



**Kentucky Power Company**

**REQUEST**

Refer to the Application, paragraph 4, wherein Kentucky Power states that its distribution system includes approximately 175,000 overhead service drops. Refer also to Kentucky Power's response to Commission Staff's First Request for Information, Item 1, in Case No. 2012-00445,<sup>1</sup> which states that as of October 2012, approximately 150,107 Kentucky Power customer received service via an overhead service and 22,600 customers were served by an underground service. Explain this discrepancy in the number of overhead and underground service customers

**RESPONSE**

The 175,000 value used in the pending application reflects the approximate number of premises or meters served by overhead and underground service drops. This number also includes service drops to inactive meters and single service drops that serve multiple premises. The Company erred in paragraph 4 of its application in alleging there are approximately 175,000 overhead service drops.

Kentucky Power's distribution system currently includes approximately 147,075 overhead service drops (excluding inactive meters) and 22,045 customers served by underground service. These values more closely approximate those in the 2012 application.

**WITNESS:** Ranie K Wohnhas

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<sup>1</sup>Case No. 2012-00445, Application of Kentucky Power Company for an Order Approving Accounting Practices to Establish Regulatory Assets and Liabilities Related to the Extraordinary Expenses Incurred by Kentucky Power Company in Connection with Four 2012 Major Storm Events (Ky. PSG Jan. 7, 2013).

## **Kentucky Power Company**

### **REQUEST**

Refer to the Application, paragraphs 6 and 7, which reference the 2015 "Major Event Day" storms.

- a. Provide the Tmed threshold value for the reporting period at issue. Include in this response the calculations to arrive at that value.
- b. Provide the System Average Interruption Duration Index for each of the days impacted by the March 4, 2015 snowstorm and the July 13, 2015 thunderstorm.

### **RESPONSE**

- a. The Kentucky Power Tmed threshold value for SAIDI and Customer Minutes of Interruption (CMI) for the 2015 calendar year was 29.14091 and 4,934,781 minutes, respectively. The Tmed calculation utilized by Kentucky Power is based upon the prior 5 years of outage data as specified in IEEE 1366 and is as follows:
  - 1) Assemble the five most recent years of historical values of SAIDI/day. If less than five years of data is available, use as much as is available.
  - 2) Discard any day in the data set that has a SAIDI/day of zero.
  - 3) Find the natural logarithm of each value in the data set.
  - 4) Compute the average (Alpha) and standard deviation (Beta) of the natural logarithms computed in step 3.
  - 5) Compute the threshold  $T_{med} = \exp(\text{Alpha} + 2.5 * \text{Beta})$ .
  - 6) Any day in the next year with SAIDI greater than the calculated Tmed is a major event day.

Please see KPCO\_R\_PSC\_1\_2\_Attachment1 for the actual calculation for the 2015 threshold.

- b. Kentucky Power Company's March 4, 2015 winter storm outage incident began at approximately 6:00 pm on March 4. Extensive flooding occurred across the entire Company service territory. The last customer was restored at approximately 8:30 pm on March 7. The System Average Interruption Duration indices for the March 4 snow storm are listed below:

<u>DATE</u>	<u>SAIDI</u>
03/04/2015	20.6977
03/05/2015	29.9473
03/06/2015	2.0146
03/07/2015	1.0105

Kentucky Power Company's July 13, 2015 thunderstorm outage began at approximately 3:14 pm on July 13. The last customer was restored at approximately 3:00 pm on July 18, except for 15 customers around the Buckhorn Lake area. The Lake was 25 feet above summer pool and it was unsafe to access the remaining customers until the water receded. The System Average Interruption Duration Indices for the July 13 thunderstorm are listed below:

07/13/2015	404.5184
07/14/2015	187.0000
07/15/2015	16.8917
07/16/2015	7.5079
07/17/2015	2.8798
07/18/2015	2.8709

The daily SAIDI totals for 2015 can also be reviewed in the spreadsheet attached as KPCO\_R\_PSC\_1\_2\_Attachment2 .

**WITNESS:** Ranie K Wohnhas

**Kentucky Power Company**

**REQUEST**

Refer to the Application, paragraph 23, where Kentucky Power states that it seeks authority to accumulate and defer for consideration in its next rate proceeding that portion of the incremental expenses that incremental expenses that exceed the storm-related operation and maintenance expense included in its base rates.

- a. When does Kentucky Power anticipate that all actual expenses related to the two major 2015 storms will be recorded on its books?
- b. Provide updates to the schedules included in paragraphs 17 and 22 for any estimated expenses included in those schedules for which the actual amounts have been recorded since the Application was filed. Consider this an ongoing request to be updated throughout this proceeding.
- c. When does Kentucky Power intend to file its next base rate case?

**RESPONSE**

- a. All actual expenses for the two major storms during 2015 have been recorded on its books.
- b. N/A. See a. above.
- c. The Company is currently evaluating when it may file its next base rate case.

**WITNESS:** Ranie K Wohnhas

## **Kentucky Power Company**

### **REQUEST**

Refer to the Application, paragraphs 25 and 26.

- a. Although Kentucky Power acknowledges in paragraph 25 that prior Commission approval is required, it nevertheless states that it deferred "for purposes of its 2015 financials" the incremental operation and maintenance expenses related to the 2015 Major Event storms instead of expensing them. Explain how Kentucky Power was able to defer these expenses without first obtaining Commission approval to do so.
- b. Explain why Kentucky Power waited until May 2016 to file this Application relating to March 2015 and July 2015 storms.
- c. In paragraph 26, Kentucky Power provided the Federal Energy Regulatory Commission accounts in which the costs were recorded as accounts 588, 593, and 903. Given that these accounts are expense accounts, explain Kentucky Power's statement in paragraph 25 that it deferred the costs rather than expensed them.

### **RESPONSE**

- a. The Company acknowledges that Commission approval is required for the Company to record a regulatory asset. Generally Accepted Accounting Principles (GAAP) nevertheless permit the Company to record the 2015 major Storm O&M costs as a regulatory asset on its 2015 financial statements where, in the opinion of the Company the costs are probable of recovery based on Commission precedent as described in paragraphs 29-34 of the Application. The Company will not seek recovery of this regulatory asset until it has received Commission approval.
- b. The Company waited until all of the costs related to both storms were recorded so that the application would reflect actual costs only. Doing so enables Kentucky Power to avoid the necessity of amending its application while the case is pending and disrupting the Commission's procedural schedule. Further, it ensures Kentucky Power can present all applicable costs for consideration.

- c. Accounts 588, 593, and 903 were used to record the costs as originally incurred. When the Company deferred these costs (see a. above) the amounts were transferred to account 182 as a regulatory asset.

**WITNESS:** Ranie K Wohnhas

**Kentucky Power Company**

**REQUEST**

By what date does Kentucky Power request a final Order in this proceeding?

**RESPONSE**

The Company requests a final order in this proceeding no later than September 30, 2016.

**WITNESS:** Ranie K Wohnhas



## **Kentucky Power Company**

### **REQUEST**

Refer to the Application, Exhibit 2.

- a. Refer to the line item "O&M Percentage." Provide the basis for the 67.75 percent used for the March 2015 Snow Storm and the 73.78 percent used for the July 2015 Thunderstorm.
- b. Refer to the line item "Jurisdictional Incremental O&M Percentage." Provide the basis for the .991 used for the March 2015 Snow Storm and the .989 percent used for the July 2015 Thunderstorm.
- c. Explain why, when calculating incremental storm costs, it would not be appropriate to use \$1,608,410, which is currently being recovered through base rates, as the amount of storm costs included in base rates rather than the \$1,243,763 calculated in this exhibit.

### **RESPONSE**

- a. The percentages used to allocate costs between capital, retirement, and O&M are initially derived from guidelines based on historical storm experiences for the type of event (wind storm, snow storm, thunderstorm, ice storm, etc.). Following the event, a calculation is made to determine the actual capital cost based on the number of retirement units installed in the field using an average installed cost of these items. This calculation provides the basis for the final allocation between Capital and O&M of the storm work order. The 67.75% and 73.78% are the recalculated percentages of O&M costs after all costs have been recorded.
- b. The .991 used for the March 2015 Snow Storm and the .989 used for the July 2015 Thunderstorm are the Gross Plant Total (GP-TOT) allocation factors used in the base rate case for the rates that were in effect for each of the storms. See c. below for the use of two different base amounts.

- c. The rates in effect (and thus the amount of storm costs “in base rates”) during the period in which the March 2015 Snow Storm costs were incurred were established in Case No. 2009-00459. The rates in effect (and thus the amount of storm costs “in base rates”) during the period in which the July 2015 Thunderstorm costs were incurred were established in Case No. 2014-00396. Because different amounts were in base rates during the two periods in which the two Major Storm costs were incurred, Kentucky Power used the hybrid process shown on Exhibit 2 to calculate the Major O&M Storm Costs in Base Rates.

**WITNESS:** Ranie K Wohnhas

## **Kentucky Power Company**

### **REQUEST**

Refer to of the Application, Exhibit 2.

- a. There is no deduction from the Total Deferral Requested for any property and casualty insurance proceeds. Does Kentucky Power maintain property and casualty insurance on its distribution and transmission systems for storm damage? If so, provide the following:
  - (1) Amount of proceeds it can expect to receive for the storm damage;
  - (2) Amount of Kentucky Power's deductible related to its property and casualty insurance; and
  - (3) The annual cost of Kentucky Power's property and casualty insurance for 2015.
- b. If not, explain why Kentucky Power does not carry property and casualty insurance and provide the most recent quotes for such insurance.

### **RESPONSE**

- a. In part. See response to (a)(1) below.
  - (1) Kentucky Power's property insurance covers damage to facilities within 1,000 ft. of transmission and distribution substations and generating stations. Kentucky Power does not expect to receive any proceeds for storm related damage due to the fact the damage was outside of the 1,000 ft. range.
  - (2) Kentucky Power's deductible for storm related damage is \$2,500,000.
  - (3) The annual cost of property insurance for the AEP System during 2015 is \$11,780,873, of which \$242,839 was allocated to Kentucky Power.
- b. N/A

**WITNESS:** Ranie K Wohnhas

## **Kentucky Power Company**

### **REQUEST**

Refer to the application, Exhibit 3, page 1.

- a. Provide a description of the type of costs included in the Other Cost Category on the lines titled "Lump Sum Pmts", "Employee Expenses", and "Misc."
- b. Provide a description of the type of costs included in the Materials & Supplies Category on the line titled "Other."

### **RESPONSE**

- a. Lump Sum Payments include payments made to internal employees for meal allowances. Employee Expenses include costs for employee and contractor hotel rooms, purchases of food, soft drinks, consumable items, and restaurant meals purchased off site. Miscellaneous includes charges for non-AEP vehicle expenses rented by contractors or AEP employees.
- b. Materials & Supplies - Other includes items issued through the Company's storeroom facilities, including insulators, lightning arresters, hardware (nuts, bolts, washers, and clevises), personal protective equipment (safety glasses, gloves, and hard hats), cases of drinking water, and outdoor dusk-to-dawn lights, street lights, and meter bases.

**WITNESS:** Ranie K Wohnhas

**Kentucky Power Company**

**REQUEST**

Refer to the Application, Exhibit 3, page 2. Explain why D. H. Elliott's amount in Column C titled "Expense" is different from the amount in the second Column C also titled "Expense."

**RESPONSE**

D.H. Elliot has a complement of employees assigned to Kentucky Power as its "in-house" contractor crews. These crews typically work a straight-time 8-hour day during the Monday-Friday work week, excluding holidays and weekends. Column C of the "03/04/15 Incremental Cost" side of the exhibit represents the costs above the normal straight time 8-hour day. The costs for the straight time hours are subtracted from the total cost in the first column C to yield the amount in the second column C to calculate the incremental labor costs resulting from the storm event.

**WITNESS:** Ranie K Wohnhas

## **Kentucky Power Company**

### **REQUEST**

Refer to the Application, Exhibits 3 and 4.

- a. Explain fully how Kentucky Power determined which costs on the left-hand side of the exhibits should be classified as "incremental" on the right-hand side of the exhibits.
- b. Explain the formula that appears in cell 064 in the Excel spreadsheet version of both of these exhibits.

### **RESPONSE**

- a. Costs on the right-hand side were classified as incremental because they would not have been incurred except for the storm event. Items omitted from the incremental cost total include straight-time labor and fringes; all Other Labor Fringes and incentives; All Other Overheads; and cell phone costs.
- b. The formula represents (a) the total event cost for D.H. Elliot in cell K64 minus the quantity of (b) total number of D.H. Elliot In-House FTE's working on each non-holiday weekday of the storm, times (c) the straight-time labor rate per hour for D.H. Elliot, times (d) 8 hours for a routine non-storm work day.

**WITNESS:** Ranie K Wohnhas

**Kentucky Power Company**

**REQUEST**

Is the methodology used by Kentucky Power in calculating the deferral request of \$4,694,230 in the current proceeding the same methodology used in Case No 2012-00445, in which the Commission approved a \$12.146 million regulatory asset?

**RESPONSE**

Yes.

**WITNESS:** Ranie K Wohnhas

**Kentucky Power Company**

**REQUEST**

Provide the 2015 storm-related costs Kentucky Power has incurred for all other storm events aside from the two major storm events in this proceeding.

**RESPONSE**

The storm related costs for all storm events except for the two major storm events as of December 31, 2015 are shown below:

O&M Expense - \$6,217,529  
Capital - \$2,480,773  
Removal - \$365,144  
Other - (\$425)  
Total - \$9,063,021

**WITNESS:** Ranie K Wohnhas



## **Kentucky Power Company**

### **REQUEST**

Provide the findings from Kentucky Power's reviews of its procedures following the major storms of 2015.

### **RESPONSE**

Kentucky Power routinely performs a post-restoration review of its storm restoration processes following large restoration efforts.

- a. The following are findings from the Company's informal reviews following the two major storms in 2015.
  1. Pre-staging outside crews prior to the storm arrival works well for events predicted well in advance such as snow storms. Outside crews would have been delayed traveling due to poor road conditions without pre-staging.
  2. Several communication difficulties added to the difficulty in restoring service. These included:
    - (a) Coverage issues existed for AT&T wireless phones being used in Lawrence and Carter Counties.
    - (b) Crews used radios to make necessary calls that slowed down data transmission and resulted in delays in providing updates to customers.
    - (c) The Lan Network was interrupted in Paintsville and crews were required to use iPhones to review restoration updates.
    - (d) Approximately seven Kentucky Power radio towers lost service but continued to operate using stand-by generators.
  3. Mutual Assistance crews came from multiple states. Some mutual assistance crew vehicles lacked pole racks and some crews lacked experience in manually setting poles. Work was reallocated to fit crew skill levels and equipment.

4. Some assessors from other American Electric Power Company operating companies lacked electronic means of receiving outage reports. Additional work was required in such instances to transfer field notes from paper to the electronic management system.
5. Forestry contract crews required additional stick saws; separate grounding personnel should be assigned to Forestry crews after completion of assessment by assessors of outage reports. This will allow line personnel to begin outage restoration upon arrival.
6. Some crews failed to enter Field Estimated Time Restoration (FETR) in the system in a timely fashion and "Mobile Alerts" to customers were sometimes delayed as a result.
7. There needs to be more consistent transmittal of information regarding hold orders, call out procedures through the night, special circumstances, and the identity of personnel remaining in field when assisted dispatching duties are transferred from local offices back to central dispatch at the end of the day.

Based on these findings, Kentucky Power plans to:

1. Continue to obtain and pre-stage outside crews for predicted major storm restoration work when appropriate.
2. Continue to remind local personnel that voice data slows down the performance of updating tickets in field and to our customers.
3. Local crew should be reminded to reprogram radios of incoming crews from other operating companies so that the other operating companies' home frequencies do not tie up additional channels at Kentucky Power radio tower sites.
4. Better specify the skills and equipment required for line crews and assessors when seeking mutual assistance. (The size of a restoration effort may affect the ability of other companies to meet Kentucky Power's staffing and equipment needs in a timely fashion.)
5. Request more stick saws for contract forestry personnel in each district. Contract forestry will be required to abide by the safety policy requiring a General Foreman to be present when a saw stick is in use as additional safety hazards exist.

6. Increase the number of "Cut and Run" crews as early as possible in the restoration effort to permit lines to be grounded and Forestry to complete its work.
  
7. Remind district dispatch center personnel of the need to transmit information regarding hold orders, call out procedures through the night, special circumstances, and the identity of personnel remaining in field when assisted dispatching duties are transferred from local offices back to central dispatch at the end of the day.

**WITNESS:** Ranie K Wohnhas

**Kentucky Power Company**

**REQUEST**

Identify and explain any impacts the two major storms in 2015 had on Kentucky Power's 2015 and 2016 Vegetation Management Plans.

**RESPONSE**

The two major storms in 2015 had no impact on Kentucky Power meeting its 2015 vegetation management plan targets. The Company exceeded the number of miles planned and slightly overspent the budgeted dollars for 2015.

**WITNESS:** Ranie K Wohnhas

## **Kentucky Power Company**

### **REQUEST**

Identify any recommendations from the Kentucky Public Service Commission Report on the 2008 Wind Storm and January 2009 Ice Storm that Kentucky Power adopted. Discuss the impact the adoption of these recommendations had in minimizing damage or the length of outages experienced by Kentucky Power customers from the storms identified in this proceeding.

### **RESPONSE**

The following are the recommendations made by the Kentucky Public Service Commission in the Ice and Ike Report which Kentucky Power Company adopted.

**Recommendation A-1** – Kentucky Power employees participate in Kentucky Emergency Management meetings discussing emergency preparation for disaster recovery. The Company anticipates participating in future drills and exercises conducted by local, regional, and state organizations.

**Recommendation A-2** The Company adopted a procedure for local management to update on at least an annual basis contact information for local and state agencies.

**Recommendation B-1** - KPCo designs its overhead distribution facilities to heavy loading standards. The Company's line design program also reduces the allowable fiber stress by 25% on all pole materials.

**Recommendation B-2** - KPCo agrees that distribution facilities that have suffered repeated weather-related outages should be evaluated to determine if hardening would be effective in improving their performance during severe weather conditions. The Company continues evaluating long span construction at locations where this characteristic is believed to have caused an outage during high wind conditions.

**Recommendation B-17** - Kentucky Power's website, [www.kentuckypower.com](http://www.kentuckypower.com), provides customer advice on how to plan and safely respond to extended outages. Posts include preparing emergency outage kits, outage safety tips and other useful information. At all times, the website has a map of the Company's service area that displays, by county, the number of customers without power. In addition, during major outage situations, Kentucky Power's storm reporting system is activated. This system moves outage and storm information to the top of our website for prominent display. Customers can view outage numbers and Estimated Time of Restoration (ETRs) by county and district. The storm information is, on average, updated two to three times a day during a storm.

**Recommendation B-18** - KPCo has a Twitter Account and Facebook page. These are monitored and maintained by Company's Corporate Communication Manager.

**Recommendation B-19** - Kentucky Power currently can place outbound calls containing restoration information. This system has been used on a targeted basis. In addition, customers can elect to receive outage information either by email, text message or both through our mobile alerts system.

**Recommendation B-22** – Kentucky Power adopted a procedure to include statements concerning estimated bills on its storm website when estimated readings are anticipated during severe storm situations.

The Commission's recommendations that had a large impact on the Company's ability to restore service quickly were already in place at the time of the 2015 Major Storms.

**WITNESS:** Ranie K Wohnhas