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Your Touchstone Energy® Cooperative 

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

APPLICATION OF BIG RIVERS)
ELECTRIC CORPORATION FOR A) Case No. 2013-00199
GENERAL ADJUSTMENT IN RATES)

**Response to Ben Taylor and the Sierra Club's
Initial Request for Information
dated August 19, 2013**

FILED: September 3, 2013

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BIG RIVERS ELECTRIC CORPORATION
APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR A GENERAL ADJUSTMENT IN RATES
CASE NO. 2013-00199

Response to Ben Taylor and Sierra Club's
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1 **Item 1)** *Refer to page 8 of the Direct Testimony of Mark Bailey and page 8 of the*
2 *Direct Testimony of Billie Richert.*

3 *a. Reconcile Ms. Richert's statement that BREC, with the requested rate*
4 *increase, would be only \$633,000 above the critical threshold of a 1.10*
5 *MFIR, with Mr. Bailey's statement that the requested increase would put*
6 *Big Rivers \$6.1 million above the same threshold.*

7 *b. Confirm how large a decline in revenues below the forecasted level BREC*
8 *could incur without needing to request an additional rate increase.*

9
10 **Response)**

11 a. The Direct Testimonies are explaining different values. Ms. Richert states
12 that Big Rivers will earn a 1.11 MFIR in the test period. After implementing
13 the rates from the Cost of Service Study, Big Rivers will actually only achieve
14 a 1.11 TIER in the test period due to the pro forma adjustments. The
15 difference between achieving a 1.11 TIER and a 1.10 TIER is approximately
16 \$633,000 in net margins. This is what Ms. Richert is explaining in her Direct
17 Testimony. Mr. Bailey in his Direct Testimony is explaining that the
18 difference between a 1.24 TIER and 1.10 TIER is only about \$6.1 million.

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1 Mr. Bailey's statement is that Big Rivers is seeking to maintain a 1.24 TIER,
2 which was the basis for the revenue requirement in the Cost of Service Study.
3 The Cost of Service Study is described in greater detail in the direct testimony
4 of John Wolfram.

5 b. To maintain a 1.10 MFIR versus a 1.11 MFIR in the test period, Big Rivers'
6 revenues, all other amounts remaining unchanged, could only decline
7 approximately \$633,000.

8

9 **Witness)** Billie J. Richert

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- 1 Item 2) *Refer to page 8 of the Direct Testimony of Mark Bailey, page 10 of the*
2 *Direct Testimony of Billie Richert, and page 11 of the Direct Testimony of Christopher*
3 *Warren.*
- 4 a. *Reconcile the statements of Mr. Bailey and Ms. Richert that Big Rivers'*
5 *requested rate increase would lead to a projected TIER of 1.24 with Mr.*
6 *Warren's statement that Big Rivers' projected TIER with the requested rate*
7 *increase would be 1.10 in 2014, 1.11 in the fully forecasted test period, and*
8 *1.22 in 2015.*
- 9 b. *Confirm Big Rivers' projected TIER for 2014, the projected test year, and*
10 *2015 with the requested rate increase.*
- 11 c. *If Mr. Warren's testimony accurately identifies Big Rivers' projected TIER*
12 *with the requested rate increase, identifying Big Rivers' resulting projected*
13 *MFIR for 2014, the projected test year, and 2015.*

14
15 **Response)**

- 16 a. Please refer to the response to SC 1-1.
- 17 b. Big Rivers' projected TIER with the requested rate increase would be 1.10 in
18 2014, 1.11 in the fully forecasted test period, and 1.22 in 2015.

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- 1 c. Big Rivers' projected MFIR with the requested rate increase would be 1.10 in
2 2014, 1.11 in the fully forecasted test period, and 1.22 in 2015.

3

4 **Witness)** Billie J. Richert

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- 1 **Item 3)** *Please refer to pages 9 to 10 of the Direct Testimony of Mark Bailey.*
- 2 *a. Please confirm that prior to the Century and Alcan rate cases, the demand*
- 3 *charge was lower for rural customers than for large industrials; while*
- 4 *under the Company's proposal in this case the reverse would be true.*
- 5 *b. If so, what accounts for this change?*
- 6

7 **Response)**

- 8 a. Confirmed. See the following table.
- 9

Time Period	Demand Charge (\$/kW-Month)		
	Rural	Large Industrial	Variance
(1)	(2)	(3)	(4) = (2) - (3)
Prior to Both Rate Cases	9.697	10.500	-0.803
Filed with Century Rate Case	16.950	12.410	4.540
Filed with Alcan Rate Case	24.742	17.979	6.763

10

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- 1 b. The change is driven by the departure of the smelters and the elimination of
2 rate subsidies from the smelters to the Rural and Large Industrial rate classes.

3

4 **Witness)** John Wolfram

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1 Item 4) *Please refer to pages 8 to 11 of the Direct Testimony of Billie Richert and*
2 *Exhibit Warren-3.*

3 *a. Is it the case that the requested rates are forecasted to achieve both a*
4 *1.24 TIER and 1.11 MFIR, as you seem to say on p.8 and p.11?*

5 *b. If these two values are equivalent, please explain the gap between them*
6 *in light of the following: The formulas on Witness Richert's Direct*
7 *Testimony of page 11 show that $TIER - MFIR = \text{Income Tax} / \text{Interest}$*
8 *Expense on Long-Term Debt. However, Exhibit Warren-3 shows that*
9 *BREC's tax payments are less than \$1,000, while interest expense is*
10 *more than \$43 million. This appears incompatible with $TIER - MFIR =$*
11 *0.13.*

12
13 **Response)**

14 a. The requested rates are forecasted to achieve a 1.11 TIER and 1.11 MFIR
15 in the forecast period. As stated in the response to SC 1-1, the basis for the
16 Cost of Service Study was a 1.24 TIER. After the proforma adjustments
17 were made, the resulting TIER for the forecast period was 1.11.

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1 b. Please see the response above.

2

3 **Witness)** Billie J. Richert

4

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- 1 **Item 5)** *Please refer to pages 10 and 12 of the Direct Testimony of Robert Berry.*
- 2 *a. If "off-system sales will remain depressed" because MISO prices are*
- 3 *expected to be below BREC's marginal generation costs throughout 2013*
- 4 *and 2014, explain how it is possible that BREC's plants are routinely*
- 5 *exceeding 90 percent dispatch rates in MISO.*
- 6 *b. For each of Big Rivers' generating units, identify the projected dispatch cost*
- 7 *for each of the years 2014 through 2027.*

8

9 **Response)**

- 10 a. Please see response to KIUC 1-49(a) for the dispatch rate of Big Rivers' units.
- 11 The generating units are being dispatched based on the production variable
- 12 costs. Big Rivers' generating units are profitable because their production
- 13 variable cost is less than the market price. The off-system sales price is
- 14 causing the off-system gross sales margins to remain depressed, not
- 15 necessarily the off-system sales volume.
- 16 b. The projected generating unit dispatch cost (production operating cost – does
- 17 not include any fixed cost) can be found in the production cost model outputs.
- 18 The production cost model outputs are provided in response to AG 1-98.

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1

2 **Witness)** Robert W. Berry

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- 1 **Item 6)** *Please refer to page 11 of the Direct Testimony of Robert Berry Direct*
2 *Testimony. With regards to the "formal responses" that Big Rivers has provided to RFPs:*
3 *a. Identify the utility that issued each RFP, the date of the RFP, the amount of*
4 *energy and/or capacity sought in the RFP, and the period of time for which*
5 *each RFP was seeking such energy and/or capacity.*
6 *b. Identify the prices that Big Rivers bid for providing energy and capacity in*
7 *each of its formal responses to the RFPs*
8 *c. Produce each RFP and Big Rivers' response to each such RFP.*
9 *d. Identify the results of each such RFP, including whether Big Rivers' formal*
10 *response to each such RFP has been accepted or rejected.*

11

12 **Response)** a-d) Big Rivers objects to this request on the grounds that it is overly broad
13 and unduly burdensome. Big Rivers also objects to this request on the grounds that it seeks
14 information that is neither relevant nor likely to lead to the discovery of admissible evidence.
15 Notwithstanding these objections, but without waiving them, please see Big Rivers' response
16 to PSC 2-16.

17

18 **Witness)** Robert W. Berry

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- 1 **Item 7)** *Refer to page 11 of the Direct Testimony of Robert Berry. With regards to*
2 *the “informally initiated discussions with other potential parties,” identify:*
- 3 *a. Each other potential party that such discussions have been initiated with*
4 *b. The amount of energy or capacity that Big Rivers has offered in each such*
5 *discussion*
6 *c. The price at which Big Rivers offered energy and/or capacity in each such*
7 *discussion*
8 *d. The results of each such discussion, including whether such discussions are*
9 *still ongoing or whether Big Rivers’ offer of energy and/or capacity has*
10 *been rejected.*

11
12 **Response)** Big Rivers objects to this request on the grounds that it is overly broad and
13 unduly burdensome. Big Rivers also objects to this request on the grounds that it seeks
14 information that is neither relevant nor likely to lead to the discovery of admissible evidence.
15 Notwithstanding these objections, but without waiving them, please see Big Rivers’ response
16 to PSC 2-16.

17
18 **Witness)** Robert W. Berry

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1 **Item 8)** *Refer to Witness Berry Direct Testimony on page 11. With regards to the*
2 *multiple parties to whom Big Rivers has offered "the option to purchase the Coleman and*
3 *Wilson Stations," identify:*

4 *a. Each party to whom Big Rivers has offered the option to purchase the*
5 *Coleman or Wilson Stations.*

6 *b. The prices at which Big Rivers offered to sell the Coleman and Wilson*
7 *Stations.*

8 *c. The response to each such offer, including any price that any party offered*
9 *to pay for the Coleman and/or Wilson Station.*

10

11 **Response)** Big Rivers objects to this request on the grounds that it is overly broad and
12 unduly burdensome. Big Rivers also objects to this request on the grounds that it seeks
13 information that is neither relevant nor likely to lead to the discovery of admissible evidence.
14 Notwithstanding these objections, but without waiving them, please see Big Rivers'
15 responses to PSC 2-15 and PSC 2-16.

16

17 **Witness)** Robert W. Berry

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1 Item 9) *Refer to page 12 of the Direct Testimony of Robert Berry. With regards to*
2 *the RFPs issued "in the last six months . . . seeking long term power contracts for over*
3 *1,500MWs," identify:*

4 a. *Each entity that issued one of those RFPs.*

5 b. *The date of each such RFP.*

6 c. *The amount of energy and/or capacity sought in each such RFP.*

7 d. *The period for which such energy and/or capacity was sought in each such*
8 *RFP.*

9 e. *Any response by Big Rivers to such RFPs and produce such response.*

10

11 **Response)** Big Rivers objects to this request on the grounds that it is overly broad and
12 unduly burdensome. Big Rivers also objects to this request on the grounds that it seeks
13 information that is neither relevant nor likely to lead to the discovery of admissible evidence.
14 Notwithstanding these objections, but without waiving them, please see Big Rivers' response
15 to PSC 2-16.

16

17 **Witness)** Robert W. Berry

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1 **Item 10)** *Refer to page 13 of the Direct Testimony of Robert Berry. Identify any*
2 *“new economic development opportunities” that have been announced or sited in the Big*
3 *Rivers service territory over the past year.*

4

5 **Response)** A number of economic development opportunities have been announced or
6 sited in Big Rivers' service territory over the past year. Among those, a coal facility will
7 begin with a load of roughly 3MW in 2013, growing to a load of 15MW in 2016. Similarly,
8 a high school (3.5MW), a rock quarry (3MW), an aluminum extrusion facility (1.5MW), a
9 rock quarry expansion (1MW), a pharmacy grade chemical company (.5MW), an extended
10 care facility (.5MW), and a fishery (.3MW) have all announced plans or begun construction
11 within the territory.

12

13 **Witness)** Robert W. Berry

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1 **Item 11)** *Refer to page 13 of the Direct Testimony of Robert Berry. Identify any*
2 *“existing load served by others” that Big Rivers could serve that has provided over the past*
3 *year its “current wholesale provider . . . notice of its intent to terminate its long term*
4 *wholesale agreement.”*

5

6 **Response)** Big Rivers is currently unaware of any existing load in its footprint served by
7 others that has given its current supplier notice of its intent to terminate its long term
8 wholesale agreement within the last year.

9

10 **Witness)** Robert W. Berry

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- 1 Item 12) *Refer to page 17 of the Direct Testimony of Robert Berry.*
- 2 a. *Please confirm that the contracts among Big Rivers, Kenergy, and Century*
- 3 *that were approved by the Commission in Case No. 2013-00221 have been*
- 4 *executed.*
- 5 b. *Has MISO determined at what Base Load Century may operate without*
- 6 *Coleman Station being required to run for reliability purposes?*
- 7 i. *If yes, please describe MISO's determination and produce any*
- 8 *documents reflecting that determination.*
- 9 ii. *If no, please explain why MISO has not yet provided a determination*
- 10 *and when Big Rivers expects such a determination to be made.*
- 11 c. *Regarding the exclusion of transmission revenues from Century in the*
- 12 *forecast test year: Under the approved agreements between Century, BREC,*
- 13 *and Kenergy, if Century continues to operate at the same load as in recent*
- 14 *years, while buying all of its power from outside the BREC system, what*
- 15 *level of recurring annual transmission revenues would BREC receive from*
- 16 *Century or its suppliers?*

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1 *d. How much transmission revenue will BREC receive if Century operates at*
2 *the baseload level determined by MISO that would allow Coleman to be*
3 *idled?*

4
5 **Response)**

6 a-b. Please see Big Rivers' response to PSC 2-17(b) in this instant filing.

7 c. Utilizing rates published by MISO effective July 1, 2013 for Schedule 9 of
8 \$15,586.7989/MW-yr and Century monthly peak loads of 482 MW, Big
9 Rivers would expect to receive about \$7,512,837/yr in transmission revenues.

10 d. Utilizing the same rates and Century monthly peak loads equal to the base
11 load level determined by MISO of 338 MW, Big Rivers would expect to
12 receive about \$5,268,338/yr in transmission revenues.

13

14 **Witness)** Robert W. Berry

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- 1 **Item 13)** *Refer to page 20 of the Direct Testimony of Robert Berry.*
- 2 *a. Produce, in machine readable format with formulas intact, the most recent*
- 3 *version of Big Rivers' long-term financial model, including all inputs and*
- 4 *outputs through the year 2028.*
- 5 *b. Produce, in machine readable format with formulas intact, all production*
- 6 *cost modeling, including all inputs and outputs, through the year 2028 used*
- 7 *in the most recent version of Big Rivers' financial model.*
- 8 *c. Provide any sensitivity analyses or alternate scenarios that were run for Big*
- 9 *Rivers' production cost modeling or financial modeling, but that were not*
- 10 *included in the most recent version of Big Rivers' financial model.*

11

12 **Response)**

- 13 a. The most recent version of Big Rivers' long-term financial model, including all
- 14 inputs and outputs through the year 2027 is provided in response to PSC 2-14. Any
- 15 linked files not included with that response were provided in response to PSC 1-57.
- 16 b. The inputs to the production cost model are provided in response to KIUC 1-12 (b, d-
- 17 g). The production cost model output is included in response to PSC 2-14.

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1 c. Two sensitivity analyses incorporating the capacity market are also included in
2 response to PSC 2-14.

3

4 **Witness)** Robert W. Berry

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- 1 Item 14) *For Big Rivers' projections included in the company's application, long-*
2 *term financial model, and production cost modeling:*
- 3 *a. Identify the price per year for each of the years 2013 through 2028 projected*
4 *for:*
- 5 *i. Market energy*
6 *ii. Market capacity*
7 *iii. Carbon dioxide*
8 *iv. Natural gas*
9 *v. Coal*
- 10 *b. Identify and produce the source for each such projection.*
- 11 *i. If you contend that you are not able to produce a source for any of*
12 *the above projections on the ground that such information is not in*
13 *your possession but is solely in the possession of a third party,*
14 *identify the name of the third party and its business address, and*
15 *provide a narrative explanation as to why the company does not have*
16 *the requested information in its possession and why the company is*
17 *not able to produce the information to the Commission and the*
18 *parties.*

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1 c. *Identify any other projections of market energy, market capacity, carbon*
2 *dioxide, natural gas, or coal prices that Big Rivers created or reviewed but*
3 *did not use in its application, long-term financial model, or production cost*
4 *modeling.*

5

6 **Response)** Please see the production cost model provided in response to PSC 2-14.

7

a. Please see responses below.

8

i. Market energy: Located on the "Annual Prices" worksheet of PCM
9 output file; Provided by ACES

10

ii. Market capacity: No market capacity pricing was used.

11

iii. Carbon dioxide: No carbon dioxide pricing was used.

12

iv. Natural gas: Located on the "Annual Prices" worksheet of PCM

13

output file (Big Rivers adds \$0.65/MMBtu for delivery charges/fees to
14 the ACES Henry Hub price forecast); Provided by ACES

15

v. Coal: Please see response to KIUC 1-12(b); Provided by Big Rivers'
16 Fuels department

17

b. Please see responses to a. above.

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1 c. Please see response to PSC 2-14 for other market power projections and
2 market capacity pricing sensitivities. There was no carbon dioxide pricing
3 used; however, in IHS market power price forecasts, IHS included carbon in
4 its forecast beginning in 2021. No other natural gas or coal price forecasts
5 were used; however, please see response to KIUC 1-59(c) explaining the
6 indices used when developing the fuel price forecast.

7

8 **Witness)** Robert W. Berry

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1 **Item 15)** *Refer to page 13 of the Direct Testimony of Robert Berry. With regards to*
2 *your contention that off-system market prices will increase to a level that would justify*
3 *returning idled generating units to operating status in 2019:*

4 *a. Confirm that the "idled generating units" referenced therein are Coleman*
5 *and Wilson.*

6 *b. Identify and produce any market price projection upon which this*
7 *contention relies.*

8 *c. Provide a narrative explanation of the expected changes in electricity*
9 *markets that will make plants profitable in 2019 that are not profitable*
10 *today.*

11 *d. Identify and produce any other projection of market prices that Big Rivers*
12 *produced or reviewed but did not use as part of this analysis.*

13

14 **Response)**

15 a. Confirmed.

16 b. Please see Big Rivers' response to PSC 2-14 in this instant case.

17 c. Please see Big Rivers' response to PSC 2-14 in this instant case.

18 d. Please see Big Rivers' response to PSC 2-14 in this instant case.

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Response to SC 1-15(a-d)
Witness: Robert W. Berry
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1

2 **Witness)** Robert W. Berry

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- 1 **Item 16)** *Refer to page 20 of the Direct Testimony of Robert Berry.*
- 2 *a. How much would BREC's costs be reduced if Coleman was sold or retired,*
- 3 *rather than idled?*
- 4 *b. How much would costs be reduced if Wilson was sold or retired, rather than*
- 5 *idled?*

6

7 **Response)**

- 8 a. If Big Rivers sold Coleman Station for the net book value it would reduce its
- 9 annual cost an additional \$16.8 Million.
- 10 b. If Big Rivers sold Wilson Station for the net book value it would reduce its
- 11 annual cost an additional \$39.7 Million. Because of the significant
- 12 unamortized plant balance of the Coleman and Wilson generating units,
- 13 retirement would result in the need to recover the unamortized plant balances
- 14 of those units. If Big Rivers were to retire the Coleman and Wilson plants it
- 15 would amount to throwing away valuable assets that the Members have
- 16 invested in and that are parts of Big Rivers' long-term rate increase mitigation
- 17 plan. Coleman and Wilson both have many years of useful life left. It just
- 18 does not make sense for Big Rivers to prematurely retire these plants without

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1 taking the time for the assets to make additional contributions for the

2 Members' benefit.

3

4 **Witness)** Robert W. Berry

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CASE NO. 2013-00199

Response to the Commission Staff's
Initial Request for Information
dated June 10, 2013

July 12, 2013

- 1 **Item 17)** *Please refer to Witness Williams' Direct Testimony on page 6.*
- 2 a. *Please provide a description of the Hyperion budgeting software used in the*
- 3 *forecast development process.*
- 4 b. *Produce, in machine readable format with formulas intact, all of the*
- 5 *modeling files (including input and output files) and workpapers produced*
- 6 *for BREC by the Hyperion budgeting software package.*

7 **Response)**

- 8 a. Hyperion is a web-based budgeting and planning tool that drives
- 9 collaborative, event-based and operational planning processes through the
- 10 organization for a wide range of financial and operational needs. The
- 11 application is for the Financial Planning and Budgeting process culminating in
- 12 the financial statements and Reports. Select outputs are then linked in the
- 13 spreadsheet model, referred to as the Big Rivers financial model.
- 14 b. Please reference Big Rivers' response to PSC 1-57 for the Hyperion budget
- 15 model output.

16

17 **Witness)** Jeffrey R. Williams

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1 **Item 18)** *Please refer to Witness Williams' Direct Testimony on page 6. Please*
2 *provide the budget and financial plan approved by the Big Rivers Board of Directors in*
3 *November 2012.*

4

5 **Response)** Please refer to Big Rivers' response to PSC 2-19.

6

7 **Witness)** Jeffrey R. Williams

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1 **Item 19)** *Please refer to Witness Barron Direct Testimony on page 6.*

2 *a. Please provide the April 2013 load forecast.*

3 *b. Please describe its principal differences from the previous BREC load*
4 *forecast.*

5 **Response)**

6 a. Please see the response to AG 1-139.

7 b. Big Rivers notes that the Sierra Club does not specify to which "...previous
8 BREC load forecast" it is referring. However, Big Rivers offers the following
9 response. The principal difference between the April 2013 Load Forecast
10 filed with RUS and the August 2011 Load Forecast filed with RUS is the
11 Century Hawesville smelter load going to zero in August 2013 and Century
12 Sebree smelter load going to zero in January 2014.

13

14 **Witness)** Lindsay N. Barron

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1 **Item 20)** *Refer to page 12 of the Direct Testimony of Lindsey Barron Direct*

2 *Testimony on page 12.*

3 *a. Identify and produce the regression analyses that Big Rivers used to*
4 *determine price elasticities of demand for rural customers.*

5 *b. For purposes of Big Rivers' long-term financial forecast, has Big Rivers*
6 *performed any analyses of the difference between short-run and long-run*
7 *price elasticity for its customers?*

8 *i. If so, please provide those analyses.*

9 *ii. If not, explain why not.*

10 *c. Identify and produce any studies or other documents that Big Rivers*
11 *reviewed or relied upon in determining the price elasticities of demand for*
12 *rural customers.*

13 *d. Explain why the price elasticities of demand identified in this proceeding*
14 *are different than the values reported by Big Rivers in response to KIUC DR*
15 *1-35 in the Century rate case.*

16
17 **Response)**

18 a. Regression models were developed for each of Big Rivers' three member
19 distribution cooperatives to project average electricity consumption per

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1 customer. Price elasticity coefficients were derived through the modeling
2 process. The model specifications, data used to estimate the models, model
3 statistics, and associated outputs are provided electronically under petition for
4 confidential treatment as Exhibit-SC-1-20a-Kenergy.xlsx, Exhibit-SC-1-20a-
5 JPEC.xlsx, and Exhibit-SC-1-20a-MCRECC.xlsx. Refer to sheet "ELAS" in
6 each file for the price elasticity coefficient.

7 b. Big Rivers has not performed any analyses of the difference between short-
8 run and long-run price elasticity. The regression models identified in item (a)
9 above are used to compute the short-run price elasticity. While a specific
10 analysis of the long-run price elasticity has not been performed, the models
11 reflect changes in the market shares and operating efficiencies of electric
12 heating and air conditioning, which indirectly capture long-run price elasticity
13 (e.g., customers purchasing more efficient appliances or switching fuel
14 sources).

15 c. Big Rivers' consultant compared the price elasticities derived in its
16 forecasting models to those published in reports by the Energy Information
17 Administration and the National Renewable Energy Laboratory. These
18 reports are provided electronically as Exhibit-SC-1-20c-EIA.pdf and Exhibit-
19 SC-1-20c-NREL.pdf.

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1 d. The price elasticity of demand provided in response to KIUC DR 1-35
2 corresponds to the models developed in Big Rivers' 2011 Load Forecast. The
3 elasticities of demand presented in the current proceeding are based on models
4 from Big Rivers' 2013 Load Forecast. The price elasticities of demand from
5 both studies are very similar and indicate that the impacts of price on
6 consumption are essentially the same in both forecasts.

7

8 **Witness)** Lindsay N. Barron

9

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- 1 Item 21) *Please refer to Witness Barron Direct Testimony at pages 12-13, discussing*
2 *the use of price elasticity in the 2013 load forecast.*
- 3 *a. State whether the 2013 load forecast assumes any price elasticity for large*
4 *industrial customers.*
- 5 *b. If so:*
- 6 *i. Identify the industrial customer elasticity values.*
7 *ii. Provide the analyses that led to those values.*
8 *iii. Identify any studies or other documents relied upon in identifying*
9 *such elasticity value.*
- 10 *c. If not:*
- 11 *i. Explain the reasons for excluding price elasticity effects on the large*
12 *industrial customer class.*
- 13 *ii. Provide any analyses supporting the claim that any increases in*
14 *electric prices for the large industrial customer class will not impact*
15 *demand from such class.*
- 16 *iii. Identify any studies or other documents relied up in deciding to*
17 *exclude price elasticity effects on the large industrial customer class.*

18

19

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1 **Response)**

2 a. Please see Big Rivers' response to PSC 2-20.

3 b. Not applicable.

4 c. Please see Big Rivers' response to PSC 2-20.

5

6 **Witness)** Lindsay N. Barron

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1 **Item 22)** *Refer to Exhibit Warren-2.*

2 *a. Provide the breakdown of the Company's net utility plant in service, by*
3 *individual plants.*

4 *b. Identify how much of the total Coleman represents*

5 *c. Identify how much of the total Wilson represents*

6

7 **Response)**

8 a. The Big Rivers financial model, from which Exhibit Warren-2 is taken, does
9 not track net utility plant in service by individual plant location. However,
10 Big Rivers does account for net utility plant in service by individual plant
11 location on an actual basis.

12 The table on the following page provides Big Rivers' net utility plant
13 in service, by individual plant, as of July 31, 2013.

14

15

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1

Plant	Net Utility Plant in Service as of 7/31/2013
Reid	\$ 7,998,090.61
Coleman	187,402,243.95
Green	156,259,870.18
Wilson	454,206,542.13
HMPL	86,916,621.39
Combustion Turbine	2,333,640.60
Other	180,908,347.06
Total	\$ 1,076,016,355.93

2

3 b. Coleman represents \$187,402,243.95 of Big Rivers' total Net Utility Plant as of
4 July 31, 2013.

5 c. Wilson represents \$454,206,542.13 of Big Rivers' total Net Utility Plant as of July
6 31, 2013.

7

8 **Witness)** Billie J. Richert

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- 1 **Item 23)** *Please refer to pages 13 to 14 of the Direct Testimony of Daniel Walker.*
- 2 *With regards to Mr. Walker's testimony that BREC should be aiming for a TIER between*
- 3 *1.40 and 1.60 in order to attract capital and obtain an investment grade rating, but that a*
- 4 *lower TIER of 1.24 is acceptable for a transition period:*
- 5 *a. Identify the duration of the transition period that would be acceptable.*
- 6 *b. How much additional revenue would be needed to get Big Rivers to a TIER*
- 7 *of between 1.40 and 1.60 in the forecasted test period?*
- 8 *c. Is it possible for BREC to reach a TIER of 1.40 to 1.60 without an*
- 9 *additional rate increase, beyond the increase requested in this case?*
- 10 *d. When should BREC plan on exiting the transition period with TIER of 1.24,*
- 11 *and raising rates again to reach a TIER of 1.40 to 1.60?*
- 12 *e. With regards to Big Rivers' long-term financial forecast, identify the*
- 13 *projected TIER for each of the years 2016 through 2028.*
- 14 *i. For each such year, identify the amount of additional revenue that*
- 15 *would be needed to get Big Rivers to a TIER of between 1.40 and*
- 16 *1.60.*

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- 1 *f. State whether simply increasing Big Rivers' TIER to the 1.40 to 1.60 range*
2 *would be sufficient to attract capital and obtain an investment grade rating,*
3 *or whether other steps would be needed?*
- 4 i. *If other steps would be needed, identify such steps?*

5 **Response)**

- 6 a. The transition period has to be long enough for Big Rivers to prove to the
7 rating agencies and creditors that Big Rivers can earn sufficient revenues to
8 produce stable margins at the 1.24x level. It is expected that the transition
9 period will take 1 to 3 years.
- 10 b. In the forecasted test period additional revenue of \$12.5 million over a 1.24
11 TIER would be needed to achieve a 1.40 TIER and an additional \$21.3
12 million over a 1.24 TIER would be needed to achieve a 1.60 TIER.
- 13 c. Yes.
- 14 d. Please refer to response in a. above regarding the duration of the transition
15 period. It is not Big Rivers' intent to seek an additional rate increase to reach
16 a TIER of 1.40 to 1.60.
- 17 e. Please see the attachment to this response for the projected TIER for each of
18 the years 2016 through 2027 (the current forecast only goes through 2027).

Case No. 2013-00199
Response to SC 1-23

Witnesses: Daniel M. Walker (a. & f.), Billie J. Richert (c. d. & f.) and
Christopher A. Warren (b. & e.)
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1 i. Please see the attachment to this response for the amount of additional
2 revenue that would be needed to get Big Rivers to a TIER of between
3 1.40 and 1.60 for each of the years 2016 through 2027.

4 f. In general, generation and transmission cooperatives ("G&Ts") have very
5 little market liquidity in the capital markets compared to investor owned
6 utilities. As a result, in order to attract capital at reasonable cost and with
7 reasonable terms and conditions, G&Ts must have solid credit profiles. In
8 some cases, investment grade ratings are not sufficient to produce enough
9 credit support to achieve reasonable costs, terms, and conditions. Achieving a
10 TIER of 1.40 to 1.60 would substantially aid in Big Rivers' ability to attract
11 capital and obtain an investment grade rating. However, other steps are
12 necessary, as well. Other steps or mitigation efforts needed to attract capital
13 and obtain investment grade ratings include:

- 14 1. Obtaining additional working capital \$50 million line of credit;
- 15 2. Obtaining financing to meet environmental compliance requirements;
- 16 3. Obtaining replacement load diversification;
- 17 4. Generating sufficient cash flows from operations; and
- 18 5. Maintaining quality financial metrics.

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Witnesses: Daniel M. Walker (a. & f.), Billie J. Richert (c. d. & f.) and
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1

2 **Witnesses)** Daniel M. Walker, Billie J. Richert and Christopher A. Warren

Big Rivers Electric Corporation
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Attachment to Response for SC 1-23
TIER

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
TIER	1.10	1.13	1.11	1.11	1.10	1.21	1.26	1.41	1.11	1.33	1.14	1.35

Additional revenue needed (\$ millions) to achieve:

1.40 TIER	\$ 12.9	\$ 11.6	\$ 12.5	\$ 12.2	\$ 11.9	\$ 7.1	\$ 4.9	\$ -	\$ 10.2	\$ 2.2	\$ 8.4	\$ 1.6
1.60 TIER	\$ 21.6	\$ 20.2	\$ 21.1	\$ 20.7	\$ 19.9	\$ 14.7	\$ 12.2	\$ 6.6	\$ 17.3	\$ 9.0	\$ 14.9	\$ 7.7

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1 **Item 24)** *Refer to page 6 of the Direct Testimony of Robert Berry. Provide a copy of*
2 *the five-year benchmarking study completed in April 2013 regarding the reliability of the*
3 *Big Rivers coal units.*

4

5 **Response)** Please see Big Rivers' response to KIUC 1-39 in this instant filing.

6

7 **Witness)** Robert W. Berry

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- 1 **Item 25)** *Refer to page 13 of the Direct Testimony of Witness Lindsay Barron. With*
2 *regards to the MetrixND software package used to compute the price elasticity of demand*
3 *coefficients:*
- 4 *a. Describe what the MetrixND software does.*
- 5 *b. Identify the vendor of the MetrixND software package and state whether the*
6 *software is proprietary software that requires a license in order to gain*
7 *access to the files.*
- 8 *c. Produce, in machine readable format with formulas intact, all of the*
9 *modeling files (including input and output files) and workpapers produced*
10 *for BREC by the MetrixND software package.*
- 11 *d. Please identify the assumptions, including any supporting documentation,*
12 *which Big Rivers or its agents used as inputs in the MetrixND software*
13 *package.*
- 14 *e. If a license is required to obtain access to any information in this request,*
15 *please explain who Sierra Club should contact to either obtain that license*
16 *or present information that Sierra Club or its experts already have a license*
17 *for that model.*
- 18 *f. How much does BREC pay for the use of the MetrixND software?*

19

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1 **Response)**

- 2 a. The requested information is available at
- 3 <https://www.itron.com/na/productsAndServices/Pages/MetrixND.aspx>.
- 4 b. The requested information is available at
- 5 <https://www.itron.com/na/productsAndServices/Pages/MetrixND.aspx>
- 6 c. Refer to Big Rivers' response to SC 1-20a for the energy models developed to
- 7 project rural energy sales for Big Rivers' three member cooperatives. The
- 8 model specification, data used to estimate the model, model statistics, and
- 9 associated outputs for the model developed to forecast Big Rivers rural system
- 10 peak demand is provided electronically under petition for confidential
- 11 treatment as Exhibit-SC-1-25.xlsx.
- 12 d. In developing the average energy use per customer models for Big Rivers'
- 13 three distribution cooperatives, the following assumptions were made for the
- 14 model inputs:
- 15 1. Average household income – Projections of average household
- 16 income are based on data obtained from Moody's Analytics.
- 17 2. Price of electricity – Projections of the retail price of electricity
- 18 are developed internally by Big Rivers. Price is expressed in real
- 19 terms using the GDP deflator index obtained from Moody's Analytics.

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1 the price impacts developed for the rural system energy sales forecast.

2 This reduced impact reflects the assumption that peak demand is less
3 elastic with respect to price than are energy sales.

4 2. Peak day heating and cooling degree days – Historical peak
5 day degree days for Evansville, Indiana; Paducah, Kentucky; and
6 Louisville, Kentucky are computed based on daily temperature data
7 obtained from WeatherBank, Inc. Projected values are based on
8 average values computed for the most recent 20 years.

9 3. Degree day buildup – Temperature buildup is represented as
10 the average of daily degree days for the two days prior to the day on
11 which the rural system peak demand occurs. Historical degree day
12 buildup values are computed for Evansville, Indiana; Paducah,
13 Kentucky; and Louisville, Kentucky based on daily temperature data
14 obtained from WeatherBank, Inc. Projected values are based on
15 average values computed for the most recent 20 years.

16 e. The requested information is available at

17 <https://www.itron.com/na/productsAndServices/Pages/MetrixND.aspx>.

18 f. Big Rivers pays its forecasting consultant for professional fees and projected
19 related expenses, which included a \$500 usage fee for MetrixND. Big Rivers

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1 notes that it also utilizes Itron's MetrixND and MetrixIDR for its daily short-
2 term load forecasting needs. Big Rivers pays Itron a maintenance fee of about
3 \$30,000 per year for MetrixIDR.

4

5 **Witness)** Lindsay N. Barron

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- 1 *Item 26) Produce all of the following communications made since those that were*
2 *produced in the Century rate case:*
- 3 *a. between BREC and its creditors.*
- 4 *b. between BREC and MISO regarding SSR agreements.*
- 5 *c. between BREC and Century regarding SSR agreements.*

6

7 **Response)**

- 8 a. Please see confidential attachment for this response, which is being provided
9 under a petition for confidential treatment, and the public attachment for this
10 response, which is being provided electronically with these responses.
- 11 b. Please see attachment for this response, which is being provided under a
12 petition for confidential treatment.
- 13 c. Please see attachment for this response, which is being provided under a
14 petition for confidential treatment.

15

16 **Witnesses)** Robert W. Berry (b, c) and Billie J. Richert (a)

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1 **Item 27)** *Clarify the following regarding BREC's proposed approach to MATS*

2 *compliance at Coleman and Wilson:*

3 *a. Does BREC intend to defer installation of MATS controls at Coleman and*
4 *Wilson while those units are idled?*

5 *i. If so, identify when BREC expects to carry out the MATS*
6 *compliance projects on each of the Coleman and Wilson units.*

7 *b. If BREC does not intend to defer the MATS compliance projects at the*
8 *Coleman and Wilson units, state whether you would seek recovery for the*
9 *cost of those projects through any SSR agreement with MISO.*

10 *i. If so, identify any support for the contention that MISO will agree to*
11 *provide SSR payments to cover the capital cost of installing pollution*
12 *controls on a generating unit that the company expects to return to*
13 *service.*

14

15 **Response)**

16 *a. Yes.*

17 *i. Approximately one year before the unit is expected to return to*
18 *service.*

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- 1 b. Big Rivers would only seek recovery if the SSR period extends beyond the
2 MATS compliance deadline.
- 3 i. This would be included in the SSR negotiations with MISO.

4

5 **Witness)** Robert W. Berry

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1 **Item 28)** *Please identify the following (and specify and define the metric used) with*
2 *respect to anticipated conditions in BREC's system during the forecasted test year:*

- 3 *a. Peak demand.*
- 4 *b. Which generating units will be idled.*
- 5 *c. Peak capacity (without including any idled generating units).*
- 6 *d. Peak capacity (including any idled generating units).*
- 7 *e. Reserve margin (without including any idled generating units).*
- 8 *f. Reserve margin (including any idled generating units).*

9

10 **Response)**

- 11 a. Please see Big Rivers' response to AG 1-71.
- 12 b. Big Rivers' forecast reflects no generation from Wilson Station or Coleman
- 13 Station in the forecasted test period. This estimation is correct because both
- 14 units will either be idled or they will be designated as a System Support
- 15 Resource by MISO as of February 1, 2014.
- 16 c. Please see Big Rivers' response to AG 1-71.
- 17 d. Please see Big Rivers' response to AG 1-71.
- 18 e. Please see Big Rivers' response to AG 1-71.
- 19 f. Please see Big Rivers' response to AG 1-71.

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1

2 **Witness)** Robert W. Berry

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1 **Item 29)** *State whether Big Rivers has evaluated the retirement, rather than idling, of*
2 *any of its generating units as an option for mitigating the impact of the termination of the*
3 *smelter contracts and/or of the decline in off-system sales revenues.*

4 *a. If so:*

5 *i. Identify which unit or units were evaluated*

6 *ii. Explain the results of that evaluation*

7 *iii. Produce any report or other document regarding that evaluation*

8 *b. If not, identify and explain each reason why not.*

9
10 **Response)** Please see Big Rivers' response to KIUC 1-51.

11

12 **Witness)** Robert W. Berry

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1 **Item 30)** *Produce a copy of any forecast or projection of future CO2 costs, taxes, or*
2 *emissions allowances prices that has been prepared by or for Big Rivers.*

3

4 **Response)** Big Rivers has no projections for future taxes or emission allowance prices.
5 Big Rivers provided CO₂ cost estimates as part of its Environmental Compliance Plan in
6 Case No. 2012-00063. Estimates have not been updated since that time.

7

8 **Witness)** Robert W. Berry

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- 1 **Item 31)** *With respect to EPA's GHG Tailoring Rule:*
- 2 a. *Does the Company anticipate that any of its units would be subject to EPA's*
- 3 *GHG Tailoring Rule? If so, when? If not, why not?*
- 4 b. *What impact does the Company anticipate the Tailoring Rule having on*
- 5 *either the costs of operations of any of its units?*
- 6 c. *Please provide any work papers or modeling analysis that considers the cost*
- 7 *impacts associated with the Tailoring Rule.*

8

9 **Response)**

- 10 a. Big Rivers does not know at this time because the specifics of this rule are not
- 11 yet known.
- 12 b. Without the specifics of the final rule, Big Rivers is unable to determine the
- 13 impact the rule will have on its units.
- 14 c. No modeling analysis is available.

15

16 **Witness)** Robert W. Berry

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1 Item 32) *EPA recently issued a proposed New Source Performance Standard that*
2 *would regulate greenhouse gas emissions from electric generating units. In this proposed*
3 *rule, EPA stated that it soon plans to issue regulations for existing electric generating*
4 *units. With respect to EPA's forthcoming rule regulating greenhouse gas emissions for*
5 *existing electric generating units ("EGUs"):*

6 *a. Does the Company anticipate that the forthcoming existing EGU*
7 *greenhouse gas rule could impact any of its units? If so, what would be the*
8 *expected cost of this rulemaking? If not, why not?*

9 *b. Has a cost for the forthcoming existing EGU greenhouse gas rule been*
10 *taken into account in any of its production cost modeling or long-term*
11 *financial forecast?*

12 *c. Please provide any work papers or modeling analysis that considers the cost*
13 *impacts associated with the forthcoming existing EGU greenhouse gas rule.*

14

15

BIG RIVERS ELECTRIC CORPORATION
APPLICATION OF BIG RIVERS ELECTRIC CORPORATION
FOR A GENERAL ADJUSTMENT IN RATES
CASE NO. 2013-00199

Response to Ben Taylor and Sierra Club's
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dated August 19, 2013

September 3, 2013

1 **Response)**

2 a. Big Rivers does not know because the specifics of the rule are currently
3 unknown.

4 b. No.

5 c. No modeling analysis is available.

6

7 **Witness)** Robert W. Berry

BIG RIVERS ELECTRIC CORPORATION

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CASE NO. 2013-00199**

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1 **Item 33)** *With regard to the potential impacts of the proposed EPA rule for Coal*

2 *Combustion Residuals (CCR):*

3 *a. Does the Company anticipate that this pending regulation would impact any*
4 *of its units? If so, what would be the expected cost of this rulemaking? If*
5 *not, why not?*

6 *b. Has a cost for the pending Coal Combustion Residuals rule been taken into*
7 *account in the modeling done by the Company? If not, how would such a*
8 *cost impact its analysis?*

9 *c. Please provide any work papers or modeling analysis that considers the cost*
10 *impacts associated with the CCR rule.*

11

12 **Response)**

13 a. Big Rivers does not know at this time because the specifics of the rule are not
14 known. The potential costs of this proposed rule were included in the Sargent
15 and Lundy study previously provided in Case No. 2012-00063.

16 b. No. It could increase production costs at the affected plant depending on the
17 specifics of the final rule.

18 c. No modeling analysis is available.

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1

2 **Witness)** Robert W. Berry

BIG RIVERS ELECTRIC CORPORATION

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- 1 **Item 34)** *With regard to the potential impacts of CSAPR being reinstated by the U.S.*
2 *Supreme Court or EPA issuing a new set of regulations to replace the vacated CSAPR.*
3 *a. Does the Company anticipate that such reinstated regulation or new*
4 *regulation would impact any of its units?*
5 *i. If so, what would be the expected cost of this rulemaking?*
6 *ii. If not, why not?*
7 *b. Has a cost for the potentially reinstated regulation or new regulation been*
8 *taken into account in the modeling done by the Company?*
9 *i. If so, explain how.*
10 *ii. If not, how would such a cost impact its analysis?*
11 *c. Please provide, in machine readable format with formulas intact, any work*
12 *papers or modeling analysis (including input and output files) that*
13 *considers the cost impacts associated with a potentially reinstated or new*
14 *CSAPR regulation.*
15
16

BIG RIVERS ELECTRIC CORPORATION
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1 **Response)**

2 a. Yes.

3 i. Big Rivers' most recent assessment of the cost of compliance with
4 CSAPR is summarized in the Environmental Compliance Plan
5 ("ECP") proposed by Big Rivers in Case No. 2012-00063. Impacts
6 from a new regulation will be unknown until such a regulation is
7 proposed by the EPA.

8 ii. Not applicable.

9 b. No.

10 i. Not applicable.

11 ii. It is unknown until a rule is finalized.

12 c. See the Sargent and Lundy report referenced in response to SC 1-33. Also
13 please see Big Rivers' original ECP in Case No. 2012-00063.

14

15 **Witness)** Robert W. Berry

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1 **Item 35)** *Produce a current curriculum vitae and list of testimony over the past six*
2 *years for Daniel Walker.*

3

4 **Response)** Please see the attachments to this response.

5

6 **Witness)** Daniel M. Walker

PROFESSIONAL BACKGROUND

DANIEL M. WALKER

7106 University Drive
Richmond, Virginia 23229

SUMMARY

Thirty years of management experience includes Executive Management, Capital Market Financing, Investment Analysis, Acquisitions, Auditing, Risk Management, Internal Control, Corporate Policy and Staff Development, Personnel Management, and Utility Analysis.

PROFESSIONAL HISTORY

WALKER AND ASSOCIATES; Richmond, Virginia

Financial Advisor – Provided financial advisory services in negotiating, structuring, and implementing almost \$3 billion of capital market transactions. Served as an expert witness before Federal and state jurisdictions on finance and regulatory issues.

OLD DOMINION ELECTRIC COOPERATIVE; Glen Allen, Virginia

Senior Vice President and CFO - Responsible for the accounting and financial integrity of Old Dominion and its subsidiaries and the development of financial resources to meet its obligations and objectives. Member of Senior Management team for over 20 years.

VIRGINIA STATE CORPORATION COMMISSION; Richmond, Virginia

Director, Accounting and Finance - Supervised a large staff of accountants, auditors, and financial analysts in their analysis of public utility matters under the jurisdiction of the Virginia State Corporation Commission. In charge of task force responsible for policy recommendation for the Virginia State Corporation Commission on deregulation in the electric and telecommunication industry.

EDUCATION

- **MBA** University of Richmond
- **B.S.** Appalachian State University

PROFESSIONAL ACTIVITY

- President, National G&T Accounting and Finance Association
- Member of G&T Alternative Finance Task Force
- Director National Society of Rates of Return Analysts
- Member of FERC-EEI Accounting Liaison Committee
- Member of NARUC Accounting Committee
- Published Article: *Public Utilities Fortnightly*
- Published Article: *William & Mary Business Review*
- Addressed Price Waterhouse's Global Structured Finance Conference in Ireland in 1999 and 2000, and in Portugal in 2001 and 2002.
- Addressed Mercedes Conference on Infrastructure Financing in Berlin, Germany in 2003.
- Adjunct faculty in Accounting and Finance, Virginia Commonwealth University
- Guest lecturer, University of Virginia, William & Mary College, Duke University and Virginia Commonwealth University
- Lecturer on various accounting and finance issues before professional groups in the United States and Europe

**Big Rivers Electric Corporation
Case No. 2013-00199**

**Testimony of Daniel Walker
2007 to 2013**

<u>Cooperative</u>	<u>Jurisdiction</u>	<u>Date</u>	<u>Case Number</u>	<u>Subject</u>
A&N Electric	Virginia	2007	PUE 2007-0060	Property Acquisition
Chugach	Alaska	2009	U-09-080/97	Cost of Capital
East Kentucky	Kentucky	2009	2009-0050	Cost of Capital
Shenn Valley	Virginia	2009	PUE 2009-00101	Property Acquisition
East Kentucky	Kentucky	2010	2010-00167	Cost of Capital
Chugach	Alaska	2010	U-10-041	Advanced Approval of Plan
Western Farmers	Oklahoma	2011	CIV-09-1129	Contract Dispute
Chugach	Alaska	2013	U-13-007	Adopt Testimony
South Texas	Texas	2013	41527	Transmission Rates
Tri State	Colorado	2013	13F-0145E	Jurisdiction and Ratings

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- 1 **Item 36)** *For each of the Wilson, Green, Coleman, Reid, or HMP&L generating*
2 *units:*
- 3 *a. Identify the estimated retirement date.*
- 4 *b. Produce any analysis or assessment of the economics of continued*
5 *operation of such unit.*
- 6 *c. Produce any analysis or assessment of the impact that retirement of each*
7 *unit would have on capacity adequacy, transmission grid stability,*
8 *transmission grid support, voltage support, or transmission system*
9 *reliability.*
- 10 *d. Identify any transmission grid upgrades or changes that would be needed to*
11 *allow for the retirement of any of the units.*
- 12 *e. Produce any analysis or assessment of the need for the continued operation*
13 *of each unit.*

14 **Response)**

15 a – e. Please see Big Rivers' response to KIUC 1-46 in this instant case.

16

17 **Witnesses)** Robert W. Berry (a-b,e) and David G. Crockett (c-d)

BIG RIVERS ELECTRIC CORPORATION
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1 **Item 37)** *For each of the following existing, proposed, or potential regulatory*
2 *requirements, produce any evaluation of the pollution controls that would be needed, or*
3 *the estimated costs that would be incurred, to bring each of Big Rivers' coal-fired electric*
4 *generating units into compliance with the requirement:*

- 5 *a. 1-hour SO₂ NAAQS.*
- 6 *b. Section 316(b) of the Clean Water Act.*
- 7 *c. Section 316(a) of the Clean Water Act.*
- 8 *d. Clean Water Act effluent limitation guidelines.*
- 9 *e. Clean Air Interstate Rule.*
- 10 *f. Ozone NAAQS.*
- 11 *g. PM_{2.5} NAAQS.*

12

13 **Response)**

- 14 a. See the Sargent and Lundy report referenced in response to SC 1-33.
- 15 b. See the Sargent and Lundy report referenced in response to SC 1-33.
- 16 c. Big Rivers' plants are compliant with current requirements.
- 17 d. Big Rivers has no evaluation or estimated costs for potential compliance.
- 18 e. See the Sargent and Lundy report referenced in response to SC 1-33.

BIG RIVERS ELECTRIC CORPORATION

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1 f. See the Sargent and Lundy report referenced in response to SC 1-33.

2 g. See the Sargent and Lundy report referenced in response to SC 1-33.

3

4 **Witness)** Robert W. Berry

BIG RIVERS ELECTRIC CORPORATION

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- 1 **Item 38)** *For each of Big Rivers' coal-fired assets:*
- 2 *a. Provide the remaining book value (plant balance) at the start of 2013.*
- 3 *b. Provide the estimated market value of each unit at the start of 2013.*
- 4 *c. Describe how Big Rivers estimated the market value of each unit.*
- 5
- 6 **Response)** Please see Big Rivers' response to SC 2-6 in Case No. 2012-00535.
- 7
- 8 **Witness)** Billie J. Richert