

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC 2020 INTEGRATED RESOURCE) Case No.
PLAN OF BIG RIVERS ELECTRIC CORPORATION) 2020-00299

ATTORNEY GENERAL'S INITIAL DATA REQUESTS

The intervenor, the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention, hereby submits the following Initial Data Requests to Big Rivers Electric Corporation [hereinafter "BREC" or "the Company"] to be answered by the date specified in the Commission's Orders of Procedure, and in accord with the following:

- (1) In each case where a request seeks data provided in response to a staff request, reference to the appropriate request item will be deemed a satisfactory response.
- (2) Identify the witness who will be prepared to answer questions concerning each request.
- (3) Repeat the question to which each response is intended to refer. The Office of the Attorney General can provide counsel for BREC with an electronic version of these questions, upon request.
- (4) These requests shall be deemed continuing so as to require further and supplemental responses if the company receives or generates additional information within the scope of these requests between the time of the response and the time of any hearing conducted hereon.
- (5) Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association, be accompanied by a signed certification of the preparer or person supervising the preparation of the response on behalf of the entity

that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

(6) If you believe any request appears confusing, request clarification directly from Counsel for the Office of Attorney General.

(7) To the extent that the specific document, workpaper or information as requested does not exist, but a similar document, workpaper or information does exist, provide the similar document, workpaper, or information.

(8) To the extent that any request may be answered by way of a computer printout, identify each variable contained in the printout which would not be self-evident to a person not familiar with the printout.

(9) If the company has objections to any request on the grounds that the requested information is proprietary in nature, or for any other reason, notify the Office of the Attorney General as soon as possible.

(10) As used herein, the words "document" or "documents" are to be construed broadly and shall mean the original of the same (and all non-identical copies or drafts thereof) and if the original is not available, the best copy available. These terms shall include all information recorded in any written, graphic or other tangible form and shall include, without limiting the generality of the foregoing, all reports; memoranda; books or notebooks; written or recorded statements, interviews, affidavits and depositions; all letters or correspondence; telegrams, cables and telex messages; contracts, leases, insurance policies or other agreements; warnings and caution/hazard notices or labels; mechanical and electronic recordings and all information so stored, or transcripts of such recordings; calendars, appointment books, schedules, agendas and diary entries; notes or memoranda of conversations (telephonic or

otherwise), meetings or conferences; legal pleadings and transcripts of legal proceedings; maps, models, charts, diagrams, graphs and other demonstrative materials; financial statements, annual reports, balance sheets and other accounting records; quotations or offers; bulletins, newsletters, pamphlets, brochures and all other similar publications; summaries or compilations of data; deeds, titles, or other instruments of ownership; blueprints and specifications; manuals, guidelines, regulations, procedures, policies and instructional materials of any type; photographs or pictures, film, microfilm and microfiche; videotapes; articles; announcements and notices of any type; surveys, studies, evaluations, tests and all research and development (R&D) materials; newspaper clippings and press releases; time cards, employee schedules or rosters, and other payroll records; cancelled checks, invoices, bills and receipts; and writings of any kind and all other tangible things upon which any handwriting, typing, printing, drawings, representations, graphic matter, magnetic or electrical impulses, or other forms of communication are recorded or produced, including audio and video recordings, computer stored information (whether or not in printout form), computer-readable media or other electronically maintained or transmitted information regardless of the media or format in which they are stored, and all other rough drafts, revised drafts (including all handwritten notes or other marks on the same) and copies of documents as hereinbefore defined by whatever means made.

(11) For any document withheld on the basis of privilege, state the following: date; author; addressee; indicated or blind copies; all persons to whom distributed, shown, or explained; and, the nature and legal basis for the privilege asserted.

(12) In the event any document called for has been destroyed or transferred beyond the control of the company, state: the identity of the person by whom it was destroyed or

transferred, and the person authorizing the destruction or transfer; the time, place, and method of destruction or transfer; and, the reason(s) for its destruction or transfer. If destroyed or disposed of by operation of a retention policy, state the retention policy.

(13) Provide written responses, together with any and all exhibits pertaining thereto, in one or more bound volumes, separately indexed and tabbed by each response, in compliance with Kentucky Public Service Commission Regulations.

(14) “And” and “or” should be considered to be both conjunctive and disjunctive, unless specifically stated otherwise.

(15) “Each” and “any” should be considered to be both singular and plural, unless specifically stated otherwise.

Respectfully submitted,
DANIEL CAMERON
ATTORNEY GENERAL



LAWRENCE W. COOK
J. MICHAEL WEST
ANGELA M. GOAD
JOHN G. HORNE II
ASSISTANT ATTORNEYS GENERAL
1024 CAPITAL CENTER DR., STE. 200
FRANKFORT, KY 40601
(502) 696-5453
FAX: (502) 564-2698
Larry.Cook@ky.gov
Michael.West@ky.gov
Angela.Goad@ky.gov
John.Horne@ky.gov

Certificate of Service and Filing

Pursuant to the Commission's Orders dated March 16, 2020 and March 24, 2020 in Case No. 2020-00085, and in accord with all other applicable law, Counsel certifies that an electronic copy of the forgoing was served and filed by e-mail to the parties of record. Further, the Attorney General will submit the paper originals of the foregoing to the Commission within 30 days after the Governor lifts the current state of emergency.

This 26th day of February, 2021



Assistant Attorney General

Electronic 2020 Integrated Resource Plan
of Big Rivers Electric Corporation
Case No. 2020-00299
Attorney General's Initial Data Requests

1. Provide the amount of power BREC is currently receiving from the Southeastern Power Administration ("SEPA"). State this quantity also in terms of the percentage of BREC's total power requirements on an average monthly basis.
 - a. Provide a discussion regarding the potential for BREC to secure rights to additional hydropower, whether from SEPA or any other source, and whether doing so would or could be cost-effective, especially in light of the Biden Administration's plan to require the electric utility industry to achieve carbon neutrality by 2035.
 - b. Provide the results of any cost-benefit analyses the Company may have conducted regarding its continued participation in the SEPA contract. With regard to any such cost-benefit analysis: (i) explain whether the emissions-free nature of the SEPA power was also taken into consideration; and (ii) provide a discussion of whether the purchase of the SEPA hydropower could provide further benefits to BREC and its members in the event that either the federal government imposes a carbon tax, or MISO institutes carbon pricing.
 - c. Provide the capacity factor of BREC's 178 MW share of SEPA power.
2. Provide an update on the project to transfer the Coleman FGD to the Wilson unit, including any updated cost projections for the project.
3. Regarding the Green units, refer to the IRP Plan, Ch. 8, p. 137, and Ch. 9, p. 176. Explain the meaning of the phrases on p. 137 that the Green units will be "idled," and on p. 176 that the units would be "suspended." In particular, explain whether these terms refer to mothballing the units (as was done with the Coleman units), actual retirement, or some other status.
 - a. If the Green units are placed into mothball status, explain whether the costs of doing so entered into any applicable cost-benefit analyses.
4. If and when BREC actually retires the two Green units, confirm that the only remaining unit at Sebree Station would be the Reid CT (Reid Unit 2). If so confirmed, provide cost estimates for any remaining demolition to be done at Sebree Station.
 - a. In the event BREC decides to move forward with its Preferred Plan of entering a partnership to own or purchase 90 MW of a 592 MW natural gas combined cycle ("NGCC") unit referenced at p. 17 and in Chapters 8 and 9 of the IRP Plan, explain whether the demolition of the Green units and any other plant at Sebree Station requiring demolition would be complete

Electronic 2020 Integrated Resource Plan
of Big Rivers Electric Corporation
Case No. 2020-00299
Attorney General's Initial Data Requests

enough to begin construction of the NGCC by the estimated construction start date of 2024.

- b. Explain whether construction of the NGCC at Coleman Station would offer more transmission benefits over constructing it at Sebree Station.
- c. Provide the estimated remaining lifespan of the Reid CT.
- d. In light of the Biden Administration's plan to require the electric utility industry to achieve carbon neutrality by 2035, explain whether the Company believes it needs to develop a revised plan regarding the cost-effectiveness of the plan of procuring a share in the generation output of a NGCC.

5. Reference the IRP Plan at pp. 176-177.

- a. Regarding the statement, “[c]onverting the [Green] units to natural gas as a capacity-only resource is currently uneconomic and would involve regulatory risk.” Explain the regulatory risk involved.
- b. Regarding the statement, “A recent (August 2020) EPA order may create an opportunity to extend the life of the Green units through December 31, 2028.” Provide a copy of the order, or a link to it.
- c. Reference Case Number 2021-00079, “Electronic Application Of Big Rivers Electric Corporation For A Certificate Of Public Convenience And Necessity To Convert Green Station To Natural Gas And Authority To Establish A Regulatory Asset.” Provide a discussion regarding how the application in this docket will change BREC's IRP analyses.
 - i. Explain the types of studies BREC may have conducted that led it to the filing of Case No. 2021-00079.
- d. If the Commission does not approve BREC's application in Case No. 2021-00079: (i) confirm that the Green units will be fully retired; and (ii) if so confirmed, provide a detailed explanation of how BREC intends to replace the generation that the Green units provided. Explain also whether the Company will file an updated application in the instant case.
- e. In the event the Commission approves BREC's application in Case No. 2021-00079: (i) provide the expected useful life of the gas-fired Green units; and (ii) in the event the lifespan is less than the full planning period covered by the current IRP, explain whether BREC will supplement the current application with revised analyses pertaining to the years of the planning period extending beyond that lifespan.

Electronic 2020 Integrated Resource Plan
of Big Rivers Electric Corporation
Case No. 2020-00299
Attorney General's Initial Data Requests

6. Regarding the current BREC Preferred Plan's reference to entering a partnership to own or purchase 90 MW of a 592 MW NGCC, explain whether BREC would be the MISO market participant regarding sales of power produced from such a plant.
7. Confirm that the Reid coal unit (Reid Unit 1) has been retired.
8. Explain whether there will be any stranded costs associated with the retirement of the Green units, including any environmental control plant and equipment. If so confirmed, confirm further that BREC has no ability to write-off any such stranded costs as tax losses.
 - a. Provide an analysis of the stranded costs that will be incurred if the Commission approves BREC's application in Case No. 2021-00079.
 - b. Provide an analysis of the stranded costs that will be incurred if the Commission does not approve BREC's application in Case No. 2021-00079.
9. Confirm that in 2016, BREC undertook a multi-million dollar project to install new environmental controls at the Green units to make them MATS-compliant.
 - a. Explain whether any of the environmental control equipment, and/or any other plant of any type or sort from the Green units could be used as potential spare parts for the Wilson unit.
 - b. Explain whether any of the plant and equipment remaining at Coleman station could be used as potential spare parts for the Wilson unit.
10. Provide an update on the status of demolition at Coleman Station.
11. Explain whether the Reid CT is fired exclusively with natural gas, or if it ever uses fuel oil.
12. Explain whether Wilson has black start capability, and if so, whether MISO provides any additional monetary contribution / reimbursement for that capability.
 - a. If Wilson lacks black start capability, explain whether BREC has conducted any studies regarding the costs and benefits of adding that capability.
13. Reference IRP Plan § 6.2, Transmission Transfer Capability, in particular the following statement: ". . . the existing transmission system is sufficient to support the export of all Big Rivers' generation power greater than the amount required to serve

Electronic 2020 Integrated Resource Plan
of Big Rivers Electric Corporation
Case No. 2020-00299
Attorney General's Initial Data Requests

Member load.”

- a. Provide a discussion of whether any MISO projects over the next four years could affect congestion in or near BREC's service territory, and/or whether any such projects could in any manner impair or impede BREC's continued ability to engage in off-system sales. Provide copies of any studies performed in this regard.
 - b. Include in your response a discussion of whether any additional MISO projects are or will be necessary or helpful in assisting BREC's ongoing off-system sales, including the increasing likelihood of regional HVDC transmission.
14. Provide a discussion of any impact that recent FERC rulings pertaining to the LG&E-KU wholesale pancaked transmission rates may have on BREC's continued ability to engage in off-system sales.
 15. Explain whether any regional transmission changes could affect the ability to attract additional parties / partners in the projected NGCC plant, and if so, how.
 16. Explain whether BREC anticipates participating in any manner with the Southeast Energy Exchange Market, and if so: (i) how; and (ii) what benefits the Company hopes to achieve in doing so.
 17. Explain whether BREC has the ability to make off-system sales into the TVA service territory. If so confirmed, provide a discussion of whether recent changes in TVA's service territory, in particular the significant retirements of coal-fired generation, could create opportunities for off-system sales into that territory.
 18. Explain how any idling, suspension, or retirement of the Green units will affect BREC's MISO reserve requirements.
 19. Provide the most current projected retirement date of the Wilson unit, and explain whether: (i) the ELG Rule; and/or (ii) the Biden Administration's plan to require electric utilities to achieve carbon neutrality by 2035 will or could in any manner affect the projected retirement date.
 20. Explain whether the retirements of the HMPL, Coleman, Reid and/or Green units have created or will create any emissions allowance credits that could be “banked” for future use at Wilson.

Electronic 2020 Integrated Resource Plan
of Big Rivers Electric Corporation
Case No. 2020-00299
Attorney General's Initial Data Requests

21. Provide the total amount of dispatchable power that BREC either owned or had access to as of the date this IRP Plan was filed.
 - a. Provide the amount of dispatchable power that BREC will either own or have access to as of the effective date of the retirements of the Reid coal unit and the Green units.
 - b. Confirm that the addition of 260 MW of power under the three solar power purchase agreements referenced in §§ 1.2.4 and 2.9 will not add any dispatchable power.
 - c. Once the solar power purchase agreements referenced above are completed, provide the amount of dispatchable power that BREC will have available. Include in your response the projected date of the NGCC's commercial operation, and BREC's anticipated share thereof.
22. Provide a discussion of how much dispatchable power BREC will have in the event that: (i) the Biden Administration's plan of requiring electric utilities to achieve carbon neutrality by 2035 becomes a reality; and (ii) BREC is left with only renewable types of power generation.
23. Reference IRP Plan § 5.4. Confirm that MISO CEO Bear, appearing before the House Committee on Energy and Commerce, Subcommittee on Energy on October 30, 2019, indicated that maintaining grid reliability beyond the 40% renewable penetration level would become significantly more complex, and that above that level, advanced technologies would be required to balance the MISO system to reduce renewable curtailments and regional transmission reliability issues and keep the system stable.
 - a. Confirm also the statement: "Big Rivers believes that because of all of this change, there remains value in retaining our most efficient baseload resource and in identifying resources that will complement intermittent renewable resources in the future."
 - b. In light of the Biden Administration's plan to require electric utilities to achieve carbon neutrality by 2035, include in your response discussions of: (i) whether it will be possible to procure supply-side resources to complement and supplement the intermittent nature of renewable resources; and (ii) the "advanced technologies" that MISO would have to procure and deploy to reduce renewable curtailments and regional transmission reliability issues in order to maintain system stability.
24. Explain how BREC will ensure reliability of services to its customers given: (i) the Company's increasing reliance on solar to meet its capacity load requirements; and (ii)

Electronic 2020 Integrated Resource Plan
of Big Rivers Electric Corporation
Case No. 2020-00299
Attorney General's Initial Data Requests

the Biden Administration's plan to require electric utilities to achieve carbon neutrality by 2035.

- a. If BREC intends to insure reliability through MISO market purchases, include in the Company's explanation a discussion relating to MISO's on-going ability to meet its members' energy needs through market purchases.
25. Given the reliability issues inherent with renewable energy sources such as solar and wind, explain how BREC's increased reliance on renewables will not lead to reliability issues for its members and end-use customers. Explain also how BREC will insure that its members and end-use customers do not experience blackouts, or rolling blackouts, as has happened in the past year in California, Texas and many other states that have increased their reliance on renewable energy.
 26. Explain how locking in solar prices for a twenty-year period is beneficial for customers as opposed to obtaining solar power on the open market during the same twenty-year period.
 27. Confirm that Moody's has given BREC an investment grade rating.
 28. Reference the IRP Plan at pp. 40-42, regarding the impact of the Covid-19 crisis. Provide an update to these figures since the time the IRP Plan was filed.
 29. Reference IRP Plan § 4.8, Conclusions for Demand Response, in particular p. 89 wherein it is stated that a residential peak time rebate (PTR) program would pass the TRC test.
 - a. Confirm that Meade RECC and Kenergy either already have, or soon will have full deployment of AMI meters.
 - b. Explain whether Jackson Purchase RECC has AMI meters.
 - c. Explain whether any such PTR program would be premised on the three members' utilizing AMI meters, or whether such a program could be implemented and operated without AMI meters.
 - d. Provide the remaining useful lives of the AMI metering systems that BREC's members have installed.
 30. Explain whether BREC and its members have considered utilizing the services of a demand response aggregator, pursuant to FERC Order 2222, to market any energy savings from potential demand response (DR) programs. If so, does BREC believe it will need to both address this issue through the IRP process, and seek permission of the Kentucky Public Service Commission before doing so?

Electronic 2020 Integrated Resource Plan
of Big Rivers Electric Corporation
Case No. 2020-00299
Attorney General's Initial Data Requests

- a. Reference the response to the question above regarding BREC's member systems' utilization of AMI meters. Explain whether utilization of AMI meters throughout BREC's footprint would or could make adoption of DR programs more feasible and cost-effective. Include in your response a discussion of whether DR programs could become more valuable in the years ahead, in light of the Biden Administration's plan to require electric utilities to achieve carbon neutrality by 2035.
31. Reference IRP Plan § 5.5.1, Net Metering Statistics. Confirm that in the last three years, net metering in BREC's service territory has grown from approximately 500 kW to in excess of 2.5 MW.
- a. Provide a breakdown of how many net metering customers are commercial, and how many residential.