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June 15, 2012

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JUN 15 2012
PUBLIC SERVICE COMMISSION

Via Federal Express

Jeff DeRouen
Executive Director
Public Service Commission
211 Sower Boulevard, P.O. Box 615
Frankfort, Kentucky 40602-0615

Re: *In the Matter of: Notice and Application of Big Rivers Electric Corporation for a General Adjustment in Rates,* PSC Case No. 2011-00036

Dear Mr. DeRouen:

Enclosed for filing on behalf of Big Rivers Electric Corporation ("Big Rivers") are an original and ten copies of Big Rivers' rehearing rebuttal testimony. A copy of this letter and a copy of the testimony have been served on each person on the attached service list.

Sincerely,

TAK

Tyson Kamuf

TAK/ej
Enclosures

cc: Albert Yockey
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PSC CASE NO. 2011-00036

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BIG RIVERS ELECTRIC CORPORATION

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR A GENERAL ADJUSTMENT IN RATES
CASE NO. 2011-00036

VERIFICATION

I, Ted J. Kelly, verify, state, and affirm that I prepared or supervised the preparation of my rehearing rebuttal testimony filed with this Verification, and that rehearing rebuttal testimony is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Ted J. Kelly

Ted J. Kelly

STATE OF MISSOURI)
COUNTY OF Jackson)

SUBSCRIBED AND SWORN TO before me by Ted J. Kelly on this the 11 day of June, 2012.

NOTARY PUBLIC STATE OF MISSOURI NOTARY SEAL

PAULA M. ANNAN
My Commission Expires
January 19, 2015
Jackson County
Commission #11992872

Paula M Annan
Notary Public
My Commission Expires 1-19-15

BIG RIVERS ELECTRIC CORPORATION

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES CASE NO. 2011-00036

VERIFICATION

I, John Wolfram, verify, state, and affirm that I prepared or supervised the preparation of my rehearing rebuttal testimony filed with this Verification, and that rehearing rebuttal testimony is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

John Wolfram

COMMONWEALTH OF KENTUCKY)
COUNTY OF JEFFERSON)

SUBSCRIBED AND SWORN TO before me by John Wolfram on this the 12th day of June, 2012.

Notary Public, Ky. State at Large
My Commission Expires 12-2-14

CARLA L. TIDD
Notary Public
State at Large
Kentucky
My Commission Expires Dec. 2, 2014

ORIGINAL

Big Rivers
ELECTRIC CORPORATION

Your Touchstone Energy® Cooperative

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES	))))	**Case No. 2011-00036**

REHEARING REBUTTAL TESTIMONY

FILED: June 15, 2012

ORIGINAL

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES	))))	Case No. 2011-0036

REHEARING REBUTTAL TESTIMONY

OF

TED J. KELLY
PRINCIPAL, BURNS & McDONNELL

ON BEHALF OF

BIG RIVERS ELECTRIC CORPORATION

FILED: June 15, 2012

REHEARING REBUTTAL TESTIMONY
OF
TED J. KELLY

Table of Contents

REHEARING REBUTTAL TESTIMONY
OF
TED J. KELLY

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Ted J. Kelly. My business address is 9400 Ward Parkway, Kansas City, Missouri 64114.

Q. Have you previously submitted testimony in this proceeding?

A. Yes, Exhibit 54 of the Application contains my direct testimony and Exhibit 65 contains my rebuttal testimony.

Q. On whose behalf are your testifying?

A. I am testifying on behalf of Big Rivers Electric Corporation ("Big Rivers").

Q. What is the purpose of your rehearing rebuttal testimony in this proceeding?

A. The purpose of my testimony is to respond to and rebut the supplemental rehearing testimony of Lane Kollen on behalf of Kentucky Industrial Utility Customers, Inc. ("KIUC") pertaining to depreciation rates previously approved in the Kentucky Public Service Commission's ("Commission") November 17, 2011, Order ("November 17 Order").

II. SUMMARY

Q. Please summarize your rehearing rebuttal testimony.

A. In this rehearing rebuttal testimony, I respond to Mr. Kollen's position that the Commission should reverse itself and modify Big Rivers' depreciation rates to reflect the depreciation rates proposed by KIUC witness King. I also respond to Mr. Kollen's false assertion that the depreciation rates proposed by KIUC witness King reflect the service lives determined by Big Rivers' management. I will also address Mr. Kollen's incorrect assertion that the depreciation rates developed for Big Rivers by Burns & McDonnell ("B&M") and sponsored by me in the Depreciation Study are not supported by the evidence. I will point out the evidence in the record that clearly supports the useful lives used to develop the depreciation rates that I have sponsored, that the Commission previously approved, and that the Rural Utilities Service ("RUS") previously accepted. I will also address Mr. Kollen's comments on the Commission's November 17 Order as it relates to the problem of early retirements experienced by Big Rivers since the closing of the unwind transaction. Finally, I conclude that the Commission should reaffirm its decision in the November 17 Order to approve the depreciation rates set forth in Table ES-1 of my direct testimony.

III. <u>RETIREMENT DATES AND SERVICE LIVES WERE NOT PROVIDED BY BIG RIVERS' MANAGEMENT</u>

Q. Throughout his supplemental rehearing testimony Mr. Kollen states that the services lives (and retirement dates) used in the Depreciation Study were provided by Big Rivers' management. Did Big Rivers' management provide B&M with expected service lives or retirement dates for any of the generating facilities or any other property owned by Big Rivers?

A. No. Big Rivers never provided retirement dates or estimated service lives to B&M. In fact, Mr. Kollen has it reversed. It was the task of B&M to estimate retirement dates and remaining service lives to complete the Depreciation Study. It was Big Rivers who asked B&M to determine its depreciation rates and estimate the service lives of its assets. Mr. Kollen's entire supplemental rehearing testimony is fundamentally flawed because he assumes that B&M ignored retirement dates or estimated service lives provided by Big Rivers' management. In fact, Big Rivers' management never provided retirement dates or estimated service lives.

Q. Does utility management typically provide estimates of service lives or retirement dates of generating units for depreciation studies?

A. Unless the generating units are actually planned to be retired in the near term, typically less than seven years, utility management will generally let the task of estimating service lives and retirement dates be conducted by engineers experienced in evaluating generating units. A flaw with many depreciation studies is that the useful lives of large generation assets are determined arbitrarily by accountants instead of engineers experienced in evaluating generating units.

Q. At pages 13-14 of his supplemental rehearing testimony, Mr. Kollen states that Big Rivers' management had concerns that the total service life used by B&M for the Wilson generating unit was too short because it was less than the 65 years they had determined was correct. Is this correct?

A. Not entirely. Prior to the rate case, Big Rivers provided the smelters with the Depreciation Study. The smelters and their consultant, Mr. King, had three major points of contention regarding the report. The useful life of Wilson was one of those points.

The statements made by Big Rivers' management in email correspondence at that time were made within the context of appeasing the smelters on this one point. They were not a true indication of what Big Rivers' production engineers really thought the useful life of Wilson would be. Big Rivers' management agreed to reflect a 65 year life for Wilson in the analysis at the request of Mr. King to appease the smelters.[1] That 65 year life for Wilson is shown in the remaining life calculations provided in Exhibit Kelly Rebuttal -1 and Exhibit Kelly Rebuttal -4.

However, and although Big Rivers did agree to reflect a 65 year life for Wilson, Big Rivers gave me the task of actually determining the remaining useful lives of Wilson and other Big Rivers assets. As shown on page 20 of KIUC Hearing Exhibit 16 (a December 15, 2010, memo from B&M to Mr. Mark Hite of Big Rivers), I felt that "65 years would be at the upper end of the age of reasonableness" and that "while more recent evidence exists that suggests a shorter life for coal plants, the 65 year life span is reflected in the analysis." As such, my analysis included multiple other scenarios involving different operating assumptions and conditions, in addition to the 65 year life for Wilson. As shown in Exhibit Kelly Rebuttal -1 through Exhibit Kelly Rebuttal -6, the estimated service life assumption for Wilson in my analysis ranges from 56 to 65 years. The remaining useful lives I determined are based on that quantitative analysis and the qualitative analyses I describe in my rebuttal testimony, including an Engineering Assessment.[2]

Q. At page 14 of his supplemental rehearing testimony, Mr. Kollen states that Mr. King's depreciation study corrected the remaining service lives and used the estimates developed by Big Rivers' own management. Is this correct?

A. No. First, as explained above, Big Rivers' management did not develop any estimates of the remaining service lives for any of the generation units. Second, Mr. King used the highest end of a range of reasonable useful lives provided by B&M. As stated previously, 65 years would be at the upper end of the age of reasonableness and more recent evidence exists that suggests a shorter life for coal plants.

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[1] *See* the July 6, 2011, Rebuttal Testimony of Mark A. Hite (Big Rivers Exhibit 66), at page 17.
[2] *See* the July 6, 2011, Rebuttal Testimony of Ted J. Kelly (Big Rivers Exhibit 65), at pages 4-13.

Q. On page 4 of his supplemental rehearing testimony, Mr. Kollen quotes part of the Commission's November 17 Order that states the following:

> **"However, due to the problem of early retirements experienced by Big Rivers since the closing of the Unwind Transaction, there is a clear need to utilize shorter service lives."**

Is this statement correct?

A. Yes, the Commission's statement is correct. Since the closing of the unwind transaction, early retirements have caused Big Rivers to take losses on under-depreciated assets. Incorporating longer service lives into depreciation rates would exacerbate this problem.

Q. Are other utilities experiencing similar problems with regard to the retirement of their coal plants?

A. Yes. Many utilities are facing huge write-downs on coal plant assets that were grossly under-depreciated because they were forced to retire the plants long before they planned to retire them due to more strict environmental regulations and the high cost of newer clean coal technology. My remaining life analysis does not take this new reality into account. If it did, the remaining lives utilized would likely be much shorter.

IV. <u>BIG RIVERS PROVIDED AMPLE EVIDENCE AND QUANTITATIVE ANALYSES IN SUPPORT OF THE REMAINING LIVES USED</u>

Q. On page 4 of his supplemental rehearing testimony, Mr. Kollen disagrees with the Commission's determination that Big Rivers provided credible evidence in support of its position on the remaining lives and proposed depreciation rates due to inconsistencies and inaccuracies. Is Mr. Kollen correct?

A. No. Again, Mr. Kollen is under the mistaken impression that Big Rivers' management provided B&M probable retirement dates for the generating units. Mr. Kollen then states, "Mr. Kelly then subjectively combined this information for each generating unit and translated it into the remaining lives for each plant account." As stated in my rebuttal testimony, and as recognized by Mr. King, depreciation analyses require the use of considerable judgment. Many factors, both quantitative and qualitative, along with the application of judgment went into determining the remaining useful lives of each production facility. The selection of the ultimate remaining lives used to calculate Big Rivers' final depreciation rates required judgment, but as shown in my rebuttal exhibits, Exhibits Kelly Rebuttal-1 through Kelly Rebuttal-6, and Table 1 herein, the selection was clearly not arbitrary. Mr. King, on the other hand, performed an arbitrary estimation of useful service lives in choosing the maximum service life of 65 years for Wilson.

Q. In addition to the Engineering Assessment, what other qualitative factors were considered in your judgment?

A. Big Rivers provided information and reports including maintenance reports, forced outage reports, two Investigation Reports and a Recommendation Form for the fire at the Wilson plant, plant operating statistics, major maintenance schedules, 2010 outages and descriptions, the prior 1998 Depreciation Study and its Engineering Assessment, capital budgets, the 2010 to 2013 Capital Plan, the 2010 Capital Budget, Capital Appropriations Summaries from 2006 to 2009, plant O&M expenses for the Coleman, Sebree (net) and Wilson plants, Boiler Condition Assessments, various fuel agreements, organization charts, status of air permits, 2009 Title V Compliance

Documentation including Air Inspection reports, and transmission and substation maintenance summaries.[3]

Q. On page 5 of his supplemental rehearing testimony, Mr. Kollen states that "Mr. Kelly relied in part on the simple averages and the MW weighted averages of the remaining lives for each generating unit to determine the remaining lives of the gross plant investment in plant accounts such as accounts 312 and 314." Is this correct?

A. No, Mr. Kollen is mistaken. Average MW and MW weighted averages were not considered in determining the remaining lives or service lives of the plant investments I previously testified to. As stated in my Direct Testimony:

> If the remaining service life of each facility is weighted by the remaining plant balances in Account 311 –Structures, Account 312 –Boiler Plant, and Account 314 –Turbine the weighted average remaining service life increases to 30 years. As such, the remaining service life for Account 311 –Structures was assumed to be 30 years and the remaining service life for Account 312 –Boiler Plant and Account 314 –Turbine was assumed to be 28 years.

I weighted the service lives not by simple averages or MW weighted averages, but by book value plant in service for each generating unit to determine all the remaining lives as clearly shown in Exhibit Kelly Rebuttal -1 through Exhibit Kelly Rebuttal -6.

Q. On page 6 of his supplemental rehearing testimony, Mr. Kollen quotes the 2011 Depreciation Study concerning Wilson:

> **"[Wilson] is in excellent condition for its age and service requirements. Provided that operation and maintenance continue as is, this unit is estimated to be suitable for ongoing service through the year 2051."**

Would this equate to a 65 year service life for Wilson?

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[3] *See* the July 6, 2011, Rebuttal Testimony of Ted J. Kelly (Big Rivers Exhibit 65), at pages 6-7.

A. Yes, but this is the maximum life that should be considered for Wilson and is at the upper end of the age of reasonableness.

Q. On page 6 of his supplemental rehearing testimony, Mr. Kollen states that you did not use a 65 year life span for the Wilson unit. Is this true?

A. No. The operating scenarios in Exhibit Kelly Rebuttal -1 and Exhibit Kelly Rebuttal -4 both consider a 65 year life for Wilson. As stated in my rebuttal testimony, this would be the absolute maximum service life assumption for Wilson one could possibly consider.

Both Mr. King and Mr. Kollen fail to recognize that in addition to maintenance, a major factor that goes into determining the useful life and remaining useful life of a production facility is how it is operated. A facility that is infrequently operated will, on average, last longer than a facility that is operated in a typical fashion for that type of facility. No one can predict the long-term future with precision when it comes to the future operation and future retirement of Wilson or any other production facility. This is why I presented a quantitative analysis of typical operating hours for each generation unit and actual operating hours for each generation unit.

Exhibit Kelly Rebuttal -1 through Exhibit Kelly Rebuttal -3 provides scenarios in which Wilson is operated in the future in a manner typical for this type of generation unit. Exhibit Kelly Rebuttal -4 through Exhibit Kelly Rebuttal -6 provide scenarios in which Wilson is operated in the future in a manner consistent with how it has been operated in the past. Neither Mr. King nor Mr. Kollen disputed Wilson's (or any other facilities) typical operating hours, actual operating hours, or the basis for using them (in part) to determine remaining useful lives.

Q. On page 6 of his supplemental rehearing testimony, Mr. Kollen states that for Wilson, "this claim would result in a remaining service life of 33 to 41 years." Is this true?

A. No, Mr. Kollen is mistaken. A summary of the remaining service lives is provided in Table 1 below, which clearly shows that a remaining life of 28 to 30 years is reasonable. This information was previously provided in my rebuttal testimony.

Table 1: Summary of Quantitative Remaining Life Analysis

	Account 311	Account 312	Account 314
Typical Operating Hours Remaining Life Analysis 1	33.8	34.2	33.6
Typical Operating Hours Remaining Life Analysis 2	30.3	30.6	30.2
Typical Operating Hours Remaining Life Analysis 3	27.8	28.1	27.8
AVERAGE (years)	**30.6**	**31.0**	**30.5**

	Account 311	Account 312	Account 314
Actual Operating Hours Remaining Life Analysis 4	31.6	32.3	31.3
Actual Operating Hours Remaining Life Analysis 5	28.6	29.1	28.4
Actual Operating Hours Remaining Life Analysis 6	26.2	26.6	26.0
AVERAGE (years)	**28.8**	**29.3**	**28.6**

Q. At page 8 of his supplemental rehearing testimony, Mr. Kollen provides a table showing select remaining lives for Wilson. Are the numbers in this table accurate?

A. Yes, but the table only shows a select part of the analysis. The table below summarizes all the remaining lives considered for Wilson, not just the highest as shown by Mr. Kollen. The same figures were provided previously in Table 1.

Table 2: Remaining Lives for Wilson, All Scenarios

		Typical Operating Hours	Exhibit	Actual Operating Hours	Exhibit
Account 311	30	33.8	Kelly Rebuttal 1	31.6	Kelly Rebuttal 4
		30.3	Kelly Rebuttal 2	28.6	Kelly Rebuttal 5
		27.8	Kelly Rebuttal 3	26.2	Kelly Rebuttal 6
Account 312	28	34.2	Kelly Rebuttal 1	32.3	Kelly Rebuttal 4
		30.6	Kelly Rebuttal 2	29.1	Kelly Rebuttal 5
		28.1	Kelly Rebuttal 3	26.6	Kelly Rebuttal 6
Account 314	28	33.6	Kelly Rebuttal 1	31.3	Kelly Rebuttal 4
		30.2	Kelly Rebuttal 2	28.4	Kelly Rebuttal 5
		27.8	Kelly Rebuttal 3	26.0	Kelly Rebuttal 6

Q. At page 9 of his supplemental rehearing testimony, Mr. Kollen states, "Mr. King developed a corrected computation of the average remaining lives for each plant account using the Company's life spans based on the Company's probable retirement dates." Is this correct?

A. No. First, Big Rivers did not provide service lives or life spans to B&M. Second, Big Rivers did not provide probable retirement dates to B&M. Third, the retirement dates used by Mr. King are only maximum retirement dates. That causes his results to be biased, incomplete and unusable.

Q. At page 10 of his supplemental rehearing testimony, Mr. Kollen states, "Yet, Mr. Kelly did not do so. He substituted his own judgment in place of the judgment of Big Rivers' management." Is this correct?

A. No. As stated previously, Mr. Kollen is under the mistaken impression that Mr. Kelly knew Big Rivers' management's projections regarding the useful life of the generating units. The useful lives utilized for the various plant accounts in the B&M study are based on B&M's specific calculations and informed judgment. In performing the

Depreciation Study, one of the items B&M was expected to complete on behalf of Big Rivers was to determine the remaining useful lives of the generating units, which we did.

Q. At page 11 of his supplemental rehearing testimony, Mr. Kollen discusses a "mismatch" between net plant and remaining service lives. Is there a mismatch between these two?

A. Yes, the dates do not match. However, Mr. Kollen is confused as to why that is the case. Depreciation rates are developed and established using the most current information available at the time of the analysis and applied to the latest plant balances to determine depreciation expense such that:

Depreciation Rate * Current Plant Balance = Current Depreciation Expense

KIUC's response to Item 3 of the Commission Staff's First Request for Information on Rehearing states that I "failed to update the related accumulated depreciation or any other historical information to the same date." This is true because I did not have that information. However, there was no error in my analysis. I relied on all of the most recent information available to me at the time my analysis was prepared.

Additionally, it is not an error because depreciation rates are fixed, but plant balances change over time. So, there will always be a "mismatch" going forward between the date depreciation rates are set (fixed) and the date of current plant balances (always changing). Moreover, even if the Commission was to consider updating plant balances and accumulated depreciation balances to December 31, 2011, Mr. Kollen does not do it correctly. The remaining lives set forth in Table ES-1 would also have to be updated to reflect the additional time that has elapsed since the analysis was prepared.

Q. At page 13 of his supplemental rehearing testimony, Mr. Kollen states that B&M had the signs reversed for the net salvage factors. Is this correct?

A. Yes. In the early stages of the analysis there was an error in the model that was acknowledged and subsequently corrected prior to issuance of the final Depreciation Study.

V. CONCLUSION

Q. What is your final recommendation?

A. I recommend that the Commission reaffirm the previously approved depreciation rates set forth in Table ES-1 of my direct testimony.

Q. Does this conclude your testimony?

A. Yes.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR A GENERAL ADJUSTMENT IN RATES	)))	Case No. 2011-0036

REHEARING REBUTTAL TESTIMONY

OF

JOHN WOLFRAM
PRINCIPAL
CATALYST CONSULTING LLC

ON BEHALF OF

BIG RIVERS ELECTRIC CORPORATION

FILED: June 15, 2012

REHEARING REBUTTAL TESTIMONY
OF
JOHN WOLFRAM

Table of Contents

Page

REHEARING REBUTTAL TESTIMONY
OF
JOHN WOLFRAM

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is John Wolfram, and my business address is Catalyst Consulting LLC, 3308 Haddon Road, Louisville, Kentucky 40241.

Q. By whom are you employed?

A. I am the Principal of Catalyst Consulting LLC, a firm that I founded on June 1, 2012, which provides consulting services in the areas of utility rate analysis, cost of service, rate design and other utility regulatory matters. I am also a Senior Associate of The Prime Group, LLC, with whom I was employed prior to June 1, 2012.

Q. On whose behalf are your testifying?

A. I am testifying on behalf of Big Rivers Electric Corporation ("Big Rivers").

Q. Did you submit direct and rebuttal testimony and direct testimony on rehearing in this proceeding?

A. Yes.

Q. What is the purpose of this testimony?

A. On April 12, 2012, the Kentucky Public Service Commission ("Commission") issued an Order in this proceeding requiring Big Rivers to file testimony in response to three issues that Kentucky Industrial Utility Customers, Inc. ("KIUC") has raised and that the Commission has incorporated into this rehearing proceeding. I will address two of the issues. As the Commission's April 12 Order does not provide for Big Rivers to file rebuttal testimony on the four issues that Big Rivers raised in its Petition for Rehearing, I will not address any of those issues.

Q. What are the three issues that KIUC has raised?

A. As explained in the Commission's April 12 Order, the three issues KIUC has raised in this rehearing are that the Commission's November 17, 2011, Order in this matter "(1) should have eliminated interclass rate subsidies; (2) should have exempted all non-rural customers from payment of any [demand-side management]-related expenses; and (3) should have accepted the KIUC proposed depreciation rates." April 12 Order at 5.

Q. Which of the KIUC rehearing issues are you addressing in your testimony?

A. I will address KIUC's allegations that the November 17 Order should have eliminated interclass rate subsidies and that the November 17 Order should have exempted all non-rural customers from payment of any demand-side management ("DSM")-related expenses. Mr. Ted J. Kelly will address the depreciation-related issue in his testimony.

II. INTERCLASS RATE SUBSIDIES

Q. On page 3, lines 15 through 17 of his rebuttal testimony, Mr. Baron asks the Commission to reconsider its November 17 Order on the revenue allocation issue and require that all subsidies paid to the Rural class be eliminated in this proceeding. Does Big Rivers agree with Mr. Baron that the Commission erred in

its determination to gradually eliminate the subsidy paid by the Smelters to the Rurals?

A. No. Big Rivers believes that the Commission's decision to gradually eliminate those subsidies is fair, just and reasonable.

Q. On page 30 of its Order in this case, the Commission stated that eliminating 100% of the Rural subsidy in a single step would be inconsistent with the long-standing practice of employing the principle of gradualism in moving toward cost-of-service-based rates. Does Mr. Baron provide any clarification or refinement in his rehearing testimony of the positions expressed by KIUC in the original proceeding regarding gradualism?

A. No. Mr. Baron restates arguments that were clearly available for the Commission in its original deliberation, and in my view, does not offer any clarification or refinement of those arguments. On page 30 of its November 17 Order, the Commission noted that it considered "the unique characteristics of the loads on Big Rivers' system," which indicates that the Commission factored into its decision-making the unique circumstances that Mr. Baron describes beginning on page 5 of his rebuttal testimony.

Q. On page 7, line 12 through page 8, line 7, Mr. Baron discusses the recent history of the LME price. Should this information persuade the Commission to alter its determination of the subsidy removal in its Order?

A. No. On the contrary, this information supports the Commission's original determination that the subsidy should be removed gradually. Full elimination of the subsidies at one time does not ensure the viability of the smelters, and thus does not justify a departure from the practice of employing the principle of gradualism. Mr. Baron himself acknowledges on page 7, line 20 that the "volatility of the LME prices contributes significantly to the risk of uneconomic operation" for the smelters. There are no assurances that the smelters will stay in business even if they get what they requested in this rehearing, because of the volatility of LME prices in the global marketplace.

Q. On page 9, lines 1 through 9 of his rebuttal testimony, Mr. Baron restates Mr. Morey's conclusions that if the smelters shut down, "Big Rivers would only manage to sell into the wholesale market an average of about 4.2 million MWh per year of the 7.3 million per year of lost Smelter sales;" that "Big Rivers' margins would deteriorate by approximately $83 million" per year; and that the shortfall would have to be made up by "the remaining, primarily Rural customers whose rates would increase by more than 55%." Do you agree with those conclusions?

A. No. Big Rivers has previously addressed the serious flaws in Mr. Morey's conclusions, including (i) the incorrect assumption that if the smelters ceased operations, Big Rivers would do nothing but attempt to sell the smelter load into the market; and (ii) the incorrect assumption that in selling the smelter load into the market, Big Rivers would be "out of market" 57.5 percent of the time, which is significantly lower than the 92.1 percent of Big Rivers' available generation that had *actually* cleared the market since Big Rivers joined the Midwest ISO, even during a time of depressed wholesale market prices through mid-2011. These arguments were fully refuted in the rebuttal testimony of Mr. Seelye, and even Mr. Morey acknowledged at the hearing that he would expect

Big Rivers to pursue the numerous options that Big Rivers would have if the smelters ceased operations (beyond just trying to sell the smelter load into the market) as Mr. Seelye identified in his rebuttal testimony. *See* the July 6, 2011, Rebuttal Testimony of William Steven Seelye at 10-17; Testimony of Dr. Mathew J. Morey, July 28, 2011, Tr. 15:23'20.

Q. On page 12, lines 1 through 4 of his rehearing testimony, Mr. Baron states that the Rural Economic Reserve "provides a unique cushion [to Rural customers] against the impact of future rate increase for these smaller customers that does not exist on other Kentucky electric utility systems." Should the existence of the Rural Economic Reserve justify allocating more of the rate increase to the Rural customers?

A. No. As explained in the Commission's March 6, 2009, Order in Case No. 2007-00455, the Rural Economic Reserve was meant to offset the higher rates to Big Rivers' members and their Rural customers coming out of the unwind. It was not intended to be a vehicle for shifting future smelter rate increases to the Rural customers. Therefore, the Rural Economic Reserve should not be used to justify placing an even greater burden on them.

Q. Please refer to KIUC's responses to Commission Staff's First Request for Information, Items 7 and 8. In those responses, the unidentified respondent for KIUC seems to be saying that the issue of class cost of service was not addressed in the smelter contract negotiations, that the smelters believe they are now entitled to

full cost-of-service rates, and that this is consistent with their obligations under their contracts. Do you agree?

A. No. The excerpt from the smelter retail agreements quoted in the response to Commission Staff Item 7 is only a portion of Section 13.1.1 of the smelter retail contracts. That section provides that smelter "intervention and participation in a regulatory proceeding involving cost-of-service issues relating to the rates of the Non-Smelter Ratepayers shall not be considered a challenge" that violates the contractual prohibition against the smelters challenging, directly or indirectly, the rate formula or other terms and conditions in the retail agreement, including the relationship of the Large Industrial Rate to amounts payable by a smelter under its retail agreement.

If the wording of the section is in any doubt, "Non-Smelter Ratepayers" is defined in Section 1.1.82 of the retail smelter contracts as "retail ratepayers of the Members other than Alcan and Century." The smelters may participate in cost-of-service issues between retail customers other than the smelters, but are contractually prohibited from challenging the rate formulae or other terms and conditions of their contracts. Thus, although the smelter contracts specifically allow the smelters to participate in this case with respect to the Non-Smelter Ratepayers cost-of-service issues, the smelters are contractually prohibited from directly or indirectly putting their cost-of-service at issue. There would be no reason for the limiting language on cost-of-service challenges if the smelters could put their cost of service at issue.

Moreover, in the unwind transaction, the smelters agreed to pay non-cost-of-service-based rates. The apparent smelter position stated by KIUC in its responses to the Commission Staff's First Request for Information, Items 7 and 8 -- that the smelters are entitled to full-cost-of-service rates – is inconsistent with the statements of the smelter witnesses in the unwind transaction approval proceeding before this Commission in Case No. 2007-00455. For example, in that case, smelter witness Henry W. Fayne acknowledged at pages 6 and 7 of his January 25, 2008, testimony[1] that the smelters had agreed to pay $0.25 above the Large Industrial Rate, the TIER Adjustment Charge and "several additional surcharge amounts to offset fuel and environmental charges to the non-smelter members." These contractual adders, which the smelters agreed to, were clearly intended to be non-cost-of-service based. *See* the smelter's February 14, 2008, response to Item 1 of the Commission Staff's First Data Request in Case No. 2007-00455[2] ("The premium of $0.25 per MWh above the large industrial rate represents a purely non-cost-based premium"); January 25, 2008, Direct Testimony of Henry W. Fayne at 13 ("the Smelter rates are higher than a traditional cost-based tariff"). Mr. Fayne described the Smelter Surcharge payments and the Economic Reserve as elements that substantially mitigate the rates for the non-smelter members.

Thus, in their contracts that they agreed to as part of the unwind transaction, the smelters clearly agreed to pay non-cost-of-service-based rates (in exchange for the higher rates and increased risks that Big Rivers and its members accepted), and they agreed to not challenge their rate formula. On this issue, KIUC has not provided any

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[1] Relevant excerpts from Mr. Fayne's Direct Testimony in Case No. 2007-00455 are attached hereto as Exhibit A.

[2] The smelters' response to Item 1 of the Commission Staff's First Data Request in Case No. 2007-00455 is attached hereto as Exhibit B.

justification for the Commission to revise its findings in Commission's November 17 Order.

III. DEMAND-SIDE MANAGEMENT EXPENSES

Q. Mr. Baron asserts that the Commission's Order unintentionally assigns a portion of Rural DSM costs to the smelters. Do you agree?

A. No. While it is true that under the rates approved in the Commission's November 17 Order the smelters are still providing a subsidy to the Rural rate class, the Commission's Order clearly assigns all costs attributable to DSM to the Rural customer class. Mr. Baron provides no support for his contention that the Commission cannot directly assign a particular cost (such as the DSM costs) to one class of customers if any subsidy remains.

Q. On page 17 of his rebuttal testimony, Mr. Baron states that if the Rural class subsidy is not fully eliminated, that any additional increase should be assigned to the Rural class, in order to not make the subsidy paid by the Smelters even greater. Does Big Rivers agree with Mr. Baron on this recommendation?

A. No. Big Rivers believes that it is fair, just, and reasonable to allocate any additional increase awarded to Big Rivers in this rehearing using the same percentages as the original increase.

IV. CONCLUSION

Q. How would you summarize the KIUC requests regarding interclass rate subsidies and the DSM-related expenses in this rehearing?

A. Both requests essentially take issue with the fact that the Commission did not fully eliminate all interclass rate subsidization in its November 17 Order. Big Rivers believes the Commission appropriately did not do so, consistent with Commission practice and with the terms of the smelter agreements approved by the Commission in the unwind transaction proceeding. A principal reason for Big Rivers agreeing to enter into the unwind transaction was to provide a long-term source of power for the smelters, and the smelters repeatedly said that the unwind transaction was their best chance of remaining viable. In exchange for Big Rivers taking on the substantial risk of serving the smelters and for the higher rates to Big Rivers' members as a result of the unwind transaction, the smelters agreed to pay contractual adders above cost of service. The smelters now want the Commission to forget that the rates the smelters agreed to were in consideration for higher rates and increased risks to Big Rivers and its members, and instead want the Commission to place an even greater burden on the non-smelter customers. Big Rivers believes that the Commission's decision in its November 17 Order to gradually eliminate those subsidies is fair, just and reasonable.

Q. What is your final recommendation?

A. I recommend that the Commission reject KIUC's claims relating to interclass rate subsidies and DSM-related expenses.

Q. Does this conclude your testimony?

A. Yes.

COMMONWEALTH OF KENTUCKY
BEFORE THE
PUBLIC SERVICE COMMISSION OF KENTUCKY

Case No. 2007-00455

DIRECT TESTIMONY OF
HENRY W. FAYNE

ON BEHALF OF
CENTURY ALUMINUM COMPANY
AND
RIO TINTO ALCAN

JANUARY 25, 2008

Q: What is the long term outlook for aluminum prices?

A: As I explained above, the price of aluminum is based on global supply and demand. Like many other commodities, the price can vary widely and is difficult to predict. The current long term outlook developed by industry analysts ranges between $1900 and $2300 per metric ton, with the average around $2100 per metric ton. As shown on HWF Exhibit 2, the near term forward curve projects LME price in the range of $2465 - $2639 per metric ton.

Q: Please describe the proposed terms of electric service to the Smelters.

A: In his testimony, Big Rivers' witness C. William Blackburn describes the terms and mechanics of the new arrangement in detail; the specific contracts are exhibits to the Joint Application. Therefore, I intend to provide a broad overview to highlight significant aspects of the arrangement.

Under the terms of the proposed contract, Big Rivers will sell to Kenergy for resale to the Smelters a base amount of up to 850 MW (368 MW for Alcan and 482 MW for Century) through 2023, unless one or both of the Smelters terminate earlier. In effect, Big Rivers, through Kenergy, is obligated to serve 100% of the Smelters' current load requirement. Such sales shall be made on a take-or-pay basis at a variable rate based on Big Rivers' cost as described in more detail below.

In return, the Smelters have agreed to pay a Base Energy Charge equivalent to $0.25/mWh above the large industrial rate (based on a 98% load factor), as well as a Fuel Adjustment Charge (FAC), a purchased power charge for purchased power not recovered through the fuel adjustment (Non-FAC PPA) and an environmental surcharge. In addition, the Smelters have agreed to pay a TIER Adjustment Charge to ensure that Big Rivers achieves TIER coverage of 1.24 times, subject to some limitations and exceptions described in the contracts. Essentially, with few exceptions, the Smelters are assuring that Big Rivers will achieve its TIER coverage target. Finally, the Smelters have agreed to pay several additional surcharge amounts to offset fuel and environmental charges to the non-smelter members.

Q: Do the Smelters agree that the inclusion of a FAC, a Non-FAC PPA, and an Environmental Surcharge is necessary?

A: Absolutely. As witnesses for Big Rivers have explained, these adjustment clauses are necessary because these costs may vary significantly. But these adjustment clauses are particularly important to insure that the non-smelter members pay their fair share of these variable costs and appropriately balance the interests of the Smelters and the non-smelter members; without the adjustment clauses (or the ability to establish regulatory accounts for future recovery as in the case of the Non-FAC PPA), the Smelters would be penalized by having to pay through the TIER Adjustment for variable energy costs incurred to meet the non-smelter member load.

Q: You indicated that the TIER Adjustment is capped. What is the basis for the caps?

cost payments from the Smelters. Most importantly, it creates the opportunity for the Kentucky generation to be used to support Kentucky businesses.

For the non-smelter members, the transaction also has benefit. By providing Big Rivers the opportunity to raise capital to make investment in its system, it assures that there will be adequate and reliable generation available after 2023 when the current arrangement otherwise would have terminated. Because of the Smelter Surcharge payments and the Economic Reserve, an increase in rates to the non-smelter members is substantially mitigated and rates for the long term are projected to remain low. And most importantly, the transaction preserves the economic health of Western Kentucky.

Although a lower rate structure would have been preferable, the transaction provides benefit to the Smelters as well. Specifically, although the Smelter rates are higher than a traditional cost-based tariff, the contract provides an energy supply based on cost, which will limit the Smelters' exposure to market prices and provide a reasonable opportunity for continued operation beyond the current contract terms of 2010 and 2011.

Q: Have the Smelters concluded that the proposed transaction provides a reasonable opportunity for their continued operation?

A: Yes. The Smelters are cautiously optimistic that the rates to the Smelters will be affordable for the long term. But that result ultimately will be a function of LME prices and the ability of Big Rivers to control its costs. As I indicated above, the

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PUBLIC SERVICE
COMMISSION

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION
CASE NO. 2007-00455

RESPONSES TO
COMMISSION STAFF'S FIRST DATA REQUEST TO
ALCAN PRIMARY PRODUCTS CORPORATION AND
CENTURY ALUMINUM OF KENTUCKY GENERAL PARTNERSHIP

1. **Staff Request:**

Refer to the direct testimony of Henry W. Fayne ("Fayne Testimony") at page 6, lines 22-23. Is the premium of $0.25 per MWh above the large industrial rate that has been agreed to by the Smelters represent a purely non-cost-based premium? If no, explain in detail the cost basis for the $0.25 per MWh premium.

Response:

The premium of $0.25 per MWh above the large industrial rate represents a purely non-cost-based premium.

Witness Responsible: H.W. Fayne