



March 31, 2010

RECEIVED

MAR 31 2010

PUBLIC SERVICE  
COMMISSION

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

Re: Annual Resource Assessment for East Kentucky Power Cooperative, Inc.  
(Administrative Case No. 387) and FERC Form No. 1: Annual Report of Major Electric  
Utilities, Licensees and Others

Dear Mr. Derouen:

Pursuant to the Commission's Order dated October 7, 2005 in Administrative Case No.  
387, please find enclosed for filing with the Commission an original and ten copies of the  
2009 Annual Resource Assessment for East Kentucky Power Cooperative, Inc. ("EKPC")

Also enclosed for filing is one signed copy of the FERC Form No. 1: Annual Report of  
Major Electric Utilities, Licensees and Others of EKPC.

If you have any questions, please call me.

Very truly yours,



Ann F. Wood  
Manager, Regulatory Services

Enclosures

**EAST KENTUCKY POWER COOPERATIVE, INC.**

**UPDATED INFORMATION TO BE FILED ANNUALLY AS SUPPLEMENT TO THE  
ANNUAL REPORT**

**AS ORDERED on October 7, 2005 in the CLOSED PSC ADMINISTRATIVE CASE 387**

**PUBLIC SERVICE COMMISSION'S REQUEST DATED 12/20/01**

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

**In the Matter of:**

<b>A REVIEW OF THE ADEQUACY OF</b>	<b>) ADMINISTRATIVE</b>
<b>KENTUCKY'S GENERATION</b>	<b>) CASE NO. 387</b>
<b>CAPACITY AND TRANSMISSION</b>	<b>)</b>
<b>SYSTEM</b>	<b>)</b>

**EAST KENTUCKY POWER COOPERATIVE, INC.**

**PSC ADMINISTRATIVE CASE 387**

**PUBLIC SERVICE COMMISSION'S REQUEST DATED 12/20/01**

East Kentucky Power Cooperative, Inc. (EKPC) hereby submits responses to the information requests contained in Appendix G to the Order of the Public Service Commission ("PSC") in this case dated December 20, 2001, as subsequently revised by Orders dated March 29, 2004 and October 7, 2005. Each response with its associated supportive reference materials is individually tabbed.

The requests listed below, which were originally contained in Appendix G of the Commission's Order dated December 20, 2001, are no longer required pursuant to the Commission's Order of March 29, 2004, amending the previous Order.

Request No. 1

Request No. 2

Request No. 5

Request No. 9

Request No. 10

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

A REVIEW OF THE ADEQUACY	)	
OF KENTUCKY'S GENERATION	)	PSC ADMINISTRATIVE
CAPACITY AND TRANSMISSION	)	CASE NO. 387
SYSTEM	)	

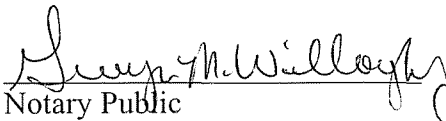
CERTIFICATE

STATE OF KENTUCKY )  
 )  
 COUNTY OF CLARK )

James C. Lamb, Jr., being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission in the above-referenced case dated December 20, 2001, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.



Subscribed and sworn before me on this 30<sup>th</sup> day of March, 2010.



Notary Public

MY COMMISSION EXPIRES NOVEMBER 30, 2013  
 NOTARY ID #409352



**EAST KENTUCKY POWER COOPERATIVE, INC.**  
**PSC ADMINISTRATIVE CASE NO. 387**  
**ANNUAL RESOURCE ASSESSMENT FILING**

**PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01**

**REQUEST 3**

**RESPONSIBLE PERSON: James C. Lamb, Jr.**

**COMPANY: East Kentucky Power Cooperative, Inc.**

**Request 3.** Actual and weather-normalized monthly coincident peak demands for the just completed calendar year. Demands should be disaggregated into (a) native load demand (firm and non-firm) and (b) off-system demand (firm and non-firm).

**Response 3a.**

**Monthly Native Load Peak Demands for 2009**

	<b>Actual (Firm and Non-Firm) (MW)</b>	<b>Weather Adjusted (Firm and Non-Firm) (MW)</b>
January	3,152	3,128
February	2,807	2,694
March	2,634	2,558
April	1,798	1,825
May	1,647	1,640
June	2,097	2,089
July	1,969	2,135
August	2,195	2,281
September	1,754	1,813
October	1,898	1,793
November	1,862	1,969
December	2,561	2,697

**Response 3b.** EKPC had no off-system demand obligations during the calendar year 2009.





**EAST KENTUCKY POWER COOPERATIVE, INC.  
PSC ADMINISTRATIVE CASE NO. 387  
ANNUAL RESOURCE ASSESSMENT FILING**

**PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01**

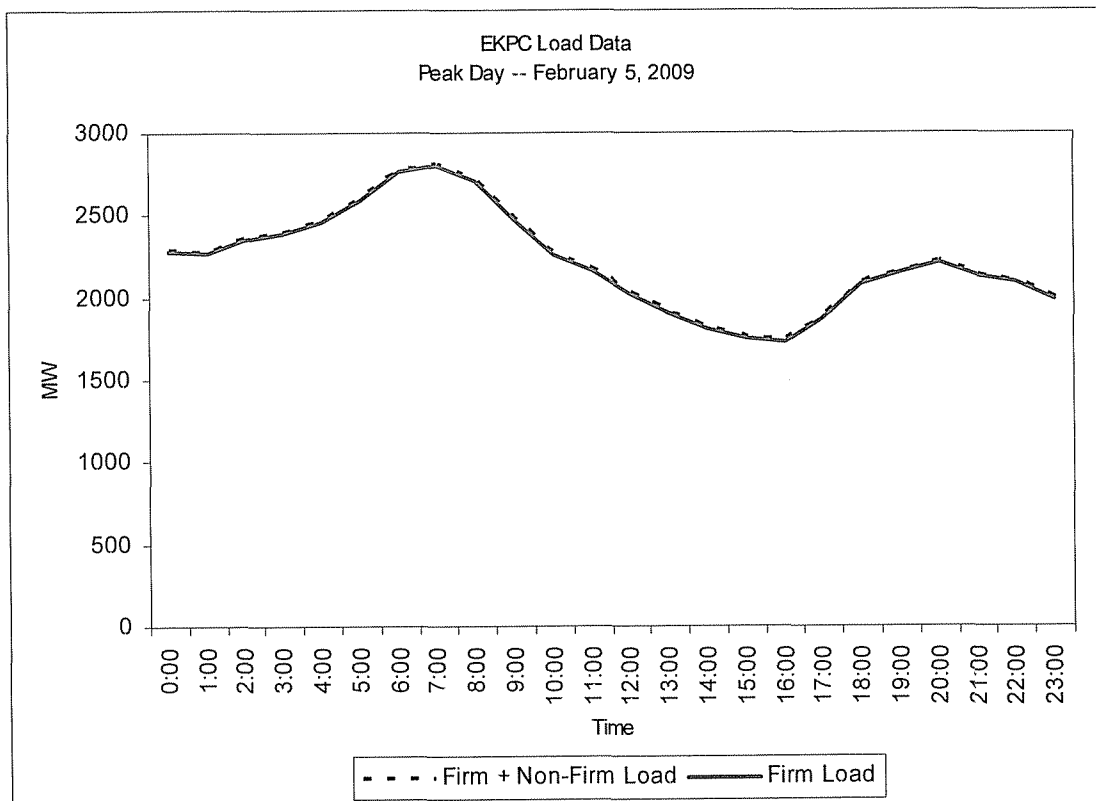
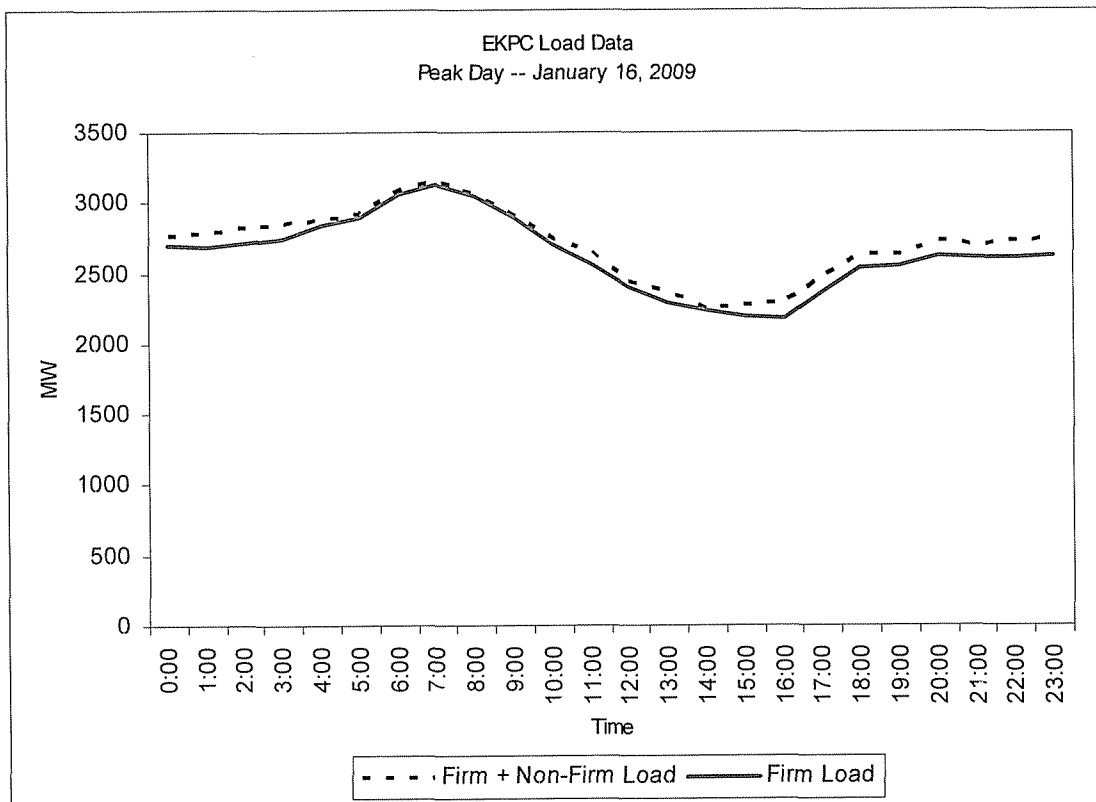
**REQUEST 4**

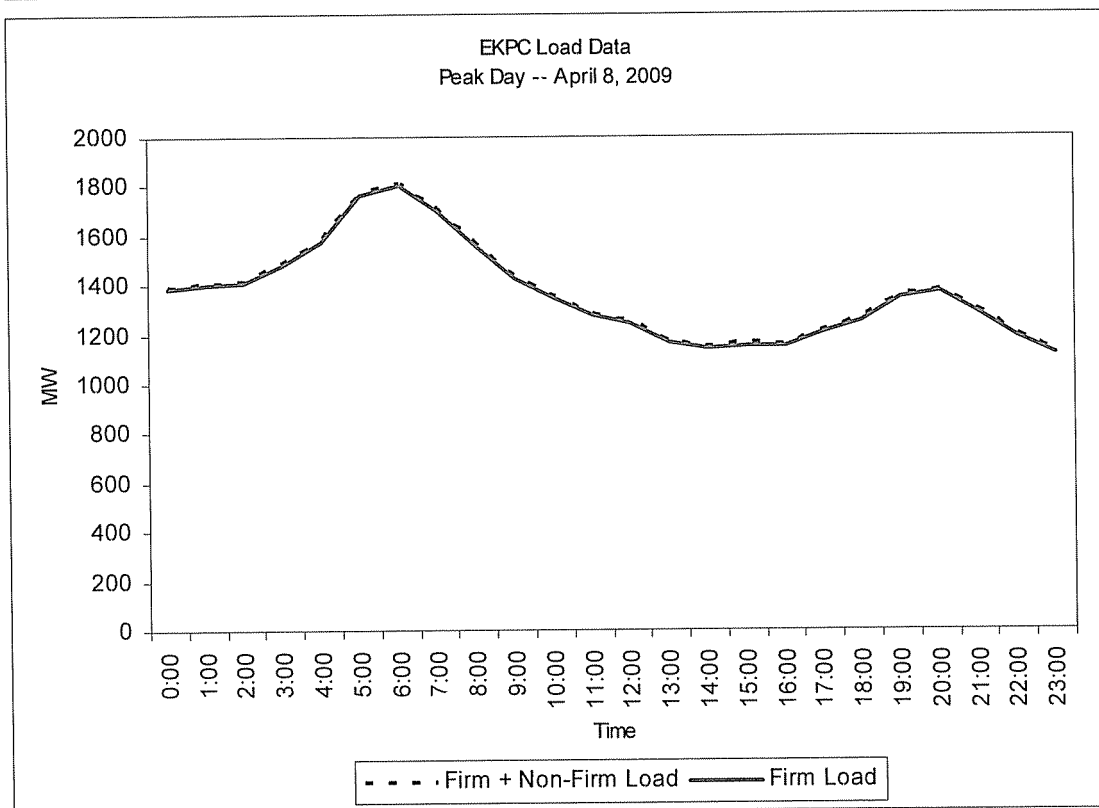
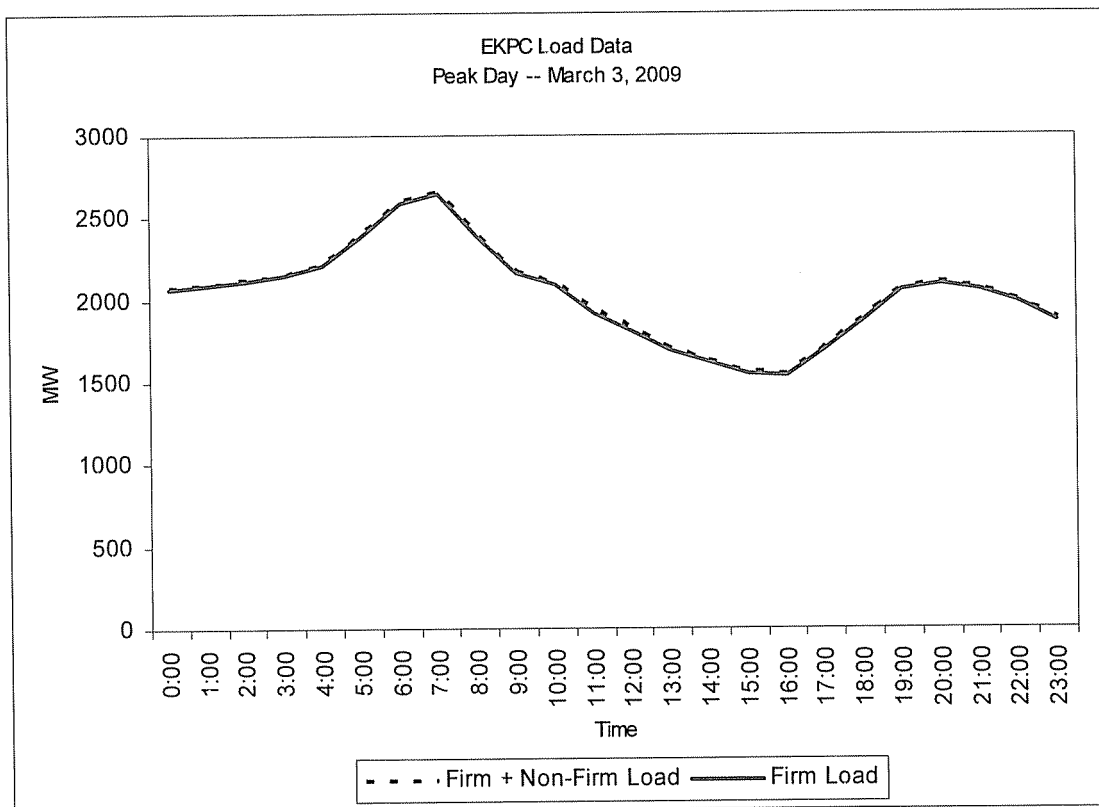
**RESPONSIBLE PERSON: James C. Lamb, Jr.**

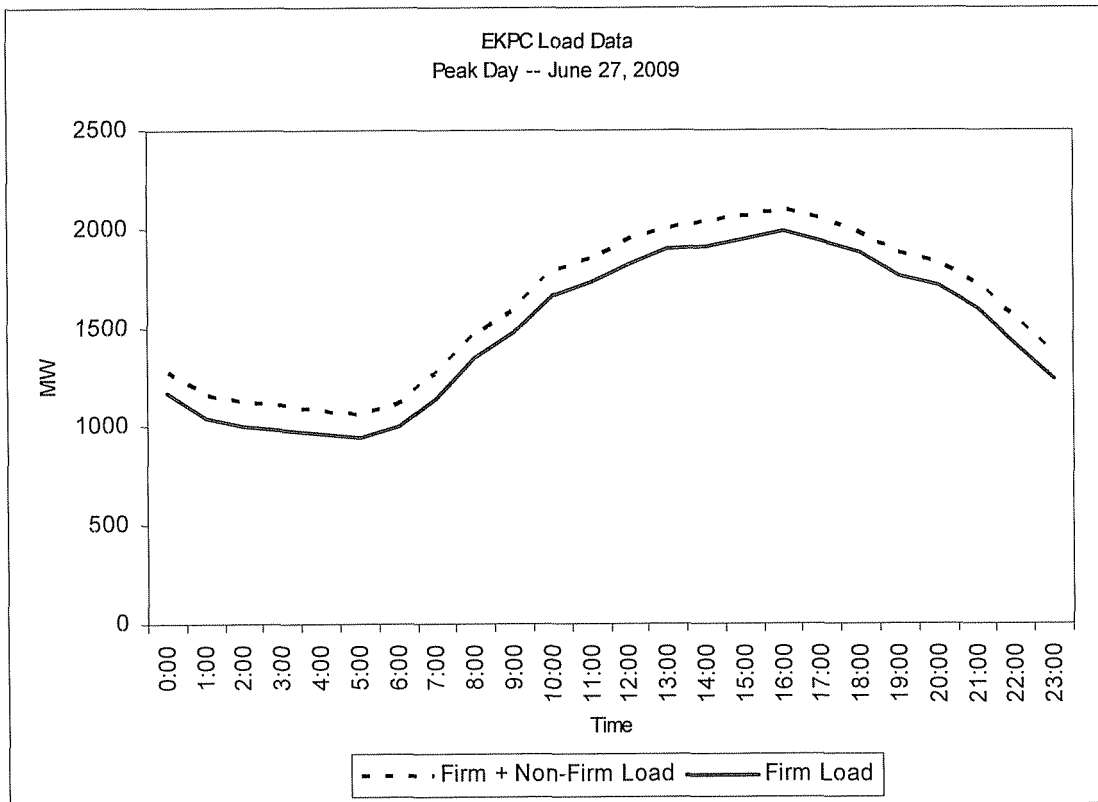
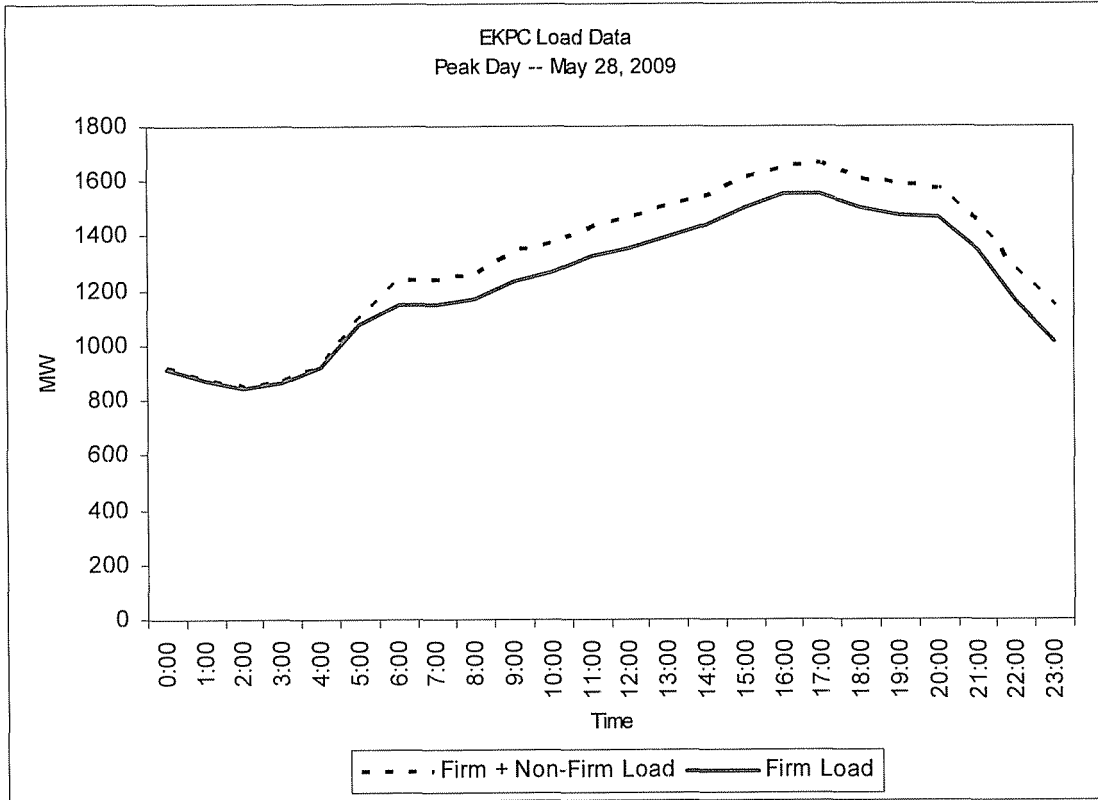
**COMPANY: East Kentucky Power Cooperative, Inc.**

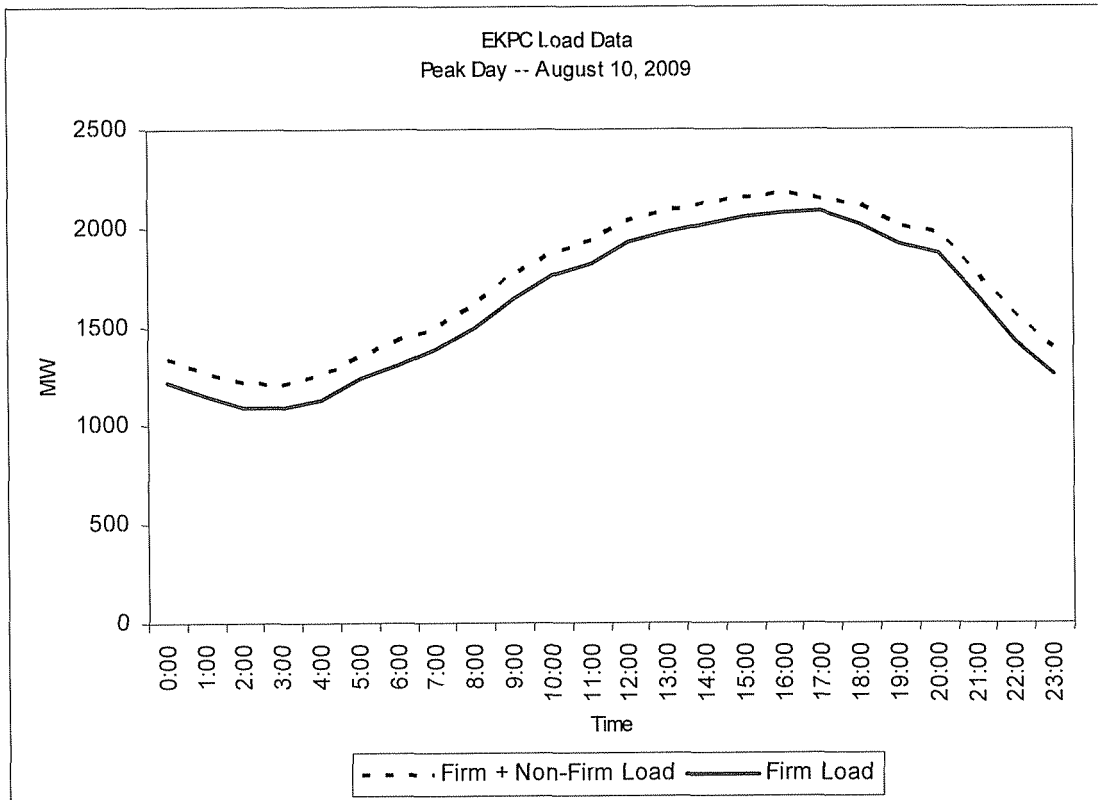
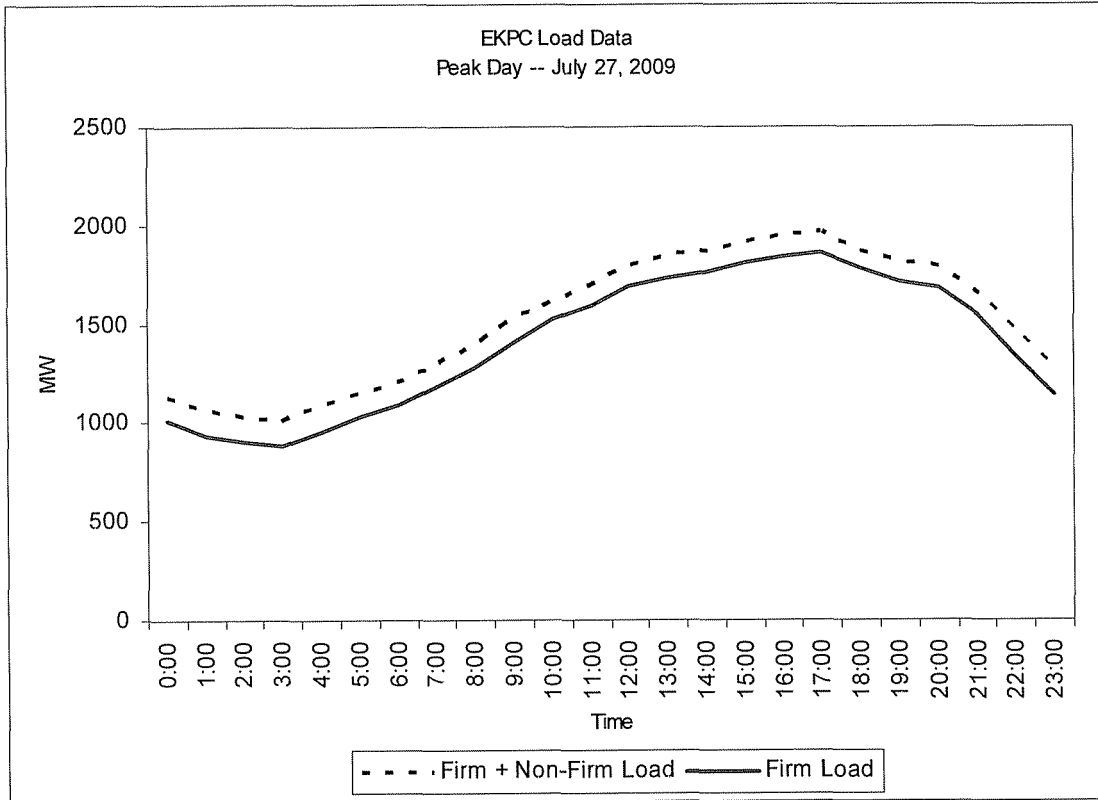
**Request 4.** Load shape curves that show actual peak demands and weather-normalized peak demands (native load demand and total demand) on a monthly basis for the just completed calendar year.

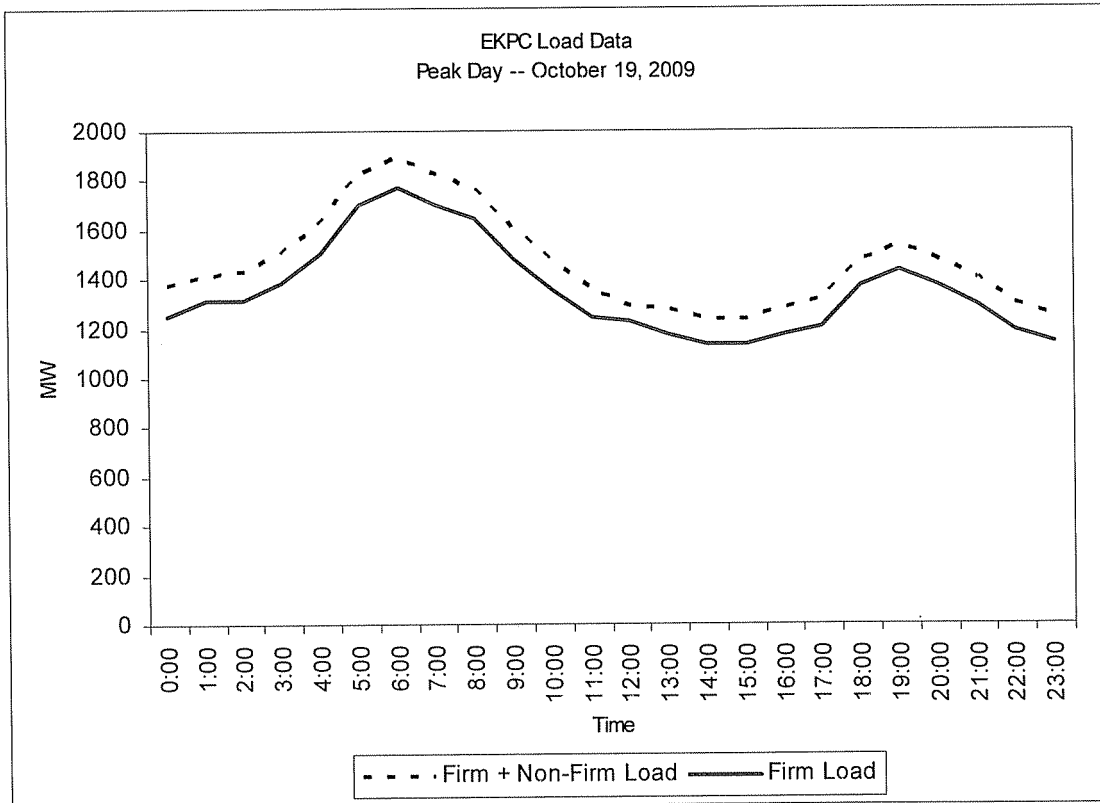
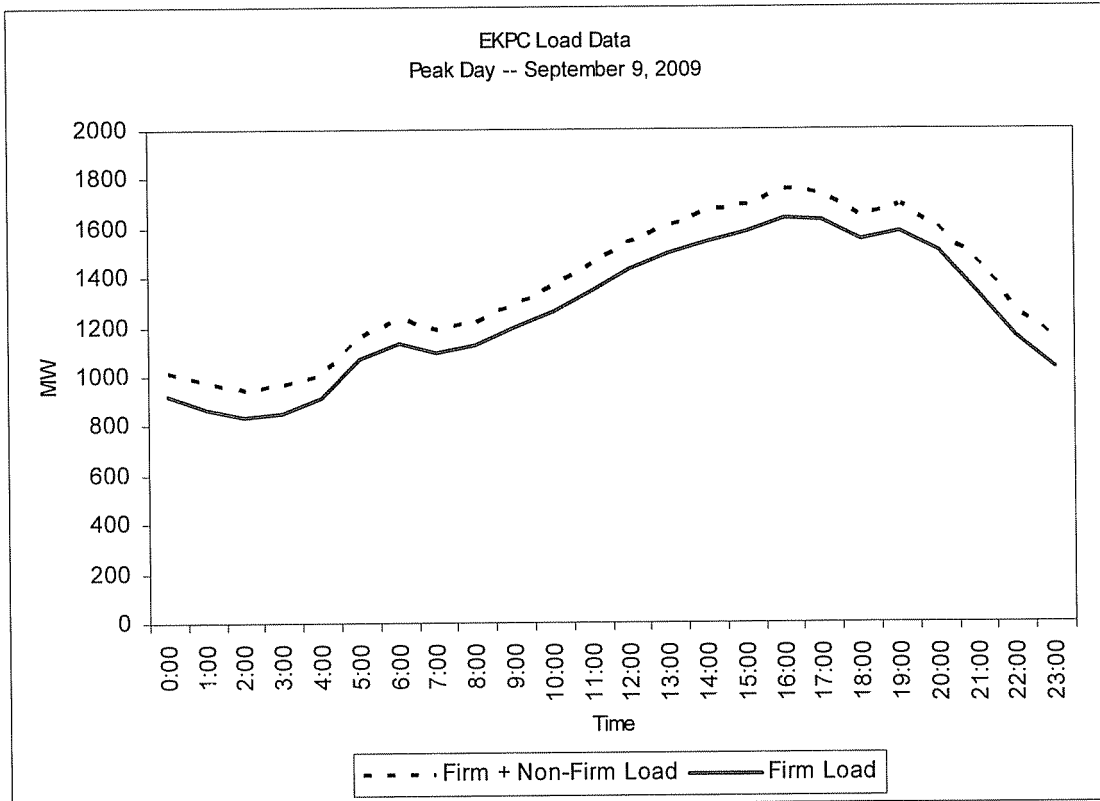
**Response 4.** Actual monthly peak day load shapes are presented on pages 2 through 7 of this response. EKPC makes an analysis to weather normalize the peak hour but EKPC does not weather adjust the peak day load shapes.

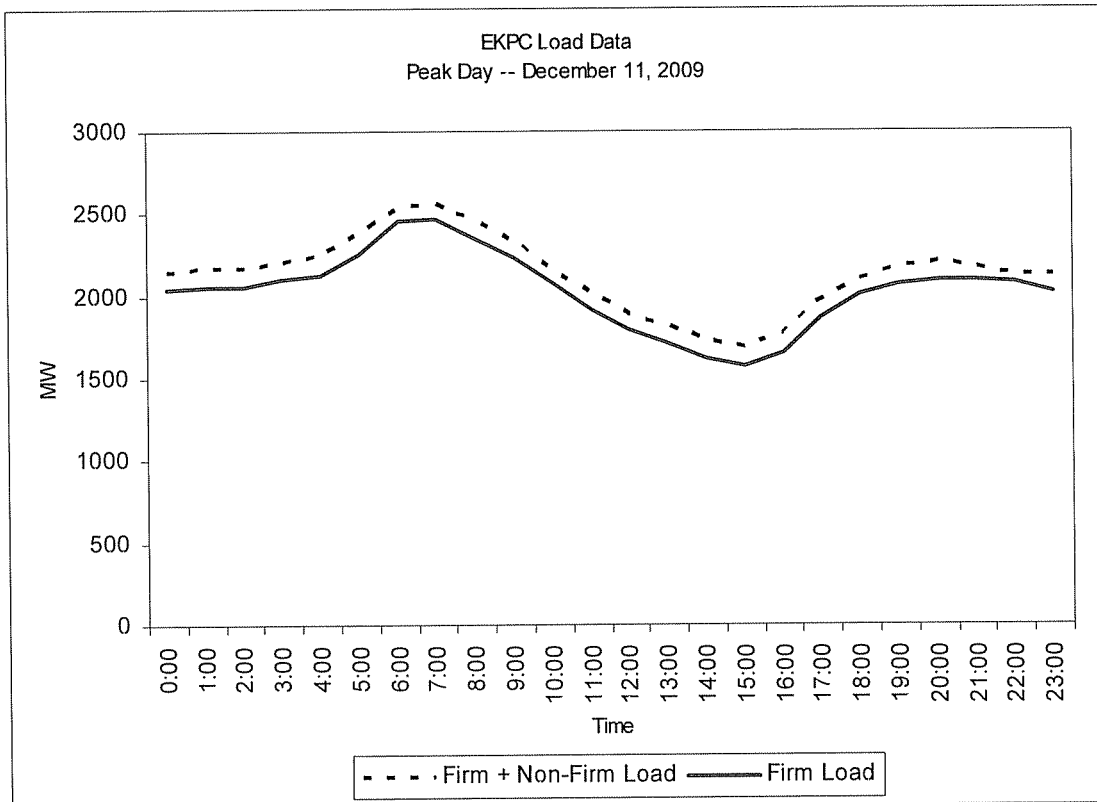
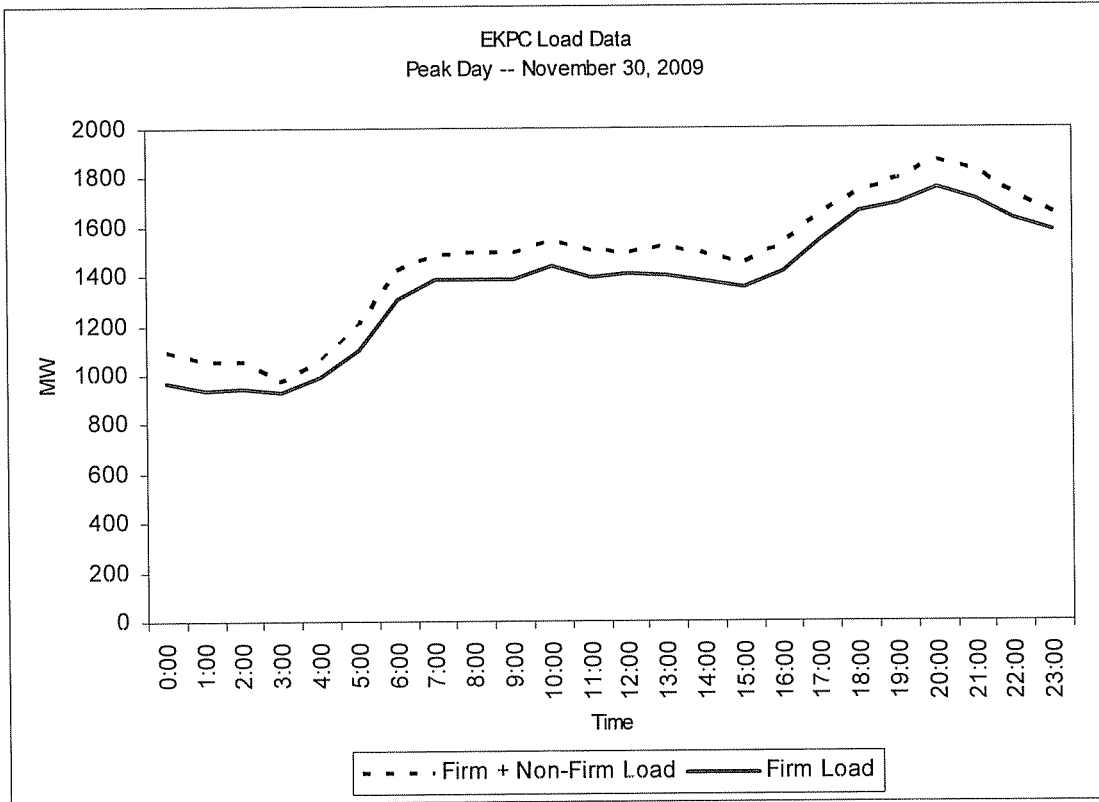
















**EAST KENTUCKY POWER COOPERATIVE, INC.  
PSC ADMINISTRATIVE CASE NO. 387  
ANNUAL RESOURCE ASSESSMENT FILING**

**PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01**

**REQUEST 6**

**RESPONSIBLE PERSON: James C. Lamb, Jr.**

**COMPANY: East Kentucky Power Cooperative, Inc.**

**Request 6.** Based on the most recent demand forecast, the base case demand and energy forecasts and high case demand and energy forecasts for the current year and the following four years. The information should be disaggregated into (a) native load (firm and non-firm demand) and (b) off-system load (both firm and non-firm demand).

**Response 6a.** EKPC prepares a high case and low case forecast to bracket its base case forecast. The ranges are shown in the tables below. These numbers are firm native load only. EKPC does not prepare range forecasts for non-firm native load.

Total Winter Peak Demand (MW)			Total Summer Peak Demand (MW)			Total Requirements (MWh)					
Season	Low Case	Base Case	High Case	Year	Low Case	Base Case	High Case	Year	Low Case	Base Case	High Case
2009-10	2,801	3,029	3,377	2010	2,142	2,406	2,555	2010	11,732,142	13,959,302	14,662,606
2010-11	2,853	3,087	3,465	2011	2,179	2,442	2,608	2011	11,974,953	14,217,198	15,033,161
2011-12	2,894	3,143	3,540	2012	2,204	2,475	2,650	2012	12,200,580	14,511,928	15,384,981
2012-13	2,943	3,215	3,623	2013	2,251	2,529	2,706	2013	12,392,213	14,777,060	15,675,828
2013-14	2,996	3,275	3,713	2014	2,295	2,579	2,769	2014	12,619,800	15,050,207	16,036,745

**Response 6b.** EKPC is projecting no off-system demands.



**EAST KENTUCKY POWER COOPERATIVE, INC.**  
**PSC ADMINISTRATIVE CASE NO. 387**  
**ANNUAL RESOURCE ASSESSMENT FILING**

**PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01**  
**REQUEST 7**

**RESPONSIBLE PERSON:** James C. Lamb, Jr.  
**COMPANY:** East Kentucky Power Cooperative, Inc.

**Request 7.** 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 of the change.

**Response 7.** The target reserve margin currently used for planning purposes is 12%. EKPC has been using a 12% reserve margin for several years, but in 2006 a change was made in how the 12% was used. EKPC had previously added long term resources or resources available all year to meet a 12% reserve margin based on the summer peak. Any additional resources needed to meet the winter peak and provide an adequate level of reserves were purchased on a seasonal or short-term basis. Since firm transmission for importing power has become more difficult to acquire, and power market prices during the winter have increased considerably over the last few years, EKPC has changed to a strategy of adding long-term resources based on a 12% reserve margin applied to the winter peak.



**EAST KENTUCKY POWER COOPERATIVE, INC.**  
**PSC ADMINISTRATIVE CASE NO. 387**  
**ANNUAL RESOURCE ASSESSMENT FILING**

**PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01**

**REQUEST 8**

**RESPONSIBLE PERSON: James C. Lamb, Jr.**

**COMPANY: East Kentucky Power Cooperative, Inc.**

**Request 8.** Projected reserve margins stated in megawatts and as a percentage of demand for the current year and the following 4 years. Identify projected deficits and current plans for addressing these. For each year identify the level of firm capacity purchases projected to meet native load demand.

**Response 8.** The tables below and associated notes show the projected reserve margins, capacity needs, and plans to address the needs.

Year	Reserve Margin <sup>1</sup> (%)		Reserve Margin <sup>1</sup> (MW)		Committed Firm Purchases (MW)		Additional Purchases Needed to Meet Reserve Margin (MW)	
	WIN	SUM	WIN	SUM	WIN	SUM	WIN	SUM
2010	6.7%	25.2%	145	503	35	40	160	0
2011	4.4%	22.3%	49	398	0	0	230	0
2012	5.9%	22.5%	76	376	0	0	190	0
2013	4.2%	19.7%	4	282	0	0	240	0
2014	11.5%	28.8%	222	511	0	0	0	0

Year	Total Firm Purchases (Committed + Needed) Used to Meet Reserve Margin (MW)	
	WIN	SUM
2010	195	40
2011	230	0
2012	190	0
2013	240	0
2014	0	0

## Notes:

1. Reserve margins include existing resources and the following committed resources: Future CTs 1-2, and Smith CFB 1 listed in Response 12. Existing and committed landfill gas generation projects are included. Seasonal purchases, primarily in winter, will likely be needed until these units reach commercial operation.



**EAST KENTUCKY POWER COOPERATIVE, INC.  
PSC ADMINISTRATIVE CASE NO. 387  
ANNUAL RESOURCE ASSESSMENT FILING**

**PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/2001  
REQUEST 11**

**RESPONSIBLE PERSON: James C. Lamb, Jr.  
COMPANY: East Kentucky Power Cooperative, Inc.**

**Request 11.** A list that identifies scheduled outages or retirements of generating capacity during the current year and the following four years.

**Response 11.** Please see scheduled outage information below and through page 6 of this response. Please note there are no retirements of generating capacity anticipated through 2014.

**Dale Unit 1**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**Dale Unit 2**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less



**Dale Unit 3**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**Dale Unit 4**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**J.K. Smith CT1**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**J.K. Smith CT2**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**J.K. Smith CT3**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**J.K. Smith CT4**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**J.K. Smith CT5**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**J.K. Smith CT6**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**J.K. Smith CT7**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**J.K. Smith CT9**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**J.K. Smith CT10**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**Cooper 1**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**Cooper 2**

2010	4 weeks or less
2011	5 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**Spurlock 1**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**Spurlock 2**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**Gilbert 3**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**Spurlock 4**

2010	4 weeks or less
2011	4 weeks or less
2012	4 weeks or less
2013	4 weeks or less
2014	4 weeks or less

**Smith CFB1**

2010	----
2011	----
2012	----
2013	----
2014	4 weeks or less



**EAST KENTUCKY POWER COOPERATIVE, INC.**  
**PSC ADMINISTRATIVE CASE NO. 387**  
**ANNUAL RESOURCE ASSESSMENT FILING**

**PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01**

**REQUEST 12**

**RESPONSIBLE PERSON: James C. Lamb, Jr.**

**COMPANY: East Kentucky Power Cooperative, Inc.**

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

**Response 12.** The following table shows planned baseload and peaking additions to meet native load for the next 10 years.

<b>Project</b>	<b>Capacity Type</b>	<b>In Service Date</b>	<b>Capacity (MW)</b>	<b>Location</b>
Landfill Gas Projects <sup>1</sup>	Baseload	Various	Up to additional 2*	Various
Future CT 1	Peaking	October 2011	98 each (Winter Rating)	Undetermined
Smith CFB 1	Baseload	Forty-Two Months after receipt of final permits.	278	J. K. Smith Site Trapp, KY
Future CT 2	Peaking	October 2018	98 each (Winter Rating)	Undetermined

\* As specified in the IRP 2009





**EAST KENTUCKY POWER COOPERATIVE, INC.**  
**PSC ADMINISTRATIVE CASE NO. 387**  
**ANNUAL RESOURCE ASSESSMENT FILING**

**PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01**

**REQUEST 13**

**RESPONSIBLE PERSON:** **James C. Lamb, Jr.**

**COMPANY:** **East Kentucky Power Cooperative, Inc.**

**Request 13.** The following transmission energy data for the just completed calendar year and the forecast for the current year and the following four years:

**Request 13a.** Total energy received from all interconnections and generation sources connected to the transmission system.

**Request 13b.** Total energy delivered to all interconnections on the transmission system.

**Response 13a & 13b.** The total energy received from all interconnections and from generation sources connected to the EKPC transmission system for calendar year 2009 was 22,881,466 MWh. The total energy delivered to all interconnections on the EKPC system was 9,343,696 MWh.

The forecasted total energy requirements for the EKPC system for 2010 through 2014 are as follows:

2010	13,959,302 MWh
2011	14,217,198 MWh
2012	14,511,928 MWh
2013	14,777,060 MWh
2014	15,050,207 MWh

**Request 13c.** Peak load capacity of the transmission system.

**Response 13c.** The transmission capacity of a grid system changes constantly based on factors like generation dispatch, ambient temperature, load characteristics, contingencies, transfers, etc. EKPC's transmission system is planned and constructed to deliver all of its generation resources to its native load delivery points during forecasted normal summer and winter peak load conditions. EKPC's transmission system is also designed to accommodate an outage of a single transmission facility and/or generating unit. Also, EKPC designs its transmission system to deliver its generation resources to its native load delivery points during "extreme" weather conditions (1-in-10 year temperatures) for summer and winter with all facilities in service.

Other than simulation of imports into EKPC to replace an outage of a single generating unit, the transfers used in the EKPC transmission planning process are those modeled in the NERC MMWG models, which are typically the long-term firm transactions known at the time of the development of the models.

Regional transfer studies have identified limits for north to south transfers that range from 0 MW to 5000 MW, depending on the specific source generators, season, etc. The following facilities have been identified in recent studies and/or during actual operating experience as possible limiting facilities on the EKPC transmission system:

- The Avon 345-138 kV Transformer (EKPC)
- The Avon-Loudon Avenue 138 kV Circuit (EKPC-LGEE)
- The Blue Lick-Bullitt County 161 kV Circuit (LGEE-EKPC)
- The Dale-Three Forks-Fawkes 138 kV Circuit (EKPC)
- The J.K. Smith-Powell County 138 kV Circuit (EKPC)
- The Lebanon-Marion County 138 kV Circuit (LGEE-EKPC)
- The Marion County 138-161 kV Transformer (EKPC)
- The Spurlock-Kenton 138 kV Circuit (EKPC-LGEE)

- The Summershade-Summershade Tap 161 kV Circuit (TVA-EKPC)
- The Wolf Creek-Russell County 161 kV Circuit (TVA-EKPC)

EKPC has constructed facilities to address some of these problems. In particular, the J.K. Smith-West Garrard 345 kV line project, the J.K. Smith-North Clark 345 kV line project, the Cranston-Rowan County 138 kV line project, and the Marion County 161-138 kV transformer upgrade project have mitigated some of these potential problems.

Additionally, the ratings of the Dale-Three Forks-Fawkes 138 kV circuit have been increased to mitigate loading problems on that line. EKPC has implemented dynamic ratings on some highly-loaded facilities to increase available capacity based on actual ambient system conditions.

Scheduled north-south transactions routinely exceed the limitations identified in regional transfer studies. These transactions have periodically overloaded EKPC transmission facilities, and moreover often have the potential to result in overloads in the event of a subsequent contingency.

**Request 13d.** Peak demand for summer and winter seasons on the transmission system.

**Response 13d.**

	<b>Summer</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Date</b>		08/10/09					
<b>Hr.</b>		1700					
<b>Peak Demand (MW)</b>		2,195	2,406	2,442	2,475	2,529	2,579
	<b>Winter</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Date</b>		1/16/09					
<b>Hr.</b>		0800					
<b>Peak Demand (MW)</b>		3,152	2,859*	3,087	3,143	3,215	3,275

\* Represents January 2010 actual winter peak.



**EAST KENTUCKY POWER COOPERATIVE, INC.  
PSC ADMINISTRATIVE CASE NO. 387  
ANNUAL RESOURCE ASSESSMENT FILING**

**PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01**

**REQUEST 14**

**RESPONSIBLE PERSON: James C. Lamb**

**COMPANY: East Kentucky Power Cooperative, Inc.**

**Request 14.** 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 14.** Responses in previous years to this request have updated EKPC's planned transmission expansion for the 2001-2010 period. Since this period is nearly over, EKPC is providing its current transmission expansion plan for the period of 2010-2019. During this period, EKPC expects to make the following transmission improvements for normal system development and load growth to serve native load customers and not to provide for large wholesale power transfers.

- 123 miles of new transmission line (345 kV, 161 kV, 138 kV, and 69 kV)
- 126 miles of transmission line reconductor (69 kV)
- 328 miles of transmission line high-temperature upgrades (161 kV and 69 kV)
  - 9 new transmission substations or upgrades (792 MVA)
  - 9 new transmission switching stations
- 18 new transmission capacitor banks (399 MVAR)
- 17 projects – upgrade terminal facilities and/or line service
- 2 projects - miscellaneous

A detailed list of EKPC's expected transmission facility additions for the 10-year planning horizon (2010-2019) is shown on pages 3 through 12 of this response.

Project Description	Need Date
Replace the existing Dale 138/69 kV, 83 MVA transformer with a 125 MVA transformer. Set the tap at 138 kV.	06/01/10
Rebuild the McKee-Tyner 69 kV line section using 556.5 MCM ACSR TW conductor.	06/01/10
Re-conductor the Munfordville EK-Munfordville KU 69 kV line section using 556.5 MCM ACSR conductor.	06/01/10
Install a 12.245 MVAR, 69 kV capacitor bank at Girdler Substation.	06/01/10
Install a 12.245 MVAR, 69 kV capacitor bank at Hargett Substation.	06/01/10
Install a 16.33 MVAR, 69 kV capacitor bank at Holloway Substation.	06/01/10
Install a 18.37 MVAR, 69 kV capacitor bank at Liberty Church Substation.	12/01/10
Re-size the 3M 69 kV, 9.6 MVAR capacitor bank to 8.4 MVAR	06/01/10
Re-size the Bill Wells 69 kV, 14.4 MVAR capacitor bank to 9.6 MVAR	06/01/10
Re-size the Cedar Grove 69 kV, 10.8 MVAR capacitor bank to 20.41 MVAR	06/01/10
Replace the two(2) assumed 600A disconnects (N55-605,615) at Duro Junction with 1200A disconnects.	06/01/10
Replace the three(3) assumed 600A disconnects at Etown #2 (W5-635) and Tharp Junction (W60-605, 615) with a 1200A disconnects.	06/01/10
Replace the assumed 600A disconnect (W17-635) at the Vine Grove Tap (Rogersville Jct) with a 1200A disconnect.	06/01/10
Construct a 138-69 kV substation at a new site ("Central Hardin") located near Kargle distribution substation, at the crossing point of KU's Hardin County-Hardinsburg 138 kV line and EKPC's Kargle-Stephensburg 69 kV line section.	11/01/10
Close the existing normally-open 69 kV interconnection between EKPC and AEP at Helechawa. Construct a 69 kV switching substation at Helechawa.	12/01/10
Rebuild the Millersburg Jct.-Sideview 69 kV line section using 556.5 MCM ACSR TW conductor.	12/01/10
Increase the maximum operating temperature of the Bardstown Shopping Center Junction-Bardstown Shopping Center 69 kV line section to 167°F.	12/01/10
Increase the maximum operating temperature of the Bass-Creston Junction 69 kV line section to 167°F.	12/01/10
Increase the maximum operating temperature of the Bedford-Milton 69 kV line section to 167°F.	12/01/10
Increase the maximum operating temperature of the Bronston-Bronson Junction 69 kV line section to 167°F.	12/01/10

Increase the maximum operating temperature of the Carpenter-Carpenter Junction 69 kV line section to 167°F.	12/01/10
Increase the maximum operating temperature of the Coburg-Garlin Junction-Coburg Junction 69 kV line section to 167°F.	12/01/10
Increase the maximum operating temperature of the Dravo Mine-Plumville 69 kV line section to 167°F.	12/01/10
Increase the maximum operating temperature of the East Somerset Junction-Norwood Junction 69 kV line section to 167°F.	12/01/10
Increase the maximum operating temperature of the Emanuel KU Junction-Girdler Junction 69 kV line section to 167°F.	12/01/10
Re-size the Helechawa 69 kV, 10.204 MVAR capacitor bank to 20.41 MVAR	12/01/10
Re-size the Mount Olive 69 kV, 7.143 MVAR capacitor bank to 10.204 MVAR	12/01/10
Construct a 9 mile, 69 kV line, using 556.5 MCM ACSR TW conductor, from Big Creek to Goose Rock. Operate the line normally open using an open switch at Goose Rock.	01/01/11
Replace the 100 MVA, 161-69 kV transformer bank at Bullitt County substation with a 150 MVA transformer.	06/01/11
Construct a 138-69 kV substation at a new site ("Webster Road") located near Richardson distribution substation, looping in DEM's Buffington-Hands 138 kV line. Construct approximately 0.5 miles of 69 kV DC line, using 556.5 MCM ACSR, to loop the Richardson-Turkey Foot 69 kV Line into the Webster Road Substation. Construct a 69 kV switching substation at Turkey Foot Junction on the Boone County-Stanley Parker 69 kV circuit.	06/01/11
Re-conductor the Horse Cave tap-EK Munfordville tap 69 kV line section using 556.5 MCM ACSR conductor.	06/01/11
Re-conductor the 266.8 MCM ACSR portion of the Central Hardin-Stephensburg 69 kV line section (556.5 MCM ACSR) and reterminate in a new bay at Stephensburg.	06/01/11
Replace the 1200A wave trap at Spurlock associated with the Spurlock-Kenton 138 kV circuit with a 1600A wave trap.	06/01/11
Construct a 138-69 kV substation at Hebron. Construct approximately 2 miles of 69 kV line, using 556.5 MCM ACSR, from the Hebron Substation to Bullittsville.	08/01/11
Construct an EKPC-AEP 69 kV switching substation at Index Junction ("Morgan County") connecting EKPC's Index-West Liberty line section with AEP's Morehead-Index line section.	12/01/11
Construct a 69 kV switching substation at Hunt Farm Junction.	12/01/11
Increase the maximum operating temperature of the Arkland Junction-KU Lynch 69 kV line section to 167°F.	12/01/11



Increase the maximum operating temperature of the Baker Lane-Holloway 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Bristow Junction-Richardson Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Bullittsville-Burlington Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Campbellsburg-Campbellsburg Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the East Somerset-East Somerset Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Emanuel-Girdler Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Fort Knox Junction-Rineyville Junction 69 kV line section to 284°F.	12/01/11
Increase the maximum operating temperature of the Index-Index Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Knob Lick-McKinney Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Lebanon-Lebanon KU Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the McKinney's Corner-McKinney's Corner Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Reid Village-Sideview 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Rice Station-Rice Station KU Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Stephensburg Vertrees 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Stephensburg-Upton Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Taylorsville-Taylorsville Junction 69 kV line section to 167°F.	12/01/11
Increase the maximum operating temperature of the Treehaven Junction-Van Meter 69 kV line section to 167°F.	12/01/11
Install a 25.51 MVAR, 69 kV capacitor bank at Skaggs Substation	12/01/11
Increase the maximum operating temperature of the Liberty Church Junction-Farley (KU) 69 kV line section to 212°F.	06/01/12

Install a 18.368 MVAR, 69 kV capacitor bank at Fox Hollow Substation	06/01/12
Construct 9.7 miles of 69 kV line using 556.5 MCM ACSR from Keith to Owen County. Install a 69 kV switching substation at Penn, and install terminal equipment at the Owen County Substation.	12/01/12
Construct a 4.1 mile, 69 kV line, using 556.5 MCM ACSR TW conductor, from the Cooper-Denny 69 kV line to Bronston. Operate this line normally-open as a backfeed for the Bronston substation.	12/01/12
Re-conductor the North Springfield section of the Dale-Newby 69 kV double circuit line section using 556.5 MCM ACSR TW conductor.	12/01/12
Increase the maximum operating temperature of the Albany-South Albany 69 kV line section to 167°F.	12/01/12
Increase the maximum operating temperature of the Arkland Junction-Oven Fork Junction 69 kV line section to 167°F.	12/01/12
Increase the maximum operating temperature of the Baker Lane-Holloway Junction 69 kV line section to 275°F.	12/01/12
Increase the maximum operating temperature of the Bluegrass Parkway Junction-Owens Illinois Junction 69 kV line section to 167°F.	12/01/12
Increase the maximum operating temperature of the Booneville-Booneville Junction 69 kV line section to 167°F.	12/01/12
Increase the maximum operating temperature of the Etown EK #1-Tunnel Hill Junction 69 kV line section to 275°F.	12/01/12
Increase the maximum operating temperature of the Fredricksburg Junction-North Springfield 69 kV line section to 167°F.	12/01/12
Increase the maximum operating temperature of the Glendale-Hodgenville 69 kV line section to 212°F.	12/01/12
Increase the maximum operating temperature of the Helechawa-Sublett Junction 69 kV line section to 167°F.	12/01/12
Increase the maximum operating temperature of the Kargle-Etown KU 69 kV line section to 248°F.	12/01/12
Increase the maximum operating temperature of the Loretto-Sulphur Creek 69 kV line section to 167°F.	12/01/12
Increase the maximum operating temperature of the Oven Fork-Oven Fork Junction 69 kV line section to 167°F.	12/01/12
Increase the maximum operating temperature of the Richardson Junction-Turkey Foot 69 kV line section to 167°F.	12/01/12

Increase the maximum operating temperature of the Volga-Volga Junction 69 kV line section to 167°F.	12/01/12
Increase terminal limits of breaker 814 at Avon Substation to prevent rating limitations below transformer thermal capability.	12/01/12
Construct 12.2 miles of 69 kV line using 556.5 MCM ACSR from the Beckton to Bon Ayr to Cave City substation. Add terminal facilities at the Fox Hollow substation to accommodate this new circuit.	06/01/13
Construct a 2nd 69 kV line, using 556.5 MCM ACSR, from Garrard County to Tommy Gooch. Serve the Tommy Gooch substation radially from Garrard County using the new line. Add a 69 kV breaker at Garrard County Substation.	06/01/13
Operate the Goldbug-KU Wofford 69 kV line normally closed.	06/01/13
Increase the maximum operating temperature of the Davis-Fayette 69 kV line section to 284°F.	06/01/13
Install an 8.164 MVAR, 34.5 kV capacitor bank at Gallatin County Substation.	06/01/13
Construct 12.8 miles of 69 kV line using 556.5 MCM ACSR from Coburg to Green County. Construct a 69 kV switching substation at Coburg Junction. Install a 69 kV line breaker at Green County Substation.	12/01/13
Construct 1.2 miles of 345 kV line from the J.K. Smith CT Substation to the J.K. Smith CFB site.	12/01/13
Construct 6.9 miles of 69 kV line using 266.8 MCM ACSR from Oakdale to AEP Jackson. Operate this line normally-open.	12/01/13
Construct 5.6 miles of 69 kV line using 266.8 MCM ACSR from Pine Mountain to KU Bailey Creek. Use this line to normally-serve Pine Mountain.	12/01/13
Construct 4.4 miles of 69 kV line using 266.8 MCM ACSR from Arkland to EON's Lynch-Imboden 69 kV line. Operate this line normally-open.	12/01/13
Install a generator step up (GSU) transformer for J.K. Smith CFB #1 Unit .	12/01/13
Re-conductor the Headquarters-Millersburg Junction 69 kV line section using 556.5 MCM ACSR conductor.	12/01/13
Re-conductor the Brodhead-Three Links Jct 69 kV line section using 556.5 MCM ACSR conductor.	12/01/13
Increase the maximum operating temperature of the Bluegrass Parkway Junction-Woodlawn 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the Bronston #2-Bronston 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the Elliottville-Rowan County 69 kV line section to 167°F.	12/01/13

Increase the maximum operating temperature of the Floyd-Floyd KU Junction 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the Garrard Junction-Goose Rock 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the Garrard KU Junction-Manchester 69 kV line section to 125°F.	12/01/13
Increase the maximum operating temperature of the Griffin-Griffin Junction 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the Jellico Creek-Jellico Creek Junction 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the Keith-Penn 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the Loretto-South Springfield Junction 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the Ninevah-Ninevah KU Junction 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the North Corbin-North Corbin KU Junction 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the North Springfield-South Springfield Junction 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the Oakdale-Oakdale Junction 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the Pelfrey-Pelfrey AEP Junction 69 kV line section to 167°F.	12/01/13
Increase the maximum operating temperature of the South Springfield-South Springfield Junction 69 kV line section to 167°F.	12/01/13
Construct a 161/69 kV substation at a new site (“Clinton County”) located between Snow and Upchurch. Construct a 4.5 mile 69 kV line using 556.5 MCM ACSR between the Snow, Clinton County, Upchurch Distribution Substations. Construct a 9 mile, 161 kV line using 954 MCM ACSR from the Clinton County Substation to the USACE 161 kV switching substation at Wolf Creek. Install 161 kV terminal facilities at Wolf Creek for the line to Clinton County.	06/01/14
Re-conductor the West Bardstown-West Bardstown Junction 69 kV line section (556.5 MCM ACSR).	06/01/14
Reconductor the 266.8 MCM section of the Kargle-Etown KU 69 kV line using 556.5 MCM ACSR conductor.	06/01/14
Re-conductor the Etown-Tunnel Hill Junction 69 kV line section (556.5 MCM ACSR).	06/01/14

Re-conductor the Baker Lane-Holloway Junction 69 kV line section using 556.5 MCM ACSR conductor.	06/01/14
Rebuild the Davis-Fayette 69 kV line using double circuit 138/69 kV construction (556.5 MCM ACSR conductor).	06/01/14
Install a 35.72 MVAR, 69 kV capacitor bank at the EKPC Etown Substation.	06/01/14
Install a second 8.164 MVAR, 34.5 kV capacitor bank at Gallatin County Substation.	06/01/14
Construct a 69 kV, 3-breaker switching substation at Munk Junction. Operate the Renaker-Williamstown 69 kV Line normally closed.	12/01/14
Replace the 100 MVA, 138-69 kV transformer bank at Powell County substation with a 150 MVA transformer. Set the tap at 0.975 P.U.	12/01/14
Re-conductor the Boston Junction-Nelson County 69 kV line section using 556.5 MCM ACSR conductor.	12/01/14
Increase the maximum operating temperature of the Big Bone-Big Bone Junction 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Carson-New Liberty 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Casey County-Liberty Junction 161 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Casey County-Marion County 161 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Cave Run-Cave Run KU Junction 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Chad-Chad KU Junction 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Colesburg-Colesburg Junction 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Eberle-Eberle Junction 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Magnolia-Summersville 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Millers Creek-Millers Creek KU Junction 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Mount Olive-Mount Olive Junction 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Mount Sterling-Reid Village 69 kV line section to 167°F.	12/01/14

Increase the maximum operating temperature of the Oven Fork-Scotia 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Pleasant Grove-Pleasant Grove KU Junction 69 kV line section to 212°F.	12/01/14
Increase the maximum operating temperature of the Russell Springs #1-Russell Springs #2 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Summershade EK-Summershade TVA 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Upton-Upton Junction 69 kV line section to 167°F.	12/01/14
Increase the maximum operating temperature of the Zula-Zula Junction 69 kV line section to 167°F.	12/01/14
Install a 12.245 MVAR, 69 kV capacitor bank at Maggard Substation. Move the Sublett 14.4 MVAR capacitor bank to Magoffin County substation.	12/01/14
Install a 17.858 MVAR, 69 kV capacitor bank at the Taylorsville EKPC Substation.	12/01/14
Increase the terminal ratings associated with the Summershade 161-69 kV transformer bank to match transformer thermal capability.	12/01/14
Construct a 138 kV line from Three links Junction to West Berea using 795 MCM ACSR. Construct a 138/69 kV substation at Three Links Junction.	12/01/15
Construct 3.9 miles of 69 kV line, using 556.5 MCM ACSR, from Beattyville Distribution to Oakdale Junction. Construct a 69 kV switching substation at Oakdale Junction.	12/01/15
Re-conductor Fort Knox Junction-Rineyville Junction 69 kV line section using 556.5 MCM ACSR conductor.	12/01/15
Re-size the Three Links Jct. 69 kV, 16.2 MVAR capacitor bank to 28.06 MVAR.	12/01/15
Increase the maximum operating temperature of the Rineyville Jct.-Smithersville Jct. 69 kV line section to 284°F.	06/01/16
Install a 14.29 MVAR, 69 kV capacitor bank at Knob Lick Substation.	06/01/16
Re-size the East Bernstadt 69 kV, 16.2 MVAR capacitor bank to 30.61 MVAR.	12/01/16
Rebuild the Davis-Nicholasville 69 kV line using double circuit 138/69 kV construction using 556.5 MCM ACSR conductor.	06/01/17
Re-conductor the Lyman B. Williams Junction-Tunnel Hill Junction 69 kV line section (556.5 MCM ACSR).	06/01/17
Install a 38.27 MVAR, 69 kV capacitor bank at Nelson County Substation.	06/01/17
Re-size the Nicholasville 69 kV, 19.8 MVAR capacitor bank to 22.96 MVAR.	06/01/17
Increase the maximum operating temperature of the Etown KU-Tharp Jct. 69 kV line section to 284°F.	06/01/17

Increase the maximum operating temperature of the Stephensburg-Upton Junction 69 kV line section to 212°F.	06/01/17
Construct 8.6 miles of 69 kV line (138 kV construction) using 556.5 MCM ACSR from Mercer County Industrial Park to Van Arsdell. Install a 69 kV switching substation at Bonds Mill Junction.	12/01/17
Construct a 2 <sup>nd</sup> 69 kV line, using 556.5 MCM ACSR, from Plumville to Rectorville Junction. Install a 69 kV breaker at Plumville. Serve the Rectorville load on the existing 266.8 MCM line.	12/01/17
Install a 14.29 MVAR, 69 kV capacitor bank at Campground Substation.	12/01/17
Install a 16.33 MVAR, 69 kV capacitor bank at Homestead Street Substation. Relocate the Slat 20.41 MVAR capacitor bank to Wayne County Substation and re-size it to 28.06 MVAR.	12/01/17
Replace the 600A switch S408-605 at the KU Russell Springs Tap with a 1200A switch.	12/01/17
Re-conductor the Colesburg Junction-Lyman B. Williams Junction 69 kV line section (556.5 MCM ACSR).	06/01/18
Install a 16.837 MVAR, 69 kV capacitor bank at Goodnight.	06/01/18
Install a 15.31 MVAR, 69 kV capacitor bank at Carpenter Substation.	06/01/18
Increase the terminal ratings associated with the Green County-Greensburg (KU) 69 kV line to match or exceed conductor thermal capability.	06/01/18
Construct a 2 <sup>nd</sup> 69 kV line, using 266.8 MCM ACSR, from Bonds Mill Junction to Powell-Taylor Junction. Install a 69 kV breaker at Bonds Mill Junction. Serve the Powell-Taylor load on the new 266.8 MCM line.	12/01/18
Construct a 138 kV line from EKPC's Thelma substation to AEP's Thelma substation. Construct a 138/69 kV substation (100 MVA transformer) at EKPC's Thelma substation. Install the necessary terminal facility additions in AEP's Thelma substation. Install a 69 kV breaker at Thelma Substation to act as a line breaker for the line extending to the AEP Thelma 138-69-46 kV substation.	12/01/18
Re-conductor the Garrard County section of the Dale-Newby 69 kV double circuit line section using 556.5 MCM ACSR TW conductor.	12/01/18
Re-conductor the Norwood Junction-Shopville 69 kV line section using 556.5 MCM ACSR conductor.	12/01/18
Re-conductor the Goddard-Plummers Landing Junction 69 kV line section using 556.5 MCM ACSR conductor.	12/01/18
Re-size the Thelma 69 kV, 16.84 MVAR capacitor bank to 30.61 MVAR	12/01/18
Re-conductor the Boston Junction-Colesburg Junction 69 kV line section using 556.5 MCM ACSR conductor.	06/01/19

Re-conductor the Murphysville-Plumville 69 kV line section using 556.5 MCM ACSR conductor.	06/01/19
Increase the maximum operating temperature of the Glendale-Hodgenville 69 kV line section to 266°F.	06/01/19
Increase the maximum operating temperature of the Bacon Creek Junction-Liberty Church Junction 69 kV line section to 212°F.	06/01/19
Install a 2 <sup>nd</sup> 25.51 MVAR, 69 kV capacitor bank at Shelby County Substation.	06/01/19
Construct a 69 kV line (138 kV construction) from Maggard Substation to Magoffin County Substation using 556.5 MCM ACSR conductor.	12/01/19
Re-conductor the Cynthiana-Headquarters 69 kV line section using 556.5 MCM ACSR conductor.	12/01/19
Re-size the Maggard 69 kV, 12.24 MVAR capacitor bank to 15.31 MVAR	12/01/19
Re-size the Magoffin Co 69 kV, 14.4 MVAR capacitor bank to 16.2 MVAR	12/01/19