

SULLIVAN, MOUNTJOY, STAINBACK & MILLER PSC
ATTORNEYS AT LAW

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Bryan R. Reynolds
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Mark W. Starnes
C. Ellsworth Mountjoy
Susan Montalvo-Gesser
Mary L. Moorhouse

June 1, 2012

Via Federal Express

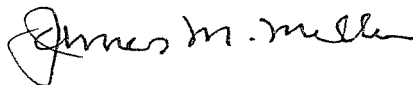
Jeff DeRouen
Executive Director
Public Service Commission
211 Sower Boulevard, P.O. Box 615
Frankfort, Kentucky 40602-0615

Re: *In the Matter of: Application of Big Rivers Electric Corporation for Approval of its 2012 Environmental Compliance Plan, for Approval of its Amended Environmental Cost Recovery Surcharge Tariff, for Certificates of Public Convenience and Necessity, and for Authority to Establish a Regulatory Account, P.S.C. Case No. 2012-00063*

Dear Mr. DeRouen:

Enclosed for filing are an original and ten copies of Big Rivers Electric Corporation's (i) response to Kentucky Industrial Utility Customers, Inc.'s initial data requests, (ii) response to Attorney General's initial data requests, (iii) response to Public Service Commission's first request for information, (iv) response to Sierra Club's first requests for information, (v) a Petition for Confidential Treatment for certain documents being filed with the responses, and (vi) a motion to deviate from the requirement that all documents filed in response to data requests be furnished in paper form. Copies of this letter and all enclosures have been served on each of the persons listed on the attached service list. A copy of the information for which confidential treatment is sought has also been served on each party that has entered into Big Rivers' confidentiality agreement.

Sincerely yours,



James M. Miller

JMM/ej
Enclosures

cc: Mark A. Bailey
Albert Yockey

Telephone (270) 926-4000
Telecopier (270) 683-6694

100 St. Ann Building
PO Box 727
Owensboro, Kentucky
42302-0727

Service List
PSC Case No. 2012-00063

Jennifer B. Hans, Esq.
Dennis G. Howard, II, Esq
Lawrence W. Cook, Esq.
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Frankfort, KY 40601-8204

Michael L. Kurtz, Esq.
Kurt J. Boehm, Esq.
Boehm, Kurtz and Lowry
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David C. Brown, Esq.
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400 West Market Street
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Joe F. Childers & Associates
300 Lexington Building
201 West Short Street
Lexington, Kentucky 40507

Kristin Henry
Staff Attorney
Sierra Club
85 Second Street
San Francisco, CA 94105

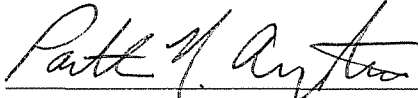
BIG RIVERS ELECTRIC CORPORATION

**THE APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR
APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN AND
REVISIONS TO ITS ENVIRONMENTAL SURCHARGE TARIFF, FOR
CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY, AND FOR
AUTHORITY TO ESTABLISH A REGULATORY ACCOUNT**

CASE NO. 2012-00063

VERIFICATION


I, Patrick N. Augustine, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



Patrick N. Augustine

COMMONWEALTH OF VIRGINIA)
COUNTY OF FAIRFAX)

SUBSCRIBED AND SWORN TO before me by Patrick N. Augustine on this
the 30 day of May, 2012.



Notary Public, Commonwealth of
Virginia
My Commission Expires Jun 30, 2013

7251149


BIG RIVERS ELECTRIC CORPORATION

**THE APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR
APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN AND
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AUTHORITY TO ESTABLISH A REGULATORY ACCOUNT**

CASE NO. 2012-00063

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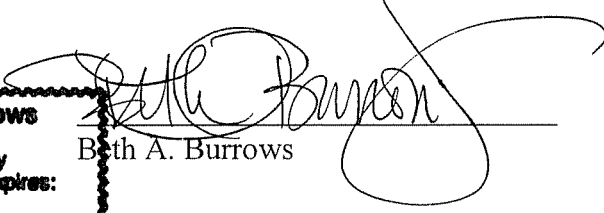
I, Brian J. Azman, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



Brian J. Azman

STATE OF INDIANA)
)
COUNTY OF HAMILTON)

SUBSCRIBED AND SWORN TO before me by Brian J. Azman on this
the 29th day of May, 2012.

 
Beth A. Burrows

BIG RIVERS ELECTRIC CORPORATION

**THE APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR
APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN AND
REVISIONS TO ITS ENVIRONMENTAL SURCHARGE TARIFF, FOR
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CASE NO. 2012-00063

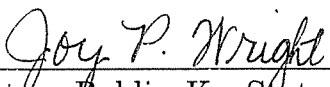
VERIFICATION

I, Robert W. Berry, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.


Robert W. Berry

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Robert W. Berry on this the
31 day of May, 2012.


Notary Public, Ky. State at Large
My Commission Expires 7-3-14

Notary Public, Kentucky State-At-Large
My Commission Expires: July 3, 2014
ID 421951

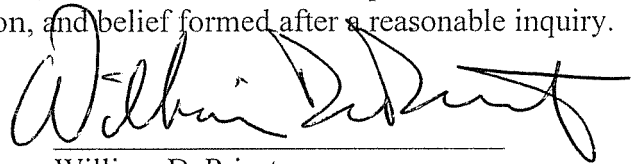
BIG RIVERS ELECTRIC CORPORATION

**THE APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR APPROVAL
OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN AND REVISIONS TO ITS
ENVIRONMENTAL SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO ESTABLISH A
REGULATORY ACCOUNT**

CASE NO. 2012-00063

VERIFICATION

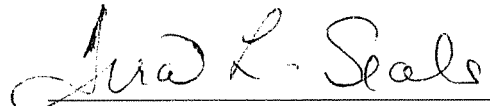
I, William DePriest, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



William DePriest

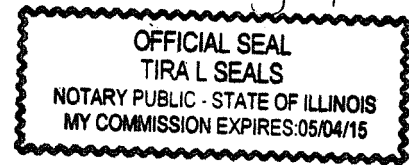
STATE OF ILLINOIS)
COUNTY OF COOK)

SUBSCRIBED AND SWORN TO before me by William DePriest on this the 30 day of May, 2012.



Notary Public,
State of Illinois

My Commission Expires May 4, 2015



BIG RIVERS ELECTRIC CORPORATION

**THE APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR
APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN AND
REVISIONS TO ITS ENVIRONMENTAL SURCHARGE TARIFF, FOR
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CASE NO. 2012-00063

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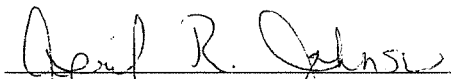
I, David G. Crockett, verify, state, and affirm that I prepared or supervised the preparation of my data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



David G. Crockett

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by David G. Crockett on this the 31st day
of May, 2012.



Notary Public, Ky. State at Large

My Commission Expires 8-9-2014

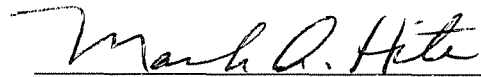
BIG RIVERS ELECTRIC CORPORATION

**THE APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR
APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN AND
REVISIONS TO ITS ENVIRONMENTAL SURCHARGE TARIFF, FOR
CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY, AND FOR
AUTHORITY TO ESTABLISH A REGULATORY ACCOUNT**

CASE NO. 2012-00063

VERIFICATION

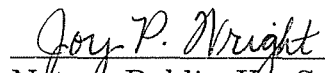
I, Mark A. Hite, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



Mark A. Hite

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by Mark A. Hite on this the 31
day of May, 2012.



Notary Public, Ky. State at Large
My Commission Expires 7-3-14

Notary Public, Kentucky State-At-Large
My Commission Expires: July 3, 2014
ID 421951

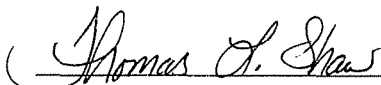
BIG RIVERS ELECTRIC CORPORATION

**THE APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR
APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN AND
REVISIONS TO ITS ENVIRONMENTAL SURCHARGE TARIFF, FOR
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AUTHORITY TO ESTABLISH A REGULATORY ACCOUNT**

CASE NO. 2012-00063

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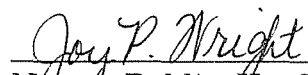
I, Thomas L. Shaw, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.



Thomas L. Shaw

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

31st SUBSCRIBED AND SWORN TO before me by Thomas L. Shaw on this the
31 day of May, 2012.



Notary Public, Ky. State at Large
My Commission Expires 7-3-14

**Notary Public, Kentucky State-At-Large
My Commission Expires: July 3, 2014
ID 421951**

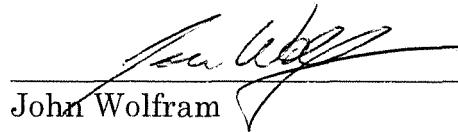
BIG RIVERS ELECTRIC CORPORATION

**THE APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR
APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN AND
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AUTHORITY TO ESTABLISH A REGULATORY ACCOUNT**

CASE NO. 2012-00063


VERIFICATION

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


John Wolfram


COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by John Wolfram on this the 31st
day of May, 2012.


Notary Public, Ky State at Large
My Commission Expires 8-9-2014

ORIGINAL



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 APPROVAL OF ITS)
2012 ENVIRONMENTAL COMPLIANCE)
PLAN, FOR APPROVAL OF ITS AMENDED)
ENVIRONMENTAL COST RECOVERY)
SURCHARGE TARIFF, FOR CERTIFICATES)
OF PUBLIC CONVENIENCE AND)
NECESSITY, AND FOR AUTHORITY TO)
ESTABLISH A REGULATORY ACCOUNT)

Case No.
2012-00063

Response to Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012

FILED: June 1, 2012

ORIGINAL

Big Rivers
ELECTRIC CORPORATION

Your Traditional Energy Corporation

AIRTECH
Report on Air
Emission Test Program
Conducted for Big
Rivers Report No. 3648
Green Unit 1
August 29, 2011

June 1, 2012
CD 1 of 8

Application of Big Rivers Electric Corporation
for Approval of its 2012
Environmental Compliance Plan, etc.
Case No. 2012-00063

Electronic Files in Response to KIUC 1-7
of KIUC's First Data Request
Dated May 21, 2012

Big Rivers
ELECTRIC CORPORATION

Your Traditional Energy Corporation

AIRTECH
Report on Air
Emission Test Program
Conducted for Big
Rivers Report No. 3648
Green Unit 2
August 29, 2011

June 1, 2012
CD 2 of 8

Application of Big Rivers Electric Corporation
for Approval of its 2012
Environmental Compliance Plan, etc.
Case No. 2012-00063

Electronic Files in Response to KIUC 1-7
of KIUC's First Data Request
Dated May 21, 2012

Big Rivers
ELECTRIC CORPORATION

Your Traditional Energy Corporation

AIRTECH
Report on Air
Emission Test Program
Conducted for Big
Rivers Report No. 3648
Henderson Unit 1
August 29, 2011

June 1, 2012
CD 3 of 8


Application of Big Rivers Electric Corporation
for Approval of its 2012
Environmental Compliance Plan, etc.
Case No. 2012-00063

Electronic Files in Response to KIUC 1-7
of KIUC's First Data Request
Dated May 21, 2012

Case No. 2012-00063
CD 1 of 8 thru CD 6 of 8 Provided in response to KIUC1-7
Witness: William DePriest
Page 1 of 3

Big Rivers

ELECTRIC CORPORATION

Your Touchstone Energy[®] Cooperative 

AIRTECH
Report on Air
Emission Test Program
Conducted for Big
Rivers Report No. 3648
Henderson Unit 2
August 29, 2011


June 1, 2012
CD 4 of 8

Application of Big Rivers Electric Corporation
for Approval of its 2012
Environmental Compliance Plan, etc.
Case No. 2012-00063

Electronic Files in Response to KIUC 1-7
of KIUC's First Data Request
Dated May 21, 2012

Big Rivers

ELECTRIC CORPORATION

Your Touchstone Energy[®] Cooperative 

AIRTECH
Report on Air
Emission Test Program
Conducted for Big
Rivers Report No. 3648
Coleman
August 29, 2011


June 1, 2012
CD 5 of 8

Application of Big Rivers Electric Corporation
for Approval of its 2012
Environmental Compliance Plan, etc.
Case No. 2012-00063

Electronic Files in Response to KIUC 1-7
of KIUC's First Data Request
Dated May 21, 2012

Big Rivers

ELECTRIC CORPORATION

Your Touchstone Energy[®] Cooperative 


AIRTECH
Report on Air
Emission Test Program
Conducted for Big
Rivers Report No. 3648
Wilson Coal
August 29, 2011

June 1, 2012
CD 6 of 8

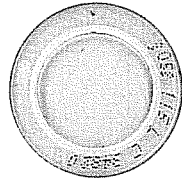
Application of Big Rivers Electric Corporation
for Approval of its 2012
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Case No. 2012-00063

Electronic Files in Response to KIUC 1-7

Big Rivers
ELECTRIC CORPORATION

Your Touchstone Energy[®] Cooperative 

AIRTECH
Report on Air
Emission Test Program
Conducted for Big
Rivers Report No. 3648
Wilson Petcoke
August 29, 2011




June 1, 2012
CD 7 of 8

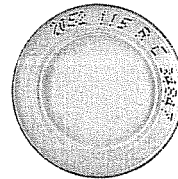
Application of Big Rivers Electric Corporation
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Case No. 2012-00063

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Dated May 21, 2012

Big Rivers
ELECTRIC CORPORATION

Your Touchstone Energy[®] Cooperative 

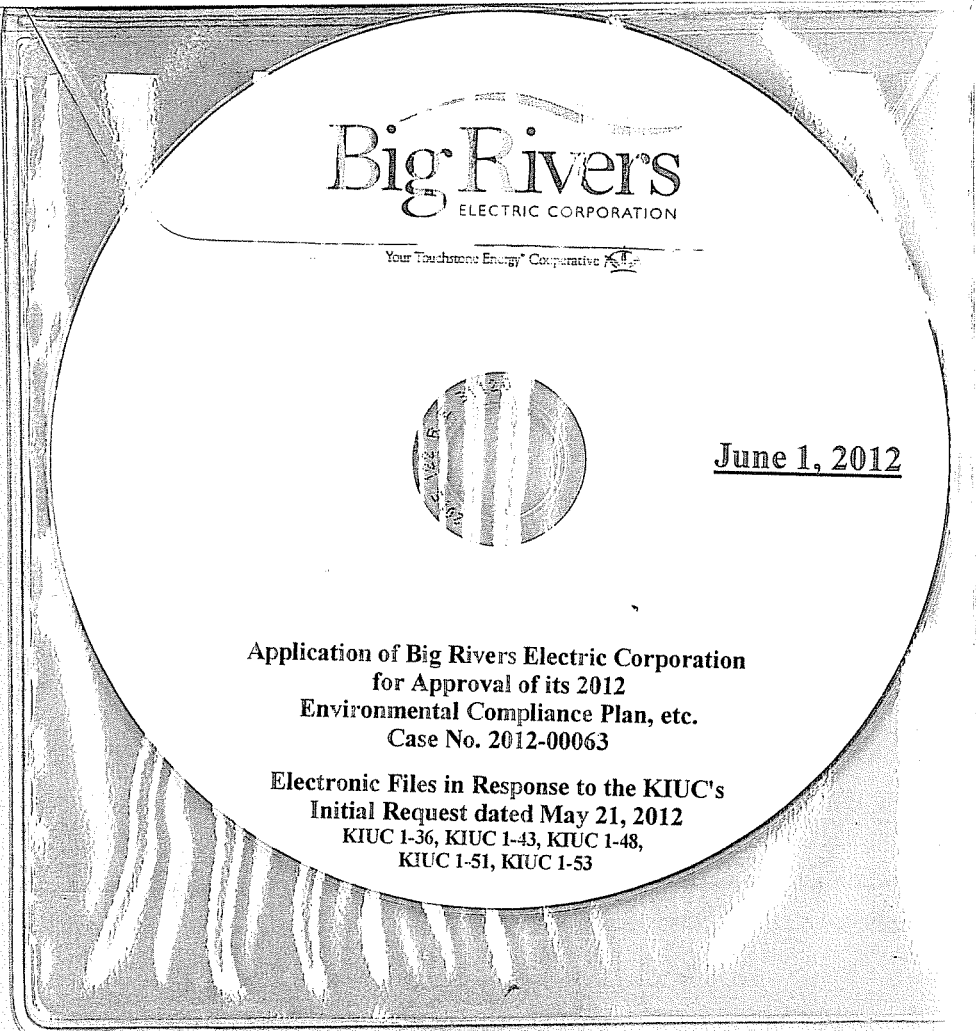
AIRTECH
Report on Air
Emission Test Program
Conducted for Big
Rivers Report No. 3648
Wilson Reduced Load
August 29, 2011



June 1, 2012
CD 8 of 8

Application of Big Rivers Electric Corporation
for Approval of its 2012
Environmental Compliance Plan, etc.
Case No. 2012-00063

Electronic Files in Response to KIUC 1-7
of KIUC's First Data Request
Dated May 21, 2012



BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN, FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063**

Response to the Kentucky Industrial Utility Customers' Initial Request for Information dated May 21, 2012

June 1, 2012

Information filed on CD accompanying responses

KIUC 1-36 – E-Mails, Documents, Memos, et. al.	
KIUC 1-43 – Redacted Big Rivers Board Minutes	
KIUC 1-48 – Documents between Big Rivers and City of Henderson and HMP&L	
KIUC 1-51 - Total Adjusted Monthly - 2011-05 through 2012-04	
KIUC 1-53 - Monthly Smelter Revenues and Credits thru 2012-04	

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST
RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Item 1)** *See Spreadsheet Financial Forecast (2012-2026) Base Case (No*
2 *Env Comp) 02-.xls, Worktab = PCM, Cell N77. This cell points to another*
3 *excel spreadsheet that was not supplied with the set of Corporate*
4 *Financial Model ("CFM") scenario spreadsheets previously supplied.*
5 *Furthermore, there are other cells within that same spreadsheet that*
6 *point to other excel spreadsheets, for example, cell N82 in the same*
7 *WorkTab points to a Monthly Resource Report worktab in another excel*
8 *spreadsheet. We request the Company to supply every spreadsheet that is*
9 *referenced within each CFM scenario that the Company previously*
10 *supplied, and to identify where the external spreadsheets are referenced*
11 *within the CFM scenario spreadsheets.*

12
13 **Response)** Please see the CD Big Rivers filed May 29, 2012, in response to the
14 May 11, 2012, letter from KIUC's counsel to Big Rivers' counsel.

15
16
17 **Witness)** Mark A. Hite
18

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST
RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
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CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Item 2) Refer to the five corporate financial model scenario Excel**
2 **workbooks provided by the Company in response to the KIUC Motion to**
3 **Dismiss.**

4
5 **a. Please confirm that the NPV spreadsheet for each**
6 **scenario quantifies the annual revenue requirement of all**
7 **variable expenses, off system sales (OSS) revenues, and**
8 **incremental fixed debt service used to finance the capital**
9 **expenditures of the scenarios.**

10 **b. Please confirm that the NPV spreadsheet for each**
11 **scenario quantifies the incremental fixed debt service**
12 **using a levelized methodology over 28 years using the**
13 **coupon interest rate and no TIER.**

14 **c. Please explain why the incremental fixed debt service does**
15 **not include a TIER. If the Company agrees that the**
16 **incremental fixed debt service should include a TIER,**
17 **then please provide revised scenarios including a TIER.**

18 **d. Please explain why the Company used a levelized**
19 **methodology for the fixed debt service rather than an**
20 **annual revenue requirement methodology consistent with**
21 **the manner in which it will recover the build or buy costs**
22 **from customers through the ECR.**

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
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RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

- 1 e. *Please provide the inputs to the CFM base case and five*
2 *scenarios obtained from ACES and all workpapers and*
3 *other analyses used to convert the ACES data to inputs for*
4 *the CFM base case and five scenarios, including all*
5 *assumptions, data, computations, and electronic*
6 *spreadsheets with formulas intact.*
- 7 f. *Please confirm that the NPV spreadsheet for each of the*
8 *two loss of Smelter load scenarios reflect no loss of*
9 *Smelter revenues under their KPSC approved contracts*
10 *after 2013, even though the Company assumed that the*
11 *available generation freed up from the closure of the*
12 *Smelters could under their KPSC approved contracts be*
13 *sold into the market and reflected both the additional*
14 *OSS revenues and the other effects on variable expenses in*
15 *the revenue requirement.*
- 16 g. *Please indicate whether the Company still believes that it*
17 *correctly modeled the two loss of Smelter load scenarios*
18 *without consideration of the loss of the Smelter revenues*
19 *under their KPSC approved contracts and explain why it*
20 *believes that the scenarios either are correct or incorrect.*
- 21 h. *Please provide revised NPV spreadsheets for the two loss*
22 *of Smelter load scenarios to reflect the loss of Smelter*

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
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CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 *revenues under their KPSC approved contracts after 2013.*
2 *Provide all assumptions, data, computations, and*
3 *workpapers, including electronic spreadsheets with*
4 *formulas intact.*

5 *i. Please explain why the Company limited its CFM*
6 *scenarios to 15 years (from 2012 through 2016) instead of*
7 *a longer horizon, such as 20, 25, or 28 years, or a shorter*
8 *horizon such as ten years.*

9

10 **Response)**

11 a. Confirmed.

12 b. Confirmed.

13 c. The analysis measured the change in cash flows, on a present
14 value basis, as compared to the "Base Case." The analysis
15 assumed 28 year level debt service and included not only
16 interest payments but also principal payments. If one were to
17 include a TIER component in the analysis, the principal
18 payments must be removed from the level debt service.
19 Removing the principal payments from the level debt service
20 and including a TIER component would decrease the present
21 value of cash flows for the incremental debt issue, slightly
22 improving the "Build Case" in comparison to the "Base Case".

BIG RIVERS ELECTRIC CORPORATION

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RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
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June 1, 2012

- 1 d. The referenced NPV tab in the financial model was an economic
2 analysis designed to identify the least cost compliance option, on
3 a present value cash flow basis, regardless of how the costs may
4 flow to rate payers. Big Rivers also analyzed the present value
5 of Big Rivers' member revenue stream, which can be found in
6 the exhibit titled Present Value of Big Rivers' Member Revenue
7 Stream attached to this response. This analysis yielded very
8 similar results when compared to Exhibit Hite-4 (a summary of
9 the NPV tabs), and results in the same conclusion.
- 10 e. Please see Big Rivers' response to Item 1 of these responses.
- 11 f. The referenced NPV tab in the financial model shows the
12 incremental revenue requirement or incremental net cost, on a
13 present value cash flow basis, when compared to the Base Case.
14 The NPV sheet does not attempt to determine how the revenue
15 requirement will be collected from Big Rivers' ratepayers; it only
16 shows the incremental amount to be collected over the 15 year
17 period. Therefore, the only revenue stream change that should
18 be included on the NPV sheet is the change in off-system
19 revenue. A change in Big Rivers' Rural, Large Industrial, or
20 Smelter revenue does not change Big Rivers' revenue
21 requirement.

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
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- 1 g. Big Rivers' believes that the NPV sheet is correct. Please see
2 the response to part f, above.
3 h. Please see the response to parts f and g above. Big Rivers
4 believes that the NPV sheet is correct.
5 i. Please see Big Rivers' response to Item 24 of the Commission
6 Staff's First Request for Information.
7
8
9 **Witness)** Mark A. Hite
10

Big Rivers Electric Corporation
Case No. 2012-00063
Present Value of Members' Revenue Streams
(\$ Millions)

	Year	2012	2013	2014	2015	2016	2017
	Period	0	1	2	3	4	5
Base Case							
Rural		125.2	129.2	139.0	143.7	148.4	148.2
Large Industrial		43.7	44.7	47.6	48.7	49.7	48.8
Smelter		373.8	380.1	391.7	395.9	398.4	393.1
Total		542.7	554.0	578.3	588.3	596.5	590.1
PV		542.7	513.3	496.4	467.9	439.6	402.9
Build							
Rural		126.1	130.9	141.2	148.1	158.7	159.9
Large Industrial		44.1	44.9	48.0	49.8	52.7	52.3
Smelter		376.2	380.8	396.5	405.2	425.7	422.3
Total		546.4	556.6	585.7	603.1	637.1	634.5
PV		546.4	515.7	502.8	479.7	469.5	433.2
Build (No SCR)							
Rural		126.1	130.9	139.8	147.1	157.1	160.7
Large Industrial		44.1	44.9	47.5	49.6	52.3	52.8
Smelter		376.2	380.8	400.8	412.2	434.6	440.0
Total		546.4	556.6	588.1	608.9	644.0	653.5
PV		546.4	515.7	504.9	484.3	474.6	446.2
Buy							
Rural		127.8	134.9	146.2	156.3	163.0	167.2
Large Industrial		44.7	46.7	50.2	53.4	55.0	55.7
Smelter		386.5	407.7	419.9	432.5	451.2	479.0
Total		559.0	589.3	616.3	642.2	669.2	701.9
PV		559.0	546.0	529.1	510.8	493.2	479.3
Build (Smelters Leave)							
Rural		126.1	130.9	219.8	207.0	203.3	154.1
Large Industrial		44.1	44.9	75.1	69.9	68.1	51.3
Smelter		376.2	380.8	0.0	0.0	0.0	0.0
Total		546.4	556.6	294.9	276.9	271.4	205.4
PV		546.4	515.7	253.2	220.2	200.0	140.2
Buy (Smelters Leave)							
Rural		127.8	134.8	242.0	232.5	225.4	200.5
Large Industrial		44.7	46.7	83.2	78.9	75.9	66.9
Smelter		386.5	404.3	0.0	0.0	0.0	0.0
Total		559.0	585.8	325.2	311.4	301.3	267.4
PV		559.0	542.8	279.2	247.7	222.0	182.6

Discount Rate	7.93%
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Big Rivers Electric Corporation
Case No. 2012-00063
Present Value of Members' Revenue Streams
(\$ Millions)

	Year	2018	2019	2020	2021	2022	2023
	Period	6	7	8	9	10	11
Base Case							
Rural		151.5	152.9	158.5	161.6	166.2	170.0
Large Industrial		49.5	49.5	50.8	51.2	52.1	52.8
Smelter		402.0	400.4	412.8	412.4	422.7	420.6
Total		603.0	602.8	622.1	625.2	641.0	643.4
PV		381.5	353.3	337.8	314.6	298.8	277.9
Build							
Rural		162.3	166.4	170.4	175.7	179.5	185.2
Large Industrial		52.6	53.5	54.1	55.2	55.8	57.0
Smelter		431.3	429.5	441.3	441.8	451.6	449.8
Total		646.2	649.4	665.8	672.7	686.9	692.0
PV		408.8	380.6	361.6	338.5	320.2	298.9
Build (No SCR)							
Rural		162.7	170.6	171.2	179.3	183.2	191.1
Large Industrial		52.9	55.2	54.6	56.8	57.3	59.2
Smelter		455.6	455.0	468.9	473.8	483.8	483.6
Total		671.2	680.8	694.7	709.9	724.3	733.9
PV		424.6	399.0	377.3	357.2	337.7	317.0
Buy							
Rural		178.0	183.8	191.0	194.3	206.2	207.2
Large Industrial		59.1	60.5	62.3	62.6	65.9	65.3
Smelter		499.5	514.5	522.3	540.9	533.6	545.7
Total		736.6	758.8	775.6	797.8	805.7	818.2
PV		466.0	444.8	421.2	401.4	375.6	353.4
Build (Smelters Leave)							
Rural		129.5	125.6	109.4	85.7	71.4	29.5
Large Industrial		43.0	41.4	36.0	28.3	23.6	10.9
Smelter		0.0	0.0	0.0	0.0	0.0	0.0
Total		172.5	167.0	145.4	114.0	95.0	40.4
PV		109.1	97.9	79.0	57.4	44.3	17.5
Buy (Smelters Leave)							
Rural		187.1	196.5	177.8	171.5	143.0	114.5
Large Industrial		62.0	64.5	57.9	55.4	46.1	37.0
Smelter		0.0	0.0	0.0	0.0	0.0	0.0
Total		249.1	261.0	235.7	226.9	189.1	151.5
PV		157.6	153.0	128.0	114.2	88.2	65.4

Discount Rate	7.93%
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Big Rivers Electric Corporation
Case No. 2012-00063
Present Value of Members' Revenue Streams
(\$ Millions)

	Year	2024	2025	2026	PV	NPV
	Period	12	13	14		
Base Case						
Rural		177.9	185.2	191.2	1,398.4	
Large Industrial		54.5	56.2	57.3	457.7	
Smelter		443.6	446.0	483.0	3,747.5	
Total		676.0	687.4	731.5		
PV		270.5	254.9	251.3	5,603.4	
Build						
Rural		190.6	198.9	201.6	1,476.8	(78.4)
Large Industrial		57.9	59.9	59.9	479.5	(21.8)
Smelter		473.5	477.6	515.9	3,928.8	(181.3)
Total		722.0	736.4	777.4		
PV		289.0	273.1	267.1	5,885.1	(281.7)
Build (No SCR)						
Rural		195.1	207.3	211.0	1,491.4	(93.0)
Large Industrial		59.7	63.0	63.1	486.1	(28.4)
Smelter		508.8	519.2	553.2	4,089.9	(342.4)
Total		763.6	789.5	827.3		
PV		305.6	292.8	284.2	6,067.5	(464.1)
Buy						
Rural		218.0	226.6	241.9	1,598.6	(200.2)
Large Industrial		68.0	69.8	73.9	527.7	(70.0)
Smelter		556.5	595.2	607.3	4,438.6	(691.1)
Total		842.5	891.6	923.1		
PV		337.2	330.6	317.1	6,564.7	(961.3)
Build (Smelters Leave)						
Rural		25.3	22.8	50.7	1,195.7	202.7
Large Industrial		9.6	8.9	17.0	404.9	52.8
Smelter		0.0	0.0	0.0	728.9	3,018.6
Total		34.9	31.7	67.7		
PV		14.0	11.8	23.3	2,330.0	3,273.4
Buy (Smelters Leave)						
Rural		100.0	133.2	141.5	1,619.0	(220.6)
Large Industrial		32.5	41.9	43.9	541.2	(83.5)
Smelter		0.0	0.0	0.0	761.1	2,986.4
Total		132.5	175.1	185.4		
PV		53.0	64.9	63.7	2,921.3	2,682.1

Discount Rate	7.93%
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BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
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June 1, 2012

1 **Item 3)** *If ACES performed any cases other than those used in the CFM*
2 *base case and five scenarios, please provide a detailed description of the*
3 *other cases performed, and provide the same information as requested in*
4 *the prior question for those other cases.*

5

6 **Response)** Please see the CD containing the planning models prepared by ACES
7 Power Marketing filed May 24, 2012, under a petition for confidential treatment,
8 and the May 18, 2012, letter from John Sturm to Roger Hickman explaining the
9 files on the confidential CD, which letter is attached to Big Rivers' response to
10 Item 26b of the Commission Staff's First Request for Information.

11

12

13 **Witness)** Brian J. Azman

14

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 4)** *Please supply all documents, memos, letters and emails that*
2 *were sent back and forth between the Company and ACES concerning*
3 *either input or output data associated with the base case and five*
4 *scenarios, as well as any other cases that ACES performed.*

5

6 **Response)** Please see the CD attached to Big Rivers' response to Item 36 of
7 these responses; the CD Big Rivers filed May 24, 2012, under a petition for
8 confidential treatment in response to the May 11, 2012, letter from KIUC's
9 counsel to Big Rivers' counsel; and the May 18, 2012, letter from John Sturm to
10 Roger Hickman attached to Big Rivers' response to Item 26b of the Commission
11 Staff's First Request for Information.

12

13

14 **Witnesses)** Brian J. Azman and Robert W. Berry

15

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 5)** *Please provide all assumptions, data, computations and*
2 *workpapers, including electronic spreadsheets with formulas intact used*
3 *to populate the CFM base case and each of the five scenarios.*

4

5 **Response)** Please see Big Rivers' response to Item 1 of these responses.

6

7

8 **Witness)** Mark A. Hite

9

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
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1 **Item 6)** *Please provide a narrative description of how the CFM model*
2 *was populated with data associated with each generating unit*
3 *environmental upgrade.*

4

5 **Response)** A calculation of the fixed cost of environmental compliance capital
6 can be found on the ECP tab of each financial model scenario. The variable cost of
7 environmental compliance (net of the City of Henderson) is pulled from the
8 scenario specific production cost model output files and entered in the PCM tab of
9 each financial model. The fixed and variable costs of environmental compliance
10 are then added together and allocated based on total adjusted revenue on the ECP
11 tab of each financial model scenario.

12

13

14 **Witness)** Mark A. Hite

15

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 7)** *Assuming the environmental upgrade assumptions were*
2 *sourced to Sargent & Lundy, provide the workpapers that came from*
3 *Sargent & Lundy. If the environmental upgrade assumptions were sourced*
4 *elsewhere, still provide the workpapers that were developed in whatever*
5 *process was used to create the environmental upgrade assumptions.*

6

7 **Response)** Unit test data provided by Big Rivers and emissions data reported to
8 the US EPA were used to develop the environmental upgrade assumptions
9 reported in Exhibit DePriest - 2. Please see the eight CDs entitled "AIRTECH
10 Report on Air Emission Test Program for Big Rivers" which are provided among
11 the CDs accompanying these responses.

12

13

14 **Witness)** William DePriest

15

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 8)** *Whatever the source of the environmental upgrade*
2 *assumptions, provide any spreadsheets developed for the purpose of*
3 *converting the environmental upgrade assumptions to the format required*
4 *to be input into the CFM. Please provide the workpapers electronically*
5 *with all formulas intact.*

6

7 **Response)** Please see Big Rivers' response to Item 1 of these responses.

8

9

10 **Witness)** Mark A. Hite

11

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 9)** *For all environmental upgrades evaluated but rejected, please*
2 *provide all workpapers associated with those upgrades, and provide*
3 *inputs in the format that could be inserted into the CFM model. Please*
4 *provide the workpapers electronically with all formulas intact.*

5

6 **Response)** Please see the CD Big Rivers filed May 30, 2012, in response to the
7 May 11, 2012, letter from KIUC's counsel to Big Rivers' counsel.

8

9

10 **Witness)** William DePriest

11

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 10) For each generating unit and purchase that is part of the**
2 **Company's resources, supply the following information:**

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- a. *Owner of the resource*
- b. *If the Company has partial or full ownership, specify the ownership %*
- c. *Operator of the resource*
- d. *If a purchase*
 - i. *Capacity the company is entitled to*
 - ii. *Energy the company is entitled to*
 - iii. *Capacity cost*
 - iv. *Energy cost*
- e. *If a unit*
 - i. *Min cap, max cap*
 - ii. *Heat rates Incremental and average*
 - iii. *Avail and forced outage rates*
 - iv. *Fuel type*
 - v. *Startup cost*
 - vi. *Minimum down time*
 - vii. *Maximum up time*
 - viii. *Ramp rate*
 - ix. *Operating constraints, if any, for example, must run*

BIG RIVERS ELECTRIC CORPORATION

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- 1 *x. Can it be used for quick start or spinning reserves*
- 2 *xi. Fuel constraints if any*
- 3 *xii. Any other operational data*
- 4 *xiii. Emissions data (rates, costs, etc.)*

5
6
7
8
9

Response)

a – c. Please see the owner and operator information for each Big Rivers generating units displayed in the table below.

Unit	Owner	Operator	% Ownership
Coleman 1	Big Rivers	Big Rivers	100
Coleman 2	Big Rivers	Big Rivers	100
Coleman 3	Big Rivers	Big Rivers	100
Green 1	Big Rivers	Big Rivers	100
Green 2	Big Rivers	Big Rivers	100
Henderson 1	HMP&L	Big Rivers	0 *
Henderson 2	HMP&L	Big Rivers	0 *
Reid 1	Big Rivers	Big Rivers	100
Reid CT	Big Rivers	Big Rivers	100
Wilson	Big Rivers	Big Rivers	100

* Big Rivers has no joint ownership of the HMP&L units, but Big Rivers is entitled to 64.7% (202/312) of the HMP&L units as of May 23, 2012.

10
11

BIG RIVERS ELECTRIC CORPORATION

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- 1 d. The only purchase resource that Big Rivers has is with the
2 Southeastern Power Administration ("SEPA"). For SEPA, the
3 requested information is displayed in the table below.
4

Resource	Owner	Operator	% Ownership	Entitled Capacity (MW)	Entitled Energy (MWh)	Capacity Cost (\$/Month)	Energy Cost (\$/MWh)
SEPA	SEPA	SEPA	0	178	0 *	260,937 **	17.69
* Big Rivers contract with SEPA is in force majeure and the energy Big Rivers receives from SEPA is run-of-the-river.							
** The monthly transmission charge from SEPA is \$160,937.							

- 5
6 e.
7 i. - xiii. All the requested unit information is located or can be
8 derived from the information provided on the CD Big Rivers
9 filed May 24, 2012, under a petition for confidential treatment,
10 in response to the May 11, 2012, letter from KIUC's counsel to
11 Big Rivers' counsel.

12
13
14 **Witness)** Robert W. Berry
15

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 11)** *Supply the Company's most recently completed resource*
2 *expansion plan covering the next 30 years or whatever length of time that*
3 *the Company performs its planning based on an IRP process, or whatever*
4 *process that the Company uses to develop a long run expansion plan.*
5 *Provide this electronically in excel format with all formulas intact. This*
6 *spreadsheet should show all calculations. In other words, if there is any*
7 *category such as hydro capacity made up of a set of hydro units that sum*
8 *to a total, provide the breakdown and summation to derive the total. Also,*
9 *if there is a calculation of reserve margin, please provide the calculation*
10 *with all components used in the calculation. For example, the target*
11 *reserve margin, load, capacity (by resource) should all be readily*
12 *identifiable.*

13

14 **Response)** Please see Big Rivers' response to Item 4 of the Sierra Club's Initial
15 Requests for Information for a copy of Big Rivers' most recent IRP. Spreadsheets
16 are not available as the analysis was performed by a consultant for Big Rivers
17 utilizing software that requires purchase of a license.

18

19

20 **Witness)** Robert W. Berry

21

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 12)** *Please provide all models, worksheets, analyses, etc.*
2 *electronically, with all formulas intact that led to the development of the*
3 *results found in Mr. Berry's Exhibits 2 through 6.*

4
5 **Response)** Please see the CD Big Rivers filed April 26, 2012, under a petition for
6 confidential treatment with Big Rivers' response to KIUC's Motion to Dismiss, and
7 the CD's Big Rivers filed May 24, 2012, May 29, 2012, and May 30, 2012, under
8 petitions for confidential treatment, in response to the May 11, 2012, letter from
9 KIUC's counsel to Big Rivers' counsel.

10

11

12 **Witnesses)** Robert W. Berry, Mark A. Hite, William DePriest,
13 Brian J. Azman, and Patrick N. Augustine

14

Case No. 2012-00063

Response to KIUC 1-12

**Witnesses: Robert W. Berry, Mark A. Hite, William DePriest,
Brian J. Azman, and Patrick N. Augustine**

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BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST
RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Item 13)** *Page 13 - Please provide copies of all models and worksheets,*
2 *electronically, with all formulas intact that S&L used to generate the*
3 *"capital and O&M cost estimates used in the compliance study."*

4

5 **Response)** Please see the CD Big Rivers filed May 30, 2012, under a petition for
6 confidential treatment, in response to the May 11, 2012, letter from KIUC's
7 counsel to Big Rivers' counsel.

8

9

10 **Witness)** William DePriest

11

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 14)** *Mr. DePriest mentioned that S&L compiled cost data from*
2 *recent S&L FGD, SCR, and ACI, dry sorbent injection, and other*
3 *comparable projects.*

4

5 *a. Please provide a description of each project the data was*
6 *compiled from.*

7 *b. Please provide the compiled results containing the data*
8 *used in the Big Rivers Study.*

9

10 **Response)**

11 *a. FGD modifications at HMP&L were developed based on the*
12 *existing recirculation pump size and booster fan size along with*
13 *in-house cost databases for similar equipment purchases on past*
14 *projects.*

15 *Replacement of the Wilson FGD was based on a 670MW*
16 *bituminous coal-fired power plant with existing scrubber,*
17 *reagent prep and dewatering system, where the scrubber system*
18 *will be upgraded to a vertical wet FGD system with*
19 *approximately 99% SO₂ removal.*

20 *SCR costs were based on recent project cost data for*
21 *similarly sized bituminous coal-fired units.*

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1 The costs for the Green and Reid natural gas conversions
2 were developed from a similar sized unit co-firing study along
3 with a recent conversion project for a 460MW coal-fired plant in
4 the Southwest.

5 Advanced burners and overfire air costs were developed
6 from a recent low-NOX and overfire air study along with a
7 recent 550MW coal-fired project in the Southwest.

8 Activated carbon injection and dry sorbent injection costs
9 were developed from a recent 550MW coal-fired project in the
10 Southwest.

11 316(b) modification costs were based on past project cost
12 estimates and vendor quotations and adjusted according to
13 intake bay size, quantity and flowrate.

14 CCR modification costs were developed from previous
15 conversion studies and recent past project data at similarly
16 sized coal-fired plants.

17 b. Please see the CD Big Rivers filed May 30, 2012, under a
18 petition for confidential treatment, in response to the May 11,
19 2012, letter from KIUC's counsel to Big Rivers' counsel.

20

21 Witness) William DePriest

22

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 15)** *If not provided in response to the above, please provide the*
2 *analyses, electronically and with all formulas intact, of the*
3 *models/worksheets that were used to calculate costs for each of the*
4 *technology alternatives, and to determine the NPV of each technology over*
5 *a projected 20-year life (See page 13, line 19 of Mr. DePriest's testimony).*

6

7 **Response)** Please see the CD Big Rivers filed May 30, 2012, under a petition for
8 confidential treatment, in response to the May 11, 2012, letter from KIUC's
9 counsel to Big Rivers' counsel.

10

11

12 **Witness)** William DePriest

13

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 16)** *Please provide all economic data provided by Big Rivers to*
2 *S&L (See page 13, line 22 of Mr. DePriest's testimony).*

3

4 **Response)** Economic data provided by Big Rivers to S&L is listed in Exhibit
5 DePriest – 2, Table 1-1.

6

7

8 **Witness)** William DePriest

9

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 17)** *Page 7 (of Mark Hite's Testimony) discusses that Big Rivers*
2 *acquired forward pricing data from PACE Global, which included*
3 *forward hourly energy prices, monthly coal prices, monthly natural gas*
4 *prices, and monthly allowance prices. Please provide all documents,*
5 *memos, letters and emails that went back and forth between PACE Global*
6 *and Big Rivers regarding these analyses, including the engagement letter,*
7 *contract documents, data assumption documents, model result analyses,*
8 *etc.*

9
10 **Response)** Please see the following –

- 11 1. The attached Big Rivers Purchase Order 209973;
- 12 2. The PACE Global proprietary and confidential proposal which is
- 13 provided under a petition for confidential treatment;
- 14 3. The accompanying CDs provided in Big Rivers' response to Item
- 15 36 of these responses;
- 16 4. The Forward Power Price Comparisons graph which is filed
- 17 under a petition for confidential treatment;
- 18 5. The CDs Big Rivers filed April 26, 2012, under a petition for
- 19 confidential treatment, with Big Rivers' response to KIUC's
- 20 Motion to Dismiss; and

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1 6. The CD Big Rivers filed May 29, 2012, under a petition for
2 confidential treatment, in response to the May 11, 2012, letter
3 from KIUC's counsel to Big Rivers' counsel.


4

5 **Witness)** Patrick N. Augustine

6

Big Rivers

ELECTRIC CORPORATION

Your Touchstone Energy[®] Cooperative 

VENDOR: SIEMENS INDUSTRY INC
11601 LILBURN PARK ROAD
ST LOUIS, MO 63146

PURCHASE ORDER

PURCHASE ORDER NO 209973	REVISION 2	PAGE 1
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SHIP TO:
 201 Third Street
 Henderson, KY 42420

BILL TO:
 201 Third Street
 Henderson, KY 42420

VENDOR NO 70141	DELIVER TO	DATE OF ORDER/BUYER 22-FEB-12 Frederick, Dana Leigh	REVISED DATE/BUYER 16-MAR-12 Frederick, Dana Leigh
PAYMENT TERMS 30 NET DAYS		BUYER TELEPHONE/FAX 270-844-6139 888-514-3178	F.O.B DESTINATION
FREIGHT TERMS ALLOWED/INCLUDED		SHIP VIA	VENDOR CONTACT/TELEPHONE (314) 872-1202

ITEM	PART NUMBER/DESCRIPTION	DELIVERY DATE	QUANTITY	UNIT	UNIT PRICE	EXTENSION
------	-------------------------	---------------	----------	------	------------	-----------

Special Instructions: This Purchase Order No. must appear on all invoices, packing lists, cartons and correspondences related to this order


TOTAL

CONTINUED

Dana Leigh Frederick

Big Rivers

ELECTRIC CORPORATION

Your Touchstone Energy Cooperative 

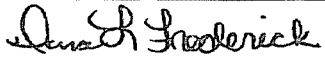
VENDOR: SIEMENS INDUSTRY INC
11601 LILBURN PARK ROAD
ST LOUIS, MO 63146

PURCHASE ORDER

PURCHASE ORDER NO 209973	REVISION 2	PAGE 2
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SHIP TO:
 201 Third Street
 Henderson, KY 42420

BILL TO:
 201 Third Street
 Henderson, KY 42420

VENDOR NO 70141		DELIVER TO		DATE OF ORDER/BUYER 22-FEB-12 Frederick, Dana Leigh		REVISED DATE/BUYER 16-MAR-12 Frederick, Dana Leigh	
PAYMENT TERMS 30 NET DAYS				BUYER TELEPHONE/FAX 270-844-6139 888-514-3178		F.O.B DESTINATION	
FREIGHT TERMS ALLOWED/INCLUDED				SHIP VIA		VENDOR CONTACT/TELEPHONE (314) 872-1202	
ITEM	PART NUMBER/DESCRIPTION	DELIVERY DATE	QUANTITY	UNIT	UNIT PRICE	EXTENSION	
1	PACE GLOBAL - EVALUATION OPTIONS TO DELAY ENVIRONMENTAL RETROFITS SHIP TO: WRIGHT, JOY POWELL	02-DEC-11	22873.75	EACH	\$ 1.00	\$ 22873.75	
2	CHANGE ORDER TO PURCHASE ORDER NO. 209973 TO INCREASE THE EXISTING PURCHASE ORDER BY AN ADDITIONAL \$20,458.75. SHIP TO: KING, VICKIE	24-FEB-12	1	EACH	\$ 20458.75	\$ 20458.75	
3	CHANGE ORDER NO. 2 TO PURCHASE ORDER NO. 209973 TO INCREASE THE AMOUNT BY \$20,000 SHIP TO: KING, VICKIE QUESTIONS / REPLIES CONCERNING THIS DOCUMENT SHOULD BE DIRECTED TO: DANA FREDERICK - HEADQUARTERS PHONE (270) 844-6139 FAX (888) 514-3178 EMAIL: DANA.FREDERICK@BIGRIVERS.COM	16-MAR-12	20000	EACH	\$ 1.00	\$ 20000.00	
TOTAL						\$ 63,332.50	
							

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 18)** *Provide copies of all models and spreadsheets developed*
2 *containing input assumptions and output results. Provide these*
3 *electronically, with all formulas intact.*

4

5 **Response)** Please see the CD Big Rivers filed May 29, 2012, under a petition for
6 confidential treatment, in response to the May 11, 2012, letter from KIUC's
7 counsel to Big Rivers' counsel.

8

9

10 **Witness)** Patrick N. Augustine

11

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 19)** *Provide copies of all written reports, memos, emails or*
2 *documents of any type that PACE Global produced regarding this project,*
3 *as well as any that Big Rivers produced related to the analyses that PACE*
4 *Global performed.*

5

6 **Response)** Please see Big Rivers' response to Item 17 of these responses.

7

8

9 **Witness)** Patrick N. Augustine

10

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 20)** *Page 8 (of Mark Hite's Testimony) discusses that Big Rivers*
2 *received production cost results from ACES Power Marketing. Please*
3 *provide all documents, memos, letters and emails that went back and*
4 *forth between ACES and Big Rivers regarding these analyses, including*
5 *the engagement letter, contract documents, data assumption documents,*
6 *model result analyses, etc.*

7

8 **Response)** Big Rivers is a member of ACES Power Marketing ("ACES") and the
9 bilateral agreement includes ongoing portfolio modeling services. There is no
10 specific engagement letter for this project. Please see Big Rivers' response to
11 Item 4 of these responses.

12

13

14 **Witness)** Brian J. Azman and Robert W. Berry

15

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 21)** *Provide copies of all models and spreadsheets developed*
2 *containing input assumptions and output results. Provide these*
3 *electronically, with all formulas intact.*

4
5 **Response)** Please see the CD containing the planning models prepared by ACES
6 filed May 24, 2012, under a petition for confidential treatment, in response to the
7 May 11, 2012, letter from KIUC's counsel to Big Rivers' counsel, and the letter
8 dated May 18, 2012, from John Sturm to Roger Hickman explaining the files on
9 the confidential CD, which is attached to Big Rivers' response to Item 26b of the
10 Commission Staff's First Request for Information.

11

12

13 **Witnesses)** Brian J. Azman

14

BIG RIVERS ELECTRIC CORPORATION

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**Response to the Kentucky Industrial Utility Customers'
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1 **Item 22)** *Provide copies of all written reports, memos, emails or*
2 *documentation of any type that either ACES or PACE Global produced*
3 *regarding this project, as well as any that Big Rivers produced related to*
4 *the analyses that either ACES or PACE Global performed.*

5

6 **Response)** Please see Big Rivers' responses to Items 4 and 17 of these
7 responses.

8

9 **Witnesses)** Brian J. Azman and Patrick N. Augustine

10

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 23)** *Please identify the production cost model used, and provide*
2 *the Documentation Manual for whatever production cost model ACES*
3 *used in its production cost runs.*

4

5 **Response)** Please see Item 24 of these responses.

6

7

8 **Witness)** Brian J. Azman

9

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 24)** *Please explain the process by which parties would have to go*
2 *through to acquire the ACES model used, and the costs associated with*
3 *acquiring the model, and what alternatives exist in case parties would*
4 *like to run alternative analyses.*

5

6 **Response)** Please see the email attached hereto.

7

8

9 **Witness)** Brian J. Azman

10

Jim Miller

From: Jim Miller
Sent: Friday, May 18, 2012 3:34 PM
To: 'Michael Kurtz'
Cc: 'dbrown@stites.com'; 'Hans, Jennifer (KYOAG)'; 'Howard, Dennis (KYOAG)'; 'Cook, Larry (KYOAG)'; 'joe@jchilderslaw.com'; 'Joe Childers (childerslaw@yahoo.com)'; 'kristin.henry@sierraclub.org'; 'Nguyen, Quang D (PSC)'; 'Burns, Faith (PSC)'; Kurt Boehm; Tyson Kamuf
Subject: RE: KIUC correspondence to BREC, Docket No. 2012-00063

Mike:

We have been working since receiving your message of last week to assemble the information you requested. At this point we can provide the following information about access to the models employed by Big Rivers' consultants in conducting their analyses. The data compilation of all input files, output files, assumptions, and other requested data is underway.

Response from ACES Power Marketing ("APM")

APM used the Ventyx Planning and RISK model. We understand that its license agreements indicate that it cannot release the licensed software or any proprietary Ventyx information. KIUC may contact Ventyx and request the cost and installation requirement by calling Julie Albright at 832-553-0880.

Response from Pace Global

The model used by Pace Global is a product of EPIS, Inc. called AuroraXMP, commonly referred to as Aurora. Aurora is an hourly merit-order dispatch simulator that calculates hourly dispatch for integrated grid operations. A license is required to use the Aurora model. Pace Global's contact at EPIS is Deborah Austin Smith.
http://epis.com/aurora_xmp/power_forecasting.php. Their formal contact address is EPIS, Inc., 1800 Blankenship Road Suite 350, West Linn, OR 97068. Phone: (503) 722-2023.

In addition, Pace Global has made several proprietary modifications to the leased Aurora model in order to enhance and improve its inherent capabilities. These modifications are confidential and proprietary, however, they can be leased from Pace Global in order to facilitate a simulation by a third party for their exclusive internal use. Licensing restrictions are based on the intended use, distribution, and access requirements of the user. To facilitate use of Aurora, Pace Global can provide input data tables in Aurora database format if necessary.

Pace Global can provide documentation and instructions on the use of its proprietary modifications to the Aurora model should third parties wish to license it. The Aurora model contains integrated instructions documentation for licensed users and can be obtained directly from the Licensor, EPIS. The contact at PACE Global is Christian Whitaker, Christian.Whitaker@PaceGlobal.com, (703) 227-1036.

Response from Sargent & Lundy

Sargent & Lundy tells us that their model is an Excel spreadsheet that can be provided without licensing.

We would expect to provide most of the production input data under a petition for confidential treatment. I think we already have confidentiality coverage for several members of the KIUC and Attorney General teams, and I have e-mailed the form of confidentiality

5/24/2012

agreement to Joe Childers for Sierra Club and Ben Taylor.

Jim

James M. Miller
Sullivan, Mountjoy, Stainback & Miller, P.S.C.
100 St. Ann Street
P.O. Box 727
Owensboro, KY 42302-0727
Telephone (270) 926-4000
Direct Dial (270) 691-1640
Fax (270) 683-6694

CONFIDENTIALITY STATEMENT:

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1 **Item 25)** *Please explain why this production cost model was selected.*

2

3 **Response)** ACES selected our model because it accounts for interaction between
4 plant dispatch of all fuel types based on power market prices. ACES' model
5 should actually be referred to as a "planning model" with the chief difference being
6 that traditional production cost models may not adequately reflect market
7 interaction between dispatching generation units versus buying power from the
8 market instead. ACES' planning model accounts for such interaction when
9 creating a least cost solution. ACES' model also has the ability to be run to show
10 *risks* in cost-to-serve. ACES performed a survey of available software in 2009 and
11 migrated to Planning and Risk in 2010. The primary selection criteria were the
12 ability to model both dispatching against market prices (as in an Independent
13 System Operator) and dispatching to load, the ability to model Imbalance Markets
14 (like Southwest Power Pool), the ability to model hydro and wind generation
15 stochastically, ease of data entry, how quickly the model calculates a solution, and
16 ease of taking model data and creating graphs/table for reporting. Note that not
17 all these features were relevant to the 15-year runs for this study.

18

19

20 **Witness)** Brian J. Azman

21

BIG RIVERS ELECTRIC CORPORATION

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1 **Item 26)** *Please discuss why an optimal resource plan analysis was not*
2 *conducted that would have evaluated more options including the*
3 *potential retirement of the coal units being upgraded, conversion to gas,*
4 *or replacement with combined cycle resources.*

5
6 **Response)** Because of the significant number of generating units involved and
7 the significant unamortized plant balance of the coal units that are being
8 upgraded, retirement of the coal plants or converting them to natural gas would
9 result in the need to recover, through rates, the unamortized plant balances of the
10 coal plants in addition to any costs of converting the plants to natural gas. Big
11 Rivers believed that this cost could be avoided by pursuing upgrades that would
12 control emissions and comply with EPA regulations for an average cost of about
13 \$169 per kW compared to an overnight installed cost of \$626 per kW for an
14 advanced combustion turbine and \$917 per kW for a new combined cycle unit
15 (Assumptions to the Annual Energy Outlook for 2011, DOE EIA, p. 97; see
16 attached). These differences were so large that Big Rivers did not consider it
17 necessary to evaluate the option of retiring coal plants or converting them to
18 natural gas.

19

20

21 **Witness)** Robert W. Berry

22

Table 8.2 Cost and performance characteristics of new central station electricity generating technologies

Technology	Online Year ¹	Size (mW)	Lead time (years)	Base	Contingency Factors		Total	Variable O&M ⁵ (2009 \$/MWh)	Fixed O&M (2009\$/kW)	Heatrate ⁶ (Btu/kWhr)	nth-of-a-kind Heatrate (Btu/kWhr)
				Overnight Cost in 2010 (2009 \$/kW)	Project Contingency Factor ²	Technological Optimism Factor ³	Overnight Cost in 2010 ⁴ (2009 \$/kW)				
Scrubbed Coal New ⁷	2014	1300	4	2,625	1.07	1.00	2,809	4.20	29.31	8,800	8,740
Integrated Coal-Gasification Comb Cycle (IGCC) ⁷	2014	1200	4	2,974	1.07	1.00	3,182	6.79	58.52	8,700	7,450
IGCC with carbon sequestration	2016	520	4	4,797	1.07	1.03	5,287	8.83	68.47	10,700	8,307
Conv Gas/Oil Comb Cycle	2013	540	3	921	1.05	1.00	967	3.37	14.22	7,050	6,800
Adv Gas/Oil Comb Cycle (CC)	2013	400	3	917	1.08	1.00	991	3.07	14.44	6,430	6,333
Adv CC with carbon sequestration	2016	340	3	1,813	1.08	1.04	2,036	6.37	29.89	7,525	7,493
Conv Comb Turbine ⁸	2012	85	2	916	1.05	1.00	961	8.15	9.75	10,745	10,450
Adv Comb Turbine	2012	210	2	626	1.05	1.00	658	6.90	14.52	9,750	8,550
Fuel Cells	2013	10	3	5,846	1.05	1.10	6,752	0.00	345.80	9,500	6,960
Adv Nuclear	2016	2236	6	4,567	1.10	1.05	5,275	2.00	87.69	10,453	10,453
Distributed Generation - Base	2013	2	3	1,349	1.05	1.00	1,416	7.37	16.58	9,050	8,900
Distributed Generation - Peak	2012	1	2	1,620	1.05	1.00	1,701	7.37	16.58	10,069	9,880
Biomass	2014	50	4	3,395	1.07	1.02	3,724	6.94	99.30	13,500	13,500
Geothermal ^{7,9}	2011	50	4	2,364	1.05	1.00	2,482	9.52	107.27	30,000	30,000
MSW - Landfill Gas	2011	50	3	7,698	1.07	1.00	8,237	8.23	369.28	13,648	13,648
Conventional Hydropower ⁹	2014	500	4	2,019	1.10	1.00	2,221	2.42	13.55	9,854	9,854
Wind	2011	100	3	2,251	1.07	1.00	2,409	0.00	27.73	9,854	9,854
Wind Offshore	2014	400	4	4,404	1.10	1.25	6,056	0.00	86.98	9,854	9,854
Solar Thermal ⁷	2013	100	3	4,333	1.07	1.00	4,636	0.00	63.23	9,854	9,854
Photovoltaic ^{7,10}	2012	150	2	4,474	1.05	1.00	4,697	0.00	25.73	9,854	9,854

¹Online year represents the first year that a new unit could be completed, given an order date of 2010. For wind, geothermal and landfill gas, the online year was moved earlier to acknowledge the significant market activity already occurring in anticipation of the expiration of the Production Tax Credit.

²A contingency allowance is defined by the American Association of Cost Engineers as the "specific provision for unforeseeable elements of costs within a defined project scope; particularly important where previous experience has shown that unforeseeable events which will increase costs are likely to occur"

³The technological optimism factor is applied to the first four units of a new, unproven design, it reflects the demonstrated tendency to underestimate actual costs for a first-of-a-kind unit.

⁴Overnight capital cost including contingency factors, excluding regional multipliers and learning effects. Interest charges are also excluded. These represent costs of new projects initiated in 2010

⁵O&M = Operations and maintenance

⁶For hydro, wind, and solar technologies, the heatrate shown represents the average heatrate for conventional thermal generation as of 2009. This is used for purposes of calculating primary energy consumption displaced for these resources, and does not imply an estimate of their actual energy conversion efficiency.

⁷Capital costs are shown before investment tax credits are applied.

⁸Combustion turbine units can be built by the model prior to 2012 if necessary to meet a given region's reserve margin

⁹Because geothermal and hydro cost and performance characteristics are specific for each site, the table entries represent the cost of the least expensive plant that could be built in the Northwest Power Pool region, where most of the proposed sites are located

¹⁰Costs and capacities are expressed in terms of net AC power available to the grid for the installed capacity.

Sources: For the AEO2011 cycle, EIA commissioned an external consultant to develop current cost estimates for utility-scale electric generating plants. This report can be found at http://www.eia.gov/oiaf/beck_plantcosts/index.html. Site specific costs for geothermal were provided by the National Energy Renewable Laboratory, "Updated U.S. Geothermal Supply Curve", February 2010

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1 **Item 27)** *Please identify the models used by Pace Global, and provide*
2 *the Documentation Manuals for all of the models that Pace Global used in*
3 *its analyses.*

4

5 **Response)** Please see the attachment provided in Item 24 of these responses.

6

7

8 **Witness)** Patrick N. Augustine

9

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1 **Item 28)** *Please explain the process by which parties would have to go*
2 *through to acquire the models Pace Global used, and the costs associated*
3 *with acquiring the model, and what options exist in case parties or the*
4 *Commission would like to run alternative analyses.*

5

6 **Response)** Please see the attachment to the response of Big Rivers to Item 24 of
7 these responses.

8

9

10 **Witness)** Patrick N. Augustine

11

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1 **Item 29)** *Please explain why these models were selected by Pace Global*
2 *to be used in this analysis.*

3

4 **Response)** PACE Global deploys the AURORAxmp dispatch model with a set of
5 proprietary enhancements for all core power market analysis work throughout the
6 United States. The dispatch tool is widely accepted throughout the industry, and
7 PACE Global has deployed the modeling system over the last ten years in
8 hundreds of power market assessments for electric utilities, industrial companies,
9 power developers, investors, and financial institutions. Our proprietary risk-
10 integrated analysis approach has been developed over the last five to seven years
11 within the AURORAxmp tool and is fundamental to our approach to power
12 market analysis. We have calibrated the modeling system for use in all NERC
13 regions and Independent System Operator zones throughout the U.S. and
14 regularly use the tool for MISO power market price projections.

15

16

17 **Witness)** Patrick N. Augustine

18

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1 **Item 30)** *Please explain what sensitivity analyses, other than the two*
2 *loss of Smelter load scenarios, were performed. Please provide*
3 *justification for why these sensitivity analyses were performed, and if none*
4 *were performed other than the loss of Smelter load scenarios, please*
5 *explain why not.*

6

7 **Response)** Please see Big Rivers' response to Item 26 of the Commission Staff's
8 First Request for Information.

9

10

11 **Witness)** Robert W. Berry

12

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1 **Item 31)** *Please explain why Big Rivers provided so little explanation of*
2 *the production cost analyses that were performed, and why the Chief*
3 *Financial Officer was selected to provide such a brief discussion of this*
4 *topic.*

5
6 **Response)** In an effort to keep costs to customers as low as possible, Big Rivers
7 outsources its production cost modeling to ACES. Big Rivers does not maintain a
8 large staff of employees for performing production cost modeling as part of their
9 routine duties. The interim Chief Financial Officer and Vice President of
10 Accounting included the results of the production cost modeling that was done by
11 ACES in his testimony because the results of the production cost models were
12 used as an input to the financial modeling about which he is testifying.

13
14
15 **Witness)** Robert W. Berry
16

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1 **Item 32)** *Please discuss in detail the process by which Big Rivers*
2 *developed its input assumptions that were used in its production cost*
3 *analyses and in the development of forward price assumptions.*

4

5 **Response)** Big Rivers developed its input assumptions for the production cost
6 modeling in a manner consistent with those employed in its routine business
7 planning and Integrated Resource Plan activities. The inputs are primarily
8 composed of generating plant operating characteristics which reflect the physical
9 attributes of the facilities. Big Rivers relied upon ACES and PACE Global for the
10 input assumptions surrounding commodity prices (including emission allowances,
11 fuel, and wholesale energy market pricing). These are provided and further
12 described in the CDs Big Rivers filed May 24, 2012, May 29, 2012, and May 30,
13 2012, under petitions for confidential treatment, in response to the May 11, 2012,
14 letter from KIUC's counsel to Big Rivers' counsel.

15

16

17 **Witness)** Mark A. Hite

18

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1 **Item 33)** *What process was used to ensure that the assumptions that*
2 *were used by ACES in its production cost modeling analyses, and the*
3 *assumptions that were used by PACE Global were consistent, and provide*
4 *a comparison of the assumptions that were used in both of the analyses.*

5
6 **Response)** First, it is important to note that Big Rivers did not retain ACES and
7 PACE Global to perform analyses of the same size and scope, so it is not necessary
8 to ensure that all assumptions are consistent. As a member of ACES, Big Rivers
9 has an annual bilateral agreement with ACES under which ACES provides a wide
10 array of services to Big Rivers, including the production cost modeling for the
11 multiple scenarios analyzed in the development of this filing. This also includes
12 the development of energy prices for use in the production cost modeling.

13 At the same time, Big Rivers recognized the value of having an
14 independent third party with the expertise and knowledge to provide forward
15 price curves for power, natural gas, emission allowances and fuel, to use in the
16 production cost models. For this reason, Big Rivers retained PACE Global to
17 provide these price forecasts.

18 Because both ACES and PACE Global have independent methods for
19 developing their forward price curves, and because that independence is one of the
20 reasons Big Rivers sought price information from both of these entities, Big Rivers
21 did not place constraints on either entity's assumptions, nor did Big Rivers initiate
22 a process to compare the detailed assumptions that each relied on to develop its

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1 price forecast information. Instead, Big Rivers compared the general methods
2 used by each entity and the resultant price curves that each entity provided.

3 For comparison purposes, the PACE Global prices were derived from
4 a proprietary stochastic model they use to provide this type of information for
5 multiple entities across the United States. The ACES price curves are derived
6 from the current market offers for the first three to five years and then rely on
7 Wood Mackenzie Consulting for all years beyond a five year time frame.

8 After Big Rivers obtained the forward power prices from these two
9 entities, it was obvious that there were some significant differences between the
10 two projections. In an attempt to better understand the differences, Big Rivers
11 acquired a third set of forward price curves from IHS Global. Please see the
12 confidential Forward Power Price Comparisons graph provided in the response to
13 Item 17.

14
15
16 **Witness)** Robert W. Berry
17

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1 **Item 34)** *Please describe the manner in which the results developed by*
2 *PACE Global were incorporated in the production cost analysis that ACES*
3 *performed.*

4
5 **Response)** PACE Global's nominal energy market prices were used for
6 generation dispatch within the ACES' planning model to create a least cost
7 solution by simulating generation input costs against hourly power markets. Big
8 Rivers provided natural gas, power, and emission allowance market prices from
9 the PACE Global study.

10

11

12 **Witness)** Brian J. Azman

13

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1 **Item 35)** *Please provide the results electronically with all formulas*
2 *intact as provided to ACES by PACE Global.*

3

4 **Response)** Please see the CD Big Rivers filed May 24, 2012, under a petition for
5 confidential treatment, in response to the May 11, 2012, letter from KIUC's
6 counsel to Big Rivers' counsel.

7

8

9 **Witness)** Brian J. Azman

10

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1 **Item 36)** *Please provide a copy of all emails, documents or memos*
2 *prepared, sent, issued or received during the last six months by Mr. Bailey,*
3 *Mr. Blackburn, Mr. Berry, Mr. Shaw or Mr. Hite and/or any of the General*
4 *Managers of any of the three member cooperatives regarding Big Rivers'*
5 *plan for compliance with federal environmental laws and regulations*
6 *including, but not limited to, considerations of the "build", "partial build"*
7 *and "buy" options referenced on page 6 of Mr. Hite's Direct Testimony.*

8

9 **Response)** Please see the CDs accompanying these responses, and the
10 documents contained on an additional CD accompanying these responses, and
11 which is filed under a petition for confidential treatment. Information protected
12 by the attorney/client and work product privileges are not provided.

13

14

15 **Witness)** Robert W. Berry

16

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1 **Item 37)** *Please provide all workpapers and/or preliminary model runs*
2 *associated with the “build”, “partial build” and “buy” options referenced*
3 *on page 6 of Mr. Hite’s Direct Testimony including, but not limited to,*
4 *documents and/or data associated with other environmental compliance*
5 *options considered by Big Rivers, but not discussed in Mr. Hite’s Direct*
6 *Testimony.*

7

8 **Response)** Please see the CDs Big Rivers filed May 29, 2012, and May 30, 2012,
9 under petitions for confidential treatment, in response to the May 11, 2012, letter
10 from KIUC’s counsel to Big Rivers’ counsel. S&L considered a variety of
11 technology approaches to comply with CSAPR and MATS as part of the build
12 scenario. These options are discussed in Sections 3, 4 and 5 of DePriest Exhibit 2.

13

14

15 **Witnesses)** Mark A. Hite, Robert W. Berry, and William DePriest

16

17

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1 **Item 38)** *Please provide a copy of all emails, documents or memos*
2 *prepared, sent, issued or received during the last two years by Mr. Bailey,*
3 *Mr. Blackburn, Mr. Berry, Mr. Shaw or Mr. Hite and/or any of the General*
4 *Managers of any of the three member cooperatives regarding Big Rivers'*
5 *business plan in the event that one or both of the Smelters gives notice*
6 *that they intend to cease operations on the Big Rivers' system.*

7

8 **Response)** Please see the CDs provided by Big Rivers in response to Item 36 of
9 these responses and the draft version of the Load Concentration Analysis and
10 Mitigation Plan provided by Big Rivers in response to Item 26 of the Commission
11 Staff's First Request for Information, and which was filed under a petition for
12 confidential treatment.

13

14

15 **Witness)** Robert W. Berry

16

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1 **Item 39)** *Please provide a copy of all emails, documents or memos*
2 *prepared, sent, issued or received during the last two years by Mr. Bailey,*
3 *Mr. Blackburn, Mr. Berry, Mr. Shaw or Mr. Hite and/or any of the General*
4 *Managers of any of the three member cooperatives regarding*
5 *consideration of mergers with another utility, the sale of Big Rivers to a*
6 *third party, or the sale of any of Big Rivers' generating units.*

7

8 **Response)** Big Rivers has no correspondence regarding consideration of mergers
9 with another utility, the sale of Big Rivers to a third party, or the sale of any of
10 Big Rivers' generating units during the last two years. The draft version of the
11 Load Concentration Analysis and Mitigation Plan provided by Big Rivers in
12 response to Item 26 of the Commission Staff's First Request for Information, and
13 which was filed under a petition for confidential treatment, includes a brief
14 discussion regarding these topics.

15

16

17 **Witness)** Robert W. Berry

18

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1 **Item 40)** *Please provide a list of all entities that Big Rivers has entered*
2 *a confidentiality agreement with in the last two years.*

3

4 **Response)** Big Rivers objects to this request on the grounds that it is overly
5 broad, unduly burdensome, and seeks information that is not relevant to this
6 proceeding.

7

8

9 **Witness)** Counsel

10

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1 **Item 41)** *Please provide a copy of all presentations during the last two*
2 *years made by the Company and/or its outside advisors to the Big Rivers*
3 *Board of Directors regarding the potential financial impact of existing or*
4 *proposed environmental regulations.*

5

6 **Response)** Please see the documents provided in the response to Item 43 of
7 these responses.

8

9

10 **Witness)** Robert W. Berry

11

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1 **Item 42)** *Please provide a copy of all presentations that the Company*
2 *has made or plans to make to the “various institutional investors”*
3 *referenced on page 15 of Mr. Hite’s Direct Testimony.*

4

5 **Response)** Big Rivers has not yet developed the presentation that it will make to
6 institutional investors as described on page 15 of my testimony. Big Rivers plans
7 to first complete and submit an RUS loan application to finance its 2012
8 Environmental Compliance Plan and assess the likelihood of being approved for
9 such FFB borrowing.

10

11

12 **Witness)** Mark A. Hite

13

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1 **Item 43)** *Please provide a copy of all minutes from the Company's*
2 *Board of Directors meetings since January 2010 through the most recent*
3 *month available. This is a continuing request and the response should be*
4 *supplemented as each additional month is available.*

5

6 **Response)** Big Rivers objects to this request on the grounds that it is overly
7 broad and seeks information that is irrelevant to this proceeding. Without
8 waiving this objection, Big Rivers provides the attached minutes, presentations,
9 and attachments from Big Rivers' Board of Directors meetings from January 2010
10 through May 2012 on the CDs accompanying these responses. Information not
11 relevant to this proceeding has been redacted from the minutes.

12

13

14 **Witness)** Robert W. Berry

15

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1 **Item 44)** *Please provide the current balance (as of April 2012 or May*
2 *2012, if available) in the Economic Reserve Fund and the Rural Economic*
3 *Reserve ("RER") fund. This should be considered a continuing request*
4 *and updates should be provided monthly as actual information for each*
5 *succeeding month is available.*

6

7 **Response)** As of April 30, 2012, the balance in the Economic Reserve fund
8 account is \$93,878,033.55. As of April 30, 2012, the balance in the Rural
9 Economic Reserve (RER) fund account is \$63,887,762.11.

10

11

12 **Witness)** Mark A. Hite

13

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1 **Item 45)** *Please provide the Company's projections of the balances in*
2 *the Economic Reserve Fund and the Rural Economic Reserve Fund for*
3 *each month during the remainder of 2012 (after the most recent month for*
4 *which actual information was provided in response to the preceding*
5 *question), and for each month during 2013 and subsequent years. Provide*
6 *all assumptions, data, and computations, including all electronic*
7 *spreadsheets with formulas intact.*

8

9 **Response)** Please see the table entitled "Estimated Economic Reserve and Rural
10 Economic Reserve Draw Schedules Based on Build Case Financial Model". They
11 utilize the April 2012 actual balance for the Economic Reserve and Rural
12 Economic Reserve, the projected withdraw amounts from the "Build Case"
13 financial model scenario, and projected interest rates from the "Build Case"
14 financial model scenario to produce a projected Economic Reserve and Rural
15 Economic Reserve draw schedule.

16

17

18 **Witness)** Mark A. Hite

19

Big Rivers Electric Corporation

Case No. 2012-00063

**Estimated Economic Reserve and Rural Economic Reserve Draw
Schedules**

Based on Build Case Financial Model

	Economic Reserve			
	Beg. Bal.	Interest	Withdraws	Ending Bal.
		0.72%		
Apr-12				93,878,034
May-12	93,878,034	56,327	(2,148,990)	91,785,371
Jun-12	91,785,371	55,071	(2,937,974)	88,902,468
Jul-12	88,902,468	53,341	(2,814,379)	86,141,431
Aug-12	86,141,431	51,685	(2,643,940)	83,549,175
Sep-12	83,549,175	50,130	(1,938,364)	81,660,941
Oct-12	81,660,941	48,997	(1,677,784)	80,032,153
Nov-12	80,032,153	48,019	(2,007,141)	78,073,032
Dec-12	78,073,032	46,844	(2,751,976)	75,367,900
Jan-13	75,367,900	45,221	(3,054,054)	72,359,066
Feb-13	72,359,066	43,415	(2,545,941)	69,856,541
Mar-13	69,856,541	41,914	(2,352,182)	67,546,273
Apr-13	67,546,273	40,528	(1,735,089)	65,851,711
May-13	65,851,711	39,511	(1,965,639)	63,925,583
Jun-13	63,925,583	38,355	(2,639,853)	61,324,086
Jul-13	61,324,086	36,794	(2,837,557)	58,523,323
Aug-13	58,523,323	35,114	(2,735,836)	55,822,601
Sep-13	55,822,601	33,494	(1,915,578)	53,940,517
Oct-13	53,940,517	32,364	(1,567,656)	52,405,225
Nov-13	52,405,225	31,443	(2,010,664)	50,426,004
Dec-13	50,426,004	30,256	(2,914,792)	47,541,468
Jan-14	47,541,468	28,525	(2,254,302)	45,315,691
Feb-14	45,315,691	27,189	(2,254,302)	43,088,578
Mar-14	43,088,578	25,853	(2,254,302)	40,860,129
Apr-14	40,860,129	24,516	(2,254,302)	38,630,343
May-14	38,630,343	23,178	(2,254,302)	36,399,220
Jun-14	36,399,220	21,840	(2,254,302)	34,166,757
Jul-14	34,166,757	20,500	(2,254,302)	31,932,955
Aug-14	31,932,955	19,160	(2,254,302)	29,697,813
Sep-14	29,697,813	17,819	(2,254,302)	27,461,330
Oct-14	27,461,330	16,477	(2,254,302)	25,223,504
Nov-14	25,223,504	15,134	(2,254,302)	22,984,337
Dec-14	22,984,337	13,791	(2,254,302)	20,743,825
Jan-15	20,743,825	12,446	(2,444,486)	18,311,785

Big Rivers Electric Corporation

Case No. 2012-00063

Estimated Economic Reserve and Rural Economic Reserve Draw Schedules

Based on Build Case Financial Model

	Rural Economic Reserve			
	Beg. Bal.	Interest	Withdraws	Ending Bal.
		1.84%		
Apr-12				63,887,762
May-12	63,887,762	97,961		63,985,723
Jun-12	63,985,723	98,111		64,083,835
Jul-12	64,083,835	98,262		64,182,097
Aug-12	64,182,097	98,413		64,280,509
Sep-12	64,280,509	98,563		64,379,073
Oct-12	64,379,073	98,715		64,477,787
Nov-12	64,477,787	98,866		64,576,653
Dec-12	64,576,653	99,018		64,675,671
Jan-13	64,675,671	99,169		64,774,840
Feb-13	64,774,840	99,321		64,874,161
Mar-13	64,874,161	99,474		64,973,635
Apr-13	64,973,635	99,626		65,073,261
May-13	65,073,261	99,779		65,173,040
Jun-13	65,173,040	99,932		65,272,972
Jul-13	65,272,972	100,085		65,373,058
Aug-13	65,373,058	100,239		65,473,296
Sep-13	65,473,296	100,392		65,573,689
Oct-13	65,573,689	100,546		65,674,235
Nov-13	65,674,235	100,700		65,774,935
Dec-13	65,774,935	100,855		65,875,790
Jan-14	65,875,790	101,010		65,976,800
Feb-14	65,976,800	101,164		66,077,964
Mar-14	66,077,964	101,320		66,179,284
Apr-14	66,179,284	101,475		66,280,759
May-14	66,280,759	101,630		66,382,389
Jun-14	66,382,389	101,786		66,484,176
Jul-14	66,484,176	101,942		66,586,118
Aug-14	66,586,118	102,099		66,688,217
Sep-14	66,688,217	102,255		66,790,472
Oct-14	66,790,472	102,412		66,892,884
Nov-14	66,892,884	102,569		66,995,453
Dec-14	66,995,453	102,726		67,098,179
Jan-15	67,098,179	102,884		67,201,063

Big Rivers Electric Corporation

Case No. 2012-00063

**Estimated Economic Reserve and Rural Economic Reserve Draw
Schedules**

Based on Build Case Financial Model

	Economic Reserve			
	Beg. Bal.	Interest	Withdraws	Ending Bal.
		0.72%		
Feb-15	18,311,785	10,987	(2,444,486)	15,878,287
Mar-15	15,878,287	9,527	(2,444,486)	13,443,327
Apr-15	13,443,327	8,066	(2,444,486)	11,006,907
May-15	11,006,907	6,604	(2,444,486)	8,569,026
Jun-15	8,569,026	5,141	(2,444,486)	6,129,681
Jul-15	6,129,681	3,678	(2,444,486)	3,688,873
Aug-15	3,688,873	2,213	(2,444,486)	1,246,600
Sep-15	1,246,600	748	(1,247,348)	0
Oct-15	0	0		0
Nov-15	0	0		0
Dec-15	0	0		0
Jan-16	0	0		0
Feb-16	0	0		0
Mar-16	0	0		0
Apr-16	0	0		0
May-16	0	0		0
Jun-16	0	0		0
Jul-16	0	0		0
Aug-16	0	0		0
Sep-16	0	0		0
Oct-16	0	0		0
Nov-16	0	0		0
Dec-16	0	0		0
Jan-17	0	0		0
Feb-17	0	0		0
Mar-17	0	0		0
Apr-17	0	0		0
May-17	0	0		0
Jun-17	0	0		0
Jul-17	0	0		0
Aug-17	0	0		0
Sep-17	0	0		0
Oct-17	0	0		0
Nov-17	0	0		0

Big Rivers Electric Corporation

Case No. 2012-00063

Estimated Economic Reserve and Rural Economic Reserve Draw Schedules

Based on Build Case Financial Model

	Rural Economic Reserve			
	Beg. Bal.	Interest	Withdraws	Ending Bal.
		1.84%		
Feb-15	67,201,063	103,042		67,304,105
Mar-15	67,304,105	103,200		67,407,305
Apr-15	67,407,305	103,358		67,510,662
May-15	67,510,662	103,516		67,614,179
Jun-15	67,614,179	103,675		67,717,854
Jul-15	67,717,854	103,834		67,821,688
Aug-15	67,821,688	103,993		67,925,681
Sep-15	67,925,681	104,153	(514,096)	67,515,738
Oct-15	67,515,738	103,524	(1,761,444)	65,857,818
Nov-15	65,857,818	100,982	(1,761,444)	64,197,356
Dec-15	64,197,356	98,436	(1,761,444)	62,534,348
Jan-16	62,534,348	95,886	(2,458,407)	60,171,827
Feb-16	60,171,827	92,263	(2,458,407)	57,805,683
Mar-16	57,805,683	88,635	(2,458,407)	55,435,912
Apr-16	55,435,912	85,002	(2,458,407)	53,062,507
May-16	53,062,507	81,363	(2,458,407)	50,685,462
Jun-16	50,685,462	77,718	(2,458,407)	48,304,773
Jul-16	48,304,773	74,067	(2,458,407)	45,920,433
Aug-16	45,920,433	70,411	(2,458,407)	43,532,438
Sep-16	43,532,438	66,750	(2,458,407)	41,140,780
Oct-16	41,140,780	63,083	(2,458,407)	38,745,456
Nov-16	38,745,456	59,410	(2,458,407)	36,346,459
Dec-16	36,346,459	55,731	(2,458,407)	33,943,783
Jan-17	33,943,783	52,047	(2,384,592)	31,611,238
Feb-17	31,611,238	48,471	(2,384,592)	29,275,116
Mar-17	29,275,116	44,889	(2,384,592)	26,935,412
Apr-17	26,935,412	41,301	(2,384,592)	24,592,121
May-17	24,592,121	37,708	(2,384,592)	22,245,237
Jun-17	22,245,237	34,109	(2,384,592)	19,894,754
Jul-17	19,894,754	30,505	(2,384,592)	17,540,667
Aug-17	17,540,667	26,896	(2,384,592)	15,182,971
Sep-17	15,182,971	23,281	(2,384,592)	12,821,659
Oct-17	12,821,659	19,660	(2,384,592)	10,456,727
Nov-17	10,456,727	16,034	(2,384,592)	8,088,168

Case No. 2012-00063

Attachment for Response to Item KIUC 1-45

Witness: Mark A. Hite

Page 4 of 6

Big Rivers Electric Corporation

Case No. 2012-00063

**Estimated Economic Reserve and Rural Economic Reserve Draw
Schedules**

Based on Build Case Financial Model

	Economic Reserve			
	Beg. Bal.	Interest	Withdraws	Ending Bal.
		0.72%		
Dec-17	0	0		0
Jan-18	0	0		0
Feb-18	0	0		0
Mar-18	0	0		0
Apr-18	0	0		0
May-18	0	0		0
Jun-18	0	0		0
Jul-18	0	0		0
Aug-18	0	0		0
Sep-18	0	0		0
Oct-18	0	0		0
Nov-18	0	0		0
Dec-18	0	0		0

Big Rivers Electric Corporation

Case No. 2012-00063

**Estimated Economic Reserve and Rural Economic Reserve Draw
Schedules**

Based on Build Case Financial Model

	Rural Economic Reserve			
	Beg. Bal.	Interest	Withdraws	Ending Bal.
		1.84%		
Dec-17	8,088,168	12,402	(2,384,592)	5,715,978
Jan-18	5,715,978	8,764	(2,464,225)	3,260,517
Feb-18	3,260,517	4,999	(2,464,225)	801,292
Mar-18	801,292	1,229	(802,520)	0
Apr-18	0	0		0
May-18	0	0		0
Jun-18	0	0		0
Jul-18	0	0		0
Aug-18	0	0		0
Sep-18	0	0		0
Oct-18	0	0		0
Nov-18	0	0		0
Dec-18	0	0		0

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST
RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Item 46)** *In the event that Big Rivers were to fail to achieve the target*
2 *MFIR under its Indenture such that Big Rivers was precluded from*
3 *issuing debt under its Indenture, how would that affect Big Rivers' choice*
4 *of environmental compliance options?*

5

6 **Response)** In the event Big Rivers were unable to issue secured debt under its
7 Indenture for its 2012 Plan due to a failure to achieve the MFIR requirement, Big
8 Rivers would likely immediately (a) initiate an emergency base rate case, (b)
9 pursue the "Buy Case" in the short term, as it is much less capital intensive,
10 requiring a \$58.4 million capital expenditure, and (c) pursue the full "Build Case"
11 at the earliest possible time thereafter (upon achieving the MFIR requirement per
12 the Indenture).

13

14

15 **Witness)** Mark A. Hite

16

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST
RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
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CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Item 47)** *Assume that the interest rate on debt issued by Big Rivers*
2 *would increase due to capital market conditions, a credit downgrade of*
3 *Big Rivers, or any other reason or combination of reasons.*

4
5 **a.** *In the event that the interest rate that Big Rivers would*
6 *incur on debt issued for the purpose of funding capital*
7 *expenditures for environmental compliance were to be*
8 *higher than Big Rivers' official forecasted interest rate of*
9 *5.50%, please indicate how the increased interest rate*
10 *would alter Big Rivers' proposed plan of compliance, if at*
11 *all.*

12
13 **Response)** An increase in the interest rate on debt would not change Big Rivers'
14 opinion that the 2012 Plan is the least cost compliance option.

15
16
17 **Witness)** Mark A. Hite
18

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST
RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
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CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Item 48)** *Please provide a complete copy of all existing contracts*
2 *between Big Rivers and the City of Henderson, Henderson Municipal*
3 *Power and Light, or any other entity related to the City of Henderson.*

4

5 **Response)** Please see the documents provided on the CD accompanying these
6 responses.

7

8

9 **Witness)** Robert W. Berry

10

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST
RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Item 49)** *Please provide all excel spreadsheets (with formulas intact)*
2 *and other workpapers supporting the development of Mr. Wolfram's*
3 *Exhibit Number 6. Include the support for the projected draw down of the*
4 *MRSM and the RER by year by rate schedule.*

5
6 **Response)** Please see the "Base Case" financial model and the "Build Case"
7 financial model provided on the CD Big Rivers filed under a petition for
8 confidential treatment with its response to KIUC's Motion to Dismiss. The rates
9 used in Mr. Wolfram's Exhibit Number 6 come directly from the Stmt's RUS tab in
10 the "Base Case" and "Build Case" financial model scenarios. Support for the
11 projected draw down of the Economic Reserve and Rural Economic Reserve can be
12 found on the Rates tab, lines 142 through 159, of each financial model scenario.

13
14
15
16

Witness) Mark A. Hite

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST
RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
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CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Item 50)** *For each of the years 2012 and 2016, please provide the*
2 *following information in an excel spreadsheet:*

3

4 *a. Total 12 month adjusted revenues, as used in the*
5 *Company's proposed ES Tariff*

6 *b. For each of rate schedules RDS, LIC, QFS and LICX, by*
7 *rate schedule, provide*

8 *i. Base rate revenues*

9 *ii. FAC revenues*

10 *iii. Non-FAC PPA revenues*

11 *iv. Fuel revenues in base rates*

12 *c. For the Smelter rate schedule, provide*

13 *i. Base Fixed Energy revenues*

14 *ii. FAC revenues*

15 *iii. Non-FAC PPA revenues*

16 *iv. Fuel revenues in base rates*

17

18 **Response)** Please see the table, and the electronic version thereof filed on the
19 CD accompanying these responses, which are being filed under a petition for
20 confidential treatment. This information is based on the "Build Case" financial
21 model.

22

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST
RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Witness) Mark A. Hite**

2

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST
RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Item 51)** *For the 12 months ending March 31, 2012 (or the most recent*
2 *12 month period available), please provide the following information in*
3 *an excel spreadsheet:*

- 4
- 5 *a. Total 12 month adjusted revenues, as used in the*
6 *Company's proposed ES Tariff*
- 7 *b. For each of rate schedules RDS, LIC, QFS and LICX, by*
8 *rate schedule, provide*
- 9 *i. Base rate revenues*
10 *ii. FAC revenues*
11 *iii. Non-FAC PPA revenues*
12 *iv. Fuel revenues in base rates*
- 13 *c. For the Smelter rate schedule, provide*
14 *i. Base Fixed Energy revenues*
15 *ii. FAC revenues*
16 *iii. Non-FAC PPA revenues*
17 *iv. Fuel revenues in base rates*
- 18

19 **Response)** Please see the attached table which is also provided on the CD
20 accompanying these responses.

21

22 **Witness)** Mark A. Hite

Big Rivers Electric Corporation
Case No. 2012-00063
Total Adjusted Monthly Revenues

	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11
<u>Rural</u>						
a. i. Base Rate Revenues	\$ 6,756,606	\$ 9,981,180	\$ 11,953,056	\$ 11,022,222	\$ 9,680,758	\$ 7,596,948
ii. FAC Revenues	1,971,290	(218,811)	107,390	282,150	258,146	132,692
iii. Non-FAC PPA Revenues	0	0	0	0	(170,623)	(164,835)
a. Total Adjusted Revenue	\$ 8,727,895	\$ 9,762,370	\$ 12,060,447	\$ 11,304,373	\$ 9,768,282	\$ 7,564,805
b. iv. Fuel Revenues in Base Rates	1,811,127	4,399,754	5,482,672	4,872,912	5,205,758	3,314,439
<u>Large Industrial</u>						
a. i. Base Rate Revenues	\$ 2,639,087	\$ 3,510,201	\$ 3,562,460	\$ 3,570,860	\$ 3,650,645	\$ 3,670,799
ii. FAC Revenues	977,082	(87,306)	35,305	104,223	133,554	71,910
iii. Non-FAC PPA Revenues	0	0	0	0	(88,273)	(89,330)
a. Total Adjusted Revenue	\$ 3,616,169	\$ 3,422,895	\$ 3,597,765	\$ 3,675,083	\$ 3,695,927	\$ 3,653,379
b. iv. Fuel Revenues in Base Rates	897,696	1,755,509	1,802,435	1,799,989	1,774,951	1,796,212
<u>Smelter</u>						
c. i. Base Rate Revenues	\$ 17,126,541	\$ 22,382,495	\$ 23,186,592	\$ 23,137,435	\$ 23,054,263	\$ 24,036,675
ii. FAC Revenues	7,161,684	(611,313)	249,416	735,736	926,713	514,081
iii. Non-FAC PPA Revenues	(795,470)	(613,074)	(27,983)	(835,898)	(268,305)	(339,245)
a. Total Adjusted Revenue	\$ 23,492,756	\$ 21,158,108	\$ 23,408,025	\$ 23,037,273	\$ 23,712,670	\$ 24,211,512
c. iv. Fuel Revenues in Base Rates	\$ 6,579,813	\$ 12,292,021	\$ 12,733,615	\$ 12,706,619	\$ 12,316,161	\$ 12,840,990

Big Rivers Electric Corporation
Case No. 2012-00063
Total Adjusted Monthly Revenues

	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12
Rural						
a. i. Base Rate Revenues	\$ 8,498,961	\$ 10,068,630	\$ 10,987,689	\$ 9,752,009	\$ 8,023,631	\$ 7,546,226
ii. FAC Revenues	(96,489)	217,035	379,313	412,228	492,559	436,532
iii. Non-FAC PPA Revenues	(176,528)	(221,503)	(233,510)	(199,874)	(164,555)	(154,410)
a. Total Adjusted Revenue	\$ 8,225,944	\$ 10,064,162	\$ 11,133,492	\$ 9,964,363	\$ 8,351,634	\$ 7,828,348
b. iv. Fuel Revenues in Base Rates	3,549,556	4,453,898	4,695,317	4,018,984	3,308,808	3,104,817
Large Industrial						
b. i. Base Rate Revenues	\$ 3,347,406	\$ 3,368,714	\$ 3,472,092	\$ 3,480,397	\$ 3,576,195	\$ 3,428,454
ii. FAC Revenues	(42,768)	78,116	134,904	171,204	262,748	234,034
iii. Non-FAC PPA Revenues	(78,244)	(79,724)	(83,049)	(83,010)	(87,779)	(82,783)
a. Total Adjusted Revenue	\$ 3,226,394	\$ 3,367,106	\$ 3,523,947	\$ 3,568,590	\$ 3,751,164	\$ 3,579,705
b. iv. Fuel Revenues in Base Rates	1,573,307	1,603,060	1,669,911	1,669,139	1,765,033	1,664,557
Smelter						
c. i. Base Rate Revenues	\$ 23,581,864	\$ 24,514,119	\$ 24,592,877	\$ 22,966,576	\$ 24,727,605	\$ 23,974,567
ii. FAC Revenues	(342,455)	638,160	1,058,600	1,255,193	1,961,392	1,796,088
iii. Non-FAC PPA Revenues	(45,139)	200,833	(132,716)	(297,575)	(279,479)	352,748
a. Total Adjusted Revenue	\$ 23,194,270	\$ 25,353,112	\$ 25,518,760	\$ 23,924,194	\$ 26,409,517	\$ 26,123,403
c. iv. Fuel Revenues in Base Rates	\$ 12,598,019	\$ 13,096,053	\$ 13,103,851	\$ 12,237,399	\$ 13,175,819	\$ 12,774,621

BIG RIVERS ELECTRIC CORPORATION

**APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST
RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC
CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Item 52)** *Please provide for 2012 and 2016 the Smelter revenue and*
2 *credit amounts for each of the categories 1 through 17 listed on lines 5*
3 *through 21 of page 15 of Mr. Wolfram's testimony in an excel spreadsheet.*

4

5 **Response)** Please see the table, and the electronic version thereof filed on the
6 CD accompanying these responses, which are being filed under a petition for
7 confidential treatment. They detail the Smelter revenue and credit amounts for
8 each of the categories 1 through 17 listed on lines 5 through 21 on page 15 of Mr.
9 Wolfram's testimony, based on the "Build Case" financial model.

10

11

12 **Witness)** Mark A. Hite

13

BIG RIVERS ELECTRIC CORPORATION

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CASE NO. 2012-00063**

**Response to the Kentucky Industrial Utility Customers'
Initial Request for Information
Dated May 21, 2012**

June 1, 2012

1 **Item 53)** *Please provide for the 12 months ending March 31, 2012 (or the*
2 *most recent 12 month period available), the Smelter revenue and credit*
3 *amounts for each of the categories 1 through 17 listed on page 15 of Mr.*
4 *Wolfram's testimony in an excel spreadsheet.*

5

6 **Response)** Please see the attached table which is also provided on the CD
7 accompanying these responses.

8

9 **Witness)** Mark A. Hite

10

Big Rivers Electric Corporation
Case No. 2012-00063
Smelter Revenues and Credits

	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11
1. Supplemental Power	0	0	0	0	0	0
2. Backup Energy Charge	23,052	7,115	7,331	173,946	171,557	184,665
3. Transmission Charge	0	0	0	0	0	0
4. Excess Reactive Demand Charge	0	0	0	0	0	0
5. TIER Adjustment Charge	1,185,776	1,185,776	1,185,776	1,185,776	1,185,776	1,185,776
6. Amortization of Restructuring Amount	0	0	0	0	0	0
7. Rebate	0	0	0	0	0	0
8. Equity Development Credit	0	0	0	0	0	0
9. Surcharge	969,535	945,545	969,535	969,535	945,545	969,535
10. Surplus Sales	(908,320)	(1,198,375)	(1,803,927)	(152,365)	(820,613)	(736,615)
11. Undeliverable Energy Sales	0	0	0	0	0	0
12. Potline Reduction Sales	0	0	0	0	0	0
13. Curtailment of Purchased Power	0	0	0	0	0	0
14. Economic Sales	0	0	0	0	0	0
15. Other Credits	0	0	0	0	0	0
16. Taxes	0	0	0	0	0	0
17. Other Amounts	0	0	0	0	0	0

Big Rivers Electric Corporation
Case No. 2012-00063
Smelter Revenues and Credits

	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12
1. Supplemental Power	0	2,201	4,411	0	0	0
2. Backup Energy Charge	74,091	78,822	31,643	23,302	108,208	80,953
3. Transmission Charge	0	0	0	0	0	0
4. Excess Reactive Demand Charge	0	0	0	0	0	0
5. TIER Adjustment Charge	1,185,776	1,185,776	1,798,780	1,798,780	1,798,780	1,798,720
6. Amortization of Restructuring Amount	0	0	0	0	0	0
7. Rebate	0	0	0	0	0	0
8. Equity Development Credit	0	0	0	0	0	0
9. Surcharge	946,545	969,535	1,152,035	1,104,055	1,151,036	1,128,045
10. Surplus Sales	(316,853)	(140,649)	(43,202)	(45,629)	(7,063)	0
11. Undeliverable Energy Sales	0	0	0	0	0	0
12. Potline Reduction Sales	0	0	0	0	0	0
13. Curtailment of Purchased Power	0	0	0	0	0	0
14. Economic Sales	0	0	0	0	0	0
15. Other Credits	0	0	0	0	0	0
16. Taxes	0	0	0	0	0	0
17. Other Amounts	0	0	0	0	0	(72,738)

BIG RIVERS ELECTRIC CORPORATION

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**Response to the Kentucky Industrial Utility Customers'
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June 1, 2012

1 **Item 54)** *Please provide the Company's estimated 2016 ES revenue*
2 *requirement, separated into variable and fixed costs. Please provide the*
3 *results for both the current ECR revenue requirements approved in Case*
4 *No. 2007-00460 and for the projects being requested for approval in this*
5 *case (the "2012 Plan") in an excel spreadsheet.*

6

7 **Response)** Please see the table, which is also provided on the CD accompanying
8 these responses, and which are being filed under a petition for confidential
9 treatment.. They estimate the 2016 ES revenue requirement by customer class,
10 based on the "Build Case" financial model scenario, separated into variable and
11 fixed costs. The variable costs of environmental compliance were divided between
12 the current plan and the "2012 Plan" by comparing the variable environmental
13 cost per MWh of generation in the "Base Case" financial model to the "Build Case"
14 financial model. Total environmental compliance costs were allocated amongst
15 Big Rivers' customer classes and off-system sales based on Total Adjusted
16 Revenue.

17

18

19 **Witness)** Mark A. Hite

20