

April 30, 2015

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HAND DELIVERED

Jeff R. Derouen
Executive Director
Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602-0615

RECEIVED

APR 30 2015

PUBLIC SERVICE
COMMISSION

RE: Kentucky Power Company's 2014 Public Service Commission Annual Report
and Related Filings

Dear Mr. Derouen:

Enclosed please find and accept for filing the original and ten copies of Kentucky Power Company's 2014 Annual Resource Assessment in accordance with the Commission's March 29, 2004 Order in Administrative Case No. 387. Included as part of the filing is the Company's detailed discussion of the consideration given to price elasticity in making its forecasts.

Also being filed is the original and ten copies of the Company's motion for confidential treatment with respect to portions of its response to Data Request No. 9.

A copy of the Company's 2014 FERC Form-1 and a copy of the 2014 Annual Public Service Commission Utility Financial Report for Kentucky Power are also enclosed.

Please do not hesitate to contact me if you have any questions.

Very truly yours,


Mark R. Overstreet

MRO

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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APR 30 2015
PUBLIC SERVICE
COMMISSION

In The Matter Of:

A REVIEW OF THE ADEQUACY OF
KENTUCKY'S GENERATION CAPACITY
AND TRANSMISSION SYSTEM

ADMINISTRATIVE CASE 387

KENTUCKY POWER COMPANY'S MOTION
FOR CONFIDENTIAL TREATMENT

Kentucky Power Company ("Kentucky Power" or "Company") moves the Public Service Commission of Kentucky pursuant to 807 KAR 5:001, Section 13(2), for an Order granting confidential treatment to the identified portions of Attachment 1 to Commission Staff Data Request 1-9. Specifically, Kentucky Power seeks confidential treatment for information relating to planned future transmission capacity additions that have not been publicly announced.

Pursuant to 807 KAR 5:001, Section 13, Kentucky Power is filing under seal those portions of the document identified above containing confidential information with the confidential portions highlighted in yellow. Kentucky Power is also filing redacted versions of the affected document. Kentucky Power will notify the Commission when it determines the information for which confidential treatment is sought is no longer confidential.

A. The Requests And The Statutory Standard.

Kentucky Power does not object to filing the identified information for which it is seeking confidential treatment, but requests that the identified portions of the responses be excluded from the public record and public disclosure.

KRS 61.878(1)(c)(1) excludes from the Open Records Act:

Upon and after July 15, 1992, records confidentially disclosed to an agency or required to be disclosed to it, generally recognized as confidential or proprietary, which if openly disclosed would permit an unfair commercial advantage to competitors of the entity that disclosed the records.

This exception applies to the following information for which Kentucky Power is seeking confidential treatment:

1. **Attachment 1 to Kentucky Power's Response to KPSC 1-9.**

Kentucky Power seeks confidential treatment for the identified portions of Attachment 1 to the Company's response to KPSC 1-9. This data request seeks information regarding the Company's planned transmission capacity upgrades. Information regarding planned transmission upgrades that have not been announced publicly is highly sensitive and confidential. Because the Company operates in the competitive electricity market, releasing this data would allow competitors to gain specific and detailed information regarding the Company's projected transmission system capacity, timing of construction, and costs of upgrades. This otherwise unavailable information would allow competitors to alter their own market participation strategies and gain an unfair advantage for themselves to the detriment of the Company and its customers. This harm could take the form of the Company receiving lower prices for its sales or paying higher prices for its purchases than would otherwise be the case.

Kentucky Power is seeking confidential treatment for the identified information until such time as the individual projects are made public through the PJM Interconnections Transmission planning process.

B. **The Identified Information is Generally Recognized As Confidential and Proprietary and Public Disclosure Of It Will Result In An Unfair Commercial Advantage for Kentucky Power's Competitors.**

The identified information required to be disclosed by Kentucky Power in response to KPSC1-9 is highly confidential. Dissemination of the information for which confidential

treatment is being requested is restricted by Kentucky Power, its parent, AEP, and its affiliates (including AEPSC). The Company, AEP, and its affiliates take all reasonable measures to prevent its disclosure to the public as well as persons within the Company who do not have a need for the information. The information is not disclosed to persons outside Kentucky Power, AEP, or its affiliates. Within those organizations, the information is available only upon a confidential need-to-know basis that does not extend beyond those employees with a legitimate business need to know and act upon the identified information.

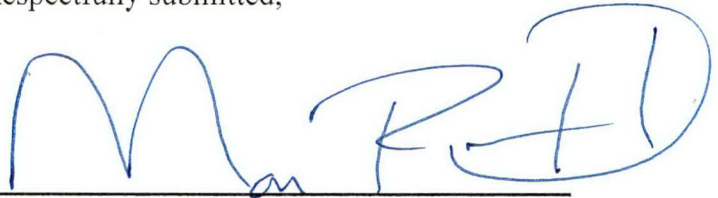
C. The Identified Information Is Required To Be Disclosed To An Agency.

The identified information is by the terms of the Commission's Order required to be disclosed to the Commission. The Commission is a "public agency" as that term is defined at KRS 61.870(1). Any filing should be subject to a confidentiality order and any party requesting such information should be required to enter into an appropriate confidentiality agreement.

WHEREFORE, Kentucky Power Company respectfully requests the Commission to enter an Order:

1. According confidential status to and withholding from public inspection the identified information; and
2. Granting Kentucky Power all further relief to which it may be entitled.

Respectfully submitted,



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Telephone: (859) 226-2300

COUNSEL FOR KENTUCKY POWER
COMPANY

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APR 30 2015

VERIFICATION

PUBLIC SERVICE
COMMISSION

The undersigned, Ranie K. Wohnhas, being duly sworn, deposes and says he is the Managing Director Regulatory and Finance for Kentucky Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge, and belief



Ranie K. Wohnhas

COMMONWEALTH OF KENTUCKY)

) Administrative Case 387

COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Ranie K. Wohnhas, this the 27th day of April 2015.



Notary Public

My Commission Expires: January 23, 2017

Kentucky Power Company

REQUEST

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). Please provide the information for both Kentucky Power Company individually and the AEP-East Power Pool (pursuant to the Commission's December 13, 2004 Order in the Rockport UPSA extension, Case No. 2004-00420).

RESPONSE

Page 1 of Attachment 1 to this response provides actual and weather normalized 2014 monthly peak internal demands for Kentucky Power Company. Kentucky Power Company did not have any contractual interruptible capacity in 2014.

Page 2 of Attachment 1 to this response provides actual 2014 monthly system demands for Kentucky. The system demands include internal load and off-system sales. Weather-normalized monthly peak system demands for Kentucky Power Company have not been developed and therefore, are not available.

The AEP Interconnection Agreement terminated on January 1, 2014. As a result, the AEP-East Power Pool no longer exists, and all prior members of the Pool are treated as stand-alone entities for capacity planning purposes. Accordingly, Kentucky Power respectfully requests that the Commission amend the Company's obligations under Administrative Case No. 387 to eliminate the requirement to provide information regarding the no-longer existent AEP-East Power Pool.

WITNESS: Ranie K Wohnhas

Kentucky Power Company
Actual and Weather Normalized Peak Internal Demand (MW)
2014

Kentucky Power Company				
Month	Peak	Peak Day	Peak Hour	Normalized Peak
January	1,645	1/24/2014	9	1,521
February	1,397	2/11/2014	8	1,373
March	1,370	3/4/2014	8	1,212
April	1,051	4/16/2014	7	891
May	959	5/30/2014	16	950
June	1,062	6/24/2014	14	1,095
July	1,076	7/22/2014	16	1,150
August	1,057	8/20/2014	16	1,151
September	1,006	9/2/2014	14	997
October	872	10/30/2014	9	785
November	1,331	11/19/2014	8	1,139
December	1,192	12/12/2014	9	1,332

**Kentucky Power Company
Actual Peak System Demand (MW)
2014**

Kentucky Power Company			
Month	Peak	Peak Day	Peak Hour
January	2,269	1/9/2014	11
February	1,921	2/17/2014	7
March	2,202	3/24/2014	8
April	2,191	4/10/2014	14
May	1,786	5/6/2014	16
June	2,233	6/27/2014	15
July	2,263	7/31/2014	14
August	2,263	8/26/2014	18
September	2,258	9/5/2014	13
October	1,047	10/1/2014	8
November	1,292	11/21/2014	24
December	2,055	12/30/2014	22

Kentucky Power Company

REQUEST

Load shape curves that show actual peak demands and weather-normalized peak demands (native load demand and total demand) on a monthly basis for the just completed calendar year. Please provide the information for both Kentucky Power Company individually and the AEP-East Power Pool (pursuant to the Commission's December 13, 2004 Order in the Rockport UPSA extension, Case No. 2004-00420)

RESPONSE

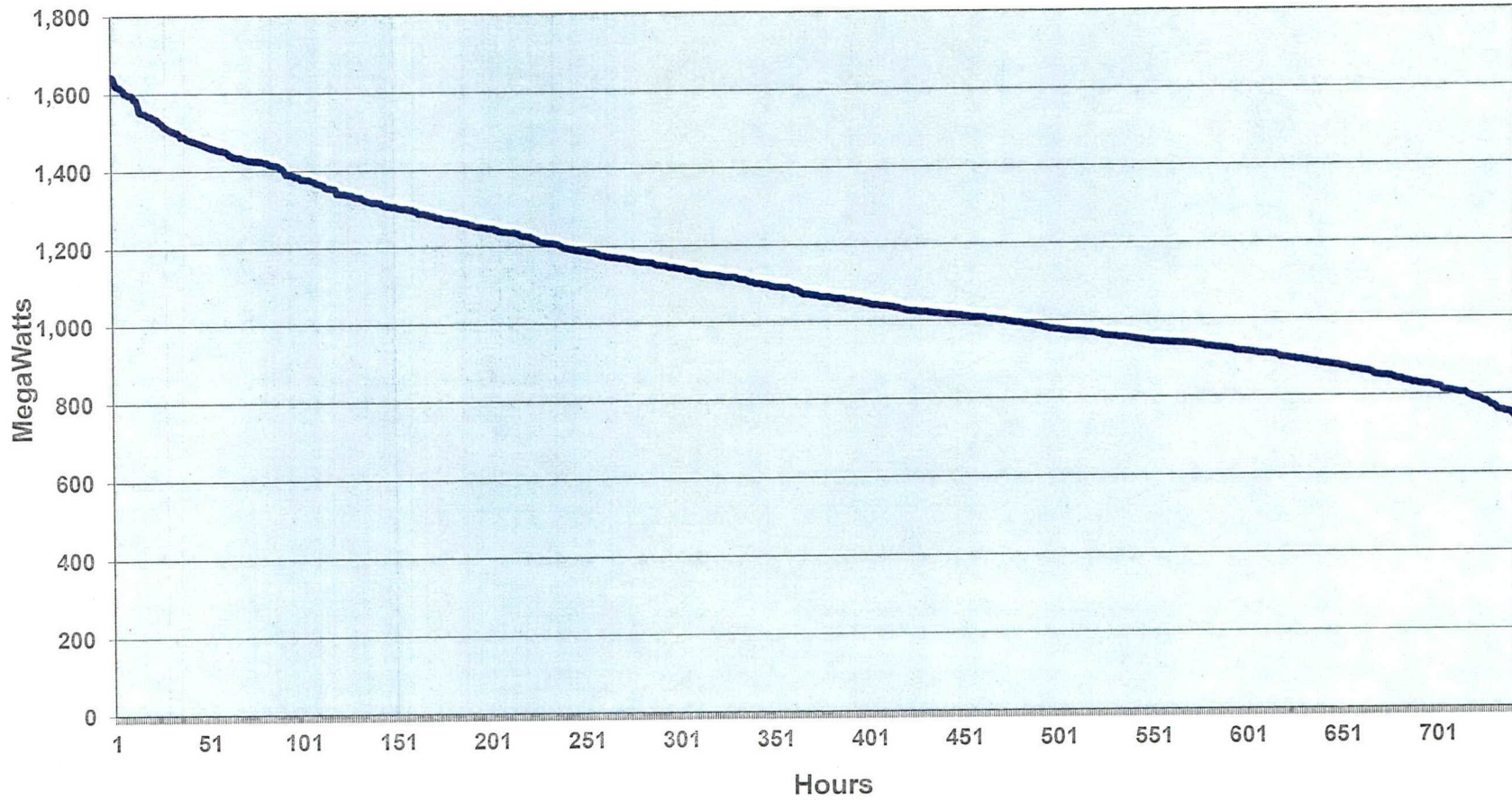
Pages 1 through 12 of Attachment 1 to this response provide 2014 monthly load duration curves for Kentucky Power Company's internal load. Pages 13 through 24 provide 2014 monthly load duration curves for Kentucky Power Company's system load. The system load, for Kentucky Power Company, includes internal load and off-system sales.

Weather-normalized monthly internal peaks for Kentucky Power Company are provided in response to Item No. 1, Page 1 of Attachment 1. Weather-normalized system peaks have not been developed and therefore, are not available.

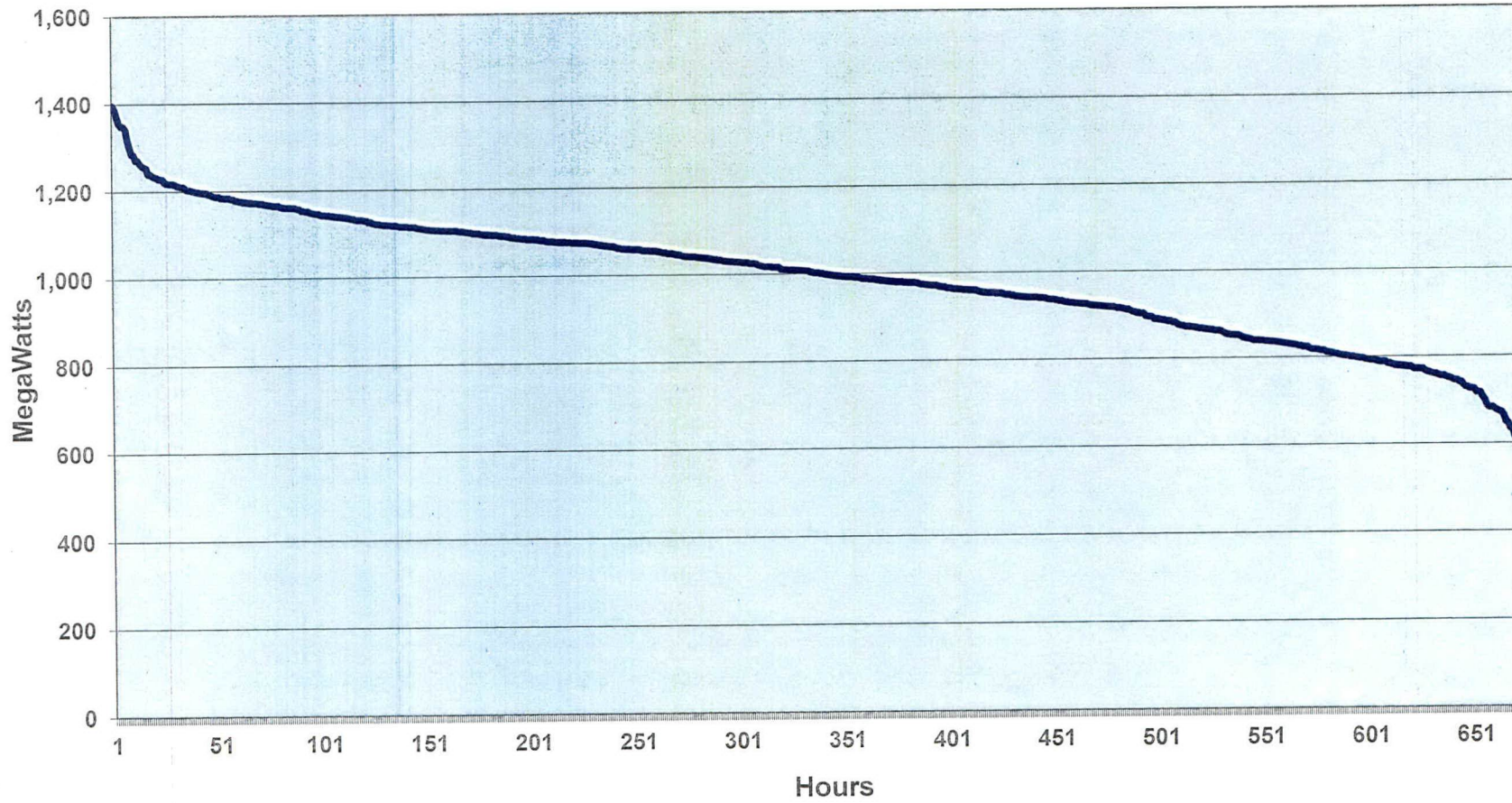
The AEP Interconnection Agreement terminated on January 1, 2014. As a result, the AEP-East Power Pool no longer exists, and all prior members of the Pool are treated as stand-alone entities for capacity planning purposes.

WITNESS Rante K. Wornhas

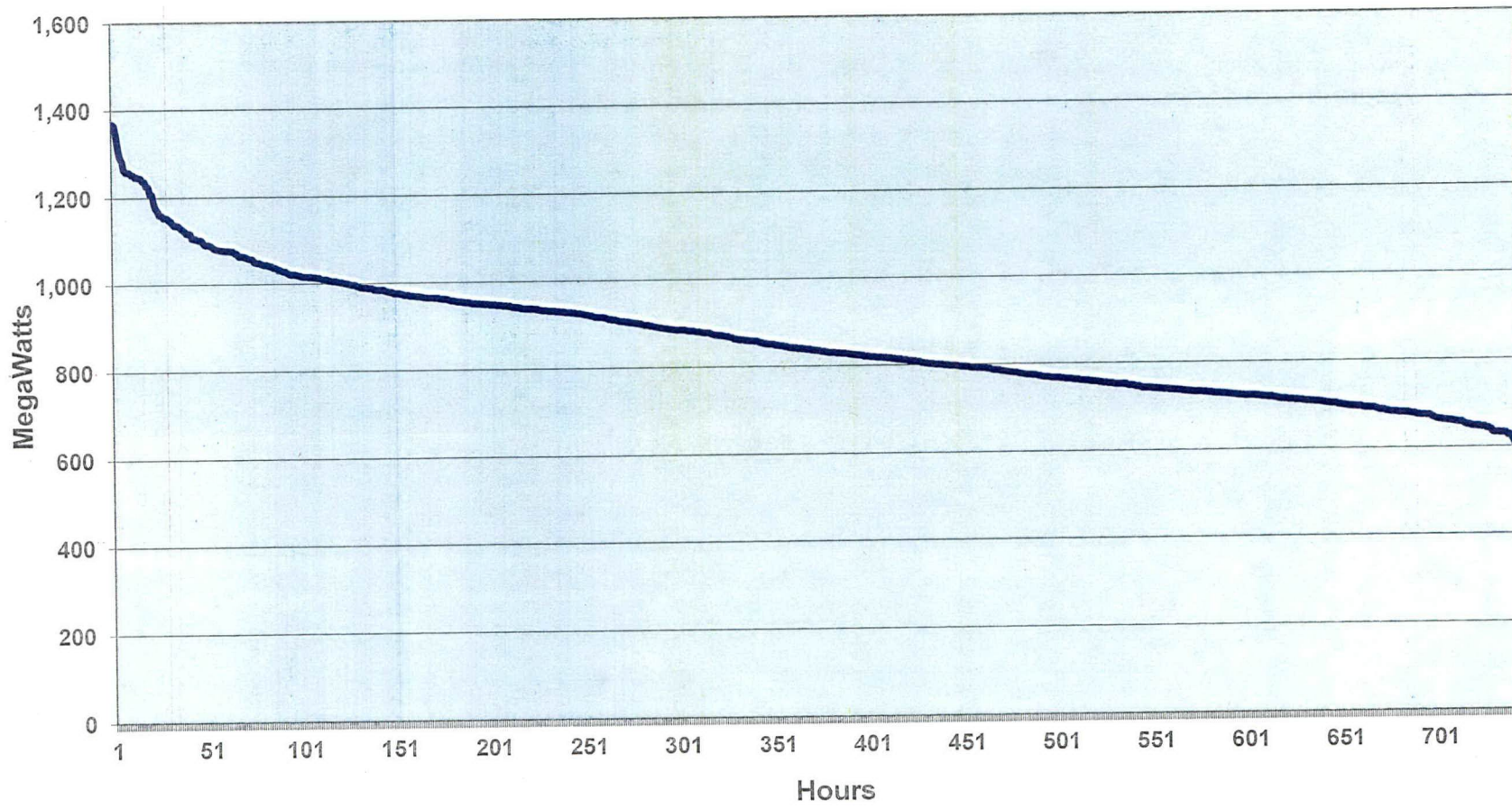
Kentucky Power Company January 2014 Load Duration Curve (Internal Load)



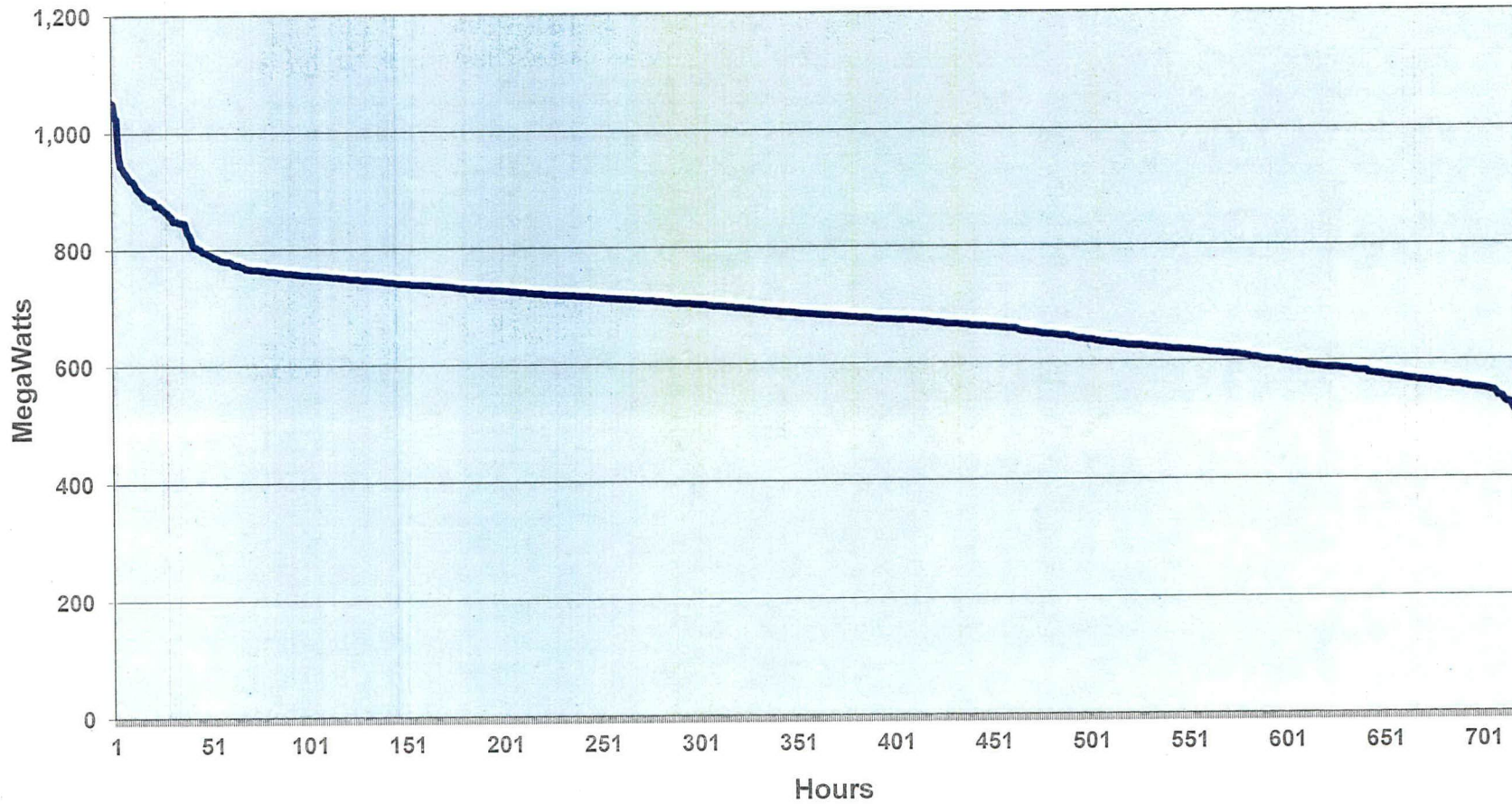
Kentucky Power Company February 2014 Load Duration Curve (Internal Load)



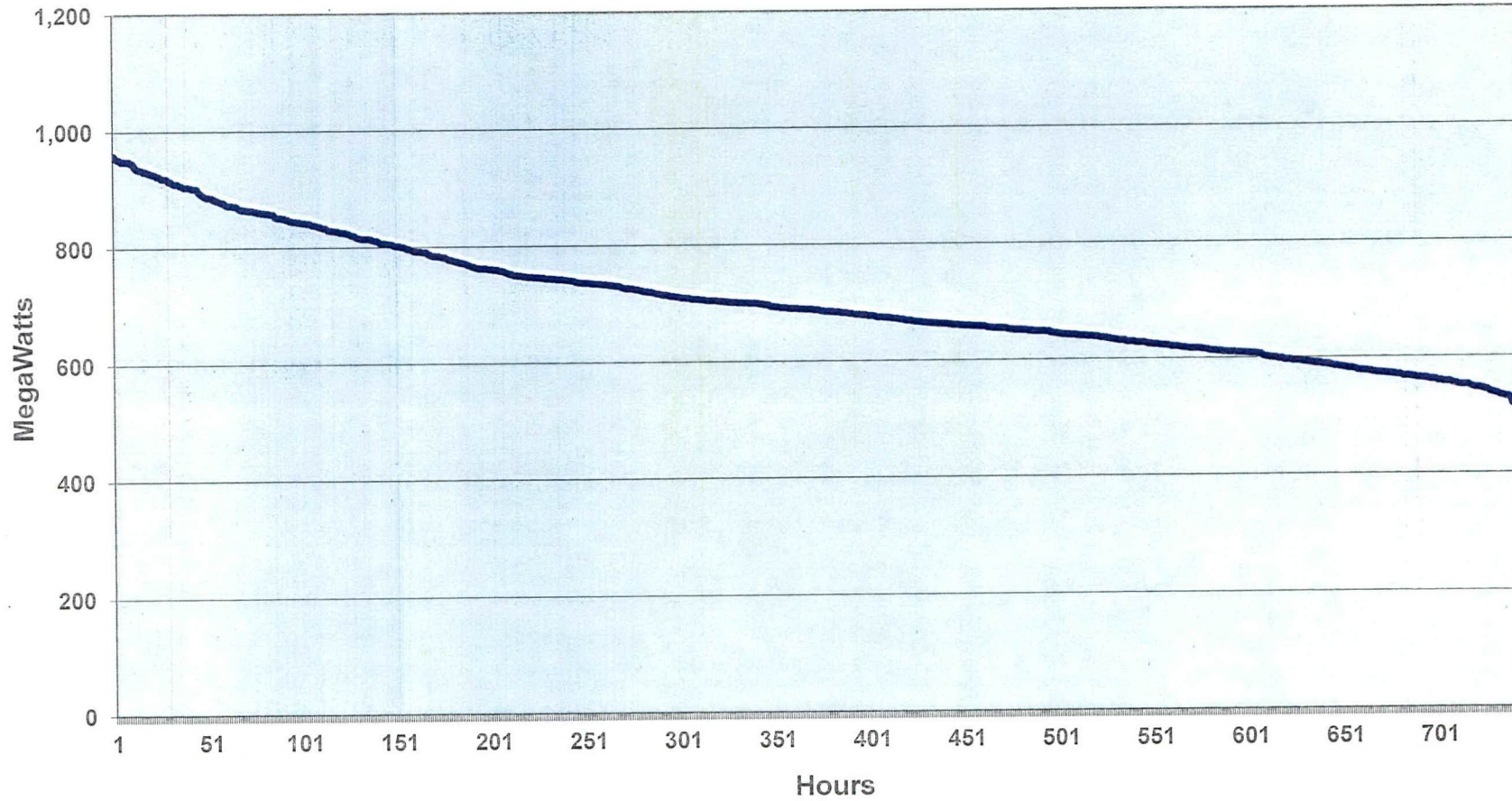
Kentucky Power Company March 2014 Load Duration Curve (Internal Load)



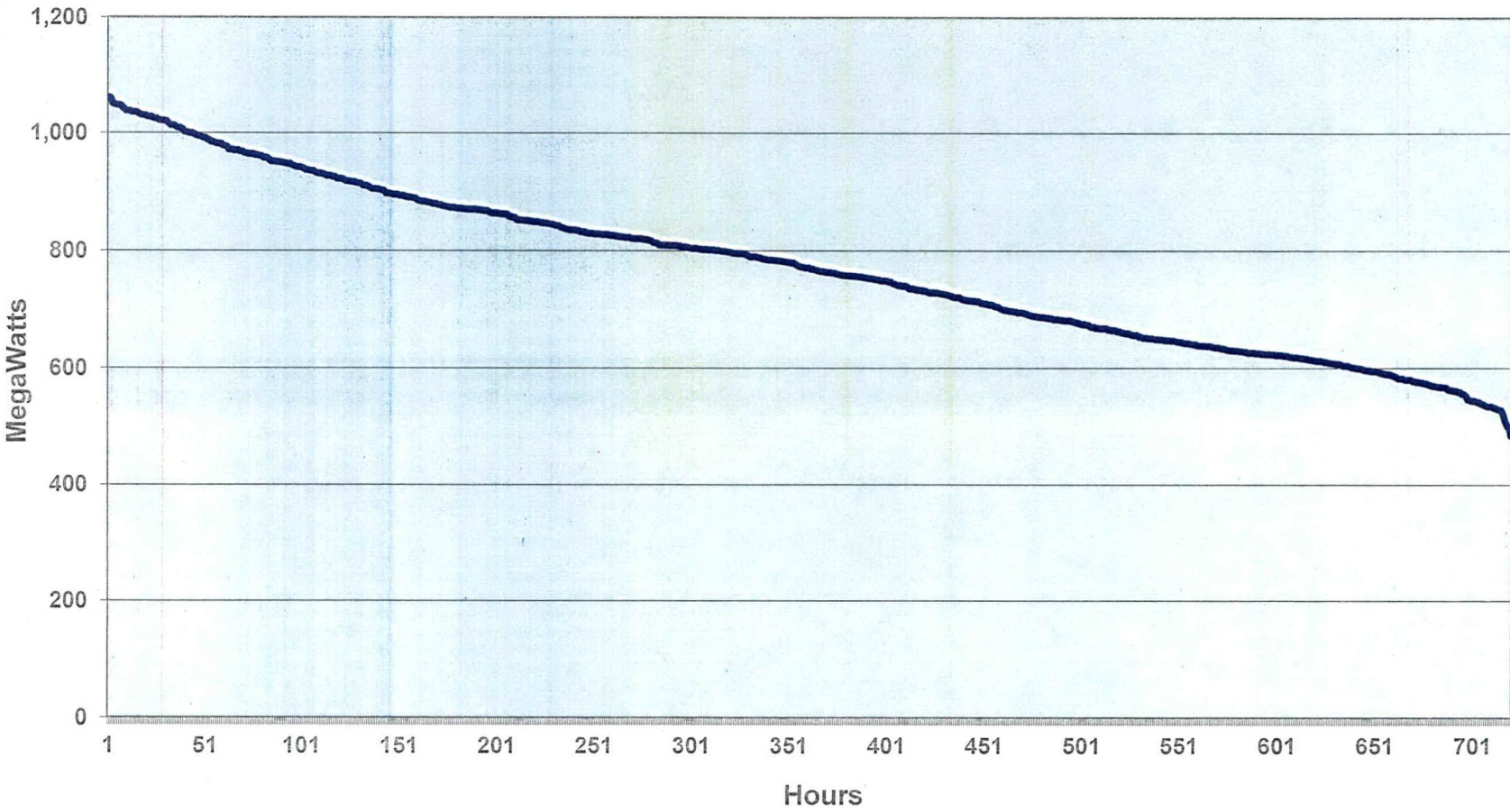
Kentucky Power Company April 2014 Load Duration Curve (Internal Load)



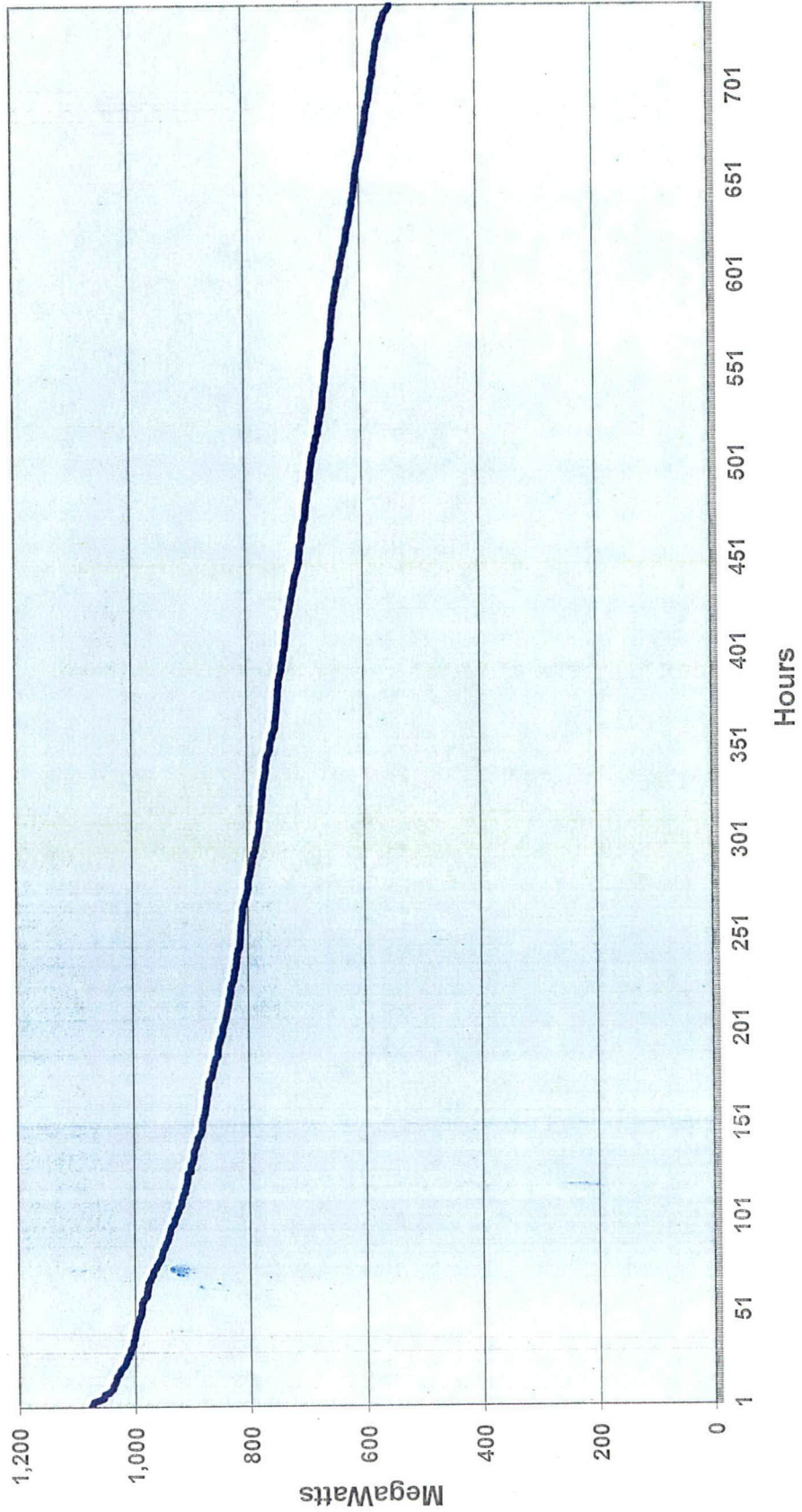
Kentucky Power Company May 2014 Load Duration Curve (Internal Load)



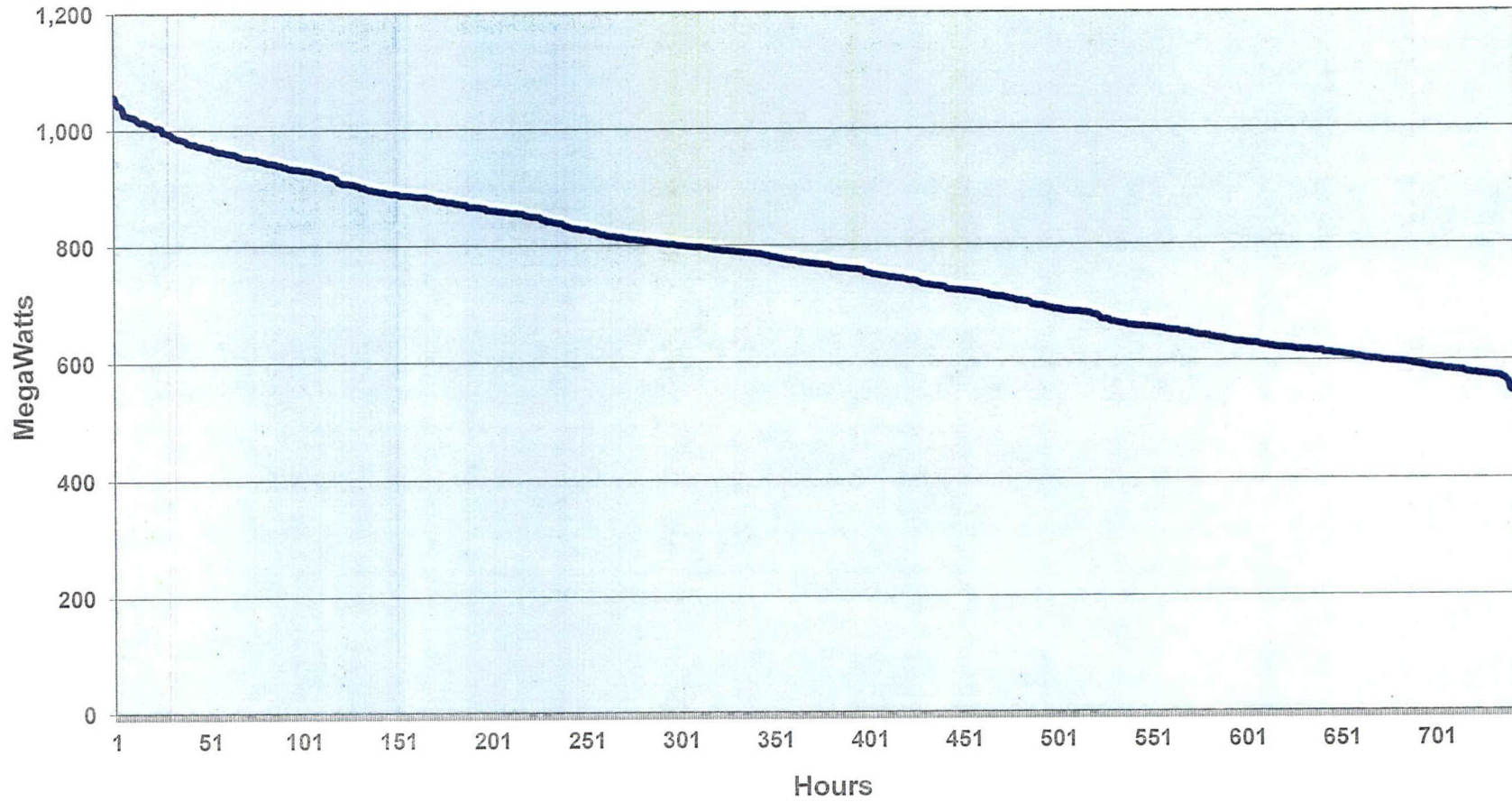
Kentucky Power Company
June 2014 Load Duration Curve
(Internal Load)



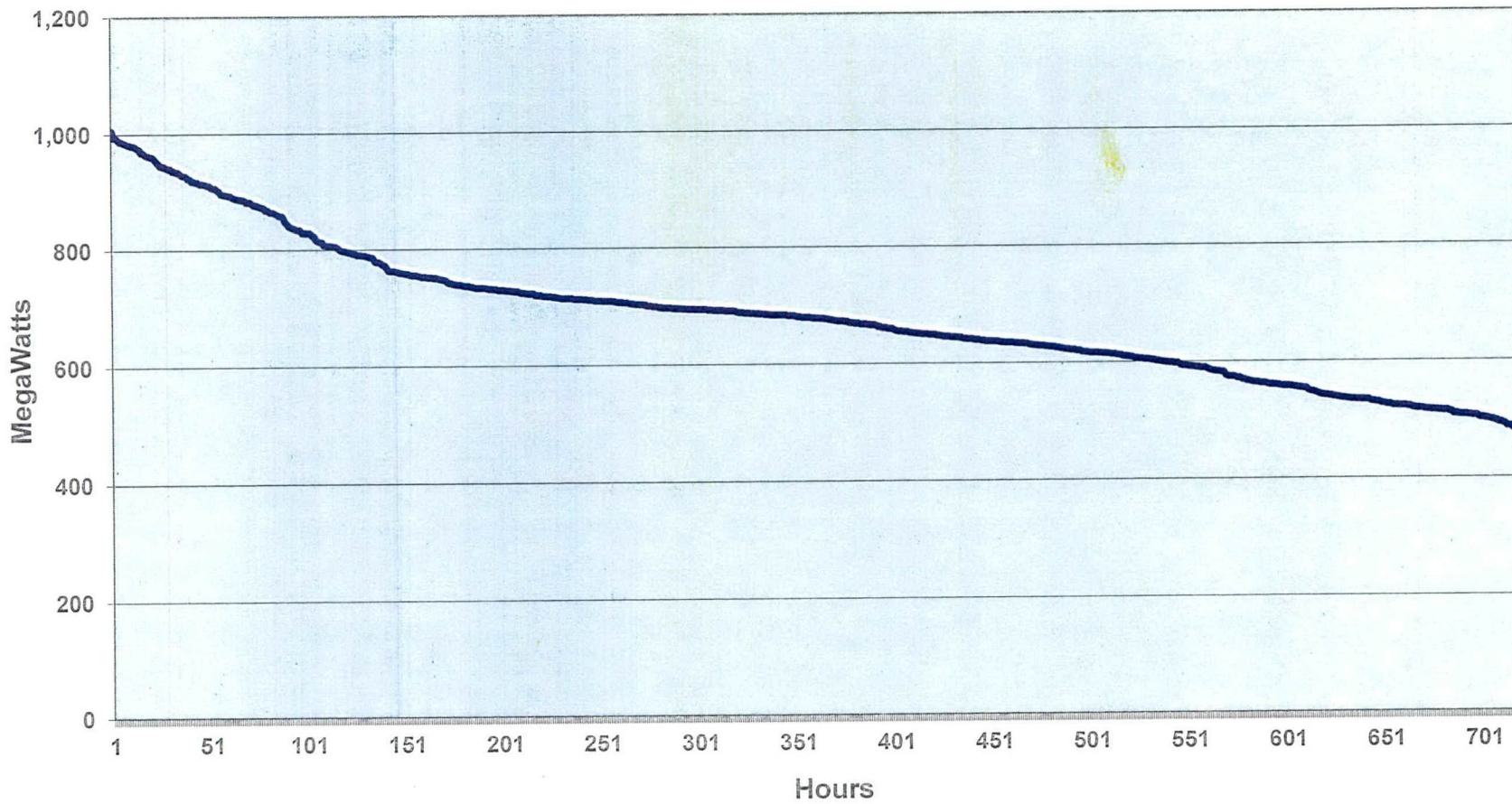
Kentucky Power Company July 2014 Load Duration Curve (Internal Load)



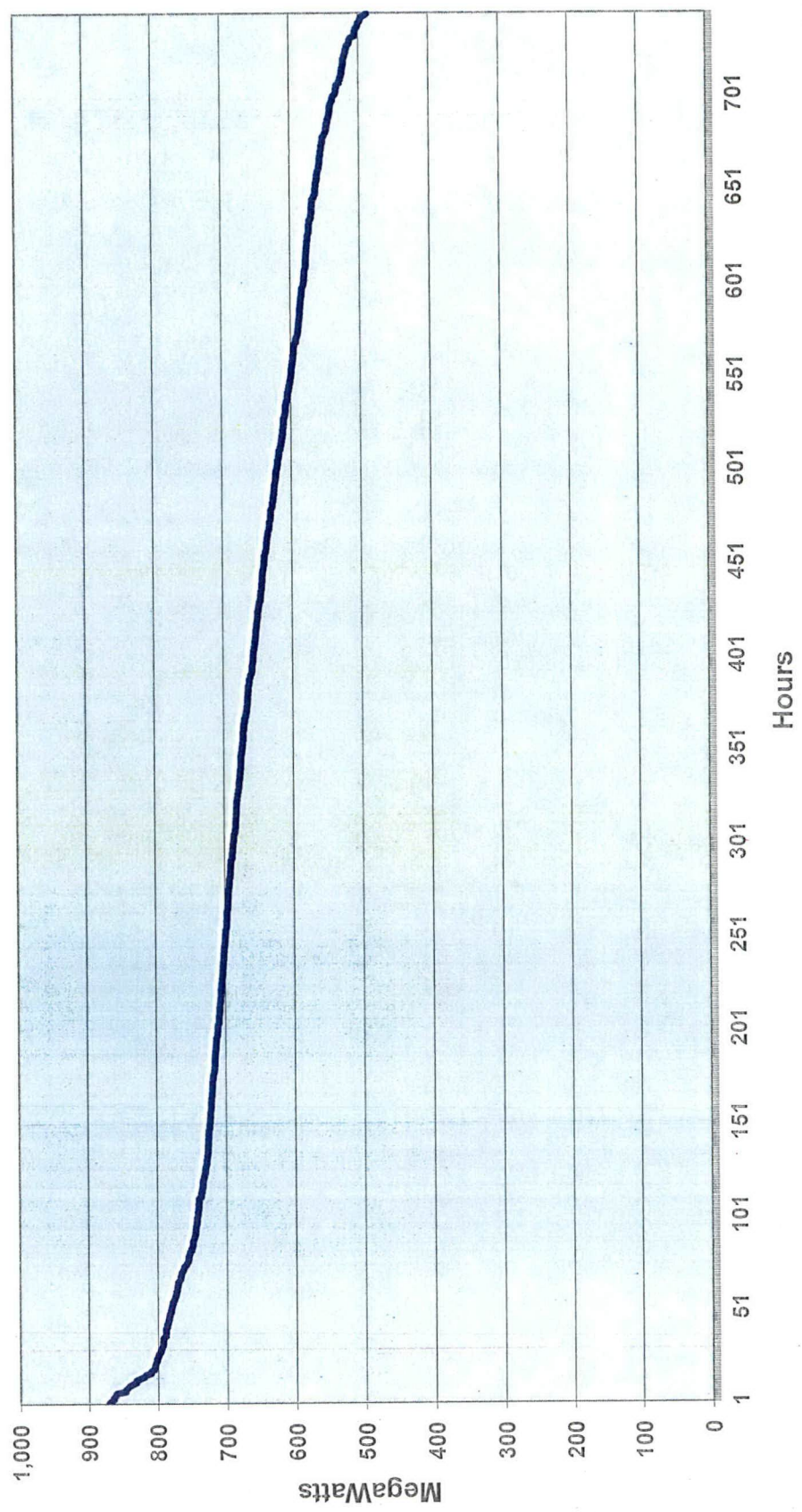
Kentucky Power Company August 2014 Load Duration Curve (Internal Load)



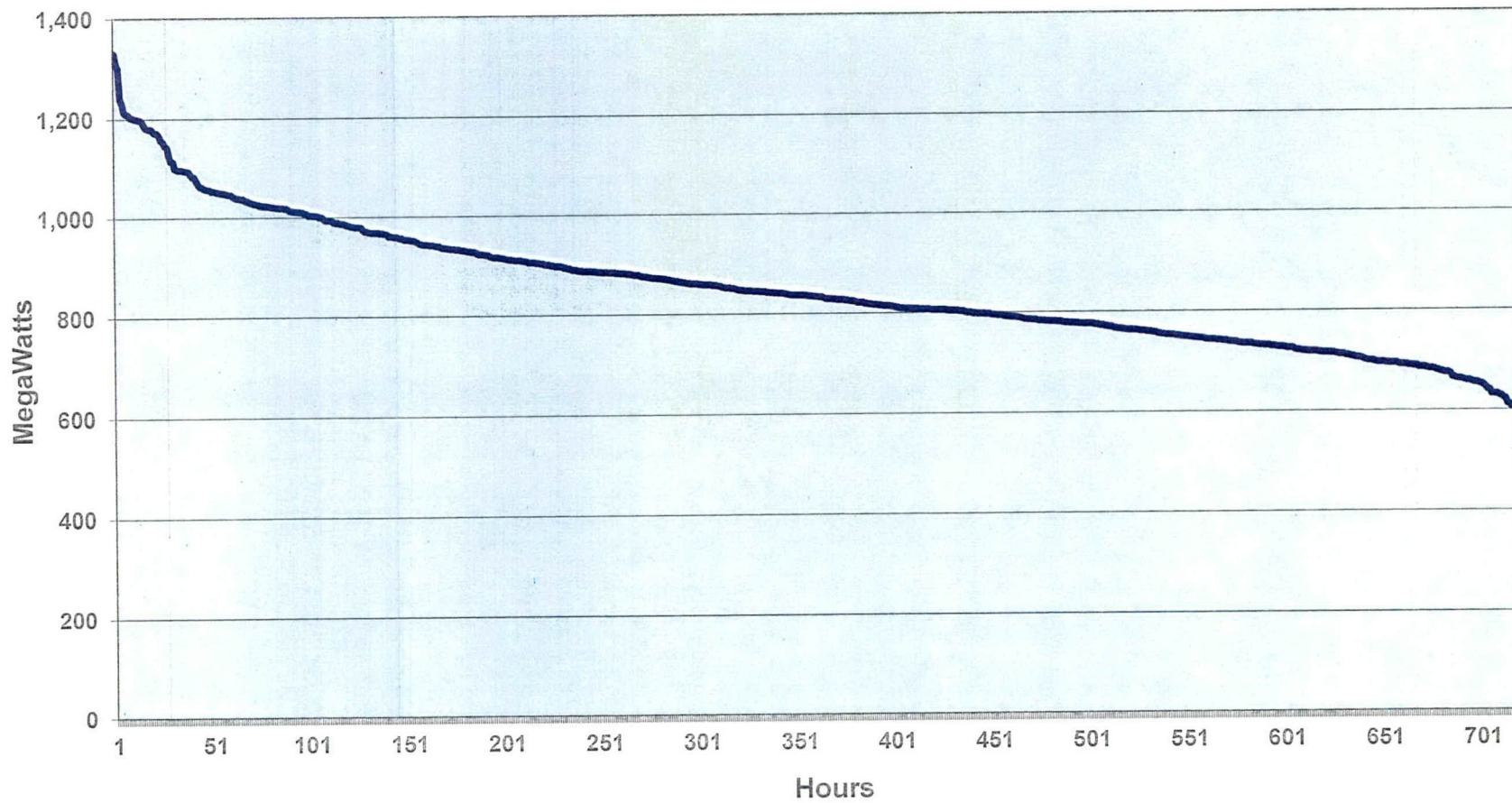
Kentucky Power Company September 2014 Load Duration Curve (Internal Load)



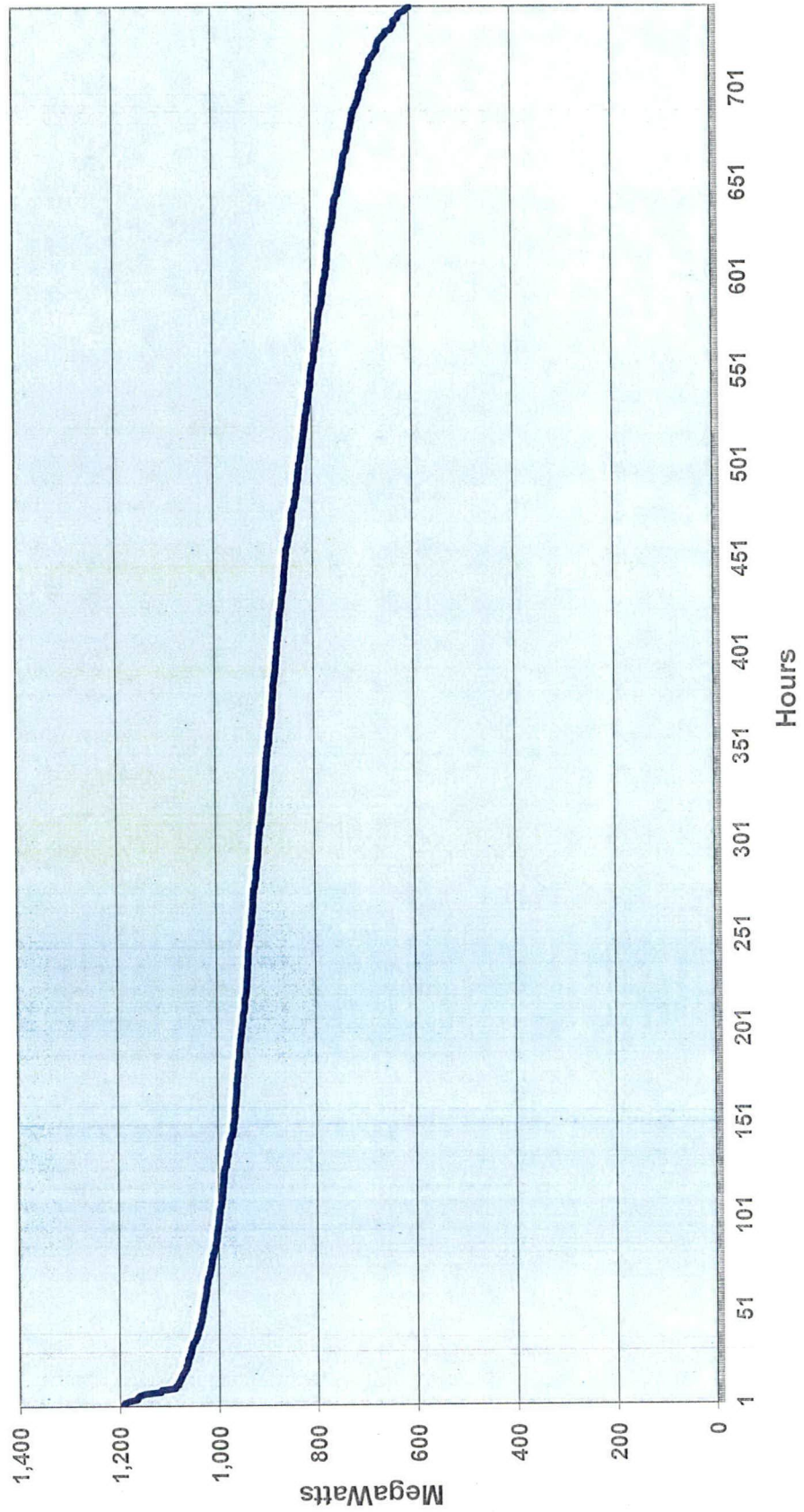
Kentucky Power Company October 2014 Load Duration Curve (Internal Load)



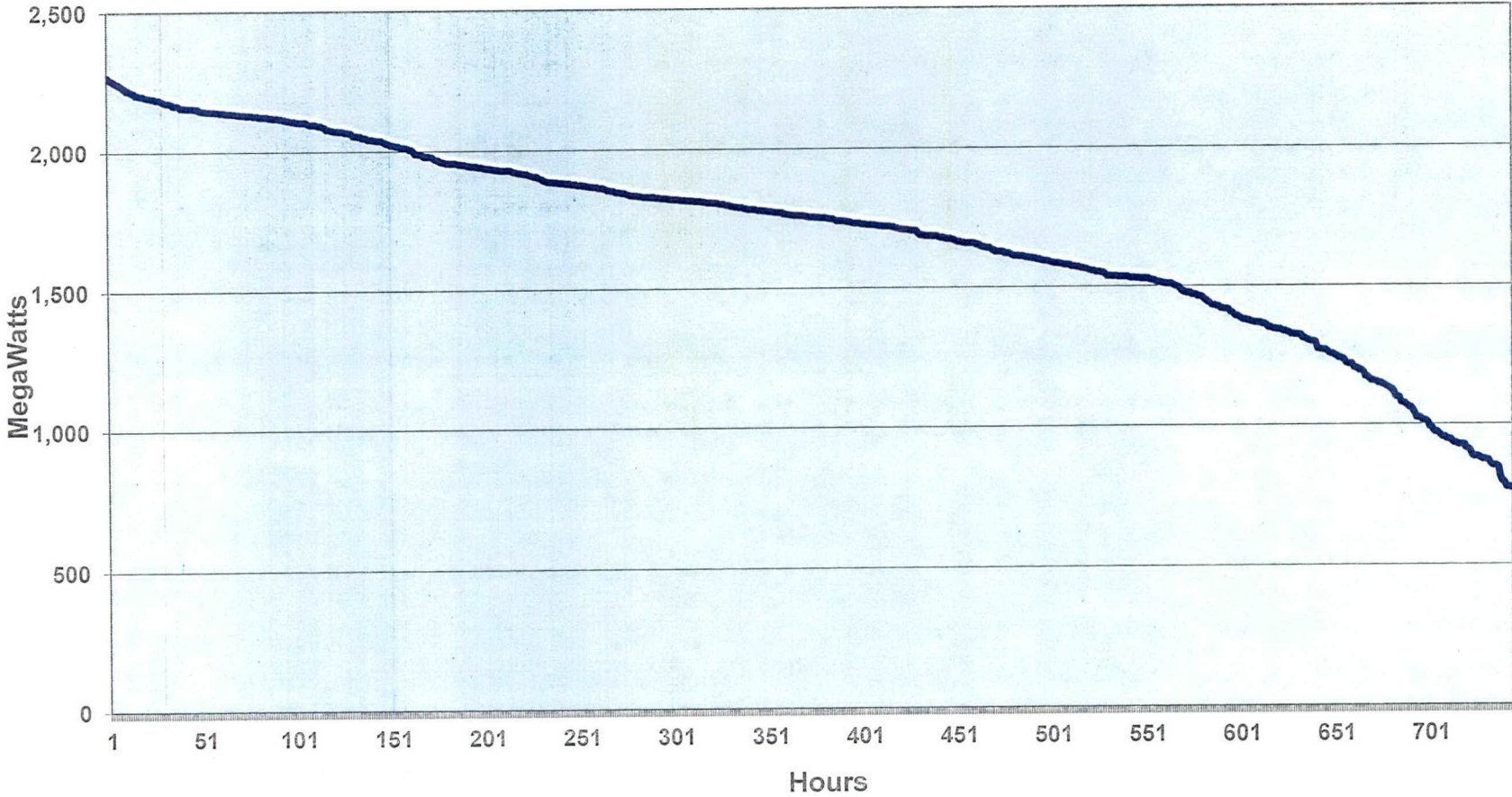
Kentucky Power Company November 2014 Load Duration Curve (Internal Load)



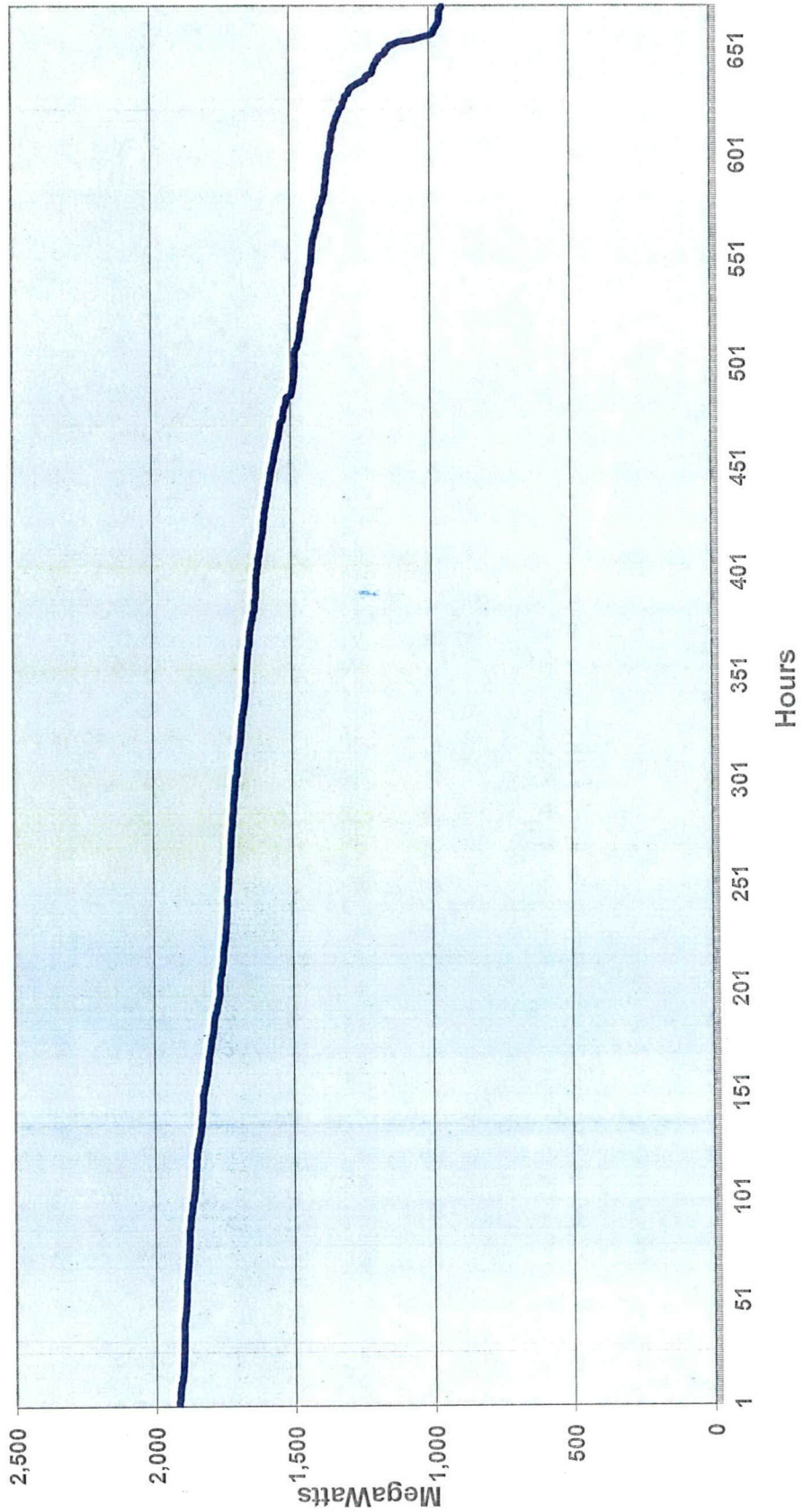
**Kentucky Power Company
December 2014 Load Duration Curve
(Internal Load)**



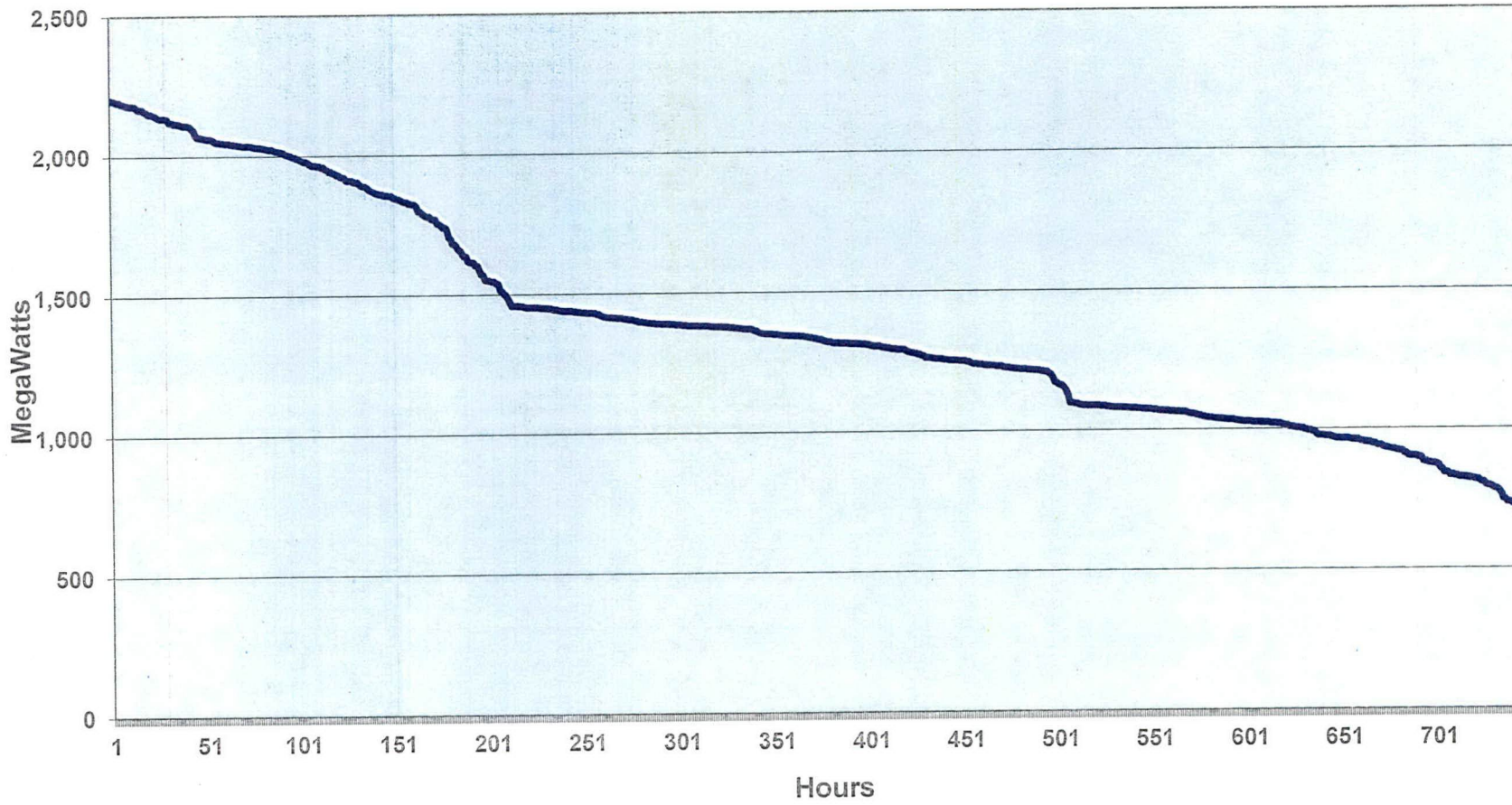
Kentucky Power Company January 2014 Load Duration Curve (System Load)



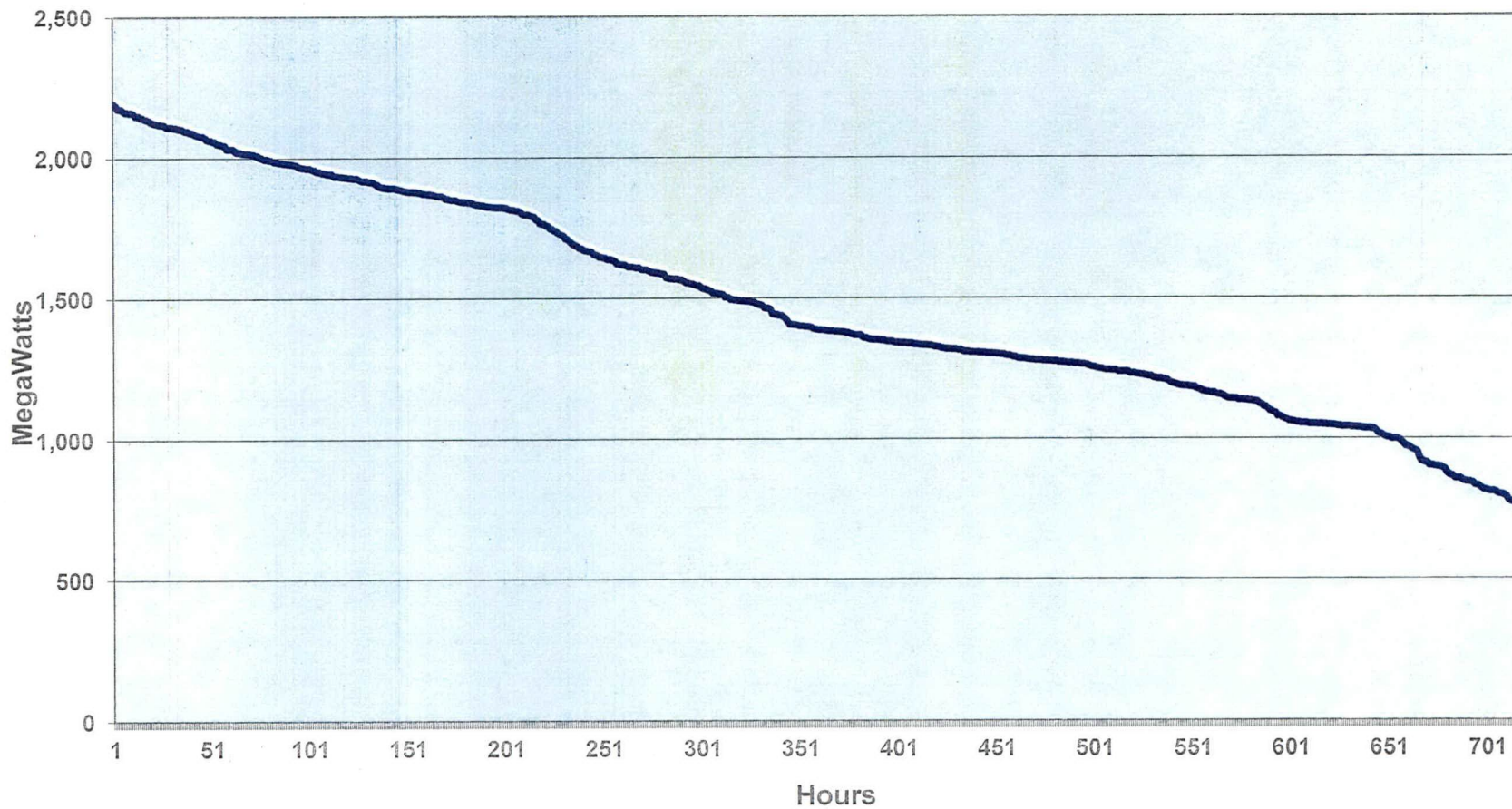
**Kentucky Power Company
February 2014 Load Duration Curve
(System Load)**



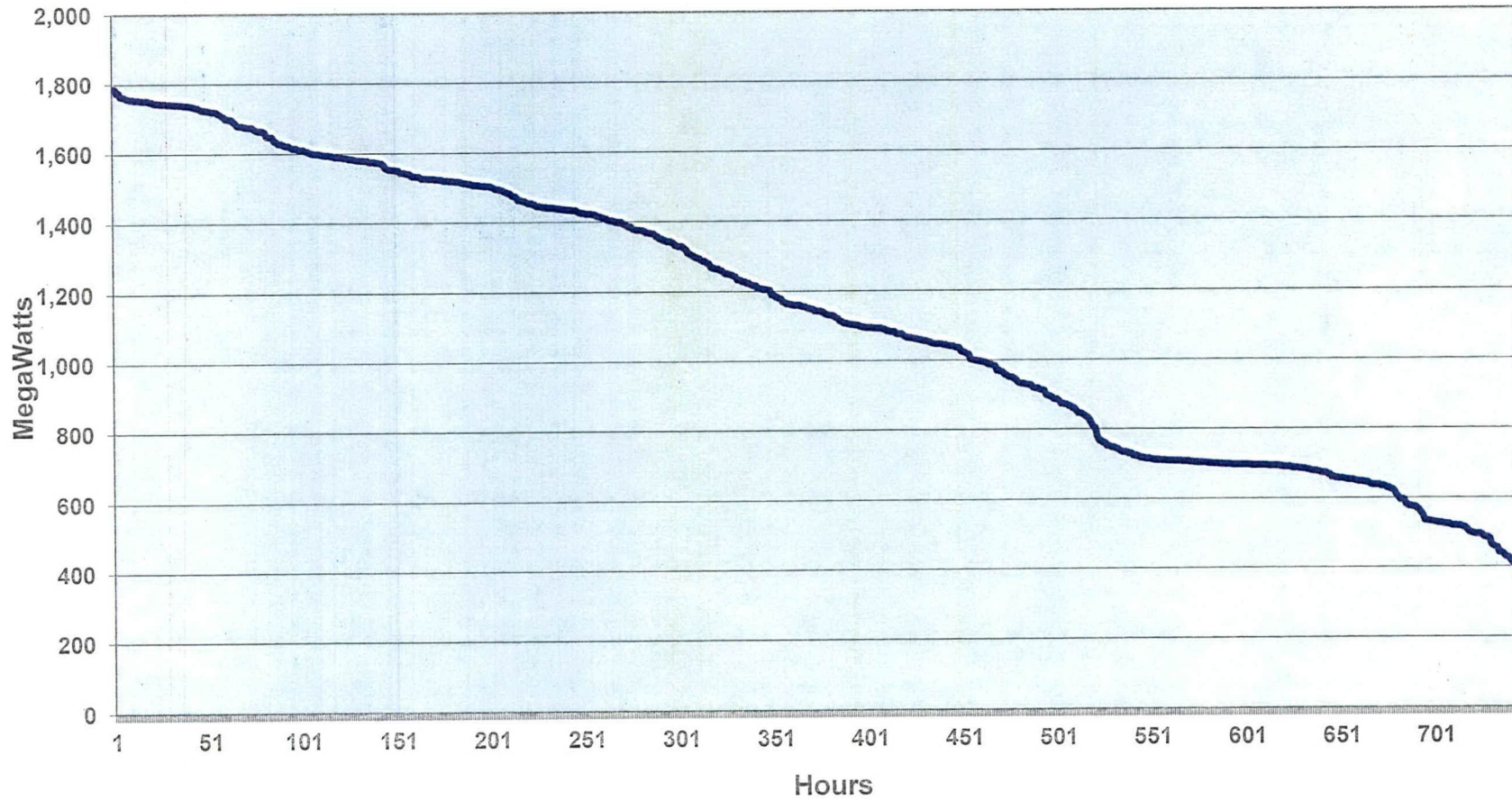
Kentucky Power Company March 2014 Load Duration Curve (System Load)



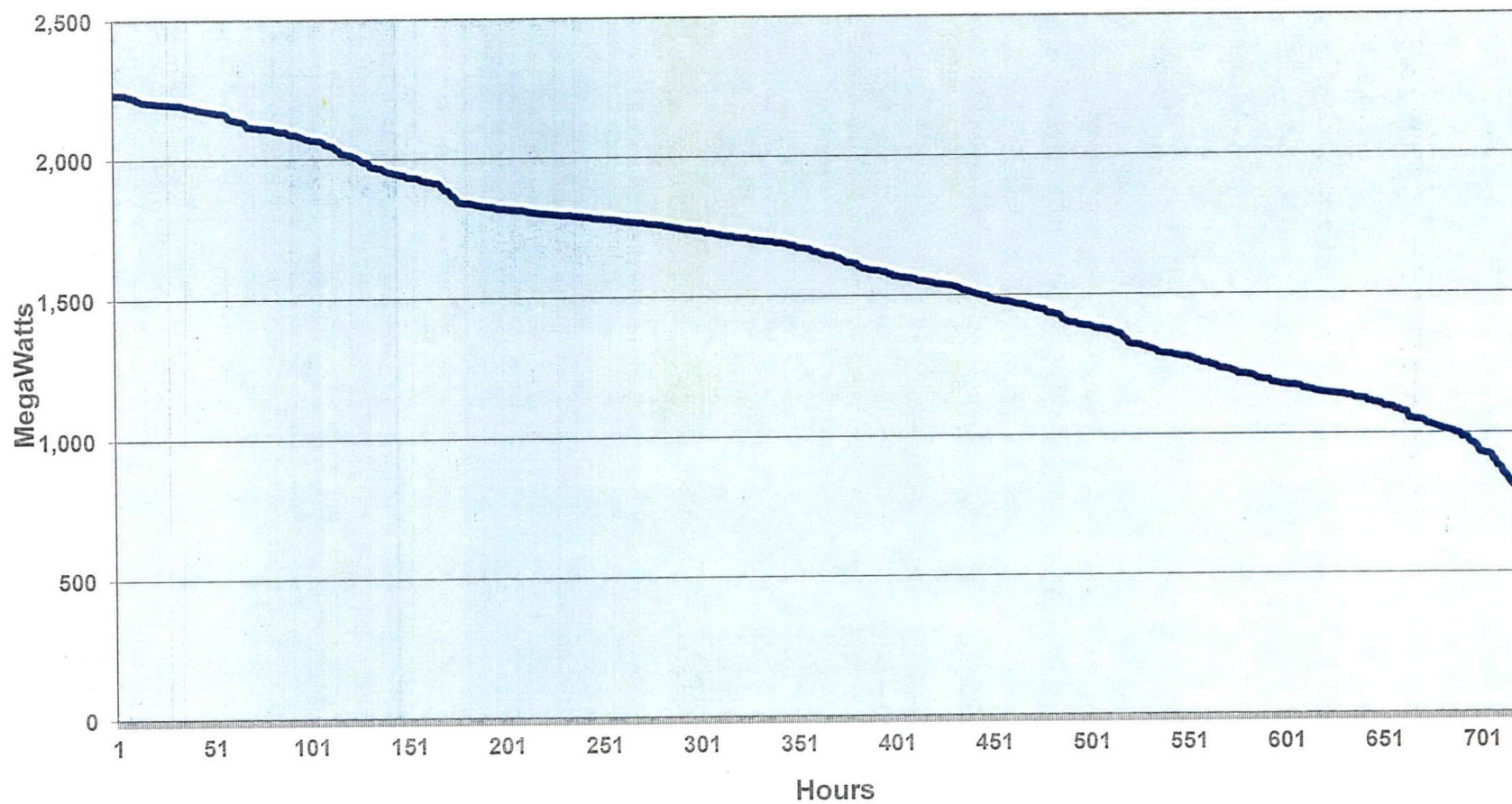
Kentucky Power Company April 2014 Load Duration Curve (System Load)



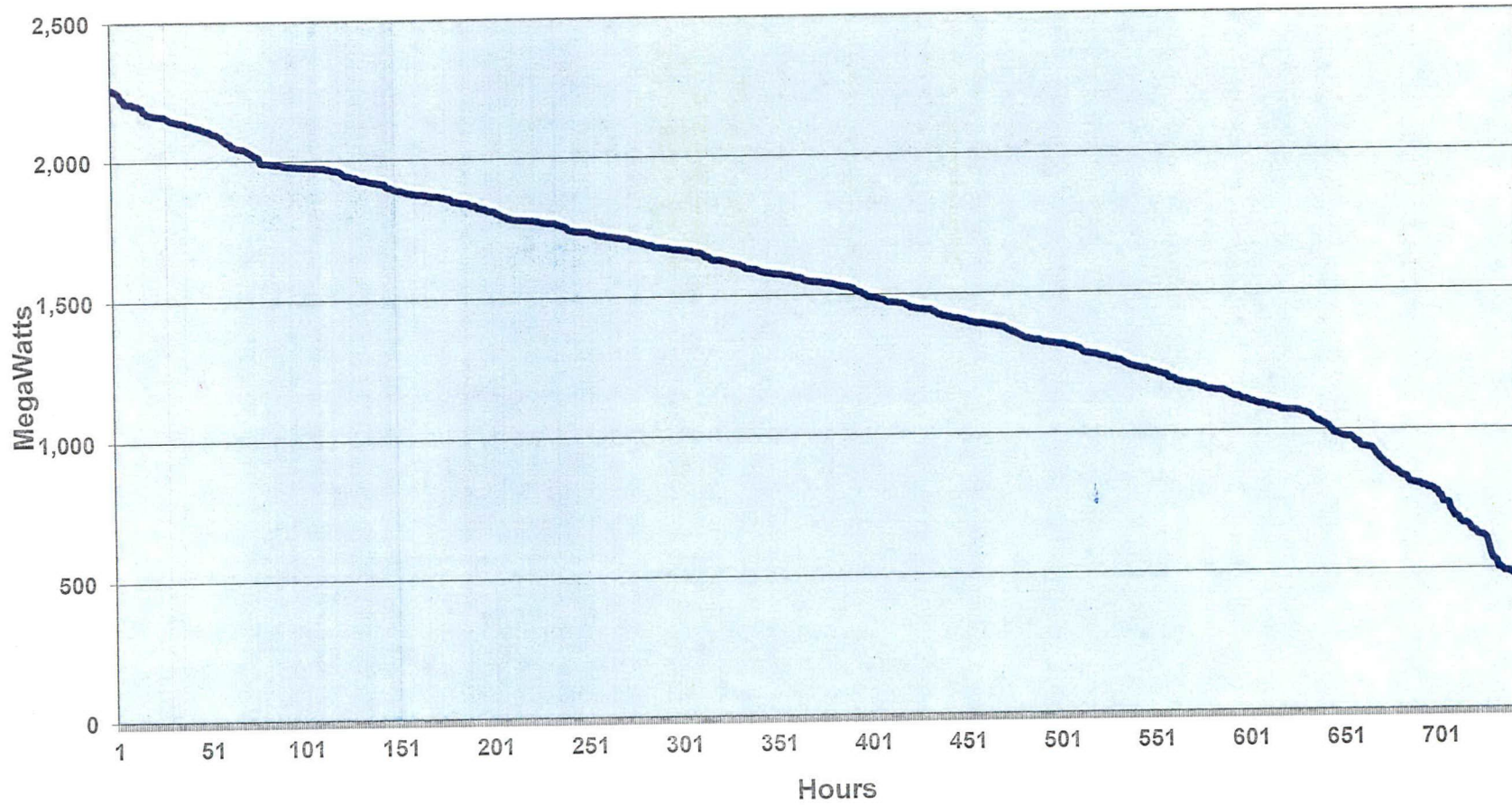
Kentucky Power Company May 2014 Load Duration Curve (System Load)



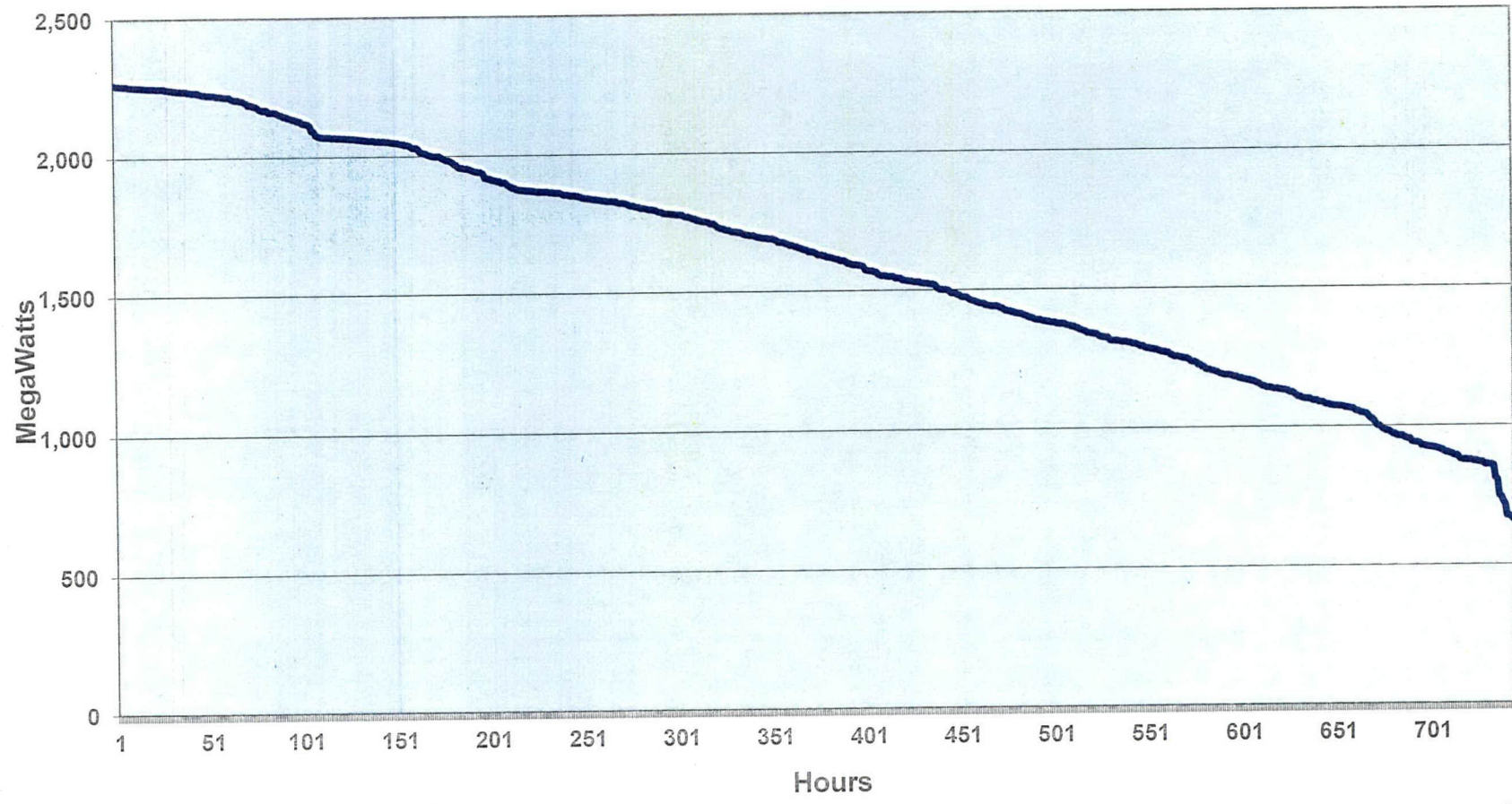
Kentucky Power Company June 2014 Load Duration Curve (System Load)



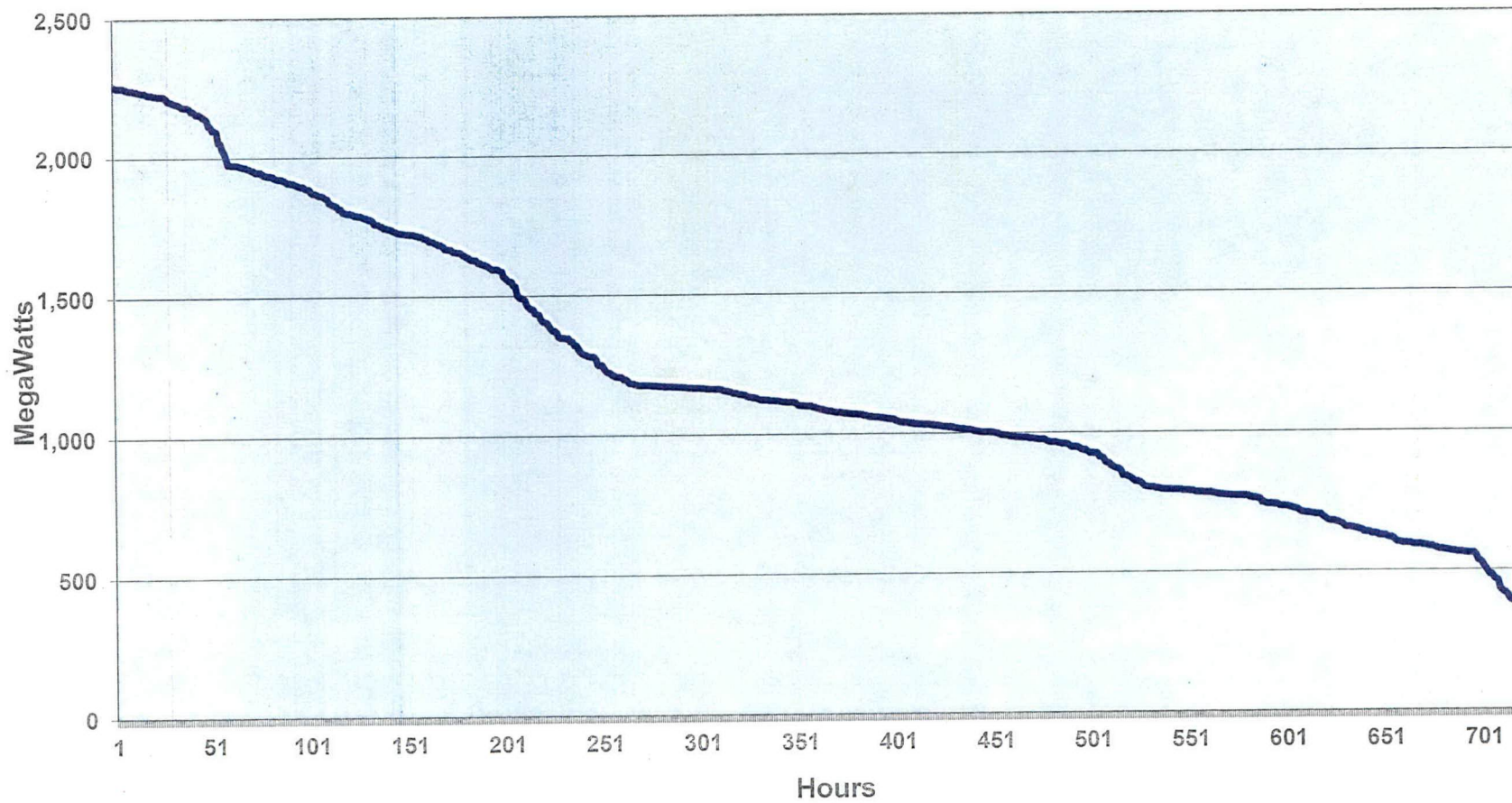
Kentucky Power Company July 2014 Load Duration Curve (System Load)



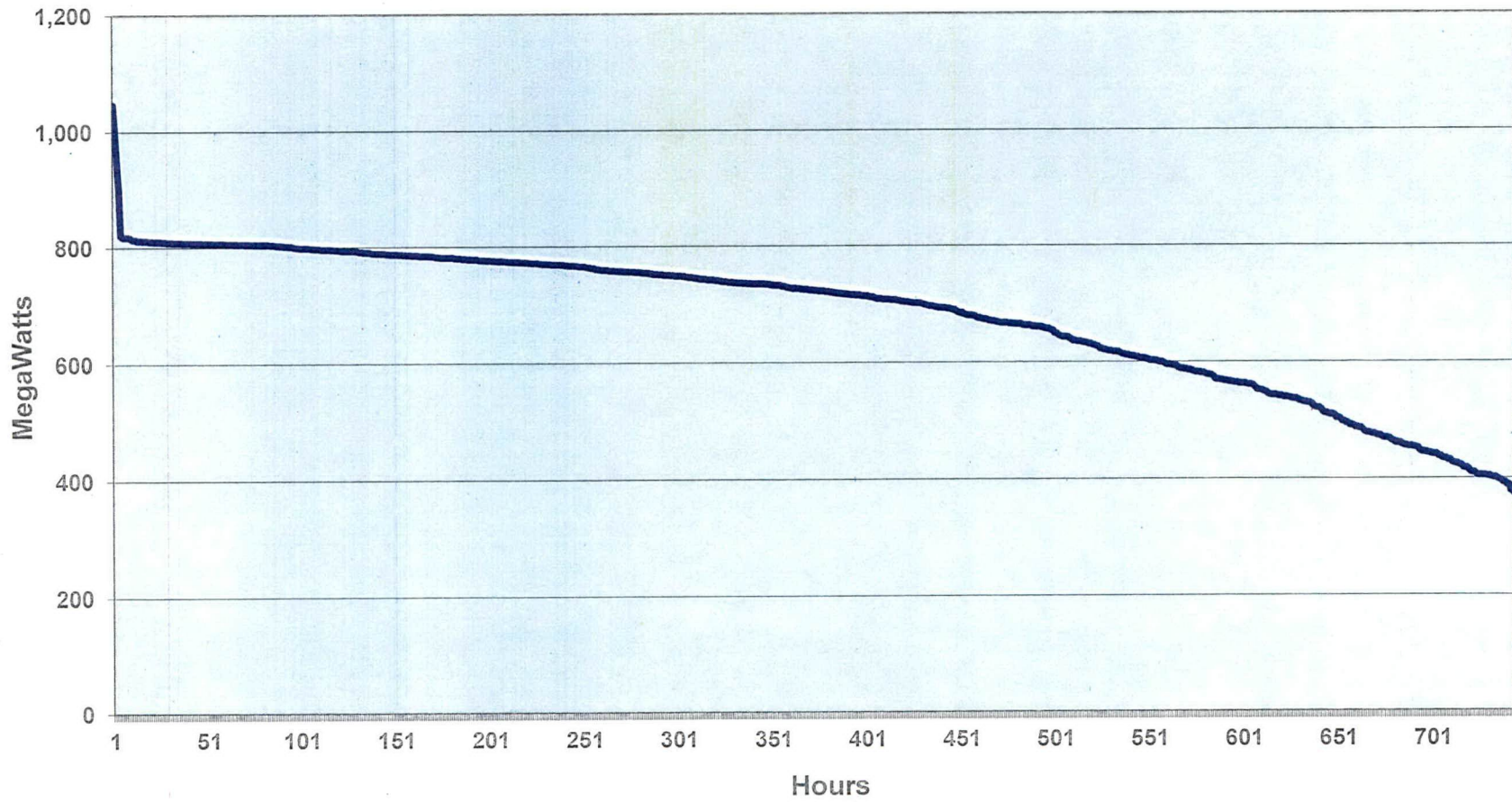
Kentucky Power Company August 2014 Load Duration Curve (System Load)



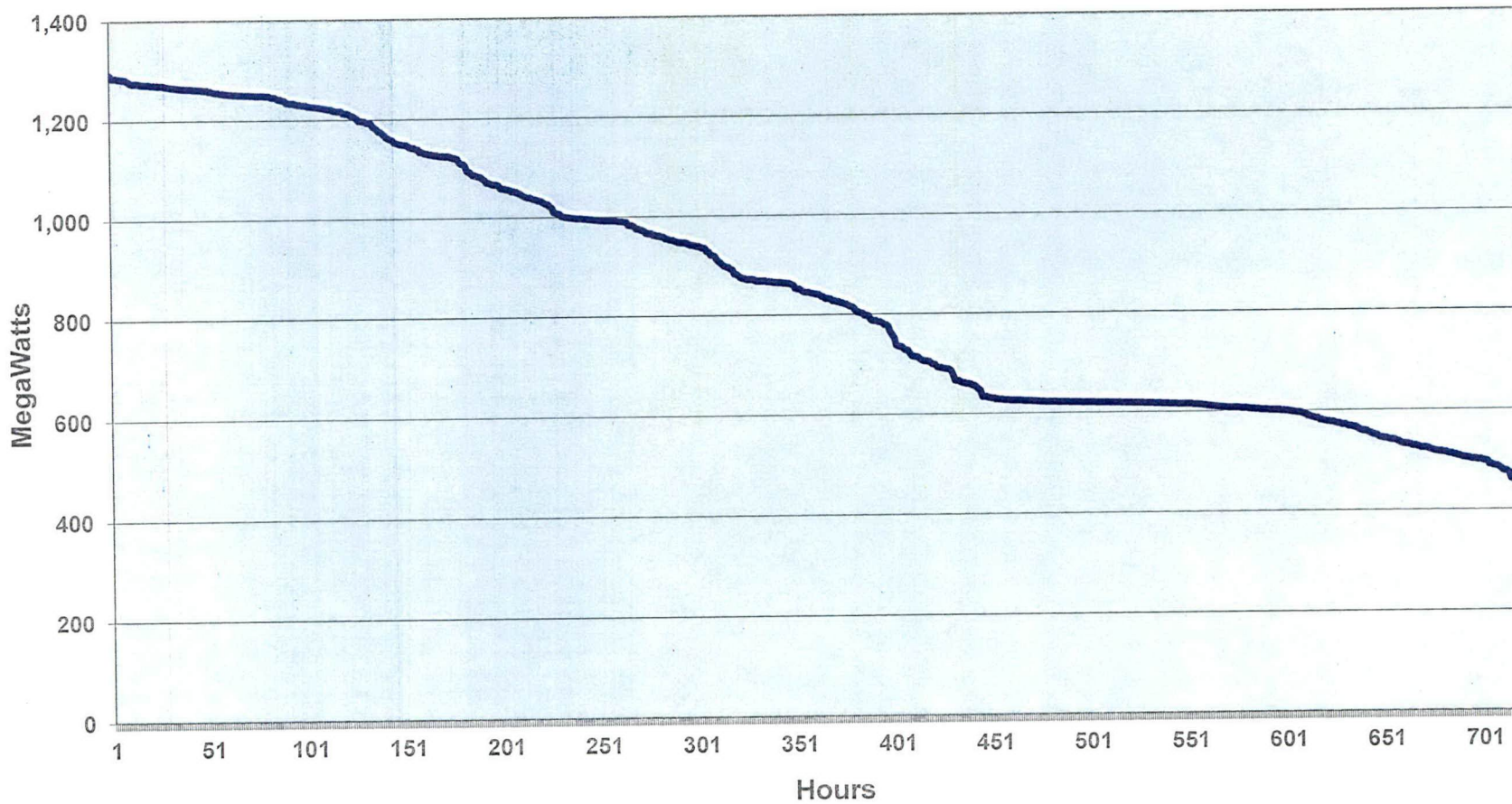
Kentucky Power Company September 2014 Load Duration Curve (System Load)



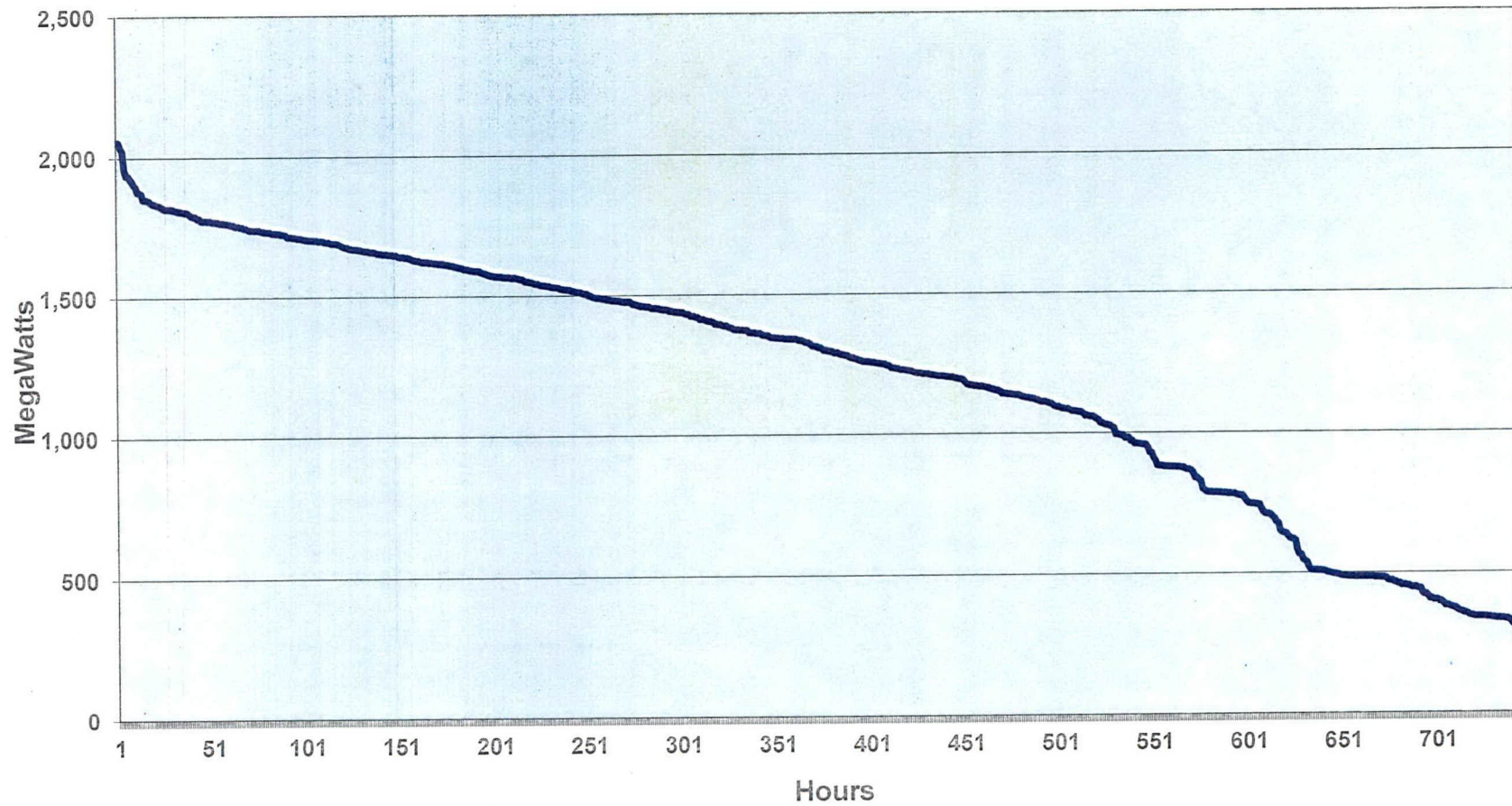
Kentucky Power Company October 2014 Load Duration Curve (System Load)



Kentucky Power Company November 2014 Load Duration Curve (System Load)



Kentucky Power Company December 2014 Load Duration Curve (System Load)



Kentucky Power Company

REQUEST

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). Please provide the information for both Kentucky Power Company individually and the AEP-East Power Pool (pursuant to the Commission's December 13, 2004 Order in the Rockport UPSA extension, Case No. 2004-00420).

RESPONSE

Page 1 of Attachment 1 to this response provides Kentucky Power Company's forecast of seasonal peak internal demands and annual internal energy requirements. In addition, the associated high forecast for seasonal peak internal demands and internal energy requirements are provided on this page.

The off-system energy sales forecasts for Kentucky Power Company are provided on page 2 of Attachment 1 to this response. Forecasts of off-system peak demand for Kentucky Power Company have not been developed and therefore, such forecasts are not available. In addition, high forecasts for off-system energy sales and peak demand have not been developed and therefore, such forecasts are not available.

The AEP Interconnection Agreement terminated on January 1, 2014. As a result, the AEP-East Power Pool no longer exists, and all prior members of the Pool are treated as stand-alone entities for capacity planning purposes.

WITNESS: Ranie K Wohnhas

Kentucky Power Company
Base and High Forecast
Energy Sales (GWH) and Seasonal Peak Demand (MW)
2015 - 2019

Year	Energy Sales		Summer Peak Demand		Preceding Winter Peak Demand	
	Base	High	Base	High	Base	High
2015	7,003	7,068	1,141	1,152	1,475	1,489
2016	7,015	7,100	1,145	1,159	1,465	1,483
2017	7,022	7,151	1,145	1,166	1,470	1,497
2018	7,027	7,220	1,147	1,179	1,468	1,509
2019	7,037	7,295	1,150	1,192	1,466	1,520

Kentucky Power Company
Forecast Off-System Energy Sales (GWh)
2015 - 2019

<u>Year</u>	KPCo Off-System <u>Sales</u>
2015	3,552
2016	2,056
2017	1,968
2018	1,616
2019	1,391

Kentucky Power Company

REQUEST

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. Please provide the information for both Kentucky Power Company individually and the AEP-East Power Pool (pursuant to the Commission's December 13, 2004 Order in the Rockport UPSA extension, Case No. 2004-00420).

RESPONSE

Due to the October 1, 2004 integration of AEP's Eastern System into the PJM Interconnection, AEP is now required to comply with the PJM mandated reserve margin.

The installed reserve margin requirement (IRM) is recalculated each year, depending on five-year average generation reliability, PJM load shape, and assistance available from neighboring regions. In addition, KPCo's responsibility to PJM depends on its twelve-month history of generator reliability and its peak demand diversity in relation to the PJM total load. Attachment 1 to this response provides an example of the PJM reserve requirement calculation.

For the 2015/16 delivery period PJM has set the IRM at 16.2%. For the 2016/17 and 2017/18 delivery periods PJM has set the IRM at 15.7% and for planning purposes KPCo assumed a 15.7% level for future years. The resulting KPCo reserve margin for 2015/16 is 21.6% as shown in Attachment 2 of the response to Item No. 5. (This compares with 12% that AEP used, based on our own determinations, from the late 1990s until 2004, and 15% prior to that.)

The AEP East System Pool terminated effective January 1, 2014. Kentucky Power is included in the AEP East regulated operating companies' FRR plan for PJM planning purposes. For AEP capacity planning purposes, however, the AEP East regulated operating companies are planned for as a single entity, and Kentucky Power must meet its native load requirements as a stand-alone entity. Following the termination of the Pool Agreement, the Company can no longer rely on the other AEP East regulated operating companies to meet to meet its long-term capacity and energy shortfalls.

WITNESS: Ranie K Wohnhas

PJM Reserve Margin Example For 2015/16 Planning Year

Line		Comment
1	Factors	
2	PJM Installed Reserve Margin (IRM) =	16.20%
3	PJM EFORd =	5.97% Based on 5-year average PJM EFORd
4	Forecast Pool Requirement (FPR) =	1.093 FPR = (1 + Line 2) * (1 - Line 3)
5		
6	Obligations	
7	Total Load Obligation =	1,096 With implied PJM diversity factor
8	UCAP Obligation =	1,198 Line 4 * Line 7
9	UCAP Market Obligations =	0
10	Total UCAP Obligation =	1,198 Line 8 + Line 9
11		
12	Resources	
13	Net ICAP =	1,450
14	KPCo EFORd =	10.16% MW-weighted average of Unit EFORds
15	Available UCAP =	1,303 Line 13 * (1- Line 14)
16		
17	Position	
18	Net UCAP Position =	105 Line 15 - Line 10
19	Net ICAP Position =	117 Line 18 / (1- Line 14)
20		
21	Reserve Margin Percent =	32.3 Question 5 Attachment 2, Column (16)
22	Reserve Percent Required By PJM =	21.6 Line 21 - (Line 19 / Question 5 Attachment 2, Column (6)) * 100

Kentucky Power Company

REQUEST

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. Please provide the information for both Kentucky Power Company individually and the AEP-East Power Pool (pursuant to the Commission's December 13, 2004 Order in the Rockport UPSA extension, Case No 2004-00420)

RESPONSE

Attachment 1 to this response provides projected winter peak demands, capabilities, and margins for KPCo for the winter seasons 2014/15/through 2018/19

Attachment 2 to this response provides projected summer peak demands, capabilities, and margins for KPCo for 2015 through 2019

The AEP Interconnection Agreement terminated on January 1, 2014. As a result, the AEP-East Power Pool no longer exists, and all prior members of the Pool are treated as stand-alone entities for capacity planning purposes

WITNESS Rame K Wohnhas

KENTUCKY POWER COMPANY
Projected Winter Peak Demands, Generating Capabilities, and Margins

Winter Season	Peak Demand - MW						Capacity - MW					Margin (e)		
	Internal Demand	DSM	Committed Sales	Total Demand	Inter-ruptible Demand	Total Demand	Existing Capacity & Chngs	Sales	Capacity Additions	Purchases	Total	MW	% of Demand	
	(a)	(b)	(3)	(4)=(1)+(2)+(3)	(5)	(6)=(4)-(5)	(c)	Net Sales	Name/ Identifier	MW	Annual Mkt. Purch.			Equivalent Capacity
(1)	(2)	(3)	(4)=(1)+(2)+(3)	(5)	(6)=(4)-(5)	(7)	(8)	(9)	(10)	(11)=(7)-(8)+Sum(9)+(10)	(12)=(11)-(6)	(13)=(12)/(6)*100		
2014/15	1,480	(5)	0	1,475	0	1,475	2,251	(d)	0		0	2,251	776	52.6
2015/16	1,471	(6)	0	1,465	0	1,465	1,451	0	0	0	0	1,451	(14)	(1.0)
2016/17	1,477	(7)	0	1,470	0	1,470	1,441	0	0	0	0	1,441	(29)	(2.0)
2017/18	1,475	(8)	0	1,468	0	1,468	1,446	0	ecoPower (Biomass) (f)	58.5	0	1,505	37	2.5
2018/19	1,475	(9)	0	1,466	0	1,466	1,446	0		0	0	1,505	39	2.7

Notes: (a) Based on July 2014 Load Forecast.

(b) Existing plus approved and projected "Passive" EE, and VVO.

(c) Reflects KPCo's ownership ratio of the following winter capability assumptions.
 EFFICIENCY IMPROVEMENTS:

2017/18: Rockport 1: 5 MW (turbine)

GAS CONVERSION RERATES:

2016/17: Big Sandy 1: (10 MW)

ASSUMED RETIREMENTS FOR PLANNING PURPOSES:

2015/16: Big Sandy 2: 600 MW

(d) Reflects the ownership transfer of 50% of Mitchell Units 1 & 2 effective 2014/15 (780 MW)

(e) Represents margin relative to KPCo peak demand, not PJM requirement.

(f) Commercial operation of the ecoPower facility was expected to begin in 2017; however, construction of the facility has been suspended indefinitely pending the outcome of appeals of the Commission's October 10, 2013 order filed by Kentucky Industrial Utility Customers, Inc.

KENTUCKY POWER COMPANY
 Projected Summer Peak Demands, Generating Capabilities, and Margins

Summer Season	Peak Demand - MW						Capacity - MW						Reserve Margin		Reserve Margin		PJM ICAP Position After Interruptible w/ New Capacity	
	Internal Demand (a)	Inter-ruptible Demand Response (b)	DSM (c)	Net KPCo Internal Demand (4)+(a)+(b)+(c)	Net Other Committed Sales (5)	Total KPCo Demand (6)=(4)+(5)	Existing Capacity & Planned Changes (d)	Planned Capacity Additions				Before Interruptible w/ New Capacity		After Interruptible w/ New Capacity		Reserve % Required By PJM	Net Position MW	
								Committed Net Sales (8)	Name/ Identifier (9)	MW (10)	Annual Purch. (11)	Total Capacity (12)=(7)+(8)+(10)+(11)	MW (13)=(12)-(6)-(2)	% of Demand (14)=(13)/(6)+(2)*100	MW (15)=(12)-(6)			% of Demand (16)=(15)/(6)*100
2015	1,096	0	0	1,096	0	1,096						1,450	354	32.3	354	32.3	21.6	117
2016	1,113	0	0	1,113	0	1,113						1,440	327	29.4	327	29.4	19.1	115
2017	1,126	0	0	1,126	0	1,126						1,440	373	33.1	373	33.1	19.2	157
2018	1,136	0	0	1,136	0	1,136		ecoPower (Biomass) (e)	58.5			1,446	369	32.5	369	32.5	19.1	152
2019	1,074	0	(3)	1,071	0	1,071						1,446	434	40.5	434	40.5	19.1	229

Notes: (a) Based on (July 2014) Load Forecast (with implied PJM diversity factor)

(b) Demand Response approved by PJM in the prior planning year plus forecasted "Active" DR

(c) For PJM planning purposes, the ultimate impact of new DSM is 'delayed' about 4 years to represent the ultimate recognition of these amounts through the PJM-originated load forecast process.

(d) Reflects KPCo's ownership ratio of the following summer capability assumptions:
 EFFICIENCY IMPROVEMENTS:
 2018: Rockport 1: 6 MW (turbine)
 GAS CONVERSION RERATES:
 2016: Big Sandy 1 (10 MW)

(e) Commercial operation of the ecoPower facility was expected to begin in 2017; however, construction of the facility has been suspended indefinitely pending the outcome of appeals of the Commission's October 10, 2013 order filed by Kentucky Industrial Utility Customers, Inc.

Kentucky Power Company

REQUEST

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

RESPONSE

Please refer to Attachment 1 to this response.

WITNESS: Ranie K Wohnhas

Big Sandy Plant

Year	Unit 1	Unit 2
2014	4 weeks	4 weeks
2014	12 weeks	12 weeks
2015	7 weeks	Planned Retirement
2016	19 weeks	Retired
2017	30 days	Retired
2017	9 days	Retired
2018	30 days	Retired
2018	9 days	Retired
2019	30 days	Retired
2019	9 days	Retired

Mitchell Plant

Year	Unit 1	Unit 2
2015	6 weeks	12 weeks
2015	8 weeks	-----
2016	No Outage Scheduled	2 weeks
2017	2 weeks	2 weeks
2018	10 weeks	8 weeks
2019	8 weeks	2 weeks
2020	2 weeks	2 weeks

Kentucky Power Company

REQUEST

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. Please provide the information for both Kentucky Power Company individually and the AEP-East Power Pool (pursuant to the Commission's December 13, 2004 Order in the Rockport UPSA extension, Case No. 2004-00420).

RESPONSE

Kentucky Power entered into a renewable energy purchase agreement ("REPA") agreement with ecoPower Generation-Hazard, LLC ("ecoPower") to purchase the generation output of a planned 58.5 MW biomass generating station to be constructed near Hazard, Kentucky. The Commission approved the ecoPower REPA in Order dated October 10, 2013 in Case No. 2013-00144. Commercial operation of the ecoPower facility was expected to begin in 2017; however, construction of the facility has been suspended indefinitely pending the outcome of appeals filed by Kentucky Industrial Utility Customers, Inc. of the Commission's October 10, 2013 Order.

Additionally, while not a capacity addition, Kentucky Power will convert Big Sandy Unit 1 from a coal-fired to a natural-gas fired unit in accordance with the Commission's Order in Case No. 2013-00430. This conversion will result in a 10 MW derate for the unit.

The AEP Interconnection Agreement terminated on January 1, 2014. As a result, the AEP-East Power Pool no longer exists, and all prior members of the Pool are treated as stand-alone entities for capacity planning purposes.

WITNESS: Ranie K Wohnhas

Kentucky Power Company

REQUEST

The following transmission energy data for the just completed calendar year and the forecast for the current year and the following four years:

- a. Total energy received from all interconnections and generation sources connected to the transmission system.
- b. Total energy delivered to all interconnections on the transmission system

RESPONSE

Please refer to Attachment 1 to this response.

WITNESS: Ranie K Wohnhas

8(a) All quantities represent metered values.

<u>Received from (MWh):</u>	<u>2009</u> <u>(Actual)</u>	<u>2010</u> <u>(Actual)</u>	<u>2011</u> <u>(Actual)</u>	<u>2012</u> <u>(Actual)</u>	<u>2013</u> <u>(Actual)</u>	<u>2014</u> <u>(Actual)</u>	<u>2015</u>	
Appalachian Power (1)	4,637,687	5,042,019	4,230,880	4,338,641	4,631,523	5,171,726	(4)	
Ohio Power (1)	10,872,502	11,316,622	11,393,398	10,644,478	10,066,676	9,354,195	(4)	
East Ky Power Coop	481,140	412,663	510,543	394,193	386,124	294,361	(4)	
LGE(Kentucky Utilities)	933,540	884,267	780,095	730,063	565,818	623,285	(4)	
TVA	523,823	604,964	654,875	551,305	566,823	460,644	(4)	
Illinois Power Co. (2)	35,408	46,376	59,956	136,798	111,628	84,189	(5)	
Illinois Power Co. (3)	16,769	20,742	26,552	101,471	89,276	67,185	(5)	
Big Sandy Generating Plant	6,262,165	6,552,258	6,372,925	2,661,344	2,764,447	4,708,473	3,330,860	
Mitchell 1&2 (KPCo Share 50%)					0	4,096,020	4,024,089	(7)
Rockport (KPCo Share 15%)						2,507,564	2,156,705	(7)

8(b) All quantities represent metered values.

<u>Delivered to (MWh) :</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	
Appalachian Power (1)	15,589,080	16,340,364	15,816,607	11,673,720	11,550,084	13,038,290	(4)
Ohio Power (1)	465,000	466,832	494,931	526,005	371,910	433,763	(4)
East Ky Power Coop	154,558	154,000	176,721	206,810	136,118	236,884	(4)
LGE(Kentucky Utilities)	11	23	1	36	0	0	(4)
TVA	0	0	1	0	0	0	(4)
Illinois Power Co. (2)	0	0	0	0	0	0	(5)
Illinois Power Co. (3)	0	0	0	0	0	0	(5)
Vanceburg and Olive Hill	95,284	103,058	95,607	95,525	95,502	96,494	(6)

i: (1) An AEP System company.

(2) At the Riverside independent power producing plant (IPP) in Lawrence County, KY.

(3) At the Foothills independent power producing plant (IPP) in Lawrence County, KY.

(4) The Company does not forecast metered interchange; however, the future years' energy flows are not expected to be materially different from the year 2014 actuals.

(5) The Company does not, and can not, forecast energy production output from an IPP.

(6) This is a 3rd Party Firm Load that is served by Kentucky Power

(7) Generation shares from Mitchell Power Plant and Rockport are from Plants not directly connected to the KPCo system

Kentucky Power Company

REQUEST

The following transmission energy data for the just completed calendar year and the forecast for the current year and the following four years.

- c. Peak load capacity of the transmission system.
- d. Peak demand for summer and winter seasons on the transmission system.

RESPONSE

- c. The maximum amount of electric energy that can be transmitted through a transmission network is a function of the level of the load and generation connected to the transmission system as well as the level and direction of transmission service into, out of, and through the network. Therefore, the 'Peak Load Capacity' of the transmission system cannot be quantified as a single value.

The Kentucky Power transmission system capacity is designed to serve the existing and projected load. It is also designed to reliably serve the load for any single contingency outage of a line, transformer or generator. The existing transmission system together with the capacity additions listed in response to Item No. 9 will provide adequate capacity to serve the existing and projected loads shown in the table below.

- d. Refer to Attachment 1 to this response for the actual summer and winter peak demands for 2014 and the forecasted summer and winter peak demands for 2015 through 2019.

WITNESS: Ranie K Wohnhas

Kentucky Power Company
Seasonal Peak Demand
Actual 2014 and Forecast 2015-2019

Year	Summer Peak Demand (MW)	Preceding Winter Peak Demand (MW)
2014	1,076*	1,645*
2015	1,141	1,475
2016	1,145	1,465
2017	1,145	1,470
2018	1,147	1,468
2019	1,150	1,466

***Based on Actual Data**

Kentucky Power Company

REQUEST

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

Please refer to Attachment 1 to this response. Confidential treatment is being sought for portions of Attachment 1.

WITNESS Rame K. Wohnhas

The following projects are planned for the Kentucky Power Company transmission system:

Big Sandy Area Improvements – This project will install a second 765/345 kV transformer at the Baker 765 kV station. This project will provide double contingency reliability to the critical transmission system. The anticipated in-service date would be June 2015.

Thelma and Busseyville Station Upgrades – This project will address thermal overload concerns on the Big Sandy-Thelma 138kV circuit. Station and line work will be required. This project will increase the thermal rating on the Big Sandy-Thelma 138kV line. Current projected in-service date is June 2015.

Dorton 138kV Circuit Breaker Project- This project will install three 138kV circuit breakers and one circuit switcher at Dorton Station. The project will solve thermal loading concerns and operational reliability concerns. The current projected in-service date is June 2015.

Johns Creek and Stone Station Upgrades – This project will install two new 138 kV circuit breakers at Johns Creek and one 138kV circuit breaker at Stone Station. This project will provide additional reliability to customers, operational flexibility, and voltage support under contingency conditions. Current projected in-service date is December 2017.

Cedar Creek Station Upgrades – This project will install two new 138 kV circuit breakers at Cedar Creek Station. This project will provide operational benefits and provide voltage support for single contingency line outages. Current projected in-service date is April 2016.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Kentucky Power Company – Electricity Price in Forecast Modeling

In every load forecast, Kentucky Power Company takes electricity price and the effects of its changes into consideration. This is true for the forecast filed in Administrative Case No. 387. In accordance with the Commission's letter Dated May 31, 2013, the following provides a discussion of the impacts of prices on electricity sales and how price is accounted for in the load forecast.

An understanding of the relationship between energy prices and energy consumption is fundamental to developing a forecast of electricity consumption. In theory, the effect of a change in the price of a good on the consumption of that good can be disaggregated into two effects, the "income" effect and the "substitution" effect. The income effect refers to the change in consumption of a good attributable to the change in real income incident to the change in the price of that good. For most goods, a decline in real income would induce a decline in consumption. The substitution effect refers to the change in the consumption of a good associated with the change in the price of that good relative to the prices of all other goods. The substitution effect is assumed to be negative in all cases; that is, a rise in the price of a good relative to other, substitute goods would induce a decline in consumption of the original good. Thus, if the price of electricity were to rise, the consumption of electricity would fall, all other things being equal. Part of the decline would be attributable to the income effect; consumers must make decisions on how to allocate their budget to purchase electricity services and other goods and services after the price of electricity rises. Part would be attributable to the substitution effect; consumers would substitute relatively cheaper fuels for electricity once its price had risen.

The magnitude of the effect of price changes on consumption differs over different time horizons. In the short-term, the effect of a rise in the price of electricity is severely constrained by the ability of consumers to substitute other fuels or to incorporate more electricity-efficient technology. (The fact that the Company's short-term energy consumption models do not include price as an explanatory variable is a reflection of the belief that this constraint is severe).

In the long-term, however, the constraints on substitution are lessened for a number of reasons. First, durable equipment stocks begin to reflect changes in relative energy prices by favoring the equipment using the fuel that was expected to be cheaper; second, heightened consumer interest in saving electricity, backed by willingness to pay for more efficiency, spurs development of

conservation technology; third, existing technology, too expensive to implement commercially at previous levels of energy prices, becomes feasible at the new, higher energy prices; and fourth, normal turnover of electricity-using equipment contributes to a higher average level of energy efficiency.

For these reasons, energy price changes are expected to have an effect on long-term energy consumption levels. As a reflection of this belief, most of the Company's long-term forecasting models, including the residential, commercial, manufacturing and mine power energy sales models, incorporate the price of electricity as an explanatory variable. The residential Statistically Adjusted End-Use (SAE) Model uses price in development of explanatory variables. There are a variety of short- and long-run elasticities utilized in this analysis. In addition to electricity prices, the residential SAE model utilizes the price of natural gas and associated cross-price elasticities. Likewise, the commercial SAE model incorporates electricity price and an associated price elasticity to develop explanatory variables. Manufacturing and mine power have price as an explanatory variable. In these cases, the coefficient of the price variable provides a quantitative measure of the sensitivity of the forecast value to a change in price. The manufacturing model incorporates the price of natural gas to consumers in the state of Kentucky.