



EAST KENTUCKY POWER COOPERATIVE

March 1, 2004

HAND DELIVERED

Mr. Thomas M. Dorman
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, KY 40602

RECEIVED

MAR 01 2004

PUBLIC SERVICE
COMMISSION

Re: PSC Admin. Case No. 387

Dear Mr. Dorman:

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,

A handwritten signature in cursive script that reads "Charles A. Lile".

Charles A. Lile
Senior Corporate Counsel

Enclosures

Cc: Parties of Record

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P.O. Box 707, Winchester,
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A Touchstone Energy Cooperative The logo for Touchstone Energy Cooperative, featuring a stylized sun or starburst design.

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. Each response with its associated supportive reference materials is individually tabbed.

APPENDIX G

APPENDIX TO AN ORDER OF THE KETUCKY PUBLIC SERVICE COMMISSION IN ADMINISTRATIVE CASE NO. 387 DATED DECEMBER 20, 2001

Information to be included in annual resource assessment filings of the utilities

1. Actual and weather-normalized energy sales for the just completed calendar year. Sales should be disaggregated into native load sales and off-system sales. Off-system sales should be further disaggregated into full requirements sales, firm capacity sales, and non-firm or economy energy sales. Off-system sales should be further disaggregated to identify separately all sales where the utility acts as a reseller, or transporter, in a power transaction between two or more other parties.

2. A summary of monthly power purchases for the just completed calendar year. Purchases should be disaggregated into firm capacity purchases required to serve native load, economy energy purchases, and purchases where the utility acts as a reseller, or transporter, in a power transaction between two or more other parties.

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).

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.

5. Load shape curves showing the number of hours that native load demand exceeded these levels during the just completed calendar year: (1) 70% of the sum of installed generating capacity plus firm capacity purchases; (2) 80% of the sum of installed generating capacity plus firm capacity purchases; (3) 90% of the sum of installed generating capacity plus firm capacity purchases.

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).

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 for the change.

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.

9. By date and hour, identify all incidents during the just completed calendar year when reserve margin was less than the East Central Area Reliability Council's ("ECAR") 1.5% spinning reserve requirement. Include the amount of capacity resources that were available, the actual demand on the system, and the reserve margin, stated in megawatts and as a percentage of demand. Also identify system conditions at the time.

10. A list identifying and describing all forced outages in excess of 2 hours in duration during the just completed calendar year.

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

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.

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

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

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

c. Peak load capacity of the transmission system.

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

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.

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: David G. Eames

COMPANY: East Kentucky Power Cooperative, Inc.

Request 1. Actual and weather-normalized energy sales for the just completed calendar year. Sales should be disaggregated into native load sales and off-system sales. Off-system sales should be further disaggregated into full requirements sales, firm capacity sales, and non-firm or economy energy sales. Off-system sales should be further disaggregated to identify separately all sales where the utility acts as a reseller, or transporter, in a power transaction between two or more other parties.

Response 1. EKPC does not have weather adjusted energy sales for 2003. The information reported below is actual.

	<u>Actual MWh</u>
Sales to Native Load	11,442,556
Off-System Sales— Non-Firm	<u>71,224</u>
Total Sales	<u>11,513,780</u>

**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: David G. Eames

COMPANY: East Kentucky Power Cooperative, Inc.

Request 2. A summary of monthly power purchases for the just completed calendar year. Purchases should be disaggregated into firm capacity purchases required to serve native load, economy energy purchases, and purchases where the utility acts as a reseller, or transporter, in a power transaction between two or more other parties.

Response 2.

	<u>MWh</u>
Firm Capacity Purchases	870,511
Economy Purchases	<u>1,978,433</u>
Total Purchases	<u>2,848,944</u>

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 2003

	Actual (Firm and Non-Firm) (MW)	Weather Adjusted (Firm and Non-Firm) (MW)
January	2,568	2,696
February	2,351	2,306
March	1,987	2,008
April	1,647	1,740
May	1,445	1,452
June	1,843	1,915
July	1,958	2,015
August	1,996	2,134
September	1,771	1,799
October	1,604	1,651
November	2,031	2,059
December	2,117	2,395

Response 3b.

year 2003.

EKPC had no off-system demand obligations during the calendar

**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.

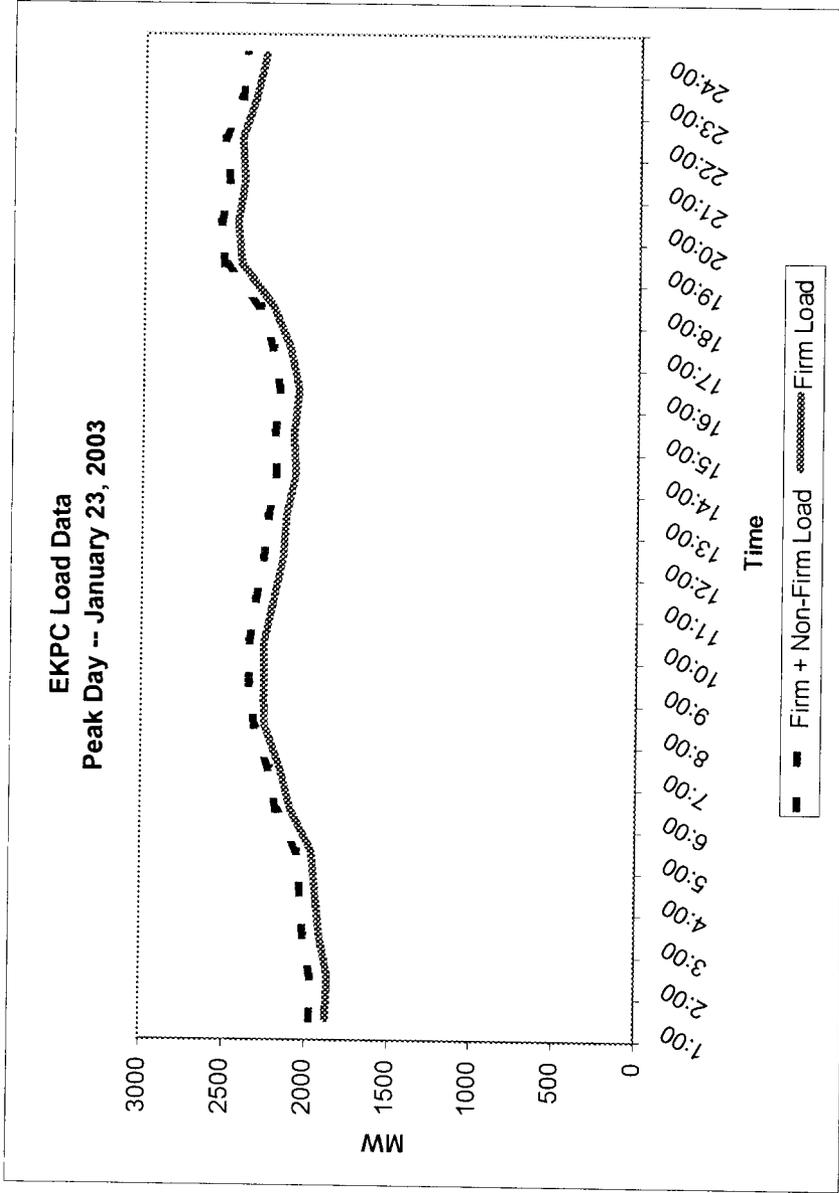
COMPANY: East Kentucky Power Cooperative, Inc.

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.

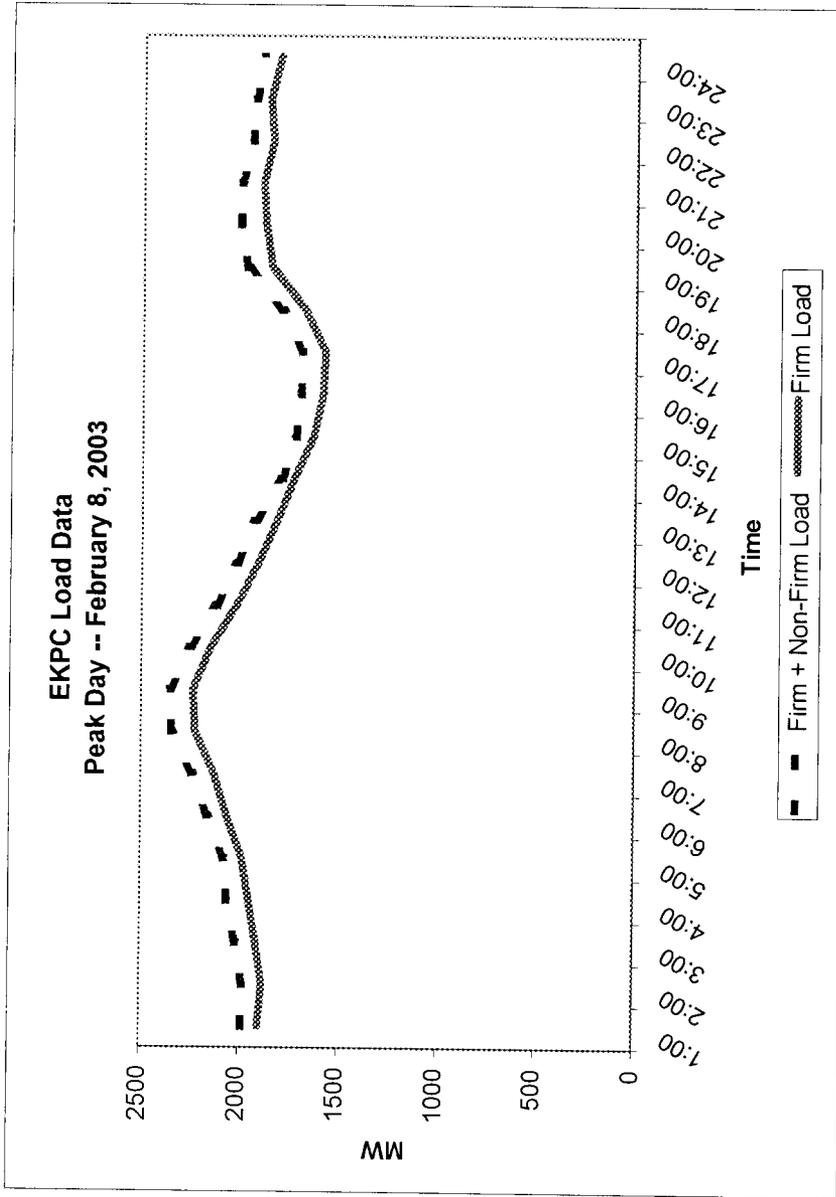
System Load Summary

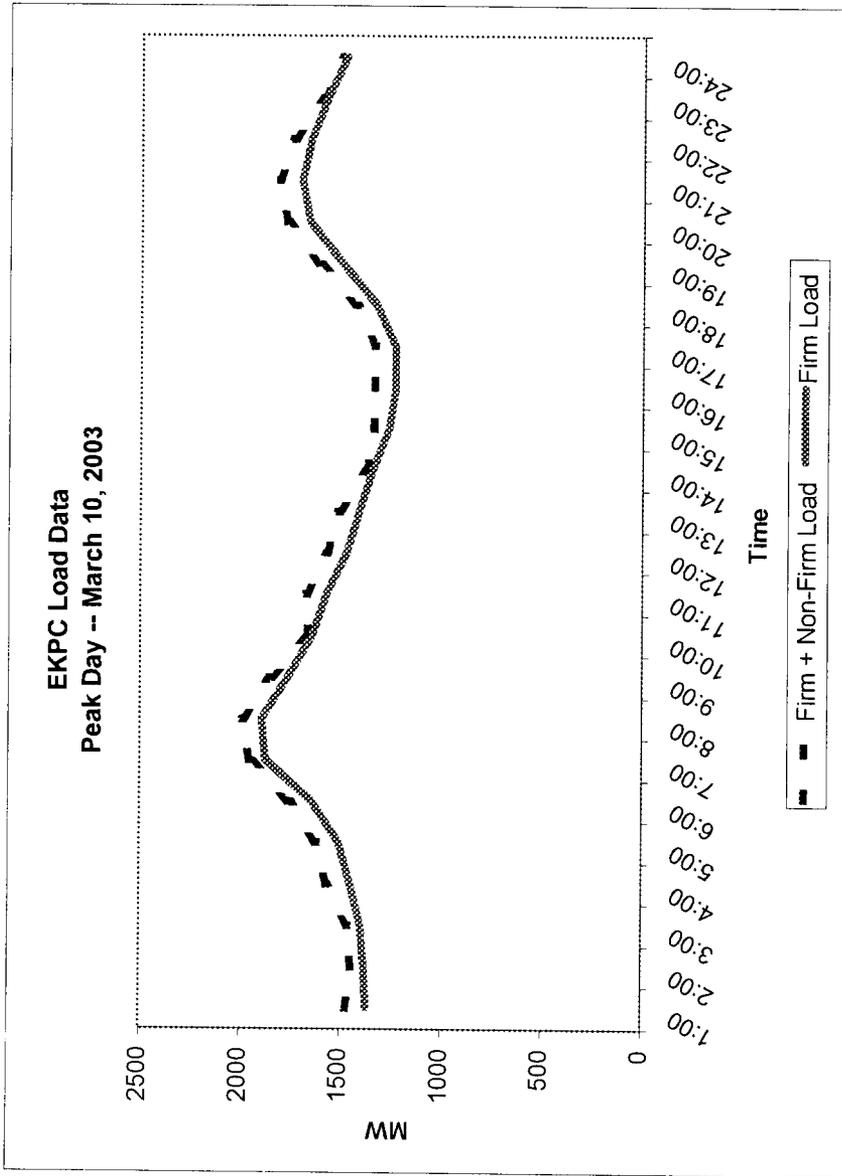
Hour	Firm + Non-Firm Load	Firm Load
1:00	1966	1874
2:00	1963	1859
3:00	2012	1912
4:00	2032	1939
5:00	2049	1965
6:00	2179	2095
7:00	2229	2161
8:00	2318	2253
9:00	2351	2263
10:00	2348	2260
11:00	2314	2205
12:00	2266	2149
13:00	2243	2131
14:00	2197	2078
15:00	2203	2088
16:00	2176	2060
17:00	2218	2118
18:00	2302	2224
19:00	2520	2416
20:00	2542	2441
21:00	2492	2401
22:00	2524	2415
23:00	2417	2332
24:00	2388	2274



System Load Summary

Hour	Firm + Non-Firm Load	Firm Load
1:00	1983	1899
2:00	1978	1881
3:00	2015	1912
4:00	2061	1949
5:00	2073	1985
6:00	2160	2066
7:00	2239	2132
8:00	2345	2225
9:00	2353	2237
10:00	2253	2147
11:00	2122	2018
12:00	2018	1909
13:00	1928	1817
14:00	1793	1733
15:00	1726	1635
16:00	1702	1591
17:00	1692	1579
18:00	1793	1681
19:00	1976	1849
20:00	2009	1883
21:00	2006	1898
22:00	1949	1848
23:00	1936	1862
24:00	1898	1811



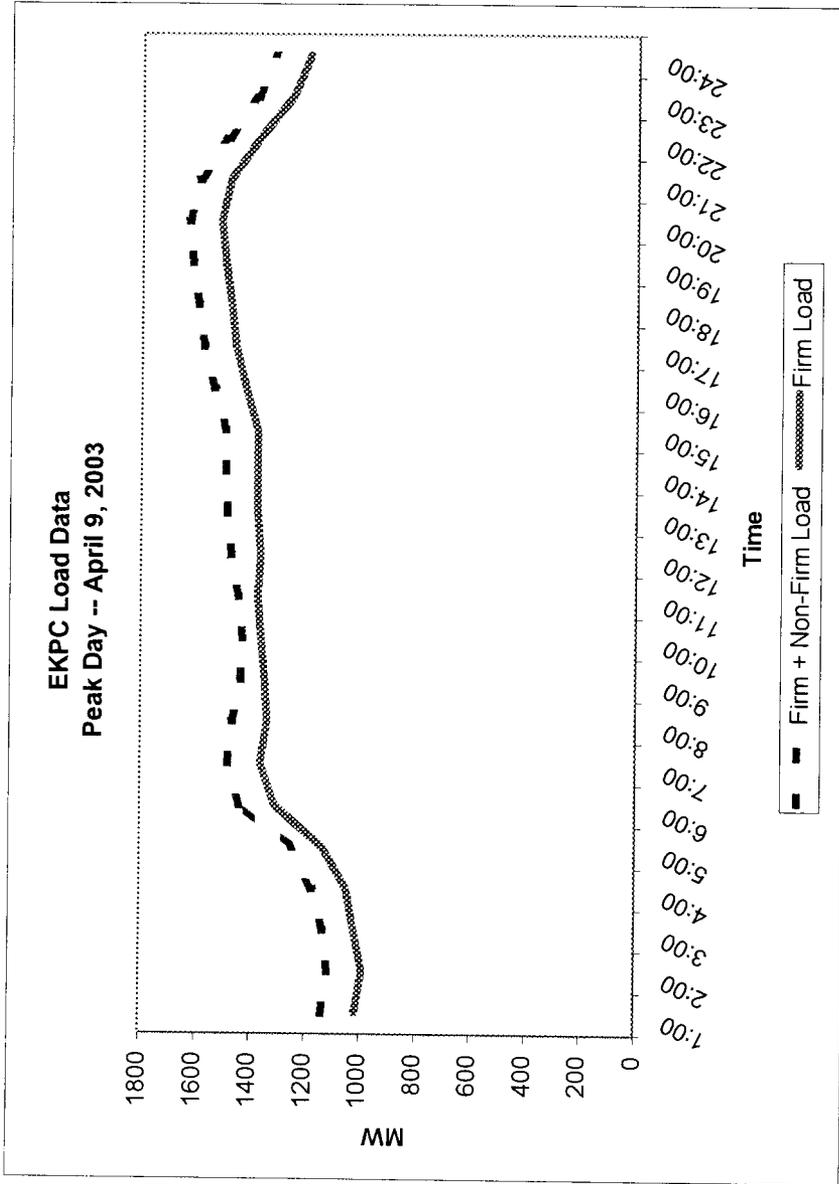


System Load Summary

Hour	Firm + Non-Firm Load	Firm Load
1:00	1476	1371
2:00	1446	1382
3:00	1464	1400
4:00	1569	1453
5:00	1620	1511
6:00	1757	1646
7:00	1954	1876
8:00	1993	1897
9:00	1856	1768
10:00	1667	1647
11:00	1677	1577
12:00	1572	1476
13:00	1518	1415
14:00	1379	1350
15:00	1345	1268
16:00	1340	1237
17:00	1336	1239
18:00	1431	1334
19:00	1617	1506
20:00	1777	1667
21:00	1820	1704
22:00	1749	1661
23:00	1595	1579
24:00	1500	1485

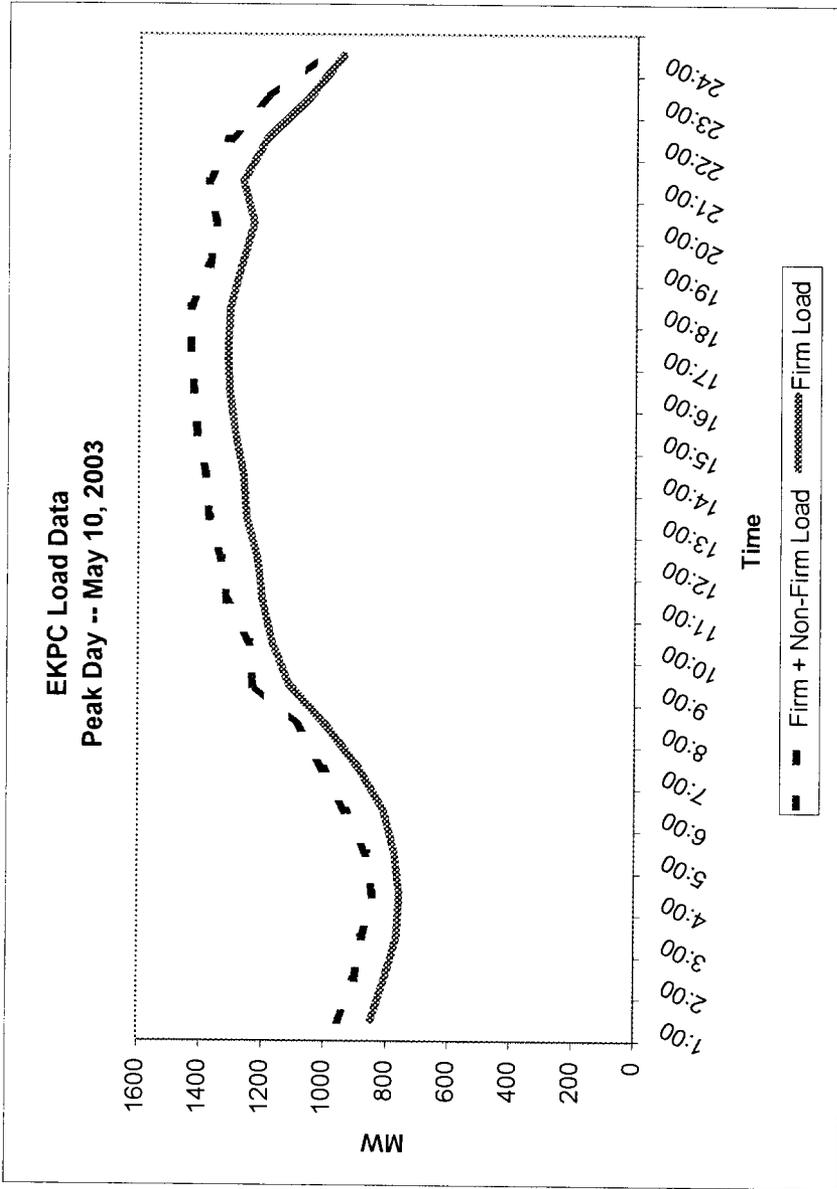
System Load Summary

Hour	Firm + Non-Firm Load	Firm Load
1:00	1139	1018
2:00	1116	991
3:00	1134	1021
4:00	1173	1050
5:00	1257	1137
6:00	1438	1313
7:00	1485	1364
8:00	1469	1342
9:00	1437	1351
10:00	1431	1364
11:00	1446	1376
12:00	1474	1366
13:00	1487	1380
14:00	1496	1380
15:00	1495	1381
16:00	1538	1424
17:00	1576	1462
18:00	1596	1479
19:00	1618	1500
20:00	1633	1516
21:00	1596	1482
22:00	1496	1379
23:00	1386	1259
24:00	1318	1194



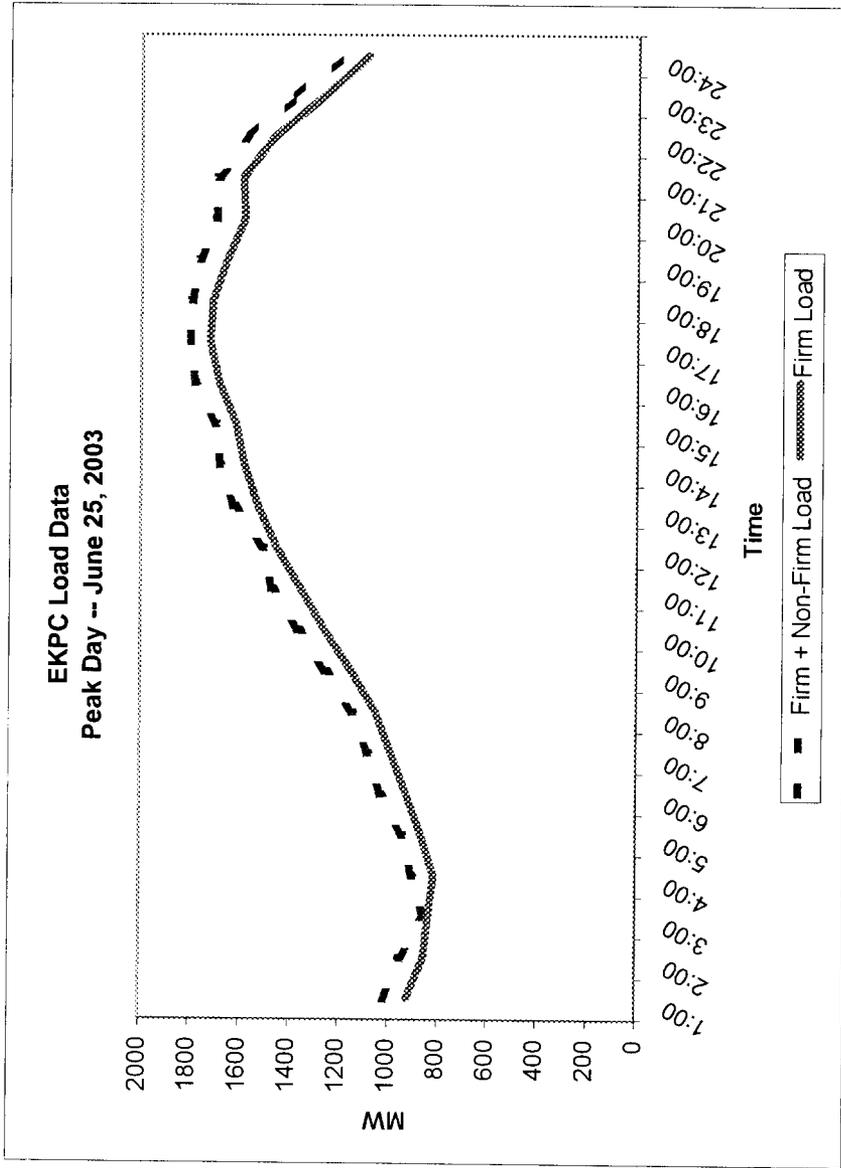
System Load Summary

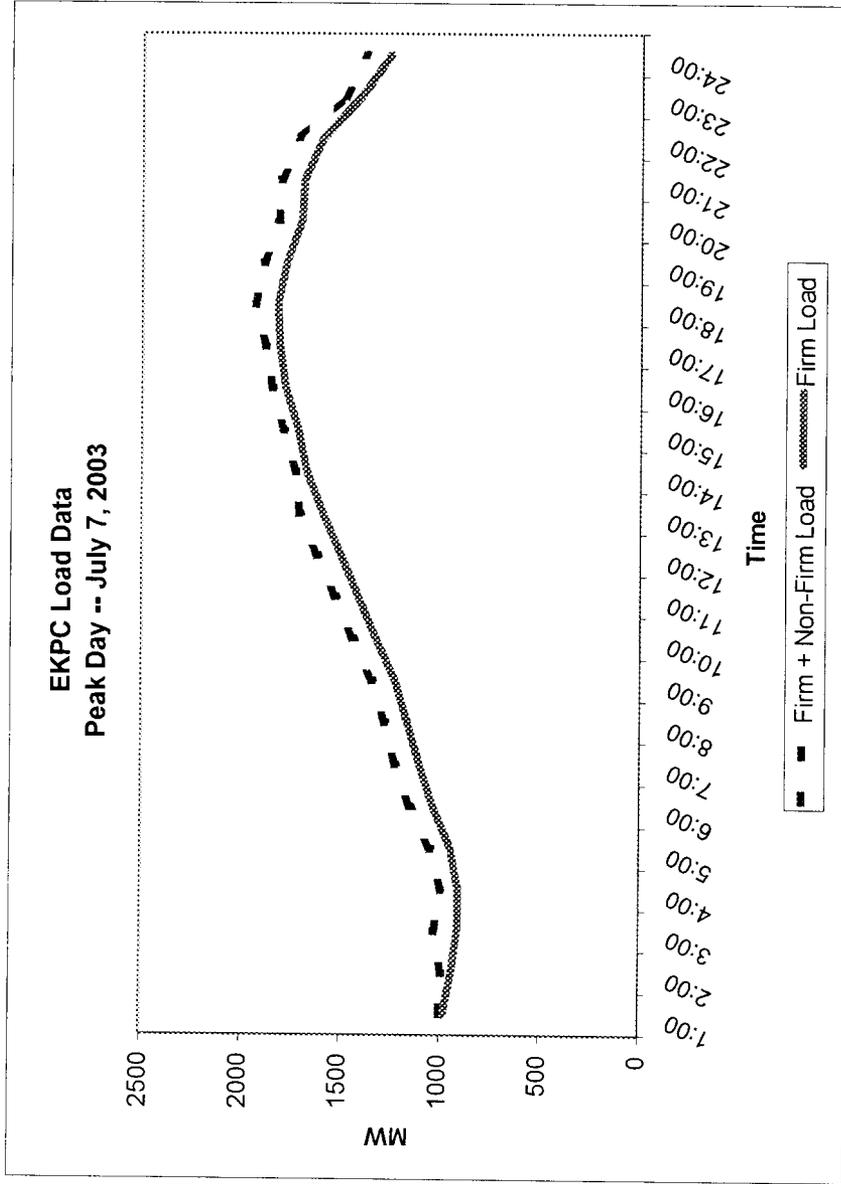
Hour	Firm + Non-Firm Load	Firm Load
1:00	956	847
2:00	901	803
3:00	879	766
4:00	843	758
5:00	864	774
6:00	934	810
7:00	1005	889
8:00	1091	995
9:00	1231	1115
10:00	1241	1170
11:00	1317	1201
12:00	1333	1218
13:00	1374	1255
14:00	1384	1264
15:00	1413	1292
16:00	1423	1311
17:00	1434	1316
18:00	1436	1309
19:00	1376	1273
20:00	1352	1232
21:00	1379	1268
22:00	1314	1193
23:00	1182	1057
24:00	1014	947



System Load Summary

Hour	Firm + Non-Firm Load	Firm Load
1:00	1019	922
2:00	951	855
3:00	855	835
4:00	902	814
5:00	941	867
6:00	1031	929
7:00	1082	990
8:00	1145	1055
9:00	1256	1154
10:00	1365	1260
11:00	1472	1359
12:00	1508	1456
13:00	1628	1531
14:00	1683	1585
15:00	1699	1620
16:00	1786	1689
17:00	1806	1725
18:00	1799	1713
19:00	1766	1657
20:00	1702	1587
21:00	1695	1593
22:00	1567	1468
23:00	1380	1268
24:00	1191	1090



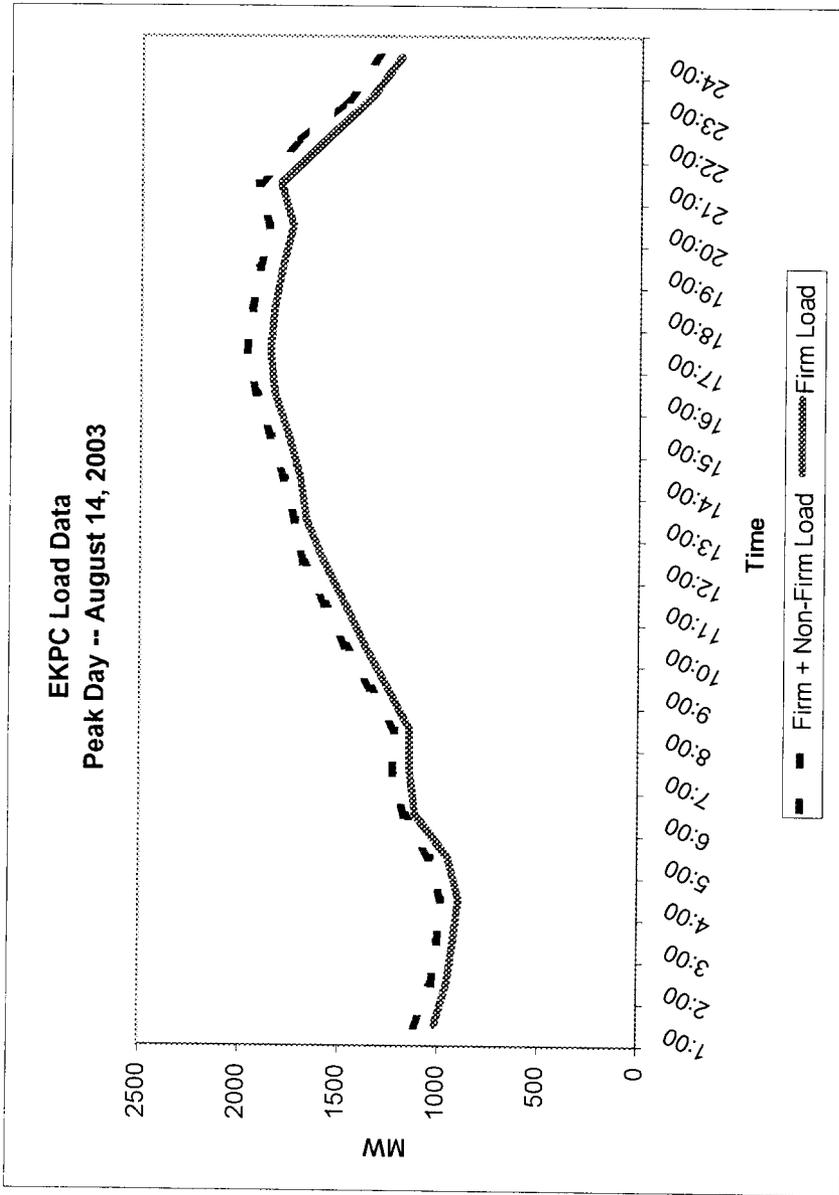


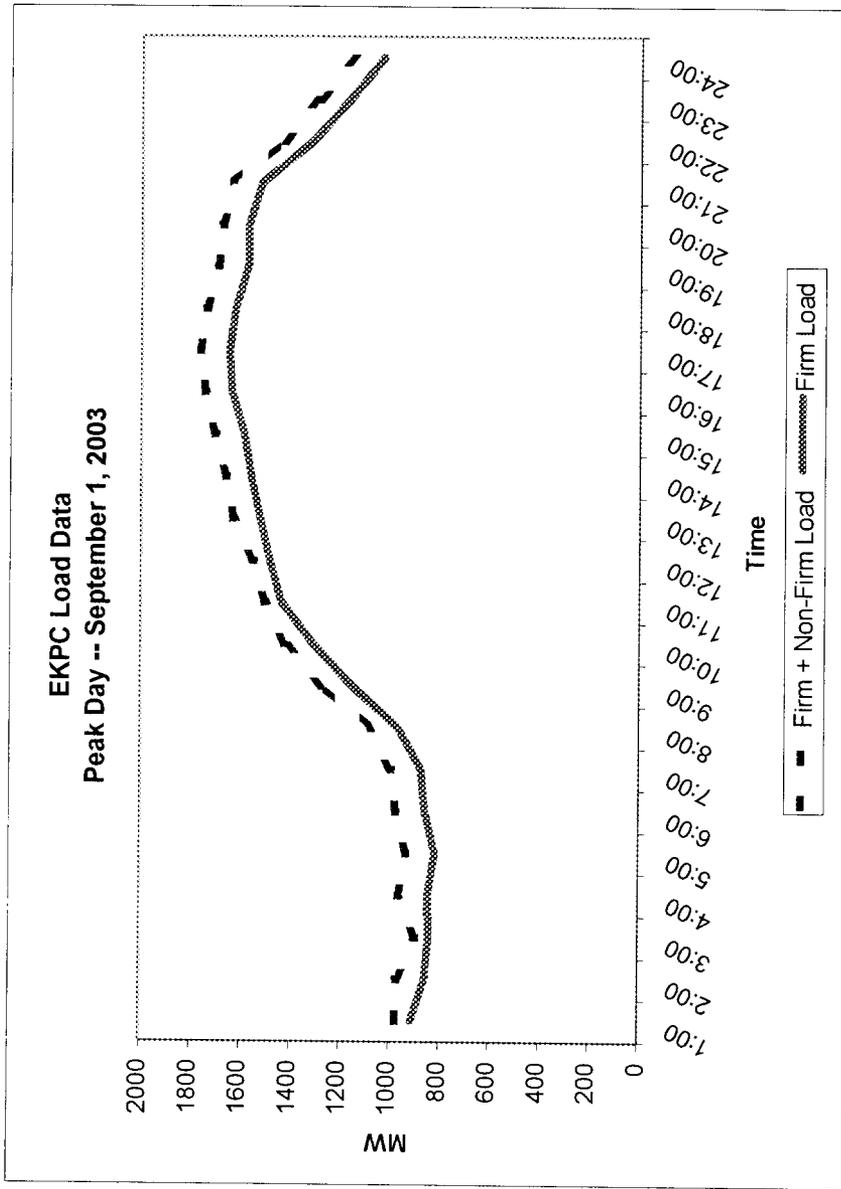
System Load Summary

Hour	Firm + Non-Firm Load	Firm Load
1:00	1002	979
2:00	988	940
3:00	1032	910
4:00	993	906
5:00	1047	948
6:00	1151	1038
7:00	1228	1106
8:00	1280	1168
9:00	1345	1229
10:00	1441	1327
11:00	1530	1416
12:00	1622	1506
13:00	1712	1597
14:00	1729	1677
15:00	1791	1719
16:00	1850	1784
17:00	1884	1816
18:00	1940	1826
19:00	1897	1783
20:00	1822	1708
21:00	1812	1695
22:00	1715	1601
23:00	1496	1410
24:00	1379	1262

System Load Summary

Hour	Firm + Non-Firm Load	Firm Load
1:00	1121	1016
2:00	1031	952
3:00	1005	923
4:00	985	897
5:00	1044	952
6:00	1173	1119
7:00	1235	1145
8:00	1222	1146
9:00	1345	1259
10:00	1472	1375
11:00	1578	1476
12:00	1688	1583
13:00	1729	1672
14:00	1786	1705
15:00	1855	1761
16:00	1924	1834
17:00	1973	1856
18:00	1947	1839
19:00	1914	1799
20:00	1862	1745
21:00	1923	1807
22:00	1710	1594
23:00	1479	1365
24:00	1315	1209



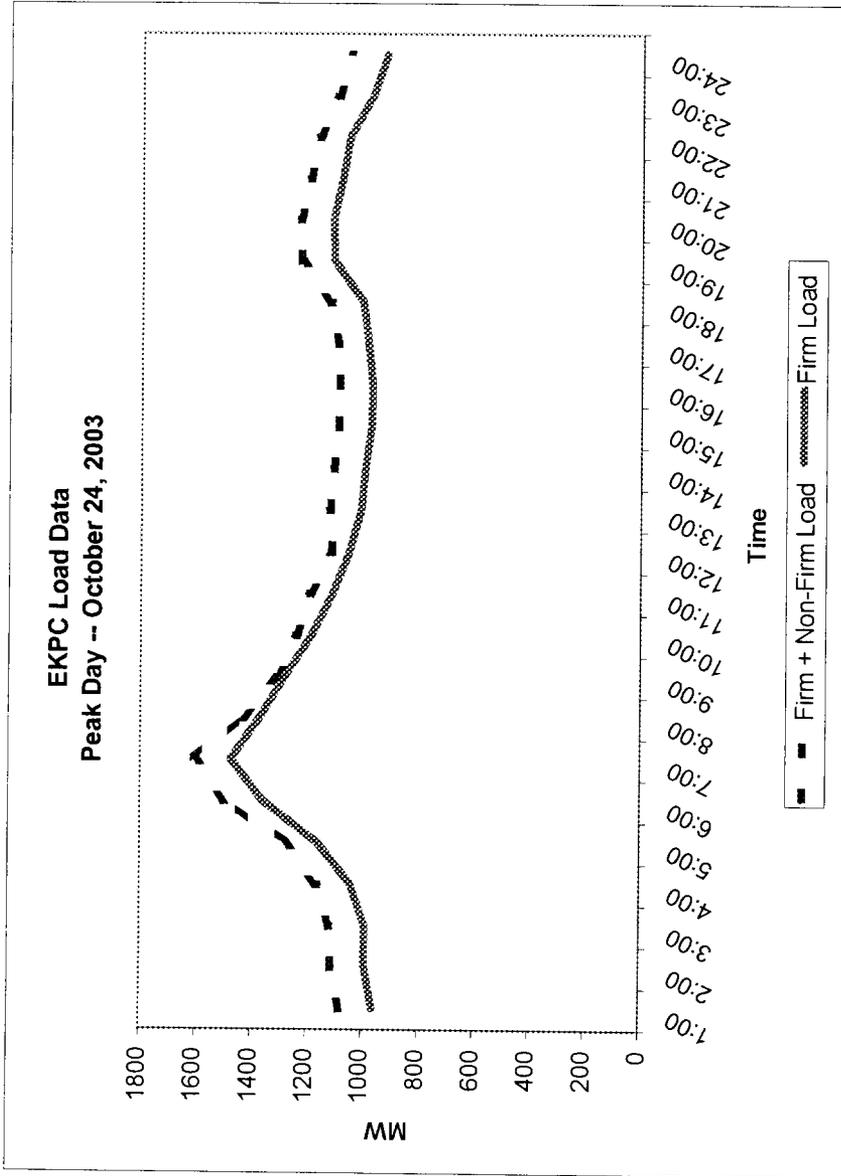


System Load Summary

Hour	Firm + Non-Firm Load	Firm Load
1:00	974	912
2:00	971	857
3:00	892	842
4:00	966	847
5:00	933	816
6:00	977	859
7:00	994	874
8:00	1089	968
9:00	1271	1155
10:00	1423	1310
11:00	1505	1438
12:00	1551	1486
13:00	1631	1526
14:00	1661	1561
15:00	1704	1590
16:00	1748	1639
17:00	1768	1651
18:00	1742	1626
19:00	1694	1578
20:00	1679	1574
21:00	1634	1522
22:00	1439	1319
23:00	1294	1171
24:00	1145	1034

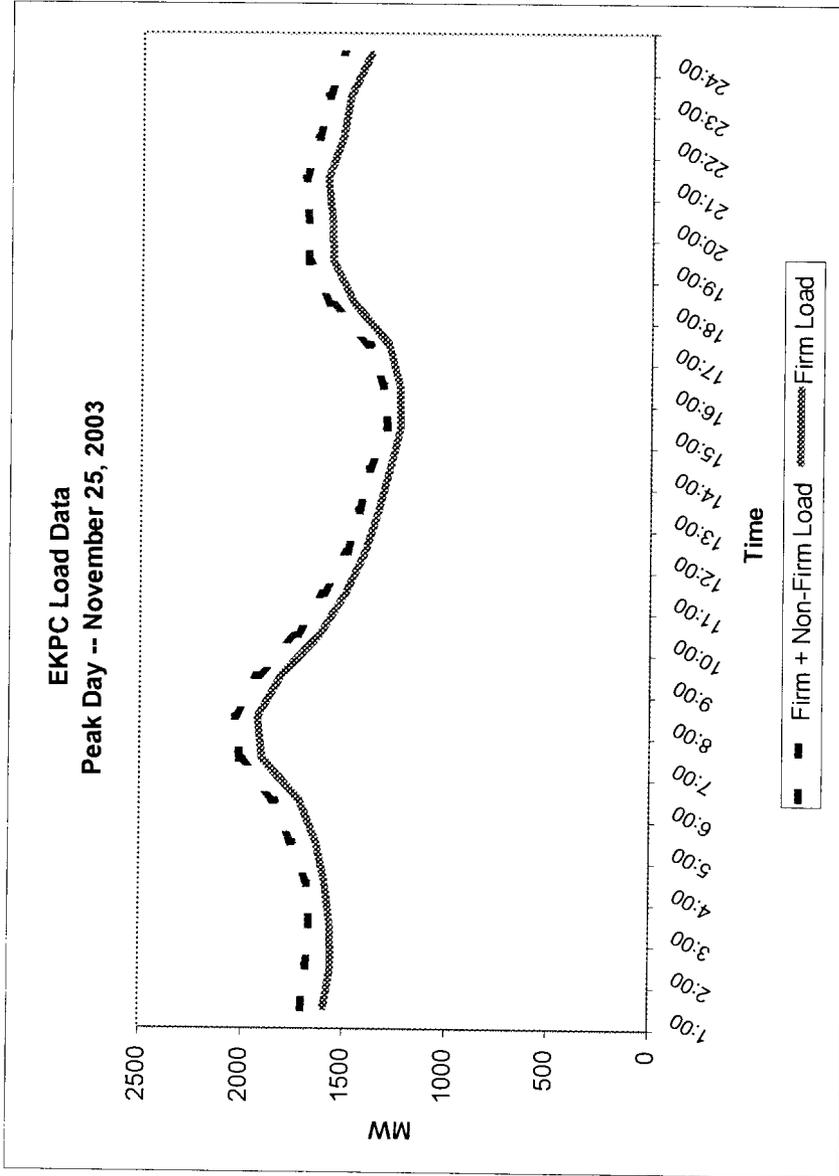
System Load Summary

Hour	Firm + Non-Firm Load	Firm Load
1:00	1079	961
2:00	1112	990
3:00	1115	988
4:00	1163	1041
5:00	1279	1160
6:00	1496	1359
7:00	1604	1474
8:00	1435	1371
9:00	1306	1282
10:00	1241	1187
11:00	1192	1112
12:00	1113	1053
13:00	1123	1011
14:00	1109	996
15:00	1090	976
16:00	1087	971
17:00	1092	987
18:00	1120	1005
19:00	1229	1112
20:00	1232	1115
21:00	1197	1082
22:00	1166	1056
23:00	1096	975
24:00	1050	923



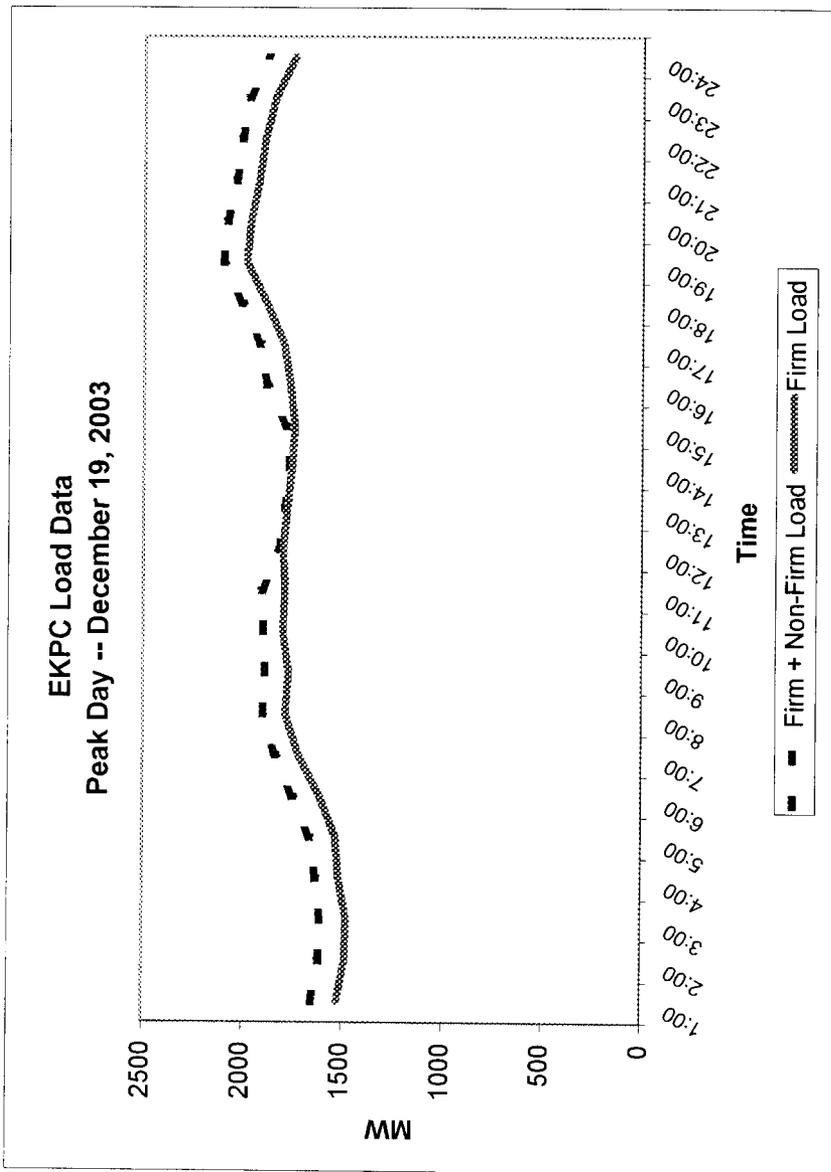
System Load Summary

Hour	Firm + Non-Firm Load	Firm Load
1:00	1705	1592
2:00	1684	1557
3:00	1667	1565
4:00	1677	1589
5:00	1757	1635
6:00	1841	1717
7:00	2011	1902
8:00	2036	1926
9:00	1930	1811
10:00	1738	1621
11:00	1605	1497
12:00	1490	1403
13:00	1432	1338
14:00	1385	1283
15:00	1296	1231
16:00	1316	1240
17:00	1388	1292
18:00	1580	1466
19:00	1685	1568
20:00	1689	1574
21:00	1704	1595
22:00	1641	1524
23:00	1594	1487
24:00	1516	1390



System Load Summary

Hour	Firm + Non-Firm Load	Firm Load
1:00	1654	1525
2:00	1618	1486
3:00	1610	1477
4:00	1633	1518
5:00	1660	1535
6:00	1748	1617
7:00	1838	1724
8:00	1904	1787
9:00	1889	1772
10:00	1899	1803
11:00	1909	1793
12:00	1822	1800
13:00	1794	1782
14:00	1773	1760
15:00	1785	1745
16:00	1887	1769
17:00	1918	1803
18:00	2009	1891
19:00	2109	1992
20:00	2089	1972
21:00	2043	1930
22:00	2015	1898
23:00	1981	1848
24:00	1878	1750



**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.

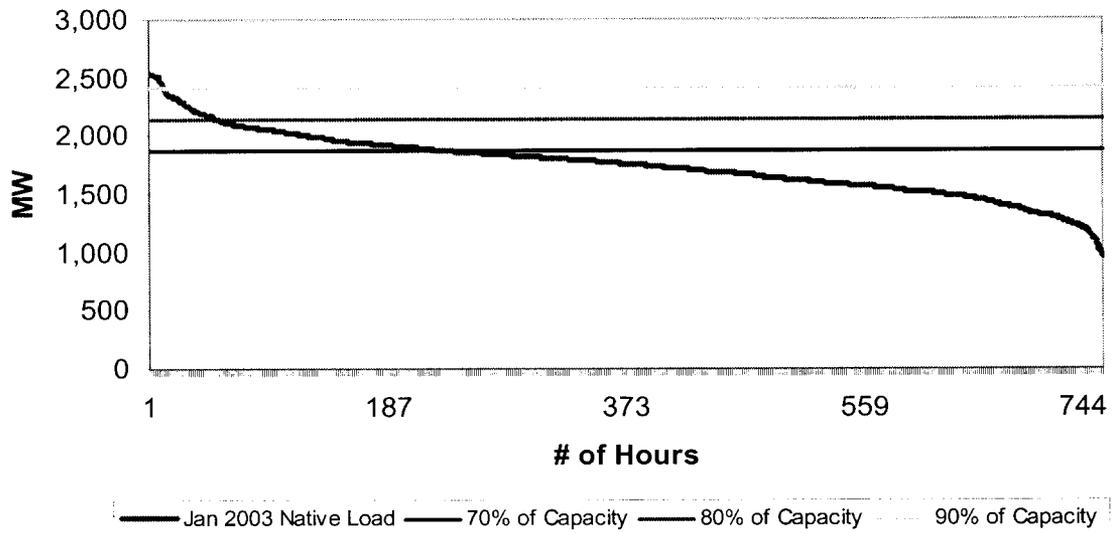
COMPANY: East Kentucky Power Cooperative, Inc.

Request 5. Load shape curves showing the number of hours that native load demand exceeded these levels during the just completed calendar year: (1) 70% of the sum of installed generating capacity plus firm capacity purchases; (2) 80% of the sum of installed generating capacity plus firm capacity purchases; (3) 90% of the sum of installed generating capacity plus firm capacity purchases.

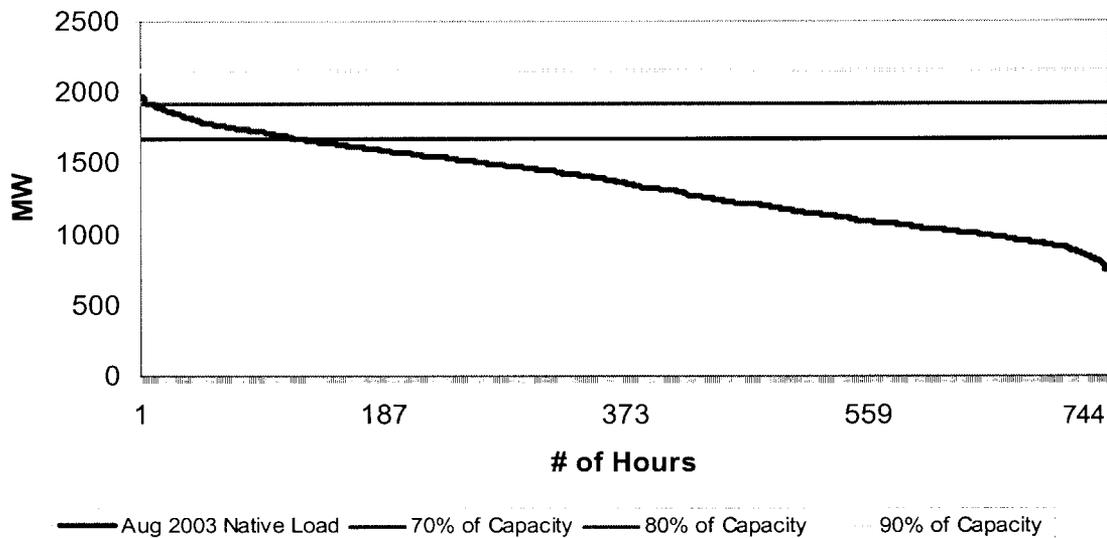
Response 5.

EKPC's generating capacity varies from winter to summer, as do its firm capacity purchases. This question is answered for EKPC's winter and summer peak months.

EKPC - January 2003



EKPC - August 2003



**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 load forecast. The ranges are shown on the attached sheet. These numbers are for firm native load only. EKPC does not prepare range forecasts for non-firm native load.

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

Net Winter Peak Demand (MW)				Net Summer Peak Demand (MW)				Total Requirements Excluding Gallatin Steel (MWh)			
Season	Low Case	Base Case	High Case	Year	Low Case	Base Case	High Case	Year	Low Case	Base Case	High Case
2003 - 04	2,238	2,528	2,815	2004	1,864	2,152	2,369	2004	10,041,721	11,121,535	12,171,370
2004 - 05	2,313	2,631	2,955	2005	1,928	2,242	2,479	2005	10,348,739	11,548,402	12,696,713
2005 - 06	2,379	2,724	3,085	2006	1,988	2,323	2,577	2006	10,655,569	11,962,737	13,199,752
2006 - 07	2,445	2,816	3,221	2007	2,049	2,403	2,683	2007	10,959,716	12,368,116	13,736,192
2007 - 08	2,496	2,903	3,346	2008	2,089	2,477	2,774	2008	11,209,186	12,776,964	14,245,229

**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: David G. Eames

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%.

**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: David G. Eames

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
2004	10.3%	0.0%	256	0	530	75	40	250
2005	-0.8%	11.3%	-22	248	150	0	330	20
2006	0.5%	10.8%	13	247	0	0	310	30
2007	0.6%	12.9%	18	304	0	0	320	0
2008	4.8%	12.5%	136	305	0	0	210	0

Year	Total Firm Purchases (Committed + Needed) Used to Meet Reserve Margin (MW)	
	WIN	SUM
2004	570	325
2005	480	20
2006	310	30
2007	320	0
2008	210	0

Notes:

1. Reserve margins include existing and committed resources, and planned resources listed in Response 12. Committed and planned landfill gas generation projects are included.

EKPC issued an RFP on December 17, 2002, for 150MW (summer)/200 MW (winter) of peaking capacity to be available by December 2004, and an additional 75MW (summer)/100MW (winter) of capacity to be available by December 2005. EKPC has entered into contracts for the purchase and construction of two GE 7EA combustion turbines (Smith CT 6-7) with a commercial operation date of December 2004. Discussions are continuing for additional capacity needs that were outlined in the RFP and are designated as Smith CT 8 in Response 12. Decisions on additional seasonal purchases are expected to be made prior to each peak season.

**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: Paul C. Atchison

COMPANY: East Kentucky Power Cooperative, Inc.

Request 9. By date and hour, identify all incidents during the just completed calendar year when reserve margin was less than the East Central Area Reliability Council's ("ECAR") 1.5% spinning reserve requirement. Include the amount of capacity resources that were available, the actual demand on the system, and the reserve margin, stated in megawatts and as a percentage of demand. Also identify system conditions at the time.

Response 9. ECAR, as EKPC's reliability council, monitors the spinning reserve requirement for its members. Preliminary ECAR Spinning Reserve Reports show there were 4 hours in the just completed calendar year (2003) when spinning reserves were less than 1.5%.

Date	Hour	Capacity Available	Actual Demand	Reserve Margin MW	Reserve Margin %	System Conditions
6/30/03	2300	1552	1621	-69	-4.3	Peak
7/16/03	1400	1770	1761	9	0.5	Near Peak
7/16/03	1700	1893	1874	19	1.0	Peak
10/8/03	2000	1330	1314	16	1.2	Peak

**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: Randy Dials

COMPANY: East Kentucky Power Cooperative, Inc.

Request 10. A list identify and describing all forced outages in excess of 2 hours in duration during the just completed calendar year.

Response 10. See Attached Pages. (J.K. Smith Unit No. 4 had no forced outage under the 2 hours duration, as requested.)

Production Management Reporting System

Forced Outages over 2 Hours in Length

Dates Between 1/1/2003 and 12/31/2003

Dale Power Station



East Kentucky Power

PSC REQUEST 10

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Unit One

Date	Time Off	Duration Hours : Minutes	Reason
01/16/2003	11 : 33	39 : 27	Generating tube leak.
02/21/2003	12 : 46	4 : 21	Repair slinger ring on outboard bearing on FD fan.
06/08/2003	16 : 36	2 : 6	Mark V EX II 2000 Trip. Fault Codes 379&16.
08/01/2003	19 : 55	7 : 18	Loss of primary and secondary network service.
11/13/2003	10 : 35	3 : 44	Loss of network communication.
11/14/2003	01 : 42	10 : 44	Loss of network communication.
11/17/2003	19 : 50	34 : 8	Generating tube leak.

Total Forced Outages: 101 : 48

Production Management Reporting System

Forced Outages over 2 Hours in Length

Dates Between 1/1/2003 and 12/31/2003

Dale Power Station



East Kentucky Power

PSC REQUEST 10

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Unit Two

Date	Time Off	Duration Hours : Minutes	Reason
02/11/2003	16 : 24	42 : 0	Generating tube leak.
06/23/2003	20 : 41	5 : 53	Tripped due to high drum level.
07/27/2003	07 : 16	45 : 5	Water wall tube leak.
08/01/2003	19 : 55	12 : 31	Loss of primary and secondary network service.
09/13/2003	22 : 10	54 : 48	Water wall tube leak.
11/13/2003	10 : 33	6 : 15	Loss of network communication.
11/14/2003	01 : 42	6 : 51	Loss of network communication.
12/28/2003	17 : 52	33 : 12	Water wall tube leak

Total Forced Outages: 206 : 35

Production Management Reporting System

Forced Outages over 2 Hours in Length

Dates Between 1/1/2003 and 12/31/2003

Dale Power Station



East Kentucky Power

PSC REQUEST 10
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Unit Three

Date	Time Off	Duration Hours : Minutes	Reason
08/01/2003	19 : 51	9 : 21	Loss of primary & secondary network server.
10/23/2003	21 : 16	36 : 6	Superheat tube leak
10/25/2003	23 : 21	73 : 5	Water wall tube leak.
10/31/2003	06 : 59	17 : 1	Water wall tube leak.
11/01/2003	00 : 00	33 : 41	Water wall tube leak.
11/07/2003	12 : 50	42 : 23	Waterwall tube leak.
11/11/2003	01 : 27	71 : 15	Waterwall tube leak.

Total Forced Outages: 282 : 52

Production Management Reporting System
Forced Outages over 2 Hours in Length
Dates Between 1/1/2003 and 12/31/2003
Dale Power Station



East Kentucky Power

PSC REQUEST 10
PAGE 5 OF 13

Unit Four

Date	Time Off	Duration Hours : Minutes	Reason
01/18/2003	03 : 05	40 : 56	High furnace pressure trip due to water wall tube leak.
02/01/2003	22 : 13	31 : 21	Water wall tube leak.
02/16/2003	04 : 58	93 : 7	Low vacuum trip-economizer tube leak-intake traveling screen repair.
05/27/2003	13 : 13	2 : 15	Tripped due to loss of ID Fan.
05/28/2003	04 : 45	3 : 19	Tripped due to loss of ID Fan
08/01/2003	19 : 51	3 : 22	Loss of primary & secondary network service.
11/13/2003	00 : 35	36 : 32	Primary super heat tube leak.

Total Forced Outages: 210 : 52

Production Management Reporting System
Forced Outages over 2 Hours in Length
Dates Between 1/1/2003 and 12/31/2003
Cooper Power Station



East Kentucky Power

PSC REQUEST 10
PAGE 6 OF 13

Unit One

Date	Time Off	Duration Hours : Minutes	Reason
04/29/2003	21 : 13	26 : 47	Tube leak around sootblower.
05/01/2003	00 : 00	18 : 13	Tube leak around sootblower.
08/27/2003	13 : 55	2 : 18	Tripped while connecting test equipment for ECAR test.
10/21/2003	21 : 44	55 : 50	Boiler tube leak.
10/24/2003	05 : 48	2 : 1	High drum level tripped on startup.
10/27/2003	00 : 26	10 : 17	Hydrogen seal oil regulator problem.

Total Forced Outages: 115 : 26

Production Management Reporting System

Forced Outages over 2 Hours in Length

Dates Between 1/1/2003 and 12/31/2003

Cooper Power Station



East Kentucky Power

PSC REQUEST 10

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Unit Two

Date	Time Off	Duration Hours : Minutes	Reason
01/01/2003	00 : 00	40 : 59	Boiler tube leak.
04/24/2003	00 : 45	49 : 21	Tube leak at economizer header & a small leak in the penthouse.
06/13/2003	23 : 42	2 : 24	Boiler controls problem.
06/18/2003	23 : 56	11 : 38	Primary air problem.
07/07/2003	12 : 14	73 : 19	Tube leak.
08/13/2003	15 : 09	52 : 53	Boiler tube leak.
10/30/2003	12 : 09	6 : 16	High vibration on turbine.

Total Forced Outages: 236 : 50

Production Management Reporting System

Forced Outages over 2 Hours in Length

Dates Between 1/1/2003 and 12/31/2003

Spurlock Power Station



East Kentucky Power

PSC REQUEST 10
PAGE 8 OF 13

Unit One

Date	Time Off	Duration Hours : Minutes	Reason
03/09/2003	07 : 26	5 : 17	Low turbine vacuum trip.
04/28/2003	14 : 46	6 : 0	High vibration on PA fan.
05/05/2003	01 : 35	4 : 46	Motor ctrl. center tripping causing loss of fans & loosing fire in boiler.
05/09/2003	04 : 52	3 : 18	New control system, there was a problem & the operator tripped the unit off
05/09/2003	11 : 52	2 : 1	Boiler tripped on air flow.
05/20/2003	16 : 33	5 : 6	Bad card in DCS control system tripped boiler feed pumps.
06/07/2003	10 : 08	2 : 21	Hi-furnace pressure - unit tripped.
08/01/2003	04 : 02	39 : 29	Ash build up in lower section of boiler.
08/25/2003	13 : 09	6 : 58	BFPT ctrl. failure & thus a low drum level & the unit tripped off manually.
09/15/2003	20 : 58	16 : 24	Construction dug into cooling tower blowdown line.
12/02/2003	14 : 42	8 : 1	Off line due to loss of both feedpumps

Total Forced Outages: 99 : 41

Production Management Reporting System

Forced Outages over 2 Hours in Length

Dates Between 1/1/2003 and 12/31/2003

Spurlock Power Station



East Kentucky Power

PSC REQUEST 10
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Unit Two

Date	Time Off	Duration Hours : Minutes	Reason
03/04/2003	10 : 41	316 : 41	Repair deaerator.
03/17/2003	18 : 21	6 : 37	Due to flame failure in boiler.
08/23/2003	00 : 00	56 : 16	2B air heater plugged
11/21/2003	18 : 20	4 : 51	Loss of megawatt signal to control system
11/25/2003	09 : 20	102 : 37	Leak in the superheater section of the boiler
12/01/2003	08 : 49	2 : 17	Off line due to loss of both feedpumps

Total Forced Outages: 489 : 19

Production Management Reporting System

Forced Outages over 2 Hours in Length

Dates Between 1/1/2003 and 12/31/2003

J.K. Smith



East Kentucky Power

PSC REQUEST 10
PAGE 10 OF 13

Unit One

Date	Time Off	Duration Hours : Minutes	Reason
12/17/2003	08 : 00	8 : 45	Rebuilt Fuel Oil Nozzle

Total Forced Outages: 8 : 45

Production Management Reporting System

Forced Outages over 2 Hours in Length

Dates Between 1/1/2003 and 12/31/2003

J.K. Smith



East Kentucky Power

PSC REQUEST 10
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Unit Two

Date	Time Off	Duration Hours : Minutes	Reason
02/01/2003	08 : 56	218 : 4	Fuel oil leak on the combustor.
02/27/2003	07 : 00	41 : 0	Fuel oil nozzle blocked.
03/01/2003	00 : 00	64 : 30	Fuel oil nozzle blocked.

Total Forced Outages: 323 : 34

Production Management Reporting System

Forced Outages over 2 Hours in Length

Dates Between 1/1/2003 and 12/31/2003

J.K. Smith



East Kentucky Power

PSC REQUEST 10
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Unit Three

Date	Time Off	Duration Hours : Minutes	Reason
02/09/2003	06 : 32	7 : 28	Trip relay failed in the generator breaker.
02/26/2003	06 : 35	8 : 25	Ignition system failed.

Total Forced Outages: 15 : 53

Production Management Reporting System

**Forced Outages over 2 Hours in Length
Dates Between 1/1/2003 and 12/31/2003**

J.K. Smith



East Kentucky Power

PSC REQUEST 10
PAGE 13 OF 13

Unit Five

Date	Time Off	Duration Hours : Minutes	Reason
08/15/2003	10 : 30	9 : 30	Starting breaker failure.

Total Forced Outages: 9 : 30

**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: Randy Dials
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.

Dale Unit 1

2004	4 weeks or less
2005	4 weeks or less
2006	More than 4 weeks
2007	More than 4 weeks
2008	More than 4 weeks

Dale Unit 2

2004	4 weeks or less
2005	4 weeks or less
2006	More than 4 weeks
2007	More than 4 weeks
2008	More than 4 weeks

J.K. Smith 4, 5

2004	4 weeks or less
2005	4 weeks or less
2006	4 weeks or less
2007	4 weeks or less
2008	4 weeks or less

J.K. Smith 6, 7

2004	4 weeks or less
2005	4 weeks or less
2006	4 weeks or less
2007	4 weeks or less
2008	4 weeks or less

Cooper 1

2004	4 weeks or less
2005	4 weeks or less
2006	4 weeks or less
2007	4 weeks or less
2008	4 weeks or less

Cooper 2

2004	4 weeks or less
2005	4 weeks or less
2006	4 weeks or less
2007	4 weeks or less
2008	4 weeks or less

Spurlock 1

2004	4 weeks or less
2005	More than 4 weeks
2006	4 weeks or less
2007	4 weeks or less
2008	4 weeks or less

Spurlock 2

2004	More than 4 weeks
2005	4 weeks or less
2006	More than 4 weeks
2007	4 weeks or less
2008	4 weeks or less

Gilbert

2004	
2005	4 weeks or less
2006	4 weeks or less
2007	4 weeks or less
2008	4 weeks or less

There are no retirements of generating capacity anticipated through 2008.

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: David G. Eames

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	2004 - 2011	up to 40 additional	Various
Gilbert Unit	Baseload	Apr 2005	268	Spurlock Site Maysville, KY
Smith CT 6-7	Peaking	Dec 2004	100 each (Winter Rating)	J. K. Smith Site Trapp, KY
Smith CT 8	Peaking	Apr 2006	100 (Winter Rating)	J. K. Smith Site Trapp, KY
Smith CT 9-10	Peaking	Apr 2007	100 (Winter Rating)	J. K. Smith Site Trapp, KY
Smith CT 11	Peaking	Apr 2008	100 (Winter Rating)	J. K. Smith Site Trapp, KY
Smith CT 12	Peaking	April 2009	100 (Winter Rating)	J. K. Smith Site Trapp, KY
CFB Coal	Baseload	Apr 2011	268	Undetermined
CT 13-14	Peaking	Apr 2013	100 (Winter Rating)	Undetermined

Notes:

1. Three landfill gas projects with a combined capacity of approximately 10 MW came online during September 2003. There are other landfill gas projects under consideration or in the development stages. These projects have a capacity of a few megawatts each and are expected to be installed from 2004 to 2011 for a total capacity of approximately 40 MW, in addition to the 10 MW already in operation.

**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: Paul C. Atchison

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>2003</u>	Forecast MWh <u>2004</u>	Forecast MWh <u>2005</u>	Forecast MWh <u>2006</u>	Forecast MWh <u>2007</u>	Forecast MWh <u>2008</u>
Receipts	9,092,782					
Deliveries	6,974,792					
Net Rec. & Deliveries	2,117,990	2,252,555	1,548,552	1,476,380	1,408,075	1,521,169
Generation	<u>9,113,577</u>	<u>9,868,980</u>	<u>10,999,850</u>	<u>11,486,357</u>	<u>11,960,041</u>	<u>12,255,795</u>
Load	<u>11,231,567</u>	<u>12,121,535</u>	<u>12,548,402</u>	<u>12,962,737</u>	<u>13,368,116</u>	<u>13,776,964</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 generation to our native load delivery points and is adequate for that purpose during peak loading and in circumstances of single contingency with normal transfers. ECAR cited in its 2003 summer and 2003/2004 winter seasonal transmission performance assessments transfer limits for north to south transfers from ECAR to TVA that range from 3,100 MW to 4,150 MW. The reports also anticipate “that the ECAR transmission systems could become constrained as a result of unit unavailability and/or economic transactions that have historically resulted in large unanticipated power flows within and through ECAR systems.” These studies cite the following facilities as limiting facilities when large transfers occur:

- Blue Lick 345-161 kV (LG&E) Transformer
- Blue Lick – Bullitt County 161 kV (LG&E-EKPC) Circuit
- Lebanon – Marion County 138 kV (LG&E) Circuit
- Marion County 138 –161 kV (LG&E-EKPC) Transformer

Marketers routinely attempt to transfer more than these amounts across the ECAR-TVA interface. These transactions can and periodically do cause overloads on the EKPC transmission system.

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

Response 13d.

	2003	2004	2005	2006	2007	2008
Summer						
Date	08/14/03					
Hr.	1700					
Peak Demand (MW)	1,996	2,152	2,242	2,323	2,403	2,477
Winter						
Date	01/23/03					
Hr.	2000					
Peak Demand (MW)	2,568	2,631	2,724	2,816	2,903	3,007

**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: Paul C. Atchison

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.

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

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

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

32 new transmission substations or upgrades (4200 MVA)

100 new distribution substations (900 MVA)

34 new transmission capacitor banks (492 MVAR)

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.	Outlet for additional generation at Spurlock; Provides an EKPC interconnection with three companies (AEP, CIN, DPL).
2	Build a 7.3 mile 138 kV line to connect Cranston and Rowan County substations.	Outlet for additional generation at Spurlock; Provides local support to the EKPC-KU system in the Rowan County-Farmers Substation vicinities.
3.	Add a 3 rd 345-138 kV transformer at Spurlock Substation.	Outlet for additional generation at Spurlock.
4.	Build a 17 mile 138 kV line to connect the JK Smith and Spencer Road (KU) Substations.	Outlet for additional generation at JK Smith site. Provides local support to the KU-EKPC system in the Spencer Road-Rowan County Substation vicinities.
5.	Build a 345-138 kV substation at the JK Smith site and a 17 mile 345 kV line to connect the JK Smith and Avon Substations.	Outlet for additional generation at JK Smith site.

The above information is the same as provided to the Commission in Request 11, Appendix B, PSC Case 387 (Dated 7/2/01). EKPC has not modified its long-range plan as reported last year other than for the short-term planning horizon.

A detailed list of EKPC's expected transmission facility additions for the short-term planning horizon through the end of 2005, as well as recent completions, is shown beginning on the next page:

TRANSMISSION PROJECTS 2003-2005	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
<u>NEW TRANSMISSION LINES</u>			
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	Dec-2004	Laurel	C, E
Garrard County - Lancaster/Brodhead (KU) 69 kV -- 0.23 miles 556.5 MCM DC (loop in KU 69 kV line)	Dec-2004	Garrard	C
Spurlock - Stuart/Zimmer (CIN/DPL) 345 kV -- 3 miles 2-954 MCM DC (loop in 345 kV line)	Dec-2004	Mason, State of Ohio	A, F
Cranston - Rowan County 138 kV - 7.50 miles 795 MCM	Dec-2005	Rowan	B, C, D
Oneida - Arnold/Delvinta (KU) 161 kV - 7.90 miles 795 MCM	Dec-2005	Clay, Owsley	C, D
Inland Container - Inland Tap 138 kV - 0.50 miles 954 MCM	Deleted	Mason	A, F
<u>NEW TRANSMISSION SUBSTATIONS</u>			
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	Dec-2004	Fleming	B, C, D
East Bernstadt 69 kV Switching Substation (EKPC - KU)	Dec-2005	Laurel	C, E
Oneida 161-69 kV Substation 100 MVA	Dec-2005	Clay	C, D
<u>TRANSMISSION SUBSTATION MODIFICATIONS</u>			
Liberty Jct. Substation add 2-161 kV breakers	Complete	Casey	B, C
Rowan County Substation add 3 -138 kV breakers	Dec-2004	Rowan	B, C, D
Spurlock substation terminal facility additions & relaying upgrades	Dec-2004	Mason	A
Stuart (DPL) and Zimmer (CIN) relaying upgrades & substation modifications	Dec-2004	State of Ohio	A
Garrard County Substation add 3-69 kV breakers and 2 line exits	Dec-2005	Garrard	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	Mar.-2004	Adair, Metcalfe	C
Campton - Helechawa - 11.08 miles	May-2004	Wolfe	C, G
Colemansville - Four Oaks Jct. - 7.92 miles	May-2004	Harrison, Pendleton	B
Colemansville - Renaker - 6.18 miles	May-2004	Harrison, Pendleton	B
Grants Lick - Stanley Parker Jct. - 9.94 miles	May-2004	Campbell, Kenton	B
Nancy - Windsor - 9.27 miles	May-2004	Casey, Pulaski	C
Beckton - Parkway - 5.40 miles	Dec-2004	Barren	C
Bonnieville - Munfordville - 8.18 miles	Dec-2004	Hart	C, G
Bowen - High Rock - 6.2 miles	Dec-2004	Powell	G

TRANSMISSION PROJECTS 2003-2005	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
<u>TRANSMISSION LINE RECONDUCTOR OR REBUILD</u>			
<u>(69 kV, 556.5 MCM ACSR, reconductor unless otherwise noted)</u>			
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	May-2005	Fayette, Jessamine	A
KU Clark County - KU Sylvania 69 kV rebuild - 0.54 miles, 795 MCM ACSR	May-2005	Clark	B
High Rock - Zachariah - 4.25 miles	Dec-2005	Powell	G
<u>TRANSMISSION LINE UPGRADES (69 kV Unless Otherwise Noted)</u>			
Annville 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	Dec.-2004	Jackson, Laurel	B
Bass - Creston Upgrade to 167F - 7.38 miles	May-2004	Casey	B
Boone Dist. - Bullittsville Upgrade to 167F - 6.4 miles	May-2004	Boone	B
New Liberty Jct. - Owen Co Upgrade to 167F - .01 miles	May-2005	Owen	B
Russell Springs Tap Upgrade to 167F - 1.2 miles	May-2005	Russell	B
Tunnel Hill Tap Upgrade to 167F - 0.54 miles	May-2005	Hardin	B
<u>TERMINAL FACILITY UPGRADES (69 kV Unless Otherwise Noted)</u>			
East Bardstown substation upgrade terminal facilities	Complete	Nelson	B
Goodnight substation upgrade 4/0 Bus terminal facilities	Complete	Barren	B
<u>SUBSTATION CAPACITOR BANK ADDITIONS (69 kV)</u>			
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	May-2004	Trimble	C
East Bernstadt 28.06 MVAR	May-2004	Laurel	C
Four Oaks 13.78 MVAR	May-2004	Harrison	C
Blevins Valley 10.2 MVAR	June-2004	Bath	C
Boone County 30.61 MVAR	June-2004	Boone	C
Maggard 12.24 MVAR	June-2004	Magoffin	C
Millersburg (EKPC) 6.12 MVAR	June-2004	Nicholas	C

TRANSMISSION PROJECTS 2003-2005	TARGET DATE	KENTUCKY COUNTIES	NEED CATEGORY
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SUBSTATION CAPACITOR BANK ADDITIONS (69 kV)

Sideview 6.12 MVAR	May-2004	Bourbon	C
Sinai 13.78 MVAR	June-2004	Anderson	C
Slat 21.6 MVAR	June-2004	Wayne	C
Mount Olive (Re-size to 10.20 MVAR)	Dec-2004	Casey	C
East Pine Knot 13.78 MVAR	Dec-2004	McCreary	C
Norwood 25.51 MVAR	Dec-2004	Pulaski	C
Tyner 20.41 MVAR	Dec-2004	Jackson	C
Knob Lick 14.29 MVAR	May-2005	Metcalfe	C
Clay Village 10.2 MVAR	Dec-2005	Shelby	C

NEW DISTRIBUTION SUBSTATION TAP LINES

Jamestown Tap, 161 kV 0.5 miles	Complete	Russell	H
Wiborg 69 Tap 4.31 miles	Complete	McCreary	H
West Bardstown #2 69 kV 0.02 miles	Jun-2004	Nelson	H
Nelson Valley Tap, 69 kV 1.4 miles	June-2004	Pulaski	H
Rineyville 69 kV Tap 6.0 miles	Dec-2004	Hardin	H
Hinkston Tap from KU 0.01 miles	Dec-2004	Montgomery	H
Loretto Tap 69kV 0.02 miles	Dec-2004	Marion	H
W. Mt. Washington #2 Tap 69 kV 0.02 miles	May-2005	Bullitt	H
Big Creek Tap 69 kV 9.3 miles	Dec-2005	Clay	H
Banklick #2 Tap 69 kV 0.02 miles	Dec-2005	Kenton	H
Columbia #2 Tap 69 kV 0.02 miles	Dec-2005	Adair	H
Fort Knox #2 Tap 69 kV 0.02 miles	Dec-2005	Hardin	H
Middle Creek #2 Tap 69 kV 0.02 miles	Dec-2005	Floyd	H
Radcliff #2 Tap 69 kV 0.02 miles	Dec-2005	Hardin	H
Sinai #2 Tap 69 kV 0.02 miles	Dec-2005	Anderson	H
Turkey Foot #2 Tap 69kV 0.02 miles	Dec-2005	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
Taylorsville #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

NEW DISTRIBUTION SUBSTATIONS

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	June-2004	Pulaski	H
Berlin Substation Upgrade/Rebuild to 11.2 mVA	June-2004	Bracken	H
Rineyville 69-12.47 kV, 11.2 MVA	Dec-2004	Hardin	H
Hinkston Substation Upgrade/Rebuild to 11.2 mVA	Dec-2004	Montgomery	H
Pleasant Grove Substation Upgrade to 15/20/25 mVA	May 2005	Bullitt	H
W. Mt. Washington #2 New Substation Addition 11.2/14 mVA	May 2005	Bullitt	H
West Bardstown #2 69-12.47 kV, 11.2 MVA	Jun-2005	Nelson	H
Headquarters Substation Upgrade/Rebuild to 11.2 mVA	June-2005	Bourbon	H
Big Creek 69-12.47 kV, 11.2 MVA	Dec-2005	Clay	H
Banklick #2 New Substation Addition 11.2/14 mVA	Dec-2005	Kenton	H
Columbia #2 #2 New Substation Addition 11.2/14 mVA	Dec-2005	Adair	H
Fort Knox #2 New Substation Addition 11.2/14 mVA	Dec-2005	Hardin	H
Middle Creek #2 New Substation Addition 11.2/14 mVA	Dec-2005	Floyd	H
Radcliff #2 New Substation Addition 11.2/14 mVA	Dec-2005	Hardin	H
Sinai #2 New Substation Addition 11.2/14 mVA	Dec-2005	Anderson	H
Turkey Foot #2 69-12.47 kV, 11.2 MVA	Dec-2005	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 11.2/14 mVA	Deleted	Jessamine	H
Tharp #2 New Substation Addition 11.2/14 mVA	Deleted	Hardin	H
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

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	Jun-2004	Marion	J
Milton Substation Upgrade to 6.44 mVA	Dec-2004	Trimble	J
South Springfield Substation Upgrade to 11.2 mVA	Dec-2005	Washington	J
West Berea Substation Upgrade to 15/20/25 mVA	Dec-2005	Madison	J
Knob Creek Sub station Upgrade to 6.44 mVA	Deferred	Bullitt	J

MISCELLANEOUS DISTRIBUTION ADDITIONS

Distribution Capacitors	Dec-2004	--	K
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Need Category--Description

- A Generation outlet or required facility to integrate new generating unit(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 Provide backfeed for radially fed substation(s).
- 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.