

ATTORNEYS

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BY HAND DELIVERY

December 20, 2013

Mr. Jeff R. Derouen, Executive Director Kentucky Public Service Commission 211 Sower Blvd. Frankfort, KY 40601

RE: Joint Application of Kenergy Corp. and Big Rivers Electric Corporation for Approval of Contracts Case No. 2013-00413

Dear Mr. Derouen:

Enclosed for filing in the above matter are an original and ten copies of the Direct Testimony of Michael Early and Jason Young on behalf of Century Aluminum Sebree LLC.

Very truly yours,

David C. Brown

DCB:msp Enclosures

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DEC 2 0 2013

PUBLIC SERVICE COMMISSION

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

Joint Application of Kenergy Corp.) and Big Rivers Electric Corporation) for Approval of Contracts and for) A Declaratory Order)

Case No. 2013-00413

DIRECT TESTIMONY

\mathbf{OF}

MICHAEL EARLY CORPORATE ENERGY DIRECTOR

ON BEHALF OF

CENTURY ALUMINUM SEBREE LLC

FILED: December 20, 2013

1 2 3 4		DIRECT TESTIMONY OF MICHAEL EARLY
5 6	Q.	Please state your name, business address, and position.
7	А.	My name is Michael Early. I am employed by Century Aluminum
8		Company, the parent of Century Aluminum Sebree LLC ("Century"),
9		as Corporate Energy Director. My responsibilities include power
10		management for the Sebree Smelter. My business address is: One
11		South Wacker Drive, Suite 1000, Chicago, Illinois 60606. I have held
12		this position since July 2011. Prior to that, I was Executive Director of
13		the Industrial Customers of Northwest Utilities for six years after
14		having represented the aluminum companies in the Northwest for over
15		20 years.
16	Q.	Did you testify in Case No. 2013-00221, concerning approval of
17		comparable transactions for Century's Hawesville Smelter?
18	А.	Yes, I did. The contracts for power supply to the Hawesville Smelter in
19		that case are similar to the contracts in this case.
20	Q.	What is the purpose of your testimony in this case?
21	A.	My testimony provides the context for the proposed contracts among
22		Big Rivers, Kenergy, and Century and addresses some of the critical
23		terms of these contracts and the importance of timely approval of these
24		contracts.

1	Q.	Were you involved in negotiating the proposed contracts?
2	А.	Yes. I participated in the contract negotiations.
3	Q.	Please briefly identify and discuss the contracts.
4	А.	There are eight contracts:
5		<u>Electric Service Agreement</u> between Kenergy and Century. This
6		is the retail electric service agreement. Kenergy sells to Century the
7		energy acquired under Kenergy's wholesale electric service agreement
8		with Big Rivers at the cost to Kenergy plus a small fee. This includes
9		as an attachment the service contract for non-smelting load if the
10		Sebree Smelter is closed.
11		Arrangement and Procurement Agreement between Big Rivers
12		and Kenergy. This is the wholesale electric service agreement. Big
13		Rivers, acting as the MISO "market participant", acquires energy,
14		capacity, transmission, and ancillary services from the market at
15		MISO prices and resells to Kenergy at a pass-through rate.
16		Direct Agreement between Big Rivers and Century. This
17		provides for direct payment by Century of other costs incurred by Big
18		Rivers if Big Rivers is no longer the market participant and these costs
19		are not paid by Century under the Electric Service Agreement.
20		Protective Relays Agreement among Big Rivers, Kenergy, and
21		Century. This addresses the protective relay systems that may be

1		installed to allow Century to operate at full capacity when operation of
2		the Wilson generating station ("Wilson") is suspended.
3		Load Curtailment Agreement ("LCA") between Century and Big
4		Rivers. Under the LCA, Century agrees that Big Rivers may curtail
5		load at the Sebree Smelter when required by MISO or upon
6		determination by Big Rivers, consistent with applicable law and rules,
7		that such curtailment will prevent or reduce a curtailment that would
8		otherwise occur on its system.
9		Tax Indemnity Agreement between Kenergy, Century, and
10		Century Parent. Century and Century Parent indemnify Kenergy for
11		any costs if Kenergy loses its tax exempt status due to implementation
12		of the proposed contracts.
13		<u>Guarantee</u> among Big Rivers, Kenergy, and Century Parent and
14		Security and Lock Box Agreement among Big Rivers, Kenergy,
15		Century, and Old National Bank. Each of these agreements assures
16		Kenergy and/or Big Rivers that required payments by Century will be
17		made and received.
18	Q.	Does Century support the Commission's approval of those
19		contracts subject to its jurisdiction?
20	А.	Yes. The contracts are the product of extensive negotiations among
21		the parties. The contract structure achieves the common goal that any
22		net incremental costs incurred by Big Rivers or Kenergy in providing

1		service under the contracts will be borne by Century. I want to
2		emphasize that the contracts impose significant new supply risks on
3		Century that are not borne by any other Kenergy customer. The
4		contract terms are acceptable to Century only as a package and any
5		modification of the terms will make the entire arrangement
6		unacceptable. I note that Big Rivers and Kenergy have not taken a
7		definitive position on whether the Commission must approve the Load
8		Curtailment Agreement. This jurisdictional issue will be addressed in
9		in Century's Brief. Century's view is that Commission approval of the
10		Load Curtailment Agreement is required.
11	Q.	Please comment on the critical importance of timely
12		Commission approval of these contracts?
13		
15	А.	As discussed in some detail in Mr. Young's Direct Testimony,
13	А.	As discussed in some detail in Mr. Young's Direct Testimony, continued operation of the Sebree Smelter depends upon the
	А.	
14	А.	continued operation of the Sebree Smelter depends upon the
14 15	A.	continued operation of the Sebree Smelter depends upon the Commission's approval of the proposed contracts, without modification,
14 15 16	A.	continued operation of the Sebree Smelter depends upon the Commission's approval of the proposed contracts, without modification, sufficiently in advance of the January 31, 2014 termination date of the
14 15 16 17	А.	continued operation of the Sebree Smelter depends upon the Commission's approval of the proposed contracts, without modification, sufficiently in advance of the January 31, 2014 termination date of the current contract. To enable time for review of the Commission's order,
14 15 16 17 18	А.	continued operation of the Sebree Smelter depends upon the Commission's approval of the proposed contracts, without modification, sufficiently in advance of the January 31, 2014 termination date of the current contract. To enable time for review of the Commission's order, final internal approvals, and the actual exchange and execution of the
14 15 16 17 18 19	A.	continued operation of the Sebree Smelter depends upon the Commission's approval of the proposed contracts, without modification, sufficiently in advance of the January 31, 2014 termination date of the current contract. To enable time for review of the Commission's order, final internal approvals, and the actual exchange and execution of the contracts, Commission approval on or before January 24, 2014 would

1	A.	Yes. I want to address issues related to the suspension of Wilson.
2		Based on the MISO study for the closure of Wilson, Sebree may
3		operate at full capacity when the transmission system is intact or even
4		when there is a single contingency event during shoulder months. For
5		this reason, unlike the Coleman/Hawesville situation, Wilson will not
6		be designated as a "must run" or System Support Resource ("SSR"),
7		and no SSR contract will be needed on February 1, 2014 when Wilson
8		closes. However, the occurrence of certain critical transmission line
9		outages could lead to a transformer overload if a second critical line
10		outage were to occur during periods of peak loading. In such events,
11		MISO could require a load reduction. A protective relay, like the
12		Special Protection Scheme ("SPS") that is being put in place to address
13		the Coleman/Hawesville situation, would avoid a "pre-conditional" load
14		reduction in the event of a single critical contingency during peak
15		loading periods. For this reason, Big Rivers and Century have
16		proposed a Protective Relays Agreement in this case. Century intends
17		to pursue and to have an appropriate SPS in place before the peak
18		loading period.
19	Q.	Is "live line" maintenance an issue in this case?

A. Yes. The testimony of Mr. Morrow from Case No. 2013-00221 has
been incorporated into the record of this proceeding. As noted above,
transmission line outages—either forced outages or planned outages—

1		could cause a load reduction at Sebree. "Live line" maintenance would
2		reduce this risk. Century requests that the Commission find here, as
3		it did in Case No. 2013-00221, that "live line" transmission
4		maintenance is consistent with good and reasonable utility practice.
5	Q.	Could an SSR be required in the future?
6	A.	The agreements anticipate that possibility. If an SSR or other
7		Reliability Cost is incurred by Big Rivers due to service to Sebree, then
8		recovery of these costs from Sebree is authorized in the Direct
9		Agreement. However, Sebree can avoid such costs by limiting its load
10		at or below the Base plus Curtailable Load amount.
11	Q.	Has Century installed additional capacitors?
12	А.	No. Based on the MISO study, no additional capacitors are needed for
13		Sebree to operate at full capacity with Wilson closed.
14	Q.	Does this conclude your testimony?
15	A.	Yes.

APPLICATION OF KENERGY CORP. AND BIG RIVERS ELECTRIC CORPORATION FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER KPSC CASE NO. 2013-00413

VERIFICATION OF MICHAEL EARLY

I, Michael Early, verify and affirm that I prepared or supervised the preparation of my Direct Testimony filed with this Verification, and that the testimony is true and accurate to the best of my knowledge, information and belief.

hut all Samp Michael Early

COMMONWEALTH OF KENTUCKY COUNTY OF FAYETTE

SUBSCRIBED AND SWORN TO before me by Michael Early this the $\frac{1\delta^{2}}{\delta}$ day of December, 2013.

Michelle felson IDH 425638

Notary Public, Ky. County of Fayette My Commission Expires <u>//ugust 9, 2014</u>

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served by United States First Class Mail, postage prepaid, on this 20th day of December, 2013 upon:

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-Brow by MRS David C. Brown

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COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

In the Matter of:

Joint Application of Kenergy Corp.) and Big Rivers Electric Corporation) for Approval of Contracts and for) A Declaratory Order)

Case No. 2013-00413

DIRECT TESTIMONY

OF

JASON YOUNG PLANT MANAGER – SEBREE SMELTER

ON BEHALF OF

CENTURY ALUMINUM SEBREE LLC

FILED: December 20, 2013

1 2 3 4		DIRECT TESTIMONY OF JASON YOUNG
5	Q.	Please state your name, business address, and position.
6	А.	My name is Jason Young. I am employed by Century Aluminum
7		Sebree LLC ("Century") as Plant Manager for the Sebree Smelter in
8		Robards, Kentucky ("Sebree Smelter"). My business address is: 9404
9		State Route 2096, Robards, KY 42348. I have held this position since
10		June 2013. Prior to that, I was the Continuous Improvement manager
11		at the Hawesville Smelter. Prior to coming to work for Century, I was
12		employed by Aleris for 18 months and before that for 14 years at Alcoa,
13		with the last two in Lafayette, IN.
14	Q.	What is the purpose of your testimony?
15	A.	The purpose of my testimony is to provide an overview of the Sebree
16		Smelter; discuss the economic impact of the Sebree Smelter on the
17		region and the Commonwealth; explain the importance to the Sebree
18		Smelter of the power procurement and supply transactions at issue in
19		this case (the "Century Transaction"); and explain the critical
20		importance of Commission approval of the Century Transaction,
21		without material changes, on or before January 31, 2014.
22	Q.	Please provide a brief overview of the Sebree Smelter.
23	А.	The Sebree Smelter began producing metal in 1973 and has a current

24 capacity of 205,000 metric tonnes. The facility is 100-percent owned

and operated through Century Aluminum and is located in Henderson 1 2 County. The plant consists of three potlines within the Reduction 3 department: a Casting department that currently freezes all the metal into two product forms: billet and low-profile sow; and the Electrode 4 5 department, which creates carbon anodes for potlines in a new, stateof-the-art bake furnace, a \$37 million project that was commissioned in 6 7 Casting has the ability to change its product mix based on 2012.8 market conditions. While sow is shipped to various customers who 9 remelt it for blending and casting into various shapes, billet is alloyed 10 to customer specifications and then shipped to extruders who apply 11 pressure and heat to re-shape the billet into such items as air 12 conditioning coils and window frames. The plant's billet is also used in 13 the automotive industry. The production areas are supported by a highly skilled Maintenance team. 14

15 Q. What are the economic benefits provided by continued 16 operation of the Sebree Smelter?

A. The Sebree Smelter provides significant economic benefits. Century
has 506 employees at the smelter. The average wages and benefits for
our employees is over \$90,000/year. The Sebree Smelter pays
approximately \$3 million/year in state income, sales, and other taxes,
and in local property taxes. The total economic impact of the Sebree
Smelter's operations is approximately \$200 million/year. The two

aluminum smelters in Kentucky – the Sebree Smelter and Century's
 Hawesville Smelter - together make Kentucky the #1 state in the
 country in terms of aluminum production. Aluminum is important to
 Kentucky manufacturing and, in particular, to the auto industry.

5 Q. How important are electricity costs to the operation of the 6 Sebree Smelter?

A. Electricity costs are the largest production cost at the Sebree Smelter,
representing approximately 35% of the cost to manufacture aluminum.
The Sebree Smelter uses about 269 million kWh per month, or more
power than consumed by 200,000 homes. The Sebree Smelter's
electricity bill is approximately \$15 million a month at the current
power rate.

13 Q. How do the Sebree Smelter's current electricity costs compare 14 to electricity costs for other smelters against which the Sebree 15 Smelter competes?

16 A. At the outset, I must make clear that the Sebree Smelter faces 17 significant and persistent global competition. Our product aluminum — is a commodity that is traded in world-wide markets. 18 19 Therefore, the Sebree Smelter has no ability to raise the price for its 20 product. To be competitive, the Sebree Smelter must manage its production costs. The primary raw material — alumina — is also a 21 22 commodity traded on world-wide markets. Even after reducing all

1 other non-power costs, the Sebree Smelter cannot survive at the 2 current power prices. The Sebree Smelter's current average rate is 3 about \$56/MWh and, even before Century gave its notice of termination, was projected to increase in the 4 near-term to 5 approximately \$60/MWh. A \$60/MWh power rate is substantially higher than the world average power rate to aluminum smelters and 6 7 the rate paid by other aluminum smelters in the United States. After exhausting other efforts at rate relief, the Sebree Smelter had no 8 9 choice but to give notice on January 31, 2013 to terminate its power 10 contract effective February 1, 2014 due to high power costs. Since providing its notice of termination, the Sebree Smelter has continued 11 12 to pursue options in an effort to continue production at the Sebree 13 Smelter beyond January 31, 2014. Fortunately, those additional efforts resulted in the Century Transaction. This electric service 14 15 arrangement will provide the Sebree Smelter an opportunity to purchase power at prices that, at current levels, will be capable of 16 17 sustaining operations at the Sebree Smelter, provided Century is allowed to deliver sufficient power to serve its entire load. Current 18 19 prices for electricity in the competitive market are about 40% lower 20 than the power rates that the Sebree Smelter pays today.

Q. What will happen if the Commission either materially modifies
 the Century Transaction adversely, or rejects the Century
 Transaction?

4 A. I would prefer not to have to be this direct, but operating under the 5 Century Transaction as it has been submitted to the Commission or 6 closing the Sebree Smelter are the only two options remaining for 7 Century. To be absolutely clear, I want to emphasize that there will be 8 no second chance for the Sebree Smelter. If the Century Transaction is 9 not approved as it was filed, the Sebree Smelter will cease operations 10 on January 31, 2014 and, once operations cease, the Sebree Smelter will, very likely, never reopen. Century's employees will lose their jobs 11 12 causing an immediate impact on their families, the communities in 13 which they live, and the economy in western Kentucky. The United Steelworkers ("USW"), which represents more than 387 employees at 14 15 the Sebree Smelter understands the critical need for timely Commission approval of the Century Transaction. 16

17 Q. Can you explain why the January 31, 2014 deadline for
18 Commission approval is so critical?

A. While aluminum smelters can sustain limited-duration curtailments,
any shut-down lasting more than 3 hours would cause the molten
aluminum to harden in the smelter's potlines. Once the aluminum
hardens or "freezes," a substantial capital investment must occur to

return the potlines to full operation. Century estimates that, if the Sebree Smelter ceases operations, an investment of approximately \$40 to \$60 Million would be required to restart the plant. In a globally competitive industry where margins are extremely thin, a capital investment of this magnitude is not recoverable. Therefore, the practical economic reality is that, if operations cease at the Sebree Smelter, the Smelter will, very likely, never reopen.

- 8 Q. Does this conclude your testimony?
- 9 A. Yes.

APPLICATION OF KENERGY CORP. AND BIG RIVERS ELECTRIC CORPORATION FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER KPSC CASE NO. 2013-00413

VERIFICATION OF JASON YOUNG

I, Jason Young, verify and affirm that I prepared or supervised the preparation of my Direct Testimony filed with this Verification, and that the testimony is true and accurate to the best of my knowledge, information and belief.

tason Jason Young

COMMONWEALTH OF KENTUCKY COUNTY OF HENDERSON

SUBSCRIBED AND SWORN TO before me by Jason Young this the $1/7^{+h}$ day of December, 2013.

Notary Public, Ky. County of Henderson My Commission Expires <u>4/38/2015</u>

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served by United States First Class Mail, postage prepaid, on this 20th day of December, 2013 upon:

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