



June 16, 2017

To Whom It May Concern:

RE: SPOT AND TERM FUEL SUPPLY BID INVITATION – BREC 18-01.

Deadline for Bids: Tuesday, June 27, 2017, 1PM Central Time

Big Rivers Electric Corporation (BREC) is soliciting proposals for steam coal and petroleum coke for BREC's Wilson, Green, and Station Two (Henderson) generating stations. Enclosed herein you will find the "Bid Package", which consists of: this cover letter of instructions, Exhibit A - Fuel Supply Bid, and Exhibit B - Fuel Quality Specification.

BREC is seeking to procure spot solid steam fuel, quality noted herein (including alternative fuels), commencing on or about July 1, 2017 through December 31, 2017; and will also consider term offers for years 2018 through 2022, or some portion thereof. However, should you desire to present an alternate plan, you are encouraged to do so. BREC will consider varying qualities of coal and alternative fuels, pricing structures, or other innovative concepts that would present a value-added benefit to both parties.

BREC is seeking up to approximately 35,000 tons per month of solid fuel for 2017 as spot delivery, and up to 500,000 tons of coal per year, for years 2018 through 2022. **BREC reserves the right to accept all, a portion, or none of the tonnage offered.** The term "ton" as used herein shall mean a net short ton of 2,000 pounds avoirdupois weight.

Bidder may offer any fuel (including petroleum coke, fuel blends or other alternative fuels) Bidder would like to offer for sale.

Bidder is invited to submit more than one quotation for each different fuel specification offered. However, **all** requested information must be provided for **each** individual set of fuel specifications proposed, including a FUEL SUPPLY BID (Exhibit A) and an ULTIMATE FUEL ANALYSIS. Bidder must provide a **recent** ULTIMATE FUEL ANALYSIS, to include full ash mineral, trace elements and equilibrium moisture analysis for your bid to be considered.

Prices quoted shall be inclusive of any and all costs, including but not limited to taxes, fees, insurance requirements, on-site haulage, on-site blending, barge fleeting, and switching charges,

loading charges/costs or like fees and expenses, which for purposes of this bid, shall be the responsibility of the Bidder. Fuel should be priced F.O.B. barge, truck or generating station(s).

Attached are fuel quality specification sheets (Exhibit B) to provide a guideline for bidding purposes. Bidder may provide fuel outside of these specifications as part of this bid. Fuel quality offered should be based upon this method (which is the same as the payment basis): as-received samples of fuel per shipment (a day's delivery of trucks or per barge loaded) calculated on a monthly weighted-average. This will represent the quality for the Bidder's monthly weighted-average and basis for establishing rejection limits in any fuel supply agreement that may result.

All quotations may be subject to a pre-award audit (which may include an examination of Bidder's operating and/or held reserves, financial stability, and quality control operations reasonably necessary) to ensure that the Bidder has the fuel of the quantity and quality as offered in the bid and is a creditworthy counter party to the transaction.

BREC reserves the right to have their representatives visit the mining operation(s), sampling systems, and loading facilities of the Bidder; to take fuel samples for analysis; to obtain other information as to the suitability of the fuel; and to otherwise evaluate the Bidder's capability to perform pursuant to its bid. Acceptance of bid(s) may be made conditional upon the results of such investigations and/or analysis.

Bidders must be willing to warrant that there are unencumbered reserves or supply equivalent to the total required to supply the tonnage and quality for the proposed term. Bidder must furnish recent fuel quality analysis of the fuel being offered. This data must be supplied as an attachment to Exhibit A. Such analyses should show the ranges of fuel quality and denote the laboratory performing the testing. The mineral ash and trace element analyses should be expressed as their respective portion of the ash sample. Guaranteed Fuel Quality should be supplied on sheets 4 and 5 of 7 of Exhibit A. *Bidder's offer(s) will be evaluated upon the proposed Guaranteed Monthly-Weighted Average for quality offered in bid, as well as the offered Rejection Limit, for that quality proposal/bid.*

ENCLOSED IS A COPY OF THE BID FORM (**EXHIBIT A**) WHICH MUST BE USED IN SUBMITTING YOUR BID. FAILURE TO USE THIS BID FORM MAY RESULT IN THE REJECTION OF YOUR BID. THE BID MUST BE FULLY COMPLETED **IN INK OR IN TYPEWRITTEN FORM** AND SUBMITTED AS DESCRIBED BELOW. A COPY SHOULD BE RETAINED FOR YOUR RECORDS.

AN ORIGINAL AND ONE COPY OF EACH BID PROPOSAL MUST BE SUBMITTED IN A SEALED ENVELOPE AND THE ENVELOPE MUST BE MARKED: **BREC FUEL BID OFFER – BREC 18-01**. BIDS SHOULD BE EITHER MAILED BY CERTIFIED MAIL, OVERNIGHT CARRIER, OR DELIVERED BY THE BIDDER TO:

Mr. Mark W. McAdams
Director – Fuel Procurement
Big Rivers Electric Corporation
201 Third Street
Henderson, Kentucky 42420

Bids must be received on or before **1:00 PM CENTRAL TIME, on TUESDAY, JUNE 27, 2017**, at the above address, shall remain in effect until **FRIDAY, JULY 21, 2017**, and may not be withdrawn within this period unless a written request from the Bidder is approved by BREC. **It is incumbent upon bidder to provide bid documents by the due date and time or the bid(s) cannot be considered.**

A "Short List" of Bidders (a list of the most competitive finalists) will be developed taking into account factors such as, but not being limited to, (in BREC'S sole discretion):

1. Suitability of the fuel.
2. Bidder's ability to meet quality specifications based on fuel reserve characteristics and quality control procedures.
3. Total evaluated cost to BREC of burning the fuel (including an assessment of transportation costs and fuel quality impact on operating costs).
4. Demonstrated reliability of supplier.
5. Reserves.
6. Financial capabilities / creditworthiness.
7. Results of test shipment(s) of fuel, if required.
8. Geological evaluation and testing.
9. References or past performance.

While not anticipated, BREC also reserves the right to request that the Bidder furnish a performance bond of an amount sufficient to provide adequate protection in the event that due diligence indicates the Bidder may be unable to satisfactorily perform the duties and obligations imposed on Bidder, under any contract which is entered into as a result of this bid.

Each Bidder must sign the Fuel Supply Bid with its usual signature and shall give its full business address. Bids shall be signed in the official name of the Bidder, followed by the signature and the designation of the president, secretary, or other person(s) signing who is authorized to legally bind the Bidder for bid purposes (price, term, quantity, etc.). The name of each person signing shall also be typed or printed below the signature.

BREC will use reasonable efforts to protect the confidential nature of all proposals and other information received pursuant to this BREC Invitation, but reserves the right to disclose such information and/or proposals to consultants that it may retain or other parties (including but not limited to creditors, consultants, legal counsel, or regulatory bodies) many of which BREC has or will enter into confidentiality agreements to assist in the evaluation and contract effort. If necessary, BREC will comply with all requests for information by a court or government agency.

Bidder will be responsible for the completeness and accuracy of all information contained or used in preparation of its proposal and will also be responsible for supplying all necessary supporting information.

BREC reserves the right to modify or withdraw this Bid Invitation, to request additional information, to waive technicalities or irregularities, to reject any or all proposals, and to terminate any subsequent discussions at any time. BREC also reserves the right to negotiate with Bidder the terms and conditions of this quotation; however, BREC encourages Bidders to *provide their most competitive offer on the bid form.* BREC further reserves the right to accept one or more proposal(s) for a portion or for all of the quantities of fuel proposed by any Bidder.

Nothing herein shall obligate BREC to compensate or reimburse Bidder for any fine, costs, or other purposed expense associated with the preparation of this proposal, or the submission of any information or data in connection therewith. Further, BREC shall not be obligated under any contract or possible order that will result from any proposal unless and until such has been approved and executed by duly authorized officials of both companies.

The Bidders placed on the "Short List" will be notified of their selection to the list as soon as possible. The proposal from those "Short List" Bidders shall remain in effect thereafter and until such time as Bidder has been eliminated from the bidding or has executed an agreement with BREC. Bidder may indicate its exception to this requirement by stating such under "Exception to Expiration Date" in Section 6 of Exhibit A.

If you have any questions regarding this solicitation, please contact Mark McAdams (270) 844-6169 or Jeffrey Vandiver (270) 844-6170.

EXHIBIT A
FUEL SUPPLY BID

Submitted By: _____ Date _____

***** ENTER BIDDER'S COMPANY NAME AND DATE *****
AT TOP OF EACH OF THE SHEETS 1 THROUGH 8

MULTIPLE QUOTATIONS MAY BE OFFERED, BUT THIS FORM MUST BE USED FOR EACH. AN ORIGINAL OF EACH QUOTATION MUST BE SUBMITTED IN A SEALED ENVELOPE. THE ENVELOPE MUST BE ADDRESSED TO BIG RIVERS ELECTRIC CORPORATION (BREC) WITH THE ENVELOPE MARKED: **BREC FUEL BID OFFER - BREC 18-01**. BIDS MUST BE RECEIVED BY BREC, ADDRESS BELOW, NOT LATER THAN **1:00 PM CENTRAL TIME, TUESDAY, JUNE 27, 2017.**

TO: Mr. Mark W. McAdams
Director – Fuel Procurement
Big Rivers Electric Corporation
201 Third Street
Henderson, Kentucky 42420

In response to your invitation for bids (BREC FUEL BID OFFER - BREC 17-01), dated **June 16, 2017**, we the undersigned propose to supply fuel of quality, in quantities, at prices, and under the terms and conditions stated in this Fuel Supply Bid, Exhibits, and in the Invitation letter.

Bidder represents that it is [] the “Producer” of the fuel offered hereby.

[] a “Fuel sales agent” acting on behalf of the producer(s) named hereinafter.

If Bidder is a Fuel sales agent, Bidder warrants that it has written authority from the fuel producer(s) involved in the submittal of this bid. The Fuel sales agent agrees to be fully liable for performance of any order awarded on this bid; and that said agent further agrees to defend, indemnify and hold harmless BREC from the Producer(s) from any claims, demands or actions made against BREC by the Producer or any other party on the grounds that agent acted contrary to agents authority on the Bid. A Producer's Statement for each Producer named, executed by both the Producer and sales agent, is made a part of this bid to Section 7 of this Exhibit A.

Bidder warrants that the prices in this bid have been arrived at independently without consultation or collusion with any other Bidder, potential Bidder, or any officer, agent or employee of BREC.

This bid will remain in effect until midnight FRIDAY, JULY 21, 2017, and may not be withdrawn within this period unless a written request from the Bidder is approved by BREC.

Submitted By: _____ Date _____

1. The PRODUCER of the fuel proposed under this bid will be:

_____ Company Name and Contact Person

_____ Business Address

_____ City, State, Zip

(_____) (Phone Number)

_____ E-mail address

Type of Organization: Corporation _____ Partnership _____

Proprietorship _____ Other (Specify below) _____

_____ Principle Office Address

Years in fuel business _____

Producer's Union Affiliation _____

Producers' Business Volume for Fuel Sales
during the most current 5 calendar years (please break-out by year):

2012: _____ tons Sales 2012: \$ _____

2013: _____ tons Sales 2013: \$ _____

2014: _____ tons Sales 2014: \$ _____

2015: _____ tons Sales 2015: \$ _____

2016: _____ tons Sales 2016: \$ _____

Submitted By: _____ Date _____

SALES AGENT: _____ Company Name and Contact Person
_____ Business Address
_____ City, State, Zip
(_____) _____ Phone Number
_____ Email

2. Source (For Each Mine)

Mine Name(s): _____

Mine Location(s) (County and State): _____

Mine Permit No(s): _____ Mine MSHA ID No(s): _____

Type of Mining: _____ Seam(s): _____

Preparation: _____ % Raw, _____ % Washed, or Blend of raw _____ % and _____ % washed

3. Price

A. Bidder's Quantity and Price

F.O.B. PRICE

Tonnage Offered	<u>BARGE</u>		<u>TRUCK</u>		<u>STATION(S)</u>	
	<u>\$/MMBTU</u>	<u>Dollars/Ton</u>	<u>\$/MMBTU</u>	<u>Dollars/Ton</u>	<u>\$/MMBTU</u>	<u>Dollars/Ton</u>
Q3/17 _____	_____	_____	_____	_____	_____	_____
Q4/17 _____	_____	_____	_____	_____	_____	_____

Submitted By: _____ Date _____

F.O.B. PRICE

Tonnage Offered	<u>BARGE</u>		<u>TRUCK</u>		<u>STATION(S)</u>	
	<u>\$/MMBTU</u>	<u>Dollars/Ton</u>	<u>\$/MMBTU</u>	<u>Dollars/Ton</u>	<u>\$/MMBTU</u>	<u>Dollars/Ton</u>
2018 _____	_____	_____	_____	_____	_____	_____
2019 _____	_____	_____	_____	_____	_____	_____
2020 _____	_____	_____	_____	_____	_____	_____
2021 _____	_____	_____	_____	_____	_____	_____
2022 _____	_____	_____	_____	_____	_____	_____

B. Loading Points - Bidder hereby offers the fuel to be loaded as listed below:

() The fuel quoted herein as F.O.B. barge shall be loaded at _____ Dock, at mile point _____ on the _____ River, near (City and State)_____.

() The fuel quoted herein as F.O.B. station(s) shall be loaded at (loading point name) _____ near (City and State)_____ and carried by the _____ trucking company to _____ Station(s).

() The fuel quoted herein as F.O.B. truck shall be loaded at (loading point or mine name) near (City and State)_____.

4. **Fuel Quality Specifications**

Bidder represents and warrants that the quality of fuel shipped hereunder will conform to the following specifications on an as-received basis:

Guaranteed Analysis, Monthly Weighted Average

<u>DESCRIPTION</u>	<u>GUARANTEED MONTHLY WEIGHTED AVERAGE</u>	<u>REJECTION LIMITS (PER SHIPMENT)</u>
BTU/lb	Min. _____	< _____
Moisture	Max. _____ %	> _____
Ash	Max. _____ %	> _____
Sulfur	Max. _____ %	> _____
Sulfur	Min. _____ %	< _____
Chlorine	Max. _____ %	> _____
Fluorine	Max. _____ %	> _____
Iron Oxide (Fe ₂ O ₃)	Max. _____ %	> _____
Calcium Oxide (CaO)	Max. _____ %	> _____
Sodium Oxide (Na ₂ O)	Max. _____ %	> _____
Nitrogen	Max. _____ %	> _____
Arsenic	Max _____ ug/g	> _____
Vanadium	Max _____ ug/g	> _____
Mercury	Max _____ ug/g	> _____
ASH/SULFUR RATIO	Min. _____	< _____
Size (3" x 0"):		
Top size (inches)	Max. _____	> _____
Fines (% by wgt)		
Passing 1/4 inch		
Screen	Max. _____	> _____
% BY WEIGHT:		
VOLATILE	Min. _____	< _____
FIXED CARBON	Min. _____	< _____
GRINDABILITY (HGI)	Min. _____	< _____
BASE ACID RATIO (B/A)	_____	> _____
SLAGGING FACTOR*	Max. _____	> _____
FOULING FACTOR**	Max. _____	> _____

Submitted By: _____ Date _____

ASH FUSION TEMPERATURE (FAHRENHEIT) (ASTM D1857)

<u>DESCRIPTION</u>	<u>GUARANTEED MONTHLY WEIGHTED AVERAGE</u>	<u>REJECTION LIMITS (PER SHIPMENT)</u>
<u>REDUCING ATMOSPHERE</u>		
Initial Deformation	Min. _____	Min. _____
Softening (H=W)	Min. _____	Min. _____
Softening (H=1/2W)	Min. _____	Min. _____
Fluid	Min. _____	Min. _____
<u>OXIDIZING ATMOSPHERE</u>		
Initial Deformation	Min. _____	Min. _____
Softening (H=W)	Min. _____	Min. _____
Softening (H=1/2W)	Min. _____	Min. _____
Fluid	Min. _____	Min. _____

*Slagging Factor (Rs) = (B/A) x (Percent Sulfur by Weight (Dry))

**Fouling Factor (Rf) = (B/A) x (Percent Na₂O by Weight (Dry))

The Base Acid Ratio (B/A) is herein defined as:

$$\text{BASE ACID RATIO (B/A)} = \frac{\text{Fe}_2\text{O}_3 + \text{CaO} + \text{MgO} + \text{Na}_2\text{O} + \text{K}_2\text{O}}{(\text{SiO}_2 + \text{Al}_2\text{O}_3 + \text{TiO}_2)}$$

TYPICAL SIZING:

- > 1.5" _____ %
- .75" < 1.5" _____ %
- .25" < .75" _____ %
- < .25" _____ %

The fines content of the fuel shall be that resulting from the normal mining and preparation sizing of the fuel, and no fine screenings or slurry shall be added unless noted as a "fines" fuel bid offering.

Note: 1. As used herein > means greater than;
< means less than.

Note: 2. Definition of "Shipment". As used herein, a "shipment" shall mean one barge load, or one day's truck deliveries in accordance with buyer's sampling and analyzing practices at the receiving generating station.

Submitted By: _____ Date _____

5. **Payment Calculations**

The unit prices offered by Bidder in Section 3 should be the base price(s) in \$/MMBTU and will be used with the monthly weighted-average quality and tonnage results for the payment calculation. Adjustments may be made to reflect variances from the Bidder specified guaranteed monthly weighted-averages as shown in Section 4. **Fuel Quality Specifications** during “short list” discussions, if any.

6. **Expiration Date of Offer**

Unless denoted differently below, this bid will remain in effect until **MIDNIGHT CENTRAL TIME on FRIDAY, JULY 21, 2017**, and may not be withdrawn within this period except by written consent from BREC. The bid for those Bidders who are chosen on the “short list” shall remain in effect thereafter and until such time as Bidder has been eliminated from the bid evaluation or has entered into a fuel supply agreement with BREC.

Exception to Expiration Date of bid: _____

7. **PRODUCER'S STATEMENT**

The undersigned Producer (the “Producer”) states that it has authorized _____ (the “Bidder”) to offer fuel produced by Producer in the quantity and quality set forth in the bid to which this statement is attached (the “Bid”).

The Producer acknowledges that, if a contract is awarded to the Bidder pursuant to the Bid or pursuant to a modification of the Bid, then BREC in its discretion will require either (a) that the Producer execute the Fuel Supply Agreement as a seller jointly and severally obligated with the Bidder or (b) that the Producer execute a Producer’s Certificate under which, among other things, the Producer will agree, represent, and warrant that it owns, or has the right to produce fuel from reserves which contain economically recoverable fuel in the quantity and quality required by the Fuel Supply Agreement and that it will not use or sell Fuel from such reserves in a way that will reduce the economically recoverable balance of Fuel to an amount less than that required by the Fuel Supply Agreement.

Submitted By: _____ Date _____

BIDDER

PRODUCER

(NAME OF COMPANY)

(NAME OF COMPANY)

BY: _____

BY: _____

TITLE: _____

TITLE: _____

DATE: _____

DATE: _____

8. BID SIGNATURE

Submitted by: _____
Company Name (herein referred to as "Bidder")

Address: _____ Telephone No. (____) _____

By: _____*
Signature

By: _____
(Individual's Name)

Title: _____

E-Mail address _____

* BIDS MUST BE SIGNED BY AN OFFICIAL OF THE ORGANIZATION SUBMITTING THE BID WHO HAS THE AUTHORITY FOR ESTABLISHING PRICES AND SUBMITTING BIDS FOR THAT ORGANIZATION.

EXHIBIT "B"

FUEL QUALITY SPECIFICATIONS

MONTHLY WEIGHTED AVERAGE BASIS

The information below shows the minimum fuel quality that is desired on a monthly average basis. Fuel quality offers exceeding the minimum quality are desired and will be given consideration per below *.

	<u>Spec "A"</u>	<u>Spec "B"</u>	<u>Spec "C"</u>	<u>Spec "D"</u>	<u>Spec "E"</u>	<u>Pet Coke</u>
BTU/lb (Minimum)	11,800	11,500	11,250	11,000	10,500	13,500
Volatile Matter (Min)	34%	34%	34%	34%	34%	7%
Ash (Max) %.	9.00	10.00	10.50	11.00	14.00	1.00
Moisture (Max) %.	10.00	11.00	11.50	12.00	12.50	12.00
SO2 LB/MMBTU (Max).	5.00	5.25	5.75	6.00	6.25	8.50
SO2 LB/MMBTU (Min)	2.50	2.50	2.50	2.50	2.50	2.50
Sizing (Max)	3" x 0	3" x 0	3" x 0	3" x 0"	3" x 0"	3" x 0
Fines (Max)	55% < 1/4"	55% < 1/4"	55% < 1/4"	55% < 1/4"	55% < 1/4"	55% < 1/4"

Ash Fusion Temperature (Degrees Fahrenheit) Reducing Atmosphere

Initial Deformation	1900 Min
Softening (H=W)	1950 Min
Softening (H= 1/2W)	2000 Min
Fluid	2050 Min

Typical Slagging / Fouling Indices of Ash

Slagging	< 1.25
Fouling	< 0.25

$$\text{Base / Acid ratio} = \frac{(\text{CaO}) + \text{MgO} + \text{Fe}_2\text{O}_3 + \text{Na}_2\text{O} + \text{K}_2\text{O}}{(\text{SiO}_2 + \text{Al}_2\text{O}_3 + \text{TiO}_2)}$$

$$\text{Slagging Index} = (\text{Base / Acid}) * (\text{Percent Sulfur, Dry})$$

$$\text{Fouling Index} = (\text{Base / Acid}) * (\text{Na}_2\text{O in Ash})$$

$$\text{Calculation of Lb. SO}_2 / \text{MMBTU} = \frac{\text{Percent Sulfur} * 20,000}{\text{BTU / Lb.}}$$

*BREC evaluates fuel in regard to its entire fuel portfolio of supply and in light of present and future generation demands. BREC may in its sole discretion, from time-to-time and according to its needs and the fuel offered, evaluate and/or purchase fuels which fall within or outside the above specifications. **However, in no event shall BREC be obligated to evaluate or purchase any fuel whatsoever, whether it falls outside or is within parameters specified above.**