

**VERIFICATION**

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

*Kelly D. Pearce*

\_\_\_\_\_  
Kelly D. Pearce

STATE OF OHIO

)

) Case No. 2014-00225

COUNTY OF FRANKLIN

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Kelly D. Pearce, this the 29<sup>th</sup> day of September 2014.

*Ann Dawn Clark*

\_\_\_\_\_  
Notary Public




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

My Commission Expires: November 16, 2015

**VERIFICATION**

The undersigned, John A. Rogness III, being duly sworn, deposes and says he is the Director Regulatory Services 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/her information, knowledge and belief.

  
John A. Rogness III

COMMONWEALTH OF KENTUCKY     )  
  ) Case No. 2014-00225  
COUNTY OF FRANKLIN                     )


Subscribed and sworn to before me, a Notary Public in and before said County and State, by John A. Rogness III, this the 29<sup>th</sup> day of September 2014.

 481393  
Notary Public

My Commission Expires: January 23, 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

  
Ranie K. Wohnhas

COMMONWEALTH OF KENTUCKY    )  
  ) Case No. 2014-00225  
COUNTY OF FRANKLIN                    )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Ranie K. Wohnhas, this the 29<sup>th</sup> day of September 2014.

  
Notary Public

My Commission Expires: January 23, 2017

## Kentucky Power Company

### REQUEST

Refer to the Company's response to Staff 2-4(b) (1). The question asked the Company to "[s]tate whether Kentucky Power generating units are producing power during the time that 'no load' costs are incurred." The Company did not answer this specific question in its response.

- a. Please answer this specific question.
- b. Please indicate whether the Company's generating units produce power during the time that so-called no-load costs are incurred.
- c. In the Company's response, it refers to "minimum loads." Is it the Company's position that the terms "no-load" and "minimum load" are interchangeable? If not, please define and source the definition used for each term and differentiate the terms and the specific manner in which the Company uses those terms.

### RESPONSE

- a. Staff 2-4(b)(1), provides:

"[s]tate whether Kentucky Power generating units are producing power during the time that no load costs are incurred."

To which the Company's response provides in part:

"b.1) The Company's units are generating energy when no load costs are incurred."

The Company is unaware of any more direct or clear way to answer this question. The Company agrees that when a unit is "generating energy" it is "producing power".

- b. See the Company's response to a. above.
- c. The Company's response to Staff 2-4(b)(1) does not use the term "minimum loads". For a definition of "no-load cost" please refer to *PJM Manual 15: Cost Development Guidelines* Section 1.7.3 on page 3. This manual is provided as KIUC-2-1 Attachment 1 for reference.

**WITNESS:** Kelly D Pearce

## Kentucky Power Company

### REQUEST

Refer to the Company's response to Staff 2-4(b) (1) in which it states: In the event that the sum of the unit minimums exceeds KPCO's internal load, the sum of all the units remaining costs, excluding the load costs, is computed on a \$/MWh basis, and this cost is assigned to the MWhs of any remaining off-system sales. The remainder of these costs are allocated to internal load.

- a. Please describe the "units remaining costs, excluding the no load costs." Provide an example showing the computation of the "units remaining costs."
- b. Please describe the basis for the MWh used to compute the \$/MWh. Is it the difference between the unit minimum and the so-called no load or something else?
- c. Please describe the term "remaining off-system sales." Provide an example showing how the "remaining off-system sales" are calculated.
- d. Provide an example taking the example provided in response to part (a) of this question through the computation of the \$/MWh basis, assignment to the MWhs of any remaining off-system sales and the allocation of the remainder of the costs to internal load. Describe each step of the computation.
- e. Please confirm that when "[t]he remainder of these costs are allocated to internal load, it is not done on a \$/MWh basis, but rather is the residual after the \$/MWh "cost is assigned to the MWhs of any remaining off-system sales."
- f. Please explain why the Company excludes the so-called no load costs from this calculation.

**RESPONSE**

- a. The "units remaining costs, excluding no load costs" reflects the variable cost of energy up to the unit minimums. Please see KIUC 2-2 Attachment 1 to this response for the requested example.
- b. The MWh level at which the computation is done is the unit minimum. This reflects the volume of energy to be allocated on each unit. The cost is the difference between the cost of the unit minimum and the no load cost.
- c. Economic dispatch allocates energy above the unit minimums. As referenced in the question, the term "Remaining off-system sales" refers to the amount by which off-system sales volume exceeds the difference between the sum of the actual output of the dispatchable resources and minimum constraints. Please see KIUC 2-2 Attachment 1 to this response for the requested example.
- d. Please see KIUC\_2\_2\_Attachment1 to this response.
- e. The settlement process allocates cost to off-systems sales. Costs not allocated to off-system sales remain with internal load.
- f. No load or "fixed fuel" cost is not variable or incremental. It is part of the expense that is incurred just to maintain a unit on-line and make its generation available to serve internal load. Consequently, no load costs are excluded from this calculation.

**WITNESS:** Kelly D Pearce

## Kentucky Power Company

### REQUEST

Refer to the Company's response to KIUC 1-2(d) wherein it states: "The PJM marginal losses are subsequently allocated to internal load only at the volume of the internal load."

- a. Please describe the allocation process. The Company's response to KIUC 1-6 ostensibly does so, but does so only generally, and does not provide the actual calculation and/or sources of data "associated with the generation that was used to generate the off-system sales."
- b. Please provide an example of the allocation process. Describe each step in the calculation, explain why the Company performs the step in that manner, and identify the source of the information used in the calculation.

### RESPONSE

- a. PJM calculates the hourly marginal loss component of the Locational Marginal Pricing point (LMP) for both generator and load points. PJM provides AEP this information for its generation and load information. Through the Power Tracker system, the percentage of generation to serve off-system sales or native load is determined. Once determined, the hourly percentage allocation of the unit that is associated with off-system sales is applied against the hourly loss component that PJM has provided AEP for this unit. The remaining marginal loss component is allocated to native load which includes the FERC all requirements wholesale customers.
- b. PJM calculates a \$2.00 per MWH marginal loss component for Plant A at Hour "X". PJM calculates a \$1.00 per MWH marginal loss component for the same hour. Credit is allocated by PJM for the marginal loss component at the Load Zone of (\$1.00 per MWH) for the native load delivered. If all volumes are constant, AEP has been assessed by PJM \$2.00 of marginal loss cost for that hour.

AEP will determine the percentage of resources through Power Tracker that were used in that hour to serve off-system sales. In this example, allocation of generation through Power Tracker indicates that 50% of Plant A served off-system sales, 50% served native load, and 100% of Plant B served native load only. The Load Zone credit is only for native load. Off-system sales would be allocated by AEP \$1.00 of marginal loss cost and internal load would be allocated the remaining \$1.00 of marginal loss cost.

**WITNESS:** Kelly D Pearce



## Kentucky Power Company

### REQUEST

Refer to the Company's response to KIUC 1-7 wherein the Company states that "[n]o load' costs are not associated with specific increments of generation, and thus are not allocated to off-system sales. They thus remain with native load costs." If the so-called no-load costs are not associated with specific increments of generation, then why are they not allocated across all generation, i.e., on a \$/MWh basis to all generation, including native load and off-system sales.

### RESPONSE

No load costs are only incurred when a unit is on-line and, whenever a unit is on-line, the Company's internal load always has the first claim on this generation. No load or "fixed fuel" cost is an expense that is incurred to make this generation available. No load costs are part of the absolute minimum required to keep the unit on-line and running so it is available as needed to serve internal load, and therefore these costs are native load costs.

To allocate this fixed fuel cost to off-system sales can create a distorted outcome as described in the Company's response to KPSC 1-29 part (b).

WITNESS: Kelly D Pearce

## **Kentucky Power Company**

### **REQUEST**

In regards to the Kentucky Power Cost Allocation Manual referenced in the Company's response to PSC 1-29,

- a. If it has not been provided, please supply a copy electronically, or reference the DR in which it has been provided.
- b. Is this Manual up-to-date with the most current methodology? If yes, when was it last revised? If no, please provide a detailed explanation of the changes that have been made to the power cost allocation procedures, and provide the most up-to-date allocation documentation that does exist, electronically.
- c. Does the Company contend that its allocation of fuel costs to off-system sales, as discussed in PSC 1-29(b), has been revised in the post period reconstruction processes of the termination of the AEP Interconnection Agreement, and the acquisition of the Plant Mitchell assets? Please explain the specific changes that were implemented, and provide any documentation that exists explaining the changes, including any programming specifications that exist.

### **RESPONSE**

- a. Please see Attachment KIUC\_2\_5a\_Attachment1.
- b. Yes. The manual was last revised on June 30, 2014. The manual was developed as a guide for allocating shared costs between operating companies and does not address the allocation of fuel costs.
- c. The Company did not change its methodology for allocating no-load costs in January 2014. No load costs remain with internal load.

The Company's individual settlement process in 2014 follows the same methodology as utilized across all of the pool members prior to the pool termination. Certain technical specifications were modified and updated at the beginning of 2014. There is no documentation explaining these changes, but an explanation of each is provided below:

1) Unit minimums - Prior to 2014, if on occasion the AEP East Pool had a "low load" condition, meaning the sum of the internal load of all the Companies was less than the sum of the economic minimums of the units, the units minimums would be adjusted to their emergency minimums and cost allocation to off system sales would continue. However, emergency minimums, as their name implies, are not economic values and requests by PJM to reduce units to emergency minimums is an infrequent occurrence. As a result, in 2014, this adjustment from economic to emergency minimums is no longer implemented.

2) Low load condition - Under the pool agreement, the sum of the pool members combined load tended to always exceed the sum of the unit minimums until near the end of the pool (this change was due to customer choice in Ohio). It was recognized that once the pool terminated, this operating condition could occur on a more frequent basis for individual operating companies. As a result, a business practice was developed for 2014 to address this operating condition and allocate additional cost below the unit minimums to off system sales by individual company for this operating situation. This method is as described in the Company's response to KPSC\_2\_4(b)(1).

3) Variable Operations and Maintenance (VOM) expense - Prior to 2014, the components of the unit supply curves, including fuel and handling, consumable/chemicals and emission allowances, were utilized on a \$/MMBTU basis. Only VOM was utilized on a \$/MWh basis. For 2014, the VOM has been modified to a \$/MMBTU basis to be consistent with the other cost components.

4) Trading transactions -- During the period when the pool was in effect, trading power purchases, if they flowed physically, would be allocated on a Member Load Ratio (MLR) basis to all of the Companies and such purchases could be allocated to off system sales or used to serve internal load. In 2014, any such transactions are recorded on the trading books used for the combined Companies and are directly assigned as the cost basis of the applicable off system sale(s). Such trading margins are then allocated under the terms of the Bridge Agreement if it is a legacy transaction or the Power Coordination Agreement (PCA) if it is a new transaction.

5) System Integration Agreement (SIA) East Zone purchases - Prior to 2014, any AEP East Zone purchases from the AEP West companies were allocated on an MLR-basis to the east companies per the pool agreement and could be used to satisfy either internal load or off-system sales. From January through May 2014, with the elimination of the East Pool, such purchases were allocated under the terms of the PCA. This activity stopped beginning with June of 2014 since the SIA was modified and East/West energy exchanges no longer occur.

**WITNESS:** Kelly D Pearce

## **Kentucky Power Company**

### **REQUEST**

With regards to the Company's response to KIUC 1-5, and for the months of January 2014 through April 2014,

- a. Please provide a workpaper, electronically, showing how the total variable cost in the Company's response to KIUC 1-5 e was developed, and please reconcile it each month with the fuel cost data for the same months found in the attachment - KIUC 1-5 Attachment 1 .xls.
- b. Please reconcile the monthly Off-System Sales fuel cost found in the attachment KIUC 1-5 Attachment 2.xls (for example, January cell W591), to the Off-System Sales fuel cost allocated to Native Load and Off-System Sales in the attachment KIUC 1-5 Attachment 1 .xls (See rows 29 and 31 in each tab).
- c. Please reconcile the Generation (MWH) Allocated to Off System Sales and Total Accounting Cost (\$) found in KIUC 1-20 Attachment 3.xls to the same values found in KIUC 1-5 Attachment 1 .xls.
- d. Please refer to KIUC 1-8 Attachment 1\_CONFIDENTIAL.pdf, page 1, and reconcile the Total Internal load column (MWH) and the System Sales (MWH) columns to the corresponding columns in KIUC 1-5 Attachment 1 .xls.

### **RESPONSE**

- a. Please see KIUC\_2\_6\_Attachment1. The fuel cost data is a subset of the total variable costs. Both the fuel cost data and the total variable costs are available in the tab labeled "Original Unit Cost Report". The fuel cost as also found in the "Original Unit Cost Report" tab is equal to the sum of the off-system allocation of fuel costs for Big Sandy, Rockport, and Mitchell. For example, the sum of cells D25, D26, and D27 in the January 2014 tab of KIUC 1-5 Attachment 1 would be equal to the fuel cost found in cell E8 of the tab labeled "Original Unit Cost Report".

- b. The amounts found in the monthly Off-System Sales tracker are total variable costs, with the fuel cost portion being a subset of this total variable cost. To reconcile the total variable costs in the System Sales Tracker, KIUC 1-5 Attachment2 (for example cell W591) to the Unit Cost reports and the total account 4470103 amount from the sales tariff reports that were provided in response to KIUC 1-20, as Attachments 5, 9, 13, 17, 21, and 25, one would take the current month estimate and add to that a true-up for the difference in the prior month estimate and the prior month actual. For example, the \$19,422,523 amount in cell W591 of KIUC 1-5 Attachment2 is the estimated monthly amount for January 2014. To reconcile this estimate to the actual total variable costs for January 2014 in the amount of \$19,141,936, (included the Company's response to KIUC 1-5), one would need to add the amount in W591 to the true-up amount in cell W705 (the amount of -\$280,587).
- c. There was a subsequent revision to KIUC 1\_5 Attachment1 and KIUC 2\_6 Attachment1 that is reflected in KIUC 1\_20 Attachment3. Although the reports were re-run to incorporate a heat rate correction for Mitchell as in KIUC 1\_20 Attachment3, the change in the costs was not booked until May business. The total difference for January and February was \$7,433.

KIUC 1\_20 Attachment7 did not include the revisions for the heat rate correction for February. For simplicity, the Company has included in KIUC 2\_6 Attachment1, the tab labeled "Revised Unit Cost Reports" the final revisions for the unit cost reports for the period from January 2014 through April 2014.

- d. A complete reconciliation of these reports is not possible because the reports are compiled using different data sources, which create timing and modeling differences. Please see KIUC 2\_6 Attachment2 for an approximate reconciliation.

Internal Load: The total internal load shown on KIUC 1-8 Attachment 1 CONFIDENTIAL, page 1 is calculated using AEP internal data sources which include marginal losses. The NER analysis performed on KIUC 1-5 Attachment 1 is compiled using PJM modeling data sources, but does not include marginal losses.

System Sales: For November 2013 and December 2013, the system sales shown on KIUC 1\_8 Attachment 1 CONFIDENTIAL, represent Kentucky Power's MLR share of system sales. The system sales on KIUC 1-5 Attachment 1, are the resource allocation results.

For January 2014 through April 2014, the system sales shown on KIUC 1-8 Attachment 1 CONFIDENTIAL, page 1 are netted against third party purchase power. The system sales on KIUC 1-5 Attachment 1, are the spot market energy sales included in the NER calculation.

**WITNESS:** John A Rogness

## Kentucky Power Company

### REQUEST

Please refer to Company response to KIUC 1-7, related to no-load costs, specifically KIUC 1-7 attachment 1 .xlsx, and with regard to the months of January 2014 through April 2014, and please provide the requested information electronically,

- a. Please provide all underlying data assumptions (hourly or otherwise) used to develop this table of “no-load costs” electronically with formulas intact.
- b. Please provide all “no-load” cost calculations hourly by unit.
- c. Please provide a narrative explanation for the methodology used to calculate the table provided in KIUC 1-7 and any additional steps or methods used to break down this table to an hourly level of detail by unit.
- d. Please provide any additional information, data, assumptions, or descriptions to independently recreate the table based on hourly data, by unit.
- e. Please provide an explanation or additional assumptions regarding purchase power as it may apply in this context.

### RESPONSE

- a. No-load modeling assumptions include:
  - 1) If unit has net generation, then no load cost will be modeled.
  - 2) For jointly owned units, the unit cost curve is prorated among co-owners based on the percentage of net output assigned to the unit owner.
- b. Please see KIUC 2-7 Attachment 1 for hourly calculations.
- c. As represented in KIUC 2-7 Attachment 1, hourly no load cost for a unit is calculated using the following formula:

If Net Generation is greater than 0 then

No Load Cost = (A Coefficient from the Heat Rate Curve / JOU Share of Unit \* Fuel Rate)

Otherwise

No Load Cost = 0.

A jurisdictional allocation based on kWh sales was done to split the no-load costs between retail customers and KPCo wholesale customers.

d. Not applicable.

e. Purchase Power is not related to no-load cost.

**WITNESS:** Kelly D Pearce



## Kentucky Power Company

### REQUEST

Please provide a narrative explanation for how the heat rate coefficients provided in KIUC 1-12 Attachment 2 were derived month by month.

### RESPONSE

For each coal unit, a family of heat rate curves is established to model operation at different circulating water temperatures. The curve applied in a period is selected based on the circulating water temperature for that period. If the circulating water temperature for the period matches one of the model values then that curve is utilized. If a circulating water temperature for a period falls between individual curve values, the specific coefficients applied for the period are derived by interpolating between the model values for the lower and higher circulating water temperatures.

**WITNESS:** Kelly D Pearce

**Kentucky Power Company**

**REQUEST**

In regards to KIUC 1-8 attachment 1,

- a. Please provide this data by hour, with customer class, jurisdiction, losses, and sales broken out, in electronic worksheet format.
- b. It appears there is an error in the March 2014 losses column. If so, please provide the corrected value.

**RESPONSE**

- a. Most retail customers are not metered on an hourly basis, therefore such data are not available.
- b. The March 2014 losses value is correct.

**WITNESS:** John A Rogness

**Kentucky Power Company**

**REQUEST**

In regards to the attachments provided in KIUC 1-9 (Purchases) and KIUC 1-10 (Sales),

- a. Please provide column descriptions
- b. Please provide an abbreviation key for any column of descriptions, that have not already been supplied.

**RESPONSE**

- a. Please see the following table for column descriptions in the attachments for KIUC 1-9 and KIUC 1-10:

<b>Column Name</b>	<b>Column Description</b>
Pd	References the month in which the Sale or Purchase took place.
Year	References the year in which the Sale or Purchase took place.
Unit	References the Business Unit.
Ref	Reference descriptions from Power Tracker.
TrkgCd	References the company associated with the Sale or Purchase.
Account	References the Kentucky Power account number.
Revenue	References the dollar amount associated with the Sale or Purchase.
Kwh Metered	References the kWh associated with the Sale or Purchase.

- b. Please see KIUC 2-10 Attachment 1 for this response.

**WITNESS:** John A Rogness

## Kentucky Power Company

### REQUEST

In the same format as the Economic Min and Max data were supplied in the response to KIUC 1-12, file KIUC 1- 12 Attachment 1.xls, please provide the following data for all hours in the period between January 1, 2014 and April 30, 2014, and for all units, as found in the reconstruction example for 1 hour (KIUC 1- 21 Attachment 1.xlsx):

- a. Col H — Incremental Dispatch Cost at Output for Actual
- b. Col BA — Fuel Rate (\$/MBTU)
- c. Col BD --- OM Price (\$/MBTU)
- d. Col BB — Handling Rate (\$/MBTU)
- e. Col BC — Chemicals Rate (\$/MBTU)
- f. Col AN — Nox Market Price (\$/Ton)
- g. Col Q — Nox Volume (conversion factor)
- h. Col AW — Nox Curve Slope
- i. Col AX — Nox Curve Intercept
- j. Col AO — Sox Market Price (conversion factor)
- k. Col AL — Nox Inventory Rate
- l. Col AU --- SOX Curve Slope
- m. Col AV — SOX Curve Intercept
- n. Col AM — SOX Inventory Rate
- o. Col H --- Purchases Inc Cost a (No need to supply this if already provided in KIUC 1-14).
- p. Col AI — Purchases \$/MWH (No need to supply this if already provided in KIUC 1-14).
- q. Col AJ — Purchases MWH (No need to supply this if already provided in KIUC 1-14).
- r. Col F, Row 12 Load Obligation
- s. Col F, Row 13 Marginal Load Adjustment
- t. Col F, Row 14, Spot Market Energy Sales (No need to supply if already provided in KIUC 1-13).
- u. Though not included in KIUC 1-21, provide the corresponding hourly spot market energy sales revenue.

**RESPONSE**

- a-u. Please see KIUC\_2\_11\_Attachment1, with the following exceptions:
- o. Provided in KIUC 1-14. This is the cost in dollars per MWh for the purchase.
- p. Provided in KIUC 1-14.
- q. Provided in KIUC 1-14.
- t. Provided in KIUC 1-13.
- u. Provided in KIUC 1-13.

**WITNESS:** Kelly D Pearce

## Kentucky Power Company

### REQUEST

Assuming that the fuel costs that flow through the FCA were recreated from the process depicted in the sample reconstruction found in KIUC 1-21 Attachment 1.xlsx, but for all hours between January and April 2014, would that resulting monthly fuel cost for both native load and off-system sales be expected to match the results in KIUC 1-5 Attachment 1.xls. If not, why not, and please provide a reconciliation of the two.

### RESPONSE

The process demonstrated in KIUC 1-21 is a subset of the functionality demonstrated in KIUC 2-2. If the manual process depicted in KIUC 2-2 was created for all hours during the period the result would be expected to materially match the results in KIUC 1- 5 Attachment 1.

An exception to this is the heat rate correction that is explained in the response to KIUC 2-6, part c.

WITNESS: John A Rogness

## Kentucky Power Company

### REQUEST

The Company's response to PSC 2 - 4 a states that other variable costs are included in the "no load" costs, including fuel handling, chemicals/consumables, emissions allowances, and variable operation and maintenance expenses. It also states these costs are subsequently removed from the FAC calculation and do not flow through the FAC.

- a. Does this mean that for the purpose of developing the incremental dispatch costs, used in the Off-System Sales reconstruction, the other variable costs are included in that step of the analysis?
- b. If that is correct, please explain the purpose in the example found in KIUC 1-21 of determining the accounting components, other than Fuel Cost, if the rest of the costs do not flow through the FAC.

### RESPONSE

- a. Yes.
- b. The other cost components besides fuel are part of the variable cost to dispatch the units. They were used to dispatch the units prior to the Company joining PJM and are used in the Company's offers of generation into PJM today.

The cost reconstruction process utilizes the same components to determine generation allocation between internal load and off system sales. The Company determines the most expensive dispatchable MWhs for each hour of on-line generation, and assigns those MWhs to off-system sales. All of the components are used to determine that allocation since all of those components are used to make the dispatch decision. Subsequently, only the fuel component flows through the Company's FAC.

WITNESS: Kelly D Pearce

**Kentucky Power Company**

**REQUEST**

Please reconcile the purchase power transaction energy provided in KIUC 1-21 as associated with the April 3, 2014 Hour 16 example, with the purchase transaction documentation provided in KIUC 1-14 Attachment 2. It appears that the purchase power value appearing in the example occurred in a different hour and on a different day (April 4th) in KIUC 1-14 Attachment 2.

**RESPONSE**

In preparing the 2014 work product recorded in KIUC-1-14 Attachment 2, the correct transactions were reported but the dates associated the transactions were inadvertently reported using the wrong time zone. Transactions reported for 2013 were presented correctly.

Please see KIUC 2-14 Attachment 1 for a revised schedule.

**WITNESS:** Kelly D Pearce



## Kentucky Power Company

### REQUEST

In regards to the company's response to KIUC 1-21, provide the following electronically, with all formulas intact, and any associated files included,

- a. Please provide the PowerTracker System; please provide this system as a dynamic model with full functionality.
- b. Please provide the PowerTracker System input data files used in the reconstruction process for 2014.
- c. Please provide all output files, logs, summary reports, and additional information associated with reconstruction process for 2014.
- d. Please provide all associated documentation, this should include a user's manual and specific assumptions or settings used in the Company's reconstruction Process.
- e. Please provide a summary of options that are available and the flexibility in changing constraints within the model.

### RESPONSE

- a. AEPSC licenses PowerTracker from the software designer, Integ Enterprise Consulting, Inc. Under the terms of the license agreement, AEPSC is prohibited from providing copies of the PowerTracker Application to third parties or using the PowerTracker Application on behalf of or for the benefit of any third party.

Unlike Strategist, Aurora, or Plexos, PowerTracker is not a model used to predict outcomes based on data input by the user. Instead, PowerTracker is an application used by AEPSC for an after-the-fact reconstruction of costs and for allocation of those costs to off-system sales. PowerTracker is part of the AEPSC software infrastructure. With limited exception, no data is "input" into the PowerTracker Application. PowerTracker is designed to search within the relevant databases on the AEPSC system for the data it needs to perform the cost reconstructions.

Because of these operational and legal constraints, the Company cannot provide the Power Tracker System.

The Company will, however, provide KIUC, KPSC, and any party executing a non-disclosure agreement in this case with a demonstration of how PowerTracker operates within the AEPSC software infrastructure at a mutually convenient date and time at AEPSC headquarters in Columbus, Ohio.

- b. Please see KIUC\_2\_15\_Attachment1 through KIUC\_2\_15\_Attachment8 for the 2014 Kentucky Power input files. All other data used in the Kentucky Power settlement process is either definitional or is imported from existing databases within the AEPSC software infrastructure.
- c. The Company provided all of the output files from the review period in response to KIUC 1-20.
- d. Please see KIUC\_2\_15\_Attachment9 for the most recent version of the user's manual for PowerTracker in AEPSC's possession. It is not a current version and is not used by the Company in the cost reconstruction process. For documents used by the Company in the cost reconstruction, please refer to KIUC 1-19.
- e. PowerTracker does not have "options" for changing the operation of its algorithms and it is not designed to support wholesale replacement of input data. It is an accounting application, used by AEPSC for an after-the-fact reconstruction and allocation of cost to off-system sales. The focal design principle is to ensure consistent, reliable and auditable dispatch and accounting algorithms. As such, algorithms related to the unit cost model, dispatch, cost component utilized, assignment of cost, and margin calculations are fixed. Data inputs can be overridden on a limited basis, but the system is not designed for bulk replacement of data and the application can not be constrained in the flexible manner that a forward-looking predictive model can.

**WITNESS:** Kelly D Pearce

## Kentucky Power Company

### REQUEST

Refer to the Forced Outage Rate Adjustment that flows through the FCA (KIUC 1-16 Attachment 1.xls), please provide the same analysis for all hours each month for the months of January 2014 through April 2014

### RESPONSE

KIUC-1-16 Attachment 1 contains the analysis for the only hours where such analysis can be performed.

The first step of the analysis is to determine the hours of each forced outage. Next, the company determines whether there were purchases made during any hour of each forced outage. If purchases are made, the full analysis is performed for hours during forced outages that last for more than six hours and require purchased replacement power. See 807 KAR 5:056, Section 1(4). All hours during the period from January 2014 through April 2014 meeting this criteria were included in KIUC-1-16 Attachment 1.

**WITNESS:** Kelly D Pearce