Provide all workpapers and source documents in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

a. The Company does not have any customers currently receiving service under Tariff EDR.
b-d. Not applicable.

Witness: Amy J. Elliott

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_022
Describe the rationale and methodology utilized by the Company to determine Tariff EDR's current tiered benefit. Provide all workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

Kentucky Power is not seeking to amend any portion of Tariff E.D.R. in this case. The bases for the design of Tariff E.D.R. are described in detail in the application, testimony, and responses to data requests in Case No. 2014-00336, which are publicly available at www.psc.ky.gov. The Commission issued an order approving Kentucky Power's Tariff E.D.R. on March 4, 2015.

Witness: Amy J. Elliott
Brad N. Hall

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 

## DATA REQUEST

AG_2_023
Tariff EDR Subsidy
a. Provide the level of subsidy received by each customer subscribing to the Tariff EDR for each year since its inception.
b. Explain how the subsidy was associated with Tariff EDR was financed for each year from since its inception. For example was the subsidy built into rates and essentially collected from customers that could not or did not subscribe to the Tariff EDR.
c. Provide the amount of subsidy provided to each customer that opted for the Tariff EDR in each year it was offered.

## RESPONSE

a. Not applicable. Please refer to the Company's response to AG 2-21.

Witness: Amy J. Elliott

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_024
Provide all documents, analyses and studies undertaken by or on behalf of the Company that have examined whether the KEDS and K-PEGG grant program have increased load allowing the Company to recover the incremental cost experienced serving the increased load? Provide all workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

Please refer to the Company's responses to AG 1-360 and AG 1-387 for information regarding load and revenue growth from the Company's economic development efforts. Customers that have added load as a result of the Company's economic development efforts take service under the Company's standard tariffs. Accordingly, these loads were not separately segregated in the cost of service studies prepared to support the Company's application in this case. No documents exist, beyond the cost of service studies, that are responsive to this request.

Witness: Alex E. Vaughan

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_025
Explain if the additional load that has been provided by grant recipients under the K-PEGG program has allowed the Company to recover the short-run and long-run costs of serving these customers. Provide all workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

As described in detail on pages 12-13 of the testimony of Company Witness Hall and in the Company's responses to AG 1-372 through AG 1-377, the Company issues grants under the KPEGG program to municipalities and local economic development agencies. It does not issue grants directly to customers or prospects.

To the extent that the request intended to seek information about customers that have added load in response to the efforts of the municipalities and local economic development agencies that have received grants under the K-PEGG program, please refer to the Company's response to AG 2-24.

Witness: Alex E. Vaughan
Brad N. Hall

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_026
Utilization Studies
a. Provide all documents, analyses and studies undertaken by or on behalf of the Company that have examined the utilization of KEDS funds for grants as a means of incentivizing increased utilization of the Company's electrical system. Provide all workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used.
b. To the extent no materials exist that are responsive to (a) above, confirm explicitly that no such materials are within the Company's possession.

## RESPONSE

a.-b. There are no documents, analyses, and studies responsive to this request. As described in detail on pages 12-13 of the testimony of Company Witness Hall and in the Company's responses to AG 1-372 through AG 1-377, the Company utilizes KEDS funding to issue grants under the K-PEGG program to municipalities and local economic development agencies. It does not issue grants directly to potential customers. As further described in Sections VI and VII of the testimony of Company Witness Hall, these grants are issued to address key gaps in local and regional economic development efforts as identified in the InSite Study included as Exhibit BNH-1.

Witness: Brad N. Hall

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 

## DATA REQUEST

AG_2_027
Explain whether KEAP is fully funded by AEP's shareholders, or from other AEP funds. If the latter, identify the source of the funds.

## RESPONSE

KEAP is funded in its entirety by Kentucky Power's shareholder.

Witness: Brad N. Hall

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_028 Explain in detail if the Company would experience a deterioration in sales if KEDS was eliminated?

## RESPONSE

Kentucky Power cannot speculate whether current customers might reduce load or relocate to a location outside of the Company's service territory if the economic development agency support funded through KEDS were eliminated. However, the Company anticipates that eliminating the KEDS (which under the Company's proposal in this case would amount to $\$ 3$ per meter per year) would negatively impact potential future load growth. The purpose of the program funded by KEDS is to support and enhance the economic development efforts of municipalities and local economic development agencies within the Company's service territory by, among other things, investing in and redefining the skill set of the leaders in the communities. This support allows these municipalities and agencies to be more competitive and attractive to industry. Without the support provided through these programs, opportunities for economic development and future load growth may be lost.

Witness: Brad N. Hall

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_029
Provide all cost-benefit analyses that have been conducted by or on the behalf of the Company that evaluate the cost-effectiveness of the Company's KEDS and K-PEGG program. Provide all workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

No cost-benefit analyses have been performed. The Company is implementing the recommendations of the InSite Gap Analysis, provided as Exhibit BNH-1, through the K-PEGG program. Details regarding the projects funded by the K-PEGG program are included in Exhibit BNH-2, the testimony of Company Witness Hall, and in the Company's response to AG 1-390.

Witness: Brad N. Hall

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_030 Provide a detailed explanation regarding KEDS and its impact on the Company's earnings including the ability for the Company to earn a fair return. Provide all workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

The Kentucky Economic Development Surcharge is a $\$ 0.15$ per meter per month charge. The Company has proposed in this case to raise KEDS to $\$ 0.25$ per meter per month. Funds raised through the KEDS are matched by the Company on a dollar-for-dollar basis and used exclusively by the Company to provide grants through the K-PEGG Program.

KEDS funds are not part of the Company's cost of service and have no impact on the Company's earnings. Specifically, customer contributions and payments to third parties are removed from the Company's Kentucky retail cost of service by adjustment W12. Furthermore, the Company's shareholder matching contributions are recorded in FERC account 426 and are not included in the Company's Kentucky retail cost of service and therefore do not impact the Company's ability to earn a fair return on its Kentucky retail jurisdictional capitalization.

Witness: Alex E. Vaughan

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_031 Provide all studies and analyses conducted by or on the behalf of the Company that examine, discuss or show whether KEDS is necessary to alleviate any earnings challenges KPCo has experienced, is currently experiencing or may experience in the future. Provide all workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

As discussed in the testimony of Company Witness Satterwhite, the primary driver for the Company's requested increase in revenue in this case is to offset a loss of load. While the Company has not conducted a cost benefit analysis of KEDS as it relates to "earnings challenges," the K-PEGG program funded by the KEDS and a dollar-for-dollar match by the Company are designed to address the economic development gaps identified by the InSite Study included as Exhibit BNH-1. As discussed in the testimony of Company Witness Hall, passim, the K-PEGG program provides needed funds to municipalities and local and regional economic development agencies to allow them to compete with other communities for economic development opportunities. Without the K-PEGG program, funded in part by the KEDS, communities within the Company's service territory would struggle to prepare potential development sites, educate the workforce, and conduct the economic development activities necessary to attract new businesses to the region.

Witness: Matthew J. Satterwhite
Brad N. Hall

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_032
Efficiency Benefits of K-PEGG
a. Provide all studies and analyses conducted by or on the behalf of the Company that examine if grant recipients receiving funding under KPEGG have promoted more efficient utilization of the Company's electric system through increased electrical usage and/or higher load factor.
b. If the Company's response to (a) is negative, explain if the Company believes the ultimate beneficiaries of grants have been providing any efficiency benefits relating to the utilization of the Company's infrastructure.
c. Provide all workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

a.-c. The Company objects to this request as vague with regard to the undefined term "efficient usage of the Company's electric system." Without waiving this objection, please refer to Sections VI and VII of the testimony of Company Witness Hall and the Company's responses to AG 1-372 through AG 1-377 for a description of the purpose of the K-PEGG program.

Witness: Brad N. Hall

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_033
Refer to the Company's response to AG_1_309 (c) where it states "the Company anticipates the addition of approximately 74 MW of demand from additional load when these projects are fully realized." Provide the total estimated amount of revenue that the Company believes will be generated from the addition of 74 MW of load. Provide all workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

The referenced 74 MW of load additions compromises seven customers.
Five of those customers were operating during the Company's test year in this case and the resulting revenue from those loads is fully reflected in the Company's going level revenue.

One customer is not anticipated to begin taking service until late 2019 and negotiations regarding its contract rate for electric service are ongoing at this time, and no revenue estimate is available.

Also, one customer began taking service from the Company in April of 2017, based on its first six bills, the anticipated total annual tariff revenues are approximately $\$ 2,600$ (total bill).

Witness: Alex E. Vaughan

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_034 Refer to the Company's response to AG_1_356 where it states "although documents may exist that reference customer attrition but do not provide the requested analyses." Provide the referenced documents in the Company's possession or control that address customer attrition since 2007.

## RESPONSE

Please refer to the Company's objections and response to AG 1-356. Kentucky Power did not identify any "documents, studies, memos, reports, analyses, presentations, e-mails, or other correspondence (including those to management or investors)" or "supporting workpapers and source documents" in its response and objections. Instead, the Company indicated the possibility that such documents and communications might exist, but that because of the time period (since 2007) and the scope of the request (every conceivable document and communication) it could not and cannot undertake such a search: "The Company has not identified specific studies or analyses addressing how Kentucky Power's efforts may affect customer attrition, although documents may exist that reference customer attrition but do not provide the requested analyses."

The Company further objected, and continues to object to the request, on the ground that the information was irrelevant and not reasonably calculated to the discovery of admissible evidence. Company Witness Satterwhite's referenced testimony provided the Company's approximate total customer count as of the date of the testimony and the decline in customers over the previous 33 -month period. For example, and without limitation, a January 1, 2007 communication addressing customer attrition, assuming such a communication exists, is irrelevant to the referenced testimony.

Without waiving the Company's ongoing objection to the burdensomeness and irrelevancy of the request, please refer to KPCO _R_AG_2_34_Attachment1.pdf for documents Kentucky Power identified in responding to this request pertaining to the period referenced by Company Witness Satterwhite.

Witness: Matthew J. Satterwhite

## Economic Impact of Two Divergent Energy Industries

## Since the Recession



Since the last recession, there has been a dramatic shift within AEP's energy producing regional economies. As the oil \& gas developments in AEP's shale counties were expanding, the mining sector in AEP's coal counties began hemorrhaging load, jobs, customers, and even population.

While the new Oil \& Gas loads that have been added since the recession are more than the Mining loads that were lost, AEP's regional economy has lost 4.5 Mining Jobs for every Oll \& Gas ioh that's been added since 2008. Not surprisingly, the dedine in Residential customers within AEP's coal counties more than offsets the growth in customers that has occurred in AEP's shake counties.

## Exhibit C-15

Kentucky Power Company Annual Internal Load by Class (GWH) 2011-2015

|  | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A. Residential |  |  |  |  |  |
| 1. Heating Customers | 1,601 | 1,526 | 1,598 | 1,640 | 1,519 |
| 2. Nonheating Customers | 741 | 715 | 713 | 711 | 673 |
| 3. Total | 2,342 | 2,241 | 2,312 | 2,350 | 2,192 |
| B. Commercial | 1,381 | 1,350 | 1,345 | 1,361 | 1,323 |
| C. Industrial |  |  |  |  |  |
| 1. Manufacturing | 2,293 | 2,289 | 2,205 | 2,198 | 2,164 |
| 2. Mine Power | 956 | 771 | 664 | 612 | 530 |
| 3. Total | 3.250 | 3,060 | 2,870 | 2,810 | 2,693 |
| D. Other Ultimate Sales |  |  |  |  |  |
| 1. Street Lighting | 11 | 11 | 11 | 11 | 10 |
| 2. Other | 0 | 0 | 0 | 0 | 0 |
| 3. Total | 11 | 11 | 11 | 11 | 10 |
| E. Total Ultimate Sales | 6,983 | 6,661 | 6,538 | 6,532 | 6,219 |
| F. Internal Sales for Resale |  |  |  |  |  |
| 1. Municipals | 94 | 94 | 94 | 95 | 90 |
| 2. Other | 0 | 0 | 0 | 0 | 0 |
| 3. Total | 94 | 94 | 94 | 95 | 90 |
| G. Total Internal Sales | 7.077 | 6,755 | 6,632 | 6,627 | 6,309 |
| H. Losses | 470 | 400 | 497 | 464 | 445 |
| I. Total Internal Load | 7,548 | 7,155 | 7,129 | 7.091 | 6,754 |

Exhibit C-14
Kentucky Power Company
Average Annual Number of Customers by Class
2011-2015

|  | $\underline{2011}$ | $\underline{2012}$ | $\underline{2013}$ | $\underline{2014}$ | $\underline{2015}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A. Residential |  |  |  |  |  |
| 1. Heating Customers | 85,541 | 85,570 | 85,612 | 85,269 | 85,057 |
| 2. Nonheating Customers | 56,319 | 55,359 | 54,552 | 53,689 | 52,887 |
| 3. Total | 141,860 | 140,929 | 140,164 | 138,958 | 137,944 |
| B. Commercial | 29,964 | 30,059 | 30,265 | 30,387 | 30,458 |
| C. Industrial |  |  |  |  |  |
| 1. Manufacturing | 961 | 954 | 940 | 940 | 933 |
| 2. Mine Power | 445 | 415 | 384 | 357 | 325 |
| 3. Total | 1,406 | 1,368 | 1,324 | 1,296 | 1,258 |
| D. Other Ultimate Sales |  |  |  |  |  |
| 1. Street Lighting | 411 | 401 | 385 | 370 | 360 |
| 2. Other | 0 | 0 | 0 | 0 | 0 |
| 3. Total | 411 | 401 | 385 | 370 | 360 |
| E. Total Ulitimate Sales | 173,642 | 172,757 | 172,138 | 171,011 | 170,020 |
| F. Internal Sales for Resale |  |  |  |  |  |
| 1. Municipals | 2 | 2 | 2 | 2 | 2 |
| 2. Other | 0 | 0 | 0 | 0 | 0 |
| 3. Total | 2 | 2 | 2 | 2 | 2 |
| G. Total Internal Sales | 173,644 | 172,759 | 172,140 | 171,013 | 170,022 |

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_035 Refer to the Company's response to AG_1_361 where it discusses the applications that were denied under the K-PEGG program. Provide all written and defined criteria that the Economic Development Team uses to evaluate whether or not an application is complete.

## RESPONSE

The Company does not have specific written and defined criteria for determining whether a KPEGG application is complete. The Company considers applications complete if they have detailed and thorough answers for each question on the K-PEGG application. As described in the Company's response to AG 1-361, the Company will deny an application if, among other things, the application does not provide a detailed description of how the requested funds will be used to support economic development.

Witness: Brad N. Hall

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 1 of 2

## DATA REQUEST

AG_2_036
Refer to the Company's response to AG_1_363 part (a). The question was not asking for information on other utilities providing economic development efforts in Kentucky Power's service territory but the service territories of those other respective utilities. To clarify:
a. Is the Company aware of any other electric or natural gas utilities that provide economic development assistance to local entities or to businesses looking to locate to that utility's respective service territory?
b. To the extent the Company's response to (a) above is in the affirmative, provide a list of regional utilities the Company is aware of.
c. For each utility referenced in response to (b) above, provide the economic development program or programs offered by the utility, and associated program parameters.
d. Has the Company compared its economic development initiatives to that of other utilities offering economic development opportunities?
e. To the extent the Company's response to (b) above is in the affirmative, provide copies of the Company's comparisons of its offerings to other relevant utilities.
f. Provide all supporting workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

a. Yes.
b. Kentucky Power is aware that Duke Energy Kentucky, Inc., Kentucky Utilities Company, Louisville Gas and Electric Company, and East Kentucky Power Cooperative, Inc. have economic development programs.

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 2 of 2

c. Kentucky Power objects to this request as being unduly burdensome, irrelevant, and not likely to lead to discovery of admissible evidence. The need for economic development activities by utilities varies throughout the Commonwealth. The required information is not generated by Kentucky Power. Information regarding the economic development activities by the other utilities identified in subpart (b) above is likely available through those utilities' websites and thus equally available to the Attorney General.
d.-f. Please refer to the Company's responses to AG 1-163 (d)-(f).

Witness: Brad N. Hall

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_037
Refer to the Company's response to AG_1_384 where it references the semi-annual EEI Rate Comparison - Industrial and Residential report to compare its rates to other utilities. Provide a copy of the semi-annual EEI Rate Comparison reports from 2014 through 2017.

## RESPONSE

The EEI Typical Bills and Average Rate Report is a semi-annual report provided only in bound paper format. EEI does not provide this report in electronic format. This report is typically several hundred pages long. AEP receives a single copy that is used to support all AEP operating companies. The bound copies may be made available for inspection during normal business hours at the AEPSC offices in Columbus, OH.

Witness: Alex E. Vaughan

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_038
For the purposes of this request, refer to the Company's response to AG-1-015, where the Company disagrees that placing a large percentage of rate increases upon the monthly customer charges does not deprive customers of the monetary incentive for conserving energy through less usage.
a. Does the Company agree that fixed charges such as customer charges are unavoidable? Confirm or deny.
b. To the extent the Company's response to (a) is in the negative, provide a detailed narrative explaining how a customer can avoid a fixed monthly charge such as a customer charge.
c. Does the Company agree that conservation activities on the behalf of customers are typically designed to reduce annual energy usage? Confirm or deny.
d. To the extent the Company's response to (c) is in the negative, provide a detailed narrative explaining how a customer's conservation activity typically affects annual energy usage.

## RESPONSE

Kentucky Power objects to this request as being vague with respect to the undefined term "large percentage." Without waiving this objection, Kentucky Power responds as follows:
a. The Company agrees that fixed charges assessed on a dollar per month basis are unavoidable. Such fixed charges are consistent with the principles of cost causation because there exist unavoidable fixed costs to serve each customer.
b. Not applicable.
c. The Company agrees that energy conservation efforts are designed to reduce annual energy usage. The reduced energy usage should, under cost causation principles, reduce the a customer's bill for only the non-fixed costs that are avoided as a result of customers' reduced usage.
d. Not applicable.

Witness: Alex E. Vaughan

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_039
For the purposes of this request, refer to the Company's response to AG-1-016, where the Company states that in the test year the average kWh usage for the Company's low-income energy assistance customers is greater than the average kWh usage for the residential class as a whole.
a. Provide a copy of the referenced analysis.
b. Provide an analogous analysis for each of the past five years, 2012 through 2016.
c. Provide all workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

a. Refer to the Company's response to AG 1-355 for the requested information.
b-c. Refer to KPCO_R_AG_2_39_Attachment1.xlsx for the requested information.

Witness: Alex E. Vaughan

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_040
For the purposes of this request, refer to the Company's response to AG-1-342, where the Company states that it does not perform the requested calculation of base revenues in the normal course of business.
a. Confirm that the Company does not calculate non-fuel tariff revenues in the normal course of business.
b. To the extent the Company's response to (a) is in the negative, provide monthly tariff revenues for each of the years 2011 through 2016, and each month of 2017.
c. Provide all workpapers and source documents supporting the Company's response in electronic spreadsheet form with all links and formulas intact, source data used, and explain all assumptions and calculations used. To the extent the data requested is not available in the form requested, provide the information in the form that most closely matches what has been requested.

## RESPONSE

a. The Company does not calculate non-fuel base revenues, as referenced in AG-1-342, in the normal course of business.
b. Refer to KPCO_R_AG_2_40_Attachment1.pdf for the requested monthly tariff revenues.
c. No such workpapers or spreadsheets exist; the reports included in KPCO_R_AG_2_40_Attachment1.pdf are generated in .pdf format.

Witness: Alex E. Vaughan






American Electric Power

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{State: KY

TARIFF}} \& \& \& \& \& \& \& \& \multicolumn{3}{|l|}{January 2011} \& Page: \& \multirow[t]{2}{*}{2} <br>
\hline \& \& \& \& \& \& \& \& \& \multicolumn{4}{|l|}{REALIZATION} \& <br>

\hline \& \& REVENUE \& FUEL CLAUSE \& REVENUE EXCL FUEL CLAUSE \& METERED KWH \& OFF PEAK KWH \& BILLING DEMAND \& \# OF CUST INCL \& $$
\begin{aligned}
& \text { \#OF } \\
& \text { CUST } \\
& \text { EXCL }
\end{aligned}
$$ \& \# OF LAMPS \& INCL FUEL \& EXCL FUEL \& FACILITY CHARGE <br>

\hline 248 \& LGS SUB \& 347,168.92 \& 4,693.48 \& 342,475.44 \& 4,616,821 \& 0 \& 17,417.0 \& 32 \& 0 \& 0 \& 7.52 \& 7.42 \& 0.00 <br>
\hline 251 \& LGS-LM-TD \& 13,886.05 \& 207.59 \& 13,678.46 \& 146,615 \& 117,800 \& 153.6 \& 9 \& 0 \& 0 \& 9.47 \& 9.33 \& 0.00 <br>
\hline 356 \& QP SEC \& 26,177.20 \& 61.07 \& 26,116.13 \& 384,987 \& 0 \& 649.0 \& 1 \& 0 \& 0 \& 6.80 \& 6.78 \& 0.00 <br>
\hline 358 \& QP PRI \& 2,127,465.60 \& 35,349.41 \& 2,092,116.19 \& 31,704,758 \& 0 \& 72,984.0 \& 49 \& 0 \& 0 \& 6.71 \& 6.60 \& 0.00 <br>
\hline 359 \& QP SUB \& 2,033,715.33 \& 21,492.29 \& 2,012,223.04 \& 33,064,816 \& 0 \& 104,688.0 \& 34 \& 0 \& 0 \& 6.15 \& 6.09 \& 0.00 <br>
\hline 360 \& QP TRANS \& 245,254.85 \& 308.74 \& 244,946.11 \& 4,126,594 \& 0 \& 13,837.0 \& 4 \& 0 \& 0 \& 5.94 \& 5.94 \& 0.00 <br>
\hline 371 \& CIP SUB \& 8,534,175.21 \& 11,481.07- \& 8,545,656.28 \& 163,636,521 \& 0 \& 282,396.0 \& 15 \& 0 \& 0 \& 5.22 \& 5.22 \& 0.00 <br>
\hline 372 \& CIP TRAN \& 1,612,418.47 \& 29,084.97 \& 1,583,333.50 \& 30,649,134 \& 0 \& 68,683.0 \& 4 \& 0 \& 0 \& 5.26 \& 5.17 \& 0.00 <br>
\hline 528 \& SL \& 90,347.97 \& 115.11- \& 90,463.08 \& 713,822 \& 0 \& 0.0 \& 51 \& 0 \& 0 \& 12.66 \& 12.67 \& 0.00 <br>
\hline 540 \& MW \& 29,901.64 \& 752.55 \& 29,149.09 \& 331,495 \& 0 \& 836.2 \& 14 \& 0 \& 0 \& 9.02 \& 8.79 \& 0.00 <br>
\hline Grand Total \& \& 61,038,703.93 \& 677,664.43 \& 60,361,039.50 \& 748,446,496 \& 1,263,964 \& 972,965.7 \& 175,027 \& 48,312 \& 57,165 \& 8.16 \& 8.06 \& 20,072.83 <br>
\hline
\end{tabular}














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 REVENUE EXCL
FUEL CLAUSE
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| State: KY |  | REVENUE | FUEL CLAUSE | REVENUE EXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | BILLING | \# OF CUST | August 2011 |  |  | Page: | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TARIFF |  |  |  |  |  |  |  |  | \# OF EXCL | \# OF LAMPS | REALIZATION |  | FACILITYCHARGE |
|  |  | INCL FUEL |  |  |  |  |  |  |  |  | EXCL FUEL |  |
| 011 | RSW-LMWH |  | 22,360.81 | 59.91 | 22,300.90 | 251,496 | 0 | 0.0 | 114 | 0 | 0 | 8.89 | 8.87 | 0.00 |
| 012 | RSW-A | 3,968.91 | 11.73 | 3,957.18 | 45,026 | 0 | 0.0 | 15 | 0 | 0 | 8.81 | 8.79 | 0.00 |
| 013 | RSW-B | 1,055.28 | 2.95 | 1,052.33 | 12,103 | 0 | 0.0 | 4 | 0 | 0 | 8.72 | 8.69 | 0.00 |
| 014 | RSW-C | 466.01 | 2.27 | 463.74 | 5,583 | 0 | 0.0 | 3 | 0 | 0 | 8.35 | 8.31 | 0.00 |
| 015 | RS | 8,582,502.80 | 16,271.26 | 8,566,231.54 | 90,634,122 | 4,201 | 598.0 | 63,292 | 0 | 0 | 9.47 | 9.45 | 0.00 |
| 017 | RS EMP | 90,135.71 | 70.24 | 90,065.47 | 1,005,522 | 0 | 0.0 | 540 | 0 | 0 | 8.96 | 8.96 | 0.00 |
| 022 | RSW-RS | 10,736,056.49 | 19,326.88 | 10,716,729.61 | 113,530,093 | 1,365 | 791.8 | 77,378 | 0 | 0 | 9.46 | 9.44 | 0.00 |
| 028 | AORH-W ON | 661.91 | 1.19 | 660.72 | 7,106 | 4,597 | 0.0 | 7 | 0 | 0 | 9.31 | 9.30 | 0.00 |
| 030 | RSW-ONPK | 12,705.69 | 44.38 | 12,661.31 | 136,671 | 80,964 | 0.0 | 70 | 0 | 0 | 9.30 | 9.26 | 0.00 |
| 032 | RS LM-ON | 19,413.04 | 26.73 | 19,386.31 | 206,214 | 112,152 | 42.0 | 101 | 0 | 0 | 9.41 | 9.40 | 0.00 |
| 034 | AORH-ON | 46.65 | 0.18- | 46.83 | 511 | 350 | 0.0 | 2 | 0 | 0 | 9.13 | 9.16 | 0.00 |
| 036 | RS-TOD-ON | 322.57 | 0.01 | 322.56 | 3,066 | 1,364 | 0.0 | 3 | 0 | 0 | 10.52 | 10.52 | 0.00 |
| 062 | RS-NT MTR | 98.94 | 0.04- | 98.98 | 1,018 | 0 | 0.0 | 1 | 0 | 0 | 9.72 | 9.72 | 0.00 |
| 093 | OL 175 MV | 12,357.48 | 13.47 | 12,344.01 | 83,257 | 0 | 0.0 | 0 | 1,281 | 1,329 | 14.84 | 14.83 | 1.60 |
| 094 | OL 100 HP | 202,815.74 | 31.61- | 202,847.35 | 824,047 | 0 | 0.0 | 0 | 22,264 | 23,875 | 24.61 | 24.62 | 4,314.23 |
| 095 | OL 400 MV | 1,874.85 | 1.69 | 1,873.16 | 15,839 | 0 | 0.0 | 0 | 85 | 113 | 11.84 | 11.83 | 2.85 |
| 097 | OL 200 HP | 26,158.65 | 23.92 | 26,134.73 | 159,597 | 0 | 0.0 | 0 | 1,706 | 2,165 | 16.39 | 16.38 | 917.16 |
| 098 | OL 400 HP | 3,792.71 | 9.98 | 3,782.73 | 29,333 | 0 | 0.0 | 0 | 79 | 226 | 12.93 | 12.90 | 293.23 |
| 099 | OL175 MVP | 110.94 | 0.27 | 110.67 | 668 | 0 | 0.0 | 0 | 5 | 11 | 16.61 | 16.57 | 0.00 |
| 107 | OL 200HPF | 24,359.75 | 16.42 | 24,343.33 | 133,696 | 0 | 0.0 | 0 | 1,304 | 1,798 | 18.22 | 18.21 | 670.89 |
| 109 | OL400 HPF | 83,417.70 | 82.59 | 83,335.11 | 647,414 | 0 | 0.0 | 0 | 1,852 | 4,353 | 12.88 | 12.87 | 2,564.48 |
| 110 | OL 250 MH | 2,522.49 | 2.31 | 2,520.18 | 11,543 | 0 | 0.0 | 0 | 59 | 130 | 21.85 | 21.83 | 251.15 |
| 111 | OL100 HPP | 10,615.99 | 2.61 | 10,613.38 | 29,249 | 0 | 0.0 | 0 | 195 | 832 | 36.30 | 36.29 | 38.85 |
| 113 | OL 150 HP | 205,658.54 | 193.97 | 205,464.57 | 1,046,142 | 0 | 0.0 | 0 | 18,643 | 20,856 | 19.66 | 19.64 | 10,079.65 |
| 116 | OL 400 MH | 21,386.70 | 27.01 | 21,359.69 | 124,171 | 0 | 0.0 | 0 | 269 | 896 | 17.22 | 17.20 | 676.62 |
| 122 | OL150 HPP | 1,391.70 | 0.86 | 1,390.84 | 3,433 | 0 | 0.0 | 0 | 14 | 66 | 40.54 | 40.51 | 9.10 |
| 131 | OL 1000MH | 3,485.39 | 6.32 | 3,479.07 | 23,102 | 0 | 0.0 | 0 | 27 | 72 | 15.09 | 15.06 | 35.60 |
| 204 | SGS-MTRD | 18,133.84 | 13.22 | 18,120.62 | 110,621 | 0 | 0.0 | 526 | 0 | 0 | 16.39 | 16.38 | 0.00 |
| 211 | SGS | 1,418,559.34 | 2,071.98 | 1,416,487.36 | 11,588,317 | 11,166 | 10,150.5 | 22,106 | 0 | 0 | 12.24 | 12.22 | 0.00 |
| 213 | SGS-UMR | 20,410.30 | 24.64 | 20,385.66 | 119,845 | 0 | 0.0 | 635 | 0 | 0 | 17.03 | 17.01 | 0.00 |
| 214 | MGS - AF | 11,414.23 | 17.73 | 11,396.50 | 111,507 | 0 | 2,287.6 | 77 | 0 | 0 | 10.24 | 10.22 | 0.00 O |
| 215 | MGS SEC | 4,842,552.03 | 9,374.76 | 4,833,177.27 | 46,360,992 | 0 | 166,818.0 | 7,228 | 0 | 0 | 10.45 | 10.43 | 0.00 ¢ |
| 217 | MGS PRI | 15,444.91 | 39.94 | 15,404.97 | 153,294 | 0 | 587.2 | 24 | 0 | 0 | 10.08 | 10.05 | 0.00 ¢ |
| 218 | MGS M SEC | 2,017.09 | 6.91 | 2,010.18 | 19,444 | 0 | 60.4 | 2 | 0 | 0 | 10.37 | 10.34 | 0.00 - |
| 220 | MGSCC PRI | 30,032.82 | 31.82 | 30,001.00 | 251,793 | 0 | 1,250.7 | 58 | 0 | 0 | 11.93 | 11.91 | $0.008>$ |
| 223 | MGS LM ON | 7,357.29 | 12.10 | 7,345.19 | 76,516 | 44,515 | 0.0 | 50 | 0 | 0 | 9.62 | 9.60 | 0.09 \# $\bar{\sim}$ |
| 225 | SGSTOD ON | 41.25 | 0.02- | 41.27 | 118 | 78 | 0.0 | 2 | 0 | 0 | 34.96 | 34.97 | 0.009 |
| 229 | MGS-TOD | 37,115.57 | 122.90 | 36,992.67 | 383,874 | 239,392 | 90.0 | 79 | 0 | 0 | 9.67 | 9.64 | 0.00 O 0 |
| 236 | MGSCC SUB | 12,626.22 | 18.80 | 12,607.42 | 94,343 | 0 | 498.0 | 15 | 0 | 0 | 13.38 | 13.36 | 0.048 |
| 240 | LGS SEC | 4,675,665.13 | 9,905.21 | 4,665,759.92 | 49,758,092 | 0 | 142,765.0 | 753 | 0 | 0 | 9.40 | 9.38 | 0.00 |
| 242 | LGS M SEC | 72,937.27 | 89.34 | 72,847.93 | 810,927 | 0 | 1,646.0 | 7 | 0 | 0 | 8.99 | 8.98 | 0.00 |
| 244 | LGS PRI | 769,081.60 | 2,487.03 | 766,594.57 | 8,783,922 | 0 | 39,506.0 | 92 | 0 | 0 | 8.76 | 8.73 | 0.00 |


| State: KY |  | REVENUE | FUEL CLAUSE | REVENUE EXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | BILLING | \# OF CUST | August 2011 |  |  | Page: | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TARIFF |  |  |  |  |  |  |  |  | \# OF EXCL | \# OF LAMPS | REALIZATION |  | FACILITYCHARGE |
|  |  | INCL FUEL |  |  |  |  |  |  |  |  | EXCL FUEL |  |
| 011 | RSW-LMWH |  | 22,360.81 | 59.91 | 22,300.90 | 251,496 | 0 | 0.0 | 114 | 0 | 0 | 8.89 | 8.87 | 0.00 |
| 012 | RSW-A | 3,968.91 | 11.73 | 3,957.18 | 45,026 | 0 | 0.0 | 15 | 0 | 0 | 8.81 | 8.79 | 0.00 |
| 013 | RSW-B | 1,055.28 | 2.95 | 1,052.33 | 12,103 | 0 | 0.0 | 4 | 0 | 0 | 8.72 | 8.69 | 0.00 |
| 014 | RSW-C | 466.01 | 2.27 | 463.74 | 5,583 | 0 | 0.0 | 3 | 0 | 0 | 8.35 | 8.31 | 0.00 |
| 015 | RS | 8,582,502.80 | 16,271.26 | 8,566,231.54 | 90,634,122 | 4,201 | 598.0 | 63,292 | 0 | 0 | 9.47 | 9.45 | 0.00 |
| 017 | RS EMP | 90,135.71 | 70.24 | 90,065.47 | 1,005,522 | 0 | 0.0 | 540 | 0 | 0 | 8.96 | 8.96 | 0.00 |
| 022 | RSW-RS | 10,736,056.49 | 19,326.88 | 10,716,729.61 | 113,530,093 | 1,365 | 791.8 | 77,378 | 0 | 0 | 9.46 | 9.44 | 0.00 |
| 028 | AORH-W ON | 661.91 | 1.19 | 660.72 | 7,106 | 4,597 | 0.0 | 7 | 0 | 0 | 9.31 | 9.30 | 0.00 |
| 030 | RSW-ONPK | 12,705.69 | 44.38 | 12,661.31 | 136,671 | 80,964 | 0.0 | 70 | 0 | 0 | 9.30 | 9.26 | 0.00 |
| 032 | RS LM-ON | 19,413.04 | 26.73 | 19,386.31 | 206,214 | 112,152 | 42.0 | 101 | 0 | 0 | 9.41 | 9.40 | 0.00 |
| 034 | AORH-ON | 46.65 | 0.18- | 46.83 | 511 | 350 | 0.0 | 2 | 0 | 0 | 9.13 | 9.16 | 0.00 |
| 036 | RS-TOD-ON | 322.57 | 0.01 | 322.56 | 3,066 | 1,364 | 0.0 | 3 | 0 | 0 | 10.52 | 10.52 | 0.00 |
| 062 | RS-NT MTR | 98.94 | 0.04- | 98.98 | 1,018 | 0 | 0.0 | 1 | 0 | 0 | 9.72 | 9.72 | 0.00 |
| 093 | OL 175 MV | 12,357.48 | 13.47 | 12,344.01 | 83,257 | 0 | 0.0 | 0 | 1,281 | 1,329 | 14.84 | 14.83 | 1.60 |
| 094 | OL 100 HP | 202,815.74 | 31.61- | 202,847.35 | 824,047 | 0 | 0.0 | 0 | 22,264 | 23,875 | 24.61 | 24.62 | 4,314.23 |
| 095 | OL 400 MV | 1,874.85 | 1.69 | 1,873.16 | 15,839 | 0 | 0.0 | 0 | 85 | 113 | 11.84 | 11.83 | 2.85 |
| 097 | OL 200 HP | 26,158.65 | 23.92 | 26,134.73 | 159,597 | 0 | 0.0 | 0 | 1,706 | 2,165 | 16.39 | 16.38 | 917.16 |
| 098 | OL 400 HP | 3,792.71 | 9.98 | 3,782.73 | 29,333 | 0 | 0.0 | 0 | 79 | 226 | 12.93 | 12.90 | 293.23 |
| 099 | OL175 MVP | 110.94 | 0.27 | 110.67 | 668 | 0 | 0.0 | 0 | 5 | 11 | 16.61 | 16.57 | 0.00 |
| 107 | OL 200HPF | 24,359.75 | 16.42 | 24,343.33 | 133,696 | 0 | 0.0 | 0 | 1,304 | 1,798 | 18.22 | 18.21 | 670.89 |
| 109 | OL400 HPF | 83,417.70 | 82.59 | 83,335.11 | 647,414 | 0 | 0.0 | 0 | 1,852 | 4,353 | 12.88 | 12.87 | 2,564.48 |
| 110 | OL 250 MH | 2,522.49 | 2.31 | 2,520.18 | 11,543 | 0 | 0.0 | 0 | 59 | 130 | 21.85 | 21.83 | 251.15 |
| 111 | OL100 HPP | 10,615.99 | 2.61 | 10,613.38 | 29,249 | 0 | 0.0 | 0 | 195 | 832 | 36.30 | 36.29 | 38.85 |
| 113 | OL 150 HP | 205,658.54 | 193.97 | 205,464.57 | 1,046,142 | 0 | 0.0 | 0 | 18,643 | 20,856 | 19.66 | 19.64 | 10,079.65 |
| 116 | OL 400 MH | 21,386.70 | 27.01 | 21,359.69 | 124,171 | 0 | 0.0 | 0 | 269 | 896 | 17.22 | 17.20 | 676.62 |
| 122 | OL150 HPP | 1,391.70 | 0.86 | 1,390.84 | 3,433 | 0 | 0.0 | 0 | 14 | 66 | 40.54 | 40.51 | 9.10 |
| 131 | OL 1000MH | 3,485.39 | 6.32 | 3,479.07 | 23,102 | 0 | 0.0 | 0 | 27 | 72 | 15.09 | 15.06 | 35.60 |
| 204 | SGS-MTRD | 18,133.84 | 13.22 | 18,120.62 | 110,621 | 0 | 0.0 | 526 | 0 | 0 | 16.39 | 16.38 | 0.00 |
| 211 | SGS | 1,418,559.34 | 2,071.98 | 1,416,487.36 | 11,588,317 | 11,166 | 10,150.5 | 22,106 | 0 | 0 | 12.24 | 12.22 | 0.00 |
| 213 | SGS-UMR | 20,410.30 | 24.64 | 20,385.66 | 119,845 | 0 | 0.0 | 635 | 0 | 0 | 17.03 | 17.01 | 0.00 |
| 214 | MGS - AF | 11,414.23 | 17.73 | 11,396.50 | 111,507 | 0 | 2,287.6 | 77 | 0 | 0 | 10.24 | 10.22 | 0.00 O |
| 215 | MGS SEC | 4,842,552.03 | 9,374.76 | 4,833,177.27 | 46,360,992 | 0 | 166,818.0 | 7,228 | 0 | 0 | 10.45 | 10.43 | 0.00 ¢ |
| 217 | MGS PRI | 15,444.91 | 39.94 | 15,404.97 | 153,294 | 0 | 587.2 | 24 | 0 | 0 | 10.08 | 10.05 | 0.00 ¢ |
| 218 | MGS M SEC | 2,017.09 | 6.91 | 2,010.18 | 19,444 | 0 | 60.4 | 2 | 0 | 0 | 10.37 | 10.34 | 0.00 - |
| 220 | MGSCC PRI | 30,032.82 | 31.82 | 30,001.00 | 251,793 | 0 | 1,250.7 | 58 | 0 | 0 | 11.93 | 11.91 | $0.008>$ |
| 223 | MGS LM ON | 7,357.29 | 12.10 | 7,345.19 | 76,516 | 44,515 | 0.0 | 50 | 0 | 0 | 9.62 | 9.60 | 0.09 \# $\bar{\sim}$ |
| 225 | SGSTOD ON | 41.25 | 0.02- | 41.27 | 118 | 78 | 0.0 | 2 | 0 | 0 | 34.96 | 34.97 | 0.009 |
| 229 | MGS-TOD | 37,115.57 | 122.90 | 36,992.67 | 383,874 | 239,392 | 90.0 | 79 | 0 | 0 | 9.67 | 9.64 | 0.00 O 0 |
| 236 | MGSCC SUB | 12,626.22 | 18.80 | 12,607.42 | 94,343 | 0 | 498.0 | 15 | 0 | 0 | 13.38 | 13.36 | 0.048 |
| 240 | LGS SEC | 4,675,665.13 | 9,905.21 | 4,665,759.92 | 49,758,092 | 0 | 142,765.0 | 753 | 0 | 0 | 9.40 | 9.38 | 0.00 |
| 242 | LGS M SEC | 72,937.27 | 89.34 | 72,847.93 | 810,927 | 0 | 1,646.0 | 7 | 0 | 0 | 8.99 | 8.98 | 0.00 |
| 244 | LGS PRI | 769,081.60 | 2,487.03 | 766,594.57 | 8,783,922 | 0 | 39,506.0 | 92 | 0 | 0 | 8.76 | 8.73 | 0.00 |



| State: KY |  | REVENUE | FUEL CLAUSE | REVENUE EXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | BILLING | $\begin{aligned} & \text { \# OF CUST } \\ & \text { INCL } \end{aligned}$ | August 2011 |  |  | Page: | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TARIFF |  |  |  |  |  |  |  |  | \# OF CUST EXCL | \# OF LAMPS | REALIZATION |  | FACILITYCHARGE |
|  |  | INCL FUEL |  |  |  |  |  |  |  |  | EXCL FUEL |  |
| 011 | RSW-LMWH |  | 22,360.81 | 59.91 | 22,300.90 | 251,496 | 0 | 0.0 | 114 | 0 | 0 | 8.89 | 8.87 | 0.00 |
| 012 | RSW-A | 3,968.91 | 11.73 | 3,957.18 | 45,026 | 0 | 0.0 | 15 | 0 | 0 | 8.81 | 8.79 | 0.00 |
| 013 | RSW-B | 1,055.28 | 2.95 | 1,052.33 | 12,103 | 0 | 0.0 | 4 | 0 | 0 | 8.72 | 8.69 | 0.00 |
| 014 | RSW-C | 466.01 | 2.27 | 463.74 | 5,583 | 0 | 0.0 | 3 | 0 | 0 | 8.35 | 8.31 | 0.00 |
| 015 | RS | 8,582,502.80 | 16,271.26 | 8,566,231.54 | 90,634,122 | 4,201 | 598.0 | 63,292 | 0 | 0 | 9.47 | 9.45 | 0.00 |
| 017 | RS EMP | 90,135.71 | 70.24 | 90,065.47 | 1,005,522 | 0 | 0.0 | 540 | 0 | 0 | 8.96 | 8.96 | 0.00 |
| 022 | RSW-RS | 10,736,056.49 | 19,326.88 | 10,716,729.61 | 113,530,093 | 1,365 | 791.8 | 77,378 | 0 | 0 | 9.46 | 9.44 | 0.00 |
| 028 | AORH-W ON | 661.91 | 1.19 | 660.72 | 7,106 | 4,597 | 0.0 | 7 | 0 | 0 | 9.31 | 9.30 | 0.00 |
| 030 | RSW-ONPK | 12,705.69 | 44.38 | 12,661.31 | 136,671 | 80,964 | 0.0 | 70 | 0 | 0 | 9.30 | 9.26 | 0.00 |
| 032 | RS LM-ON | 19,413.04 | 26.73 | 19,386.31 | 206,214 | 112,152 | 42.0 | 101 | 0 | 0 | 9.41 | 9.40 | 0.00 |
| 034 | AORH-ON | 46.65 | 0.18- | 46.83 | 511 | 350 | 0.0 | 2 | 0 | 0 | 9.13 | 9.16 | 0.00 |
| 036 | RS-TOD-ON | 322.57 | 0.01 | 322.56 | 3,066 | 1,364 | 0.0 | 3 | 0 | 0 | 10.52 | 10.52 | 0.00 |
| 062 | RS-NT MTR | 98.94 | 0.04- | 98.98 | 1,018 | 0 | 0.0 | 1 | 0 | 0 | 9.72 | 9.72 | 0.00 |
| 093 | OL 175 MV | 12,357.48 | 13.47 | 12,344.01 | 83,257 | 0 | 0.0 | 0 | 1,281 | 1,329 | 14.84 | 14.83 | 1.60 |
| 094 | OL 100 HP | 202,815.74 | 31.61- | 202,847.35 | 824,047 | 0 | 0.0 | 0 | 22,264 | 23,875 | 24.61 | 24.62 | 4,314.23 |
| 095 | OL 400 MV | 1,874.85 | 1.69 | 1,873.16 | 15,839 | 0 | 0.0 | 0 | 85 | 113 | 11.84 | 11.83 | 2.85 |
| 097 | OL 200 HP | 26,158.65 | 23.92 | 26,134.73 | 159,597 | 0 | 0.0 | 0 | 1,706 | 2,165 | 16.39 | 16.38 | 917.16 |
| 098 | OL 400 HP | 3,792.71 | 9.98 | 3,782.73 | 29,333 | 0 | 0.0 | 0 | 79 | 226 | 12.93 | 12.90 | 293.23 |
| 099 | OL175 MVP | 110.94 | 0.27 | 110.67 | 668 | 0 | 0.0 | 0 | 5 | 11 | 16.61 | 16.57 | 0.00 |
| 107 | OL 200HPF | 24,359.75 | 16.42 | 24,343.33 | 133,696 | 0 | 0.0 | 0 | 1,304 | 1,798 | 18.22 | 18.21 | 670.89 |
| 109 | OL400 HPF | 83,417.70 | 82.59 | 83,335.11 | 647,414 | 0 | 0.0 | 0 | 1,852 | 4,353 | 12.88 | 12.87 | 2,564.48 |
| 110 | OL 250 MH | 2,522.49 | 2.31 | 2,520.18 | 11,543 | 0 | 0.0 | 0 | 59 | 130 | 21.85 | 21.83 | 251.15 |
| 111 | OL100 HPP | 10,615.99 | 2.61 | 10,613.38 | 29,249 | 0 | 0.0 | 0 | 195 | 832 | 36.30 | 36.29 | 38.85 |
| 113 | OL 150 HP | 205,658.54 | 193.97 | 205,464.57 | 1,046,142 | 0 | 0.0 | 0 | 18,643 | 20,856 | 19.66 | 19.64 | 10,079.65 |
| 116 | OL 400 MH | 21,386.70 | 27.01 | 21,359.69 | 124,171 | 0 | 0.0 | 0 | 269 | 896 | 17.22 | 17.20 | 676.62 |
| 122 | OL150 HPP | 1,391.70 | 0.86 | 1,390.84 | 3,433 | 0 | 0.0 | 0 | 14 | 66 | 40.54 | 40.51 | 9.10 |
| 131 | OL 1000MH | 3,485.39 | 6.32 | 3,479.07 | 23,102 | 0 | 0.0 | 0 | 27 | 72 | 15.09 | 15.06 | 35.60 |
| 204 | SGS-MTRD | 18,133.84 | 13.22 | 18,120.62 | 110,621 | 0 | 0.0 | 526 | 0 | 0 | 16.39 | 16.38 | 0.00 |
| 211 | SGS | 1,418,559.34 | 2,071.98 | 1,416,487.36 | 11,588,317 | 11,166 | 10,150.5 | 22,106 | 0 | 0 | 12.24 | 12.22 | 0.00 |
| 213 | SGS-UMR | 20,410.30 | 24.64 | 20,385.66 | 119,845 | 0 | 0.0 | 635 | 0 | 0 | 17.03 | 17.01 | 0.00 |
| 214 | MGS - AF | 11,414.23 | 17.73 | 11,396.50 | 111,507 | 0 | 2,287.6 | 77 | 0 | 0 | 10.24 | 10.22 | 0.00 O |
| 215 | MGS SEC | 4,842,552.03 | 9,374.76 | 4,833,177.27 | 46,360,992 | 0 | 166,818.0 | 7,228 | 0 | 0 | 10.45 | 10.43 | 0.00 - |
| 217 | MGS PRI | 15,444.91 | 39.94 | 15,404.97 | 153,294 | 0 | 587.2 | 24 | 0 | 0 | 10.08 | 10.05 | 0.00 ¢ |
| 218 | MGS M SEC | 2,017.09 | 6.91 | 2,010.18 | 19,444 | 0 | 60.4 | 2 | 0 | 0 | 10.37 | 10.34 | 0.00 - |
| 220 | MGSCC PRI | 30,032.82 | 31.82 | 30,001.00 | 251,793 | 0 | 1,250.7 | 58 | 0 | 0 | 11.93 | 11.91 | $0.008>$ |
| 223 | MGS LM ON | 7,357.29 | 12.10 | 7,345.19 | 76,516 | 44,515 | 0.0 | 50 | 0 | 0 | 9.62 | 9.60 | 0.09 \# |
| 225 | SGSTOD ON | 41.25 | 0.02- | 41.27 | 118 | 78 | 0.0 | 2 | 0 | 0 | 34.96 | 34.97 | 0.009 |
| 229 | MGS-TOD | 37,115.57 | 122.90 | 36,992.67 | 383,874 | 239,392 | 90.0 | 79 | 0 | 0 | 9.67 | 9.64 | 0.00 O |
| 236 | MGSCC SUB | 12,626.22 | 18.80 | 12,607.42 | 94,343 | 0 | 498.0 | 15 | 0 | 0 | 13.38 | 13.36 | 0.08 ¢ |
| 240 | LGS SEC | 4,675,665.13 | 9,905.21 | 4,665,759.92 | 49,758,092 | 0 | 142,765.0 | 753 | 0 | 0 | 9.40 | 9.38 | 0.00 |
| 242 | LGS M SEC | 72,937.27 | 89.34 | 72,847.93 | 810,927 | 0 | 1,646.0 | 7 | 0 | 0 | 8.99 | 8.98 | 0.00 |
| 244 | LGS PRI | 769,081.60 | 2,487.03 | 766,594.57 | 8,783,922 | 0 | 39,506.0 | 92 | 0 | 0 | 8.76 | 8.73 | 0.00 |





















| REVENUE EXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | BILLINGDEMAND | \# OF CUST | September 2011 |  |  | Page:PATION | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | REALIZATION |  |  |  |
|  |  |  |  |  | \# OF EXCL | $\begin{aligned} & \text { \#OF } \\ & \text { LAMPS } \end{aligned}$ | INCL FUEL | EXCL FUEL | FACILITY CHARGE |
| 5,147.04 | 65,325 | 0 | 223.0 | 1 | 0 | 0 | 7.97 | 7.88 | 0.00 |
| 256,410.21 | 3,587,990 | 0 | 16,628.0 | 32 | 0 | 0 | 7.25 | 7.15 | 0.00 |
| 19,487.38 | 223,126 | 147,700 | 149.6 | 9 | 0 | 0 | 8.83 | 8.73 | 0.00 |
| 26,370.32 | 379,448 | 0 | 744.0 | 1 | 0 | 0 | 7.05 | 6.95 | 0.00 |
| 2,180,121.15 | 30,266,065 | 0 | 87,781.0 | 50 | 0 | 0 | 7.30 | 7.20 | 0.00 |
| 1,944,320.92 | 29,502,991 | 0 | 96,586.0 | 34 | 0 | 0 | 6.68 | 6.59 | 0.00 |
| 197,073.97 | 3,118,780 | 0 | 11,056.0 | 4 | 0 | 0 | 6.42 | 6.32 | 0.00 |
| 8,396,715.95 | 155,658,683 | 0 | 264,626.0 | 14 | 0 | 0 | 5.49 | 5.39 | 0.00 |
| 1,562,613.33 | 29,688,810 | 0 | 69,757.0 | 4 | 0 | 0 | 5.36 | 5.26 | 0.00 |
| 109,891.58 | 679,146 | 0 | 0.0 | 54 | 0 | 0 | 16.27 | 16.18 | 0.00 |
| 38,709.01 | 458,158 | 0 | 1,721.3 | 14 | 0 | 0 | 8.49 | 8.45 | 0.00 |
| 37,697,937.17 | 492,111,934 | 596,504 | 909,702.9 | 173,126 | 47,752 | 56,812 | 7.76 | 7.66 | 20,020.97 |







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REVENUE EXCL
FUEL CLAUSE

REVENUE









| REVENUE | FUEL CLAUSE | REVENUEEXCL <br> FUEL CLAUSE | METERED KWH | OFF PEAK KWH | BILLING DEMAND | \# OF CUST INCL | \# OF CUST EXCL | \# OF LAMPS | REALIZATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | INCL FUEL | EXCL FUEL | FACILITY CHARGE |
| 676,796.41 | 2,142 96- | 678,939.37 | 7,736,875 | 0 | 35,843.0 | 89 | 0 | 0 | 8.75 | 8.78 | 0.00 |
| 6,599.43 | 28 05- | 6,627.48 | 85,190 | 0 | 230.0 | 1 | 0 | 0 | 7.75 | 7.78 | 0.00 |
| 275,698.82 | 1,395 02- | 277,093.84 | 4,160,764 | 0 | 13,056.0 | 27 | 0 | 0 | 6.63 | 6.66 | 0.00 |
| 17,346.32 | 109 26- | 17,455.58 | 192,036 | 0 | 1,946.0 | 1 | 0 | 0 | 9.03 | 9.09 | 0.00 |
| 21,812.30 | 50.78- | 21,863.08 | 240,696 | 146,700 | 146.4 | 9 | 0 | 0 | 9.06 | 9.08 | 0.00 |
| 48,047.10 | 324 25- | 48,371.35 | 673,346 | 0 | 1,334.0 | 3 | 0 | 0 | 7.14 | 7.18 | 0.00 |
| 1,322,369.53 | 6,232.46- | 1,328,601.99 | 18,217,147 | 0 | 59,129.0 | 44 | 0 | 0 | 7.26 | 7.29 | 0.00 |
| 1,214,026.42 | 9,460 02- | 1,223,486.44 | 17,492,906 | 0 | 78,414.0 | 27 | 0 | 0 | 6.94 | 6.99 | 0.00 |
| 126,023.50 | 910 50- | 126,934.00 | 1,742,689 | 0 | 7,455.0 | 3 | 0 | 0 | 7.23 | 7.28 | 0.00 |
| 299,459.77 | 1,893.63- | 301,353.40 | 4,864,221 | 0 | 3,019.0 | 4 | 0 | 0 | 6.16 | 6.20 | 0.00 |
| 119,733.00 | 1,182 00- | 120,915.00 | 1,872,648 | 0 | 5.0 | 1 | 0 | 0 | 6.39 | 6.46 | 0.00 |
| 2,657,574.78- | 88,064 51- | 2,569,510.27- | 60,605,888- | 18,728,156- | 78,366.0 | 10 | 0 | 0 | 4.39 | 4.24 | 0.00 |
| 1,612,727.28 | 10,450 25- | 1,623,177.53 | 31,586,643 | 0 | 76,552.0 | 4 | 0 | 0 | 5.11 | 5.14 | 0.00 |
| 9,998,905.78 | 253 00- | 9,999,158.78 | 226,157,578 | 83,785,367- | 158,017.0 | 5 | 0 | 0 | 4.42 | 4.42 | 0.00 |
| 106,366.99 | 387 21- | 106,754.20 | 615,232 | 0 | 0.0 | 56 | 0 | 0 | 17.29 | 17.35 | 0.00 |
| 26,127.35 | 33 97- | 26,161.32 | 305,900 | 0 | 782.1 | 12 | 0 | 0 | 8.54 | 8.55 | 0.00 |
| 41,554,430.66 | 198,509.49- | 41,752,940.15 | 548,513,905 | 101,905,665- | 838,408.6 | 172,529 | 47,687 | 56,734 | 7.58 | 7.61 | 20,207.78 |

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| October 2012 | Page: | 1 |
| :---: | :---: | :---: |
|  | REALIZATION |  |
| $\begin{array}{cc}\text { \#OF } \\ \text { LAMPS }\end{array}$ | INCL FUEL EXCL FUEL | $\begin{array}{c}\text { FACILITY } \\ \text { CHARGE }\end{array}$ |










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$\underset{\text { KWH }}{\substack{\text { OFF PEAK }}}$







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| REVENUE | FUEL CLAUSE | REVENUE EXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | BILLING DEMAND | \# OF CUST INCL | January 2013 |  |  | Page: | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | REALIZATION |  |  |  |  |
|  |  |  |  |  |  |  | \# OF EXCL | $\begin{aligned} & \text { \#OF } \\ & \text { LAMPS } \end{aligned}$ | INCL FUEL | EXCLFUEL | FACILITY CHARGE |
| 63,303.48 | 915 51- | 64,218.99 | 744,377 | 0 | 1,633.0 | 7 | 0 | 0 | 8.50 | 8.63 | 0.00 |
| 651,945.86 | 6,962.61- | 658,908.47 | 7,870,506 | 0 | 32,859.0 | 83 | 0 | 0 | 8.28 | 8.37 | 0.00 |
| 3,804.01 | 85 02- | 3,889.03 | 50,377 | 0 | 160.0 | 1 | 0 | 0 | 7.55 | 7.72 | 0.00 |
| 327,713.80 | 12,778.12- | 340,491.92 | 5,631,668 | 0 | 13,384.0 | 24 | 0 | 0 | 5.82 | 6.05 | 0.00 |
| 31,561.26 | 1,724 99- | 33,286.25 | 456,793 | 0 | 578.0 | 2 | 0 | 0 | 6.91 | 7.29 | 0.00 |
| 19,995.08 | 159.71 - | 20,154.79 | 225,577 | 141,740 | 80.0 | 9 | 0 | 0 | 8.86 | 8.93 | 0.00 |
| 78,632.64 | 3,138 93- | 81,771.57 | 1,202,626 | 0 | 2,380.0 | 3 | 0 | 0 | 6.54 | 6.80 | 0.00 |
| 1,334,368.24 | 13,627 92- | 1,347,996.16 | 21,169,137 | 0 | 61,974.0 | 38 | 0 | 0 | 6.30 | 6.37 | 0.00 |
| 1,298,774.47 | 45,27400- | 1,344,048.47 | 20,609,488 | 0 | 65,602.0 | 23 | 0 | 0 | 6.30 | 6.52 | 0.00 |
| 109,760.70 | 9,320 52- | 119,081.22 | 1,963,435 | 0 | 7,546.0 | 2 | 0 | 0 | 5.59 | 6.06 | 0.00 |
| 184,797.42 | 8,387.67- | 193,185.09 | 3,572,193 | 0 | 3,053.0 | 6 | 0 | 0 | 5.17 | 5.41 | 0.00 |
| 113,725.72 | 10,082.17- | 123,807.89 | 2,022,208 | 0 | 2,671.0 | 1 | 0 | 0 | 5.62 | 6.12 | 0.00 |
| 7,738,178.38 | 891,417 02- | 8,629,595.40 | 167,037,375 | 0 | 100,595.0 | 13 | 0 | 0 | 4.63 | 5.17 | 0.00 |
| 1,689,952.40 | 54,911.18- | 1,744,863.58 | 34,843,314 | 6,613,345- | 100,881.0 | 4 | 0 | 0 | 4.85 | 5.01 | 0.00 |
| 273,592.16- | 4,897.00 | 278,489.16- | 3,123,525- | 0 | 183,034.0 | 0 | 0 | 0 | 8.76 | 8.92 | 0.00 |
| 101,564.10 | 5,117 89- | 106,681.99 | 894,670 | 0 | 0.0 | 56 | 0 | 0 | 11.35 | 11.92 | 0.00 |
| 30,221.89 | 281.29 | 29,940.60 | 363,617 | 0 | 728.4 | 11 | 0 | 0 | 8.31 | 8.23 | 0.00 |
| 49,031,598.12 | 1,365,497 93- | 50,397,096.05 | 658,278,583 | 5,672,029- | 923,825.5 | 173,021 | 47,674 | 56,733 | 7.45 | 7.66 | 20,087.08 |






















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 TARIFF SUMMARY ReVENUE - ALL REVENUE CLASSES





























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REALIZATION

| FUEL | EXCLFUEL |
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| 8.77 | 8.66 |
| 10.96 | 10.87 |
| 11.86 | 11.78 |
| 9.71 | 9.64 |
| 9.33 | 9.24 |
| 8.61 | 8.52 |
| 8.65 | 8.54 |
| 6.68 | 6.54 |
| 5.82 | 5.67 |
| 5.71 | 5.63 |
| 24.10 | 23.94 |
| 11.00 | 10.94 |














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AEP American Electric Power

| REVENUE | FUEL CLAUSE | REVENUE EXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFFPEAKK } \\ & \text { KWH } \end{aligned}$ | BILLINGDEMAND | INCL <br> \# OF CUST | \# OF EXCL | $\begin{aligned} & \text { \#OF } \\ & \text { LAMPS } \end{aligned}$ | REALIZATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | INCL FUEL | EXCLFUEL | FACILITY CHARGE |
| 635,230.75 | 8,737.56 | 626,493.19 | 5,784,140 | 0 | 20,887.0 | 57 | 0 | 0 | 10.98 | 10.83 | 0.00 |
| 9,105.06 | 139.22 | 8,965.84 | 96,076 | 0 | 196.0 | 1 | 0 | 0 | 9.48 | 9.33 | 0.00 |
| 202,105.41 | 3,812.19 | 198,293.22 | 2,588,783 | 0 | 6,165.0 | 17 | 0 | 0 | 7.81 | 7.66 | 0.00 |
| 6,276.36 | 65.60 | 6,210.76 | 45,310 | 0 | 343.0 | 2 | 0 | 0 | 13.85 | 13.71 | 0.00 |
| 21,205.10 | 282.32 | 20,922.78 | 188,870 | 86,596 | 130.5 | 8 | 0 | 0 | 11.23 | 11.08 | 0.00 |
| 27,412.67 | 379.33 | 27,033.34 | 271,318 | 78,960 | 269.0 | 2 | 0 | 0 | 10.10 | 9.96 | 0.00 |
| 1,154,529.36 | 15,257.03 | 1,139,272.33 | 10,132,396 | 0 | 34,863.0 | 160 | 0 | 0 | 11.39 | 11.24 | 0.00 |
| 14,626.64 | 246.98 | 14,379.66 | 158,397 | 0 | 420.0 | 1 | 0 | 0 | 9.23 | 9.08 | 0.00 |
| 101,075.93 | 1,993.38 | 99,082.55 | 1,556,352 | 0 | 3,402.0 | 1 | 0 | 0 | 6.49 | 6.37 | 0.00 |
| 119,256.46 | 1,915.85 | 117,340.61 | 1,328,067 | 0 | 2,389.0 | 4 | 0 | 0 | 8.98 | 8.84 | 0.00 |
| 2,254,937.67 | 40,077.24 | 2,214,860.43 | 26,783,229 | 0 | 56,102.0 | 37 | 0 | 0 | 8.42 | 8.27 | 0.00 |
| 1,486,314.62 | 24,948.85 | 1,461,365.77 | 17,963,312 | 0 | 53,184.0 | 20 | 0 | 0 | 8.27 | 8.14 | 0.00 |
| 37,423.36 | 757.56 | 36,665.80 | 631,295 | 0 | 5.0 | 1 | 0 | 0 | 5.93 | 5.81 | 0.00 |
| 7,882,305.39 | 165,576.88 | 7,716,728.51 | 135,203,876 | 0 | 328,172.5 | 8 | 0 | 0 | 5.83 | 5.71 | 0.00 |
| 1,428,475.64 | 37,220.71 | 1,391,254.93 | 24,382,469 | 0 | 37,691.0 | 2 | 0 | 0 | 5.86 | 5.71 | 0.00 |
| 133,505.36 | 738.53 | 132,766.83 | 614,559 | 0 | 0.0 | 55 | 0 | 0 | 21.72 | 21.60 | 0.00 |
| 18,350.19 | 284.69 | 18,065.50 | 173,072 | 0 | 262.4 | 10 | 0 | 0 | 10.60 | 10.44 | 0.00 |
| 51,754,974.22 | 763,950.84 | 50,991,023.38 | 529,582,781 | 645,670 | 814,070.4 | 168,493 | 46,264 | 55,565 | 9.77 | 9.63 | 22,197.95 |



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$\underset{\text { KWH }}{\substack{\text { OFF PEAK }}}$







|  |  |  |  |  |  |  |  |  | REALIZATION |  |  |
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| REVENUE | FUEL CLAUSE | REVENUE EXCL FUEL CLAUSE | METERED KWH | OFF PEAK KWH | BILLING DEMAND | \# OF CUST INCL | $\begin{aligned} & \text { \#OF } \\ & \text { CUST } \end{aligned}$ EXCL | $\begin{aligned} & \text { \#OF } \\ & \text { LAMPS } \end{aligned}$ | INCL FUEL | EXCL FUEL | FACILITY CHARGE |
| 503,937.39 | 12,447.67 | 491,489.72 | 4,828,623 | 0 | 21,403.0 | 58 | 0 | 0 | 10.44 | 10.18 | 0.00 |
| 6,465.53 | 165.59 | 6,299.94 | 66,961 | 0 | 209.0 | 1 | 0 | 0 | 9.66 | 9.41 | 0.00 |
| 202,598.25 | 6,482.93 | 196,115.32 | 2,614,190 | 0 | 7,674.0 | 18 | 0 | 0 | 7.75 | 7.50 | 0.00 |
| 4,197.05 | 61.02 | 4,136.03 | 25,794 | 0 | 343.0 | 2 | 0 | 0 | 16.27 | 16.03 | 0.00 |
| 19,808.23 | 464.42 | 19,343.81 | 183,273 | 110,772 | 71.0 | 8 | 0 | 0 | 10.81 | 10.55 | 0.00 |
| 15,288.89 | 398.63 | 14,890.26 | 157,141 | 104,880 | 369.0 | 2 | 0 | 0 | 9.73 | 9.48 | 0.00 |
| 1,291,884.54 | 24,987.64 | 1,266,896.90 | 11,777,113 | 0 | 44,950.0 | 162 | 0 | 0 | 10.97 | 10.76 | 0.00 |
| 18,035.98 | 505.41 | 17,530.57 | 191,255 | 0 | 596.0 | 1 | 0 | 0 | 9.43 | 9.17 | 0.00 |
| 81,589.49 | 2,678.02 | 78,911.47 | 1,317,864 | 0 | 3,276.0 | 1 | 0 | 0 | 6.19 | 5.99 | 0.00 |
| 1,498,614.59 | 41,850.58 | 1,456,764.01 | 26,976,000 | 0 | 41,616.0 | 2 | 0 | 0 | 5.56 | 5.40 | 0.00 |
| 96,841.54 | 2,738.12 | 94,103.42 | 1,143,771 | 0 | 2,383.0 | 4 | 0 | 0 | 8.47 | 8.23 | 0.00 |
| 1,711,631.30 | 56,823.33 | 1,654,807.97 | 22,173,746 | 0 | 53,212.0 | 36 | 0 | 0 | 7.72 | 7.46 | 0.00 |
| 1,277,492.10 | 34,561.15 | 1,242,930.95 | 15,230,996 | 0 | 54,292.0 | 18 | 0 | 0 | 8.39 | 8.16 | 0.00 |
| 98,360.26 | 1,477.78 | 96,882.48 | 746,349 | 0 | 5,480.0 | 1 | 0 | 0 | 13.18 | 12.98 | 0.00 |
| 5,921,492.01 | 211,904.36 | 5,709,587.65 | 100,314,826 | 0 | 174,569.0 | 7 | 0 | 0 | 5.90 | 5.69 | 0.00 |
| 1,258,376.58 | 57,102.49 | 1,201,274.09 | 23,011,578 | 0 | 37,393.0 | 2 | 0 | 0 | 5.47 | 5.22 | 0.00 |
| 129,824.41 | 1,325.63 | 128,498.78 | 681,504 | 0 | 0.0 | 55 | 0 | 0 | 19.05 | 18.86 | 0.00 |
| 13,449.28 | 371.24 | 13,078.04 | 125,142 | 0 | 251.5 | 10 | 0 | 0 | 10.75 | 10.45 | 0.00 |
| 39,513,744.10 | 1,034,960.65 | 38,478,783.45 | 427,433,933 | 689,682 | 709,521.6 | 168,556 | 46,243 | 55,465 | 9.24 | 9.00 | 22,205.13 |













| REVENUE | FUEL CLAUSE | REVENUE EXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | BILLINGDEMAND | $\begin{aligned} & \text { \# OF CUST } \\ & \text { INCL } \end{aligned}$ | \#OFCUST EXCL | \#OFLAMPS | REALIZATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | INCL FUEL | EXCL FUEL | FACILITY CHARGE |
| 649,827.26 | 24,585.57 | 625,241.69 | 6,011,121 | 0 | 21,740.0 | 56 | 0 | 0 | 10.81 | 10.40 | 0.00 |
| 6,051.65 | 237.37 | 5,814.28 | 58,602 | 0 | 187.0 | 1 | 0 | 0 | 10.33 | 9.92 | 0.00 |
| 244,333.34 | 11,838.75 | 232,494.59 | 2,901,565 | 0 | 8,412.0 | 20 | 0 | 0 | 8.42 | 8.01 | 0.00 |
| 5,453.78 | 118.37 | 5,335.41 | 29,045 | 0 | 343.0 | 2 | 0 | 0 | 18.78 | 18.37 | 0.00 |
| 22,627.76 | 854.12 | 21,773.64 | 207,730 | 113,644 | 142.0 | 8 | 0 | 0 | 10.89 | 10.48 | 0.00 |
| 25,208.39 | 1,008.48 | 24,199.91 | 248,549 | 145,504 | 500.0 | 3 | 0 | 0 | 10.14 | 9.74 | 0.00 |
| 1,101,151.82 | 39,568.46 | 1,061,583.36 | 9,336,888 | 0 | 35,651.0 | 162 | 0 | 0 | 11.79 | 11.37 | 0.00 |
| 17,390.21 | 719.92 | 16,670.29 | 172,348 | 0 | 555.0 | 1 | 0 | 0 | 10.09 | 9.67 | 0.00 |
| 90,495.15 | 5,345.69 | 85,149.46 | 1,354,332 | 0 | 3,360.0 | 1 | 0 | 0 | 6.68 | 6.29 | 0.00 |
| 774,005.73 | 50,796.98 | 723,208.75 | 13,056,000 | 0 | 20,832.0 | 1 | 0 | 0 | 5.93 | 5.54 | 0.00 |
| 117,004.64 | 5,101.82 | 111,902.82 | 1,256,428 | 0 | 2,365.0 | 4 | 0 | 0 | 9.31 | 8.91 | 0.00 |
| 2,169,834.09 | 105,609.49 | 2,064,224.60 | 25,742,582 | 0 | 52,989.0 | 36 | 0 | 0 | 8.43 | 8.02 | 0.00 |
| 1,447,646.04 | 66,601.59 | 1,381,044.45 | 16,583,294 | 0 | 53,780.0 | 18 | 0 | 0 | 8.73 | 8.33 | 0.00 |
| 107,236.66 | 2,855.20 | 104,381.46 | 724,432 | 0 | 4,827.0 | 1 | 0 | 0 | 14.80 | 14.41 | 0.00 |
| 6,963,185.59 | 461,901.14 | 6,501,284.45 | 118,096,253 | 0 | 182,819.8 | 7 | 0 | 0 | 5.90 | 5.51 | 0.00 |
| 1,544,676.59 | 107,986.03 | 1,436,690.56 | 26,325,830 | 0 | 36,785.0 | 2 | 0 | 0 | 5.87 | 5.46 | 0.00 |
| 133,465.02 | 3,097.73 | 130,367.29 | 795,888 | 0 | 0.0 | 55 | 0 | 0 | 16.77 | 16.38 | 0.00 |
| 18,815.35 | 699.84 | 18,115.51 | 167,971 | 0 | 232.0 | 10 | 0 | 0 | 11.20 | 10.78 | 0.00 |
| 42,055,096.51 | 1,751,099.91 | 40,303,996.60 | 431,422,751 | 652,139 | 683,482.1 | 168,201 | 46,115 | 55,434 | 9.75 | 9.34 | 22,220.83 |










| REVENUE | FUEL CLAUSE | REVENUE EXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | BILLINGDEMAND | \# OF CUST INCL | \# OF EXCL | \#OF LAMPS | REALIZATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | INCL FUEL | EXCL FUEL | FACILITY CHARGE |
| 815,149.38 | 32,581.28 | 782,568.10 | 6,972,586 | 0 | 21,380.0 | 57 | 0 | 0 | 11.69 | 11.22 | 0.00 |
| 5,389.17 | 220.15 | 5,169.02 | 47,237 | 0 | 144.0 | 1 | 0 | 0 | 11.41 | 10.94 | 0.00 |
| 465,870.83 | 24,242.95 | 441,627.88 | 5,179,879 | 0 | 12,328.0 | 19 | 0 | 0 | 8.99 | 8.53 | 0.00 |
| 6,718.10 | 161.35 | 6,556.75 | 34,389 | 0 | 343.0 | 2 | 0 | 0 | 19.54 | 19.07 | 0.00 |
| 26,152.90 | 1,042.92 | 25,109.98 | 222,803 | 104,768 | 71.0 | 8 | 0 | 0 | 11.74 | 11.27 | 0.00 |
| 30,250.25 | 1,154.10 | 29,096.15 | 247,165 | 99,552 | 522.0 | 3 | 0 | 0 | 12.24 | 11.77 | 0.00 |
| 1,280,192.49 | 46,529.20 | 1,233,663.29 | 9,928,507 | 0 | 35,332.0 | 162 | 0 | 0 | 12.89 | 12.43 | 0.00 |
| 16,887.42 | 704.33 | 16,183.09 | 149,291 | 0 | 469.0 | 1 | 0 | 0 | 11.31 | 10.84 | 0.00 |
| 119,705.29 | 8,384.55 | 111,320.74 | 1,830,140 | 0 | 4,116.0 | 1 | 0 | 0 | 6.54 | 6.08 | 0.00 |
| 713,646.07 | 49,678.52 | 663,967.55 | 10,872,000 | 0 | 20,544.0 | 1 | 0 | 0 | 6.56 | 6.11 | 0.00 |
| 140,159.59 | 6,767.61 | 133,391.98 | 1,453,488 | 0 | 2,924.0 | 4 | 0 | 0 | 9.64 | 9.18 | 0.00 |
| 2,635,356.69 | 136,775.95 | 2,498,580.74 | 29,261,356 | 0 | 53,053.0 | 36 | 0 | 0 | 9.01 | 8.54 | 0.00 |
| 1,654,691.36 | 90,964.14 | 1,563,727.22 | 19,651,084 | 0 | 54,900.0 | 16 | 0 | 0 | 8.42 | 7.96 | 0.00 |
| 72,768.00 | 3,463.00 | 69,305.00 | 758,000 | 0 | 5.0 | 1 | 0 | 0 | 9.60 | 9.14 | 0.00 |
| 7,741,311.05 | 535,392.21 | 7,205,918.84 | 116,838,160 | 25,968,000- | 182,969.0 | 7 | 0 | 0 | 6.63 | 6.17 | 0.00 |
| 1,873,631.84 | 137,817.81 | 1,735,814.03 | 29,438,365 | 0 | 35,595.0 | 2 | 0 | 0 | 6.36 | 5.90 | 0.00 |
| 140,823.50 | 3,845.13 | 136,978.37 | 841,440 | 0 | 0.0 | 55 | 0 | 0 | 16.74 | 16.28 | 0.00 |
| 25,149.31 | 994.12 | 24,155.19 | 211,362 | 0 | 209.7 | 10 | 0 | 0 | 11.90 | 11.43 | 0.00 |
| 49,339,325.50 | 2,165,830.19 | 47,173,495.31 | 465,575,442 | 25,391,369- | 689,887.7 | 168,263 | 46,220 | 55,167 | 10.60 | 10.13 | 22,164.71 |










| TARIFF |  | REVENUE | FUEL CLAUSE | REVENUEEXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | BILLINGDEMAND | \# OF CUST | \#OF EXCL | $\begin{aligned} & \text { \#OF } \\ & \text { LAMPS } \end{aligned}$ | REALIZATION |  | CHARGE <br> FACILITY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | INCL FUEL |  |  |  |  |  |  |  |  | EXCLFUEL |  |
| 244 | LGS PRI |  | 754,778.52 | 25,472.48 | 729,306.04 | 6,885,779 | 0 | 23,362.0 | 58 | 0 | 0 | 10.96 | 10.59 | 0.00 |
| 246 | LGS M PRI | 4,358.76 | 151.38 | 4,207.38 | 40,466 | 0 | 125.0 | 1 | 0 | 0 | 10.77 | 10.40 | 0.00 |
| 248 | LGS SUB | 177,019.28 | 7,035.40 | 169,983.88 | 2,205,377 | 0 | 9,271.0 | 18 | 0 | 0 | 8.03 | 7.71 | 0.00 |
| 250 | LGS TRAN | 6,239.62 | 176.98 | 6,062.64 | 45,203 | 0 | 343.0 | 2 | 0 | 0 | 13.80 | 13.41 | 0.00 |
| 251 | LGS-LM-TD | 24,143.07 | 751.78 | 23,391.29 | 201,885 | 125,896 | 97.9 | 8 | 0 | 0 | 11.96 | 11.59 | 0.00 |
| 256 | LGSSECTOD | 21,234.65 | 565.64 | 20,669.01 | 167,107 | 82,672 | 475.0 | 3 | 0 | 0 | 12.71 | 12.37 | 0.00 |
| 260 | PS SEC | 1,101,795.53 | 31,784.70 | 1,070,010.83 | 9,056,986 | 0 | 36,975.0 | 162 | 0 | 0 | 12.17 | 11.81 | 0.00 |
| 264 | PS PRI | 16,511.11 | 518.25 | 15,992.86 | 158,827 | 0 | 559.0 | 1 | 0 | 0 | 10.40 | 10.07 | 0.00 |
| 321 | CS-IRP | 60,734.52 | 4,586.26 | 56,148.26 | 955,312 | 0 | 3,906.0 | 0 | 0 | 0 | 6.36 | 5.88 | 0.00 |
| 331 | CS-IRP ST | 693,402.00 | 59,469.00 | 633,933.00 | 12,387,402 | 0 | 5.0 | 1 | 0 | 0 | 5.60 | 5.12 | 0.00 |
| 356 | IGS SEC | 121,596.52 | 5,539.41 | 116,057.11 | 1,433,639 | 0 | 2,203.0 | 4 | 0 | 0 | 8.48 | 8.10 | 0.00 |
| 358 | IGS PRI | 1,940,468.58 | 87,437.00 | 1,853,031.58 | 24,432,767 | 0 | 52,467.0 | 35 | 0 | 0 | 7.94 | 7.58 | 0.00 |
| 359 | IGS SUB | 1,706,365.54 | 88,372.29 | 1,617,993.25 | 20,921,103 | 0 | 55,573.0 | 17 | 0 | 0 | 8.16 | 7.73 | 0.00 |
| 360 | IGS | 54,044.27 | 3,802.61 | 50,241.66 | 792,000 | 0 | 2,656.0 | 1 | 0 | 0 | 6.82 | 6.34 | 0.00 |
| 371 | IGS | 7,587,892.83 | 563,076.14 | 7,024,816.69 | 119,821,469 | 89,535,000- | 184,362.0 | 7 | 0 | 0 | 6.33 | 5.86 | 0.00 |
| 372 | IGS | 1,541,697.36 | 92,490.78 | 1,449,206.58 | 26,065,440 | 0 | 39,563.0 | 2 | 0 | 0 | 5.91 | 5.56 | 0.00 |
| 528 | SL | 143,641.85 | 4,379.11 | 139,262.74 | 915,128 | 0 | 0.0 | 55 | 0 | 0 | 15.70 | 15.22 | 0.00 |
| 540 | MW | 19,445.01 | 512.93 | 18,932.08 | 167,821 | 0 | 283.8 | 10 | 0 | 0 | 11.59 | 11.28 | 0.00 |
| Grand Total |  | 55,170,225.02 | 2,125,906.71 | 53,044,318.31 | 540,372,222 | 88,721,065- | 695,487.4 | 168,533 | 46,223 | 55,388 | 10.21 | 9.82 | 22,343.35 |







| TARIFF |  | REVENUE | FUEL CLAUSE | REVENUEEXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | BILLINGDEMAND | \# OF CUST INCL | \#OF EXCL | $\begin{aligned} & \text { \# OF } \\ & \text { LAMPS } \end{aligned}$ | REALIZATION |  | CHARGE <br> FACILITY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | INCL FUEL |  |  |  |  |  |  |  |  | EXCLFUEL |  |
| 244 | LGS PRI |  | 702,508.63 | 13,016.16 | 689,492.47 | 6,671,884 | 0 | 23,133.0 | 59 | 0 | 0 | 10.53 | 10.33 | 0.00 |
| 246 | LGS M PRI | 4,064.36 | 79.50 | 3,984.86 | 39,680 | 0 | 125.0 | 1 | 0 | 0 | 10.24 | 10.04 | 0.00 |
| 248 | LGS SUB | 183,172.45 | 4,441.37 | 178,731.08 | 2,319,774 | 0 | 7,276.0 | 17 | 0 | 0 | 7.90 | 7.70 | 0.00 |
| 250 | LGS TRAN | 6,770.13 | 135.80 | 6,634.33 | 66,433 | 0 | 343.0 | 2 | 0 | 0 | 10.19 | 9.99 | 0.00 |
| 251 | LGS-LM-TD | 32,027.60 | 570.85 | 31,456.75 | 289,123 | 171,604 | 97.9 | 8 | 0 | 0 | 11.08 | 10.88 | 0.00 |
| 256 | LGSSECTOD | 20,623.68 | 331.53 | 20,292.15 | 170,786 | 101,008 | 554.0 | 3 | 0 | 0 | 12.08 | 11.88 | 0.00 |
| 260 | PS SEC | 975,115.45 | 16,777.20 | 958,338.25 | 8,440,471 | 0 | 34,415.0 | 162 | 0 | 0 | 11.55 | 11.35 | 0.00 |
| 264 | PS PRI | 20,819.10 | 423.21 | 20,395.89 | 220,864 | 0 | 664.0 | 1 | 0 | 0 | 9.43 | 9.23 | 0.00 |
| 321 | CS-IRP | 135,020.68 | 6,611.67 | 128,409.01 | 2,037,797 | 0 | 4,583.0 | 2 | 0 | 0 | 6.63 | 6.30 | 0.00 |
| 331 | CS-IRP ST | 703,035.16 | 25,022.70 | 678,012.46 | 11,948,598 | 26,976,000- | 20,856.0 | 1 | 0 | 0 | 5.88 | 5.67 | 0.00 |
| 356 | IGS SEC | 109,095.35 | 2,493.50 | 106,601.85 | 1,254,377 | 0 | 2,829.0 | 4 | 0 | 0 | 8.70 | 8.50 | 0.00 |
| 358 | IGS PRI | 1,670,193.52 | 38,901.01 | 1,631,292.51 | 20,164,021 | 0 | 46,103.0 | 35 | 0 | 0 | 8.28 | 8.09 | 0.00 |
| 359 | IGS SUB | 1,500,149.50 | 38,807.76 | 1,461,341.74 | 18,922,947 | 0 | 49,520.0 | 18 | 0 | 0 | 7.93 | 7.72 | 0.00 |
| 360 | IGS | 84,450.87 | 1,848.23 | 82,602.64 | 858,215 | 0 | 2,596.0 | 1 | 0 | 0 | 9.84 | 9.62 | 0.00 |
| 371 | IGS | 7,009,929.34 | 254,186.60 | 6,755,742.74 | 118,964,913 | 0 | 159,407.0 | 7 | 0 | 0 | 5.89 | 5.68 | 0.00 |
| 372 | IGS | 1,294,064.77 | 45,413.41 | 1,248,651.36 | 23,264,943 | 0 | 39,583.0 | 2 | 0 | 0 | 5.56 | 5.37 | 0.00 |
| 528 | SL | 138,256.09 | 1,913.53 | 136,342.56 | 888,714 | 0 | 0.0 | 55 | 0 | 0 | 15.56 | 15.34 | 0.00 |
| 540 | MW | 16,812.20 | 278.83 | 16,533.37 | 152,170 | 0 | 257.5 | 10 | 0 | 0 | 11.05 | 10.87 | 0.00 |
| Grand Total |  | 50,966,144.23 | 1,033,321.39 | 49,932,822.84 | 517,639,342 | 25,983,193- | 680,300.1 | 168,466 | 46,219 | 55,271 | 9.85 | 9.65 | 22,312.42 |










| REVENUE | FUEL CLAUSE | REVENUEEXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | BILLING DEMAND | \# OF CUST INCL | \# OF EXCL | \#OF <br> LAMPS | REALIZATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | INCL FUEL | EXCL FUEL | FACILITY CHARGE |
| 669,674.56 | 10,859.41 | 658,815.15 | 6,178,010 | 0 | 25,722.0 | 58 | 0 | 0 | 10.84 | 10.66 | 0.00 |
| 3,636.50 | 56.69 | 3,579.81 | 33,443 | 0 | 125.0 | 1 | 0 | 0 | 10.87 | 10.70 | 0.00 |
| 181,383.86 | 4,097.54 | 177,286.32 | 2,258,790 | 0 | 6,760.0 | 17 | 0 | 0 | 8.03 | 7.85 | 0.00 |
| 6,005.48 | 78.02 | 5,927.46 | 47,788 | 0 | 343.0 | 2 | 0 | 0 | 12.57 | 12.40 | 0.00 |
| 5,705.48 | 79.51 | 5,625.97 | 40,608 | 53,988 | 97.9 | 8 | 0 | 0 | 14.05 | 13.85 | 0.00 |
| 20,690.67 | 298.14 | 20,392.53 | 166,433 | 90,864 | 554.0 | 3 | 0 | 0 | 12.43 | 12.25 | 0.00 |
| 1,079,364.19 | 17,358.42 | 1,062,005.77 | 9,107,377 | 0 | 39,346.0 | 161 | 0 | 0 | 11.85 | 11.66 | 0.00 |
| 13,019.86 | 254.75 | 12,765.11 | 128,976 | 0 | 541.0 | 1 | 0 | 0 | 10.09 | 9.90 | 0.00 |
| 111,687.83 | 3,065.04 | 108,622.79 | 1,824,336 | 0 | 4,200.0 | 1 | 0 | 0 | 6.12 | 5.95 | 0.00 |
| 634,749.74 | 15,910.28 | 618,839.46 | 11,040,000 | 0 | 41,755.0 | 1 | 0 | 0 | 5.75 | 5.61 | 0.00 |
| 109,545.27 | 2,024.16 | 107,521.11 | 1,192,658 | 0 | 2,798.0 | 4 | 0 | 0 | 9.18 | 9.02 | 0.00 |
| 1,882,134.79 | 38,749.80 | 1,843,384.99 | 21,922,800 | 0 | 53,393.0 | 35 | 0 | 0 | 8.59 | 8.41 | 0.00 |
| 1,760,789.78 | 36,733.23 | 1,724,056.55 | 22,484,111 | 0 | 62,234.0 | 18 | 0 | 0 | 7.83 | 7.67 | 0.00 |
| 81,592.78 | 1,239.31 | 80,353.47 | 860,285 | 0 | 3,276.0 | 1 | 0 | 0 | 9.48 | 9.34 | 0.00 |
| 6,649,841.91 | 164,374.47 | 6,485,467.44 | 111,369,953 | 0 | 194,450.0 | 7 | 0 | 0 | 5.97 | 5.82 | 0.00 |
| 1,401,476.73 | 43,187.65 | 1,358,289.08 | 23,906,888 | 0 | 38,282.0 | 2 | 0 | 0 | 5.86 | 5.68 | 0.00 |
| 136,497.23 | 1,083.92 | 135,413.31 | 751,336 | 0 | 0.0 | 55 | 0 | 0 | 18.17 | 18.02 | 0.00 |
| 17,029.14 | 300.80 | 16,728.34 | 153,880 | 0 | 238.8 | 10 | 0 | 0 | 11.07 | 10.87 | 0.00 |
| 43,363,150.37 | 760,458.35 | 42,602,692.02 | 443,890,642 | 717,994 | 755,484.9 | 168,163 | 46,092 | 55,093 | 9.77 | 9.60 | 22,160.65 |






$A=$ American Electric Power

| REVENUE | FUEL CLAUSE | REVENUE EXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | BILLINGDEMAND | $\begin{aligned} & \text { \# OF CUST } \\ & \text { INCL } \end{aligned}$ | \# OF <br> EXCL | $\begin{aligned} & \text { \#OF } \\ & \text { LAMPS } \end{aligned}$ | REALIZATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | INCL FUEL | EXCLFUEL | FACILITY CHARGE |
| 877,789.13 | 25,351.51 | 852,437.62 | 7,931,345 | 0 | 24,737.0 | 59 | 0 | 0 | 11.07 | 10.75 | 0.00 |
| 4,571.96 | 132.93 | 4,439.03 | 41,399 | 0 | 125.0 | 1 | 0 | 0 | 11.04 | 10.72 | 0.00 |
| 257,632.50 | 9,512.93 | 248,119.57 | 2,995,946 | 0 | 7,016.0 | 17 | 0 | 0 | 8.60 | 8.28 | 0.00 |
| 7,473.52 | 184.65 | 7,288.87 | 56,138 | 0 | 343.0 | 2 | 0 | 0 | 13.31 | 12.98 | 0.00 |
| 23,924.29 | 671.51 | 23,252.78 | 207,813 | 93,112 | 97.9 | 8 | 0 | 0 | 11.51 | 11.19 | 0.00 |
| 26,873.05 | 728.99 | 26,144.06 | 228,275 | 96,480 | 496.0 | 3 | 0 | 0 | 11.77 | 11.45 | 0.00 |
| 1,276,619.71 | 33,146.92 | 1,243,472.79 | 10,476,384 | 0 | 37,016.0 | 165 | 0 | 0 | 12.19 | 11.87 | 0.00 |
| 20,318.30 | 599.25 | 19,719.05 | 194,530 | 0 | 575.0 | 1 | 0 | 0 | 10.44 | 10.14 | 0.00 |
| 107,946.06 | 4,878.74 | 103,067.32 | 1,681,867 | 0 | 4,116.0 | 1 | 0 | 0 | 6.42 | 6.13 | 0.00 |
| 702,039.68 | 42,142.87 | 659,896.81 | 12,192,000 | 0 | 21,024.0 | 1 | 0 | 0 | 5.76 | 5.41 | 0.00 |
| 139,489.17 | 4,864.41 | 134,624.76 | 1,502,495 | 0 | 2,911.0 | 4 | 0 | 0 | 9.28 | 8.96 | 0.00 |
| 2,248,703.38 | 85,301.56 | 2,163,401.82 | 26,520,337 | 0 | 54,850.0 | 35 | 0 | 0 | 8.48 | 8.16 | 0.00 |
| 2,008,024.64 | 83,237.71 | 1,924,786.93 | 25,447,668 | 0 | 74,338.0 | 18 | 0 | 0 | 7.89 | 7.56 | 0.00 |
| 108,630.41 | 2,855.41 | 105,775.00 | 817,500 | 0 | 1,416.0 | 1 | 0 | 0 | 13.29 | 12.94 | 0.00 |
| 7,067,083.32 | 406,111.70 | 6,660,971.62 | 116,688,728 | 0 | 194,337.0 | 7 | 0 | 0 | 6.06 | 5.71 | 0.00 |
| 1,723,213.75 | 93,851.67 | 1,629,362.08 | 29,316,142 | 0 | 38,500.0 | 2 | 0 | 0 | 5.88 | 5.56 | 0.00 |
| 137,159.98 | 2,600.25 | 134,559.73 | 752,471 | 0 | 0.0 | 55 | 0 | 0 | 18.23 | 17.88 | 0.00 |
| 24,455.03 | 681.23 | 23,773.80 | 219,836 | 0 | 288.2 | 10 | 0 | 0 | 11.12 | 10.81 | 0.00 |
| 54,285,933.90 | 1,734,836.04 | 52,551,097.86 | 534,990,176 | 694,788 | 746,336.3 | 168,144 | 46,023 | 55,142 | 10.15 | 9.82 | 21,849.73 |












| REVENUE | FUEL CLAUSE | REVENUEEXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | $\begin{aligned} & \text { BILLING } \\ & \text { DEMAND } \end{aligned}$ | $\begin{aligned} & \text { \# OF CUST } \\ & \text { INCL } \end{aligned}$ | \#OF EXCL | $\begin{aligned} & \text { \#OF } \\ & \text { LAMPS } \end{aligned}$ | REALIZATION |  | FACILITY |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | INCL FUEL | EXCL FUEL |  |
| 541,702.24 | 14,947.68 | 526,754.56 | 4,714,779 | 0 | 20,503.0 | 59 | 0 | 0 | 11.49 | 11.17 | 0.00 |
| 4,141.29 | 96.08 | 4,045.21 | 39,795 | 0 | 125.0 | 1 | 0 | 0 | 10.41 | 10.17 | 0.00 |
| 138,269.23 | 3,282.93 | 134,986.30 | 1,391,705 | 0 | 7,012.0 | 18 | 0 | 0 | 9.94 | 9.70 | 0.00 |
| 5,959.08 | 108.67 | 5,850.41 | 44,593 | 0 | 343.0 | 2 | 0 | 0 | 13.36 | 13.12 | 0.00 |
| 12,011.10 | 233.29 | 11,777.81 | 97,955 | 65,600 | 97.9 | 8 | 0 | 0 | 12.26 | 12.02 | 0.00 |
| 21,098.75 | 411.65 | 20,687.10 | 173,466 | 93,584 | 502.0 | 3 | 0 | 0 | 12.16 | 11.93 | 0.00 |
| 891,013.35 | 16,742.20 | 874,271.15 | 7,084,864 | 0 | 36,251.0 | 163 | 0 | 0 | 12.58 | 12.34 | 0.00 |
| 14,316.82 | 309.08 | 14,007.74 | 132,969 | 0 | 625.0 | 1 | 0 | 0 | 10.77 | 10.53 | 0.00 |
| 137,612.68 | 5,309.78 | 132,302.90 | 1,991,518 | 0 | 8,059.0 | 1 | 0 | 0 | 6.91 | 6.64 | 0.00 |
| 705,192.69 | 30,702.07 | 674,490.62 | 12,432,000 | 0 | 21,144.0 | 1 | 0 | 0 | 5.67 | 5.43 | 0.00 |
| 111,651.02 | 2,723.89 | 108,927.13 | 1,138,516 | 0 | 2,755.0 | 4 | 0 | 0 | 9.81 | 9.57 | 0.00 |
| 1,830,657.98 | 50,477.18 | 1,780,180.80 | 21,217,018 | 0 | 51,673.0 | 35 | 0 | 0 | 8.63 | 8.39 | 0.00 |
| 1,882,281.12 | 56,740.37 | 1,825,540.75 | 23,372,750 | 0 | 67,240.0 | 22 | 0 | 0 | 8.05 | 7.81 | 0.00 |
| 80,984.07 | 1,955.81 | 79,028.26 | 792,000 | 0 | 6,295.0 | 1 | 0 | 0 | 10.23 | 9.98 | 0.00 |
| 6,733,466.57 | 276,956.15 | 6,456,510.42 | 112,484,464 | 0 | 177,707.0 | 6 | 0 | 0 | 5.99 | 5.74 | 0.00 |
| 1,355,779.69 | 54,100.46 | 1,301,679.23 | 22,706,613 | 0 | 38,711.0 | 2 | 0 | 0 | 5.97 | 5.73 | 0.00 |
| 138,488.12 | 1,576.18 | 136,911.94 | 638,817 | 0 | 0.0 | 55 | 0 | 0 | 21.68 | 21.43 | 0.00 |
| 14,874.07 | 302.15 | 14,571.92 | 130,158 | 0 | 292.2 | 10 | 0 | 0 | 11.43 | 11.20 | 0.00 |
| 38,408,882.00 | 943,434.61 | 37,465,447.39 | 393,356,546 | 581,383 | 721,698.3 | 167,576 | 45,909 | 55,101 | 9.76 | 9.52 | 22,135.39 |










| TARIFF |  | REVENUE | FUEL CLAUSE | REVENUEEXCL FUEL CLAUSE | METERED KWH | $\begin{aligned} & \text { OFF PEAK } \\ & \text { KWH } \end{aligned}$ | $\begin{aligned} & \text { BILLING } \\ & \text { DEMAND } \end{aligned}$ | $\begin{gathered} \text { \# OF CUST } \\ \text { INCL } \end{gathered}$ | \# OF EXCL | \#OF LAMPS | REALIZATION |  | FACILITY CHARGE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | INCL FUEL |  |  |  |  |  |  |  |  | EXCL FUEL |  |
| 244 | LGS PRI |  | 808,584.23 | 15,623.36 | 792,960.87 | 6,968,761 | 0 | 23,003.0 | 57 | 0 | 0 | 11.60 | 11.38 | 0.00 |
| 246 | LGS MPRI | 5,741.64 | 114.98 | 5,626.66 | 51,842 | 0 | 142.0 | 1 | 0 | 0 | 11.08 | 10.85 | 0.00 |
| 248 | LGS SUB | 185,857.77 | 5,206.90 | 180,650.87 | 2,332,201 | 0 | 4,130.0 | 17 | 0 | 0 | 7.97 | 7.75 | 0.00 |
| 250 | LGS TRAN | 7,964.08 | 131.96 | 7,832.12 | 59,293 | 0 | 343.0 | 2 | 0 | 0 | 13.43 | 13.21 | 0.00 |
| 251 | LGS-LM-TD | 17,083.08 | 320.48 | 16,762.60 | 143,703 | 63,808 | 97.9 | 8 | 0 | 0 | 11.89 | 11.66 | 0.00 |
| 256 | LGSSECTOD | 30,005.68 | 562.92 | 29,442.76 | 251,503 | 99,648 | 505.0 | 3 | 0 | 0 | 11.93 | 11.71 | 0.00 |
| 260 | PS SEC | 1,236,055.70 | 22,374.52 | 1,213,681.18 | 9,949,415 | 0 | 34,452.0 | 163 | 0 | 0 | 12.42 | 12.20 | 0.00 |
| 264 | PS PRI | 18,164.33 | 378.03 | 17,786.30 | 164,171 | 0 | 537.0 | 1 | 0 | 0 | 11.06 | 10.83 | 0.00 |
| 321 | CS-IRP | 116,176.48 | 3,682.13 | 112,494.35 | 1,728,879 | 0 | 4,074.0 | 1 | 0 | 0 | 6.72 | 6.51 | 0.00 |
| 331 | CS-IRP ST | 706,280.34 | 26,064.50 | 680,215.84 | 12,528,000 | 0 | 21,144.0 | 1 | 0 | 0 | 5.64 | 5.43 | 0.00 |
| 356 | IGS SEC | 133,636.54 | 3,203.07 | 130,433.47 | 1,448,509 | 0 | 2,568.0 | 4 | 0 | 0 | 9.23 | 9.00 | 0.00 |
| 358 | IGS PRI | 2,598,260.22 | 65,724.37 | 2,532,535.85 | 29,337,192 | 0 | 53,843.0 | 37 | 0 | 0 | 8.86 | 8.63 | 0.00 |
| 359 | IGS SUB | 1,968,505.93 | 50,118.26 | 1,918,387.67 | 23,095,290 | 0 | 67,486.0 | 20 | 0 | 0 | 8.52 | 8.31 | 0.00 |
| 360 | IGS | 81,343.51 | 1,647.76 | 79,695.75 | 792,000 | 0 | 3,640.0 | 1 | 0 | 0 | 10.27 | 10.06 | 0.00 |
| 371 | IGS | 6,847,578.79 | 227,994.80 | 6,619,583.99 | 108,672,545 | 0 | 48,237.0 | 6 | 0 | 0 | 6.30 | 6.09 | 0.00 |
| 372 | IGS | 1,939,050.13 | 72,563.53 | 1,866,486.60 | 32,146,336 | 0 | 49,262.0 | 2 | 0 | 0 | 6.03 | 5.81 | 0.00 |
| 528 | SL | 138,571.48 | 1,176.30 | 137,395.18 | 565,034 | 0 | 0.0 | 55 | 0 | 0 | 24.52 | 24.32 | 0.00 |
| 540 | MW | 20,035.14 | 395.06 | 19,640.08 | 171,436 | 0 | 237.2 | 10 | 0 | 0 | 11.69 | 11.46 | 0.00 |
| Grand Total |  | 45,778,220.13 | 990,845.48 | 44,787,374.65 | 448,875,642 | 517,353 | 575,373.6 | 167,499 | 45,855 | 55,047 | 10.20 | 9.98 | 22,076.04 |



















Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_041
For the purposes of this request, refer to the Company's response to AG-1-355, Attachment 1.
a. Confirm that the attached analysis examines a sample of the Company's total pool of residential customers.
b. To the extent the Company's response to (a) is in the affirmative, provide a detailed narrative explaining how the Company arrived at its representative sample of residential customers taking service from the utility.

## RESPONSE

a. Denied. KPCO_R_AG_1_355_Attachment1 examines the Company's entire residential population.
b. Not applicable.

Witness: Alex E. Vaughan

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_042
For the purposes of this request, refer to the Company's response to AG-1-356. Confirm that there exists no analysis, study, report, or other analytical analysis within the Company's possession that is explicitly responsive to the Attorney General's request.

## RESPONSE

The Company cannot confirm the statement. Please refer to the response to AG 1-356 and AG 2-34.

Witness: Matthew J. Satterwhite

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 1 of 2

## DATA REQUEST

AG_2_043 For the purposes of this request, refer to the Company's responses to AG-1-378 and AG1-379.
a. Confirm that the Company does not examine the best practices of its affiliates in developing its economic development programs, as "information regarding the economic development activities of Kentucky Power's affiliates in other jurisdictions have no bearing on the Company's economic development activities."
b. To the extent the Company's response to (a) is in the negative, provide a detailed narrative explaining how the Company assesses the best practices of its affiliates in developing its economic development programs while not examining individual economic development incentives offered by affiliated electric distribution utilities.
c. Confirm or Deny. Does the Company agree that businesses looking to locate in the Company's service territory can decide to locate in the service territory of an affiliate of the Company?
d. Confirm or Deny. Does the Company agree that a business looking to locate in a particular location considers the economic development offerings of local utilities along with other economic and non-economic factors?
e. Confirm or Deny. Does the Company believe it competes with other utilities, including its affiliates, for new large commercial and industrial customers?
f. Provide a detailed narrative explaining why the Company views as irrelevant any examination of the economic development offerings of affiliated utilities when examining the competitiveness of the Company's own economic development offerings.

## RESPONSE

a. Confirmed. While members of the Kentucky Power Economic Development Team informally discuss economic development practices and trends with members of the economic development teams at other AEP operating companies, the service territory specific nature of the economic development needs of each operating company means that Kentucky Power does not formally assess the "best practices" of its affiliates. Kentucky Power has built its economic development program based on the specific needs

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 2 of 2

of its service territory. Kentucky Power focuses this effort primarily through Commissionapproved programs in which the Company partners with municipalities and economic development agencies to fill the local and regional economic development gaps identified in the InSite Gap Analysis provided as Exhibit BNH-1. This study and the recommendations included within were based on an evaluation of the specific economic development needs of the Company's service territory.
b Not applicable.
c. Confirmed. Businesses are free to locate in any location that they chose.
d. Confirmed. The criteria that each business utilizes as part of its site selection process vary. It has been the Company's experience that for many businesses, especially industrial and manufacturing enterprises, economic development offerings including utility prices, are among the criteria used. The weight accorded utility prices varies on the energy-intensive nature of the business. Businesses utilize a variety of other criteria used in considering where to locate, including the proximity to market, transportation infrastructure, the education system in the state, local culture, the availability and skills of the local workforce, amount of government regulation, and the support that the state and local government provide to the businesses already present in the communities.
e. It has been the Company's experience that communities involved in the site selection process for large commercial and industrial facilities will include utilities as part of a community team competing with other communities for the new businesses. To the extent that Kentucky Power is part of a community team competing with another community for a prospect and the other community's team includes a utility, the Company would compete with other utilities.
f. The Attorney General misconstrues the Company's objection. Kentucky Power does not view the economic development practices of its affiliates as irrelevant. The Company's objections in response to AG 1-378(c) and 1-379(c) related to the burden and relevancy of providing detailed analyses of the sums of money spent by the Company's affiliates on discounted rates and economic development programs. Kentucky Power crafted its economic development program based on a thorough understanding of the needs of its service territory. This understanding was developed through the InSite Gap Analysis provided as Exhibit BNH-1 and years of experience of its economic development team members. Because of the service territory specific nature of economic development efforts, details regarding funds spent by other affiliated operating companies are irrelevant to the efficacy of the Company's economic development programs.

Witness: Brad N. Hall

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_044 For the purposes of this request, refer to the Company's response to AG-1-396. Identify the party that has final authority to deny K-PEGG grants.

## RESPONSE

The K-PEGG review team has final authority to deny K-PEGG grants.

Witness: Brad N. Hall

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_045 Refer to the Company's response to Commission staff request 2-49 and the response to AG 1-2. Provide a copy of the complaints which first named Big Sandy and Rockport, respectively, in litigation which lead to the consent decree(s). This request seeks the a copy of the original pleadings that brought Big Sandy and Rockport into the litigation that led to the consent decrees each are either under, or were under, whether amended or not. Alternatively, an adequate response would indicate the date of the original pleadings, and the case style and number. If no such pleadings exist, provide a detailed narrative why not.

## RESPONSE

The Company objects to this request on the grounds that it is not reasonably calculated to lead to the discovery of admissible evidence. The Company further objects to the extent the request calls for publicaly available information. Without waiving these objections, the Company states that the complaints and all other filings in the referenced litigation, United States of America et al. v. American Electric Power Service Corp. et al., Civil Action Nos. C2-99-1182 and consolidated cases, are publically available on the docket of the United States District Court for the Southern District of Ohio. The allegations in the original complaints focused on a limited number of units, and did not include the Rockport Plant or the Big Sandy Plant. During the course of the litigation, discovery was conducted concerning AEP plants not named in the original complaints, including the Rockport Plant the Big Sandy Plant. The first pleading involving the Rockport Plant and the Big Sandy Plant was the Consent Decree lodged with the Court by the parties in October 2007. The 2007 Consent Decree is attached as KPCO_R_AG_2_45_Attachment1.pdf. An opportunity was provided for public comment on the Consent Decree before it was entered as a final order in December 2007.

Witness: Matthew J. Satterwhite


V.
) JUDGE GREGORY L. FROST
) Magistrate Judge Norah McCann King

AMERICAN ELECTRIC POWER SERVICE ) CORP., ET AL.,

Defendants.

## CONSENT DECREE

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WHEREAS, the following complaints have been filed against American Electric Power Service Corporation, Indiana Michigan Power Company, Ohio Power Company, Appalachian Power Company, Cardinal Operating Company, and Columbus Southern Power Company in the above-captioned cases, United States, et al. v. American Electric Power Service Corp., et al., Civil Action Nos. C2-99-1182 and C2-99-1250 ("AEP I") and United States, et al. v. American Electric Power Service Corp., et al., Civil Action Nos. C2-04-1098 and C2-05-360 ("AEP IP"):
(a) the United States of America ("United States"), on behalf of the United States Environmental Protection Agency ("EPA"), filed initial complaints on November 3, 1999 and April 8, 2005, and filed amended complaints on March 3, 2000 and September 17, 2004, pursuant to Sections 113(b), 165, and 167 of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413, 7475 , and 7477 ;
(b) the States of New York, Connecticut, New Jersey, Vermont, New Hampshire, Maryland, and Rhode Island, and the Commonwealth of Massachusetts, after their motion to intervene was granted, filed initial complaints on December 14, 1999 and November 18, 2004, and filed amended complaints on April 5, 2000, September 24, 2002, and September 17, 2004, pursuant to Section 304 of the Act, 42 U.S.C. § 7604; and
(c) Ohio Citizen Action, Citizens Action Coalition of Indiana, Hoosier Environmental Council, Valley Watch, Inc., Ohio Valley Environmental Coalition, West Virginia Environmental Council, Clean Air Council, Izaak Walton League of America, United States Public Interest Research Group, National Wildlife Federation, Indiana Wildlife Federation, League of Ohio Sportsmen, Sierra Club, and Natural Resources Defense Council,

Inc. filed an initial complaint on November 19, 1999, and filed amended complaints on Pagaid of 138 1, 2000 and September 16, 2004, pursuant to Section 304 of the Act, 42 U.S.C. § 7604;

WHEREAS, the complaints filed against Defendants in AEP I and AEP II sought injunctive relief and the assessment of civil penalties for alleged violations of, inter alia, the:
(a) Prevention of Significant Deterioration and Nonattainment New Source

Review provisions in Part C and D of Subchapter I of the Act, 42 U.S.C. §§ 7470-
7492, 7501-7515; and
(b) federally-enforceable state implementation plans developed by Indiana,

Ohio, Virginia, and West Virginia;
WHEREAS, EPA issued notices of violation ("NOVs") to Defendants with respect to such allegations on November 2, 1999, November 22, 1999, and June 18, 2004;

WHEREAS, EPA provided Defendants and the States of Indiana, Ohio, and West Virginia, and the Commonwealth of Virginia, with actual notice pertaining to Defendants' alleged violations, in accordance with Section 113(a)(1) and (b) of the Act, 42 U.S.C.
§ 7413(a)(1) and (b);
WHEREAS, in their complaints, the United States, the States, and Citizen Plaintiffs (collectively, the "Plaintiffs") alleged, inter alia, that Defendants made major modifications to major emitting facilities, and failed to obtain the necessary permits and install the controls necessary under the Act to reduce sulfur dioxide, nitrogen oxides, and/or particulate matter emissions, and further alleged that such emissions damage human health and the environment;

WHEREAS, the Plaintiffs' complaints state claims upon which relief can be granded of 138 against Defendants under Sections 113, 165, and 167 of the Act, 42 U.S.C. §§ 7413, 7475, and 7477, and 28 U.S.C. § 1355;

WHEREAS, Defendants have denied and continue to deny the violations alleged in the complaints and NOVs, maintain that they have been and remain in compliance with the Act and are not liable for civil penalties or injunctive relief, and state that they are agreeing to the obligations imposed by this Consent Decree solely to avoid the costs and uncertainties of litigation and to improve the environment;

WHEREAS, Defendants have installed and operated SCR technology on several Units in the AEP Eastern System, as those terms are defined herein, during the five (5) month ozone season to achieve emission reductions in compliance with the $\mathrm{NO}_{\mathrm{x}}$ SIP Call;

WHEREAS, the Plaintiffs and Defendants anticipate that this Consent Decree, including the installation and operation of pollution control technology and other measures adopted pursuant to this Consent Decree, will achieve significant reductions of emissions from the AEP Eastern System and thereby significantly improve air quality;

WHEREAS, the liability phase of AEP I was tried on July 6-7, 2005, and July 11-12, 2005, and no decision has been rendered;

WHEREAS, the Parties have agreed, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length; that this settlement is fair, reasonable, and in the public interest, and consistent with the goals of the Act; and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

NOW, THEREFORE, without any admission by Defendants, and without adjudication of of the violations alleged in the complaints or the NOVs, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

## I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, Sections 113, 167, and 304 of the Act, 42 U.S.C. $\S 7413,7477$, and 7604 . Solely for the purposes of this Consent Decree, venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree and the underlying complaints, and for no other purpose, Defendants waive all objections and defenses that they may have to the Court's jurisdiction over this action, to the Court's jurisdiction over Defendants, and to venue in this District. Defendants shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Solely for the purposes of the complaints filed by the Plaintiffs in this matter and resolved by the Consent Decree, for the purposes of entry and enforcement of this Consent Decree, and for no other purpose, Defendants waive any defense or objection based on standing. Except as expressly provided for herein, this Consent Decree shall not create any rights in or obligations of any party other than the Plaintiffs and Defendants. Except as provided in Section XXV (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice. To facilitate entry of this Consent Decree, upon the Date of Lodging of this Consent Decree the Parties shall file a Joint Motion to Consolidate AEP I and AEP II so that AEP II is consolidated into AEP I.

## II. APPLICABILITY

2. Upon entry, the provisions of the Consent Decree shall apply to and be binding upon and inure to the benefit of Plaintiffs and Defendants, and their respective successors and assigns, and upon their officers, employees, and agents, solely in their capacities as such.
3. Defendants shall be responsible for providing a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, Defendants shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. For this reason, in any action to enforce this Consent Decree, Defendants shall not assert as a defense the failure of their officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless Defendants establish that such failure resulted from a Force Majeure Event, as defined in Paragraph 158 of this Consent Decree.

## III. DEFINITIONS

Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Consent Decree, every other term used in this Consent Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Consent Decree what such term means under the Act or those implementing regulations.
4. A"1-hour Average $\mathrm{NO}_{\mathrm{x}}$ Emission Rate" for a re-powered gas-fired, electric generating unit means, and shall be expressed as, the average concentration in parts per million
("ppm") by dry volume, corrected to $15 \% \mathrm{O}_{2}$, as averaged over one (1) hour. In determining 10 ofhe 138 1-Hour Average $\mathrm{NO}_{\mathrm{x}}$ Emission Rate, Defendants shall use CEMS in accordance with applicable reference methods specified in 40 C.F.R. Part 60 to calculate the emissions for each 15-minute interval within each clock hour, except as provided in this Paragraph. Compliance with the 1Hour Average $\mathrm{NO}_{\mathrm{x}}$ Emission Rate shall be shown by averaging all 15-minute CEMS interval readings within a clock hour, except that any 15 -minute CEMS interval that contains any part of a startup or shutdown shall not be included in the calculation of that 1-Hour average. A minimum of two 15 -minute CEMS interval readings within a clock hour, not including startup or shutdown intervals, is required to determine compliance with the 1-Hour average $\mathrm{NO}_{\mathrm{x}}$ Emission Rate. All emissions recorded by CEMS shall be reported in 1-Hour averages.
5. A "30-Day Rolling Average Emission Rate" for a Unit means, and shall be expressed as, a lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Unit during an Operating Day and the previous twenty-nine (29) Operating Days; second, sum the total heat input to the Unit in mmBTU during the Operating Day and the previous twenty-nine (29) Operating Days; and third, divide the total number of pounds of the pollutant emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. Each 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of startup, shutdown, and Malfunction within an Operating Day, except as follows:
a. Emissions and BTU inputs that occur during a period of Malfunction shall be excluded from the calculation of the 30-Day Rolling Average Emission accordance with Paragraph 159 in Section XIV (Force Majeure) of this

## Consent Decree;

b. Emissions of $\mathrm{NO}_{\mathrm{x}}$ and BTU inputs that occur during the fifth and subsequent Cold Start Up Period(s) that occur at a given Unit during any 30-day period shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate if inclusion of such emissions would result in a violation of any applicable 30-Day Rolling Average Emission Rate and Defendants have installed, operated, and maintained the SCR in question in accordance with manufacturers' specifications and good engineering practices. A "Cold Start Up Period" occurs whenever there has been no fire in the boiler of a Unit (no combustion of any Fossil Fuel) for a period of six (6) hours or more. The $\mathrm{NO}_{\mathrm{x}}$ emissions to be excluded during the fifth and subsequent Cold Start Up Period(s) shall be the lesser of (i) those $\mathrm{NO}_{\mathrm{x}}$ emissions emitted during the eight (8) hour period commencing when the Unit is synchronized with a utility electric distribution system and concluding eight (8) hours later, or (ii) those $\mathrm{NO}_{\mathrm{x}}$ emissions emitted prior to the time that the flue gas has achieved the minimum SCR operational temperature specified by the catalyst manufacturer; and
c. For $\mathrm{SO}_{2}$, shall include all emissions and BTUs commencing from the time the Unit is synchronized with a utility electric distribution system through boiler.
6. A"30-Day Rolling Average Removal Efficiency" means, for $\mathrm{SO}_{2}$, at a Unit other than Conesville Unit 5 and Conesville Unit 6, the percent reduction in the mass of $\mathrm{SO}_{2}$ achieved by a Unit's FGD system over a 30-Operating Day period and shall be calculated as follows: step one, sum the total pounds of $\mathrm{SO}_{2}$ emitted as measured at the outlet of the FGD system for the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days as measured at the outlet of the FGD system for that Unit; step two, sum the total pounds of $\mathrm{SO}_{2}$ delivered to the inlet of the FGD system for the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days as measured at the inlet to the FGD system for that Unit; step three, subtract the outlet $\mathrm{SO}_{2}$ emissions calculated in step one from the inlet $\mathrm{SO}_{2}$ emissions calculated in step two; step four, divide the remainder calculated in step three by the inlet $\mathrm{SO}_{2}$ emissions calculated in step two; and step five, multiply the quotient calculated in step four by 100 to express as a percentage of removal efficiency. A new 30-day Rolling Average Removal Efficiency shall be calculated for each new Operating Day, and shall include all emissions that occur during all periods within each Operating Day except that emissions that occur during a period of Malfunction may be excluded from the calculation if Defendants provide Notice of the Malfunction to Plaintiffs in accordance with Section XIV (Force Majeure) and it is determined to be a Force Majeure Event pursuant to that Section.
7. "AEP Eastern System" means, solely for purposes of this Consent Decree, the following coal-fired, electric steam generating Units (with the nominal nameplate net capacity of each Unit):
a. Amos Unit 1 ( 800 MW ), Amos Unit 2 ( 800 MW ), and Amos Unit ${ }^{\text {Page }}{ }^{13}{ }^{13} 1 \mathrm{of}$ d ${ }^{38}$ MW) located in St. Albans, West Virginia;
b. Big Sandy Unit 1 (260 MW) and Big Sandy Unit 2 ( 800 MW) located in Louisa, Kentucky;
c. Cardinal Unit 1 ( 600 MW), Cardinal Unit 2 ( 600 MW), and Cardinal Unit 3 (630 MW) located in Brilliant, Ohio;
d. Clinch River Unit 1 (235 MW), Clinch River Unit 2 ( 235 MW), and Clinch River Unit 3 (235 MW) located in Carbo, Virginia;
e. Conesville Unit 1 ( 125 MW), Conesville Unit 2 ( 125 MW), Conesville Unit 3 (165 MW), Conesville Unit 4 (780 MW), Conesville Unit 5 (375 MW), and Conesville Unit 6 ( 375 MW) located in Conesville, Ohio;
f. Gavin Unit 1 (1300 MW) and Gavin Unit 2 (1300 MW) located in Cheshire, Ohio;
g. Glen Lyn Unit 5 (95 MW) and Glen Lyn Unit 6 (240 MW) located in Glen Lyn, Virginia;
h. Kammer Unit 1 (210 MW), Kammer Unit 2 (210 MW), and Kammer Unit 3 (210 MW) located in Moundsville, West Virginia;
i. Kanawha River Unit 1 (200 MW) and Kanawha River Unit 2 (200 MW) located in Glasgow, West Virginia;
j. Mitchell Unit 1 ( 800 MW) and Mitchell Unit 2 ( 800 MW) located in Moundsville, West Virginia;
k. Mountaineer Unit 1 (1300 MW) located in New Haven, West Virginia;

1. Muskingum River Unit 1 (205 MW), Muskingum River Unit $2\left(295^{14} \mathrm{Pff} \mathrm{S}^{138}\right.$, Muskingum River Unit 3 (215 MW), Muskingum River Unit 4 (215 MW), and Muskingum River Unit 5 (585 MW) located in Beverly, Ohio;
m. Picway Unit 9 (100 MW) located in Lockbourne, Ohio;
n. Rockport Unit 1 (1300 MW) and Rockport Unit 2 (1300 MW) located in Rockport, Indiana;
o. Sporn Unit 1 (150 MW), Sporn Unit 2 (150 MW), Sporn Unit 3 (150 MW), Sporn Unit 4 (150), and Sporn Unit 5 (450 MW) located in New Haven, West Virginia; and
p. Tanners Creek Unit 1 (145 MW), Tanners Creek Unit 2 (145 MW), Tanners Creek Unit 3 (205 MW), and Tanners Creek Unit 4 (500 MW) located in Lawrenceburg, Indiana.
2. "Boiler Island" means: a Unit's (a) fuel combustion system (including bunker, coal pulverizers, crusher, stoker, and fuel burners); (b) combustion air system; (c) steam generating system (firebox, boiler tubes, and walls); and (d) draft system (excluding the stack), all as further described in "Interpretation of Reconstruction," by John B. Rasnic, U.S. EPA (November 25, 1986) and attachments thereto.
3. "CEMS" or "Continuous Emission Monitoring System" means, for obligations involving $\mathrm{NO}_{\mathrm{x}}$ and $\mathrm{SO}_{2}$ under this Consent Decree, the devices defined in 40 C.F.R. § 72.2 and installed and maintained as required by 40 C.F.R. Part 75.
4. "Citizen Plaintiffs" means, collectively, Ohio Citizen Action, Citizens Action Coalition of Indiana, Hoosier Environmental Council, Ohio Valley Environmental Coalition, Inc.
5. "Clean Air Act" or "Act" means the federal Clean Air Act, 42 U.S.C. §§ 74017671q, and its implementing regulations.
6. "Clean Air Interstate Rule" or "CAIR" means the regulations promulgated by EPA on May 12, 2005, at 70 Fed. Reg. 25,161, which are entitled, "Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to $\mathrm{NO}_{\mathrm{x}}$ SIP Call; Final Rule," and any subsequent amendments to that regulation, and any applicable, federally-approved state implementation plan or the federal implementation plan to implement CAIR.
7. "Consent Decree" or "Decree" means this Consent Decree and the appendices attached hereto, which are incorporated into this Consent Decree.
8. "Continuously Operate" or "Continuous Operation" means that when an SCR, FGD, ESP, or Other $\mathrm{NO}_{\mathrm{x}}$ Pollution Controls are used at a Unit, except during a Malfunction, they shall be operated at all times such Unit is in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for such equipment and the Unit so as to minimize emissions to the greatest extent practicable.
9. "Date of Entry" means the date this Consent Decree is approved or signed by the United States District Court Judge; provided, however, that if the Parties' Joint Motion to Consolidate, as specified in Paragraph 1, is denied or not decided, then the "Date of Entry"
means the date that the last of the two United States District Court Judges hearing these Page ises in 138 approves or signs this Consent Decree.
10. "Date of Lodging" means the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Southern District of Ohio.
11. "Day" means, unless otherwise specified, calendar day.
12. "Defendants" or "AEP" means American Electric Power Service Corporation, Kentucky Power Company d/b/a American Electric Power, Indiana Michigan Power Company d/b/a American Electric Power, Ohio Power Company d/b/a American Electric Power, Cardinal Operating Company and its owners (Ohio Power and Buckeye Power, Inc.), Appalachian Power Company d/b/a American Electric Power, and Columbus Southern Power Company d/b/a American Electric Power.
13. "Eastern System-Wide Annual Tonnage Limitation" means the limitations, as specified in this Consent Decree, on the number of tons of the air pollutants that may be emitted from the AEP Eastern System during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of the air pollutants emitted during all periods of startup, shutdown, and Malfunction, except that emissions that occur during a period of Malfunction may be excluded from the calculation if Defendants provide Notice of the Malfunction to Plaintiffs in accordance with Section XIV (Force Majeure) and it is determined to be a Force Majeure Event pursuant to that Section.
14. "Emission Rate" means the number of pounds of pollutant emitted per million BTU of heat input ("lb/mmBTU"), measured in accordance with this Consent Decree.
15. "EPA" means the United States Environmental Protection Agency.
16. "ESP" means electrostatic precipitator, a pollution control device for the ${ }^{\text {Page } 17 \text { of } 138}$ reduction of PM .
17. "Environmental Mitigation Project" means a project funded or implemented by Defendants as a remedial measure to mitigate alleged damage to human health or the environment, including National Parks or Wilderness Areas, claimed to have been caused by the alleged violations described in the complaints or to compensate Plaintiffs for costs necessitated as a result of the alleged damages.
18. "Existing Unit" means a Unit that commenced operation prior to the Date of Lodging of this Consent Decree.
19. "Flue Gas Desulfurization System," or "FGD," means a pollution control device with one or more absorber vessels that employs flue gas desulfurization technology for the reduction of $\mathrm{SO}_{2}$.
20. "Fossil Fuel" means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, or natural gas.
21. An "Improved Unit" for $\mathrm{NO}_{\mathrm{x}}$ means an AEP Eastern System Unit equipped with an SCR or scheduled under this Consent Decree to be equipped with an SCR, or required to be Retired, Retrofitted, or Re-powered. A Unit may be an Improved Unit for one pollutant without being an Improved Unit for another. Any Other Unit in the AEP Eastern System can become an Improved Unit for $\mathrm{NO}_{\mathrm{x}}$ if it is equipped with an SCR and the requirement to Continuously Operate such SCR is incorporated into a federally-enforceable non-Title V permit or site-specific amendment to the state implementation plan and the Title V Permit applicable to that Unit.
22. An "Improved Unit" for $\mathrm{SO}_{2}$ means an AEP Eastern System Unit equippaged 18 ofth ${ }^{38}$ an FGD or scheduled under this Consent Decree to be equipped with an FGD, or required to be Retired, Retrofitted, or Re-powered. A Unit may be an Improved Unit for one pollutant without being an Improved Unit for another. Any Other Unit in the AEP Eastern System can become an Improved Unit for $\mathrm{SO}_{2}$ if it is equipped with an FGD and the requirement to Continuously Operate such FGD is incorporated into a federally-enforceable non-Title V permit or sitespecific amendment to the state implementation plan and the Title V Permit applicable to that Unit.
23. "KW" means kilowatt or one thousand watts.
24. "lb/mmBTU" means one pound per million British thermal units.
25. "Malfunction" means any sudden, infrequent, and not reasonably preventable
failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.
26. "MW" means a megawatt or one million watts.
27. "NSR Permit" means a preconstruction permit issued by the permitting authority pursuant to Parts C or D of Subchapter I of the Clean Air Act.
28. "National Ambient Air Quality Standards" or "NAAQS" means national ambient air quality standards that are promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.
29. "New and Newly Permitted Unit" means a Unit that commenced operation after the Date of Lodging of this Consent Decree, and that has been issued a final NSR Permit for $\mathrm{SO}_{2}$ and $\mathrm{NO}_{\mathrm{x}}$ that includes applicable Best Available Control Technology ("BACT") and/or Lowest
30. "Nonattainment NSR" means the nonattainment area New Source Review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, and its regulations, 40 C.F.R. Part 51.
31. " $\mathrm{NO}_{\mathrm{x}}$ " means oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.
32. " $\mathrm{NO}_{\mathrm{x}}$ Allowance" means an authorization to emit a specified amount of $\mathrm{NO}_{\mathrm{x}}$ that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or a state implementation plan.
33. " $\mathrm{NO}_{\mathrm{x}}$ CAIR Allocations" means the number of $\mathrm{NO}_{\mathrm{x}}$ Allowances allocated to the AEP Eastern System Units pursuant to the Clean Air Interstate Rule, excluding any $\mathrm{NO}_{\mathrm{x}}$ Allowances awarded by Indiana, Kentucky, Ohio, West Virginia, and Virginia to an AEP Eastern System Unit from the "compliance supplement pool," as that phrase is defined at 40 C.F.R. § 96.143 , in a federally-approved state implementation plan, or federal implementation plan to implement CAIR.
34. "Operating Day" means any day on which a Unit fires Fossil Fuel.
35. "Other $\mathrm{NO}_{\mathrm{x}}$ Pollution Controls" means the measures identified in the table in Paragraph 69 that will achieve reductions in $\mathrm{NO}_{\mathrm{x}}$ emissions at the Units specified therein.
36. "Other $\mathrm{SO}_{2}$ Measures" means the measures identified in Paragraph 90 that will achieve reductions in $\mathrm{SO}_{2}$ emissions at the Units specified therein.
37. "Other Unit" means any Unit of the AEP Eastern System that is not an Page 20 of 138 Unit for the pollutant in question.
38. "Operational or Ownership Interest" means part or all of Defendants' legal or equitable operational or ownership interests in any Unit in the AEP Eastern System.
39. "Parties" means the United States, the States, the Citizen Plaintiffs, and Defendants. "Party" means one of the Parties.
40. "Plaintiffs" means the United States, the States, and the Citizen Plaintiffs.
41. "Plant-Wide Annual Rolling Tonnage Limitation for $\mathrm{SO}_{2}$ at Clinch River" means the sum of the tons of $\mathrm{SO}_{2}$ emitted during all periods of operation from the Clinch River plant, including, without limitation, all $\mathrm{SO}_{2}$ emitted during periods of startup, shutdown, and Malfunction, in the most recent month and the previous eleven (11) months. A new Annual Rolling Average Tonnage Limitation for years 2010 through 2014, and for 2015 and continuing thereafter, shall be calculated in accordance with Paragraph 88.
42. "Plant-Wide Annual Tonnage Limitation for $\mathrm{SO}_{2}$ at Kammer" means the sum of the tons of $\mathrm{SO}_{2}$ emitted during all periods of operation from the Kammer plant, including, without limitation, all $\mathrm{SO}_{2}$ emitted during periods of startup, shutdown, and Malfunction, during the relevant calendar year (i.e., January 1 through December 31). A new Plant-Wide Annual Tonnage Limitation shall be calculated for each new calendar year.
43. "PM" means particulate matter, as measured in accordance with the provisions of this Consent Decree.
44. "PM CEMS" or "PM Continuous Emission Monitoring System" means fage 21 of 138 equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, an electronic or paper record of PM emissions.
45. "PM Emission Rate" means the number of pounds of PM emitted per million BTU of heat input ( $\mathrm{lb} / \mathrm{mmBTU}$ ), as measured in annual stack tests in accordance with EPA Method 5, 5B, or 17, 40 C.F.R. Part 60, including Appendix A.
46. "Project Dollars" means Defendants' expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section VIII (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section VIII (Environmental Mitigation Projects) and Appendix A of this Consent Decree, and (b) constitute Defendants' direct payments for such projects, or Defendants' external costs for contractors, vendors, and equipment.
47. "PSD" means Prevention of Significant Deterioration within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, and its regulations, 40 C.F.R. Part 52.
48. "Re-power" means either (1) the replacement of an existing pulverized coal boiler through the construction of a new circulating fluidized bed ("CFB") boiler or other technology of equivalent environmental performance that at a minimum achieves and maintains a 30-Day Rolling Average Emission Rate not greater than $0.100 \mathrm{lb} / \mathrm{mmBTU}$ or a 30 -Day Rolling Average Removal Efficiency of at least ninety-five percent (95\%) for $\mathrm{SO}_{2}$ and a 30-Day Rolling Average Emission Rate not greater than $0.070 \mathrm{lb} / \mathrm{mmBTU}^{2} \mathrm{NO}_{\mathrm{x}}$; or (2) the modification of
such Unit, or removal and replacement of Unit components, such that the modified or Pagepaced 138 Unit generates electricity through the use of new combined cycle combustion turbine technology fueled by natural gas containing no more than 0.5 grains of sulfur per 100 standard cubic feet of natural gas, and at a minimum, achieves a 1-hour Average $\mathrm{NO}_{\mathrm{x}}$ Emission Rate not greater than 2.0 ppm .
49. "Retire" means that Defendants shall: (a) permanently shut down and cease to operate the Unit; and (b) comply with any state and/or federal requirements applicable to that Unit. Defendants shall amend any applicable permits so as to reflect the permanent shutdown status of such Unit.
50. "Retrofit" means that the Unit must install and Continuously Operate both an SCR and an FGD. For the 600 MW listed in the table in Paragraph 68 and 87, "Retrofit" means that the Unit must meet a federally-enforceable 30-Day Rolling Average Emission Rate of 0.100 $\mathrm{lb} / \mathrm{mmBTU}$ for $\mathrm{NO}_{\mathrm{x}}$ and a 30-Day Rolling Average Emission Rate of $0.100 \mathrm{lb} / \mathrm{mmBTU}$ for $\mathrm{SO}_{2}$, measured in accordance with the requirements of this Consent Decree.
51. "Selective Catalytic Reduction System" or "SCR" means a pollution control device that employs selective catalytic reduction technology for the reduction of $\mathrm{NO}_{\mathrm{x}}$ emissions.
52. "Selective Non-Catalytic Reduction" means a pollution control device for the reduction of $\mathrm{NO}_{x}$ emissions that utilizes ammonia or urea injection into the boiler.
53. " $\mathrm{SO}_{2}$ " means sulfur dioxide, as measured in accordance with the provisions of this Consent Decree.
54. " $\mathrm{SO}_{2}$ Allowance" means "allowance" as defined at 42 U.S.C. § 7651 a (3) ${ }^{\text {Page. } 23 \text { an }} 138$ authorization, allocated to an affected unit by the Administrator of EPA under Subchapter IV of the Act, to emit, during or after a specified calendar year, one ton of sulfur dioxide."
55. " $\mathrm{SO}_{2}$ Allocations" means the number of $\mathrm{SO}_{2}$ Allowances allocated to the AEP Eastern System Units.
56. "Super-Compliant $\mathrm{NO}_{\mathrm{x}}$ Allowance" means an allowance attributable to reductions beyond the requirements of this Consent Decree as determined in accordance with Paragraph 80.
57. "Super-Compliant $\mathrm{SO}_{2}$ Allowance" means an allowance attributable to reductions beyond the requirements of this Consent Decree as determined in accordance with Paragraph 98.
58. "States" means the States of Connecticut, Maryland, New Hampshire, New Jersey, New York, Rhode Island, and Vermont, and the Commonwealth of Massachusetts.
59. "Title V Permit" means the permit required for Defendants' major sources under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.
60. "Unit" means collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine, and boiler, and all ancillary equipment, including pollution control equipment. An electric steam generating station may comprise one or more Units.

## IV. $\underline{N O}_{\underline{2}}$ EMISSION REDUCTIONS AND CONTROLS

A. Eastern System-Wide Annual Tonnage Limitations for $\mathrm{NO}_{\mathrm{x}}$.
67. Notwithstanding any other provisions of this Consent Decree, except Section XIV (Force Majeure), during each calendar year specified in the table below, all Units in the AEP

Annual Tonnage Limitations:

| Calendar Year | Eastern System-Wide Annual Tonnage <br> Limitations for $\mathbf{N O}_{\mathbf{x}}$ |
| :--- | :--- |
| 2009 | 96,000 tons |
| 2010 | 92,500 tons |
| 2011 | 92,500 tons |
| 2012 | 85,000 tons |
| 2013 | 85,000 tons |
| 2014 | 85,000 tons |
| 2015 | 75,000 tons |
| 2016, and each year thereafter | 72,000 tons |

B. $\mathrm{NO}_{\underline{x}}$ Emission Limitations and Control Requirements.
68. No later than the dates set forth in the table below, Defendants shall install and Continuously Operate SCR on each Unit identified therein, or, if indicated in the table, Retire, Retrofit, or Re-power such Unit:

| Unit | $\mathbf{N O}_{\mathbf{x}}$ Pollution Control | Date |
| :--- | :--- | :--- |
| Amos Unit 1 | SCR | January 1, 2008 |
| Amos Unit 2 | SCR | January 1, 2009 |
| Amos Unit 3 | SCR | January 1, 2008 |
| Big Sandy Unit 2 | SCR | January 1, 2009 |
| Cardinal Unit 1 | SCR | January 1, 2009 |
| Cardinal Unit 2 | SCR | January 1, 2009 |


| Unit | NO $_{\mathbf{x}}$ Pollution Control | Date |
| :--- | :--- | :--- |
| Cardinal Unit 3 | SCR | January 1, 2009 |
| Conesville Unit 1 | Retire, Retrofit, or Re-power | Date of Entry of this <br> Consent Decree |
| Conesville Unit 2 | Retire, Retrofit, or Re-power | Date of Entry of this <br> Consent Decree |
| Conesville Unit 3 | Retire, Retrofit, or Re-power | December 31, 2012 |
| Conesville Unit 4 | SCR | December 31, 2010 |
| Gavin Unit 1 | SCR | January 1, 2009 |
| Gavin Unit 2 | SCR | January 1, 2009 |
| Mitchell Unit 1 | SCR | January 1, 2009 |
| Mitchell Unit 2 | SCR | January 1, 2009 |
| Mountaineer Unit 1 | Retire, Retrofit, or Re-power | December 31, 2015 |
| Muskingum River Units 1-4 | SCR | January 1, 2008 |
| Muskingum River Unit 5 | SCR | December 31, 2017 |
| Rockport Unit 1 | SCR | December 31, 2019 |
| Rockport Unit 2 | Retire, Retrofit, or Re-power | December 31, 2018 |
| Sporn Unit 5 | December 31, 2013 |  |
| A total of at least 600 MW from <br> the following list of Units: Sporn <br> Units 1-4, Clinch River Units 1-3, <br> Tanners Creek Units 1-3, and/or <br> Kammer Units 1-3 |  |  |

69. Other $\mathrm{NO}_{\underline{x}}$ Pollution Controls. No later than the dates set forth in the tabale feefow, 138 Defendants shall Continuously Operate the Other $\mathrm{NO}_{\mathbf{x}}$ Pollution Controls on the Units identified therein:

| Unit | Other $\mathbf{N O}_{\mathbf{x}}$ Pollution <br> Controls | Date |
| :--- | :--- | :--- |
| Big Sandy Unit 1 | Low $\mathrm{NO}_{\mathrm{x}}$ Burners | Date of Entry |
| Glen Lyn Units 5 and 6 | Low $\mathrm{NO}_{\mathrm{x}}$ Burners | Date of Entry |
| Clinch River Units 1, 2, and 3 | Low $\mathrm{NO}_{\mathrm{x}}$ Burners, and <br> Selective Non-catalytic <br> Reduction | For Low $\mathrm{NO}_{\mathrm{x}}$ Burners, Date <br> Non-Catalytic Reduction, <br> December 31, 2009 |
| Conesville Units 5 and 6 | Low $\mathrm{NO}_{\mathrm{x}}$ Burners | Date of Entry |
| Kammer Units 1, 2, and 3 | Overfire Air | Date of Entry |
| Kanawha River Units 1 and 2 | Low $\mathrm{NO}_{\mathrm{x}}$ Burners | Date of Entry |
| Picway Unit 9 | Low $\mathrm{NO}_{\mathrm{x}}$ Burners | Date of Entry |
| Tanners Creek Units 1, 2, and 3 | Low $\mathrm{NO}_{\mathrm{x}}$ Burners | Date of Entry |
| Tanners Creek Unit 4 | Overfire Air | Date of Entry |

C. General Provisions for Use and Surrender of $\mathrm{NO}_{\underline{x}}$ Allowances.
70. Except as may be necessary to comply with this Section and Section XIII
(Stipulated Penalties), Defendants may not use $\mathrm{NO}_{\mathrm{x}}$ Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation or Eastern System-Wide Annual Tonnage Limitation required by this Decree, by using, tendering,
or otherwise applying $\mathrm{NO}_{x}$ Allowances to achieve compliance or offset any emissions aagove 27 qite ${ }^{138}$ limits specified in this Consent Decree.
71. As required by this Section IV of this Consent Decree, Defendants shall surrender $\mathrm{NO}_{x}$ Allowances that would otherwise be available for sale, trade, or transfer as a result of actions taken by Defendants to comply with the requirements of this Consent Decree.
72. $\mathrm{NO}_{\mathrm{x}}$ Allowances allocated to the AEP Eastern System may be used by Defendants to meet their own federal and/or state Clean Air Act regulatory requirements for the Units included in the AEP Eastern System. Subject to Paragraph 70, nothing in this Consent Decree shall prevent Defendants from purchasing or otherwise obtaining $\mathrm{NO}_{\mathrm{x}}$ Allowances from another source for purposes of complying with their own federal and/or state Clean Air Act requirements to the extent otherwise allowed by law.
73. The requirements in this Consent Decree pertaining to Defendants' use and surrender of $\mathrm{NO}_{\mathrm{x}}$ Allowances are permanent injunctions not subject to any termination provision of this Consent Decree. These provisions shall survive any termination of this Consent Decree.
D. Use of Excess $\mathrm{NO}_{\underline{x}}$ Allowances.
74. Calculation of Unrestricted and Restricted $\mathrm{NO}_{\underline{x}}$ Allowances. On an annual basis, beginning in 2009, Defendants shall calculate the difference between the $\mathrm{NO}_{\mathrm{x}}$ CAIR Allocations for the Units in the AEP Eastern System for that year and the annual Eastern System-Wide Tonnage Limitations for $\mathrm{NO}_{\mathrm{x}}$ for that calendar year. This difference represents the total Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances for that calendar year. For purposes of this Consent Decree, for each year commencing in 2009 and ending in 2015, forty-two percent (42\%) of the Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances shall be Unrestricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances and fifty-eight percent (58\%) shall be

Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances. Commencing in 2016, and continuing thereafter, aapg Excess 138 $\mathrm{NO}_{\mathrm{x}}$ Allowances shall be Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances.
75. Use and Surrender of Unrestricted Excess $\mathrm{NO}_{\underline{\underline{x}}}$ Allowances. For each calendar year commencing in 2009 and ending in 2015, Defendants may use Unrestricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances in any manner authorized by law. No later than March 1, 2016, Defendants must surrender, or transfer to a non-profit third party selected by Defendants for surrender, all unused Unrestricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances subject to surrender accumulated during the period from 2009 through 2015.
76. Use and Surrender of Restricted Excess NO $_{\underline{x}}$ Allowances. Beginning in calendar year 2009, and for each calendar year thereafter, Defendants shall calculate the difference between the number of any Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances and the number of $\mathrm{NO}_{\mathrm{x}}$ Allowances that is equal to the amount of actual $\mathrm{NO}_{\mathrm{x}}$ emissions from: (a) any New and Newly Permitted Unit as defined in this Consent Decree, and (b) the following five natural-gas plants but only up to a cumulative total of 1200 tons of $\mathrm{NO}_{\mathrm{x}}$ in any single year: Ceredo Generating Station located near Ceredo, West Virginia, with a nominal generating capacity of 505 megawatts; Waterford Energy Center located in southeastern Ohio, with a nominal generating capacity of 821 megawatts; Darby Electric Generating Station located near Columbus, Ohio, with a nominal generating capacity of 480 megawatts; Lawrenceburg Generating Station located in Lawrenceburg, Indiana, with a generating capacity of 1,096 megawatts; and a natural gas-fired power plant under construction near Dresden, Ohio, with a nominal generating capacity of 580 megawatts. This difference shall be the amount of Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances
potentially subject to surrender in 2016. During calendar years 2009 through 2015, Defege 29 of 138 may accumulate Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances potentially subject to surrender in 2016.
77. $\underline{N O}_{\underline{x}}$ Allowances from Renewable Energy. Beginning in calendar year 2009, and for each calendar year thereafter, Defendants may subtract from the number of Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances potentially subject to surrender, a number of allowances calculated in accordance with this Paragraph. To calculate such number, Defendants shall use the following method: multiply 0.0002 by the sum of (a) the actual annual generation in $\mathrm{MWH} /$ year generated from solar or wind power projects first owned or operated by Defendants after the Date of Lodging of this Consent Decree, and (b) the actual annual generation in MWH/year purchased by Defendants from solar or wind power projects in any year after the Date of Lodging of this Consent Decree. Such figure so calculated shall be subtracted from the number of Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances potentially subject to surrender each year. The remainder shall be the Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances subject to surrender.
78. Defendants may, solely at their discretion, use Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances at a New and Newly Permitted Unit for which Defendants have received a final NSR Permit from the permitting agency even if the NSR Permit has been appealed but not stayed during the permit appeal process. If Defendants use Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances at such New and Newly Permitted Unit, and the emissions from such New and Newly Permitted Unit are greater than what such Unit is permitted to emit after final adjudication of the appeal process, Defendants shall, within thirty (30) days of such final adjudication, retire an amount of $\mathrm{NO}_{\mathrm{x}}$ Allowances equal to the number of tons of $\mathrm{NO}_{x}$ actually emitted that exceeded the finally adjudicated permit limit.
79. No later than March 1, 2016, the total number of Restricted Excess $\mathrm{NO}_{\mathrm{x}}^{\text {Page } 30 \text { of } 138}$ Allowances subject to surrender accumulated during 2009 through 2015 as calculated in accordance with Paragraphs 74,76 , and 77 , shall be surrendered or transferred to a non-profit third party selected by Defendants for surrender, pursuant to Subsection F, below. Beginning in calendar year 2016, and for each calendar year thereafter, the total number of Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances subject to surrender for that year calculated in accordance with Paragraph 74, 76 and 77, shall be surrendered, or transferred to a non-profit third party selected by Defendants for surrender, by March 1 of the following calendar year.

## E. Super-Compliant $\mathrm{NO}_{\underline{x}}$ Allowances.

80. In each calendar year beginning in 2009, and continuing thereafter, Defendants may use in any manner authorized by law any $\mathrm{NO}_{\mathrm{x}}$ Allowances made available in that year as a result of maintaining actual $\mathrm{NO}_{x}$ emissions from the AEP Eastern System below the Eastern System-Wide Annual Tonnage Limitations for $\mathrm{NO}_{\mathrm{x}}$ under this Consent Decree for each calendar year. Defendants shall timely report the generation of such Super-Compliant $\mathrm{NO}_{\mathrm{x}}$ Allowances in accordance with Section XI (Periodic Reporting) and Appendix B of this Consent Decree.

## F. Method for Surrender of Excess $\mathrm{NO}_{x}$ Allowances.

81. For purposes of this Consent Decree, the "surrender" of Excess Restricted or Unrestricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances subject to surrender means permanently surrendering to EPA $\mathrm{NO}_{\mathrm{x}}$ Allowances from the accounts administered by EPA so that such $\mathrm{NO}_{\mathrm{x}}$ Allowances can never be used thereafter to meet any compliance requirement under the Clean Air Act, a state implementation plan, or this Consent Decree.
82. For all Restricted or Unrestricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances subject to surfege 31 of 138 required to be surrendered to EPA in Paragraphs 79 and 75, above, Defendants or the third party recipient(s) (as the case may be) shall first submit a $\mathrm{NO}_{\mathrm{x}}$ Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such $\mathrm{NO}_{\mathrm{x}}$ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Defendants or the third party recipient(s) shall irrevocably authorize the transfer of these $\mathrm{NO}_{\mathrm{x}}$ Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the $\mathrm{NO}_{\mathrm{x}}$ Allowances being surrendered.
83. If any $\mathrm{NO}_{\mathrm{x}}$ Allowances required to be surrendered under this Consent Decree are transferred directly to a non-profit third party, Defendants shall include a description of such transfer in the next report submitted to EPA as required by Section XI (Periodic Reporting) of this Consent Decree. Such report shall: (a) identify the non-profit third party recipient(s) of the $\mathrm{NO}_{\mathrm{x}}$ Allowances and list the serial numbers of the transferred $\mathrm{NO}_{\mathrm{x}}$ Allowances; and (b) include a certification by the third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the $\mathrm{NO}_{\mathrm{x}}$ Allowances and will not use any of the $\mathrm{NO}_{\mathrm{x}}$ Allowances to meet any obligation imposed by any environmental law. No later than the second periodic report due after the transfer of any $\mathrm{NO}_{x}$ Allowances, Defendants shall include a statement that the third party recipient(s) surrendered the $\mathrm{NO}_{\mathrm{x}}$ Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 82 within one (1) year after Defendants transferred the $\mathrm{NO}_{\mathrm{x}}$ Allowances to them. Defendants shall not have complied with the $\mathrm{NO}_{\mathrm{x}}$ Allowance
surrender requirements of this Paragraph until all third party recipient(s) have actually ${ }^{\text {Page } 32 \text { of } 138}$ surrendered the transferred $\mathrm{NO}_{\mathrm{x}}$ Allowances to EPA.
G. Reporting Requirements for $\mathrm{NO}_{\underline{x}}$ Allowances.
84. Defendants shall comply with the reporting requirements for $\mathrm{NO}_{\mathrm{x}}$ Allowances as described in Section XI (Periodic Reporting) and Appendix B.
H. General NO $\underline{\underline{x}} \underline{\text { Provisions. }}$
85. To the extent a $\mathrm{NO}_{\mathrm{x}}$ Emission Rate is required under this Consent Decree, Defendants shall use CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75 to determine such Emission Rate.

## V. $\underline{S O}_{2} \underline{\text { EMISSION REDUCTIONS AND CONTROLS }}$

A. Eastern System-Wide Annual Tonnage Limitations for $\mathrm{SO}_{2}$.
86. Notwithstanding any other provisions of this Consent Decree, except Section XIV (Force Majeure), during each calendar year specified in the table below, all Units in the AEP Eastern System, collectively, shall not emit $\mathrm{SO}_{2}$ in excess of the following Eastern System-Wide Annual Tonnage Limitations:

| Calendar Year | Eastern System-Wide Annual Tonnage <br> Limitations for SO $_{2}$ |
| :--- | :--- |
| 2010 | 450,000 tons |
| 2011 | 450,000 tons |
| 2012 | 420,000 tons |
| 2013 | 350,000 tons |
| 2014 | 340,000 tons |


| Calendar Year | Eastern System-Wide Annual Tonnage <br> Page 33 of 138 <br> Limitations for $\mathbf{S O}_{2}$ |
| :--- | :--- |
| 2015 | 275,000 tons |
| 2016 | 260,000 tons |
| 2017 | 235,000 tons |
| 2018 | 184,000 tons |
| 2019, and each year thereafter | 174,000 tons |

B. $\mathrm{SO}_{2}$ Emission Limitations and Control Requirements.
87. No later than the dates set forth in the table below, Defendants shall install and Continuously Operate an FGD on each Unit identified therein, or, if indicated in the table,

Retire, Retrofit, or Re-power such Unit:

| Unit | SO $_{2}$ Pollution Control | Date |
| :--- | :--- | :--- |
| Amos Units 1 and 3 | FGD | December 31, 2009 |
| Amos Unit 2 | FGD | December 31, 2010 |
| Big Sandy Unit 2 | FGD | December 31, 2015 |
| Cardinal Units 1 and 2 | FGD | December 31, 2008 |
| Cardinal Unit 3 | FGD | December 31, 2012 |
| Conesville Units 1 and 2 | Retire, Retrofit, or Re-power | Date of Entry |
| Conesville Unit 3 | Retire, Retrofit, or Re-power | December 31, 2012 |
| Conesville Unit 4 | FGD | December 31, 2010 |
| Conesville Unit 5 | Upgrade existing FGD and <br> meet a 95\% 30-day Rolling <br> Average Removal Efficiency | December 31, 2009 |


| Unit | SO $_{2}$ Pollution Control | Date |
| :--- | :--- | :--- |
| Conesville Unit 6 | Upgrade existing FGD and <br> meet a 95\% 0138 <br> Average Removal Efficiency |  |
| Gavin Units 1 and 2 | December 31, 2009 |  |
| Mitchell Units 1 and 2 | FGD | Date of Entry |
| Mountaineer Unit 1 | FGD | December 31, 2007 |
| Muskingum River Units 1-4 | Retire, Retrofit, or Re-power | December 31, 2015 |
| Muskingum River Unit 5 | FGD | December 31, 2015 |
| Rockport Unit 1 | FGD | December 31, 2017 |
| Rockport Unit 2 | FGD | December 31, 2019 |
| Sporn Unit 5 | Retire, Retrofit, or Re-power | December 31, 2013 |
| A total of at least 600 MW from <br> the following list of Units: Sporn <br> Units 1-4, Clinch River Units 1-3, <br> Tanners Creek Units 1-3, and/or <br> Kammer Units 1-3 | Retire, Retrofit, or Re-power | December 31, 2018 |

88. Plant-Wide Annual Rolling Average Tonnage Limitation for $\mathrm{SO}_{2}$ at Clinch River.

Beginning on January 1, 2010, and continuing through December 31, 2014, Defendants shall limit their total annual $\mathrm{SO}_{2}$ emissions at the Clinch River plant to a Plant-Wide Annual Rolling Average Tonnage Limitation of 21,700 tons. Beginning on January 1, 2015, and continuing thereafter, Defendants shall limit their total annual $\mathrm{SO}_{2}$ emissions at the Clinch River plant to a Plant-Wide Annual Rolling Average Tonnage Limitation of 16,300 tons. For purposes of calculating the Plant-Wide Annual Rolling Average Tonnage Limitation that begins in 2010, Defendants shall use the period beginning January 1, 2010 through December 31, 2010 to establish the initial annual period that is subject to the Plant-Wide Annual Rolling Average ${ }^{35}$ of 138 Tonnage Limitation for 2010 through 2014. Defendants shall then calculate a new Plant-Wide Annual Rolling Average Tonnage Limitation each month thereafter through December 31, 2014, by averaging the most recent month with the previous eleven (11) months. For purposes of calculating the Plant-Wide Annual Rolling Average Tonnage Limitation that begins in 2015, Defendants shall use the period beginning January 1, 2015 through December 31, 2015 to establish the initial annual period that is subject to the Plant-Wide Annual Average Rolling Tonnage Limitation for 2015. Defendants shall then calculate a new Plant-Wide Annual Rolling Average Tonnage Limitation each month thereafter by averaging the most recent month with the previous eleven (11) months.

## 89. Plant-Wide Annual Tonnage Limitation for $\mathrm{SO}_{2}$ at Kammer. Beginning on

 January 1,2010 , and continuing annually thereafter, Defendants shall limit their total annual $\mathrm{SO}_{2}$ emissions at the Kammer plant to a Plant-Wide Annual Tonnage Limitation of 35,000 tons.90. Other $\mathrm{SO}_{2}$ Measures. No later than the dates set forth in the table below, Defendants shall comply with the limit on coal sulfur content for such Units, at all times that the Units are in operation:

| Unit | Other $\mathbf{S O}_{2}$ Measures | Date |
| :--- | :--- | :--- |
| Big Sandy Unit 1 | Units can only burn coal with a <br> sulfur content no greater than <br> $1.75 \mathrm{lb} / \mathrm{mmBTU}$ on an annual <br> average basis | Date of Entry |
| Glen Lyn Units 5 and 6 | Units can only burn coal with a <br> sulfur content no greater than <br> $1.75 \mathrm{lb} / \mathrm{mmBTU}$ on an annual <br> average basis. | Date of Entry |


| Unit | Other $\mathbf{S O}_{2}$ Measures | Date |
| :--- | :--- | :--- |
| Kanawha River Units 1 <br> and 2 | Units can only burn coal with a <br> sulfur content no greater than <br> l.75 lb/mmBTU on an annual <br> average basis | Date of Entry |
| Tanners Creek Units 1, 2, <br> and 3 | Units can only burn coal with a <br> sulfur content no greater than <br> 1.2 lb/mmBTU on an annual <br> average basis | Date of Entry |
| Tanners Creek Unit 4 | Unit can only burn coal with a <br> sulfur content no greater than <br> $1.2 \%$ on an annual average <br> basis | Date of Entry |

C. Use and Surrender of $\mathrm{SO}_{2}$ Allowances.
91. Defendants may use $\mathrm{SO}_{2}$ Allowances allocated to the AEP Eastern System by the Administrator of EPA under the Act, or by any state under its state implementation plan, to meet their own federal and/or state regulatory requirements for the Units included in the AEP Eastern System. Subject to Paragraph 92, nothing in this Consent Decree shall prevent Defendants from purchasing or otherwise obtaining $\mathrm{SO}_{2}$ Allowances from another source for purposes of complying with their own federal and/or state Clean Air Act requirements to the extent otherwise allowed by law.
92. Except as may be necessary to comply with this Section and Section XIII (Stipulated Penalties), Defendants may not use any $\mathrm{SO}_{2}$ Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation, Eastern System-Wide Annual Tonnage Limitations, Plant-Wide Annual Rolling

Average Tonnage Limitation for $\mathrm{SO}_{2}$ at Clinch River, or Plant-Wide Annual Tonnage Limitation
93. On an annual basis beginning in 2010, and continuing thereafter, Defendants shall calculate the number of Excess $\mathrm{SO}_{2}$ Allowances by subtracting the number of $\mathrm{SO}_{2}$ Allowances equal to the annual Eastern System-Wide Tonnage Limitations for $\mathrm{SO}_{2}$ for each calendar year times the applicable allowance surrender ratio from the annual $\mathrm{SO}_{2}$ Allocations for all Units within the AEP Eastern System for the same calendar year. Defendants shall surrender, or transfer to a non-profit third party selected by Defendants for surrender, all Excess $\mathrm{SO}_{2}$ Allowances that have been allocated to the AEP Eastern System for the specified calendar year by the Administrator of EPA under the Act or by any state under its state implementation plan. Defendants shall make the surrender of $\mathrm{SO}_{2}$ Allowances required by this Paragraph to EPA by March 1 of the immediately following calendar year.
D. Method for Surrender of Excess $\mathrm{SO}_{2}$ Allowances.
94. For purposes of this Subsection, the "surrender" of Excess $\mathrm{SO}_{2}$ Allowances means permanently surrendering allowances from the accounts administered by EPA so that such allowances can never be used thereafter to meet any compliance requirement under the Clean Air Act, a state implementation plan, or this Consent Decree.
95. If any $\mathrm{SO}_{2}$ Allowances required to be surrendered under this Consent Decree are transferred directly to a non-profit third party, Defendants shall include a description of such transfer in the next report submitted to EPA pursuant to Section XI (Periodic Reporting) of this Consent Decree. Such report shall: (i) identify the non-profit third party recipient(s) of the $\mathrm{SO}_{2}$ Allowances and list the serial numbers of the transferred $\mathrm{SO}_{2}$ Allowances; and (ii) incluage ${ }^{38}$ of 138 certification by the third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the $\mathrm{SO}_{2}$ Allowances to meet any obligation imposed by any environmental law. No later than the second periodic report due after the transfer of any $\mathrm{SO}_{2}$ Allowances, Defendants shall include a statement that the third party recipient(s) surrendered the $\mathrm{SO}_{2}$ Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 96 within one (1) year after Defendants transferred the $\mathrm{SO}_{2}$ Allowances to them. Defendants shall not have complied with the $\mathrm{SO}_{2}$ Allowance surrender requirements of this Paragraph until all third party recipient(s) have actually surrendered the transferred $\mathrm{SO}_{2}$ Allowances to EPA.
96. For all $\mathrm{SO}_{2}$ Allowances surrendered to EPA, Defendants or the third party recipient(s) (as the case may be) shall first submit an $\mathrm{SO}_{2}$ Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such $\mathrm{SO}_{2}$ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Defendants or the third party recipient(s) shall irrevocably authorize the transfer of these $\mathrm{SO}_{2}$ Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the $\mathrm{SO}_{2}$ Allowances being surrendered.
97. The requirements in this Consent Decree pertaining to Defendants' surrender of $\mathrm{SO}_{2}$ Allowances are permanent injunctions not subject to any termination provision of this Decree. These provisions shall survive any termination of this Consent Decree in whole or in part.
E. Super-Compliant $\mathrm{SO}_{2}$ Allowances.
98. In each calendar year beginning in 2010, and continuing thereafter, Defendants may use in any manner authorized by law any $\mathrm{SO}_{2}$ Allowances made available in that year as a result of maintaining actual $\mathrm{SO}_{2}$ emissions from the AEP Eastern System below the Eastern System-Wide Annual Tonnage Limitations for $\mathrm{SO}_{2}$ under this Consent Decree for each calendar year. Defendants shall timely report the generation of such Super-Compliant $\mathrm{SO}_{2}$ Allowances in accordance with Section XI (Periodic Reporting) and Appendix B of this Consent Decree.
F. Reporting Requirements for $\mathrm{SO}_{2}$ Allowances.
99. Defendants shall comply with the reporting requirements for $\mathrm{SO}_{2}$ Allowances as described in Section XI (Periodic Reporting) and Appendix B.

## G. General $\mathrm{SO}_{2}$ Provisions.

100. To the extent an Emission Rate or 30-Day Rolling Average Removal Efficiency for $\mathrm{SO}_{2}$ is required under this Consent Decree, Defendants shall use CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75 to determine such Emission Rate.
101. Notwithstanding Paragraphs 6 and 100, the 30-Day Rolling Average Removal Efficiency for $\mathrm{SO}_{2}$ at Conesville Unit 5 and Conesville Unit 6 shall be determined in accordance with Appendix C.

## VI. PM EMISSION REDUCTIONS AND CONTROLS

## A. Optimization of Existing ESPs.

102. Beginning thirty (30) days after the Date of Entry, and continuing thereafter, Defendants shall Continuously Operate each ESP on Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5 to maximize PM emission reductions at all times when the Unit is in
operation, provided that such operation of the ESP is consistent with the technological Page 40 of 138 limitations, manufacturers' specifications, and good engineering and maintenance practices for the ESP. Defendants shall, at a minimum, to the extent reasonably practicable: (a) fully energize each section of the ESP for each unit, and repair any failed ESP section at the next planned Unit outage (or unplanned outage of sufficient length); (b) operate automatic control systems on each ESP to maximize PM collection efficiency; (c) maintain power levels delivered to the ESPs, consistent with manufacturers' specifications, the operational design of the Unit, and good engineering practices; and (d) inspect for and repair during the next planned Unit outage (or unplanned outage of sufficient length) any openings in ESP casings, ductwork, and expansion joints to minimize air leakage.

## B. PM Emission Rate and Testing.

103. No later than the dates specified in the table below, Defendants shall

Continuously Operate each Unit specified therein to achieve and maintain a PM Emission Rate no greater than $0.030 \mathrm{lb} / \mathrm{mmBTU}$ :

| Unit | Date to Achieve and Maintain PM <br> Emission Rate |
| :--- | :--- |
| Cardinal Unit 1 | December 31, 2009 |
| Cardinal Unit 2 | December 31, 2009 |
| Muskingum River Unit 5 | December 31, 2012 |

104. On or before the date established by this Consent Decree for Defendants to 41 of 138 achieve and maintain $0.030 \mathrm{lb} / \mathrm{mmBTU}$ at Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5, Defendants shall conduct a performance test for PM that demonstrates compliance with the PM Emission Rate required by this Consent Decree. Within forty-five (45) days of each such performance test, Defendants shall submit the results of the performance test to Plaintiffs pursuant to Section XVIII (Notices) of this Consent Decree.

## C. PM Emissions Monitoring.

105. Beginning in calendar year 2010 for Cardinal Unit 1 and Cardinal Unit 2, and calendar year 2013 for Muskingum River Unit 5, and continuing in each calendar year thereafter, Defendants shall conduct a stack test for PM on each stack servicing Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5. The annual stack test requirement imposed by this Paragraph may be satisfied by stack tests conducted by Defendants as required by their permits from the State of Ohio for any year that such stack tests are required under the permits.
106. The reference methods and procedures for determining compliance with PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5, 5B, or 17, or an alternative method that is promulgated by EPA, requested for use herein by Defendants, and approved for use herein by EPA. Use of any particular method shall conform to the EPA requirements specified in 40 C.F.R. Part 60, Appendix A and 40 C.F.R. § 60.48Da(b) and (e), or any federally-approved method contained in the Ohio State Implementation Plan. Defendants shall calculate the PM Emission Rates from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA within forty-five (45) days of completion of each test.
D. Installation and Operation of PM CEMS.
107. Defendants shall install, calibrate, operate, and maintain PM CEMS, as specified below. Each PM CEMS shall comprise a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units of $\mathrm{lb} / \mathrm{mmBTU}$. Defendants shall maintain, in an electronic database, the hourly average emission values produced by all PM CEMS in $\mathrm{lb} / \mathrm{mmBTU}$. Defendants shall use reasonable efforts to keep each PM CEMS running and producing data whenever any Unit served by the PM CEMS is operating.
108. No later than December 31, 2011, Defendants shall submit to EPA pursuant to Section XII (Review and Approval of Submittals) of this Consent Decree: (a) a plan for the installation and certification of each PM CEMS, and (b) a proposed Quality Assurance/Quality Control ("QA/QC") protocol that shall be followed in calibrating such PM CEMS. In developing both the plan for installation and certification of the PM CEMS and the QA/QC protocol, Defendants shall use the criteria set forth in 40 C.F.R. Part 60, Appendix B, Performance Specification 11, and Appendix F, Procedure 3. Following approval by EPA of the protocol, Defendants shall thereafter operate each PM CEMS in accordance with the approved protocol.
109. No later than the dates specified below, Defendants shall install, certify, and operate PM CEMS on the stacks or common stacks for Cardinal Unit 1, Cardinal Unit 2, and a third Unit, as further described in Paragraph 110:

| Stack | Date to Commence Operation of PM <br> CEMS |
| :--- | :--- |
| Cardinal Unit 1 | December 31, 2012 |
| Cardinal Unit 2 | December 31, 2012 |
| Unit to be identified pursuant to Paragraph <br> 110 | December 31, 2012 |

110. No later than December 31, 2011, Defendants shall identify, subject to Plaintiffs' approval, the third Unit required by Paragraph 109.
111. No later than ninety (90) days after Defendants begin operation of the PM CEMS, Defendants shall conduct tests of each PM CEMS to demonstrate compliance with the PM CEMS installation and certification plan submitted to and approved by EPA.
112. Demonstration that PM CEMS are Infeasible. Defendants shall operate the PM CEMS for at least two (2) years on each of the Units specified in Paragraphs 109 and 110. After two (2) years of operation, Defendants may attempt to demonstrate that it is infeasible to continue operating PM CEMS. As part of such demonstration, Defendants shall submit an alternative PM monitoring plan for review and approval by EPA. The plan shall explain the basis for stopping operation of the PM CEMS and propose an alternative PM monitoring plan. If the United States disapproves the alternative PM monitoring plan, or if the United States rejects Defendants' claim that it is infeasible to continue operating PM CEMS, such disagreement is subject to Section XV (Dispute Resolution).
113. "Infeasible to Continue Operating PM CEMS" Standard. Operation of a PM CEMS shall be considered no longer feasible if: (a) the PM CEMS cannot be kept in proper with the QA/QC protocol, or (b) Defendants demonstrate that recurring, chronic, or unusual equipment adjustment or servicing needs in relation to other types of continuous emission monitors cannot be resolved through reasonable expenditures of resources. If EPA determines that Defendants have demonstrated pursuant to this Paragraph that operation is no longer feasible, Defendants shall be entitled to discontinue operation of and remove the PM CEMS.
114. PM CEMS Operations Will Continue During Dispute Resolution or Proposals for Alternative Monitoring. Until EPA approves an alternative monitoring plan, or until the conclusion of any proceeding under Section XV (Dispute Resolution), Defendants shall continue to operate the PM CEMS. If EPA has not issued a decision regarding an alternative monitoring plan within 120 days, Defendants may initiate action under Section XV (Dispute Resolution).

## E. PM Reporting.

115. Defendants shall comply with the reporting requirements for PM as described in Section XI (Periodic Reporting) and Appendix B.
F. General PM Provisions.
116. Although stack testing shall be used to determine compliance with the PM Emission Rate established by this Consent Decree, data from the PM CEMS shall be used, at a minimum, to monitor progress in reducing PM emissions.

## VII. PROHIBITION ON NETTING CREDITS OR

117. Emission reductions that result from actions required to be taken by Defendants after the Date of Entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit or offset under the Clean Air Act's Nonattainment NSR and PSD programs.
118. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by a State or EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increment, or air quality related values, including visibility, in a Class I area.

## VIII. ENVIRONMENTAL MITIGATION PROJECTS

119. Defendants shall implement the Environmental Mitigation Projects ("Projects") described in Appendix A to this Consent Decree and fund the categories of Projects described in Subsection B, below, in compliance with the approved plans and schedules for such Projects and other terms of this Consent Decree. In funding and/or implementing all such Projects in Appendix A and Subsection B, Defendants shall expend moneys and/or implement Projects valued at no less than $\$ 36$ million for the Projects identified in Appendix A and $\$ 24$ million for the payments to the States to fund Projects within the categories set forth in Subsection B. Defendants shall fund and/or implement such Projects over a period of no later than five (5) years from the Date of Entry. Defendants may propose establishing one or more qualified settlement funds within the meaning of Treas. Reg. §1.468B-1 in conjunction with one or more Mitigation Projects. Any such trust would be established pursuant to a trust agreemen Attachment 1 to be mutually agreed upon by the affected Parties. Nothing in the foregoing is intended by the United States to be a determination or opinion regarding whether such trust would meet the requirements of Treas. Reg. $\S 1.468 \mathrm{~B}-1$ or is otherwise appropriate.

## A. Requirements for Projects Described in Appendix A (\$36 million).

120. Defendants shall maintain, and present to EPA upon request, all documents to substantiate the Project Dollars expended to implement the Projects described in Appendix A, and shall provide these documents to EPA within thirty (30) days of a request for the documents.
121. All plans and reports prepared by Defendants pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA shall be publicly available from Defendants without charge.
122. Defendants shall certify, as part of each plan submitted to EPA for any Project, that Defendants are not otherwise required by law to perform the Project described in the plan, that Defendants are unaware of any other person who is required by law to perform the Project, and that Defendants will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law, including any applicable renewable portfolio standards.
123. Defendants shall use good faith efforts to secure as much benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.
124. If Defendants elect (where such an election is allowed) to undertake a Project by contributing funds to another person or entity that will carry out the Project in lieu of Defendants, but not including Defendants' agents or contractors, that person or instrumentality
 legal authority to conduct the Project for which Defendants contribute the funds. Regardless of whether Defendants elect (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, Defendants acknowledge that they will receive credit for the expenditure of such funds as Project Dollars only if Defendants demonstrate that the funds have been actually spent by either Defendants or by the person or instrumentality receiving them, and that such expenditures met all requirements of this Consent Decree.
125. Defendants shall comply with the reporting requirements for Appendix A Projects as described in Section XI (Periodic Reporting) and Appendix B.
126. Within sixty (60) days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), Defendants shall submit to the United States a report that documents the date that the Project was completed, Defendants' results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by Defendants in implementing the Project.
B. Mitigation Projects to be Conducted by the States (\$24 million).
127. The States, by and through their respective Attorneys General, shall jointly submit to Defendants Projects within the categories identified in this Subsection B for funding in amounts not to exceed $\$ 4.8$ million per calendar year for no less than five (5) years following the Date of Entry of this Consent Decree beginning as early as calendar year 2008. The funds for these Projects will be apportioned by and among the States, and Defendants shall not have approval rights for the Projects or the apportionment. Defendants shall pay proceeds as
 seventy-five (75) days after being notified in writing by the States. Notwithstanding the $\$ 4.8$ million and 5-year limitation above, if the total costs of the projects submitted in any one or more years are less than $\$ 4.8$ million, the difference between that amount and $\$ 4.8$ million will be available for funding by Defendants of new or previously submitted projects in the following years, except that all amounts not designated by the States within ten (10) years after the Date of Entry of this Consent Decree shall expire.
128. Categories of Projects. The States agree to use money funded by Defendants to implement Projects that pertain to energy efficiency and/or pollution reduction. Such projects may include, but are not limited by, the following:
a. Retrofitting land and marine vehicles (e.g., automobiles, off-road and onroad construction and other vehicles, trains, ferries) and transportation terminals and ports, with pollution control devices, such as particulate matter traps, computer chip reflashing, and battery hybrid technology;
b. Truck-stop and marine port electrification;
c. Purchase and installation of photo-voltaic cells on buildings;
d. Projects to conserve energy use in new and existing buildings, including appliance efficiency improvement projects, weatherization projects, and projects intended to meet EPA's Green Building guidelines (see http://www.epa.gov/greenbuilding/pubs/enviro-issues.htm) and/or the Leadership in Energy and Environmental Design (LEED) Green Building Rating System (see
http://www.usgbc.org/DisplayPage.aspx?CategoryID=19), and projects to conservation programs;
e. Construction associated with the production of energy from wind, solar, and biomass;
f. "Buy back" programs for dirty old motors (e.g., automobile, lawnmowers, landscape equipment);
g. Programs to remove and/or replace oil-fired home heating equipment to allow use of ultra-low sulfur oil, and outdoor wood-fired boilers;
h. Purchase and retirement of $\mathrm{SO}_{2}$ and $\mathrm{NO}_{\mathrm{x}}$ allowances; and
i. Funding program to improve modeling of mobile source sector.

## IX. CIVIL PENALTY

129. Within thirty (30) days after the Date of Entry, Defendants shall pay to the United States a civil penalty in the amount of $\$ 15,000,000$. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing USAO File Number 1999v01542 and DOJ Case Number 90-5-2-106893 and the civil action case name and consolidated case numbers of this action. The costs of such EFT shall be Defendants' responsibility. Payment shall be made in accordance with instructions provided to Defendants by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Ohio. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, Defendants shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and consolidated case numbers, to the Department of Justice and to EPA in accordance with Section XVIII (Notices) of this Consent Decree.
130. Failure to timely pay the civil penalty shall subject Defendants to interepatge 50 of 138 accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render Defendants liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.
131. Payment made pursuant to this Section is a penalty within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and is not a tax-deductible expenditure for purposes of federal law.

## X. RESOLUTION OF CIVIL CLAIMS AGAINST DEFENDANTS

## A. Resolution of the United States' Civil Claims.

132. Claims Based on Modifications Occurring Before the Date of Lodging of this

Consent Decree. Entry of this Decree shall resolve all civil claims of the United States against Defendants that arose from any modifications commenced at any AEP Eastern System Unit prior to the Date of Lodging of this Consent Decree, including but not limited to, those modifications alleged in the Notices of Violation and complaints filed in AEP I and AEP II, under any or all of: (a) Parts C or D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515; (b) Section 111 of the Clean Air Act, 42 U.S.C. § 7411, and 40 C.F.R. § 60.14; (c) the federallyapproved and enforceable Indiana State Implementation Plan, Kentucky State Implementation Plan, Ohio State Implementation Plan, Virginia State Implementation Plan, and West Virginia State Implementation Plan; or (d) Sections 502(a) and 504(a) of Title V of the Clean Air Act, 42 U.S.C §§ 7611(a) and 7611(c), but only to the extent that such claims are based on Defendants' failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111 of the Clean Air Act.
133. Claims Based on Modifications after the Date of Lodging of This Conse Attachment 1

Decree. Entry of this Consent Decree also shall resolve all civil claims of the United States against Defendants that arise based on a modification commenced before December 31, 2018, or solely for Rockport Unit 2, before December 31, 2019, for all pollutants, except Particulate Matter, regulated under Parts C or D of Subchapter I of the Clean Air Act, and under regulations promulgated thereunder, as of the Date of Lodging of this Consent Decree, and:
a. where such modification is commenced at any AEP Eastern System Unit after the Date of Lodging of this Consent Decree; or
b. where such modification is one this Consent Decree expressly directs Defendants to undertake.

The term "modification" as used in this Paragraph shall have the meaning that term is given under the Clean Air Act and under the regulations in effect as of the Date of Lodging of this Consent Decree, as alleged in the complaints in AEP I and AEP II.
134. Reopener. The resolution of the United States' civil claims against Defendants, as provided by this Subsection A, is subject to the provisions of Subsection B of this Section.
B. Pursuit by the United States of Civil Claims Otherwise Resolved by Subsitachment 1
A.
135. Bases for Pursuing Resolved Claims for the AEP Eastern System. If Defendants
violate: (a) the Eastern System-Wide Annual Tonnage Limitations for $\mathrm{NO}_{\mathrm{x}}$ required pursuant to Paragraph 67; (b) the Eastern System-Wide Annual Tonnage Limitations for $\mathrm{SO}_{2}$ required pursuant to Paragraph 86; or (c) operate a Unit more than ninety (90) days past a date established in this Consent Decree without completing the required installation, upgrade, or commencing Continuous Operation of any emission control device required pursuant to Paragraphs 68, 69, 87, 102, and 103 then the United States may pursue any claim at any AEP Eastern System Unit that is otherwise resolved under Subsection A (Resolution of United States' Civil Claims), subject to (a) and (b) below.
a. For any claims based on modifications undertaken at any Unit in the AEP Eastern System that is not an Improved Unit for the pollutant in question, claims may be pursued only where the modification(s) on which such claim is based was commenced within the five (5) years preceding the violation or failure specified in this Paragraph.
b. For any claims based on modifications undertaken at an Improved Unit, claims may be pursued only where the modification(s) on which such claim is based was commenced: (1) after the Date of Lodging of this Consent Decree and (2) within the five (5) years preceding the violation or failure specified in this Paragraph.
136. Additional Bases for Pursuing Resolved Claims for Modifications at an Improved

Unit. Solely with respect to an Improved Unit, the United States may also pursue claims arising 48 from a modification (or collection of modifications) at an Improved Unit that has othepattachment 1 resolved under Subsection A (Resolution of the United States' Civil Claims) if the modification (or collection of modifications) at the Improved Unit on which such claim is based (a) was commenced after the Date of Lodging of this Consent Decree and (b) individually (or collectively) increased the maximum hourly emission rate of that Unit for $\mathrm{NO}_{\mathrm{x}}$ or $\mathrm{SO}_{2}$ (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent ( $10 \%$ ).
137. Any Other Unit can become an Improved Unit for $\mathrm{NO}_{\mathrm{x}}$ if (a) it is equipped with an SCR, and (b) the operation of such SCR is incorporated into a federally-enforceable non-Title V permit or site-specific amendment to the state implementation plan and incorporated into a Title V permit applicable to that Unit. Any Other Unit can become an Improved Unit for $\mathrm{SO}_{2}$ if (a) it is equipped with an FGD, and (b) the operation of such FGD is incorporated into a federally-enforceable non-Title V permit or site-specific amendment to the state implementation plan and incorporated into a Title V permit applicable to that Unit.

## 138. Additional Bases for Pursuing Resolved Claims for Modifications at Other Units.

a. Solely with respect to Other Units, i.e., a Unit that is not an Improved Unit under the terms of this Consent Decree, the United States may also pursue claims arising from a modification (or collection of modifications) at an Other Unit that has otherwise been resolved under Subsection A (Resolution of the United States’ Civil Claims), if the modification (or collection of modifications) at the Other Unit on which the claim is based was commenced within the five (5) years preceding any of the following events:

1. a modification (or collection of modifications) at such Other Unit commenced after the Date of Lodging of this Consent Decree increases the maximum hourly
emission rate for such Other Unit for the relevant pollutant $\left(\mathrm{NO}_{\mathrm{x}}\right.$ or $\left.\mathrm{SO}_{2}\right)$ (as measured, Attagh $\begin{aligned} & \text { Age } 54 \text { of } 138\end{aligned}$ C.F.R. § 60.14(b) and (h));
2. the aggregate of all Capital Expenditures made at such Other Unit exceed $\$ 125 / \mathrm{KW}$ on the Unit's Boiler Island (based on the generating capacities identified in Paragraph 7) during the period from the Date of Entry of this Consent Decree through December 31, 2015. (Capital Expenditures shall be measured in calendar year 2007 constant dollars, as adjusted by the McGraw-Hill Engineering News-Record Construction Cost Index); or
3. a modification (or collection of modifications) at such Other Unit commenced after the Date of Lodging of this Consent Decree results in an emissions increase of $\mathrm{NO}_{\mathrm{x}}$ and/or $\mathrm{SO}_{2}$ at such Other Unit, and such increase: (i) presents, by itself, or in combination with other emissions or sources, "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 U.S.C. $\S 7603$; (ii) causes or contributes to violation of a NAAQS in any Air Quality Control Area that is in attainment with that NAAQS; (iii) causes or contributes to violation of a PSD increment; or (iv) causes or contributes to any adverse impact on any formally-recognized air quality and related values in any Class I area. The introduction of any new or changed NAAQS shall not, standing alone, provide the showing needed under Subparagraphs (3)(ii) or (3)(iii) of this Paragraph, to pursue any claim for a modification at an Other Unit resolved under Subparagraph A of this Section.
b. Solely with respect to Other Units at the plant listed below, the United States may also pursue claims arising from a modification (or collection of modifications) at such Other Units commenced after the Date of Lodging of this Consent Decree if such modification (or collection of modifications) results in an emissions increase of $\mathrm{SO}_{2}$ at such Other Unit, and such increase causes the emissions at the plant at issue to exceed the Plant-Wide Annual Rolling

Average Tonnage Limitation for $\mathrm{SO}_{2}$ at Clinch River listed in the table below for year Pade $\begin{gathered}\text { Adtaghment } 1 \\ 55 \\ \text { of } 138\end{gathered}$ 2014 and/or 2015 and beyond:

| Plant | Year | $\underline{\text { SO}_{2}}$ Tons Limit |
| :--- | :--- | :--- |
| Clinch River | $2010-2014$ | 21,700 |
| Clinch River | 2015 and each year <br> thereafter | 16,300 |

C. Resolution of Past Claims of the States and Citizen Plaintiffs and Reservation of Rights.
139. The States and Citizen Plaintiffs agree that this Consent Decree resolves all civil claims that have been alleged in their respective complaints or could have been alleged against Defendants prior to the Date of Lodging of this Consent Decree for violations of: (a) Parts C or D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515, and (b) Section 111 of the Act, 42 U.S.C. § 7411, and 40 C.F.R § 60.14, at Units within the AEP Eastern System.
140. The States and Citizen Plaintiffs expressly do not join in giving the Defendants the covenant provided by the United States through Paragraph 133 of this Consent Decree, do not release any claims under the Clean Air Act and its implementing regulations arising after the Date of Lodging of this Consent Decree, and reserve their rights, if any, to bring any actions against the Defendants pursuant to 42 U.S.C. § 7604 for any claims arising after the Date of Lodging of this Consent Decree.
141. Notwithstanding Paragraph 140, the States and Citizen Plaintiffs release Defendants from any civil claim that may arise under the Clean Air Act for Defendants' performance of activities that this Consent Decree expressly directs Defendants to undertake, criteria pollutant other than $\mathrm{SO}_{2}, \mathrm{NO}_{\mathrm{x}}$, or PM.
142. Retention of Authority Regarding NAAQS Exceedences. Nothing in this Consent Decree shall be construed to affect the authority of the United States or any state under applicable federal statutes or regulations and applicable state statutes or regulations to impose appropriate requirements or sanctions on any Unit in the AEP Eastern System, including, but not limited to, the Units at the Clinch River plant, if the United States or a state determines that emissions from any Unit in the AEP Eastern System result in violation of, or interfere with the attainment and maintenance of, any ambient air quality standard.

## XI. PERIODIC REPORTING

143. Beginning on March 31, 2008, and continuing annually thereafter on March 31 until termination of this Consent Decree, and in addition to any other express reporting requirement in this Consent Decree, Defendants shall submit to the Unites States, the States, and the Citizen Plaintiffs a progress report in compliance with Appendix B of this Consent Decree.
144. In any periodic progress report submitted pursuant to this Section, Defendants may incorporate by reference information previously submitted under their Title V permitting requirements, provided that Defendants attach the Title V permit report, or the relevant portion thereof, and provide a specific reference to the provisions of the Title V permit report that are responsive to the information required in the periodic progress report.
145. In addition to the progress reports required pursuant to this Section, Defendants shall provide a written report to the United States, the States, and the Citizen Plaintiffs of any violation of the requirements of this Consent Decree within fifteen (15) days of when Defendants knew or should have known of any such violation. In this report, Defendants shall explain the such violations in the future.
146. Each report shall be signed by Defendants' Vice President of Environmental Services or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.
147. If any $\mathrm{SO}_{2}$ or $\mathrm{NO}_{\mathrm{x}}$ Allowances are surrendered to any third party pursuant to this Consent Decree, the third party's certification pursuant to Paragraphs 83 and 95 shall be signed by a managing officer of the third party and shall contain the following language:

I certify under penalty of law that, $\qquad$ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.
148. Defendants shall submit each plan, report, or other submission required by this Consent Decree to the Plaintiffs specified, whenever such a document is required to be submitted for review or approval pursuant to this Consent Decree. The Plaintiff(s) to whom the report is submitted, as required, may approve the submittal or decline to approve it and provide written comments explaining the bases for declining such approval as soon as reasonably practicable. Such Plaintiff(s) will endeavor to coordinate their comments into one document when explaining their bases for declining such approval. Within sixty (60) days of receiving written comments from any of the Plaintiff(s), Defendants shall either: (a) revise the submittal consistent with the written comments and provide the revised submittal to the Plaintiff(s); or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XV (Dispute Resolution) of this Consent Decree.
149. Upon receipt of Plaintiffs' or Plaintiff's (as the case may be) final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, Defendants shall implement the approved submittal in accordance with the schedule specified therein.
150. For any failure by Defendants to comply with the terms of this Consent Decree, and subject to the provisions of Sections XIV (Force Majeure) and XV (Dispute Resolution), Defendants shall pay, within thirty (30) days after receipt of written demand to Defendants by the United States, the following stipulated penalties to the United States:

| Consent Decree Violation | Stipulated Penalty (Per Day, <br> Per Violation, Unless <br> Otherwise Specified) |
| :--- | :--- |
| a. Failure to pay the civil penalty as specified in Section IX <br> (Civil Penalty) of this Consent Decree | $\$ 10,000$ per day |
| b. Failure to comply with any applicable 30-Day Rolling <br> Average Emission Rate, 30-Day Rolling Average Removal <br> Efficiency, Emission Rate for PM, or Other SO2 Measures <br> where the violation is less than 5\% in excess of the limits <br> set forth in this Consent Decree | $\$ 2,500$ per day per violation |
| c. Failure to comply with any applicable 30-Day Rolling <br> Average Emission Rate, 30-Day Rolling Average Removal <br> Efficiency, Emission Rate for PM, or Other SO2 Measures <br> where the violation is equal to or greater than 5\% but less <br> than 10\% in excess of the limits set forth in this Consent <br> Decree | $\$ 5,000$ per day per violation |
| d. Failure to comply with any applicable 30-Day Rolling <br> Average Emission Rate, 30-Day Rolling Average Removal <br> Efficiency, Emission Rate for PM, or Other SO |  |
| where the violation is equal to or greater than 10\% in |  |
| excess of the limits set forth in this Consent Decree |  |$\quad \$ 10,000$ per day per violation $\quad$ $\quad$|  |
| :--- |


| Consent Decree Violation | Stipulated Penalty (Pepq99ff 138 <br> Per Violation, Unless <br> Otherwise Specified) |
| :--- | :--- |
| e. Failure to comply with the Eastern System-Wide Annual <br> Tonnage Limitation for $\mathrm{SO}_{2}$ | $\$ 5,000$ per ton for the first 1000 <br> tons, and \$10,000 per ton for <br> each additional ton above 1000 <br> tons, plus the surrender, <br> pursuant to the procedures set <br> forth in Paragraphs 82 and 83, <br> of NO Allowances in an <br> amount equal to two times the |
| number of tons by which the |  |
| limitation was exceeded |  |$|$


| Consent Decree Violation | Stipulated Penalty (Peqq9ayf, 138 Per Violation, Unless Otherwise Specified) |
| :---: | :---: |
| j. Failure to install or operate CEMS as required in this Consent Decree | \$1,000 per day per violation |
| k. Failure to conduct performance tests of PM emissions, as required in this Consent Decree | \$1,000 per day per violation |
| 1. Failure to apply for any permit required by Section XVI (Permits) | \$1,000 per day per violation |
| m . Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required in this Consent Decree | $\$ 750$ per day per violation during the first ten days, $\$ 1,000$ per day per violation thereafter |
| n. Using $\mathrm{NO}_{\mathrm{x}}$ Allowances except as permitted by Paragraphs 75, 76, and 78 | The surrender of $\mathrm{NO}_{\mathrm{x}}$ Allowances in an amount equal to four times the number of $\mathrm{NO}_{\mathrm{x}}$ Allowances used in violation of this Consent Decree |
| o. Failure to surrender $\mathrm{NO}_{\mathrm{x}}$ Allowances as required by Paragraphs 75 and 79 | (a) $\$ 32,500$ per day plus (b) $\$ 7,500$ per $\mathrm{NO}_{\mathrm{x}}$ Allowance not surrendered |
| p. Failure to surrender $\mathrm{SO}_{2}$ Allowances as required by Paragraph 93 | (a) $\$ 32,500$ per day plus (b) $\$ 1,000$ per $\mathrm{SO}_{2}$ Allowance not surrendered |
| q. Failure to demonstrate the third party surrender of an $\mathrm{SO}_{2}$ Allowance or $\mathrm{NO}_{\mathrm{x}}$ Allowance in accordance with Paragraphs 95-96 and 82-83. | \$2,500 per day per violation |
| r. Failure to implement any of the Environmental Mitigation Projects described in Appendix A in compliance with Section VIII (Environmental Mitigation Projects) of this Consent Decree | The difference between the cost of the Project, as identified in Appendix A, and the dollars Defendants spent to implement the Project |


| Consent Decree Violation | Stipulated Penalty (Pengqiaff, 138 Per Violation, Unless Otherwise Specified) |
| :---: | :---: |
| s. Failure to fund an Environmental Mitigation Project, as submitted by the States, in compliance with Section VIII (Environmental Mitigation Projects) of this Consent Decree | $\$ 1,000$ per day per violation during the first 30 days, $\$ 5,000$ per day per violation thereafter |
| t. Failure to Continuously Operate required Other $\mathrm{NO}_{\mathrm{x}}$ Pollution Controls required in Paragraph 69 | $\$ 10,000$ per day during the first 30 days, and $\$ 32,500$ each day thereafter |
| u. Failure to comply with the Plant-Wide Annual Tonnage Limitation for $\mathrm{SO}_{2}$ at Kammer | $\$ 40,000$ per ton, plus the surrender, pursuant to the procedures set forth in Paragraphs 95 and 96 of $\mathrm{SO}_{2}$ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded |
| v. Any other violation of this Consent Decree | \$1,000 per day per violation |

151. Violation of an Emission Rate or 30-Day Rolling Average Removal Efficiency that is based on a 30-Day Rolling Average is a violation on every day on which the average is based. Where a violation of a 30-Day Rolling Average Emission Rate or 30-Day Rolling Average Removal Efficiency (for the same pollutant and from the same source) recurs within periods of less than thirty (30) days, Defendants shall not pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.
152. All stipulated penalties shall begin to accrue on the day after the performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.
153. Defendants shall pay all stipulated penalties to the United States within ptyathermerfor days of receipt of written demand to Defendants from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless Defendants elect within twenty (20) days of receipt of written demand to Defendants from the United States to dispute the accrual of stipulated penalties in accordance with the provisions in Section XV (Dispute Resolution) of this Consent Decree.
154. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 152 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:
a. If the dispute is resolved by agreement, or by a decision of Plaintiffs pursuant to Section XV (Dispute Resolution) of this Consent Decree that is not appealed to the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) days of the effective date of the agreement or of the receipt of Plaintiffs' decision;
b. If the dispute is appealed to the Court and Plaintiffs prevail in whole or in part, Defendants shall, within sixty (60) days of receipt of the Court's decision or order, pay all accrued stipulated penalties determined by the Court to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in Subparagraph c, below;
c. If the Court's decision is appealed by any Party, Defendants shabage thach ith t fifteen (15) days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with interest accrued on such stipulated penalties determined to be owing by the appellate court.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by the Plaintiffs and Defendants, or determined by the Plaintiffs through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 150.
155. All stipulated penalties shall be paid in the manner set forth in Section IX (Civil Penalty) of this Consent Decree.
156. Should Defendants fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.
157. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to Plaintiffs by reason of Defendants' failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated penalty, Defendants shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

## XIV. FORCE MAJEURE

158. For purposes of this Consent Decree, including, but not limited to, Paragraphs 67 and 86, a "Force Majeure Event" shall mean an event that has been or will be caused by circumstances beyond the control of Defendants or any entity controlled by Defendants that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite Defendants' best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay or violation is minimized to the greatest extent possible.
159. Notice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which Defendants intend to assert a claim of Force Majeure, Defendants shall notify the Plaintiffs in writing as soon as practicable, but in no event later than twenty-one (21) business days following the date Defendants first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, Defendants shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by Defendants to prevent or minimize the delay or violation, the schedule by which Defendants propose to implement those measures, and Defendants' rationale for attributing a delay or violation to a Force Majeure Event. Defendants shall adopt all reasonable measures to avoid or minimize such delays or violations. Defendants shall be deemed to know of any circumstance which Defendants or any entity controlled by Defendants knew or should have known.
160. Failure to Give Notice. If Defendants materially fail to comply with the Attachment 1 requirements of this Section, the Plaintiffs may void Defendants' claim for Force Majeure as to the specific event for which Defendants have failed to comply with such notice requirement.
161. Plaintiffs' Response. The Plaintiffs shall notify Defendants in writing regarding Defendants' claim of Force Majeure as soon as reasonably practicable. If the Plaintiffs agree that a delay in performance has been or will be caused by a Force Majeure Event, the Parties shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event, or the extent to which Defendants may be relieved of stipulated penalties or other remedies provided under the terms of this Consent Decree. Such agreement shall be reduced to writing, and signed by all Parties. If the agreement results in a material change to the terms of this Consent Decree, an appropriate modification shall be made pursuant to Section XXII (Modification). If such change is not material, no modification of this Consent Decree shall be required.
162. Disagreement. If Plaintiffs do not accept Defendants' claim of Force Majeure, or if the Plaintiffs and Defendants cannot agree on the length of the delay actually caused by the Force Majeure Event, or the extent of relief required to address the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XV (Dispute Resolution) of this Consent Decree.
163. Burden of Proof. In any dispute regarding Force Majeure, Defendants shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. Defendants shall also bear the burden of proving that Defendants gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a

Force Majeure Event. An extension of one compliance date based on a particular eventagnachment Atst will not necessarily, result in an extension of a subsequent compliance date.
164. Events Excluded. Unanticipated or increased costs or expenses associated with the performance of Defendants' obligations under this Consent Decree shall not constitute a Force Majeure Event.
165. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and Defendants' response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; unanticipated coal supply or pollution control reagent delivery interruptions; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs Defendants to operate an AEP Eastern System Unit in response to a local or system-wide (state-wide or regional) emergency (which could include unanticipated required operation to avoid loss of load or unserved load). Depending upon the circumstances and Defendants' response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of Defendants and Defendants have taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.
166. As part of the resolution of any matter submitted to this Court under Sestatachongt 1 (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, the Plaintiffs and Defendants by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the Plaintiffs or approved by the Court. Defendants shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule (provided that Defendants shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).

## XV. DISPUTE RESOLUTION

167. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Parties.
168. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Parties advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Parties receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.
169. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend dispute to a mutually agreed upon alternative dispute resolution (ADR) forum if the Parties agree that the ADR activities can be completed within the 30-day informal negotiations period (or such longer period as the Parties may agree to in writing).
170. If the disputing Parties are unable to reach agreement during the informal negotiation period, the Plaintiffs shall provide Defendants with a written summary of their position regarding the dispute. The written position provided by Plaintiffs shall be considered binding unless, within forty-five (45) days thereafter, Defendants seek judicial resolution of the dispute by filing a petition with this Court. The Plaintiffs may respond to the petition within forty-five (45) days of filing. In their initial filings with the Court under this Paragraph, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.
171. The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the Party's basis for seeking such a scheduling modification.
172. This Court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties' inability to reach agreement.
173. As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. Defendants shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.
174. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their initial filings with the Court under Paragraph 170, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

## XVI. PERMITS

175. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires Defendants to secure a permit to authorize construction or operation of any device contemplated herein, including all preconstruction, construction, and operating permits required under state law, Defendants shall make such application in a timely manner. Defendants shall provide Notice to Plaintiffs under Section XVIII (Notices), for each Unit that Defendants submit an application for any permit described in this Paragraph 175.
176. Notwithstanding the previous Paragraph, nothing in this Consent Decree shall be construed to require Defendants to apply for or obtain a PSD or Nonattainment NSR permit for physical changes in, or changes in the method of operation of, any AEP Eastern System Unit that would give rise to claims resolved by Paragraph 132 and 133, subject to Paragraphs 134 through 138, or Paragraphs 139 and 141 of this Consent Decree.
177. When permits are required as described in Paragraph 175, Defendants shall complete and submit applications for such permits to the appropriate authorities to allow time for all legally required processing and review of the permit request, including requests for additional
information by the permitting authorities. Any failure by Defendants to submit a timelyandachment 1 application for any Unit in the AEP Eastern System shall bar any use by Defendants of Section XIV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.
178. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term or limit has or will become part of a Title V permit, subject to the terms of Section XXVI (Conditional Termination of Enforcement Under Decree) of this Consent Decree.
179. Within three (3) years from the Date of Entry of this Consent Decree, and in accordance with federal and/or state requirements for modifying or renewing a Title V permit, Defendants shall amend any applicable Title V permit application, or apply for amendments to their Title V permits, to include a schedule for any Unit-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, required emission rates or other limitations. For Units subject to a requirement to Retire, Retrofit, or Re-power, Defendants shall apply to modify, renew, or obtain any applicable Title V permit to include a schedule for any Unit-specific performance, operation, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, required emission rates or other limitations, within (12) twelve months of making such election to Retire, Retrofit, or Re-power.
180. Within one (1) year from commencement of operation of each pollution Attachment 1 device to be installed, upgraded, and/or operated under this Consent Decree, Defendants shall apply to include the requirements and limitations enumerated in this Consent Decree into federally-enforceable non-Title V permits and/or site-specific amendments to the applicable state implementation plans to reflect all new requirements applicable to each Unit in the AEP Eastern System, the Plant-Wide Annual Rolling Average Tonnage Limitation for $\mathrm{SO}_{2}$ at Clinch River, and the Plant-Wide Annual Tonnage Limitation for $\mathrm{SO}_{2}$ at Kammer.
181. Defendants shall provide the United States with a copy of each application for a federally-enforceable non-Title V permit or amendment to a state implementation plan, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any public comment period.
182. Prior to termination of this Consent Decree, Defendants shall obtain enforceable provisions in their Title V permits for the AEP Eastern System that incorporate (a) any Unitspecific requirements and limitations of this Consent Decree, such as performance, operational, maintenance, and control technology requirements, (b) the Plant-Wide Annual Rolling Average Tonnage Limitation for $\mathrm{SO}_{2}$ at Clinch River and the Plant-Wide Annual Tonnage Limitation for $\mathrm{SO}_{2}$ at Kammer, and (c) the Eastern System-Wide Annual Tonnage Limitations for $\mathrm{SO}_{2}$ and $\mathrm{NO}_{\mathrm{x}}$. If Defendants do not obtain enforceable provisions for the Eastern System-Wide Annual Tonnage Limitations for $\mathrm{SO}_{2}$ and $\mathrm{NO}_{\mathrm{x}}$ in such Title V permits, then the requirements in Paragraphs 86 and 67 shall remain enforceable under this Consent Decree and shall not be subject to termination.
183. If Defendants sell or transfer to an entity unrelated to Defendants ("Third-Party Purchaser") part or all of Defendants' Ownership Interest in a Unit in the AEP Eastern System, for such facility.

## XVII. INFORMATION COLLECTION AND RETENTION

184. Any authorized representative of the United States, including attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of any facility in the AEP Eastern System at any reasonable time for the purpose of:
a. monitoring the progress of activities required under this Consent Decree;
b. verifying any data or information submitted to the United States in accordance with the terms of this Consent Decree;
c. obtaining samples and, upon request, splits of any samples taken by Defendants or their representatives, contractors, or consultants; and
d. assessing Defendants' compliance with this Consent Decree.
185. Defendants shall retain, and instruct their contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in their or their contractors' or agents' possession or control (with the exception of their contractors' copies of field drawings and specifications), and that directly relate to Defendants' performance of their obligations under this Consent Decree until six (6) years following completion of performance of such obligations. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.
186. All information and documents submitted by Defendants pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of and documents contain confidential business information.
187. Nothing in this Consent Decree shall limit the authority of EPA to conduct tests and inspections at Defendants' facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations, or permits.

## XVIII. NOTICES

188. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

## As to the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station

Washington, DC 20044-7611
DJ\# 90-5-2-1-06893
and

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency

Ariel Rios Building [Mail Code 2242A]
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460
and

Air Enforcement \& Compliance Assurance Branch
U.S. EPA Region V

77 W. Jackson St.
Mail Code AE17J
Chicago, IL 60604
and

Air Protection Division Director
U.S. EPA Region III

1650 Arch Street
Philadelphia, PA 19103
As to the State of Connecticut:
Office of the Attorney General
Environmental Department
P.O. Box 120

Hartford, Connecticut
06141-0120
As to the State of Maryland:
Frank Courtright
Program Manager
Air Quality Compliance Program
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, Maryland 21230
fcourtright@mde.state.md.us
As to the Commonwealth of Massachusetts:
Frederick D. Augenstern, Assistant Attorney General
Office of the Attorney General
1 Ashburton Place, 18th floor
Boston, Massachusetts 02108
fred.augenstern@state.ma.us
and

Douglas Shallcross, Esquire
Department of Environmental Protection
Office of General Counsel
1 Winter Street
Boston, Massachusetts 02108
Douglas.Shallcross@state.ma.us

Director, Air Resources Division
New Hampshire Department of Environmental Services
29 Hazen Dive
Concord, New Hampshire 03302-0095
As to the State of New Jersey:
Kevin P. Auerbacher
Section Chief
Environmental Enforcement Section
R.J. Hughes Justice Complex

25 Market Street
P.O. Box 093

Trenton, New Jersey 08625-0093
As to the State of New York:
Robert Rosenthal
Assistant Attorney General
New York State Attorney General's Office
The Capitol
Albany, New York 12224
As to the State of Rhode Island:
Tricia K. Jedele
Special Assistant Attorney General
150 South Main Street
Providence, RI 02903
(401) 274-4400, Ext. 2400
tjedele@riag.ri.gov
As to the State of Vermont:
Environmental Division
Office of the Attorney General
109 State Street
Montpelier, Vermont 05609-1001
and

Director
Air Pollution Control Division
Department of Environmental Conservation
Agency of Natural Resources
Building 3 South
103 South Main Street
Waterbury, Vermont 05671-0402
As to the Citizen Plaintiffs:
Nancy S. Marks
Natural Resources Defense Council, Inc.
40 West 20th Street
New York, New York 10011
(212) 727-4414
nmarks@nrdc.org
and

Albert F. Ettinger
Environmental Law and Policy Center
35 East Wacker Dr. Suite 1300
Chicago, Illinois 60601-2110
(312) 673-6500
aettinger@elpc.org
As to Defendants:
Vice President, Environmental Services
American Electric Power Service Corporation
1 Riverside Plaza
Columbus, OH 43215
jmmcmanus@aep.com
and

General Counsel
American Electric Power
1 Riverside Plaza
Columbus, OH 43215
jbkeane@aep.com
189. All notifications, communications, or submissions made pursuant to this Section
shall be sent as follows: (a) by overnight mail or overnight delivery service to the United States;
and (b) by electronic mail to all Plaintiffs, if practicable, but if not practicable, then bypage Attachment 1 mail or overnight delivery service to the States and Citizen Plaintiffs. All notifications, communications, and transmissions sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service.
190. Any Party may change either the notice recipient or the address for providing notices to it by serving all other Parties with a notice setting forth such new notice recipient or address.

## XIX. SALES OR TRANSFERS OF OPERATIONAL OR OWNERSHIP INTERESTS

191. If Defendants propose to sell or transfer an Operational or Ownership Interest to an entity unrelated to Defendants ("Third Party"), they shall advise the Third Party in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the Plaintiffs pursuant to Section XVIII (Notices) of this Consent Decree at least sixty (60) days before such proposed sale or transfer.
192. No sale or transfer of an Operational or Ownership Interest shall take place before the Third Party and Plaintiffs have executed, and the Court has approved, a modification pursuant to Section XXII (Modification) of this Consent Decree making the Third Party a party to this Consent Decree and jointly and severally liable with Defendants for all the requirements of this Decree that may be applicable to the transferred or purchased Interests.
193. This Consent Decree shall not be construed to impede the transfer of any Interests between Defendants and any Third Party so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation - as between Defendants and any Third Party - of the burdens of compliance with this Decree,
provided that both Defendants and such Third Party shall remain jointly and severally pliatachment 1 the obligations of the Consent Decree applicable to the transferred or purchased Interests.
194. If the Plaintiffs agree, the Plaintiffs, Defendants, and the Third Party that has become a party to this Consent Decree pursuant to Paragraph 192, may execute a modification that relieves Defendants of liability under this Consent Decree for, and makes the Third Party liable for, all obligations and liabilities applicable to the purchased or transferred Interests. Notwithstanding the foregoing, however, Defendants may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Interests, including the obligations set forth in Section VIII (Environmental Mitigation Projects), Paragraphs 86 and 67, and Section IX (Civil Penalty). Defendants may propose and the Plaintiffs may agree to restrict the scope of the joint and several liability of any purchaser or transferee for any obligations of this Consent Decree that are not specific to the transferred or purchased Interests, to the extent such obligations may be adequately separated in an enforceable manner.
195. Defendants may propose and Plaintiffs may agree to restrict the scope of joint and several liability of any purchaser or transferee for any AEP Eastern System obligations to the extent such obligations may be adequately separated in an enforceable manner using the methods provided by or approved under Section XVI (Permits).
196. Paragraphs 191-195 of this Consent Decree do not apply if an Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as Defendants: (a) remain the operator (as that term is used and interpreted under the Clean Air Act) of the subject AEP Eastern System Unit(s); (b) remain

Plaintiffs with the following certification within thirty (30) days of the sale or transfer:
"Certification of Change in Ownership Interest Solely for Purpose of Consummating Financing. We, the Chief Executive Officer and General Counsel of American Electric Power ("AEP"), hereby jointly certify under Title 18 U.S.C. Section 1001, on our own behalf and on behalf of AEP, that any change in AEP's Ownership Interest in any AEP Eastern System Unit that is caused by the sale or transfer as collateral security of such Ownership Interest in such Unit(s) pursuant to the financing agreement consummated on [insert applicable date] between AEP and [insert applicable entity]: a) is made solely for the purpose of providing collateral security in order to consummate a financing arrangement; b) does not impair AEP's ability, legally or otherwise, to comply timely with all terms and provisions of the Consent Decree entered in United States, et al. v. American Electric Power Service Corp., et al., Civil Action No. C2-99-1250 ("AEP I") and United States, et al. v. American Electric Power Service Corp., et al., Civil Action Nos. C2-04-1098 and C2-05-360 ("AEP II"); c) does not affect AEP's operational control of any Unit covered by that Consent Decree in a manner that is inconsistent with AEP's performance of its obligations under the Consent Decree; and d) in no way affects the status of AEP's obligations or liabilities under that Consent Decree."

## XX. EFFECTIVE DATE

197. The effective date of this Consent Decree shall be the Date of Entry.

## XXI. RETENTION OF JURISDICTION

198. The Court shall retain jurisdiction of this case after the Date of Entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.
199. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the Plaintiffs and Defendants. Where the modification constitutes a material change to any term of this Decree, it shall be effective only upon approval by the Court.

## XXIII. GENERAL PROVISIONS

200. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The limitations and requirements set forth herein do not relieve Defendants from any obligation to comply with other state and federal requirements under the Clean Air Act at any Units covered by this Consent Decree, including the Defendants' obligation to satisfy any state modeling requirements set forth in a state implementation plan.
201. This Consent Decree does not apply to any claim(s) of alleged criminal liability.
202. In any subsequent administrative or judicial action initiated by any of the Plaintiffs for injunctive relief or civil penalties relating to the facilities covered by this Consent Decree, Defendants shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by any of the Plaintiffs in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph affects the validity of Paragraphs Paragraph 132 and 133, subject to Paragraphs 134 through 138, or Paragraphs 139 and 141.
203. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Defendants of their obligation to comply with all applicable federal, state, and local laws and regulations. Subject to the provisions in Section X (Resolution of Civil prevent or limit the rights of the Plaintiffs to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.
204. At any time prior to termination of this Consent Decree, Defendants may request approval from Plaintiffs to implement other control technology for $\mathrm{SO}_{2}$ or $\mathrm{NO}_{\mathrm{x}}$ than what is required by this Consent Decree. In seeking such approval, Defendants must demonstrate that such alternative control technology is capable of achieving pollution reductions equivalent to an FGD (for $\mathrm{SO}_{2}$ ) or SCR (for $\mathrm{NO}_{\mathrm{x}}$ ) at the Units in the AEP Eastern System at which Defendants seek approval to implement such other control technology for $\mathrm{SO}_{2}$ or $\mathrm{NO}_{\mathrm{x}}$. Approval of such a request is solely at the discretion of the Plaintiffs.
205. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act generated either by the reference methods specified herein or otherwise.
206. Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.
207. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101 . Defendants shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual

Emission Rate is 0.1004 , that shall be reported as 0.100 , and shall be in compliance wiftage fithment 1 Emission Rate of 0.100, and if an actual Emission Rate is 0.1005 , that shall be reported as 0.101 , and shall not be in compliance with an Emission Rate of 0.100. Defendants shall report data to the number of significant digits in which the standard or limit is expressed.
208. This Consent Decree does not limit, enlarge, or affect the rights of any Party to this Consent Decree as against any third parties.
209. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supersedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Consent Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.
210. Except for Citizen Plaintiffs, each Party to this action shall bear its own costs and attorneys' fees. Defendants shall reimburse the Citizen Plaintiffs' attorneys' fees and costs, pursuant to 42 U.S.C. § 7604(d), and the agreement between counsel for Defendants and Citizen Plaintiffs within thirty (30) days of the Date of Entry of this Consent Decree.

## XXIV. SIGNATORIES AND SERVICE

211. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
212. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.
213. Each Party hereby agrees to accept service of process by mail with respa Attachment 1 matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

## XXV. PUBLIC COMMENT

214. The Parties agree and acknowledge that final approval by the United States and the entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. The Defendants shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified the Defendants, in writing, that the United States no longer supports entry of the Consent Decree.
XXVI. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER DECREE
215. Termination as to Completed Tasks. As soon as Defendants complete a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, Defendants may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
216. Conditional Termination of Enforcement Through the Consent Decree. After Defendants:
a. have successfully completed construction, and have maintained Continuous Operation, of all pollution controls as required by this Consent Decree;
b. have obtained final Title V permits (i) as required by the terms p Aftachment 1 Consent Decree; (ii) that cover all Units in this Consent Decree; and (iii) that include as enforceable permit terms all of the Unit performance and other requirements specified in this Consent Decree; and
c. certify that the date is later than December 31, 2022;
then Defendants may so certify these facts to the Plaintiffs and this Court. If the Plaintiffs do not object in writing with specific reasons within forty-five (45) days of receipt of Defendants' certification, then, for any Consent Decree violations that occur after the filing of notice, the Plaintiffs shall pursue enforcement of the requirements contained in the Title V permit through the applicable Title V permit and not through this Consent Decree.
217. Resort to Enforcement under this Consent Decree. Notwithstanding Paragraph 216, if enforcement of a provision in this Consent Decree cannot be pursued by a Party under the applicable Title V permit, or if a Consent Decree requirement was intended to be part of a Title V Permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Consent Decree at any time.
218. Upon approval and entry of this Consent Decree by the Court, this Consent

Decree shall constitute a final judgment among the Parties.
SO ORDERED, THIS $\qquad$ DAY OF $\qquad$ , 2007.

Signature Page for Consent Decree in:
United States et al.
$v$.
American Electric Power Service Corp., et al.

## FOR THE UNITED STATES:



Signature Page for Consent Decree in:
United States of America
$v$.
American Electric Power Service Corp, et al

## FOR THE UNITED STATES OF AMERICA:



## United States et al.

$v$.
American Electric Power Service Corp., et al.

## FOR THE UNITED STATES:



Assistant Administrator
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency


Director, Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency


ADAM M. KUSHNER
Acting Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency


Signature Page for Consent Decree in:
United States et al.
$v$.
American Electric Power Service Corp., et al.


MARY A. GALE
Regional Administrator
Region 5
U.S. Environmental Protection Agency


Regional Counsel
Region 5
U.S. Environmental Protection Agency


Air and Radiation Division
Region 5
U.S. Environmental Protection Agency


SABRINA ARGENTIERI
Associate Regional Counsel
Region 5
U.S. Environmental Protection Agency

Signature Page for Consent Decree in:

## United States et al.,

$v$.
American Electric Power Service Corp., et al.


DONALD S. WELSH
Regional Administrator
U.S. EPA Region III

## Margant ILottinaen

WILLIAM C. EARLY
for
Regional Counsel
U.S. EPA Region III


Senior Assistant Regional Counsel
U.S. EPA Region III


Senior Assistant Regional Counsel
U.S. EPA Region III

Signature Page for Consent Decree in:
United States et al.
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## FOR THE STATE OF CONNECTICUT:



Attorney General


Signature Page for Consent Decree in:
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$v$.
American Electric Power Service Corp., et al.

## FOR THE STATE OF MARYLAND:



SHARI T. WILSON, Secretary
Maryland Department of the Environment 1800 Washington Blvd.
Baltimore, Maryland 21230

DOUGLAS F. GANSLER Attorney General of Maryland


MATTHEW ZIMMERMAN Assistant Attorney General Office of the Attorney General 1800 Washington Blvd.
Baltimore, Maryland 21230
410-537-3452

United States et al.
$\nu$.
American Electric Power Service Corp., et al.

## FOR THE COMMONWEALTH OF MASSACHUSETTS:

> MARTHA COAKLEY
> ATTORNEY GENERAL


Signature Page for Consent Decree in:

## United States et al.

$v$.
American Electric Power Service Corp., et al.

## FOR THE STATE OF NEW HAMPSHIRE:


K. ALLEN BROOKS

Assistant Attorney General
33 Capitol Street
Concord, New Hampshire 03301

# Signature Page for Consent Decree in: <br> United States et al. <br> v. <br> American Electric Power Service Corp., et al. 

FOR THE STATE OF NEW JERSEY:

Very Truly Yours,
ANNE MILGRAM
ATTORNEY GENERAL OF NEW JERSEY


Jon C. Martin
Deputy Attorney General

Signature Page for Consent Decree in:
United States et al.
$v$.
American Electric Power Service Corp., et al.

## FOR THE STATE OF NEW YORK:



ANDREW M. CUOMO
Attorney General


MICHAEL J. MYERS
Assistant Attorneys General
Environmental Protection Bureau
The Capitol
Albany, New York 12224
(518) 402-2260

Of counsel

Signature Page for Consent Decree in:
United States et al.
$v$.
American Electric Power Service Corp., et al.

## FOR THE STATE OF RHODE ISLAND:



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American Electric Power Service Corp., et al.

## FOR THE STATE OF VERMONT:

> WILLIAM H. SORRELL
> ATTORNEY GENERAL STATE OF VERMONT


United States et al.
v.

American Electric Power Service Corp., et al.

## FOR CITIZEN PLAINTIFFS:



Natural Resources Defense Council, Inc.
40 West 20th Street
New York, New York 10011
(212) 727-4414

For Citizen Plaintiffs Sierra Club and Natural Resources Defense Council, Inc.

Signature Page for Consent Decree in:
United States et al.
$\nu$.
American Electric Power Service Corp., et al.

## FOR CITIZEN PLAINTIFFS:

$$
\begin{aligned}
& \text { ALBERT F. ETTINGLR } \\
& \text { Environmental Law \& Policy Center } \\
& 35 \text { East Wacker Drive, Suite } 1300 \\
& \text { Chicago, Illinois 60601-2110 } \\
& \text { For Citizen Plaintiffs Ohio Citizen Action, } \\
& \text { CitizensAction Coalition of Indiana, } \\
& \text { Hoosier Environmental Council, } \\
& \text { Ohio Valley Environmental Coalition, } \\
& \text { West Virginia Environmental Council, } \\
& \text { Clean Air Council, } \\
& \text { Izaak Walton League of America, } \\
& \text { United States Public Interest Research Group, } \\
& \text { National Wildlife Federation, } \\
& \text { Indiana Wildlife Federation } \\
& \text { and League of Ohio Sportsmen }
\end{aligned}
$$

# United States et al. 

$\nu$.
American Electric Power Service Corp., et al.

## FOR CITIZEN PLAINTIFFS:


\$TEPHEN P. SAMUELS, Ohio Bar \#0007979
Schottenstein, Zox \& Dunn Co., LPA
P.O. Box 165020

Columbus, Ohio 43216-5020
(614) 462-5021

Local Counsel for Sierra Club and
Natural Resources Defense Council, Inc. Ohio Citizen
Action, Citizens Action Coalition of Indiana, Hoosier
EnvironmentalCouncil, Ohio Valley
Environmental Coalition, West Virginia
Environmental Council, Clean Air Council, Izaak Walton League of America, United States Public Interest Research Group, National Wildlife Federation, Indiana Wildlife Federation, and League of Ohio Sportsmen

## United States et al

$\nu$.
American Electric Power Service Corp, et al.

FOR DEFENDANTS AMERICAN ELECTRIC POWER SERVICE CORPORATION, ET AL:


NICHOLAS K AKINS
Executive Vice President - Generation

## APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS

In compliance with and in addition to the requirements in Section VIII of this Consent Decree (Environmental Mitigation Projects), Defendants shall comply with the requirements of this Appendix to ensure that the benefits of the $\$ 36$ million in federally directed Environmental Mitigation Projects are achieved.

## I. National Parks Mitigation

A. Within 45 days from the Date of Entry, Defendants shall pay to the National Park Service the sum of $\$ 2$ million to be used in accordance with the Park System Resource Protection Act, 16 U.S.C. § 19jj, for the restoration of land, watersheds, vegetation, and forests using adaptive management techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. This may include reforestation or restoration of native species and acquisition of equivalent resources and support for collaborative initiatives with state and local agencies and other stakeholders to develop plans to assure resource protection over the long-term. Projects will focus on one or more of the following Class I areas alleged in the underlying action to have been injured by emissions from Defendants facilities: Shenandoah National Park, Mammoth Cave National Park, and Great Smoky Mountains National Park.
B. Payment of the amount specified in the preceding paragraph shall be made to the Natural Resource Damage and Assessment Fund managed by the United States Department of the Interior. Instructions for transferring funds will be provided to the Defendants by the National Park Service. Notwithstanding Section I.A of this Appendix, payment of funds by Defendants is not due until ten (10) days after receipt of payment instructions.
C. Upon payment of the required funds into the Natural Resource Damage and Assessment Fund, Defendants shall have no further responsibilities regarding the implementation of any project selected by the National Park Service in connection with this provision of the Consent Decree.

## II. Overall Environmental Mitigation Project Schedule and Budget

A. Within 120 days of the Date of Entry, as further described below, Defendants shall submit plans to EPA for review and approval for completing the remaining $\$ 34$ million in federally directed Environmental Mitigation Projects specified in this Appendix over a period of not more than five (5) years from the Date of Entry. EPA will consult with the Citizen Plaintiffs, through their counsel, prior to approving or commenting on any proposed plan. The Parties agree that Defendants are entitled to spread their payments for Environmental Mitigation Projects evenly over the five-year period commencing upon the Date of Entry. Defendants are not, however, precluded from accelerating payments to better effectuate a proposed mitigation plan, provided however, Defendants shall not be entitled to any reduction in the nominal amount of the required paymentegey 105 of 138 virtue of the early expenditures. EPA may, but is not required to, approve a proposed Project budget that results in a back-loading of some expenditures. EPA shall determine prior to approval that all Projects are consistent with federal law.
B. Defendants may, at their election, consolidate the plans required by this Appendix into a single plan.
C. In addition to the requirements set forth below, Defendants shall submit within 120 days of the Date of Entry, a summary-level budget and Project time-line that covers all of the Projects proposed.
D. Beginning March 31, 2008, and continuing on March 31 of each year thereafter until completion of each Project (including any applicable periods of demonstration or testing), Defendants shall provide the United States and Citizen Plaintiffs with written reports detailing the progress of each Project, including Project Dollars.
E. Within 60 days following the completion of each Project required under Appendix A, Defendants shall submit to the United States and Citizen Plaintiffs a report that documents the date that the Project was completed, the results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by Defendants in implementing the Project.
F. Upon approval of the plans required by this Appendix by EPA, Defendants shall complete the Environmental Mitigation Projects according to the approved plans. Nothing in this Consent Decree shall be interpreted to prohibit Defendants from completing Environmental Mitigation Projects before the deadlines specified in the schedule of an approved plan.

## III. Acquisition and Restoration of Ecologically Significant Areas in Indiana, Kentucky, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia

A. Within 120 days of the Date of Entry, and on each anniversary of the initial submission for the following four (4) years, Defendants shall submit a plan to EPA for review and approval, in consultation with the Citizen Plaintiffs, for acquisition and/or restoration of ecologically significant areas in Indiana, Kentucky, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia ("Land Acquisition and Restoration"). Defendants shall spend no less than a total of $\$ 10$ million in Project Dollars on Land Acquisition and Restoration over the five year period provided under this Appendix for completion of federally directed Environmental Mitigation Projects.
B. Defendants' proposed plan shall:

1. Describe the proposed Land Acquisition and Restoration projects in sufficient detail to allow the reader to ascertain how each proposed action meets the requirements set out below. For purposes of this Appendix and Section VIII (Environmental Mitigation Projects) of this Consent Decree, land acquisition means purchase of interests in land, including fee ownership, easements, or other restrictions that run with the land that provide for perpetual protection of the acquired land. Restoration may include, by way of illustration, direct reforestation (particularly of tree species that may be affected by acidic deposition) and soil enhancement. Any restoration action must also incorporate the acquisition of an interest in the restored lands sufficient to ensure perpetual protection of the restored land. Any proposal for acquisition of land must identify fully all owners of the interests in the land. Every proposal for acquisition of land must identify the ultimate holder of the interests to be acquired and provide a basis for concluding that the proposed holder of title is appropriate for long-term protection of the ecological or environmental benefits sought to be achieved through the acquisition.
2. Describe generally the ecological significance of the area to be acquired or restored. In particular, identify the environmental/ecological benefits expected as a result of the proposed action. In proposing areas for acquisition and restoration, Defendants shall focus on those areas that are in most need of conservation action or that promise the greatest conservation return on investment.
3. Describe the expected cost of the Land Acquisition and Restoration, including the fair market value of any areas to be acquired.
4. Identify any person or entity other than Defendants that will be involved in the land acquisition or restoration action. Defendants shall describe the third-party's role in the action and the basis for asserting that such entity is able and suited to perform the intended role. For purposes of this Section of the Appendix, third-parties shall only include non-profits; federal, state, and local agencies; or universities. Any proposed third-party must be legally authorized to perform the proposed action or to receive Project Dollars.
5. Include a schedule for completing and funding each portion of the project.
C. Performance - Upon approval of the plan by EPA, after consultation with the Citizen Plaintiffs, Defendants shall complete the Land Acquisition and Restoration project according to the approved plan and schedule.

## IV. Nitrogen Impact Mitigation in the Chesapeake Bay

A. Within 120 days of Date of Entry, Defendants shall submit a plan to EPA for review and approval, in consultation with the Citizen Plaintiffs, for the mitigation of adverse impacts on the Chesapeake Bay associated with nitrogen ("Chesapeake Bay Mitigation Project"). Defendants shall spend no less than a total of \$3 million in Project Dollars on the Chesapeake Bay Mitigation Project.
B. Defendant's proposed plan shall:

1. Describe proposed Project(s) that reduce nitrogen loading in the Chesapeake Bay or otherwise mitigate the adverse effects of nitrogen in the Chesapeake Bay. Projects that may be approved include, by way of illustration, creation of forested stream buffers on agricultural land or other land cover to establish a "buffer zone" to keep livestock out of the adjoining waterway and to filter runoff before it enters the waterway.
2. Describe generally the expected environmental benefit of the proposed Chesapeake Bay Mitigation Project. The key criteria for selection of components of the Project are the magnitude of the expected ecological/environmental benefit(s) in relation to the cost and the relative permanence of the expected benefit(s). Expected loadings benefits should be quantified to the extent practicable.
3. Describe the expected cost of each element of the Chesapeake Bay Mitigation Project, including the fair market value of any interests in land to be acquired.
4. Identify any person or entity other than Defendants that will be involved in any aspect of the Chesapeake Bay Mitigation Project. Defendants shall describe the third-party's role in the action and the basis for asserting that such entity is able and suited to perform the intended role. For purposes of this Section of the Appendix, third-parties shall only include nonprofits; federal, state, and local agencies; or universities. Any proposed third-party must be legally authorized to perform the proposed action or to receive Project Dollars.
5. Include a schedule for completing and funding each portion of the Project.
C. Performance - Upon approval of the plan for Chesapeake Bay Mitigation by EPA, Defendants shall complete the Project according to the approved plan and schedule.

## V. Mobile Source Emission Reduction Projects

A. Within 120 days of the Date of Entry, Defendants shall submit a plan to EPA for review and approval, in consultation with the Citizen Plaintiffs, for the completion of Projects to reduce emissions from Defendants' fleet of barge tugboats on the Ohio River, diesel trains at or near power plants, Defendants' fleet of motor vehicles in certain eastern states, and/or truck stops in certain eastern states ("Mobile Source Projects"). Defendants shall spend no less than a total of $\$ 21$ million in Project Dollars on one or more of the three Mobile Source Projects specified in this Section, in accordance with the plans for such Projects approved by EPA, after consultation with the Citizen Plaintiffs. The key criteria for selection of components of the Mobile Source Projects are the magnitude of the expected environmental benefit(s) in relation to the cost.
B. Diesel Tug/Train Project

1. Defendants are among the leading barge operators in the country, with operations on the Ohio River, the Mississippi River, and the Gulf Coast. Barges are propelled by tugboats, which generally use a type of marine diesel fuel known as No. 2 distillate fuel oil. Tugboats that switch to ultra-low sulfur diesel fuel ("ULSD") reduce emissions of $\mathrm{NO}_{\mathrm{x}}, \mathrm{PM}$, volatile organic compounds ("VOCs"), and other air pollutants. All marine diesel fuel must be ULSD by June 1, 2012, pursuant to EPA's Nonroad Diesel Rule (see "Control of Emissions of Air Pollution from Nonroad Diesel Engines and Fuels; Final Rule," 69 Fed. Reg. 38,958 (June 29, 2004)). Defendants also receive coal by diesel trains.
2. As part of the plan for Mobile Source Projects, Defendants may elect to achieve accelerated emission reductions from their tugboat fleet on the Ohio River ("Ohio River Tug Fleet") and/or their diesel powered trains used at or near their power plants, as one of the three possible mobile source Projects under this Consent Decree ("Diesel Tug/Train Project").
3. The Diesel Tug/Train Project shall require one or more of the following:
a. The accelerated retrofitting or re-powering of Tugs with engines that require the use of ULSD. Selection of this Project is expressly conditioned upon identification of satisfactory technology and an agreement between EPA and Defendants on how to credit Project Dollars towards this project.
b. The retrofitting or repowering of the marine engines in the Ohio River Tug Fleet with diesel oxidation catalysts ("DOCs"), diesel particulate filters ("DPFs"), or other equivalent advanced technologies that reduce emissions of PM and VOCs from marine engines in tugboats (collectively "DOC/DPFs"). Defendants shall only install DOCs/DPFs that have received applicable approvals or reducing emissions from tugboat engines. Defendants must maintain any DOCs/DPFs installed as part of the Tug Project for the useful life of the equipment (as defined in the proposed Plan), even after the completion of the Tug Project. Project Dollars may be spent on DOCs/DPFs within 5 years of the Date of Entry, in accordance with the approved schedule for the mitigation projects in this Appendix.
c. The accelerated use of ULSD for the Ohio River Tug Fleet, from the Date of Entry through January 1, 2012. Notwithstanding any other provision of this Consent Decree, including this Appendix, Defendants shall only receive credit for the incremental cost of ULSD as compared to the cost of the fuel Defendants would otherwise utilize.
d. Emission reduction measures for diesel powered trains. Such measures may include retro-fitting with, or conversion to, Multiple Diesel Engine GenSets that are EPA Tier III Off-Road certified; Diesel Electric Hybrid; Anti-idling controls/strategies and Auto Shut-Off capabilities. Selection of this Project is expressly conditioned upon identification of satisfactory technology and an agreement between EPA and Defendants on how to credit Project Dollars towards this project.
4. The proposed plan for the Diesel Tug/Train Project shall:
a. Describe the expected cost of the project, including the costs for any equipment, material, labor costs, and the proposed method for accounting for the cost of each element of the Diesel Tug/Train Project, including the incremental cost of ULSD.
b. Describe generally the expected environmental benefit of the project, including any expected fuel efficiency improvements and quantify emission reductions expected.
c. Include a schedule for completing each portion of the Diesel Tug/Train Project.
5. Performance - Upon approval of the Diesel Tug/Train Project plan by EPA, Defendants shall complete the project according to the approved plan and schedule.

## C. Hybrid Vehicle Fleet Project

1. AEP has a fleet of approximately 11,000 motor vehicles in the eleven states where it operates, including vehicles in Indiana, Ohio, Michigan, Virginia, West Virginia, and Kentucky. These motor vehicles are generally powered by conventional diesel or gasoline engines and include vehicles such as diesel "bucket" trucks. The use of hybrid engine technologies in Defendants' motor vehicles, such as diesel-electric engines, will improve fuel efficiency and reduce emissions of $\mathrm{NO}_{\mathrm{x}}, \mathrm{PM}$, VOCs, and other air pollutants.
2. As part of the plan for Mobile Source Projects, Defendants may elect to spend Project Dollars on the replacement of conventional motor vehicles in their fleet with newly manufactured Hybrid Vehicles ("Hybrid Vehicle Fleet Project").
3. The proposed plan for the Hybrid Vehicle Fleet Project shall:
a. Propose the replacement of conventional gasoline or diesel powered motor vehicles (such as bucket trucks) with Hybrid Vehicles. For purposes of this subsection of this Appendix, "Hybrid Vehicle" means a vehicle that can generate and utilize electric power to reduce the vehicle's consumption of fossil fuel. Any Hybrid Vehicle proposed for inclusion in the Hybrid Fleet Project shall meet all applicable engine standards, certifications, and/or verifications.
b. Provide for Hybrid Vehicles replacement in that portion of Defendants' fleet in Indiana, Ohio, Michigan, West Virginia, Virginia, and/or Kentucky. Notwithstanding any other provision of this Consent Decree, including this Appendix, Defendants shall only receive credit toward Project Dollars for the incremental cost of Hybrid Vehicles as compared to the cost of a newly manufactured, similar motor vehicle.
c. Prioritize the replacement of diesel-powered vehicles in Defendants' fleet.
d. Provide a method to account for the costs of the Hybrid Vehicles, including the incremental costs of such vehicles as compared to conventional gasoline or diesel motor vehicles.
e. Certify that Defendants will use the Hybrid Vehicles for their useful life (as defined in the proposed plan).
f. Include a schedule for completing each portion of the Project.
g. Describe generally the expected environmental benefits Oaqe the 11 of 138 Project, including any fuel efficiency improvements, and quantify emission reductions expected.
4. Performance - Upon approval by EPA of the plan for the Hybrid Vehicle Fleet Project, after consultation with the Citizen Plaintiffs, Defendants shall complete the Project according to the approved plan.

## D. Truck Stop Electrification

1. Long-haul truck drivers typically idle their engines at night at rest areas to supply heat or cooling in their sleeper cab compartments, and to maintain vehicle battery charge while electrical appliances such as televisions, computers, and microwaves are in use. Modifications to rest areas to provide parking spaces with electrical power, heat, and air conditioning will allow truck drivers to turn their engines off. Truck stop electrification reduces idling time and therefore reduces diesel fuel usage, and thus reduces emissions of $\mathrm{PM}, \mathrm{NO}_{x}$, and VOCs.
2. As part of the plan for Mobile Source Projects, Defendants may elect to achieve emission reductions by truck stop electrification, which shall include, where necessary, techniques and infrastructure needed to support such a program ("Truck Stop Electrification Project").
3. The proposed plan for the Truck Stop Electrification Project shall:
a. Identify truck stops in one or more of the following States for Electrification: Ohio, Indiana, Kentucky, North Carolina, Pennsylvania, West Virginia, and Virginia. EPA may give preference to electrification Projects that are co-located, if possible, along the same transportation corridor.
b. Describe the level of expected usage of the planned electrification facilities, air quality in the vicinity of the proposed Projects, proximity of the proposed Project to population centers, and whether the owner or some other entity is willing to pay for some portion of the work.
c. Provide for the construction of truck stop electrification stations with established technologies and equipment.
d. Account for hardware procurement and installation costs at the recipient truck stops.
e. Include a schedule for completing each portion of the Project. Project and quantify emission reductions expected.
4. Performance - Upon approval of the plan for the Truck Stop Electrification Project by EPA, after consultation with the Citizen Plaintiffs, Defendants shall complete the Project according to the approved plan.

## APPENDIX B

## REPORTING REQUIREMENTS

## I. Annual Reporting Requirements

In accordance with the dates specified below, for periods on and after the Date of Entry, Defendants shall submit annual reports to the United States, the States, and the Citizen Plaintiffs, electronically and in hard copy, as required by Paragraph 143 and certified as required by Paragraph 146. In such annual reports, Defendants shall include the following information:
A. Eastern System-Wide Annual Tonnage Limitations for $\mathrm{SO}_{2}$ and $\mathrm{NO}_{\mathrm{x}}$

Beginning on March 31, 2010, for the Eastern System-Wide Annual Tonnage Limitations for $\mathrm{NO}_{\mathrm{x}}$, and March 31, 2011, for the Eastern System-Wide Annual Tonnage Limitations for $\mathrm{SO}_{2}$, and annually thereafter, Defendants shall report the following information: (a) the total actual annual tons of the pollutant emitted from each Unit (or for Units vented to a common stack, from each combined stack) within the AEP Eastern System, as defined in Paragraph 7, during the prior calendar year; (b) the total actual annual tons of the pollutant emitted from the AEP Eastern System during the prior calendar year; (c) the difference, if any, between the applicable Eastern System-Wide Annual Tonnage Limitation for the pollutant in that calendar year and the amount reported in subparagraph (b); and (d) the annual average emission rate, expressed as a $\mathrm{lb} / \mathrm{mmBTU}$ for $\mathrm{NO}_{\mathrm{x}}$, for each Unit within the AEP Eastern System and for the entire AEP Eastern System during the prior calendar year. Data reported pursuant to this subsection shall be based upon the CEMS data submitted to the Clean Air Markets Division.
B. Plant-Wide Annual Rolling Average Tonnage Limitation for $\mathrm{SO}_{2}$ at Clinch River

Beginning on March 31, 2011, and continuing annually thereafter, Defendants shall report: (a) the actual tons of $\mathrm{SO}_{2}$ emitted from all Units at the Clinch River plant on an annual rolling average basis as defined in Paragraphs 47 and 88 for the prior calendar year; and (b) the applicable Plant-Wide Annual Rolling Average Tonnage Limitation for $\mathrm{SO}_{2}$ at the Clinch River plant for the prior calendar year. For calendar years other than 2010 and 2015, Defendants shall also report the 12-month rolling average emissions for each month.
C. Plant-Wide Tonnage Limitation for $\mathrm{SO}_{2}$ at Kammer

Beginning on March 31, 2011, and continuing annually thereafter, Defendants shall report: (a) the actual tons of $\mathrm{SO}_{2}$ emitted from all Units at the Kammer plant as specified in Paragraph 48 for the prior calendar year; and (b) the Plant-Wide Tonnage Limitation for $\mathrm{SO}_{2}$ at the Kammer plant for that calendar year.

## 1. Reporting Requirements for Unrestricted Excess $\mathrm{NO}_{\underline{x}}$ Allowances

Beginning on March 31, 2010, and continuing annually through March 31, 2016, Defendants shall report the number of Unrestricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances available each year between 2009 through 2015, and how or whether such allowances were used so that Defendants account for each Unrestricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowance for each year during 2009 through 2015. No later than March 31, 2016, Defendants shall report: (a) the cumulative number of unused Unrestricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances subject to surrender pursuant to Paragraph 75 and calculated pursuant to Paragraph 74, and (b) the total number of unused Unrestricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances that they surrendered.

## 2. Reporting Requirements for Restricted Excess $\mathrm{NO}_{\underline{\underline{x}}}$ Allowances

a. Beginning on March 31, 2010, and continuing annually through March 31, 2016, Defendants shall report: (a) the number of Restricted Excess NOx Allowances available each year between 2009 through 2015; (b) the actual emissions from any New and Newly Permitted Unit during each year; (c) the actual NOx emissions from the five natural gas plants listed in Paragraph 76 during each year; (d) the amount, if any, of Restricted Excess NOx Allowances that are not subject to surrender each year because of Defendants' investment in renewable energy as defined in Paragraph 77 and the data supporting Defendants' calculation; and (e) the difference between the cumulative total of Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances available from each year and any prior year and the actual emissions reported under (b) and (c), above, for that year and any Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances not subject to surrender reported under (d), above. No later than March 31, 2016, Defendants shall report: (a) the cumulative number of unused Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances subject to surrender calculated pursuant to Paragraphs 76 and 77, and (b) the total number of unused Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances that they surrendered.
b. No later than March 31, 2017, and continuing annually thereafter, Defendants shall report: (a) the number of Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances available in the prior year; (b) the actual emissions from any New and Newly Permitted Unit during such year; (c) the actual emissions from the five natural gas plants listed in Paragraph 76 during such year; (d) the amount, if any, of Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances that are not subject to surrender for such year because of Defendants' investment in renewable energy as defined in Paragraph 77 and the data supporting Defendants' calculation; (e) the number of Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances subject to surrender for such year calculated pursuant to Paragraphs 76 and 77; and (f) the total number of unused Restricted Excess $\mathrm{NO}_{\mathrm{x}}$ Allowances that they surrendered for such year.

Beginning on March 31, 2011, and continuing annually thereafter, Defendants shall report: (a) the number of Excess $\mathrm{SO}_{2}$ Allowances subject to surrender calculated pursuant to Paragraph 93, and (b) the total number of Excess $\mathrm{SO}_{2}$ Allowances that they surrendered.
F. Continuous Operation of Pollution Controls required by Paragraphs 68, 69, 87, and 102

On March 31 of the year following Defendants' obligation pursuant to this Consent Decree to commence Continuous Operation of an SCR, FGD, ESP, or Additional $\mathrm{NO}_{\mathrm{x}}$ Pollution Controls, Defendants shall report the date that they commenced Continuous Operation of each such pollution control as required by this Consent Decree. Beginning on March 31, 2008, and continuing annually thereafter, Defendants shall report, for any SCR, FGD, ESP, or Additional $\mathrm{NO}_{\mathrm{x}}$ Pollution Controls required to Continuously Operate during that year, the duration of any period during which that pollution control did not Continuously Operate, including the specific dates and times that such pollution control did not operate, the reason why Defendants did not Continuously Operate such pollution control, and the measures taken to reduce emissions of the pollutant controlled by such pollution control.

## G. Installation of $\mathrm{SO}_{2}$ and $\mathrm{NO}_{\mathrm{x}}$ Pollution Controls

Beginning on March 31, 2008, and continuing annually thereafter, Defendants shall report on the progress of construction of $\mathrm{NO}_{\mathrm{x}}$ and $\mathrm{SO}_{2}$ pollution controls required by this Consent Decree including: (1) if construction is not underway, any available information concerning the construction schedule, including the dates of any major contracts executed during the prior calendar year, and any major components delivered during the prior calendar year; (2) if construction is underway, the estimated percent of installation as of the end of the prior calendar year, the current estimated construction completion date, and a brief description of completion of significant milestones during the prior calendar year, including a narrative description of the current construction status (e.g. foundations completed, absorber installation proceeding all material on-site, new stack erection completed, etc.); and (3) once construction is complete, the dates the equipment was placed in service and any acceptance testing was performed during the prior calendar year.

## H. Installation and Operation of PM CEMS

Beginning on March 31, 2013, for Cardinal Units 1 and 2 and a third Unit identified pursuant to Paragraph 110, and continuing annually thereafter for all periods of operation of PM CEMS as required by this Consent Decree, Defendants shall report the data recorded by the PM CEMS, expressed in $\mathrm{lb} / \mathrm{mmBTU}$ on a 3-hour rolling average basis in electronic format for the prior calendar year, in accordance with Paragraph 107.

## I. Other $\mathrm{SO}_{2}$ Measures

Commencing in the first annual report Defendants submit pursuant to Paragraph 143, and continuing annually thereafter, Defendants shall submit all data necessary to determine Defendants' compliance with the annual average coal content specified in the table in Paragraph 90.
J. 1-Hour Average $\mathrm{NO}_{\mathrm{x}}$ Emission Rate and 30-Day Rolling Average Emission Rates for $\mathrm{SO}_{2}$ and $\mathrm{NO}_{\mathrm{x}}$

1. Beginning on March 31 of the year following Defendants' obligation pursuant to this Consent Decree to first comply with an applicable 1-Hour Average $\mathrm{NO}_{\mathrm{x}}$ Emission Rate and/or 30-Day Rolling Average Emission Rate for $\mathrm{SO}_{2}$ and $\mathrm{NO}_{x}$, and continuing annually thereafter, Defendants shall report all 1-Hour Average Emission Rate results and/or 30-Day Rolling Average Emission Rate results to determine compliance with such emission rate, as defined in Paragraph 4 or 5, as appropriate. Defendants shall also report: (a) the date and time that the Unit initially combusts any fuel after shutdown; (b) the date and time after startup that the Unit is synchronized with a utility electric distribution system; (c) the date and time that the fire is extinguished in a Unit; and (d) for the fifth and subsequent Cold Start Up Period that occurs within any 30-Day period, the earlier of the date and time that is either (i) eight hours after the unit is synchronized with a utility electric distribution system, or (ii) the flue gas has reached the SCR operational temperature range specified by the catalyst manufacturer.
2. Within the first report that identifies a 1-Hour Average $\mathrm{NO}_{\mathrm{x}}$ Emission Rate or 30-Day Rolling Average Emission Rate for $\mathrm{SO}_{2}$ or $\mathrm{NO}_{\mathrm{x}}$, Defendants shall include at least five (5) example calculations (including hourly CEMS data in electronic format for the calculation) used to determine the 1-Hour Average $\mathrm{NO}_{\mathrm{x}}$ Emission Rate and the 30-Day Rolling Average Emission Rate for $\mathrm{SO}_{2}$ or $\mathrm{NO}_{\mathrm{x}}$ for five (5) randomly selected days. If at any time Defendants change the methodology used in determining the 1-Hour Average $\mathrm{NO}_{\mathrm{x}}$ Emission Rate or the 30-Day Rolling Average Emission Rate for $\mathrm{SO}_{2}$ or $\mathrm{NO}_{\mathrm{x}}$, Defendants shall explain the change and the reason for using the new methodology.

## K. 30-Day Rolling Average Removal Efficiency for $\mathrm{SO}_{2}$

1. Beginning on March 31 of the year following Defendants' obligation pursuant to this Consent Decree to first comply with a 30-Day Rolling Average Removal Efficiency, and continuing annually thereafter, Defendants shall report all 30-Day Rolling Average Removal Efficiency results to determine compliance with such removal efficiency as defined in Paragraph 6 or, for Conesville Units 5 and 6, as specified in Appendix C.
2. Within the first report that identifies a 30-Day Rolling Average Removal Efficiency for $\mathrm{SO}_{2}$, Defendants shall include at least five (5) example calculations (including hourly CEMS data in electronic format for the calculation) used to determine the 30-Day Rolling Average Removal Efficiency for five (5) randomly selected days. If
at any time Defendants change the methodology used in determining the 30-Day Ragnilitg of 138 Average Removal Efficiency, Defendants shall explain the change and the reason for using the new methodology.

## L. PM Emission Rates

Beginning on March 31, 2010, for Cardinal Units 1 and 2, and beginning on March 31, 2013 for Muskingum River Unit 5, and continuing annually thereafter, Defendants shall report the PM Emission Rate as defined in Paragraph 51, for Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5. For all such Units, Defendants shall attach a copy of the executive summary and results of any stack test performed during the calendar year covered by the annual report.
M. Environmental Mitigation Projects

1. Mitigation Projects to be Conducted by the States

Defendants shall report the disbursement of funds as required in Paragraph 127 of the Consent Decree in the next annual progress report that Defendants submit pursuant to Paragraph 143 following such disbursement of funds.

## 2. Appendix A Projects

Beginning March 31, 2008, and continuing on March 31 of each year thereafter until completion of each Project (including any applicable periods of demonstration or testing), Defendants shall provide the United States and Citizen Plaintiffs with written reports detailing the progress of each Project, including Project Dollars.

## N. Other Unit becoming an Improved Unit

If Defendants decide to make an Other Unit an Improved Unit, Defendants shall so state in the next annual progress report they submit pursuant to Paragraph 143 after making such decision, and comply with the reporting requirements specified in Section I.G of this Appendix and any other reporting or notice requirements in accordance with the Consent Decree.

## II. Deviation Reports

Beginning March 31, 2008, and continuing annually thereafter, Defendants shall report a summary of all deviations from the requirements of the Consent Decree that occurred during the prior calendar year, identifying the date and time that the deviation occurred, the date and time the deviation was corrected, the cause and any corrective actions taken for each deviation, if necessary, and the date that the deviation was initially reported under Paragraph 145. In addition to any express requirements in Section I, above, or in the Consent Decree, such deviations required to be reported include, but are not limited to, the following requirements: the 1-Hour Average $\mathrm{NO}_{\mathrm{x}}$ Emission Rate, the Removal Efficiency for $\mathrm{SO}_{2}$, and the PM Emission Rate.

## III. Submissions Pending Review

In each annual report Defendants submit pursuant to Paragraph 143, Defendants shall include a list of all plans or submissions made pursuant to this Consent Decree during the calendar year covered by the annual report, the date(s) such plans or submissions were submitted to one or more Plaintiffs for review and/or approval, and shall identify which, if any, are still pending review and approval by Plaintiffs upon the date of submission of the annual report.

## IV. Other Information Necessary To Determine Compliance

To the extent that information not expressly identified above is necessary to determine Defendants' compliance with the requirements of this Consent Decree during a reporting period, and has not otherwise been submitted in accordance with the provisions of the Consent Decree, Defendants shall provide such information as part of the annual report required pursuant to Section XI of the Consent Decree.

## APPENDIX C

## MONITORING STRATEGY AND CALCULATION OF THE 30-DAY ROLLING AVERAGE REMOVAL EFFICIENCY FOR CONESVILLE UNITS 5 AND 6

## I. Monitoring Strategy

1. The $\mathrm{SO}_{2}$ monitoring system for Conesville Units $5 \& 6$ will consist of two separate FGD inlet monitors in each of the two FGD inlet ducts for each Unit, and one FGD outlet monitor in the combined flow from the outlets of the FGD modules for each Unit, prior to the common stack.
2. Due to space constraints and potential interferences, monitors are currently located in the inlet duct for one FGD module on each Unit and at the combined outlet from both FGD modules for each Unit prior to entering the stack using best engineering judgment.
3. On or before December 31, 2008, Defendants shall submit a monitoring plan to EPA for approval that will propose where to site and install an additional inlet monitor in each of the unmonitored FGD inlet ducts for each Unit, and include a requirement that Defendants submit a complete certification application for the Conesville Units 5 \& 6 monitoring system to EPA and the state permitting authority.
4. The Monitoring Plan will incorporate the applicable procedures and quality assurance testing found in 40 C.F.R. Part 75, subject to the following:
a. The PS-2 siting criteria will not be applied to these monitoring systems; however, the majority of the procedures in Section 8.1.3.2 of PS-2 will be followed. Sampling of at least nine (9) sampling points selected in accordance with PS-1 will be performed prior to the initial RATA. If the resultant $\mathrm{SO}_{2}$ emission rates for any single sampling point calculated in accordance with Equation 19.7 are all within $10 \%$ or $0.02 \mathrm{lb} / \mathrm{mmBtu}$ of the mean of all nine (9) sampling points, the alternative traverse point locations ( $0.4,1.2$, and 2.0 meters from the duct wall) will be representative and may be used for all subsequent RATAs.
b. The required relative accuracy test audit will be performed in accordance with the procedures of 40 C.F.R. Part 75, except that the calculations will be performed on an $\mathrm{SO}_{2}$ emission rate basis (i.e., $\mathrm{lb} / \mathrm{mmBtu}$ ).
c. The criteria for passing the relative accuracy test audit will be the same criteria that 40 C.F.R. Part 75 requires for relative accuracy or alternative performance specification as provided for $\mathrm{NO}_{\mathrm{x}}$ emission rates.
d. "Diluent capping" (i.e., $5 \% \mathrm{CO}_{2}$ ) will be applied to the $\mathrm{SO}_{2}$ emissiorierate of 138 for any hours where the measured $\mathrm{CO}_{2}$ concentration rounds to zero.
e. Results of quality assurance testing, data gathered by the inlet and outlet monitoring systems, and the resultant 30-day Rolling Average Removal Efficiencies for these monitoring systems are not required to be reported in the quarterly reports submitted to EPA's Clean Air Markets Division for purposes of 40 C.F.R. Part 75. Results will be maintained at the facility and available for inspection, and the 30-day Rolling Average Removal Efficiency will be reported in accordance with the requirements of the Consent Decree and Appendix B. Equivalent data retention and reporting requirements will be incorporated into the applicable permits for these Units.
f. Missing Data Substitution of 40 C.F.R Part 75 will not be implemented.
g. Initial performance testing will be performed before the effective date of the 30-Day Rolling Average Removal Efficiency requirements, and the results will be reported to Plaintiffs as part of the annual report submitted in accordance with Appendix B.

## II. Calculation of 30-Day Rolling Average Removal Efficiency

1. Removal efficiency shall be calculated by the equation:
$\left[\mathrm{SO}_{2}\right.$ emission rate $_{\text {Inlet }}-\mathrm{SO}_{2}$ emission rate $\left.{ }_{\text {Outlet }}\right] / \mathrm{SO}_{2}$ emission rate Inlet $^{*} 100$
2. Inlet and outlet emission rates shall be calculated using the methodology specified in 40 C.F.R. Part 60 Appendix B - Method 19. Inlet emission rates will be based on the average of the valid recorded values calculated for each of the inlet FGD monitors at each Unit. Measurements are made on a wet basis, so Equation 19.7 will be utilized to determine the hourly $\mathrm{SO}_{2}$ emission rate at each location. To make the conversion between the measured wet $\mathrm{SO}_{2}$ and $\mathrm{CO}_{2}$ concentrations and an emission rate in pounds per million BTU, an electronic Data System will perform Equation 19.7 using the $\mathrm{SO}_{2} \mathrm{ppm}$ conversion factor from Table 19-1 of Method 19 and the Fc factor for the applicable fuel (currently bituminous coal) in Table 19-2 of Method 19. The resulting equation will be:

Emission rate $\left(\mathrm{lb} \mathrm{SO}_{2} / \mathrm{mmBtu}\right)=1.660 \times 10^{-7} * \mathrm{SO}_{2}($ in ppm $) * \mathrm{Fc} * 100 / \mathrm{CO}_{2}($ in $\%)$
3. The electronic data system will calculate the hourly average $\mathrm{SO}_{2}$ and $\mathrm{CO}_{2}$ concentration in accordance with 40 C.F.R. Part 75 quality control/quality assurance requirements and will compute and retain these $\mathrm{SO}_{2}$ emission rates for every operating hour meeting the minimum data capture requirements in accordance with 40 C.F.R. Part 75. Prior to the
calculation of the $\mathrm{SO}_{2}$ emission rate, hourly $\mathrm{SO}_{2}$ and $\mathrm{CO}_{2}$ concentratisens ${ }^{1}$ of 138 will be rounded to the nearest tenth (i.e., 0.1 ppm or $0.1 \% \mathrm{CO}_{2}$ ) and the resulting $\mathrm{SO}_{2}$ emission rate will be rounded to the nearest thousandth (i.e., $0.001 \mathrm{lb} / \mathrm{mmBtu}$ ).
4. From these hourly $\mathrm{SO}_{2}$ emission rates, $\mathrm{SO}_{2}$ removal efficiencies will be calculated for each hour when the Unit is firing fossil fuel, and the hourly $\mathrm{SO}_{2}$ and $\mathrm{CO}_{2}$ monitors meet the QA/QC requirements of Part 75. Hourly $\mathrm{SO}_{2}$ removal efficiencies will be computed by taking the hourly inlet $\mathrm{SO}_{2}$ emission rate minus the outlet $\mathrm{SO}_{2}$ emission rate, dividing the result by inlet $\mathrm{SO}_{2}$ emission rate and multiplying by 100 . The resulting removal efficiency will be rounded to the nearest tenth (i.e., $95.1 \%$ ). Daily $\mathrm{SO}_{2}$ removal efficiencies will be calculated by taking the sum of Hourly $\mathrm{SO}_{2}$ removal efficiencies and dividing by the number of valid monitored hours for each Operating Day. The resulting daily removal efficiencies will be rounded to the nearest tenth (i.e., 95.1\%).
5. The 30-Day Rolling Average Removal Efficiency will be computed by taking the current Operating Day's daily $\mathrm{SO}_{2}$ removal efficiency (as described in Paragraph 4 of this Appendix C) plus the previous 29 Operating Days' daily $\mathrm{SO}_{2}$ removal efficiency, and dividing the sum by 30. In the event that a daily $\mathrm{SO}_{2}$ removal efficiency is not available for an Operating Day, Defendants shall exclude that Operating Day from the calculation of the 30-Day Rolling Average Removal Efficiency. The resulting 30-day Rolling Average Removal Efficiency will be rounded to the nearest tenth of a percent (i.e., a value of $95.04 \%$ rounds down to $95.0 \%$, and a value of $95.05 \%$ rounds up to $95.1 \%$ ).



CORP., ET AL.,

Defendants.

JUDGE GREGORY L. FROST
Magistrate Judge Norah McCann King

Civil Action No. C2-04-1098

## JOINT NOTICE OF THE PARTIES' SUBSTITUTION OF CORRECTED PAGES FOR THE PROPOSED CONSENT DECREE

On October 9, 2007, the United States of America ("United States") lodged a proposed Consent Decree in the above-captioned matter, to which the AEP Defendants, the United States, the State Co-Plaintiffs, and thirteen Citizen Co-Plaintiffs were signatories (collectively "Parties"). The Parties recently noticed typographical or scriveners' errors in three paragraphs of the Consent Decree, which are found at pages 35, 56, and 75. Corrected substitute pages, agreed upon by all of the Parties, are attached hereto as Attachment A. The pagination of the remaining pages of the Consent Decree remains the same. The Parties agree that their prior signatures from the originally lodged Consent Decree are sufficient, and that new signature pages need not be executed. To assist the Court in understanding the corrections, redlines of the corrected pages are found at Attachment B hereto.

The Parties request that the Court maintain the currently scheduled December 10, 2007 hearing date on the proposed Consent Decree. The United States will file a Motion to Enter the Consent Decree on or before December 3, 2007. Although the United States published a Notice
these three typographical and scriveners' errors are not material and do not warrant additional notice and comment. Accordingly, the Parties request that the Court maintain the current schedule and continue to bring this matter to an expeditious conclusion.

Respectfully submitted:
DATED: $\quad$ November 30, 2007

## ON BEHALF OF ALL PLAINTIFFS:

/s/ Justin A. Savage
JUSTIN A. SAVAGE
JENNIFER A. LUKAS-JACKSON
THOMAS A. BENSON
KATHERINE L. VANDERHOOK
MYLES E. FLINT, II
Trial Attorneys
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
P.O. Box 7611

Washington, D.C. 20044-7611
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Facsimile: (202) 616-6584
Email: Thomas.Benson@usdoj.gov
s/ D. Michael Miller (w/ permission)
D. MICHAEL MILLER (0023117), Trial Attorney

American Electric Power Service Corporation
1 Riverside Plaza, 29th Floor
Columbus, OH 43215
(614) 716-1645
dmmiller@aep.com
Counsel for Defendants Ohio Power Company, Appalachian Power Company, Indiana Michigan Power Company, and Columbus Southern Power Company
s/ Alvin J. McKenna (w/ permission)
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41 South High Street
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amckenna@porterwright.com
Counsel for Defendants American Electric Power
Service Corporation and Cardinal Operating Company

OF COUNSEL:
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egallon@porterwright.com
mcrabtree@porterwright.com

## CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Joint Notice of the Parties' Substitution of Corrected Pages for the Proposed Consent Decree was served upon Counsel of Record by electronic mail on November 30, 2007.
/s/ Justin Savage
Justin Savage

## ATTACHMENT A

E. Super-Compliant $\mathrm{SO}_{2}$ Allowances.
98. In each calendar year beginning in 2010, and continuing thereafter, Defendants may use in any manner authorized by law any $\mathrm{SO}_{2}$ Allowances made available in that year as a result of maintaining actual $\mathrm{SO}_{2}$ emissions from the AEP Eastern System below the Eastern System-Wide Annual Tonnage Limitations for $\mathrm{SO}_{2}$ under this Consent Decree for each calendar year. Defendants shall timely report the generation of such Super-Compliant $\mathrm{SO}_{2}$ Allowances in accordance with Section XI (Periodic Reporting) and Appendix B of this Consent Decree.
F. Reporting Requirements for $\mathrm{SO}_{2} \underline{\text { Allowances. }}$
99. Defendants shall comply with the reporting requirements for $\mathrm{SO}_{2}$ Allowances as described in Section XI (Periodic Reporting) and Appendix B.
G. General $\mathrm{SO}_{2}$ Provisions.
100. To the extent an Emission Rate or 30-Day Rolling Average Removal Efficiency for $\mathrm{SO}_{2}$ is required under this Consent Decree, Defendants shall use CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75 to determine such Emission Rate or Removal Efficiency.
101. Notwithstanding Paragraphs 6 and 100, the 30-Day Rolling Average Removal Efficiency for $\mathrm{SO}_{2}$ at Conesville Unit 5 and Conesville Unit 6 shall be determined in accordance with Appendix C.

## VI. PM EMISSION REDUCTIONS AND CONTROLS

## A. Optimization of Existing ESPs.

102. Beginning thirty (30) days after the Date of Entry, and continuing thereafter, Defendants shall Continuously Operate each ESP on Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5 to maximize PM emission reductions at all times when the Unit is in

| Consent Decree Violation | Stipulated Penalty (Peqe Biaff Per Violation, Unless Otherwise Specified) |
| :---: | :---: |
| e. Failure to comply with the Eastern System-Wide Annual Tonnage Limitation for $\mathrm{SO}_{2}$ | $\$ 5,000$ per ton for the first 1000 tons, and $\$ 10,000$ per ton for each additional ton above 1000 tons, plus the surrender, pursuant to the procedures set forth in Paragraphs 95 and 96, of $\mathrm{SO}_{2}$ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded |
| f. Failure to comply with the Plant-Wide Annual Rolling Tonnage Limitation for $\mathrm{SO}_{2}$ at Clinch River | $\$ 40,000$ per ton, plus the surrender, pursuant to the procedures set forth in Paragraphs 95 and 96, of $\mathrm{SO}_{2}$ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded |
| g. Failure to comply with the Eastern System-Wide Annual Tonnage Limitation for $\mathrm{NO}_{\mathrm{x}}$ | $\$ 5,000$ per ton for the first 1000 tons, and $\$ 10,000$ per ton for each additional ton above 1000 tons, plus the surrender, pursuant to the procedures set forth in Paragraphs 82 and 83, of $\mathrm{NO}_{\mathrm{x}}$ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded |
| h. Failure to install, commence operation, or Continuously Operate a pollution control device required under this Consent Decree | $\$ 10,000$ per day per violation during the first 30 days, $\$ 32,500$ per day per violation thereafter |
| i. Failure to Retire, Retrofit, or Re-power a Unit by the date specified in this Consent Decree | $\$ 10,000$ per day per violation during the first 30 days, $\$ 32,500$ per day per violation thereafter | the obligations of the Consent Decree applicable to the transferred or purchased Interests.

194. If the Plaintiffs agree, the Plaintiffs, Defendants, and the Third Party that has become a party to this Consent Decree pursuant to Paragraph 192, may execute a modification that relieves Defendants of liability under this Consent Decree for, and makes the Third Party liable for, all obligations and liabilities applicable to the purchased or transferred Interests. Notwithstanding the foregoing, however, Defendants may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Interests, including the obligations set forth in Section VIII (Environmental Mitigation Projects), Paragraphs 86 and 67, and Section IX (Civil Penalty).
195. Defendants may propose and Plaintiffs may agree to restrict the scope of joint and several liability of any purchaser or transferee for any AEP Eastern System obligations to the extent such obligations may be adequately separated in an enforceable manner using the methods provided by or approved under Section XVI (Permits).
196. Paragraphs 191-195 of this Consent Decree do not apply if an Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as Defendants: (a) remain the operator (as that term is used and interpreted under the Clean Air Act) of the subject AEP Eastern System Unit(s); (b) remain

## ATTACHMENT B

## E. Super-Compliant $\mathrm{SO}_{2}$ Allowances.

98. In each calendar year beginning in 2010, and continuing thereafter, Defendants
may use in any manner authorized by law any $\mathrm{SO}_{2}$ Allowances made available in that year as a result of maintaining actual $\mathrm{SO}_{2}$ emissions from the AEP Eastern System below the Eastern System-Wide Annual Tonnage Limitations for $\mathrm{SO}_{2}$ under this Consent Decree for each calendar year. Defendants shall timely report the generation of such Super-Compliant $\mathrm{SO}_{2}$ Allowances in accordance with Section XI (Periodic Reporting) and Appendix B of this Consent Decree.
F. Reporting Requirements for $\mathrm{SO}_{2}$ Allowances.
99. Defendants shall comply with the reporting requirements for $\mathrm{SO}_{2}$ Allowances as described in Section XI (Periodic Reporting) and Appendix B.
G. General SO $2_{2}$ Provisions.
100. To the extent an Emission Rate or 30-Day Rolling Average Removal Efficiency for $\mathrm{SO}_{2}$ is required under this Consent Decree, Defendants shall use CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75 to determine such Emission Rate or Removal Efficiency.
101. Notwithstanding Paragraphs 6 and 100, the 30-Day Rolling Average Removal Efficiency for $\mathrm{SO}_{2}$ at Conesville Unit 5 and Conesville Unit 6 shall be determined in accordance with Appendix C.

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| Consent Decree Violation | Stipulated Penalty (Per Day, Per Violation, Unless Otherwise Specified) |
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| i. Failure to Retire, Retrofit, or Re-power a Unit by the date specified in this Consent Decree | $\$ 10,000$ per day per violation during the first 30 days, $\$ 32,500$ per day per violation thereafter |

Deleted: 82
Deleted: 83
Deleted: NO
provided that both Defendants and such Third Party shall remain jointly and severally liable for the obligations of the Consent Decree applicable to the transferred or purchased Interests.
194. If the Plaintiffs agree, the Plaintiffs, Defendants, and the Third Party that has become a party to this Consent Decree pursuant to Paragraph 192, may execute a modification that relieves Defendants of liability under this Consent Decree for, and makes the Third Party liable for, all obligations and liabilities applicable to the purchased or transferred Interests. Notwithstanding the foregoing, however, Defendants may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Interests, including the obligations set forth in Section VIII (Environmental Mitigation Projects), Paragraphs 86 and 67, and Section IX (Civil Penalty). .
195. Defendants may propose and Plaintiffs may agree to restrict the scope of joint and several liability of any purchaser or transferee for any AEP Eastern System obligations to the extent such obligations may be adequately separated in an enforceable manner using the methods provided by or approved under Section XVI (Permits).
196. Paragraphs 191-195 of this Consent Decree do not apply if an Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as Defendants: (a) remain the operator (as that term is used and interpreted under the Clean Air Act) of the subject AEP Eastern System Unit(s); (b) remain

## UNITED STATES OF AMERICA, Plaintiff, and

STATE OF NEW YORK, et al., Plaintiff-Intervenors, v.

AMERICAN ELECTRIC POWER SERVICE CORP., et al., Defendants.

> OHIO CITIZEN ACTION, et al., Plaintiffs,
v.

AMERICAN ELECTRIC POWER SERVICE CORP., et al., Defendants.

## UNITED STATES OF AMERICA, Plaintiff,

v.

AMERICAN ELECTRIC POWER SERVICE CORP., et al., Defendants.
Hantint,

Consol. Cases No. 2:99-CV-1182
No. 2:99-CV-1250
JUDGE EDMUND A. SARGUS, JR.
Magistrate Judge Terence P. Kemp

| v. | Case No. 2:05-CV-360 |
| :---: | :--- |
| JMDGE EDMUND A. SARGUS, JR. |  |
| AMERICAN ELECTRIC POWER | Magistrate Judge Norah McCann King |
| SERVICE CORP., et al., |  |
| Defendants. |  |

ORDER
In accordance with the Court's approval of the Consent Decree in this action, the Clerk is

## IT IS SO ORDERED.

## 12-13-2007 <br> DATE


218. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment among the Parties.

IT IS SO ORDERED, this 10th_day of December, 2007.


Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 1 of 3

## DATA REQUEST

AG_2_046
Ohio CAT tax refund. Refer to the response to KPSC 1-26.
a. Has KPCo included Ohio CAT tax as an expense in any of its previous rate cases?
i. If not, explain fully why not.
ii. If so, identify in which previous rate cases, KPCo has included Ohio CAT tax as a component of its requested revenue requirement, and identify the amounts of Ohio CAT tax included in each such case, from 2008 through the present.
b. Why is KPCo not amortizing the $\$ 78,778$ Ohio CAT tax refund over a reasonable period of time?
c. Identify and provide the amended Oho CAT tax return for 2009 that is related to the refund.
d. How much Ohio CAT tax did KPCo record on its books by account for each year 2008 through 2016 ?
e. Identify and provide the supporting documentation for the $\$ 14,498$ 2014Q4 True-Up amount.
f. Identify and provide the supporting documentation for the negative amount of $\$ 2,114,516$ of Gross Receipts in Ohio for the 4th Quarter 2016.
g. What amount of Gross Receipts in Ohio does KPCo project for 2017?
h. Identify and provide the basis for the Commercial Activity Tax Rate of $0.260 \%$.
i. For the test year, did the Company record on its balance sheet any amounts uncertain tax positions or FIN 48 impacts that were recorded in account 190 ? If so, identify, quantify and explain the amounts, and identify the amount of FIN 48 interest associate with each.

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 <br> Page 2 of 3 

## RESPONSE

a. Yes.
i. N/A.
ii. The amounts of Ohio CAT Tax included in previous Kentucky Power base rate cases are as follows:

Case No. 2009-00459-\$222,171;
Case No. 2013-00197-\$73,640;
Case No. 2014-00396-\$33,386
b. Historically changes from expenses included in prior rate cases are not compared with actual expenses incurred unless they are subject to some sort of true-up mechanism. It is not appropriate to include an out-of-period tax refund as an amortization in a future rate proceeding. The amount of $\$ 78,778$ stated in the data request is incorrect. The amount of the refund received that was included in the Company's 2009 base case was $\$ 21,758$.
c. Please refer to KPCO_R_AG_2_046_Attachment1.pdf. The Ohio CAT return is filed quarterly. The attachment contains the $3^{\text {rd }}$ and $4^{\text {th }}$ quarter 2009 amended Ohio CAT returns along with the refund claims for both periods. Also included in the attachment is the letter from ODOT approving most of the refund claims.

| BU 117 | Original <br> Refund <br> Request | Disallowed <br> Amount | Total <br> Refund |
| :--- | :---: | ---: | :---: |
| 2009 Q3 | 22,064 | $(306)$ | 21,758 |
| 2009 Q4 | 57,323 | $(306)$ | 57,018 |
| Total Requested | 79,387 | $(611)$ | 78,776 |

d. Please refer to KPCO_R_AG_2_046_Attachment2.xlsx.

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 <br> Page 3 of 3 

e. The $\$ 14,498$ true up was calculated as follows:

| Accruals Booked | $\$ 9,000$ |
| :--- | ---: |
| Tax Due | $\underline{(\$ 5,498)}$ |
| True-Up Entry | $\$ 14,498$ |
| Required |  |

Please refer to KPCO_R_AG_2_046_Attachment3.xlsx for the calculation of tax due.
f. Please refer to KPCO_R_AG_2_046_Attachment3.xlsx. The negative amount is the result of a reallocation entry that was made by the accounting group in Account 4470006 to correct the state jurisdiction on revenue previously booked. As a matter of convenience, the accounting group temporarily sources all sales in this account to the State of Ohio until it has time to record the bystate entries. After each quarter, it prepares a reallocation entry to move the revenue to the proper jurisdiction. The entry is typically booked in the month following the close of the quarter, with the exception of the 4th quarter, when they make the reallocation entry in December. Therefore, the 4th quarter ends up with two reallocation entries (one for the 3rd quarter booked in October, and one for the 4th quarter booked in December). This resulted in a negative revenue amount in this account for the State of Ohio.
g. The forecasted amount is $\$ 27,600$.
h. Please refer to KPCO_R_AG_2_046_Attachment4.pdf. The Ohio CAT rate is set by the Ohio State legislature.
i. There are none related to CAT Tax.

Witness: Mark A. Pyle

CAT-ARCH-QRTV1


Important CAT Information
Commercial Activity Tax
View/Print Archived CAT Reports
View/Print Filing Information

## View/Print Filing Information

| Company | American Electric Power Company, |
| :--- | :--- |
| Name: | Inc. |
| Company ID: | $* * * * * 2640$ |
| CAT: | 95228963 |

Filed By: Sarah Wagner Date Filed: 8/21/2013 Session Confirmation ID: 37202770 Filing Period: 7/1/2009 to 9/30/2009 Filing Type: Amended Quarterly Actual

| Taxable Gross Receipts: | \$1,157,661,920.00 |
| :---: | :---: |
| Less Exclusion: | \$250,000.00 |
| Taxable Gross Receipts After Exclusion: | \$1,157,411,920.00 |
| Unused Exclusion: | \$0.00 |
| Net Taxable Gross Receipts: | \$1,157,411,920.00 |
| Total Tax Liability: | \$3,009,271.00 |
| Non Refundable Credits: | \$0.00 |
| Tax After Non Refundable Credits: | \$3,009,271.00 |
| Annual Minimum Tax: | \$0.00 |
| Total Amount Due: | \$3,009,271.00 |
| Refundable Credits: | \$0.00 |
| Amount Due After Refundable Credits: | \$3,009,271.00 |
| Credit Carry Forward: | \$0.00 |
| Total Amount Due: | \$3,009,271.00 |
| Tax Liability Previously Paid on your Return(s) for this Filing Period: | \$3,322,999.00 |

## Back

If you need assistance with this page, please view our help.

# Transaction Confirmation and Receipt 

Company Name American Electric Power Company, Inc. Company ID *****2640

The following transactions will be sent to the respective agency that administers the service. Please note the session confirmation number when calling the OBG Help Desk (866-644-6468).

If your transaction(s) includes payment, please note that this confirmation acknowledges that payment instructions have been received, but it does not acknowledge that funds have been transferred from your account. Payment instructions may not be processed for reasons that include insufficient funds and prohibited or blocked payments. You should review your account statement to insure that funds have been transferred (settled). For ACH debit payments, settlement is projected to be two business days after the date of this confirmation (or the selected deferred payment date, if applicable). If the date falls on a weekend or holiday, settlement is projected to be two business days after the next business day. The actual settlement date is dependent upon the processing timelines of the agency and their bank.

If multiple agencies are being paid, payment instructions will be processed separately so you will see multiple entries on your account statements.

| Date/Time | $8 / 21 / 2013$ 3:27 PM |
| :---: | :---: |
| Confirmation \# | 37202770 |
| Receipt \# | 13515848 |


| $\ldots$ | Transaction | Defer <br> Date | Payment <br> Type | Amount |
| :---: | :---: | :---: | :---: | :---: |
| Fee |  |  |  |  |
| CAT Amended Quarterly Actual 7/1/2009 <br> to $9 / 30 / 2009$ | N/A | N/A | N/A | N/A |

Department of Taxation

Please do not use staples. Refund

| CAT account number | FEIN/SSN |
| ---: | ---: |
| 95228963 | $13-4922640$ |

Use only UPPERCASE letters.
Reporting member's name

## AMERICAN ELECTRIC POWER

Street address (number and street)
1 RIVERSIDE PLAZA
City

| State | ZIP code |
| :---: | :--- |
| OH | 43215 |

COLUMBUS
OH
43215

Time period covered by the refund request (MM/DD/YY)
07/01/09
to (MM/DD/YY) 09/30/09
Total amount of refund claimed $\$ \quad 313,728$
State full and complete reasons for the above claim. You may attach additional sheets and/or supporting documentation.

## SEE ATTACHED

Note: This application must be filed within four years from the date of the erroneous payment of the tax. Refund applications may only be submitted by primary registrants; members may not submit refund requests.

## SIGN HERE (required)

I declare under penalty of perjury that I am the taxpayer or the taxpayer's authorized agent having knowledge of the relevant facts in this matter to file this refund application.


Contact person: The taxpayer will be represented in the matter by the following individual. Please attach a Declaration of Tax Representative (form TBOR 1), which can be found on the department's Web site at tax.ohio.gov.


Please send this application to: Ohio Department of Taxation, CAT Division-CAT REF, P.O. Box 16158 Columbus, OH 43216-6158.

CAT-ARCH-QRTV1


Important CAT Information
Commercial Activity Tax
View/Print Archived CAT Reports
View/Print Filing Information

## View/Print Filing Information

Filed By: Sarah Wagner
Date Filed: 8/21/2013 Session Confirmation ID: 37202885 Filing Period: 10/1/2009 to 12/31/2009 Filing Type: Amended Quarterly Actual

Taxable Gross Receipts: $\quad \$ 488,476,495.00$
Less Exclusion: \$250,000.00
Taxable Gross Receipts $\quad \$ 488,226,495.00$
After Exclusion:
Unused Exclusion: $\$ 0.00$
Net Taxable Gross $\quad \$ 488,226,495.00$
Receipts:
Total Tax Liability: \$1,269,389.00
Non Refundable Credits: $\$ 0.00$
Tax After Non Refundable
Credits:
Annual Minimum Tax: $\$ 0.00$
Total Amount Due: $\quad \$ 1,269,389.00$
Refundable Credits: $\$ 0.00$
$\begin{array}{ll}\text { Amount Due After } \\ \text { Refundable Credits: }\end{array} \quad \$ 1,269,389.00$
Refundable Credits:
Credit Carry Forward:
\$0.00
Total Amount Due: $\quad \$ \mathbf{1 , 2 6 9} \mathbf{3 8 9 . 0 0}$
Tax Liability Previously
Paid on your Return(s) for $\$ 2,086,013.00$ this Filing Period:
Net Balance Due:
(\$816,624.00)

# Transaction Confirmation and Receipt 

Company Name American Electric Power Company, Inc. Company ID *****2640

The following transactions will be sent to the respective agency that administers the service. Please note the session confirmation number when calling the OBG Help Desk (866-644-6468).

If your transaction(s) includes payment, please note that this confirmation acknowledges that payment instructions have been received, but it does not acknowledge that funds have been transferred from your account. Payment instructions may not be processed for reasons that include insufficient funds and prohibited or blocked payments. You should review your account statement to insure that funds have been transferred (settled). For ACH debit payments, settlement is projected to be two business days after the date of this confirmation (or the selected deferred payment date, if applicable). If the date falls on a weekend or holiday, settlement is projected to be two business days after the next business day. The actual settlement date is dependent upon the processing timelines of the agency and their bank.

If multiple agencies are being paid, payment instructions will be processed separately so you will see multiple entries on your account statements.

| Date/Time | 8/21/2013 3:28 PM |
| :---: | :---: |
| Confirmation \# | 37202885 |
| Receipt \# | 13515880 |


| Transaction Defer <br> Date Payment <br> Type Amount Fee |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CAT Amended Quarterly Actual <br> $10 / 1 / 2009$ to 12/31/2009 | N/A | N/A | N/A | N/A |



Note: This application must be filed within four years from the date of the erroneous payment of the tax. Refund applications may only be submitted by primary registrants; members may not submit refund requests.

## SICN HERE (required)

I declare under penalty of perjury that I am the taxpayer or the taxpayer's authorized agent having knowledge of the relevant facts in this matter to file this refund application.


Name


MANAGER - TRANSACTION TAXES Title

Contact person: The taxpayer will be represented in the matter by the following individual. Please attach a Declaration of Tax Representative (form TBOR 1), which can be found on the department's Web site at tax.ohio.gov.
Your first name M.I. Last name
Home address (number and street)
City
Telephone
Title

Please send this application to: Ohio Department of Taxation, CAT Division-CAT REF, P.O. Box 16158 Columbus, OH 43216-6158.

American Electric Power Company<br>Dan Ernst, Manager Transaction Taxes<br>1 Riverside Plaza<br>Columbus, OH 43215

Re: Ohio Commercial Activity Tax ID Number: 95228963
Audit Period from 07/01/2009 - 12/31/2009
Application for Refund Number: 900006336
Requested Refund Amount: \$1,130,352
Proposed Refund Amount: \$1,094,325
Dear Mr. Ernst,
We have completed our examination and review of the above referenced application for refund and have enclosed the final proposed audit results. The final proposed audit results indicate that the refund amount be denied in part. Applicable interest will be calculated in accordance with Ohio Revised Code (R.C.) section 5751.06(G). The final proposed audit results have been made for the following reasons:

## Issue 1: Properly situs taxable gross receipts (TGR) to Ohio. <br> Facts:

Taxpayer is claiming that a change in an operational practice had incorrectly sourced certain receipts to Ohio. Upon further investigation, the taxpayer learned that the accounting group had temporarily sourced the sales to Ohio until they had time to record the "by-state" entries. This was an accounting convenience in order to allow more time for the accounting group to properly source the receipts by the appropriate state. It is the claim by the taxpayer that this issue has been corrected going forward.

## Department Position:

The trial balance accounts in question are $4470002,4470006,4470028$ and 4470170 . The auditors questioned these accounts and obtained sufficient documentation to warrant the adjustment based on state by state apportionments of these accounts.

Total reduction to TGR of $221,279,812$ or the audit period.
Issue 2: Review and substantiate taxpayer claim of excludable hedging activities.

## Facts:

The taxpayer is claiming that receipts associated with hedging, through the use of financial instruments, were originally included in their CAT TGR base.
(c) Receipts from the sale, exchange, or other disposition of an asset described in section 1221 or 1231 of the Internal Revenue Code, without regard to the length of time the person held the asset. Notwithstanding section 1221 of the Internal Revenue Code, receipts from hedging transactions also are excluded to the extent the transactions are entered into primarily to protect a financial position, such as managing the risk of exposure to (i) foreign currency fluctuations that affect assets, liabilities, profits, losses, equity, or investments in foreign operations; (ii) interest rate fluctuations; or (iii) commodity price fluctuations. As used in division (F)(2)(c) of this section, "hedging transaction" has the same meaning as used in section 1221 of the Internal Revenue Code and also includes transactions accorded hedge accounting treatment under statement of financial accounting standards number 133 of the financial accounting standards board. For the purposes of division $(\mathrm{F})(2)(\mathrm{c})$ of this section, the actual transfer of title of real or tangible personal property to another entity is not a hedging transaction.

## Department Position:

Auditors reviewed the M3 schedule of the Federal 1120 associated with the calculation and reporting of hedging transactions. Substantial detail was provided to support the two trial balance accounts associated with the hedging transactions, which are account 4470082 and 4470143. The total of these two accounts tie over to the Federal M3 schedule, which ties over to the refund claim when you sort the spreadsheet by months to obtain each quarterly period. Since the taxpayer included the everywhere amount in the Ohio CAT return, a state by state breakdown was not needed. Auditors have accepted the taxpayer's claim of hedging.

Total reduction to TGR of $213,470,963$ for the audit period.

## Issue 3: Inclusion of additional accounts of interest found during the trial balance review of the AEP and its affiliates.

## Facts:

Auditors reviewed the consolidated trial balances in detail in relation to the as filed returns and the trial balances reported on those returns. There were several accounts that required additional information.

## Department Position:

Auditors put together detailed workbooks of all of the revenue accounts associated with the members of the Ohio CAT group that report TGR activity. Auditors then reached out to the taxpayer regarding certain revenue items for further clarification. Taxpayer was able to provide a response and it was determined that accounts 4118003,4118004 , and 4560050 had TGR for the year in accordance with R.C.5751.033(C). In order to properly allocate the TGR to each quarter, the auditors divided the total yearly totals for each respective BU by 4 to obtain the quarterly figures.

Total increase to TGR of $13,856,577$ for the audit period.

We have initiated the process to issue the proposed refund amount plus interest and a check will be mailed to the taxpayer within three to four weeks. If you do not agree with this final proposal, you may request further review by sending me a letter that either (i) includes additional information for this Department to consider, and/or (ii) requests a hearing with our Tax Appeals Division. If within $\mathbf{6 0}$ days of this letter's date, you do not send me a letter, either providing this additional information and/or requesting a hearing, the application for refund will be considered completed and the results are final.

If you have any questions regarding this matter, please contact me.


Audit Division, South Central Region
(614) 387-2052

Fx (206) 350-6996
Josh.Oty@tax.state.oh.us

Ohio Department of Taxation $>$ commercial activities $>$ information releases $>$ index ca... Page 1 of 1

## Information Release

## CAT 2013-05 - Commercial Activity Tax: Annual Minimum Tax Tiered Structure- Issued October, 2013

This information release is to provide notification to commercial activity tax (CAT) taxpayers of the recent legislative change in Am. Sub. H.B. 59 of the 130th General Assembly to the structure of the annual minimum tax (AMT). It is important to note that, in general, persons with $\$ 150,000$ or less in taxable gross receipts are not subject to the CAT. Also note that the CAT rate of $0.26 \%$ remains unchanged and continues to apply to those taxpayer's with taxable gross receipts over $\$ 1$ million (the first $\$ 1$ million in taxable gross receipts are excluded from the calculation of a taxpayer's CAT liability with respect to the $0.26 \%$ rate component).

All CAT taxpayers pay an AMT which is due with calendar year taxpayers' annual returns and with quarterly taxpayers' first quarter returns, due on or before May 10th of each year. Currently, the AMT is $\$ 150$. For tax periods beginning on January 1, 2014 and thereafter, the AMT will become a tiered structure, and taxpayers will pay an amount that corresponds with their overall commercial activity. The taxpayer will utilize its previous calendar year's taxable gross receipts to determine the current year's AMT. Those taxpayers with $\$ 1$ million or less in taxable gross receipts will pay $\$ 150$ AMT (no change). The AMT for taxpayers with total taxable gross receipts of more than $\$ 1$ million but less than or equal to $\$ 2$ million will be $\$ 800$; AMT for taxpayers with taxable gross receipts more than $\$ 2$ million but less than or equal to $\$ 4$ million, $\$ 2,100$; and AMT for taxpayers with taxable gross receipts in excess of $\$ 4$ million, $\$ 2,600$. Please refer to the chart below.

| Taxable Gross Receipts | Annual Minimum Tax | CAT |
| :---: | :---: | :---: |
| \$1 Million or less | $\$ 150$ | No Additional Tax |
| More than \$1 Million but less <br> than or equal to \$2 Million | $\$ 800$ | $0.26 \% \times$ (Taxable Gross Receipts <br> $-\$ 1$ Million) |
| More than \$2 Million but less <br> than or equal to \$4 Million | $\$ 2,100$ | $0.26 \% \times$ (Taxable Gross Receipts <br> $-\$ 1$ Million) |
| More than \$4 Million | $\$ 2,600$ | $0.26 \% \times$ (Taxable Gross Receipts <br> $-\$ 1$ Million) |

Example: $A B C, L L C(A B C)$ is an annual taxpayer $A B C$ reports taxable gross receipts of $\$ 900,000$ for the reporting period of January 1, 2013 to December 31, 2013 on its annual return in May, 2014 ABC will pay an annual minimum tax for 2014 of $\$ 150$ with the 2013 annual return filed in May, 2014

Example: DEF Corp (DEF) is a quarterly taxpayer DEF reports cumulative taxable gross receipts of \$3 million for the reporting period of January 1, 2013 to December 31, 2013 (all four quarters of 2013) When DEF files its first quarter 2014 return in May, 2014, the annual minimum tax associated with DEF for 2014 will be $\$ 2,100$ Assume that on its first quarter 2014 return, DEF reports taxable gross receipts of $\$ 1,300,000$ for the first quarter of 2014 DEF's total tax due with that return is $\$ 2,880$, which includes the $\$ 2,100$ AMT plus $\$ 780$ CAT ( $026 \% \times(\$ 1,300,000-\$ 1,000,000$ Exclusion))

Please contact the CAT Division at 1-888-722-8829 with questions regarding this release or any other CAT matter.

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_047
Has the Company included any amounts in rate base for uncertain tax positions or FIN 48 impacts that were recorded in account 190? If so, identify, quantify and explain the amounts, and identify the amount of FIN 48 interest associated with each.

## RESPONSE

Please refer to the Company's responses to AG 1-58 and AG 1-59. For FERC purposes, FIN-48 ADFIT balances are included in accrued taxes (Account 236) not in the normal ADFIT accounts. Therefore FIN-48 ADFIT items having balances as of February 28, 2017 were not included in the Company's Application. However, a net ADFIT credit balance of $\$ 7,762$ related to State FIN-48 and ADFIT on FIN-48 Accrued Interest was included in the Company's Application.

Witness: Mark A. Pyle

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_048
For 2016, did the Company record any amounts of FIN 48 interest on its books? If so, identify, quantify and explain the amounts recorded in each account, and show how the interest was computed, showing the interest rate used, and the balance to which the interest rate was applied, to compute the FIN 48 interest.

## RESPONSE

Yes. Please refer to KPCO_R_AG_2_048_Attachment1.xlsx. The FIN-48 interest is computed in a system called DMI (licensed by Decision Modeling, Inc., an unaffiliated third party) This interest is recorded in expense Accounts 4190002 and 4310023 . There was no FIN-48 interest included in the Cost of Service supporting the Company's Application.

Witness: Mark A. Pyle

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 

## DATA REQUEST

AG_2_049
Did the Company include any FIN 48 interest in its cost of debt? If so, identify, quantify and explain the amounts. If not, explain fully why not.

## RESPONSE

No. FIN 48 interest, if any, is not part of the Company's cost of debt because it is not interest associated with the Company's debt capital or the calculation of the Company's cost of capital reflected in, and supported by, the Company's Application.

Witness: Ranie K. Wohnhas

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_050
For each regulatory liability that the Company had recorded on its books as of the beginning and end of the test year, provide the following information:
a. a description of the regulatory liability,
b. a citation to the order or other authority relied upon for establishing the regulatory liability.
c. the amortization period
d. the amount of related expense or income recorded in the test year related to accounting entries related to the regulatory liability.

## RESPONSE

a. - d. Please refer to KPCO_R_AG_2_50_Attachment1.xlsx for the requested information.

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_051
For each regulatory asset that the Company had recorded on its books as of the beginning and end of the test year, provide the following information:
a. a description of the regulatory asset,
b. a citation to the order or other authority relied upon for establishing the regulatory asset.
c. the amortization period
d. the amount of related expense or income recorded in the test year related to accounting entries related to the regulatory asset.

## RESPONSE

a. - c. Please refer to KPCO_R_AG_2_51_Attachment1.xlsx for the requested information.
d. Please refer to KPCO_R_AG_2_51_Attachment2.xlsx for the requested information.

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_052
In the test year did KPCo record any amounts for Cash Surrender Value Earnings? If so, provide the following information:
a. the amounts recorded by account,
b. details on how the recorded amounts were determined,
c. comparable amounts for each year, 2012-2016

## RESPONSE

Yes, the Company recorded amounts for Cash Surrender Value Earnings during the test year.
a. The test year expense recorded by Kentucky Power in account 9260036 was $\$ 27,323$.
b. The test year amount was determined by Northwestern Mutual Life Insurance Company.
c. The total account 9260036 amount expensed for 2012 was $\$ 23,453$, for 2013 was $\$ 14,242$, for 2014 was $\$ 23,565$, for 2015 was a credit for $\$ 3,559$, and for 2016 was $\$ 27,323$.

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_053
How much storm cost has KPCo requested? Show the amounts for each storm. Also, show the amortizations of storm cost deferrals that KPCo has included in its requested revenue requirement.

## RESPONSE

The Company is requesting $\$ 1,500,082$ in storm costs based upon its three year average. Test year storm costs were $\$ 903,554$ in the test year producing a $\$ 596,528$ adjustment to the test year as shown by Adjustment W17 in Section V, Exhibit 2, Page 18 of 60.

For the test year ended February 28, 2017, KPCo amortized $\$ 2,429,200$ in storm expenses related to 2012 deferred storm expenses (approved for deferral in Case No. 2012-00445) of $\$ 12,146,000$ which the Company began amortizing in July 2015 with the establishment of new base rates in Case No. 2014-00396.

The Company proposes to include additional annual storm amortization of $\$ 875,467$ in the Company's revenue requirement over five years related to additional major storm costs of $\$ 4,377,336$ incurred in 2015 that were approved for deferral by the Commission in Case No. 2016-00180.

Please refer to page 14 of the testimony by Company Witness Wohnhas for a complete explanation of the amortization of storm costs being requested in this proceeding and amortized over the test year.

Witness: Ranie K. Wohnhas

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_054
Rockport Unit 1 SCR. Identify by amount and account all costs related to the Rockport Unit 1 SCR that KPCo has included in its proposed revenue requirement. Include complete supporting details.

## RESPONSE

All costs related to the Rockport Unit 1 SCR will be booked to Kentucky Power in account 5550027. For the calculation of costs by type, please refer to Exhibit AJE-5.

Witness: Amy J. Elliott

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 

## DATA REQUEST

AG_2_055
Refer to the response to AG1-002(r). Identify by amount and account all costs related to the Rockport UPA 12.16\% ROE that KPCo has included in its proposed revenue requirement. Include complete supporting details.

## RESPONSE

The Company's Kentucky retail cost of service includes $\$ 2,943,068$ of return on common equity included in the Rockport Power bill expense which is recorded in account 5550027.

Refer to KPCO_R_AG_2_55_Attachment1.xls for the calculation of this amount.

Witness: Ranie K. Wohnhas

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_056
Refer to the response to AG1-002(q) which indicates that the Rockport Unit 1 SCR went into service on August 9, 2017. Identify, quantify and explain the impact on charges to KPCo for the Rockport UPA from the impact of the Rockport Unit 1 SCR going into service. Include complete supporting details.

## RESPONSE

The full effect of the Rockport Unit 1 SCR on the monthy AEG billings will not be identified until the September 2017 billing. In September, depreciation expense will begin and there will be an increase in the return component of the bill. These amounts cannot be properly identified until the bill is prepared.

Witness: Amy J. Elliott

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_057
What is the total amount that KPCo is requesting in the current case for charges related to the Rockport Unit 1 SCR? Show the total and the amounts requested by account and by requested rate component (e.g., base rate amount, environmental surcharge amount, etc.)

## RESPONSE

Please refer to the Company's response to AG 2-54 for the requested information regarding the Rockport Unit 1 SCR costs. All costs associated with the Rockport Unit 1 SCR will be recovered through the Company's environmental surcharge mechanism until the Company's next base rate case.

Please also refer to pages 10 and 11 of the testimony of Company Witness Elliott for a discussion of how projects not in service during the test year, such as the Rockport Unit 1 SCR, are treated with regard to calculation of the monthly environmental compliance base revenue requirement.

Witness: Amy J. Elliott

# Kentucky Power Company 

KPSC Case No. 2017-00179 General Rate Adjustment
Attorney General's Second Set of Data Requests
Dated September 8, 2017

## DATA REQUEST

AG_2_058 Refer to the response to AG 1-175. Identify, explain and provide the calculations of each of the following:
a. the $\$ 34$ million identified in the response to AG 1-175(d).
b. the $\$ 5.8$ million identified in the response to AG 1-175(e).
c. the $\$ 6.7$ million identified in the response to AG 1-175(f).
d. the $\$ 3.8$ million identified in the response to AG 1-175(h).
e. the $\$ 3.9$ million identified in the response to AG 1-175(i).
f. the $\$ 9.2$ million identified in the response to AG 1-175(j).
g. the $\$ 5.8$ million identified in the response to AG $1-175(\mathrm{k})$.

## RESPONSE

Refer to KPCO_R_AG_2_58_Attachment1.xlsx for the requested calculations and explanations.

Witness: Alex E. Vaughan

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_059
Refer to the response to AG 1-175(i). Provide calculations of the $\$ 3.9$ million environmental compliance expense impact broken out between:
a. Rockport environmental costs
b. Mitchell environmental costs
c. Other environmental costs

Include workpapers and supporting calculations for each.

## RESPONSE

a-c. The referenced $\$ 3.9$ million environmental compliance expense is the estimate of Kentucky Power's share of the annual Rockport Unit 1 SCR expense. Please refer to Exhibit AJE-5 for the supporting calculation.

Witness: Amy J. Elliott

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_060
With all Company proposed adjustments, what are the expense amounts that KPCo is requesting, in total and by account, for each of the following components of KPCo incentive compensation:
a. Incentive Compensation Plan
b. Restricted Stock Units
c. Performance Share Incentives?

Include workpapers and supporting calculations for each.

## RESPONSE

Please see KPCO_R_AG_2_60_Attachment1.xlsx for the requested detail for the Company's Incentive Compensation Plan.

For the Restricted Stock Units and Performance Shares, please see the Company's response to KIUC 1-31 and KPCO_R_KIUC_1_31_Attachment1.xlsx.

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_061
With all Company proposed adjustments, what are the expense amounts that KPCo is requesting, in total and by account, for each of the following components of incentive compensation charged or allocated to KPCo by AEP Service Company:
a. Incentive Compensation Plan
b. Restricted Stock Units
c. Performance Share Incentives?

Include workpapers and supporting calculations for each.

## RESPONSE

a. Please refer to KPCO_R_AG_2_061_Attachment1.xlsx for the requested expense amounts that the Company is requesting for the incentive compensation plan allocated to Kentucky Power by AEP Service Corporation for the test year ended February 28, 2017.
b. Please refer to KPCO_R_KIUC_1_031_Attachment2.xlsx that was provided in response to KIUC 1-031 for the requested expense amounts for Restricted Stock Units (RSU) Incentives (PSI) allocated to Kentucky Power by AEP Service Corporation.
c. Please refer to KPCO_R_KIUC_1_031_Attachment2.xlsx that was provided in response to KIUC 1-031 for the requested expense amounts for Performance Share Incentives (PSI) allocated to Kentucky Power by AEP Service Corporation.

Please refer to KPCO_R_AG_2_61_Attachment2.xlsx for the supporting workpapers and calculations for the Company's responses to subparts $\mathrm{a}, \mathrm{b}$ and c .

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 1 of 2

## DATA REQUEST

AG_2_062
Refer to Mr. Carlin's direct testimony at page 20.
a. Why are the 2015 and 2016 increases above the utility industry median ( $3.5 \%$ each year versus $3.0 \%$ )?
b. Has the Company requested any pay increases for 2017? If so, identify, quantify and explain the 2017 pay increases, and identify the impact on expenses in total and by account.
c. Has the Company requested any pay increases for 2018? If so, identify, quantify and explain the 2018 pay increases, and identify the impact on expenses in total and by account.
d. Does the Company have any information regarding how its requested 2017 and 2018 pay increases compare with utility industry increases for 2017 and/or projected increases for 2017 or 2018 ? If so, identify and provide such information.

## RESPONSE

a. Table ARC- 3 on p. 20 of witness Carlin's direct testimony shows that the Company's overall rate of wage growth lagged the market median rate of increase by $4.25 \%$ from 2009 through 2016. Market survey information for specific positions, such as Line Mechanic, also showed that the Company's total compensation was significantly behind the market median (see exhibit ARC-4 to Witness Carlin's direct testimony). The 2015 and 2016 wage increases for physical and craft positions were intended to take measured steps to address these compensation disparities relative to the utility industry median. These wage increases were also negotiated in 2014 as part of a three-year wage agreement with labor unions that enabled the Company to address a broad range of issues as part of these negotiations.
b. Yes, the Company has requested merit pay increases for 2017. Please see Company Witness Ross' Cost of Service Adjustment in Exhibit 2, W33 and account level details for the merit increase adjustment in KPCO_R_AG_1_079_Attachment_1.xlsx.
c. No, the Company has not requested pay increases for 2018 .

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 2 of 2

d. Yes, the Company does have the 2017-2018 World at Work Salary Budget Survey. Additional survey sources will be available at a later date. This survey indicates that the utility industry median total salary increase budget is $3 \%$ for 2017 and is projected to be $3 \%$ for 2018 for all employee categories.

For 2017, AEP budgeted and has largely implemented $3.5 \%$ salary increases for nonexempt salaried and exempt employees. As was the case the prior 2 years, the salary increase budget consisted of a $3.0 \%$ merit budget and a $0.5 \%$ promotion and equity adjustment budget. Please refer to the Company's response to AG 2-73 for additional information about the salary increases for nonexempt salaried and exempt employees. AEP also budgeted a $5.0 \%$ wage increase for physical and craft positions. The increases for physical and craft employees were negotiated in 2014 as part of a 3 -year IBEW master bargaining agreement covering 2015 through 2017. The $5.0 \%$ total wage increase consisted of a $3.0 \%$ general increase, a $1.0 \%$ market equity adjustment and a $1.0 \%$ wage equalization increase. Please refer to the Company's response to AG 2-74 for additional information about these types of wage increases for physical and craft employees.

Witness: Tyler H. Ross
Andrew R. Carlin

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 1 of 2

## DATA REQUEST

AG_2_063 Refer to Mr. Carlin's direct testimony at page 28.
a. Identify, quantify and explain fully (1) the 2016 earnings targets and (2) the achieved earnings that result in the "substantially above target score earned for calendar 2016 by Kentucky Power distribution and staff employees."
b. Does KPCo have any earnings targets for 2017 or 2018? If not, explain fully why not. If so, identify, quantify and explain such earnings targets.

## RESPONSE

a. (1) For 2016 the annual incentive plan for Company's distribution and staff employees included a Kentucky Power net income vs. The control budget goal with a $10 \%$ weight. For 2016, Company management recognized that the Company's earnings potential was relatively low and took this into consideration in setting the control budget and net income incentive target at $\$ 51.3$ million. As is the Company's practice, this target represents a stretch but achievable level, taking into consideration the degree of difficulty of its achievement, rather than utilizing an absolute standard that may be either easily achievable or nearly impossible in particular situations. This is done to better ensure that the Company provides market competitive compensation opportunities to all employees. However, Company management also recognized that it would be inherently unfair to other incentive groups if the upside and downside incentive opportunities for Company employees was the same as that for higher earning incentive groups. To reflect this, the net income goal was established with asymmetrical threshold (0\% payout) and maximum payout ( $200 \%$ payout) points at $10 \%$ below target and $30 \%$ above the target, respectively.

There was also an AEP operating earnings per share ("Operating EPS") target measure with a $75 \%$ weight as part of the 2016 funding factors. This measure had an Operating EPS threshold of $\$ 3.65$ with a $33.3 \%$ of target payout, a target of $\$ 3.75$ with a $100 \%$ payout and a maximum payout point of $\$ 3.95$ with a $200 \%$ of target payout.

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 2 of 2

a. (2) Because Kentucky Power Company's annual incentive expense was adjusted to the target level in its requested cost of service, the expense associated with the above target payout is not relevant to this case. The "substantially above target score earned for calendar 2016 by KPCO distribution and staff employees" was the result of all the Company's short-term incentive goals and strong funding results from AEP, not just Kentucky Power's net income goal, which had only a $10 \%$ weight. The Company's net income was $\$ 54.36$ million, including allowed adjustments, which, when compared to the degree of difficulty based target, produced a $120 \%$ of target score. With only a $10 \%$ weight, this result contributed very little to the overall Kentucky Power payout of $185.7 \%$ of target.
b. Yes, the Company has a 2017 net income target of $\$ 44.9$ million, which is lower than its 2016 target. Please refer to a. (1) above for a description of how this target was set based on the degree of difficulty of its achievement. Again for 2017, to reflect the Company's relatively low earnings potential the net income goal was established with asymmetrical threshold ( $0 \%$ payout) and maximum payout ( $200 \%$ payout) points at $10 \%$ below target and $30 \%$ above the target, respectively.

The Company has not yet established incentive targets for 2018.

Witness: Andrew R. Carlin

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_064 Refer to Mr. Carlin's direct testimony at page 29.
a. Were any portions of KPCo's incentive compensation disallowed in previous KPCo rate cases? If so, explain.
b. From 2008 through the present, were any disallowed portions of KPCo's incentive compensation replaced with increases in base pay? If so, identify, quantify and explain all increases in base pay for KPCo employees that have occurred to replace disallowed portions of incentive compensation.
c. From 2008 through the present, were any disallowed portions of AEP Service Company charges to KPCo for AEP Service Company incentive compensation replaced with increases in base pay for AEPSC employees? If so, identify, quantify and explain all increases in base pay for SEPSC employees that have occurred to replace disallowed portions of incentive compensation.

## RESPONSE

a. Yes. fifteen percent of the target annual incentive compensation and $100 \%$ of long-term incentive compensation for the Company was disallowed from the requested cost of service in the last base rate case. The Company does not maintain a $\log$ of the treatment of incentive compensation for all past litigated rate cases prior to the most recent base rate case. Rate cases prior to Case No. 2014-00396 resolved through all-issues settlements did not identify disallowances of employee incentive compensation.
b. No, the Company has considered replacing incentive compensation with additional base pay for employees but has not done so. Among the many concerns that have weighed against taking this step is the reduced productivity expected to result from the elimination of incentive compensation and the negative impact this would have on customers and shareholders alike. Furthermore, replacing incentive compensation with additional base pay would require creating a different pay structure for Kentucky Power that would disadvantage the Company relative to internal and external labor markets. This, in turn, likely would increase employee turnover and result in increased employee training, hiring, administrative and overall expense.
c. No for the same reasons as described in b. above.

Witness: Andrew R. Carlin

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 

## DATA REQUEST

AG_2_065
Refer to KPSC 1-66. Was any cost charged or allocated to KPCo or recorded by KPCo during the test year for the HR Committee compensation consultant?
a. If not, explain fully why not.
b. If so, identify the amount by account. Also, show the total amount and how it was allocated to KPCo.
c. Identify and provide a copy of the contract for 2016 and 2017 for the HR Committee outside compensation consultant.

## RESPONSE

a. Yes, cost was allocated to Kentucky Power during the test year for a compensation consultant.
b. During the test year ended February 28, 2017, Kentucky Power was allocated \$10,771 for costs related to the HR Committee Compensation Consultant. Please refer to KPCO_R_AG_2_065_Attachment1.xlsx for the breakdown of Kentucky Power's allocated amount by account.
c. Please see KPCO_R_AG_2_65_Attachment2.pdf for the requested information.

Witness: Tyler H. Ross
Andrew R. Carlin

Mr. Ralph D. Crosby, Jr.<br>Human Resources Committee Chair<br>American Electric Power<br>1 Riverside Plaza<br>Columbus, OH 43215

## Re: Agreement to Provide Executive Compensation Consulting Services

Dear Ralph:
This letter agreement is intended to set forth the terms and conditions of the consulting relationship between Meridian Compensation Partners, LLC and the Human Resources Committee of American Electric Power's Board of Directors.

## Retention by the Committee

Under the terms of its charter and consistent with good corporate governance, the Committee is authorized to hire third-party advisors. Based on this authority, the Committee is retaining Meridian to provide independent advice to the Committee on matters pertaining to executive compensation and related governance. The Committee is the sole party responsible for determining the scope of service performed by Meridian, the directions given to Meridian regarding the performance of such services, and the review and approval of Meridian's invoices. The Company shall be responsible for the payment of Meridian invoices approved by the Committee.

## Relationship Scope

The parties agree that such advice and any related work product is not intended to be used, and may not be used, by any other party outside the Company. Based on our experience, we anticipate the scope of our services may include, but not be limited to, providing:

- Guidance on the Committee's decision making with respect to executive compensation matters in light of the Company's business strategy, pay philosophy, prevailing market practices, shareholder interests, and relevant regulatory mandates.
- Advice on the Company's executive pay philosophy.
- Counsel on the Company's compensation peer group.
- Consulting on incentive plan design, for both annual and various long-term incentive vehicles and other compensation and benefit programs that meet Company objectives.
- An analysis related to market studies so the Committee can consider CEO and senior management base salary, annual bonus opportunity, long-term incentive awards, benefits, perquisites, and severance arrangements.
- Impact on emerging practices as well as changes in the regulatory and corporate governance environment.

Meridian will attend such meetings the Committee deems appropriate throughout the course of each year, including executive sessions, and we will remain available for ongoing consultation at other times.

Meridian reserves the right to review in advance the use of its name in the Company's annual proxy filing.

## Professional Fees and Expenses

Fees for services rendered will be determined on a time and materials basis in accordance with Meridian's standard billing rates. Fees are due and payable within 30 days of the invoice date. All invoices will be submitted to the Company official designated by the Committee Chair. The Company or Committee will promptly notify Meridian of any questions regarding any invoice.

In addition to fees, we will bill for all expenses incurred in the performance of services requested under this Agreement. These expenses include, but are not limited to, copying charges, courier charges, costs relating to the acquisition of benchmark compensation data from third-party vendors, and overnight travel expenses relating to air and ground transportation, lodging, and meals. Expenses will be billed in the same manner as our professional fees.

## Limitation on Liability

To the full extent permitted by law, and notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of Meridian, for any and all claims, losses, expenses, costs or damages, including attorneys' fees and costs of any nature whatsoever ("Claim") resulting from or in any way related to the services rendered by Meridian under the terms of this Agreement from any cause or causes shall not exceed the fees paid to Meridian under this Agreement during the 12-month period immediately preceding the date Meridian receives notice of such Claim. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

## Term of Agreement

This Agreement will commence as of the date hereof and will continue until terminated by either party upon 30 days advance written notice. Following notice of termination of this Agreement by either party, Meridian will complete any outstanding assignments at the direction and approval of the Committee, Meridian will bill the Company for completion of such assignments, and the Company will pay Meridian's bill all in the manner described in the section entitled "Professional Fees and Expenses."

We trust that the consulting relationship we have outlined continues to be satisfactory to the Committee. If you should have any questions or comments regarding this Agreement, please contact me.

We look forward to working with you and your Committee members.

Best regards,

Meridian Compensation Partners, LLC

James C. McGough

JCM:cag
AEP/Engagement Letter February 2016

Please acknowledge your agreement to the terms and conditions of the Committee's retention of Meridian as set forth in this Agreement by signing and returning a copy of this Agreement.

Accepted this $\qquad$ day of $\qquad$ 2016

American Electric Power Human Resources Compensation Committee
$B y$ : $\qquad$

Signature: $\qquad$
Title: $\qquad$

Mr. Ralph D. Crosby, Jr.<br>Human Resources Committee Chair<br>American Electric Power<br>1 Riverside Plaza<br>Columbus, OH 43215

Re: Agreement to Provide Executive Compensation Consulting Services

## Dear Ralph:

This letter agreement is intended to set forth the terms and conditions of the consulting relationship between Meridian Compensation Partners, LLC and the Human Resources Committee of American Electric Power's Board of Directors.

## Retention by the Committee

Under the terms of its charter and consistent with good corporate governance, the Committee is authorized to hire third-party advisors. Based on this authority, the Committee is retaining Meridian to provide independent advice to the Committee on executive compensation and related governance. The Committee is the sole party responsible for determining the scope of service performed by Meridian, the directions given to Meridian regarding the performance of such services, and the review and approval of Meridian's invoices. The Company shall be responsible for the payment of Meridian invoices approved by the Committee.

## Relationship Scope

The parties agree that such advice and any related work product is not intended to be used, and may not be used, by any other party outside the Company. Based on our experience, we anticipate the scope of our services may include, but not be limited to, providing:

- Guidance on the Committee's decision making with respect to executive compensation matters in light of the Company's business strategy, pay philosophy, prevailing market practices, shareholder interests, and relevant regulatory mandates.
- Advice on the Company's executive pay philosophy.
- Counsel on the Company's compensation peer group.
- Consulting on incentive plan design, for both annual and various long-term incentive vehicles and other compensation and benefit programs that meet Company objectives.
- Preparation of market analyses so the Committee can consider CEO and senior management base salary, annual bonus opportunity, long-term incentive awards, benefits, perquisites and severance arrangements in context of market practices.
- Evaluate emerging practices as well as changes in the regulatory and corporate governance environment.

Meridian will attend such meetings the Committee deems appropriate throughout the course of each year, including executive sessions, and we will remain available for ongoing consultation at other times.

Meridian reserves the right to review in advance the use of its name in the Company's annual proxy filing.

## Professional Fees and Expenses

Fees for services rendered will be determined on a time and materials basis in accordance with Meridian's standard billing rates. Fees are due and payable within 30 days of the invoice date. All invoices will be submitted to the Company official designated by the Committee Chair. The Company or Committee will promptly notify Meridian of any questions regarding any invoice.

In addition to fees, we will bill for all expenses incurred in the performance of services requested under this Agreement. These expenses include, but are not limited to, the acquisition of benchmark compensation data from third-party vendors, travel expenses relating to air and ground transportation, lodging and meals as well as other direct out-of-pocket expenses related to services for American Electric Power. Expenses will be billed in the same manner as our professional fees.

## Limitation on Liability

To the full extent permitted by law, and notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of Meridian, for any and all claims, losses, expenses, costs or damages, including attorneys' fees and costs of any nature whatsoever ("Claim") resulting from or in any way related to the services rendered by Meridian under the terms of this Agreement from any cause or causes shall not exceed the fees paid to Meridian under this Agreement during the 12 -month period immediately preceding the date Meridian receives notice of such Claim. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

## Term of Agreement

This Agreement will commence as of the date hereof and will continue until terminated by either party upon 30 days advance written notice. Following notice of termination of this Agreement by either party, Meridian will complete any outstanding assignments at the direction and approval of the Committee, Meridian will bill the Company for completion of such assignments, and the Company will pay Meridian's bill all in the manner described in the section entitled "Professional Fees and Expenses."

If you should have any questions or comments regarding this Agreement, please contact me.

We look forward to working with you and your Committee members.
Best regards,

Meridian Compensation Partners, LLC
Jamer C Me herogh

JCM:cag
AEP/Engagement Letter January 2017

Please acknowledge your agreement to the terms and conditions of the Committee's retention of Meridian as set forth in this Agreement by signing and returning a copy of this Agreement.

Accepted this $\qquad$ day of $\qquad$ 2017

American Electric Power Human Resources Compensation Committee


# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 

## DATA REQUEST

AG_2_066
Refer to the response to AG 1-303.
a. How much revenue from Rockport capacity charges did KPCo reflect for the test year?
b. In what account did KPCo record the Rockport capacity charge revenue amounts that were listed in the response to AG 1-303?

## RESPONSE

a. Zero dollars of capacity charge rider revenues are reflected in the Company's base rate cost of service in this case. Refer to adjustment W1.
b. Capacity charge rider revenues are recorded in the following retail revenue accounts:

$$
4400002,4400001,4420001,4420006,4420007,4420002,4420004,4440000 .
$$

Witness: Alex E. Vaughan

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_067
Refer to the responses to KIUC 1-43 which included Rockport UPA monthly invoices through July 2017 and AG1-002(q) which states that the Rockport Unit 1 SCR went into service on August 9, 2017. Provide the Rockport UPA monthly invoices for months subsequent to July 2017 that reflect billings when the Rockport Unit 1 SCR was in service.

## RESPONSE

Please refer to KPCO_R_AG_2_67_Attachment1.xls for the requested information. Please note that the full effect of Rockport Unit 1 SCR being in service will not be reflected until the September 2017 bill due to incorporation of balance sheet activity on a one month lag and depreciation expense beginning in September.

Witness: Ranie K. Wohnhas

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_068 Refer to the response to AG 1-294.
a. How did KPCo record the $\$ 3.2$ million of Big Sandy severance cost on its books?
b. Is any amount for Big Sandy severance being amortized? Over what period? What are the monthly amortization amounts, and in what account is the severance amortization recorded?
c. Is any amount of expense for Big Sandy severances included in the Company's requested revenue requirement? If so, how much and in what accounts? Include complete details.

## RESPONSE

a. In 2014, Kentucky Power recorded a total company severance expense of $\$ 3.2$ million to account 5060000 related to Big Sandy.
b. There are no severance expenses being amortized.
c. No severance related expenses are included in the Company's revenue requirement. Please refer to Section V, Exhibit 2, W31 of the application for the $\$ 35,433$ Kentucky retail jurisdictional cost of service adjustment to remove severance-related true-ups recorded during the test year to account 5060000 related to the original $\$ 3.2$ million Big Sandy severance described in a. above.

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_069
Refer to the response to AG 1-294, which indicates that Big Sandy severances took place between December 2014 through January 2016 and reduced wages (including FICA) by $\$ 2.6$ million per year. Identify, quantify and explain the amount of reduced payroll related to such severances in each month of that period.

## RESPONSE

For the payroll reductions related to the Big Sandy severance please refer to KPCO_R_AG_2_069_Attachment1.xlsx. None of the payroll expense related to the positions that were eliminated was included in the adjusted cost of service in this case.

Witness: Andrew R. Carlin

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_070
Rate Case Expense. Refer to the response to AG_1_128 and Section V, Exhibit 2, W19 from the Company's filing.
a. Explain fully and in detail why the Company has included $1 / 3$ of its estimated rate case expense for the current case in rate base.
b. Section V, Exhibit 2, W19 indicates that the annual average rate case costs totaling $\$ 458,333$ is included in O\&M expense. Identify by amount and account, the amount of rate case expense that KPCo included in its rate base.

## RESPONSE

a. The Company included $1 / 3$ of its rate case expense in this case because three years is a reasonable amount of time for which to recover these expenses.
b. Please refer to Section V, Exhibit 1 included in Excel format in the Company's response to KPSC 1-73, Attachment 3 for the requested information. More specifically, please refer to Column V of the tab labeled "Sch 5" for the amounts included in this case.

Witness: Amy J. Elliott

# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests <br> Dated September 8, 2017 <br> Page 1 of 2 

## DATA REQUEST

AG_2_071 Executive Compensation. Refer to the confidential response to KPSC_1_46.
a. Referring to page 1 of Attachment 1 from the referenced response, for each executive offer listed, state whether the amounts shown under the Test Year Salary column are included in the Company's filing.
b. If the answer to part "a" is "yes", state whether the salaries reflect total Company amounts. If so, provide the Kentucky jurisdictional amounts.
c. For each period (2014-2016 and the Test Year) shown in Attachment 1 (page 1), provide a breakout of the components that comprise each executive officer's Other Compensation. If the amounts shown on Attachment 1 are total Company amounts, provide the Kentucky jurisdictional amounts of each executive officer's Other Compensation.
d. Pursuant to part "c", if the amounts shown on Attachment 1 are total Company amounts, provide the Kentucky jurisdictional amounts in the breakout of each executive officer's Other Compensation.

## RESPONSE

a. The amounts shown under the Test Year Salary column are total salary values, a portion of which are allocated to Kentucky Power as included in the Company's filing. See response to b. Below.
b.-d. The Salaries reflected in page 1 of Attachment 1 from the response to KPSC_1_46 are total salaries. Please see KPCO_R_AG_2_071_Attachment1_Redacted.xlsx and KPCO_R_AG_2_071_Attachment2_Redacted.xlsx for the Kentucky retail jurisdictional amounts of Executive Salaries by FERC Account.

In recording accrual entries for each incentive compensation plan for AEP Service Corporation and Kentucky Power, costs are accrued in aggregate by department. Kentucky Power's general ledger does not separately track actual incentive compensation costs by employee.

Although the requested information is not separately tracked by individual employee as discussed above, the Company has prepared an estimate based on the data provided in response to KPSC_1_46 which listed the total test year/calendar year payments to the respective employees. Please refer to KPCO_R_AG_2_071_Attachment3_Redacted.xlsx the allocation of

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 2 of 2

the total payouts during the requested periods by AEPSC executive employee by incentive program and KPCO_R_AG_2_071 _Attachment4_Redacted.xlsx for Kentucky Power executives. In both KPCO_R_AG_2_071_Attachment3_Redacted.xlsx and KPCO_R_AG_2_071_Attachment4_Redacted.xlsx, these incentive payouts have been allocated by account based on each individual's actual salary expense as charged/allocated to Kentucky Power for the respective periods. Retail jurisdictional factors for the test year ended February 28, 2017 were applied to incentive compensation amounts for the calendar years ended December 31, 2014, 2015, and 2016 since corresponding cost of service studies for those years have not been performed.

Please note that incentive compensation for all AEP Service Corporation employees, as provided in the response to AG 2-61, that was allocated to Kentucky Power includes incentive compensation for AEP Service Corporation executive employees. As noted above, Kentucky Power's general ledger does not track the actual expenses of other compensation by individual AEP Service Corporation employee. Therefore, the amounts provided in KPCO_R_AG_2_071_Attachment3_Redacted.xlsx and KPCO_R_AG_2_071 _Attachment4_Redacted.xlsx are not additive to the amounts in the response to AG 2-61 but instead are estimates, based on actual incentive payouts, for the requested executive components.

Witness: Tyler H. Ross
Alex E. Vaughan
Andrew R. Carlin

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 1 of 2

## DATA REQUEST

AG_2_072
Operating Expenses. Refer to the response to KPSC_1_23. Subparts a through c of the referenced response requested total Company and Kentucky jurisdictional amounts for the data requested. However, upon reviewing the attachments provided (Attachments 1, 2 and 3), there is only one set of numbers listed on each.
a. Are the amounts shown on Attachments 1, 2 and 3 total Company numbers? If so, provide the corresponding Kentucky jurisdictional amounts.

## RESPONSE

Kentucky Power objects to the Attorney General's characterization of KPSC 1_ 23 and the Company's response. The requests asks for "Kentucky operating expense accounts" not "Kentucky jurisdictional amounts". Specifically, the original request provided as follows:
"Provide the following:
a. A schedule showing a comparison of the balance in the total company and Kentucky operating expense accounts for each month of the test year to the same month of the preceding year for each account or subaccount included in Kentucky Power's chart of accounts. See Schedule 19.
b. A schedule, in comparative form, showing the total company and Kentucky operating expense account balance for the test year and each of the five calendar years preceding the test year for each account or subaccount included in Kentucky Power's annual report (FERC Form 1, pages 320-323). Show the percentage of increase or decrease of each year over the prior year.
c. A schedule of total company and Kentucky salaries and wages for the test year and each of the three calendar years preceding the test year as shown in Schedule 23c. Show for each time period the amount of overtime pay."

Kentucky Power provided the requested information in full.
a. The amounts shown in KPCO_R_KPSC_1_23_Attachment1.xlsx;

KPCO_R_KPSC_1_23_Attachment2.xlsx; KPCO_R_KPSC_1_23_Attachment3.xls are total Company expenses by Kentucky operating expense account. The amounts in the attachments are not Kentucky Retail Jurisdictional figures.

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 2 of 2

Please refer to KPCO_R_KPSC_1_73_Attachment3, Allocation Factors Tab for the appropriate Kentucky Retail Jurisdictional allocation factors by FERC account for the test year. For previous years, no Kentucky retail jurisdictional studies have been performed, however, the test year allocation factors could be used in the absence of specific prior year allocators.

Witness: Ranie K. Wohnhas

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_073
Payroll Expense. Refer to the response to KPSC_2_018. Explain fully and in detail the purpose of the $0.5 \%$ promotion and equity adjustment for nonexempt salaried and exempt employees.

## RESPONSE

Utilization of the $0.5 \%$ combined promotion and equity adjustment budget was used to better ensure the Company's salaries were market competitive and internally consistent, which results in improved employee engagement and retention. This budget was utilized for the specific purposes described below, not as a supplement to merit budget. These increases were generally subject to higher level management review and were not fully utilized to the extent they were not needed to address one of the purposes for which they were intended.

This budget was used to provide line of progression promotions, such as Accounting Associate to Accountant. These types of promotions are based on a manager's assessment of the employee's readiness to perform the work of the next higher level within their job family as well as minimum experience and job requirements. They differ from opportunity promotions, which require a position vacancy. Prior to 2015 , line of progression promotions were constrained due to tight labor budgets and changes in the salary budgeting process. This led to situations in which employees were not only sufficiently experienced and qualified to perform the work associated with the next higher level position within their job family but many of these employees were regularly performing such work without commensurate compensation. The budget for line of progression promotions provided an avenue for managers to address these situations and improve the retention of these highly desirable employees.

This budget was also used to address both internal and external pay disparities that were unrelated to individual employee performance or time in job. Changes in position responsibilities, market compensation, starting salaries, salary grade changes and internal transfers, among other factors, can lead to such pay disparities. Equity adjustments from this budget were provided to address these situations.

Witness: Andrew R. Carlin

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_074
Payroll Expense. Refer to Section V, Exhibit 2, page 35 of 60. Explain fully and in detail why the merit increase for nonexempt employees is so much higher at $5.00 \%$ than the merit increases shown for exempt and salaried nonexempt employees ( $3.50 \%$ ).

## RESPONSE

It is the Company's and AEPSC's long-standing practice to target market-competitive compensation for all types of positions but this practice must be balanced with other priorities. Since market competitive compensation for different types of positions can change at different rates, the Company's salary increases may also vary by type of position. The Company's priorities in addressing market-competitive compensation may also vary from time to time by type of positon, in part due to the leverage and influence of labor unions.

The $5 \% 2017$ increase for the physical and craft workforce was negotiated in 2014 as part of a 3year IBEW master bargaining agreement for 2015, 2016 and 2017. The negotiated wage increases were $3.5 \%, 3.5 \%$ and $5 \%$ for 2015, 2016 and 2017, respectively. The $5 \%$ total 2017 wage increase budget for physical and craft positions is comprised of a $3 \%$ general wage increase, $1 \%$ external market equity adjustment and $1 \%$ internal wage equalizer adjustments.

Market compensation survey comparisons indicated that the Company's compensation for physical and craft employees, as well as that for most other AEP operating companies, was below market median ( $5.4 \%$ below) on average (see Exhibit ARC-4 to Carlin's direct testimony). The $1 \%$ market equity budget was utilized only for those journey level positions across the AEP system whose compensation was below the median of the market competitive range for similar positions.

Base wage rates for similar positions also varied internally by operating company in ways that did not correspond with market competitive compensation variances. These internal compensation differences were creating employee relations, collective bargaining and mutual assistance difficulties. The $1 \%$ wage equalization budget was utilized only for those journey level positions (such as Line Mechanic A) across the AEP system whose compensation was below that paid by other AEP operating Companies for similar positions.

Witness: Andrew R. Carlin

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment Attorney General's Second Set of Data Requests<br>Dated September 8, 2017<br>Page 1 of 2

## DATA REQUEST

AG_2_075
Payroll Expense. Refer to the response to KSPC_1_24.
a. Explain fully and in detail why First/Mid Level officials worked $22,226.50$ hours of overtime during the test year.
b. Explain fully and in detail why Technicians worked 17,531.40 hours of overtime during the test year.
c. Explain fully and in detail why Craft Workers worked 91,079.10 hours of overtime during the test year.
d. Provide similar regular hours and overtime hours data for each year 2014, 2015 and 2016.

## RESPONSE

a. In the utility business overtime work is both inevitable and necessary. These include events that require surges in work volume such as storm restoration and power plant maintenance. The timing and duration of surge events is often unpredictable.

Department level and higher level Company management regularly review short-term and longer-term work volume expectations. Company management uses this information to determine the most efficient and effective way to complete the expected work load. This includes decisions about employee staffing levels, staffing shifts between departments, contract worker staffing levels, insourcing, outsourcing, staffing mix, work assignments, and overtime. Worker safety, legal requirements and union contracts are also factors in these decisions.

There are substantial fixed costs associated with hiring employees that weigh against the cost of overtime when determining employee staffing levels, such as the expense associated with hiring, training, and fixed cost employee benefits. Even when the cost of overtime exceeds the fixed cost associated with hiring additional employees, adding employees may not be the most efficient or effective solution. Other options, such as outsourcing work or hiring contract workers, are also considered.

# Kentucky Power Company 

KPSC Case No. 2017-00179 General Rate Adjustment
Attorney General's Second Set of Data Requests
Dated September 8, 2017
Page 2 of 2
Based on the staffing available at the time, in each case that overtime was worked a decision was made that the most efficient and effective way of completing the work at hand was for one or more employees to work overtime. These overtime hours, as with all other hours worked, require the approval of the employee's manager or their department time-keeper. Company management also regularly reviews overtime reports. Furthermore, cost center managers are always required to control expense, including overtime and other labor costs, within their cost center's budget.
b. Please refer to a. above.
c. Please refer to a. above.
d. Please refer to KPCO_R_AG_2_75_Attachment1.xlsx

Witness: Andrew R. Carlin

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_076
Prepaid Pension Asset. Refer to the response to AG_1_055.
a. Explain fully and in detail whether the Company has included an amount for a prepaid pension asset in its rate base. If so, identify by amount and account where the prepaid pension asset is reflected in KPCo's filing.
b. If the answer to part "a" is "yes", quantify and explain fully and in detail the impact (if any) of the Company's prepaid pension asset in its adjusted capitalization amount of $\$ 1,191,785,493$.

## RESPONSE

a. Kentucky Power has included an amount for prepaid pension asset in rate base. The Company's prepaid pension asset of $\$ 48,706,586$ is included in Account 1650010 which is reflected in Line 231 of Section V, Schedule 4.
b. The full amount of the Company's prepaid pension asset is included in the adjusted capitalization amount of $\$ 1,191,785,493$.

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_077
Pension Expense. Refer to the response to AG_1_084 and Section V, Exhibit 2, W23 from the Company's filing.
a. Referring to the response to AG_1_084(a), reconcile the $\$ 1,733,323$ of net qualified pension expense in the test year to the test year amounts shown for pension expense on Company workpaper W23. Identify, quantify and explain each reconciling item.

## RESPONSE

Please refer to KPCO_R_AG_2_77_Attachment1.xlsx for the requested information.

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_078
Pension Expense. Refer to the response to AG_1_110 and Section V, Exhibit 2, W23 from the Company's filing.
a. Referring to Attachments 1 and 2 from the response to AG_1_110, reconcile the test year pension expense amounts shown for KPCo and AEPSC employees to the test year amounts shown on Company workpaper W23. Identify, quantify and explain each reconciling item.

## RESPONSE

Please refer to KPCO_R_AG_2_78_Attachment1.xlsx for the requested information for pension expense related to Kentucky Power employees.

The test year amounts shown on workpaper W23 are for pension expense related to Kentucky Power employees only and thus there is no reconciliation for pension expense related to AEPSC employees.

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_079
SERP Expense. Refer to the response to AG_1_083 and Section V, Exhibit 2, W23 from the Company's filing.
a. Reconcile the net test year SERP expense of $\$ 3,409$ to the amount shown on Company workpaper W23. Identify, quantify and explain each reconciling item.
b. Reconcile the rate effective period SERP expense of $\$ 6,273$ to Company workpaper W23. Identify, quantify and explain each reconciling item.

## RESPONSE

a. Please refer to $\mathrm{KPCO} R \_A G \_2 \_79 \_$Attachment1.xlsx for the requested information.
b. Please refer to KPCO_R_AG_2_79_Attachment2.xlsx for the requested information.

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_080
OPEB Expense. Refer to the response to AG_1_085 and Section V, Exhibit 2, W23 from the Company's filing.
a. Reconcile the net test year OPEB expense of $(\$ 1,755,862)$ to the amount shown on Company workpaper W23. Identify, quantify and explain each reconciling item.
b. Reconcile the rate effective period OPEB expense of $(\$ 1,586,749)$ to Company workpaper W23. Identify, quantify and explain each reconciling item.

## RESPONSE

a. Please refer to KPCO_R_AG_2_80_Attachment1.xlsx for the requested information.
b. Please refer to KPCO_R_AG_2_80_Attachment2.xlsx for the requested information.

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_081
OPEB Expense. Refer to the response to AG_1_111 and Section V, Exhibit 2, W23 from the Company's filing.
a. Referring to Attachments 1 and 2 from the response to AG_1_111, reconcile the test year OPEB amounts shown for KPCo and AEPSC employees to the test year amounts shown on Company workpaper W23. Identify, quantify and explain each reconciling item.

## RESPONSE

Please refer to KPCO_R_AG_2_80_Attachment1.xlsx in the Company's response to AG 2-080 for the requested information for OPEB expense related to KPCo employees.

The test year amounts shown on workpaper W23 are for OPEB expense related to Kentucky Power employees only. No adjustments were made for AEPSC employees.

Witness: Tyler H. Ross

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_082
Advertising Expense. Refer to the response to AG_1_261 and Section V, Exhibit 2, W21.
a. Reconcile the test year expense of $\$ 34,802$ shown on Attachment 1 from AG_1_261 to the $\$ 136,858$ shown on Company workpaper W21. Identify, quantify and explain each reconciling item.
b. Explain fully and in detail the nature of the advertising expense category "Employee Expenses".

## RESPONSE

a. KPCO_R_AG_1_261_Attachment1.xls inadvertently did not provide a full listing of all of the accounts comprising advertising expenses during the test year. Please refer to the Company's response to KPSC 1-30 and KPCO_R_KPSC_1_30_Attachment1.xlsx for a complete breakdown of all test year accounts and expenses that make up the $\$ 136,858$ shown in Section V, Exhibit 2, W21.
b. Expenses categorized as "Employee Expense" are those expenses incurred by an employee using a corporate credit card.

Witness: Stephen L. Sharp

Kentucky Power Company<br>KPSC Case No. 2017-00179 General Rate Adjustment<br>Attorney General's Second Set of Data Requests<br>Dated September 8, 2017

## DATA REQUEST

AG_2_083
Uncollectibles Expense. Refer to the response to AG_1_264. Explain fully and in detail whether the $\$ 62,911$ accounts receivable charge-off is included in the Company's cost of service. If so, explain fully why and identify by account where this amount is reflected in the Company's filing.

## RESPONSE

The customer accounts receivable charge-off of $\$ 62,911$ in 2016 referenced in the Company's response to AG_1_264 was reflected on the books of AEP Credit and not the Company's cost of service.

AEP Credit, an affiliated company, factors Kentucky Power's accounts receivable, and in return for factoring or securitizing Kentucky Power's customer accounts receivables, AEP Credit discounts the amount paid to Kentucky Power by $2 \%$ of total receivables in return for assuming the risk of uncollectible accounts adjusted on a 12-month rolling average for actual chargeoffs. For the twelve months ended February 28, 2017, the total company amount recorded to Account 4265010, Factored Customer Accounts Receivable-Bad Debts-Affiliated, and included in Kentucky Power's cost of service, was $\$ 1,636,590$. The referenced $\$ 62,911$ charge-off would have had a minimal impact on the 12-month average of charge-off experience.

Witness: Tyler H. Ross

# Kentucky Power Company 

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## DATA REOUEST

AG_2_084


## RESPONSE

Please refer to KPCO_R_AG_2_084_Attachment1_Redacted.xlsx. for the requested information. In addition, please refer to KPCO_R_AG_2_084_Attachment2.pdf for copies of advertisements that ran in 2016 and occurred during the test year that the Company did not eliminate in Section V, Exhibit 2, Workpaper 21.

Witness: Mark A. Pyle

# Copper wire - it's not worth your life. 

It may get you a few bucks, but stealing wire from electrical lines, substations or other electrical equipment is not only illegal, it can kill you.

Don't do it. Don't let people you care about do it.
If you know anything about theft of electrical equipment, call Kentucky Power's toll-free security hotline: 1-866-747-5845

A safety message from Kentucky Power.


RENTUCKMY POWFER ${ }^{\circ}$ A unit of American Electric Power


# Kentucky Power Company 

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## DATA REQUEST

AG_2_085


## RESPONSE

Please refer to KPCO_R_AG_2_085Attachment1_Redacted.xlsx for the requested information.

Witness: Mark A. Pyle

# Kentucky Power Company 

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## DATA REQUEST

AG_2_086


## RESPONSE

a. Kentucky Power records cash deposits in Account 134 related to various counterparties for certain transactions, including participation in RTOs, auctions and broker clearing house activity.
b. In 2016, the Company recorded $\$ 22$ in net expense in Account 930.2 related to broker fees and commissions associated with hedging instruments used to purchase wholesale gasoline and diesel fuel. The Company also recorded $\$ 14,395$ in net expense to Account 902 related to other fuel hedging. The net expense is included in the Company's cost of service and requested revenue requirement.
c. Speculative Allowances are related to the purchase of NOx allowances for speculative purposes. Purchased speculative allowance inventory is recorded to Account 124 and related sale activity is recorded to Account 426.5.
d. In 2016, the Company recorded $\$ 754$ in speculative allowance expense in Account 426.5.

Witness: Tyler H. Ross

## DATA REQUEST

AG_2_087


## RESPONSE

a. The Company includes the cash surrender value of life insurance policies on former executives of Kentucky Power in Account 1240007.
b. (1) For changes in the balances of Account 1240007 , the Company recorded $\$ 27,323.17$ in total company expense to Account 9260036 during the year ended December 31, 2016.
b. (2) Total Company expense in Account 9260036 related to balance changes in Account 1240007 are included in the Company's test year.

Witness: Tyler H. Ross
Mark A. Pyle

# Kentucky Power Company 

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## DATA REQUEST

AG_2_088


## RESPONSE

Please refer to KPCO_R_AG_2_88_Attachment1.xlsx for the requested identification of each regulatory asset included in the referenced amounts by account. Please also see KPCO_R_KIUC_1_33_Attachment1.pdf in the Company's response to KIUC 1-33 for the requested amortization period for each regulatory asset, as applicable, and the amount of amortization recorded by account in 2016.

Witness: Tyler H. Ross
Mark A. Pyle

AG_2_089


## RESPONSE

a. The referenced Provision of Possible Refunds relates to PJM transmission revenues including PJM formula rate true-ups except for $\$ 8,626$ related to a North American Electric Reliability Corporation (NERC) penalty accrual recorded below-the-line in Account 426.3.
b. Yes, transmission revenues are a part of base rates.

Witness: Tyler H. Ross
Mark A. Pyle

# Kentucky Power Company 

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## DATA REQUEST

AG_2_090


## RESPONSE

a.-b. Please refer to KPCO_R_AG_2_090_Attachment1.xlsx. Also refer to the Company's Responses to AG 2-47, AG 2-48 and AG 2-96.
c. The Company's true-ups during 2016 related to the Big Sandy 2014 severance (excluding relocation expense) were recorded to account 5060000 .
d. The $\$ 146,000$ of relocation expense (shown as "Accrued Severance Benefits" in statement 288) was recorded in account 9200000 during 2016.
e. Severance expense true-ups were recorded for employee terminations at the Big Sandy Plant.
f. The Company recorded severance benefit expenses (credits) of:
Kentucky Power Company

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2012:
\(5060000-\$ 82,574\)
5660000-\$116,824
5880000 - \(\$ 332,486\)
2013:
5060000 - \((\$ 82,574)\)
5660000 - \((\$ 116,824)\)
5880000 - (\$162,922)
2014:
5060000-\$3,169,231
2015:
5060000-\$36,474
```

g. The expense for Deferred Comp-Cash Surrender Value was recorded in account 9260036 during the test year.

Witness: Tyler H. Ross
Mark A. Pyle
Andrew R. Carlin

# Kentucky Power Company 

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## DATA REQUEST

AG_2_091


## RESPONSE

a. The "Reg Asset-Big Sandy U1 OR-Unrec Equity CC" amount was recorded in Account 1823410 (unrecognized equity carrying charge contra account). This amount was recorded in 2016. No related expense was recorded. The offset was recorded to Account 1823411 BSIOR Under Recovery CC which is the regulatory asset account for total related carry charges (debt and equity).
b. The "Reg Asset-NERC Compliance Cyber CC-Unreq Eq" amount was recorded in Account 1823536. This amount was recorded in 2016 (unrecognized equity carrying charge contra account). No related expense was recorded. The offset was recorded to Account 1823537 CCNERC Compliance/Cyber Sec which is the regulatory asset account for total related carry charges (debt and equity).

Witness: Tyler H. Ross
Mark A. Pyle

# Kentucky Power Company 

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## DATA REQUEST

AG_2_092


## RESPONSE

This amount represents the normal book/tax basis difference on property retirements that happen in the course of the year. For book purposes, the book cost is debited to Accum. Depreciation resulting in no book gain or loss. For tax purposes, the net remaining tax basis is deducted on the tax return. Deferred taxes are recorded at $35 \%$ of the Schedule $M$ on this book/tax basis difference and are amortized over the estimated remaining book life. The retirements are not identified by "plant time".

Witness: Mark A. Pyle

## DATA REQUEST

AG_2_093


## RESPONSE

a. Statement 329 reflects the recognition of previously deferred unrecognized equity carrying charges on RTO formation/integration costs which are recorded in Account 1823115. These carrying charges were recorded on the unamortized balance of RTO deferrals.
b. The Company recorded a credit of $\$ 12,588$ in 2016 to Account 4073000 to recognize equity carrying charges on deferred RTO formation/integration costs commensurate with recovery.
c. The Company recorded a credit of $\$ 12,588$ in the test year to Account 4073000 to recognize equity carrying charges on deferred RTO formation/integration costs commensurate with recovery.

Witness: Tyler H. Ross

# Kentucky Power Company 

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## DATA REQUEST

AG_2_094


## RESPONSE

a. Kentucky Power, a regulated entity subject to cost-based regulation, records unrealized marked-to-market amounts as a regulatory asset (Account 182.3) or a regulatory liability (Account 254).
b. No.

Witness: Tyler H. Ross

# Kentucky Power Company 

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## DATA REQUEST

AG_2_095


## RESPONSE

a. Kentucky Power records costs related to the Economic Development Fund to Accounts 908 (expense related to customer revenue) and Account 426.1 (expense related to company match). Kentucky Power records economic development rider revenue to Accounts 440001, 440002, 4420001, 4420002, 4420004, 4420006, 4420007 and 4440000.
b. Please refer to Attachment 1, KPCO_R_AG_2_95_Attachment1.xlsx for the listing of the beginning of year and end of year balances and monthly debits and credits for the Economic Development Fund.
c. Kentucky Power received Economic Development Fund revenues from the Kentucky Economic Development Surcharge (KEDS) of \$303,444 in 2016.
d. Please refer to KPCO_R_AG_2_95_Attachment2.xlsx for a listing for the vendors paid from the economic development fund for 2016. Please also refer to the testimony of Company Witness Hall and Exhibits BNH-2 and BNH-3 for information regarding the projects funded through the KEAP and K-PEGG programs.

Witness: Tyler H. Ross
Mark A. Pyle
Brad N. Hall

## DATA REQUEST

AG_2_096


## RESPONSE

a. Please refer to the Company's Response to AG 2-90. There are no state uncertain tax positions, only the state impact of Federal Audit items.
b. Please refer to KPCO_R_AG_2_096_Attachment1_Redacted.pdf.
c. Please refer to the Company's Response to AG 2-47.
d. Please refer to the Company's Response to AG 2-47.

Witness: Mark A. Pyle

## KPCO_R_AG_2_096_Attachment1.pdf

 has been redacted in its entirety.
# Kentucky Power Company <br> KPSC Case No. 2017-00179 General Rate Adjustment <br> Attorney General's Second Set of Data Requests 

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## DATA REQUEST

AG_2_097


## RESPONSE

a. The majority of the net capital gain was related to a land sale. Please see the table below which identifies the property sold to produce the net capital gain.

| Description of |  | Gain |
| :--- | :--- | ---: | ---: |
| Property |  |  |
| Section 1256/1234 | $\$$ | 348,088 |
| Fiber Optic Lines | $\$$ | 5,198 |
| Emission Allowances | $\$$ | 395,706 |
| Timber | $\$$ | 10,543 |
| Land | $\$$ | $\underline{1,001,860}$ |
| Total | $\$$ | $1,761,395$ |

Section 1256/1234 gains and Emission Allowance gains are for tax purposes only. Gains related to sales of Fiber Optic Lines, Timber and Land are recorded to Accounts 419, 421 and 411.6, respectively.
b. In December 2016, KPCO sold 739 acres of land in Lewis County, Kentucky to a third party for $\$ 2,216,811$. The original cost of the 739 acres sold was $\$ 1,102,455$ and after selling expenses of $\$ 112,496$, KPCO recorded an estimated gain of $\$ 1,001,860$ in December 2016. The gain was recorded in account 411.6, Gains from Disposition of Utility Plant. The final gain recorded was $\$ 996,669$ after a March 2017 true-up.
c. The gain on the sale of the 739 acres was excluded from the requested revenue requirement.

Witness: Tyler H. Ross/Mark A. Pyle

## DATA REQUEST

AG_2_098


## RESPONSE

a. Please refer to KPCO_R_AG_2_098Attachment1_Redacted.xlsx
b. Yes. ADFIT has been recorded on these items at the $35 \%$ Federal income tax rate. All ADIT is included in the Company's Application consistent with prior rate filings. Please also refer to the Company's Response to AG 1-058.

Witness: Mark A. Pyle

# Kentucky Power Company 

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## DATA REQUEST

AG_2_099


RESPONSE
a. Yes.
b.
b.
c. It had a direct dollar-for-dollar impact.
d. No. The 2016 NOL has not yet been analyzed since the 2016 Federal income tax return was just recently filed. The accrual for 2016 indicated that Kentucky Power would have taxable income of $\square$

Witness: Mark A. Pyle

## DATA REQUEST

AG_2_100


## RESPONSE

None of the Workers Compensation Policy Premium amount was charged or allocated to Kentucky Power.

Witness: Tyler H. Ross

# Kentucky Power Company 

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## DATA REQUEST

AG_2_101


RESPONSE


Witness: Andrew R. Carlin


[^0]:    

[^1]:    LGS PRI
    LGS M PRI
    LGS SUB
    LGS TRAN
    LGS-LM-TD
    QP SEC
    QP PRI
    QP SUB
    QP TRANS
    RTP QPPRI
    RTP QPSUB
    CIP SUB
    CIP TRAN
    RTPCIPSUB
    SL
    MW

    LGS PRI
    LGS M PR
    LGS SUB
    LGS TRAN
    LGS-LM-TD
    QP SEC
    QP PRI
    QP SUB
    QP TRANS
    RTP QPPR
    RTP QPSU
    CIP SUB
    CIP TRAN
    RTPCIPSUB
    SL
    MW
    TARIFF
    志

