SULLIVAN, MOUNTJOY, STAINBACK & MILLER PSC

ATTORNEYS AT LAW

Ronald M. Sullivan
Jesse T Mountjoy
Frank Stainback
James M. Miller
Michael A. Fiorella
William R Dexter
Allen W. Holbrook
R. Michael Sullivan
P. Marcum Willis
Bryan R Reynolds
Mark G. Luckett
Tyson A Kamuf
Mark W. Starnes

November 12, 2004

Via Federal Express

Ms. Elizabeth O'Donnell
Executive Director
Public Service Commission
211 Sower Boulevard, P.O. Box 615
Frankfort, Kentucky 40602-0615

RECEIVED
NOV 15 2004
PUBLIC SERVICE COMMISSION

Re: In the matter of: The Application of Big Rivers Electric Corporation for a Certificate of Public Convenience and Necessity to Construct a 161 kV Transmission Line in Breckinridge and Meade Counties, Kentucky, PSC Case No. 2004-365

Dear Ms. O'Donnell:

Enclosed for filing are an original and ten copies of the Response of Big Rivers Electric Corporation to November 1, 2004, Deficiency Letter from the Public Service Commission. Please call if you have any questions.

Sincerely,

Tyson Kamuf

TAK/ej
Enclosures

cc w/o exhibits: David Spainhoward
Burns Mercer

Telephone (270) 926-4000
Telecopier (270) 683-6694

100 St. Ann Building
PO Box 727
Owensboro, Kentucky
42302-0727

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of:	)	
	)	
The Application of Big Rivers Electric Corporation	)	Case No. 2004-00365
for a Certificate of Public Convenience and	)	
Necessity to Construct a 161 kV Transmission Line	)	
in Breckinridge and Meade Counties, Kentucky	)	

RESPONSE OF BIG RIVERS ELECTRIC CORPORATION TO NOVEMBER 1, 2004, DEFICIENCY LETTER FROM THE PUBLIC SERVICE COMMISSION

Big Rivers Electric Corporation ("Big Rivers") submits this response to the letter from the Public Service Commission ("Commission") dated November 1, 2004, rejecting Big Rivers' Application in this matter as deficient. Specifically, the Commission stated that insufficient information was provided on historical outages and on past, present, and future reliability, and that no references to industry standard guidelines were provided. In response, and as a supplement to its previous filings in this matter, Big Rivers states as follows:

1. Big Rivers proposes to construct a 161 kilovolt ("kV") transmission line that is approximately 17.3 miles in length and that is located in Breckinridge and Meade Counties, Kentucky. This line is required by public convenience and necessity as a back-up power supply source for Big Rivers Meade County substation. The Meade County substation serves seven Meade County Rural Electric Cooperative Corporation ("Meade County RECC")[1] distribution substations, which in turn serve approximately 9,800 retail customers. The proposed transmission line will provide a significant benefit to these retail customers by offering increased reliability.

[1] Meade County RECC is one of Big Rivers' three distribution cooperative members.

2. The existing source serving the Meade County substation is a 161 kV circuit from New Hardinsburg to Meade County. Historically, this line has been a reliable transmission line. In 2002, a short outage (less than one hour) was needed to repair tornado damage. In 2004, a storm with high winds resulted in two broken poles and a 16-hour outage. Planned maintenance has been scheduled at night to avoid low voltages or line overloads. However, even though the existing transmission line has been reliable, the line is a 17.9-mile wood pole circuit that is over 20 years old. As such, increased outages are expected, and Big Rivers must plan appropriately.

3. Although the existing line has been reliable in the past, reliability studies demonstrate the need for the proposed transmission line. As noted in the Application, the need for a system improvement was first identified in the 2000-2002 Transmission System Construction Work Plan ("2000-2002 CWP"), a copy of which is attached hereto as Exhibit A and incorporated herein by reference. The need for a system improvement was again documented in the 2003-2005 Transmission System Construction Work Plan ("2003-2005 CWP"), a copy of which is attached hereto as Exhibit B and incorporated herein by reference. The 2003-2005 CWP has been approved by the Rural Utilities Service ("RUS"). After the CWP's revealed reliability concerns, a number of alternative solutions were considered as part of the overall study procedure. The proposed transmission line was shown to be the most feasible and economical of these alternatives that would provide the requisite increase in reliability. The study procedure, as documented in the 2003-2005 CWP, is discussed below.

Power Flow Model Development

The model for the power flow studies found in the CWP's was created from an ECAR[2] power flow base case. This ECAR case was modified in order to develop a base case that

[2] The East Central Area Reliability Coordination Agreement ("ECAR") is one of the ten Regional Reliability Councils of the North American Electric Reliability Council ("NERC"). ECAR was established in 1967 to address

represents a 2005 summer peak scenario. The modifications included merging a detailed Big Rivers system representation into the case and changing the load at each member substation.

Load Allocation

The total load for the 2005 summer peak was taken from the 2001 load forecast for Big Rivers and its three member cooperatives. The load allocation for each substation was found by a regression analysis using historical substation load data. Actual load data for each substation from 1993 to 2001 was regressed on time. From the regression results, a forecasted load for each substation was determined. This regression and forecasting was done using summer peak data. These forecasted loads were then ratioed to values that sum to the proper total system load given in the 2001 load forecast. Coincident peak power factors from July 2001 were used for these studies.

Study Approach

The study approach was a comprehensive analysis of the entire transmission system. To begin this study, a 2005 summer peak base case was run followed by a contingency study. In the contingency study, each transmission line, generator, and generation/transmission line combination was individually outaged. The voltages, line loadings, and transformer loadings found in these studies were evaluated on a case-by-case basis for compliance with Big Rivers' transmission planning criteria.

Next, a reliability analysis was completed. This analysis included a review of all radial 69 kV circuits against Big Rivers' MW-mile rule reliability criteria in order to determine whether loop feeds needed to be developed to ensure the desired service reliability for the consumers served from these radial feeds.

---

matters related to the reliability of its members' systems through coordinated planning and operation of its members' generation and transmission facilities.

After the reliability analysis, a review of system work plans from each of Big Rivers' three distribution cooperative members was completed. The intent of this review was to determine the transmission system improvements that will be necessary to support the system additions planned by the distribution cooperatives.

Finally, a short-circuit study was performed for the Big Rivers 2002 electric system. Equivalent system impedances were modeled for each of Big Rivers' interconnections. These equivalent impedances were obtained from each neighboring utility with their system at maximum generation. These impedances were added to Big Rivers' system model and short-circuit studies were performed. Big Rivers' generation facilities, including both HMP&L Station 2 units, were simulated at maximum generation at 1.0 per unit voltage. Three-phase short-circuit studies were performed by placing a three-phase fault at each bus and calculating the results. Single-phase short-circuit studies were performed by placing a phase-to-ground fault on each bus and calculating the results. A comparison of the maximum three-phase and single-phase-to-ground fault levels with the existing power circuit breaker ratings at each system substation was made to determine if the replacement of any circuit breakers would be required during the study period.

Big Rivers applied several criteria throughout the study process in order to identify any reliability issues apparent in Big Rivers' existing system. Each is discussed below. This is intended to be a brief overview of the criteria, which when applied, reveal the need for the proposed transmission line. More detailed data and results can be found in the attached studies.

A. Contingency Criteria. Big Rivers follows two RUS recommended criteria for analyzing the adequacy of its transmission system. The first criterion defines single contingency outages to be used in all system planning studies. This criterion serves as the basis for planning and justifying system improvements. The second criterion outlines double contingency outages that can be analyzed to determine the extent of problems encountered on the system under extreme outage or emergency situations. In most double contingency cases, system improvements would not be considered justifiable. However, the type and severity of the system problems encountered is useful information in planning those system improvements that are justifiable. These two RUS recommended criteria are outlined in the following table.

Single Contingency (emergency ratings with Cont.- normal ratings with no outages)	**Double Contingency**
1. Outage of two generating units (any combination).	1. Outage of two transmission lines on the same right-of-way.
2. Outage of one generating unit and one transmission line.	2. Outage of transmission lines due to outage of one bus.
3. Outage of one generating unit and one transformer.	3. Outage of three generating units.
4. Outage of one transmission line.	

In addition to the above-described criteria, Big Rivers also analyzes its transmission system to ensure compliance with NERC Planning Standard IA.[3]

B. Voltage Criteria. As indicated in the following table, Big Rivers has adopted voltage criteria for its 161 kV and 69 kV transmission systems. These criteria define acceptable minimum and maximum voltage levels for the high-side buses at all delivery points. The criteria include a range of acceptable voltages for normal system conditions (all facilities in service) and during single contingency conditions.

[3] NERC is a voluntary organization whose mission is to ensure that the bulk electric system in North America is reliable, adequate and secure. To fulfill its mission, NERC develops reliability and planning standards, and monitors, assesses, and enforces compliance with those standards.

Transmission System Conditions	**69 kV Bus Voltage**		**161kV Bus Voltage**	
	Minimum	**Maximum**	**Minimum**	**Maximum**
Range A: Normal System Operations	95.0%	105.0%	95.0%	105.0%
Range B: Single Contingency Conditions	91.7%	105.8%	92.0%	105.0%

Big Rivers' criteria and planning practices are also intended to be consistent with NERC and ECAR planning standards. The basic requirements for planning under normal and contingency conditions are summarized in the following NERC Table I, which is included in NERC Planning Standard IA.

Table I.[4] Transmission Systems Standards — Normal and Contingency Conditions

Category	Contingencies		System Limits or Impacts				
	Initiating Event(s) and Contingency Element(s)	Elements Out of Service	Thermal Limits	Voltage Limits	System Stable	Loss of Demand or Curtailed Firm Transfers	Cascading[c] Outages
A - No Contingencies	All Facilities in Service	None	Applicable Rating[a] (A/R)	Applicable Rating[a] (A/R)	Yes	No	No
B - Event resulting in the loss of a single element	Single Line Ground (SLG) or 3-Phase (3Ø) Fault, with Normal Clearing: 1. Generator 2. Transmission Circuit 3. Transformer Loss of an Element without a Fault.	 Single Single Single Single	 A/R A/R A/R A/R	 A/R A/R A/R A/R	 Yes Yes Yes Yes	 No[b] No[b] No[b] No[b]	 No No No No
	Single Pole Block, Normal Clearing[f]: 4. Single Pole (dc) Line	Single	A/R	A/R	Yes	No[b]	No
C - Event(s) resulting in the loss of two or more (multiple) elements.	SLG Fault, with Normal Clearing[f]: 1. Bus Section 2. Breaker (failure or internal fault)	 Multiple Multiple	 A/R A/R	 A/R A/R	 Yes Yes	 Planned/Controlled[d] Planned/Controlled[d]	 No No
	SLG or 3Ø Fault, with Normal Clearing[f], Manual System Adjustments, followed by another SLG or 3Ø Fault, with Normal Clearing[f]: 3. Category B (B1, B2, B3, or B4) contingency, manual system adjustments, followed by another Category B (B1, B2, B3, or B4) contingency	Multiple	A/R	A/R	Yes	Planned/Controlled[d]	No
	Bipolar Block, with Normal Clearing[f]: 4. Bipolar (dc) Line Fault (non 3Ø), with Normal Clearing[f]: 5. Any two circuits of a multiple circuit towerline[g]	Multiple Multiple	A/R A/R	A/R A/R	Yes Yes	Planned/Controlled[d] Planned/Controlled[d]	No No
	SLG Fault, with Delayed Clearing[f] (stuck breaker or protection system failure): 6. Generator 7. Transmission Circuit 8. Transformer 9. Bus Section	 Multiple Multiple	 A/R A/R	 A/R A/R	 Yes Yes	 Planned/Controlled[d] Planned/Controlled[d]	 No No
D[e] - Extreme event resulting in two or more (multiple) elements removed or cascading out of service	3Ø Fault, with Delayed Clearing[f] (stuck breaker or protection system failure): 1. Generator 2. Transmission Circuit 3. Transformer 4. Bus Section 3Ø Fault, with Normal Clearing[f]: 5. Breaker (failure or internal fault)	Evaluate for risks and consequences. ▪ May involve substantial loss of customer demand and generation in a widespread area or areas. ▪ Portions or all of the interconnected systems may or may not achieve a new, stable operating point. ▪ Evaluation of these events may require joint studies with neighboring systems.					

[4] December 15, 2000 Version. Approved by Planning Committee February 27, 2001. Approved by NERC Board of Trustees June 12, 2001. Categories A and B were approved by Planning Committee February 27, 2001, and NERC Board of Trustees June 12, 2001. Category C was approved by Planning Committee November 15, 2001, the Market Interface Committee January 10, 2002, and NERC Board of Trustees February 20, 2002. Category D was approved by Planning Committee September 27, 2001, and NERC Board of Trustees October 16. 2001.

	Other: 6. Loss of towerline with three or more circuits 7. All transmission lines on a common right-of way 8. Loss of a substation (one voltage level plus transformers) 9. Loss of a switching station (one voltage level plus transformers) 10. Loss of all generating units at a station 11. Loss of a large load or major load center 12. Failure of a fully redundant special protection system (or remedial action scheme) to operate when required 13. Operation, partial operation, or misoperation of a fully redundant special protection system (or remedial action scheme) for an event or condition for which it was not intended to operate 14. Impact of severe power swings or oscillations from disturbances in another Regional Council.	

Notes:

a) Applicable rating (A/R) refers to the applicable normal and emergency facility thermal rating or system voltage limit as determined and consistently applied by the system or facility owner. Applicable ratings may include emergency ratings applicable for short durations as required to permit operating steps necessary to maintain system control. All ratings must be established consistent with applicable NERC Planning Standards addressing facility ratings.

b) Planned or controlled interruption of electric supply to radial customers or some local network customers, connected to or supplied by the faulted element or by the affected area, may occur in certain areas without impacting the overall security of the interconnected transmission systems. To prepare for the next contingency, system adjustments are permitted, including curtailments of contracted firm (non-recallable reserved) electric power transfers.

c) Cascading is the uncontrolled successive loss of system elements triggered by an incident at any location. Cascading results in widespread service interruption which cannot be restrained from sequentially spreading beyond an area predetermined by appropriate studies.

d) Depending on system design and expected system impacts, the controlled interruption of electric supply to customers (load shedding), the planned removal from service of certain generators, and/or the curtailment of contracted firm (non-recallable reserved) electric power transfers may be necessary to maintain the overall security of the interconnected transmission systems.

e) A number of extreme contingencies that are listed under Category D and judged to be critical by the transmission planning entity(ies) will be selected for evaluation. It is not expected that all possible facility outages under each listed contingency of Category D will be evaluated.

f) Normal clearing is when the protection system operates as designed and the fault is cleared in the time normally expected with proper functioning of the installed protection systems. Delayed clearing of a fault is due to failure of any protection system component such as a relay, circuit breaker, or current transformer (CT), and not because of an intentional design delay.

g) System assessments may exclude these events where multiple circuit towers are used over short distances (e.g., station entrance, river crossings) in accordance with Regional exemption criteria.

C. MW-mile criteria. Big Rivers utilizes a 75 MW-mile rule reliability criterion. This criterion uses the load served by a radial 69 kV circuit and the length of the radial circuit to determine when loop feeds need to be developed. To apply this criterion, the radial length in miles is multiplied by the expected load in MW. If the resulting MW-mile value is greater than

75, then loop feeds may need to be developed due to service reliability concerns for sensitive load areas. This criterion is intended to be used as a general guideline.

As part of the study process, Big Rivers performed this reliability analysis of its entire system. This analysis is typically applied to 69 kV circuits, not 161 kV circuits. Since the existing New Hardinsburg to Meade County line is a 161 kV circuit, the MW-mile criterion was not applied in determining the need for the proposed transmission line. Instead, the need for the proposed transmission line was based on the single-contingency line loading and voltage criteria. Nevertheless, while served from a 161 kV radial circuit, the Meade County substation load can be partially served from the 69 kV system. With the maximum line loading from the 2004 summer (42 MW), had the MW-mile criterion been applied, the resulting MW-mile for this 17.9-mile circuit would be 751.8 MW-mile. This is well in excess of Big Rivers' 75 MW-mile criteria, indicating reliability concerns that require a system improvement.

Problem Solving

As the attached studies show, the study process yielded results that did not satisfy the above criteria. When unacceptable voltage or equipment loading problems were encountered, possible solutions were developed and then tested to determine their viability. These alternative solutions were tested in the order of their relative cost, from the least to the most costly.

The least cost alternative and, therefore, the first option studied was system switching. The objective was to shift load off overloaded lines and transformers or to provide support for low voltage areas. All of the switching solutions utilized existing equipment.

When switching alone failed, it was combined with the addition of capacitor banks at load buses to solve specific low voltage problems. The size of these capacitor banks was adjusted as needed to raise the system voltages to acceptable levels and, if possible, to reduce line and transformer loadings to acceptable levels. Capacitor banks at load buses will not be sized larger than that which will result in unity power factor at that load bus at peak load conditions.

Other alternative solutions studied, primarily for overload problems, included re-sagging, re-conductoring or double circuiting transmission lines, upgrading or replacing transformers, constructing new transmission lines, and constructing new substations.

The 2003-2005 CWP established that the proposed project is required due to unacceptable single contingency conditions during an outage of the 161 kV New Hardinsburg to Meade County circuit. The CWP presented three options to correct the system deficiencies.

The preferred option includes a second high voltage source to the Meade County 161/69 kV substation. The second option described in the CWP includes the upgrade of existing facilities and delays the need for the proposed project. However, the second option was found to be more costly and less robust than the preferred option. In addition, due to the severity of system conditions immediately following the 161 kV line outage, the second option would necessitate a change in the normal system configuration. The new configuration would include the creation of two additional 69 kV loops from New Hardinsburg to Meade County by closing normally open switches. These loops would increase line exposure and could result in additional loss of load during fault conditions. The system would also be vulnerable to the loss of the Meade County 69 kV capacitor during the outage (69 kV voltages would be below 90% at multiple delivery points). In addition, with the Meade County line outage, virtually the entire Meade County RECC load would be served from one transmission substation. The following table shows the system conditions with 2005 summer peak loads and 2008 summer peak loads with various scenarios. Study results with and without a planned, but yet-to-be constructed, 69 kV line addition are included.

2003-2005 Construction Work Plan Study Results

MCRECC Delivery Point or 69 kV transmission line	2005 Conditions without outage*	2005 Voltages/Loadings with Outage**			2008 Conditions
		w/o re-configuration	w/re-configuration ***	w/re-configuration ****	w/ re-configuration****
Andyville	69.4 kV (1.006 P.U.)	55.0 kV (0.797 P.U.)	68.7 kV (0.995 P.U.)	68.9 kV (0.998 P.U.)	68.1 kV (0.988 P.U.)
Battletown	69.3 kV (1.004 P.U.)	54.8 kV (0.794 P.U.)	68.5 kV (0.993 P.U.)	68.7 kV (0.998 P.U.)	67.9 kV (0.984 P.U.)
Brandenburg	69.2 kV (1.003 P.U.)	54.8 kV (0.793 P.U.)	66.8 kV (0.969 P.U.)	67.1 kV (0.972 P.U.)	65.8 kV (0.953 P.U.)
Cloverport	70.3 kV (1.018 P.U.)	67.6 kV (0.980 P.U.)	70.5 Kv (1.022 P.U.)	70.7 kV (1.024 P.U.)	70.6 kV (1.023 P.U.)
Custer	67.0 kV (0.971 P.U.)	51.9 kV (0.752 P.U.)	66.2 kV (0.960 P.U.)	66.4 kV (0.963 P.U.)	65.4 kV (0.947 P.U.)
Doe Valley	69.4 kV (1.006 P.U.)	54.9 kV (0.796 P.U.)	67.0 kV (0.974 P.U.)	67.2 kV (0.974 P.U.)	66.0 kV (0.956 P.U.)
Falls of Rough	68.9 kV (0.999 P.U.)	66.2 kV (0.959 P.U.)	71.6 kV (1.038 P.U.)	71.8 kV (1.041 P.U.)	72.1 kV (1.045 P.U.)
Flaherty	67.0 kV (0.972 P.U.)	51.9 kV (0.752 P.U.)	65.7 kV (0.952 P.U.)	65.9 kV (0.955 P.U.)	64.4 kV (0.933 P.U.)
Fordsville	70.8 kV (1.025 P.U.)	67.7 kV (0.982 P.U.)	70.5 Kv (1.022 P.U.)	65.6 kV (0.950 P.U.)	65.3 kV (.946 P.U.)
Garrett	67.9 kV (0.983 P.U.)	52.9 kV (0.767 P.U.)	66.3 kV (0.961 P.U.)	66.6 kV (0.965 P.U.)	65.3 kV (0.947 P.U.)
Hardinsburg #1	70.6 kV (1.022 P.U.)	67.9 kV (0.984 P.U.)	71.1 kV (1.03 P.U.)	71.3 kV (1.033 P.U.)	71.4 kV (1.035 P.U.)
Hardinsburg #2	70.9 kV (1.027 P.U.)	68.3 kV (0.989 P.U.)	71.9 kV (1.041 P.P.)	72.1 kV (1.045 P.U.)	72.5 kV (1.050 P.U.)
Harned	68.1 kV (0.988 P.U.)	65.4 kV (0.947 P.U.)	67.5 kV (0.979 P.U.)	67.7 kV (0.982 P.U.)	67.1 kV (0.973 P.U.)
Irvington	70.4 kV (1.021 P.U.)	57.9 kV (0.839 P.U.)	68.5 kV (0.993 P.U.)	68.8 kV (0.996 P.U.)	67.9 kV (0.985 P.U.)
McDaniels	68.3 kV (0.990 P.U.)	65.6 kV (0.950 P.U.)	67.0 kV (0.972 P.U.)	67.2 kV (0.974 P.U.)	66.5 kV (.964 P.U.)
Union Star	69.95 kV (1.014 P.U.)	67.3 kV (0.975 P.U.)	69.3 kV (1.004 P.U.)	69.5 kV (1.007 P.U.)	69.0 kV (1.000 P.U.)
Meade Co. Substation (69 kV)	70.7 kV (1.024 P.U.)	56.6 kV (0.820 P.U.)	68.3 kV (0.990 P.U.)	68.5 kV (0.993 P.U.)	67.6 kV (0.979 P.U)
Meade Co. Substation (161 kV)	160.1 kV (0.994 P.U.)	126.5 kV (0.786 P.U.)	141.7 kV (0.880 P.U.)	142.1 kV (0.883 P.U.)	140.2 kV (0.871 P.U.)
New Hardinsburg Trans. 1	49%	106%	96%	95%	117%
New Hardinsburg Trans. 2	55%	121%	109%	108%	103%
Harned to McDaniels (2 miles)	38%	39%	73%	72%	81%
Hardinsburg 1 to Harned (10.5 mile)	normally open	normally open	91%	91%	102%
New Hardinsburg to Irvington (14 miles)	34%	220%	103%	100%	114%

Notes:
* The system conditions with the proposed line in-service (during the outage) are virtually identical to those presented
** Outage of 161 kV circuit from New Hardinsburg to Meade County
** System reconfiguration includes looping three existing 69 kV circuits between New Hardisnburg and Meade County
*** System reconfiguration includes looping three 69 kV circuits between New Hardisnburg and Meade County (including a planned 69 kV circuit) The voltages presented above would be significantly lower without the Meade County capacitor in-service (below 90% at multiple delivery points)

When study results and experience are considered, it seems reasonable to conclude that the increasing Meade County RECC load levels will eventually result in the need for a second high voltage source for the Meade County substation (acceptable back-up service through the 69 kV system cannot be provided indefinitely). The studies and present worth analysis indicate that constructing the proposed circuit at this time is the most cost effective and prudent decision. The proposed construction will result in the most robust transmission system and is expected to provide the most reliable service to the Meade County RECC customers.

4. In conclusion, the need for the proposed transmission line was first identified in the 2000-2002 CWP. Big Rivers' studies at that time determined that outages of the Meade County transformer, the Meade County 161 kV source from New Hardinsburg, or an outage of one of the New Hardinsburg 161/69 kV transformers would yield unacceptable loading and

voltage conditions. That study indicated that additional studies were required to determine the most economical and feasible alternative. Subsequent studies continued to demonstrate an outage of the Meade County 161 kV source from New Hardinsburg would yield unacceptable loading and voltage conditions, and that construction of a back-up source would alleviate the loading and voltage constraints. The proposed line is the most feasible and economic back-up source available to Big Rivers.

WHEREFORE, Big Rivers requests that the Commission accept Big Rivers' Application, as supplemented by this filing, as complete; issue an order granting Big Rivers a certificate of public convenience and necessity for the construction of the proposed 161 kV transmission line; and for all other relief to which it may be entitled.

On this the 12th day of November, 2004.

SULLIVAN, MOUNTJOY, STAINBACK
& MILLER, P.S.C.

James M. Miller
Tyson Kamuf
100 St. Ann Building, P. O. Box 727
Owensboro, Kentucky 42302-0727
(270) 926-4000
Counsel for Big Rivers Electric Corporation