

**ORIGINAL**



**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

**In the Matter of:**

**ELECTRONIC EXAMINATION OF THE )  
APPLICATION OF THE FUEL ADJUSTMENT )  
CLAUSE OF BIG RIVERS ELECTRIC ) Case No.  
CORPORATION FROM ) 2021-00058  
NOVEMBER 1, 2018 THROUGH OCTOBER 31, 2020 )**

**DIRECT TESTIMONY**

**OF**

**MARK W. McADAMS  
DIRECTOR, FUELS PROCUREMENT**

**ON BEHALF OF**

**BIG RIVERS ELECTRIC CORPORATION**

**FILED: March 22, 2021**

**ORIGINAL**



1 WKE on December 31, 2007, to assume the responsibilities of the Director,  
2 Fuels Procurement for Big Rivers.

3

4 **Q. Please summarize your duties at Big Rivers.**

5 A. I am responsible for Big Rivers' procurement of solid fuel, fuel oil, flue-gas  
6 desulphurization bulk reagent (lime and limestone), powdered activated  
7 carbon for mercury reduction, natural gas (as of February 1, 2019), and  
8 related logistics associated with the delivery of the foregoing materials.

9

10 **Q. Have you previously testified before this Commission?**

11 A. Yes. During my tenure with LG&E, I testified in LG&E's fuel reviews.  
12 During my time at Big Rivers, I have testified in Big Rivers' six-month and  
13 two-year fuel adjustment clause ("FAC") reviews since 2009.

14

15 **Q. What is the purpose of your testimony in this proceeding?**

16 A. The purpose of my testimony is to describe Big Rivers' procurement practices  
17 for solid fuel and fuel oil as they relate to the FAC for the period from  
18 November 1, 2018, through October 31, 2020 (the "Review Period").

19

20 **Q. Have Big Rivers' coal suppliers adhered to their contract delivery**  
21 **schedules during the Review Period?**

1 A. Yes, the majority of coal supply contracts are compliant with contract  
2 delivery schedules that were established during the time frame of the Review  
3 Period. Big Rivers did terminate two coal supply contracts during the two-  
4 year review period due to the suppliers' inabilities to meet contractual terms  
5 and conditions which specifically impacted quantity and delivery schedules.

6 From time-to-time, there are various impediments to delivery (mine  
7 operations, river-related matters of freezing, flooding and/or drought,  
8 equipment break-down, *etc.*) that cause delays. Most often, shipments are  
9 rescheduled to deliver the product at a later date, via alternate mode of  
10 transportation, or carried forward into the subsequent month or quarter to  
11 complete delivery. Such make up of delayed tonnage is based upon the  
12 contractual language of the coal supply agreement and the reason for delay  
13 (*e.g.*, force majeure). All (100%) of contractual deliveries were achieved in  
14 2019 and 2020, except as Amended with Alliance Coal, LLC (Big Rivers  
15 Contract Number BRE-18-003) whose delivery delays were associated with  
16 mine idling for approximately two months as a result of the COVID-19  
17 pandemic.

18

19 **Q. What efforts has Big Rivers made in general to help ensure coal**  
20 **suppliers' adherence to contract delivery schedules during the**  
21 **Review Period?**

1 A. Big Rivers' fuel department personnel review its delivery schedules with  
2 suppliers, with providers of logistics services, and with Big Rivers generating  
3 station contacts on a daily basis to ensure that scheduled tonnage has been  
4 completed during the course of the term of the contractual agreement. In the  
5 event of delay (mining, loading/unloading, and/or logistics issues), the parties  
6 confer and agree upon revised schedules to ensure completion of contractual  
7 tonnage amounts. Contract shipment status is reviewed weekly, monthly,  
8 and quarterly to ensure contractual compliance. In the event of an extended  
9 force majeure, the non-declaring party has a contractual option as to whether  
10 to reschedule any shortfall tonnage. Contractual documents for coal supply  
11 denote that time is of the essence in regard to coal delivery and that failure  
12 to deliver is a material breach of the contractual agreement which could  
13 result in termination of the coal supply agreement. Big Rivers has not had,  
14 to date, a situation where it needed to invoke contract language regarding  
15 delinquent or missed shipments. In such an event, the supplier would be  
16 provided notice of its material breach of non-delivery pursuant to the  
17 contractual agreement and would be obligated to remedy such default or face  
18 the potential termination of the agreement.

19  
20 **Q. What efforts has Big Rivers made to maintain the adequacy of its**  
21 **coal supplies in light of any coal supplier's inability or unwillingness**  
22 **to make coal contract deliveries?**

1 A. Big Rivers makes reasonable efforts to work with its suppliers to set delivery  
2 schedules and to reschedule shipments, in a timely fashion, in the event of  
3 delays. In the event of an extended delay, such as a force majeure, Big Rivers  
4 would, if necessary, seek alternative spot supply to cover any shortfall due to  
5 such an extended delay. Big Rivers also maintains a reasonable inventory  
6 supply at each generating station as a buffer to ensure that it has adequate  
7 fuel supply at all times, despite delayed or interrupted shipment deliveries.  
8 When contract conditions will allow, Big Rivers may also provide notice of its  
9 desire for increased tonnage within its coal supply agreements to assist  
10 during shipment shortfall(s) by another of its suppliers.

11

12 **Q. Please describe any changes in coal market conditions that occurred**  
13 **during the Review Period or that Big Rivers expects to occur within**  
14 **the next two years that have significantly affected or will**  
15 **significantly affect Big Rivers' solid fuel procurement practices.**

16 A. The U.S. coal industry will continue to be challenged by competition from  
17 natural gas, renewable energy sources (solar, wind, *etc.*) and more stringent  
18 environmental regulation. During the window of this Review Period, several  
19 coal companies have sold portions of their business, exited the business, or  
20 have declared bankruptcy (*e.g.*, Murray Energy, Foresight Coal,  
21 Hartshorne/Paringa, and Rhino Energy). Mining firms are finding  
22 themselves challenged in regard to obtaining financing for capital for

1 maintenance of existing operations, expansion, or initiating new projects.  
2 Additional announcements regarding the retirement of coal – fired utility  
3 generation or their conversion to natural gas are occurring more frequently.  
4 These retirements and/or conversions will impact coal production and sales.  
5 Also, U.S. coal demand and production was greatly reduced during 2020 as a  
6 result of the global COVID-19 pandemic. Despite depletion, closure,  
7 bankruptcy and production cuts in certain basins, the Illinois Basin is  
8 anticipated to continue production; albeit with fewer producers and in a  
9 reduced scale as compared to prior years. Recent excess inventory situations  
10 appear be in the process of reduction and more toward lower inventory levels.  
11 Production is much more aligned with contractual obligations which closely  
12 follows coal-fired generation demand. An extended outage event at a very  
13 large supply point could quickly create pressure on the marketplace for  
14 physical coal, along with short-term pricing spikes, until such an event could  
15 be resolved. Coal producers have taken steps to reduce their on-site  
16 inventory and excess production, and continue to delay or forego intended  
17 expansion of either existing or new mining reserves. This may have an  
18 impact on spot and term coal availability and pricing over the next several  
19 years.

20 Over the Review Period, Big Rivers experienced inventory increases  
21 as a result of reduced electricity demand, part due to the continuing COVID  
22 –19 pandemic. Furthermore, Big Rivers is procuring less coal than in prior

1 years as a result of generation station retirement and dispatch of renewable  
2 energy. In the near term, Big River's fuel procurement practices have  
3 recommenced, with fuel procurement occurring in 2021. At present,  
4 adequate coal supply has been offered via solicitations, and one contract of  
5 one-year term has been executed. The potential change of all of these various  
6 market pressures has created challenges in the coal producing sector. Coal  
7 companies have elected to merge/consolidate, sell assets, or declare Chapter  
8 7 or Chapter 11 bankruptcy. The result of these challenges has created a  
9 smaller marketplace from which utilities may source coal supply. Big Rivers  
10 will continue its due diligence to actively survey the marketplace for  
11 opportunities to secure its fuel supply for short- and long-term business,  
12 weighing these market forces while ensuring prudent procurement decisions.

13  
14 **Q. Have Big Rivers' fuel procurement purchases and practices for solid**  
15 **fuel during the Review Period been reasonable?**

16 A. Yes. During the course of this Review Period, Big Rivers' practices have  
17 included a determined focus on the reduction of inventory, and balancing  
18 procurement to reduced demand. Big Rivers continues to review and  
19 appropriately act in the spot, mid-term, and long-term fuel and logistics  
20 markets, in a concerted and planned fashion, to attempt to limit its exposure  
21 to volatility in the marketplace and to ensure competitive and reliable fuel  
22 supply to its generating stations. Big Rivers' fuel procurement practices



1 include interaction with various departments within the Company (finance,  
2 risk management, generation planning, operations, energy marketing, and  
3 material handling) to ensure that any fuel supply agreements being  
4 contemplated meet the planned generation and inventory goals of the  
5 Company. Solid fuel is secured after evaluation of fuel quality, and of the  
6 reliability and economic competitiveness of the fuel provider in light of the  
7 short- and long-term fuel needs at the generating station(s). Big Rivers  
8 strives for transparency within and outside of the cooperative, ensuring that  
9 its procurement practices are sound, ethical, and appropriate for the  
10 intended purpose. Big Rivers engages in formal competitive bid processes  
11 and follows internal controls (internal bid opening processes to include  
12 multiple persons and departments, bid tabulation and review by various  
13 constituencies of the Company, and internal risk management evaluation) to  
14 ensure transparency, accountability, and appropriate officer and  
15 management level approval for procurement action. Big Rivers' fuel  
16 procurement costs are competitive as compared to the fuel benchmarking  
17 performed amongst Kentucky utilities.

18  
19 **Q. Earlier you mentioned that your responsibilities also included, as of**  
20 **February 1, 2019, procuring natural gas. Did those responsibilities**  
21 **continue throughout the Review Period?**

1 A. Yes, throughout the Review Period I was responsible for the procurement of  
2 natural gas.

3

4 **Q. Please discuss the reasonableness of Big Rivers' natural gas**  
5 **procurement practices during the review period.**

6 A. Big Rivers' currently has one natural gas fired generator. It is the Reid  
7 Combustion Turbine ("Reid CT"). It operates as a peaking unit, and for  
8 reliability needs within the MISO<sup>1</sup> system. Big Rivers purchases gas on the  
9 spot market when this combustion turbine is needed. Big Rivers' agent,  
10 ACES,<sup>2</sup> has gas traders on its staff that procure the gas for the Reid CT when  
11 it is required. ACES gas traders maintain a list of available gas supply  
12 companies so they have a variety of choices if the need arises to procure gas.  
13 Big Rivers has a transmission agreement with Texas Gas Transmission, LLC  
14 to supply the gas to this combustion turbine. This transmission service is an  
15 interruptible service that is appropriate for the level of use at the Reid CT.  
16 Since the combustion turbine does not operate on a daily basis, it does not  
17 warrant a firm gas contract. Big Rivers' gas procurement efforts during the  
18 Review Period have been reasonable and practical, and represent the least  
19 cost methodology of procuring gas for the operation of the Reid CT.

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<sup>1</sup> MISO = Midcontinent Independent System Operator, Inc. ([www.misoenergy.org](http://www.misoenergy.org)).

<sup>2</sup> ACES ([www.acespower.com](http://www.acespower.com)) is a nationwide energy management company, headquartered in Carmel, Indiana, that helps its clients buy, sell, and manage energy.

1 **Q. Does this conclude your testimony?**

2 **A. Yes.**

3

**BIG RIVERS ELECTRIC CORPORATION**

**AN ELECTRONIC EXAMINATION OF  
THE APPLICATION OF THE FUEL ADJUSTMENT CLAUSE  
OF BIG RIVERS ELECTRIC CORPORATION  
FROM NOVEMBER 1, 2018 THROUGH OCTOBER 31, 2020  
CASE NO. 2021-00058**

**VERIFICATION**

I, Mark W. McAdams, verify, state, and affirm that I prepared or supervised the preparation of the Direct Testimony filed with this Verification, and that Direct Testimony is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry

*Mark W. McAdams*

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Mark W. McAdams

COMMONWEALTH OF KENTUCKY )  
COUNTY OF HENDERSON )

22nd SUBSCRIBED AND SWORN TO before me by Mark W. McAdams on this the  
day of March, 2021.

*Rathene R. Sly, KY NP16841*  
Notary Public, Kentucky State at Large

My Commission Expires October 31, 2024

