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February 27, 2004

Federal Express

Thomas M. Dorman
Executive Director
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Frankfort, KY 40602-0615

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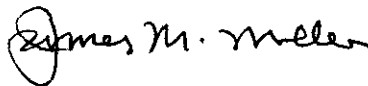
**PUBLIC SERVICE
COMMISSION**

Re: Big Rivers Electric Corporation - In the Matter of: A Review of the
Adequacy of Kentucky's Generation Capacity and Transmission
System, Kentucky Public Service Commission,
Administrative Case No. 387

Dear Mr. Dorman:

Enclosed are an original and ten copies of the responses of Big Rivers Electric Corporation to the continuing data requests in the above-styled matter. I certify that copies of this letter and attachments have been served upon each of the persons identified on the attached service list. Please feel free to contact me with any questions.

Sincerely yours,



James M. Miller

JMM/ej
Enclosures

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**KENTUCKY POWER COMPANY
D/B/A AMERICAN ELECTRIC
POWER**

**COMMONWEALTH OF KENTUCKY
BEFORE THE
PUBLIC SERVICE COMMISSION OF KENTUCKY**

In the Matter of:

**A Review of the Adequacy of)
Kentucky's Generation)
Capacity and Transmission)
System)**

**ADMINISTRATIVE
CASE NO. 387**

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**PUBLIC SERVICE
COMMISSION**

**BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE
COMMISSION'S REVIEW OF THE ADEQUACY OF
KENTUCKY'S GENERATION CAPACITY AND
TRANSMISSION SYSTEM
FOR CALENDAR YEAR 2003—ADMINISTRATIVE CASE NO. 387
ORDER OF DECEMBER 20, 2001**

March 1, 2004

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
REVIEW OF THE ADEQUACY OF KENTUCKY'S
GENERATION CAPACITY AND TRANSMISSION SYSTEM
FOR CALENDAR YEAR 2003 - ADMINISTRATIVE CASE NO. 387
ORDER DATED DECEMBER 20, 2001

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4 **Item 1-G)** Actual and weather-normalized energy sales for the just completed
5 calendar year. Sales should be disaggregated into native load sales and off-system
6 sales. Off-system sales should be further disaggregated into full requirements sales,
7 firm capacity sales, and non-firm or economy energy sales. Off-system sales shall be
8 further disaggregated to identify separately all sales where the utility acts as a reseller,
9 or transporter, in a power transaction between two or more other parties.

10
11 **Response)** Table # 1-G shows the native and off-system sales for 2003 and the
12 further breakdowns as applicable to Big Rivers. Big Rivers supplies power to be used
13 for back-up of the Weyerhaeuser cogeneration facility. However, this back-up power
14 is received by Big Rivers through a separate back-up power supply agreement and is
15 not included in Table # 1-G.

16
17 Please note that the "TOTAL NATIVE LOAD & OFF-SYSTEM ENERGY SALES"
18 category in Table # 1-G represents energy associated with Big Rivers' power supply
19 only. The category "LOAD NOT SERVED BY BIG RIVERS" represents additional
20 energy that is on the Big Rivers' transmission system. The "Control Area" load is
21 composed of energy provided by others to Kenergy Corp. for resale to the aluminum
22 smelters as well as part of the load for the City of Henderson and Big Rivers acts as the
23 "transporter" for control area load. In addition, Big Rivers acts as transporter for
24 energy from Big Rivers' generators sold off-system by LG&E Energy Marketing. Big
25 Rivers does not track megawatt hours for these transports.

26
27 **Witness)** C. William Blackburn
28 Travis D. Housley, P.E.
29 David G. Crockett, P.E.
30
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Table #1G

BIG RIVERS ELECTRIC CORPORATION

Month	TOTAL NATIVE LOAD & OFF-SYSTEM ENERGY SALES (MWh)		LOAD NOT SERVED BY BIG RIVERS			
	Native Load		Off-System		Control	
	Total Energy		Off-System Energy		Area Load	
	Actual	Weather Normalized	Firm	Non-Firm	Reseller	Wheeling
Jan-03	311,451	275,469	53,317	67,585	1,940	621,201
Feb-03	270,205	233,132	48,220	73,698	170	561,514
Mar-03	244,209	243,822	47,087	120,221	1,701	622,974
Apr-03	221,207	213,952	52,265	110,634	1,079	600,665
May-03	219,859	222,737	52,184	77,006	274	622,592
Jun-03	240,536	260,037	29,126	79,962	991	602,280
Jul-03	297,623	293,768	30,097	71,397	891	623,588
Aug-03	301,425	295,216	30,097	83,989	2,151	625,649
Sep-03	241,407	250,031	46,117	54,687	5,146	603,294
Oct-03	225,385	221,385	48,706	77,663	1,024	620,324
Nov-03	233,748	227,471	44,498	79,870	1,712	599,238
Dec-03	280,476	274,700	47,896	69,093	14,351	621,547
Total	3,087,530	3,011,717	529,612	965,803	31,430	7,324,866

Note 1: Big Rivers off-system sales are market blocks of power. Therefore, the off-system sales cannot be weather normalized.

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BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
REVIEW OF THE ADEQUACY OF KENTUCKY'S
GENERATION CAPACITY AND TRANSMISSION SYSTEM
FOR CALENDAR YEAR 2003 - ADMINISTRATIVE CASE NO. 387
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Item 2-G) A summary of monthly power purchases for the just completed calendar year. Purchases should be disaggregated into firm capacity purchases required to service native load, economy energy purchases, and purchases where the utility acts as a reseller, or transporter, in a power transaction between two or more other parties.

Response) Table # 2-G show energy purchases, both firm and economy, which came through Big Rivers' Power Supply for 2003. Table # 2-G also shows additional energy purchased for the control area by others and it shows the quantity of wheeling for 2003.

Witness) C. William Blackburn
Travis D. Housley, P.E.
David G. Crockett, P.E.

TABLE # 2G

BIG RIVERS ELECTRIC CORPORATION

Month	Monthly Power Purchases by Big Rivers				Load Not Served By Big Rivers	
	Native Load		Economy Energy MWh	Resell Energy MWh	Control Area Load MWh	Wheeling MWh
	Firm Capacity MWh					
Jan-03	311,451	119,124	1,940	73,905	6,385	
Feb-03	270,205	120,918	170	72,237	4,400	
Mar-03	244,209	165,346	1,701	28,580	41,308	
Apr-03	221,207	157,508	1,079	23,719	3,998	
May-03	219,859	128,532	274	50,409	1,810	
Jun-03	240,536	109,226	991	64,190	5,651	
Jul-03	297,623	101,729	891	37,584	31,376	
Aug-03	301,425	114,220	2,151	61,619	19,775	
Sep-03	241,407	100,511	5,146	36,267	2,655	
Oct-03	225,385	127,054	1,024	17,365	3,251	
Nov-03	233,748	124,618	1,712	37,807	6,433	
Dec-03	280,476	116,728	14,351	49,993	2,290	
Total	3,087,530	1,485,515	31,430	553,675	129,332	

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BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
REVIEW OF THE ADEQUACY OF KENTUCKY'S
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FOR CALENDAR YEAR 2003 - ADMINISTRATIVE CASE NO. 387
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Item 3-G) Actual and weather-normalized monthly coincident peak demands for the just completed calendar year. Demands should be disaggregated into (a) native load demand (firm and non-firm) and (b) off-system demand (firm and non-firm).

Response) Table # 3-G shows the actual and weather normalized native load demand and the off-system coincident for 2003. Big Rivers sells its surplus power into the market and therefore the off-system sales cannot be weather normalized.

Please see the second paragraph of the response to # 1-G for additional explanation.

Witness) C. William Blackburn

TABLE # 3G

BIG RIVERS ELECTRIC CORPORATION

Month	Native Load		Off-System Sales		Load Not Served By Big Rivers	
	All Firm		Off-System Demand		Control Area Load	Off System Firm(OPC)
	Peak Demand		Firm Non-Firm			
	Actual	Normalized	Firm	Non-Firm		
Jan-03	585	523	105	60	893	---
Feb-03	513	499	105	54	892	---
Mar-03	470	457	135	30	840	---
Apr-03	406	400	186	50	842	---
May-03	400	491	44	117	878	---
Jun-03	536	545	105	92	848	---
Jul-03	551	577	40	134	878	---
Aug-03	584	575	40	89	885	---
Sep-03	496	547	90	67	879	---
Oct-03	379	455	90	194	875	---
Nov-03	451	422	105	175	886	---
Dec-03	477	487	90	120	892	---

Note: Big Rivers off-system sales are market blocks of power. Therefore, the off-system sales cannot be weather normalized.

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
REVIEW OF THE ADEQUACY OF KENTUCKY'S
GENERATION CAPACITY AND TRANSMISSION SYSTEM
FOR CALENDAR YEAR 2003 - ADMINISTRATIVE CASE NO. 387
ORDER DATED DECEMBER 20, 2001

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4 **Item 4-G)** Load shape curves that show actual peak demands and weather-
5 normalized peak demands (native load demand and total demand) on a monthly basis
6 for the just completed calendar year.

7
8 **Response)** Graph # 4-G shows the monthly native load demand with the monthly
9 weather normalized native load demand for 2003. The total curve represents the native
10 load demand plus the actual firm off-system sales.

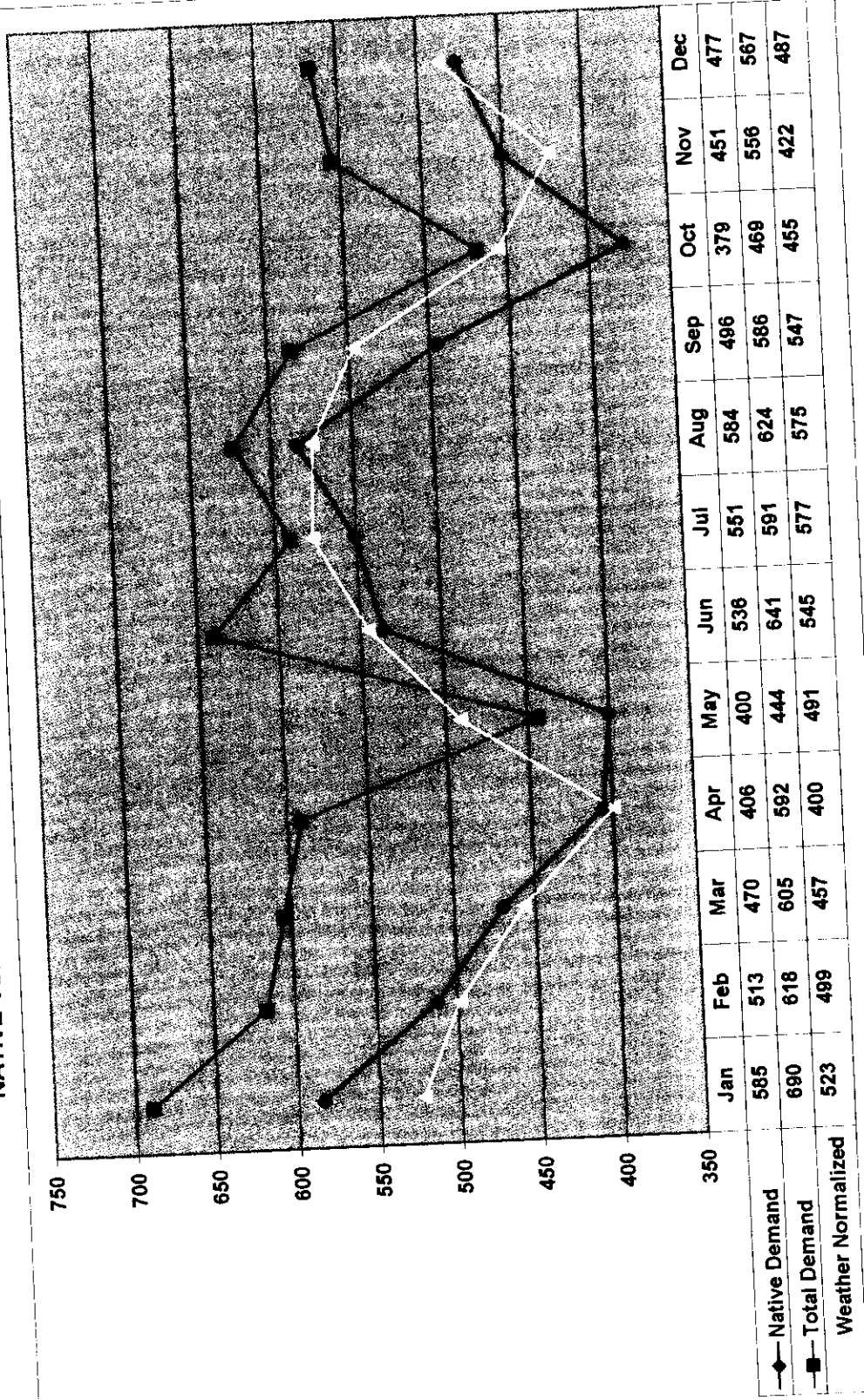
11
12 Please note that this graph represents power that comes through Big Rivers' power
13 supply and does not represent the activity of others in the Big Rivers' control area. Big
14 Rivers does not have the data to supply the remaining power for the control area.

15
16 **Witness)** C. William Blackburn
17 Travis D. Housley, P.E.
18 David G. Crockett, P.E.
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Graph #4G

BIG RIVERS ELECTRIC CORPORATION

NATIVE AND TOTAL COINCIDENT PEAK DEMANDS (MW) - 2003



BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
REVIEW OF THE ADEQUACY OF KENTUCKY'S
GENERATION CAPACITY AND TRANSMISSION SYSTEM
FOR CALENDAR YEAR 2003 - ADMINISTRATIVE CASE NO. 387
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4 **Item 5-G)** Load shape curves showing the number of hours that native load demand
5 exceeded these levels during the just completed calendar year: (1) 70% of the sum of
6 installed generating capacity plus firm capacity purchases; (2) 80% of the sum of
7 installed generating capacity plus firm capacity purchases; (3) 90% of the sum of
8 installed generating capacity plus firm capacity purchases.

9
10 **Response)** Graphs, # 5-G-1, 5-G-2 and 5-G-3, show the hourly native load demand
11 for 2003 with each dot representing the demand for that hour. They also show the
12 lines representing 70%, 80% and 90% (respectively) of Big Rivers' total capacity. Big
13 Rivers exceeded 70% of its capacity for a total of 54 hours during the year, which may
14 be seen as all of the dots above the 543 line on the graph. At 80% and 90% of Big
15 Rivers' capacity (620 MW and 698MW respectively), Big Rivers' maximum native
16 load did not exceed either of those levels.

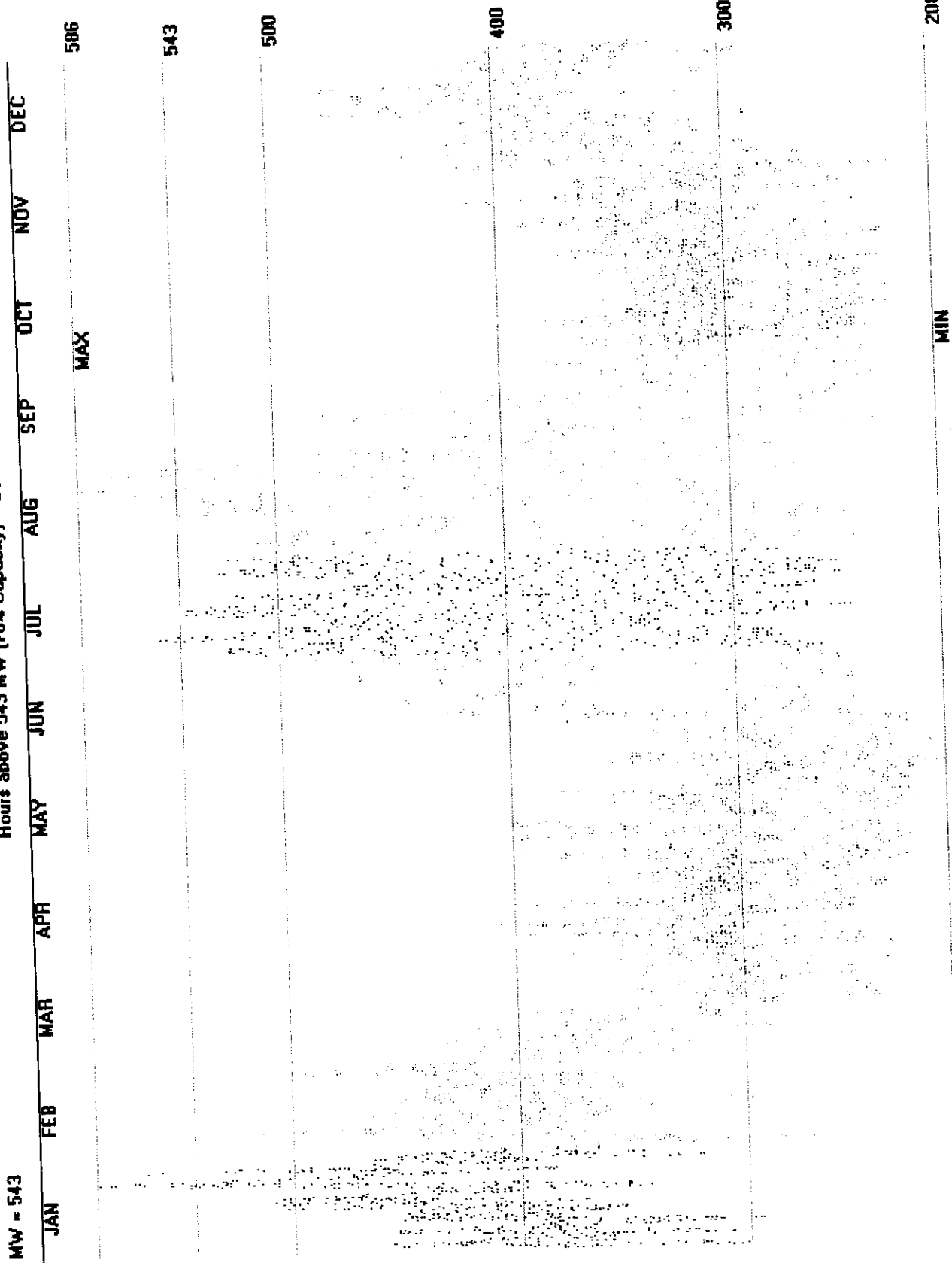
17
18 Please note that these graphs represent power that came through Big Rivers' power
19 supply and does not represent the activity of others in the Big Rivers' control area. Big
20 Rivers does not have the data to supply the remaining power for the control area.

21
22 **Witness)** C. William Blackburn
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Big Rivers' Hourly Native Load Shape - 2003
Hours above 543 MW (70% Capacity) = 54

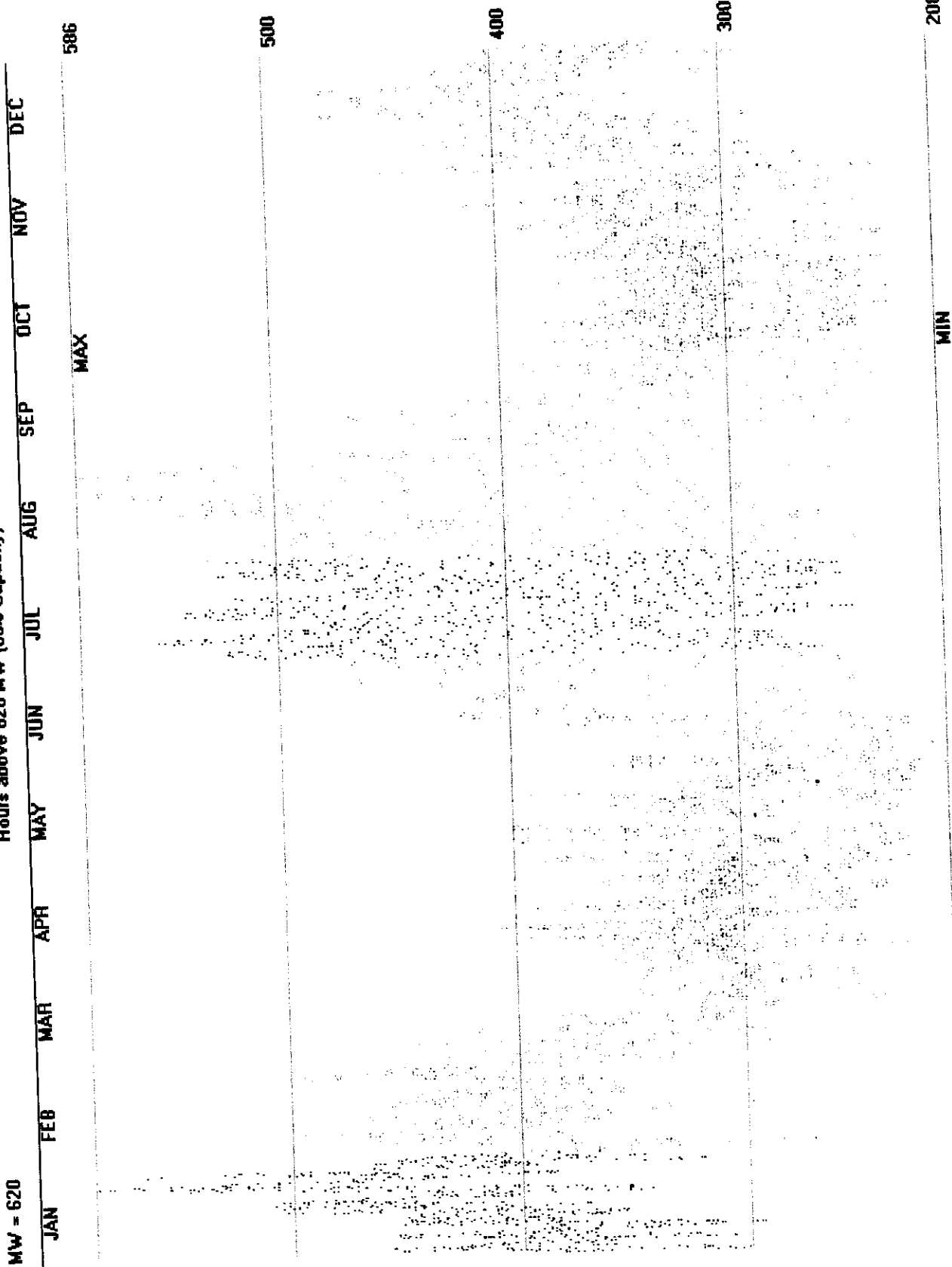
MWH = 951

MW = 543



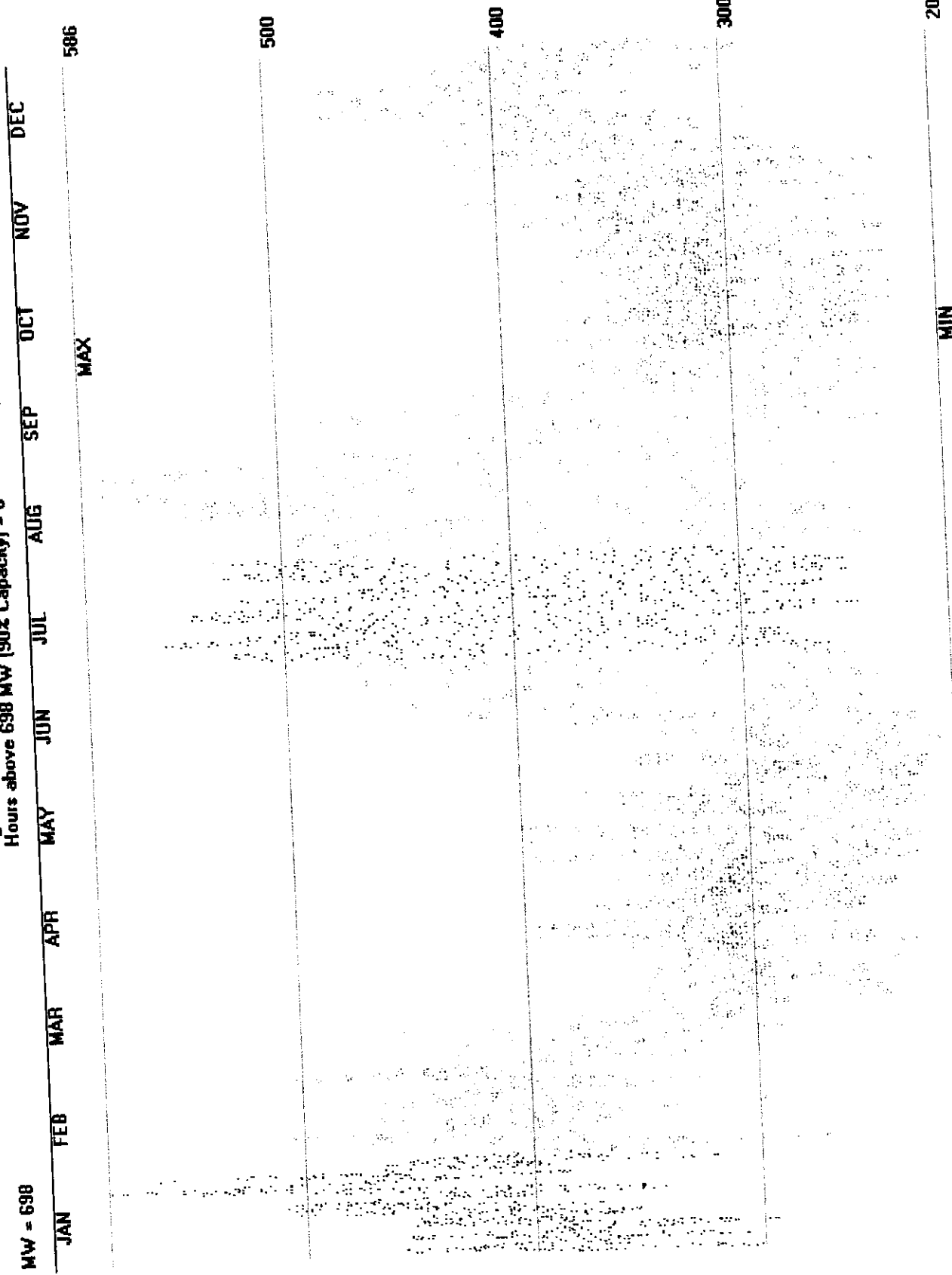
Big Rivers' Hourly Native Load Shape - 2003
Hours above 620 MW (80% Capacity) = 0

Mw/H = 0



Big Rivers' Hourly Native Load Shape - 2003
Hours above 698 MW (90% Capacity) = 0

MWH = 0



MW = 698

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
REVIEW OF THE ADEQUACY OF KENTUCKY'S
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FOR CALENDAR YEAR 2003 - ADMINISTRATIVE CASE NO. 387
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Item 6-G) Based on the most recent demand forecast, the base case demand and energy forecasts and high case demand and energy forecasts for the current year and the following four years. The information should be disaggregated into (a) native load (firm and non-firm demand) and (b) off-system load (both firm and non-firm demand).

Response) Table # 6-G tabulates the forecasted base case and high case demand and energy in the associated demand breakdowns as requested. Big Rivers does not have any native non-firm demand.

Please note that this table represents power that came through Big Rivers' power supply and does not represent the activity of others in the Big Rivers' control area. Big Rivers does not have the data to supply the remaining power for the control area.

Witness) C. William Blackburn

TABLE # 6G

BIG RIVERS ELECTRIC CORPORATION

**TOTAL NATIVE LOAD & OFF-SYSTEM LOADS
BASE & HIGH CASE FORECASTS**

Year	Native Load				Off-System Sales*			
	Base Case		High Case		Base Case		High Case	
	Demand (MW)	Energy (MWh)	Demand (MW)	Energy (MWh)	FIRM Demand (MW)	NON-FIRM Demand (MW)	FIRM Demand (MW)	NON-FIRM Demand (MW)
2004	612	3,167,095	640	3,292,633	90	53	90	53
2005	623	3,215,084	650	3,341,928	85	30	85	30
2006	634	3,262,191	661	3,390,360	85	30	85	30
2007	644	3,316,135	673	3,445,723	50	0	50	0
2008	656	3,365,334	685	3,496,298	50	0	50	0

*The forecasted demand for off-system sales is assumed to be at the time of the native load coincident peak demand.

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
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FOR CALENDAR YEAR 2003 - ADMINISTRATIVE CASE NO. 387
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Item 7-G) The target reserve margin currently used for planning purposes, stated as a percentage of demand. If changed from what was in use in 2001, include a detailed explanation for the change.

Response) When Big Rivers operated its own generation, a generation planning reserve margin was calculated using output data from statistical calculations for loss of load probabilities and loss of generation expectations for various outage states of the generators.

Big Rivers is now a unique utility in Kentucky because it leases all of its generation capacity and purchases most of its power requirements as liquidated damages firm (LD firm) power. Reserve margins are calculated from historical generator operating characteristics and various states of generator outages. Because Big Rivers' native load is now supplied with LD firm power from LG&E Energy Marketing and firm power from the Southeastern Power Administration. Because of this, Big Rivers has no formal planning reserve margin.

Witness) C. William Blackburn

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
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Item 8-G) Projected reserve margins stated in megawatts and as a percentage of demand for the current year and the following 4 years. Identify projected deficits and current plans for addressing these. For each year identify the level of firm capacity purchases projected to meet native load demand.

Response) Please see Response to # 7-G relative to reserve margins. Big Rivers has no projected deficits for the current year nor for the following 4 years. Big Rivers' level of firm capacity purchases for the next 4 years is 775 MW.

Witness) C. William Blackburn

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
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4 **Item 9-G)** By date and hour, identify all incidents during the just completed
5 calendar year when reserve margin was less than the East Central Area Reliability
6 Council's ("ECAR") 1.5% spinning reserve requirements. Include the amount of
7 capacity resources that were available, the actual demand on the system, and their
8 reserve margin, stated in megawatts and as a percentage of demand. Also identify
9 system conditions at the time.

10
11 **Response)** The attached table lists the incidents as reported to ECAR, when the
12 contingency spinning reserves in Big Rivers' control area was less than the required
13 1.5%. The table contains the available generation capacity, system demand, reserve
14 margin, and system condition information as requested.

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16 **Witness)** Travis D. Housley, P.E.
17 David G. Crockett, P.E.
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Big Rivers Electric Corporation
Response to Item 9

2003	Month	Day	Hour CPT	Capacity Resources (MW)	System Demand (MW)	Reserve Margin (MW)	Reserve Margin (%)	System Conditions
	October	14	14:00	1273	1269	+4	+0.3	Wilson 1 Forced Outage Hend 1, PMO, Reid 1, Cole 2, Cole 3 & Hend 2 Forced Outage
	April	8	21:00	1318	1309	+9	+0.7	Reid 1, PMO Hend 1, Cole 3, Forced Outage.
	April	3	20:00	1306	1292	+14	+1.1	Reid 1, PMO Hend 1, Cole 3, Forced Outage.
	April	2	20:00	1308	1296	+12	+0.9	Reid 1, Forced Outage. Hend 1, Cole 3, PMO
	March	31	20:00	1351	1334	+17	+1.3	Coleman 3, PMO
	March	6	21:00	1426	1410	+16	+1.1	Coleman 3, PMO
	March	5	20:00	1395	1392	+3	+0.2	Coleman 3, PMO
	January	24	18:00	1472	1465	+7	+0.5	Hend 2 & Wilson 1, Forced Outage
	January	24	07:00	1564	1559	+5	+0.3	Hend 2 & Wilson 1, Forced Outage Cole 1, Cole 3, Hend 2 & Wilson 1, Forced Outage
	January	23	18:00	1535	1528	+7	+0.5	Cole 1, Cole 3, Hend 2 & Wilson 1, Forced Outage
	January	23	07:00	1545	1544	+1	0	Forced Outage
	January	22	19:00	1550	1540	+10	+0.6	Cole 1, Cole 3, Hend 2 & Wilson 1, Forced Outage
	January	21	18:00	1448	1430	+18	+1.3	Cole 1, Cole 3, Hend 2 & Wilson 1, Forced Outage
	January	14	18:00	1457	1438	+19	+1.3	Wilson 1 Forced Outage
	January	14	19:00	1472	1455	+17	+1.2	Wilson 1 Forced Outage
	January	8	18:00	1354	1343	+11	+0.8	Wilson 1 Forced Outage
	January	6	20:00	1444	1436	+8	+0.6	Wilson 1 Forced Outage

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
REVIEW OF THE ADEQUACY OF KENTUCKY'S
GENERATION CAPACITY AND TRANSMISSION SYSTEM
FOR CALENDAR YEAR 2003 - CASE NO. 387
ORDER DATED DECEMBER 20, 2001

Item 10-G) A list identifying and describing all forced outages in excess of 2 hours in duration during the just completed calendar year.

Response) Big Rivers Electric Corporation entered into various agreements with Western Kentucky Energy Corp. ("WKE") and with WKE Station Two Inc. ("WKE Station Two") which require the two companies to operate and maintain Big Rivers' generating stations and Henderson Municipal Power and Light's Station Two generating stations respectively. The requested information cannot be provided by Big Rivers without written approval from WKE and WKE Station Two. Big Rivers is forwarding a copy of this response to Western Kentucky Energy Corp. and WKE Station Two Inc., Attention: Mr. Robert Toerne, Contract Manager, Western Kentucky Energy Corp., P.O. Box 1518, Henderson, KY, 42419-1518.

Witness) David Spainhoward

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
REVIEW OF THE ADEQUACY OF KENTUCKY'S
GENERATION CAPACITY AND TRANSMISSION SYSTEM
FOR CALENDAR YEAR 2003 - ADMINISTRATIVE CASE NO. 387
ORDER DATED DECEMBER 20, 2001

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Item 11-G) A list that identifies scheduled outages or retirements of generating capacity during the current year and the following four years.

Response) Big Rivers Electric Corporation entered into various agreements with Western Kentucky Energy Corp. ("WKE") and with WKE Station Two Inc., ("WKE Station Two") which require the two companies to operate and maintain Big Rivers' generating stations and Henderson Municipal Power and Light's Station Two generating stations respectively. The requested information cannot be provided by Big Rivers without written approval from WKE and WKE Station Two. Big Rivers is forwarding a copy of this response to Western Kentucky Energy Corp. and WKE Station Two Inc., Attention: Mr. Robert Toerne, Contract Manager, Western Kentucky Energy Corp., P.O. Box 1518, Henderson, KY, 42419-1518. There are no retirements of generating capacity planned for the next four years nor has any capacity been retired in the last year.

Witness) David Spainhoward

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
REVIEW OF THE ADEQUACY OF KENTUCKY'S
GENERATION CAPACITY AND TRANSMISSION SYSTEM
FOR CALENDAR YEAR 2003 - ADMINISTRATIVE CASE NO. 387
ORDER DATED DECEMBER 20, 2001

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Item 12-G) Identify all planned base load or peaking capacity additions to meet native load requirements over the next 10 years. Show the expected in-service date, size and site for all planned additions. Include additions planned by the utility, as well as those by affiliates, if constructed in Kentucky or intended to meet load in Kentucky.

Response) Big Rivers presently has no plans to make base load or peaking capacity additions to meet native load for the years 2004 through 2013.

Witness) C. William Blackburn

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
REVIEW OF THE ADEQUACY OF KENTUCKY'S
GENERATION CAPACITY AND TRANSMISSION SYSTEM
FOR CALENDAR YEAR 2003 - CASE NO. 387
ORDER DATED DECEMBER 20, 2001

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4 **Item 13-G)** The following transmission energy data for the just completed calendar
5 year and the forecast for the current year and the following four years:

6 a) Total energy received from all interconnections and generation
7 sources connected to the transmission system.

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9 b) Total energy delivered to all interconnections on the transmission
10 system.

11 c) Peak load capacity of the transmission system.

12
13 d) Peak demand for summer and winter seasons on the transmission
14 system.
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18 **Response)** The attached four tables list the Big Rivers' transmission system energy,
19 capacity and demand responses.

20
21 **Witness)** Travis D. Housley, P.E.
22 David G. Crockett, P.E.

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Big Rivers Electric Corporation
Response to Item 13a

Transmission System Energy Received (MWh)

	<u>Generation</u>	<u>Interconnections</u>	<u>Total</u>
2003	11,190,322	3,682,979	14,873,301

Projected System Energy Received (MWh)

			15,000,000
2004			15,000,000
2005			15,000,000
2006			15,000,000
2007			15,000,000
2008			15,000,000

Big Rivers Electric Corporation
Response to Item 13b

Transmission System Energy Delivered at Interconnections (MWh)

2003

Total

4,284,682

Projected System Energy Delivered at Interconnection (MWh)

2004

4,250,000

2005

4,200,000

2006

4,150,000

2007

4,100,000

2008

4,050,000

Big Rivers Electric Corporation
Response to Item 13c

Transmission Peak Capacity (MW)

2003	2035
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Projected Transmission Peak Capacity (MW)

2004	2035
2005	2035
2006	2035
2007	2035
2008	2035

**Big Rivers Electric Corporation
Response to Item 13d**

Transmission System Peak Demand (MW)

Winter

Summer

2003

1741

1811

Projected System Peak Demand (MW)

Winter

Summer

2004

1800

1850

2005

1800

1850

2006

1800

1850

2007

1800

1850

2008

1800

1850

BIG RIVERS ELECTRIC CORPORATION'S
RESPONSE TO THE KENTUCKY PUBLIC SERVICE COMMISSION'S
REVIEW OF THE ADEQUACY OF KENTUCKY'S
GENERATION CAPACITY AND TRANSMISSION SYSTEM
FOR CALENDAR YEAR 2003 - ADMINISTRATIVE CASE NO. 387
ORDER DATED DECEMBER 20, 2001

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Item 14-G) Identify all planned transmission capacity additions for the next 10 years. Include the expected in-service date, size and site for all planned additions and identify the transmission need each addition is intended to address.

Response) The attached table lists Big Rivers' current ten-year transmission capacity addition plan. All the projects in this plan are for the purpose of meeting member cooperative load growth and if load patterns deviate from the current forecast, the plan will be correspondingly altered.

Witness) Travis D. Housley, P.E.
David G. Crockett, P.E.

BIG RIVERS ELECTRIC TRANSMISSION ADDITIONS, 2004 – 2013

Notes

Project Description

Year: 2004

Falls of Rough – McDaniels 69 kV Line (7 miles)
Hardinsburg # 1 RCS
Meade County Substation 161 kV Interconnection
Crossroads Substation 161/69 kV (20 MVA)
Reid EHV, Coleman EHV, Wilson EHV RTU
6GHz Microwave System Digital Radios
Bryan Road Transformer Addition (SOMUA)

Up-grading infrastructure to meet system load growth
Up-grading infrastructure to meet system load growth
Support for radial fed Substation
New Substation to replace temporary facilities
Equipment replacement
Equipment replacement
Up-grading infrastructure to meet system load growth

Year: 2005

Hardinsburg 161 kV Substation Modification
Possum Trot 69 kV Tap/Metering
McCracken Co. – Olivet Church 69 kV Line (4 miles)
Livingston Co. & McCracken Co. RTU
Re-Sag Hardinsburg – Fordsville Tie (1 mile)
Re-Sag Livingston Co. - Smithland (5.3 miles)
Henderson Co. – Newman 161 kV Line (13 miles)
Henderson Co. – 161 kV Line Terminal
Newman 161 kV Line Terminal

Increase Substation operational flexibility
Member Substation tap line and metering
Up-grading infrastructure to meet system load growth
Equipment replacement
Additional line capacity for load growth
Additional line capacity for load growth
Up-grading infrastructure to meet system load growth
Up-grading infrastructure to meet system load growth
Up-grading infrastructure to meet system load growth

BIG RIVERS ELECTRIC TRANSMISSION ADDITIONS, 2004 – 2013

Project Description

Notes

Year: 2006

Hardinsburg Transformer Upgrades (100 MVA)
Hopkins Co. & Skillman RTU
Re-conductor Reid – Niagara to 336 MCM (6 miles)
Re-conductor Corydon – Geneva to 336 MCM (6 miles)
Co-op Substation 69 kV Line (2 miles)

Up-grading infrastructure to meet system load growth
Equipment replacement
Up-grading infrastructure to meet system load growth
Up-grading infrastructure to meet system load growth
Member Substation tap line and metering

Year: 2007

Co-op Substation 69 kV Line (2 miles)

Member Substation tap line and metering

Year: 2008

East Owensboro Substation (50 MVA)
East Owensboro 69 kV and 161 kV Lines (5 miles)
Relaying PLC at Reid (2), Henderson & Daviess Co.
Re-conductor Henderson Co. – Zion tap (1.6 miles)
Co-op Substation 69 kV Line (2 miles)

New Substation to meet system load growth
Transmission lines to connect new Substation
Equipment replacement
Up-grading infrastructure to meet system load growth
Member Substation tap line and metering

BIG RIVERS ELECTRIC TRANSMISSION ADDITIONS, 2004 – 2013

<u>Project Description</u>	<u>Notes</u>
Year: 2009 Relaying PLC at Henderson Co., Coleman, Hardinsburg(2), & Skillman Re-conductor Meade Co. – Garrett (8.5 miles) Co-op Substation 69 KV Line (2 miles)	Equipment replacement Up-grading infrastructure to meet system load growth Member Substation tap line and metering
Year: 2010 Hancock Co. Transformer Upgrades (100 MVA) Co-op Substation 69 KV Line (2 miles)	Up-grading infrastructure to meet system load growth Member Substation tap line and metering
Year: 2011 Corydon 161/69 KV Substation (50 MVA) HMP&L #4 161 KV Line Terminal Corydon-HMP&L #4 161 KV Line (9 miles) Co-op Substation 69 KV Line (2 miles)	New Substation to meet system load growth Transmission Line to connect new Substation Transmission Line to connect new Substation Member Substation tap line and metering
Year: 2012 Co-op Substation 69 KV Line (2 miles)	Member Substation tap line and metering
Year: 2013 Co-op Substation 69 KV Line (2 miles)	Member Substation tap line and metering