



EAST KENTUCKY POWER COOPERATIVE

RECEIVED

MAR 31 2014

PUBLIC SERVICE
COMMISSION

March 31, 2014

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).

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 2013 Annual Resource Assessment for East Kentucky Power Cooperative, Inc. ("EKPC")

If you have any questions, please call me.

Very truly yours,

A handwritten signature in black ink, appearing to read 'P. Woods'.

Patrick C. Woods
Director, Regulatory and Compliance Services

Enclosures

4775 Lexington Rd. 40391
P.O. Box 707, Winchester,
Kentucky 40392-0707

Tel. (859) 744-4812
Fax: (859) 744-6008
www.ekpc.coop

A Touchstone Energy Cooperative

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:

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

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)	
CAPACITY AND TRANSMISSION)	PSC ADMINISTRATIVE
SYSTEM)	CASE NO. 387

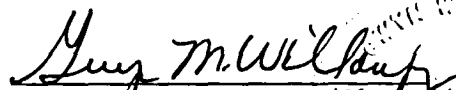
CERTIFICATE

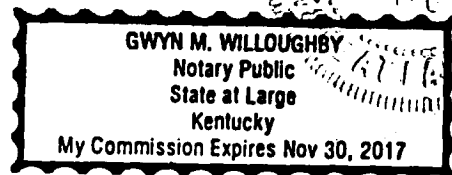
STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Darrin W. Adams, 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 3rd day of March, 2014.


Notary Public #500104



COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

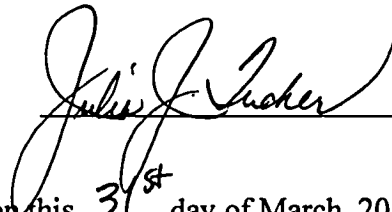
In the Matter of:

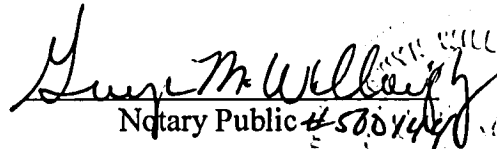
A REVIEW OF THE ADEQUACY)
OF KENTUCKY'S GENERATION) PSC ADMINISTRATIVE
CAPACITY AND TRANSMISSION) CASE NO. 387
SYSTEM)

CERTIFICATE

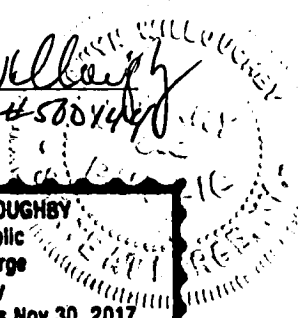
STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Julia J. Tucker, being duly sworn, states that she 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 her knowledge, information and belief, formed after reasonable inquiry.


Subscribed and sworn before me on this 31st day of March, 2014.


Notary Public #58044

GWYN M. WILLOUGHBY
Notary Public
State at Large
Kentucky
My Commission Expires Nov 30, 2017



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: Julia J. Tucker

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 2013

	Actual (Firm and Non- Firm) (MW)	Weather Adjusted (Firm and Non- Firm) (MW)
January	2,582	2,784
February	2,551	2,577
March	2,388	2,441
April	1,829	1,853
May	1,844	1,842
June	2,095	2,062
July	2,190	2,190
August	2,140	2,201
September	2,133	2,131
October	1,898	2,040
November	2,285	2,264
December	2,468	2,615

Response 3b. EKPC had no off-system demand obligations during the calendar year 2013.

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

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01

REQUEST 4

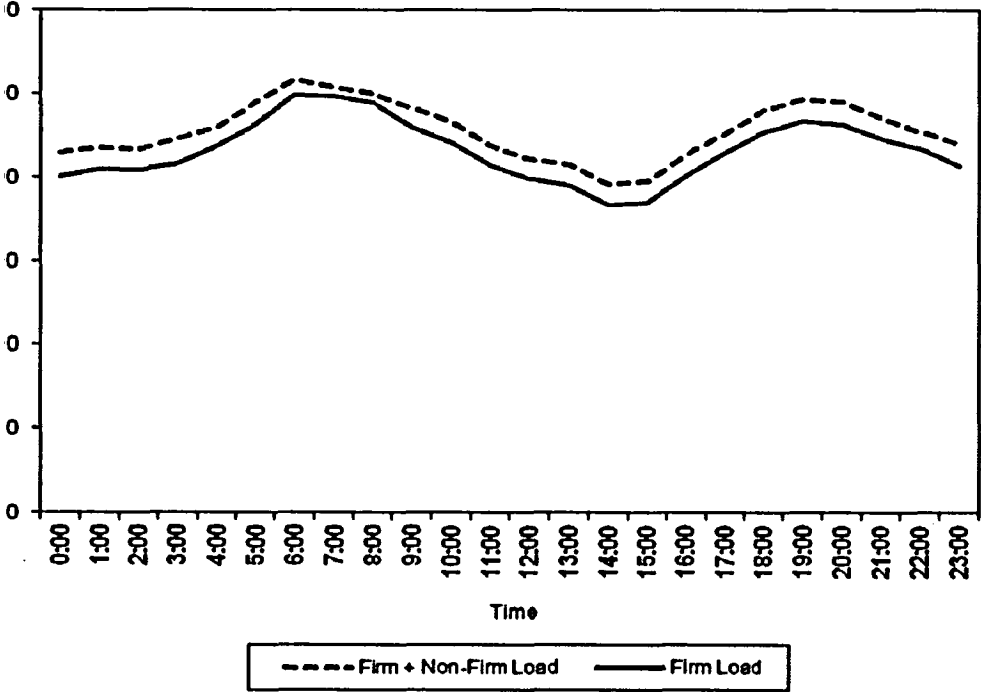
RESPONSIBLE PERSON: Julia J. Tucker

COMPANY: East Kentucky Power Cooperative, Inc.

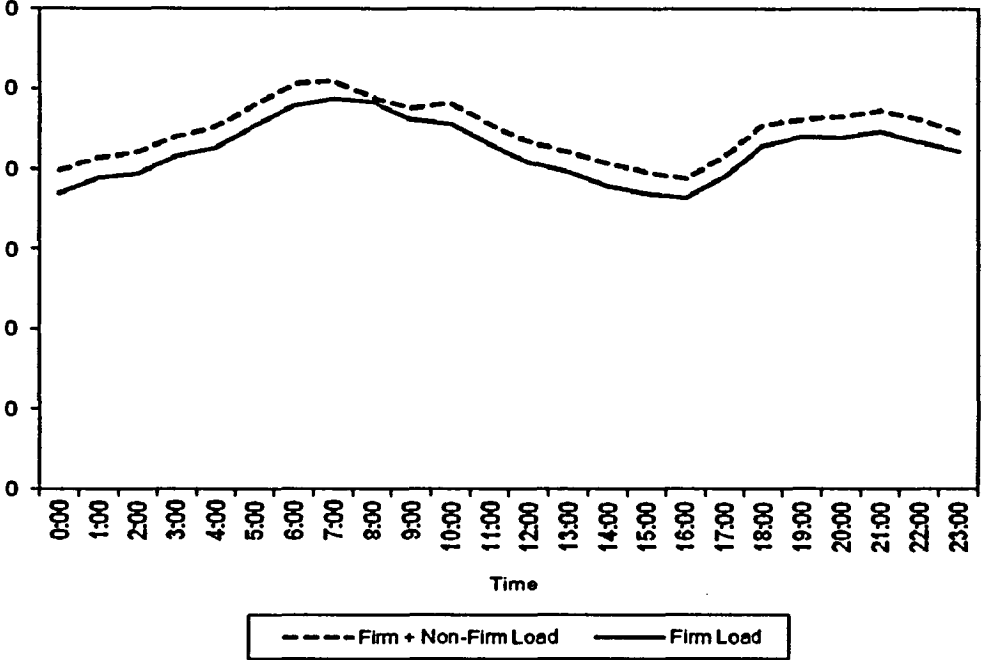
Request 4. Load shape curves that show actual peak demands and weather-normalized peak demands (native load demand and total demand) on a monthly basis for the just completed calendar year.

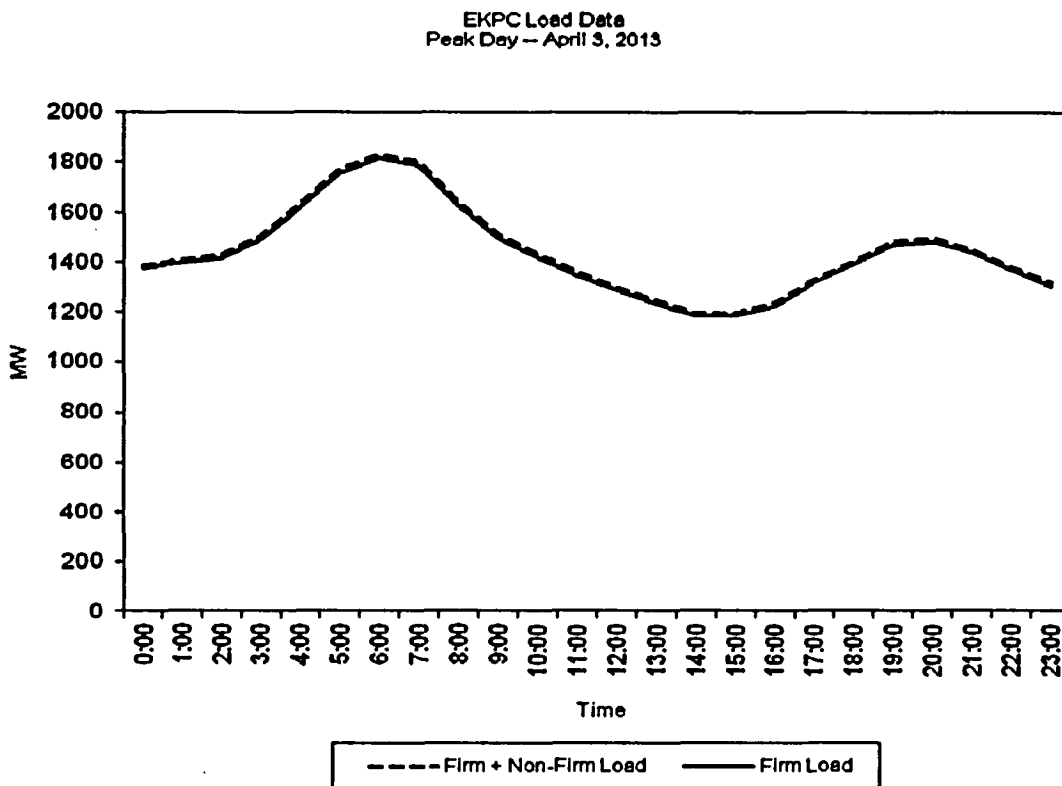
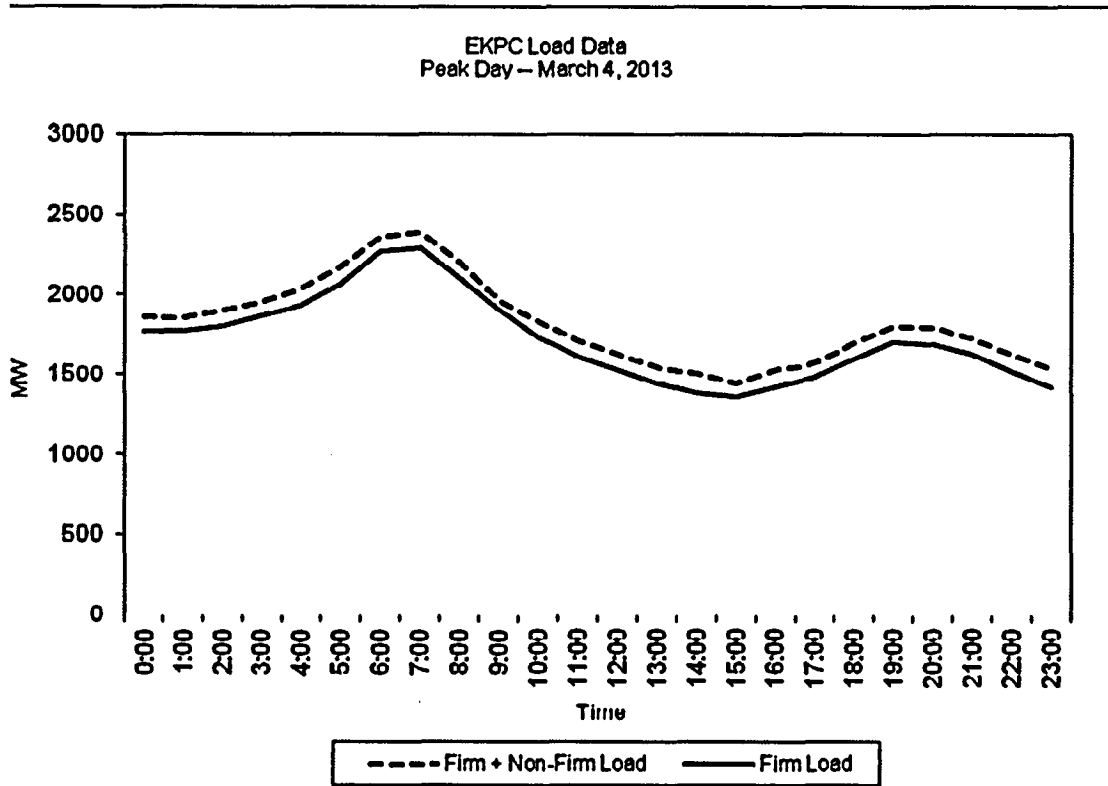
Response 4. Actual monthly peak-day load shapes are presented on pages 2 through 7 of this response. EKPC performs an analysis to weather-normalize the peak hour but EKPC does not weather-normalize the peak-day load shapes.

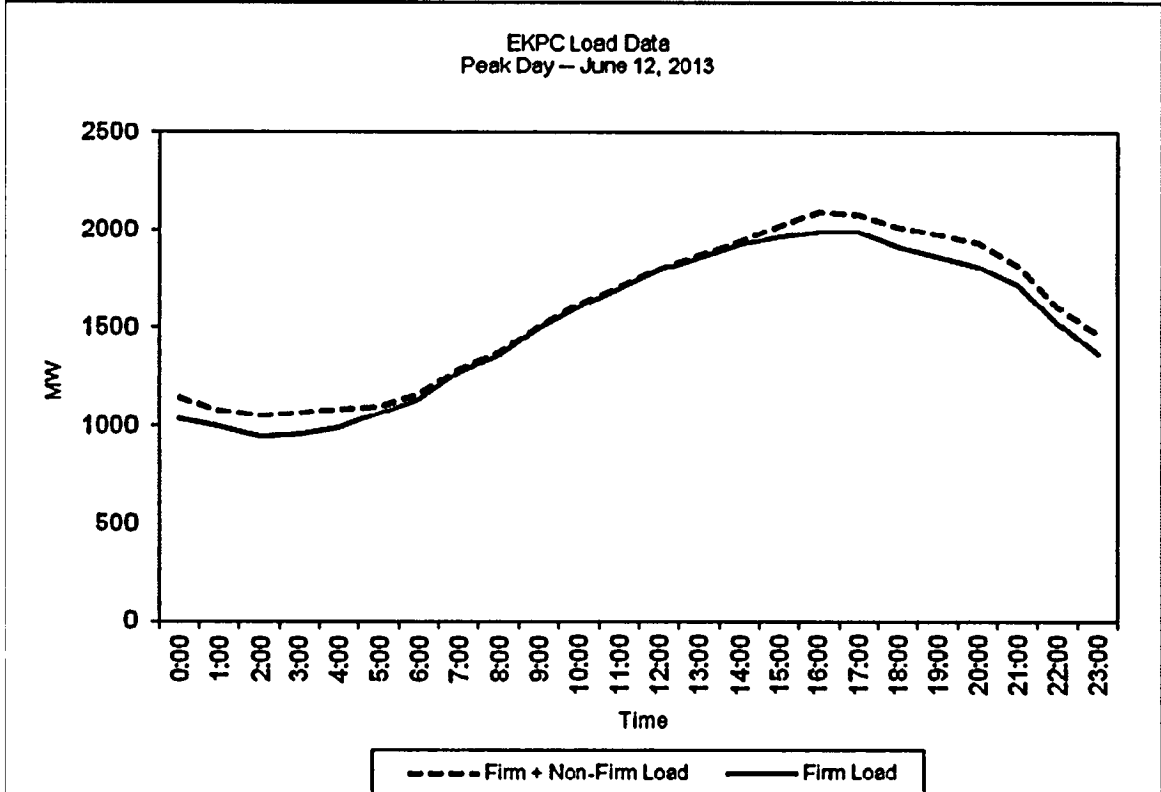
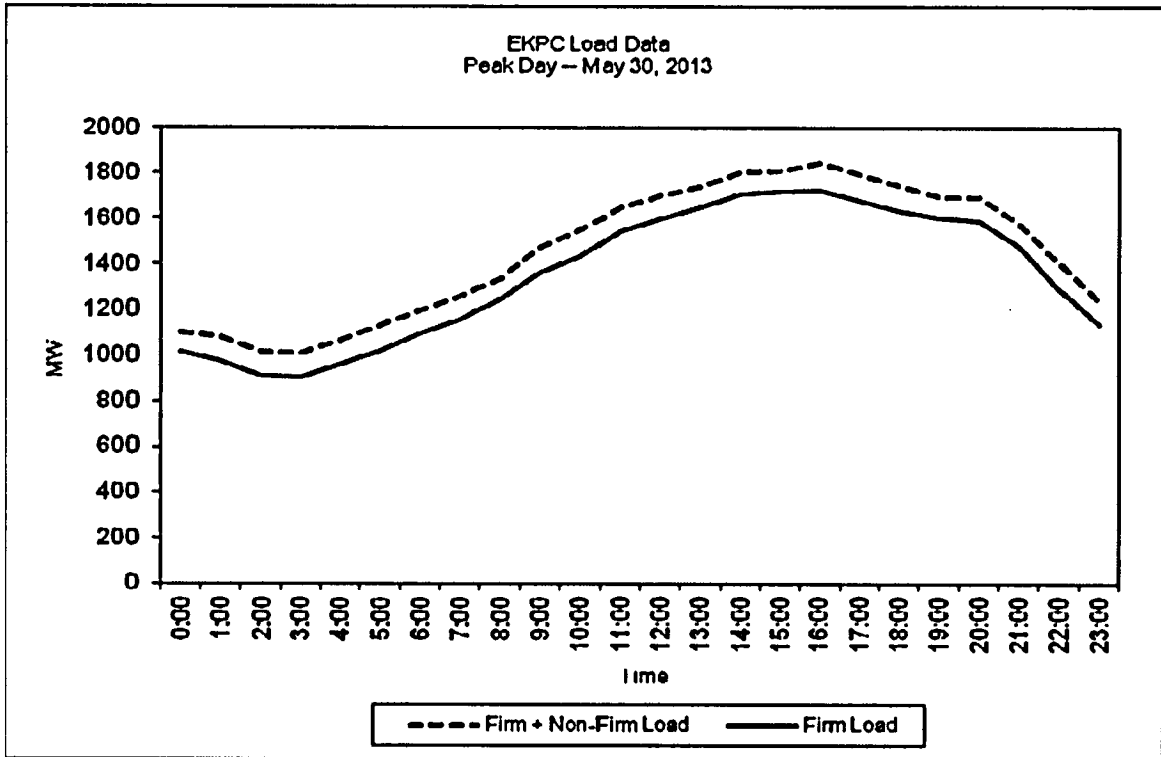
EKPC Load Data
Peak Day -- January 22, 2013

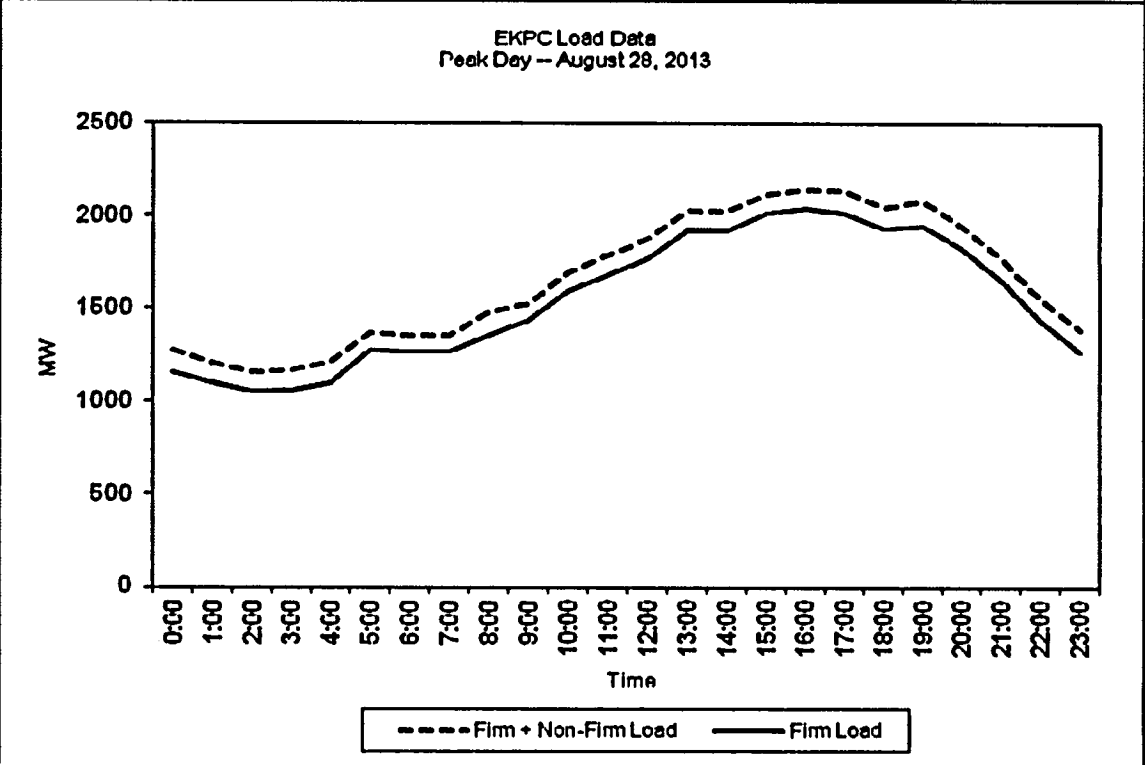
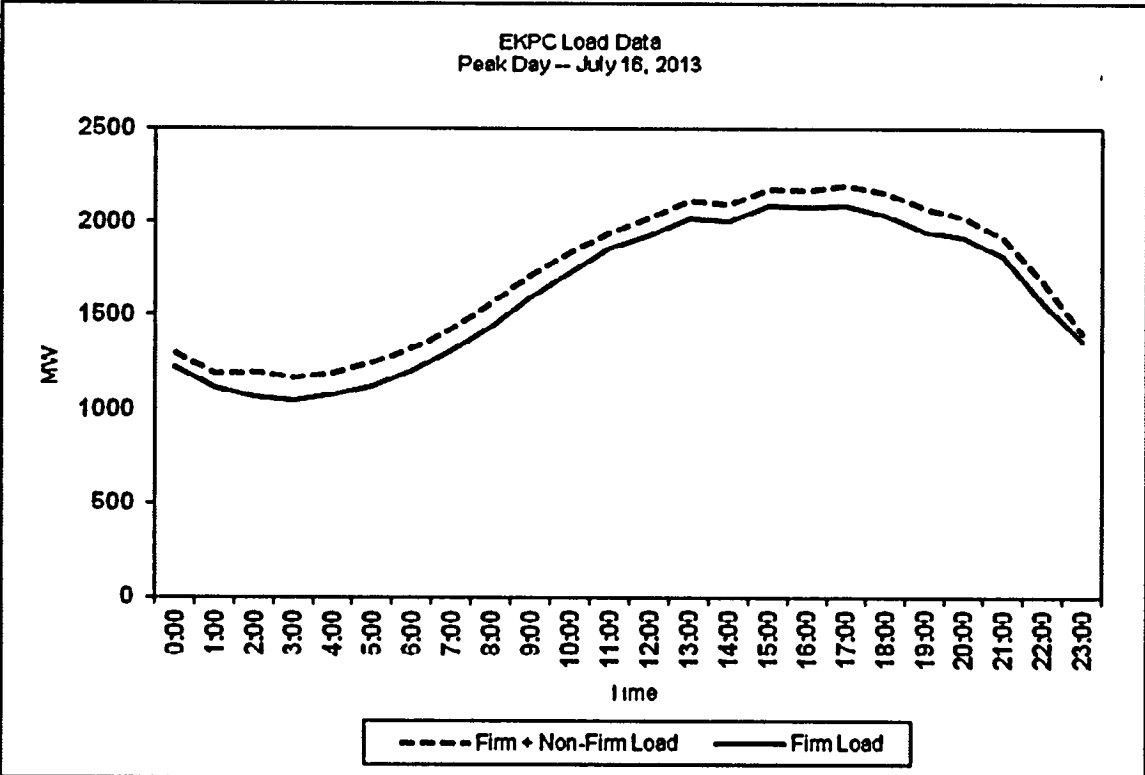


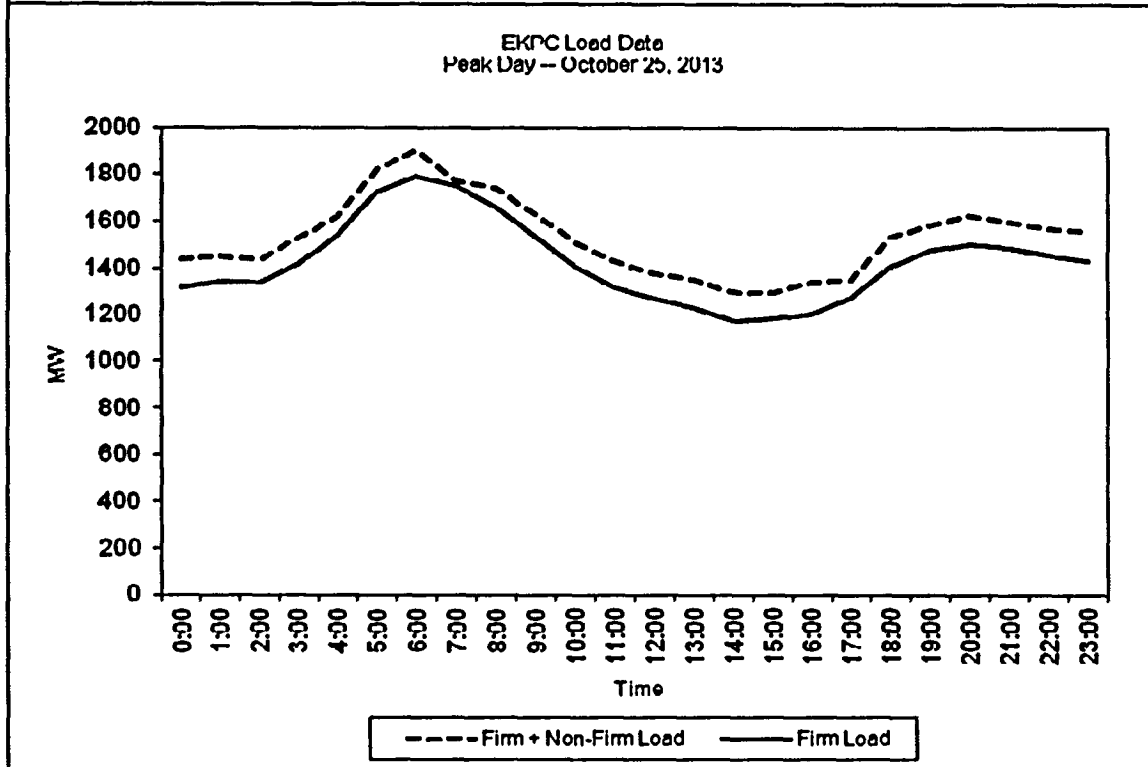
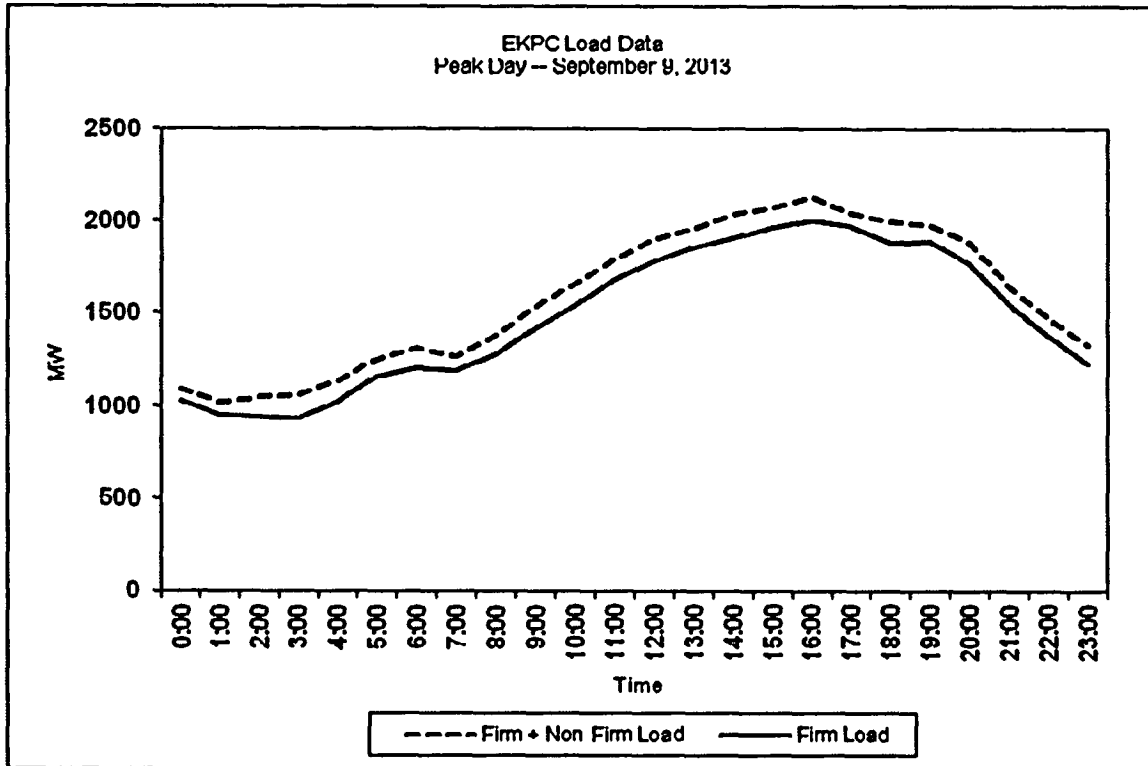
EKPC Load Data
Peak Day -- February 1, 2013

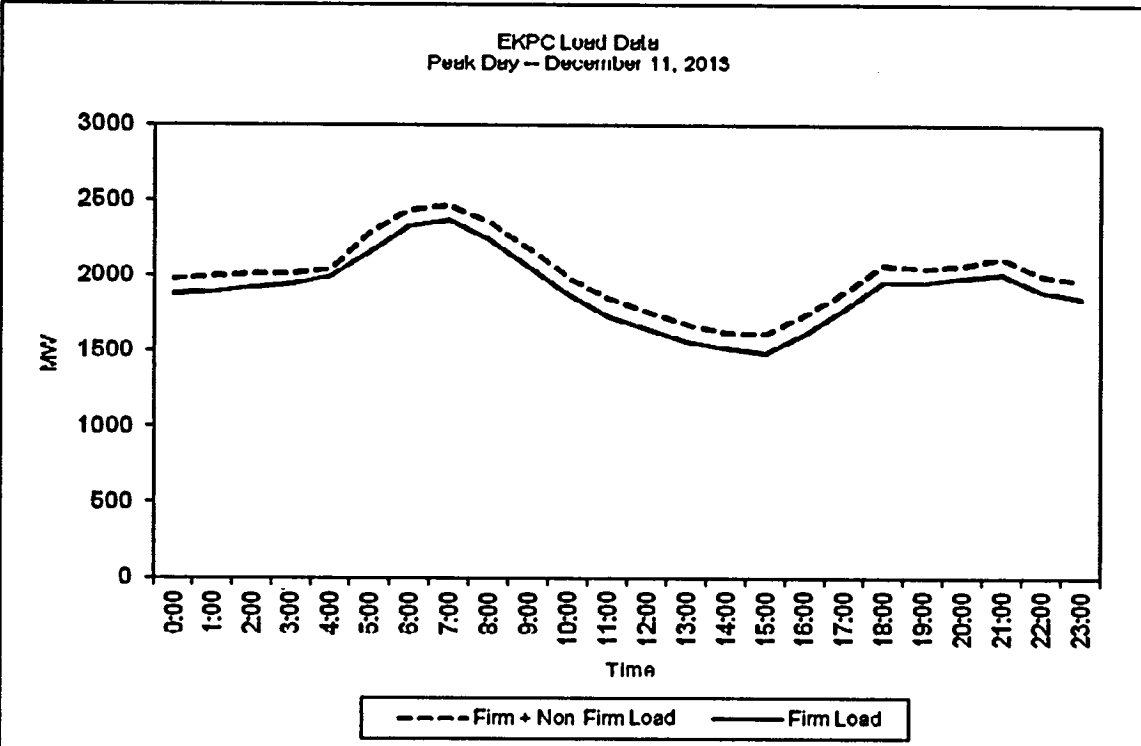
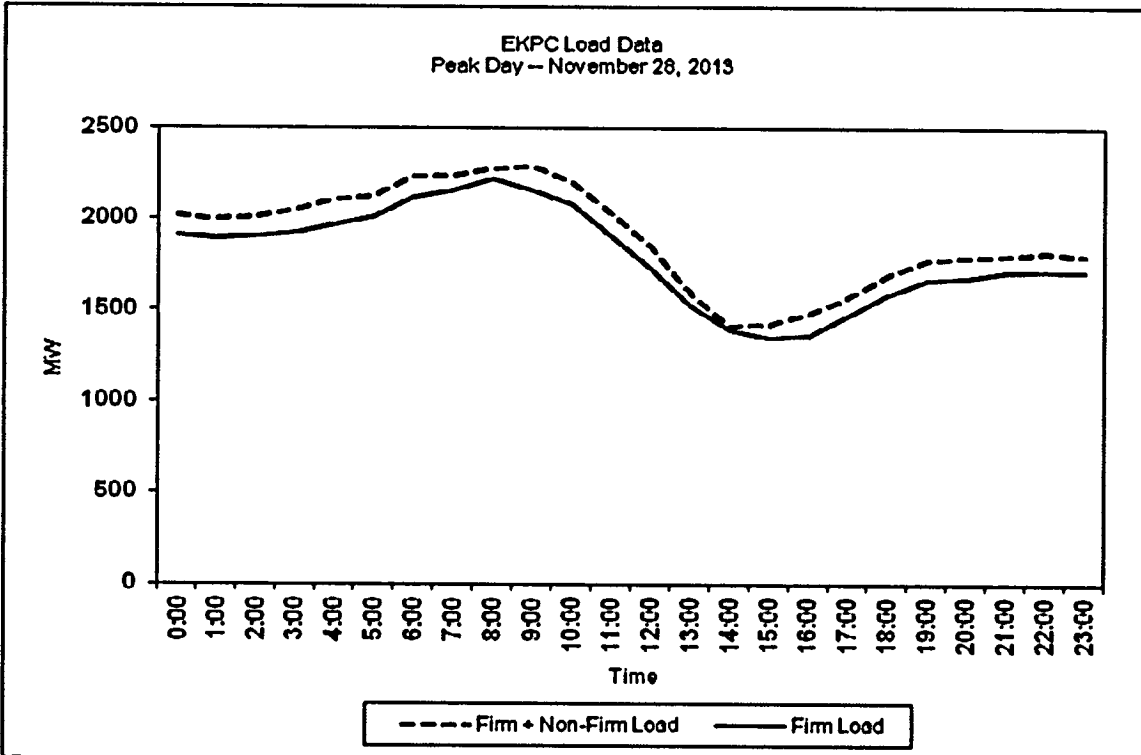












EAST KENTUCKY POWER COOPERATIVE, INC.
PSC ADMINISTRATIVE CASE NO. 387
ANNUAL RESOURCE ASSESSMENT FILING

PUBLIC SERVICE COMMISSION REQUEST DATED 12/20/01
REQUEST 6

RESPONSIBLE PERSON: Julia J. Tucker

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 higher and lower growth scenarios to bracket its baseline scenario forecast. The ranges are shown in the table below. The peaks 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 (GWh)			
Season	Low Case	Base Case	High Case	Year	Low Case	Base Case	High Case	Year	Low Case	Base Case	High Case
2013-14	2,885	2,980	3,057	2014	2,263	2,337	2,427	2014	12,662	13,078	13,581
2014-15	2,891	3,017	3,133	2015	2,269	2,368	2,488	2015	12,731	13,286	13,955
2015-16	2,900	3,056	3,210	2016	2,279	2,402	2,551	2016	12,847	13,541	14,378
2016-17	2,913	3,101	3,293	2017	2,289	2,436	2,615	2017	12,896	13,728	14,733
2017-18	2,922	3,140	3,370	2018	2,295	2,467	2,674	2018	12,961	13,932	15,104

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: Julia J. Tucker

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. EKPC integrated into PJM on June 1, 2013. EKPC is required to provide its pro-rated share of the PJM reserve requirements. PJM is a summer peaking system, so EKPC's reserve requirement shifted from being based on winter peak to summer peak. Additionally, EKPC's load diversity with PJM's peak period acts to reduce EKPC's net reserve requirements. Based on current conditions, EKPC carries approximately 6% reserves on its summer peak load during the first three years under the Fixed Resource Requirements ("FRR") plan. Starting on June 1, 2016, EKPC will participate in the Reliability Pricing Model ("RPM"), which will lower EKPC's resource requirements to roughly 3% of its summer peak load..



**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: Julia J. Tucker

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 table below shows the projected summer peak and reserve levels.

Year	Summer Load (MW)*	Reserves (MW)	Reserves (%)
2014	2337	371	16%
2015	2368	340	14%
2016	2402	306	13%
2017	2436	272	11%
2018	2467	241	10%

* Net of Demand Response.

As indicated in the table above, there are no projected reserve deficits.

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: **Julia J. Tucker**
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 that neither EKPC's management nor EKPC's Board of Directors has approved any retirements of generating capacity in the years reflected below.

Dale Unit 1

2014	0	weeks or less
2015	0	weeks or less
2016	0	weeks or less
2017	0	weeks or less
2018	0	weeks or less

Dale Unit 2

2014	0	weeks or less
2015	0	weeks or less
2016	0	weeks or less
2017	0	weeks or less
2018	0	weeks or less

Dale Unit 3

2014	0	weeks or less
2015	0	weeks or less
2016	0	weeks or less
2017	0	weeks or less
2018	0	weeks or less

Dale Unit 4

2014	0	weeks or less
2015	0	weeks or less
2016	0	weeks or less
2017	0	weeks or less
2018	0	weeks or less

JK Smith CT1

2014	1	weeks or less
2015	9	weeks or less
2016	1	weeks or less
2017	1	weeks or less
2018	1	weeks or less

JK Smith CT2

2014	9	weeks or less
2015	1	weeks or less
2016	1	weeks or less
2017	1	weeks or less
2018	1	weeks or less

JK Smith CT3

2014	1	weeks or less
2015	1	weeks or less
2016	1	weeks or less
2017	1	weeks or less
2018	1	weeks or less

JK Smith CT4

2014	4	weeks or less
2015	2	weeks or less
2016	1	weeks or less
2017	1	weeks or less
2018	1	weeks or less

JK Smith CT5

2014	1	weeks or less
2015	4	weeks or less
2016	1	weeks or less
2017	1	weeks or less
2018	1	weeks or less

JK Smith CT6

2014	1	weeks or less
2015	4	weeks or less
2016	1	weeks or less
2017	1	weeks or less
2018	1	weeks or less

JK Smith CT7

2014	1	weeks or less
2015	1	weeks or less
2016	1	weeks or less
2017	1	weeks or less
2018	1	weeks or less

JK Smith CT9

2014	4	weeks or less
2015	4	weeks or less
2016	4	weeks or less
2017	4	weeks or less
2018	4	weeks or less

JK Smith CT10

2014	4	weeks or less
2015	4	weeks or less
2016	4	weeks or less
2017	4	weeks or less
2018	4	weeks or less

Cooper 1

2014	3	weeks or less
2015	7	weeks or less
2016	3	weeks or less
2017	3	weeks or less
2018	3	weeks or less

Cooper 2

2014	3	weeks or less
2015	4	weeks or less
2016	4	weeks or less
2017	4	weeks or less
2018	4	weeks or less

Spurlock 1

2014	3	weeks or less
2015	2	weeks or less
2016	2	weeks or less
2017	2	weeks or less
2018	2	weeks or less

Spurlock 2

2014	4	weeks or less
2015	3	weeks or less
2016	2	weeks or less
2017	2	weeks or less
2018	2	weeks or less

Gilbert 3

2014	4	weeks or less
2015	8	weeks or less
2016	4	weeks or less
2017	4	weeks or less
2018	4	weeks or less

Spurlock 4

2014	4	weeks or less
2015	4	weeks or less
2016	4	weeks or less
2017	4	weeks or less
2018	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

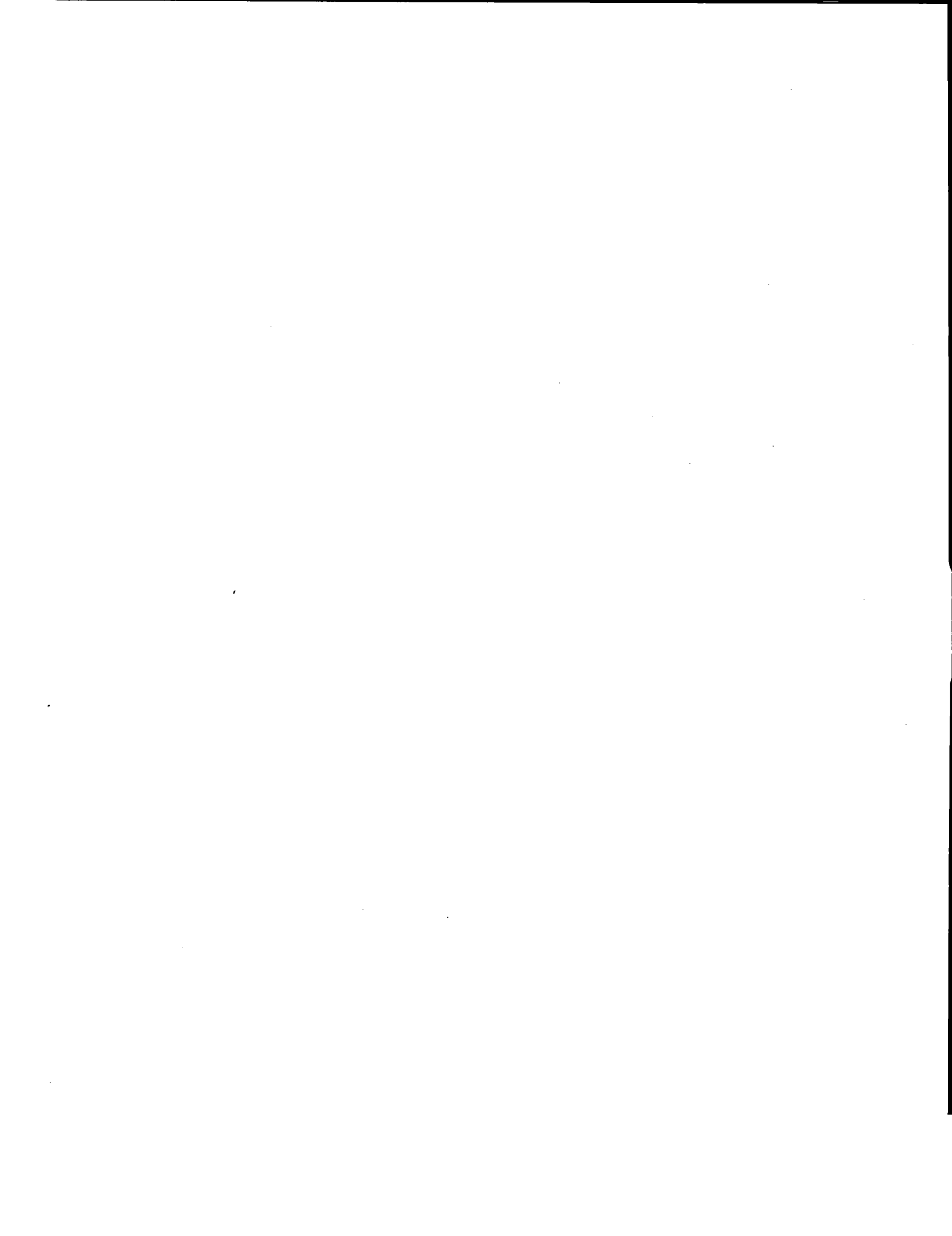
REQUEST 12

RESPONSIBLE PERSON: Julia J. Tucker

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. EKPC has no planned capacity additions. EKPC is currently evaluating its options to meet MATS compliance in 2015. EKPC recently received PSC approval to modify the Cooper 1 plant to meet MATS standards.



**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: Darrin W. Adams
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 2013 was 22,508,718 MWh. The total energy delivered to all interconnections on the EKPC system was 9,882,440 MWh.

The forecasted total energy requirements for the EKPC system for 2014 through 2018 are as follows:

2014	13,078,179 MWh
2015	13,285,509 MWh
2016	13,540,771 MWh
2017	13,728,389 MWh
2018	13,931,887 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 and to other contracted users of the EKPC transmission system 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.

Transfer studies performed in regional assessments by both SERC and PJM have not identified any significant limitations within the EKPC system. Therefore, EKPC's system is expected to be capable of handling a reasonable level of overlaid transfers while also delivering energy to EKPC's native-load customers and other transmission customers using EKPC's transmission system to deliver energy for their native-load customers (for instance, LG&E/KU).

EKPC has constructed facilities to address some of the limitations that had previously been identified on its transmission system. These facilities include the J.K. Smith-West Garrard 345 kV line, the J.K. Smith-North Clark 345 kV line, the Cranston-Rowan County 138 kV line, and the Marion County 161-138 kV transformer upgrade. EKPC has implemented dynamic ratings on some highly-loaded facilities to increase available capacity based on actual ambient system conditions.

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

Response 13d.

Summer		2013	2014	2015	2016	2017	2018
Date		07/16/13					
Hr.		1900					
Peak Demand (MW)		2,190	2,337	2,368	2,402	2,436	2,467
Winter		2013	2014	2015	2016	2017	2018
Date		01/22/13	01/29/14				
Hr.		0700	0800				
Peak Demand (MW)		2,597	3,428*	3,017	3,056	3,101	3,140

* Represents January 2014 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: Darrin W. Adams
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. Pages 2 through 7 of this response include EKPC's 10-year transmission expansion plan for the 2014-2023 period. 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.

- 45 miles of new transmission line (69 kV)
- 57 miles of transmission line reconductor/rebuild (69 kV)
- 1 new transmission substations or upgrades (50 MVA added)
- 13 transmission capacitor banks (295 MVAR)
- 9 projects – upgrade terminal facilities
- 3 modifications of existing substations
- 29 upgrades of existing distribution substations (213 MVA added)
- 13 new distribution substations (280 MVA added)

EAST KENTUCKY POWER COOPERATIVE 2014-2023 TRANSMISSION EXPANSION PLAN	
A. New Lines and Substations Project Identification	Current ISD
Construct 10.9 miles of 69 kV line using 556.5 MCM ACSR/TW conductor, between the Keith and Owen County substations. Install terminal equipment at the Keith and Owen County substations. Operate the existing Penn-Keith 69 kV line normally open. COMMITTED	6/2014
Construct 2.7 miles of 69 kV line using 556.5 MCM ACSR/TW conductor, between the Fox Hollow and Parkway substations. Serve the Parkway #1 and #2 distribution substations radially from the Fox Hollow switching substation. Install additional terminal equipment at the Fox Hollow substations. COMMITTED	6/2014
Install terminal equipment at the Fox Hollow substations to form a 69 kV circuit between the Barren County and Fox Hollow substations. Operate the Cave City-Bon Ayr 69 kV line normally closed. COMMITTED	6/2014
Operate the Cynthiana-Headquarters and Sideview-Cane Ridge 69 kV lines normally-closed	12/2015
Establish a 69 kV interconnection with Duke Energy at Hebron by installing two 69 kV circuit breakers at EKPC's Hebron.	12/2015
Construct a new 69 KV line between KU's West Frankfort substation and the Bridgeport substation (1.2 miles). Install a 69 KV switch between the Bridgeport #1 and Bridgeport #2 substations and operate this switch normally-open, with Bridgeport #1 served from the new line and Bridgeport #2 served from the existing tap line.	6/2016
Replace the existing 100 MVA 161-69 kV transformer bank at Bullitt County substation with a 150 MVA transformer.	12/2018
Construct a 2 nd 69 kV line, using 556.5 MCM ACSR/TW conductor, between the Garrard County and Tommy Gooch substations (7.5 miles). Install terminal equipment at the Garrard County substation. Serve the Tommy Gooch distribution substations radially from the Garrard County switching substation.	12/2021

EAST KENTUCKY POWER COOPERATIVE 2014-2023 TRANSMISSION EXPANSION PLAN	
B. Line Reconductor/Rebuild Projects	Current
Project Identification	ISD
Re-conductor the Cynthiana Jct-Headquarters 69 kV line section using 556.5 MCM ACTW wire.	12/2015
Re-conductor the W. Bardstown-W. Bardstown Jct 69 kV line section using 556.5 MCM ACTW wire.	12/2018
Re-conductor the Brodhead-Three Links Jct 69 kV line section using 556.5 MCM ACTW wire.	12/2020
Re-conductor the Albany-Snow Jct 69 kV line section using 556.5 MCM ACTW wire.	6/2022
Re-conductor the Leon-Airport Road 69 kV line section (5.72 miles) using 556.5 MCM ACTW conductor.	12/2022
Re-conductor the Renaker-Williamstown 69 kV line section (18.45 miles) using 556.5 MCM ACTW conductor.	6/2023

EAST KENTUCKY POWER COOPERATIVE 2014-2023 TRANSMISSION EXPANSION PLAN	
C. Line Upgrade Projects	Current
Project Identification	ISD
Increase the MOT of the Helechawa-Sublett Junction 69 kV line section to 167°F.	6/2015
Increase the MOT of the Glendale-Hodgenville 69 kV line section to 212°F.	6/2015
Increase the MOT of the J.K. Smith-Union City 138 kV line section to 330°F (LTE at 312°F) .	6/2015
Increase the MOT of the West Bardstown Jct.-West Bardstown 69 kV line section to 284°F.	6/2015
Increase the MOT of the Magnolia-Summersville 69 kV line section to 167°F.	6/2015
Increase the MOT of the Bacon Creek Tap-Liberty Church Tap 69 kV line section to 212°F.	6/2015
Increase the MOT of the Headquarters-Millersburg Jct. 69 kV line section to 167°F.	6/2015
Increase the MOT of the South Springfield Tap-South Springfield 69 kV line section to 167°F.	6/2015
Increase the MOT of the Upton Tap-Upton 69 kV line section to 167°F.	6/2015
Increase the MOT of the Colesburg Jct.-Colesburg 69 kV line section to 167°F.	6/2015
Increase the MOT of the Etown EK #1-Tunnel Hill Junction 69 kV line section to 284°F.	6/2015
Increase the MOT of the Union City-Lake Reba Tap 138 kV line section to 330°F (LTE at 312°F).	6/2016
Increase the MOT of the Arkland Tap-Oven Fork 69 kV line section to 167°F.	6/2016
Increase the MOT of the Mount Olive Jct.-Mount Olive 69 kV line section to 167°F.	6/2016
Increase the MOT of the North Springfield-South Springfield Jct. 69 kV line section to 167°F.	6/2016
Increase the MOT of the Loretto-Sulphur Creek 69 kV line section to 167°F.	6/2016
Increase the MOT of the Oakdale Jct.-Oakdale 69 kV line section to 167°F.	6/2016
Increase the MOT of the Pelfrey Jct.-Pelfrey 69 kV line section to 167°F.	6/2016
Increase the MOT of the Zula Tap-Zula 69 kV line section to 167°F.	6/2016
Increase the MOT of the Ninevah-Ninevah KU Junction 69 kV line section to 167°F.	6/2016

Increase the MOT of the Loretto-South Springfield Junction 69 kV line section to 167°F.	6/2016
Increase the MOT of the Davis Junction-Fayette 69 kV line section to 266°F.	6/2017
Increase the MOT of the Eberle Tap-Eberle 69 kV line section to 167°F.	6/2017
Increase the MOT of the Rowan County-Elliottville 69 kV line section to 167°F.	6/2017
Increase the MOT of the Mount Sterling-Fogg Pike-Reid Village 69 kV line section to 167°F.	6/2017
Increase the MOT of the Jellico Creek Tap-Jellico Creek 69 kV line section to 167°F.	6/2017
Increase the MOT of the Penn-Keith 69 kV line section to 167°F.	6/2017
Increase the MOT of the Tharp Tap-Tharp 69 kV line section to 167°F.	6/2017
Increase the MOT of the Big Bone Tap-Big Bone 69 kV line section to 167°F.	6/2017
Increase the MOT of the Cave Run Tap-Cave Run 69 kV line section to 167°F.	6/2017
Increase the MOT of the Carson-New Liberty 69 kV line section to 167°F.	6/2017
Increase the MOT of the Griffin-Griffin Junction 69 kV line section to 167°F.	6/2017
Increase the MOT of the Bacon Creek Tap-South Corbin 69 kV line section to 212°F.	6/2018
Increase the MOT of the J.K. Smith-Dale 138 kV line section to 275°F.	6/2019
Increase the MOT of the Plumville-Rectorville 69 kV line section to 212°F.	6/2020

EAST KENTUCKY POWER COOPERATIVE 2014-2023 TRANSMISSION EXPANSION PLAN	
D. Capacitor Bank Additions	Current
Project Identification	ISD
Resize the Hunt Farm Jct 69 kV capacitor bank from 8.164 to 16.327 MVAR. COMMITTED	2/2014
Install a 25.51 MVAR, 69 kV capacitor bank at Veechdale substation. COMMITTED	6/2014
Retire the Cynthiana 69 kV capacitor bank and increase the size of the 3M 69 kV capacitor bank to 12.24 MVAR.	6/2014
Install a 15.307 MVAR, 69 kV capacitor bank at Perryville substation. COMMITTED	12/2014
Increase the size of the 3M 69 kV capacitor bank from 12.24 MVAR to 16.84 MVAR.	12/2015
Install a 14.286 MVAR, 69 kV capacitor bank at the Lebanon EKPC Substation	6/2016
Install a 28.062 MVAR, 69 kV capacitor bank at Owen County Substation.	12/2017
Install a 14.286 MVAR, 69 kV capacitor bank at Magoffin County Substation.	12/2017
Resize the Cedar Grove 69 kV capacitor bank from 10.8 to 20.409 MVAR.	6/2018
Install a 69 kV, 10.715 MVAR capacitor bank at Rowan County Substation.	12/2019
Install a 161 kV, 81.636 MVAR capacitor bank (2 stages of 40.818 MVARs each) at Cooper Station	12/2020
Install a 17.858 MVAR, 69 kV capacitor bank at Fox Hollow Substation.	6/2021
Install a 69 kV, 51.022 MVAR capacitor bank at Somerset Substation.	12/2021

EAST KENTUCKY POWER COOPERATIVE 2014-2023 TRANSMISSION EXPANSION PLAN	
E. Terminal Facility Upgrades Project Identification	Current ISD
Change the tap setting of the Skaggs 138/69 kV transformer from 0.950 to 0.975 per-unit.	12/2014
Upgrade the 4/0 bus and jumpers at Nelson County substation associated with the Nelson County-West Bardstown Jct. 69 kV line using 500 MCM copper or equivalent equipment.	6/2018
Increase the Zone 3 distance relay setting at Barren County associated with the Barren County-Bonnieville 69 kV line to at least 85 MVA.	6/2018
Upgrade the 4/0 bus and jumpers at Green County substation associated with the Green County-KU Taylor County 69 kV line using 500 MCM copper or equivalent equipment.	6/2018
Upgrade the 4/0 bus and jumpers at Denny substation associated with the Denny-Wayne County 69 kV line using 500 MCM copper or equivalent equipment.	6/2019
Upgrade the 600A CT at Denny associated with the Denny-Wayne County 69 kV line with a 1200A CT.	12/2020
Upgrade the 750 MCM copper bus at Dale Station associated with the JK Smith-Dale 138 kV line using 1-inch IPS or equivalent equipment.	6/2021
Upgrade the 4/0 jumpers at Boone County substation associated with the Boone County-Hebron 69 kV line using 500 MCM copper or equivalent equipment.	6/2022
Upgrade the 4/0 bus and jumpers at Three Links Jct. substation associated with the West Berea Jct.-Three Links Jct. 69 kV line using 500 MCM Copper or equivalent equipment.	12/2023

EAST KENTUCKY POWER COOPERATIVE 2014-2023 TRANSMISSION EXPANSION PLAN	
F. Distribution Substation Projects Project Description	Current ISD
Construct a new Jonesville 69-25 kV, 12/16/20 MVA Substation and associated 69 kV tap line (0.1 mile) COMMITTED	4/2014
Upgrade the existing Burlington 69-12.5 kV, 11.2/14 MVA Substation to 15/20/25 MVA. COMMITTED	4/2014
Construct a new Veechdale 69-25 kV, 15/20/25 MVA Substation and associated 69 kV tap line from Shelby County Substation (3.5 miles). COMMITTED	4/2014
Replace the existing Perryville 69-12.5 kV, 11.2/14 MVA transformer with another 11.2/14 MVA transformer. COMMITTED	6/2014
Move the existing Cynthiana 69-12.5 kV, 11.2/14 MVA Substation to 3M (#2) and upgrade to 12/16/20 MVA. COMMITTED	6/2014
Upgrade the existing Turkey Foot 69-12.5 kV, 11.2/14 MVA Substation to 12/16/20 MVA. COMMITTED	6/2014

Upgrade the existing Long Run 69-12.5 kV, 5.6/7 MVA Substation to 12/16/20 MVA.	12/2014
Upgrade the existing Van Arsdell 69-12.5 kV, 11.2/14 MVA Substation to 12/16/20 MVA.	12/2014
Construct a new Carty Branch 69-25 kV, 12/16/20 MVA Substation and 69-12.5 kV, 12/16/20 MVA Substation, and associated 69 kV tap line (0.1 mile)	6/2015
Upgrade the existing Peytons Store 69-25 kV, 11.2/14 MVA Substation to 12/16/20 MVA.	12/2015
Construct a new Pleasant Grove #2 69-12.5 kV, 12/16/20 MVA Substation and associated 69 kV tap line (0.1 mile)	6/2015
Construct a new Bridgeport #2 69-25 kV, 12/16/20 MVA substation and associated 69 kV tap line (0.1 miles). Replace the existing Bridgeport #1 15/20/25 MVA transformer with a 12/16/20 MVA transformer.	6/2015
Upgrade the existing West Bardstown 69-12.5 kV, 11.2/14 MVA substation to 12/16/20 MVA.	6/2015
Upgrade the existing Bank Lick 69-12.5 kV, 11.2/14 MVA Substation to 12/16/20 MVA.	6/2015
Upgrade the existing Jellico Creek 69-13.2 kV, 5.6/7 MVA Substation to 11.2/14 MVA, and convert to 25 kV low-side.	12/2015
Upgrade the existing Williamstown 69-12.5 kV, 11.2/14 MVA Substation to 15/20/25 MVA.	3/2016
Upgrade the existing Rectorville 69-12.5 kV, 11.2/14 MVA Substation to 12/16/20 MVA, and convert to 25 kV low-side.	6/2016
Upgrade the existing Holloway 69-12.5 kV, 11.2/14 MVA Substation to 15/20/25 MVA.	6/2016
Construct a new Long Lick 69-25 kV, 12/16/20 MVA Substation and associated 69 kV tap line (0.7 miles)	6/2016
Upgrade the existing W.M. Smith #2 69-12.5 kV, 11.2/14 MVA Substation to 15/20/25 MVA.	6/2016
Upgrade the existing Shepherdsville #2 69-12.5 kV, 11.2/14 MVA substation to 12/16/20 MVA.	6/2016
Upgrade the existing Bluegrass Parkway 69-12.5 kV, 11.2/14 MVA substation to 12/16/20 MVA.	6/2016
Construct a new Roanoke 69-12.5 kV, 12/16/20 MVA Substation and associated 69 kV tap line (5.0 miles)	12/2016
Construct a new Big Woods 69-12.5 kV, 12/16/20 MVA Substation and associated 69 kV tap line (0.2 mile)	12/2016
Construct a new Roseville 69-25 kV, 12/16/20 MVA Substation and associated 69 kV tap line (3.5 miles)	12/2016
Construct a new Tommy Gooch #2 69-25 kV, 12/16/20 MVA Substation and associated 69 kV tap line (0.1 mile)	12/2016
Construct a new Hebron #2 138-12.5 kV, 12/16/20 MVA Substation and associated 138 kV tap line (0.1 mile)	6/2017
Upgrade the McKinney's Corner 69-12.5 kV, 6 MVA substation to 12/16/20 MVA.	6/2017
Construct a new Vancleve 69-12.5 kV, 12/16/20 MVA Substation and associated 69 kV tap line (9.1 miles)	12/2017
Upgrade the existing Mt. Washington #2 69-12.5 kV, 11.2/14 MVA substation to 12/16/20 MVA.	6/2018
Upgrade the Mile Lane 69-12.5 kV, 11.2/14 MVA substation to 12/16/20 MVA.	6/2019

PSC Request 14

Upgrade the existing North Springfield 69-12.5 kV, 10 MVA substation to 12/16/20 MVA.	6/2019
Upgrade the existing Phil 69-12.5 kV, 11.2/14 MVA substation to 12/16/20 MVA	12/2019
Upgrade the existing Balltown 69-12.5 kV, 11.2/14 MVA substation to 12/16/20 MVA.	12/2022
Upgrade the existing Richardson #1 69-12.5 kV, 11.2/14 MVA substation to 12/16/20 MVA.	6/2022
Upgrade the existing Bullittsville 69-12.5 kV, 11.2/14 MVA substation to 12/16/20 MVA.	6/2022
Upgrade the existing Sandy Hook 69-12.5 kV, 6 MVA substation to 12/16/20 MVA.	12/2022
Upgrade the existing Keith #1 69-12.5 kV, 10 MVA substation to 12/16/20 MVA.	6/2023
Construct a new Darwin Thomas #2 161-12.5 kV, 12/16/20 MVA Substation and associated 161 kV tap line (0.1 mile)	6/2023
Upgrade the existing Cave Run 69-12.5 kV, 2 MVA substation to 5 MVA.	6/2023
Upgrade the existing Oakley Noel 69-12.5 kV, 11.2/14 MVA substation to 12/16/20 MVA.	6/2023
Upgrade the existing Campbellsville #2 69-12.5 kV, 11.2/14 MVA substation to 12/16/20 MVA.	6/2023