

C

February 27, 2007

HAND DELIVERED

Ms. Elizabeth O'Donnell
Executive Director
Public Service Commission
Post Office Box 615
Frankfort, KY 40602

RECEIVED

FEB 27 2007

PUBLIC SERVICE
COMMISSION

Re: PSC Admin. Case No. 387

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission in the above-referenced case ten copies of the Annual Resource Assessment filing of East Kentucky Power Cooperative, Inc., in response to Appendix G of the Commission's Order dated December 20, 2001.

Very truly yours,



Charles A. Lile
Senior Corporate Counsel

Enclosures

Cc: Parties of Record



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FEB 27 2007

PUBLIC SERVICE
COMMISSION

COMMONWEALTH OF KENTUCKY

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**

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 Order dated March 29, 2004. Each response with its associated supportive reference materials is individually tabbed.

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

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01

REQUEST 1

RESPONSIBLE PERSON: James C. Lamb, Jr.

COMPANY: East Kentucky Power Cooperative, Inc.

Request 1. This request has been eliminated as a result of the Order issued by the Commission in March 2004 pertaining to this case.

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

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01

REQUEST 2

RESPONSIBLE PERSON: James C. Lamb, Jr.

COMPANY: East Kentucky Power Cooperative, Inc.

Request 2. This request has been eliminated as a result of the Order issued by the Commission in March 2004 pertaining to this case.

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 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 2006

	Actual (Firm and Non-Firm) (MW)	Weather Adjusted (Firm and Non-Firm) (MW)
January	2,222	2,621
February	2,488	2,469
March	2,115	2,148
April	1,744	1,752
May	1,999	1,989
June	2,114	2,099
July	2,298	2,309
August	2,332	2,333
September	1,652	1,657
October	1,922	1,897
November	2,155	2,170
December	2,735	2,760

Response 3b. EKPC had no off-system demand obligations during the calendar year 2006.

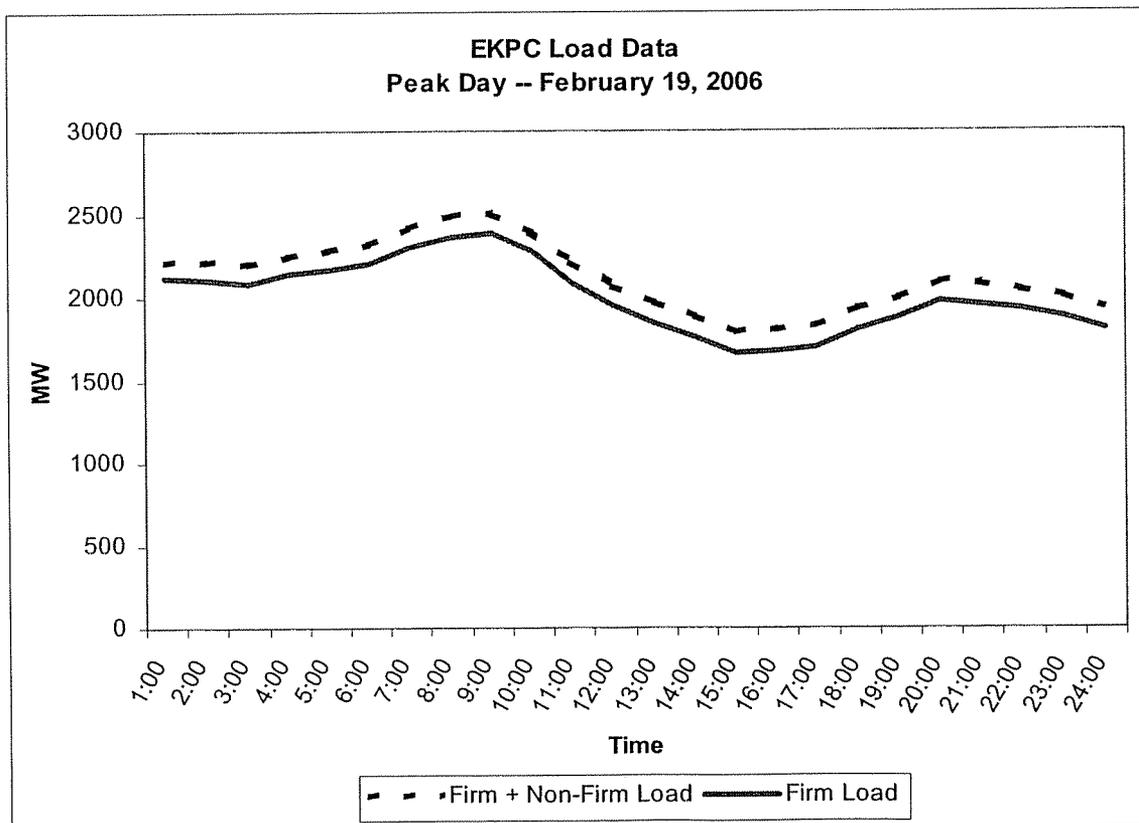
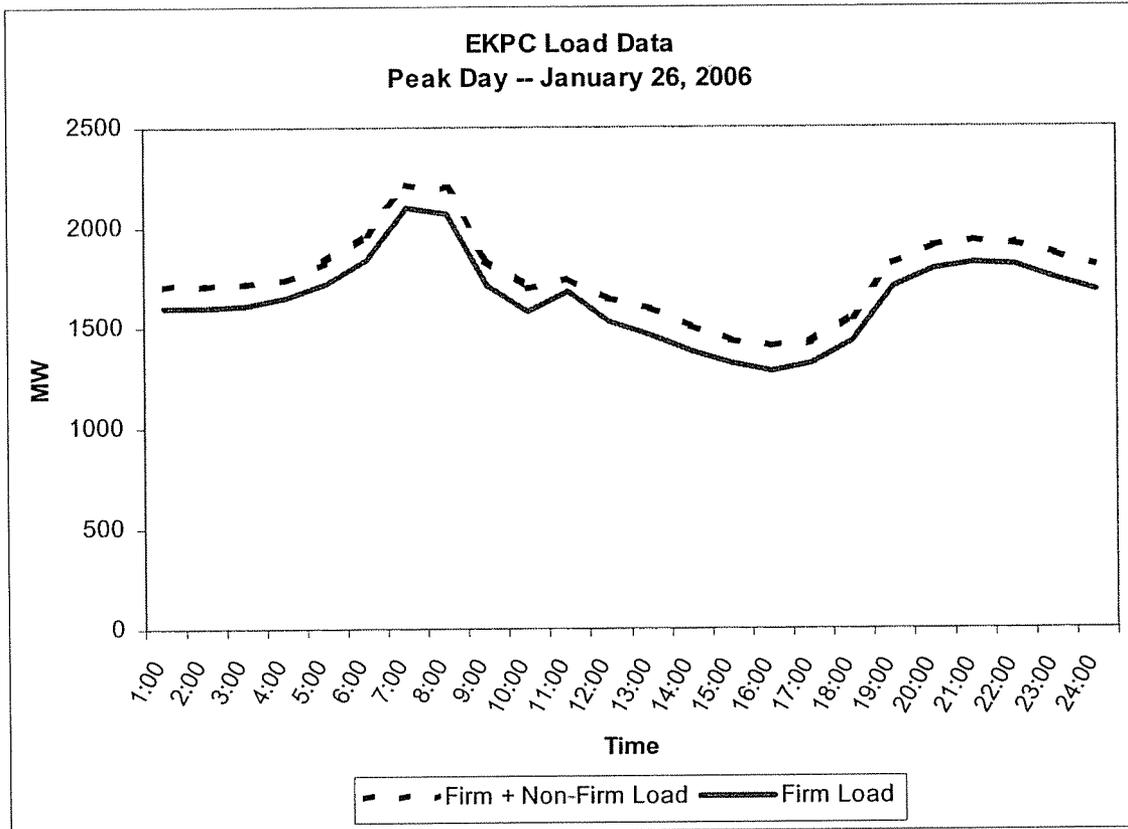
EAST KENTUCKY POWER COOPERATIVE, INC.
PSC ADMINISTRATIVE CASE NO. 387
ANNUAL RESOURCE ASSESSMENT FILING

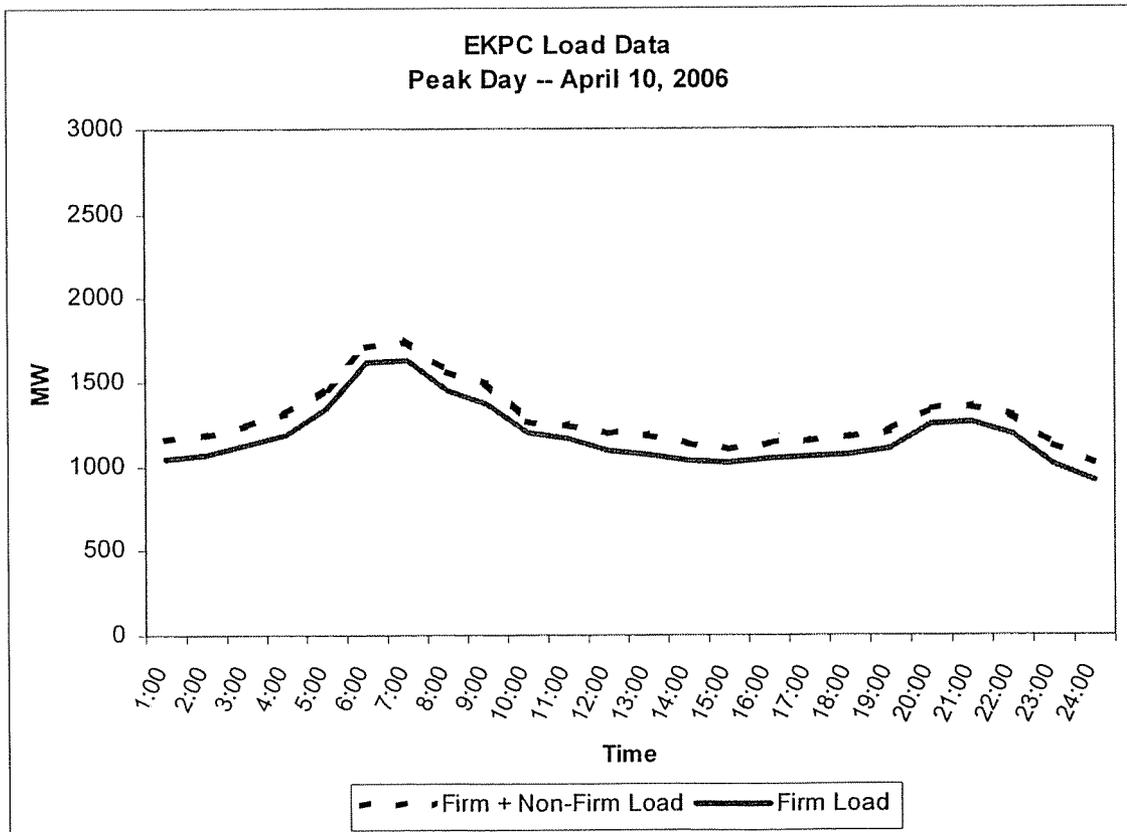
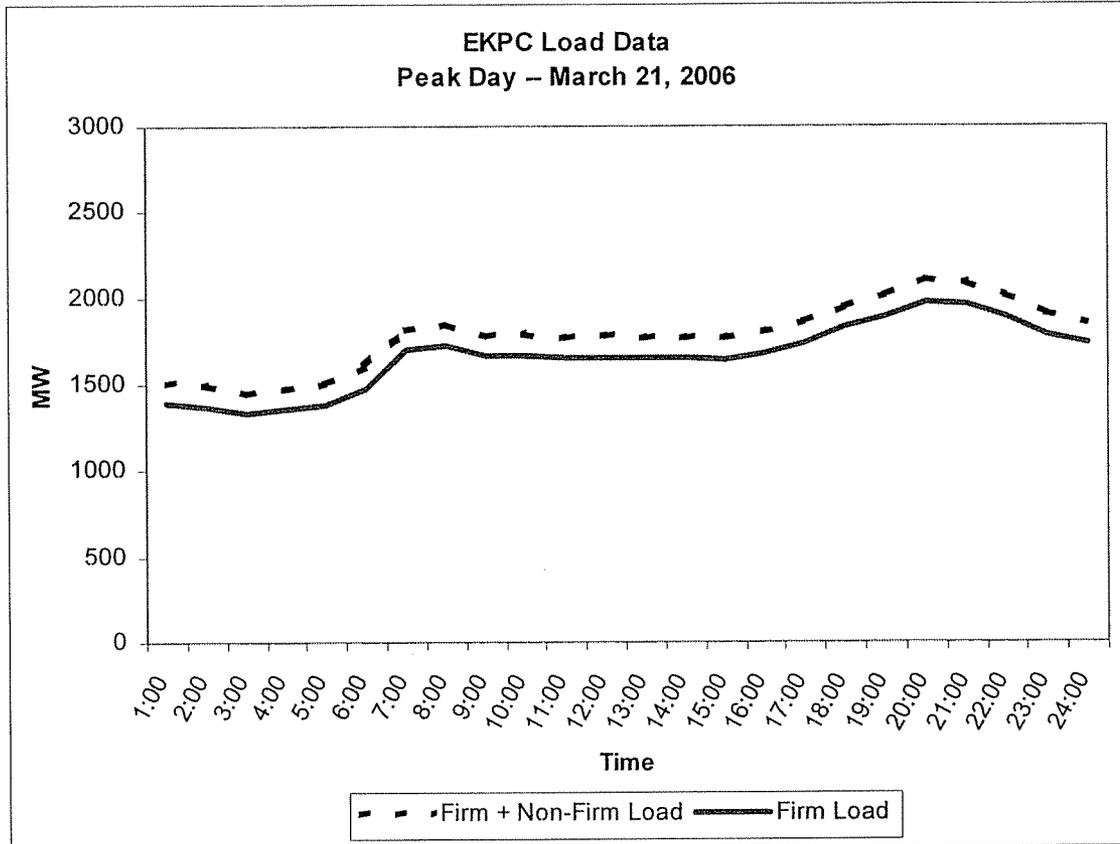
PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 4

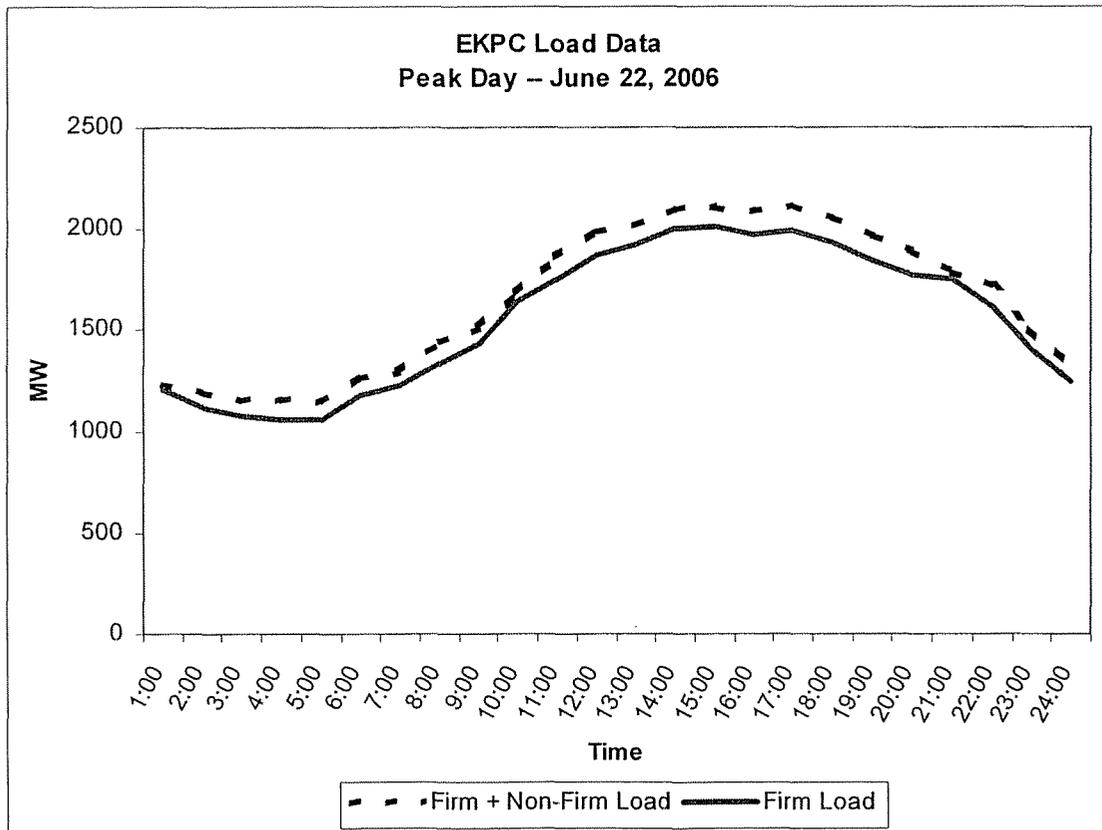
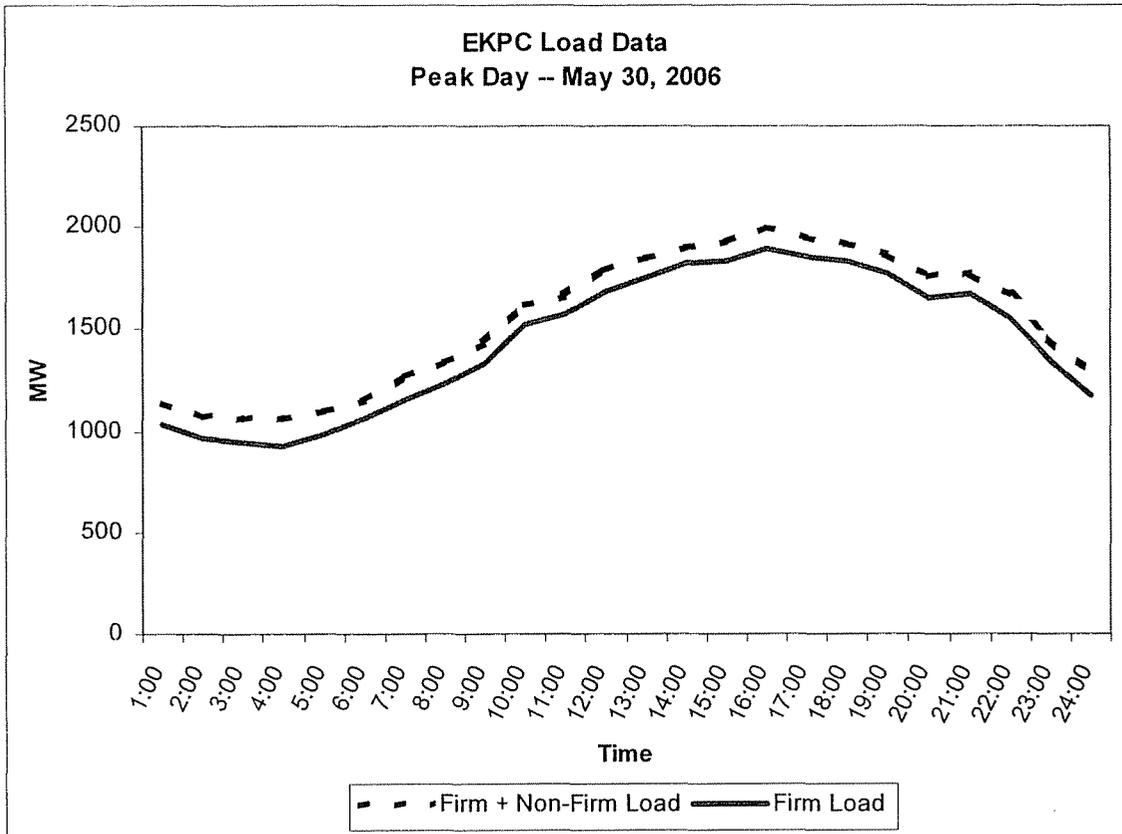
RESPONSIBLE PERSON: James C. Lamb, Jr.
COMPANY: East Kentucky Power Cooperative, Inc.

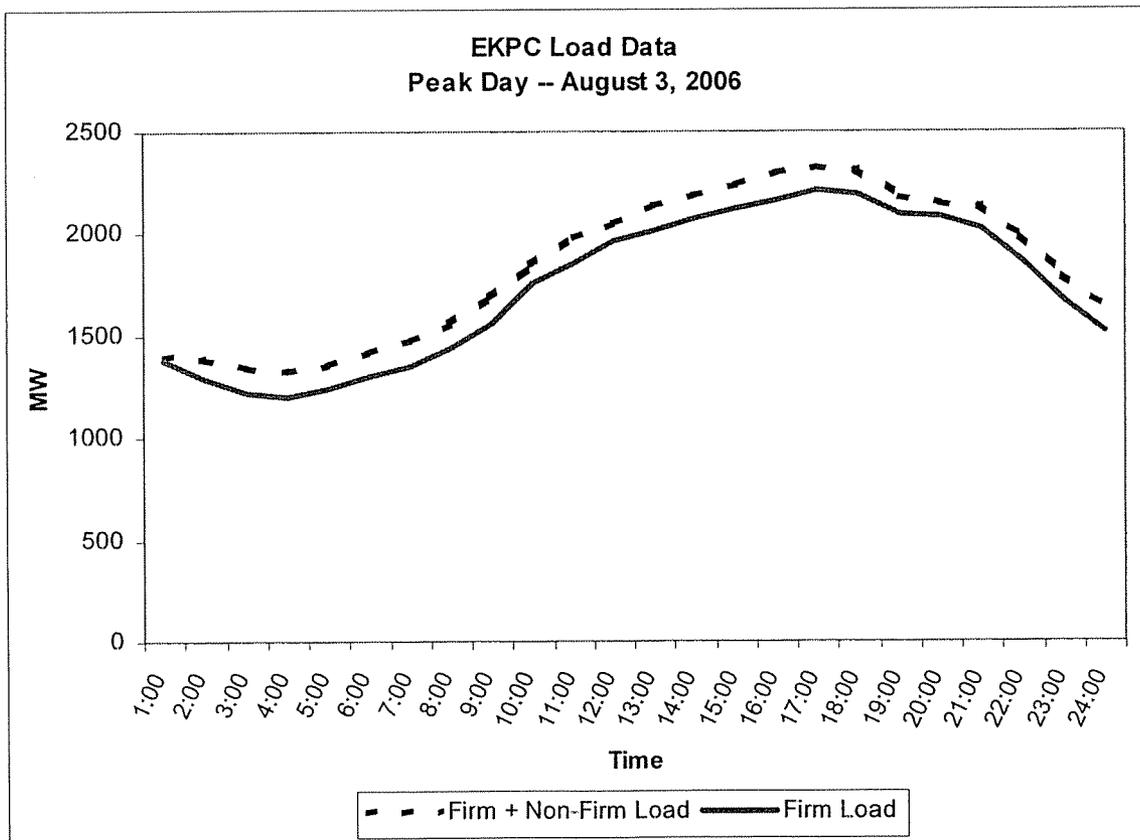
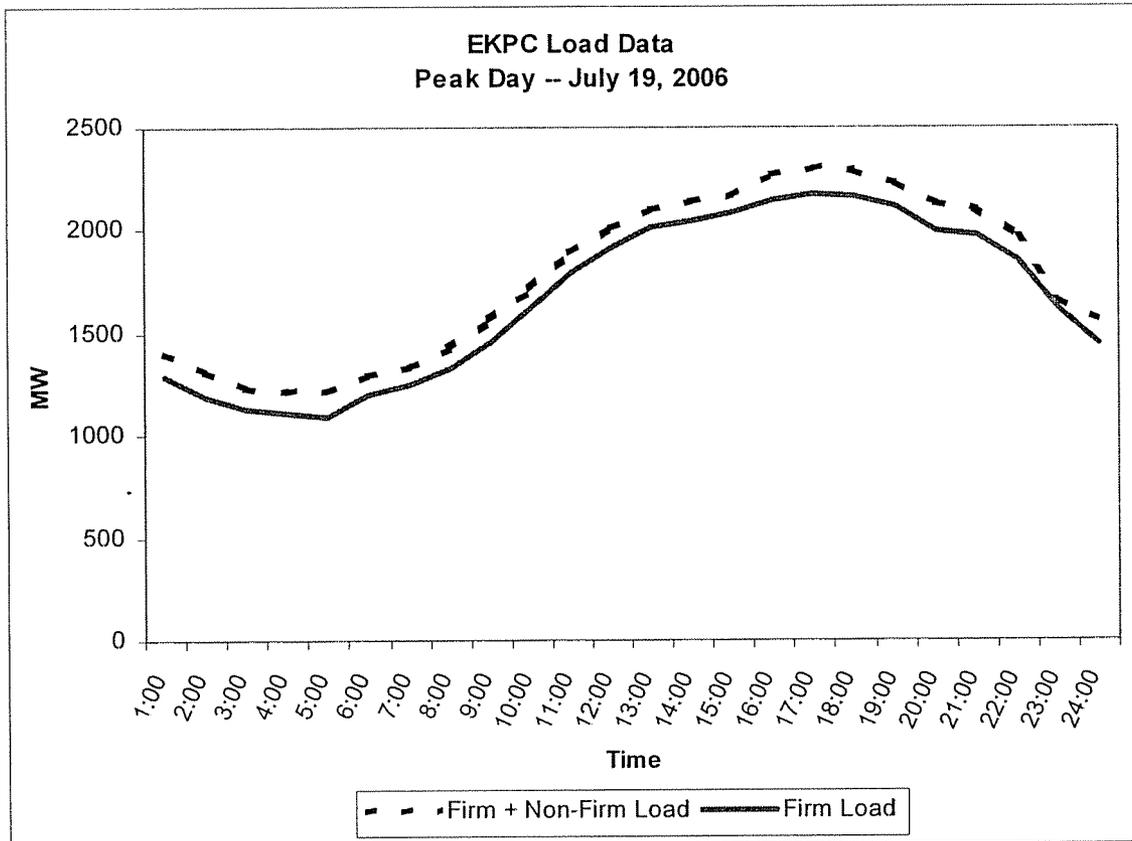
Request 4. Load shape curves that show actual peak demands and weather-normalized peak demands (native load demand and total demand) on a monthly basis for the just completed calendar year.

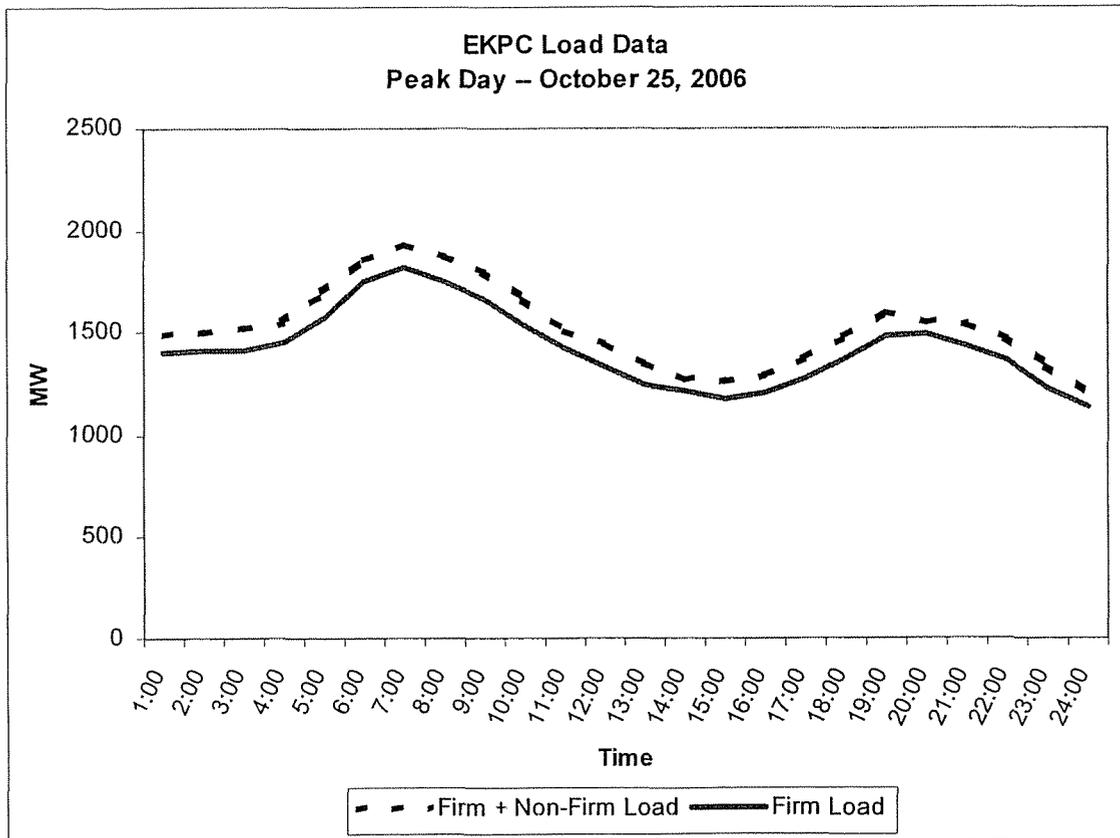
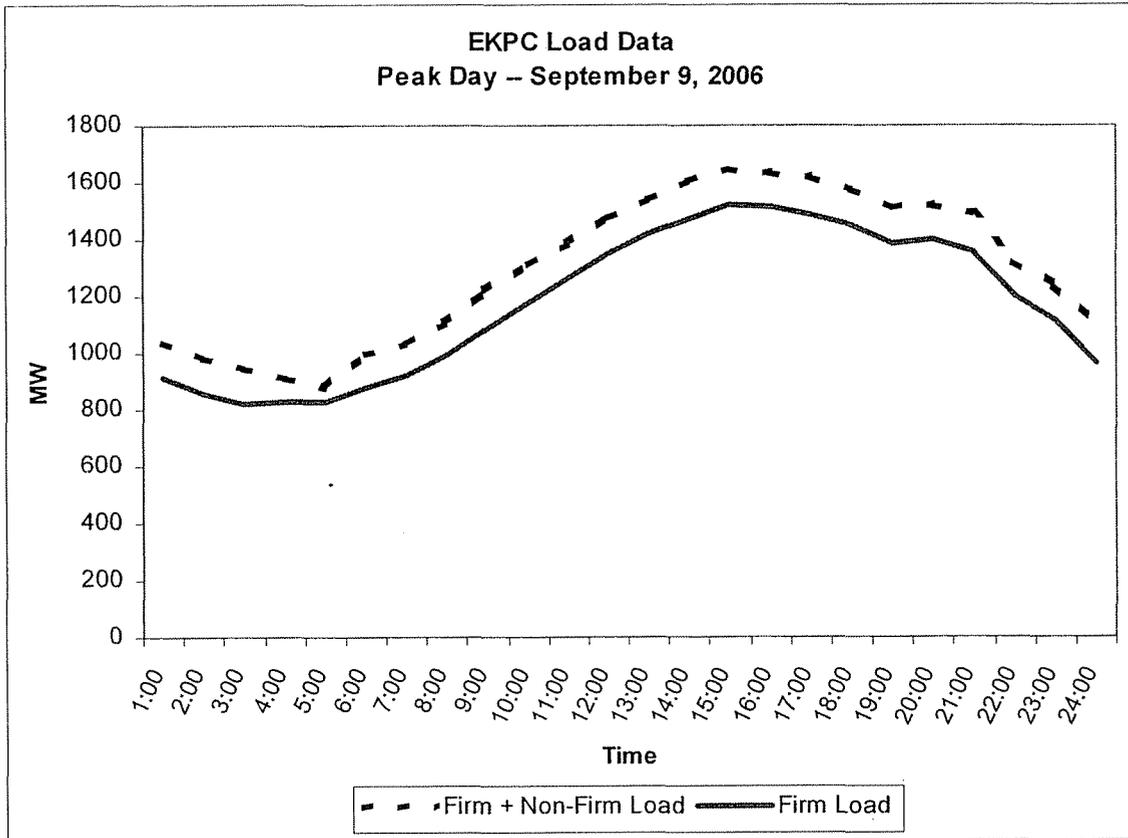
Response 4. Actual monthly peak day load shapes are presented on the attached pages. EKPC makes an analysis to weather normalize the peak hour but EKPC does not weather adjust the peak day load shapes.

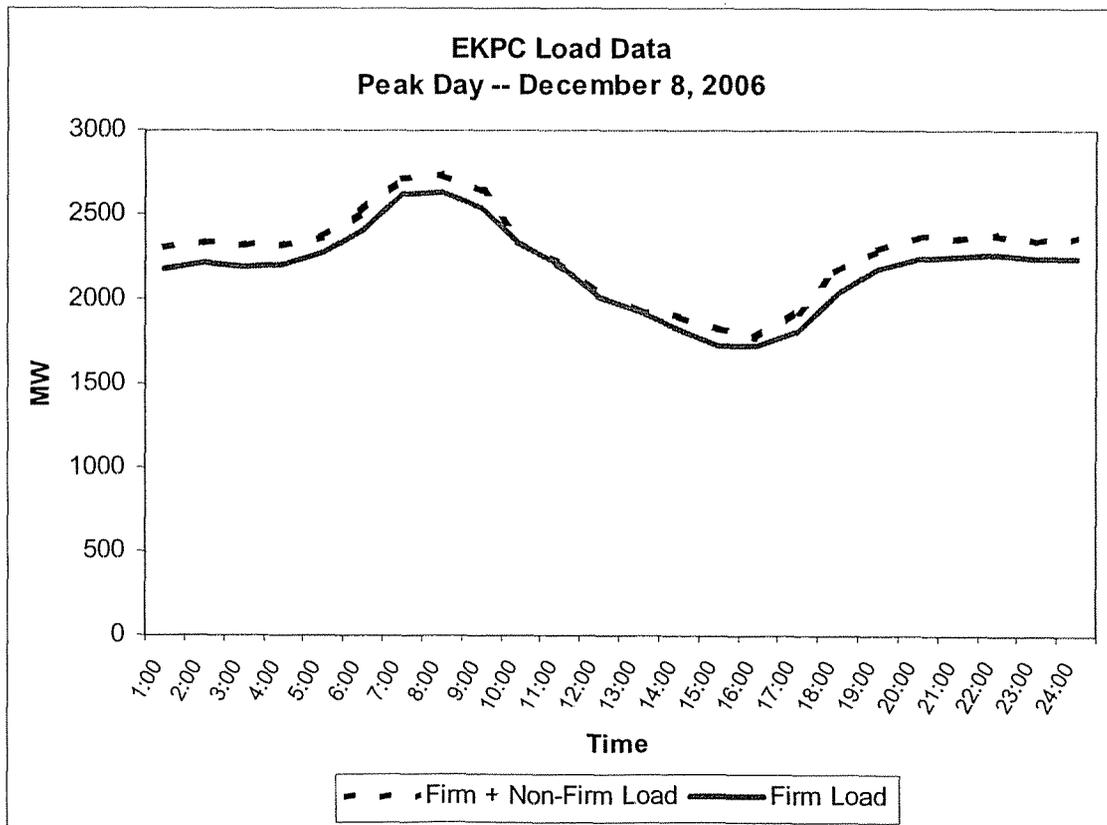
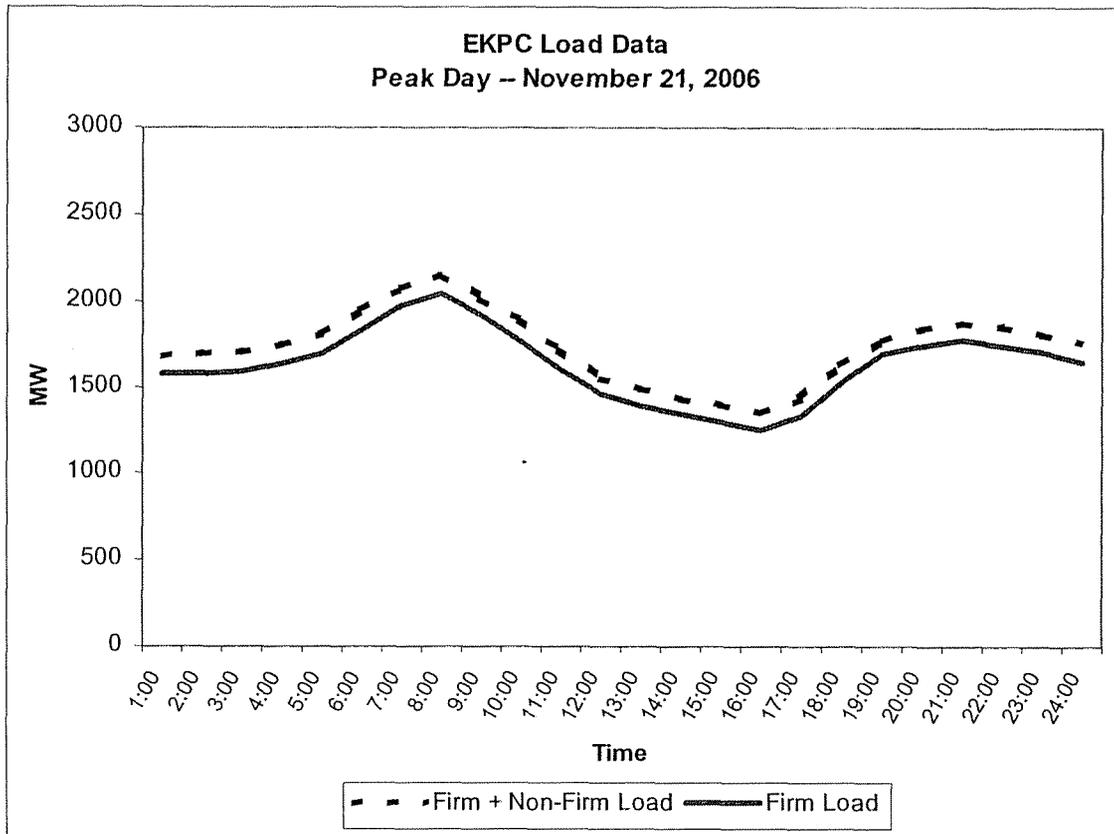












EAST KENTUCKY POWER COOPERATIVE, INC.
PSC ADMINISTRATIVE CASE NO. 387
ANNUAL RESOURCE ASSESSMENT FILING

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 5

RESPONSIBLE PERSON: James C. Lamb, Jr.

COMPANY: East Kentucky Power Cooperative, Inc.

Request 5. This request has been eliminated as a result of the Order issued by the Commission in March 2004 pertaining to this case.

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 table 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
2006 - 07	2,461	2,781	3,134	2007	1,894	2,221	2,490	2007	11,632,503	12,956,841	14,101,331
2007 - 08	2,486	2,856	3,207	2008	1,985	2,282	2,533	2008	12,193,214	13,399,136	14,471,067
2008 - 09	2,563	2,946	3,299	2009	2,051	2,350	2,604	2009	12,530,184	13,769,433	14,870,988
2009 - 10	2,642	3,030	3,393	2010	2,098	2,412	2,671	2010	12,866,193	14,138,674	15,269,768
2010 - 11	2,699	3,102	3,471	2011	2,145	2,465	2,725	2011	13,160,143	14,461,695	15,618,631

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. More detail on this subject was provided in EKPC's 2006 Integrated Resource Plan, filed with the Commission on October 21, 2006, beginning on page 8-65.

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 ¹ (%)		Reserve Margin ¹ (MW)		Committed Firm Purchases (MW)		Additional Purchases Needed to Meet Reserve Margin (MW)	
	WIN	SUM	WIN	SUM	WIN	SUM	WIN	SUM
2007	3.3%	8.7%	91	193	185	40	242	73
2008	-4.6%	10.2%	-131	232	35	40	473	41
2009	-8.5%	23.9%	-251	560	35	40	604	0
2010	4.6%	20.7%	140	498	35	40	222	0
2011	1.0%	27.8%	32	683	0	0	339	0

Year	Total Firm Purchases (Committed + Needed) Used to Meet Reserve Margin (MW)	
	WIN	SUM
2007	427	113
2008	508	81
2009	639	40
2010	257	40
2011	339	0

Notes:

1. Reserve margins include existing resources and the following committed resources: Spurlock 4, Smith CTs 8-9, and Smith CFB 1 listed in Response 12. Existing and committed landfill gas generation projects are included.

EKPC received Certificates of Convenience and Necessity and Site Compatibility for construction of Spurlock 4 (PSC Case 2004-00423) and Smith CFB 1 and Smith CTs 8-12 (PSC Case 2005-00053). Due to Warren RECC's decision to return to TVA as its power supplier, the Commission opened Case No. 2006-00564 to consider the re-certification of the units mentioned above. EKPC's current plans are to build the two baseload units and two of the five CTs originally certificated. The Commission has not yet issued a decision in Case No. 2006-00564. These capacity additions are shown in Response 12, and will bring EKPC's reserve margin up close to its 12% target reserve margin by 2012. 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 12/20/01
REQUEST 9

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

Request 9. This request has been eliminated as a result of the Order issued by the Commission in March 2004 pertaining to this case.

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

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/2001
REQUEST 10

RESPONSIBLE PERSON: James C. Lamb, Jr.

COMPANY: East Kentucky Power Cooperative, Inc.

Request 10. This request has been eliminated as a result of the Order issued by the Commission in March 2004 pertaining to this case.

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: John Twitchell

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. See Below – There are no retirements of generating capacity anticipated through 2011.

Dale Unit 1

2007	4 weeks or less
2008	More than 4 weeks
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

Dale Unit 2

2007	4 weeks or less
2008	More than 4 weeks
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

Dale Unit 3

2007	More than 4 weeks
2008	4 weeks or less
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

Dale Unit 4

2007	4 weeks or less
2008	4 weeks or less
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

J.K. Smith CT1

2007	More than 4 weeks
2008	4 weeks or less
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

J.K. Smith CT2

2007	4 weeks or less
2008	4 weeks or less
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

J.K. Smith CT3

2007	4 weeks or less
2008	More than 4 weeks
2009	More than 4 weeks
2010	4 weeks or less
2011	4 weeks or less

J.K. Smith CT4

2007	4 weeks or less
2008	4 weeks or less
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

J.K. Smith CT5

2007	4 weeks or less
2008	4 weeks or less
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

J.K. Smith CT6

2007	4 weeks or less
2008	4 weeks or less
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

J.K. Smith CT7

2007	4 weeks or less
2008	4 weeks or less
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

J.K. Smith CT8

2007	-----
2008	-----
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

J.K. Smith CT9

2007	-----
2008	-----
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

Cooper 1

2007	4 weeks or less
2008	4 weeks or less
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

Cooper 2

2007	4 weeks or less
2008	More than 4 weeks
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

Spurlock 1

2007	4 weeks or less
2008	4 weeks or less
2009	More than 4 weeks
2010	4 weeks or less
2011	4 weeks or less

Spurlock 2

2007	More than 4 weeks
2008	4 weeks or less
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

Gilbert 3

2007	4 weeks or less
2008	4 weeks or less
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

Spurlock 4

2007	-----
2008	-----
2009	4 weeks or less
2010	4 weeks or less
2011	4 weeks or less

J.K. Smith CFB1

2007	-----
2008	-----
2009	-----
2010	4 weeks or less
2011	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.

Project	Capacity Type	In Service Date	Capacity (MW)	Location
Landfill Gas Projects ¹	Baseload	Various	up to 35 additional	Various
Smith CT 8-9	Peaking	Jun 2009	98 each (Winter Rating)	J. K. Smith Site Trapp, KY
Spurlock 4	Baseload	Apr 2009	278	Spurlock Site Maysville, KY
Smith CFB 1	Baseload	Jun 2011	278	J. K. Smith Site Trapp, KY
Smith CT 10	Peaking	Oct 2011	98 each (Winter Rating)	J. K. Smith Site Trapp, KY
Smith CT 11	Peaking	Oct 2012	98 each (Winter Rating)	J. K. Smith Site Trapp, KY
Smith CT 12	Peaking	Oct 2013	98 each (Winter Rating)	J. K. Smith Site Trapp, KY
New CT 1	Peaking	Oct 2015	98 each (Winter Rating)	Undetermined
New Baseload	Baseload	Oct 2016	278	Undetermined

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: John Twitchell

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.

Forecast of Net Receipts and Deliveries reflect resources in addition to generation required to serve EKPC native load. EKPC does not have forecasted receipts and deliveries resulting from transfers over its transmission system. (See Next Page).

	Actual MWh <u>2006</u>	Forecast MWh <u>2007</u>	Forecast MWh <u>2008</u>	Forecast MWh <u>2009</u>	Forecast MWh <u>2010</u>
Receipts	10,395,250				
Deliveries	9,414,454				
Net Rec. & Deliveries	980,796	1,499,972	1,403,064	709,131	(268,763)
Generation	<u>11,270,491</u>	<u>11,314,104</u>	<u>11,782,922</u>	<u>12,701,737</u>	<u>14,228,983</u>
Load	<u>12,331,272</u>	<u>12,814,076</u>	<u>13,185,986</u>	<u>13,410,868</u>	<u>13,960,220</u>

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 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. 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. Voltage studies have shown that possible voltage collapse on the EKPC system is possible. ECAR cited in its 2005 Summer and 2005/06 Winter Seasonal Assessments of Transmission System Performance transfer limits for north to south transfers from ECAR to TVA that range from 0 MW to 4750 MW, depending on the specific source generators. These reports also indicate that potential voltage collapse on the EKPC system is possible for north to

south transfer levels of 2200 MW to 5000 MW, depending on system conditions. 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 Goddard-Rodburn 138 kV Circuit (LGEE)
- 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 Summershade-Summershade Tap 161 kV Circuit (TVA-EKPC)
- The Wolf Creek-Russell County 161 kV Circuit (TVA-EKPC)

EKPC is presently in the process of constructing facilities to address some of these problems. In particular, the J.K. Smith-North Clark 345 kV Project and the Cranston-Rowan County 138 kV Project will address some of these potential problems. Other facilities are being planned to address several other facility limits identified above.

Scheduled north-south transactions routinely exceed the limitations identified in ECAR's Seasonal Assessments. 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.

Summer	2006	2007	2008	2009	2010
Date	08/03/06				
Hr.	1700				
Peak Demand (MW)	2,332	2,357	2,418	2,486	2,548
Winter	2006	2007	2008	2009	2010
Date	12/08/06				
Hr.	0800				
Peak Demand (MW)	2,735	2,901	2,976	3,066	3,150

**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. During the period 2001-2010, 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.

317 miles of new transmission line (161 kV, 138 kV, and 69 kV)

89 miles of new distribution substation taps (161 kV, 138 kV and 69 kV)

505 miles of transmission line reconductor (138 kV and 69 kV)

42 new transmission substations or upgrades (4200 MVA)

120 new distribution substations (900 MVA)

36 new transmission capacitor banks (492 MVAR)

20 projects – upgrade terminal facilities and/or line service

20 projects - miscellaneous

As a result of planned generation capacity to be added to the EKPC system for native load, EKPC expects to add the following new transmission facilities within the period 2001-2010. Although the additions could have significant effects on transmission capacity, none are required for existing constraints, bottlenecks, or other transmission system problems.

The new facilities are listed below, along with the justification of each facility:

#	Facility	Justification
1	Build a 2.6 mile double circuit 345 kV line to loop the Stuart-Zimmer Line into Spurlock Substation. Completed 12/12/04.	Outlet for additional generation at Spurlock; Provides an EKPC interconnection with three companies (AEP, CIN, DPL).
2	Add a 3 rd 345-138 kV transformer at Spurlock Substation. Completed May 2004.	Outlet for additional generation at Spurlock.
3.	Build 35 miles of 345 kV line to connect the J.K. Smith Substation to the KU Brown-Pineville 345 kV line. Construct a new 345 kV switching substation at the connection point called West Garrard.	Outlet for additional generation at J.K. Smith site.

EKPC’s previous responses to this data request identified the following transmission facility additions as necessary outlets for generation additions:

- The 7.3-mile Cranston-Rowan County 138 kV line
- The 17-mile J.K. Smith-Spencer Road 138 kV line
- The 17-mile J.K. Smith-Avon 345 kV line and the J.K. Smith 345-138 kV Substation
- The 43-mile J.K Smith-Tyner 345 kV line and the Tyner 345-161 kV Substation

These items have been removed from the list of facilities needed for future generation additions for the following reasons:

- The Cranston-Rowan 138 kV line is needed to address existing system issues in the area.
- The J.K. Smith Spencer Road 138 kV line is no longer a recommended outlet based on updated studies.
- The J.K. Smith-Avon 345 kV line has been replaced by a planned 345 kV line from J.K. Smith to North Clark, which is needed to address existing system issues.
- The J.K. Smith-Tyner 345 kV line has been replaced by a planned new 345 kV line from J.K. Smith to KU's Brown-Pineville 345 kV line (Item 3 in the above table).

A detailed list of EKPC's expected transmission facility additions for the short-term planning horizon through the end of 2009, as well as recent completions, is shown beginning on the next page:

PSC Request 14

TRANSMISSION PROJECTS 2004-2009	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
---------------------------------	-------------	-------------------	---------------

NEW TRANSMISSION LINES

Pulaski County - Floyd 69 kV - 4.8 miles 556.5 MCM	Complete	Pulaski	B, C
South Floyd Tap 69 kV - 0.04 miles 556.5 MCM	Complete	Pulaski	B, C
Pulaski County - Norwood 69 kV - 5.2 miles 556.5 MCM	Complete	Pulaski	B, C
Pulaski Co. Tap 161 kV - 6.8 miles 556.5 MCM	Complete	Pulaski	B, C
Keavy - Laurel County 69 kV (Circuit #2) - 0.40 miles 266.8 MCM	3/15/07	Laurel	C, E
Garrard County - Lancaster/Brodhead (KU) 69 kV -- 0.10 miles 556.5 MCM DC (loop in KU 69 kV line)	3/1/07	Garrard	C
Spurlock - Stuart/Zimmer (CIN/DPL) 345 kV -- 3 miles 2-954 MCM DC (loop in 345 kV line)	Complete	Mason, State of Ohio	A, F
Cranston - Rowan County 138 kV - 7.50 miles 795 MCM	May-2007	Rowan	B, C, D
Oneida - Arnold/Delvinta (KU) 161 kV - 7.90 miles 795 MCM	Deleted	Clay, Owsley	C, D
Inland Container - Inland Tap 138 kV - 0.50 miles 954 MCM	Deleted	Mason	A, F
Flemingsburg - Goddard Rebuild 138 kV 9.20 miles	Complete	Fleming	B, C, D
Spurlock - Flemingsburg Trans. Line 138 kV 18 mi. (Carryover)	Complete	Fleming	B, C
WRECC's Bristow - GM 161 kV Trans. Line Eng. Only	Complete	Barren	B, C
Smith - N. Clark 345 kV Transmission Line 17 miles	June-2007	Madison, Clark	B, C
Cynthiana Normally Open 69kV Interconnection Tap and Switch	12/1/07	Harrison	B, C
J.K. Smith 138 kV/345 DC Tie Line	6/1/2007	Clark	B, C
Barren Co. - Oakland- Magna 161 kV 28.29 Miles	Cancelled	Barren, Warren	B, C
General Motors - Memphis Jct. 161 kV 14.96 miles	Cancelled	Warren	B, C
Memphis Jct. - Aberdeen Trans. Line 161 kV 23.48 miles	Cancelled	Warren & Bulter	B, C
Wilson - Aberdeen Trans. Line 161 kV 26.79 miles	Cancelled	Bulter & Ohio	B, C
Beam-Joe Tichenor/W. Bardstown 69 kV 10 miles	9/1/07	Nelson	B, C

NEW TRANSMISSION SUBSTATIONS

Pulaski County 161-69 kV Substation 100 MVA	Complete	Pulaski	B, C
Casey County 161-69 kV Substation 100 MVA	Complete	Casey	C
Inland Tap (EKPC-KU) 138 kV Switching Station	Deleted	Mason	A, F
Goddard 138 kV Switching Station	Complete	Fleming	B, C, D
East Bernstadt 69 kV Switching Substation (EKPC - KU)	Complete	Laurel	C, E
Oneida 161-69 kV Substation 100 MVA	Deleted	Clay	C, D
Aberdeen 161kV Trans. Sub (2Brkrs)	Cancelled	Bulter	C, D
East Bowling Green 161 kV Trans. Sub (1Brkr)	Cancelled	Warren	C, D
J.K. Smith CT Substation 345 kV	6/1/2007	Clark	C, D
Memphis Junction Trans Sub (4 Brkrs)	Cancelled	Warren	C, D
North Clark (Sideview) 345 kV Breaker Station	6/1/2007	Clark	C, D
Salmons Substation 161-69 kV (Warren RECC)	Cancelled	Simpson	C, D
West Bardstown Jct. 69 kV Switching Station	6/8/07	Nelson	C, D
West Garrard 345 kV Transmission Station	6/1/09	Garrard	C, D

TRANSMISSION SUBSTATION MODIFICATIONS

Liberty Jct. Substation add 2-161 kV breakers	Complete	Casey	B, C
Rowan County Substation add 3 -138 kV breakers	Complete	Rowan	B, C, D

TRANSMISSION PROJECTS 2004-2009	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
<u>TRANSMISSION SUBSTATION MODIFICATIONS</u>			
Spurlock substation terminal facility additions & relaying upgrades	Complete	Mason	A
Stuart (DPL) and Zimmer (CIN) relaying upgrades & substation modifications	Complete	State of Ohio	A
Garrard County Substation add 3-69 kV breakers and 2 line exits	3/1/07	Garrard	C
Fall Rock 69 kV 161-69kV Substation –plus Install 3-69kV Brkrs	5/1/08	Clay	C
Dale Station – Rebuild 138 & 69 kV Switchyard	Cancelled	Clark	C
East Bardstown Rebuild 69 kV Switchyard	Cancelled	Nelson	C
Beattyville Distr. – Beattyville Sw. Sta. 69 kV Trans. Line	Deferred	Lee	C
Dale Station – Install New General SVC #2 Feeder	12-7-2007	Clark	C
J.K. Smith 450 MVA Station Modifications	Deferred	Clark	C
J.K. Smith 345-138 kV Transformer – Station Modifications	6/1/07	Clark	C
J.K. Smith #8 and #9 Sub Modifications	6/1/07	Clark	C
Beattyville Substation Switching Add. – 69 kV	Dec-2007	Lee	C
Bullitt County 69 kV Breaker Addition (2 Brkrs.)	Complete	Bullitt	C
Spurlock #4 345 kV Brkr and Terminal Facilities	2/15/2008	Mason	C
Marion County 161 –138 kV – Replace Transformer	12/1/07	Marion	C
Tyner Breaker Addition	5/1/08	Clay	C
<u>TRANSMISSION LINE RECONDUCTOR OR REBUILD</u>			
<u>(69 kV, 556.5 MCM ACSR, reconductor unless otherwise noted)</u>			
Denny - Whitley City - 14 miles	Complete	McCreary, Wayne	B, C
Frenchburg-Maytown Jct. - 10.79 miles	Complete	Menifee, Morgan	C
West Berea - West Berea Jct. - 1.95 miles	Complete	Madison	B
Burkesville Jct. - Summer Shade - 18.89 miles	Complete	Cumberland, Metcalfe	C
Nancy – W. Somerset Jct. - 5.52 miles	Complete	Pulaski	B, C
Summer Shade - W. Columbia Jct. - 23.27 miles	Complete	Adair, Metcalfe	C
Campton - Helechawa - 11.08 miles	Complete	Wolfe	C, G
Colemansville - Four Oaks Jct. - 7.92 miles	Complete	Harrison, Pendleton	B
Colemansville - Renaker - 6.18 miles	Complete	Harrison, Pendleton	B
Grants Lick - Stanley Parker Jct. - 9.94 miles	5/1/07	Campbell, Kenton	B
Nancy - Windsor - 9.27 miles	Complete	Casey, Pulaski	C
Beckton - Parkway - 5.40 miles	Complete	Barren	C
Bonnieville - Munfordville - 8.18 miles	Complete	Hart	C, G
Bowen - High Rock - 6:2 miles	Complete	Powell	G
Avon - Loudon Avenue (KU) 138 kV reconductor or rebuild - 8.72 miles	Deleted	Fayette	A
Inland Container - Spurlock 138 kV - 0.46 miles, 954 MCM ACSS	Deleted	Mason	A, F
KU Kenton - KU Goddard 138 kV rebuild - 22.13 miles, 795 MCM ACSR	Deleted	Fleming, Mason	A
Fayette-Davis-Nicholasville - 7.12 miles	Deferred	Fayette, Jessamine	A
KU Clark County - KU Sylvania 69 kV rebuild - 0.54 miles, 795 MCM ACSR	Hold	Clark	B
High Rock - Zachariah - 4.25 miles	Complete	Powell	G
Avon-Boonesboro North Tap Recond. 138 kV 8.82 mi.	Complete	Clark, Fayette	B, C
Baker Lane-Holloway Jct. Reconductor, 69 kV, 1.28 miles	Cancelled	Fayette, Jessamine	B, C
Fort Knox Jct.-Smithersville Jct. Reconductor - 69 kV, 3.11 miles	May-2009	Hardin	B, C
Lees Lick – Renaker Reconductor – 69 kV, 12.7 mi.	Cancelled	Harrison	B, C

TRANSMISSION PROJECTS 2004-2009	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
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TRANSMISSION LINE RECONDUCTOR OR REBUILD**(69 kV, 556.5 MCM ACSR, reconductor unless otherwise noted)**

Dale - Three Forks Jct. 138 kV Rebuild 4.75 miles	Cancelled	Clark, Madison	B,C
Headquarters - Millersburg Reconductor	Complete	Harrison	B,C
Hillsboro - Peastick 69kV Reconductor, 556.6, 10.51 miles	Deferred	Fleming, Bath	B,C
LGEE's Fawkes Tap - Fawkes KU 138 kv Line Reconductor	5/1/08	Madison	B,C
Tyner - McKee Trans. Line Rebuild 954 MCM 9.3 miles	12/1/2009	Jackson	B,C
Tyner. - North London Rebuild 954 MCM 69kV, 16.71 mi.	5/1/2009	Jackson,Laurel	B,C
W. Bardstown - W. Bardstown Jct. 69kV Recond. W/556 4.50 mi.	5/1/2007	Nelson	B,C
W.Berea - Three Links Reconductor .09 miles	Complete	Madison	B,C
Burkesville – Snow Junction 69kV Reconductor 10.17 miles	12/1/07	Clinton, Wayne	B,C
Hickory Plains- PPG 69kV Reconductor 2.5 miles	12/2/07	Madison	B,C
Bonds Mill Jct. –Clay Lick Jct. – Van Arsdell Rebuild 5.16 miles	5/1/08	Anderson, Mercer	B,C

TRANSMISSION LINE UPGRADES (69 kV Unless Otherwise Noted)

Annvile Jct. - East Bernstadt Upgrade to 212F - 14.54 miles	Complete	Jackson, Laurel	B
Bloomfield - Sinai Upgrade to 167F - 13.4 miles	Complete	Anderson, Nelson	B
Boone Co. - Renaker 138 kV Upgrade to 167F - 41.17 miles	Complete	Boone, Grant, Pendleton, Harrison	B
Bristow Jct. - Turkey Foot Upgrade to 167F – 2.05 miles	Complete	Kenton	B
Creston - Phil Upgrade to 167F - 5.79 miles	Complete	Casey	B
Four Oaks - Four Oaks Jct Upgrade to 167F -0.37 miles	Complete	Pendleton	B
Hunt - Sideview Upgrade to 167F - 15.5 miles	Complete	Clark	B
Liberty Jct. - Liberty KU Tap Upgrade to 167F - 3.47 miles	Complete	Casey	B
Norwood Jct. - Norwood Jct. Upgrade to 167F - 5.28 miles	Complete	Pulaski	B
Pittsburg - Tyner 161 kV Upgrade to 167F - 16.49 miles	Complete	Jackson, Laurel	B
Bass – Creston Upgrade to 167F - 7.38 miles	Complete	Casey	B
Boone Dist. - Bullittsville Upgrade to 167F - 6.4 miles	Complete	Boone	B
New Liberty Jct. - Owen Co Upgrade to 167F - .01 miles	Complete	Owen	B
Russell Springs Tap Upgrade to 167F - 1.2 miles	Deferred	Russell	B
Tunnel Hill Tap Upgrade to 167F - 0.54 miles	Deferred	Hardin	B
Ballard-Hunt Farm Jct. Upgrade to 212 69 kV 8.34 miles	May -2007	Clark, Jessamine	B
Hunters Bottom – Milton 69 kV Line Upgrade	May-2007	Carroll, Trimble	B
Owens Illinois Jct. – Woodlawn 69 kV Line Upgrade	May-2008	Nelson	B
Helechawa-Magoffin County Line Upgrade 69 kV 20.33 mile	Deferred	Magoffin	B
Knob Lick-McKinney's Corner Jct. Line Upgrade, 69 kV, 12.53 miles	May-2007	Metcalfe, Green	B
Clay Lick Jct.-Van Arsdell Line Upgrade, 69 kV, 2.46 miles	Cancelled	Mercer	B
Bedford- Milton Line Upgrade 8.7 miles	Deferred	Trimble	B
Blue Lick - Bullitt County 161 kV Line Upg. (To be done by LGEE)	Complete	Bullitt	B
Magnolia - Summersville Upgrade 167 15 miles	5/1/2007	Larue,Green	B
Radcliff - Vine Grove Line Upgrade .55 miles	Deferred	Hardin	B
Upton Jct - Stephensburg 69kV Line Upgrade, 10.76 miles	5/1/2009	Hardin	B
EK Office – EK Office Jct. Line Upgrade .17 miles	5/1/07	Clark	B
Marion Co. – Casey Co. – Liberty Jct. 161 kV Line Upg. To 125 F	5/1/07	Marion,Casey	B
Bacon Creek Jct. – Farley 69kV Line Upgrade 2.1 miles	5/1/08	Whitley	B
Bacon Creek Jct. – South Corbin Jct. 69kV Line Upgrade	5/1/09	Whitley	B
Blue Grass Parkway Jct. Woodlawn- Fredricksburg Jct. Line Upgrade	5/1/09	Washington	B
Bronston Jct. – Denny 69k V Line Upgrade	5/1/09	Pulaski,Wayne	B

TRANSMISSION PROJECTS 2004-2009	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
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TRANSMISSION LINE UPGRADES (69 kV Unless Otherwise Noted)(Continued)

Hunt Farm Jct. – Perryville 69 kV Line Upgrade	5/1/09	Boyle	B
North Springfield – South Springfield Line Upgrade	5/1/09	Washington	B

TERMINAL FACILITY UPGRADES (69 kV Unless Otherwise Noted)

East Bardstown substation upgrade terminal facilities	Complete	Nelson	B
Goodnight substation upgrade 4/0 Bus terminal facilities	Complete	Barren	B
Crooksville Jct. Line Switch Upgrade (S70-615)	Dec-2006	Madison	B
Dale Line Terminal Upgrade (N35-804)	Complete	Clark	B
Dale Line Switches Upgrade	Complete	Clark	B
Davis Line Switch Upgrade	Complete	Jessamine	B
Duro-Turkey Foot Jct. Line Switch Upgrade (N55-615)	Dec-2006	Kenton	B
Fayette Line Switch Upgrade	Complete	Fayette	B
Hickory Plains Line Switch Upgrade	Dec-2006	Madison	B
Newby Line Switch Upgrade	Complete	Madison	B
Pine Grove Jct. Line Switch Upgrade (E86-605)	Complete	Laurel	B
West Berea Jct. Line Switch Upgrade	Complete	Madison	B
West London Line Switch Upgrade	Complete	Laurel	B
Boone County Line Switch Upgrade	Dec-2006	Boone	B
Devon Line Switch Upgrade	Dec-2006	Boone	B
Duro-Turkey Foot Jct. Line Switch Upgrade (N55-625)	Dec-2006	Boone	B
Avon Upgrade 138kV Switch 345-138 kV to 3000 AMPS	Complete	Fayette	B
Dale - Three Forks Jct -Upgrade Replace 1200 Amp Bkr	Complete	Madison ,Clark	B
Duro Tap - Upgrade (2) 69kV disconnect sw N55-605 to 1200A	12/1/2006	Boone	B
E. Bardstown-Bardstown(KU)-Change meter CT setting 69kV line	Complete	Nelson	B
Fawkes - Replace 1200 metering CT's (S62-834)	12/1/2008	Madison	B
Fawkes - Replace 500 MCM Bus	12/1/2006	Madison	B
Green County- Greensburg (KU)Change meter CT setting	5/1/2006	Green	B
J.K. Smith - Dale Replace 1200 Amp Line Traps	12/1/2008	Clark	B
JK Smith - Fawkes Upgrade - Replace 1200 A Line Traps	12/1/2008	Clark,Madison	B
Marion Co. 138kV Switch to 2000 AMP	Complete	Marion	B
Plumville -Upgrade 69kV disc sw N34-643 to 2000A	Complete	Boone	B
Renaker -Upgrade 69kV disconnect sw N6-643, N6-645	12/1/2006	Harrison	B
Russell Springs KU Tap-Upgrade 69kV disc sw S408-605	12/1/2007	Russell	B
Stanley Parker-Change line CT setting of bkr N43-614 from 600/5	12/1/2006	Kenton	B
Summer Shade (Fox Hollow Line)-Upgrade 69kV disc. switches S11-633, S11-635s	5/1/2007	Metcalfe	B
Summersshade Upgrade 69kV breaker S11-658 to 2000A	12/1/2006	Metcalfe	B
Three Links Jct. - W. Berea Jct. disc sw (1) to 1200A	12/1/2007	Madison,Clark	B
Vine Grove Tap Upgrade 69kV disconnect switch W17-635 to 1200 amps	12/1/2007	Hardin	B

TRANSMISSION PROJECTS 2004-2009	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
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SUBSTATION CAPACITOR BANK ADDITIONS (69 kV)

Loretto 13.78 MVAR	Complete	Marion	C
Magnolia 12.24 MVAR	Complete	Larue	C
Pelfrey 7.14 MVAR	Complete	Carter	C
Russell Springs 18.37 MVAR	Complete	Russell	C
Shelby County 25.51 MVAR	Complete	Shelby	C
Shepherdsville 13.78 MVAR	Complete	Bullitt	C
Van Meter 13.78 MVAR	Complete	Clark	C
Bedford 6.12 MVAR	Complete	Trimble	C
Four Oaks 13.78 MVAR	Complete	Harrison	C
Blevins Valley 10.2 MVAR	Complete	Bath	C
Boone County 30.61 MVAR (W.R. Smoot)	Complete	Boone	C
Maggard 12.24 MVAR	Deferred	Magoffin	C
Millersburg (EKPC) 6.12 MVAR	Complete	Nicholas	C
Sideview 6.12 MVAR	Complete	Bourbon	C
Sinai 13.78 MVAR	Complete	Anderson	C
Slat 21.6 MVAR	Complete	Wayne	C
Mount Olive (Re-size to 10.20 MVAR)	Deferred	Casey	C
East Pine Knot 13.78 MVAR	Deferred	McCreary	C
Norwood 25.51 MVAR (Pulaski)	Complete	Pulaski	C
Tyner 16.33 MVAR	3/15/07	Jackson	C
Knob Lick 14.29 MVAR	Cancelled	Metcalfe	C
Clay Village 10.2 MVAR	Complete	Shelby	C
Tommy Gooch 12.25 MVAR	11/1/07	Garrard	C
Griffin 9.18 MVAR	Complete	Pendleton	C
Milton 10.20 MVAR	Cancelled	Trimble	C
Maytown 10.2 MVAR	Complete	Morgan	C
Shelby County #2 25.51 MVAR	Cancelled	Shelby	C
Hickory Plains 25.51 MVAR Capacitor Bank	Complete	Madison	C
Martin County 12.25 MVAR Capacitor Bank	Complete	Martin	C
Headquarters 8.164 MVAR Capacitor Bank	12/1/08	Harrison	C
Peyton's Store Re-Size from 7.14 MVAR to 13.27 MVAR	12/1/09	Casey	C

TRANSMISSION PROJECTS 2004-2009	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
<u>NEW DISTRIBUTION SUBSTATION TAP LINES</u>			
Jamestown Tap, 161 kV 0.5 miles	Complete	Russell	H
Wiborg 69 Tap 4.31 miles	Complete	McCreary	H
West Bardstown #2 69kV .02 miles	Complete	Nelson	H
Nelson Valley Tap, 69kV 1.4 miles	Complete	Pulaski	H
Rineyville 69kV Tap 6.0 miles	Complete	Hardin	H
Hinkston Tap from KIU .01 miles	Complete	Montgomery	H
Loretto Tap 69 kV 02. Miles	Complete	Marion	H
W. Mt. Washington #2 Tap 69 kV 0.02 miles	Complete	Bullitt	H
Big Creek Tap 69 kV 9.3 miles	11/2/07	Clay	H
Banklick #2 Tap 69 kV 0.02 miles	Deferred	Kenton	H
Columbia #2 Tap 69 kV 0.02 miles	Deferred	Adair	H
Fort Knox #2 Tap 69 kV 0.02 miles	Deleted	Hardin	H
Middle Creek #2 Tap 69 kV 0.02 miles	Deferred	Floyd	H
Radcliff #2 Tap 69 kV 0.02 miles	Deferred	Hardin	H
Sinai #2 Tap 69 kV 0.02 miles (Powell-Taylor)	Deleted	Anderson	H
Turkey Foot #2 Tap 69kV 0.02 miles (Richardson #2)	Deleted	Kenton	H
Cynthiana #2 Tap, 69 kV 0.02 miles	Deferred	Harrison	H
Fayette #3 Tap, 69 kV 0.02 miles	Deferred	Fayette	H
Balltown #2 Tap 69 kV 0.02 miles	Deferred	Nelson	H
Boone County #2 Tap 69 kV 0.02 miles	Deferred	Boone	H
Munfordville #2 Tap 69 kV 0.02 miles	Deferred	Hart	H
Taylorville #2 Tap, 69 kV 0.02 miles	Deleted	Spencer	H
Tharp #2 Tap 69 kV 0.02 miles	Deleted	Hardin	H
Vine Grove #2 Tap 69 kV 0.02 miles	Deleted	Hardin	H
Holloway #2 Tap 69 kV 0.02 miles	Deleted	Jessamine	H
Clay City #2 Tap 69 kV 0.02 miles	Deleted	Powell	H
Williamstown #2 Tap, 69 kV 0.02 miles	Deleted	Grant	H
Grants Lick #2 Tap	Complete	Campbell	H
Oxford Tap, 0.08 mi.	Complete	Scott	H
Plummers Mill Tap, 0.02 mi.	Complete	Fleming	H
Richardson #2 Tap	Complete	Kenton	H
South Point Tap	Complete	Jessamine	H
Southville Tap	Complete	Shelby	H
Upchurch 69 kV Tap, 1.75 mi.	Complete	Clinton	H
Little Mount 161 kV Tap (Carryover)	Complete	Spencer	H
Bull Run 0.5 mile 69 kV Tap	Deleted	Adair	H
Conway 69 kV Tap, 0.25 mile	June-2007	Rockcastle	H
Corinth 69 kV Tap, .2 mi.	Deferred	Grant	H
Deatsville 69 kV Tap, 2.30 miles	August-2007	Nelson	H
Defoe 69 kV Tap, 5 miles	Deferred	Henry	H
Gap of the Ridge 69 kV Tap, 4.5 miles	2/30/07	Wayne	H
Headquarters .02 miles 69 kV Tap	Complete	Harrison	H
Oak Ridge Tap .2 mile 69 kV Tap	Complete	Lewis	H
West Berea Tap	Deferred	Madison	H
Alex Creek 69kV Tap, 1.4 mile, 266.8	3/21/08	Knox,Bell	H
Beattyville #2 Tap 266.8 Cond.	Cancelled	Lee	H
Blue Grass Parkway 69 kV Tap .04 miles	Complete	Nelson	H
Bristow #2 Tap 69kV, 0.1 mile, 266.8	Complete	Kenton	H
Burlington Tap 69kV, .19 mile, 266.8	6/22/07	Boone	H
Campbellsville #2 Tap 266.8 Cond.	5/1/2007	Taylor	H

TRANSMISSION PROJECTS 2004-2009	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
<u>NEW DISTRIBUTION SUBSTATION TAP LINES</u>			
Cedar Grove Industrial Park Tap 161kV, 0.2 miles, 556.5	Complete	Bullitt	H
Downing #2 Tap 69kV, 0.1 mile, 266.8	Complete	Owen	H
Garlin 69kV Tap, 0.5 mile, 266.8	1/1/2008	Taylor	H
Girdler 69kV Tap, 3.5 mile, 266.8	1/1/2008	Knox	H
Headquarters .02 miles 69 kV Tap	Complete	Harrison	H
Inez 69kV Tap Approx. 6 miles	5/1/2007	Martin	H
Laurel Co. Ind. Park #2 69 kV Tap	Complete	Laurel	H
Liberty Church 69kV Tap, 1.8 mile, 266.8	10/15/2007	Knox	H
Pine Grove #2 Tap 69kV, 0.1 mile, 266.8	11/1/2007	Laurel	H
Powell-Taylor 69 kV Tap 4.75 miles	Complete	Anderson	H
Snow Hill 0.2 69kV Tap	6/1/2007	Robertson	H
Webb's Cross Roads .03 mile 69 kV Tap	3/1/2007	Russell	H
West Nicholasville Tap 69kV, .04 mile, 266.8	5/1/2007	Jessamine	H
Woodstock 69kV Tap, 4.4 mile, 266.8	12/1/2007	Pulaski	H
Sterling Tap 138 kV 0.8 miles	11/1/2007	Gallatin	H
Smith Back-up Power Tap	1/4/2008	Clark	H
Flint Ink Tap 0.3 miles	8/1/2007	Hardin	H
Sideview Upgrade Tap Modification	5/1/2008	Bourbon	H
Garrard County Tap 69 kV .04 miles	12/1/2008	Garrard	H
Toddville 69 kV Tap 0.8 miles	12/1/2008	Garrard	H
<u>NEW DISTRIBUTION SUBSTATIONS</u>			
Jamestown 161-12.47 kV, 12 MVA	Complete	Russell	H
Wiborg 69-25 kV, 11.2 MVA	Complete	McCreary	H
Nelson Valley 69-12.47 kV, 11.2 MVA	Complete	Pulaski	H
Berlin Substation Upgrade/Rebuild to 11.2 MVA	Complete	Bracken	H
Rineyville 69-12.47 kV, 11.2 MVA	Complete	Hardin	H
Hinkston Substation Upgrade/Rebuild to 11.2 MVA	Complete	Montgomery	H
Pleasant Grove Substation Upgrade to 15/20/25 MVA	Deferred	Bullitt	H
W. Mt. Washington #2 New Substation Addition 11.2/14 MVA	Complete	Bullitt	H
West Bardstown #2 69-12.47 kV, 11.2 MVA	Deferred	Nelson	H
Headquarters Substation Upgrade/Rebuild to 11.2 MVA	Complete	Bourbon	H
Big Creek 69-12.47 kV, 11.2 MVA	11/2/2007	Clay	H
Banklick #2 New Substation Addition 11.2/14 MVA	Deferred	Kenton	H
Columbia #2 #2 New Substation Addition 11.2/14 MVA	Deferred	Adair	H
Fort Knox #2 New Substation Addition 11.2/14 MVA	Deleted	Hardin	H
Middle Creek #2 New Substation Addition 11.2/14 MVA	Deferred	Floyd	H
Radcliff #2 New Substation Addition 11.2/14 MVA	Deferred	Hardin	H
Sinai #2 New Substation Addition 11.2/14 MVA (Powell-Taylor)	Deferred	Anderson	H
Turkey Foot #2 69-12.47 kV, 11.2 MVA (Richardson#2)	Deferred	Kenton	H
Balltown #2 New Substation Addition 11.2/14 MVA	Deferred	Nelson	H
Beckton New Substation Addition 11.2/14 MVA	Deferred	Barren	H
Boone County #2 New Substation Addition 11.2/14 MVA	Deferred	Boone	H
Cynthiana #2 New Substation Addition 11.2/14 MVA	Deferred	Harrison	H
Fayette #3 New Substation Addition 11.2/14 MVA	Deferred	Fayette	H
Munfordville #2 New Substation Addition 11.2/14 MVA	Deferred	Hart	H
Taylorsville #2 69-12.47 kV, 11.2 MVA	Deleted	Spencer	H
Holloway #2 New Substation Addition 1.2/14 MVA	Deleted	Jessamine	H
Tharp #2 New Substation Addition 11.2/14 MVA	Deleted	Hardin	H

TRANSMISSION PROJECTS 2004-2009	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
<u>NEW DISTRIBUTION SUBSTATIONS</u>			
Vine Grove #2 New Substation Addition 11.2/14 MVA	Deleted	Hardin	H
Clay City #2 New Substation Addition 11.2/14 MVA	Deleted	Powell	H
Williamstown #2 69-12.47 kV, 11.2 MVA	Deleted	Grant	H
Oxford 11.2/14 MVA	Complete	Scott	H
Plummers Mill	Complete	Fleming	H
Upchurch 11.2/14 MVA	Complete	Clinton	H
Little Mount 12/16/29 MVA 161-125.5 kV (Carryover)	Complete	Spencer	H
South Point 11.2/13 MVA, 69-12.5 kV	Complete	Jessamine	H
Bull Run 11.2/14 MVA, 69-25 kV Distr. Substation (NE Columb)	Deleted	Adair	H
Conway 11.2/14 MVA, 69-12.5 kV Distribution Substation	6/9/2007	Rockcastle	H
Corinth 11.2/14 MVA Distribution Substation	Deferred	Grant	H
Deatsville 11.2/14 MVA, 69-12.5 kV Distribution Substation	8/24/2007	Nelson	H
Defoe 11.2/14 MVA, 69-12.5 kV Distribution Substation	Deferred	Henry	H
Gap of the Ridge 11.2/14 MVA, 69-25 kV & 25-12.5 kV Distri. Sub.	2/30/2007	Wayne	H
Oak Ridge Distri. Sub. 11.2/14 MVA 69-25 kV	Complete	Lewis	H
Alex Creek 5.6/6.44 MVA Substation	3/21/2008	Knox, Bell	H
Beattyville #2, 69-12.5 kV, 11.2/14 MVA	Cancelled	Lee	H
Blue Grass Parkway 11.2/14 MVA 69-12.5 kV Distr Sub.	Complete	Nelson	H
Bristow #2 69-12.5kV, 11.2/14 MVA Substation Addition	Complete	Kenton	H
Burlington 15/20/25 MVA 69-12.5 Distr.Sub	6/22/2007	Boone	H
Campbellsville #2 69-12.5 kV, 11.2/14 MVA	Complete	Taylor	H
Cedar Grove Industrial Park Sub 161-12.5kV, 12/16/20 MVA	Complete	Bullitt	H
Downing #2 69-12.5kV, 11.2/14 MVA Substation Addition	Complete	Owen	H
Garlin 11.2/14, 69-12.5 kV MVA Substation	1/19/2008	Taylor	H
Girdler 11.2/14 MVA,69-13.2 kV Substation	1/18/2008	Knox	H
Headquarters 11.2/14 MVA 69-12.5 kV Distribution Station	Complete	Harrison	H
Inez Distribution Site (Purchase Site Only)	Complete	Martin	H
Laurel Co. Ind. Park #2 Station Add. 11.2/14 MVA 69-12.5 kV	Complete	Laurel	H
Liberty Church 11.2/14 MVA, 69--13.2 kV Substation	11/16/2007	Knox	H
Pine Grove #2 69-12.5kV, 11.2/14 MVA Substation Addition	11/1/2007	Laurel	H
Powell-Taylor 11.2/14 MVA, 69-12.5 kV Substation	Complete	Anderson	H
Snow Hill 11.2/14 MVA, 69-25 kV Distribution Station	6/1/2007	Robertson	H
Webb's Cross Roads 11.2 MVA 69-12.5 Distr.Sub	3/1/2007	Russell	H
West Nicholasville #2 69-12.5kV, 11.2/14 MVA Substation Addition	5/1/2007	Jessamine	H
Woodstock 11.2/14 MVA Substation	12/1/2007	Pulaski	H
Smith Back-up Power 69-13.8 kV 11.2/14 MVA	8/1/2007	Clark	H
Sterling Distribution Substation 12/16/20 MVA 138-12.5 kV	10/1/2007	Gallatin	H
Flink Ink 11.2/14 MVA 69-12.5 Distribution Substation	8/10/2007	Hardin	H
Sideview Substation Rebuild	4/4/2008	Bourbon	H
Garrard County 11.2/14 MVA 69-12.5 kV	6/6/2008	Garrard	H
Toddville 11.2/14 MVA 69-25 kV Distribution Substation	3/7/2008	Garrard	H

TRANSMISSION PROJECTS 2004-2009	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
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DISTRIBUTION STATION UPGRADES AND MODIFICATIONS

Cave Run Tap, 2-way, 69 kV switch addition (By KU)	Complete	Rowan	J
Brooks rebuild existing 11.2/14 MVA substation	Complete	Bullitt	J
Loretto conversion to 69-25kV, 11.2 MVA	Complete	Marion	J
Milton Substation Upgrade to 6.44 MVA	Deferred	Trimble	J
South Springfield Substation Upgrade to 11.2 MVA	Deferred	Washington	J
West Berea Substation Upgrade to 15/20/25 MVA	Deferred	Madison	J
Knob Creek Sub station Upgrade to 6.44 MVA	Deferred	Bullitt	J
Southville Upgrade Station to 11.2 MVA	Complete	Shelby	J
Grants Lick #2 Upgrade to 15/20/25 MVA	Complete	Grant	J
Hillsboro Convert to 25 kV	Complete	Fleming	J
Headquarters 11.2/14 MVA 69-12.5 kV Distribution Station	Complete	Harrison	J
Leon Upgrade, 11.2 MVA	Complete	Carter	J
McKinney Corner Upgrade, 11.2 MVA	5/1/2008	Green	J
Boone Sub. Upg. to 15/20/25 MVA (Phase I & 2)	Complete	Boone	J
Stanton Box/Circuit Addition	11/15/2007	Powell	J
Phil Substation 12.5 Box Addition	5/10/2007	Casey	J

MISCELLANEOUS DISTRIBUTION ADDITIONS

Distribution Capacitors	Complete	--	K
Change-Out 10-69 kV Breakers	Complete	--	K
Change-Out 1-138 kV Breaker	Complete	--	K
Change-Out 6-69 kV Breakers	Complete	--	K
Distribution Capacitors-2006	Complete	--	K

TRANSMISSION PROJECTS 2004-2009	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
<u>MISCELLANEOUS TRANSMISSION ADDITIONS</u>			
Avon Trans. Sta. -Digital Fault Recorder	12/31/2007	Fayette	B
Bonnieville 69 kV Install new Relay Panels	12/1/2007	Hart	B
Boone 69kV Relay Replacement	12/1/2008	Boone	B
Bullitt County Digital Fault Recorder	12/1/2008	Bullitt	B
Cooper 69 kV Install new Relay Panels	12/1/2007	Pulaski	B
Cooper Switchyard -Digital Fault Recorder	12/31/2007	Pulaski	B
Dale Station 138 kV Switchyard Monitoring	12/31/2008	Clark	B
Dale Station Upgrade- 3- 138kV Breakers	12/31/2007	Clark	B
Dale-Replace Sw., Main Bus, Lightning, Arrester, Etc	12/31/2007	Clark	B
Denny 69 kV\ Install new Relay Panels	12/1/2007	Wayne	B
Gilbert GSU Spare Transformer	12/1/2008	Mason	B
Goddard -Replace Goddard 69 kV Line Panels	12/31/2007	Fleming	B
Green County 69 kV Relay Relplacement	12/1/2007	Fleming	B
Hardin County Landfill - Plant GSU, Reclosers & Meter Add.	Complete	Green	H
Hope 69 kV Install new Relay Panels	12/1/2007	Hardin	B
Leon 69 kV Install new Relay Panels	12/1/2007	Powell	B
Marion County - 161 kV Install new Relay Panels	12/1/2007	Carter	B
McCreary County Digital Fault Recorder	12/1/2007	Marion	B
Pendleton County Landfill - Plant GSU, Reclosers & Meter Add.	2/1/2006	McCreary	H
Powell County 69 kV Relay Replacement	12/1/2007	Pendleton	B
Renaker 138 kV Install new Relay Panels	12/1/2007	Powell	B
Renaker 69kV Switchyard- Replace Switches and Main Bus	12/1/2007	Harrison	B
Replace Obsolete Relays (5 Locations)	Complete	-----	B
Skaggs 69 kV Relay Replacement	12/1/2007	Lawrence	B
Somerset 69 kV Switchyard - Repl. Sw. & Main Bus	12/1/2007	Pulaski	B
Somerset 69 kV Breaker Replacements (4) 69 kV	Complete	Pulaski	B
Somerset 69 kV Relay Replacement	Complete	Pulaski	B
Summersshade 69 kV Relay Replacement	Complete	Metcalfe	B
Summersshade -Replace 161 kV Line Panels	12/1/2008	Metcalfe	B
Tyner 161/69 kV - Install New Relay Panels	12/1/2007	Jackson	B
Tyner 69kV Switchyard-Replace Switches and Main Bus	12/1/2006	Jackson	B

Need Category--Description

- A Generation outlet or required facility to integrate new generating units(s)
- B Eliminate potential thermal overload(s) for normal or single contingency outage conditions
- C Eliminate Potential low voltage level(s) for normal or single contingency outage conditions
- D Reduce MW – mile outage exposure to switched circuit
- E Reduce MW-mile outage exposure to switched circuit.
- F Improve transient stability margin at generating plant or generating unit(s).
- G Reduce losses on line section.
- H New member system delivery point
- J Upgrade member system delivery point
- K Power factor correction