

SULLIVAN, MOUNTJOY, STAINBACK & MILLER PSC

ATTORNEYS AT LAW

July 8, 2010

RECEIVED

JUL 08 2010

**PUBLIC SERVICE
COMMISSION**

Via Federal Express

Jeff DeRouen
Executive Director
Public Service Commission
211 Sower Boulevard, P.O. Box 615
Frankfort, Kentucky 40602-0615

Re: In the Matter of: Application of Big Rivers Electric Corporation
for Approval to Transfer Functional Control of Its Transmission
System to Midwest Independent Transmission System Operator, Inc.
PSC Case No. 2010-00043

Dear Mr. DeRouen:

Enclosed for filing on behalf of Big Rivers Electric Corporation ("Big Rivers") are an original and nine copies of an update to the application filed in this matter and updates to the following data request responses previously filed by Big Rivers: Item 9 of the Commission Staff's first data request, Item 3 of the first data request of Kentucky Industrial Utility Customers, Inc. ("KIUC"), Item 12 of KIUC's first data request, Item 19 of KIUC's second data request, and Item 20 of KIUC's second data request. Also enclosed are verification pages for two of the persons listed as witnesses on the updated responses. A verification page for the other witness, Ralph Luciani, was not available at the time of filing. Mr. Luciani's verification page will be filed when it is available. A copy of this letter and all attachments hereto have been served on the attached service list.

Sincerely,



Tyson Kamuf

TAK/ej
Enclosures

cc: Albert M. Yockey
David G. Crockett
C. William Blackburn
Ralph L. Luciani
Douglas Beresford
John Lilyestrom
Service List

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Service List
Case No. 2010-00043

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VERIFICATION

I verify, state, and affirm that the updated data request responses filed with this verification for which I am listed as a witness are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

David G. Crockett
David G. Crockett

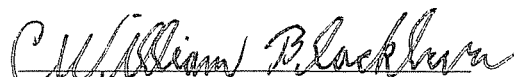
COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by David G. Crockett on this the 7th day of July, 2010.

Paula Mitchell
Notary Public, Ky. State at Large
My Commission Expires 1-12-13

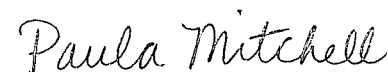
VERIFICATION

I verify, state, and affirm that the updated data request responses filed with this verification for which I am listed as a witness are true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.


C. William Blackburn

COMMONWEALTH OF KENTUCKY)
COUNTY OF HENDERSON)

SUBSCRIBED AND SWORN TO before me by C. William Blackburn on this the 7th
day of July, 2010.


Notary Public, Ky. State at Large
My Commission Expires 1-12-13

BIG RIVERS ELECTRIC CORPORATION'S
UPDATES TO THE APPLICATION AND DATA REQUEST RESPONSES
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1

2 **Update to Application)** In its Application filed in this matter, Big Rivers noted that it
3 might be necessary for it to enter to the Agency Agreement (Appendix G of the Midwest ISO
4 Agreement) that was attached as Exhibit 17 to the Application. *See* Application pages 12-13.
5 Big Rivers will be entering into that agreement.

6

7 **Witness)** David G. Crockett

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2 **Item PSC 1-9)** *Refer to pages 37 - 38 of the Direct Testimony of David G. Crockett*
3 *("Crockett Testimony"). Provide the cost of the Reserves Agreement under which Big Rivers*
4 *will satisfy its contingency reserve obligation during the period January 1, 2010 to September*
5 *1, 2010.*

6

7 **Update to Response)** The actual costs for access to reserves under Attachment RR for the
8 months of January 2010 through March 2010 are as follows:

9 Jan \$82,600.26

10 Feb \$93,082.78

11 Mar \$100,609.50

12 These amounts are the costs for just having the reserve agreement in place; they do not include
13 the cost for power actually purchased under Attachment RR.

14

15 **Witness)** C. William Blackburn

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1
2 **Item KIUC 1-3)** *If not included in your responses to Item 1 or Item 2, please provide all*
3 *Documents and Studies to/from Big Rivers, CRA, and MISO, or any other firm acting on*
4 *behalf of Big Rivers relating to the estimate of the benefits and/or costs to Big Rivers to join*
5 *MISO.*

6
7 **Update to Response)** See attached email.

8
9 **Witness)** David G. Crockett

From: Cheryl A. Bredenbeck [mailto:cbredenbeck@midwestiso.org]
Sent: Friday, May 21, 2010 11:03 AM
To: David Crockett
Cc: John Harmon; Cheryl A. Bredenbeck; Kevin Vannoy; Gloria Bryant; Guy Ridgely; John Harmon; Ray Beaver; Joe Gardner; Nicholas Eaton; Todd Ramey; Catherine G Brewster; Nicholas Eaton
Subject: RE: MISO Uplift Charges

Dave,

To address your questions, the RNU Charge is allocated on a Market Load Ratio Share basis. Historically, the RNU has represented a charge. Details of historical levels of the charges, including the individual components, is available on a daily report on the Midwest ISO's website at the following link:
http://www.midwestmarket.org/home/Market%20Reports?type=ms_rnu&list=all

The Auction Revenue Rights Infeasible Uplift Amount is allocated to FTR Holders and represents a charge. The following table presents the historical values for the uplift and provides the percentage of FTR Revenues.

TRADE_DATE	Infeasible ARR Uplift	FTR Auction Revenue	Percentage of FTR Value
6/1/2009	\$ 1,173,087	\$ 31,716,008	3.7%
7/1/2009	\$ 1,173,087	\$ 31,716,009	3.7%
8/1/2009	\$ 1,173,087	\$ 31,716,008	3.7%
9/1/2009	\$ 1,597,082	\$ 23,335,497	6.8%
10/1/2009	\$ 1,597,081	\$ 23,335,642	6.8%
11/1/2009	\$ 1,597,081	\$ 23,300,643	6.9%
12/1/2009	\$ 818,931	\$ 17,800,465	4.6%
1/1/2010	\$ 818,931	\$ 17,800,466	4.6%
2/1/2010	\$ 818,931	\$ 17,800,468	4.6%
3/1/2010	\$ 992,933	\$ 19,942,063	5.0%
4/1/2010	\$ 992,933	\$ 19,942,064	5.0%
5/1/2010	\$ 992,933	\$ 19,941,475	5.0%

It is difficult if not impossible to predict the impact, if any, that Big Rivers' GFA Option A load will have on these charges.

Cheryl

From: David Crockett [mailto:David.Crockett@bigrivers.com]
Sent: Wednesday, May 19, 2010 8:42 AM
To: Cheryl A. Bredenbeck
Subject: MISO Uplift Charges

Cheryl,

Questions have arisen about and hopefully you can provide some clarity surrounding certain uplift charges in the MISO market settlements. The two uplift charges in question are the RNU and infeasible LTTRs. Our first question is whether it is likely that these uplift charges would likely represent additional costs rather than revenue benefits to Big Rivers or not? Secondly, does our GFA Option A served load impact positively these uplift charges or conversely does the non-GFA served load impact negatively these charges to Big Rivers? Thanks again for your help in addressing these questions.

Dave

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Item KIUC 1-12) Refer to page 10, lines 11-15 of your direct testimony. Please identify the business and financial risks that Big Rivers will assume by joining MISO, over and above the additional costs incurred by Big Rivers to cover MISO-related charges for transmission expansion, administrative charges and fees; FERC administrative charges; and additional staffing costs and related operating charges. Please state with specificity those areas of risk and the potential financial impact of those risks on Big Rivers and, potentially, its customers.

Update to Response) Big Rivers has been informed by Southern Illinois Power Company (“SIPC”) that SIPC’s SEPA capacity may not be being counted toward the Resource Adequacy reserves that Midwest ISO requires for SIPC due to SEPA capacity being “run of the river” rather than “scheduled” energy. SEPA capacity may continue to not be counted toward the Resource Adequacy requirements until repairs can be finished at Wolf Creek Dam, which are expected to be finished in the fall of 2012. Upon completion of those repairs, the reservoir will need to refill during the winter of 2012 and spring of 2013 before SEPA power can be fully scheduled again. However, given the current low level of capacity prices in the Midwest ISO Voluntary Capacity Auction (VCA) and the significant amount by which the Midwest ISO reserve margin exceeds the Midwest ISO target reserve margin currently and for a number of years into the future, the potential impact on Big Rivers of not being able to count SEPA capacity toward the Resource Adequacy requirements is believed to be minimal (i.e., less than \$25,000 per year).

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- 1 Witness) C. William Blackburn
- 2 Ralph L. Luciani

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1 **Item KIUC 2-19)** *Please refer to Big Rivers' response to KIUC 1-26. Please provide the*
2 *information received from Hoosier Energy concerning its experiences with the market*
3 *settlements area of MISO.*

4

5 **Update to Response)** The original response to this item noted that a member of Mr. Blackburn's
6 staff was going to visit Hoosier Energy on April 28, 2010. A write-up of the notes taken at that
7 meeting by the staff member and materials given to the staff member at the meeting are attached
8 to this response.

9

10 **Witness)** C. William Blackburn

Hoosier Energy visit – April 28, 2010

Big Rivers: Mike Mattox, Dee McDowell

Hoosier Energy: Dave Stolz (Manager Power Markets), Michelle King (Power Marketing Analyst-Settlements), Mike Mooney (Manager, Corporate Planning)

Hoosier has a Power Marketing Manager, Analyst and Assistant for daily MISO activity

- Hoosier has two morning calls. First with their generation units and a second with ACES.
- Hoosier forecasts their day-ahead load using Itron/Metrix software and Telvent weather service; Big Rivers uses the same vendors.
- Hoosier puts together Day-Ahead MISO bid/offer for load/generation based on the phone calls and their load forecast. A spreadsheet is sent via ftp to ACES, where an internal process/software submits info to the MISO portal. Hoosier does not have the software in-house to send the info to MISO directly.
- Hoosier found ACES is too conservative in bids/offers into MISO
- Hoosier is satisfied with ACES real-time execution.
- Hoosier utilizes and is satisfied with ACES' handling of FTRs. Hoosier was generally covered by GFAs but these have been expiring in the past 2 years or so, such that FTRs are increasingly needed. At first Hoosier had a revenue sharing agreement with a consultant to optimize FTR economics, but ACES reportedly convinced the Hoosier CEO that ACES should be doing the work.
- Due to lack of software/resources Hoosier does not know if they have the most efficient mix when offering energy vs. ancillary services into the MISO market.

Hoosier has a Power Marketing Analyst-Settlements devoted to shadow settling select MISO charges

- Manual spreadsheet, very time consuming process.
- MISO settlements are published every day (including weekends) so the Analyst is at risk of quickly falling behind
- Due to time/resource limitations only select high value charges/credits that are prone to error are checked
- Among those high value credits are make whole payments which Hoosier indicated ACES nMarket software cannot check
- Problem with ACES check is that if MISO and ACES both use bad info, the shadow settlement will check-out (Big Rivers has encountered this)
- ACES does not do in-depth settlement analysis. Hoosier appears to be finding and submitting most of the disputes with MISO
- Depending on nature of the dispute ACES may have disincentive to find errors if it will reflect poorly on ACES
- Hoosier would prefer to have PCI-type software but due to budget and ACES opposition this is unlikely in the near future.

- Hoosier has found technical problems with their meters reporting bad data, which must be submitted to MISO on a 5 minute basis for settlements. Therefore they do statistical analysis to verify data.

Resource Planning

- Limited time to talk in-depth about this area.
- Hoosier relies heavily on ACES in this area like Big Rivers.
- Wanting to have more in-house capability as Big Rivers Energy Services does due to similar issues/reasons regarding ACES.

Take-Aways

- PCI-type software is needed to verify settlements and analyze data to find ways to optimize assets, i.e. in the words of PCI “identify P&L leakage”.
- While ACES generally performs well, they still need to be closely monitored due to conflicts of interest and lack of incentives/accountability.
- Big Rivers should analyze and verify 5 minute data before submitting to MISO, since we have no experience at this granularity level. Our PCI training showed that even 2 or 3 intervals of bad 5 minute data can have a profound impact on settlements for an entire day.

Bilateral Checkouts with Counterparties

Monthly & Daily Sales/Purchases external to MISO

- I. Tracking – 2 methods
 - A. Internal E-mail – Senior Power Marketing Analyst submits an e-mail to Power Marketing group with daily transaction information
 - B. External E-mail (ACES) – ACES sends internal and external confirmation e-mails to Power Marketing Settlements Analyst with details on daily/monthly transaction deals *(email) trade confirm*
- II. Recordkeeping
 - A. Internal – Power Marketing Settlements Analyst manually enters trade activity into an excel spreadsheet.
 1. Date
 2. MWH(s)
 3. DA/RT
 4. \$
 5. Any additional info pertaining to the trade
 - B. External – ACES has trade capture system which also has hourly detail on each transaction. This is exported to excel and sent to Power Marketing Settlements Analyst on a weekly basis.
- III. Month-End Checkout
 - A. Compare HE internal information with external (ACES) information
 - B. E-mail is sent to each counterparty listing month totals on MWHs and \$ values.
 1. Request is made for agreement of information
 - a. If we do not agree, detail is sent/received for identification of discrepancy
 - C. Internal process is to be checked out by 10th day of the month. This gives time for info on payables/receivables to be completed within the terms of the contract invoicing

MDMA Process

The MDMA Process is laid out in the MISO Settlements Business Practices Manual

- I. MDMA – Hoosier Energy's MDMA is the manager of System Control.
- II. Meter Data Uploads
 - A. Upload to MISO Portal by Hoosier MDMA
 - B. Upload to ACES by Power Marketing via FTP
- III. Validation – The 2 uploads are compared in nMarket for discrepancies for S7, S14, S55, & S105

Settlement Validation

- I. Hoosier -- Mostly a manual process is used. Due to MISO converting most of their calculations to a 5 minute-interval basis, internally created spreadsheet validations are done & use MISO 5-minute telemetry data for input.
- II. ACES -- Uses nMarket. The last discussion regarding nMarket calculations were sometime in June 2009. Not sure of the current capability, but prior discussions indicated that nMarket lacked a method for 5-minute settlement data validations

Dispute Coordination

- I. Submission -- can be done by Hoosier or ACES, but generally by Hoosier
- II. Communication -- Discrepancies & any resolutions on settlement statements or invoices are discussed by Hoosier and ACES.

Databases

Hoosier has an exclusive settlements database. This houses any data from all settlement statement files. It is used to generate specific reports to the Hoosier accounting department or ad hoc reports for analysis.

MSWG Participation

Power Marketing Settlements Analyst or Senior Power Marketing Analyst attend the MISO Settlements Working Group monthly meetings. These meetings update Market Participants on any upcoming issues that will impact them regarding settlements &/or invoicing

ASM CHARGE TYPE
Day Ahead Regulation Amount
Day Ahead Spinning Reserve Amount
Day Ahead Supplemental Reserve Amount
Contingency Reserve Deployment Failure Charge Amount
Excessive Energy Amount
Real Time Excessive Deficient Energy Deployment Charge Amount
Net Regulation Adjustment Amount
Non-Excessive Energy Amount
Real Time Regulation Amount
Regulation Cost Distribution Amount
Real Time Spinning Reserve Amount
Spinning Reserve Cost Distribution Amount
Real Time Supplemental Reserve Amount
Supplemental Reserve Cost Distribution Amount
Cost of Regulation, Spin, and Supp

Make-Whole Payments

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1 **Item KIUC 2-20)** *For each month during 2010 please provide the number, duration,*
2 *amount in MW and cause of each event when Big Rivers was required to call on MISO for*
3 *reserve sharing. This is a continuing request.*

4
5 **Update to Response)** See attached document, which provides the MISO Contingency Reserve
6 Requests for May 2010.

7

8 **Witness)** David G. Crockett

MISO CONTINGENCY RESERVE EVENTS

May					
Date	Event	Reserve Requested	Start Time (CPT)	Stop Time (CPT)	Duration
5/3/2010	Coleman 1&2 feeder outages	80 MW	0627	0700	33 minutes
5/6/2010	Coleman #2 unit outage	125 MW	2002	2115	73 minutes
5/7/2010	HMP&L #2 unit outage	130 MW	1217	1300	43 minutes