STITES & HARBISON PLLC

ATTORNEYS

RECEIVED

APR 2 5 2008

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R. Benjamin Crittenden (502) 209-1216 (502) 223-4388 FAX bcrittenden@ stites.com

April 25, 2008

VIA HAND DELIVERY

Ms. Stephanie Stumbo Executive Director Public Service Commission 211 Sower Blvd. Frankfort, Kentucky 40602-0615

Re: Administrative Case No. 387

Dear Ms. Stumbo:

Enclosed please the original and ten (10) copies of Kentucky Power's Response to Commission Order Dated December 20, 2001, in *In the Matter of: A Review of the Adequacy of Kentucky's Generation Capacity and Transmission System*, Administrative Case No. 387. Please call me if you have any questions.

Sincerely,

STITES & HARBISON, PLLC R. Benjamin Crittenden

Enclosures

PSC ADMINISTRATIVE CASE NO. 387 SERVICE LIST

I hereby certify that a true and accurate copy of the foregoing was served by United States First Class Mail, postage prepaid, upon the following:

Kendrick R. Riggs Allyson K. Sturgeon Ogden Newell & Welch PLLC 1700 PNC Plaza 500 West Jefferson Street Louisville, Kentucky 40202-2874

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John N. Hughes 124 West Todd Street Frankfort, Kentucky 40601

April 25, 2008

R. Benjamin Crittenden

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COMMONWEALTH OF KENTUCKY

APR 25 2008

PUBLIC SERVICE COMMISSION

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF :

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

ADMINISTRATIVE CASE NO. 387

RESPONSE OF KENTUCKY POWER COMPANY

ТО

COMMISSION ORDER DATED DECEMBER 20, 2001

April 25, 2008

KPSC Administrative Case No. 387 Annual Resource Assessment Calendar Year 2007 Order Dated December 20, 2001 Item No. 1 Page 1 of 3

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 2 of this response provides actual and weather normalized 2007 monthly peak internal demands for Kentucky Power Company and AEP System-East. Kentucky Power Company and AEP System-East had 0 and 1,016 MW of contractual interruptible capacity, respectively.

Page 3 of this response provides actual 2007 monthly system demands for Kentucky Power and AEP System-East. The system demands include internal load and off-system sales. Weathernormalized monthly peak system demands for Kentucky Power Company and AEP System-East have not been developed and therefore, are not available.

WITNESS: Errol K Wagner

Kentucky Power Company and AEP System-East Zone Actual and Weather Normalized Peak Internal Demand (MW) 2007

			_		AEP System-East Zone			
		Kentucky Pow Peak	er Company Peak	Normalized	Book	Peak	Peak Hour	Normalized Peak
Month January February March April May June July August September October	Peak 1,674 1,808 1,350 1,303 1,140 1,306 1,226 1,348 1,203 1,096	Day 1/31/2007 2/6/2007 3/8/2007 4/10/2007 5/30/2007 6/13/2007 6/13/2007 8/24/2007 9/6/2007 10/30/2007	Peak Hour 8 9 8 7 15 15 17 16 16 16 8 9	Peak 1,639 1,495 1,387 1,166 1,084 1,197 1,228 1,271 1,085 1,085 1,085 1,269	Peak 20,169 21,702 18,579 17,339 19,117 21,022 21,413 22,413 20,932 19,336 18,218	Day 1/31/2007 2/6/2007 3/6/2007 4/10/2007 5/30/2007 6/18/2007 6/18/2007 8/8/2007 9/5/2007 10/8/2007 11/30/2007	8 8 7 16 16 16 14 17 15 8	20,274 20,182 18,741 15,796 17,583 20,096 20,629 21,610 18,935 16,344 17,541 19,468
November December	1,287 1,418	11/30/2007 12/18/2007	9	1,446	20,030	12/18/2007	8	10,100

Kentucky Power Company and AEP System-East Zone Actual Peak System Demand (MW) 2007

	Kent	ucky Power Com	bany	AEP System-East Zone			
Month	Peak	Peak Day	Peak Hour	Peak	Peak Day	Peak Hour	
January	1,862	1/31/2007	8	23,046	1/31/2007	8	
February	2,009	2/6/2007	9	24,742	2/6/2007	8	
March	1,560	3/8/2007	8	21,420	3/8/2007	8	
April	1,488	4/10/2007	7	19,803	4/10/2007	7	
Мау	1,403	5/30/2007	15	22,585	5/30/2007	16	
June	1,505	6/13/2007	17	24,358	6/27/2007	14	
July	1,401	7/9/2007	16	24,261	7/9/2007	16	
August	1,543	8/23/2007	14	25,445	8/23/2007	16	
September	1,381	9/5/2007	16	23,666	9/5/2007	17	
October	1,232	10/30/2007	8	22,077	10/8/2007	16	
November	1,432	11/30/2007	8	20,643	11/30/2007	8	
December	1,592	12/18/2007	9	23,014	12/17/2007	20	

KPSC Administrative Case No. 387 Annual Resource Assessment Calendar Year 2007 Order Dated December 20, 2001 Item No. 2 Page 1 of 49

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 competed 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).

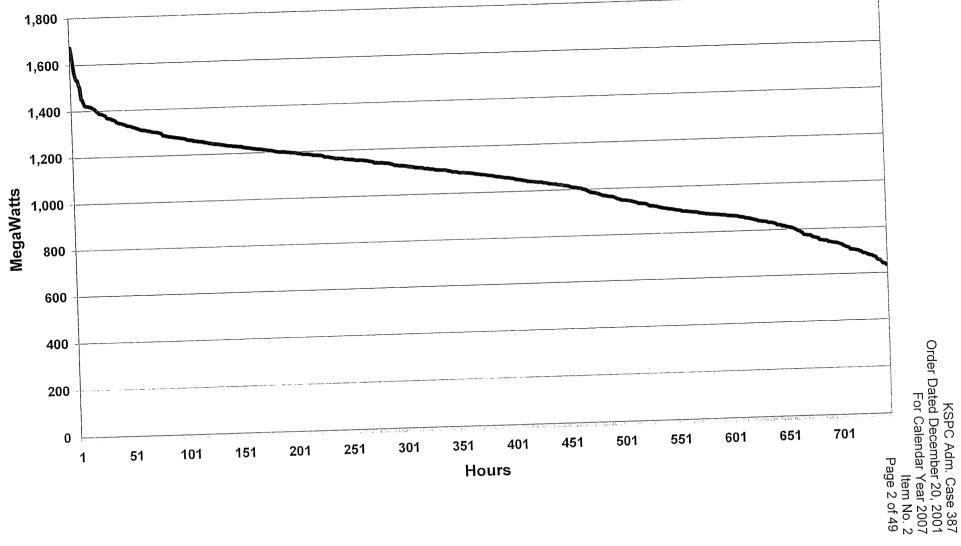
RESPONSE

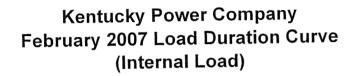
Pages 2 through 13 provide 2007 monthly load duration curves for Kentucky Power Company's internal load. Pages 14 through 25 provide 2007 monthly load duration curves for Kentucky Power Company's system load. Pages 26 through 37 provide 2007 monthly load duration curves for AEP System-East's internal load. Pages 38 through 49 provide 2007 monthly load duration curves for AEP System-East's system load. The system load, for both Kentucky Power Company and AEP System-East, includes internal load and off-system sales.

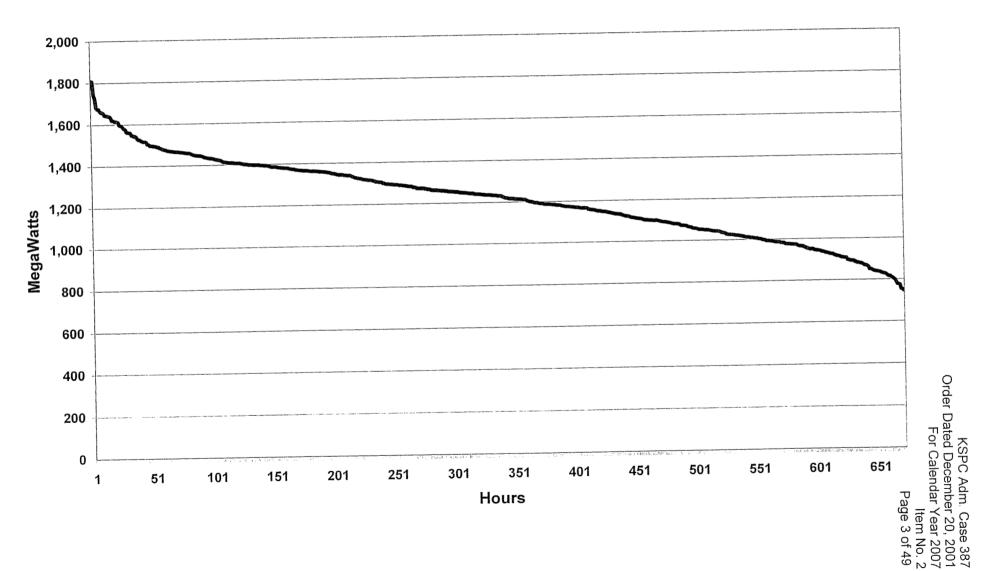
Weather-normalized monthly internal peaks for Kentucky Power Company and AEP System-East are provided on Page 2 of Item Number 1. Weather normalized system peaks have not been developed and therefore, are not available.

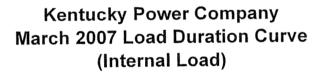
WITNESS: Errol K Wagner

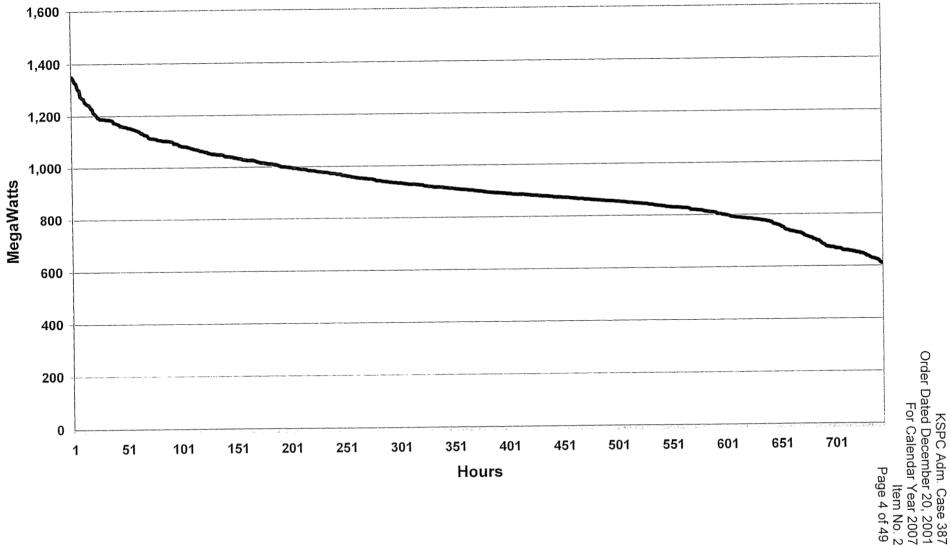
Kentucky Power Company January 2007 Load Duration Curve (Internal Load)





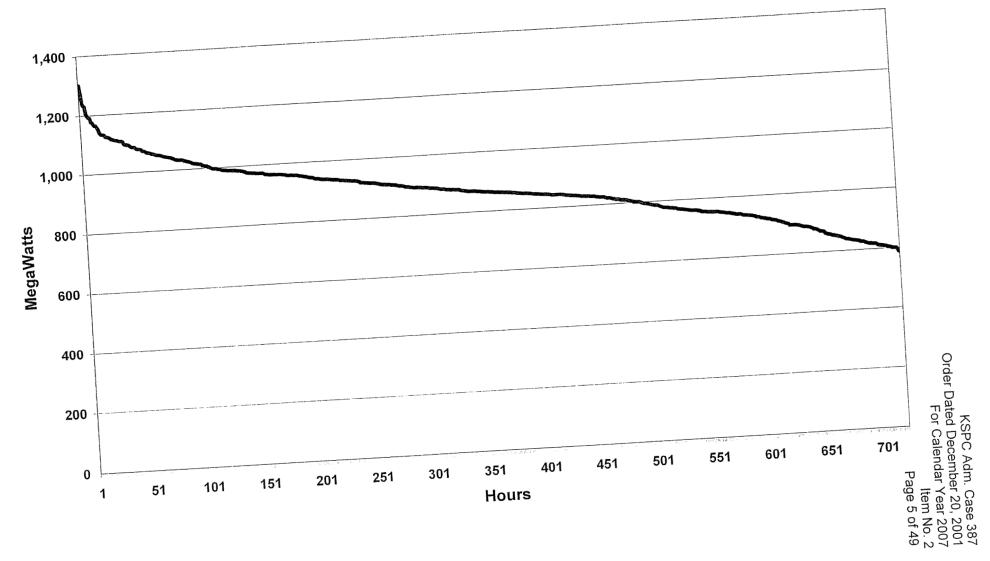


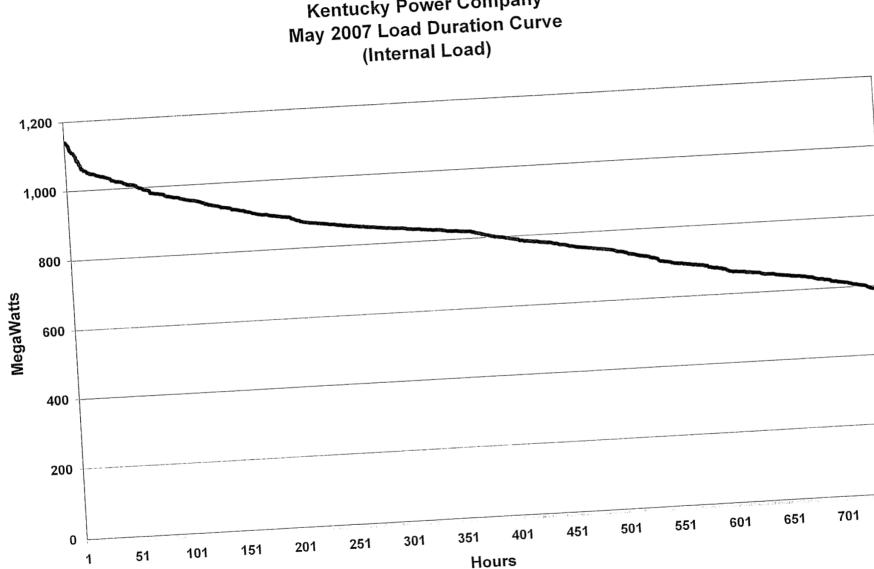




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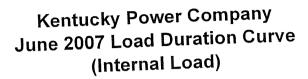


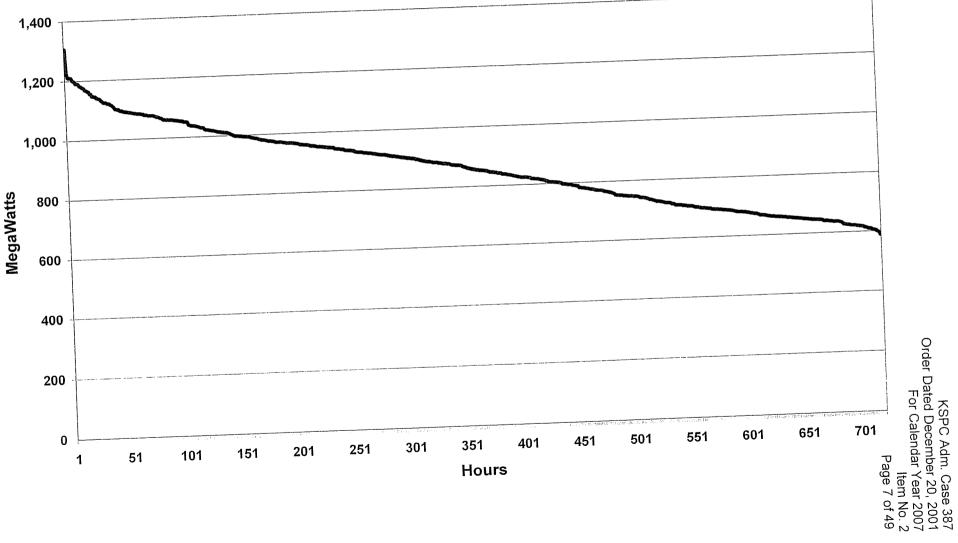


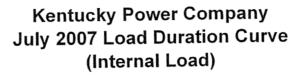


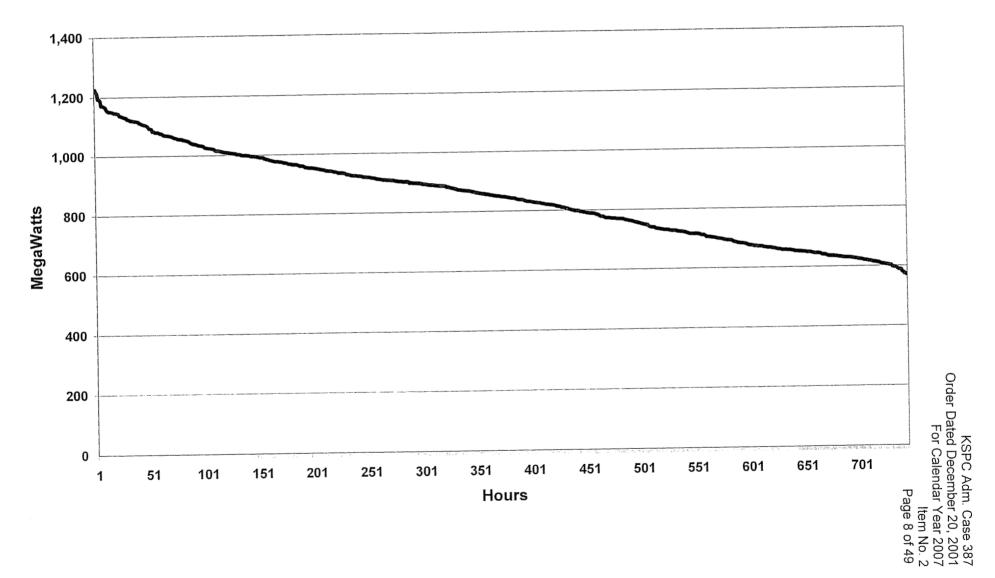
Kentucky Power Company

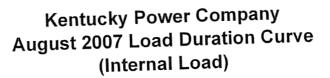
KSPC Adm. Case 387 Order Dated December 20, 2001 For Calendar Year 2007 Item No. 2 Page 6 of 49

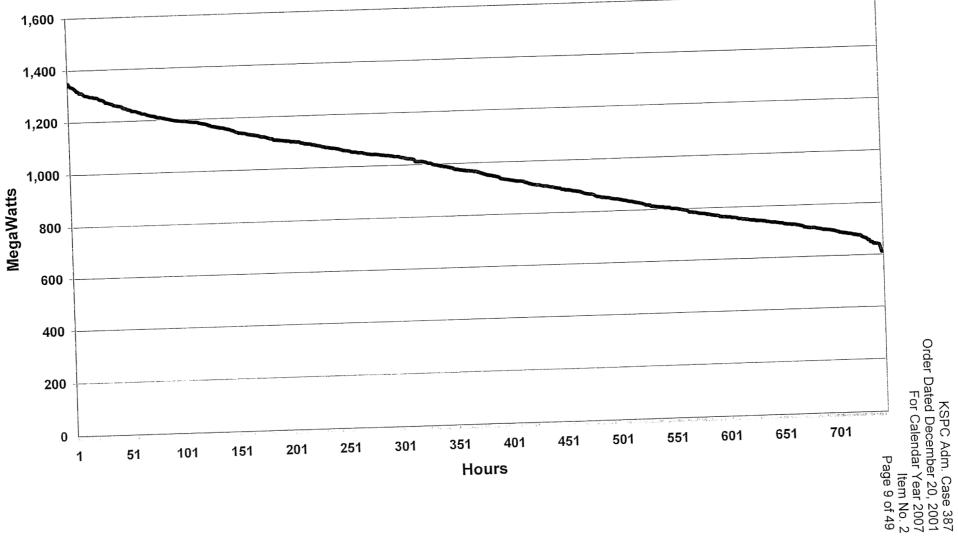


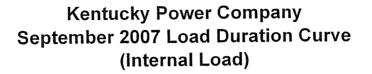


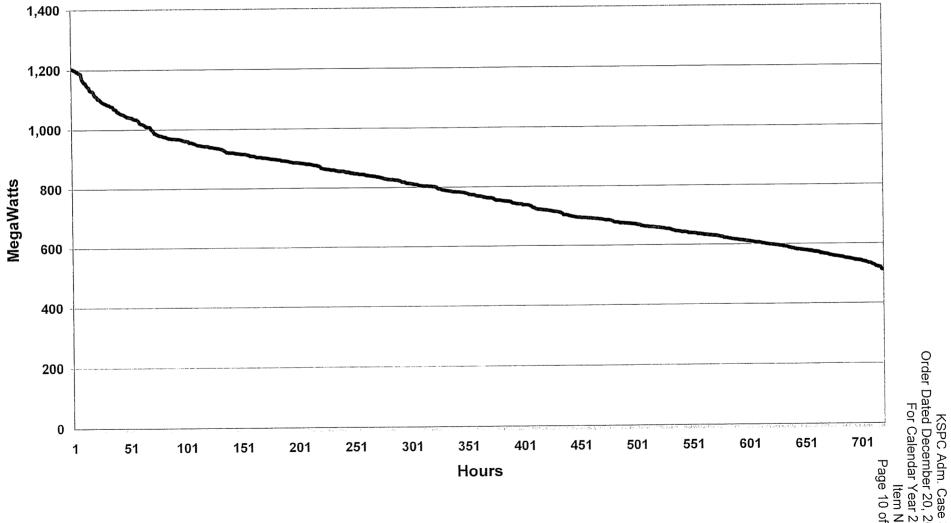






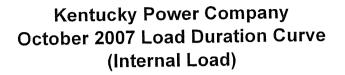


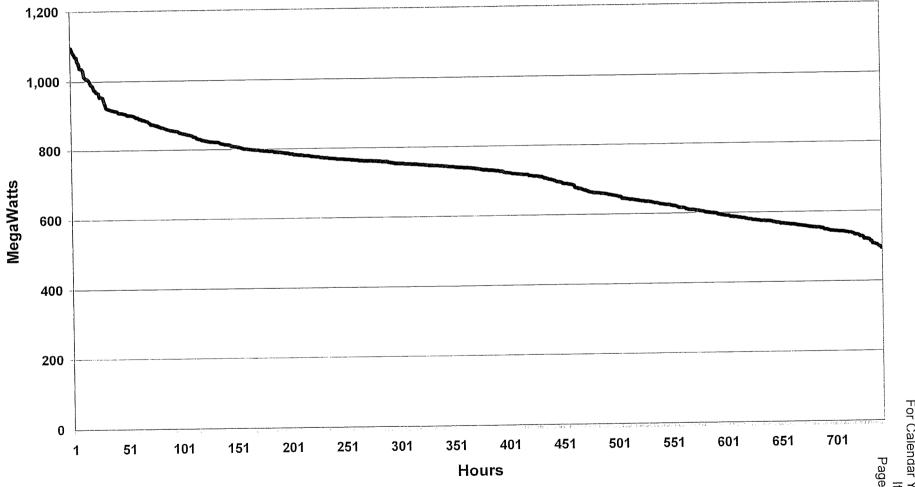




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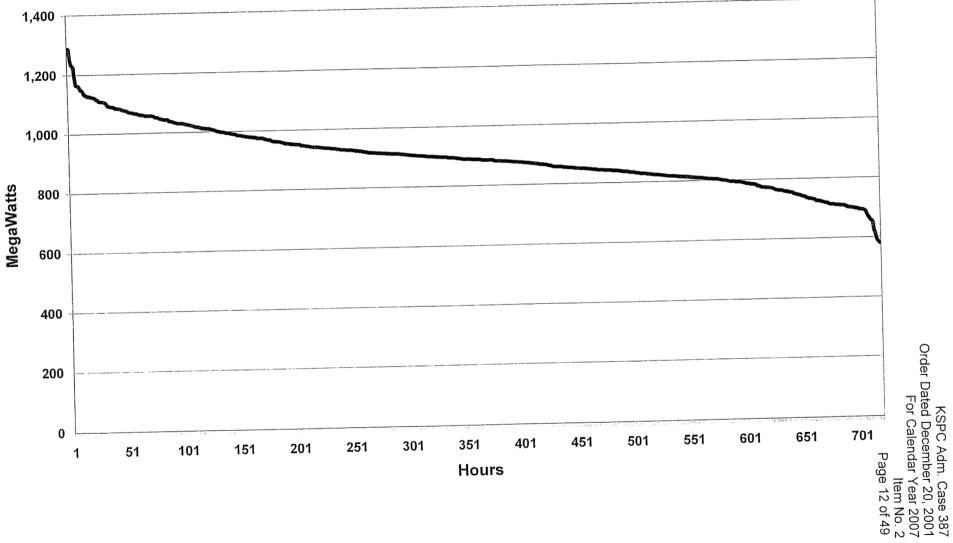
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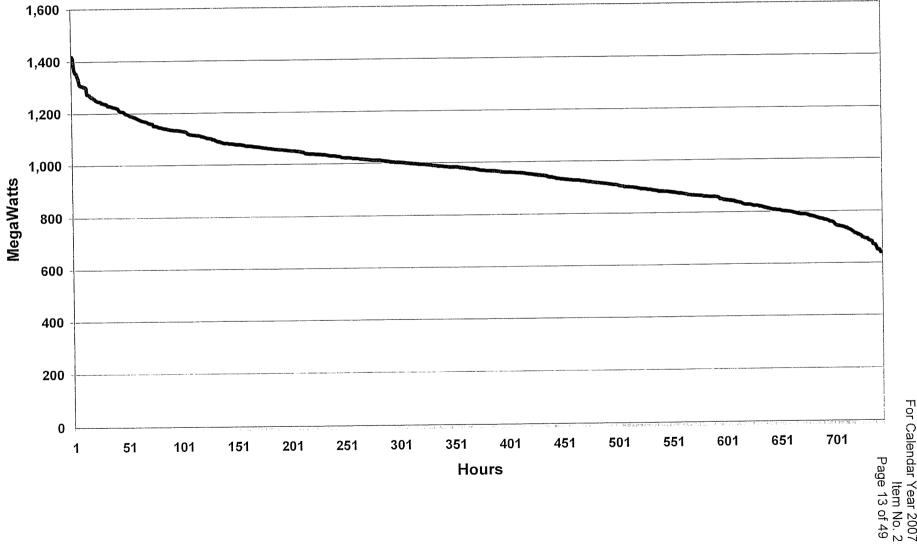


KSPC Adm. Case 387 Order Dated December 20, 2001 For Calendar Year 2007 Item No. 2 Page 11 of 49

Kentucky Power Company November 2007 Load Duration Curve (Internal Load)

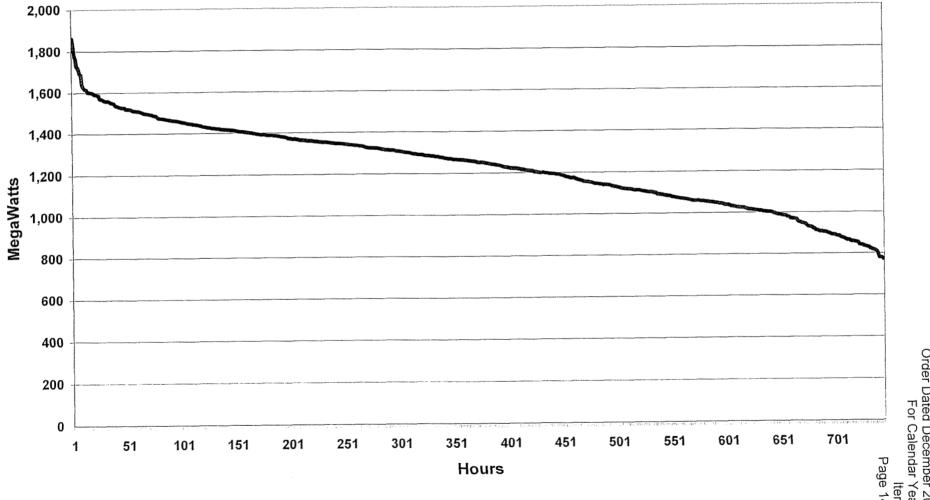


Kentucky Power Company December 2007 Load Duration Curve (Internal Load)



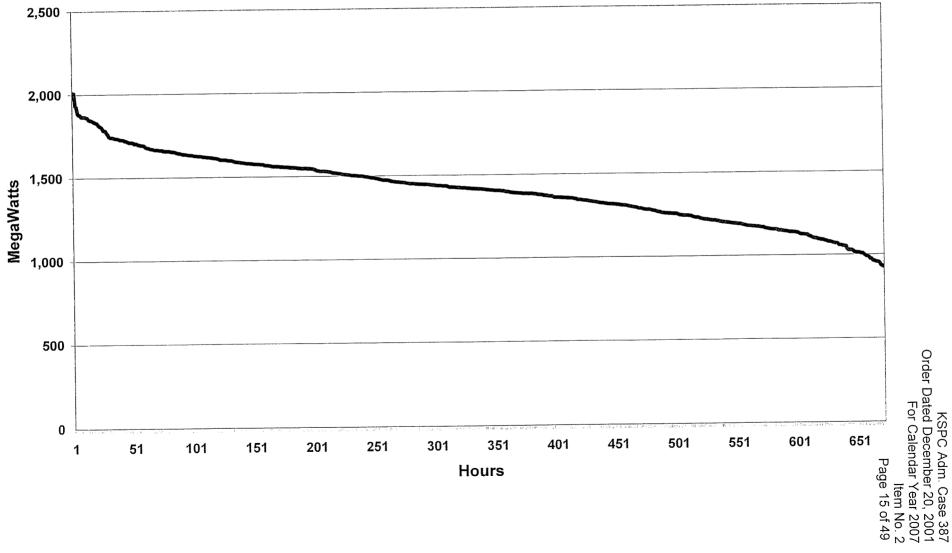
KSPC Adm. Case 387 Order Dated December 20, 2001 For Calendar Year 2007 Item No. 2

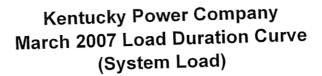
Kentucky Power Company January 2007 Load Duration Curve (System Load)

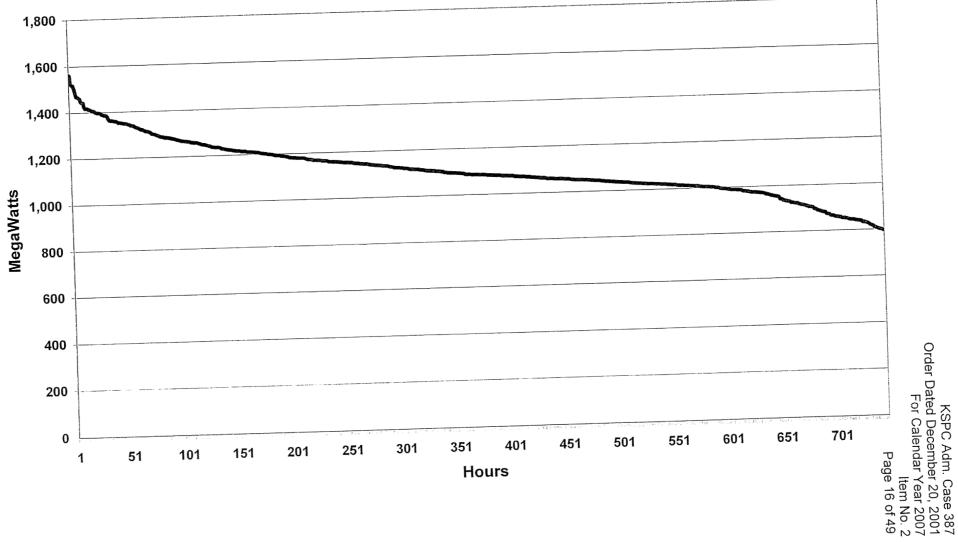


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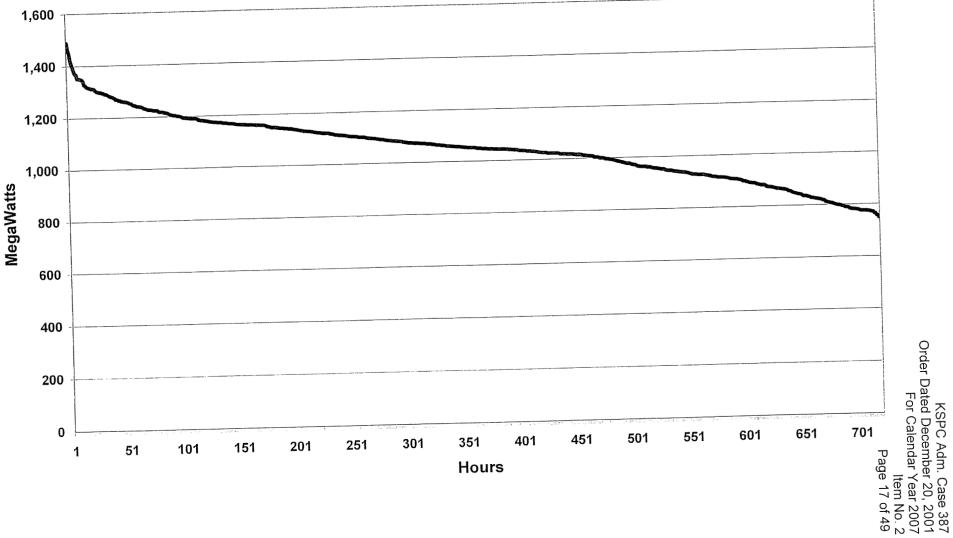
Kentucky Power Company February 2007 Load Duration Curve (System Load)

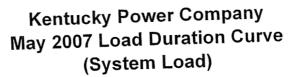


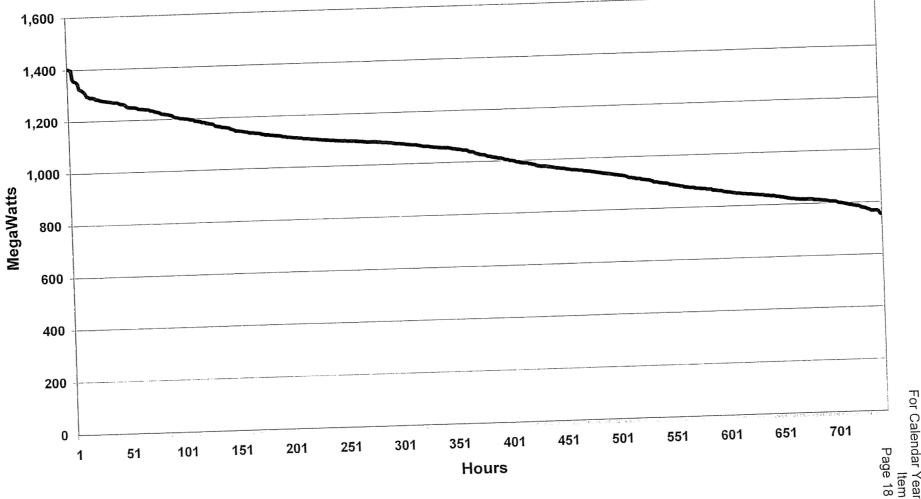




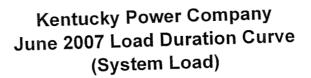
Kentucky Power Company April 2007 Load Duration Curve (System Load)

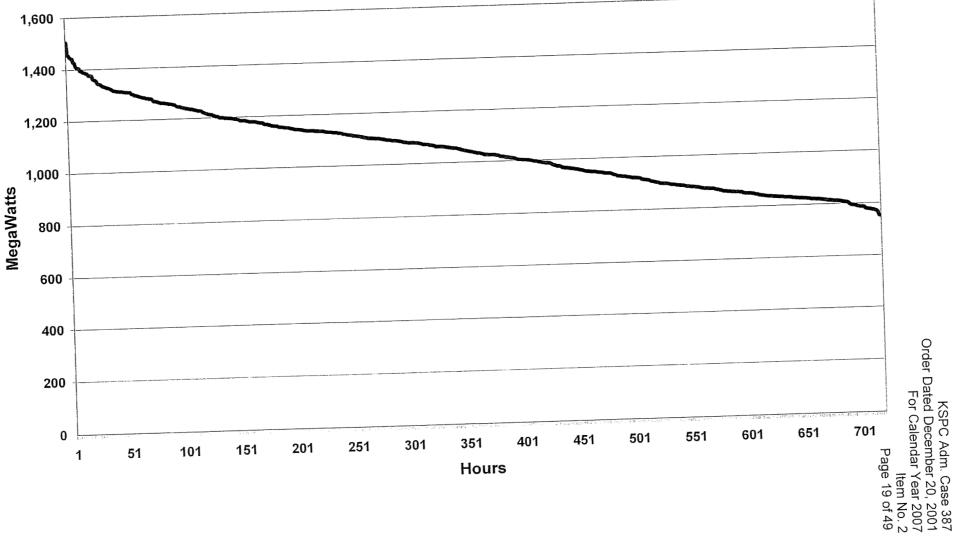




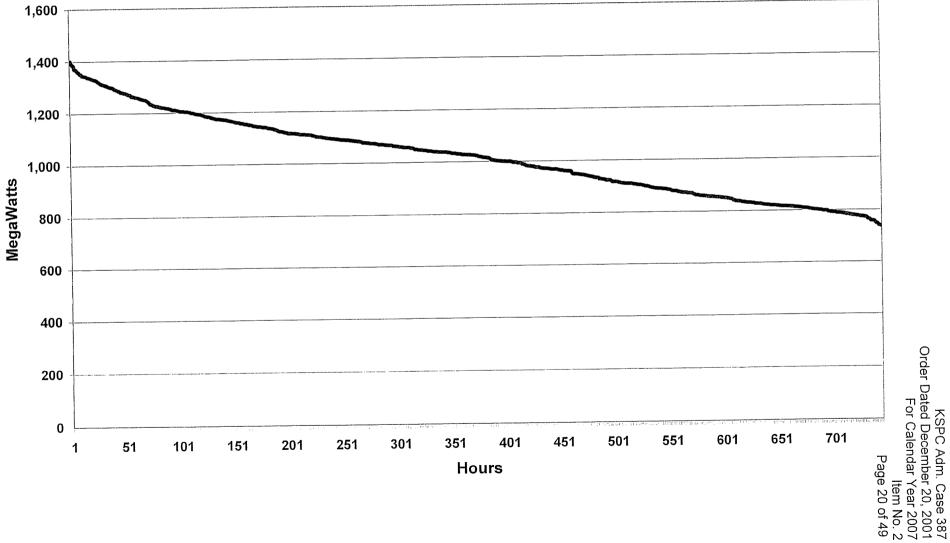


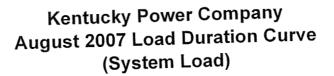
KSPC Adm. Case 387 Order Dated December 20, 2001 For Calendar Year 2007 Item No. 2 Page 18 of 49

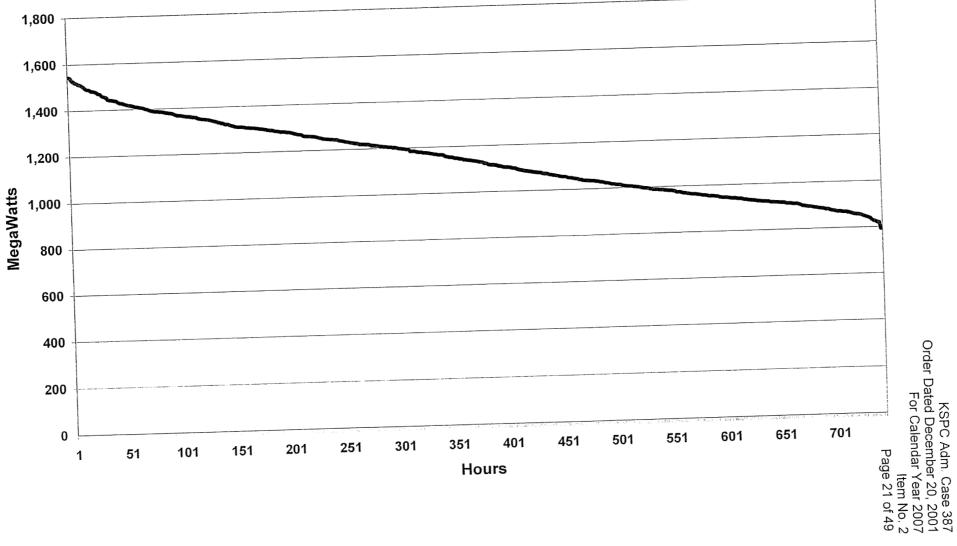


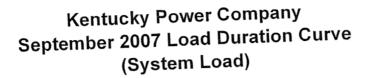


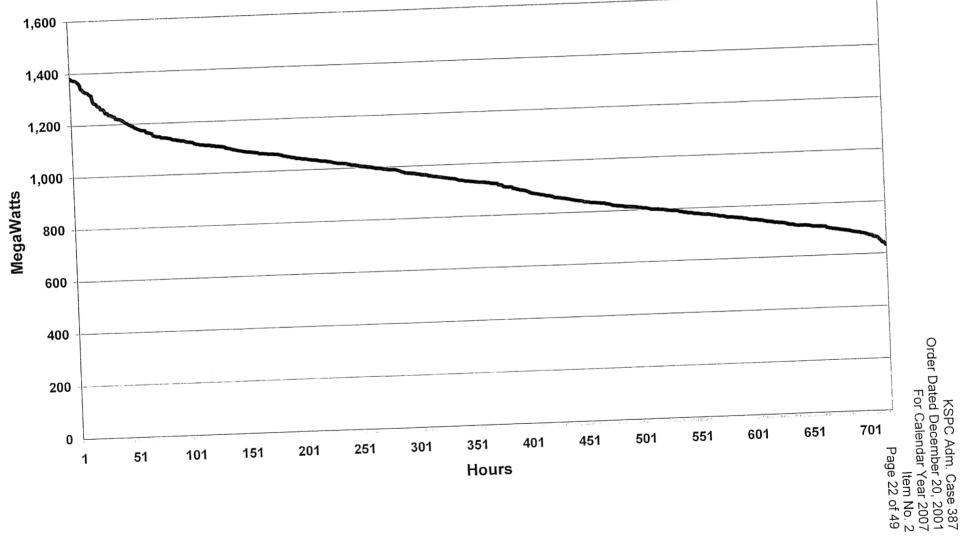
Kentucky Power Company July 2007 Load Duration Curve (System Load)

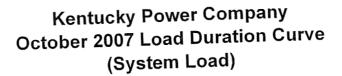


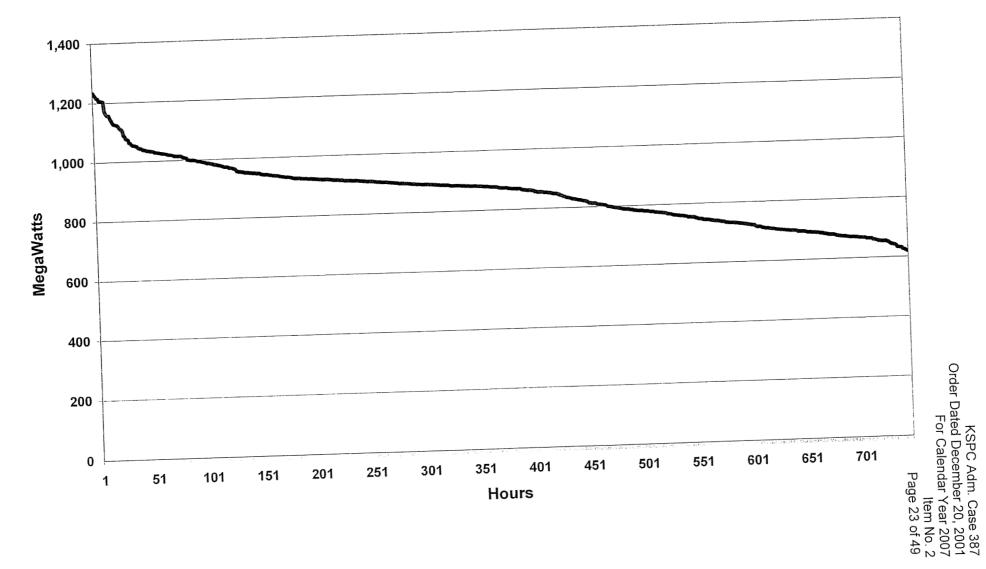


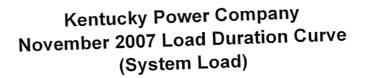


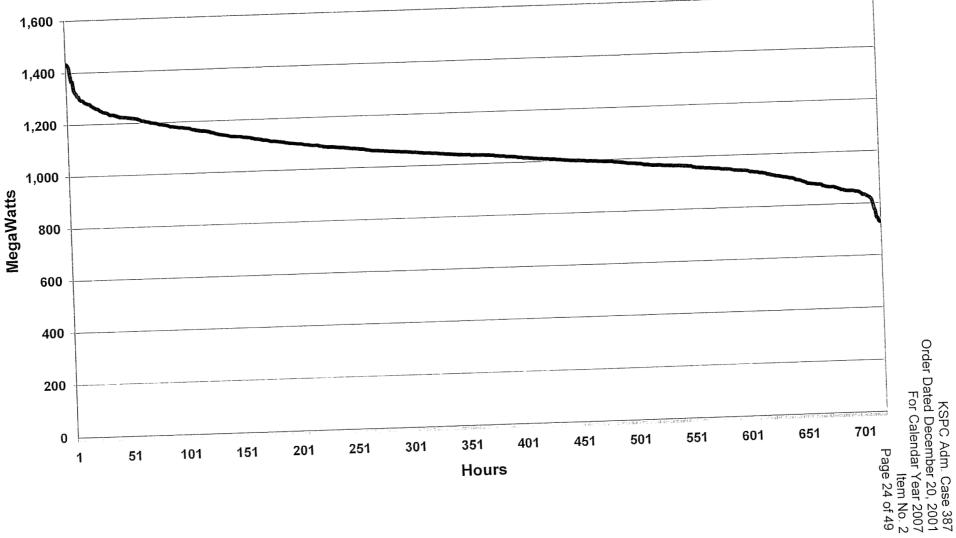




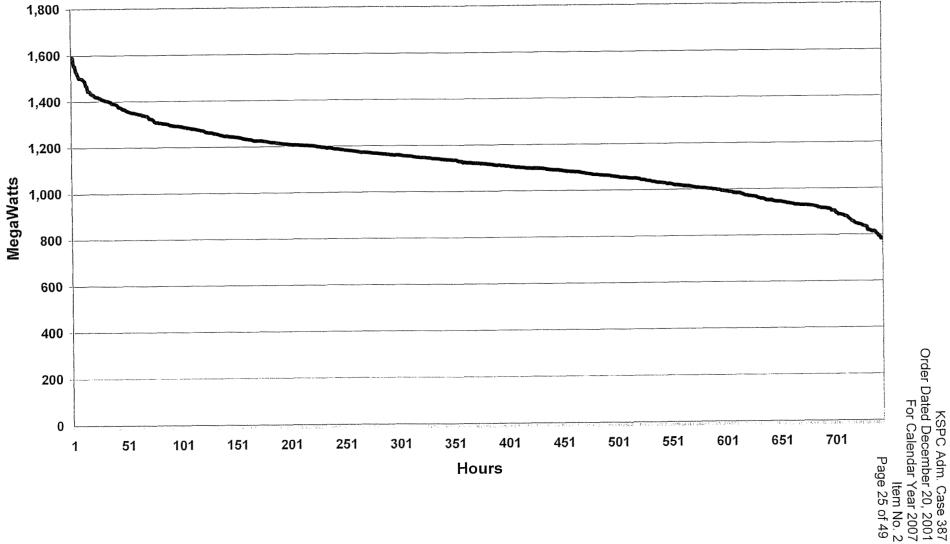






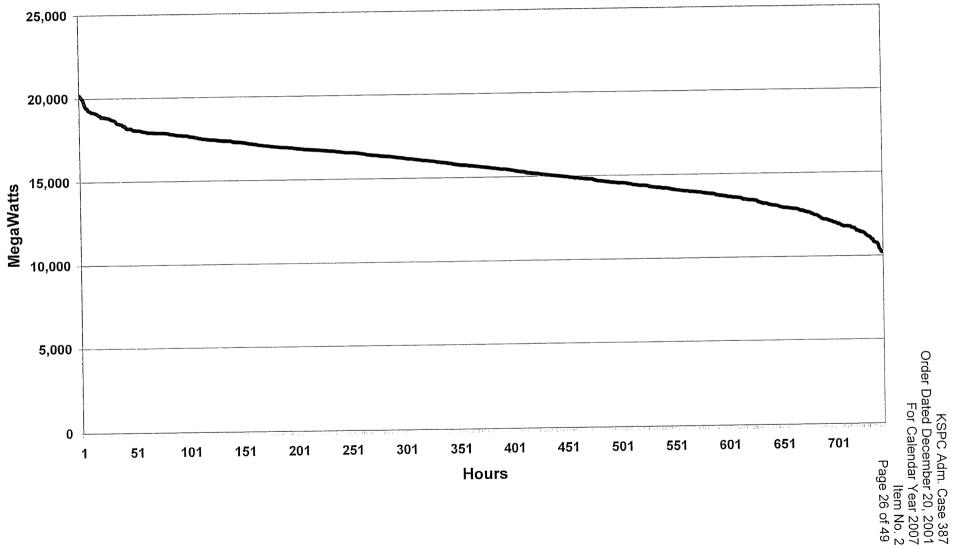


Kentucky Power Company December 2007 Load Duration Curve (System Load)



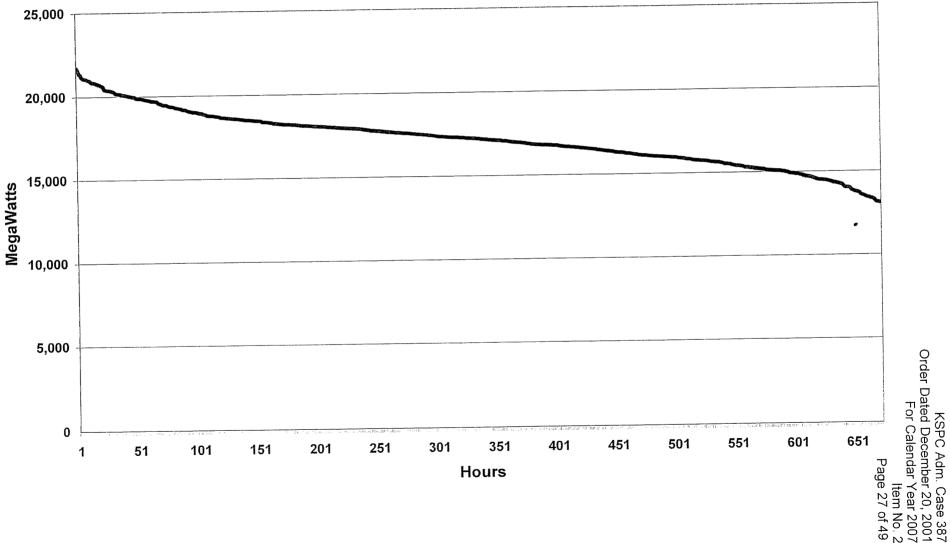
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AEP System-East Zone January 2007 Load Duration Curve (Internal Load)

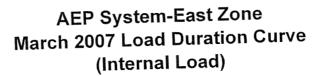


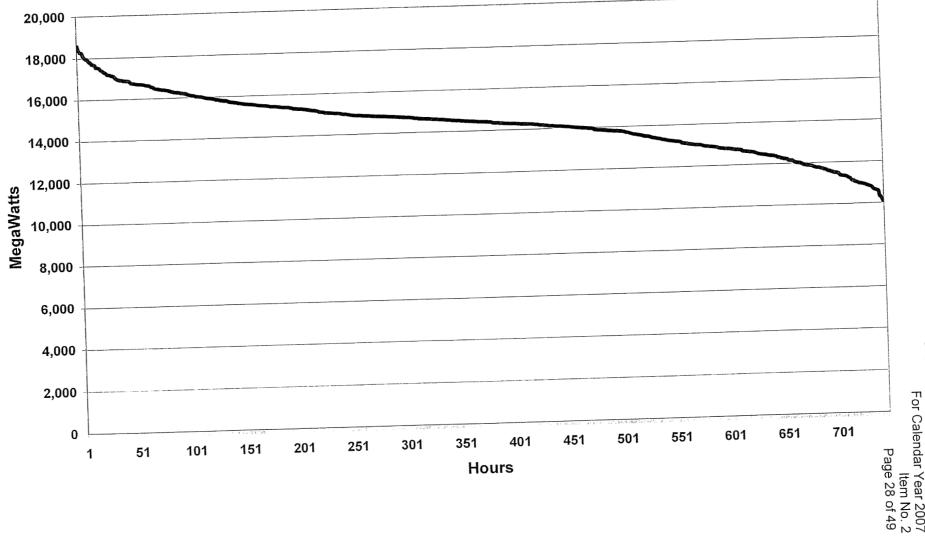
Item No. 2 Page 26 of 49

AEP System-East Zone February 2007 Load Duration Curve (Internal Load)



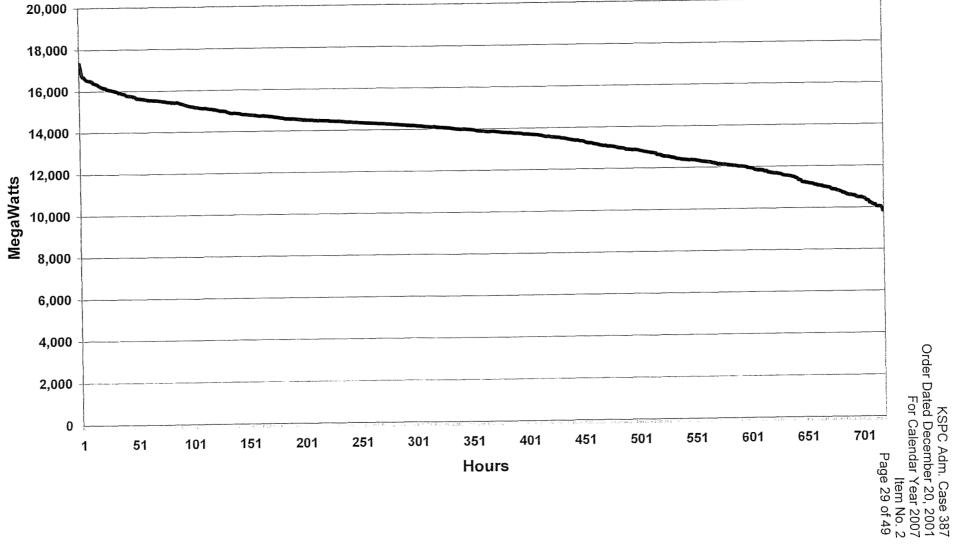
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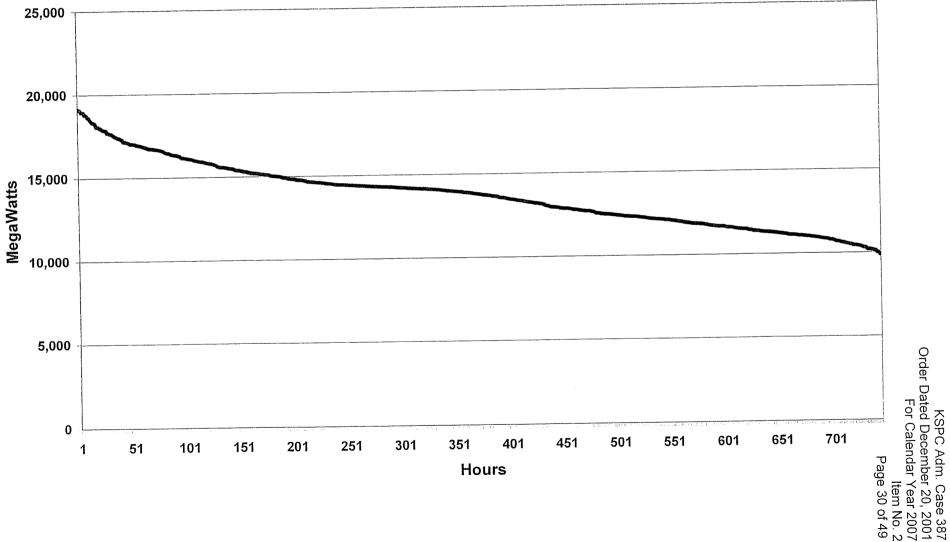


KSPC Adm. Case 387 Order Dated December 20, 2001 For Calendar Year 2007 Item No. 2

AEP System-East Zone April 2007 Load Duration Curve (Internal Load)

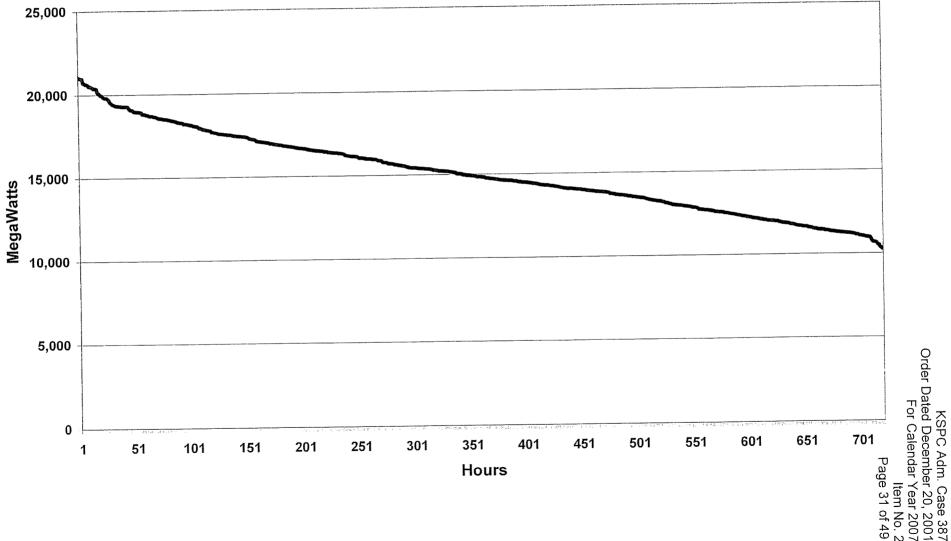


AEP System-East Zone May 2007 Load Duration Curve (Internal Load)



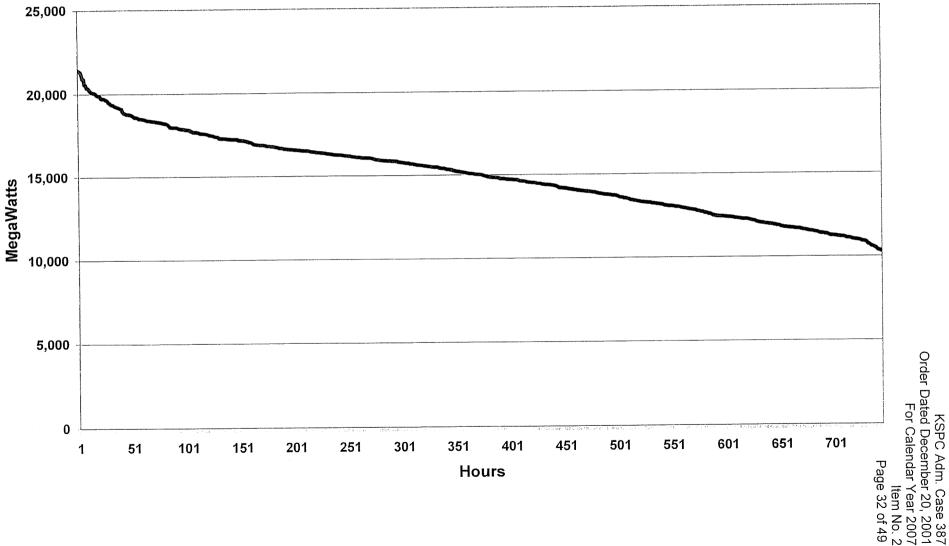
endar Year 2007 Item No. 2 Page 30 of 49

AEP System-East Zone June 2007 Load Duration Curve (Internal Load)

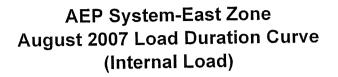


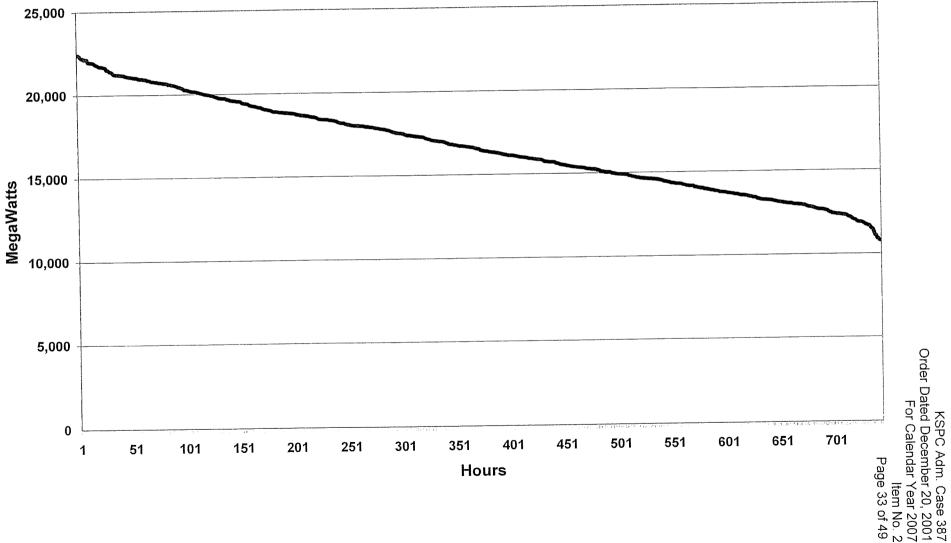
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AEP System-East Zone July 2007 Load Duration Curve (Internal Load)



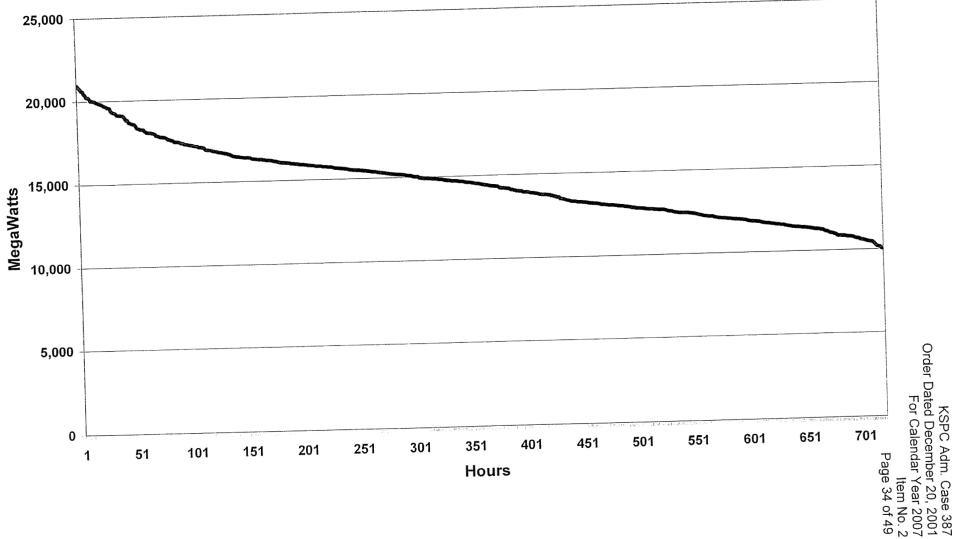
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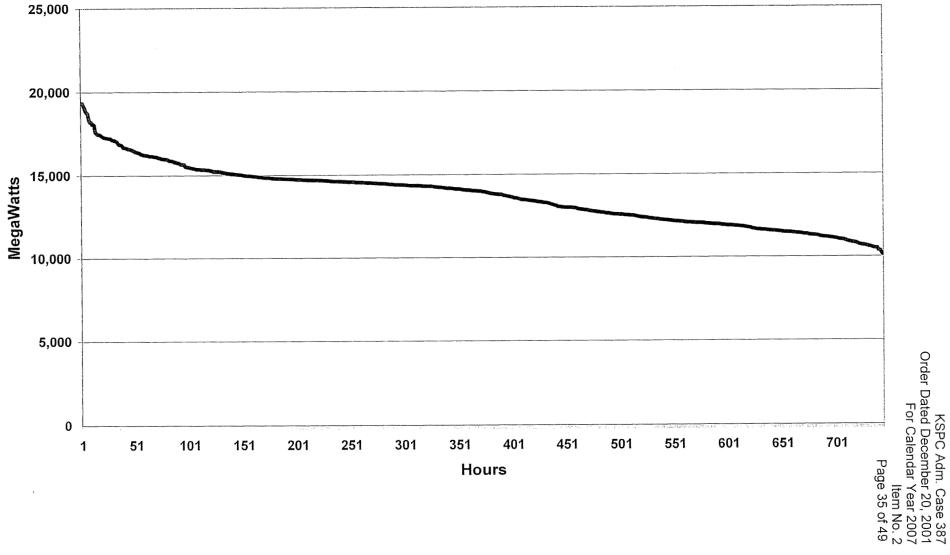


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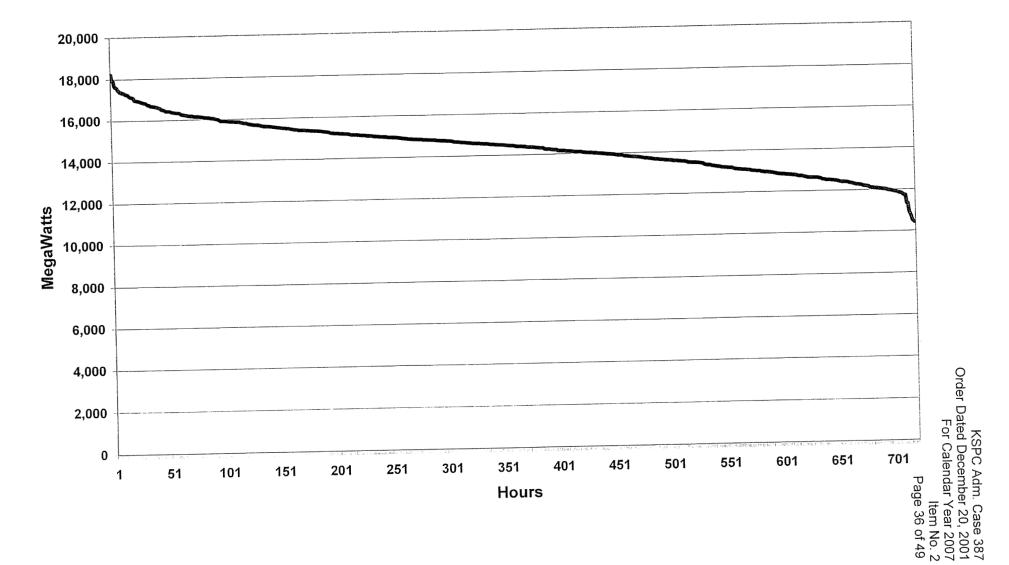
AEP System-East Zone September 2007 Load Duration Curve (Internal Load)



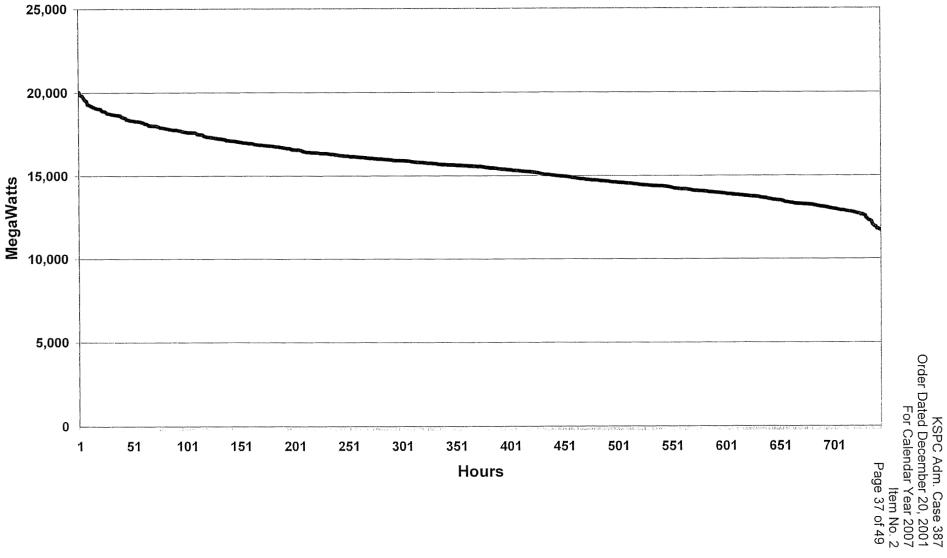
AEP System-East Zone **October 2007 Load Duration Curve** (Internal Load)



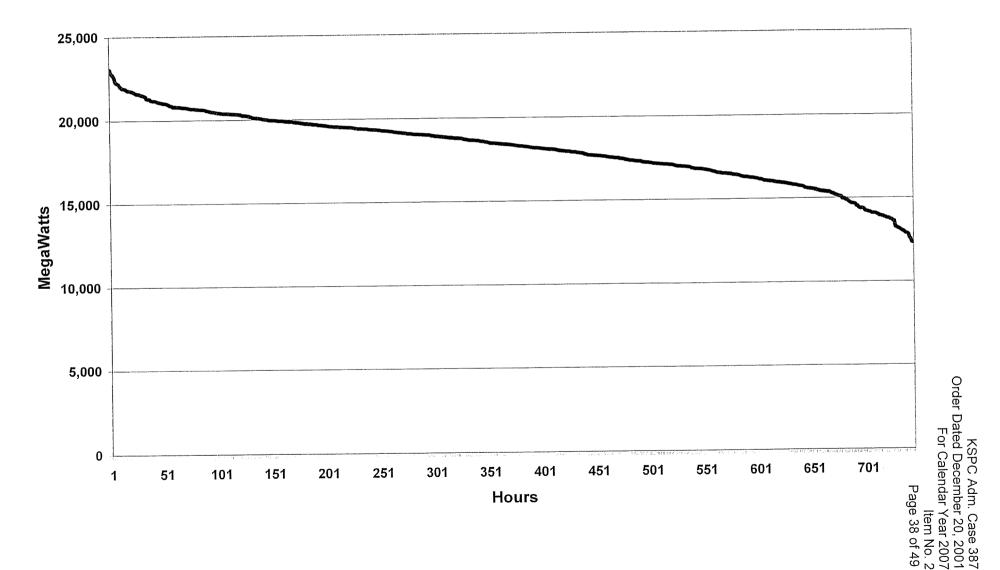
AEP System-East Zone November 2007 Load Duration Curve (Internal Load)



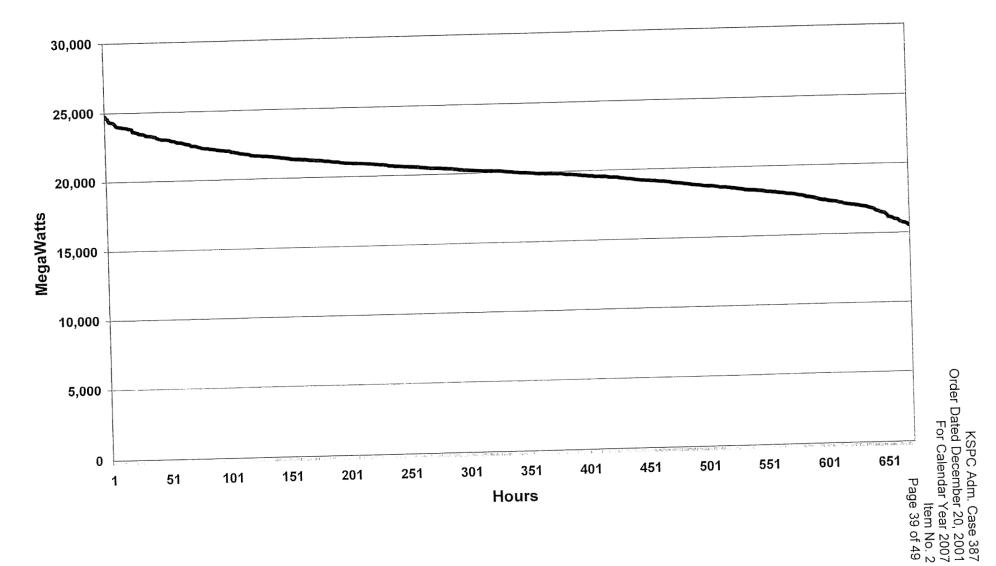
AEP System-East Zone **December 2007 Load Duration Curve** (Internal Load)



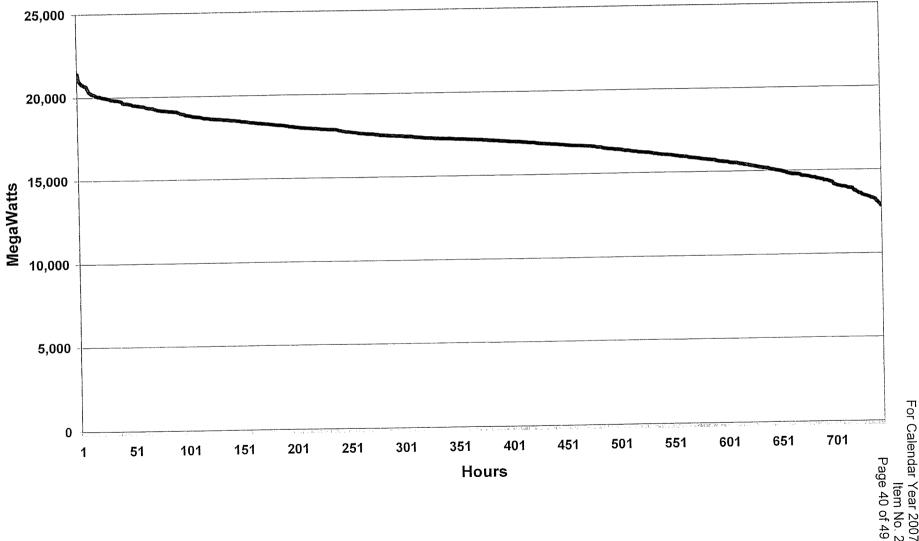
AEP System-East Zone January 2007 Load Duration Curve (System Load)



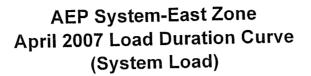
AEP System-East Zone February 2007 Load Duration Curve (System Load)

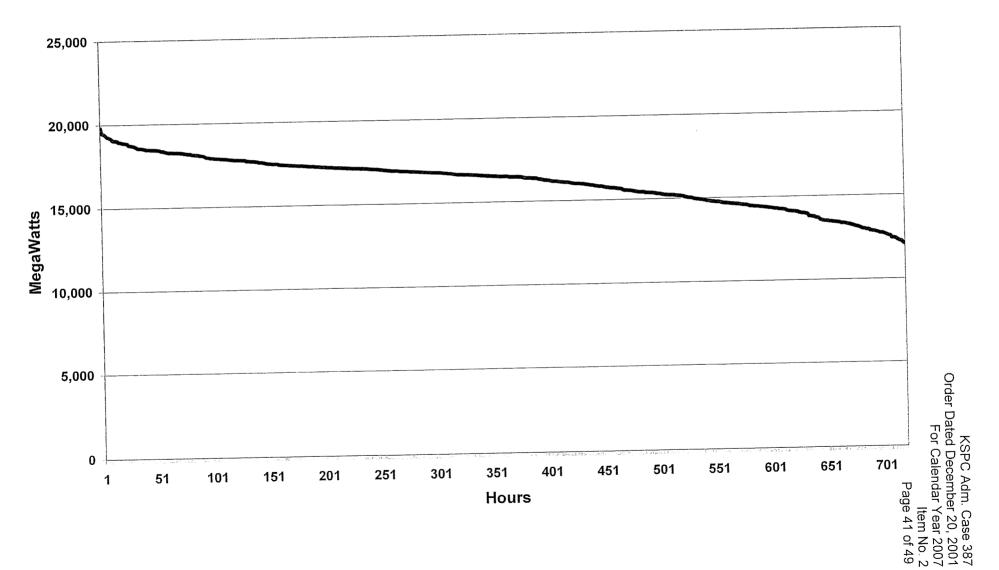


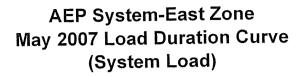
AEP System-East Zone March 2007 Load Duration Curve (System Load)

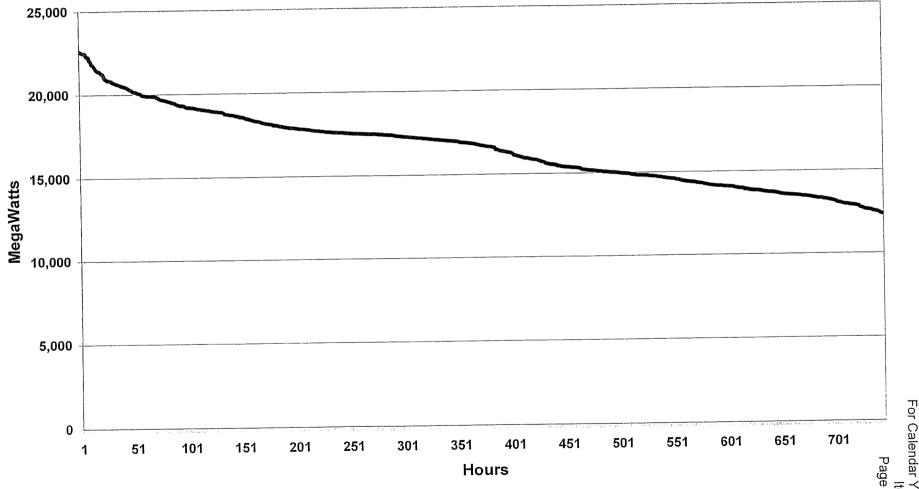


KSPC Adm. Case 387 Order Dated December 20, 2001 For Calendar Year 2007 Item No. 2 Page 40 of 49



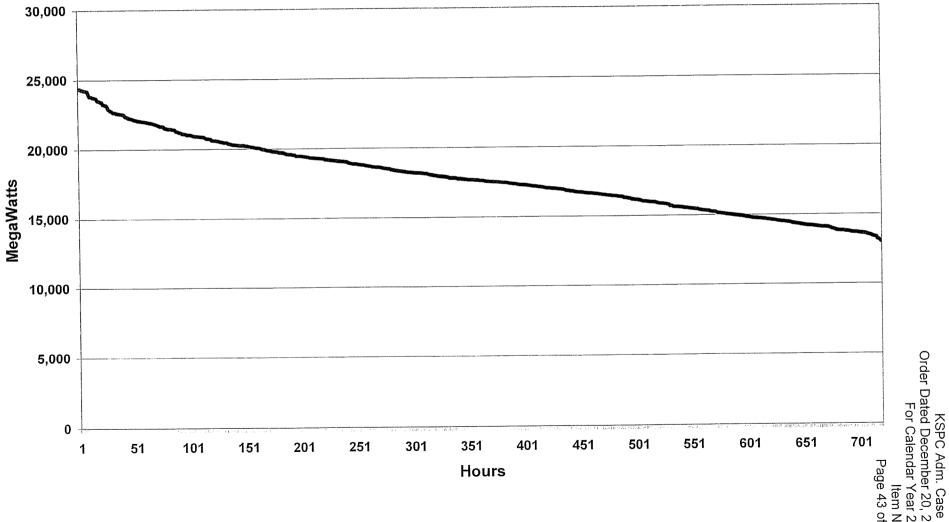






KSPC Adm. Case 387 Order Dated December 20, 2001 For Calendar Year 2007 Item No. 2 Page 42 of 49

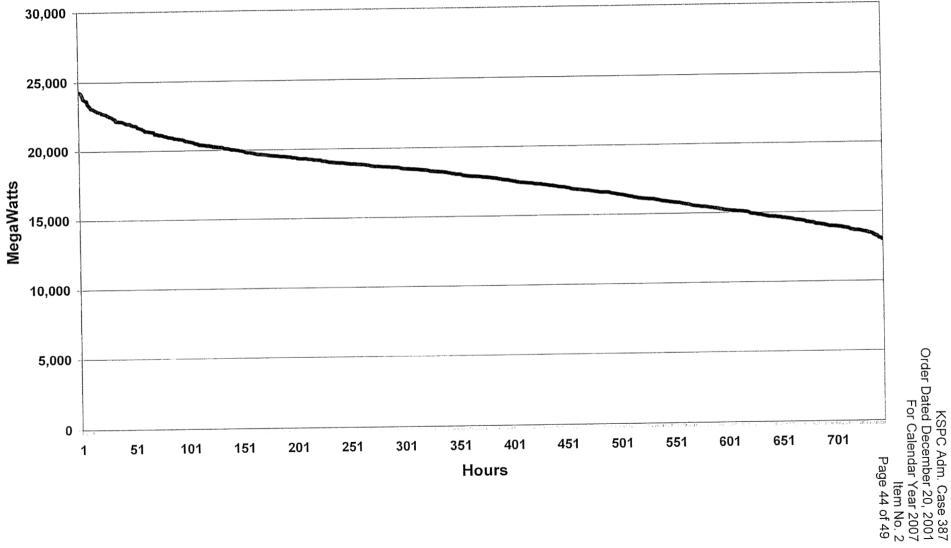
AEP System-East Zone June 2007 Load Duration Curve (System Load)



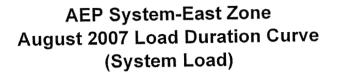
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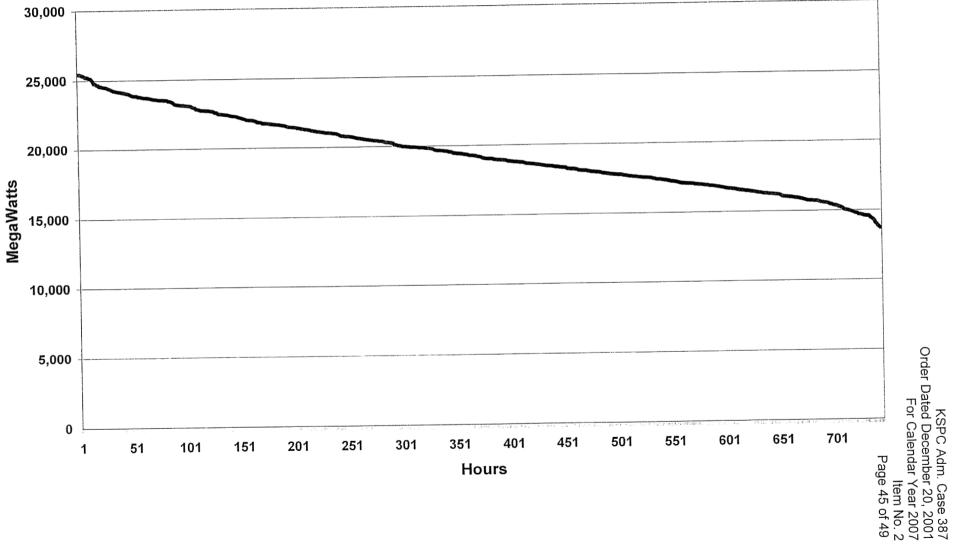
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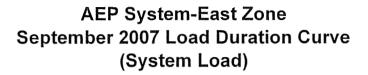
AEP System-East Zone July 2007 Load Duration Curve (System Load)

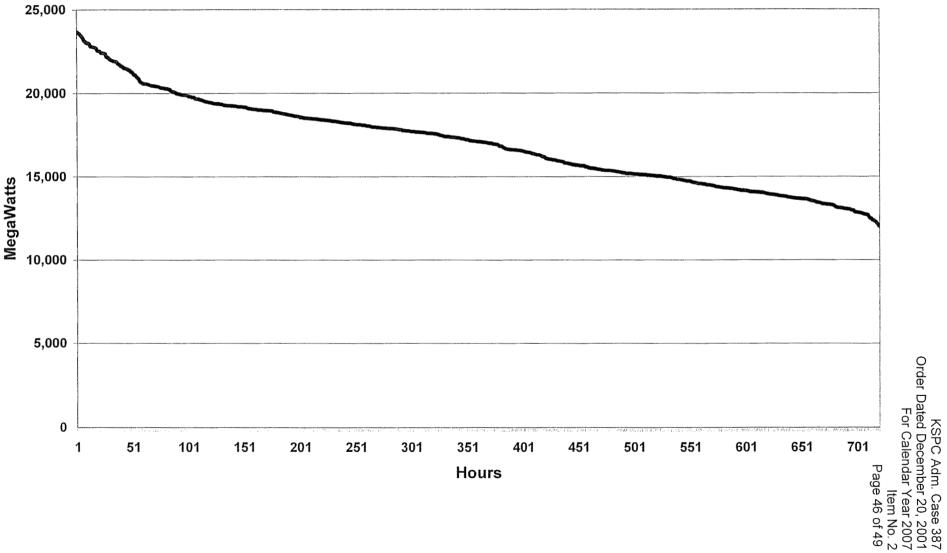


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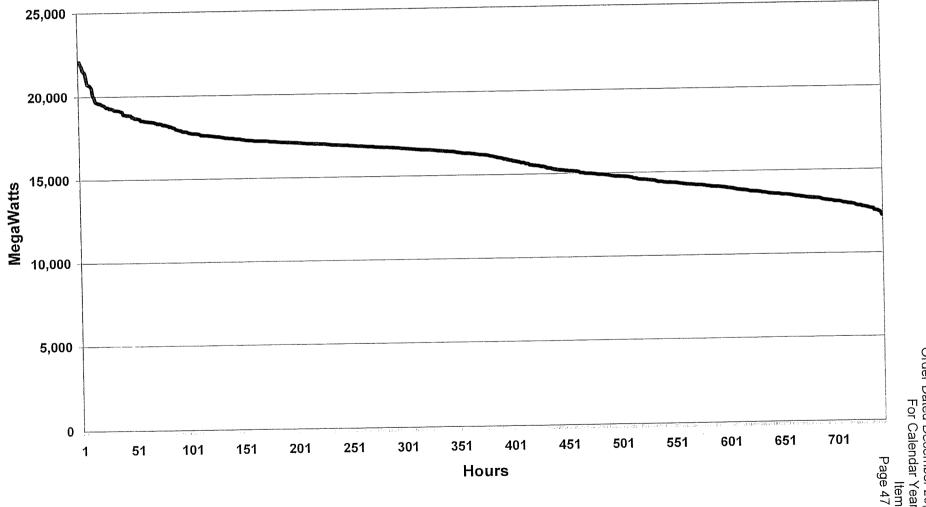






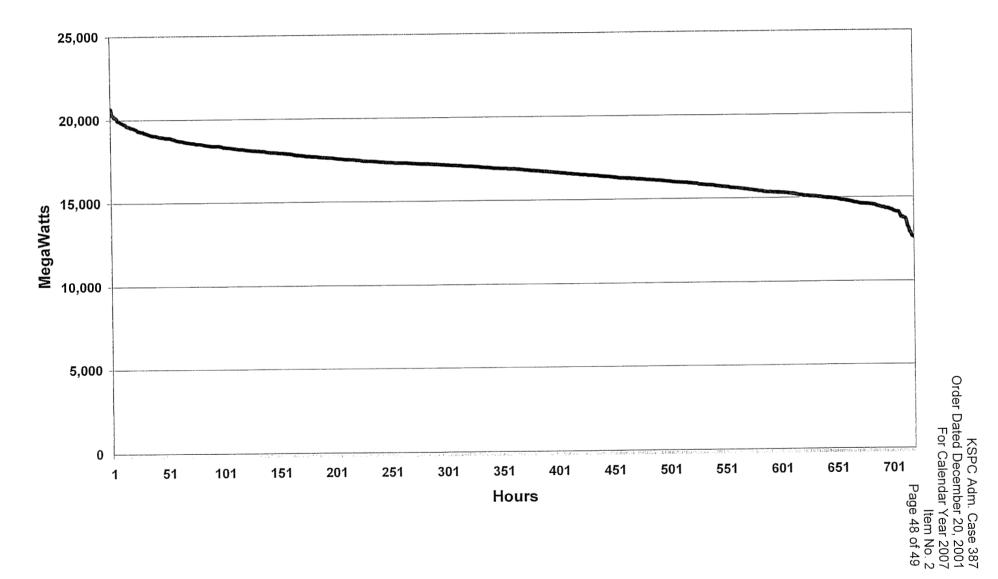


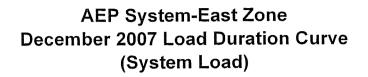
AEP System-East Zone October 2007 Load Duration Curve (System Load)

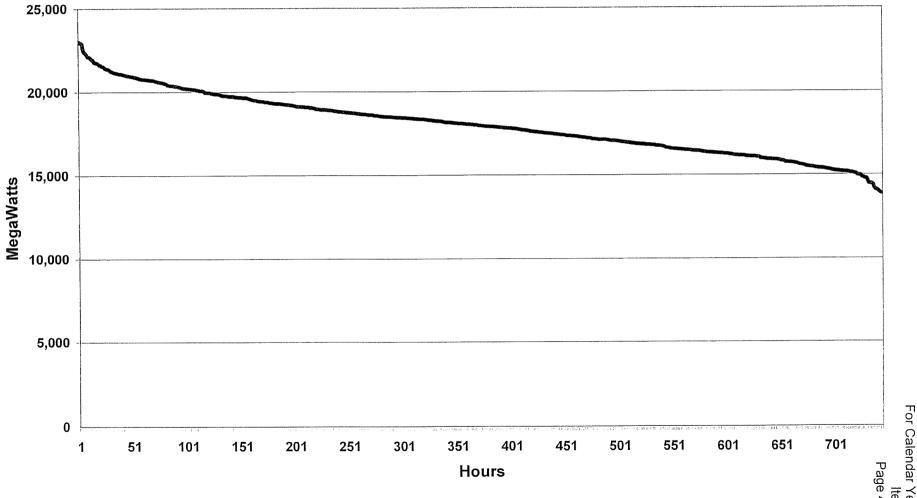


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AEP System-East Zone November 2007 Load Duration Curve (System Load)







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Kentucky Power Company

REQUEST

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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 2 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.

Page 3 provides AEP System-East'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 and AEP System-East are provided on Page 4 of this response. Forecasts of off-system peak demand for Kentucky Power Company and AEP System-East 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.

Kentucky Power Company Base and High Forecast Energy Sales (GWH) and Seasonal Peak Demand (MW) 2008 - 2012

	Energy	Sales	Sum Peak D		Precedin Peak D	emand
Year	Base	High	Base	High	Base	High
2008 2009 2010 2011 2012	7,976 8,158 8,196 8,212 8,270	8,195 8,475 8,579 8,653 8,796	1,310 1,339 1,344 1,347 1,353	1,347 1,391 1,407 1,419 1,439	1,610 1,626 1,646 1,648 1,647	1,655 1,689 1,723 1,737 1,752

AEP System-East Zone Base and High Forecast Energy Sales (GWH) and Seasonal Peak Demand (MW) 2008 - 2012

	Energ	y Sales		nmer Demand		ng Winter Demand
Year	Base	High	Base	High	Base	High
2008	134,393	138,096	22,551	23,172	21,373	21,962
2009	136,101	141,397	22,913	23,805	21,790	22,638
2010	137,256	143,673	23,133	24,215	22,014	23,043
2011	138,323	145,741	23,349	24,601	22,167	23,356
2012	139,988	148,897	23,532	25,029	22,295	23,714

Kentucky Power Company and AEP-System-East Forecast Off-System Energy Sales (GWh) 2008 - 2012

	KPCo Off-System	AEP-East Off-System
Year	Sales	Sales
2008	2,460	35,723
2009	1,865	28,026
2010	2,176	32,680
2011	2,054	30,926
2012	2,209	33,536

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KPSC Administrative Case No. 387 Annual Resource Assessment Calendar Year 2007 Order Dated December 20, 2001 Item No. 4 Page 1 of 2

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 is recalculated each year, depending on five-year average generation reliability, PJM load shape, and assistance available from neighboring regions. In addition, AEP'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. Page 2 of this response provides an example of the PJM reserve requirement calculation.

For the June 2008 through May 2009 and 2009/10 planning periods, PJM has set the Installed Reserve Margin (IRM) at 15.0%. For the 2010/11 planning period PJM has set the IRM at 15.5% and for projection purposes AEP has assumed it remains at that level for future years. The resulting AEP reserve requirement ranges from 9.2% to 15.7%, as shown on Page 2 attached to the response to Question 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.) Note that the reserve requirement appears low for 2008 and 2009. This is due to the fact that the AEP coincident demand forecasted by PJM for these two years is considerably lower than the forecast by AEP which is used in the remaining years to calculate the requirement.

Currently, Kentucky Power Company is capacity deficient on a stand-alone basis. The basis of the AEP Interconnection Agreement is that, over time, each member, including Kentucky Power Company, is responsible for installing its share of the System capacity. However, other members of the AEP Interconnection Agreement are more deficient at this time and it is the members with the highest capacity deficiencies that are expected to add capacity first.

PJM Reserve Margin Example For 2008/09 Planning Year

Comment

Line

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1	Factors	
2	PJM Installed Reserve Margin (IRM) =	15.00%
3	PJM EFORd =	6.12% Based on 5-year average PJM EFORd
4	Forecast Pool Requirement (FPR) =	1.0796 FPR = (1 + Line 2) * (1 - Line 3)
5		
6 (Obligations	
7	Total Load Obligation =	20,643 Coincident peak forecasted by PJM
8	UCAP Obligation =	22,287 Line 4 * Line 7
9	UCAP Market Obligations =	(3)
10	Total UCAP Obligation =	22,284 Line 8 + Line 9
11		
12	Resources	
13	Net ICAP =	26,931
14	AEP EFORd =	7.74% MW-weighted average of Unit EFORds
15	Available UCAP =	24,847 Line 13 * (1- Line 14)
16		
17	Position	
18	Net UCAP Position =	2,563 Line 15 - Line 10
19	Net ICAP Position =	2,778 Line 18 / (1- Line 14)
20		
21	Reserve Margin Percent =	21.6 Question 5 attached Exhibit 5-2, Column (16)
22	Reserve Percent Required By PJM =	9.6 Line 21 - (Line 19 / Question 5 attached Exhibit 5-2, Column (6)) * 100

KPSC Administrative Case No. 387 Annual Resource Assessment Calendar Year 2007 Order Dated December 20, 2001 Item No. 5 Page 1 of 3

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

The attached Page 2 provides projected winter peak demands, capabilities, and margins for KPCo for the period 2007/08 through 2011/12.

The attached Page 3 provides projected summer peak demands, capabilities, and margins for the AEP System - East Zone for the period 2008 through 2012.

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

				1 4415/			[Cap	pacity - MW			Ma	rgin
			Peak De	mand - MW			Existing	Sales	Capacity A	Additions	Purchases			
Winter	Internal Demand	DSM	Committed Sales	Total	Inter- ruptible	Total	Capacity & Chngs	Net Sales	New Build Additions	New Build MW	Annual Mkt. Purch.	Total Equivalent Capacity	MW	% of Demand
Season	(a)	(b) (2)	(c)	Demand (4)=(1)-(2+(3)	Demand 151	Demand (6)=(4)-(5)	10/	(8)		(9)	(10)	(11)=(?)-(6)+(9)+(10)	(12)=(11)=(6)	(13)=[(12)(6)]*100
2007/08 2008/09 2009/10 2010/11 2011/12	1,610 1,626 1,646 1,648 1,647	1 1 8 8 9	15 15 14 0 0	1,624 1,640 1,652 1,640 1,638	0 0 0 0	1,624 1,640 1,652 1,640 1,638	1,453 1,463 1,463 1,463 1,463 1,463	(7) (7) (27) (27) (27)	No New Build No New Build No New Build No New Build No New Build	0 0 0 0	0 0 0 0	1,460 1,470 1,490 1,490 1,490	(164) (170) (162) (150) (148)	(10.1) (10.4) (9.8) (9.1) (9.0)

Notes: (a) Based on Nov. 2008 Load Forecast.

(b) Includes expanded DSM.

(c) Includes companies MLR share of:

East-West transfer in 2007 (250 MW) NCEMC sale, through 2010 (220 MW) 3 MW capacity credit from SEPA's Philpot Dam via Blue Ridge contract.

(d) Reflects the members ownership ratio of following winter capability assumptions:

EFFICIENCY IMPROVEMENTS: 2008/09: 10 MW (e) Includes companies MLR share of:

Sale of 50 MW to Wisconsin Public Service in 2007 Sale of 100 MW to Wolverine in 2007, netted against a 100 MW purchase from Dynegy Purchase from Constellation (300 MW), 2009 through 2011 Contractual share of Mone capacity, initially between 52 and 68 MW.

130 MW beginning in 2010, based on improved Cardinal EFORd.

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AEP SYSTEM - EAST ZONE Projected Summer Peak Demands, Generating Capabilities, and Margins

1		Peak	Demar	d - MW					Capacity - MW				Reserve	Margin	Reserve	e Margin	PJM ICAP P	locition
					Net		Existing Planned						- margin	After Intern				
		Inter-			Other		Capacity		Capacity Additions				Before Int	erruptible	After Inte	erruptible	w/ New Ca	
Summer	Internal	ruptible		Net AEP	Committed	Total	& Planned	Committed					w/ New	Capacity		Capacity	Reserve %	Net
Season	Demand (a)	Demand	DSM	Internal Demand	Sales	AEP Demand	Changes	Net Sales	Capacity	MW	Annual	Total		% of		% of	Required By	Position
ocuson	(0)	(0)	(0)		((e)	(1)	Additions	(g)	Purch.	Capacity	MW	Demand	MW	Demand	PJM	MW
	119	(2)	(Cr	(American's Billio 3)	:5}	(Gim (4) - (S)	(F)	:3)	[31	(10)	(11)	1237(7)(8)+(10)+(11)	(\$3:=(\$2:-((0)-(2))	11-11-1111(E1-(21)*100	115:11:121-(6)	(16==(15=(6) *100		
2008	22,551	(614)	(1)	21,936	1,267	23,203	28,137	(65)	75 MW Wind	11	0	28,213	4,396	18.5	5,010	21.6	9.6	2,778
2009	22,913	(614)	(1)	22,298	1,267	23,565	28,118	(102)	200 MW Wind	30	ő	28,261	4,082	16.9	4,696			
2010	23,133	(614)	(161)	22,358	1,259	23,617	27,495	(430)	540 MW D CC2	540	0	28,506	4,082			19.9	9.2	2,510
2011	23,349	(614)	(161)	22,574	1.039	23,613	27,515	(430)	500 MW Wind	75	0			17.6	4,889	20.7	15.0	1,345
2012	23.532	(614)	(161)	22,757	1,039	23,796	26,650				U	28,601	4,374	18.1	4,988	21.1	14.4	1,573
	20.002	(014)	(101)	22,131	1,039	23,790	20,050	(130)	623 MW IGCC & 220 MW Wind & 10 MW NAS Batt.	666	0	28,102	3,692	15.1	4,306	18.1	15.7	571

Notes:

(a) Based on Nov. 2008 Load Forecast (not coincident with PJM's peak).

(b) Load forecasting view of Interruptible Demand.

(c) Includes expanded DSM.

(d) Includes:

Buckeye-Cardinal commitment NCEMC sale, through 2010 (220 MW) 3 MW capacity credit from SEPA's Philpot Dam via Blue Ridge contract.

(e) Reflects the following summer capability assumptions:

AEP PPR share of OVEC capacity: 951 MW (Summer) Hydro plants, including Summersville, are rated at average August output.

FGD DERATES:

2008: Cardinal 1&2: 20 MW each; Stuart 1-4: 2 MW each

2009: Amos 2: 22 MW; Amos 3: 35 MW; Kyger Creek 1-5: 4 MW each; :Conesville 4: 15 MW

2010: Amos 1: 22 MW; Cardinal 3: 10 MW; Clifty Creek 1-6: 2 MW each

SNCR DERATES:

2009: Clinch R. 1-3: 2 MW each; Muskingum R. 1-4: 6 MW total; Sporn 3-4: 1 MW each

2012: Kammer 1-3: 2 MW each

(e) conlinued EFFICIENCY IMPROVEMENTS: 2008: 28 MW 2009: 71 MW 2010: 12 MW 2011: 20 MW 2012: 20 MW ASSUMED RETIREMENTS FOR PLANNING PURPOSES: 2010: 605 MW 2012: 879 MW

(f) Includes: CPL unit power sale of 250 MW through 2009 Purchase to cover CSP's former Monongahela Power load in 2008 Purchase from Constellation (300 MW), 2009 through 2011 Contractual share of Mone capacity, initially between 52 and 68 MW, 130 MW beginning in 2010, based on improved Cardinal EFORd.

(g) New wind capacity value is assumed to be 15% of nameplate.

KPSC Administrative Case No. 387 Annual Resource Assessment Calendar Year 2007 Order Dated December 20, 2001 Item No. 6 Page 1 of 1

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

Listed below is the outages scheduled for Big Sandy units as of this date.

YEAR	UNIT 1	UNIT 2
2008	More than 4 weeks	More than 4 weeks
2009	Less than 4 weeks	Less than 4 weeks
2010	More than 4 weeks	Less than 4 weeks
2011	Less than 4 weeks	More than 4 weeks
2012	Less than 4 weeks	Less than 4 weeks

There is no retirement of generating capacity planned for the current year or following four years.

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KPSC Administrative Case No. 387 Annual Resource Assessment Calendar Year 2007 Order Dated December 20, 2001 Item No. 7 Page 1 of 1

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

At the present time, AEP is evaluating a mix of generation resources to meet its projected capacity needs through 2018. Although the precise timing, mix of technology, location and size of such additions remain under review, for planning and projection purposes, System expansion plan includes these additions:

Date	<u>Size, MW</u>	Type	Site
late 2007	75	wind purchase	Illinois
2008	200	wind purchase	Indiana
2010	540	combined cycle	Dresden, O.
late 2010	500	wind purchase	unknown
late 2011	220	wind purchase	unknown
2012	10 x 1	NaS batteries	unknown
late 2012	623	IGCC	New Haven, W. Va.
late 2013	200	wind purchase	unknown
late 2014	200	wind purchase	unknown
2015	500	combined cycle	unknown
2015	10 x 1	NaS batteries	unknown
2015	6 x 81	combustion turbines	unknown
2016	500	combined cycle	unknown
2017	623	IGCC	Meigs Co., O.

KPSC Administrative Case No. 387 Annual Resource Assessment Calendar Year 2007 Order Dated December 20, 2001 Item No. 8 a & b Page 1 of 2

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.

Total energy delivered to all interconnections on the transmission system

RESPONSE

Please see Page 2 of this response.

8(a) All quantities represent metered values.

Received from (MWh):	<u>2003</u> (Actual)	<u>2004</u> (Actual)	<u>2005</u> (Actual)	<u>2006</u> (Actual)	<u>2007</u>	<u>2008</u>
Appalachian Power (1)	11,353,842	11,066,166	11,871,456	9,485,862	7,280,995	(4)
Ohio Power (1)	8,224,235	9,766,209	8,687,031	9,470,141	7,782,679	(4)
East Ky Power Coop	277,577	279,973	362,963	398,269	324,865	(4)
LGE(Kentucky Utilities)	91,767	95,146	137,523	330,912	600,592	(4)
TVA	585,205	700,836	649,374	501,071	390,216	(4)
Illinois Power Co. (2)	8,866	0	34,647	13,555	38,216	(5)
Illinois Power Co. (3)	10,190	752	30,508	11,908	24,485	(5)
Big Sandy Generating Plant	6,170,931	6,550,509	7,345,624	7,171,505	7,533,223	6,624,800

8(b) All quantities represent metered values.

Delivered to (MWh) :	<u>2003</u>	<u>2004</u>	2005	2006	<u>2007</u>	<u>2008</u>
Appalachian Power (1)	18,721,045	20,152,403	20,485,009	18,982,168	15,501,979	(4)
Ohio Power (1)	235,326	205,829	303,310	215,747	257,462	(4)
East Ky Power Coop	275,826	314,621	263,853	218,005	277,818	(4)
LGE(Kentucky Utilities)	1,268	1,205	476	97	370	(4)
	13	116	86	70	6,050	(4)
ois Power Co. (2)	0	1,267	0	0	0	(5)
Illinois Power Co. (3)	0	308	0	0	0	(5)

Notes: (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 2006 actuals.

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

KPSC Administrative Case No. 387 Annual Resource Assessment Calendar Year 2007 Order Dated December 20, 2001 Item No. 8 c & d Page 1 of 2

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 Question 9 will provide adequate capacity to serve the existing and projected loads shown in the table below.

d. The actual summer and winter peak demands for 2007 and the forecasted summer and winter peak demands for 2008 through 2012 are noted in the table below.

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	Kentucky Power Company Seasonal Peak Demand Actual 2007 and Forecast 2008-2012								
Veer	Summer	Preceding Winter							
Year	Peak Demand	Peak Demand							
	(MW)	(MW)							
2007	1348	1808							
2008	1310	1610							
2009	1339	1626							
2010	1344	1646							
2011	1347	1648							
2012	1353	1647							

KPSC Administrative Case No. 387 Annual Resource Assessment Calendar Year 2007 Order Dated December f20, 2001 Item No. 9 Page 1 of 1

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

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

• Coalton Area Network Improvement - Tap the Chadwick-KES 138 kV circuit and install a new 138/69 kV 200 MVA transformer at the Coalton station. This project will alleviate thermal overload and heavy loading conditions, improve reliability, and provide margin for future growth in the South Neal-Coalton-Bellefonte area. Current projected in service date is 2009.

• Thelma-Paintsville Area Project - Add a 138/69 kV, 90 MVA transformer at Thelma Station and construct 1.8 miles of 69 kV line from West Paintsville Station to Paintsville Station. Convert Thelma-Paintsville 46 kV line to 69 kV to close the 69 kV loop. This project will provide single contingency reliability to the Paintsville area. Current projected in service date is December 2008.

• Kentucky Hydrocarbon Project – Construct a 138 kV switching station between Betsy Lane Station and Beaver Creek Station. Construct an 8 mile 138 kV line extension to serve Equitable Gatherings Gas Compressor Plant. This project will provide 138 kV service to the new industrial load as well as transmission capacity for future area load growth. Current projected in service date is June 2008.