



Edward T. Depp  
502-540-2347  
tip.depp@dinsmore.com

RECEIVED

JUL 11 2013

PUBLIC SERVICE  
COMMISSION

July 11, 2013

**VIA HAND DELIVERY**

Jeff Derouen  
Kentucky Public Service Commission  
211 Sower Blvd.  
P.O. Box 615  
Frankfort, KY 40602-0615

*Re: Joint Application of Kenergy Corp. )  
and Big Rivers Electric Corporation )  
for Approval of Contract and for a ) Case No. 2013-00221  
Declaratory Order )*

Dear Mr. Derouen:

Enclosed are an original and ten copies of Kenergy Corp. and Big Rivers Electric Corporation's: (1) Response to the Commission Staff's Initial Request for Information; (2) Response to the Office of the Attorney General's Initial Request for Information; (3) Response to the Kentucky Industrial Utility Customers, Inc.'s Initial Request for Information; (4) Petition for Confidential Treatment; and (5) Motion for Deviation in the above-referenced matter.

I certify that on this date a copy of these documents has been served on all persons on the attached service list by hand-delivery or by Federal Express.

Sincerely,

Edward T. Depp

ETD/lb  
Enclosures

cc: Mark A. Bailey  
Billie J. Richert

Service List  
PSC Case No. 2013-00221

Jennifer B. Hans  
Lawrence W. Cook  
Dennis G. Howard, II  
Assistant Attorneys General  
1024 Capital Center Dr.  
Suite 200  
Frankfort, KY 40601

Michael L. Kurtz, Esq.  
Kurt J. Boehm, Esq.  
Boehm, Kurtz & Lowry  
36 E. Seventh St., Suite 1510  
Cincinnati, Ohio 45202

Bernard F. Lovely, Jr.  
Bowles Rice LLP  
Suite 1700  
333 West Vine Street  
Lexington, KY 40507

Michael Early  
Corporate Energy Director  
Century Aluminum  
1300 SW Fifth Avenue, Suite 1750  
Portland, Oregon 97201

Robert A. Weishaar, Jr.  
McNees Wallace & Nurick LLC  
777 N. Capitol St., NE  
Suite 401  
Washington, DC 20002-4292

G. Kelly Nuckols  
President and CEO  
Jackson Purchase Energy Corporation  
2900 Irvin Cobb Drive  
P.O. Box 4030  
Paducah, KY 42002-4030

Melissa D. Yates  
Denton & Keuler, LLP  
555 Jefferson Street  
Suite 301  
Paducah, KY 42001

Burns Mercer  
Meade County RECC  
1351 Hwy. 79  
P.O. Box 489  
Brandenburg, Kentucky 40108

Thomas C. Brite, Esq.  
Brite & Hopkins, PLLC  
83 Ballpark Road  
Hardinsburg, KY 40143

Gregory Starheim  
President & CEO  
Kenergy Corp.  
3111 Fairview Drive  
P.O. Box 1389  
Owensboro, KY 42302-1389

J. Christopher Hopgood, Esq.  
318 Second Street  
Henderson, Kentucky 42420

Joe Childers  
Joe F. Childers & Associates  
300 Lexington Building  
201 West Short Street  
Lexington, Kentucky 40507

Shannon Fisk  
Senior Attorney  
Earthjustice  
1617 John F. Kennedy Blvd., Suite 1675  
Philadelphia, PA 19103

BIG RIVERS ELECTRIC CORPORATION  
JOINT APPLICATION OF KENERGY CORP.  
AND BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND  
FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

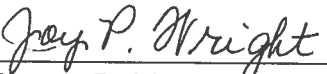
VERIFICATION

I, Robert W. Berry, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

  
Robert W. Berry

COMMONWEALTH OF KENTUCKY )  
COUNTY OF HENDERSON )

SUBSCRIBED AND SWORN TO before me by Robert W. Berry on this  
the 8 day of July, 2013.

  
Notary Public, Ky. State at Large  
My Commission Expires \_\_\_\_\_

Notary Public, Kentucky State-At-Large  
Commission Expires: July 3, 2014  
ID 421951

BIG RIVERS ELECTRIC CORPORATION

JOINT APPLICATION OF KENERGY CORP.  
AND BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND  
FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

VERIFICATION

I, Billie J. Richert, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

  
Billie J. Richert

COMMONWEALTH OF KENTUCKY )  
COUNTY OF HENDERSON )

SUBSCRIBED AND SWORN TO before me by Billie J. Richert on this  
the 8<sup>th</sup> day of July, 2013.

  
Notary Public, Ky. State at Large  
My Commission Expires 1-12-17

BIG RIVERS ELECTRIC CORPORATION

JOINT APPLICATION OF KENERGY CORP.  
AND BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND  
FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

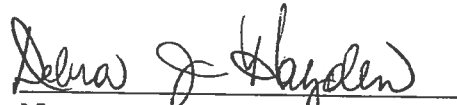
VERIFICATION

I, Gregory J. Starheim, verify, state, and affirm that I prepared or supervised the preparation of the data responses filed with this Verification, and that those data responses are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

  
Gregory J. Starheim

COMMONWEALTH OF KENTUCKY )  
COUNTY OF HENDERSON )

SUBSCRIBED AND SWORN TO before me by Gregory J. Starheim on  
this the 9<sup>th</sup> day of July, 2013.

  
Notary Public, Ky. State at Large  
My Commission Expires 5-24-15

**ORIGINAL**

**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. 2013-00221**

**Response to the Kentucky Industrial Utility Customers'  
Initial Request for Information  
dated July 2, 2013**

**FILED: July 11, 2013**

**ORIGINAL**

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

- 1 Item 1) *Refer to page 29 lines 13-14 of Mr. Berry's Direct Testimony wherein states*  
2 *that the Century will pay Big Rivers for MISO charges that include "SSR costs relating to*  
3 *that [Hawesville] node."*
- 4 a. *Please confirm that MISO may designate only one Coleman unit as an*  
5 *SSR or as many as all three of the Coleman units as SSRs. Please*  
6 *describe how MISO will make the decision on how many units and*  
7 *which units to designate as SSRs.*
- 8 b. *If the Company is required by MISO to continue operation of only one*  
9 *or two of the Coleman units as SSRs, then does the Company plan to*  
10 *idle the other units?*
- 11 c. *Please list and describe the specific costs that MISO will reimburse Big*  
12 *Rivers ("make whole payments") if MISO designates one or more of the*  
13 *Coleman units as SSRs.*
- 14 d. *Provide a quantification of the make whole payments for Coleman from*  
15 *MISO to reimburse Big Rivers if MISO designates one or more of the*  
16 *Coleman units as SSRs based on the test year costs included in the*  
17 *Company's revenue requirement in Case No. 2012-00535. Provide this*  
18 *information by unit. Provide a copy of all workpapers and source*

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

1                    *documents, including, but not limited to, electronic spreadsheets with*  
2                    *formulas intact.*

3                    *e. Please provide a quantification of the specific costs for Coleman that*  
4                    *MISO will not reimburse Big Rivers for if MISO designates one or more*  
5                    *of the Coleman units as SSRs based on the test year costs included in the*  
6                    *Company's revenue requirement in Case No. 2012-00535. Provide this*  
7                    *information by unit. Provide a copy of all workpapers and source*  
8                    *documents, including, but not limited to, electronic spreadsheets with*  
9                    *formulas intact.*

10                  *f. Please provide a quantification of the specific costs for Coleman by unit*  
11                  *and plant that are included in the Company's revenue requirement in*  
12                  *Case No. 2012-00535 and a quantification of the costs that can be*  
13                  *avoided for each unit that is idled. Provide a copy of all workpapers and*  
14                  *source documents, including, but not limited to, electronic spreadsheets*  
15                  *with formulas intact.*

16                  *g. Please explain specifically how and from whom MISO will recover the*  
17                  *make whole payments made to Big Rivers for the Coleman units*



**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1                   *designated as SSRs. Explain how these costs will be allocated to and*  
2                   *recovered from each relevant Local Balancing Area, LSE or node.*

3                   *h. Please confirm that under the MISO Attachment Y-2 Study Report,*  
4                   *91.63% of the Coleman SSR costs will be allocated to and recovered*  
5                   *from Big Rivers. If this is not correct, then please explain the*  
6                   *significance of the 91.63% set forth in Table 2 of the Report.*

7                   *i. Will the Hawesville node be considered an LBA? Please explain why or*  
8                   *why not.*

9  
10 **Response)**

11                   a. Confirmed. Please see the MISO Tariff Section 38.2.7.c, "Evaluation of  
12                   SSR Unit Application." This MISO Tariff section is provided as an  
13                   attachment to this response.

14                   b. Yes. Big Rivers' current plan is to idle the other Coleman units until such  
15                   time as the market will support the total production cost of the unit or until  
16                   Big Rivers finds sufficient replacement load, or enters into a bilateral  
17                   contract or contracts that justify operating the units.

18                   c. Please see the MISO Tariff section 38.2.7.h, "SSR Unit Compensation."

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

- 1           d.    Make whole payments cannot be quantified until Big Rivers enters into an  
2                    approved SSR agreement with MISO.    Section 4.1 (a) of the Direct  
3                    Agreement requires Century to pay all cost incurred by Big Rivers if Big  
4                    Rivers is required to operate one or more of the Coleman units until the  
5                    SSR is approved.
- 6           e.    Make whole payments cannot be quantified until Big Rivers enters into an  
7                    approved SSR agreement with MISO.    Section 4.1 (a) of the Direct  
8                    Agreement requires Century to pay all cost incurred by Big Rivers if Big  
9                    Rivers is required to operate one or more of the Coleman unit/units until  
10                   the SSR is approved.    The MATS capital equipment will not be  
11                   reimbursed by MISO or Century unless the SSR agreement is extended  
12                   beyond June 1, 2014.
- 13          f.    As stated in Case No. 2012-00535, all costs associated with Coleman were  
14                   included in Big Rivers' revenue requirement; however, the avoidable costs  
15                   of Wilson were not included, as Wilson was originally assumed to be  
16                   idled. As described in Exhibit Berry Rebuttal-2 in Case No. 2012-00535,  
17                   the fixed operating costs savings associated with idling Coleman is  
18                   approximately \$90,000 (\$91,426) greater than the fixed operating costs

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 savings included in the requested rate adjustment, thus there is essentially  
2 no rate impact due to the idling of Coleman in the case. This is the  
3 difference in Big Rivers' total cost of service with Coleman idled instead  
4 of Wilson. As such, it should be assumed that no avoidable costs for  
5 Coleman are included in the rate request. The depreciation, taxes, and  
6 interest associated with Coleman plant were included in the requested rate  
7 adjustment and are not avoidable even if the unit is idled. The  
8 CONFIDENTIAL must-run analysis for the Coleman plant is provided in  
9 an attachment to Big Rivers' response to AG 1-1. This analysis shows  
10 detailed costs for the Coleman Station. Costs by unit are not available.

11 g. MISO will utilize section 38.2.7.j of its tariff to determine how and from  
12 whom it will recover the make whole payments made to Big Rivers for the  
13 Coleman units designated as SSRs. The areas identified in the non-  
14 binding Attachment Y-2 report for the cost allocation are Big Rivers  
15 Electric Corporation (BREC) (91.63%), Southern Indiana Gas & Electric  
16 (SIGE) (4.52%), Ameren Illinois (AMIL)(3.75%) and Duke Energy  
17 Indiana (DEI) (0.10%). Please see response to KIUC item 1-2 for the  
18 redacted version of the Coleman Attachment Y-2 report.

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

- 1           h.    The 91.63% is the potential SSR cost allocation MISO provided in the  
2                    Attachment Y-2 request, which is a non-binding study. The final cost  
3                    allocation will be determined by MISO as part of the Attachment Y,  
4                    “Notification of Potential Resource/SCU Change of Status,” and  
5                    Attachment Y-1, “Standard Form Support Supply Resource (“SSR”)  
6                    Agreement” process. The 91.63% is the amount allocated to the Big  
7                    Rivers load node (BREC.BREC), which includes Century’s share of the  
8                    costs. After the Century load node is effective on August 20, 2013,  
9                    Century’s share of the 91.63% will be charged to its load node.
- 10           i.    No, the Hawesville node is a commercial pricing node. Local Balancing  
11                    Authority designations are based on the transmission owner level of the  
12                    physical transmission system and are not determined based on how load or  
13                    generation is assigned to a particular commercial pricing node.

14  
15   **Witness)**     Robert W. Berry  
16  
17  
18

**38.2.7 System Support Resources Version: 2.0.0 Effective: 9/24/2012**

System Support Resource (SSR) procedures provide a mechanism for the Transmission Provider to enter into agreements with Market Participants that own or operate Generation Resources or Synchronous Condenser Units (SCUs) that are required by the Transmission Provider to maintain reliability of the Transmission System, if all or a specified portion of the capacity of such Generation Resources or SCUs would otherwise either Retire or Suspend.

The SSR procedures include: (a) a requirement that any Market Participant planning to Retire or Suspend, all or a portion of a Generation Resource or SCU located within the Transmission Provider Region for reasons other than a Generator Planned Outage must notify the Transmission Provider of such events by submitting a completed Attachment Y to the Transmission Provider documenting the proposed plans for such Generation Resource or SCU, at least twenty-six (26) weeks prior to taking such actions; (b) Market Participants must submit all necessary information to enable the Transmission Provider to evaluate whether SSR Unit status is appropriate for such Generation Resource or SCU; (c) if the Transmission Provider determines that SSR Unit status is justified for a Generation Resource or SCU, the Transmission Provider and such Market Participant shall enter into an SSR Agreement, in accordance with the Attachment Y-1 form of agreement; (d) the SSR Unit will be operated in accordance with the terms of the SSR Agreement, which contains detailed terms and conditions regarding operation and compensation of such Generation Resource or SCU and the allocation of costs; (e) costs to compensate an SSR Unit will be allocated to the LSE(s) that benefits from the operation of the SSR Unit; and (f) the Transmission Provider shall periodically review the reliability requirements of the Transmission Provider Region and shall determine which, if any, SSR Agreements should be extended.

a. **SSR Unit Notification Procedures.** A Market Participant shall complete and deliver to the Transmission Provider Attachment Y, Notification of Potential Generation Resource or SCU Change of Status, at least twenty-six (26) weeks prior to Retiring or Suspending all or a portion of a Generation Resource or a SCU that it either owns or operates, except as provided below. The provisions of Section 38.2.7 do not apply to: (1) Generation Resources and SCUs that are in forced outage or forced derate status; (2) Generation Resources and SCUs that are requesting, or are not available due to, a Generator Planned Outage; (3) Behind the Meter Generation Resources; or (4) Generation Resources that are identified as needed for Blackstart by a Transmission Operator. Section 38.2.7 shall not modify or alter a Transmission Operator's obligations under the Tariff to identify Blackstart Units that are included in a System Restoration Plan, or a Blackstart Unit Owner's obligations to comply with the terms of any Blackstart Service agreement, in accordance with Schedule 33, or the requirements of Commission approved reliability standards.

Market Participants that own or operate Generation Resources or SCUs that are not directly interconnected to the Transmission System shall notify the Transmission Provider in accordance with Section 38.2.7(a) if the Market Participant plans to Retire or Suspend such facilities. The Transmission Provider shall coordinate with the entity to which the Generation Resource or SCU is directly connected to determine whether the Generation Resource or SCU is necessary for reliability of the Transmission System.

The Transmission Provider shall treat Attachment Y as Confidential Information until the Attachment Y reliability analysis is completed and the study results are disclosed to the Market Participant.

The Transmission Provider shall respond to the Market Participant within twenty (20) weeks

with the results of the study completed in response to the Attachment Y. A Market Participant certifies by submitting an Attachment Y that such Market Participant has made a definitive decision to Retire or Suspend a Generation Resource or SCU and the Attachment Y shall be executed by an officer of the owner or operator of the Generation Resource or SCU attesting to the facts supporting that claim, who has the legal authority to bind such Market Participant. The Transmission Provider shall notify the Market Participant prior to publicizing the Attachment Y request and study results that the Attachment Y analysis is complete, however, the Transmission Provider shall not provide any information related to the study or study results to the Market Participant at that time. The Market Participant may rescind its Attachment Y submission by notifying the Transmission Provider of such rescission via electronic communication and certified mail not more than five (5) business days after receiving notice from the Transmission Provider that the Attachment Y analysis is complete, in which case the confidentiality of the Attachment Y shall be preserved. If a Market Participant rescinds an Attachment Y submission, then such Market Participant shall not receive the results of the study and such Market Participant shall pay the Transmission Provider 100% of the costs that the Transmission Provider has incurred in conducting an Attachment Y analysis up until the date of such rescission. Once a response is provided by the Transmission Provider to the Market Participant, the Transmission Provider shall promptly post on OASIS: (1) that an Attachment Y was submitted; and (2) whether the Transmission Provider's study concluded that the Generation Resource or SCU was required for the reliability of the Transmission System. An owner or operator of a Generation Resource or SCU that notifies the Transmission Provider of a definitive decision to Suspend may only modify its decision to Suspend by submitting a request to the Transmission Provider that demonstrates significantly changed legal, regulatory, or economic

conditions justifying modification of an Attachment Y Suspend decision. In determining whether the Generation Resource or SCU may return prematurely from suspension, the Transmission Provider will evaluate factors, including, but not limited to: (i) any reliability impacts if the Generation Resource or SCU operates differently than planned for by the Transmission Provider based on the Attachment Y notification; and (ii) costs that the Transmission Provider, or other Market Participants, may incur as a result of such modified operations. After the Transmission Provider has posted on OASIS that a Generation Resource or SCU is required for the reliability of the Transmission System, the owner or operator of such facility may modify the effective date of a definitive decision to Retire or Suspend if: (1) the Transmission Provider has determined that demand response, generation or transmission expansion alternatives are required; and (2) the owner or operator of the Generation Resource or SCU agrees in writing with the Transmission Provider to continue to operate the facility without entering into an SSR Agreement until the alternative(s) have been implemented to maintain the reliability of the Transmission System.

**b. Notification of the Outage Scheduler After Submittal of Attachment Y.** After receipt of an Attachment Y, the Transmission Provider shall schedule such outage notification through the Transmission Provider's Control Room Operations Window ("CROW") outage scheduling system, or successor system, to coordinate the outage planning of a Generation Resource or SCU through CROW, on behalf of the Market Participant.

**c. Evaluation of SSR Unit Application.** The Transmission Provider will perform an Attachment Y reliability analysis to determine whether the Generation Resource or SCU is necessary for the reliability of the Transmission System based on the criteria set forth in the Business Practices Manuals, but will not determine in this initial analysis the available



alternatives to designating the Generation Resource or SCU as an SSR Unit. The Transmission Provider shall post the determination of reliability need on the Transmission Provider's OASIS. Before entering into an SSR Agreement with any Generation Resource or SCU, the Transmission Provider shall assess, in an open and transparent planning process in accordance with the provisions of the Transmission Expansion Planning Protocol Attachment FF to the Tariff, feasible alternatives to the proposed SSR Agreement. The list of alternatives to SSR Unit status that the Transmission Provider shall consider and expeditiously approve as applicable include (depending upon the type of reliability concern identified): (i) redispatch/reconfiguration through operator instruction; (ii) remedial action plans; (iii) special protection schemes initiated upon Generation Resource trips or unplanned Transmission Outages; (iv) committed demand response or Generator alternatives; and (v) transmission expansions. In assessing applicability for SSR status, the Transmission Provider will not require continued operation when the continued operation of a portion or all of Generation Resources or SCUs would be contrary to applicable law, regulations, or court or agency orders (such as a settlement with an environmental agency or a consent decree approved by a court). In performing the Attachment Y reliability analysis and any planning studies to assess feasible alternatives to an SSR Agreement, the Transmission Provider shall collaborate with the affected Transmission Owners and NERC-registered Transmission Planners, and if appropriate, may consult with a retained consultant. The Transmission Provider will appropriately identify any Confidential Information regarding a Retire or Suspend decision before the Transmission Provider transfers such information to any entity. An entity that receives Confidential Information must agree in writing to maintain such confidentiality, to comply with any confidentiality obligations owed to Transmission Provider under the Tariff or pursuant to a related non-disclosure agreement, and to

comply with applicable Standards of Conduct found in 18 C.F.R. § 358. The Transmission Provider will reasonably assist the owner or operator of a potential SSR Unit in working with regulatory agencies to obtain environmental waivers or exemptions to the extent necessary to maintain the reliability of the Transmission System. The Market Participant that owns or operates the Generation Resource or SCU subject to review under this section shall provide the Transmission Provider in a timely manner with all necessary data, including but not limited to, engineering data required to enable the Transmission Provider to evaluate whether such Generation Resource or SCU qualifies as an SSR Unit.

**d. Execution of SSR Agreement.** The Transmission Provider shall enter into an SSR Agreement with the Market Participant owning or operating an SSR Unit in accordance with Attachment Y-1. The Transmission Provider will file an SSR Agreement with the Commission for approval if the Transmission Provider's analysis determines that the Generation Resource or SCU is required for reliability of the Transmission System. All potentially affected parties will receive notification of such Commission filing. During the period that a Generation Resource or SCU is subject to an executed Attachment Y-1 agreement, it shall qualify as an SSR Unit. SSR service is a contracted service between the Market Participant that owns or operates an SSR Unit and the Transmission Provider and shall be for a term of twelve (12) months, unless the Transmission Provider requires a different term. The Transmission Provider must have available the entire capacity specified in the SSR Agreement of each SSR Unit.

**e. Operation of SSR Unit.** Once the Transmission Provider has entered into an SSR Agreement with a Generation Resource or SCU, the Transmission Provider shall have the right to dispatch the SSR Unit at any time for reliability of the facilities within the Transmission Provider Region. The Transmission Provider shall make every attempt to minimize the use of an

SSR Unit. The Transmission Provider will dispatch the SSR Unit as early as possible once conditions are identified that require the use of the SSR Unit and will make best efforts to minimize the uneconomic dispatch of the SSR Unit(s). The SSR Agreement found in Attachment Y to this Tariff shall provide for equitable compensation to an SSR Unit when it is dispatched by the Transmission Provider.

**f. Scheduling Rules for SSR Units.** No later than 1000 hours EST the day prior to the Operating Day, the Transmission Provider shall notify Market Participants with SSR Units as to the quantity (in MW and/or MVAR) and time period of Energy, Operating Reserve and/or Other Ancillary Services required from each SSR Unit.

**g. SSR Unit Participation in Markets.** A Market Participant may offer Energy or Ancillary Services from SSR Units into the Day-Ahead Energy and Operating Reserve Market, RAC, or Real-Time Energy and Operating Reserve Market during times when the Transmission Provider has not requested the Market Participant to run the SSR Unit at full capacity unless this would impair the ability of the SSR Unit to provide the Energy, Operating Reserve or Other Ancillary Services when requested by the Transmission Provider.

**Market Participants that own or operate an SSR Unit shall not use the SSR Unit to: (i) participate in Interchange Schedules; (ii) except for plant auxiliary Load obligations under the SSR Agreement, use the SSR Unit as a Self-Scheduled Resource to submit Self-Schedules for Energy and/or Operating Reserve; (iii) submit Self-Schedules for Other Ancillary Services, if applicable, to the extent that Other Ancillary Services are required by the Transmission Provider under this Section; and (iv) participate in the Energy and Operating Reserve Markets, except for incremental Offers of additional Capacity beyond the amount designated by the Transmission Provider as necessary for reliability purposes**

to the extent allowed in the SSR Agreement.

**h. SSR Unit Compensation.**

**i. The Transmission Provider will propose appropriate compensation for the Market Participant owning the Generation Resources or SCUs deemed to be SSR Units. Prior to the execution of the SSR Agreement, the Transmission Provider will negotiate with the Market Participant to determine the level of compensation due the Market Participant for the SSR Unit. The Market Participant will receive appropriate compensation for any fixed operations and maintenance expenses that could have been avoided through a Retire or Suspend decision for the entire period of time that an SSR Agreement is in effect for a portion or all of the Generation Resource or SCU that is required for reliability of the Transmission System as an SSR Unit. Compensation for an SSR Unit shall commence on the date that the Generation Resource or SCU commences operation as an SSR Unit.**

**ii. The SSR Agreement will provide compensation only for going forward costs. The Transmission Provider will evaluate, at a minimum, the following factors in negotiating compensation for an SSR Unit: (a) fixed and variable operating and maintenance costs to existing equipment; (b) applicable state, federal, local or property taxes; and (c) non-capital costs of any environmental waivers, allowances, and/or exemptions that are obtained by the SSR Unit and not otherwise recoverable by the SSR Unit owner or operator. Any compensation to the SSR Unit will be reduced by payments under Schedule 2 of this Tariff, payments under resource adequacy programs, infra-marginal rents from Energy and Operating Reserve Market transactions, and any other compensation paid under the market or via other contractual arrangements.**

i. **Termination of Interconnection Rights.** Except as provided in Attachment X or any applicable agreement for the interconnection of the Generation Resource or SCU, the Transmission Provider shall file with the Commission to terminate the interconnection rights to the Transmission Provider's system held by an owner or operator of a Generation Resource or SCU that certifies by submitting an Attachment Y that it plans to Retire a Generation Resource or SCU upon the latter of: (1) the current termination date specified in an SSR Agreement, even if the Transmission Provider gives prior notice of an earlier termination of an SSR Agreement; or (2) the Retire date certified by a Market Participant in Attachment Y. The owner or operator of such resource may retain its interconnection rights and continue to operate after the conclusion of an SSR Agreement or the Retire date certified in the Attachment Y if: (1) substantial changes to applicable law, regulations, or court or agency orders pursuant to which the owner or operator of the Generation Resource or SCU originally relied upon in submitting the Attachment Y, occur either during the term of the SSR Agreement or during the time between the submission of an Attachment Y and the specified Retire date that significantly affect the economic operation of the resource; or (2) the owner or operator of an SSR Unit planning to Retire a facility simultaneously submits with Attachment Y a request for interconnection pursuant to Attachment X of another facility or an increase in capacity of an existing facility at the identical point of interconnection, with a Commercial Operation Date within thirty-six (36) months of the Retire date of the existing Generation Resource or SCU, in which case the interconnection rights may be transferred to the new facility upon successful completion of the applicable interconnection procedures under Attachment X. If the owner of an Generation Resource or SCU that submitted an Attachment Y to Retire fails to terminate

operation of such facility and the Transmission Provider has approved construction of Transmission System upgrades that were necessitated by such facility's Retire plans (and such upgrades were approved by the Transmission Provider's Board of Directors as Appendix A projects), then the owner of the Generation Resource or SCU that planned to Retire shall be allocated the costs of such Transmission System upgrades necessitated by the planned unavailability of the facility.

j. **Allocation of SSR Unit Costs.** The costs pursuant to the SSR Agreement shall be allocated to LSE(s) which require(s) the operation of the SSR Unit for reliability purposes, and shall be specified in the SSR Agreement. For the purposes of this Section, any SSR Unit costs allocated to the footprint of the American Transmission Company shall be allocated to all Market Participants within the footprint of the American Transmission Company on a *pro rata* basis.

k. **Annual Review of SSR Unit Status.** On at least an annual basis, the Transmission Provider will review Generation Resource or SCU characteristics to determine whether the Generation Resource or SCU is qualified to remain as an SSR Unit in coordination with a review of the Transmission Provider's annual regional transmission expansion plan in accordance with Attachment FF. If an SSR Unit continues to be required for reliability of the Transmission System, then the Transmission Provider will have the unilateral right to enter into a subsequent SSR Agreement by providing the Market Participant at least ninety (90) days advance notice prior to the termination date of the existing SSR Agreement and by negotiating and filing a new SSR Agreement at the Commission. If not, the SSR Agreement will expire by its own terms and the Generation Resource or SCU will lose its SSR Unit status and will either Retire or resume suspension in accordance with the Attachment Y request.

l. **Time Limitations on Suspension.** A Market Participant owning or operating a

Generation Resource or a SCU may request suspension pursuant to the provisions of this Section 38.7.2 for a maximum of 36 cumulative months during any five (5) year period. A Market Participant owning or operating a Generation Resource or a SCU that had been granted a suspension pursuant to an Attachment Y request for less than thirty-six (36) cumulative months, or that has been operating under an SSR Agreement for less than thirty-six (36) cumulative months, may request an extension to such time limits by submitting a new Attachment Y request twenty-six (26) weeks prior to the end of the originally granted period or the termination date specified in the SSR Agreement, provided that the combined period of the originally granted period, or the period of operation under an SSR Agreement, and the extension is not greater than thirty-six (36) months.

**m. Non-Binding Informational Studies.** A Market Participant owning or operating a Generation Resource or a SCU may complete Attachment Y-2 to request that the Transmission Provider conduct a study to determine whether it is likely that a portion or all of such Generation Resource or SCU would qualify as an SSR Unit. The Transmission Provider will collaborate with the affected Transmission Owners and NERC-registered Transmission Planners, and if appropriate, will consult with a retained consultant to evaluate whether the facility is required for the reliability of the Transmission System. The Transmission Provider will appropriately identify any Confidential Information regarding a Retire or Suspend decision that the Transmission Provider transfers to any entity. An entity that receives Confidential Information must agree in writing to maintain such confidentiality, or to any confidentiality obligations owed to Transmission Provider under the Tariff or related non-disclosure agreement, and to comply with applicable Standards of Conduct found in 18 C.F.R. § 358. The Market Participant will not be bound to the change of status indicated in an Attachment Y-2 request. Along with a

completed Attachment Y-2, such Market Participant shall submit a study deposit of \$70,000 to the Transmission Provider for the reasonable costs and expenses of such study. The Transmission Provider shall invoice such Market Participant for all costs and expenses incurred in addition to the deposit amount, or shall refund any unused portion of such deposit upon completion of the study. The Transmission Provider shall use reasonable efforts to submit the results of such study to the Market Participant upon its completion within 75 days of receipt of the deposit and completed Attachment Y-2, unless an alternative period is mutually agreed to. The Transmission Provider shall treat Attachment Y-2 as Confidential Information until the Attachment Y-2 reliability analysis is completed and the study results are disclosed to the Market Participant. The Transmission Provider shall notify the Market Participant prior to publicizing the Attachment Y-2 study results that the Attachment Y-2 study is completed, however the Transmission Provider shall not provide any information related to the study or study results to the Market Participant at that time. The Market Participant may rescind its Attachment Y-2 submission by notifying the Transmission Provider of such rescission via electronic communication and certified mail not more than five (5) business days after receiving notice from the Transmission Provider that the Attachment Y-2 study is complete, in which case the confidentiality of the request for an Attachment Y-2 study shall be preserved. If a Market Participant rescinds an Attachment Y-2 study request, then such Market Participant shall not receive the results of the study and the Market Participant shall pay the Transmission Provider 100% of the total costs incurred in conducting the study up until the date of such rescission. Once a response is provided by the Transmission Provider to a Market Participant, the Transmission Provider shall promptly post on OASIS the fact that an Attachment Y-2 request was made and the determination by the Transmission Provider whether the Generation Resource



or SCU was required for the reliability of the Transmission System. The results of such study will provide the Market Participant with the outcome if the Market Participant elects to submit an Attachment Y to request SSR status in the future and does so in accordance with Section 38.2.7(n).

The Transmission Provider shall maintain regional power flow models on its public website, pursuant to Section I.A of Attachment FF, for use by a Market Participant owning a Generation Resource or a SCU choosing to conduct a study.

**n. Submission of Attachment Y Following Non-Binding Reliability Studies Under Y-2.** An Attachment Y that is submitted by a Market Participant within 30 business days after receipt of a response from the Transmission Provider for the same Generation Resource or SCU pursuant to an Attachment Y-2 study, may request a change of status of the Generation Resource or SCU commencing on a date 26 weeks from the date of receipt by the Transmission Provider of the related Attachment Y-2 study request. To the extent practicable, the Transmission Provider will use Y-2 study results in preparing the Attachment Y analysis.

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 **Item 2)**      *Refer to page 5 lines 9-11 of Mr. Berry's Rebuttal Testimony in Case No.*  
2 *2012-00535 wherein he states that Big Rivers converted its Attachment Y-2 into an*  
3 *Attachment Y, seeking permission to idle the Coleman Station.*

4                    *a. Please provide a copy of the Company's Attachment Y-2.*

5                    *b. Please indicate when the Company expects to obtain a decision on the*  
6 *Attachment Y-2 request.*

7  
8 **Response)**

9                    a. Please see a redacted version of the Attachment Y-2 report for the  
10 Coleman Plant, attached to this response. Please note that the confidential  
11 critical infrastructure information in this document has been redacted, and  
12 that the remaining contents of the document are not confidential.

13                    b. Big Rivers expects MISO to provide the Base Load amount within the  
14 next two weeks.

15  
16  
17 **Witness)**      Robert W. Berry

18

---

**Attachment Y-2 Study  
Coleman Units 1, 2 & 3: 443 MW Coal  
29 Month Suspension 8/20/2013 – 1/1/2015**

# **ATTACHMENT Y-2 STUDY REPORT**

May 2, 2013

**CONTAINS CONFIDENTIAL AND  
CRITICAL ENERGY INFRASTRUCTURE INFORMATION (CEII)  
DO NOT RELEASE**

**CONFIDENTIAL**

This document contains confidential information and should only be shared with direct recipients on a need to know basis. All contents of the following document are confidential and proprietary to MISO. Information cannot be shared with outsiders without explicit authorization.

## EXECUTIVE SUMMARY

MISO received an Attachment Y-2 Request for Non-Binding Study Regarding Potential SSR Status (Attachment Y-2 Request) from Big Rivers Electric Corporation (BRPS) on December 18, 2012. The request was for MISO to determine the reliability impact of the potential Suspension of Coleman Units 1 & 2 & 3 from August 20, 2013 to January 1, 2015. Attachment Y-2 analysis is performed as a non-binding assessment of potential reliability issues due to the Suspension or Retirement of a Generation Resource. The results of the study are not definitive and the analysis is intended only to provide information to the Market Participant (MP) to assist them in evaluating their options. However, it does not commit the Market Participant to proceed with plans for Suspension or Retirement.

The study results indicate that potential reliability issues exist that would require the need for Coleman Units 1, 2 and 3 to enter into an System Support Resource (SSR) Agreement if a mitigation plan is not developed and implemented prior to the potential unit change of status, in accordance with Section 38.2.7 of the MISO Open Access Transmission, Energy & Operating Reserve Markets Tariff ("Tariff"). In addition to determining if reliability issues result from the suspension, further analysis was performed to identify the areas that are subject to allocation of the SSR costs. The areas identified for the cost allocation are Big Rivers Electric Corporation (BREC), Southern Illinois Gas & Electric (SIGE), Ameren Illinois (AMIL), and Duke Energy Indiana (DEI).

## Contents

I.	Introduction.....	4
II.	Study objectives.....	5
III.	Models and Assumptions.....	5
a.	Model Assumptions.....	5
b.	Transmission Projects.....	5
c.	Table of Models.....	6
IV.	Study Criteria and Methodology.....	6
a.	Applicable Reliability Planning Criteria.....	6
b.	MISO Transmission Planning BPM - SSR Criteria.....	8
c.	Contingencies.....	9
V.	Study Results.....	9
a.	Branch Results (Appendix A Table 1a).....	9
b.	Voltage Results (Appendix A Table 1b).....	9
VI.	Potential SSR Agreement Cost Allocation.....	10
VII.	Conclusion.....	10
VIII.	Appendices.....	11

## I. INTRODUCTION

Big Rivers Electric Corporation, submitted an Attachment Y-2 “Request for Non-Binding Study Regarding Potential SSR Status”. Unlike the Attachment Y, an Attachment Y-2 Request is for an informational study to evaluate the potential for a unit to be designated as an SSR and does not commit the Market Participant to proceed with plans to Retire or Suspend. This study of the Coleman Generation Units 1, 2 and 3 determined the reliability impacts that would occur if these units were to be removed from service on August 20, 2013 and return to service on January 1, 2015. With Coleman generation unavailable during this period of time, the study will also address the reliability impacts of two scenarios: 1) Century Aluminum ceases operation on August 19, 2013 and 2) Century Aluminum continues normal operations.

**Location:** Hawesville, Kentucky

**Number and type of generating units:** (3) coal fired, steam turbine units

**Plant and unit numbers:** Coleman Unit #1 (150 MW), Unit #2 (138 MW), and Unit #3 (155 MW)

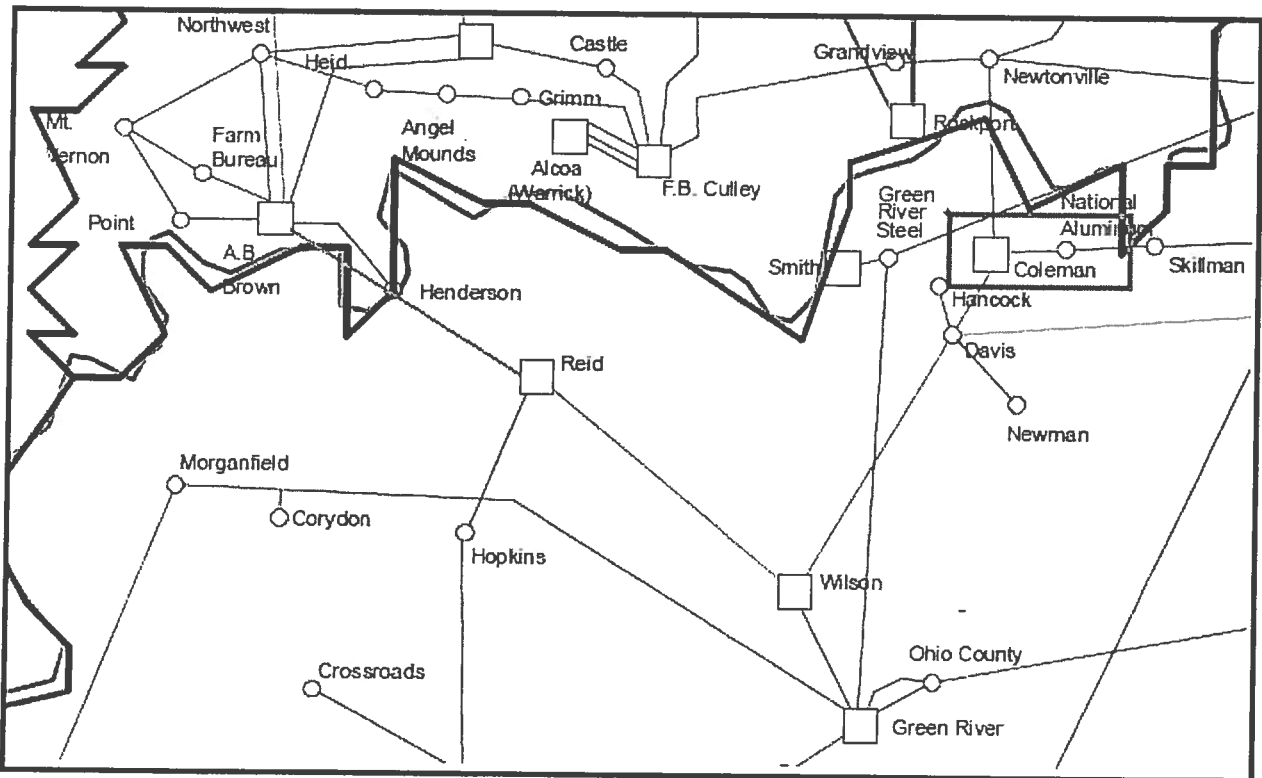


Figure 1: General Location of the Coleman Plant in Northern Kentucky

## II. STUDY OBJECTIVES

Under Section 38.2.7 of MISO's Tariff, SSR procedures maintain system reliability by providing a mechanism for MISO to enter into agreements with Market Participants that own or operate Generation Resources or Synchronous Condenser Units (SCUs) that have requested to either Retire or Suspend, but are required to maintain system reliability.

The principal objective of an Attachment Y-2 study is to determine if the units for which a change in status is requested are necessary for system reliability based on the criteria set forth in the MISO Business Practices Manuals. The study work included monitoring and identifying the steady state thermal/voltage violations on transmission facilities due to the unavailability of the Generation Resource. The relevant MISO Transmission Owner and/or regional reliability criteria were used for monitoring such violations.

## III. MODELS AND ASSUMPTIONS

Corresponding to the anticipated suspension of the Coleman Units 1, 2, & 3 the following power system analysis source models were used for the study:

- 2014 Summer Peak
- 2017 Summer Peak
- 2017 Shoulder

The Attachment Y study models were created following the MISO Transmission Planning Business Practice Manual (BPM-020-r8) Section 6.2.2. This includes creating a set of models from each source model in which the units being studied are at full generation or taken out of service.

### a. Model Assumptions

1. Load Sensitivity to Century Aluminum Plant (485 MW)

### b. Transmission Projects

1. LGEE / KU Matanzas 161 kV Substation The new Matanzas 161 kV Substation has an anticipated in-service date of December 1, 2012. This new substation will be included in the 2014 and 2017 models since the substation will be in-service during the time Coleman Generation is unavailable.

**c. Table of Models**

n	Model	Coleman 1,2,3	Century Aluminum	Contingency Categories
1	2014SP	off	off	B, C1, C2, C5
2	2014SP	off	on	B, C1, C2, C5
3	2014SP	on	off	B, C1, C2, C5
4	2014SP	on	on	B, C1, C2, C5
5	2017SH	off	off	B, C1, C2, C3, C5
6	2017SH	off	on	B, C1, C2, C3, C5
7	2017SH	on	off	B, C1, C2, C3, C5
8	2017SH	on	on	B, C1, C2, C3, C5
9	2017SP	off	off	B, C1, C2, C5
10	2017SP	off	on	B, C1, C2, C5
11	2017SP	on	off	B, C1, C2, C5
12	2017SP	on	on	B, C1, C2, C5

**IV. STUDY CRITERIA AND METHODOLOGY**

Siemens PTI’s Power System Simulator for Engineering (PSS/E) and Managing and Utilizing System Transmission (MUST) were used to perform AC contingency analysis. Contingency analysis is the study of transmission system facility outages. Outages of transmission facilities are applied to a mathematical model of the transmission system in order to calculate the effects on the remainder of the system. The models were solved with automatic control of Load Tap Changers (LTCs), phase shifters, DC taps, switched shunts enabled (regulating), and area interchange disabled. The results are compared to determine if there were any criteria violations due to the change in the status for the unit(s).

**a. Applicable Reliability Planning Criteria**

**MISO Transmission Owners**

AMIL Transmission Planning Criteria applied for the thermal analysis:

- For Category A contingencies, all thermal loadings exceeding 100% of the normal rating for AMIL System
- For Category B and C contingencies, all thermal loadings exceeding 100% of the emergency rating for AMIL System

AMIL Transmission Planning Criteria applied for the voltage analysis:

- For Category A contingencies, all substation voltages less than 95% or above 105%
- For Category B and C contingencies, all substation voltages less than 90% or above 110%



BREC Transmission Planning Criteria applied for the thermal analysis:

- For Category A contingencies, all thermal loadings exceeding 100% of the normal rating for BREC System
- For Category B and C contingencies, all thermal loadings exceeding 100% of the emergency rating for BREC System

BREC Transmission Planning Criteria applied for the voltage analysis:

- For Category A contingencies, all substation voltages less than 95% or above 105%
- For Category B and C contingencies, all substation voltages less than 90% or above 110%

DEI Transmission Planning Criteria applied for the thermal analysis:

- For Category A contingencies, all thermal loadings exceeding 100% of the normal rating for DEI System
- For Category B and C contingencies, all thermal loadings exceeding 100% of the emergency rating for BREC System

DEI Transmission Planning Criteria applied for the voltage analysis:

- For Category A contingencies, >100 kV substation voltages less than 95% or above 105%
- For Category B and C contingencies, >100 kV substation voltages less than 90% or above 105%

HE Transmission Planning Criteria applied for the thermal analysis:

- For Category A contingencies, all thermal loadings exceeding 100% of the normal rating for HE System
- For Category B and C contingencies, all thermal loadings exceeding 100% of the emergency rating for HE System

HE Transmission Planning Criteria applied for the voltage analysis:

- For Category A contingencies, >100 kV substation voltages less than 95% or above 105%
- For Category B and C contingencies, >100 kV substation voltages less than 90% or above 110%

SIGE Transmission Planning Criteria applied for the thermal analysis:

- For Category A contingencies, all thermal loadings exceeding 100% of the normal rating for SIGE System
- For Category B and C contingencies, all thermal loadings exceeding 100% of the emergency rating for SIGE System

SIGE Transmission Planning Criteria applied for the voltage analysis:

- For Category A contingencies, >100 kV substation voltages less than 95% or above 105%
- For Category B and C contingencies, >100 kV substation voltages less than 95% or above 105%

SIPC Transmission Planning Criteria applied for the thermal analysis:

- For Category A contingencies, all thermal loadings exceeding 100% of the normal rating for SIGE System
- For Category B and C contingencies, all thermal loadings exceeding 100% of the emergency rating for SIGE System

SIPC Transmission Planning Criteria applied for the voltage analysis:

- For Category A contingencies, >100 kV substation voltages less than 91% or above 105%
- For Category B and C contingencies, >100 kV substation voltages less than 91% or above 105%

### **Non-MISO Transmission Owners**

LGEE Transmission Planning Criteria applied for the thermal analysis:

- For Category A contingencies, all thermal loadings exceeding 100% of the normal rating for LGEE System
- For Category B and C contingencies, all thermal loadings exceeding 100% of the emergency rating for LGEE System

LGEE Transmission Planning Criteria applied for the voltage analysis:

- For Category A contingencies, >100 kV substation voltages less than 95% or above 105%
- For Category B and C contingencies, >100 kV substation voltages less than 90% or above 110%

TVA Transmission Planning Criteria applied for the thermal analysis:

- For Category A contingencies, all thermal loadings exceeding 100% of the normal rating for TVA System
- For Category B and C contingencies, all thermal loadings exceeding 100% of the emergency rating for TVA System

TVA Transmission Planning Criteria applied for the voltage analysis:

- For Category A contingencies, >100 kV substation voltages less than 95% or above 105%
- For Category B and C contingencies, >100 kV substation voltages less than 90% or above 110%

AECI Transmission Planning Criteria applied for the thermal analysis:

- For Category A contingencies, all thermal loadings exceeding 100% of the normal rating for AECI System
- For Category B and C contingencies, all thermal loadings exceeding 100% of the emergency rating for AECI System

AECI Transmission Planning Criteria applied for the voltage analysis:

- For Category A contingencies, >100 kV substation voltages less than 95% or above 105%
- For Category B and C contingencies, >100 kV substation voltages less than 90% or above 110%

Under category C contingencies, for the valid thermal and voltage violations as specified above, generation re-dispatch, system reconfiguration, and/or load shedding will be considered if applicable.

### **b. MISO Transmission Planning BPM - SSR Criteria**

As specified in MISO BPM-020-r8, the SSR criteria for determining if an identified facility is impacted by the generator change of status will be:

- Under system intact and contingent events, branch thermal violations are only valid if the flow increase on the element in the “after” retirement scenario is equal to or greater than:

- a) 5% of the “to-be-retired” unit(s) MW amount (i.e. 5% Power Transfer Distribution Factor (PTDF)) for a “base” violation compared with the “before” retirement scenario, or
  - b) 3% of the “to-be-retired” unit(s) amount (i.e. 3% Outage Transfer Distribution Factor (OTDF)) for a “contingency” violation compared with the “before” retirement scenario.
- Under system intact and contingent events, high and low voltage violations are only valid if the change in voltage is greater than 1% as compared to the “before” retirement voltage calculation.

**c. Contingencies**

A subset of the MISO Transmission Expansion Plan (MTEP) contingencies in the central region was used for AC contingency analysis. Additional contingencies from TVA, LG&E, and AECI were included in this analysis to provide coverage for events on those adjacent transmission systems.

The following North American Electric Reliability Corporation (NERC) Categories of contingencies were evaluated:

1. Category A when the system is under normal conditions.
2. Category B contingencies resulting in the loss of a single element.
3. Category C contingencies resulting in the loss of two or more (multiple) elements.
4. Maintenance outage condition with forced outage during shoulder load conditions.

## V. STUDY RESULTS

**a. Branch Results (Appendix A Table 1a)**

Table 1a in Appendix A shows contingent conditions causing branch criteria violations without Coleman Units 1 & 2 & 3 and the improvements resulting from the operation of Coleman Units 1 & 2 & 3. Contingent events causing branch violations include NERC Categories B, C1, C2, and C3. While the study scenario with Century Aluminum off does indicate fewer constraints, there remain a few thermal loading issues resulting from Category C contingencies that exist in the MISO Transmission system even with the load removed.

**b. Voltage Results (Appendix A Table 1b)**

Significant voltage criteria violations associated with the suspension of Coleman Units 1, 2, & 3 and continued operation of Century Aluminum were identified when compared to the continued availability of the units. Table 1 in Appendix A shows contingent conditions causing criteria violations without Coleman Units 1, 2, & 3 and the improvements resulting from the operation of Coleman Units 1, 2, & 3. Contingent events causing voltage criteria violations include NERC Categories B, C1, C2, and C3. The acceptable post-contingency voltage range is between 0.92 per unit to 1.07 per unit. Therefore, voltages less than 0.92 or greater than 1.07 per unit are a

criteria violation. If Century Aluminum were to cease operations, with a load of 0 MVA, the voltage issues within the MISO would be eliminated.

## VI. POTENTIAL SSR AGREEMENT COST ALLOCATION

MISO utilizes a load shed methodology to determine the reliability benefits to each MISO Local Balancing Area (LBA) of operation, without the SSR unit(s). Although load shed is not permitted for NERC Category A or B events, this methodology determines the load shed amount needed to relieve all Category B reliability issues and the most severe Category C reliability issues identified, as a proxy for the reliability benefit of the SSR unit operation. The potential SSR Agreement LBA shares that were calculated for this Attachment Y-2 study are included below in Table 2.

**Table 2: Potential SSR Agreement LBA Shares**

<b>LBA</b>	<b>Load Shed (MW)</b>	<b>LBA Share</b>
BREC	1541.84	91.63%
SIGE	76.11	4.52%
AMIL	63.02	3.75%
DEI	1.72	.10%
Total	1682.69	100.00%

## VII. CONCLUSION

The study results indicate that potential reliability issues exist which would require the need for Coleman Units 1, 2 and 3 to enter into an SSR Agreement if a mitigation plan is not developed and implemented prior to the potential unit change of status, in accordance with Section 38.2.7 of the MISO Open Access Transmission, Energy & Operating Reserve Markets Tariff ("Tariff"). In addition to determining if reliability issues result from the suspension, further analysis was performed to identify the areas that are subject to allocation of the SSR costs. The areas identified for the cost allocation are Big Rivers Electric Corporation (BREC), Southern Illinois Gas & Electric (SIGE), Ameren Illinois (AMIL), and Duke Energy Indiana (DEI).

## VIII. APPENDICES

### Appendix A: Steady-State AC Contingency Results

Table 1a: Branch Results

Table 1b: Voltage Results

Table 1a. Results

MISO Coleman Units 1, 2, & 3 Attachment Y-2 Study - Compare Branch Results  
 CONFIDENTIAL / CEH - DO NOT RELEASE

Model	Contingency Description	Limiting Element		Type	Rating	Coleman 1, 2, & 3 OFF			Coleman 1, 2, & 3 ON			Unit Impact			MISO Comments	
		From bus	To bus			CKT	Cont MVA	Base Flow	Loading %	Cont MVA	Base Flow	Loading %	MWoff-MWon	PTDF (> 5%)		OTDF (> 3%)
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	335.0	239.6	100.0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	335.0	239.6	100.0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	335.3	239.6	100.1	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	335.3	239.6	100.1	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248642 07MIDWAY	69 0 248861 07TRY_69	69 0 1	LN	35	35.9	25.6	102.7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248642 07MIDWAY	69 0 248861 07TRY_69	69 0 1	LN	35	35.9	25.6	102.7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248642 07MIDWAY	69 0 248861 07TRY_69	69 0 1	LN	35	35.9	25.6	102.7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	253580 10NTVL16	161 253581 10NTVL13	138 15	TR	176	217.4	91.9	123.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248642 07MIDWAY	69 0 248861 07TRY_69	69 0 1	LN	35	35.9	25.6	102.7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	335.3	239.6	100.1	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	335.3	239.6	100.1	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248642 07MIDWAY	69 0 248861 07TRY_69	69 0 1	LN	35	35.9	25.6	102.7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	491.0	239.6	146.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	324084 21RTLE CRK	769 0 324562 2HARS57	69 0 1	LN	35	37.8	13.3	108.0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	324543 2FOUR M	69 0 324686 2PINEVI	69 0 1	LN	32	33.6	15.4	105.0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	249631 08THRNTN	230 991964 THORNTWN	1 00 1	TR	69.9	87.3	48.7	125.0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250310 08BRINGH	69 0 250451 08FLORAJ	69 0 1	LN	34	37.4	3.0	110.0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250321 08BURROW	69 0 250790 08ROCKFL	69 0 1	LN	34	47.6	8.1	139.9	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250441 08FWSTJ	69 0 250457 08FRAB B	69 0 1	LN	100.3	112.0	57.8	111.7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250451 08FLORAJ	69 0 250790 08ROCKFL	69 0 1	LN	34	43.6	4.5	128.2	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250457 08FRAB B	69 0 250683 08MIDFLO	69 0 1	LN	45	87.1	31.3	193.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250608 08KOK HP	69 0 250610 08KOHAI	69 0 1	LN	45	129.0	10.3	286.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250608 08KOK HP	69 0 250614 08KOSE	69 0 1	LN	65	69.7	44.0	107.2	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250610 08KOHAI	69 0 250798 08RUSIAV	69 0 1	LN	45	129.5	10.3	287.9	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250625 08LAF	69 0 250948 08VWMDNI	69 0 1	LN	45	66.9	18.0	148.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250683 08MIDFLO	69 0 250795 08ROSSVL	69 0 1	LN	44	52.7	6.1	119.8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250683 08MIDFLO	69 0 250798 08RUSIAV	69 0 1	LN	44	150.2	9.6	341.3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250795 08ROSSVL	69 0 250948 08VWMDNI	69 0 1	LN	45	65.9	17.0	146.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	250847 08THRNTW	69 0 991964 THORNTWN	1 00 1	TR	69.9	84.1	47.2	120.4	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	342.6	248.6	102.3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	342.6	248.7	102.3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	354.5	248.6	105.8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	354.5	248.7	105.8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	497.6	248.6	148.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	497.7	248.7	148.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248642 07MIDWAY	69 0 248861 07TRY_69	69 0 1	LN	35	35.8	24.9	102.3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	497.6	248.6	148.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	497.7	248.7	148.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248642 07MIDWAY	69 0 248861 07TRY_69	69 0 1	LN	35	35.8	24.9	102.3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	497.6	248.6	148.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	497.7	248.7	148.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248642 07MIDWAY	69 0 248861 07TRY_69	69 0 1	LN	35	35.8	24.9	102.3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	497.6	248.6	148.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	497.7	248.7	148.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248642 07MIDWAY	69 0 248861 07TRY_69	69 0 1	LN	35	35.8	24.9	102.3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248807 07DOGWOOD	69 0 248808 07MAUKPT	69 0 1	LN	25	27.5	26.5	109.9	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248807 07DOGWOOD	69 0 248808 07MAUKPT	69 0 1	LN	25	27.5	26.5	109.9	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	354.5	248.6	105.8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	354.5	248.7	105.8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	161 1	LN	335	497.6	248.6	148.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 SCOLEMAN	161 1	LN	335	497.7	248.7	148.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension

Table 1a: Branch Results

MISO Coleman Units 1, 2, & 3 Attachment Y-2 Study - Compare Branch Results  
 CONFIDENTIAL / CEII - DO NOT RELEASE

Model	Contingency Description	Limiting Element		Coleman 1, 2, & 3 OFF			Coleman 1, 2, & 3 ON			Unit Impact			MISO Comments		
		From bus	To bus	Type	Rating	Cont MVA	Base Flow	Loading %	Cont MVA	Base Flow	Loading %	MW off		PTDF (> 5%)	OTDF (> 3%)
2017SP	[REDACTED CONTINGENCY]	248642 07MIDWAY	69.0 248861 07TRY_69	LN	35	35.8	24.9	102.3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	362186 2WATAUGA HP	69.0 362187 2ELIZABETHTN69.0	LN	58.4	62.7	61.4	107.3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248807 07DOGWOOD	69.0 248808 07MAUKPT	LN	25	28.2	27.2	112.8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248807 07DOGWOOD	69.0 248808 07MAUKPT	LN	25	28.2	27.2	112.8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	362124 2LOVELLN	69.0 362496 2WATTROAD TN69.0	LN	58.4	62.2	61.2	106.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	362124 2LOVELLN	69.0 362496 2WATTROAD TN69.0	LN	58.4	60.0	61.2	102.8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	362124 2LOVELLN	69.0 362496 2WATTROAD TN69.0	LN	58.4	62.2	61.2	106.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	347946 4PANA	138 348788 4SCHRAMCY TP 138	LN	202	232.8	38.0	115.2	219.4	35.0	108.6	13.4	3.0248307	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	348067 7RAMSEY	345 348068 4RAMSEY CIPS 138	TR	382	388.9	94.9	101.8	371.0	95.6	97.1	17.9	4.0406321	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	348067 7RAMSEY	345 348068 4RAMSEY CIPS 138	TR	382	388.3	94.9	101.7	370.5	95.6	97.0	17.8	4.0180587	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 253580 10NTVL16	LN	335	434.2	133.5	129.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	248435 07NWTVL1	161 340552 5COLEMAN	LN	335	434.4	133.6	129.7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	248642 07MIDWAY	69.0 248861 07TRY_69	LN	35	37.1	24.6	106.0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	324578 2HRDSTB	69.0 324769 2WALKRUK	LN	28	29.0	11.0	103.4	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	324628 2MARI S	69.0 324629 2MARONKU	LN	28	28.4	19.6	101.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	362124 2LOVELLN	69.0 362496 2WATTROAD TN69.0	LN	58.4	61.6	62.7	105.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	325077 5COLEMAN TAP	161 325078 5PADUCAH PRI 161	LN	245	251.4	181.2	102.6	236.0	172.3	96.3	15.4	3.476298	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	340618 5LVING	161 360016 5MARSHALL KY 161	LN	223	238.1	63.0	106.8	214.2	56.1	96.1	23.9	5.3950339	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	340618 5LVING	161 360326 5BARKLEY HP 161	LN	223	281.2	92.6	126.1	250.2	79.5	112.2	31.0	6.9977427	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	362124 2LOVELLN	69.0 362496 2WATTROAD TN69.0	LN	58.4	61.7	62.7	105.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	362124 2LOVELLN	69.0 362496 2WATTROAD TN69.0	LN	58.4	61.7	62.7	105.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	362124 2LOVELLN	69.0 362496 2WATTROAD TN69.0	LN	58.4	61.7	62.7	105.6	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	325077 5COLEMAN TAP	161 325078 5PADUCAH PRI 161	LN	245	248.9	181.2	101.6	233.5	172.3	95.3	15.4	3.476298	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	340618 5LVING	161 360016 5MARSHALL KY 161	LN	223	232.5	63.0	104.3	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	340618 5LVING	161 360326 5BARKLEY HP 161	LN	223	274.7	92.6	123.2	243.6	79.5	109.2	31.1	7.020916	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	362186 2WATAUGA HP	69.0 362187 2ELIZABETHTN69.0	LN	58.4	60.6	61.6	103.8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	348774 7BALDWIN	345 348776 7TURKEY HILL 345	LN	956	1177.0	693.4	123.1	1161.5	692.2	121.5	15.5	3.4988713	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	348728 4W MT VERN W	138 348827 7W MT VERNON 345	TR	448	465.3	250.7	103.9	451.7	249.1	100.8	13.6	3.0699774	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	347016 4EFFGHMHW	138 347024 4EFFINGHM 138	LN	263	293.2	60.8	111.5	279.5	60.2	106.3	13.7	3.0925508	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	347016 4EFFGHMHW	138 347024 4EFFINGHM 138	LN	263	293.5	60.8	111.6	279.7	60.2	106.4	13.8	3.1151242	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	347946 4PANA	138 348788 4SCHRAMCY TP 138	LN	202	236.0	39.5	116.9	220.2	35.8	109.0	15.8	3.5665914	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	348730 4MIDWAY E	138 348788 4SCHRAMCY TP 138	LN	202	266.3	73.5	131.8	251.0	70.2	124.2	15.3	3.4537246	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	347946 4PANA	138 348068 4RAMSEY CIPS 138	LN	264	266.4	44.5	100.9	251.3	44.8	95.2	15.1	3.4085779	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	348067 7RAMSEY	345 348068 4RAMSEY CIPS 138	TR	382	390.9	95.5	102.3	370.2	96.0	96.9	20.7	4.6726862	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	347946 4PANA	138 348068 4RAMSEY CIPS 138	LN	264	266.3	44.5	100.9	251.2	44.8	95.1	15.1	3.4085779	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	348067 7RAMSEY	345 348068 4RAMSEY CIPS 138	TR	382	390.4	95.5	102.2	369.6	96.0	96.8	20.8	4.6952596	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	348774 7BALDWIN	345 348776 7TURKEY HILL 345	LN	956	1054.9	693.4	110.3	1039.9	692.2	108.8	15.0	3.3860045	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	348774 7BALDWIN	345 348776 7TURKEY HILL 345	TR	448	470.3	293.8	105.0	456.3	287.1	101.8	14.0	3.1602709	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	350204 4CAMPBELLHIL	138 350205 4CAMPBELLHIL 161	TR	224	323.8	25.8	144.5	295.9	22.6	132.1	27.9	6.2979684	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	300061 5BOONE	161 300493 2BOONE	LN	112	126.0	92.7	112.5	111.6	92.8	99.7	14.4	3.2505643	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	324512 2EDDY P	69.0 324693 2PRINCE	TR	64	67.8	32.1	105.0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	324512 2EDDY P	69.0 362916 2KY DAM	LN	70	71.5	35.8	102.1	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	360103 5PHIPPS B NP	161 360705 5JSEV C34 TP 161	LN	472.1	492.1	319.4	104.2	478.7	314.4	101.4	13.4	3.0248307	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	362124 2LOVELLN	69.0 362496 2WATTROAD TN69.0	LN	58.4	61.6	62.7	105.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	340618 5LVING	161 360016 5MARSHALL KY 161	LN	223	224.2	59.3	100.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	340618 5LVING	161 360326 5BARKLEY HP 161	LN	223	261.8	83.9	117.4	230.1	70.6	103.2	31.7	7.1557562	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	362124 2LOVELLN	69.0 362496 2WATTROAD TN69.0	LN	58.4	63.9	62.7	109.5	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	362124 2LOVELLN	69.0 362496 2WATTROAD TN69.0	LN	58.4	61.7	62.7	105.7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SH	[REDACTED CONTINGENCY]	340618 5LVING	161 360326 5BARKLEY HP 161	LN	223	255.3	83.9	114.5	223.6	70.6	100.3	31.7	7.1557562	Violation made worse by suspension	
2017SH	[REDACTED CONTINGENCY]	362124 2LOVELLN	69.0 362496 2WATTROAD TN69.0	LN	58.4	61.7	62.7	105.7	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension





Table 1b Page Results

MISO Coleman Units 1, 2, & 3 Attachment Y-2 Study - Compare Voltage Results  
 CONFIDENTIAL / CEII - DO NOT RELEASE

Model	Contingency Description	Limiting Element							Coleman 1, 2, & 3 OFF			Coleman 1, 2, & 3 ON			Unit Impact	MISO Comments
		Bus #	Bus Name	KV	Area	Zone	Low Limit	Upp Limit	Cont Volt	Base Volt	Viol	Cont Volt	Base Volt	Viol	Voff-Von (>0.01)	
2014SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.9081	0.9855	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340564	5NATAL	161	314	1314	0.92	1.05	0.8236	0.97	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.8959	0.9743	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340621	5COLEEHV	161	314	1314	0.92	1.05	0.8172	0.9676	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340566	5MEADE	161	314	1314	0.92	1.05	0.8775	0.9851	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340616	5N HARD	161	314	1314	0.92	1.05	0.8616	0.9957	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340566	5MEADE	161	314	1314	0.92	1.05	0.8775	0.9851	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340616	5N.HARD	161	314	1314	0.92	1.05	0.8616	0.9957	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.9031	0.9855	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.8907	0.9743	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248435	07NWTVL1	161	207	1207	0.9	1.1	0.8516	0.9693	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	248887	07NWTNVL	161	207	1207	0.9	1.1	0.873	0.9793	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340552	5COLEMAN	161	314	1314	0.92	1.05	0.8125	0.9607	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340557	5SHANCO	161	314	1314	0.92	1.05	0.8214	0.9669	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340558	5SKILMAN	161	314	1314	0.92	1.05	0.8487	0.9798	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.9081	0.9855	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340563	7COLEMAN	345	314	1314	0.92	1.05	0.8171	0.9928	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340564	5NATAL	161	314	1314	0.92	1.05	0.8235	0.97	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.8958	0.9743	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	340621	5COLEEHV	161	314	1314	0.92	1.05	0.8171	0.9676	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	324139	5DORCHST	161	363	379	0.9	1.1	0.8832	1.0034	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	324149	5IMBODEN	161	363	379	0.9	1.1	0.8724	1.0025	L	1.1048	1.003	H	-0.232	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	324157	5POCK N	161	363	379	0.9	1.1	0.8677	1.0048	L	1.111	1.0053	H	-0.243	Violation caused by suspension
2014SP	[REDACTED CONTINGENCY]	324158	5POCKET	161	363	379	0.9	1.1	0.8677	1.0047	L	1.111	1.0052	H	-0.243	Violation caused by suspension
2014SP	Centlof	324310	4SPENC	138	363	380	0.9	1.1	0.8823	0.9699	L	0.8718	0.9699	L	0.011	Pre-existing
2017SP	[REDACTED CONTINGENCY]	248435	07NWTVL1	161	207	1207	0.9	1.1	0.8482	0.9696	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248887	07NWTNVL	161	207	1207	0.9	1.1	0.8697	0.979	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340552	5COLEMAN	161	314	1314	0.92	1.05	0.8085	0.9602	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340557	5SHANCO	161	314	1314	0.92	1.05	0.8173	0.9662	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340558	5SKILMAN	161	314	1314	0.92	1.05	0.8454	0.9791	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.9049	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340564	5NATAL	161	314	1314	0.92	1.05	0.8197	0.9694	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.8928	0.973	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340621	5COLEEHV	161	314	1314	0.92	1.05	0.8132	0.967	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435	07NWTVL1	161	207	1207	0.9	1.1	0.8482	0.9696	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248887	07NWTNVL	161	207	1207	0.9	1.1	0.8697	0.979	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340552	5COLEMAN	161	314	1314	0.92	1.05	0.8085	0.9602	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340557	5SHANCO	161	314	1314	0.92	1.05	0.8173	0.9662	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340558	5SKILMAN	161	314	1314	0.92	1.05	0.8454	0.9791	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.9049	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340563	7COLEMAN	345	314	1314	0.92	1.05	0.8132	0.9921	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340564	5NATAL	161	314	1314	0.92	1.05	0.8197	0.9694	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.8928	0.973	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340621	5COLEEHV	161	314	1314	0.92	1.05	0.8132	0.967	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	248435	07NWTVL1	161	207	1207	0.9	1.1	0.8482	0.9696	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	253581	10NTVL13	138	210	1210	0.95	1.05	0.9354	0.9903	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340552	5COLEMAN	161	314	1314	0.92	1.05	0.8085	0.9602	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340557	5SHANCO	161	314	1314	0.92	1.05	0.8173	0.9662	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension
2017SP	[REDACTED CONTINGENCY]	340558	5SKILMAN	161	314	1314	0.92	1.05	0.8454	0.9791	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension

Table 11 Voltage Results

MISO Coleman Units 1, 2, & 3 Attachment Y-2 Study - Compare Voltage Results  
 CONFIDENTIAL / CEII - DO NOT RELEASE

Model	Contingency Description	Limiting Element								Coleman 1, 2, & 3 OFF			Coleman 1, 2, & 3 ON			Unit Impact	MISO Comments
		Bus #	Bus Name	KV	Area	Zone	Low Limit	Upp Limit	Cont Volt	Base Volt	Viol	Cont Volt	Base Volt	Viol	Voff-Von (>0.01)		
2017SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.9049	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340563	7COLEMAN	345	314	1314	0.92	1.05	0.8132	0.9921	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340564	5NATAL	161	314	1314	0.92	1.05	0.8197	0.9694	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.8928	0.973	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340621	5COLEEHV	161	314	1314	0.92	1.05	0.8132	0.967	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.8924	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.88	0.973	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.8923	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.88	0.973	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	253580	10NTVL16	161	210	1210	0.95	1.05	0.9349	0.9697	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.8923	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.88	0.973	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.8923	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.8923	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.8923	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.88	0.973	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	248431	07BRISTW	161	207	1207	0.9	1.1	0.8436	1.0012	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	248435	07NWTVL1	161	207	1207	0.9	1.1	0.7285	0.9696	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	248865	07TRY161	161	207	1207	0.9	1.1	0.7892	0.9896	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	248887	07NWTNVL	161	207	1207	0.9	1.1	0.7568	0.979	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340552	5COLEMAN	161	314	1314	0.92	1.05	0.6327	0.9602	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	248435	07NWTVL1	161	207	1207	0.9	1.1	0.8482	0.9696	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	248887	07NWTNVL	161	207	1207	0.9	1.1	0.8697	0.979	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340552	5COLEMAN	161	314	1314	0.92	1.05	0.8085	0.9602	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340557	5HANCO	161	314	1314	0.92	1.05	0.8174	0.9662	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340558	5SKILMAN	161	314	1314	0.92	1.05	0.8455	0.9791	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.9049	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340564	5NATAL	161	314	1314	0.92	1.05	0.8198	0.9694	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.8928	0.973	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340621	5COLEEHV	161	314	1314	0.92	1.05	0.8132	0.967	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340566	5MEADE	161	314	1314	0.92	1.05	0.8653	0.9846	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340616	5N.HARD	161	314	1314	0.92	1.05	0.8484	0.9956	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	253580	10NTVL16	161	210	1210	0.95	1.05	0.9367	0.9697	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	253580	10NTVL16	161	210	1210	0.95	1.05	0.9367	0.9697	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340566	5MEADE	161	314	1314	0.92	1.05	0.8654	0.9846	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340616	5N.HARD	161	314	1314	0.92	1.05	0.8484	0.9956	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.8952	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.8829	0.973	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	248435	07NWTVL1	161	207	1207	0.9	1.1	0.8482	0.9696	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	248887	07NWTNVL	161	207	1207	0.9	1.1	0.8697	0.979	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340552	5COLEMAN	161	314	1314	0.92	1.05	0.8085	0.9602	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340557	5HANCO	161	314	1314	0.92	1.05	0.8173	0.9662	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340558	5SKILMAN	161	314	1314	0.92	1.05	0.8454	0.9791	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.9049	0.984	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340563	7COLEMAN	345	314	1314	0.92	1.05	0.8132	0.9921	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340564	5NATAL	161	314	1314	0.92	1.05	0.8197	0.9694	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.8928	0.973	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	340621	5COLEEHV	161	314	1314	0.92	1.05	0.8132	0.967	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SP	[REDACTED CONTINGENCY]	360430	5HARRIMAN TN	161	347	1368	0.9	1.1	0.7649	1.0426	L	0.7822	1.0427	L	-0.017	Pre-existing	

Table 1 - Voltage Results

MISO Coleman Units 1, 2, & 3 Attachment Y-2 Study - Compare Voltage Results  
 CONFIDENTIAL / CEII - DO NOT RELEASE

Model	Contingency Description	Limiting Element								Coleman 1, 2, & 3 OFF			Coleman 1,2, & 3 ON			Unit Impact Voff-Von (>-0.01)	MISO Comments
		Bus #	Bus Name	KV	Area	Zone	Low Limit	Upp Limit	Cont Volt	Base Volt	Viol	Cont Volt	Base Volt	Viol			
2017SP	[REDACTED CONTINGENCY]	361099	5BLAIR RD TP	161	347	1368	0.9	1.1	0.7641	1.0477	L	0.7815	1.0477	L	-0.017	Pre-existing	
2017SP	[REDACTED CONTINGENCY]	361146	5BLAIR RD TN	161	347	1368	0.9	1.1	0.7638	1.0474	L	0.7812	1.0474	L	-0.017	Pre-existing	
2017SP	[REDACTED CONTINGENCY]	360430	5HARRIMAN TN	161	347	1368	0.9	1.1	0.6888	1.0426	L	0.7309	1.0427	L	-0.042	Pre-existing	
2017SP	[REDACTED CONTINGENCY]	361099	5BLAIR RD TP	161	347	1368	0.9	1.1	0.6889	1.0477	L	0.7311	1.0477	L	-0.042	Pre-existing	
2017SP	[REDACTED CONTINGENCY]	361146	5BLAIR RD TN	161	347	1368	0.9	1.1	0.6885	1.0474	L	0.7307	1.0474	L	-0.042	Pre-existing	
2017SP	[REDACTED CONTINGENCY]	361383	5W OAK RIDGT	161	347	1368	0.9	1.1	0.689	1.0479	L	0.7312	1.0479	L	-0.042	Pre-existing	
2017SP	[REDACTED CONTINGENCY]	360430	5HARRIMAN TN	161	347	1368	0.9	1.1	0.6979	1.0426	L	0.7309	1.0427	L	-0.033	Pre-existing	
2017SP	[REDACTED CONTINGENCY]	360692	5ROANE B#2	161	347	1368	0.9	1.1	0.6981	1.0479	L	0.7312	1.0479	L	-0.033	Pre-existing	
2017SP	[REDACTED CONTINGENCY]	361099	5BLAIR RD TP	161	347	1368	0.9	1.1	0.6981	1.0477	L	0.7311	1.0477	L	-0.033	Pre-existing	
2017SP	[REDACTED CONTINGENCY]	361146	5BLAIR RD TN	161	347	1368	0.9	1.1	0.6976	1.0474	L	0.7307	1.0474	L	-0.033	Pre-existing	
2017SP	[REDACTED CONTINGENCY]	361383	5W OAK RIDGT	161	347	1368	0.9	1.1	0.6981	1.0479	L	0.7312	1.0479	L	-0.033	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	360430	5HARRIMAN TN	161	347	1368	0.9	1.1	0.7308	1.0426	L	0.6782	1.0426	L	0.053	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	361099	5BLAIR RD TP	161	347	1368	0.9	1.1	0.731	1.0477	L	0.6784	1.0477	L	0.053	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	361146	5BLAIR RD TN	161	347	1368	0.9	1.1	0.7306	1.0474	L	0.6779	1.0474	L	0.053	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	361383	5W OAK RIDGT	161	347	1368	0.9	1.1	0.731	1.0479	L	0.6784	1.0479	L	0.053	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	360430	5HARRIMAN TN	161	347	1368	0.9	1.1	0.7556	1.0426	L	0.7821	1.0426	L	-0.027	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	361099	5BLAIR RD TP	161	347	1368	0.9	1.1	0.7548	1.0477	L	0.7814	1.0477	L	-0.027	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	361146	5BLAIR RD TN	161	347	1368	0.9	1.1	0.7544	1.0474	L	0.781	1.0474	L	-0.027	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	360430	5HARRIMAN TN	161	347	1368	0.9	1.1	0.7308	1.0426	L	0.6782	1.0426	L	0.053	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	361099	5BLAIR RD TP	161	347	1368	0.9	1.1	0.731	1.0477	L	0.6784	1.0477	L	0.053	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	361146	5BLAIR RD TN	161	347	1368	0.9	1.1	0.7306	1.0474	L	0.6779	1.0474	L	0.053	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	361383	5W OAK RIDGT	161	347	1368	0.9	1.1	0.731	1.0479	L	0.6784	1.0479	L	0.053	Pre-existing	
2017SPCentoff	[REDACTED CONTINGENCY]	361364	5WEAVER GA	161	347	1367	0.9	1.1	0.5784	1.0104	L	0.5537	1.0104	L	0.025	Pre-existing	
2017SH	[REDACTED CONTINGENCY]	340566	5MEADE	161	314	1314	0.92	1.05	0.9011	0.9887	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	340616	5N.HARD	161	314	1314	0.92	1.05	0.8889	0.998	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	248435	07NWTVL1	161	207	1207	0.9	1.1	0.8438	0.9768	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	248365	07TRY161	161	207	1207	0.9	1.1	0.8832	0.9902	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	248337	07NWTNVL	161	207	1207	0.9	1.1	0.8622	0.9831	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	340552	5COLEMAN	161	314	1314	0.92	1.05	0.8062	0.9699	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	340557	5HANCO	161	314	1314	0.92	1.05	0.8109	0.9696	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	340558	5SKILMAN	161	314	1314	0.92	1.05	0.8386	0.9824	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	340559	5DAVIS	161	314	1314	0.92	1.05	0.9048	0.9902	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	340563	7COLEMAN	345	314	1314	0.92	1.05	0.8062	0.9931	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	340564	5NATAL	161	314	1314	0.92	1.05	0.8128	0.9724	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	340565	5NEWMAN	161	314	1314	0.92	1.05	0.8933	0.9798	L	#N/A	#N/A	#N/A	#N/A	Violation caused by suspension	
2017SH	[REDACTED CONTINGENCY]	360430	5HARRIMAN TN	161	347	1368	0.9	1.1	0.757	1.0422	L	0.7804	1.0424	L	-0.023	Pre-existing	
2017SH	[REDACTED CONTINGENCY]	361099	5BLAIR RD TP	161	347	1368	0.9	1.1	0.7562	1.0473	L	0.7797	1.0474	L	-0.024	Pre-existing	
2017SH	[REDACTED CONTINGENCY]	361146	5BLAIR RD TN	161	347	1368	0.9	1.1	0.7558	1.047	L	0.7793	1.0472	L	-0.024	Pre-existing	
2017SH	[REDACTED CONTINGENCY]	360430	5HARRIMAN TN	161	347	1368	0.9	1.1	0.757	1.0422	L	0.7803	1.0424	L	-0.023	Pre-existing	
2017SH	[REDACTED CONTINGENCY]	361099	5BLAIR RD TP	161	347	1368	0.9	1.1	0.7562	1.0473	L	0.7796	1.0474	L	-0.023	Pre-existing	
2017SH	[REDACTED CONTINGENCY]	361146	5BLAIR RD TN	161	347	1368	0.9	1.1	0.7558	1.047	L	0.7793	1.0472	L	-0.024	Pre-existing	
2017SHCentoff	[REDACTED CONTINGENCY]	324310	4SPENC	138	363	380	0.9	1.1	0.8782	0.9682	L	0.8646	0.9682	L	0.014	Pre-existing	
2017SHCentoff	[REDACTED CONTINGENCY]	360430	5HARRIMAN TN	161	347	1368	0.9	1.1	0.757	1.0422	L	0.7803	1.0423	L	-0.023	Pre-existing	
2017SHCentoff	[REDACTED CONTINGENCY]	361099	5BLAIR RD TP	161	347	1368	0.9	1.1	0.7562	1.0473	L	0.7796	1.0474	L	-0.023	Pre-existing	
2017SHCentoff	[REDACTED CONTINGENCY]	361146	5BLAIR RD TN	161	347	1368	0.9	1.1	0.7558	1.047	L	0.7793	1.0471	L	-0.024	Pre-existing	
2017SHCentoff	[REDACTED CONTINGENCY]	360033	8UNION MS	500	347	1356	0.9	1.1	0.8606	1.0475	L	0.8793	1.0476	L	-0.019	Pre-existing	
2017SHCentoff	[REDACTED CONTINGENCY]	360430	5HARRIMAN TN	161	347	1368	0.9	1.1	0.757	1.0422	L	0.7803	1.0423	L	-0.023	Pre-existing	
2017SHCentoff	[REDACTED CONTINGENCY]	361099	5BLAIR RD TP	161	347	1368	0.9	1.1	0.7562	1.0473	L	0.7796	1.0474	L	-0.023	Pre-existing	
2017SHCentoff	[REDACTED CONTINGENCY]	361146	5BLAIR RD TN	161	347	1368	0.9	1.1	0.7558	1.047	L	0.7793	1.0471	L	-0.024	Pre-existing	

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

1   Item 3)       *Refer to page 5 lines 12-17 of Mr. Berry's Rebuttal Testimony in Case No.*  
2   *2012-00535 wherein he provides three reasons why it is appropriate for Big Rivers to idle*  
3   *Coleman Station, one of which is that Coleman has higher fuel costs than other Big Rivers*  
4   *units.*

5               a.   *If one or more of the Coleman units are designated as SSRs, then how*  
6                *will this affect the fuel costs included in and recoverable from customers*  
7                *through the Company's FAC?*

8               b.   *Please provide a quantification of the effect on the fuel costs included in*  
9                *the Company's FAC and recoverable from customers if one or more of*  
10              *the Coleman units are designated as SSRs for the entirety of the test year*  
11              *in Case No. 2012-00535.*

12              c.   *Please explain how the MISO make whole payments compensate Big*  
13              *Rivers for these increased fuel costs and whether the compensation*  
14              *reflects dollar for dollar recovery.*

15              d.   *If one or more of the Coleman units are designated as SSRs, then how*  
16              *will this affect the environmental consumables included in and*  
17              *recoverable from customers through the Company's environmental*  
18              *surcharge rider?*

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1           e.   *Please provide a quantification of the effect on the environmental*  
2                    *consumables included in the Company's environmental surcharge rider*  
3                    *and recoverable from customers if one or more of the Coleman units are*  
4                    *designated as SSRs for the entirety of the test year in Case No. 2012-*  
5                    *00535.*

6  
7   **Response)**

- 8           a.   If one or more of the Coleman units are designated as SSR, the fuel costs  
9                    will be recovered through the SSR process and will not be included in Big  
10                  Rivers FAC filings.
- 11          b.   All variable operating costs are reimbursed under the SSR agreement.  
12                    *See*, the MISO tariff section 38.2.7. The fuel costs will not be included in  
13                  Big Rivers' FAC filings.
- 14          c.   Big Rivers' understanding is that all actual variable cost, (fuel, reagent and  
15                    disposal) will be recovered under the SSR agreement. Please refer to  
16                  section 38.2.7 of the MISO tariff.
- 17          d.   If one or more of the Coleman units are designated as SSR, the  
18                    environmental consumable costs will be recovered through the SSR

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 process, and will not be included in Big Rivers' environmental surcharge  
2 rider.

3 e. Big Rivers' understanding is that all actual variable cost, (fuel, reagent and  
4 disposal) will be recovered under the SSR agreement. Please refer to  
5 section 38.2.7 of the MISO tariff. Please see also, the response to subpart  
6 (d), above.

7

8 **Witness)** Robert W. Berry

9

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1    Item 4)        *Refer to page 5 lines 12-17 of Mr. Berry's Rebuttal Testimony in Case No.*  
2    *2012-00535 wherein he provides three reasons why it is appropriate for Big Rivers to idle*  
3    *Coleman Station, one of which is that Coleman has the least amount of pollution control*  
4    *equipment installed.*

5                    *a.   Please explain why this is a reason to idle Coleman Station and how this*  
6                    *affects the decision to idle Coleman Station.*

7                    *b.   If Big Rivers idles one or more of the Coleman units, does Big Rivers*  
8                    *plan to defer the installation of any of the pollution control equipment*  
9                    *previously approved by the Commission for recover through the*  
10                    *environmental surcharge rider? If it does not plan to do so, then please*  
11                    *explain why it should not defer these capital expenditures unless and*  
12                    *until the unit is needed for service at some later date in the future.*

13

14    **Response)**

15                    a.   During Big Rivers' evaluation to determine which unit (Coleman or  
16                    Wilson) to idle, it considered both current and future environmental  
17                    regulations. The cost to retrofit Coleman to comply with MATS is  
18                    approximately three times the cost for Wilson to comply with MATS.

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1                   Likewise, Wilson is compliant with both the proposed Coal Combustion  
2                   Residual (CCR) regulation and the proposed 316 (a) and (b) regulation,  
3                   whereas Coleman will potentially require capital investments to comply  
4                   with each of these proposed regulations.

5                   b.   At this time, if Big Rivers idles one or more of the Coleman units it will  
6                   not install the MATS equipment on the idled units unless the SSR extends  
7                   beyond June 1, 2014. The MATS equipment will be installed prior to  
8                   restart after April of 2015, if and when the economics support restart of  
9                   the unit.

10  
11  
12  
13

**Witness)**     Robert W. Berry



**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1    **Item 5)**        *Refer to page 5 lines 18-22 of Mr. Berry's Rebuttal Testimony in Case No.*  
2    *2012-00535 wherein he states that whether Coleman is idled or Big Rivers is required to*  
3    *operate Coleman as an SSR, "it will not cause a meaningful financial impact on the rate*  
4    *adjustment Big Rivers seeks in this proceeding." Please describe and provide a copy of all*  
5    *analyses that supports this statement.*

6  
7    **Response)**    As stated in Section V of my Rebuttal Testimony, pages 17 through 20, the rate  
8    adjustment requested in case No. 2012-00535 is based on Wilson being idled and Coleman  
9    operating. Whether Coleman is idled or operating under an SSR, the financial impact for Big  
10   Rivers is substantially the same, so the choice will not have a material effect on the requested  
11   rate adjustment. The fixed operating costs savings associated with idling Coleman is  
12   approximately \$90,000 greater than the fixed operating costs savings included in the requested  
13   rate adjustment.

14                I also testified during the evidentiary hearing on July 2, 2013, that the proposed  
15   transaction has the potential to impact the requested rate adjustment depending on whether or  
16   not a SSR is required of the Coleman plant. If a SSR is required then the severance costs  
17   requested in Case No. 2012-00535 will be deferred until the SSR terminates. Also if Century  
18   operates at the Base Load amount, Big Rivers will receive transmission revenue from Century.

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 In either scenario, it is Big Rivers' intention to pass along to its Members any benefit above  
2 Big Rivers' reasonable margins resulting from the Century transaction. Since the two  
3 scenarios are uncertain and difficult to determine, no formal analysis has been performed.

4

5

6 **Witness)** Robert W. Berry

7

8

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1   Item 6)       *Refer to page 18 lines 13-16 of Mr. Berry's Rebuttal Testimony in Case No.*  
2   *2012-00535 wherein he states that "[u]nder the SSR status, MISO retains the revenue from*  
3   *the Coleman generation to help offset the operation cost so that, essentially, Coleman will*  
4   *not be part of Big Rivers' portfolio."*

5           a.   *Please explain how it is that MISO retains the revenue from the*  
6                *Coleman generation.*

7           b.   *Please describe how the revenue is quantified, under what markets the*  
8                *revenue is obtained, and how that is reflected in the MISO make whole*  
9                *payments to Big Rivers.*

10  
11   **Response)**

12           a.   While Coleman is designated by MISO as an SSR unit, Big Rivers will not  
13                receive revenues related to negotiated or market prices for generation  
14                produced from Coleman. Instead, MISO will dispatch the unit as needed  
15                to satisfy reliability needs. Pursuant to section 38.2.7(h)(ii) of the MISO  
16                Tariff, Big Rivers will receive compensation from MISO based on Big  
17                Rivers' going forward costs of operating Coleman. Any revenue that is  
18                generated by the unit in the day-ahead and real-time market is treated as

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1                   an offset to the SSR costs that are recovered from load, as discussed to (b),  
2                   below.

3                   b. Revenue can be quantified as payments for resource adequacy and  
4                   revenues from energy market transactions. MISO's *pro forma* SSR  
5                   agreement provides that MISO will conduct an annual true-up, or make-  
6                   whole payment, to match market and other revenues with the SSR unit's  
7                   annual revenue requirements, which are based on its costs of operation.  
8                   Through its market settlement process, MISO will issue make-whole  
9                   payments for hours in which the applicable market-clearing price for the  
10                  SSR unit is less than its applicable cost-based SSR payment, and will debit  
11                  the settlement statements for each hour in which the applicable market-  
12                  clearing price is above the applicable SSR payment.

13  
14

15   **Witness)**     Robert W. Berry

16

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

- 1 Item 7) *Refer to page 19 lines 17-22 of Mr. Berry's Rebuttal Testimony in Case No.*  
2 *2012-00535 wherein he states that the Commission should address the costs and revenues*  
3 *related to Century in Case No. 2013-00221. Mr. Berry further states that "Century has*  
4 *agreed to pay Big Rivers for any additional out-of-pocket costs it incurs or commits to in*  
5 *connection with the Century Transaction".*
- 6 a. *Please list and describe each of the costs that Century has agreed to pay*  
7 *Big Rivers and the revenues that Century will provide Big Rivers.*
- 8 b. *Please describe how the Company and Century will quantify each of the*  
9 *costs and revenues identified in response to part (a) of this question.*
- 10 c. *Please provide a quantification of each of the costs that Big Rivers will*  
11 *incur and the related revenues that Century will pay to Big Rivers in the*  
12 *test year used in Case No. 2012-00535. Please quantify the effect of*  
13 *each of these costs and revenues on the revenue requirement in Case*  
14 *No. 2012-00535.*
- 15 d. *Please confirm that if the Wilson Station and the Coleman Station*  
16 *continue to operate, then Big Rivers will not incur severance costs and*  
17 *that the claimed revenue requirement in Case No. 2012-00535 should be*

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

- 1                    *reduced to remove the severance-related amortization estimated to idle*  
2                    *the Wilson Station.*
- 3                    e.   *Please confirm that the MISO make whole payments will not provide*  
4                    *recovery of capital expenditures at the Coleman Station.*
- 5                    f.   *Please confirm that the designation of the Coleman units as SSRs will*  
6                    *not reduce or eliminate the market price risk associated the generation*  
7                    *from those units.*

8

9   **Response)**

- 10                    a.   Please see page 10, line 15 through page 11, line 14 of Mr. Starheim's  
11                    Direct Testimony and page 29, line 7 through p. 33, line 11 of Mr. Berry's  
12                    Direct Testimony.
- 13                    b.   The costs to be incurred and the revenues to be received by Big Rivers  
14                    generally are straightforward as to their quantification as nearly all of the  
15                    costs are amounts determined by reference to amounts invoiced to Big  
16                    Rivers (*e.g.*, under a Bilateral Contract or from MISO under the MISO  
17                    Tariff). Big Rivers has the ability to allocate out-of-pocket costs incurred  
18                    or committed to by Big Rivers with respect to service to Kenergy for the

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 benefit of Century. To the extent known to the parties, those items and the  
2 bases for allocation of those items are set forth in Exhibit B to the Electric  
3 Service Agreement and the Direct Agreement and Exhibit A to the  
4 Arrangement Agreement.

5 c. No formal quantification has been performed because Big Rivers does not  
6 know whether Century will operate at the Base Load without Coleman  
7 operating or if it will operate above the Base Load with Coleman  
8 operating under an SSR status, or will operate under each scenario for  
9 some period. Please also see Big Rivers' response to AG 1-1.

10 d. If the Coleman plant is operated under an SSR then the severance costs  
11 related to Case No. 2012-00535 can be deferred until such time Coleman  
12 is idled. An amortized portion of the severance costs associated with  
13 idling the Wilson plant is included in the revenue requirement in Case No.  
14 2013-00199.

15 e. Pursuant to the standard SSR Agreement set forth in Attachment Y-1 of  
16 the MISO Tariff, the annual true-up is intended to match market and other  
17 revenues with the SSR unit's annual revenue requirement, which is based  
18 on its costs. Through its market settlement process, MISO will issue

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1                   make-whole payments for hours in which the applicable market-clearing  
2                   price for the SSR unit is less than its applicable cost-based SSR payment,  
3                   and will debit the settlement statements for each hour in which the  
4                   applicable market-clearing price is above the applicable SSR payment. As  
5                   a general matter, the SSR payments are intended to provide recovery for,  
6                   among other things, going forward capital expenditures necessary to  
7                   operate the SSR unit. Accordingly, a portion of the make-whole payments  
8                   will cover going forward capital expenditures at the Coleman Station.

9                   f.     Confirmed.

10  
11  
12  
13  
14

**Witness)**     Robert W. Berry



**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1    **Item 8)**        *Refer to page 7 lines 15-18 of Mr. Berry's Rebuttal Testimony in Case No.*  
2    *2012-00535 wherein he states: "MISO, through an SSR, will not pay for interest,*  
3    *depreciation, property tax, or property insurance for an SSR unit. MISO clearly states that*  
4    *an entity would incur those costs regardless of whether the unit was being used for reliability*  
5    *purposes." Please provide a copy of the MISO tariffs and all other source documents relied*  
6    *on for these assertions.*

7  
8    **Response)**     Under Section 38.2.7 of the MISO tariff, the owner of the SSR unit will be  
9    compensated for property taxes and insurance. But Big Rivers' understanding from MISO has  
10   been that property taxes will not be reimbursed. This issue must be resolved with MISO in the  
11   negotiation of the SSR Agreement. However, the rate will not include interest or depreciation,  
12   or other cost components of a full cost-based rate.

13                    Please refer to MISO Tariff section 38.2.7, a copy of which is attached to Big  
14   Rivers' response to KIUC 1-1a. Big Rivers has also relied upon the following documents,  
15   which are lengthy (total of over 350 pages), and were not copied because they are publicly  
16   available in the eLibrary section of the FERC website.

- 17                    •    MISO, FERC Filing of SSR Agreement with DTE Elec. Co., Docket No.  
18                    ER13-1226-000, at 12 (filed Apr. 2, 2013).

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

- 1                   •     MISO, FERC Filing of SSR Agreement with City of Escanaba, Docket  
2                                 No. ER13-38-000 (filed Oct. 5, 2012).

3

4   **Witness)**     Robert W. Berry

5

6

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 **Item 9)**        *Refer to page 7 line 22 through page 8 line 2 of Mr. Berry's Rebuttal*  
2 *Testimony in Case No. 2012-00535 wherein he states: "Century – not Big Rivers or its*  
3 *members – will pay for all costs not reimbursed to Big Rivers related to operating the*  
4 *Coleman Station under SSR status."*

5                    *a. Please provide all support for the referenced statement.*

6                    *b. Please identify all costs that Big Rivers will incur, operating and capital,*  
7 *that Century will not pay for if Coleman is designated an SSR.*

8  
9 **Response)**

10                    a. Please see Section 4.1(a) and (d) of the Direct Agreement and the  
11 definition of "SSR Costs" set forth in Section 1.1.87 of the Electric  
12 Service Agreement.

13                    b. The referenced testimony was discussing additional, incremental costs of  
14 operating Coleman Station under an SSR agreement. In that context, there  
15 are no additional costs that will be borne by Big Rivers; those costs will be  
16 borne by Century, assuming that the question is intended to refer to  
17 additional costs relating to Plant Coleman incurred as a result of Plant  
18 Coleman being designated as a SSR.

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1

2 **Witness)**      Robert W. Berry

3

4

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

1 Item 10) Refer to page 44 lines 4-13 of Mr. Berry's Direct Testimony wherein he states  
2 the following:

3 "Offsetting transmission revenue against Century's SSR Costs obligation is  
4 reasonable as proposed in the Transaction documents because it will  
5 potentially allow the Hawesville Smelter to remain in operation until it can  
6 install equipment to eliminate the SSR condition at the Coleman Station. Big  
7 Rivers would have received no transmission revenue from Century if it had  
8 terminated smelting operations at the Hawesville Smelter. The advantage  
9 Kenergy and Big Rivers negotiated in the Century Transaction is that Big  
10 Rivers will receive the Century transmission revenue if and when there is no  
11 requirement for a SSR Agreement."

- 12 a. Please explain how offsetting the transmission revenue against  
13 Century's SSR Costs obligation will allow the Hawesville Smelter to  
14 remain in operation. Please be specific.
- 15 b. Please explain why Big Rivers and its non-Smelter customers should not  
16 retain the Century transmission revenues regardless of whether the  
17 Coleman units are designated as SSRs.



**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 Rivers, Kenergy and Century. If the Hawesville Smelter closes, Big  
2 Rivers will not receive the transmission revenue in question. Century is  
3 obligated to pay all SSR Costs incurred by Big Rivers, even those  
4 attributable to others if Big Rivers does not actually receive payment from  
5 those other entities. Further, continued operation of the Hawesville  
6 Smelter generates additional benefits to Big Rivers and Kenergy through  
7 the indirect economic boost associated with continued operation of other  
8 businesses in western Kentucky and the approximately 600 people who  
9 retain their jobs. Ultimately, Big Rivers made a business judgment that  
10 the financial consequence of the Hawesville Smelter closing outweighed  
11 the offset of some transmission revenue credit during the SSR period.

- 12 c. The SSR Costs are costs that will be incurred by Big Rivers.
- 13 d. The referenced statement in my Direct Testimony states the reasons why  
14 Big Rivers believes it is reasonable under the circumstances to allow  
15 Century to offset SSR costs with transmission revenue received from  
16 Century under this proposed transaction.

17  
18 Witness) Robert W. Berry

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1   **Item 11)**     *Please provide a copy of all correspondence and documents between BREC*  
2   *and Century since January 1, 2012 relating to Century market access and/or the contracts*  
3   *that BREC seeks approval of in this proceeding.*

4  
5   **Response)**    Big Rivers objects to this item on the grounds that it is unduly burdensome and  
6   overly broad. Without waiving that objection, please see the attached documents that are being  
7   provided consistent with the agreement between counsel for Big Rivers and counsel for KIUC.  
8   Some of these materials are being provided pursuant to a petition for confidentiality.

9  
10

11   **Witness)**     Robert W. Berry  
12



JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

1 Item 12) *See the Application of Kenergy and Big Rivers at Section III, Item 9 on page*  
2 *5, which states that all legal authority for Kenergy to provide electric service to the*  
3 *Hawesville Smelter will terminate on August 20, 2013.*

4 a. *Does Kenergy take the position that the existing Smelter Tariff under*  
5 *which electric service is provided to the Hawesville Smelter co-*  
6 *terminates with the termination of the 2009 Retail Electric Services*  
7 *Agreement between Kenergy and Century? If so, what is the basis for*  
8 *Kenergy to provide continuing electric service to the Sebree Smelter?*  
9 *Explain Kenergy's position in detail, citing applicable law.*

10 b. *Does Kenergy take the position that the Smelter Tariff will no longer be*  
11 *available to Century upon the termination of the 2009 Retail Electric*  
12 *Services Agreement between Kenergy and Century? If so, explain*  
13 *Kenergy's position in detail, citing applicable laws or regulations.*

14 c. *Does Kenergy take the position that if it has no legal authority or*  
15 *obligation to provide electric service to the Hawesville Smelter on or*  
16 *after August 20, 2013, Century would have the right to seek electric*  
17 *service from another electric supplier? If not, explain Kenergy's*  
18 *position in detail, citing applicable laws or regulations.*

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1   **Response)**

2           a.   No. Kenergy Tariff 33 does not terminate with the termination of the  
3                   2009 Retail Electric Service Agreement. The former Alcan Primary  
4                   Products Corporation ("Alcan") smelter will continue to be served under  
5                   the 2009 contract between Alcan and Kenergy.

6           b.   Yes. Kenergy Tariff 33 states that the tariff for service to Century  
7                   Aluminum of Kentucky General Partnership consists of the Retail Electric  
8                   Service Agreement dated as of July 1, 2009 (the "Century Retail  
9                   Agreement"). That tariff expires at the end of the day on August 19, 2013.  
10                  With the termination of the Century Retail Agreement, Century will no  
11                  longer receive power under this expired tariff.

12           c.   No. Kenergy would still be the exclusive retail supplier for Century  
13                   pursuant to KRS 278.018(1), and have the right and the reasonable  
14                   obligation to serve Century's load pursuant to KRS 278.030, subject to  
15                   Commission approval of an appropriate contract or tariff for service.

16

17   **Witness)**    Gregory J. Starheim

18

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

- 1 Item 13) *See the Application of Kenergy and Big Rivers at Section IV, Item 15(c)*  
2 *beginning at page 12.*
- 3 a. *Cite all applicable sections of the Loan Contract between Big Rivers and*  
4 *RUS under which RUS holds the right of approval for the Century*  
5 *Transaction.*
- 6 b. *Cite all applicable sections of the Loan Contract between Big Rivers and*  
7 *RUS that set forth the schedule for RUS to decide upon approval of the*  
8 *Century Transaction, including the right of RUS to defer its decision in*  
9 *this matter.*
- 10 c. *Provide copies of all written communications between Big Rivers and*  
11 *RUS addressing the proposed Century Transaction or the relationship*  
12 *between Century Transaction and the credit enhancement plan that Big*  
13 *Rivers submitted to RUS pursuant to the terms of the Loan Contract*  
14 *between Big Rivers and the RUS.*
- 15 d. *State whether Big Rivers' management believes that RUS' decision to*  
16 *approve or decline to approve the proposed Century Transaction will be*

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

1                   *influenced by the decision of the Commission in the pending Case No.*  
2                   *2012-00535.*

3           e.   *Does Kenergy take the position that if RUS approval of the Century*  
4               *Transaction is not granted by August 19, 2013, Kenergy should have the*  
5               *right to disconnect electric service to a retail customer located within its*  
6               *franchise service territory? Explain Kenergy's position in detail, citing*  
7               *applicable laws or regulations.*

8           f.   *Describe in detail the creditor agreement default issue, citing the*  
9               *applicable sections of the Amended and Restated Revolving Credit*  
10              *Agreement between Big Rivers and the National Rural Utilities*  
11              *Cooperative Finance Corporation ("CFC") that could prevent Big*  
12              *Rivers from entering into the Century Transaction.*

13           g.   *Provide copies of all written communications between Big Rivers and*  
14               *CFC from August 19, 2012, to the present that address or discuss the*  
15               *creditor agreement default issue.*

16           h.   *State whether Big Rivers' management believes that the resolution of*  
17               *the creditor agreement default issue between Big Rivers and CFC will*

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

1                    *depend upon or be influenced by the decision of the Commission in the*  
2                    *pending Case No. 2012-00535.*

3                    *i. Does Kenergy take the position that if the creditor agreement default*  
4                    *issue between Big Rivers and CFC prevents Big Rivers from entering into*  
5                    *the Century Transaction by August 19, 2013, Kenergy should have the*  
6                    *right to disconnect electric service to a retail customer located within its*  
7                    *franchise service territory? Explain Kenergy's position in detail, citing*  
8                    *applicable laws or regulations.*

9  
10    **Response)**

11                    a. Section 5.6(a)(ii), (iii) and (v) of the Loan Contract, relating to entry into  
12                    any contract for the purchase, exchange or sale of electric power or energy  
13                    that has a term exceeding two years, any contract for the purchase or sale  
14                    of transmission, ancillary services or similar power supply arrangements  
15                    that has a term exceeding two years, and any amendment or modification  
16                    of any wholesale power contract.

17                    b. Section 8.1 of the Loan Contract provides that Big Rivers must give RUS  
18                    notice in writing of the Transaction. If RUS delivers written notice that it

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 objects to the transaction to Big Rivers within 60 days, then Big Rivers  
2 cannot consummate the transaction without RUS approval. If RUS  
3 objects, there is no specified time by which RUS must grant or give notice  
4 of its failure to approve the transaction.

5 c. Please see the attached document. In the interest of economy, the copy of  
6 the application in this matter and the extra copies of transaction documents  
7 that are exhibits to the application that are attachments to that document  
8 are not copied and attached to this information request response.

9 d. Big Rivers has no basis on which to express a belief on this question  
10 beyond saying that if an order unfavorable to Big Rivers is entered in Case  
11 No. 2012-00535, it may be more difficult to focus the attention of the RUS  
12 on the Century transaction.

13 e. KRS 278.160(2) prohibits a utility from providing electric service except  
14 pursuant to approved rate schedules. If there is no approved rate schedule  
15 in place prior to August 20, 2013, Kenergy would have no legal authority  
16 to provide service. Kenergy may source wholesale power to provide retail  
17 electric service to Century from any source it chooses. But contracting to  
18 provide service to the Century smelting load is a complex process that

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1           takes an enormous amount of time to properly document. There is no  
2           Kenergy tariff under which Kenergy can provide retail electric service for  
3           the Century smelting load after August 19, 2013. So the only alternative  
4           for providing service to the Century smelting load upon the expiration of  
5           the current agreement is under the proposed arrangements. If Century  
6           ceases smelting, Kenergy would still need a contract like the Alternate  
7           Service Agreement to provide electric service to Century. But if  
8           Kenergy has no Commission-approved set of contracts in place on a  
9           timely basis, Kenergy will have no authority to continue providing service  
10          to Century upon the expiration of the current agreement.

11                        If Century elects to continue smelting at Hawesville, then Kenergy  
12          could supply retail electric service from a Market Participant other than  
13          Big Rivers. However, with no such alternate Market Participant in place,  
14          Kenergy cannot reasonably do so. Kenergy is only required to provide  
15          service if it can reasonably do so pursuant to KRS 278.030, and only has a  
16          right to do so if it has a Commission-approved rate schedule under which  
17          the service can be provided.

**Case No. 2013-00221  
Response to KIUC 1-13  
Witnesses: Billie J. Richert (a., b., c., d., f., g and h.), and  
Gregory J. Starheim (e. and i.)  
Page 5 of 7**

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1           f.   Big Rivers is seeking to amend the Amended and Restated Revolving  
2           Credit Agreement between Big Rivers and National Rural Utilities  
3           Cooperative Finance Corporation ("CFC Credit Agreement") to eliminate  
4           an event of default in that agreement that would result if the proposed  
5           contracts (or any future contracts with Century) were entered into and then  
6           terminated prior to their stated term. In the proposed contracts, Century  
7           could terminate the Electric Service Agreement prior to the end of the  
8           stated term which would terminate the Arrangement Agreement. If this  
9           happened, under the current form of the CFC Credit Agreement, an event  
10          of default would occur under that agreement that could then constitute an  
11          event of default under other credit agreements of Big Rivers.

12          g.   Please see the attached documents.

13          h.   If an order unfavorable to Big Rivers is entered in Case No. 2012-00535,  
14          CFC may refuse to close the transaction amending the revolving credit  
15          agreement to eliminate the default issue.

16          i.   See response to part e., above.

17  
18   **Witnesses)**   Billie J. Richert (a., b., c., d., f., g. and h), and

**Case No. 2013-00221  
Response to KIUC 1-13  
Witnesses: Billie J. Richert (a., b., c., d., f., g and h.), and  
Gregory J. Starheim (e. and i.)  
Page 6 of 7**



**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 Gregory J. Starheim (e. and i.)

2

SULLIVAN, MOUNTJOY, STAINBACK & MILLER PSC  
ATTORNEYS AT LAW

June 12, 2013

Donald M. Sullivan  
Jesse T. Mountjoy  
Frank Stainback  
James M. Miller  
Michael A. Fiorella  
Allen W. Holbrook  
R. Michael Sullivan  
Bryan R. Reynolds\*  
Tyson A. Kamuf  
Mark W. Starnes  
C. Ellsworth Mountjoy

Rural Utilities Service  
United States Department of Agriculture  
Room No. 5135-S  
1400 Independence Avenue, S.W.  
Stop 1510  
Washington, D.C. 20250  
Attention: Administrator

Rural Utilities Service  
United States Department of Agriculture  
Room No. 0270-S  
1400 Independence Avenue, S.W.  
Stop 1568  
Washington, D.C. 20250  
Attention: Power Supply Division

Subject: KY 62 Big Rivers Electric Corporation  
Transaction Involving Century Aluminum of Kentucky General  
Partnership

Dear Sir or Madam:

We are counsel to Big Rivers Electric Corporation ("*Big Rivers*"). Big Rivers and Kenergy Corp. ("*Kenergy*"), a Big Rivers member, are proposing a transaction by which Kenergy will provide a retail aluminum smelter customer, Century Aluminum of Kentucky General Partnership ("*Century*"), retail electric service with power acquired from the wholesale market that is priced based upon market pricing (the "*Century Transaction*"). The Century Transaction will commence on and after the termination date of the existing retail electric service agreement with Century and other related agreements at 12:00 a.m. CDT on August 20, 2013 (the "*Termination Date*"). The purpose of this letter to the Rural Utilities Service ("*RUS*") is to submit documents Big Rivers proposes to enter into in connection with the Century Transaction to the RUS for review pursuant to the Amended and Consolidated Loan Contract between Big Rivers and United States of America dated as of July 16, 2009, (the "*Loan Contract*"), Sections 5.6 and 8.1.

The documents Big Rivers submits for RUS review are described in detail in the joint application Big Rivers and Kenergy have filed today with the Kentucky Public Service Commission seeking necessary state regulatory approvals for the Century Transaction (the "*Application*"). A copy of the

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

Ann Building  
PO Box 727  
Owensboro, Kentucky  
42302-0727

Rural Utilities Service

June 12, 2013

Page 2

Application is enclosed for reference purposes, and to provide you with the best available description of the Century Transaction and the documents for which Big Rivers seeks RUS review.

The documents submitted in draft form for RUS review are:

- Arrangement and Procurement Agreement between Big Rivers and Kenergy (Application Exhibit 5). This agreement is the basic wholesale power agreement between Big Rivers and Kenergy for the Century Transaction. A summary of this agreement can be found in the Application, pages 6 and 7. This agreement is further described in the testimony of Big Rivers' Chief Operating Officer, Robert W. Berry (Exhibit 3, pages 15, and 22-24). Mr. Berry's testimony also contains details about the entire Century Transaction. The Arrangement and Procurement Agreement is a back-to-back agreement with the Electric Service Agreement, which is the retail service agreement between Kenergy and Century. The Electric Service Agreement is described in the testimony of Kenergy's President and CEO, Gregory J. Starheim (Exhibit 3, pages 7-14).
- Direct Agreement between Big Rivers and Century (Application Exhibit 6). This agreement provides for Century to pay Big Rivers certain expenses incurred by Big Rivers, even if Big Rivers is no longer the Market Participant under the Arrangement and Procurement Agreement and Kenergy is obtaining wholesale power for resale to Century from a source other than Big Rivers. A summary of this agreement can be found in the Application, page 7. This agreement is further described in the testimony of Mr. Berry (Exhibit 3, pages 16, and 25 and 26).
- Wholesale Letter Agreement (Application Exhibit 14). The Wholesale Letter Agreement supplements the all-requirements wholesale power contract between Big Rivers and Kenergy in connection with Big Rivers' provision of wholesale electric service to Kenergy for delivery under the proposed Alternate Service Agreement with Century (Application Exhibit 13). The Alternate Service Agreement provides a reduced amount of retail electric service (10 MW) to the Century smelter facility if smelting operations cease. The Alternate Service Agreement and the Wholesale Letter Agreement are described in the Application (pages 5 and 10-11), the testimony of Mr. Starheim

Rural Utilities Service  
June 12, 2013  
Page 3

(Exhibit 2, pages 23-24) and in the testimony of Mr. Berry (Exhibit 3, page 21). The Alternate Service Agreement and the Wholesale Letter Agreement are forms of agreements that Kenergy and Big Rivers use regularly.

Enclosed with this letter are the following documents:

- Six certified counterparts of an excerpt from the minutes of the meeting of the Big Rivers board of directors on May 17, 2013, at which Big Rivers' management was authorized to negotiate and enter into documents in connection with the Century Transaction;
- Six certified counterparts of an excerpt from the minutes of the meeting of the Kenergy board of directors on June 11, 2013, at which Kenergy was authorized to sign the Wholesale Letter Agreement and the Arrangement and Procurement Agreement;
- Six draft copies of the Arrangement and Procurement Agreement;
- Six draft copies of the Direct Agreement;
- Six draft copies of the Wholesale Letter Agreement; and
- Three copies of the Application.

Please note that the RUS Administrator has been provided one copy of these documents, and the RUS Power Supply Division has been provided the multiple, original signed counterparts of the documents listed above.

Timing is very critical in the Century Transaction. The three documents for which RUS review is sought must be approved and executed by the parties before the existing agreements under which Century is taking electric service expire at the end of the day on August 19, 2013. When the existing agreements terminate, if other agreements have not been approved and executed by the parties, neither Kenergy nor Big Rivers have any legal authority to continue providing electric service to Century, and by law service to Century's smelter must be disconnected.

Big Rivers understands that the documents presented for RUS review are part of a complex transaction. If at any point it would be helpful for

Rural Utilities Service

June 12, 2013

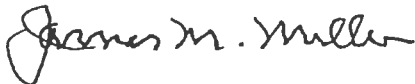
Page 4

representatives of Big Rivers to review those documents or the Century Transaction with RUS staff, Big Rivers will be pleased to do so.

Please note that Section 8.1 of the Loan Contract provides that the RUS has sixty (60) days (or such shorter period as the parties shall agree to in writing) after receipt of this notice letter in which to object to the proposed transaction and require Big Rivers not to complete the transaction without RUS approval. By our calculation, this notice letter will be received by RUS on Thursday, June 13, 2013, and the sixtieth day following delivery of this notice letter to RUS will expire no later than midnight on August 12, 2013.

Please contact me with any questions you have regarding this request.

Sincerely yours,



James M. Miller  
Counsel for Big Rivers Electric Corporation

cc: Billie J. Richert, Big Rivers Electric Corporation  
Robert Berry, Big Rivers Electric Corporation

**EXCERPT FROM THE MINUTES OF REGULAR MEETING  
OF THE BOARD OF DIRECTORS  
OF BIG RIVERS ELECTRIC CORPORATION  
HELD IN HENDERSON, KENTUCKY, ON  
MAY 17, 2013**

After considerable discussion, Director Denton moved adoption of the following resolutions:

WHEREAS, Big Rivers, Kenergy and Century have reached non-binding agreement on a term sheet that provides a framework for negotiation of definitive agreements to establish terms on which Kenergy will provide retail electric service to Century from the wholesale power market after the termination of Century's retail service agreement on August 20, 2013;

WHEREAS, Big Rivers is anticipated to participate in that structure as the transmission provider and, at least initially, as the Market Participant for Kenergy for wholesale power market transactions; and

WHEREAS, timing of completion and approval of the transactions necessary to implement retail service to Century under new agreements by August 20, 2013, is critical.

RESOLVED, that each of the following employees of the Corporation is an Authorized Representative: The President and Chief Executive Officer, the Vice President Accounting, Rates and CFO, and the Chief Operating Officer, and any other officer or employee of the Corporation designated as an Authorized Representative in writing by an Authorized Representative listed above.

FURTHER RESOLVED, that the proposed transactions between and among Big Rivers, Kenergy and Century described in the term sheet presented to the Board of Directors is approved in all respects, including but not limited to the alternate service arrangements.

FURTHER RESOLVED, that the Authorized Representatives of Big Rivers be, and they hereby are, and each of them hereby is authorized and directed for, and on behalf of Big Rivers, to negotiate and execute all such agreements, documents, instruments certificates, and other papers, and to do all such acts and things as may be necessary or desirable to complete the transactions authorized hereby substantially on the terms contained in the term sheet, including, without limitation, the seeking and securing of all approvals or consents from Big Rivers' creditors and the Kentucky Public Service Commission, and the carrying out of the terms of the various agreements and document authorized or approved in the foregoing resolutions.

FURTHER RESOLVED, that the Authorized Representatives of Big Rivers be, and they hereby are, and each of them hereby is authorized and directed for, and on behalf of Big Rivers, to prepare for the possibility that agreement may not be reached on definitive documents, or that approvals of the definitive documents may not be obtained timely, including as part of that

**EXCERPT FROM THE MINUTES OF REGULAR MEETING  
OF THE BOARD OF DIRECTORS  
OF BIG RIVERS ELECTRIC CORPORATION  
HELD IN HENDERSON, KENTUCKY, ON  
MAY 17, 2013**

preparation, without limitation, the seeking and securing of all necessary approvals or consents from Big Rivers' creditors and the Kentucky Public Service Commission to protect the interests of the Corporation, and to comply with the Corporation's legal obligations.

The motion was seconded, and adopted by unanimous vote.

I, Paula Mitchell, Executive Secretary of the Board of Directors of Big Rivers Electric Corporation, hereby certify that the above is a true and correct excerpt from the minutes of the Regular Meeting of the Board of Directors of said Corporation held on 5-17-13.

Paula Mitchell

## KENERGY CORP.

### RESOLUTION

#### WHEREAS:

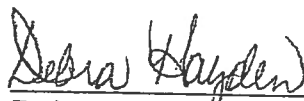
1. By letter dated August 20, 2012, Century Aluminum of Kentucky General Partnership ("Century") served notice to Kenergy Corp. ("Kenergy") that it was terminating its retail power contract with Kenergy;
2. Since that time Kenergy and its wholesale power supplier, Big Rivers Electric Corporation ("BREC"), have been negotiating with Century to enable Century to acquire power from the wholesale market through BREC as a market participant that would be distributed by Kenergy to Century;
3. The negotiations have now resulted in contractual terms in the following agreements involving Kenergy:
  - (a) Electric Service Agreement between Kenergy and Century;
  - (b) Arrangement Agreement between Kenergy and BREC;
  - (c) Tax Indemnity Agreement from Century to Kenergy protecting Kenergy from negative tax consequences as a result of the transaction;
  - (d) Parent Guarantee by Century's parent of Century's obligations to Kenergy;
  - (e) Protective Relay Agreement regarding system reliability;
  - (f) Capacitor Agreement involving system reliability;
  - (g) Century's guarantee(s) to Kenergy of the Capacitor and Protective Relay Agreements;
  - (h) Alternative Service Agreement between Kenergy and Century for Century's non-smelting load up to 10 megawatts should Century no longer smelt aluminum but still need power for non-smelting reasons;
  - (i) Wholesale letter agreement between BREC and Kenergy for the supply of wholesale power of up to 10 megawatts that would be necessary to serve Century's non-smelting load; and



(j) Lockbox Agreement whereby Century's payments for power are conveniently and securely processed through a bank account;

**NOW**, therefore, **BE IT RESOLVED** that the Board of Directors approves the foregoing contracts and accepts the guarantees and authorizes Gregory Starheim to sign the foregoing documents on behalf of Kenergy, and submit the contracts to applicable lending and regulatory authorities for approval

I hereby certify that the foregoing is a true and correct copy of a resolution adopted by the Board of Directors of Kenergy Corp. on June 11, 2013, and that said resolution has not been amended or modified and is in full force and effect, this the 11<sup>th</sup> day of June, 2013.



Debra Hayden, Assistant Secretary



United States Department of Agriculture  
Rural Development

Rural Business-Cooperative Service • Rural Housing Service • Rural Utilities Service  
Washington, DC 20250

SUBJECT: Waiver of Provisions of RUS Loan Documents  
Large Retail Power Contracts

TO: All RUS Electric Borrowers

FROM: BLAINE D. STOCKTON  
Assistant Administrator  
Electric Program

Rural Utilities Service (RUS) electric loan documents require the borrower to obtain RUS approval prior to entering into certain large retail power contracts. Approval is necessary when the contract is for the sale of power and energy for periods exceeding two (2) years if the kWh sales or kW demand for any year covered by such contract shall exceed 25 percent of the Borrower's total kWh sales or maximum kW demand for the year immediately preceding the execution of such contract.<sup>1</sup>

Pursuant to its authority to waive compliance with provisions of RUS loan documents,<sup>2</sup> RUS hereby waives compliance with the requirement to obtain RUS approval prior to entering into a large retail power contract as described above. Following execution of the contract, the borrowers will be required, however, to submit an original signed copy of the contract along with an original signed certificate to the General Field Representative (GFR). The certificate is to be in the identical form that is enclosed with this memorandum. The GFR will maintain the contract and certification in his/her file. The GFR will also fax or forward a copy of the certification to the appropriate Regional Office in Washington.

Borrowers are reminded that this waiver applies solely to the rights of RUS under its loan documents with the borrower and is not intended to and does not effect the rights of any third parties, including other lenders or co-mortgagees that may have imposed limitations on distributions by the borrower. RUS reserves the right to withdraw this waiver in whole and in part and on a case-by-case basis by written notice to borrowers signed by or on behalf of RUS.

In addition, Bulletin 112-6 which provides guidance for RUS approval of large retail power contracts has been rescinded.

<sup>1</sup> Paragraph B of Section 6.5. Limitations on Certain Types of Contracts, Appendix A to Subpart C to Part 1718-Model Form of Loan Contract for Electric Distribution Borrowers. 7 CFR 1718.104.

<sup>2</sup> Section 9.10. Complete Agreement; Amendments, Appendix A to Subpart C to Part 1718-Model form of the Loan Contract for Electric Distribution Borrowers. 7 CFR 1718.104.

LARGE RETAIL POWER CONTRACT AND ASSOCIATED RATE(S)  
CERTIFICATE

Manager's Certification

On behalf of [insert name and address of borrower], I, [manager's name] hereby certify, to the best of my knowledge and as of the date thereof, that:

1. [Borrower's full legal name] and [large power load name] have executed a retail large power contract (Contract) dated [date].
2. The term of this Contract is for [insert number of years and final date, and include information on any renewal opportunities or conditions].
3. The execution of this Contract between [borrower's full legal name] will not have any adverse effect on the [borrower's full legal name], including, but not limited to, [borrower's full legal name] ability to meet all Rural Utilities Service (RUS) Mortgage and regulatory requirements.
4. I have reviewed the adequacy of the rate schedule(s) associated with the Contract and concluded that such rate(s) do/does not impose an undue burden on any other rate classes or consumers. The rate schedule(s) to be used in conjunction with this Contract is identified as [insert name and date of rate schedule and if it is-a general or special rate].
5. I have complied with all RUS required engineering approvals for the plans and/or construction of facilities to serve the new large power load.
6. I have determined that entering into this Contract for supplying this large power service will not interrupt the adequate power supply needed to meet the total demands of the system or cause any unusual fluctuations or disturbances, and that

the [borrower's full legal name] has sufficient resources to serve this large power load.

7. Any/all required or appropriate regulatory notification or approval in connection with the Contract or the rate(s) associated with the Contract have been obtained.
8. The cost of additional required facilities have been financed by [indicate with loan funds, general funds, or aid in construction funds].
9. Any additional facilities required for this Contract are [indicate either dedicated or not dedicated to the specific large power load] and the maintenance of the dedicated facilities will be performed by the [borrower's full legal name] at [indicate if the borrower or the large power load recipient is responsible for the cost of maintenance].
10. If the Contract is terminated by either party prior to its full term, the Contract contains terms and conditions providing adequate financial protection for the [borrower's full legal name], its consumers and the security of the Government's lien.

\_\_\_\_\_  
[Signature of Manager]

\_\_\_\_\_  
[Date]

## Billie Richert

---

**From:** Billie Richert  
**Sent:** Wednesday, June 12, 2013 4:56 PM  
Thomas Hall; Dan Lyzinski (Dan.Lyzinski@nrucfc.coop)  
Mary Susan Bowles; Ralph Ashworth  
**Subject:** Joint Application of Kenergy Corp. and BREC for Approval of Contracts and for a Declaratory Order

Tom/Dan,

Today we delivered the above application to the PSC. We will FEDEX a copy of this application to you tomorrow.

*Billie Richert, CPA, CFP*

VP Accounting, Rates and CFO  
Big Rivers Electric Corporation  
201 Third Street  
Henderson, KY 42420

Corporate: (270) 827-2561  
Office Direct: (270) 844-6190  
Mobile: (270) 577-6221

---

The information contained in this transmission is intended only for the person or entity to which it is directly addressed or copied. It may contain material of confidential and/or private nature. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is not allowed. If you receive this message and the information contained therein by error, please contact the sender and delete the material from your/any storage medium.

**Billie Richert**

---

**From:** Thomas Hall <Thomas.Hall@nrucfc.coop>  
**Content:** Wednesday, June 12, 2013 7:24 PM  
**Subject:** Billie Richert  
Re: Joint Application of Kenergy Corp. and BREC for Approval of Contracts and for a Declaratory Order

Thanks Billie.

-----  
CFC: Created and Owned by America's Electric Cooperative Network

Thomas Hall  
Regional Vice President

National Rural Utilities Cooperative Finance Corporation  
20701 Cooperative Way  
Dulles, VA 20166  
Office: 703-467-2746  
Cell: 703-483-1398  
Fax: 703-467-5653

|----->  
| From: |  
|----->

>-----|  
Billie Richert <Billie.Richert@bigrivers.com>

|----->  
| To: |  
|----->

>-----|  
Thomas Hall <Thomas.Hall@nrucfc.coop>, "Dan Lyzinski (Dan.Lyzinski@nrucfc.coop)" <Dan.Lyzinski@nrucfc.coop>

|----->  
| Cc: |  
|----->

>-----|  
Mary Susan Bowles <Mary.Bowles@bigrivers.com>, Ralph Ashworth <Ralph.Ashworth@bigrivers.com>

|----->  
| Date: |  
|----->

>-----|  
06/12/2013 05:56 PM

|----->  
| Subject: |  
|----->

>-----|

Tom/Dan,

Today we delivered the above application to the PSC. We will FEDEX a copy of this application to you tomorrow.

Billie Richert, CPA, CITP  
VP Accounting, Rates and CFO  
Big Rivers Electric Corporation  
201 Third Street  
Henderson, KY 42420

Corporate: (270) 827-2561  
Office Direct: (270) 844-6190  
Mobile: (270) 577-6221

The information contained in this transmission is intended only for the person or entity to which it is directly addressed or copied. It may contain material of confidential and/or private nature. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is not allowed. If you receive this message and the information contained therein by error, please contact the sender and delete the material from your/any storage medium.

The information contained in this transmission is intended only for the person or entity to which it is directly addressed or copied. It may contain material of confidential and/or private nature. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is not allowed. If you receive this message and the information contained therein by error, please contact the sender and delete the material from your/any storage medium.

This may contain information that is confidential or privileged. If you are not the addressee indicated in this message (or responsible for delivery of this message to such person), you should not copy or deliver this message to anyone or make any other use of the information set forth herein. In such case, you should destroy this message and notify the sender by telephone or e-mail.

## Billie Richert

---

**From:** Dan Lyzinski <Dan.Lyzinski@nrucfc.coop>  
**Sent:** Wednesday, June 12, 2013 7:34 PM  
**Subject:** Billie Richert  
Re: Joint Application of Kenergy Corp. and BREC for Approval of Contracts and for a Declaratory Order

Thanks Billie.

CFC: Created and Owned by America's Electric Cooperative Network

----- Original Message -----

**From:** Billie Richert [Billie.Richert@bigrivers.com]  
**Sent:** 06/12/2013 04:56 PM EST  
**To:** Thomas Hall; Dan Lyzinski  
**Cc:** Mary Susan Bowles <Mary.Bowles@bigrivers.com>; Ralph Ashworth <Ralph.Ashworth@bigrivers.com>  
**Subject:** Joint Application of Kenergy Corp. and BREC for Approval of Contracts and for a Declaratory Order

Tom/Dan,

Today we delivered the above application to the PSC. We will FEDEX a copy of this application to you tomorrow.

Billie Richert, CPA, CITP  
VP Accounting, Rates and CFO  
Rivers Electric Corporation  
201 Third Street  
Henderson, KY 42420

Corporate: (270) 827-2561  
Office Direct: (270) 844-6190  
Mobile: (270) 577-6221

---

The information contained in this transmission is intended only for the person or entity to which it is directly addressed or copied. It may contain material of confidential and/or private nature. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is not allowed. If you receive this message and the information contained therein by error, please contact the sender and delete the material from your/any storage medium.

---

The information contained in this transmission is intended only for the person or entity to which it is directly addressed or copied. It may contain material of confidential and/or private nature. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is not allowed. If you receive this message and the information contained therein by error, please contact the sender and delete the material from your/any storage medium.

This message may contain information that is confidential or privileged. If you are not the addressee indicated in this message (or responsible for delivery of this message to such person), you should not copy or deliver this message to anyone or make



any other use of the information set forth herein. In such case, you should destroy this message and notify the sender by telephone or e-mail.

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1    **Item 14)**     *If Big Rivers were unable to obtain the approval of RUS for the Century*  
2    *Transactions, or if Big Rivers were unable to enter into the Century Transactions upon a*  
3    *failure to resolve the existing creditor agreement default issue between Big Rivers and CFC,*  
4    *does Kenergy believe that the proposed Century Transaction could be restructured with a*  
5    *Member of MISO other than Big Rivers? Explain in detail whether such a restructuring*  
6    *with a Member of MISO other than Big Rivers would be possible.*

7  
8    **Response)**     Kenergy, Big Rivers and Century spent much time analyzing how the proposed  
9    transaction would be implemented in time for it to be effective prior to August 19, 2013. The  
10   conclusion of all three parties was that the only way the transaction could be closed by that  
11   date was through the structure set forth in the Transaction Documents with Big Rivers initially  
12   serving as the Market Participant. Even given the advantage of the parties' intimate history  
13   and knowledge of each other, the transaction took more than five (5) months of intensive  
14   negotiation and document drafting to put together the documents submitted with the  
15   Application. To bring in a new party at this late date likely would require a substantial delay.  
16   Any new commercial requirements of that party likely would disrupt the delicate balancing of  
17   the parties' interest in the documents. As an example, the handling of the must run condition  
18   of Coleman was a critical part of the negotiations. Only Big Rivers has the ability to provide

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 commitments relating to the operation of Coleman. The Transaction Documents do  
2 contemplate that a Market Participant other than Big Rivers could succeed to that role  
3 following compliance with the provisions relating to the appointment of a successor Market  
4 Participant. Yet, even the selection of a Market Participant other than Big Rivers would not  
5 affect the existence of term of the Direct Agreement and protections to Big Rivers relating to  
6 the transaction. Of course, the Direct Agreement must be approved for it to be available for  
7 Big Rivers to recover SSR costs charged to Big Rivers.

8

9

10 **Witness)** Gregory J. Starheim

11

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1    **Item 15)**     *Assuming the consent of Century, would Kenergy and Big Rivers be willing to*  
2    *agree to a temporary extension of the existing Retail Electric Services Agreement and the*  
3    *existing Wholesale Electric Service Agreement for the purposes of (a) allowing the*  
4    *Commission more time to examine the implications of the proposed Century Transaction,*  
5    *and (b) allowing time for Big Rivers to obtain the approval of RUS and to resolve the credit*  
6    *agreement default issue with CFC?*

7

8    **Response)**     Assuming the consent of Century, Kenergy and Big Rivers would be willing to  
9    agree to a temporary extension of the existing contractual arrangements. Any such extension  
10   of those agreements would need to be submitted to RUS for its approval prior to their effective  
11   date. Given the date, however, the RUS 60 day period to determine whether it objects to entry  
12   into the agreements extending the current agreements would be problematic because absent  
13   prior approval by RUS, Big Rivers would not be able to enter into any such arrangements.  
14   Extension of the existing agreements would also require other creditor consents, arrangements  
15   for credit support from Century, and Commission approval of all arrangements that come  
16   under its jurisdiction. Kenergy and Big Rivers believe accomplishing amendment of the  
17   agreements as suggested would be practically impossible given the short time left between now  
18   and the termination of the current Century retail service agreement.

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1

2 **Witnesses)** Robert W. Berry and

3 Gregory J. Starheim

4

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

1    Item 16)     *Does Kenergy contemplate that the Commission would retain regulatory*  
2    *oversight over the pricing and other contractual terms of a Bilateral Agreement between*  
3    *Kenergy and a third party Market Participant? If so, explain whether the necessity of*  
4    *obtaining Commission approval of a Bilateral Agreement would adversely affect the ability*  
5    *of the Hawesville Smelter to obtain market based pricing.*

6  
7    **Response)**   Kenergy believes the Commission would have jurisdiction over a Market  
8    Agreement between Kenergy and a Market Participant. Kenergy does not believe that the  
9    Commission would have jurisdiction over a bilateral agreement between a Market Participant  
10   and a wholesale power market counterparty. If the Commission determines that it has  
11   jurisdiction over a bilateral agreement, the answer as to whether this interferes with the ability  
12   of the Hawesville Smelter to obtain market based pricing depends upon how quickly the  
13   bilateral agreement must be in place. Approval of a multi-year bilateral agreement would not  
14   hinder the ability of the Hawesville Smelter to obtain market based pricing once the bilateral  
15   agreement is approved. But if access to market pricing is based upon short term or day-ahead  
16   transactions that would be problematic to implement if Commission approval is required. This  
17   could perhaps be alleviated by putting in place a process similar to how Supplemental Energy  
18   Transactions are handled under Kenergy's Tariff 57.

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1

2 **Witness)** Gregory J. Starheim

3

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1    **Item 17)**     *If Big Rivers were to be successful in selling Plant Wilson, how would that*  
2    *action affect the “must run” status of Plant Coleman or otherwise affect the economic*  
3    *drivers that are embedded in the proposed Century Transaction? Do the documents in the*  
4    *proposed Century Transaction provide for appropriate modifications in terms and conditions*  
5    *upon a sale of Plant Wilson by Big Rivers? If not, why not?*

6

7    **Response)**    The sale of the Wilson plant will have no effect on the “must run” SSR status of  
8    the Coleman plant. The SSR determination of a specific plant is based on system reliability,  
9    not ownership of the generating units. The Century Transaction does not provide for  
10   modifications in terms and conditions due to the sale of the Wilson plant. The Wilson plant  
11   has no direct impact to the Century Transaction, therefore, no terms were negotiated to modify  
12   the agreements due to the sale of the Wilson plant.

13

14

15   **Witness)**     Robert W. Berry

16



JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

1    **Item 18)**     *If Big Rivers were to be successful in selling Plant Coleman, how would that*  
2    *action affect the “must run” status of Plant Coleman or otherwise affect the economic*  
3    *drivers that are embedded in the proposed Century Transaction? Do the documents in the*  
4    *proposed Century Transaction provide for appropriate modifications in terms and conditions*  
5    *upon a sale of Plant Coleman by Big Rivers? If not, why not?*

6    **Response)**    The sale of Plant Coleman would not affect the “must-run” status of the facility.  
7    Whether the facility is required to operate for reliability purposes is not affected by who owns  
8    the facility. A sale of Plant Coleman also would not affect the recovery by Big Rivers of any  
9    SSR Costs under the Direct Agreement to the extent those costs are incurred by Big Rivers and  
10   to the extent the Direct Agreement provides for the recovery of the particular costs from  
11   Century. Century’s obligations to reimburse Big Rivers for the costs subject to the Direct  
12   Agreement to the extent provided in the Direct Agreement do not terminate. Recovery of any  
13   amounts flowing through the “Applicable RTO Charges” similarly would not be affected to the  
14   extent Big Rivers remained the Market Participant. Further, the transaction documents also  
15   contemplate circumstances where Plant Coleman is not operating. For these reasons, without  
16   other assumptions regarding changes in circumstances, Big Rivers does not believe the  
17   transaction documents would need to be modified if Plant Coleman was sold.

18

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 **Witness)** Robert W. Berry

2

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

- 1   Item 19)     *Explain in detail the purpose of the proposed Capacitor Agreement among*  
2   *Big Rivers, Kenergy and Century. Such explanation should address*
- 3                a.   *whether the terms and conditions of the Capacitor Agreement will be*  
4                *effective if Plant Coleman is running or only if Plant Coleman is not*  
5                *running,*
- 6                b.   *whether the existence of the contemplated capacitors at the Hawesville*  
7                *Smelter will affect the "must-run" status of Plant Coleman,*
- 8                c.   *whether the existence of the contemplated capacitors will affect the costs*  
9                *that Century would be expected to bear with respect to Plant Coleman,*
- 10              d.   *the implications for capacitor related costs if Big Rivers were to sell*  
11              *Plant Wilson, and*
- 12              e.   *the implications for capacitor related costs if Big Rivers were to sell*  
13              *Plant Coleman.*

14  
15   **Response)**

- 16              a.   The Capacitor Agreement will become effective upon execution by the  
17              parties to the agreement and will remain in effect until terminated  
18              notwithstanding the operational status of Plant Coleman. Under Section

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1                   2.15, Century's obligations under specified sections of the agreement will  
2 terminate if Century permanently ceases smelting operations at the  
3 Hawesville Smelter (as defined in the agreement). The agreement does  
4 not have a stated termination date, due to its purpose. That is, Big Rivers  
5 and Kenergy intend to enter into the agreement solely to accommodate  
6 Century's desire to undertake the obligations set forth in the agreement  
7 relating to the Capacitor Additions (as defined in the agreement) and to  
8 protect Big Rivers and Kenergy from related risks. For example, a claim  
9 relating to the Capacitor Additions could be made against Big Rivers or  
10 Kenergy following cessation of the operation of Plant Coleman or even  
11 the Hawesville Smelter. In such case, Big Rivers and Kenergy required  
12 the Capacitor Agreement to remain in effect to protect them from any  
13 resulting costs, or other potential exposures.

14                   b. The Capacitor Additions are planned to provide voltage support in the  
15 Hawesville area when the Coleman Plant is idled. The Capacitors will  
16 only provide voltage support and will not mitigate any thermal issues  
17 associated with the import capability with the Coleman Plant being  
18 temporary idled. The "must run", SSR status is evaluated by both thermal

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1 issues as well as voltage issues. Since the Capacitors will only provide  
2 voltage support, they will not by themselves eliminate the SSR, “must  
3 run” condition. Big Rivers and Kenergy intend to enter into the agreement  
4 to accommodate the desires of Century relating to the Capacitor Additions  
5 and to protect Big Rivers and Kenergy from any resulting risks. Recital D  
6 to the agreement does note that “Century intends that the Capacitor  
7 Additions will support serving its requirements for electric services under  
8 an Electric Service Agreement . . . as part of the Transaction, in  
9 circumstances where Big Rivers has idled its Kenneth C. Coleman Plant . .  
10 . . .”

- 11 c. The Capacitor Agreement will not affect any allocation of costs for  
12 Electric Services or recovery of SSR Costs amongst Big Rivers, Kenergy  
13 and Century. It could change the level at which an SSR condition exists  
14 and thus whether SSR Costs are incurred. The agreement would not affect  
15 Plant Wilson or Plant Coleman if either were to be sold.
- 16 d. Please see the response to part c., above.
- 17 e. Please see the response to part c., above.
- 18

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1   **Witness)**     Robert W. Berry

2

**JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221**

**Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013**

**July 11, 2013**

1    **Item 20)**     *For Kenergy customers who are presently provided MISO power on a backup*  
2    *basis, will their access to MISO backup power be adversely impacted in any way by the*  
3    *Kenergy-Century agreement - with or without the Coleman Station in operation?*

4  
5    **Response)**    Any Kenergy customer that presently receives MISO power as backup power  
6    under its retail service agreement will not have their access to MISO backup power adversely  
7    impacted by the Kenergy-Century agreement, with or without the Coleman Station in  
8    operation.

9  
10  
11   **Witness)**     Robert W. Berry

12

JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

1 **Item 21)** *For Kenergy customers who are presently provided MISO power on a backup*  
2 *basis, will these customers see any increased MISO costs as a result of SSR costs being*  
3 *socialized?*

4

5 **Response)** Backup power MISO costs to Kenergy customers will not be increased by  
6 socialization of SSR costs in MISO.

7

8

9 **Witness)** Robert W. Berry

10



JOINT APPLICATION OF KENERGY CORP. AND  
BIG RIVERS ELECTRIC CORPORATION  
FOR APPROVAL OF CONTRACTS AND FOR A DECLARATORY ORDER  
CASE NO. 2013-00221

Response to the Kentucky Industrial Utility Customers, Inc.'s  
Initial Request for Information  
dated July 2, 2013

July 11, 2013

1 **Item 22)** *For Kenergy customers who are presently provided MISO power on a backup*  
2 *basis, will these customers see any increased MISO costs not related to SSR as a result of the*  
3 *Kenergy-Century agreement?*

4

5 **Response)** Given the variability of timing and volumes of backup power taken by Kenergy  
6 customers it is impossible for Big Rivers to predict whether these customers will see any  
7 increased MISO costs as described in this information request.

8

9

10 **Witness)** Robert W. Berry

11