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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
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PSC Case No. 2012-00063

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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 June 30, 2013

725149

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, 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
Resident Of
Marion County
My Commission Expires:
8/24/2016

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 CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO ESTABLISH A REGULATORY ACCOUNT

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

OFFICIAL SEAL
TIRA L SEALS
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:05/04/15

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, 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

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.

Joy P. Wright

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, 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)

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

Big Rivers
ELECTRIC CORPORATION

Your Touchstone Energy® Cooperative

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

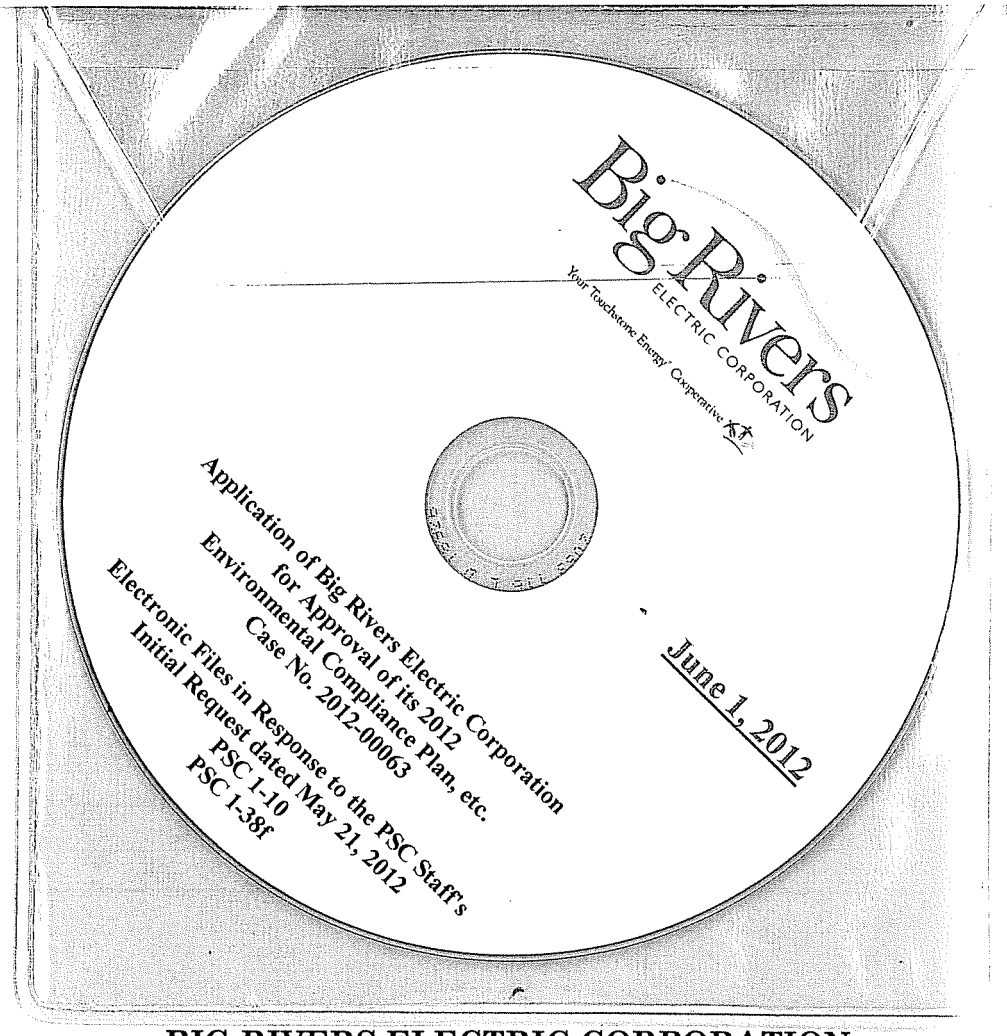
In the Matter of:

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR 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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

FILED: June 1, 2012

ORIGINAL



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 Commission Staff's
Initial Request for Information dated May 21, 2012

June 1, 2012

Information filed on CD accompanying responses

PSC 1-10 - BR Depreciation Report - January 2011	
Folders included on this CD:	
PSC 1-38f - Outage Information for Last 10 Years	

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 1) *Refer to the Application, page 7, which states that Big Rivers is requesting authority to establish a regulatory account. The Application states, "[a]s explained further in Mr. Hite's testimony, Big Rivers has incurred costs in developing this Application, and it will incur additional costs to prosecute this case. These costs primarily stem from the retention of experts in the legal, regulatory, and engineering professions." Provide the actual costs incurred to date by type and vendor. Consider this an ongoing request to be updated by the 15th of the month, to report the prior month's expense, for each month up to and including the month of the hearing in this case.*

Response) In developing the application and prosecuting this case, the actual cost incurred to-date (through and including May 23, 2012), by type (purpose) and vendor (entity), is $197,594.01. Please see attached. Note that this amount excludes the $218,189 cost Big Rivers incurred for Sargent & Lundy to conduct the study titled Environmental Compliance Study, dated February 13, 2012, which, in accordance with RUS accounting requirements, has been charged to Account 183, Preliminary Survey and Investigation Charges. Big Rivers will update this response on a monthly basis, by the 15th of each month, beginning in June 2012.

Witness) Mark A. Hite

Big Rivers Electric Corporation
Case No. 2012-00063
Cost Incurred to Develop Environmental Compliance Plan Application

Entity	Incurred To-Date	Estimate of Yet-To-Be Incurred	Estimated Total	Time Period	Purpose
Sullivan, Mountjoy, Stainback and Miller, P.S.C.	$ 71,113.50	$ 228,886.50	$ 300,000.00	January 2012 - November 2012	Legal
Prime Group, LLC, The	50,507.01	199,492.99	250,000.00	January 2012 - November 2012	Rate and Tariff Consultant
Sargent and Lundy LLC	32,641.00	117,359.00	150,000.00	January 2012 - November 2012	Environmental Compliance Consultant
Siemens Industry Inc (PACE) *	43,332.50	44,667.50	88,000.00	January 2012 - November 2012	Forward Price Inputs for Modeling
APM *	0.00	50,000.00	50,000.00	May 2012 - November 2012	Production Cost Modeling
Vantage *	0.00	62,000.00	62,000.00	May 2012 - November 2012	Commission's Consultant
	$ 197,594.01	$ 702,405.99	$ 900,000.00		

* Vendor not included in Exhibit Hite-5 of the Direct Testimony of Mark Hite. The majority of the $200,000 incremental cost estimate, vs. the $750,000 per Exhibit Hite-5, is due to the scope of the initial information requests and the Commission's hiring of a consultant to be paid by Big Rivers

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 2) *Refer to page 13 of the Direct Testimony of Robert W. Berry ("Berry Testimony"), lines 17-20. It states, "[i]n 2016, when the projects in the 2012 Plan should be complete, total billings to the rate classes will increase by approximately 6.9% relative to projected 2016 billings absent the 2012 Plan, and by approximately 7.8% relative to projected 2012 billings." Also refer to Exhibits Wolfram-5 and Wolfram-6, of the Direct Testimony of John Wolfram ("Wolfram Testimony").*

a. Exhibit Wolfram-6 shows the 6.9 percent and 7.8 percent increases to be for the Rural class. State whether the percentages apply only to the Rural class or to the system as a whole.

b. Provide the projected completed forms from Exhibit Wolfram-5 which support the 6.9 percent and 7.8 percent projected 2016 billing.

c. Provide the calculations that support the amounts shown in columns 1, 2 and 3 of Exhibit Wolfram-6.

Response)

a. The percentages apply only to the Rural rate class. The amounts for each class are shown in Exhibit Wolfram-6.

b. The proposed increases are supported by the cost effectiveness evaluations referenced in the direct testimony of Mr. Hite, not by the forms. It is not possible to develop completed forms for 2016 that demonstrate the projected 6.9% and 7.8% increases. The forms require accounting data in a more granular forms (e.g., monthly cost figures by particular RUS accounts) that is used in the Big Rivers cost effectiveness evaluations (e.g., annualized total costs). Completed forms using historical data are provided in response to Item 77 of the Attorney General's Initial Data Requests.

c. The calculations are provided electronically on the CD Big Rivers filed with its April 26, 2012, response to KIUC's Motion to Dismiss, in the file "Financial Forecast (2012-2026) Build," tab "Rates."

Witness) John Wolfram

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 Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 3) *Refer to page 18 of the Berry Testimony at lines 17-19. How will Big Rivers replace the demand and energy that would normally be provided by Wilson Unit 1 during the three-year period from 2013 through 2016 when the new flue gas desulfurization, or scrubber, system is being fabricated and constructed?*

Response) Please note that Wilson Unit 1 will not be offline for the entire three-year period. As shown in Big Rivers' response to Item 37 of the Commission Staff's First Request for Information, Big Rivers will minimize the amount of time Wilson Unit 1 will be offline when the FGD is installed. When Big Rivers does curtail generation at Wilson to construct the new Wilson FGD, it will purchase the energy as required to meet its system needs from the market until the Wilson FGD is completed and placed into service.

Witness) Robert W. Berry

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 4) *Refer to page 20 of the Berry Testimony. Project 6 is the completion of the Reid Unit 1 conversion of the boiler's coal burners to natural gas. KRS 278.183(1) provides, in relevant part, as follows:*

> *[A] utility shall be entitled to current recovery of its costs of complying with the Federal Clean Air Act as amended and those federal, state, or local environmental requirements which apply to coal combustion wastes and by-products from facilities utilized for production of energy from coal in accordance with the utility's compliance plan . . . .*

a. *Provide the basis of how the costs of Project 6 can be recovered through an environmental surcharge in light of the language of KRS 278.183(1).*
b. *If Project 6 could not be reflected in the monthly environmental cost recovery mechanism, provide the effect this would have on any testimony and/or exhibits filed in this proceeding.*
c. *Starting at line 9, Mr. Berry states that four of the boiler's eight coal burners were converted to natural gas in 2004*

but that the burners were never permitted, tested or put into service. Mr. Berry also states that Project 6 "will provide the maintenance, testing and other necessary tasks to complete the existing natural gas conversion that was started in 2004."

(1) State whether the four converted burners are currently recorded in plant in service on Big Rivers' books or if they are recorded in another account for plant not in service.

(2) State whether the investment of the 2004 conversion is being recovered through Big Rivers' base rates.

(3) Provide Big Rivers' plan with regard to the four coal burners.

d. State whether there is an adequate supply of gas to serve a converted Reid Unit 1.

e. At lines 15-17 of the Berry Testimony on page 20, Mr. Berry states that "[n]atural gas firing will reduce SO2 and NOx emissions for CSAPR, and exempt [Reid Unit 1] from MATS." Explain how the conversion to natural gas would exempt Reid Unit 1 from the MATS requirements.

Response)

a. Project 6, which converts Reid 1 to fire the boiler solely with natural gas, frees up SO2 and NOx allowances that allows Big Rivers to continue to burn coal without further controls at its other coal burning facilities. This conversion is part of an overall compliance strategy by which Big Rivers will comply with the amended Clean Air Act requirements and through which Big Rivers can continue to maximize the amount of coal that it is allowed to burn subject to federal, state, or local environmental requirements. Absent converting Reid 1 to natural gas, the unit will not be in compliance with MATS; thus the conversion of the Reid 1 burners is part of an overall compliance strategy for the Clean Air Act Amendments.

b. The removal of Project 6 will have a negligible effect on the filing at large. Removing Project 6 from the filing would reduce the total capital costs of the 2012 Plan, as outlined in Exhibit Berry-2, by $1.2 million, which is less than 0.5% of the total capital cost of the 2012 Plan. With respect to O&M expense, there is no incremental O&M cost associated with Project 6 in any year of the study period. For these reasons, removal of Project 6 would have no measurable impact on the rate

increases outlined in Exhibit Wolfram-6, or on the testimony and exhibits in this filing.

c(1) The four converted burners on Reid unit 1 are recorded in plant in service on Big Rivers' books.

c(2) The 2004 natural gas conversion assets are recorded on Big Rivers' books, and the investment cost is being recovered through base rates on the basis of a 44 year depreciation schedule.

c(3) The four coal burners and the four natural gas burners are all mounted on the boiler in a common wind box. The four coal burners will remain in place and be used to stage combustion air for NOx reduction when firing with natural gas.

d. Yes.

e. The February 16, 2012, MATS rule only applies to coal-fired and oil-fired units. Conversion of Reid Unit 1 from coal-fired to natural gas-fired would mean that Reid Unit 1 is not subject to MATS. Please see 77 Fed. Reg. 9304, 9309 (April 16, 2012). If the Reid Unit 1 is not converted to natural gas, activated carbon injection and dry sorbet injection will be required to comply with the MATS regulation, thus increasing the cost of the Big Rivers ECP.

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
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CASE NO. 2012-00063

Response to Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Witnesses) Robert W. Berry, John Wolfram, and Thomas L. Shaw

BIG RIVERS ELECTRIC CORPORATION

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

Response to Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 5) ***Refer to page 21 of the Berry Testimony. Starting at line 6, Mr. Berry states that the estimated capital cost for Reid Unit 1 conversion is $1.2 million and that ongoing operation and maintenance expenses are not expected to increase. He also states that "[h]owever, anticipated increases in fuel cost will most likely cause this unit to continue to be used for peaking service in the future."***

a. Confirm that the type of "fuel cost" to which Mr. Berry is referring is natural gas. If not, provide the type of fuel cost referred to.

b. Is Reid Unit 1 currently used for peaking purposes? If yes, explain why a coal unit such as Reid Unit 1 is not used for baseload purposes.

Response)

a. The fuel cost to which Mr. Berry is referring is natural gas.

b. Reid Unit 1 is currently being used as a peaking unit because its production costs are often greater than market prices. It is a small non-reheat unit with only four of its original eight coal burners in service, which has driven its net heat rate above 13,000 Btu/kwh. Further, the unit has no SO2 or NOx control equipment, which forces Big Rivers to purchase more expensive

medium sulfur coal (less than 5.2 lb/MMBtu) and buy NOx allowances to stay in compliance with emission standards when Reid is operating. The combined effect makes this unit unprofitable to operate except in times of peak market demand.

Witness) Robert W. Berry

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 6) *Refer to page 21 of the Berry Testimony at lines 7-9, which refers to anticipated increases in fuel costs that would likely result in Reid Unit 1 being used as a peaking unit after its conversion to natural gas. When does Big Rivers anticipate such an increase in fuel costs will occur that would render Reid Unit 1 to be a peaking unit after being converted to natural gas?*

Response) The Reid Unit 1 is currently being utilized as a peaking unit due to its variable cost of production being greater than the average market energy price. The Reid unit would only be operated when the average market price of energy is greater than the variable cost of production using natural gas.

Witness) Robert W. Berry

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 7) ***Refer to page 22 of the Berry Testimony. Starting at line 12, Mr. Berry states that the portion of the 2012 Environmental Compliance Plan ("2012 Plan") related to Station Two is currently under review by Henderson Municipal Power and Light ("HMP&L"). Provide the status of the Station Two review being conducted by HMP&L and the timeframe for a response from HMP&L.***

Response) Big Rivers met with representatives of HMP&L to provide an overview of the findings of the Environmental Compliance Plan on February 15, 2012. A copy of the actual report was provided to them the following week. HMP&L requested that Big Rivers prepare a proposal for engineering services relative to the FGD improvement projects. This proposal was sent to potential service providers on May 11 and bids are due back to Big Rivers on June 1, 2012. Big Rivers has also been in contact with the original FGD vendor on the HMP&L units to solicit their comments on potential upgrades. They have made an on-site visit and should complete their report in early June. Following receipt of these two documents, Big Rivers and HMP&L personnel will meet to review the findings and determine next steps.

Witness) Robert W. Berry

BIG RIVERS ELECTRIC CORPORATION

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
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CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO
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CASE NO. 2012-00063

Response to Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 8) *Refer to page 23 of the Berry Testimony at lines 19-20. Does Big Rivers plan to accomplish the two years of fabrication and construction related to Projects 8, 9 and 10 during planned outage schedules?*

Response) Yes. Fabrication and construction of these projects will occur over the two year period, but the equipment will be tied into the units during planned or forced outage opportunities. No special outages have been scheduled specifically for these projects. Please also see Big Rivers' response to Item 37 of the Commission Staff's First Request for Information.

Witness) Robert W. Berry

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 9) *Refer to page 28 of the Berry Testimony at lines 19-20 in which it is noted that although the Sargent & Lundy study included consideration of the U.S. Environmental Protection Agency's ("EPA") proposed regulation concerning coal combustion residuals and the EPA's rules relating to impingement mortality and entrainment under Section 316(b) of the Clean Water Act, Big Rivers did not include the potential costs of compliance with these rules in analyzing the cost effectiveness of the alternatives considered for inclusion in its 2012 Plan.*

a. What impact would compliance with these potential regulations have on the operations of the affected plants?

b. How would compliance with these regulations affect the economic feasibility of Big Rivers' 2012 Plan?

Response)

a. Neither the Coal Combustion Residuals ("CCR") regulation nor the Section 316(b) rule is final, and EPA has requested comment on regulatory alternatives it is considering. The alternatives being considered under each rule are significantly different, so determining compliance costs would be speculative at this time. Big Rivers has accordingly not determined what

effect these potential regulations would have on the operations of the affected plants.

b. As shown in Tables 6–6 and 6–7 of DePriest Exhibit-2, S&L projected that compliance with these two regulations may cost Big Rivers $122.74 million in capital, $1.12 million annually in incremental fixed O&M, and approximately $2.50/ton in variable O&M depending on available landfill options. However, due to the uncertainty of what the final rules may require, Big Rivers did not include these costs in its financial models. Big Rivers will continue to monitor these pending regulations and will fully incorporate the requirements into its compliance planning when the certainty around such requirements increases.

Witness) Robert W. Berry

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 Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 10) *Refer to Exhibit Berry-3, pages 1-2.*

a. Provide the age of each of the units listed on Tables 1-2 and 1-3.

b. Provide the most recent life extension studies performed on each of the units listed on Tables 1-2 and 1-3.

Response)

a. The unit data follows:

Unit	Year Commissioned	Age
Coleman Unit 1	1969	43 years
Coleman Unit 2	1970	42 years
Coleman Unit 3	1972	40 years
Wilson Unit 1	1986	26 years
Green Unit 1	1979	33 years
Green Unit 2	1981	31 years
Henderson Unit 1	1973	39 years
Henderson Unit 2	1974	38 years
Reid Unit 1	1966	46 years

b. Big Rivers has not performed life extension studies on any of its units; however, Burns and McDonnell Engineering has identified the expected life of each of the Big Rivers units in the depreciation study Big Rivers filed with the Kentucky Public

Service Commission in Case No. 2011-00036. A copy of that depreciation study is provided on the CD accompanying these responses.

Witness) Robert W. Berry

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 Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 11) *Refer to Exhibit Berry-3, page 1 of 3, at footnote 2.*

a. For each of the three Coleman Units, provide the actual average SO2 emissions of the three highest years during the 2006-2010 time period.

b. Explain why an annual average emission rate of 0.25 lb/MMBtu was used.

Response)

a. Please see the actual SO2 emissions from Coleman Station (each of the units bypass stacks and the common scrubber) for the 2006-2010 time period displayed in the table below.

Coleman Station SO2 Emission (Tons)					
	2006	**2007**	**2008**	**2009**	**2010**
Coleman 1 Bypass Stack	3,238.0	1,087.0	153.9	871.9	1,273.9
Coleman 2 Bypass Stack	4,249.0	111.0	300.4	1,219.5	275.5
Coleman 3 Bypass Stack	3,412.0	868.0	467.3	70.9	1,497.4
Coleman Scrubbed Stack	*	926.0	1,823.9	1,730.8	3,062.8
Total	10,899.0	2,992.0	2,745.5	3,893.1	6,109.6

* Coleman Scrubber began operation in February 2006; commercial completion was May 31, 2007

b. Coleman schedules a 2-week planned outage on the common scrubber every 2 years. The planned scrubber outage coincides with one of the unit's planned outages, but the remaining two running units are bypassing the scrubber (running without any

SO2 removal). The Coleman scrubber can remove 96% of the inlet SO2 with all units at full load and will remove higher percentages at lower loads. At 5.0 lbs SO2 / MMBtu flue gas inlet and with a 96% removal rate, the common scrubber emission rate equates to 0.20 lbs SO2 / MMBtu. In order to include emissions from the bypass stacks due to scrubber upsets or outages, the annual average emission rate of 0.25 lbs SO2 / MMBtu was chosen. During the times when a running unit is bypassing the scrubber, the running unit's generation may be curtailed or entirely removed from service in an attempt to reduce emissions. This is especially true during the years when there is a 2-week planned outage on the common scrubber. Big Rivers believes the annual target of 4,517 SO2 tons emitted by Coleman (this represents the 0.25 lbs SO2 / MMBtu emission rate at the baseline annual heat input and can be seen in Table 1-2 of DePriest Exhibit 2 (located on page 1-5)) is a realistic and attainable target.

Witness) Robert W. Berry

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 12) ***Refer to page 4 of the Direct Testimony of William DePriest ("DePriest Testimony") wherein Mr. DePriest provides the total capital and operation and maintenance costs associated with Project 7, the upgrades at HMP&L Units 1 and 2, as well as Big Rivers' share of those costs. Provide the basis for the allocation of costs between Big Rivers and HMP&L or state where in the Application it can be found.***

Response) The fixed costs and variable costs of operating HMP&L Units 1 and 2 are allocated between HMP&L and Big Rivers pursuant to the provisions of the contracts between HMP&L and Big Rivers. These contracts have been filed with and approved by the Commission in prior proceedings, and copies of the principal contracts are attached to Big Rivers' response to Item 48 of KIUC's First Set of Data Requests. Fixed costs, including capital, are allocated to HMP&L based on HMP&L's reserved capacity as a percentage of the HMP&L Units 1 and 2 net rated capacity of 312 MW. Through the end of May 2012, HMP&L's capacity take is 110 MW. Based upon HMP&L's latest notice, HMP&L intends to increase its capacity take by 5 MW every June through 2015 when it will reach 125 MW, and remain there through May 31, 2017. Variable generation costs at the HMP&L Units 1 and 2 are allocated to HMP&L based on HMP&L's energy (MWh) usage as a percentage of the total MWh generation at the units.

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 ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063

Response to Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 13) *Refer to page 15 of the DePriest Testimony, lines 3-7 concerning the conversion of Reid Unit 1 to natural gas.*

a. *What is the expected impact of the Reid Unit 1 conversion on the unit's heat rate and generating capability?*

b. *Explain whether Big Rivers considered retiring Reid Unit 1 and repowering the unit with a natural gas combined cycle unit.*

c. *Explain whether Big Rivers considered retiring Reid Unit 1 and purchasing power on the wholesale market.*

Response)

a. Based on S&L's experience, it is expected that a derate of approximately 20% from a unit's original maximum capacity rating (MCR) would result if a unit were converted to natural gas. The MCR of Reid Unit 1 is 65 MW net; however, due to the natural gas conversion in 2004 the current capacity is 55 MW net. That conversion was engineered such that the Unit would achieve 55 MW net on either coal or natural gas. This means that there will be no additional derate on the capacity of Reid Unit 1.

b. Big Rivers did not consider retiring the Reid 1 boiler and repowering as a combined cycle unit. The Reid Unit 1 is only used during peak demand periods. Over the last five years, (2007-2011) the Reid Unit 1 has operated at a net capacity factor of 19.8% and has only produced approximately 113,000 MWhs annually; therefore, it would not be economically feasible to repower for such a small volume of energy.

c. Big Rivers did not consider retiring Reid Unit 1 and purchasing power on the wholesale market. However, as a practical matter, Reid 1 currently operates at a very low capacity factor due to its high heat rate and emission profile. Should Big Rivers be short power on any given day, and Reid 1 does not clear the MISO market, then Big Rivers will purchase power in the MISO market to make up any shortfall.

Witnesses) a. William DePriest and Robert W. Berry

b. Robert W. Berry

c. Robert W. Berry

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 Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 14) *Refer to page 16 of the DePriest Testimony, lines 16-25.*

a. Did Sargent & Lundy consider the replacement of the electro-static precipitators ("ESP") with a fabric filter?

b. Does Big Rivers have a strategy if the ESP performance is inadequate?

Response)

a. Yes.

b. Big Rivers anticipates performing precipitator testing or modeling its ESP's performance in 2013. Should this testing or modeling indicate potential issues not foreseen in the study results, then Big Rivers will consider the ESP upgrades mentioned in the DePriest testimony.

Witnesses) a. William DePriest

b. Robert W. Berry

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 15) ***Refer to Exhibit DePriest – 2, Sargent & Lundy study, at page ES-1. What are the current plans to update the environmental compliance study to reflect the new Mercury and Air Toxins Standard, or MATS rule?***

Response) S&L developed a supplemental discussion of the impact of the MATS rule for the environmental compliance study. It is filed as Exhibit DePriest–3. Big Rivers incorporated this supplement and the new MATS Standard in its 2012 Plan.

Witness) William DePriest

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 16) ***Refer to page 1-3 of the Exhibit DePriest – 2, Table 1. For each of the economic parameters listed, provide the source of the data and, where appropriate, any supporting calculations and documentation.***

Response) Economic parameters were jointly reviewed and agreed to between S&L and Big Rivers. The attached table highlights the sources of the data used in the S&L analysis. Please also see the CD Big Rivers filed May 30, 2012, in response to the May 11, 2012, letter from KIUC's counsel.

Witness) William DePriest

Big Rivers Electric Corporation
Case No. 2012-00063
Economic Parameters and Data Sources

Economic Parameter	Organization	Source
Installation Year	Big Rivers	Compliance Deadline
Cost Estimate Basis Year	Sargent & Lundy	Year of study
Operating Life of Facility	Big Rivers	Engineering Judgment
Discount Rate	Big Rivers	2011 Fiscal Policy Review
Capital Cost Escalation Rate	Big Rivers	Engineering Judgment
O&M Escalating Rate	Big Rivers	Engineering Judgment
Levilized Fixed Charge Rate	Sargent & Lundy	Calculated using Discount Rate and Operating Life
Labor Rate	Big Rivers	Composite labor rate
Auxiliary Power Cost	Big Rivers	Engineering Estimate
Hydrated Lime	Big Rivers	2012 Budget Input E mail
Activated Carbon	Sargent & Lundy	Based on quotations received from other projects during study
Calcium Bromide	Sargent & Lundy	Based on quotations received from other projects during study
Ammonia	Big Rivers	2012 Budget Input E mail
Urea	Sargent & Lundy	Based on quotations received from other projects during study
Lime	Big Rivers	2012 Budget Input E mail
Limestone Wilson	Big Rivers	2012 Budget Input E mail
Limestone	Big Rivers	2012 Budget Input E mail
Additional Ash Disposal for CCR	Sargent & Lundy	Estimate based on need for liners and monitors under subtitle D
SO2 Allowance Price	Sargent & Lundy	Estimate based on similar compliance studies, the cost of SO2 and NOx control technologies, and internal estimates of allowance markets.
NOx Allowance Price	Sargent & Lundy	Estimate based on similar compliance studies, the cost of SO2 and NOx control technologies, and internal estimates of allowance markets.
Natural Gas	Sargent & Lundy	U.S. Department of Energy, Energy Information Administration
Coal	Sargent & Lundy	U.S. Department of Energy, Energy Information Administration

Case No. 2012-00063
Attachment for Response to Item PSC 1-16
Witness: William DePriest

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 Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 17) ***Refer to page 1-3 of the Exhibit DePriest – 2, Table 1-1. The Sargent & Lundy study used a natural gas forecast of $4.50/MMBtu.***

a. Recognizing that the current cost of natural gas is $2.00/MMBtu, what is the impact of a continued low natural gas price forecast on the proposed environmental compliance decisions?

b. Has any sensitivity analysis been performed relative to a range of natural gas price forecasts?

Response)

a. Continued low natural gas prices may make gas conversion a more viable environmental option. As shown in Table 5-8 of DePriest Exhibit 2, sustained natural gas prices below $2.23/mmbtu are required before converting the Green units becomes an attractive alternative.

b. Yes. Please see Section 5.2.1 of Exhibit DePriest – 2.

Witness) William DePriest

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 Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 18) *Refer to page 1-4 of the Exhibit DePriest – 2.*

a. Describe the "minimal-contracts approach to project execution" used in the development of the environmental compliance study.

b. How much would the inclusion of owner's cost add to the estimated cost?

Response)

a. "Minimal-contracts approach to project execution" refers to the process control of engineering, procurement and construction. Under an "EPC (engineer-procure-construct) contract" approach, an Owner enters into a single contract with one company, who is responsible for performing all engineering tasks, purchasing all equipment and material, and performing all construction and startup tasks. This approach is subject to large mark-ups in equipment purchases from OEMs (original equipment manufacturers), thereby increasing overall project costs. Under a "minimal contracts approach," the Owner enters into contracts with each of the major equipment suppliers, an engineering designer, and a construction contractor. This strategy allows the Owner to perform major engineering design earlier in the

overall process, provides the ability to purchase major equipment directly and eliminate mark-up costs, and provides a firm basis for the construction contract, thereby resulting in the lowest overall cost to the Owner.

b. Owner's costs were not specifically included in the Sargent and Lundy cost estimate. However, they are anticipated to be relatively insignificant and are covered by the contingency in the estimate.

Witness) William DePriest

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 19) *Refer to page 4-15 of the Exhibit DePriest – 2. At the bottom of the page it is stated that "[r]eturning the Coleman scrubber back to as-designed operation conditions and lime produces a reduction of approximately 2,630 tpy when compared to the baseline output." Explain how and why the Coleman scrubber is not currently operating as designed. Include in your response the cost to return the scrubber back to as-designed operations.*

Response) The Coleman scrubber is operating as designed, but has been utilizing a lower quality limestone. The lower quality limestone reduces cost, but has also lowered the SO2 removal efficiency. As stated in Table 3.1 on page 3-4 of Exhibit DePriest - 2, "the existing performance can readily be improved" by utilizing a better quality limestone in the Coleman scrubber. The decision to utilize the lower quality limestone was strictly economic and when those economics change, a better quality limestone will be utilized. There is no capital cost component associated with increasing the limestone quality.

Witness) Robert W. Berry

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 20) *Refer to Exhibit DePriest – 2, the second page after Page A-1 of Appendix 1. This page includes a chart labeled "Technology Selection & Results – NAAQS/CSAPR & MACT." For each of the Coleman units, the Capital Cost for SO2 is shown as $3.93 million. Identify the project(s) related to this investment.*

Response) The capital cost value of $3.93 million was part of a previous estimate to increase efficiency of the Coleman FGD by increasing the slurry recirculation within the absorber vessel. After further review of performance data and a review of plant operations, it was determined that sufficient SO2 reductions could be achieved via operational changes, as noted in Big Rivers' response to Item 19 of the Commission Staff's First Request for Information. The SO2 capital cost for this scenario should indicate a value of $0 rather than $3.93 million.

Witness) William DePriest

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 Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 21) *Refer to Exhibit DePriest – 2, the first page after Page A-3 of Appendix 3. Provide this schedule electronically with the formulas intact and unprotected.*

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

Witnesses) William DePriest

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 Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 22) ***Refer to page 9 of the Direct Testimony of Thomas L. Shaw ("Shaw Testimony"), lines 5-6. Discuss the basis for the belief that the Cross-State Air Pollution Rule will be imposed in a form substantially similar to its current form.***

Response) The Cross-State Air Pollution Rule ("CSAPR") was stayed by the United States Court of Appeals for the District of Columbia Circuit on December 30, 2011. The Court's decision was not directed to the substance of the rule. CSAPR was designed to remedy defects identified in 2008 by the D.C. Circuit in the predecessor rule, the Clean Air Interstate Rule (CAIR). In part, the stay was issued in response to arguments from newly-affected individual states that the rule was implemented without adequate notice and comment and that CSAPR would pose a significant financial burden on electric ratepayers and electric utilities. It is believed that EPA will likely overcome challenges to the rule and will ultimately prevail. If so, it is highly likely that the EPA will leave the rule as-is.

Witness) Thomas L. Shaw

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 23) ***Refer to page 16 of the Shaw Testimony. Starting at line 4, Mr. Shaw discusses the proposal to add a Dry Sorbent Injection system at the Coleman, Wilson, and Green units for acid gas removal. Regarding this proposal, Mr. Shaw states that, "[i]t is anticipated that the combination of Dry Sorbent Injection and the necessary reductions to meet the 2014 CASPR allocations will result in unit SO2 emission rates below 0.20 lb/MMBtu, which will allow for use of SO2 emissions data as a surrogate for demonstrating compliance with the acid gas provisions of the MATS rule." (Emphasis added). Is there uncertainty as to whether this proposal will make Big Rivers compliant with the MATS rule? If yes, explain.***

Response) There is no uncertainty as to whether the combination of Dry Sorbent Injection and the necessary reduction to meet the 2014 CASPR allocations will be sufficient to achieve compliance with the MATS rule. Rather, the sentence is addressing the compliance option of accepting a limit of .20 lbs/MMBtu SO2, which can be monitored with existing equipment, and avoiding the need to install Continuous Emission Monitors (CEMS) for HCl.

Witness) Thomas L. Shaw

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 Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 24) ***Refer to page 6 of the Direct Testimony of Mark A. Hite ("Hite Testimony"), lines 19-21.***

a. Why was a 15-year study period used in the financial model?

b. Refer to page 1-3 of the Exhibit DePriest – 2, Table 1-1. One of the design basis values and assumptions for the Sargent & Lundy study listed on the Table, Operating Life of the Facility, is assumed to be 20 years. Why was a 15-year period used for the financial model instead of the assumed operating life of 20 years?

Response)

a. The use of a 15-year financial model took the analysis just three years beyond the scheduled expiration of the Smelter agreements on December 31, 2023. In the past, Big Rivers has generally only prepared financial models through 2023 in an effort to avoid extraneous assumptions about smelter rates once the current contracts expire. While Big Rivers knows that the environmental compliance assets being analyzed have useful lives longer than 15 years, Big Rivers found that it was unnecessary to make assumptions about Smelter rates well

beyond the 2023 time horizon because longer periods of time would only serve to improve the "Build Case." In essence, the 15-year time period used in the analysis is biased against the relatively longer-lived "Build Case" assets (and therefore more conservative), and the "Build Case" still has a better net present value than the "Buy Case."

b. See response to part 24a, above.

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
ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063

Response to Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 25) *Refer to page 7 of the Hite Testimony, lines 11-15, at which Mr. Hite discusses the use of Big Rivers' 2010 cost of capital, 7.93 percent, as the discount rate for net present value purposes. Mr. Hite states that a discount rate of 7.93 percent was also used for the Sargent and Lundy study. Explain how it was determined that 7.93 percent was reasonable for the purpose of net present value calculations.*

Response) Cost of capital includes interest expense, depreciation expense, property tax expense, and property insurance expense. Since S&L used Big Rivers' 2010 cost of capital of 7.93% due to it being the most current and readily available at the time, Big Rivers concluded it reasonable to also utilize the 2010 cost of capital as the discount rate for evaluation purposes for comparability. Big Rivers' 2011 cost of capital was 7.98 percent, nearly identical to Big Rivers' 2010 cost of capital.

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
ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063

Response to Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 26) ***Refer to page 10 of the Hite Testimony. A discussion of a sensitivity analysis pertaining to the loss of the Smelter load is provided.***

a. Describe any analysis performed to determine the physical and economic feasibility of selling the capacity and energy that results from the loss of the Smelter load.

b. Identify and provide the results of any other sensitivity or risk analyses performed by Big Rivers relating to the economic feasibility of its proposed 2012 Plan.

Response)

a. The economic feasibility of selling the capacity and energy that result from the loss of the smelter load has been analyzed through multiple scenarios. The planning model analyses (also referred to previously as the "production cost modeling") which were conducted by ACES Power Marketing (previously filed on May 24, 2012, in response to the May 11, 2012, letter from KIUC's counsel to Big Rivers' counsel), demonstrate the amount of energy Big Rivers is expected to be able to sell in the MISO market given numerous assumptions, such as: the exit of one or both smelters, Big Rivers' environmental compliance strategy,

market prices, and mitigation factors implemented to offset the loss of load. Please note, in those scenarios where only one smelter is modeled to cease operations, the remaining smelter is assumed in the model to shoulder its proportionate share of the cost increase associated with the departure of the other smelter. The assumptions used in the ACES planning models and Big Rivers' financial model were filed on May 24, 2012, and May 29, 2012, in response to the May 11, 2012, letter from KIUC's counsel to Big Rivers' counsel.

ACES has also conducted a price sensitivity analysis for Big Rivers which estimates the impact to MISO LMPs at Big Rivers' generators that result from the reduction of load in Big Rivers' system. The loss of load is expected to decrease the LMPs at Big Rivers' generators by 7% if Big Rivers makes no adjustments to its current generation availability. A copy of the analysis is being filed under a Petition for Confidential Treatment.

Big Rivers' has drafted a Load Concentration Analysis and Mitigation Plan. The plan provides an overview of Big Rivers' analyses regarding the loss of smelter load. The plan is being filed under a Petition for Confidential Treatment.

To assess the physical feasibility of selling the capacity and energy that results from the potential loss of smelter load, Big Rivers requested a MISO assessment of transfer capability from the Big Rivers transmission zone into other MISO zones and TVA assuming the loss of all smelter load (850 MW). The July 11, 2011 MISO study results indicate the transmission grid has a transfer capacity in excess of the 850 MW currently provided to the smelters should the smelter operations cease. Thus, the transmission system, under normal or single contingency conditions, will permit Big Rivers to export all of the excess power from the loss of both smelters.

b. Big Rivers continues to run various pricing and Smelter loss sensitivities to assess the impact to its rate payers. Please see the attached letter from John Sturm to Roger Hickman; the CD Big Rivers filed April 26, 2012, with Big Rivers' response to KIUC's motion to dismiss; and the CDs Big Rivers filed May 24, 2012, May 29, 2012, and May 30, 2012, in response to the May 11, 2012, letter from KIUC's counsel to Big Rivers' counsel.

Witnesses) a. Robert W. Berry and David G. Crockett

b. Mark A. Hite, Brian J. Azman, William DePriest

ACES POWER MARKETING
Co-ops of America

May 22, 2012 *Via FedEx Overnight Delivery*

Roger Hickman
Regulatory Affairs Manager
Big Rivers Electric Corporation
201 Third Street
P.O. Box 24
Henderson, KY 42419

RE: Data Request Submission

Dear Roger,

Enclosed you will find compiled data as requested for your Environmental Compliance Plan filed with the Public Service Commission of Kentucky. The data provided is consistent with input, output and analysis data available from my letter to Mike Thompson on May 18, 2012. In addition to the 20 individual zipped folders representing the 20 sets if data for each scenario, there is a cross reference folder that correlates our naming convention with the Big Rivers naming convention for their the various financial and production modeling scenarios.

If you have any questions about the data feel free to contact me.

Sincerely,

John Sturm
VP Corporate and Regulatory Affairs

JS/bab

Enclosure

cc: Mike Thompson
Wayne Harris

4140 West 99th Street • Carmel, IN 46032-7731 • 317.344.7000 *telephone* • 317.344.7001 *facsimile* • www.acespower.com


CONFIDENTIAL

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 Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 27) *Refer to page 14 of the Hite Testimony. Beginning at line 13, Mr. Hite states that "[a]ny gain or loss will be booked to the Accumulated Depreciation Reserve Account."*

a. Confirm that Big Rivers is aware that neither a gain nor a loss is recorded on the retirement of a plant asset but that the difference between the original cost and accumulated depreciation for the asset is recorded in the accumulated depreciation reserve account.

b. Explain whether there will be any sale of equipment that is retired from service.

Response)

a. Confirmed.

b. Big Rivers will attempt to sell any equipment that is retired from service. Ideally, the equipment will be sold, however; it might end up being sold as scrap depending upon the cost and complexity of physically removing it from its current location. See also Big Rivers' response to Item 52 of the Attorney General Initial Data Request.

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 ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063

Response to Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 28) *Refer to page 19 of the Hite Testimony, lines 9-14, at which Big Rivers requests authority to establish a regulatory asset for costs related to this case, to amortize the costs over three years, and to recover them through the environmental surcharge. Is Big Rivers aware of any other environmental compliance case in which the Commission has approved a similar request?*

Response) No. However, the approvals Big Rivers seeks in this case are necessary for Big Rivers to comply with the environmental regulations covered by KRS 278.183, and as such, it is appropriate to recover the costs of prosecuting this case through the environmental surcharge. Also, Big Rivers is aware of other cases in which the Commission approved an applicant's request to establish a regulatory asset, where such treatment is consistent with the Commission's practice of amortizing prudently incurred but extraordinary expenses over a three-year period for ratemaking purposes.

Witness) John Wolfram

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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Response to Commission Staff's
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Dated May 21, 2012

June 1, 2012

Item 29) ***Refer to Exhibit Hite-3, page 1 of 3. Just past the middle of the page, the Exhibit shows an interest rate of 5.5 percent for 2012 Plan capital financing. On page 17, line 18, of the Hite Testimony, the rate is estimated to be 5.78 percent to 6.16 percent. Explain the discrepancy in interest rate estimates.***

Response) The interest rate of 5.50% used in the evaluation of the 2012 Plan capital financing was based upon 30 year level debt service. The average life of 30 year level debt service is approximately 20 years (19.35). Accordingly, the derivation of the 5.50% was a 2.75% 20 year U.S. treasury rate plus a 2.75% Big Rivers' spread, which was believed to be a reasonable estimate at the time the 2012 Plan financial models were prepared, and continues to be a reasonable estimate today. Please note that year-to-date 2012, the 20 year U.S. treasury rate has ranged from a low of 2.39% on May 17, 2012, to a high of 3.14% on March 19, 2012, a 0.75% difference. While the Big Rivers' credit spread is uncertain and yet to be determined by the capital markets, the 2.75% spread assumed was based upon advice received from Goldman Sachs, Big Rivers' investment advisor.

Conversely, the interest rates of 5.78% to 6.16% were based upon the 3.41% 30 year U.S. treasury rate on March 16, 2012, rather than the 3.08% 20 year, 0.33% higher. The 20 year U.S. treasury rate best represents the expected benchmark for Big Rivers' 2012 Plan capital financing, which was 2.41% as of May 23, 2012. Unless Big Rivers were to enter into an interest rate "lock", which

carries a cost, in advance of the closing, the interest rate will be determined at the closing. Big Rivers plans to further investigate options for financing its 2012 Plan capital expenditures, including an RUS borrowing via the Federal Financing Bank, which at a spread over U.S. treasury of only 0.125% results in lower financing costs. Big Rivers is preparing a RUS loan application to try to secure access to that financing as an option.

Witness) Mark A. Hite

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

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Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 30) ***Refer to Exhibit Hite-3, page 3 of 3, the "Build" assumptions. Listed in this section is the statement "Member Rate Stability Mechanism adjusted to accommodate new ES allocation method." Explain this assumption and state whether any adjustment would be necessary to the Member Rate Stability Mechanism tariff.***

Response) Until now, the Member Rate Stability Mechanism ("MRSM") has been calculated in the financial model on a kWh basis. Since the proposed Environmental Surcharge will be allocated on a Total Adjusted Revenue basis, the financial model was updated to accommodate the new allocation method. The MRSM tariff expresses the MRSM in terms of a dollar amount rather than a rate per kWh, so no adjustment is necessary to the MRSM tariff.

Witness) Mark A. Hite

BIG RIVERS ELECTRIC CORPORATION

APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN,
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June 1, 2012

Item 31) *Refer to page 11 of the Wolfram Testimony at lines 8-12 which state that Big Rivers' proposal to use a 1.24 TIER in the rate of return on rate base ("RORB") calculation is because it is limited to a 1.24 TIER as defined in the Smelter Agreements. Provide the TIER that Big Rivers is required to achieve by its debt covenants and explain why that TIER level would not be more appropriate for use in the RORB calculation.*

Response) Big Rivers is required by its debt covenants to maintain a minimum margins for interest ratio ("MFIR") of 1.10. The October 2008 Unwind Financial Model, the so-called "decision model", in Case No. 2007-00455 reflected a 1.24 smelter "contract" TIER, pursuant to Section 4.7, TIER Adjustment Charge, of the smelter electric service agreements. The Commission's March 6, 2009, Order approving the Unwind (the Unwind transaction closed July 17, 2009) was based upon the 1.24 "contract" TIER. The required adjustments to the "contract" TIER, as defined in that Section 4.7, resulted in a slightly higher "conventional" TIER in the October 2008 Unwind Model of approximately 1.30.

The Commission's November 17, 2011, Order in Big Rivers' first and only post-Unwind base rate case to date, Case No. 2011-00036, also was based upon the 1.24 "contract" TIER. A "conventional" TIER target of either 1.24 or 1.30 for Big Rivers is very low. If Big Rivers could achieve a 1.24 contract TIER, which Big Rivers has been unable to do since the Unwind, its TIER would rank among the lowest of all G&T cooperatives in the United States.

In negotiating the Unwind, Big Rivers' advisors indicated a 1.24 TIER was the minimum TIER necessary for Big Rivers to achieve and maintain a minimum of two long-term secured issuer investment grade ratings from the major credit rating agencies. Big Rivers indeed has a unique and challenging credit profile, as is described in the ratings reports on Big Rivers that are attached to Big Rivers' response to Item 33 of the Attorney General's Initial Data Requests. Standard & Poor's May 22, 2012 "Report Card: Rate Adjustments Compensate for U.S. Cooperative Utilities' Regulatory and Economic Risks," which is attached to this response, emphasizes the importance of strong financial metrics for Big Rivers. Setting the rate of return on rate base for the environmental capital expenditures in this proceeding at the minimum required 1.10 MFIR in Big Rivers' debt covenants does not provide for maintaining strong financial metrics for Big Rivers and would only exacerbate the rating agencies' concerns about the effect of state regulation on the financial metrics of jurisdictional electric cooperatives. Accordingly, although Big Rivers' minimum debt covenant TIER (or MFIR) requirement is only 1.10, 1.24 is the minimum appropriate TIER that should be applied to the return on rate base in the environmental surcharge for Big Rivers.

Witness) Mark A. Hite

Standard and Poor's May 22, 2012 –
Report Card: Rate Adjustments Compensate for U.S. Cooperative Utilities' Regulatory and Economic Risk

May 22, 2012

Report Card:

Rate Adjustments Compensate For U.S. Cooperative Utilities' Regulatory And Economic Risks

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Table Of Contents

Report Card:

Rate Adjustments Compensate For U.S. Cooperative Utilities' Regulatory And Economic Risks

The pace of federal regulatory initiatives to control emissions accelerated over the past year, making it a particularly challenging one for all U.S. electric utilities, including cooperative utilities. The regulatory push comes on top of budget constraints arising from the weak economy that could limit these companies' financial flexibility.

Environmental Protection Agency (EPA) initiatives governing power plant operations dominate the electric industry's operational, financial, and credit concerns. The litany of new regulations and proposals includes the agency's December 2011 Mercury and Air Toxics Standards Rule, its May 2010 Greenhouse Gas Tailoring Rule, and the October 2011 Cross-State Air Pollution Rule. The EPA has also proposed significant rules that would limit new power plants' carbon emissions, regulate coal plants' combustion residuals, and restrict power plants' use of rivers, lakes, and oceans for open-loop cooling. These potentially burdensome regulations are not unique to cooperative utilities. Public power utilities, investor-owned utilities, and merchant generators are all subject to the same rules.

Overview

- Regulatory initiatives create significant uncertainty for electric utilities' operational and financial plans and the sluggish economic recovery is adding to the ambiguity.
- However, cooperative utilities have largely shown that they will adjust rates as needed to maintain their financial metrics.
- As a result, we believe the sector's credit quality will substantially be stable over our two-year outlook horizon.

Yet, except for its negative outlook for the merchant utilities sector, Standard & Poor's Ratings Services forecasts stable ratings over the next two years for cooperatives, public power utilities, and investor-owned utilities. We base this conclusion on our view that those who set rates for load-serving electric utilities will use rate adjustments to provide cost recovery and facilitate utilities' implementation of EPA and state initiatives to control power plant emissions. Cooperative utilities with rate-setting autonomy have shown they are willing to raise rates as needed to maintain their financial metrics. They did so during the recession, and credit quality stayed strong as a result. Similarly, rated generation and transmission cooperatives whose rates are governed by the Federal Energy Regulatory Commission and state regulators have fared well. Consequently, Standard & Poor's doesn't expect ratings in the cooperative utilities sector to move much during its two-year outlook horizon.

Ratings Overview

We maintain strong ratings and stable outlooks on most U.S. cooperative utilities. More than 90% of these ratings are 'A-' or higher, and our overwhelmingly stable outlooks for these utilities reflect our expectation that the sector's strong ratings distribution will continue for the next two years (see charts 1 and 2).

Chart 1

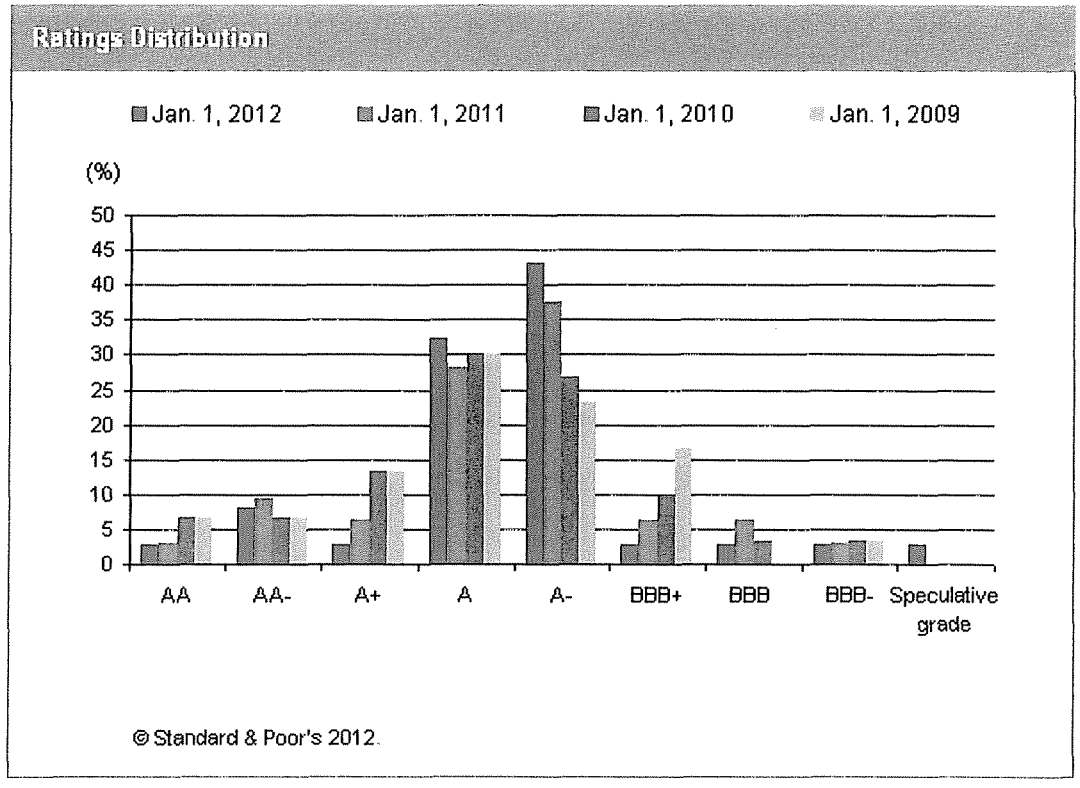
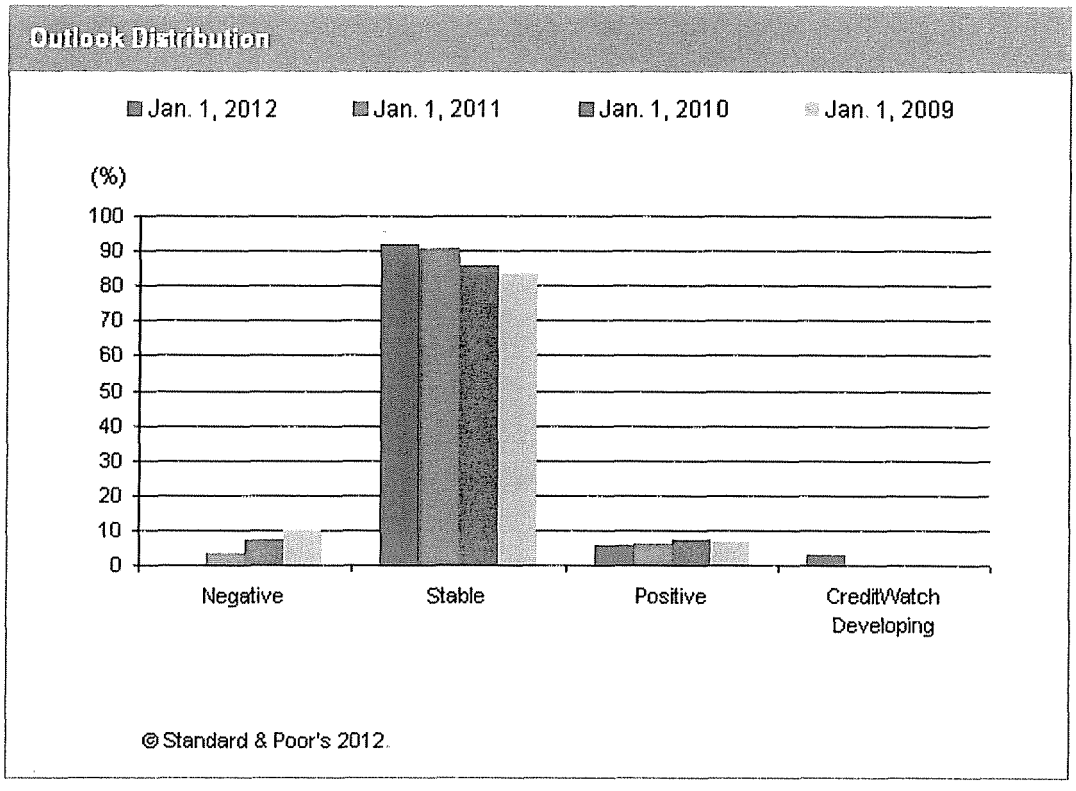

Ratings Distribution
Jan. 1, 2012
Jan. 1, 2011
Jan. 1, 2010
Jan. 1, 2009
(%)
50
45
40
35
30
25
20
15
10
5
0
AA
AA-
A+
A
A-
BBB+
BBB
BBB-
Speculative grade
© Standard & Poor's 2012.

Chart 2



What Underpins The Strong Ratings?

Key factors that reconcile the continued strength of electric cooperative ratings with the issues they face include the following:

Autonomous ratemaking authority or supportive external rate regulation

We believe cooperative utilities' widespread, but not universal freedom to adjust rates mitigates the risks of regulatory lag and cost disallowances that could erode the financial performance of rate-regulated utilities. We assign this distinction significant weight in our analysis.

Many cooperative boards exercised their ratemaking authority during the recession, adjusting rates to maintain a sound alignment between revenues, expenses, and debt service obligations. Consequently, we believe that cooperative utilities should have the financial flexibility and willingness to respond to potentially higher costs as emissions regulations progress.

During the economic downturn, we observed that generation and transmission cooperatives that are subject to federal rate regulation have similarly benefited from credit-supportive rate orders, including those that established or perpetuated formulary rates that dynamically recover changing costs. These mechanisms are important tools for avoiding protracted rate-setting proceedings. At the same time, distribution cooperatives that are subject to state rate regulation tend to have mechanisms that allow them to pass through changes in their power suppliers' costs.

A narrow strategic focus

Electric cooperative utilities generally have a narrow strategic focus, and their lack of a profit motive reduces incentives for management to place capital at risk. This paradigm generally yields conservative strategies that help shield financial performance from volatility.

Limited merchant risk

With few exceptions, cooperative utilities generally align their generation capacity with their native customers' load requirements, which limits exposure to and reliance on sales in competitive wholesale power markets.

Long-term contracts

We believe generation and transmission cooperative utilities' long-term wholesale power contracts with their distribution members provide largely captive customer bases. In addition, generation and distribution cooperatives' members' joint and several liability, along with generally modest exposure to industrial customers, help provide secure and stable revenue streams.

Benefits of amortizing debt

Unlike investor-owned utilities, electric cooperatives principally use amortizing debt, which limits their exposure to refinancing risk and mitigates the high leverage that is common among cooperative utilities.

These and other strengths help cooperative utilities withstand risks to their financial performance, including economic weakness and the costs of complying with emissions mandates.

The Recession's Litmus Test

The U.S. recovery is progressing in fits and starts, and consumers continue to feel the downturn's effects. These economic concerns have eroded consumer confidence. Also, customers' tight budgets and reduced economic activity whittled electric consumption.

Lower electric use makes it more difficult for utilities to apportion fixed costs. The downturn's effects might have suggested limits on the ability to reallocate fixed costs through ratemaking and financial flexibility. However, we believe the sector's rate-setting and financial performance during the recession validated our assumption that utility boards and regulators are generally willing and able to set rates at levels that perpetuate sound lender protections. These actions let many cooperative utilities emerge from the recession with unblemished credit quality.

At the same time that the recession eroded demand for electricity, it also reduced the need for additional generation resources. The resulting reduction in capital spending and debt issuance tempered other financial strains and, together with rate adjustments, helped shore up credit quality.

Uncertainty About Emissions Regulations Weighs on Utilities

Potentially costly emissions regulations could present significant stresses to the financial strength of electric utilities and create operational issues. EPA's proposed controls on several facets of power plant operations compounds its multipronged strategy for reducing a host of power plant emissions. Some utilities also face state-level emissions restrictions and renewable portfolio standards.

The federal regulatory arena is dynamic. Some of EPA's initiatives, such as mercury rules, have developed into firm

and costly regulations. Another one of the more significant and potentially costly regulations, the Cross-State Air Pollution Rule, has been under a judicial stay since December 2011, and further judicial proceedings will likely delay its implementation. Other initiatives are still pending, such as the March 2012 proposal to regulate power plants' carbon emissions, as well as earlier proposals to regulate coal combustion residuals and proposals to regulate the use of surface water for power plant cooling.

Uncertainties about when these regulatory initiatives will go into effect complicate utilities' generation resource planning, both for new resources and the retrofitting of existing resources. Utilities must divine strategies to meet regulatory requirements, even when their requirements and timing are uncertain. If a utility is proactive, it might save money if its beats the pack and upgrades or adds resources before other utilities begin to do so, causing equipment and labor prices to go up. However, if early action proves to be poorly aligned with final regulations, operations could suffer, and the cost implications might be substantial. Consequently, management teams at many utilities are waiting for more clarity before acting.

There is a broad spectrum of solutions for each power plant within utilities' fleets. Some of the points along the continuum include the following:

- Taking no action for generation units that will likely be immune from further emissions regulation;
- Investing in remedial retrofits for units likely to be caught in the regulatory crosshairs; and
- Shuttering noncompliant units for which retrofits wouldn't be economical.

We expect that shutting units that are nearing the end of their life cycles, are inefficient, or do not dispatch much will not have a significant impact on utilities' operations or finances. However, in some cases, shuttering units could pare regional capacity, contribute to higher capacity prices, and create the need for replacement capacity or additional energy resources.

In March 2012, the EPA announced its newest and possibly the most significant of its recent emissions proposals. It proposes to restrict carbon emissions from new power plants, which would have the biggest impact on coal-fired production. Although Congress was unable to muster sufficient support for carbon controls, the agency has elected to take up the mantle. This proposal could alter the face of the power industry in the U.S., which has historically relied on coal for about half of its electricity production.

In recent years, the EPA principally focused on regulating power plant emissions other than carbon, including mercury, sulfur dioxide, nitrogen oxide, and particulates. Many viewed these regulations as a backdoor to carbon controls because they imposed constraints on fossil fuel plants' operations. The agency's March 2012 proposal is thus noteworthy because it directly advocates carbon controls.

Although the EPA's carbon regulation proposals are momentous, we don't think they will have negative implications for the financial and operational performance of cooperative utilities or our ratings on them in the near term, because they will apply only to new coal plants. However, as the highly coal-dependent cooperative sector's power plants reach the end of their useful lives, the regulations' operational and cost consequences will rise to the fore and color utilities' resource decisions.

Some utilities may feel the regulations' impact even before they must retire existing plants. As the economic recovery takes hold and electric demand and baseload needs increase, utilities would have to meet this need while avoiding baseload coal units, which would effectively steer them to natural gas. The economics and attractiveness of other

baseload options, such as nuclear, have diminished in the face of ongoing low natural gas prices.

If gas-fired resources come to dominate new generation, gas commodity prices might end up rising. Utilities could also find themselves paying premium prices for gas turbines as utilities move to this technology. For example, from 1999 to 2001, when merchant generators purchased a large number turbines to create broad operating footprints, the spike in demand strained manufacturers' capacity and pushed turbine prices up.

Our focus on looming regulatory risks does not detract from our consideration of near-term regulatory concerns. We continue to look at the cost and operational impacts of pending EPA rules covering mercury, sulfur dioxide, and nitrogen oxide emissions. While the cost implications of these regulations are not clear enough yet to assess their full impact, we're seeing preliminary indications that utilities' recent emissions retrofits will temper their spending needs.

Low Natural Gas Prices: The Pros And Cons

Natural gas prices fell to 10-year lows in recent months. But even before reaching these levels, falling prices since 2010 have helped many utilities rein in operating costs and reduced problematic emissions. Low prices enabled cleaner, gas-fired resources to displace costlier and dirtier coal-based resources.

The low natural gas prices aren't good news for all electric utilities. Those utilities with long generation positions need to sell their surpluses to nonmember customers to spread their capacity's fixed costs over more megawatt-hours. They also rely on surplus sales' margins to support sound financial performance. However, these sales' margins withered as the price of the marginal fuel, natural gas, whittled wholesale electricity prices. The past year's mild weather and the decline in electric demand resulting from the economic downturn are compounding unfavorable conditions in wholesale power markets. Utilities generally responded by raising rates for their native load customers. However, the rate adjustments have not uniformly supported stable financial metrics. Examples of cooperative utilities with significant long positions include Associated Electric Cooperative, Basin Electric Power Cooperative, Buckeye Power, and Seminole Electric Cooperative.

We Expect Rating Stability To Continue

The sector's nearly ubiquitous stable outlooks indicate that with few exceptions, the weak economy, emissions regulations, and low natural gas prices aren't likely to be catalysts for downgrades. We expect the rate-setting bodies--whether the utility itself or an outside body--will continue to make timely rate adjustments to provide for the recovery of mandated environmental costs, and facilitate the implementation of new regulations.

However, the full recovery of regulatory costs alone will not ensure ratings stability if cost pressures on rates constrain adjustments to the point that a utility's financial metrics decline. Excess margins that protect lenders are critical to maintaining stable credit quality, and a migration to merely adequate margins could impair that.

Nevertheless, recent years' rate adjustments suggest that strong financial performance will continue through our two-year outlook horizon, although we think the opportunities for upgrades are limited. We expect regulatory costs will prevent utilities from strengthening financial metrics sufficiently to prompt upgrades.

Our analysis goes beyond the impact of a weak economy and regulatory compliance costs, however, to look at the willingness of a utility's management to pass costs on to ratepayers. As regulatory costs crystallize, we will assess

them in the context of management teams' responses and measure the interplay between costs and rate adjustments and their implications for the debt service coverage ratios and liquidity cushions that are critical to sound credit quality. And because management actions so far have largely preserved sound financial risk profiles, we believe cooperative utilities remain reasonably well-positioned to take on an uncertain future.

Issuer Review

Table 1

Issuer/issuer credit or senior secured debt rating*/Comments	Analyst
Arkansas Electric Cooperative Corp. (AECC) (AA-/Stable/A-1+) AECC is one of the few state-regulated generation and transmission cooperatives. In 2009, the utility gained much greater rate-setting flexibility, with legislation that allows it to raise rates up to 5% in one year or 8% in two after an expedited rate review without engaging in protracted rate proceedings. Proposed rates will cover the costs of the 150 MW generating plant purchased in 2005 and AECC's 70 MW share of the coal-fired Turk Plant, which management expects will provide power by late 2012. Management will issue additional debt to complete its share of Turk plant costs, acquire a 746 MW combined cycle plant in Hot Springs and add environmental equipment to existing units, but it expects equity to account for at least 35% of capital even with its maximum estimate of additional debt. Management also expects DSC to be about 1.5x, as it was in fiscal 2011.	Judith Waite
Associated Electric Cooperative Inc., MO (AA/Stable) This G&T cooperative benefits from a very large footprint that contributes to the integrity of financial metrics. However, the utility has historically relied on sales of surplus energy and purchases for resale to enhance financial performance and contribute to favorable member rates. Nonmember revenues peaked at 43% of operating revenues in 2004, but declined significantly to about 18% in 2009-2011 due to native load growth that consumed surplus capacity and lower natural gas prices that depressed wholesale markets' electricity prices. Management implemented a 25.3% rate increase in 2008 and a 12.5% increase in 2009 to offset these trends. DSC was sound, in our view, at nearly 1.5x in 2010 and 1.4x in 2011. Fixed charge coverage was about 10 basis points lower in these years. We believe Associated is very carbon-intensive, which could have credit implications depending on the costs of complying with emissions regulations. Yet, overall, recessionary erosion of electricity demand and downward revisions of emissions compliance costs temper capital spending needs compared to previous forecasts.	David Bodek
Baldwin Electric Membership Cooperative (BEMC), AL (A/Stable) While growth has slowed for this Powersouth distributor, major new employers in the region have still led to almost a 2% increase in metered accounts per year. Growth is mainly among residential customers. To fund growth-driven projects, BEMC has a $42.95 million RUS loan upon which to draw. Even with the additional borrowings, annual DSC remains solid, in our view, at more than 1.5x	Ted Chapman
Basin Electric Power Cooperative, ND (A/Stable) Fiscal 2011 financial performance remained what we view as strong because of substantial increases in customers' rates in the past five years, an uptick in electric sales to oil exploration and production customers, and strong agricultural demand for the ammonia that Basin sells as a byproduct of its coal gasification. However, this G&T utility's financial performance remains vulnerable to rising debt service obligations, reduced prices for its surplus electricity sales, and lower prices for its synthetic natural gas commodity. We believe that Basin's substantial reliance on nonmember revenues that are susceptible to cyclicality distinguishes it from many G&T cooperatives and do not provide the revenue security or predictability of member sales under long-term requirements contracts. However, the proportion of member revenues reached 46% in 2011, up from 29% in 2007. Nevertheless, this remains low compared with those of other G&T cooperatives. In our view, historically strong financial performance, with DSC of nearly 2.0x in 2011, helped compensate for the business risks that revenues from competitive businesses present.	David Bodek
Big Rivers Electric Corp. (BREC), KY (BBB-/Stable) This G&T cooperative faces extreme customer concentration and its leading customers represent meaningful credit exposures. BREC relies on two aluminum smelters for about two-thirds of energy sales. The smelters' operations are vulnerable to economic cycles and, in particular, sharply lower aluminum prices. Furthermore, the cooperative and its members are subject to state rate regulation. Rate regulation could potentially expose the utilities' financial performance to delayed rate relief or cost disallowances. Although the cooperative produced strong scheduled DSC of nearly 1.5x in 2010 and 1.7x in 2011, we believe it needs strong coverage levels as a cushion against losing the smelters or reductions in smelter demand.	David Bodek
Brazos Electric Power Cooperative Inc., TX (A-/Positive) In 2011, Brazos introduced a new 560 MW combined cycle plant to its generation mix. However, the Sandy Creek Energy Center--an 800 MW pulverized coal plant--will not achieve its original commercial operational date of 2012; although opposition to the final permit has been resolved, the plant sustained damage during an October 2011 test run. Brazos is insulated from any financial or operational repercussions from the delay, however, due to the engineering, procurement, and construction contract and liquidated damages. Given	Theodore Chapman

that the bulk of its $740 million, five-year capital budget consists of transmission-related projects that carry a regulated rate of return from the state public utilities commission, we believe it is likely that Brazos could exceed its forecast coverage metrics at a level we believe could be in line with an 'A' rating. Management has established a DSC target of at least 1.25x and 15% equity, which it projects to achieve even after accounting for equity contributions to the Sandy Creek project. Accrual basis fixed charge coverage was 1.2x in 2010 and 1.26x in 2011.

Brunswick Electric Membership Corp., NC (A/Stable) — Judith Waite

In our view, the credit strengths that support the rating on this distribution cooperative include the board's willingness to set rates that target 2.0x DSC; the all-requirements power supply contract with North Carolina Electric Membership Corp. that provides fairly low-cost power; and a growing, primarily residential, customer base that is mainly in Brunswick County, an attractive destination for retirees. The cooperative has invested heavily in its power delivery system to assure reliability, and nearly all of its power lines along the coast are now underground. This will help avoid costly storm-related repairs. The utility also installed an automated meter reading system, which allows customers to monitor their usage and it to implement time-of-use rates. The cooperative's balance sheet is more highly leveraged than those of most distribution utilities, with debt equal to about 65% of total capital and averaging about $2,000 per customer, which constrains the rating. The debt-funded system expansion accommodated rapid population growth.

Buckeye Power Inc., OH (A-/Stable) — Jeffrey Panger

In our view, Buckeye's uneven financial results and increased leverage have resulted in weak DSC requirements in the past several years, although we note that audited results for fiscal 2011 were slightly better than those for 2010. We believe the 2011 coverage level was inflated through a financial transaction in which Buckeye used a portion of its line of credit to repay a note to Arch Coal, effectively putting the next three years of note amortization on credit (the line expires in 2015) Buckeye's rates to its members are slightly above average for G&T cooperatives. Already long on power, it has recently added additional capacity. However, a weaker natural gas market has chilled the utility's ability to generate profits on sales from its surplus capacity. Given reliance on volatile wholesale sales revenue, we believe that achieving these projected metrics is uncertain. Coal-fired generation from two Cardinal Station units dominates Buckeye's power supply. Since 2005, debt has more than doubled to $1.3 billion, largely driven by emissions controls additions. Further emissions related projects will bring debt up to $1.4 billion by 2012.

Central Electric Power Cooperative Inc., SC (AA-/Stable) — David Bodek

Central Electric principally procures and transmits electricity to its 20 distribution cooperative members and their more than 720,000 customers. It also collects and remits funds for energy purchases and develops and finances transmission assets. In our view, the narrow scope of its business model translates into low business risk that mitigates narrow DSC margins and limited working capital. Although power supply costs are passed through as incurred, overhead costs are not fully recovered in the year incurred if the utility sells fewer-than-projected MWh. Accrual-basis DSC strengthened to 1.10x in 2010-2011 after hovering near 1.05x in 2008-2009.

Central Iowa Power Cooperative (CIPCO) (A/Stable) — Peter Murphy

CIPCO is a G&T utility that benefits from a diverse and low-cost generation portfolio, including coal and nuclear baseload resources, natural gas peaking capacity and a growing renewable energy portfolio of PPAs. In December 2010, it received a 20-year license extension from the Nuclear Regulatory Commission through 2034 for the nuclear plant (Duane Arnold) that it owns a 124 MW (20%) stake in. The nuclear license extension, and recent increase in contracted wind capacity are positive developments, in our view, given their low-carbon attributes. However, CIPCO has exposure to carbon regulation for a sizable 53% of its energy resources, although this is below the average for its region. While the utility reduced its rates slightly in 2011, the relatively low density of its 12 member cooperatives' service territories, which contributes to above-average retail rates, could limit practical rate-making flexibility. Nevertheless, we believe CIPCO's financial performance was strong the past three fiscal years, with DSC at 1.4x in fiscal 2011, and liquidity, including unused credit lines, at more than 220 days' expenditures.

Chugach Electric Association, AK (A-/Stable/A-1) — Peter Murphy

Chugach serves about 67,000 retail members, and is among the dominant electricity providers and generators in Alaska. Its financial performance remains solid, in our view. The utility posted 2011 DSC of 2.3x, although this represents coverage with very little amortizing debt. With the refinancing of $270 million of bullet maturities in 2011 and 2012, all of Chugach's debt will now be amortizing. New money borrowings of about $250 million during the past two years funded a 70% share of a natural gas-fired generation plant, with Anchorage Municipal Light and Power taking the rest. Management expects plant completion within a year, and further expects the installation of more efficient gas generation capacity will result in substantial fuel savings. The utility faces several issues rare among cooperatives, including the authority of the Regulatory Commission of Alaska (RCA) over both retail and wholesale contract rates. However, the RCA permits Chugach to pass fuel cost increases to customers through a rate surcharge.

Dairyland Power Cooperative (DPC), WI (A/Stable) — Jeffrey Panger

DPC has what we consider a diverse membership of 25 distribution cooperatives that serves primarily residential bases in four states. Members have all-requirement contracts through 2055 and account for about 75% of operating revenues. Year-over-year financial operations were stable for 2011, with coverage of debt service requirements at 1.21x; The utility had about 49 days' of operating expenses in cash, and inclusive of credit lines, liquidity was 235 days. DPC still relies on coal-fired generation. The environmental retrofit of its baseload coal plants is the primary driver of its capital plan. At fiscal year-end 2011, the utility had $871 million of debt outstanding, and management expects total debt will rise modestly over the next several years. DPC has no baseload needs through 2020 and complies with Wisconsin's 10% by 2015 renewable portfolio mandate.

Diverse Power Inc., GA (A/Stable)
Diverse Power, a distribution cooperative, will own about 18.4 MW of the proposed Vogtle nuclear plants through its membership in Oglethorpe Power Corp (OPC). OPC and the other owners expect the nuclear units will begin operating in 2016 and 2017 and replace contractual power purchases. By the end of 2011, OPC had invested about $1.4 billion in the Vogtle plant construction and expects its share of the total cost to be about $4.2 billion (in 2008 dollars). Diverse's share of the cost is 2.79%, or about $117 million. OPC supplies about 53% of Diverse's electricity, and would be a potential source of additional power supply. Diverse Power's rates are in line with state averages, despite the lower density of the cooperative's customer base, and will likely continue to be even with the cost of the Vogtle units included, since almost all providers of electricity in Georgia are investors in the project. Supporting the ratings are financial metrics, including fixed charge coverage of about 1.2x and cash plus lines of credit equal to about 165 days of operating expense. — Judith Waite

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East Kentucky Power Cooperative Inc. (BBB/Stable)
This generation and transmission cooperative produces nearly all of the energy it sells to its 16 member cooperatives. It relies only nominally on off-system sales revenues. The utility and its members are subject to state rate regulation. Although the utility lacks the scope of autonomous ratemaking authority traditionally available to cooperative utilities, we believe that lenders benefit from the commission's oversight because its 2008 mandated management audit stopped the utility's financial and operational profile from degrading further. DSC ratios were only about 0.9x in 2007-2008, but rate adjustments produced coverage of 1.1x in 2009, and 1.3x in 2010 and 2011. East Kentucky exhibits very high leverage, in our view, with a debt-to-capitalization ratio of 90%. Coal resources account for about 85% of the utility's energy sales, which exposes it and its lenders to the impacts of potentially higher regulation costs. — David Bodek

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Georgia Transmission Corp. (GTC) (AA-/Stable/A-1+)
GTC is the transmission system of the OPC cooperative electric system, and is part of Georgia's Integrated Transmission System (ITS). GTC expects capital expenditures for 2012-2016 to be about $730 million to fund the transmission system's continuing upgrade and expansion. During the next several years, there will be increased competition for funding from the Federal Financing Bank under the guarantee of the RUS, and funding will depend on annual legislature approval. However, GTC continues to have what we view as good access to RUS-guaranteed debt. The cooperative has $150 million available under RUS loan commitments, and also has a $300 million shelf loan available from the National Rural Utilities Cooperative Finance Corp., of which $229 million remains available. In addition, the cooperative sold secured debt in the private placement market in 2009 and 2010, and so has an alternative source of funding. Management expects debt to increase to about $1.7 billion in 2016 from $1.5 billion in 2011. Financial metrics are weak, in our view, with DSC of 1.1x-1.2x, but we believe mitigating this are the low business risk and the strong level of liquidity GTC maintains, with minimum unrestricted cash equal to almost one year's operating expenses. — Judith Waite

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Golden Spread Electric Cooperative Inc., TX (A/Stable)
This G&T cooperative provides power to 16 member cooperatives in both the Southwest Power Pool (SPP) at rates regulated by the FERC; and in the Electric Reliability Council of Texas (ERCOT), where rates are not regulated. Golden Spread serves SPP members with 544 MW of owned generation and 765 MW it purchases. In 2019, a 525 MW contract will expire, ramping down before then. Golden Spread has invested in wind turbines (78.3 MW) and associated gas-fired quick-start generating units (168 MW), which began operating in mid-2011. Management expects that the new capacity will maintain a 15% reserve margin even at a growth rate of 3%. In ERCOT, Golden Spread has a power supply contract that terminates in May 2016. Protecting the financial risk profile are the member contracts' terms. The purchased power contracts include a 1.5x DSC margin on generating plant debt. Because the utility can adjust rates monthly with an annual true-up to assure full cost recovery, management expects to show fairly strong, stable coverage even after adding debt to fund construction of new assets. In 2011, DSC was more than 3.00x and fixed charge coverage was 1.45x. — Judith Waite

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Great River Energy, MN (A-/Stable)
This G&T cooperative serves 28 member distribution cooperatives. Member revenues accounted for nearly 90% of 2010 operating revenues, which limits reliance on competitive wholesale markets for revenues. However, low natural gas prices that are compressing spark spreads on off-system sales, as well as softer market demand for power, present financial pressures. The utility benefits from the availability of an automatic monthly power cost adjustment mechanism that allows it to pass through increases in fuel and purchased power costs and, importantly, recover declines in nonmember margins to preserve financial performance. The cooperative projects that its generation resources should be sufficient through 2023 or 2024, which is longer than earlier projections, because the recession eroded electric demand and its new, but idle, Spiritwood Station generating plant represents surplus capacity. The Spiritwood Station's substantial cost overruns also present concerns. Accrual basis DSC was consistent at 1.1x in 2010-2011. Balance-sheet liquidity is strong for a cooperative utility and represented more than six months' operating expenses at year-end, Dec. 31, 2011. Debt leverage is high at 87%, but not atypical for a cooperative utility. The utility depends heavily on coal-fired resources, which accounted for more than 70% of members' 2010 energy requirements and expose it and its customers to potentially higher regulatory costs. — David Bodek

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Guadalupe Valley Electric Power Cooperative Inc., TX (GVEC) (A+/Stable)
In November 2010, GVEC gave official notice to its power supplier, the Lower Colorado River Authority (LCRA) that it intends to pursue other supply options after its full-requirements wholesale contract expires in June 2016. Management has already executed some new medium-term purchased power agreements that will provide the bulk of its baseload requirements, and still has sufficient time to fully address the remainder of its requirements after the LCRA contract has expired. The utility has a history of what we view as very strong — Theodore Chapman

financial metrics, including annual DSC of 3x-4x.

Hoosier Energy Rural Electric Cooperative Inc. (A/Stable) — Jeffrey Panger

The rating on Hoosier reflects our view of the utility's ability to adjust rates under all-requirements contracts for its 17 distribution cooperative members, fixed cost coverage, and liquidity above levels generally seen for cooperatives; and a power cost adjustment mechanism that we expect will minimize cyclical under- or over-collection of power costs. However, we believe that because Hoosier depends on its coal-fired Merom and Ratts station units for the bulk of its energy needs, which exposes the cooperative to potentially significant outage or carbon regulation costs. These units have experienced high forced outage rates, necessitating the purchase of higher-cost replacement power. This has, together with increased capital spending and debt levels, placed upward pressure on rates. Nevertheless, we believe strong DSC and fixed cost coverage, in the 1.4x and 1.3x ranges, respectively, mitigate this exposure.

Minnkota Power Cooperative Inc., ND (A-/Stable) — Judith Waite

This G&T cooperative and its 11 distribution cooperatives own sufficient generating capacity to supply electricity demand at least through 2030, including the needs of Northern Municipal Power Agency (NMPA), a joint action agency for 12 municipalities in Minnesota and North Dakota that accounts for about 7% of the combined Minnkota-NMPA kilowatt-hour (kWh sales. Coal-fired units supply most of the power, but Minnkota has made the necessary investment in pollution control equipment and expects any additional required investment will be small. The utility owns and operates the 256 MW Milton R. Young unit 1 and its members own 455 MW unit 2. In the next two years, Minnkota's members will invest about $340 million to build two power lines: a 345 kilovolt (kV) alternating current transmission line from the Young plant to Grand Forks, N.D., and a 230 kV line from Bemidji to Grand Rapids, Minn. In March 2011 the board raised rates to 6.5 cents per kWh from 5.3 cents, to assure a $7.5 million margin and established a revenue deferral plan to help limit rate increases. Retail rates of about 9 cents are between the higher average in Minnesota and the lower average in North Dakota. What we view as weak financial metrics offsets the strong business risk profile somewhat. We expect DSC to be about 1.2x

North Carolina Electric Membership Corp. (A-/Stable) — David Bodek

This G&T utility generates only about one-third of its customers' energy needs and purchases the balance, which yields accrual basis fixed charge coverage that is about 30 basis points lower than direct debt coverage. DSC was strong, in our view, at 1.4x in 2010 and nearly 1.5x in 2011. Using the utility's financial projections, we calculated fixed charge coverage that will consistently be about 1.1x through 2014, which we believe represents a baseline for the rating. We believe the utility is highly leveraged, particularly for a utility that relies on others for substantial portions of its customers' electricity needs. Its debt-to-capitalization ratio was 93% in 2011, which was significantly improved compared to 2008's 100%.

Oglethorpe Power Corp. (OPC), GA (A/Stable/A-1) — Judith Waite

The generation cooperative's board's stated commitment to maintaining a moderately strong financial risk profile as management pursues plans to add substantial generating assets is an important credit factor. These plans, in particular OPC's nuclear investment, will likely increase debt to about $9 billion by 2016 from $5 billion now, and DSC will double. By the end of 2011, OPC's investment in the Vogtle 3 and 4 nuclear units was about $1.3 billion. Oglethorpe and its members are responsible for their share of Vogtle construction costs if the plant is cancelled or delayed. In accordance with the indenture, OPC must set wholesale rates high enough to cover costs plus a 1.1x MFI. The board raised the MFI to 1.12x in 2009 and 1.14x in 2010. As a result, and combined with higher load, DSC was 1.53x in 2010 and 1.57x in 2011. The board also directed management to increase liquidity significantly. We view both steps as evidence of its commitment to maintaining the rating.

Old Dominion Electric Cooperative (ODEC), VA (A/Stable) — David Bodek

This G&T is subject to FERC regulation and its members face state rate regulation. Pass-through mechanisms mitigate regulatory concerns. Having a high proportion of residential customers benefits the utility. ODEC's distribution members acquired and added about 100,000 Potomac Edison customers, which could create generation resource or purchase needs. The utility depends substantially on power purchases, which its limited generating investment and 68% debt-to-capitalization ratio reflect. In 2011, ODEC reduced its bullet debt maturities to 7% of total debt from 40%. DSC was skewed by 2011's large principal payment, but coverage of direct debt would have been about 1.4x without the bullet's repayment and coverage of direct debt and fixed charges would have been about 1.2x for the same period.

Peninsula Generation Cooperative (PGC), MI (A-/Stable.) — Jeffrey Panger

PGC is a relatively new and wholly owned subsidiary of Wolverine Power Cooperative. It was formed for the sole purpose of purchasing an ownership interest in Ohio Valley Electric Corp.'s Kyger Creek and Clifty Creek plants. The rating on PGC reflects our views of Wolverine's credit quality because the latter has an unconditional obligation to purchase PGC power and pay debt service, even if the plant is not operating. In addition to its five distribution cooperative members, Wolverine's Alternative Energy Supply member, Wolverine Power Marketing Cooperative, competes for large commercial and industrial customers in Michigan. We believe that sales to this member introduce a degree of downside financial risk. We expect power costs to be relatively high, but note that the cost to purchase this interest is commensurately lower than a typical new build facility.

PowerSouth Energy Cooperative, AL (A-/Stable) — Judith Waite

The board of this G&T cooperative agreed to raise rates sufficiently to create a reserve for expected capital spending. This indicates a

shift toward stronger bondholder protection. The board intends to establish a cash reserve of at least $170 million to partially fund plant acquisition and construction costs, in accordance with the mortgage indenture that requires that the cooperative fund at least 9% of all major capital spending with internally generated cash. We view the plan to build cash as a vehicle for strengthening operating cash flow, bolstering DSC and equity. Historical DSC was about 1.1x and the utility projects coverage of about 1.2x, which it achieved in 2011. Most of PowerSouth's electricity comes from low-cost, compliant coal-fired plants, supplemented by gas-fired units and purchased power. After 2016, about 10% of electricity will come from nuclear power. The utility has a 20-year contract with the Municipal Power Agency of Georgia for 125 MW of the proposed Vogtle nuclear generating units.

San Miguel Electric Cooperative Inc., TX (A-/Stable)

This single-asset cooperative owns and operates the 411 MW lignite-fired San Miguel plant for the benefit of its two G&T off-takers, South Texas Electric Cooperative and Brazos, both of which we rate 'A'. We understand that contracts obligate South Texas and Brazos Electric to pay San Miguel's debt obligations through 2020, even if the plant is not operating. This plant is an important resource for these utilities, but is only one of several in their portfolios. South Texas and Brazos share output and costs in equal shares under long-term contracts expiring in June 2020. Management expects some additional investment for pollution controls, although the full size and timeline have not been fully determined.

Theodore Chapman

Seminole Electric Cooperative, FL (A-/Stable)

Nine of Seminole's 10 members have signed extensions of their take and pay all requirement contracts through 2045. The extension includes provisions for conversion to partial-requirement membership, signaling that member interests are not necessarily aligned. The approved withdrawal of the tenth and historically second-largest member (Lee County Electric Cooperative) in 2014 bears this out further. While this relieves Seminole of the need to provide additional power supply, it diminishes the membership base's overall diversity. We consider the 1.09x fixed cost coverage for 2011 was just adequate at the current rating, and the cooperative's projections indicate a continuation of this metric. We believe liquidity is just adequate. At fiscal year-end 2010 (Dec. 31), cash and investments measured only 79 days of operating expenses, but was supplemented by a $200 million committed credit line, boosting overall liquidity to 117 days. Seminole has a substantial carbon footprint.

Jeffrey Panger

South Mississippi Electric Power Association (SMEPA) (A-/Stable)

We raised our rating on this G&T cooperative to 'A-' from 'BBB+' in October 2011 to reflect stronger financial metrics in 2009 and 2010, and our view of board policies that could perpetuate the utility's stronger financial performance because the board committed to budget for 1.2x coverage of direct debt. Accrual coverage was consistently 1.3x in 2009-2011 and fixed charge coverage was 10-15 basis points lower in those years. SMEPA produces about one-third of its 11 member customers' energy needs and purchases the balance under contracts. Nearly 100% of energy sales are to native load, which we view as contributing to revenue-stream predictability and stability. The utility raised rates substantially in recent years to maintain its financial strength. Coal resources, including power purchases, account for about 53% of SMEPA's energy sales, which exposes the utility and its lenders to potentially higher regulatory costs.

David Bodek

South Texas Electric Cooperative (STEC) (A-/Stable)

This G&T serves eight distribution cooperatives that have all extended their wholesale power contracts uniformly through 2049. The distribution cooperatives serve more than 230,000 mainly residential retail customers. Coleto Creek No. 2, a proposed 650 MW coal unit in Goliad County, is on hold for now, although given EPA's March 2012 announcement regarding carbon emissions, the project might be scrapped altogether. STEC might still opt to build later in the decade as one possible way to address an anticipated need for capacity by 2020; management suspended a surcharge it had used to build up funds for an equity contribution to Coleto 2 but still plans to designate the reserves towards some future plan, whether also for an equity contribution towards another project or even as a rate stabilization reserve. Management forecasts a 2% cumulative annual growth rate during its 10-year plan, even apart from as much as several hundred megawatts of additional load growth driven by activity in the Eagle Ford shale. A $265 million syndicated letter of credit that STEC could tap to provide interim funding for investment in additional generation adds to liquidity resources.

Theodore Chapman

Square Butte Electric Cooperative, ND (A-/Stable)

Square Butte owns a 455 MW lignite-fired mine-mouth generating station (Milton R. Young 2). It sells half of the output under a long-term contract to Minnkota, the plant's operator. The balance is sold to Minnesota Power Inc. (MP). In a transaction related to the sale of 465 miles of transmission to MP, Minnkota share of the plant's energy and capacity will increase annually beginning in 2014, eventually reaching 100% by 2026. The Young 2 plant is competitive, providing power in 2011 at an average cost of $36.10 per MWh, achieving 95% capacity factor, despite its 34-year age. The plant complies with nitrogen oxide emissions requirements, but recent EPA mercury and hazardous air pollution requirements will have to be addressed within three years.

Peter Murphy

Tri-State Generation & Transmission Association, CO (A/Stable)

Tri-State is a generation and transmission cooperative serving 44 members across a 250,000-square-mile area in portions of Wyoming, Nebraska, Colorado, and New Mexico. It indirectly serves more than 601,000 retail customers. Accrual-basis DSC was consistently 1.3x in 2008-2010, but only 1.0x in 2011 because, in 2011, Tri-State deferred accrual recognition of $55 million of revenues as a hedge against the uncertain operating costs of its 2010 Colowyo coal mine purchase and Fort Lupton power plant acquisition By comparison, cash from operations debt service coverge was 1.3x in 2008, 1.1x in 2009, 1.7x in 2010 and 1.3x in 2011. RUS policy dictates that Tri-State segregate the $75 million of deferred revenues it is holding for application when recognized through 2018. The utility has yet to update 2010's financial forecast because the Colowyo mine's capital needs and the Fort Lupton plant's operating costs remain

David Bodek

uncertain. Tri-State lacks an automatic rate adjustment mechanism for capturing changes in fuel and purchased power costs. Electricity produced with coal at six generating stations accounted for about two-thirds of 2010 energy sales and purchases raised coal's contribution to about 80%. We believe this high reliance exposes the utility and its customers to the costs of additional emissions controls.

Vermont Electric Cooperative Inc. (VEC) (A-/Stable) — Judith Waite

We raised our rating on VEC March 22, 2011, to reflect the stronger financial risk profile of this distribution cooperative in northern Vermont. Unlike most cooperatives, VEC's rates are regulated. In recent years, the regulator has approved rate increases that include a 2.18x MFI, compared with 1.50x-1.80x in previous years. This will allow the utility to self-fund about 40% of its $9.65 million annual capital investment through 2019; debt will fund the remainder. DSC was about 2.0x in 2009 and 2010, and 2.3x in 2011. Fixed charge coverage, which includes purchased power capacity payments as a fixed obligation like debt service, improved from 1.4x to 1.5x in 2011. Management contracts for about 90% of electricity requirements about two years out, but the tenor of a portion of the supply portfolio is much longer. Committed lines of credit permit direct borrowing up to $10 million and letters of credit up to a cap of $20 million combined. This mitigates somewhat management's decision to maintain very minimal unrestricted cash.

Wabash Valley Power Association (WVPA), IN (A-/Stable) — Peter Murphy

WVPA generated margins that increased its equity level to management's 20% target. Audited figures for fiscal 2011 indicate a margin of $18 million. What we view as good budget performance and low market prices for power and natural gas have helped the utility achieve stronger margins, with no cost deferrals in fiscal years 2009-2011, unlike 2007-2008. In our view, liquidity was strong as of Dec. 31, 2011, at more than 100 days' expenditures, when considering $120 million of committed lines of credit, and on-balance sheet liquidity is also sufficient, at 45 days. Rates are competitive, at $67 per MWh for 2012, although management expects rates to increase modestly each year for the next five. Most of WVPA's owned resources are gas-based, including 80 MW of recently acquired peaking capacity. The utility has 26 members, although two will terminate membership within the next three years, and combined with a nonmember that WVPA will supply through 2017, account for about 15% of annual revenue. The loss does not threaten credit quality, due to a flexible portfolio of purchased power contracts; the 2008 addition of Citizens, now the largest member (11% of sales); and the modest growth in sales to remaining members.

Western Farmers Electric Cooperative, OK (BBB+/Positive) — David Bodek

We revised our outlook on this G&T cooperative to positive from stable in March 2011 to reflect the benefits of a generation plant's lease restructuring that we believe averted a potentially costly lease-termination; and reduced, but did not remove, the cooperative's exposure to ratings triggers and contingent liabilities. The revised outlook also reflects our view of the utility's projections of stronger DSC because of debt extensions and rate increase plans. However, accrual DSC slipped to 1.1x in 2011 from 1.3x in 2010. Cash from operations coverage in 2011 was nearly 1.2x, up from about 1.0x in 2010. Well-aligned and strong accrual and cash DSC are important to the direction of credit quality.

*Ratings as of May 22, 2012. DSC--Debt service coverage. EPA--Environmental Protection Agency. FERC--Federal Energy Regulatory Commission. G&T--Generation and transmission. MFI--Margins for interest. MW--Megawatts. MWh--Megawatt-hours. RUS--Rural Utilities Service.

Rating Activity

Table 2

Rating/Outlook/CreditWatch Actions*

Issuer	To	From	Date
Southern Montana Electric Generation & Transmission Co-op	D	CC/Watch Dev	Jan. 25, 2012
Southern Montana Electric Generation & Transmission Co-op	CC/Watch Dev	BBB/Stable	Oct. 24, 2011
South Mississippi Electric Power Association	A-/Stable	BBB+/Positive	Oct. 18, 2011
Brazos Electric Power Cooperative Inc.	A-/Positive	A-/Stable	March 31, 2011
Vermont Electric Cooperative Inc	A-/Stable	BBB/Positive	March 22, 2011
Western Farmer's Electric Cooperative	BBB+/Positive	BBB+/Stable	March 8, 2011
Basin Electric Power Cooperative	A/Stable	A-/Stable	March 2, 2011

*Dates represent the period from Jan. 1, 2011, to May 22, 2012, covered by this report card.

Contact Information

Table 3

Contact Information

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Related Criteria And Research

- Continued Ratings Stability Expected For U.S. Regulated Electric Utilities In 2012, Jan. 27, 2012
- A Sluggish Economy And Developing Regulations Remain The Biggest Shocks To U.S. Public Power Credit Quality, Jan. 19, 2012
- What's Driving The U.S. Merchant Power Sector's Credit Outlook for 2012?, Jan. 11, 2012

Comments and data reflect publicly available information as of May 22, 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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 32) ***Refer to page 13 of the Wolfram Testimony which states that Big Rivers is proposing to revise its current "per kWh" allocation of environmental costs to a "percentage of Total Adjusted Revenue" allocation method. For the year 2011, provide the total amount that was allocated to each member under the current allocation method and the total amount that would have been allocated to each member had the proposed allocation method been in place in 2011.***

Response) Please see the attached schedule.

Witness) Mark A. Hite

Big Rivers Electric Corporation
Case No. 2012-00063
Member Allocations

Rate Class	2011 Actual		2011 by Proposed Method		
	Actual ES Revenue	%	Total Adjusted Revenue	%	Share of Total ES Charges
Rurals	$ 5,132,283.24	22%	$ 114,670,501.27	27%	$ 6,234,707.15
Large Industrials	$ 2,111,468.15	9%	$ 40,729,321.64	10%	$ 2,214,478.79
Smelters	$ 15,692,571.51	68%	$ 266,451,529.54	63%	$ 14,487,136.96
Total	$ 22,936,322.90	100%	$ 421,851,352.45	100%	$ 22,936,322.90

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 33) ***Refer to page 19 of the Wolfram Testimony, line 3, at which Mr. Wolfram states that Big Rivers' proposed forms are "generally" consistent with forms approved by the Commission for other electric utilities. Is Big Rivers aware of anything in the proposed forms that is not consistent with other forms approved by the Commission?***

Response) No. The forms proposed by Big Rivers are not inconsistent with the forms approved by the Commission for other electric utilities. The word "generally" was used only because Big Rivers' proposed forms have a unique element, i.e. they account for the removal of certain line items specified in the Smelter Agreements. These items are outlined in the Direct Testimony of John Wolfram on page 15 of 21. This is the only item in the forms that is unique to Big Rivers.

Witness) John Wolfram

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 34) *Refer to Revised Exhibit Wolfram-3.*

a. *Refer to page 5 of 6. Under the "Availability" section, it is stated that the "[t]he Environmental Surcharge ("ES") is mandatory to all Standard Rate Schedules listed in Section 1 of the General Index . . . ." Section 1 of the General Index of Big Rivers' tariff includes the following rate schedules: Rural Delivery Service, Large Industrial Customer, Cable Television Attachment, Cogeneration Small Power Production Purchase, Cogeneration Small Power Production Sales, and Large Industrial Customer Expansion. Explain why the ES should apply to the Cable Television Attachment and the Cogeneration tariffs.*

b. *Refer to page 6 of 6. Paragraph (3) states that "[t]he revenue R(m) is the average monthly revenue, including base revenues and automatic adjustment clause revenue less Environmental Cost Recovery Surcharge revenues . . ."*

   (1) *Explain why "automatic adjustment clause" is used rather than stating the specific adjustment clause(s) that would be included?*

   (2) *Does the use of "automatic adjustment clause" refer only to the Fuel Adjustment Clause ("FAC") and the*

Non-Smelter Non-FAC Purchase Power Adjustment? If no, explain.

(3) The phrase "automatic adjustment clause revenue" is used. (Emphasis added). Instead of the word "revenue," should a different word or combination of words be used given that automatic adjustment clauses can result in a credit on member bills?

Response)

a. The ES should not apply to the Cable Television Attachment or the Cogeneration tariffs. The ES should apply only to the following tariffs listed in in Section 1 of the General Index:

- Rural Delivery Service
- Large Industrial Customer
- Large Industrial Customer Expansion

b. (1) & (2)

The phrase "automatic adjustment clause" is used because the titles of the specific adjustment clauses that apply to the Rural and Large Industrial rate classes differ from those that apply to the smelters. For the Rural and Large Industrial rate classes, the specific adjustment clauses include the FAC and the Non-

Smelter Non-FAC PPA. For the smelters, this includes the FAC and the Non-FAC PPA.

b. (3)

It would be appropriate to replace the word "revenue" with the phrase "charges or credits" in Paragraph (3).

Witness) John Wolfram

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 35) ***Refer to Exhibit Wolfram-5.***

a. ***Refer to page 2 of 16, ES Form 1.10. This form shows E(m) = RORB + OE - BAS where RORB is identified as Rate Base times the Rate of Return. Exhibit Wolfram-3, pages 4 and 5, show E(m) = [RB/12)(RORB)] + OE - BAS where RORB is identified as the Rate of Return on Environmental Compliance Rate Base. Although the calculations would result in the same E(m), explain why the formula in the ES form differs from that in the proposed tariff and why the definition of RORB differs in the exhibits.***

b. ***Refer to page 3 of 16, ES Form 2.0. The first two sections on this form are identified as "RORB". Confirm that the first section should be identified as "RB" or explain why it is correct as shown.***

Response)

a. A distinction should be made between the Rate of Return on Rate Base, which is a percentage, and the Return on Rate Base, which is a value in dollars. The formulas could be presented as follows:

Exhibit Wolfram-3, pages 4 and 5, ES Tariff:

E(m) = [(RB/12) (RORORB)] + OE
where RORORB is the Rate Of Return On Rate Base (in %)

Exhibit Wolfram-5, page 2 of 16, ES Form 1.10:

E(m) = RORB + OE – BAS
where RORB is the Return on Rate Base, which is equivalent to the term in square brackets above:
RORB = [(RB/12) (RORORB)] (in $)

b. Confirmed. The first section of Exhibit Wolfram-5, page 3 of 16, ES Form 2.0, should be identified as "RB"

Also, on ES Form 1.00 in Exhibit Wolfram – 4, page 1 of 9, the zeroes shown for CESF, BESF, and MESF should not be marked with the dollar sign. These values are percentages.

Witness) John Wolfram

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 36) ***Refer to Exhibit Wolfram-6, page 1 of 1. Provide this exhibit with the effects of Project No. 6, Converting Burners to Natural Gas, removed from the schedule.***

Response) Please see Big Rivers' response to Item 4(b) of these responses.

Witness) John Wolfram

BIG RIVERS ELECTRIC CORPORATION

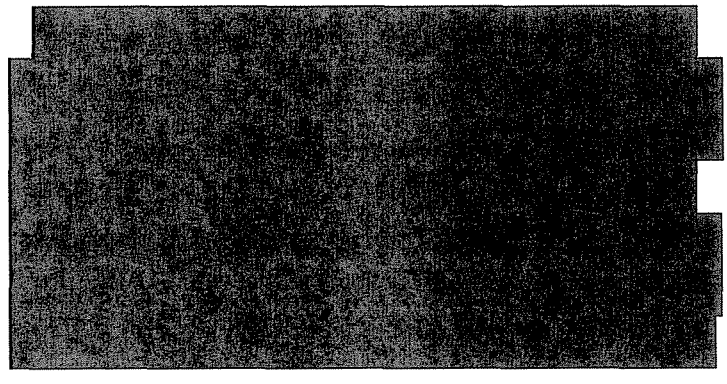
APPLICATION OF BIG RIVERS ELECTRIC CORPORATION FOR APPROVAL OF ITS 2012 ENVIRONMENTAL COMPLIANCE PLAN, FOR APPROVAL OF ITS AMENDED ENVIRONMENTAL COST RECOVERY SURCHARGE TARIFF, FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY, AND FOR AUTHORITY TO ESTABLISH A REGULATORY ACCOUNT
CASE NO. 2012-00063

Response to Commission Staff's Initial Request for Information Dated May 21, 2012

June 1, 2012

Item 37) *State whether any of Big Rivers units will be taken offline during construction of the 2012 Plan projects. If yes, provide the projected shutdown dates by unit and state how Big Rivers plans to meet its load requirements during those times.*

Response) Big Rivers will minimize the amount of time each unit will be off line to complete the projects shown in the plan. All of Big Rivers' projects are expected to be completed during regularly scheduled maintenance outages with the exception of the Green Unit 2 SCR, whose currently scheduled three week outage may be extended up to an additional three weeks, but not more than six weeks total. Anticipated outages, subject to change, are:



The majority of these outages will be in spring and fall time periods, when demand is lower on the Big Rivers system. Big Rivers will meet its load

requirements as it currently does by bidding its required load and available generation into the MISO day ahead and real time markets.

Witness) Robert W. Berry

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 38) ***Provide the following operational information for all units proposed for pollution control retrofit:***

a. Commercial operation date;
b. The number of normal cycles (stops and starts);
c. The number of emergency trips and starts;
d. Capacity Factor for the last five years;
e. Heat Rate for the last five years; and
f. For the last 10 years, provide any and all major and minor outages, including the major projects completed during each outage.

Response)

a.-e. Please see the attached tables.

f. Please see the listing on the attached CD of maintenance tasks that have been completed during all of Big Rivers' planned maintenance outages since the Unwind closing on July 17, 2009. Big Rivers does not have accurate information prior to the July 17, 2009 closing of the Unwind transaction.

Witness) Robert W. Berry

Big Rivers Electric Corporation
Case No. 2012-00063
Unit Operational Information

TABLE 1

UNIT OPERATING DATA											
Unit	Commercial Operation Date 38 a.	Gross Capacity Factor, % 38 d.					Net Heat Rate, Btu/kWH 38 e.				
		2007	2008	2009	2010	2011	2007	2008	2009	2010	2011*
Coleman 1*	November-69	80.4	60.4	71.0	76.5	85.7	10,925	10,562	10,702	10,694	10,925
Coleman 2*	September-70	70.5	82.9	69.7	65.1	84.8	11,614	11,520	11,861	11,934	10,946
Coleman 3*	January-72	79.8	82.1	67.3	81.4	85.5	10,506	10,522	10,837	10,629	10,870
Green 1	December-79	82.4	93.3	87.7	88.2	86.0	11,067	10,952	11,049	11,125	11,270
Green 2	January-81	92.4	91.0	74.9	92.6	91.4	11,285	11,255	11,302	11,159	11,193
Henderson 1	June-73	83.4	78.7	72.8	87.0	84.2	10,996	10,904	10,860	10,961	11,035
Henderson 2	April-74	75.7	79.1	85.8	78.2	76.5	11,238	11,053	11,151	11,194	11,286
Wilson 1	November-86	88.3	82.6	74.7	91.2	92.9	11,445	11,520	11,342	10,885	10,752

*Coleman's common scrubber auxiliary power is pulled from Coleman 2; Beginning in 2011, the scrubber auxiliary power was distributed equally between all three Coleman units more truly representing the Coleman units' net heat rates.

TABLE 2

UNIT NUMBER OF OUTAGES AND STARTS 38 b. and 38 c.															
Unit	Number of Forced Outages					Number of Maintenance Outages					Number of Starts				
	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Coleman 1	9	11	5	11	7	6	4	3	2	2	14	17	8	13	9
Coleman 2	4	6	5	8	5	5	2	5	4	3	10	8	10	15	8
Coleman 3	7	6	10	6	14	1	2	3	4	2	8	8	14	9	15
Green 1	9	8	10	8	7	4	3	1	1	2	17	13	11	10	11
Green 2	10	6	13	1	8	0	1	2	1	1	13	8	17	2	6
Henderson 1	16	19	29	13	14	1	0	3	3	2	16	16	30	14	17
Henderson 2	13	11	9	17	20	2	4	5	2	4	16	21	14	16	17
Wilson 1	17	14	13	11	13	1	3	2	4	1	19	15	14	13	13

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 39) ***Has Big Rivers considered the potential impact of CO2 regulation or legislation being promulgated or enacted during the planning period studied? If so, discuss the impact. If not, explain why the potential CO2 impact was not considered.***

Response) Except with regard to PACE Global's projections that were used in ACES' planning models, Big Rivers did not include the impact of potential CO2 legislation in its analyses in this proceeding because the rules that may be enacted are unknown and doing otherwise would be speculative.

Witnesses) Robert W. Berry
Patrick N. Augustine

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 Commission Staff's
Initial Request for Information
Dated May 21, 2012

June 1, 2012

Item 40) ***Provide a detailed description of the decision model used in the Sargent & Lundy study. Provide electronic versions of the models including all input and output files.***

Response) S&L used models and worksheets to generate the capital and O&M cost estimates, and to determine the Net Present Value (NPV) of each technology over a projected 20-year life. S&L used the lowest NPV between the various technologies while still complying with the applicable regulatory requirements to decide the most cost effective option. Big Rivers filed a CD containing EXCEL spreadsheets of the models and worksheets S&L used to calculate NPV values on May 30, 2012, in response to the May 11, 2012, letter from KIUC's counsel to Big Rivers' counsel.

Witness) William DePriest