

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Application Of Kentucky Power Company For:)	
(1) A General Adjustment Of Its Rates For Electric)	
Service; (2) An Order Approving Its 2014)	
Environmental Compliance Plan; (3) An Order)	Case No. 2014-00396
Approving Its Tariffs And Riders; And (4) An)	
Order Granting All Other Required Approvals)	
And Relief)	

REBUTTAL TESTIMONY OF
JEFFERY D. LAFLEUR
ON BEHALF OF KENTUCKY POWER COMPANY

**DIRECT TESTIMONY OF
JEFFERY D. LAFLEUR, ON BEHALF OF
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CASE NO. 2014-00396

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I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.**

2 A. My name is Jeffery D. LaFleur. My title is Vice President – Generating Assets
3 for Kentucky Power Company (“Kentucky Power” or “Company”) and
4 Appalachian Power Company (“APCo”). Both Kentucky Power and APCo are
5 wholly owned subsidiaries of American Electric Power (“AEP”). My business
6 address is 707 Virginia Street, East, Suite 1000, Charleston, West Virginia 25301.

7 **Q. ARE YOU THE SAME JEFFERY D. LAFLEUR WHO FILED DIRECT**
8 **TESTIMONY IN THIS PROCEEDING?**

9 A. Yes, I am.

II. PURPOSE OF REBUTTAL TESTIMONY

10 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS**
11 **PROCEEDING?**

12 A. The purpose of my rebuttal testimony is to respond to the direct testimony of
13 Attorney General Witness Ralph Smith with respect to his recommendations
14 related to plant maintenance expense. Specifically I will discuss how the
15 Company’s chosen three year period of historical plant maintenance costs is a
16 reasonable time frame for establishing an appropriate level of plant maintenance
17 expenses in the future. I will also discuss how Mr. Smith, in determining his own

1 recommended adjustment for plant maintenance normalization, improperly
2 disregarded the time value of money as it pertains to the evaluation of historical
3 expenses.

**III. A THREE YEAR AVERAGE ESTABLISHES A REASONABLE LEVEL OF
MAINTENANCE EXPENSE**

4 **Q. PLEASE EXPLAIN HOW THE COMPANY DETERMINED A**
5 **NORMALIZED LEVEL OF STEAM MAINTENANCE.**

6 A. The Company used the test year (twelve months ending September 30, 2014), and
7 the two preceding years, on an inflation adjusted basis, to calculate an average
8 value. An adjustment was then made to adjust the test year value to the average
9 value.

10 The Company purposefully chose a three year period of actuals to
11 calculate a plant maintenance normalization adjustment because the past three
12 years reasonably depict the necessary level of plant maintenance to maintain the
13 safe and operable reliability of Mitchell Plant on an ongoing basis.

14 **Q. WHAT COMPRISES THE STEAM MAINTENANCE EXPENSES, FOR**
15 **WHICH THE COMPANY IS PROPOSING TO MAKE A**
16 **NORMALIZATION ADJUSTMENT?**

17 A. The steam maintenance expenses are made up of planned outage, maintenance
18 outage, and forced outage costs, as well as other non-outage maintenance costs
19 performed while the unit is running.

20 Planned outage work is a major component of the steam maintenance
21 expenses. Planned outages typically consist of necessary inspections in

1 conjunction with major repairs and replacement of older equipment so that the
2 unit can continue to operate effectively. Since these outages are scheduled, as
3 opposed to a forced outage which can be instantaneous, additional repair and
4 maintenance work for the unit can be planned ahead of time. As a result, they
5 typically are more expensive than forced outages. For example, while work on a
6 high pressure reheater may be the driving factor behind a planned outage, the fact
7 that the outage is planned ahead of time allows for the simultaneous upgrade or
8 replacement of other major components that can be performed in the same amount
9 of time (e.g. without extending the outage unnecessarily). This approach is
10 different than a forced outage in which the main goal is to address the reason for
11 the outage and get the unit back online, resulting in a limited ability to add other
12 major work to the scope of the forced outage without extending the outage.

13 **Q. DID THE MITCHELL PLANT EXPERIENCE ANY MAJOR PLANNED**
14 **OUTAGES DURING THE ADDITIONAL YEARS OF 2010 AND 2011**
15 **INCLUDED BY MR. SMITH IN HIS PLANT MAINTENANCE**
16 **NORMALIZATION ADJUSTMENT?**

17 A. No.

18 **Q. WHY WERE THERE NO MAJOR PLANNED OUTAGES AT THE**
19 **MITCHELL PLANT DURING THE 2010 AND 2011 PERIODS**
20 **INCLUDED BY MR. SMITH?**

21 A. In 2007 Mitchell Plant completed a major environmental retrofit with the
22 installation of Flue Gas Desulphurization (FGD) and Selective Catalytic
23 Reduction (SCR) systems on both units. The retrofit of FGD and SCR systems

1 required a planned outage of approximately three and a half months on each unit
2 at the Mitchell Plant. As part of these major planned outages, major projects
3 other than the environmental retrofits were completed, including the revitalization
4 and replacement of existing equipment. As a result of these significant
5 investments, coupled with the fact that these environmental control systems were
6 newer pieces of equipment, the need for major planned outages was relatively low
7 in the years immediately following the environmental retrofits.

8 **Q. ARE THESE TWO ADDITIONAL YEARS, 2010 AND 2011, REFLECTIVE**
9 **OF THE PLANNED OUTAGE SCHEDULE MOVING FORWARD?**

10 A. No. The level of maintenance at Mitchell Plant was relatively low following the
11 installation of the SCR and FGD systems. However, these systems are now
12 approximately 8 years old. While this equipment is in good working order, it is
13 necessary to make periodic repairs to maintain its reliability and operability.
14 Therefore, it is my professional opinion that the 2010 and 2011 test year periods
15 are not reflective of the necessary planned outage frequency moving forward. As
16 a result, Mr. Smith's inclusion of the additional two years unreasonably skews his
17 calculation.

18 **Q. IS IT YOUR BELIEF THAT THE THREE YEAR PERIOD UTILIZED BY**
19 **THE COMPANY IN THIS CASE IS REASONABLE TO DETERMINE**
20 **THE PLANT MAINTENANCE NORMALIZATION ADJUSTMENT?**

21 A. Yes. It is my professional opinion that, based on the specific factors contributing
22 to Mitchell Plant's historical maintenance costs, the three year historical period
23 utilized in this case results in a reasonable adjustment to plant maintenance and

1 ensures adequate funding for future maintenance needs. It is also my opinion that
2 including the additional periods proposed by Mr. Smith does not provide an
3 accurate depiction of the necessary costs moving forward to adequately maintain
4 the operability of the Mitchell Plant.

**IV. MR. SMITH FAILS TO SUPPORT HIS PROPOSAL TO NORMALIZE THE
STEAM MAINTENANCE EXPENSE OVER FIVE YEARS**

5 **Q. DOES MR. SMITH PROVIDE CREDIBLE BASIS FOR HIS PROPOSAL**
6 **TO INCLUDE ADDITIONAL YEARS IN THE PLANT MAINTENANCE**
7 **NORMALIZATION ADJUSTMENT?**

8 A. No. Mr. Smith, who is not an engineer, and whose testimony is devoid of any
9 relevant experience in the operation of coal-fired steam generating plants, bases
10 his recommendation on his belief, unsupported by anything in his testimony, that
11 “a period greater than three years provides a better measure for smoothing out any
12 abnormal plant maintenance costs.”¹ Mr. Smith’s naked opinion lacks supporting
13 evidence, as well as any analysis demonstrating that his approach is more
14 reasonable than the three year period used by the Company.

15 **Q. DOES MR. SMITH TAKE INTO ACCOUNT THE ANTICIPATED PLANT**
16 **MAINTENANCE OBLIGATIONS MOVING FORWARD IN**
17 **DETERMINING HIS SUGGESTED PLANT MAINTENANCE**
18 **NORMALIZATION ADJUSTMENT?**

19 A. No. Mr. Smith ignores the historical maintenance requirements of the Mitchell
20 Plant, as well as all future maintenance needs, when determining his suggested

¹ KPSC Case Number: 2014-00396. Direct Testimony of Attorney General Witness Ralph Smith. Page 58, lines 8-9.

1 plant maintenance normalization adjustment. Aside from his claim that
2 “normalizing Mitchell Plant maintenance expense over a longer period, such as
3 five years, should be a more accurate methodology for smoothing out any
4 abnormal plant maintenance costs”² Mr. Smith never considers the frequency of
5 outages at the Mitchell Plant, industry and manufacturer-recommended
6 maintenance schedules, the condition of the equipment at the plant, or even the
7 costs that constitute steam maintenance expense. For these reasons, his claim that
8 a five year period is more appropriate for establishing a going-level of steam
9 maintenance expense should be seen as nothing more than an unsupported
10 opinion that should be dismissed.

11 **Q. DID YOU CONSIDER EACH OF THESE FACTORS IN YOUR CHOICE**
12 **OF A THREE-YEAR NORMALIZATION PERIOD?**

13 A. Yes, along with the other considerations discussed above and in my earlier
14 testimony. In addition, my choice of a three-year normalization period was
15 premised in part on my more than thirty-years of experience in Power Plant
16 operation and maintenance. This includes six years of experience with the
17 Mitchell generating station, including five years prior to the installation of the
18 FGD systems and one year with the operation of the FGD systems. Mr. Smith’s
19 five-year normalization period, by contrast, lacks any evidentiary or real-world
20 basis.

V. MR. SMITH ALSO FAILS TO ADDRESS THE TIME VALUE OF MONEY

21 **Q. WHAT IS THE TIME VALUE OF MONEY?**

² Ralph Smith. Page 58, lines 13-15.

1 A. The time value of money is a widely accepted notion that “money available at the
2 present time is worth more than the same amount in the future due to its earning
3 capacity”³. Alternatively, when comparing costs from historical periods to
4 present values, it is an accepted convention to adjust historical amounts to current
5 dollars.

6 **Q. ARE THERE ANY GENERALLY ACCEPTED INDICES THAT ARE**
7 **USED TO ADJUST DOLLARS FROM DIFFERENT TIME PERIODS?**

8 A. Yes, there are a number of well-recognized indices and methods for adjusting
9 costs across time periods. Many are specific to particular “baskets of goods.” For
10 the power industry, the Handy-Whitman index is generally accepted as a
11 reasonable manner for adjusting expenses over time to put them on an “apples-to-
12 apples” basis.

13 **Q. WHAT IS THE HANDY-WHITMAN INDEX?**

14 A. The Handy-Whitman index is a nationally recognized aggregate indicator of
15 regional construction cost. It is widely used in the regulatory arena to support
16 price changes in power related capital projects. The Handy-Whitman index
17 includes “prices of basic materials such as cement, sand, gravel, cast iron pipe,
18 wire, etc... obtained from publications such as Engineering News-Record and
19 checked against prices actually being paid for such materials. Labor cost trends
20 are computed from labor rates obtained from sources such as the Construction

³ <http://www.investopedia.com/terms/t/timevalueofmoney.asp>

1 Labor Research Council. Prices and cost trends of equipment are obtained from
2 nationally recognized manufacturers, and operating utilities.”⁴

3 **Q. DID THE COMPANY UTILIZE THE HANDY-WHITMAN INDEX IN**
4 **ADJUSTING THE PREVIOUS THREE YEARS OF ACTUAL PLANT**
5 **MAINTENANCE COSTS?**

6 A. Yes. In calculating the plant maintenance normalization adjustment the Company
7 applied the Handy-Whitman index to the previous three years of plant
8 maintenance costs to state the costs in 2014 dollars.

9 **Q. DID MR. SMITH APPLY ANY INFLATION FACTOR TO THE**
10 **PREVIOUS YEARS’ PLANT MAINTENANCE COSTS WHEN**
11 **DEVELOPING A PLANT NORMALIZATION ADJUSTMENT?**

12 A. No.

13 **Q. SHOULD MR. SMITH HAVE APPLIED AN INFLATION FACTOR,**
14 **SUCH AS THE HANDY-WHITMAN INDEX, TO HISTORICAL COSTS**
15 **WHEN CALCULATING A PLANT MAINTENANCE NORMALIZATION**
16 **ADJUSTMENT?**

17 A. Most certainly yes. Failing to adjust the costs over the three-year normalization
18 period to 2014 dollars significantly skews Mr. Smith’s calculation toward a lower,
19 non-representative value. His use of unadjusted costs over a five-year period only
20 further exacerbates the error of his calculation.

VI. CONCLUSION

⁴ Whitman, Requardt, & Associates, LLP. (2008). The Handy-Whitman Index of Public Utility Construction Costs: Bulletin 168. Baltimore, Maryland. Whitman, Requardt, & Associates, LLP.

1 **Q. WHAT IS YOUR RECOMMENDATION REGARDING THE PLANT**
2 **MAINTENANCE NORMALIZATION ADJUSTMENT?**

3 A. I recommend the plant maintenance normalization adjustment proposed in the
4 direct testimony of Company Witness Wohnhas be included in the Company's
5 going-level amount of steam plant maintenance expense. It is my opinion that
6 this adjustment, as proposed by the Company, provides a reasonable
7 representation of going level of steam maintenance expenses for the Company's
8 Mitchell Plant.

9 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

10 A. Yes.