Kentucky Power Company
KPSC Case No. Administrative Case No. 387-2026
Annual Responses

DATA REQUEST

1 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

Please refer to Page 1 of KPCO_R_KPSC_1_1_Attachment1 for actual and weather normalized 2025 monthly peak native load demands for Kentucky Power Company.

Kentucky Power Company had four customers with interruptible provisions in their contracts in 2025 for PJM initiated events and four customers with peak shaving provisions in their contracts. Combined, these customers had approximately 3.9 MW of interruptible load available for use in PJM capacity auctions. The interruptible load available for PJM auctions reflects the average load for these customers, less contractually firm load, at the time of the PJM five coincident peaks in the summer of 2024. The 4 customers with the peak shaving provisions have approximately 50 MW available for such an event.

Please refer to Page 2 of KPCO_R_KPSC_1_1_Attachment1 for actual 2025 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 are not available.

The AEP Interconnection Agreement terminated on January 1, 2014 and the AEP-East Power Pool no longer exists. As a result, the requested information regarding the AEP East Power Pool is no longer available.

Witness: Amy J. Elliott

Kentucky Power Company
Actual and Weather Normalized Peak Internal Demand (MW)
2025

	Kentucky Power Company			
Month	**Peak**	**Peak Day**	**Peak Hour**	**Normalized Peak**
January	1,347	1/22/2025	9	1,235
February	1,156	2/22/2025	8	1,135
March	999	3/3/2025	8	1,087
April	878	4/9/2025	7	768
May	784	5/15/2025	17	756
June	934	6/25/2025	13	881
July	930	7/31/2025	15	912
August	917	8/19/2025	16	877
September	765	9/5/2025	16	766
October	705	10/24/2025	8	587
November	908	11/29/2025	9	1,001
December	1,171	12/15/2025	8	1,076

Kentucky Power Company
Actual Peak System Demand (MW)
2025

	Kentucky Power Company		
Month	**Peak**	**Peak Day**	**Peak Hour**
January	1,283	1/10/2025	24
February	1,052	2/12/2025	20
March	869	3/10/2025	8
April	892	4/12/2025	12
May	829	5/19/2025	23
June	1,550	6/23/2025	24
July	1,393	7/2/2025	20
August	1,299	8/12/2025	22
September	783	9/19/2025	20
October	1,082	10/25/2025	22
November	1,531	11/19/2025	23
December	1,387	12/9/2025	3

Kentucky Power Company
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DATA REQUEST

2 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

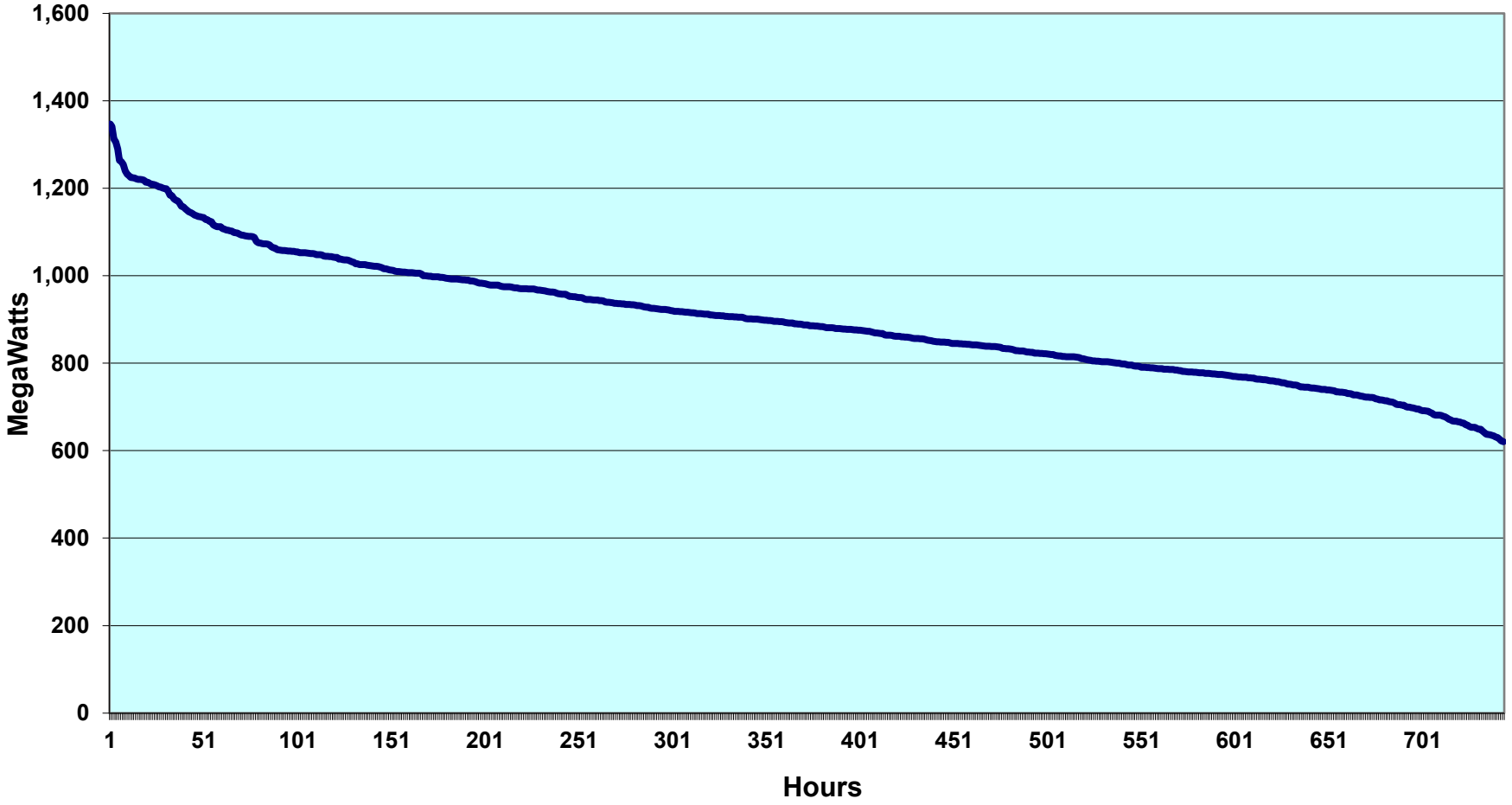
Please refer to Pages 1 through 12 of KPCO_R_KPSC_1_2_Attachment1 for 2025 monthly load duration curves for Kentucky Power Company's internal native load. Please refer to Pages 13 through 24 of KPCO_R_KPSC_1_2_Atttachment1 for 2025 monthly load duration curves for Kentucky Power Company's system load. 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 on Page 1 of KPCO_R_KPSC_1_1_Attachment1. Weather normalized system peaks have not been developed and are not available.

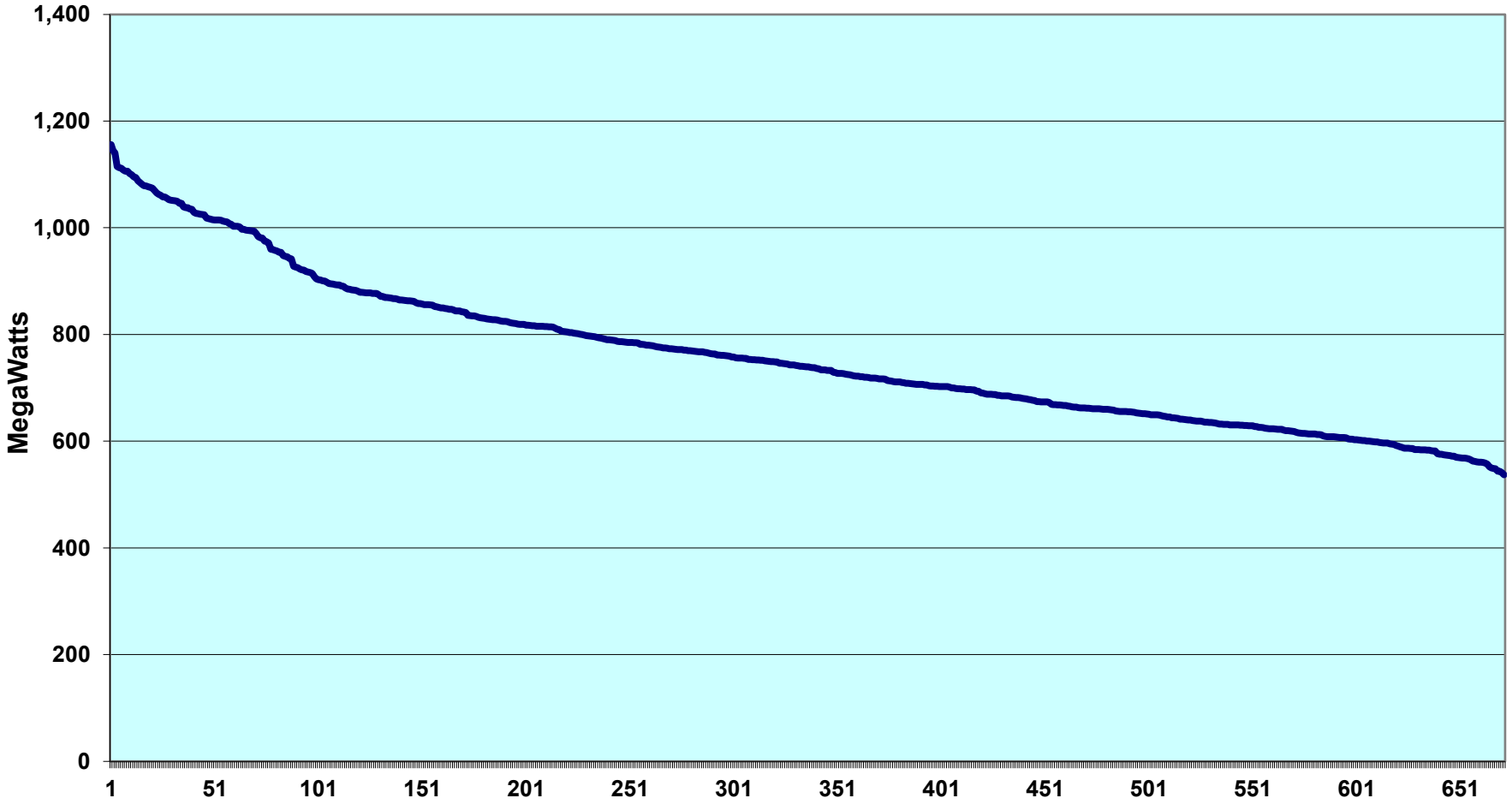
The AEP Interconnection Agreement terminated on January 1, 2014 and the AEP-East Power Pool no longer exists. As a result, the requested information regarding the AEP East Power Pool is no longer available.

Witness: Amy J. Elliott

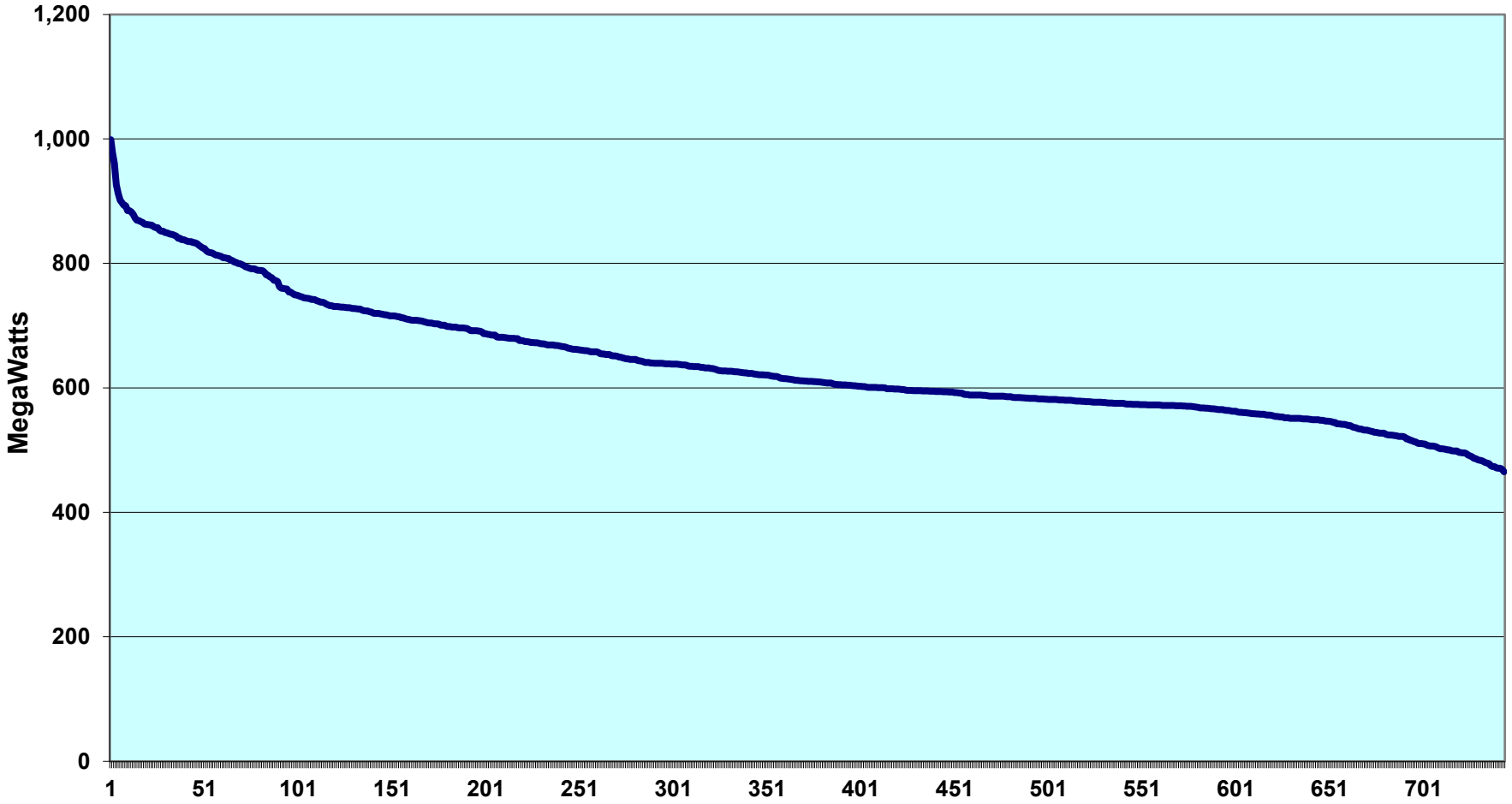
Kentucky Power Company
January 2025 Load Duration Curve
(Internal Load)



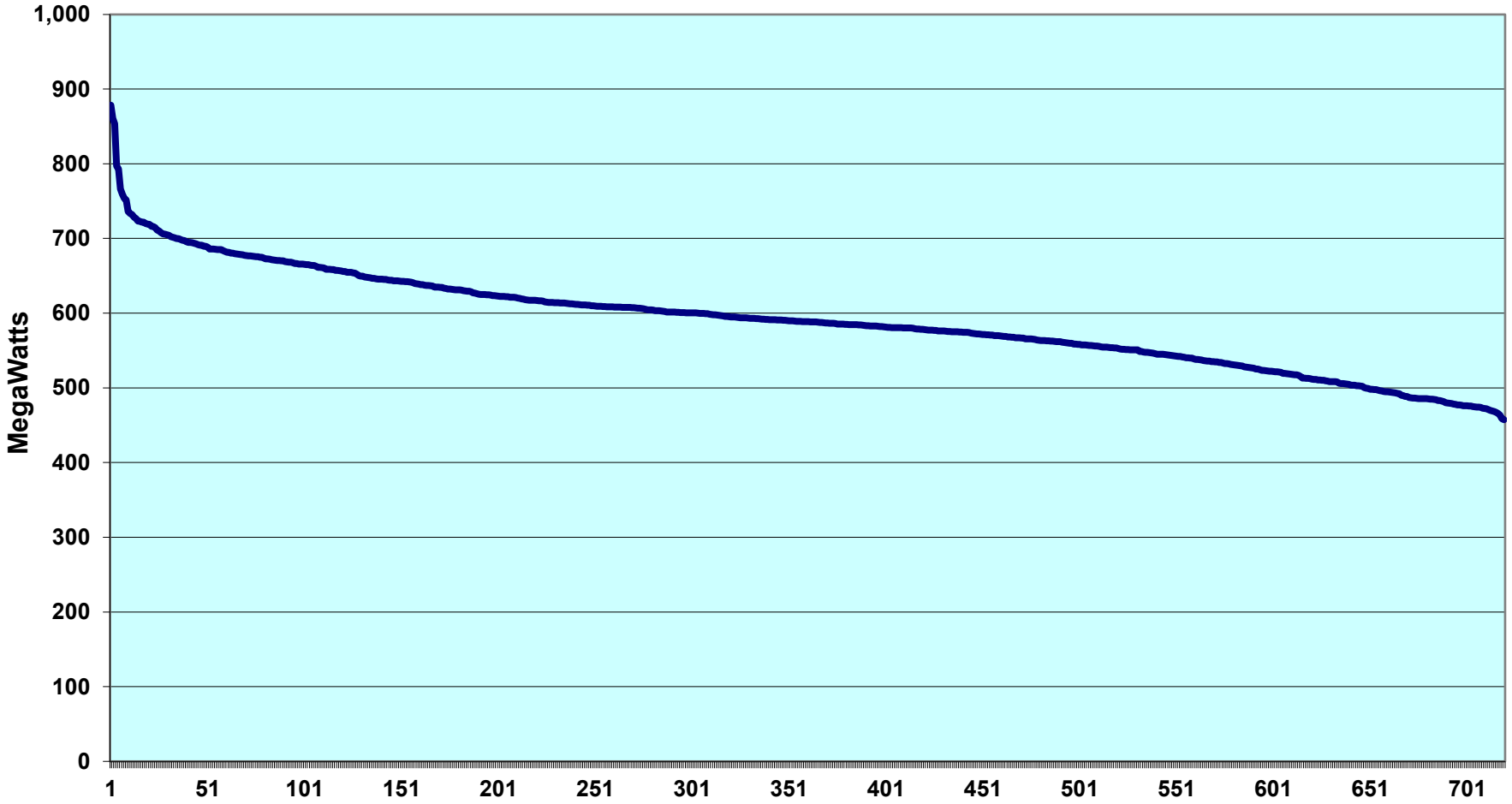
Kentucky Power Company
February 2025 Load Duration Curve
(Internal Load)



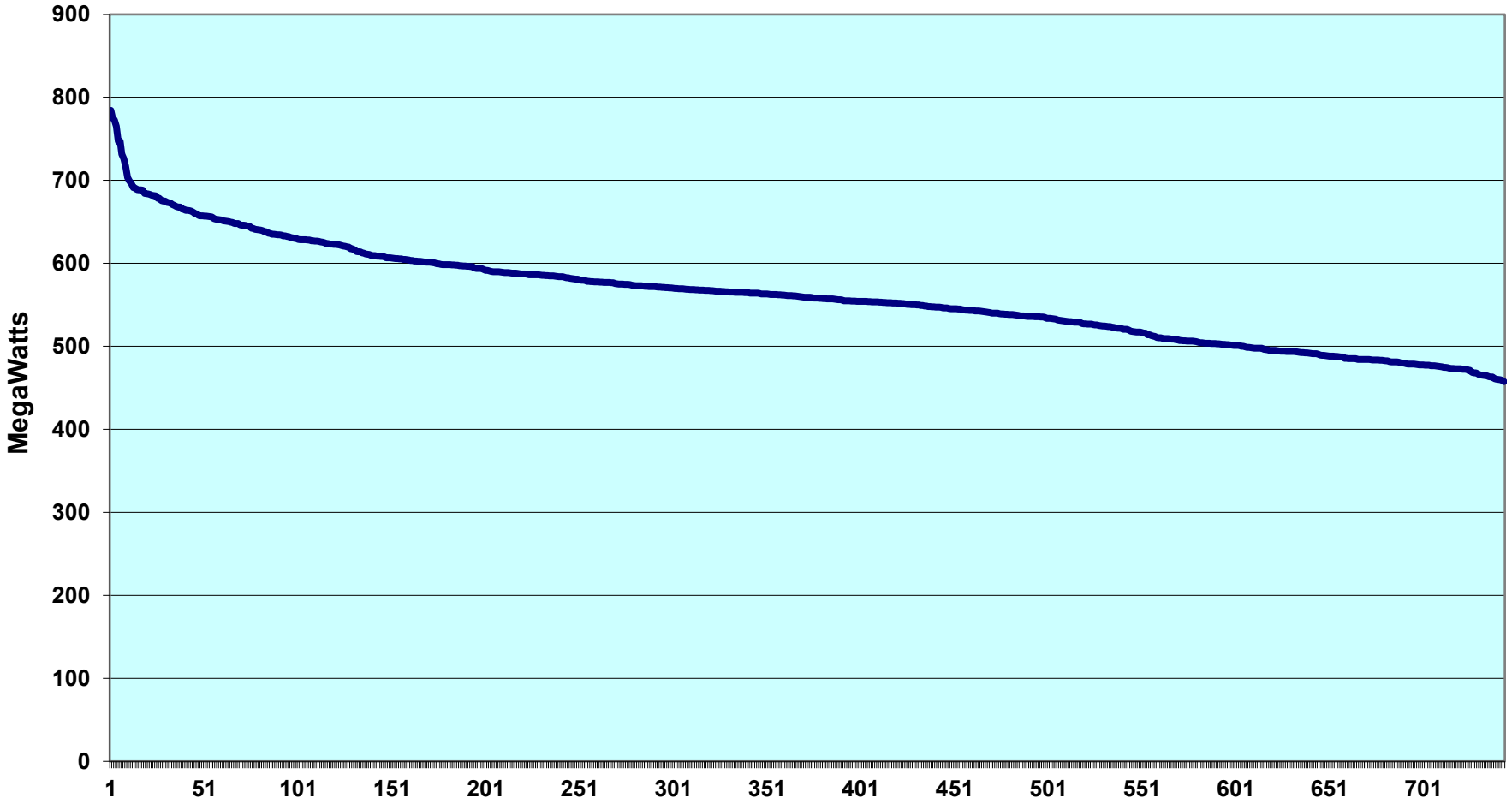
Kentucky Power Company
March 2025 Load Duration Curve
(Internal Load)



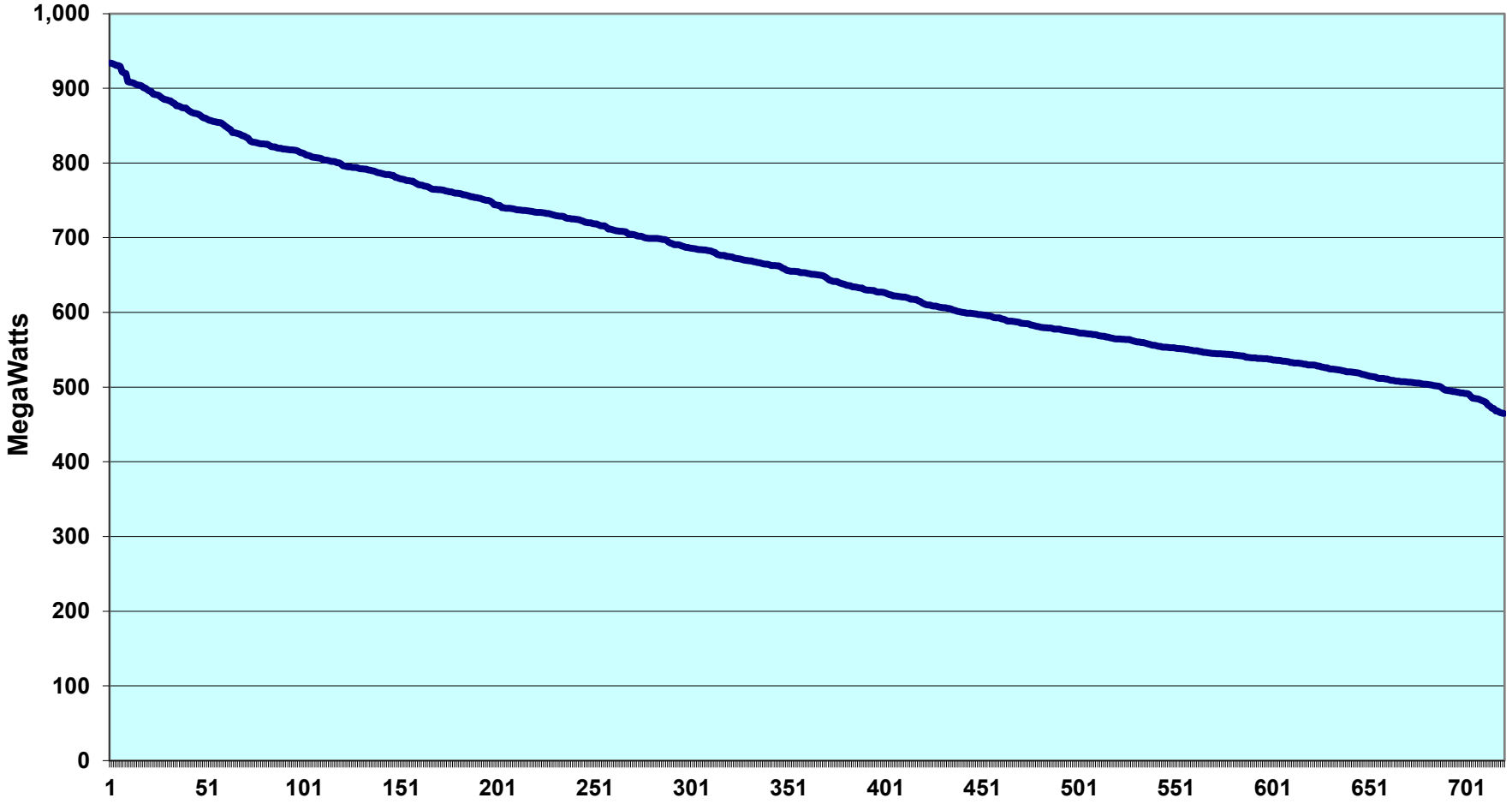
Kentucky Power Company
April 2025 Load Duration Curve
(Internal Load)



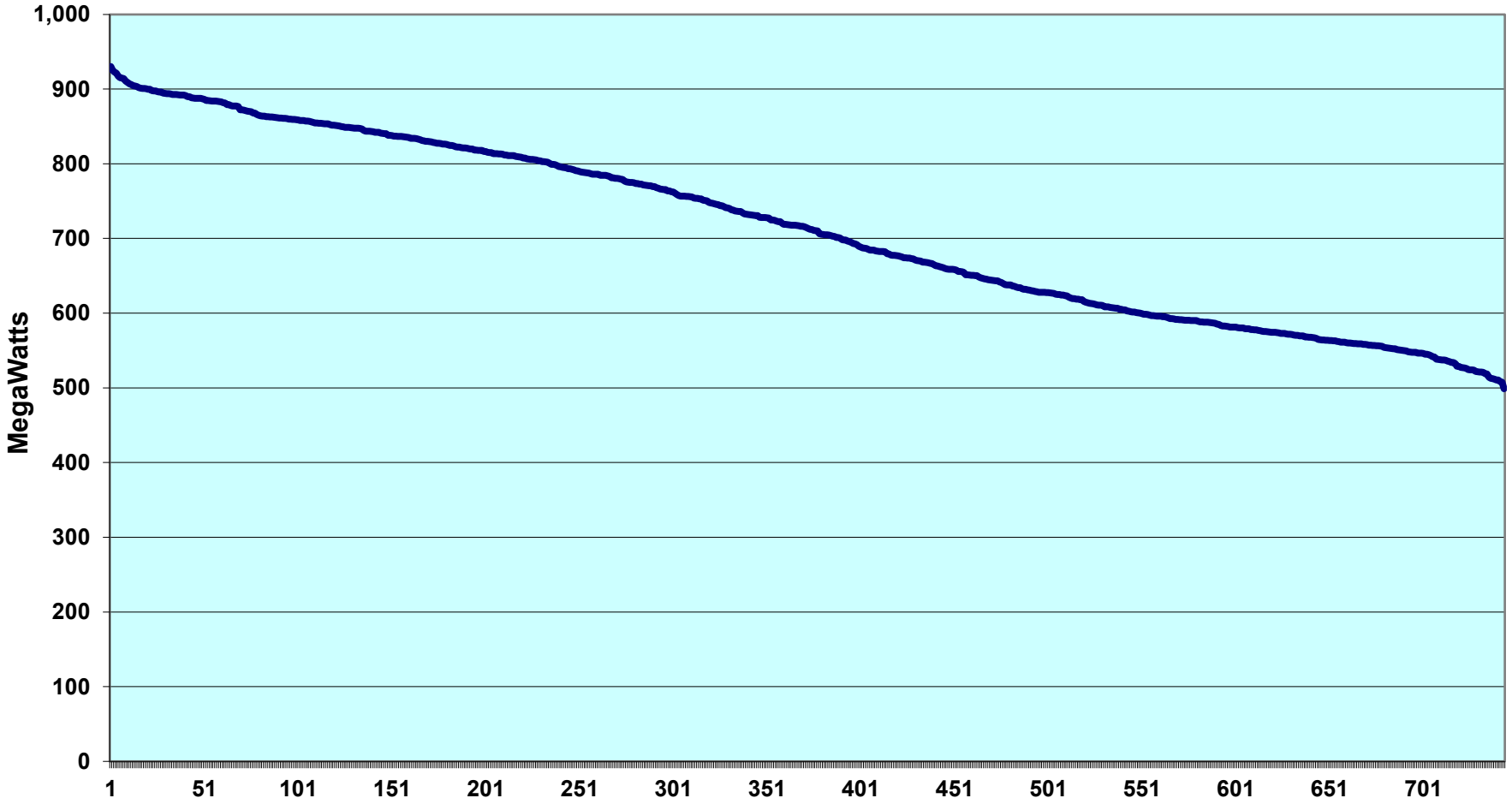
Kentucky Power Company
May 2025 Load Duration Curve
(Internal Load)



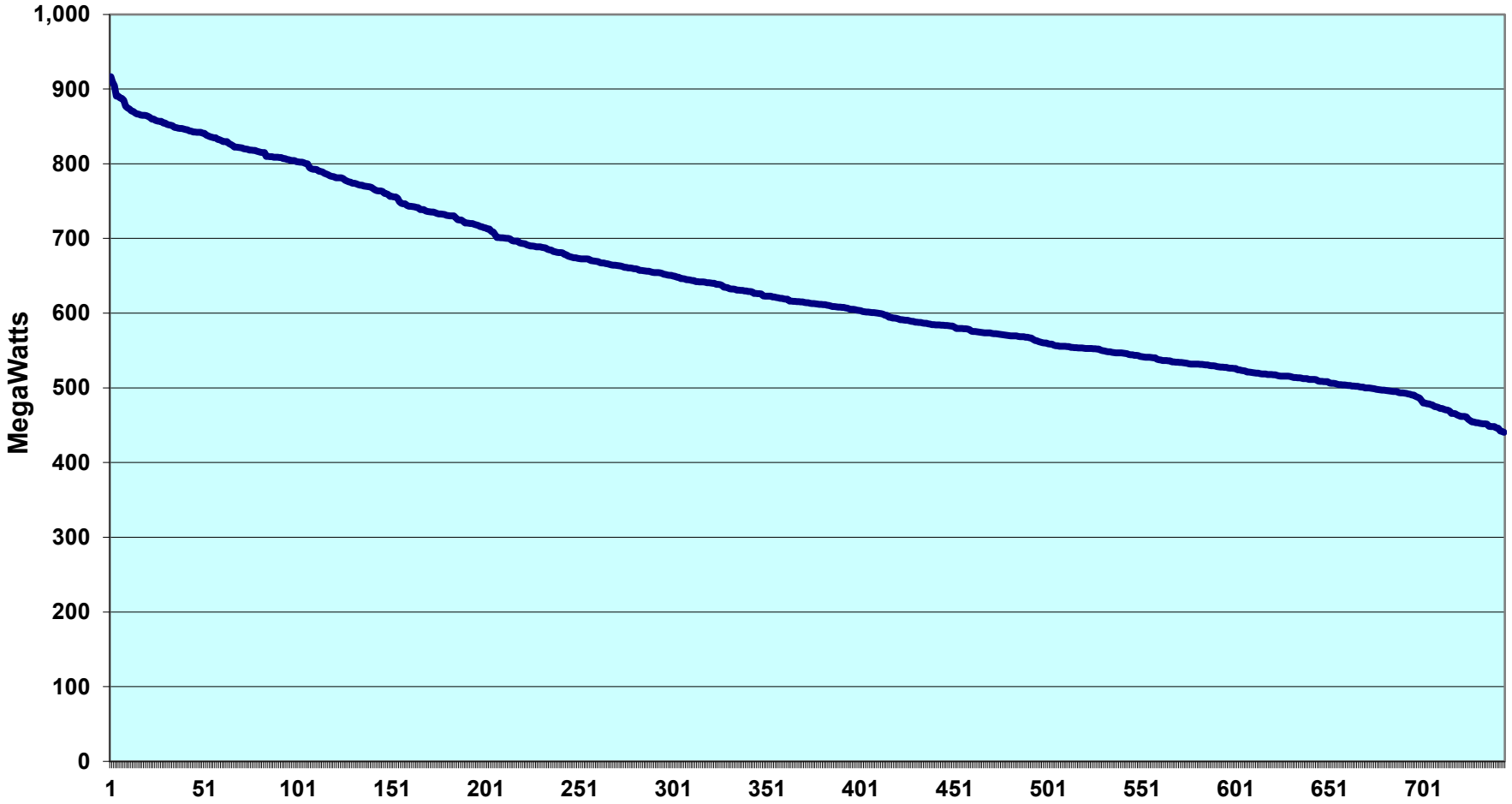
Kentucky Power Company
June 2025 Load Duration Curve
(Internal Load)



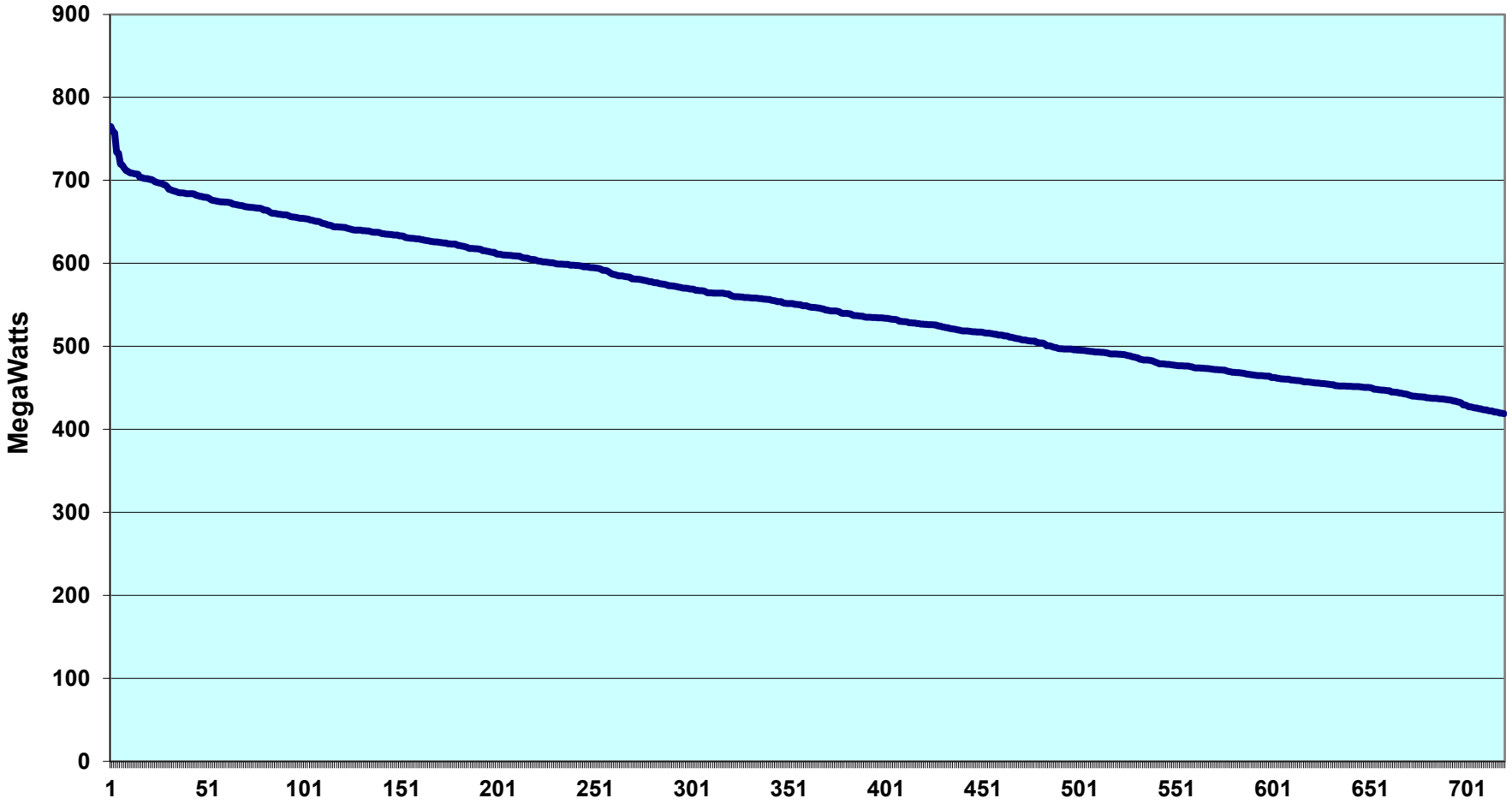
Kentucky Power Company
July 2025 Load Duration Curve
(Internal Load)



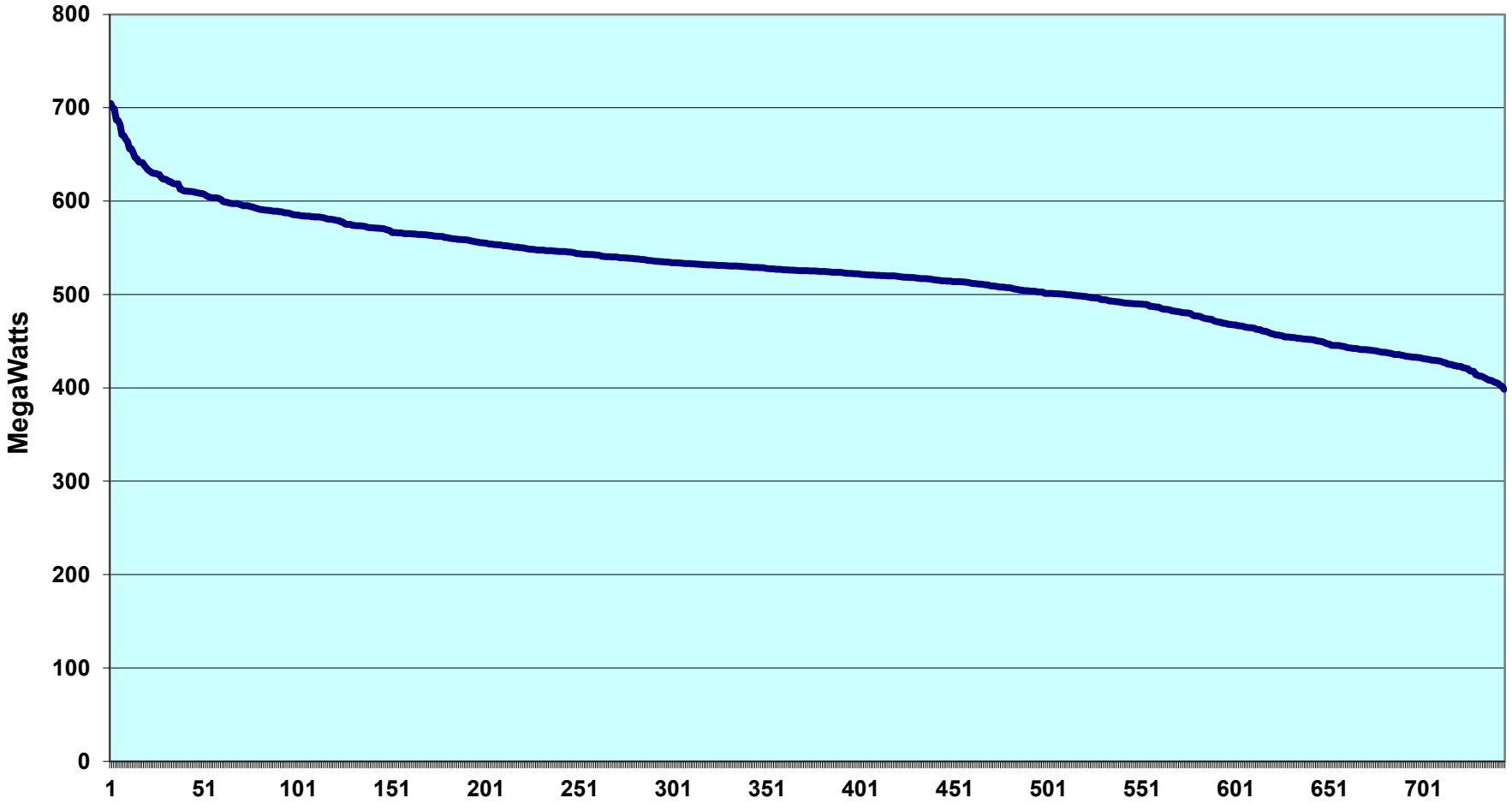
Kentucky Power Company
August 2025 Load Duration Curve
(Internal Load)



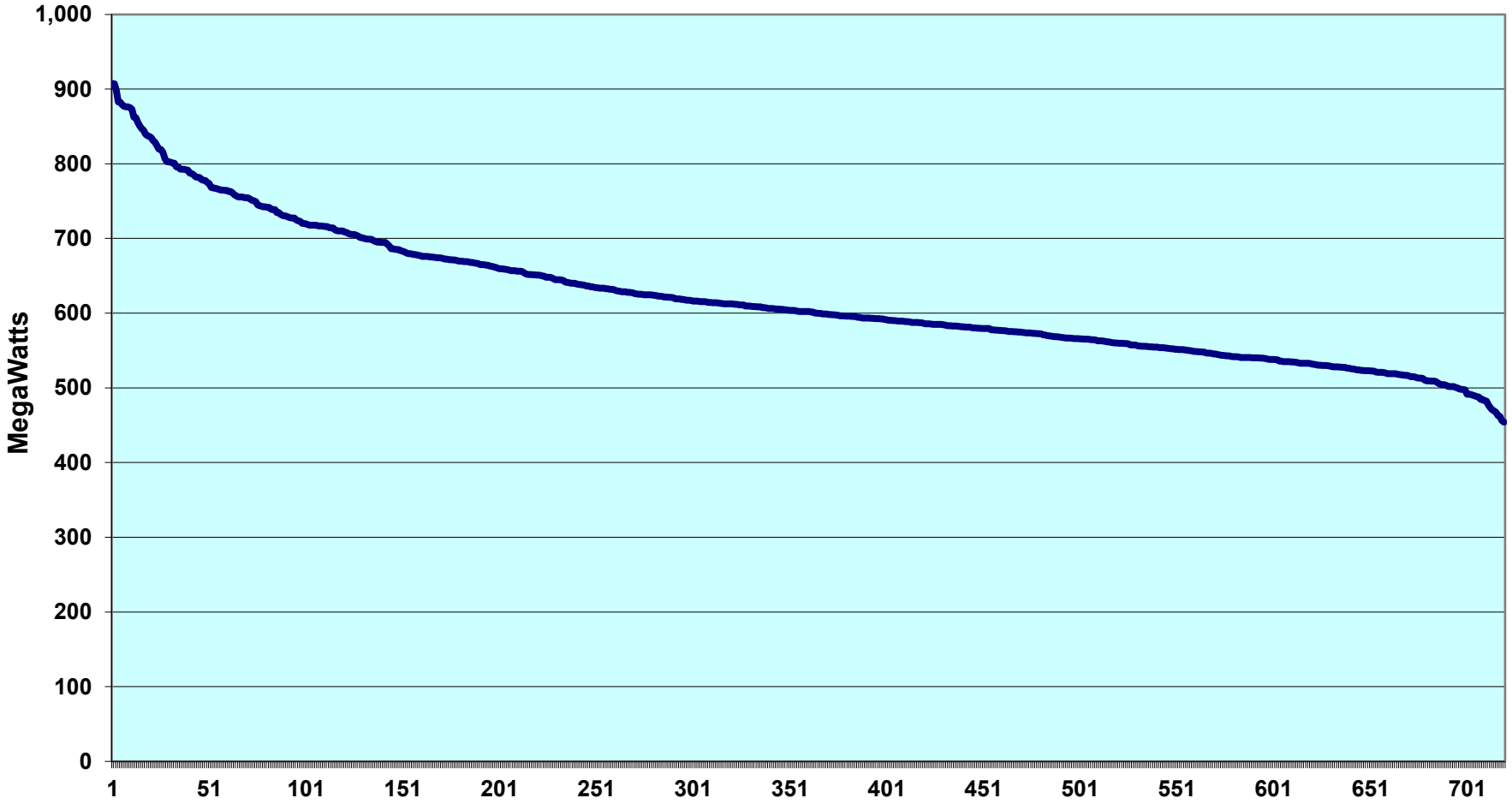
Kentucky Power Company
September 2025 Load Duration Curve
(Internal Load)



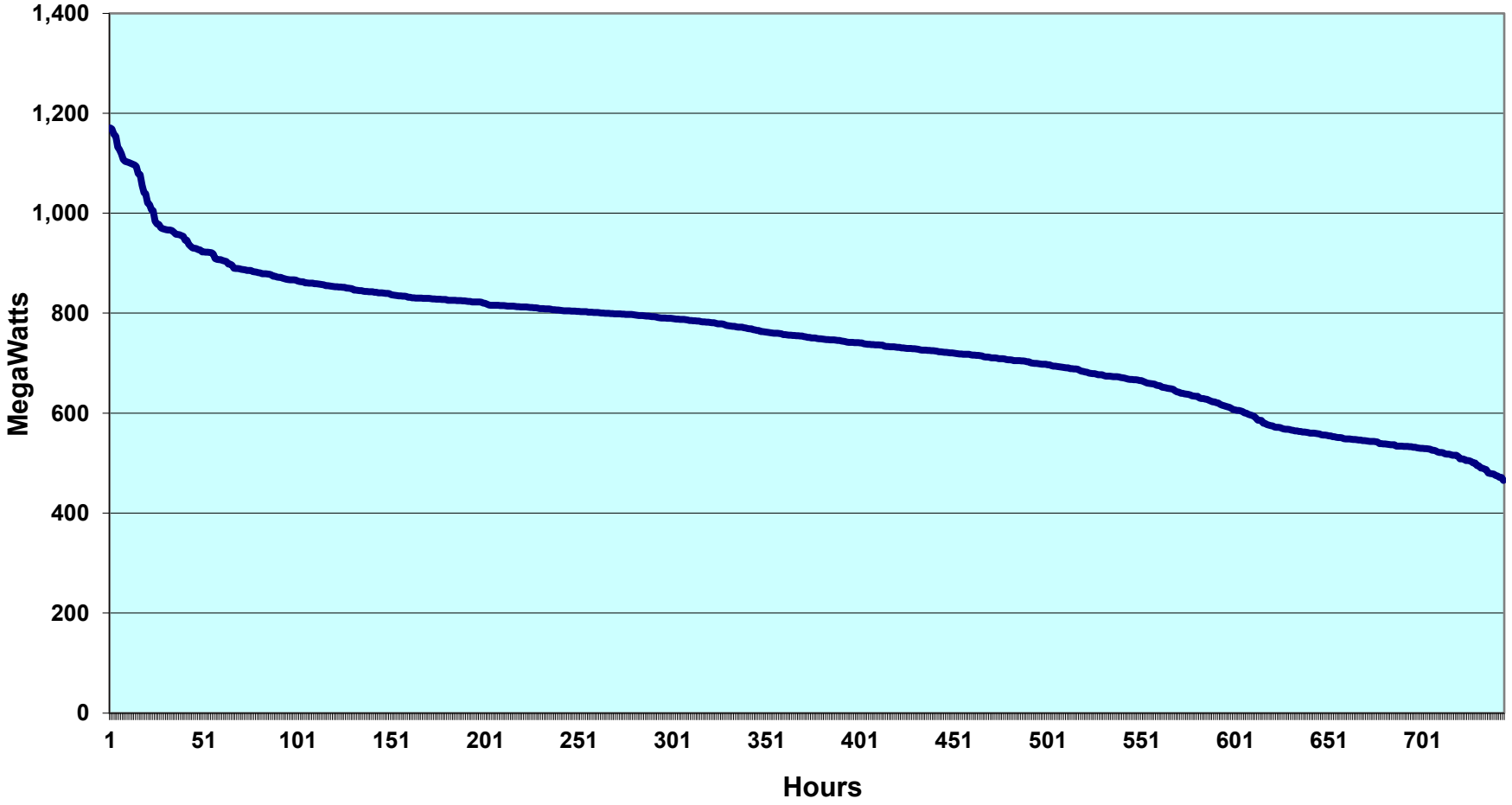
Kentucky Power Company
October 2025 Load Duration Curve
(Internal Load)



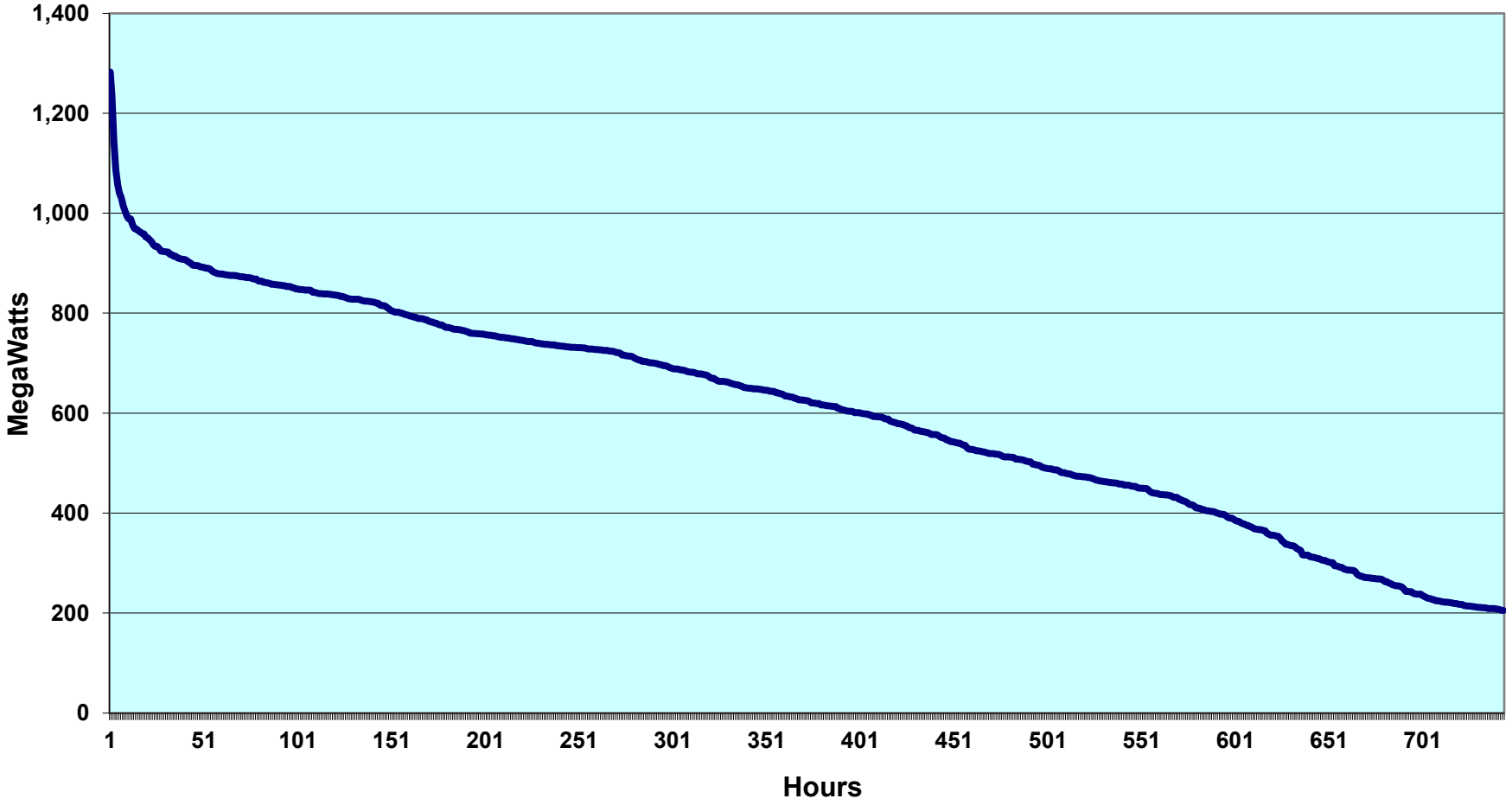
Kentucky Power Company
November 2025 Load Duration Curve
(Internal Load)



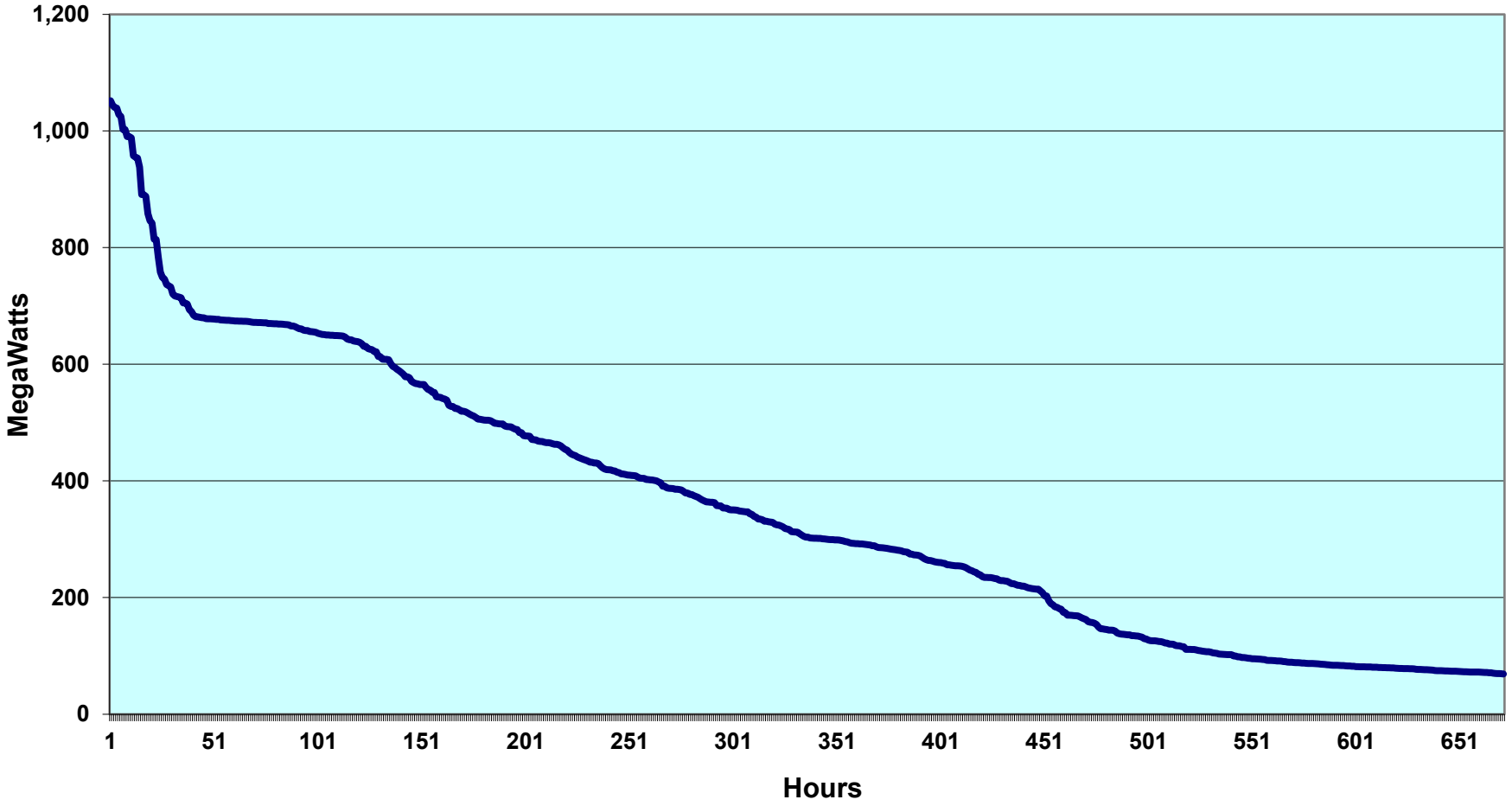
Kentucky Power Company
December 2025 Load Duration Curve
(Internal Load)



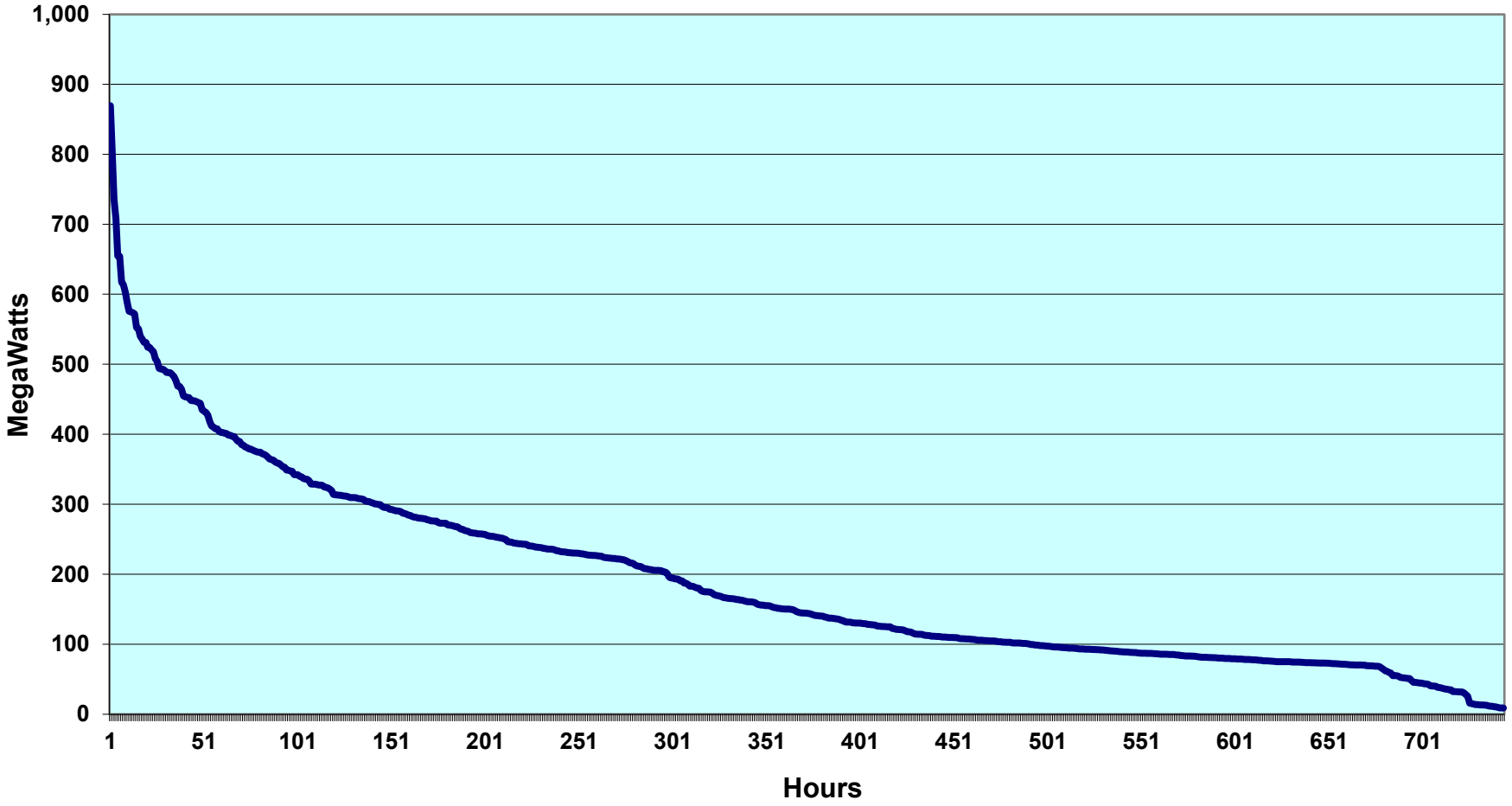
Kentucky Power Company
January 2025 Load Duration Curve
(System Load)



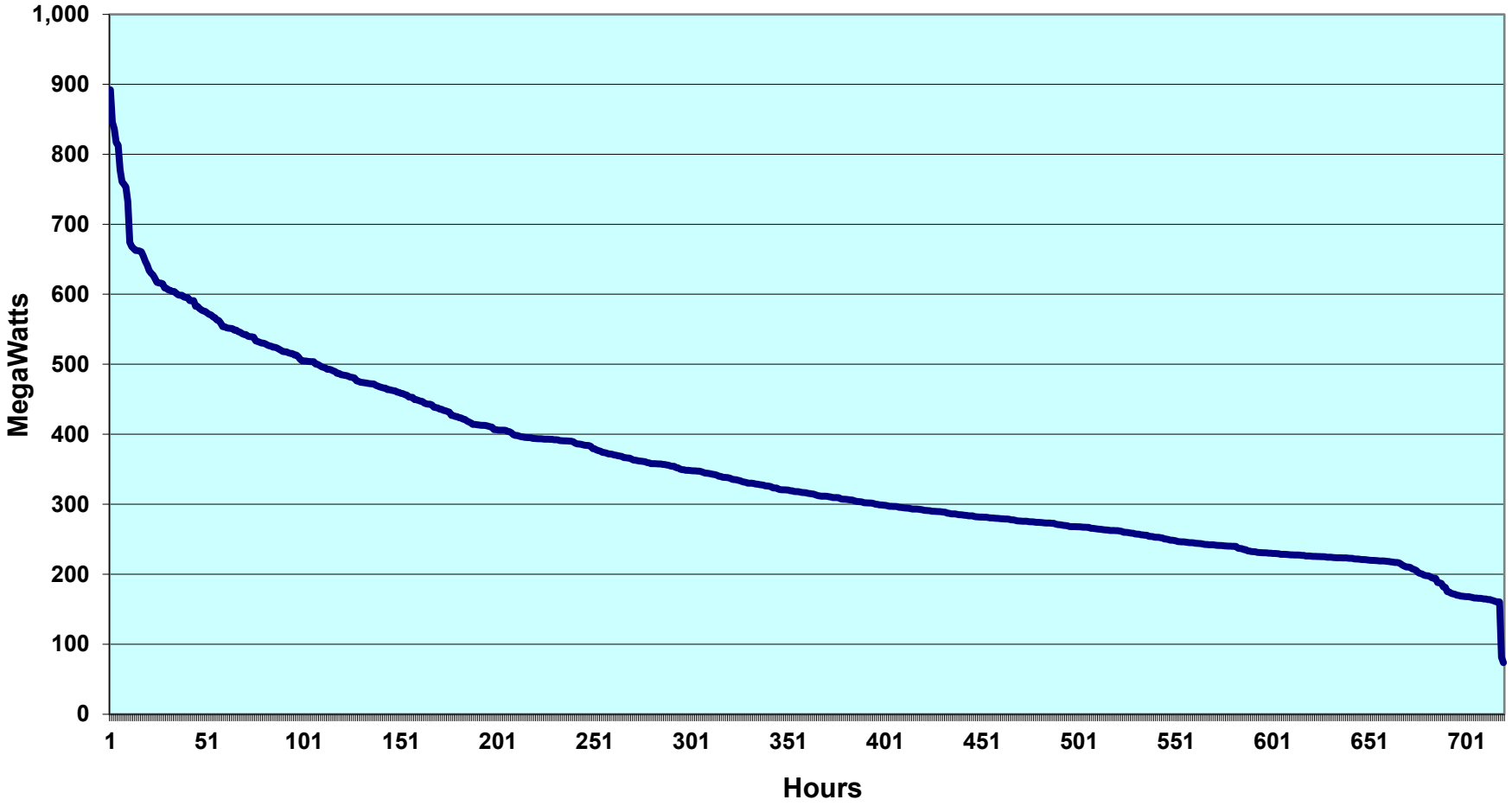
Kentucky Power Company
February 2025 Load Duration Curve
(System Load)



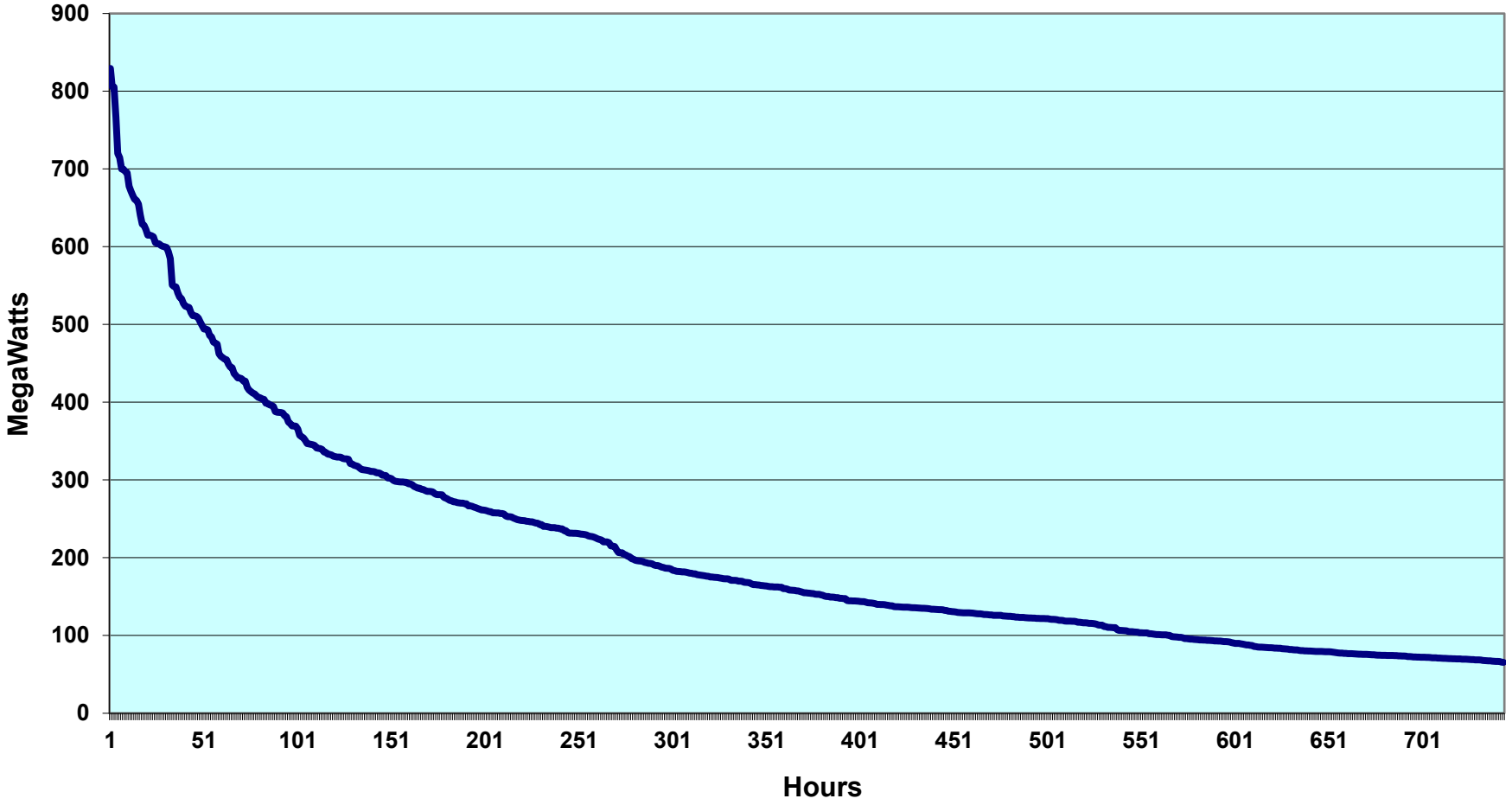
Kentucky Power Company
March 2025 Load Duration Curve
(System Load)



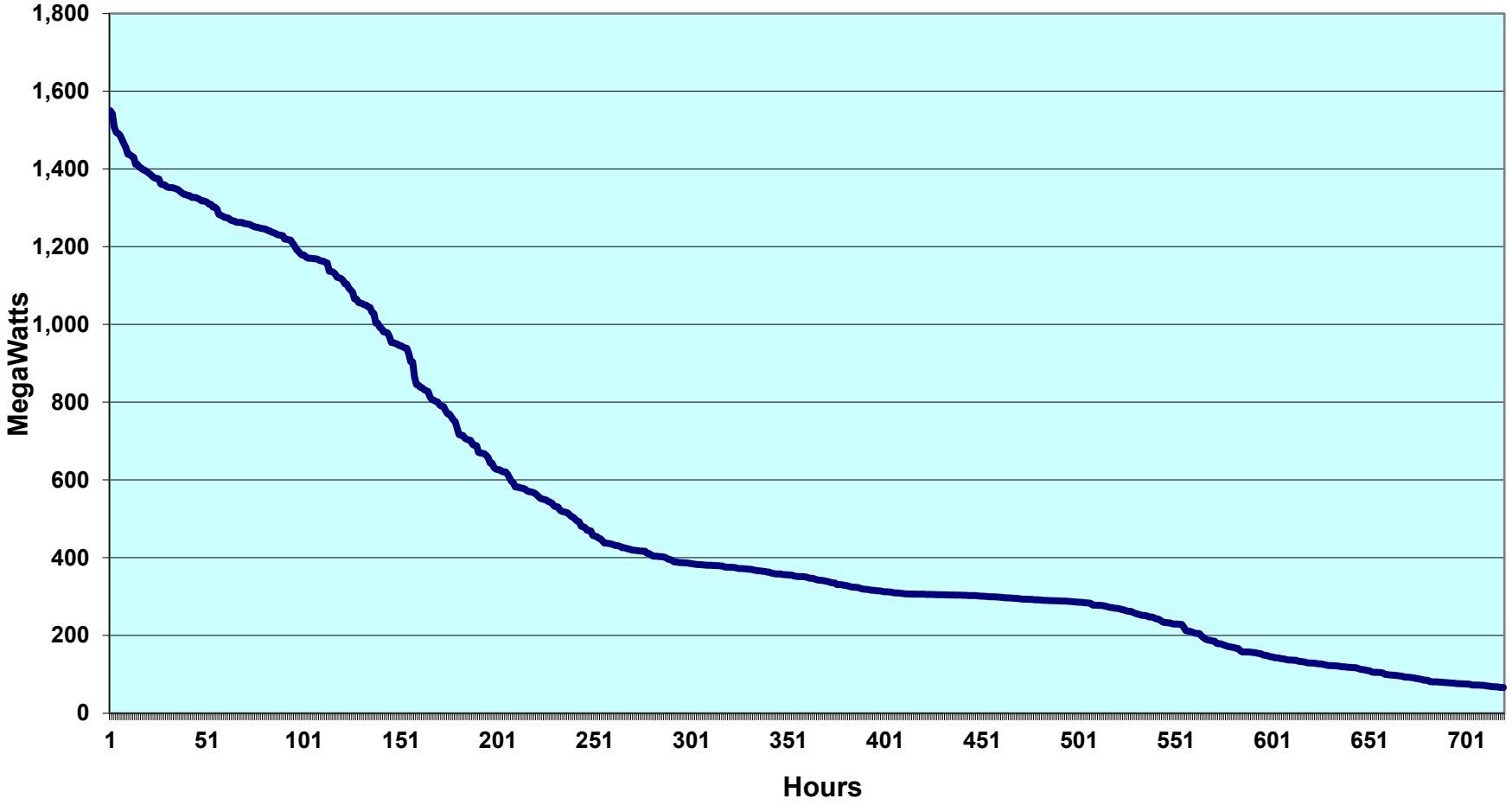
Kentucky Power Company
April 2025 Load Duration Curve
(System Load)



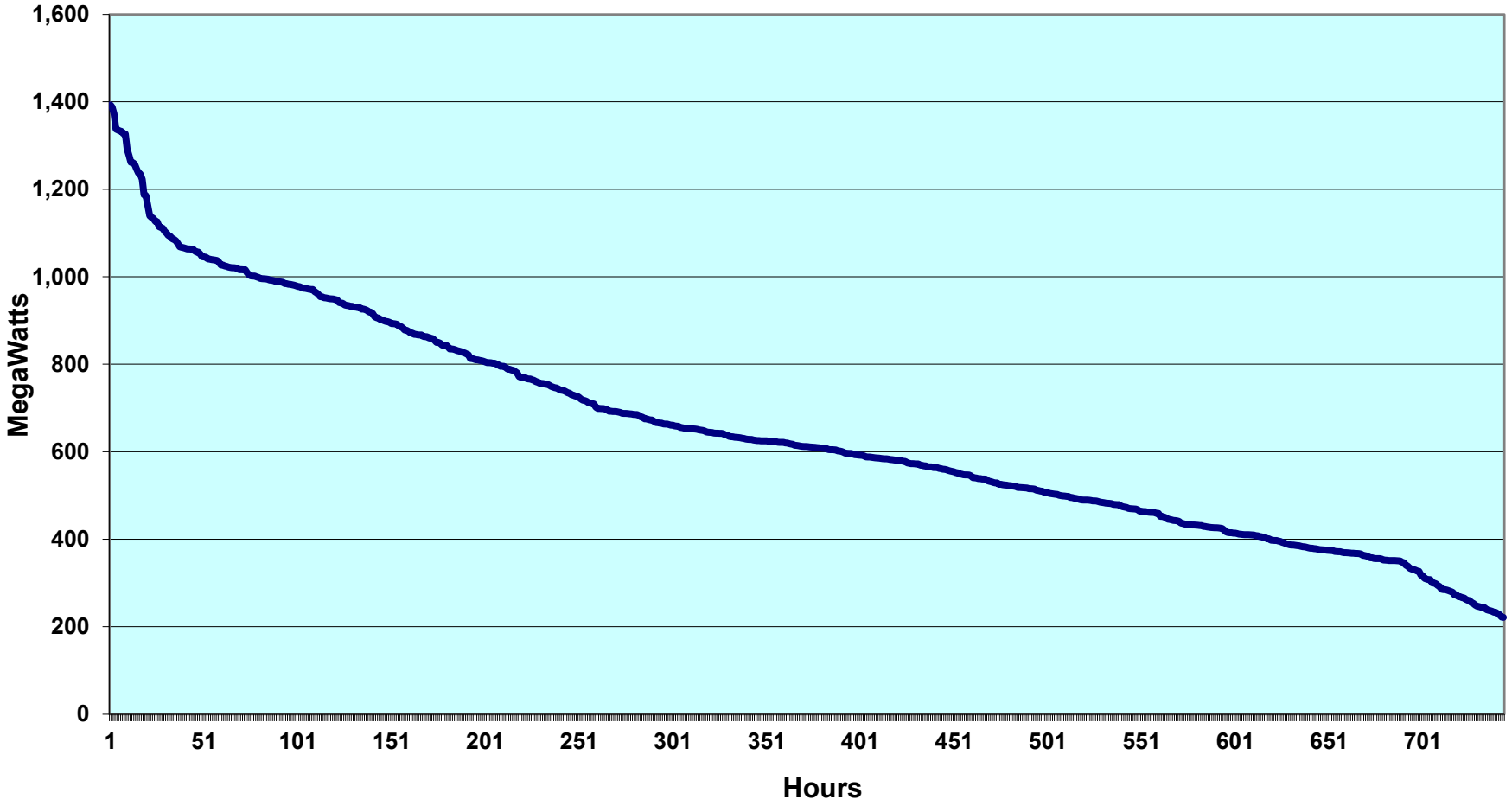
Kentucky Power Company
May 2025 Load Duration Curve
(System Load)



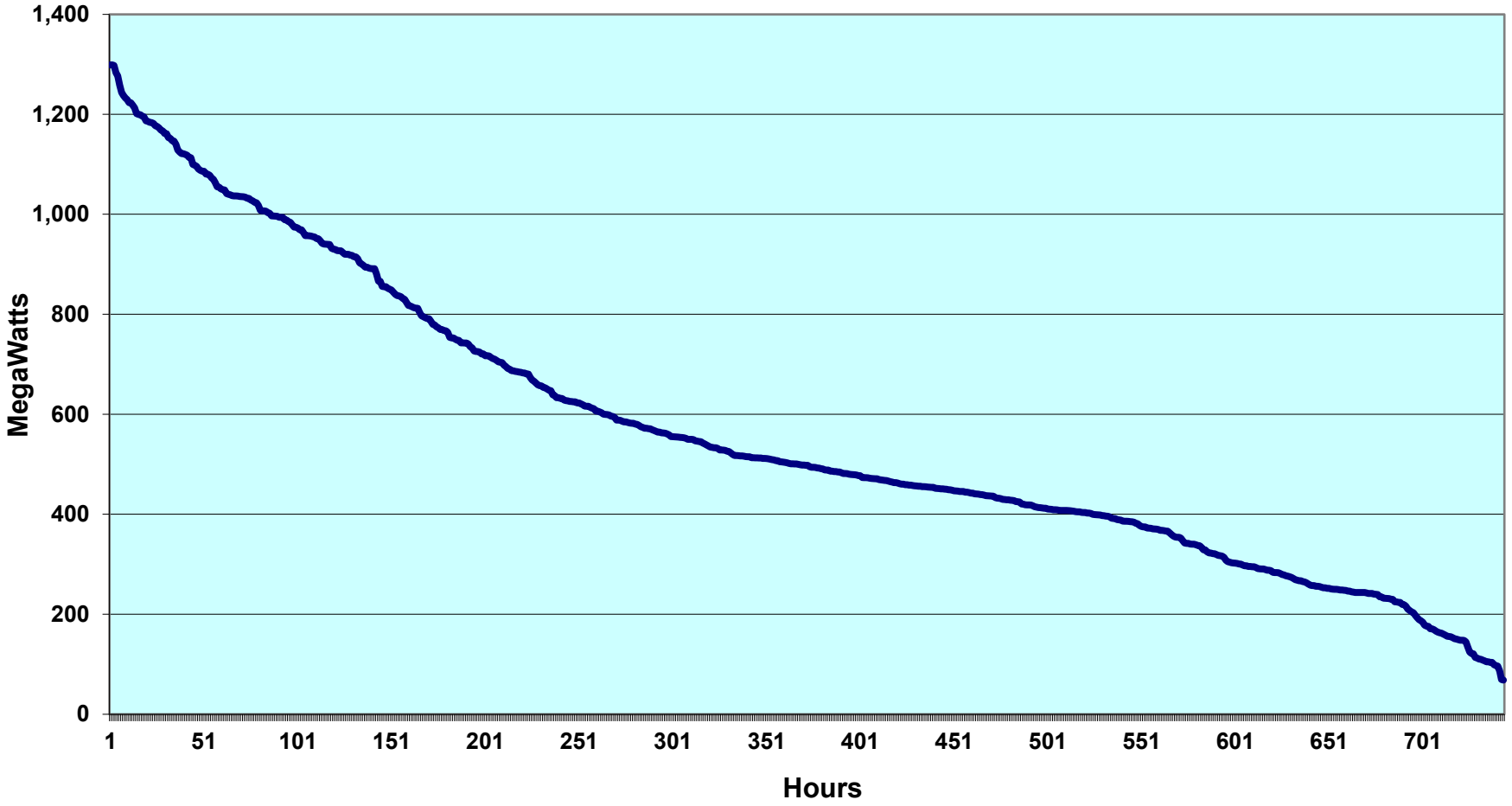
Kentucky Power Company
June 2025 Load Duration Curve
(System Load)



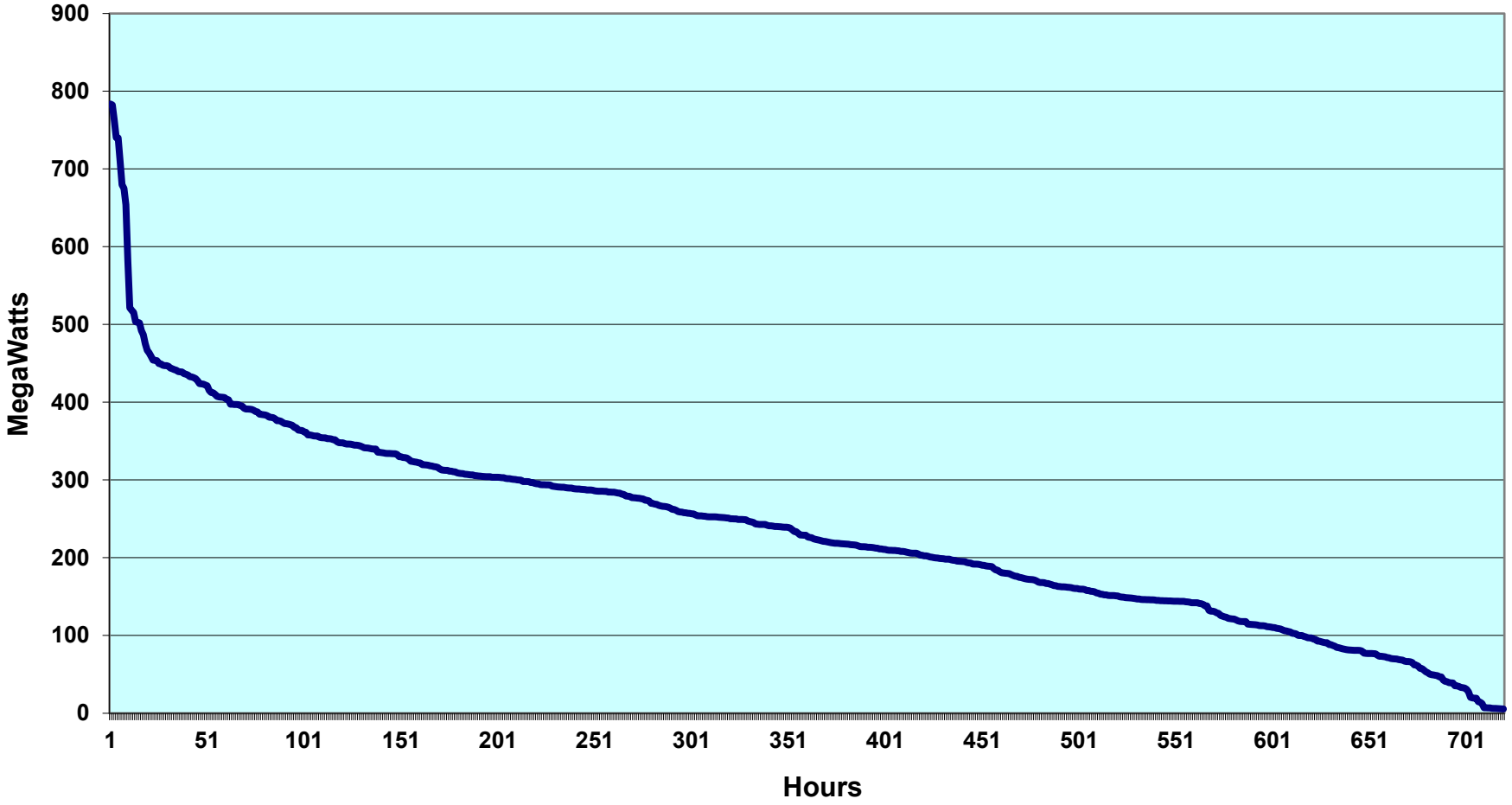
Kentucky Power Company
July 2025 Load Duration Curve
(System Load)



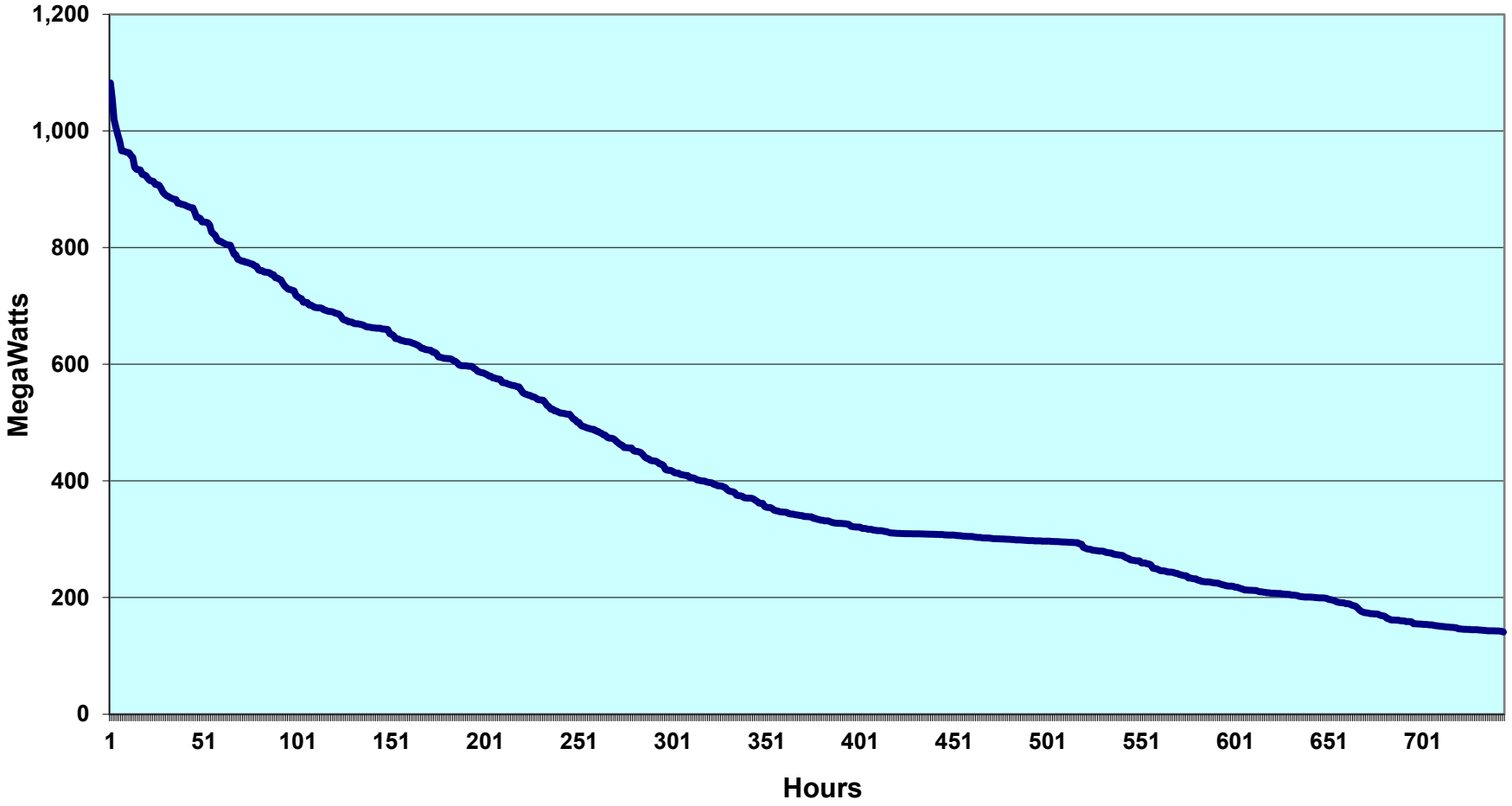
Kentucky Power Company
August 2025 Load Duration Curve
(System Load)



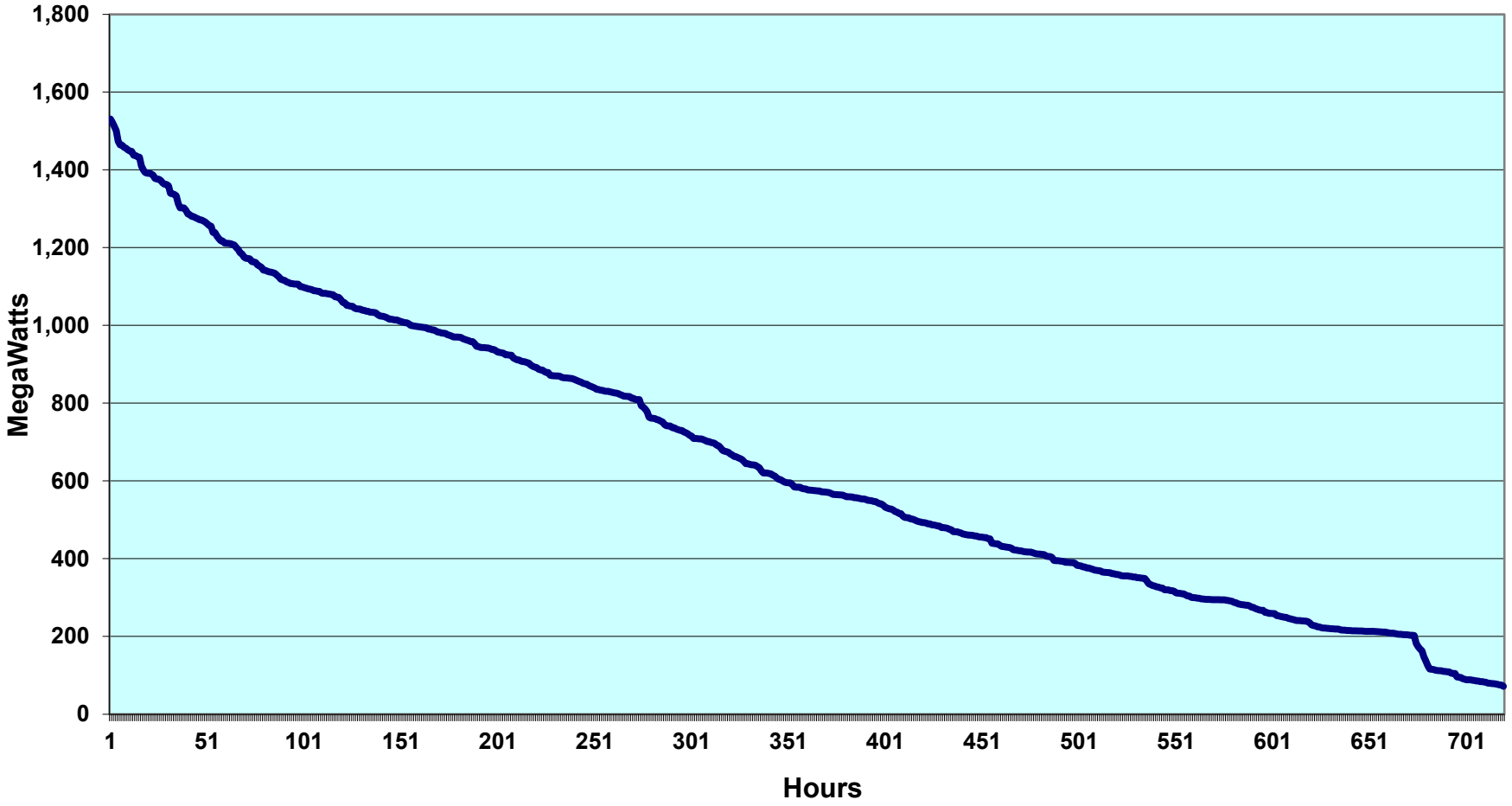
Kentucky Power Company
September 2025 Load Duration Curve
(System Load)



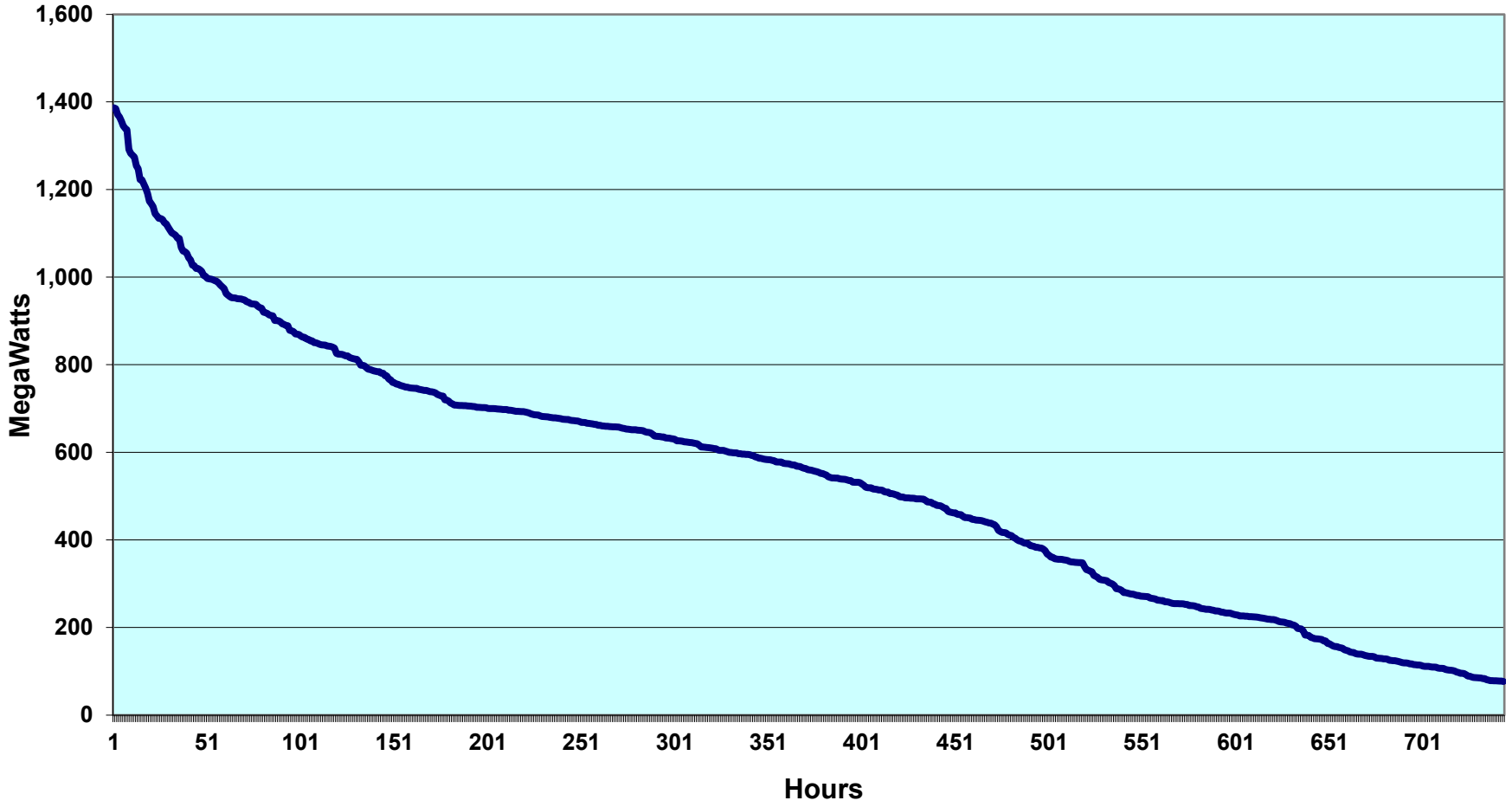
Kentucky Power Company
October 2025 Load Duration Curve
(System Load)



Kentucky Power Company
November 2025 Load Duration Curve
(System Load)



Kentucky Power Company
December 2025 Load Duration Curve
(System Load)



Kentucky Power Company
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DATA REQUEST

3 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

Please refer to Page 1 of KPCO_R_KPSC_1_3_Attachment1 for Kentucky Power Company's forecasts 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 Page 1.

The off-system energy sales forecasts for Kentucky Power Company are provided on Page 2 of KPCO_R_KPSC_1_3_Attachment1. Forecasts of off-system peak demand for Kentucky Power Company have not been developed and are not available. In addition, high economic growth forecasts for off-system energy sales and peak demand have not been developed and are not available.

The AEP Interconnection Agreement terminated on January 1, 2014 and the AEP-East Power Pool no longer exists. As a result, the requested information regarding the AEP East Power Pool is no longer available.

Witness: Amy J. Elliott

Kentucky Power Company
Base and High Forecast
Energy Sales (GWH) and Seasonal Peak Demand (MW)
2026 - 2030

	Energy Sales		Summer Peak Demand		Preceding Winter Peak Demand	
Year	**Base**	**High**	**Base**	**High**	**Base**	**High**
2026	5,656	5,894	944	984	1,215	1,266
2027	5,635	5,898	942	986	1,208	1,265
2028	5,613	5,894	937	984	1,198	1,258
2029	5,585	5,893	931	983	1,192	1,258
2030	5,555	5,885	927	982	1,183	1,253

Kentucky Power Company
Forecast Off-System Energy Sales (GWh)
2026 - 2030

Year	KPCo Off-System Sales
2026	340
2027	294
2028	337
2029	1,056
2030	885

Kentucky Power Company
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DATA REQUEST

4 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

The AEP-East operating companies are required to comply with the PJM mandated reserve margin following the October 1, 2004 integration of AEP's Eastern System into the PJM Interconnection.

In recent years, PJM has adjusted its method for determining load obligations for Fixed Resource Requirement (FRR) Load Serving Entities (LSE) like Kentucky Power. A system-wide Installed Reserve Margin (IRM) is calculated through an hourly loss-of-load expectation (LOLE) model where IRM is based on the total installed capacity in the model, reduced by the Capacity Benefit of Ties (CBOT). The IRM is used as part of the calculation of the Forecast Pool Requirement (FRP), which is the demand that Kentucky Power is required to meet with its own unforced capacity (UCAP) for a given delivery year. PJM uses the following formula to calculate FRP: (1 + IRM) x Pool-Wide Average Accredited UCAP Factor. Accredited UCAP is the ratio of UCAP to Installed Capacity (ICAP). The IRM for PJM Delivery Year 2026/27 is 19.1% as determined by PJM's Reserve Requirement Study.

The AEP Interconnection Agreement terminated on January 1, 2014, and the AEP-East Power Pool no longer exists. The requested information regarding the AEP-East Power Pool no longer exists.

Witness: Amy J. Elliott

DATA REQUEST

5 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

Kentucky Power uses PJM's FPR and UCAP values to plan for the capacity resources needed to meet current and future demand. The FPR is not strictly a reserve margin, however, it does account for the potential of forced outages, weather-related risks and the Effective Load Carry Capability (ELCC) value of different resource types at times of peak system demand. The table below lists Kentucky Power's Internal Demand, FPR and UCAP values for the Planning Year 2026 through Planning Year 2030.

Planning Year	Internal Demand (MW)	Forecast Pool Requirement (FPR)	Load Obligation – UCAP (MW)
PY2026	856.8	0.929	796.1
PY2027	858.4	0.926	794.9
PY2028	860.1	0.940	808.6
PY2029	863.0	0.9153	789.9
PY2030	868.6	0.9157	795.4

Based on forecasted demand and existing resources, Kentucky Power does not project any deficits for the current planning year and following four years. The table below includes UCAP, UCAP Resources & Sales, and the Net Position of Kentucky Power.

Planning Year	Load Obligation – UCAP (MW)	UCAP Resources	UCAP Sales	Net Position
PY2026	796.07	850.70	27.50	27.00
PY2027	794.92	834.20	22.40	17.00
PY2028	808.62	857.50	0.00	49.00
PY2029	789.88	829.70	0.00	40.00
PY2030	795.39	829.60	0.00	34.00

The values represented are based on existing demand and resource accreditation as determined by PJM. The potential addition of large load customers could result in future changes to Kentucky Power's load obligation. Therefore, this should be understood as a point in time reflecting current circumstances.

The AEP Interconnection Agreement terminated on January 1, 2014, and the AEP-East Power Pool no longer exists. The requested information regarding the AEP-East Power Pool no longer exists.

Witness: Amy J. Elliott

Kentucky Power Company
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DATA REQUEST

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

RESPONSE

There are two types of generating unit outages that are considered "scheduled": Planned Outages and Maintenance Outages.

A Planned Outage is an outage lasting several weeks and is taken to permit the Company to perform work on major equipment groups that are not immediately required for the safe operation of the unit. Planned Outages are scheduled approximately a year in advance. The dates of the Planned Outages are approved by PJM.

Maintenance Outages also are approved by PJM. They require shorter lead time for notifying PJM and are taken to perform repair and maintenance work. Maintenance Outages may be initially scheduled for up to nine days, although they may be extended once underway.

See KPCO_R_KPSC_1_6_Attachment1 for a list of scheduled outages that occurred in the first three months of 2026.

See KPCO_R_KPSC_1_6_ConfidentialAttachment2 for a list of Planned Outages for April 1, 2026, through December 31, 2030. Please note that the Company does not have a similar schedule for Maintenance Outages as the Company does not forecast Maintenance Outages.

The Company is not planning any retirement of generating capacity during the current year and the following four years.

Witness: Amy J. Elliott

KPCo Scheduled Outages
January 1, 2026 - March 31, 2026

Unit Name	Event Type	Start Date	End Date	Event Description
Mitchell 1	MO	12/29/2025 00:00:00	01/02/2026 09:30:00	Remove and inspect #11 MT bearing and #10 bearing/hydrogen seal
Mitchell 1	MO	02/28/2026 00:00:00	03/15/2026 00:00:00	Steam Generator inspect and repair (i/r), Deaerator vent inspect and repair, ID Fan and duct work inspect and repair, MT Bearing inspect and repair, Generator Hydrogen Seal inspect and repair, Boiler Drain Valve 26L replacement, #12 FD Fan Breaker inspect and repair, DSI 1A/1B Stack-up clean-out, Ammonia Injection valve inspect and repair, Urea Solution Strainer replacement
Mitchell 2	MO	03/04/2026 00:00:00	03/06/2026 01:26:00	River water piping inspect and repair
Mitchell 2	PO	03/14/2026 22:00:00	05/25/2026 06:00:00	HP/IP turbine rotor replacement, BFPT rotor replacement, ID fan rebuilds, Boiler inspections/repairs, Clinker grinder/doghouse upgrade, HP SV/CV, BFPT SV/CV

KPCo Forecasted Scheduled Outages
April 1, 2026 through December 31, 2030

Plant	Unit	Scheduled Start Date	Scheduled End Date
Big Sandy	1	[redacted]	
Big Sandy	1		
Big Sandy	1		
Big Sandy	1		
Big Sandy	1		
Big Sandy	1		
Big Sandy	1		
Big Sandy	1		
Big Sandy	1		
Big Sandy	1		
Mitchell	1		
Mitchell	1		
Mitchell	1		
Mitchell	1		
Mitchell	1		
Mitchell	2		
Mitchell	2		
Mitchell	2		
Mitchell	2		
Mitchell	2		

Kentucky Power Company
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DATA REQUEST

7 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

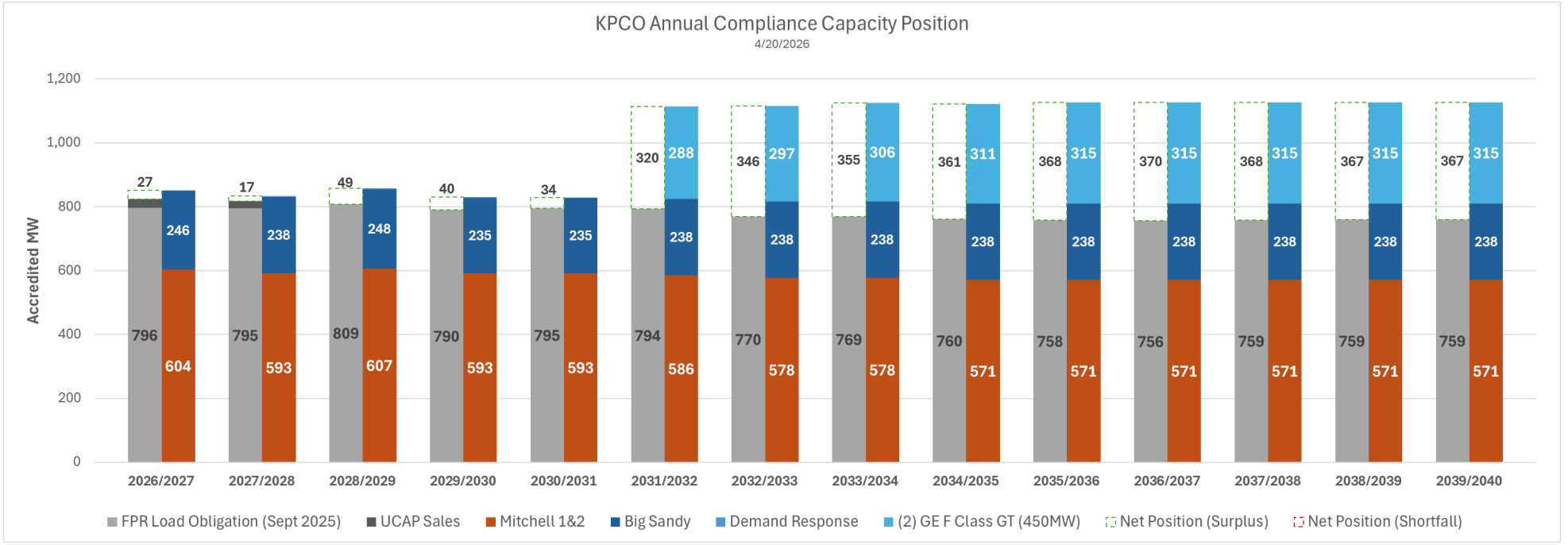
Kentucky Power plans to meet current and future capacity requirements over the next ten years through a combination of existing and planned generation resources.

KPCO_R_KPSC_1_7_Attachment1 lists the capacity and expected service years of resources needed to meet Kentucky Power's FPR Load Obligation. The potential addition of large load customers could result in future changes to Kentucky Power's generation needs.

The AEP Interconnection Agreement terminated on January 1, 2014, and the AEP-East Power Pool no longer exists. The requested information regarding the AEP-East Power Pool no longer exists.

Witness: Amy J. Elliott

KPCO Annual Capacity Position



KPCO Resources

Unit Name	Location	Fuel Type	C.O.D.[1] or Contract Start Date	Retirement or Contract Expiration Date[2]	PJM Nameplate Capacity (MW)[4]	Capacity Position Resource Group
Big Sandy	Kentucky	Gas- Steam	1963 [3]	2040	295	Existing Capacity
Mitchell 1	West Virginia	Coal	1971	2040	385	Existing Capacity
Mitchell 2	West Virginia	Coal	1971	2040	395	Existing Capacity
					1,076	

(1) Commercial operation date.
(2) Retirement or Contract Expiration dates are assumptions for IRP planning purposes. Hydro units retirement dates represent license expiration dates.
(3) Big Sandy Plant ceased burning goal in 2015, and converted to natural gas
(4) Represents KPCo's allocation (50%) of Mitchell

Kentucky Power Company
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Annual Responses

DATA REQUEST

8 a&b 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

a.&b. Please see KPCO_R_KPSC_1_8a&b_Attachment1 for 2025 actual energy receipt and delivery data. The Company does not maintain forecast data by interconnection or generation source. Total-system energy forecasts are provided in KPCO_R_KPSC_1_3_Attachment1.

Witness: Amy J. Elliott

Kentucky Power Company
KPSC Case No. Administrative Case No. 387-2026
Annual Responses

DATA REQUEST

8 c&d 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. Based on information currently available, the existing transmission system, together with the transmission capacity additions described in KPCO_R_KPSC_1_9_Attachment1, will provide adequate capacity to serve the existing and projected loads provided in response to part d of this request.

d. Please refer to KPCO_R_KPSC_1_8d_Attachment1 for the requested information.

Witness: Amy J. Elliott

Kentucky Power Company
Seasonal Peak Demand
Actual 2025 and Forecast 2026 -2030

Year	Summer Peak Demand (MW)	Preceding Winter Peak Demand (MW)
2025	934*	1,347*
2026	944	1,215
2027	942	1,208
2028	937	1,198
2029	931	1,192
2030	927	1,183

***Based on Actual Data**

Kentucky Power Company
KPSC Case No. Administrative Case No. 387-2026
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DATA REQUEST

9 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 see KPCO_R_KPSC_1_9_Attachment1 for the requested information.

Witness: Amy J. Elliott

***ALL CAPACITIES AND IN SERVICE DATES APPROXIMATE/SUBJECT TO CHANGE**

Allen Station Improvement (Baseline):

Rebuild Allen Station in the clear. A 0.2-mile segment of the Allen-East Prestonburg 46 kV line will be relocated to the new station. The McKinney-Allen line extension will walk around the south and east sides of the existing Allen station to the new Allen Station being built in the clear. A short segment of new single circuit 69 kV line and a short segment of new double circuit 69 kV line (both operated at 46 kV) will be added to the line to tie into the new Allen Station bays. A segment of the Stanville-Allen line will have to be relocated to the new station. A 0.25-mile segment of the existing Allen-Prestonburg single circuit will be relocated. Remote end work will be required at Prestonburg, Stanville, and McKinney stations. The current projected in-service date for this project is May 2028.

- **Stanville - Allen 46kV transmission line**
  Existing Summer Emergency Conductor Capacity: 47 MVA
  Proposed Summer Emergency Conductor Capacity: 50 MVA
- **Allen – East Prestonsburg transmission line**
  Existing Summer Emergency Conductor Capacity: 45 MVA
  Proposed Summer Emergency Conductor Capacity: 53 MVA
- **PJM Baseline (B3353):** Please see pages 9-11
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/2021/20211119/20211119-reliability-analysis-update.ashx

Garrett Area Improvements

This project will construct ~10.3 miles of single circuit 138kV from Soft Shell to Garrett picking up Salt Lick Co-op via Snag Fork along the way. The Project will also construct ~3 miles of single circuit 138kV from the Eastern station to Garrett station, a short extension from the new Eastern station to the existing Hays Branch metering point, a short extension to existing Morgan Fork – Hays Branch 138 kV circuit from Eastern station, and a double circuit cut into existing Hays Branch - Morgan Fork line to tie into new Eastern station. In addition, the Garrett station will be expanded to install a straight bus with two 138kV breakers, a circuit switcher and a 138/12kV 30 MVA transformer. A new 138 kV substation (Eastern) will be constructed south of the existing Hays Branch station and will include two 138kV breakers (3000A 40kA) on exits toward Morgan Fork and Garrett station. Finally, the Project will construct a new Snag Fork Switch Station and install a 3-way phase over phase motorized (automated) switching structure near Saltlick to serve the EKPC co-op. The current projected in-service date is May 2027.

- **Eastern - Garrett 138kV transmission line**
  Existing Summer Emergency Conductor Capacity: 29-50 MVA
  Proposed Summer Emergency Conductor Capacity: 253 MVA
- **Garrett – Soft Shell 138kV transmission line**
  Existing Summer Emergency Conductor Capacity: 29-50 MVA
  Proposed Summer Emergency Conductor Capacity: 253 MVA

- **PJM Supplemental (S2188):** Please see pages 115-118
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/postings/aep-local-plan-submission-of-the-supplemental-projects-for-2020-rtep.ashx

Hatfield Station Upgrades:

At Hatfield Substation, expand the substation yard. Relocate 138/69/46kV XF#1. Replace 138/69/46kV XF#1 Bushings, 138kV 3 phase Bus CCVTs, MOAB X1 and GND Switch Z1 with a new 138kV Circuit Switcher. Replace 138KV Sprigg Line metering, Line Switch "11" with a 138kV Circuit Breaker. Replace and relocate 69kV CB-B to standard Bay position. Replace 69KV CB-A and add 3 phase CCVTs to John's Creek 69kV line. Add 138kV Backup and 69kV Primary Station Service transformers and Station Service. Expand yard and install a 16' X 27' base DICM. Remove 111MVA 46/7.2KV Transformer #2 and associated equipment and 7.2KV 3-phase station service. Remove the control building. The current projected in-service date for this project is May 2028.

- **PJM Supplemental (S2815):** Please see pages 23-25
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/postings/2023/aep-local-plan-submission-of-the-supplemental-projects-for-2023-rtep.ashx

New Camp Loop (Baseline & Supplemental):

Construct ~ 2.75 mi Orinoco - Stone 69kV transmission line in the clear between Orinoco station and Stone station. Construct ~ 3.25 mi Orinoco – New Camp 69kV transmission line in the clear between Orinoco station and New Camp station. At Stone substation, Circuit breaker A to remain in place and be utilized as T1 low side breaker, Circuit Breaker B to remain in place and be utilized as new Hatfield (via Orinoco and New Camp) 69KV line breaker. Add new 69KV Circuit Breaker E for Coleman Line exit. Reconfigure the New Camp tap which includes access road improvements/installation, temporary wire, and permanent wire work along with dead end structures installation. At New Camp substation, rebuild the 69kV bus, add 69KV MOAB W and replace the 69KV Ground switch Z1 with a 69kV Circuit Switcher on the New Camp Transformer.

In conjunction with the baseline work identified under B3288 which would install new 69kV line between Stone and New Camp via Orinoco substation, the following is proposed under this solution to address the identified needs on the Sprigg – Stone 46kV line. Replace Belfry substation with Orinoco substation by installing a 69KV box bay and 12KV rural bay to be built in the clear southwest of existing Belfry station. Install 69/12kV 20 MVA transformer and two 12kV breakers. Retire Belfry 46kV substation. Retire 46kV equipment from Stone substation. At Hatfield substation, replace MOAB Y with a 69KV Circuit Breaker towards Stone 69kV line via New Camp and Orinoco. Retire the 46kV equipment at Sprigg station towards Stone (via Belfry). Retire Turkey Creek Tap. Retire the ~8.23 miles of the 46kV Sprigg – Stone 46 KV circuit. The current projected in-service date for this project is November 2027.

- **New Camp - Orinoco 69kV transmission line**
  Proposed Summer Emergency Conductor Capacity: 142 MVA

- **Orinoco – Stone 69kV transmission line**
  Proposed Summer Emergency Conductor Capacity: 142 MVA
- **PJM Baseline (B3288):** Please see pages 23-25
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/2021/20210115/20210115-reliability-analysis-update.ashx
- **PJM Supplemental (S2446):** Please see pages 84-86
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/postings/2021/aep-local-plan-submission-of-the-supplemental-projects-for-2021-rtep.ashx

Bellefonte Station Upgrades (Baseline & Supplemental):

At Bellefonte substation, the N-1-1 loss of 138kV source from Kenova and loss of Bellefonte Transformer #2 causes an overload on the 69kV risers between 69kV Bus #2 and 69kV winding of TR#3. At Bellefonte substation, 69kV breakers JJ, C, I, AB, Z and G are overdutied. To mitigate the safety and baseline issue at Bellefonte substation following Upgrades are planned: Replacement of 69kV risers to Bus to mitigate identified overload on this section between TR#3 and 69kV Bus #2, Replacement of overdutied 69kV breakers C, G, I, Z, AB and JJ in place. The new 69kV breakers to be rated at 3000 A 40kA breakers. Remote end relaying at Point Pleasant, Coalton and South Point 69KV substations.

At Bellefonte, Replace XFR #2 with a 200 MVA Auto unit and retire XFR #1 & #5. The U/G feeder for XFR #3 69kV riser is getting reconductored under B3349. Reconductor sections of 138kV Bus #1 and 138kV Bus #2. Replace remaining oil PTs connected to Bus #1 and Bus #2. Upgrade Primary and back up station service. Replace 69kV bus tie breaker H. Replace the hook stick disconnects switches for the tie breaker H and 69kV tie breaker location will be relocated one bay south of the existing location and 69kV buses will be reconfigured. Replace the hook stick disconnects switches for Raceland breaker D. Relocate the Raceland feeder to bus #1 after extending the 69kV bus #1. The cap bank switcher/Moab Mark 5 combo unit will get replaced with 69kV breaker and set of breaker disconnects and relocated to bus #1. 69kV breaker is needed instead of circuit switcher due to the high fault current. Relocate the cap bank to bus #1 after extending the 69kV bus #1. 69kV Air Products line MOABs will be replaced with 2000A SW. Replace hook-stick switches for Oil CB – AB, JJ, I, G, Z, T and C. These Breakers are replaced as part of B3350. Install 16'x48' DICM for 69kV Yard and a 16'x48' DICM for the 138kV Yard. Replace cable trench, single phase AC system & cable work, entire fence replacement and ground grid extension for 100'X10' expansion toward the Northwest of the 69kV yard. Both 138kV and 69kV control house will be retired. Retire entire 34kV Yard, contingent on the timing of the customer being removed from service. The ISD for this project is October 2027.

- **Bellefonte Transformer #2**
  Existing 138/69kV Nameplate Capacity: 175 MVA
  Proposed 138/69kV Nameplate Capacity: 200 MVA
- **PJM Baseline (B3350):** Please see pages 3-4
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/2022/20220121/20220121-reliability-analysis-update.ashx

- **PJM Baseline (B3349):** Please see pages 3-4
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/2021/20211119/20211119-reliability-analysis-update.ashx
- **PJM Supplemental (S2814):** Please see pages 15-22
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/postings/2023/aep-local-plan-submission-of-the-supplemental-projects-for-2023-rtep.ashx

Breaks – Dorton 69kV Conversion (Baseline):

In 2027 Winter RTEP case, Dorton, Pike 29, Rob Fork, Burdine, Henry Clay, Draffin 46KV buses (along the Cedar Creek - Elwood and Breaks - Dorton – Elwood 46KV circuits) experience voltage magnitude and drop violations under multiple N-1-1 contingency scenarios. Establish 69kV bus and new 69 kV line CB at Dorton substation. At Breaks substation, reuse 72kV breaker A as the new 69kV line breaker. Rebuild ~16.7 mi Dorton – Breaks 46kV line to 69kV. Retire ~17.2 mi Cedar Creek – Elwood 46kV circuit. Retire ~ 6.2 mi Henry Clay – Elwood 46kV line section. Rebuild Henry Clay as a 69 kV substation. Install a new 0.7 mi double circuit extension to Henry Clay 69kV. Retire Draffin substation and replace with a new Ratliff substation. Install a new 0.25 mi double circuit extension to Ratliff substation. Remote End work at Jenkins substation. Provide Transition fiber to Dorton, Breaks, Henry Clay, Jenkins and Ratliff substations. Cedar Creek substation work, At Breaks substation retire 46kV equipment. Retire Pike 29 SS and Rob Fork SS. Serve Pike 29 and Rob Fork customers from nearby 34kV Distribution sources. Henry Clay 46kV substation retirement. New Ratliff 69kV substation install. Draffin 46kV substation retirement. The current projected in-service date for this project is November 2028.

- **Breaks Dorton Elwood 46kV Transmission line**
  Existing 69kV Nameplate Capacity: 48-69 MVA
- **Breaks Dorton 69kV Transmission line**
  Proposed 69kV Nameplate Capacity: 102 MVA
- **PJM Baseline (B3349):** Please see pages 26-28
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/2022/20221014/item-03---srrtep-west-reliability-update.ashx

Prestonsburg – Thelma 46kV Rebuild (Baseline) & Kenwood looped service:

In 2026 RTEP Winter case, voltage magnitude and voltage drop violations at McKinney, Salisbury, Allen, East Prestonsburg, Prestonsburg, Middle Creek, Kenwood 46kV buses are identified for multiple N-1-1 contingency pairs. Furthermore in 2026 RTEP Winter case, the 46kV winding of the Thelma TR#1 is overloaded for multiple N-1-1 contingency pairs. Prestonsburg – Thelma 46kV circuit 2013-2018 the Prestonsburg - Thelma 46 kV circuit (~ 16 miles) has experienced 22 momentary and permanent outages. The circuit has 34 category A open conditions associated with the structures that make up the line. These conditions include damaged/rotted poles and damaged guy wires, cross arms. The majority of this circuit utilizes 1960s wood structures and 336.4 ACSR conductor. Rebuilding the Prestonsburg – Thelma 46kV line, replacing the 46kV Thelma transformer and associated remote end relaying upgrades addresses the voltage and thermal violations as well as the identified needs.

In conjunction with Prestonsburg-Thelma 46 kV rebuild, a new extension will be constructed to Kenwood station to provide looped service. The line will be constructed at 69 kV and operated at 46 kV. It will be approximately 2.25 miles of single circuit construction through mountainous terrain in Floyd and Johnson Counties in Kentucky. The extension will tap the existing Prestonsburg-Thelma 46kV Line around structure K346- 50 and the existing ~1.77 mi Kenwood Tap line from Kenwood to Van Lear Tap Structure will be rebuilt on the existing center line. The projected ISD for this work is October 2028.

- **Kenwood 69 kV transmission line**
  Proposed Summer Emergency Conductor Capacity: 61 MVA
- **Prestonsburg - Kenwood Tap 46kV transmission line**
  Proposed Summer Emergency Conductor Capacity: 85 MVA
- **Kenwood – Thelma 46kV Tap transmission line**
  Proposed Summer Emergency Conductor Capacity: 85 MVA
- **Thelma 138/69/46kV Transformer #1**
  Existing 46kV Nameplate Capacity: 35.7 MVA
  Proposed 46kV Nameplate Capacity: 90 MVA
- **PJM baseline (B3361):** Please see pages 17-18
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/2021/20211119/20211119-reliability-analysis-update.ashx
- **PJM Supplemental (B3360):** Please see pages 15-16
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/2021/20211119/20211119-reliability-analysis-update.ashx
- **PJM Supplemental (S2470):** Please see pages 33-35
  https://pjm.com/-/media/committees-groups/committees/srrtep-w/2021/20210319/20210319-aep-supplemental-projects.ashx

Elwood station replacement:

Construct a greenfield 138KV Myra Station to replace Elwood Station. Install 138KV double box bay with two 138kV circuit breakers and line exits to Fremont & Beaver Creek. Install 138/34.5 kV transformer with high-side circuit switcher and associated 34.5kV breakers. Install fiber connectivity for upgraded relaying. Construct a new ~2 mi double circuit 138 kV line to the proposed Myra substation. Reconfigure the existing Beaver Creek - Fremont 138kV circuit to facilitate the construction of the new double circuit Myra Extension 138kV Line to feed the proposed Myra Substation. Install two replacement structures in order to bypass Elwood station. Transfer wires from old structure to new structure. Tie the new structure to Cedar Creek-Henry Clay 46kV Line. The current projected in-service date for this project is November 2029.

- **Beaver Creek - Myra 138kV transmission line**
  Proposed Summer Emergency Conductor Capacity: 310 MVA
- **Myra – Fremont 138kV transmission line**
  Proposed Summer Emergency Conductor Capacity: 310 MVA
- **PJM Supplemental (S2436):** Please see pages 66-69
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/postings/2021/aep-local-plan-submission-of-the-supplemental-projects-for-2021-rtep.ashx

Stinnett - Pineville 161 kV Project

The proposed project would rebuild the approximately 30-mile Stinnett – Pineville 161 kV line. The project would address equipment material conditions, performance, and risk concerns associated with the 1940's wood structure line. Current projected in-service date for the project June 2030.

- **Stinnett - Pineville 161 kV Line**
  Existing Summer Emergency Conductor Capacity: 215 MVA
  Proposed Summer Emergency Conductor Capacity: 390 MVA
- **PJM Supplemental (S2428):** Please see pages 81-83
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/postings/2021/aep-local-plan-submission-of-the-supplemental-projects-for-2021-rtep.ashx

Middle Creek BESS and Middle Creek – Prestonsburg 46kV Rebuild

This project will address needs on ~23 miles of the Falcon – Prestonsburg 46kV circuit. Falcon – Prestonsburg 46kV line consists of 1940s wood structures. As part of the solution, A BESS (Battery Energy Storage Solution) will be installed sat Middle Creek substation. The project will retire ~14.5 miles of 46kV lines between Falcon and Middle Creek substations. The project will rebuild ~8.5 miles of 46kV line between Prestonsburg and Middle Creek station. The current projected in-service date is October 2029.

- **Middle Creek BESS**
  Proposed Nameplate Capacity: 2 MW
- **Middle Creek – Prestonsburg 46kV transmission line**
  Existing Summer Emergency Conductor Capacity: 23 MVA
  Proposed Summer Emergency Conductor Capacity: 70 MVA
- **PJM Supplemental (S2200):** Please see pages 138-139
  https://www.pjm.com/-/media/committees-groups/committees/srrtep-w/postings/aep-local-plan-submission-of-the-supplemental-projects-for-2020-rtep.ashx

VERIFICATION

The undersigned, Amy J. Elliott, being duly sworn, deposes and says she is the Vice President, Regulatory and External Affairs for Kentucky Power, that she has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of her information, knowledge, and belief.

Amy J. Elliott

Amy J. Elliott

Commonwealth of Kentucky)
)
County of Boyd)

Administrative Case No. 387

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Amy J. Elliott this 30th day of April 2026.

Marilyn Michelle Caldwell
Notary Public

My Commission Expires May 5, 2027

Notary ID Number KYNP71841

MARILYN MICHELLE CALDWELL
Notary Public
Commonwealth of Kentucky
Commission Number KYNP71841
My Commission Expires May 5, 2027