



Via Courier

May 6, 2013

Mr. Jeff Derouen, Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, Kentucky 40602

**Re: Docket CASE NO. 2012-00535 Initial Requests for Information**

Dear Mr. Derouen:

Enclosed for the filing are an original and ten copies of the *BEN TAYLOR AND SIERRA CLUB'S SUPPLEMENTAL REQUESTS FOR INFORMATION TO BIG RIVERS ELECTRIC COOPERATIVE* and a certificate of service in docket 2012-00535 before the Kentucky Public Service Commission. This filing contains no confidential information.

Sincerely,

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Ruben Mojica  
Sierra Club Environmental Law Program  
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San Francisco CA, 94105  
(415)977-5737

RECEIVED

MAY 06 2013

PUBLIC SERVICE  
COMMISSION

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**Application of Big Rivers Electric Corporation    )**  
**For an Adjustment of Rates                            )**       **Case No. 2012-00535**

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**BEN TAYLOR AND SIERRA CLUB’S SUPPLEMENTAL REQUESTS FOR  
INFORMATION TO BIG RIVERS ELECTRIC COOPERATIVE**

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Ben Taylor and Sierra Club (collectively “Sierra Club”) pursuant to the Kentucky Public Service Commission’s (“Commission”) April 17, 2013 Order and the April 19, 2013 memorandum regarding scheduling, propound the following requests for information on the Big Rivers Electric Cooperative’s (“Big Rivers”) regarding Big Rivers’ application for an adjustment of rates that is the subject of the above captioned proceeding.

Big Rivers shall answer these requests for information no later than the May 15, 2013 deadline set forth in the April 19, 2013 memorandum and in the manner set forth in the February 1, 2013 Commission Order. Big Rivers shall include the name of the witness responsible or able to respond to inquiries regarding specific data requests and responses. Wherever possible, Big Rivers shall provide data and spreadsheets in original, digital, electronic form with formulae and links intact.

Wherever the response to a request consists of a statement that the requested information is already available to Sierra Club, provide a detailed citation to the document that contains the information. This citation shall include the title of the document, relevant page number(s), and to the extent possible paragraph number(s) and/or chart/table/figure number(s).

In the event that any document referred to in response to any request for information has been destroyed, specify the date and the manner of such destruction, the reason for such destruction, the person authorizing the destruction and the custodian of the document at the time of its destruction.

**DEFINITIONS**

Unless otherwise specified in each individual interrogatory or request, “you,” “your,” “Big Rivers,” “Cooperative” or “Company” refers to Big Rivers Electric Cooperative, and its affiliates, employees, and authorized agents.

“And” and “or” shall be construed either conjunctively or disjunctively as required by the context to bring within the scope of these interrogatories and requests for production of documents any information which might be deemed outside their scope by another construction.

“Any” means all or each and every example of the requested information.

“CO<sub>2</sub>” means carbon dioxide

“Communication” means any transmission or exchange of information between two or more persons, whether orally or in writing, and includes, without limitation, any conversation or discussion by means of letter, telephone, note, memorandum, telegraph, telex, telecopy, cable, email, or any other electronic or other medium.

“Document” refers to written matter of any kind, regardless of its form, and to information recorded on any storage medium, whether in electrical, optical or electromagnetic form, and capable of reduction to writing by the use of computer hardware and software, and includes all copies, drafts, proofs, both originals and copies either (1) in the possession, custody or control of the Companies regardless of where located, or (2) produced or generated by, known to or seen by the Companies, but now in their possession, custody or control, regardless of where located whether or still in existence.

Such “documents” shall include, but are not limited to, applications, permits, monitoring reports, computer printouts, contracts, leases, agreements, papers, photographs, tape recordings, transcripts, letters or other forms of correspondence, folders or similar containers, programs, telex, TWX and other teletype communications, memoranda, reports, studies, summaries, minutes, minute books, circulars, notes (whether typewritten, handwritten or otherwise), agenda, bulletins, notices, announcements, instructions, charts, tables, manuals, brochures, magazines, pamphlets, lists, logs, telegrams, drawings, sketches, plans, specifications, diagrams, drafts, books and records, formal records, notebooks, diaries, registers, analyses, projections, email correspondence or communications and other data compilations from which information can be obtained (including matter used in data processing) or translated, and any other printed, written, recorded, stenographic, computer-generated, computer-stored, or electronically stored matter, however and by whomever produced, prepared, reproduced, disseminated or made.

Without limitation, the term “control” as used in the preceding paragraphs means that a document is deemed to be in your control if you have the right to secure the document or a copy thereof from another person or public or private entity having actual possession thereof. If a document is responsive to a request, but is not in your possession or custody, identify the person with possession or custody. If any document was in your possession or subject to your control, and is no longer, state what disposition was made of it, by whom, the date on which such disposition was made, and why such disposition was made.

For purposes of the production of “documents,” the term shall include copies of all documents being produced, to the extent the copies are not identical to the original, thus requiring the production of copies that contain any markings, additions or deletions that make them different in any way from the original

“DSM” means demand-side management programs including demand-response, interruptible load, and energy efficiency programs.

“HMP&L” means Henderson Municipal Power & Light

“Identify” means:

- (a) With respect to a person, to state the person’s name, address and business relationship (e.g., “employee”) to Big Rivers;
- (b) With respect to a document, to state the nature of the document in sufficient detail for identification in a request for production, its date, its author, and to identify its custodian. If the information or document identified is recorded in electrical, optical or electromagnetic form, identification includes a description of the computer hardware or software required to reduce it to readable form.

“MATS” means Mercury Air Toxics Standard Rule

“MWh” means megawatt-hours

“NAAQS” means National Ambient Air Quality Standards

“NOx” means nitrogen oxides

“O&M” means operation and maintenance

“Relating to” or “concerning” means and includes pertaining to, referring to, or having as a subject matter, directly or indirectly, expressly or implied, the subject matter of the specific request.

“SO<sub>2</sub>” means sulfur dioxide

### **PRIVILEGE OR CONFIDENTIALITY**

If you claim a privilege including, but not limited to, the attorney-client privilege or the work product doctrine, as grounds for not fully and completely responding to any request for information, describe the basis for your claim of privilege in sufficient detail so as to permit the Commission to adjudicate the validity of the claim if called upon to do so.

### **TIME**

Unless otherwise provided, the applicable time period for each of these requests for information is January 1, 2009 to the present.

## REQUESTS FOR INFORMATION

1. See BREC response to SC DR 1-5(a)(i-iii). To the extent that these controls are being installed on each unit separately, please provide the table with costs broken down by unit and control type.
2. See BREC response to SC DR 1-7. “Big Rivers’ operating plan consists of the current year budget and a three year financial plan; therefore, we can only provide 2013 through 2016 for this request...”
  - a. Does the Company do any modeling or planning beyond the three year horizon?
    - i. If so, describe what modeling and planning is performed beyond the three year horizon, and produce the results of the most recent modeling or planning run by or for the Company.
    - ii. If not, describe why the Company expects that it is reasonable or prudent to only review three years of forward looking costs.
  - b. Does the Company run, or have run on its behalf, production cost modeling that extends beyond a three year horizon?
    - i. If so, identify the year to which production cost modeling is performed, and produce the results of the most recent production cost modeling run by or for the Company.
    - ii. If not, describe in detail why the Company expects that it is reasonable or prudent to only review three years of forward looking costs.
  - c. If the Company only projects off system sales revenues through 2016, please explain how the Company can be sure that off system sales revenues will recover/improve in the future.
  - d. See BREC response to PSC 2-21(c): “Big Rivers’ current long term financial model indicates Wilson Station will restart in 2019.”
    - i. Please provide any and all evidence that, if idled, Wilson Station will restart in 2019. If such evidence has already been provided, please indicate reference to workbook.
    - ii. Please explain how the Company is able to predict a restart in 2019 if its operating plan projections only go out to 2016.
3. For each of the Company’s generating units, for the years 2013-2030, if the Company maintains any records or information for the purposes of modeling, forecasting, or other resource planning, please provide the following information, on an annual basis:
  - a. Non-environmental capital expenditures
  - b. Capital expenditures for pollution controls

- c. Generation
  - d. Variable operating costs
  - e. Fixed operating costs
  - f. Fuel costs
  - g. Heat rate
  - h. Capacity factor
  - i. EFOR
  - j. Emission allowance expenditures
4. See BREC response to SC 1-21(e). Please provide the ACES forecasts for the following variables on an annual basis for the electricity market in MISO and PJM (separately) from 2013-2030. Specify if in constant or nominal dollars, and dollar year.
- a. Capacity market prices
  - b. On peak energy prices
  - c. Off peak energy prices
  - d. Annual energy prices
5. Provide BREC's assumptions for the following variables on an annual basis from 2013-2030. Specify if in constant or nominal dollars, and dollar year.
- a. Natural gas prices at Henry Hub
  - b. Natural gas prices, delivered to BREC
  - c. Coal prices delivered to each of BREC's coal-fired assets
6. For each of the Company's coal-fired assets:
- a. Provide the remaining book value (plant balance) at the start of 2013.
  - b. Provide the estimated market value of each unit at the start of 2013.
  - c. Describe how the Company estimated the market value of each unit.
7. See BREC confidential response to PSC 2-21(b). Please provide the sale price for the Wilson Station that was approved by the BREC Board for submittal to LGE/KU.
8. For BREC as a whole, for the years 2013-2030, provide the expected or modeled:
- a. Contractual energy purchases from bilateral or fixed contracts in MWh and dollars
  - b. Spot market energy purchases from an RTO in MWh and dollars
  - c. Contractual energy sales to internal load in MWh and dollars

- d. Contractual energy sales to external parties in MWh and dollars
  - e. Spot market energy sales to an RTO in MWh and dollars.
  - f. Please describe the scenario used to generate the above values (i.e. which units are assumed in service, which smelters are assumed to have contracts in force)
9. Please describe how the Company anticipates meeting the new Proposed Effluent Guidelines for the Steam Electric Power Generating Category, made public on April 19, 2013.
- a. What is the Company's anticipated cost of mitigation should the rule be finalized with the least stringent option proposed (Option 1)? Provide a response for each of the Company's coal-fired assets, individually.
  - b. What is the Company's anticipated cost of mitigation should the rule be finalized with the most stringent option proposed (Option 5)? Provide a response for each of the Company's coal-fired assets, individually.
  - c. Provide workpapers or documents relied upon or consulted to derive, calculate, or generate the values provided above.
  - d. If the Company has not reviewed these draft guidelines, please explain why not.
10. See BREC response to SC DR 1-33. Please explain BREC's compliance obligations under each of the following existing regulatory requirements and how the Company is meeting or planning to meet these obligations:
- a. 1-hour SO<sub>2</sub> NAAQS
  - b. Section 316(a) of the Clean Water Act
  - c. 2012 PM<sub>2.5</sub> NAAQS
  - d. MATS
11. See BREC response to SC DR 1-33(a) – (j). Is it the opinion of the Company that the rules listed in SC DR 1-33(a)-(j) will each impose costs on Big Rivers's generation units?
- a. If so, please provide estimates of the costs and the timeframes for these expenditures.
  - b. If not, please explain why not.
12. See Direct Testimony of Richert, pages 8 and 9.
- a. Will the Company still be tied to the Contract TIER provisions described therein after the departure of Alcan? If so, why?
  - b. How does the Company anticipate Contract TIER provisions would change (if at all) once both Century and Alcan have departed?

- c. See specifically p8, lines 8-14. If net margins are not returned first to the smelters, how will ratepayers either benefit or not benefit? Please provide a quantitative answer if available.
  
13. Please identify if the Company held an exit agreement with the smelters.
  - a. If so:
    - i. Provide a synopsis of the provisions of the exit agreement.
    - ii. Provide a copy of the exit agreement.
    - iii. Describe if the exit agreement, or any other contract signed with either of the smelters contained language that would make other BREC ratepayers whole in the case that the smelters exited the agreement. If the contract did not contain such language, please explain in detail why not.
  - b. If not, please describe in detail why no such provisions were put in place.
  - c. Refer to the Evansville Courier & Press article from April 29, 2013, entitled "Century Aluminum to buy Alcan's Sebree smelter," in which the Company announces that they have come to a framework for an agreement for Century to purchase power on the open market instead of generated by Big Rivers.
    - i. If such an agreement has been finalized, please provide the agreement.
    - ii. If the agreement has not yet been finalized, please describe the salient elements.
  
14. Identify the date upon which Century first indicated through formal or informal notice, that they might consider leaving the BREC contract.
  
15. See Company response to PSC 2-21(a) regarding the Attachment Y-2 Request for Non-Binding Study to MISO. The response states that "MISO estimates that the Attachment Y-2 analysis will take 75 days." Please provide the Y-2 analysis and any correspondence between the Company and MISO regarding the Y-2 request or analysis.
  
16. See Company response to PSC 2-21(f)(1), Attachment 1. Memo from Chris Bradley to David Crockett dated May 23, 2012. The Company states that this memo and study substantiates the statement that "Big Rivers assumed that if the Century facility continues to operate in any substantial way on or after August 20, 2013, MISO would require Big Rivers to continue to operate the Coleman Station for system reliability reasons."
  - a. Was this memo generated from the MISO study referenced in 2-21(a)?
  - b. Was this memo generated from knowledge that Century and/or Alcan might depart from the BREC system? If so, which (or both), and what was the source of that information?



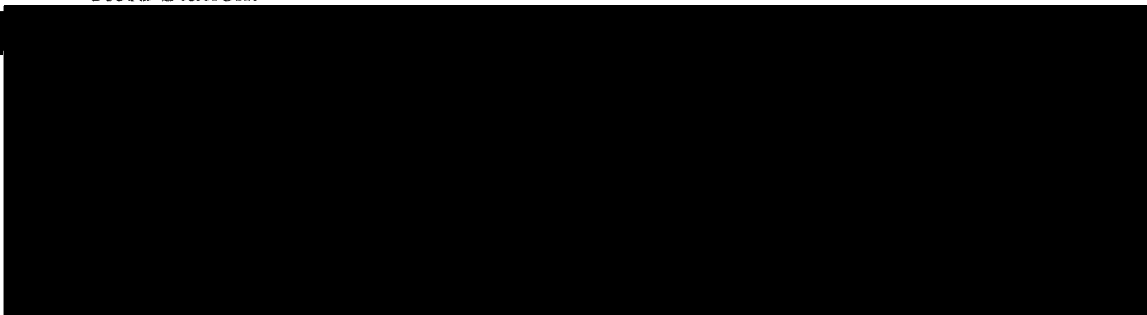
- c. Provide any other documentation, memoranda, papers or results produced in conjunction with this memo.
- d. See the first through fourth bullet points under “Coleman Station Idled.” Short of maintaining the Coleman unit, provide an explanation of any other mitigation that would be required to avoid each of these transmission violations, the cost of each of these mitigation measures, and the year that such measures mitigation could be put in place. If the Company has not explored alternative mitigation measures, please explain why not in detail.
- e. See the second bullet point under “Coleman Station Idled.”
  - i. Has the Company reviewed opportunities to reinforce the existing 161 kV infrastructure to avoid a transmission violation? If so, provide the cost and timeline for implementing such mitigation. If not, why not?
  - ii. Has the Company reviewed opportunities to construct new transmission ties to nearby 345 kV or higher transmission infrastructure? If so, provide the cost and timeline for implementing such mitigation. If not, why not?
- f. With regard to the Reid Station:
  - i. Has the Company reviewed opportunities to reinforce the existing 161kV infrastructure to avoid the transmission violations? If so, provide the cost and timeline for implementing such mitigation. If not, why not?
  - ii. Has the Company reviewed opportunities to construct new transmission ties to nearby 345kV or higher transmission infrastructure? If so, provide the cost and timeline for implementing such mitigation. If not, why not?

17. See response to PSC 2-22(a) regarding Attachment Y application and notice.

- a. Has the Company filed an Attachment Y application with MISO for Wilson Station? If not, why not?
- b. Does the Company expect that it could also file an Attachment Y application with MISO to idle the Coleman Station?
- c. If the Company filed to idle the Coleman station and it was found to be needed for reliability purposes, please confirm that the Company would expect to receive reimbursement from MISO to keep the plant operational (under an SSR agreement, for example) until such time that alternative mitigation measures were put in place. If not, provide a correction or clarification to the above statement, or explain.
- d. If the Company filed to idle the Coleman station and it was found to be needed for reliability purposes, please confirm that the smelters would be held responsible in part for SSR payments. If not, why not?
- e. At the time that Alcan departs, does the Company anticipate that Reid station would also be subject to a reliability constraint? If so, does the Company

anticipate that it could receive reliability payments if the plant were subject to an SSR agreement? Please provide all documentation of studies performed by or on behalf of the Company regarding possible reliability constraints related to the Reid Station.

18.



19. See Response to PSC 1-57, file PSC 1-57 – Big Rivers 2013 Cost of Service Study-CONFIDENTIAL, Tab StmtS RUS. Please explain why there is an energy value for Century in the years 2017-2027 but not in the years 2014-2016.

20. Refer to your response to SC DR 1-13(c). Explain why you defined achievable potential for DSM to represent the “attainable savings if the market penetration of high efficiency electric appliances and equipment reaches 30%” as opposed to a higher percent. Identify and produce any studies, analyses, or documents that support basing achievable potential on a 30% market penetration.

21. Refer to your response to SC DR 1-17(c):

- a. Explain the basis for your belief that “we have reached a steady state in the market”
  - i. Identify and produce any studies, analyses, or documents supporting that belief.
- b. Identify and produce the “projections” that “indicate that there will be no major drivers of change in market prices in the next several years.”

22. Refer to your response to SC DR 1-23(b). With regards to Big Rivers’ coal-fired generating units:

- a. Identify and produce any analyses, studies, or documents that support your contention that “Big Rivers’ members will be able to reap significant benefits from the units in the future.”
- b. Identify any estimate or projection of the level of “significant benefits” that Big Rivers’ members will be able to reap in the future.

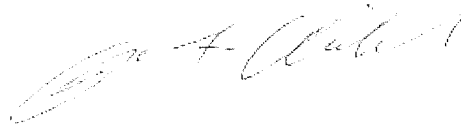
23. See Company's motion to KY PSC entitled "Big Rivers Electric Corporation Integrated Resource Plan filing due November 15, 2013" and dated December 13, 2012.
- a. See statement "Under the mitigation plan, Rig Rivers is currently investigating idling a plant or plants until Rig Rivers is able to find replacement load or until prices in the wholesale power market improve."
    - i. Identify which "plants" were under investigation for idling at the time that this motion was submitted.
    - ii. For any plants other than Wilson, identify the reasons why the Company has not sought to idle any units at those plants after December 13, 2012.
    - iii. To the extent that they have not already been provided, produce any documents or analyses evaluating the idling of any of Big Rivers plants.
    - iv. Identify to what levels "prices in the wholesale market" need to improve in order for it to be beneficial to ratepayers for Big Rivers to end the idling of one or more of its plants.
    - v. Identify and produce any analyses, studies, or documents related to the company's projections for improvement in wholesale market prices.
  - b. See statement "Without more certainty, at best the IRP process will be a hypothetical exercise of little practical value that consumes limited resources at both the Commission and Rig Rivers."
    - i. Is it the Company's contention that an IRP is in general "a hypothetical exercise of little practical value?"
    - ii. Is it the Company's contention that an IRP in the face of uncertainty is "a hypothetical exercise of little practical value?"
    - iii. What level of certainty is required before an IRP is no longer "a hypothetical exercise of little practical value?"
    - iv. If other factors, aside from load, were in flux (such as gas prices or market prices), would the Company also consider an IRP "a hypothetical exercise of little practical value?"
    - v. Please provide the Company's understanding of the purpose of an IRP.
    - vi. Have the Company's IRP or other public planning processes ever considered the departure of either one or both of the Company's smelter customers? If so, provide such analyses and documentation of such analyses in full. If not, why not?
    - vii. Have the Company's internal planning processes ever considered the departure of either one or both of the Company's smelter customers? If so, provide such analyses and documentation of such analyses in full. If not, why not?
24. See April 29, 2013 press release from Century Aluminum, which states:

*“Century Aluminum of Kentucky, a wholly owned subsidiary of Century Aluminum Company (NASDAQ: CENX), Kenergy Corp. and Big Rivers Electric Corp. today announced that they have reached a tentative agreement on the framework for providing market priced power to the Hawesville smelter. Under the arrangement, the electric cooperatives would purchase power on the open market and pass it through to Century at the market prices plus additional costs incurred by them. The arrangement is intended to have no impact on the current rate proposal of Big Rivers of the related flow-through rate proposal of Kenergy, each currently pending before the Kentucky Public Service Commission. The framework is subject to the negotiation of definitive agreements and approvals from various third parties, including the boards of directors of all parties, the KPSC, the Rural utilities Service and others. The parties intend to move as expeditiously as possible to finalize the agreement in advance of the expiration of the current power contract on August 20, 2013.”*

- a. Please provide a copy of the tentative agreement(s).
  - b. Does the Company agree with Century that the “arrangement is intended to have no impact on the current rate proposal of Big Rivers”? Please explain.
25. Please describe in detail the role and responsibilities that Big Rivers, Kenergy, and Century each will have pursuant to the “arrangement” and the functions and activities that Big Rivers specifically will perform pursuant to the “arrangement.”
26. Please describe and quantify the costs that Big Rivers and Kenergy each will incur to provide Century market access.
27. Please provide copies of all analyses prepared by or on behalf of Big Rivers and/or Kenergy to identify and quantify the costs that will be incurred to provide Century market access.
28. Please provide a quantification of the costs that Big Rivers and/or Kenergy each will incur to provide Century market access for the test year, including an allocation of each Company’s present costs as well as any incremental costs to do so, and the amounts included in the Company’s test year revenue requirement in this case. If Big Rivers does not agree that there should be an allocation of any of the Company’s present costs, then please explain why it does not agree.
29. Please provide the order(s) or agreement(s) establishing the franchise of Big Rivers Electric Cooperative, and any terms and conditions incumbent in said order(s). The relevant time period for this request extends beyond 2009 and includes the years

preceding establishment of Big Rivers Electric Cooperative—circa 1961—to present, or whenever said order(s) was drafted.

Respectfully submitted,



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Dated: May 6, 2013

## CERTIFICATE OF SERVICE

I certify that I mailed a copy of Ben Taylor and Sierra Club's Supplemental Request for Information from Big Rivers Electric Cooperative by first class on May 6, 2013 to the following:

Mark A Bailey  
President CEO  
Big Rivers Electric Corporation  
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Henderson, KY 42419-0024

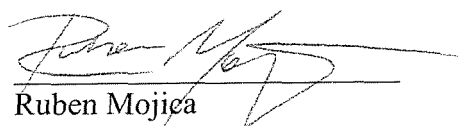
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