FLEMING-MASON ENERGY
COOPERATIVE, INC.

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March 31, 2005

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PUBLIC SERVICE
COMMISSION

Kentucky Public Service Commission
211 Sower Blvd.
P O Box 615
Frankfort Kentucky 40602-0615

RE: Case No. 2005-00090

The following is the response to Public Service Commission Case No. 2005-00090 by Fleming-Mason Energy Cooperative Inc.

Fleming-Mason Energy Cooperative Inc. is a distribution cooperative and therefore will be filing responses to item numbers 1,2,5 and 17-33 of Appendix B. Enclosed are the original and 10 copies.

Sincerely,

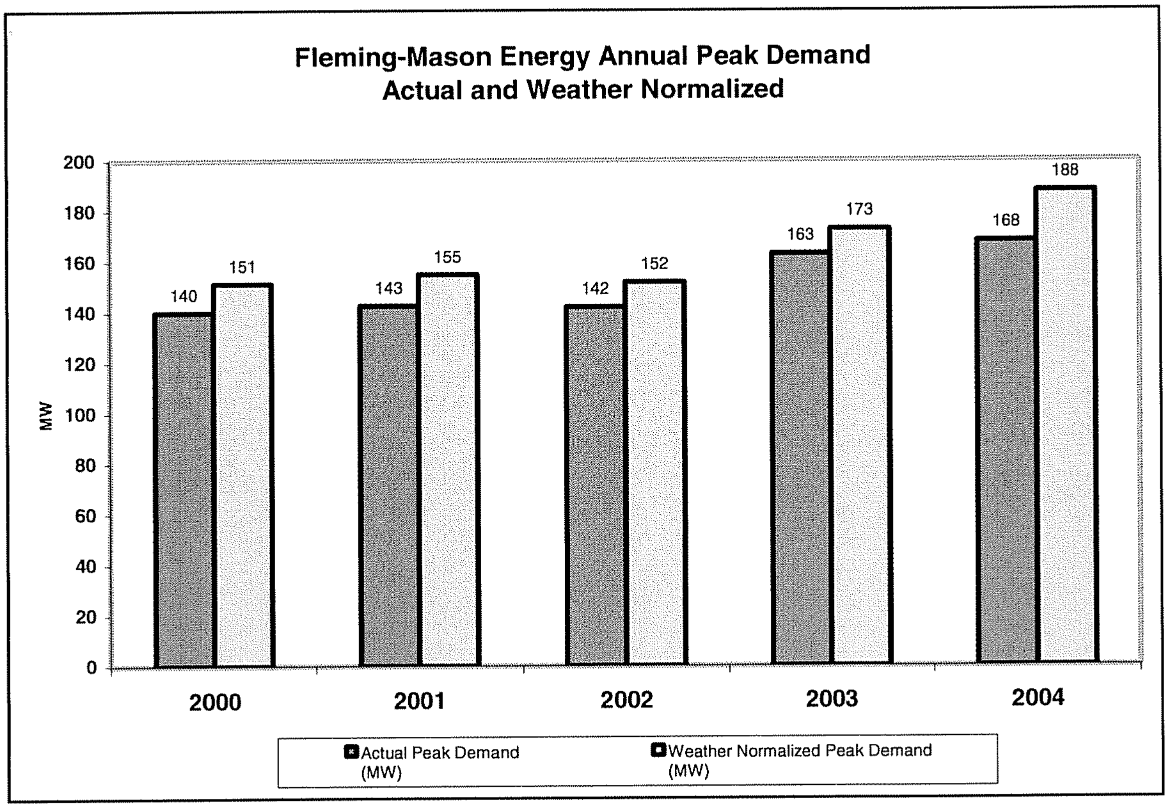
Anthony P. Overbey, President and CEO
Fleming-Mason Energy Cooperative Inc.

1. The resource planning process is ongoing. It is performed by working closely with East Kentucky Power (EKP) on the Power Requirements Study every two years. Other forms of planning occur with the required Construction Work Plans (CWP) done for RUS. During these processes, the system is evaluated for any upgrades and improvements that may be necessary due to aged conductors, equipment, and load growth.

2. New technologies are being used to improve reliability, efficiency, and safety. The technologies that are being implemented include improved mapping systems that allow for easy access to information with the next step including the use of an outage management system. Advanced fault indicators are being used on very rural lines in conjunction with sectionalizing devices to isolate faults and restore power quicker. An infrared camera is being used to identify potential problems in all parts of the system. It is being used to detect hot spots in substations, transformers, and connections throughout the system. In the near future, SCADA is going to be installed to improve operations and further improve reliability.

5.

Fleming-Mason Energy Actual and Weather-Normalized Annual Coincident Peak Demands					
Annual Peak	Actual Peak Demand (MW)	Weather Response Function (MW / Degree)	Actual Peak Day Temperature (Degrees F)	Normal Peak Day Temperature (Degrees F)	Weather Normalized Peak Demand (MW)
December-00	140.1	-1.03	11	0	151.4
January-01	142.6	-1.23	10	0	154.9
March-02	142.1	-1.23	8	0	152.0
January-03	163.1	-1.23	8	0	172.9
January-04	168.3	-1.23	16	0	187.9
Based on Huntington WV Weather Station Data and Fleming-Mason Energy Hourly Load Data					



17.

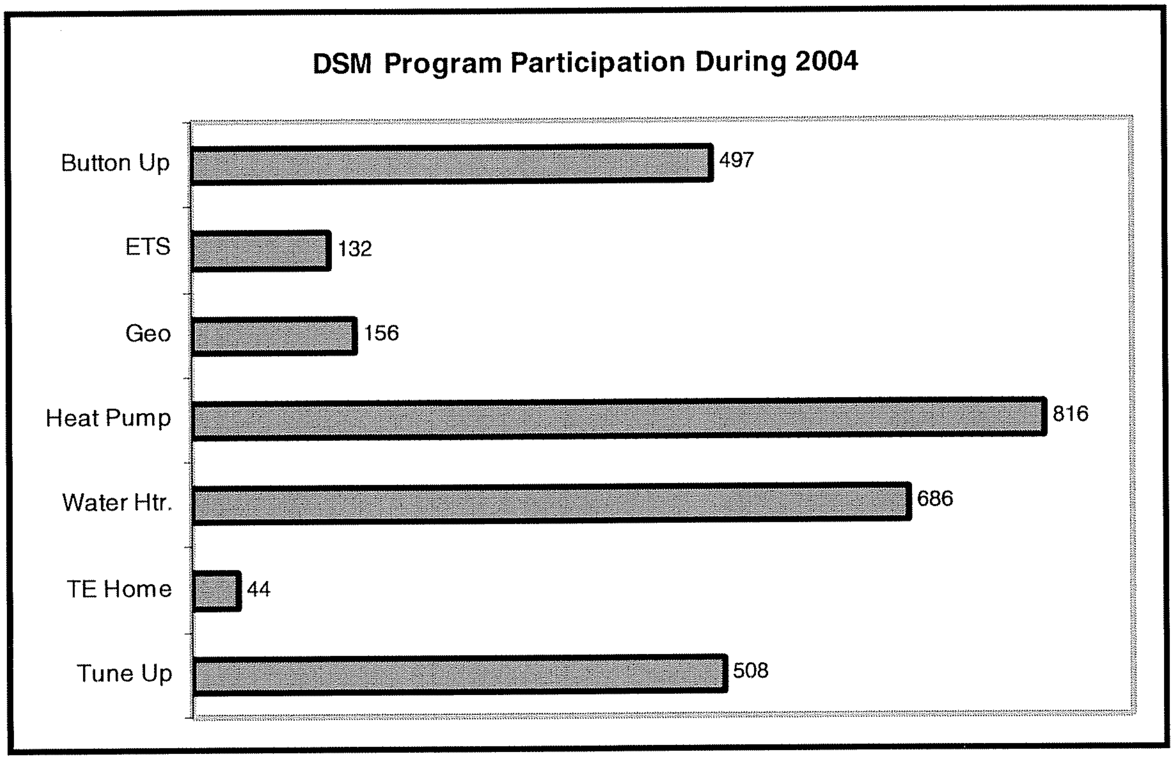
Fleming-Mason Energy and East Kentucky Power work together to design DSM programs. Program implementation is done by Fleming-Mason Energy, with support by EKPC. DSM programs are exclusively residential in nature, and almost always involve HVAC or water heating efficiency measures.

DSM programs currently in place at EKPC and Fleming-Mason are as follows:

1. Air-Source Heat Pump Incentive
2. Button Up Weatherization
3. Electric Thermal Storage (ETS)
4. Electric Water Heater Incentive
5. Geothermal Heating and Cooling
6. Touchstone Energy Home[1]
7. Tune Up – HVAC Maintenance

In 2004, the programs had the following number of participants for the entire EKPC system.

[1] Note that a home meeting the guidelines for this program would also qualify as an Energystar home.



The next two pages summarize the programs.

Button Up Weatherization Program

The program requires the installation of insulation materials or the use of other weatherization techniques to reduce heat loss in the home. Any retail member living in a stick-built or manufactured home that is at least two years old and which uses electric as the primary source of heat is eligible.

Air-Source Heat Pump Incentive

This program promotes efficient air-source heat pumps. The primary targets for this program are retail members building new homes in areas where natural gas heat is an option. An important secondary target is the HVAC retrofit market, offering incentives to retail members to replace electric furnaces and gas or propane heat with high-efficiency electric heat pumps.

Electric Thermal Storage

This program involves heating bricks during off-peak hours, thus storing the heat. During on-peak times, the heat is dispersed into the home. A time-of-day rate for ETS energy encourages retail members to use heating energy off-peak rather than on-peak. While this program is not a conservation program, it nonetheless helps to clip winter peak demand.

Electric Water Heater Incentive

The electric water heater incentive is designed to encourage residential customers engaged in new construction to choose a high-efficiency electric water heater over other available options. It is also designed to encourage conversion from a fossil-fuel water heater to a high-efficiency electric water heater.

Geothermal Heating and Cooling

Traditional air-source heat pumps remove heat from the air. Geothermal heating is a heat pump that removes heat from the ground. It is a very efficient heating and cooling appliance. EKPC and its member systems pioneered the development and implementation of geothermal heating and cooling during the eighties and nineties.

Touchstone Energy Home

This program provides incentives and support relating to new home construction. A home built to Touchstone Energy specifications will be at least as efficient as an Energystar home.

Tune Up HVAC Maintenance

This program includes cleaning indoor and outdoor heat-exchanger coils, changing filters, measuring the temperature differential across the indoor coil to determine proper compressor operation, checking the thermostat to verify operation and proper staging, measuring air flows to ensure proper conditioned air distribution, and sealing ductwork either through traditional mastic sealers or the Aeroseal dust sealing system.

Demand / Energy Impacts And Annual Budget
EKPC And All Distribution Member Systems

The table below reports program impacts. Note that this data is per installation.

	Energy Impact (kWh)	Impact On Winter Peak (kW)	Impact On Summer Peak (kW)
Button Up	(2,700)	(2.7)	(1.0)
Tune Up	(2,200)	(2.2)	(1.0)
Geothermal	(6,000)	(3.5)	(1.5)
ETS	9300*	(2.1)	0.0
Efficient Heat Pump In New Construction	(925)	2.5**	(1.0)
Touchstone Energy Home	(5,100)	(2.4)	(1.4)
Efficient Water Heater	700**	0.2**	0.1**

* Off-peak
** Impacts are positive due to customers who normally would have chosen natural gas

Annual budgets are a function of administrative cost and incentive payments. The table below reports EKPC administrative costs, and typical administrative costs and incentive payments by EKPC member distribution cooperatives.

	EKPC Administrative Costs	Distribution Cooperative Administrative Costs	Incentive Payment
Button Up	$32	$163	Up to $400
Tune Up	$60	$216	($50)*
Geothermal	$17	$254	$300
ETS	$57	$304	$50 per kW Installed
Efficient Heat Pump In New Construction	$13	$182	$300
Touchstone Energy Home	$13	$162	Varies Widely By Distribution Cooperative
Efficient Water Heater	$8	$61	$100

*Homeowner pays $50 for the service

For a more in depth discussion of EKPC and member distribution cooperative DSM programs, please see Administrative Case No. 2003-00051, Appendix II.

18. Distribution is the facilities owned at the load-side of the substation reclosers. All facilities owned by Fleming-Mason Energy would be classified as distribution. Transmission facilities would be owned and operated by East Kentucky Power.

19. Interconnections are only made with EKP.

20. N/A

21. N/A

22. N/A

23. N/A

24. N/A

25. N/A

26. The indices that are supported by IEEE have not been the standard measurement tool for cooperatives in the past. However, it is important for cooperatives to adopt these indices in the future to standardize outage reporting. Fleming-Mason Energy has started using these indices and tracking them monthly. But, this was started only in late 2003. Therefore, five years of data is not available. The table below is the calculated indices for each substation and feeder on the system for the year 2004. The second table is a list of the outage data that is reported to RUS each year on the Form 7. The table lists the outage data for the last five years by individual categories. The data in each table is given in hours instead of minutes.

	SAIFI	SAIDI	CAIDI
CHARTERS 1	0.80	2.58	3.23
CHARTERS 2	2.28	3.67	1.61
CHARTERS 3	4.76	9.62	2.00
CHARTERS 4	2.27	4.85	2.13
FLEMINGSBURG 1	1.75	2.98	1.70
FLEMINGSBURG 2	2.03	2.49	1.23
FLEMINGSBURG 3	0.58	1.14	1.98
FLEMINGSBURG 4	0.28	0.33	1.19
FLEMINGSBURG 5	0.44	0.61	1.41
HILDA 2	4.47	5.70	1.27
HILDA 3	1.55	1.72	1.11
HILDA 4	1.28	1.65	1.29
HILDA 5	0.02	0.03	1.47
HILLSBORO 1	0.77	1.11	1.43
HILLSBORO 2	0.99	0.79	0.80
HILLSBORO 3	0.26	0.30	1.17
HILLSBORO 4	0.20	0.33	1.61
MAYSVILLE 1	0.24	0.49	2.03
MAYSVILLE 2	0.55	1.49	2.71
MAYSVILLE 3	0.03	0.03	0.92
MURPHYSVILLE 1	1.24	2.42	1.96
MURPHYSVILLE 2	0.92	2.10	2.28
MURPHYSVILLE 3	0.72	3.71	5.14
MURPHYSVILLE 4	0.59	1.83	3.13
PEASTICKS 1	0.54	0.82	1.51
PEASTICKS 2	1.54	4.49	2.92
PEASTICKS 3	0.57	1.31	2.28
PEASTICKS 4	7.73	9.91	1.28
RECTORVILLE 1	1.30	2.51	1.93
RECTORVILLE 2	0.84	1.14	1.36
RECTORVILLE 3	2.43	4.92	2.03
SHARKEY 2	0.25	0.19	0.75
SHARKEY 3	0.18	0.41	2.26
SHARKEY 1	0.16	0.11	0.70

Note: The data is only for the year 2004. Fleming-Mason Energy is working to get all outage data into a format to match IEEE 1366, but only started the process in late 2003.

	Power Supplier	Extreme Storm	Planned	All Other	Total
2000	1.47	2.33	0.17	3.18	7.15
2001	0.68	0.00	0.00	2.65	3.33
2002	0.29	0.00	0.03	2.01	2.33
2003	0.82	81.96	0.22	1.72	84.71
2004	0.25	0.00	0.10	3.15	3.50

Note: Data from the Form 7 data reported to RUS. The 2003 numbers include the ices storm in February.

27. See question 26.

28. There are still no objective standards for SAIDI and SAIFI that have been identified. We are monitoring these indices on our system to see if there are any trends that can be identified. The acceptable values for these measures will vary depending on a number of characteristics including the customer density, urban versus rural, and terrain.

29. As stated in the response to question 28, there are no objective standards for the CAIDI and CAIFI indices. We continue to monitor and measure these indices, but have not set a level to be achieved. We have company goals to keep outage duration and number as low as possible. The main goal is to improve the system and reduce outages that are in our power to control.

30. The only reportable outage that occurred in the period from January 1, 2003 through March, 2005 is the ice storm in February, 2003. The records for the outage have been submitted to the PSC in 2003.

31. Fleming-Mason Energy performs reliability planning with the Construction Work Plan and the Long-Range Plan. Reliability measures are being developed and monitored monthly to determine any appropriate improvements to be made.

   a. Reliability is measured by applying the methods outlined in the IEEE Guide for Electric Power Distribution Reliability Indices (IEEE 1366) and the RUS Bulletin, Interruption Reporting and Service Continuity Objectives for Electric Distribution Systems (RUS 161-1).
   b. It is measured by creating and analyzing the monthly indices as compiled by staff using a database of outage records.
   c. The tracking system has only been implemented over the last two years and it is early in the process to determine overall performance improvements.
   d. The improvements are approved by the staff and evaluated before any corrective action is taken.

32. Summary of the following activities.

a. The right-of-way (ROW) program is managed internally by the operations department. There is a dedicated ROW manager that works with the contracted crews for Fleming-Mason Energy to ensure that the system is being cleared in the desired manner in a timely fashion. The ROW program is scheduled to clear the entire distribution system every five years. At this point in time, there are two companies that are used to perform the clearing and spraying over the system. The following table is a summary of the costs for the last five years.

Year	**Cost**
2000	$ 659,687
2001	$ 732,181
2002	$ 983,245
2003	$ 1,073,998
2004	$ 1,017,420

b. Vegetation management is performed by following up on recently cut right-of-way with spraying of approved chemicals. The following table is a summary of the costs over the last five years.

Year	Cost
2000	$ 58,692
2001	$ 118,221
2002	$ 135,492
2003	$ 141,110
2004	$ 164,850

c. The distribution inspection program is performed to comply with the two-year cycle as set forth by the Kentucky Public Service Commission. The inspections are performed over the required portion of the system by internal line personnel and a private contractor that performs pole inspection. When code violations, unsafe conditions, or deteriorated equipment is found, the personnel performing the inspection will create a work order or service order to fix the equipment or condition.

The following table is the costs associated with line inspection for the last five years. The pole inspection and treatment is performed by a contract company and they inspect approximately 5000 poles per year. The plan involves every pole being inspected once in a ten year period. The remaining portion of the inspection is performed by in-house personnel. The helicopter inspection was used in the past, but has since been abandoned and replaced by walking inspections. The aerial inspection is still used in emergency situations due to the increased speed of inspecting the system.

Year	Pole Inspection	Helicopter
2000	$ 55,844	$ 19,905
2001	$ 59,111	$ 59,455
2002	$ 48,466	$ 48,430
2003	$ 107,087	-
2004	$ 80,718	-

33. The criteria used to determine if pole or conductor replacement is necessary is based on the design criteria set forth in the Construction Work Plan and approved by RUS. The following is a summary of the criteria as related to pole and conductor replacement.

- Poles and/or crossarms that are found to be deteriorated through visual inspection or pole testing will be replaced. The testing includes sounding and boring for external and internal decay. Also, any pole that is damaged by wildlife will be replaced.
- Conductors that are deteriorated through inspection will also be replaced. Deterioration of conductor includes any fraying, excessive sag, or excessive splicing.

- Conductor replacement may also occur when the load exceeds 75% of the thermal rating of the conductor.
- The long-range plan also includes yearly upgrades of aged copper conductor.

2000	$	2,035,411	2015	$	3,138,121
2001	$	1,594,914	2016	$	3,244,817
2002	$	1,388,716	2017	$	3,355,141
2003	$	988,819	2018	$	3,469,216
2004	$	2,172,420	2019	$	3,587,169
2005	$	2,246,282	2020	$	3,709,133
2006	$	2,322,656	2021	$	3,835,244
2007	$	2,401,626	2022	$	3,965,642
2008	$	2,483,281	2023	$	4,100,474
2009	$	2,567,713	2024	$	4,239,890
2010	$	2,655,015	2025	$	4,384,046
2011	$	2,745,286	2026	$	4,533,104
2012	$	2,838,626	2027	$	4,687,229
2013	$	2,935,139	2028	$	4,846,595
2014	$	3,034,934	2029	$	5,011,379

Note: The costs for 2000-2004 are from system improvements and capital expenditures from the Construction Work Plan. The budgets for the remaining years was obtained by increasing the actual costs by the rate of inflation.