COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

THE JOINT APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY DEMAND-SIDE MANAGEMENT FOR THE REVIEW, MODIFICATION, AND CONTINUATION OF ENERGY EFFICIENCY PROGRAMS AND DSM COST RECOVERY MECHANISMS	**) CASE NO. 2007-00319**

ATTORNEY GENERAL'S AMENDED COMMENTS

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SIDE MANAGEMENT FOR THE REVIEW,	) **CASE NO. 2007-00319**
MODIFICATION, AND CONTINUATION OF	)
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COST RECOVERY MECHANISMS	)

ATTORNEY GENERAL'S AMENDED COMMENTS

Comes now the intervenor, the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention (hereinafter the "Attorney General"), and tenders the following amended comments in the above-styled matter. Succinctly stated, this joint application should only be approved subject to the changes and disallowances discussed hereinafter.

I. Summary of Plan

In their application, Louisville Gas and Electric Company ("LG&E) and Kentucky Utilities Company ("KU") (collectively "the Companies") request approval for their proposed Energy Efficiency Program Plan and Demand Side Management ('DSM") cost recovery tariffs. These proposals offer significant modifications to existing programs and propose new initiatives designed to encourage and assist ratepayers in all rate classes to become more energy efficient. The Companies assume an effective date of January 1, 2008 for all programs in its Application.[1]

The Application assumes a seven year program life and entails significant increases in costs to ratepayers over the program last approved by the Commission. The Companies' 2008 budget for the programs is estimated at $25.8 million and averages approximately $26.0 million

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[1] See Application, Paragraph 13, p 6

per year for 2008-2014.[2] While actual costs may vary, the Companies propose that these costs will be reconciled through the balancing adjustment component of the DSM cost recovery mechanism.

The Application notes that while the program will operate as "one" effort from a customer perspective, the Companies intend to maintain separate accounting to allow recovery of each individual program's costs from the individual customers within the appropriate rate class.

In order to fund the programs contained in the Application, the Companies seek to continue the DSM Cost Recovery Mechanism from the current tariff for both LG&E and KU. This mechanism provides that the DSM Cost Recovery Component ("DSMRC") be comprised of four parts: DSM Cost Recovery Component ("DCR"), DSM Revenues from Lost Sales ("DRLS"), DSM Incentive ("DSM"), and DSM Balancing Adjustment ("DBA"). The amount charged to customers on a monthly basis is calculated using the formula as follows:[3]

$$DSMRC = DCR + DRLS + DSMI + DBA$$

This formula was approved by the Commission in the Companies' previous DSM filings.

To calculate the DSM incentive, the Companies note that the current tariff employs two methods. Currently, the tariff specifies that for all programs except Education and Load Control, the DSM incentive amount is computed by multiplying the annual net resource savings expected under the programs by fifteen (15) percent, not to exceed five (5) percent of program expenditures.[4] The Application notes that currently net resource savings is defined as program

[2] See Application, Paragraph 9, p 4

[3] See Application, Paragraph 11, p. 5

[4] See Application, Paragraph 12, p 5

benefits less utility program costs and participant costs where program benefits are calculated using the present value of the Companies' avoided costs over the expected life of the program, and includes both capacity and energy savings. For the Education and Load Control programs, the current tariff specifies that the DSM incentive amount is calculated by multiplying the annual cost of the programs by five (5) percent.

The Companies seek to modify the DSM incentive calculation in their current Application to use the method employed for Education and Load Control for all their proposed programs. The Companies state that they seek this modification in order to simplify the calculation and to apply a consistent methodology to all their programs.[5]

The Application outlines the Companies' existing Energy Efficiency Program offerings to consist of the following:[6]

- Residential Conservation Program,
- Residential and Commercial Load Management Program,
- Residential Low Income Weatherization Program, and
- Commercial Conservation Program.

In addition to their existing programs, the Companies propose the following new programs:

- Responsive Pricing and Smart Metering Pilot Program,
- Residential High Efficiency Lighting Program,
- Residential New Construction Program,
- Residential and Commercial HVAC Diagnostics and Tune Up Program,

[5] See Application, Paragraph 13, p 5
[6] See Application, Paragraph 8, p 4

- Customer Education and Public Information Program, and
- Dealer Referral Network.

The Companies state that they evaluated each program's benefits versus costs using DSManager software which incorporates the tests outlined in the California Standard Practice Manual. Each program was examined utilizing the Participant, Utility Cost, Ratepayer Impact, and the Total Resource Cost tests.[7] The cost/benefit ratios for each program under each test are given for each program in the Application,[8] and the Companies state that each of the proposed programs passes the Participant and Total Resource Cost test.

The Companies provide an estimate of the annual, cumulative energy savings from all its Energy Efficiency Programs in the Application and states that over the seven year life of the proposed programs they expect to save 3,346,213 MWh, 303 MW, of electricity and 13,322 MCF of natural gas.[9] The proposed total expenditure for all its energy efficiency and DSM programs for the seven year life is estimated at $182,053,656.00.[10]

The Companies state that they plans to address the implementation requirements of their existing programs initially as the program structure and management are already in place and the Companies believe it is important to maintain continuity of service.[11] The Companies intend to finalize program specifications and issue requests for proposals ("RFP") during the third quarter of 2007. The Companies hope to complete contractor selection and the negotiation of contracts for the existing programs during the fourth quarter of 2007 and, pending program approval by

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[7] See Application, Executive Summary, p. 7
[8] See Application, Executive Summary, p. 8
[9] See Application, Executive Summary, p.9.
[10] See Application, Executive Summary, p 9
[11] See Application, Section 12, p. 74

the Commission, will be prepared to sign contractual documents to ensure that no interruption of service occurs.[12] A schedule indicating implementation milestones is provided by the Companies in Section 12, page 74 of the Application. The Companies intend to implement new programs as quickly as feasible and once Commission approval is received, the Companies will prepare descriptions for new positions associated with the programs for posting. The Companies note that the demand for such employees is high and as such there is a shortage of qualified personnel. The Companies state that they will fill the new positions as rapidly as possible and will utilize existing personnel to the extent possible to complete preliminary work on the programs.[13] The Companies state that they hope to implement all new program offerings by the end of the third quarter of 2008.[14] The Companies provide a schedule indicating the anticipated implementation of new programs in Section 12, page 75 of the application.

The Companies have budgeted for a complete on-going evaluation of its program offerings to ensure that program goals are being met. While the individual evaluation budgets are given in the specific program descriptions, the Companies have budgeted approximately $5.18 million dollars or 2.8% of its total program budget over the life of the program for evaluation efforts.

II. Program Description

A. Residential Conservation Program

The Residential Conservation Program was originally approved in April 1998 and re-approved in 2000. The current program offers customers an in-home energy analysis utilizing a

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[12] See Application, Section 12, p. 74

[13] See Application, Section 12.0, p. 75.

[14] See Application, Section 12.0, p. 75.

walk-through inspection, examination and recording of appliance data, measurement and testing of energy related attributes of the home, and an evaluation of the personal energy habits and usage of the customer. This information is compared to historical energy usage and is used to develop energy saving recommendations to the customer. These recommendations are incorporated into a formal report that is provided to the customer and which details each recommendation along with its potential energy and cost savings.

The results of this program were independently evaluated by Summit Blue Consulting ("SBC") and the results of this evaluation are provided in the Application.[15] These results indicate that the program participation exceeded its participant goal achieving 122% of customer participation levels.[16] However, the evaluation indicated mixed results with program energy savings, achieving only 54% of its planned electrical savings but performing much better on the gas side with the program achieving 234% of its planned gas savings.[17] The evaluation also noted that while the audits are valued by customers, the implementation rate of recommended measures requiring extra effort or capital was extremely low at only 5%.[18] The Companies note that this low implementation rate is typical throughout the industry.

The Companies propose to modify this program to add on-line and telephone energy audit capability. The rationale being that customers who are only marginally interested in the program will have the opportunity to participate initially via computer or telephone at no-cost to gauge their interest in the on-site audits. From the Application, the on-site audit currently utilized

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[15] See Application, Volume III, Appendix D
[16] See Application, Section 1 0, p. 13
[17] See Application, Section 1 0, p 13
[18] See Application, Section 1 0, p 12

by the Companies does not appear to change significantly; however, based on the results of the audit, customers may be referred to other programs offered by the Companies (e.g., HVAC Diagnostics and Tune Up Program). Customers choosing to participate via the on-line and telephone audits will answer questions regarding their home and those answers will be used in conjunction with data stored in the audit database to generate a formal report which may either be printed, if the participant uses the on-line audit, or which will be mailed to the customer in the case of a telephone audit. All customers participating in the program will be furnished with printed educational materials which will offer recommendations and tips for conserving energy. The on-line and telephone audits will not be as comprehensive or detailed as the on-site audit due to the imprecise nature of the data obtained. Customers participating in the on-line audit may receive compact florescent light bulbs ("CFL").

The Companies propose to increase the amount charged to a customer choosing the on-site audit from $15.00 to $25.00.[19] This increase will not cover the Companies' cost of the audit but will provide a contribution that the Companies feel is appropriate. Customers participating in the on-site audit may receive CFLs, programmable thermostats, air sealing services, energy saving showerheads, water heater wraps, and faucet aerators.[20] The Companies propose to monitor customer satisfaction and quality assurance through the use of random site visits, review of data from customers, and follow-up customer surveys. Additionally, the Companies intend to retain an independent evaluation contractor to review program results.

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[19] See Company Responses to the Data Requests of the Attorney General, Question No. 4

[20] See Application, Section 1.0, p.14

The Companies estimate that approximately 43,000 customers will participate in the program with the cumulative annual energy savings over the life of the program estimated at 56,142 MWh, 6,070 Kw in electrical savings and 2,924,054 CCF of gas savings.[21]

The Companies estimate the cost of on-line and telephone audits at $5.00 per participant and $200.00 per participant for on-site audits.[22]

The total budget for the life of the program is $5,242,288.00 or $748,898.00 average per year.[23]

B. Residential and Commercial Load Management Program

This program was originally implemented in 2001 as "Demand Conservation." The program seeks to reduce peak demand and energy use through the installation of control devices which allow the Companies to cycle specified equipment on and off according to a predetermined strategy. The control devices are typically installed on an air conditioning or heat pump unit but can also be utilized to control electric water heaters and/or pool pumps. These devices utilize a one-way commercial paging system to control the devices connected to the customer's equipment.[24] The Companies' control strategy has been to control a consumer's load between 30% to 45% based on temperature and the equipment controlled.[25] This 30% to 45% is predicated on the theory that if equipment is turned off for 15 minutes over a 30 minute period, it is being "cycled" 50% of the time. The Companies state that their current control strategy has provision for up to 20 control days per year and has allowed it to achieve an average demand

[21] See Application, Section 1 0, p 14

[22] See Application, Section 1 0, p 17

[23] See Application, Section 1 0, p 17

[24] See Application, Section 2 0, p 23

[25] See Application, Section 2 0, p 19

reduction of over 1 Kw per switch, although the Companies' actual control days have averaged only 11 days per year since 2003.[26] The results of the program indicated a summer peak demand reduction of over 107 Mw and were evaluated and verified by SBC in 2004[27] and GoodCents Solutions in 2005.[28]

Beginning in late 2005, the Companies began deploying a new programmable thermostat to participants which incorporated load control functions in addition to the functions of a standard programmable thermostat. These thermostats are offered as an option to customers participating in the program and those choosing this option are not provided the bill credit that is given to participants who have only the load control device. The Companies state this option offers the potential for additional energy savings as participants may use the thermostat to "set back" the control temperature in the home at night or when the home is unoccupied.[29] Although the use of the programmable thermostat option has a higher initial cost, the Companies state the elimination of the on-going bill credit results in a lower life cycle cost and results in additional Kwh energy savings and reduced HVAC contractor concerns regarding installation of load control switches and any perceived interference with system operation.[30]

The Companies will allow all residential and commercial customers with qualifying equipment to participate in the program subject to the availability of reliable paging

[26] See Application, Section 2 0, p 20

[27] See Application, Volume III, Appendix F

[28] See Application, Volume III, Appendix F

[29] See Application, Section 2 0, p 20

[30] See Application, Section 2 0, p. 20

communication services in the customer's area.[31] The Companies propose to continue to offer incentives to participants in the program and will offer incentives such that residential customers choosing the switch option will receive an annual incentive of $20.00 per year for each air conditioner and $8.00 per year for a water heater or pool pump.[32] The Companies have also worked with large residential complexes to install devices. In the case of large residential complexes, the incentive is reduced to $16 per year per air conditioner and is split between property owners and tenants.[33] The Companies note that although it sees substantial benefits from the program, other than the incentives, customers participating in the switch option see very little if any kWh savings as a result of the load management.[34] Citing the example of a participant's air conditioning system, the Companies state that because the internal temperature of the space controlled by the switch will rise during control periods, the system will still need to remove this additional heat, resulting in the "payback" of any energy conserved.[35] As stated previously, participants choosing the programmable thermostat option, may be able to achieve additional energy savings due to setback function.

The program currently has approximately 15% market saturation,[36] and the Companies believe it is reasonable to double that number under the proposed program to achieve a 33% market saturation by 2014.[37] In order to achieve these goals, the Companies seek to increase the number of residential customers enrolled in the program to 135,000 and commercial customers

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[31] See Application, Section 2.0, p. 22.
[32] See Application, Section 2.0, p. 22.
[33] See Application, Section 2.0, p. 22.
[34] See Application, Section 2.0, p. 23.
[35] See Application, Section 2.0, p. 23.
[36] See Application, Section 2.0, p. 20.
[37] See Application, Section 2.0, p. 20.

to 5,000 by 2014.[38] Should the Companies attain these goals, they estimate that they will save 120,057 MWh, 110.9 MW, and 7,098,000 CCF from residential participants and 5,709 MWh, 7.3 MW, and 337,000 CCF from commercial participants over the life of the program.[39]

The Companies propose to spend $68.8 million dollars over the life of the program on the residential portion of the program and $3 million dollars on the commercial portion of the program. A proposed program budget is furnished by the Company under table 2.6 and 2.6.2.[40]

C. Residential Low Income Weatherization Program (WeCare)

This program was initially implemented as a pilot program in 1994 and included education and weatherization components. The pilot program was renamed the Energy Partners Program and targeted 1,500 participants in its initial three-year period. An independent evaluation of the program determined that while the program met customer participation goals, positively impacted customers' bills and achieved customer satisfaction, the program did not meet its targeted energy savings and was terminated pursuant to the Commission's Order in April 1998.[41]

In response, the Companies redesigned the program to incorporate a tiered approach that tied dollars spent on energy saving measures to a customer's historical energy usage and utilized a matrix system to identify maximum potential energy saving measures to ensure cost effective implementation. These changes were approved by the Commission in Case No. 2000-00459, and the redesigned program has continued to the present application.[42]

[38] See Application, Section 2.0, p. 20.
[39] See Application, Section 2.0, p. 22.
[40] See Application, Section 2.0, p. 24.
[41] See Application, Section 3.0, p. 27.
[42] See Application, Section 3.0, p. 27.

As proposed, the program is comprised of three tiers or levels based upon participant annual energy usage. These levels are used to determine the amount of funds to available to each household for installation of energy saving measures. Tier A consists of households having an annual energy usage of up to 1,299 CCF or 11,499 kWh with Tier B households having between 1,300-1,800 CCF or 11,500-16,000 kWh. Tier C households are those having usage greater than Tier B. Under the program, Tier A households are eligible for $200.00 of allowable measure cost, Tier B $750.00 and Tier C $1,700.[43] No funds are distributed directly to participants.[44]

As proposed by the Companies, those households eligible to participate must be at or below the current year LIHEAP Federal Poverty guidelines as issued by the U.S. Department of Health and Human Services. Eligible households are pro-actively identified through LIHEAP programs at the Community Action Councils ("CAC"). Those households who feel they may qualify but who have not applied for LIHEAP benefits may be referred by other community organizations to their local CAC office to complete the intake process and evaluation.[45]

The services provided to participants consist of an initial visit by an auditor who will provide audit services, "customer education and implementation of simple energy efficiency improvements," and follow-up visits by an implementation contractor for more extensive installations. As part of the audit, a participant's residence will be measured and the HVAC equipment inspected along with the water heater, appliances and building shell. Based upon this inspection, the auditor will recommend improvements based upon the participant's tier classification. Customer education will consist of the auditor discussing the audit findings with

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[43] See Application, Section 3.0, p. 30.
[44] See Application, Section 3.0, p. 30.
[45] See Application, Section 3.0, p. 27.

the participant and providing feedback to the participant on energy usage and strategies that may be employed to reduce consumption.[46] The Companies state that when it is possible, they will attempt to coordinate weatherization services under the proposed program with those provided under local Weatherization Assistance Programs ("WAP") or available pursuant to other funding sources to avoid duplication of services.[47]

The current program was subjected to independent evaluations by SBC. In the 2004 billing analysis, SBC estimated, with a 95% confidence level, that the program was achieving 92% of engineering estimates of overall electrical savings and 97% of engineering estimates of overall natural gas savings. [48] In a formal evaluation of the program from its inception through July 2006, SBC determined that the program is achieving high customer satisfaction rates and is highly valued by customers. The evaluation noted that while Tier A and B customers were exceeding energy savings in both electric and natural gas, Tier C customers under LG&E fell short of the program goal.[49] As part of its evaluation, SBC recommended adjustments to maximize program cost effectiveness, and the Companies state that these recommendations are incorporated into the current application. [50]

The Companies propose to provide energy education and weatherization services to 8,400 low income households over the life of the program with LG & E and KU serving approximately 600 customers each annually.[51] This goal doubles the number of participants in the program over

[46] See Application, Section 3 0, p 31

[47] See Application, Section 3 0, p 30

[48] See Application, Volume III, Appendix G

[49] See Application, Volume III, Appendix H

[50] See Application, Section 3.0, p 28

[51] See Application, Section 3 0, p 29

the previous program, and the Companies propose to contract with an independent contractor to perform quality assurance audits.[52] The Companies estimate energy savings of 64,308 MWh, 1,835 KW and 5,976,348 CCF over the life of the program.[53]

The program budget estimates total project expenditures at approximately $12.9 million dollars over the life of the program or $1.8 million dollars per year on average.[54]

D. Commercial Conservation Program

The Commercial Conservation Program was initially approved by the Commission in Case No. 93-150 with the goal of providing recommendations on energy saving measures to commercial customers. That program was evaluated in 1997 by an independent auditor who reported that participants were highly satisfied and that the program was generating energy savings.[55]

The program was subsequently redesigned in 1998 and SBC evaluated the redesigned program in 2006. In reporting their results, SBC determined that the program was achieving program goals with regard to electric usage and had exceeded goals with respect to gas usage.[56] The evaluation also noted that the program focus had shifted to emphasize smaller commercial customers and that the Companies should place more emphasis on non-lighting energy saving measures. The Companies provide a summary of evaluated program savings through July 2006

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52 See Application, Section 3.0, p.32

53 See Application, Section 3.0, p. 30.

54 See Application, Section 3.0, p. 32.

55 See Application, Section 4.0, p. 35.

56 See Application, Section 4.0, p. 35

in Table 4.1.1.[57] The Companies note that implementation rates of recommended measures have been less than desired.[58]

To combat the low implementation rates, the Companies propose to provide incentives to commercial customers to offset the cost of installed measures.[59] These incentives will be offered to customers who choose to retrofit or replace existing equipment with energy efficient equipment. Eligible equipment includes, but is not limited to, high efficiency lighting, motors, pumps, and refrigeration.[60] The incentives offered by the Companies will be prescriptive and will be based on an amount per Kw saved. The Companies propose to monitor and adjust the amount of incentives offered under the program to maintain maximum cost effectiveness and to limit rebates offered to $50,000.00 per facility, per calendar year.[61]

The Companies propose to contract audit and implementation services through a third party. The contractor will enroll customers, perform audits, prepare audit reports with recommendations, maintain program databases, verify rebate eligibility, and track rebates along with energy impacts. Additionally, the contractor may offer installation services for energy saving measures.[62]

The Companies propose that all commercial customers will be eligible for audits with high energy use customers specifically targeted by the Companies for participation in the program.[63] The Companies' Application states that it will have oversight of the program and will

57 See Application, Section 4.0, p. 35.
58 See Application, Section 4.0, p. 35.
59 See Application, Section 4.0, p. 36.
60 See Application, Section 4.0, p. 36.
61 See Application, Section 4.0, p. 36.
62 See Application, Section 4.0, p. 37.
63 See Application, Section 4.0, p. 37.

perform independent evaluations as part of its quality assurance process.[64] Additionally, as part of the quality assurance process, the Companies will create a follow-up survey to be distributed by the audit contractor to obtain customer feedback.[65]

The Companies estimate energy savings of 1,539,664 Mwh, 144,821 Kw for electric and (4,280,688) of natural gas from the program[66] and state that incentives will be based upon $0.10 per watt for verified results.[67]

The Companies provide a program budget in table 4.6 and estimate total project expenditures at approximately $22.4 million dollars over the life of the program or $3.2 million dollars per year on average.[68]

E. Smart Metering/Responsive Pricing Program

This program was the subject of a separate application as part of Case No. 2007-00117. Reference to the full record in Case No. 2007-00117 will provide specific details of the program and budget information. However, in summary the purpose of the program is to discern whether small customers (RS and GS ratepayers) will respond to the variable pricing proposed under the program to both reduce their demand during critical peak demand hours and shift variable demand to low peak hours.

The tariff for RS customers participating in the program varies from the low cost rate of 0.0399 $/kWh to a critical cost rate of 0.30107 $/kWh, while the tariff for GS customers participating in the program varies from the low cost rate of 0.04400 $/kWh to a critical cost rate

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64 See Application, Section 4.0, p. 37.
65 See Application, Section 4.0, p. 38.
66 See Application, Section 4.0, p. 36
67 See Application, Section 4.0, p. 39
68 See Application, Section 4.0, p. 39

of 0.30107 $/kWh. It was proposed that approximately 87% of the hours in a year are subject to the low and medium cost rates for each class and that approximately 12% of the hours in a year are subject to the higher cost rates. The critical cost rate is limited by LG&E to 1% or 80 hours maximum per year for each class.

The low and medium cost rates are lower than the current RS and GS tariffs. The high and critical cost rates have rates that are significantly (approximately 2x-5x) higher than the current RS and GS tariffs. The program is designed to be cost neutral to participants who choose not to respond to the pricing signal and revenue neutral to LG&E.

The program is voluntary and for those who choose to participate in the program LG&E will install additional metering, appliance control, and energy use display equipment. A participant may withdraw from the program at any time but will be ineligible to participate in the pilot program in the future and will also be responsible for the uncollected customer specific costs. A "control" group was also proposed to collect additional data to be used in the evaluation of data gathered from the program participants. This control group will have varying levels of the same equipment installed but will not be subject to the tariffs proposed under the program. Each participant will be assessed the customer specific costs of the energy use display and the associated communications card with a cost per participant of $193.00 and a monthly Customer charge of $10.00/month for RS customers and $20.00/month for single-phase GS customers and $24.00/month for three-phase GS customers. Other program costs, the non-customer specific costs, were proposed to be recovered from all RS and GS customers through the existing DSM Cost Recovery Mechanism.

Under the program, each participant will receive the pricing signal from LG&E indicating which tariff is currently applicable to their use of electricity by way of the energy display unit which is installed in each participant's home or facility. The display unit provides a visual signal to indicate the different tariff costs. This visual signal incorporates both a digital numerical readout of the applicable tariff and a variable four color "band" to indicate the applicable tariff. LG&E intends to notify customers via a separate signal to the display unit or by some other method (i.e., email) 30 minutes prior to the implementation of the critical cost tariff to allow the customer time to respond.

The Commission approved the application in its Order dated July 12, 2007, and LG&E is in the process of ramping up the program with a target of January 2008 for implementation. The Company will evaluate the performance of the pilot program and file an annual report with the Commission detailing program results. Additionally, a full program evaluation will be performed and the report filed within 6 months after the first three years of implementing the plan. The pilot program provides for 2000 participants, including those in the test group and those in the control group. The program budget estimates total project expenditures at approximately $1.95 million dollars over the life of the program, including both specific and non-specific customer costs.

F. Residential High Efficiency Lighting Program

The Companies propose this new program to encourage and facilitate a shift in consumer purchasing from incandescent lighting to compact florescent lighting ("CFL"). To accomplish this, the Companies propose to partner with several retail outlets to promote the use of CFLs and to maintain an adequate inventory of bulbs. The Companies also intend to offer consumer incentives for the purchase of CFLs by way of discount coupons redeemable at participating retailers.[69] The Companies intend to mail these coupons directly to consumers along with educational materials at various times throughout each year of the program.[70] The incentives proposed under the program will provide discounts to consumers of $1.00 per CFL standard bulb and $2.00 per CFL flood. The Companies intend to monitor the sales of the types of bulbs and reserves the right to adjust the discounts offered to maintain the program budget.[71]

Participating retailers will be asked to capture and report consumer data on the sale of CFL's to the Companies. This data will include number and type of bulbs sold and bar-coded consumer information from the pre-printed form. Retailers will also be expected to provide program details in their local advertising and work with the Companies on joint promotion, point-of-sale information, and educational materials.

The Companies acknowledge that, to this point, consumers have been reluctant to purchase CFLs due to real or perceived concerns over lighting quality and warm-up time (i.e., the gap between turning on the switch and the bulb energizing). The Companies expect to use the aforementioned educational materials to inform consumers of the improvements in CFL technology over the past few years in regard to lighting quality and warm-up times.[72]

The Companies propose to provide incentives to customers for the purchase of one bulb per year for the life of the program. The Companies' goal is to have 5.8 million bulbs purchased and in use by consumers as a result of the program.[73]

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[69] See Application, Section 6.0, p. 44

[70] See Application, Section 6.0, p. 46.

[71] See Application, Section 6.0, p. 46.

[72] See Application, Section 6.0, p. 45.

[73] See Application, Section 6.0, p 45.

The Companies provide information indicating the energy impact of the program in table 6.3.2 and estimates cumulative residential energy savings at 1,470,476 MWh and 23,083 KW for the life of the program.[74]

The program budget estimates total project expenditures at approximately $24.1 million dollars over the life of the program, or an average yearly expenditure of $3.4 million dollars.[75]

G. Residential New Construction Program

This is a new program of the Companies, and the purpose is to encourage new home construction utilizing Energy Star construction standards. The Companies propose to accomplish this by educating builders and contractors in energy efficient construction techniques.[76] Additionally, the Companies propose to provide assistance to local home builder associations in creating the necessary program infrastructure.[77] The Companies note that although there are substantial potential energy saving benefits from new home construction using the Energy Star methods, there is low market penetration as well as builder-customer resistance due to the availability of low cost energy. Further, there is a lack of certified-practicing Home Energy Rating System ("HERS") raters and quality control providers, and also customer-perceived high program related costs.[78] The Companies note that for 2006, only 80 units were built in Kentucky (excluding the Cincinnati area and military residential housing).[79] The Companies note that although customers perceive these homes to have a substantially higher initial cost, a study by

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[74] See Application, Section 6.0, p. 46

[75] See Application, Section 6.0, p. 47

[76] See Application, Section 7.0, p. 49

[77] See Application, Section 7.0, p. 49

[78] See Application, Section 7.0, p. 50

[79] See Application, Section 7.0, p. 50

the University of Kentucky Department of Agriculture indicates that for the typical 2,000 sq. ft. home, the cost difference to build to Energy Star standards is only $1,763.00.[80]

To combat these issues, the Companies propose to provide incentives focusing on program infrastructure and which consist of providing incentives to new raters for the purchase of test equipment, sponsoring of seminars, training sessions and reference materials to raters and builders, and reimbursement to builders for the cost of plan reviews and inspections upon the successful certification of a new home.[81] Raters and builders participating in the program will also be listed upon the Companies' website as part of its Dealer Referral Network as outlined in Section 10.0 of the Application.[82] The Companies provide a table indicating participation estimates in table 7.3.1 and estimate that 4,487 homes will be constructed utilizing the Energy Star standards under the program.[83]

The Companies provide the estimated the energy savings from the program in table 7.3.2 and estimate that the program will save 36,839 Mwh, 3,807 Kw of electric and 1,267,491 CCF of natural gas over the seven-year life of the program.[84]

The Companies provide program budgets in table 8.6.1 and 8.6.2 and estimate total project expenditures at approximately $7.8 million dollars over the life of the program or $1.1 million dollars per year on average.[85]

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[80] See Application, Section 7.0, p. 49.
[81] See Application, Section 7.0, p. 51.
[82] See Application, Section 10.0, p. 65.
[83] See Application, Section 7.0, p. 51.
[84] See Application, Section 7.0, p. 51.
[85] See Application, Section 7.0, p. 54.

H. Residential and Commercial HVAC Diagnostics and Tune-up Program

This is a new program proposed by the Companies that seeks to reduce peak demand and energy use by ensuring that customer HVAC equipment is operating correctly. The Companies intend to provide performance checks on residential and small commercial HVAC equipment to diagnose problems involving four areas: restricted indoor and/or outdoor coils, over and/or under refrigerant charge. Customers having one or more of these conditions will be referred to the proposed Dealer Referral Network proposed by the Companies for repairs under the tune-up portion of the program.[86]

This program will not be marketed to the customer base as a whole but to those having probable performance issues. Customers with non-operational equipment will not be served under the program as those repairs fall outside the scope of the program.[87]

The Companies state that their installation technicians in the Demand Conservation Program estimate that over 80% of the units inspected where a customer requests removal of the switch installed under the program have a maintenance or operational problem with their unit. The Companies also reference a study which indicated that over 60% of existing HVAC systems need one or more of the corrective actions identified under the proposed program.[88] The Companies state that most customers are unaware of the marginal operation of these units and that as a result, these units experience longer run times, reduction in equipment life, and increased energy consumption. The Companies state that by identifying these relatively minor problems, the customer can then obtain the necessary repairs which will ensure proper system

[86] See Application, Section 8.0, p. 56.
[87] See Application, Section 8.0, p. 56.
[88] See Application, Section 8.0, p. 56.

operation. This in turn will reduce the unit's energy consumption, lower run time of the unit, extend the life of the equipment, and increase customer comfort.

The Companies do not intend to offer incentives directly to customers participating in the program but will subsidize the cost of the inspections, and if needed, the cost of corrective action if within the scope of the program.[89] The cost to the Companies for the inspection is estimated at $125.00 per residential unit and $200.00 per commercial unit.[90] The Companies estimate the cost of corrective actions under the tune-up program to be $200.00 per residential unit and $300.00 per commercial unit.[91]

The Companies intend to charge residential customers a fixed fee of $35.00 and commercial customers $50.00 for diagnostics of the unit and a fixed fee of $50.00 for residential customers and $100.00 for commercial customers for the tune-up of the unit.[92]

The Companies assume that the program will perform approximately 7,000 residential inspections and 3,750 commercial inspection over the life of the proposed program with approximately 65% of residential and 60% percent of commercial units inspected requiring tune-up services. In the tables under section 8.3.1, the Companies provide a breakdown of the estimated program participation levels and it should be noted that the Commercial table indicates more units in the tune-up portion than in the diagnostics portion for the last three years of the program.[93] This is assumed to be a typographical error and it has been assumed that LG&E and KU will perform 210 commercial tune-ups each for these years.

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[89] See Application, Section 8 0, p. 57
[90] See Application, Section 8 0, p. 59.
[91] See Application, Section 8 0, p. 59
[92] See Application, Section 8 0, p. 59.
[93] See Application, Section 8 0, p. 59.

As the proposed program is a new offering, energy impacts have been estimated by the Companies at 15%. The Companies state that they base this estimate on the results of numerous field studies and that the results of those studies indicated an average of 17% savings.[94] Using energy savings of 15%, the Companies estimate energy savings over the life of the program of 2,575 KW and 19,793 MWh for residential customers and 2,374 KW and 33,225 MWh for commercial customers.[95]

The Companies provide program budgets in table 8.6.1 and 8.6.2 and estimate total project expenditures at approximately $2.9 million dollars over the life of the program or $0.4 million dollars per year on average for the Residential component of the program and approximately $2.6 million dollars per year over the life of the program or $0.37 million dollars per year on average for the commercial component of the program.[96]

I. Customer Education and Public Information Program

This program is designed to increase public awareness of energy efficiency and environmental and financial impacts resulting from climate change issues. The Companies state that they believe that, by providing customers information regarding energy use and the associated costs and impacts, consumer behavior can be modified with regard to energy use. The Companies also believe that such information will encourage customers to take advantage of the various energy efficiency programs offered by the Companies and that such efforts are essential for the long-term sustainability of its energy efficiency portfolio.[97]

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[94] See Application, Section 8.0, p. 58.
[95] See Application, Section 8.0, p. 58.
[96] See Application, Section 8.0, p. 59.
[97] See Application, Section 9.0, p. 61.

To accomplish the goal of increasing customer awareness, the Companies propose to create an on-line resource for elementary and middle school teachers to provide lesson plans, teaching materials and student worksheets on the issues of energy efficiency and climate change. Additionally, the Companies intend to provide a full-time resource (either employed directly by the Companies or outsourced) to interface with school systems and provide support for its school outreach program.[98] The Companies also intend to pursue a mass media campaign, consisting of television, radio and newspaper advertising, to promote and emphasize energy efficiency and climate change issues.[99] Finally, the Companies intend to expand their corporate website and provide additional tools and information to customers wishing more information on energy related topics. These tools will provide links to the Companies' energy efficiency programs, educational materials, energy cost calculators, and energy star products and homes.[100]

There are no customer incentives offered under this program[101] and the information provided under the proposed program will be disseminated at no fee to consumers.

The Companies provide a program budget in table 9.6 and estimates total program expenditures at approximately $23.5 million dollars over the life of the program or approximately $3.4 million dollars per year on average for the program.[102]

J. Dealer Referral Network

The Companies propose to establish and maintain an on-line database of contractors and subcontractors to assist customers in finding qualified personnel to install energy efficiency

[98] See Application, Section 9.0, p. 62.
[99] See Application, Section 9.0, p. 62.
[100] See Application, Section 9.0, p. 63.
[101] See Application, Section 9.0, p. 62.
[102] See Application, Section 9.0, p. 63.

improvements and to assist contractors in locating appropriate subcontractors to assist in the construction of new energy efficient homes and energy improvements/additions to existing homes.[103]

The Companies note that low implementation rates of energy improvements is one of the weaknesses of any audit program. It is hoped that by providing a resource to customers and contractors listing companies providing assistance in the installation of energy efficient improvements will increase the implementation rates of recommended measures. Additionally, the Companies will maintain the rebate and fulfillment process as part of the program.[104]

While there are no incentives specific to this program, the incentives of other programs will be processed through this program. Additionally, there is no energy impacts associated with this program as the energy impacts of any energy efficiency improvements are reflected in the individual programs.[105]

The Companies intend to provide the dealer referral database through the use of a contractor who will create and maintain a website listing contractor information.[106] The Companies will provide program oversight and establish the criteria for the listing of participating contractors. It is anticipated that such criteria will consist of verification of service provider qualifications, certifications and licensing, execution of agreements requiring the service provider to adhere with all applicable building codes, manufacturer required installation procedures and/or best practices, and verification of acceptable levels of liability and errors and

[103] See Application, Section 10.0, p. 65.
[104] See Application, Section 10.0, p. 66.
[105] See Application, Section 10.0, p. 66.
[106] See Application, Section 10.0, p. 66.

omissions insurance.[107] The Companies will not guarantee or accept any liability for work performed by service providers, nor will the Companies provide any type of rating system for service providers participating in the program.[108]

Under the rebate and incentive fulfillment process, the Companies intend to utilize a contractor experienced in rebate processing. This contractor will require verifications and follow specific procedures established by the Companies prior the payment of any claim by customers and vendors.[109] The Companies will require the contractor to obtain three documents prior to the processing of any claim under the program. These documents are approved application, original receipts, and written approval by the Companies' program manager. Once these documents have been received, the contractor will process the claim submitted and funds will be reimbursed to the appropriate party.[110]

The Companies provide a program budget in table 10.6 and estimate total program expenditures at approximately $1.08 million dollars over the life of the program or approximately $155,000.00 dollars per year on average for the program.[111]

K. Program Development and Administration

From the Companies' description, this program is essentially a support program. It is included as it incorporates and captures generic development and administrative costs and functions that are common to the Companies' other programs but not directly assignable to those programs. The Companies state that costs for consultant costs for new program concept and

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[107] See Application, Section 10.0, p. 66
[108] See Application, Section 10.0, p. 66
[109] See Application, Section 10.0, p. 67
[110] See Application, Section 10.0, p. 67
[111] See Application, Section 10.0, p. 67

initial design, market research related to new programs, research and evaluation of new programs and technologies, overall program tracking and management, attendance at energy efficiency/DSM related conferences and workshops, personnel development efforts, trade organization memberships and subscriptions, and office supplies and equipment are all costs that will be captured and within this program's budget.[112]

There are no specific program goals, energy impacts or incentives associated with this program.[113]

The Companies provide a program budget in table 11.6 and estimates total program expenditures at approximately $5.6 million dollars over the life of the program or approximately $798,000.00 dollars per year on average for the program.[114]

III. Attorney General's Comments

The Attorney General applauds the Petitioner and the other Joint Applicants' Initiative; however, the Attorney General does wish to express a few reservations with the proposed programs which he believes should be addressed by the Commission prior to the approval of the application.

A. General Comments

The Attorney General notes that the total expenditures for the portfolio of programs over their seven year life are estimated by the Companies to be $182 Million Dollars[115] which equates to approximately $26.0 million dollars per year on average. As the Companies' current DSM

[112] See Application, Section 11 0, p 70
[113] See Application, Section 11 0, p 71
[114] See Application, Section 11 0, p 72
[115] See Application, p. 9.

budget is approximately $9.7 million dollars per year, this is an unprecedented increase in DSM/Energy Efficiency spending over those programs previously approved by the Commission.

Based on the proposed budget, the Attorney General notes that the cost of the proposed programs is approximately $219.28 per customer over the seven year life of the program, using the assumption of approximately 830,000 gas and electric customers. This is a significant increase to the individual ratepayers.

Additionally, upon review of the application, the Companies estimate the energy savings from its programs to be 3,346,213 Mwh (303 Mw) for electricity, and 13,322 MCF of natural gas.[116]

Using the residential tariff rates approved by the Commission and posted on the Companies' website, the Companies propose to save approximately $201,943,954.00 dollars worth of electricity and $13,813,715.00 dollars worth of natural gas as a result of the proposed programs. However, when the costs associated with the individual programs are compared to the proposed savings, significant discrepancies between expenditures and savings are revealed. The Companies propose to spend $182 million of ratepayer provided funds to achieve $215.7[117] million dollars of energy savings. Put another way, ratepayers will spend approximately 0.84 dollars for every dollar saved under the program. Although it is acknowledged that DSM/Energy Efficiency programs may not "pay for themselves" given Kentucky's historically low energy

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[116] See Application, Executive Summary, p. 9

[117] The Attorney General based his conclusion regarding any cost savings comparisons based upon the data found in table ES 8, pg 9 of the Executive Summary which states that the energy impacts listed therein are cumulative savings from initiatives beginning in 2008. The Company has clarified to the Attorney General that these numbers do no represent cumulative total program savings but rather represent yearly savings inclusive of prior installed measures

rates, the Attorney General's position is that DSM/Energy Efficiency programs should be as cost efficient as possible given that ratepayers are *required* to participate in the program.

Additionally, the Attorney General believes that expenses associated with DSM/Energy Efficiency programs should be closely and carefully examined to ensure that the money paid by ratepayers toward these programs are expended by the Companies in programs that directly benefit as many ratepayers as possible. Examining the Application of the Companies in this light, it is clear that some aspects of the Application are not a good return on the forced investment of ratepayer funds.

Examining the program budget, the Companies have indicated how ratepayer funds will be allocated under each program. From the Application, it appears that the bulk of the program funding (over 90%) is allocated to the following areas:[118]

Outside Services -	$51,579,544.00	(28%)
Rebates & Incentives -	$42,977,484.00	(23.6%)
Advertising -	$40,661,603.00	(22.3%)
Equipment -	$22,459,052.00	(12.3%)
Direct Labor -	$12,528,899.00	(6.8%)
Total -	$170,206,582.00	(93.49%)

The Attorney General notes that $40 million dollars of ratepayer funds are to be used to advertise the programs proposed by the Companies. Although the Attorney General emphatically supports education on energy efficiency, whether by advertising or otherwise, this expenditure is excessive. Significantly, it should be noted that the proposed advertising budget well exceeds the

118 See Application, Executive Summary, Table E S 9 1, p. 9

entire budget of the Company's current DSM/Energy Efficiency programs. While some advertising expense is reasonable to support the dissemination of information about the Companies' programs, the proposed sum represents an unreasonable excess.

Additionally, the shareholders of the Companies reap benefits from such advertising in the form of corporate goodwill and as evidence of responsible corporate citizenship. While these benefits are difficult to quantify, they exist nonetheless. Although the Companies have not submitted examples of their proposed advertising as part of the application, examples of previous advertisements by the Companies in printed media and on radio and television clearly indicate that these advertisements are not in the pure form of a public service announcement type of advertisement. These ads prominently feature the Companies, through their parent E.ON, along with statements encouraging energy conservation and outlining the Companies' efforts in this area, supporting the assertion that the Companies recognize a benefit, however intangible, for sponsoring such advertising.

Additionally, while the Companies have proposed new offerings in its application, a significant portion are existing programs to be continued and expanded. Some of these programs have been in existence for nearly a decade and consumers should be aware of their existence at this point. To vastly increase advertising for these existing programs is an unreasonable use of ratepayer funds.

Finally, programs such as the Low Income Weatherization Program should need little or no advertising funds as information concerning the program is disseminated primarily through local Community Action Councils.

Therefore, the costs of advertising should be significantly lower than proposed by the Companies, and, as there is a benefit to shareholders from such advertising, there should be some sharing of these expenses between ratepayers and shareholders.

Next, the Companies propose to modify the manner in which they calculate the DSM incentive received under the program to employ the methodology used for the Education and Load Control Programs. In their response to the Second Data Request of the Commission Staff, Question No. 1, the Companies state that this change is computationally easier and, therefore, more easily understood and verifiable.[119] In the example calculation provided by the Companies as part of their response, it appears that the incentives for most programs are unaffected by the proposed change in methodology. However, the proposed change in methodology would provide incentives for the Companies under their Responsive Pricing Pilot Program, the Residential HVAC Diagnostics & Tune-up Program, and the Program Development and Administration that do not exist under the current calculation methodology. While an incentive *may* be appropriate for the proposed Residential HVAC Diagnostics and Tune-up Program, the budget for the Responsive Pricing Pilot was approved by the Commission in Case No. 2007-00117, and the incentive now proposed by the Companies was not part of the budget in the original application in that matter. As the budget for pilot program approval of the Commission did not include the incentive now proposed by the Companies, it is inappropriate to now include an incentive based on the new methodology in this filing.

Additionally, the incentive proposed by the Companies for their Program Development and Administration Program is also inappropriate. From the application, the Companies state that

[119] See Response of the Company to Second Data Request of Commission Staff, Question No. 1

the main purpose of this program is to capture costs associated with development and administration of Energy Efficiency programs that are difficult to assign to an individual program. The Companies state that these costs include, *<u>but are not limited to</u>*:

- Consultant costs for new program concept and initial design,
- Market research related to new programming,
- Research and technical evaluation of new technologies and programs,
- Overall program tracking and management,
- Attendance at Energy Efficiency/DSM conferences and workshops,
- Development of key personnel,
- Membership in associated trade organizations,
- Subscriptions to educational and trade publications, and
- Office supplies and equipment related to general management of the organization.[120]

While these activities are asserted by the Companies to be necessary to the program, some of these activities, such as consultant costs for new program concept and initial design, and research and technical evaluation, are simply too remote to provide any direct benefit to ratepayers and, therefore, while the *<u>costs</u>* associated with these activities may be reimbursable to the Companies, any *<u>incentive</u>* to the Companies on these costs should be disallowed.

In similar fashion, Program Management activities may be necessary in order to track individual program costs and results, but the costs associated with these Program Management activities are fully reimbursable to the Companies. These activities provide little direct benefit to ratepayers and, therefore, allowing an incentive on these costs is inappropriate. Additionally,

[120] See Application, Section 11 0, p 70

some of the proposed activities mainly provide benefits to the Companies rather than ratepayers. Specifically, the Attorney General believes that activities such as personnel development, workshop and conference attendance, and membership in trade organizations and subscriptions, mainly benefit the Companies and their personnel and as such these costs should be disallowed for recovery under the DSM Cost Recovery Mechanism.

Finally, the DSM Incentive component should only be applied to those costs which are directly related to the Companies' DSM efforts. For example, any incentive for the purchase of office supplies and equipment related to general management of the programs is also inappropriate as the Companies are reimbursed for these costs under the program. Therefore, an incentive on these items should not be allowed.

Next, the Companies' DSM Cost Recovery Mechanism includes a component for recovery of revenue from lost sales. The Application does not indicate whether this component is only applicable to the energy savings generated by the individual programs or not. While such a component is authorized by statute,[121] it is debatable whether these programs have any real effect to reduce the sales of the Companies. As originally designed, this component anticipated that the Companies would experience lost sales as a result of these programs from the lowering of overall demand and load. However, from an examination of the Companies' projections in previous filings, this is clearly not the case and the overall demand and load projected by the Companies is forecasted to increase each year.[122] In fact, as the Commission staff noted in its Report on the Companies' 2005 Integrated Resource Plan, the Companies projected their growth at a robust

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[121] K.R.S. 278.285(1)(c)

[122] See 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No 2005-00162

2.0% per year for the period between 2005-2019.[123] Additionally, the demand peaks experienced by the Companies are forecasted to set new records each and every year[124] and, as evidenced by the Companies' current and proposed construction projects, the Companies are increasing generation capacity to keep up with this increasing demand.[125]

Under the Companies' latest Integrated Resource Plan, the Companies propose to add 549 MW of capacity in 2010 with the construction of Trimble Unit #2, 148 MW of capacity with the addition of Greenfield CT unit #1 in 2013 and to purchase an undetermined amount of capacity as a result of its West Virginia Hydro purchase power agreement in 2014. Although the time frame is not covered by the current application, it should be noted that the Companies plan an additional 740 MW of capacity resulting from Greenfield CT units which are projected for installation between 2015 and 2018 with the addition of another 750 MW Greenfield supercritical coal unit to be installed in 2019.[126] Clearly, from their own statements, the Companies expect their demand (sales) to increase.

While DSM programs do have an effect on capacity, their overall impact is to shift required increases in generation capacity to a later date and not to eliminate demand increases entirely as envisioned by the statute. The Companies' own forecast and every other reliable indicator points to ever increasing demand in the electrical market. Therefore, while these programs may slow the increase in consumer demand, in reality there are no "lost sales" year

123 See Staff Report on the 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No. 2005-00162, p 2

124See 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No. 2005-00162, Table 8.(4)(a)-1, p 8-93 and Table 8.(4)(a)-2, p 8-94

125 See 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No. 2005-00162, Table 8.(4), p 8-91

126 See 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No. 2005-00162, Table 8.(4), p 8-91

over year for which the Companies need to be reimbursed and, in fact, the year over year "sales" forecasted by the Companies are *increasing*. This component represents a bonus to the Companies based on the "fiction" of "lost sales." Therefore the recovery of this component should not be allowed by the Commission.

Additionally, the Companies operate their generating plants to ensure economic efficiency, and as such, if there is spare capacity, the Companies will not simply "turn off" the plant to reduce generation; they will sell such excess capacity on the energy markets. From their 2005 Integrated Resource Plan, the Companies anticipate having average reserve margins well in excess of their planning reserve of 14% during the time frame envisioned in the application even without the proposed additional capacity reductions in its current application. Therefore, the Companies will have extra capacity to sell, especially after the addition of the 549 MW generated by Trimble Unit #2. With these off-system sales the Companies can recoup their costs of generation or even sell at a higher price than it would experience if it sold in its regulated market. However, again, this results in *no overall lost sales*.

There is no reasonable basis for approval of this component and, therefore, the Commission should not approve the use of the DSM Lost Recovery Component and the Companies should only be authorized to recover their direct costs associated with the implementation of these programs.

However, should the Commission desire to approve this component, it should only apply to the actual, verifiable lost energy sales of the Companies. Therefore, the Commission should require that this component should subtract off-system energy sales by the Company prior to the calculation of any incentive in any Order.

B. Program Comments

1. Residential Conservation Program

This program is an example of a long term offering by the Companies. Originally approved by the Commission in 1998, the program was re-approved in 2000. Currently, for a nominal fee to the customer, the Companies will perform an in-home energy audit analyzing energy efficiency of the customer's appliances and the home envelope. The customer is furnished with a report of the findings and a list of recommended energy saving improvements. Additionally, as part of the audit, the Companies will install some simple energy saving devices, such as a water heater blanket, weather-stripping, and faucet aerators. The fee currently charged is $15.00.

In its Application, the Companies acknowledge that some data errors were found during the program evaluation. These errors consisted of the wrong number of heating degree days for the LG&E service area and a computational error which did not subtract the door or window area from the total wall area when data was entered into the program. The Companies state that these areas were discovered and addressed quickly.[127] Additionally, the Companies note that while the customer participation rates were high, the evaluation of the program discovered low implementation rate by customers of the measures recommended by the audit. This implementation rate was less than 5% for measures requiring extra effort and/or capital.[128]

[127] See Company Responses to Data Requests of the Attorney General, Question No. 3

[128] See Application, Section 1.0, p. 12.

The Companies propose the budget for the program at $5.2 million dollars for the seven years of the program or an average of approximately $748,898.00 per year and estimate the savings at 56,142 Mwh, 6,070 Kw electric and 2,924,054 CCF of natural gas cumulative for the seven years. Using these numbers and the tariff costs from the Companies' website, the program estimates that it will save approximately $3,388,169.00 in electric and $3,031,980.00 in natural gas for a total estimated savings of $6,420,150.00. When compared to the expenditures for the program, for every dollar saved, the Companies propose to collect and spend $0.82 of ratepayer funds.

The Companies propose to modify this program to provide an on-line audit to customers in addition to the on-site audits. The Companies state that this option will provide those customers who desire information on their energy usage but are only casually interested in the program a tool to evaluate whether an on-site audit would be appropriate for them. The Companies state that the on-line audits would cost significantly less per customer to perform than the on-site audit and it is hoped that those customers choosing the on-site audit would be more receptive to implementing the recommended measures. As the Companies have estimated the cost of the on-line audits at only $5.00 per participant, versus $200.00 per participant for the on-site audit, the Attorney General believes the proposed on-line audits are a cost effective tool.

However, while the Companies propose to increase the fee charged customers for the on-site audit from $15.00 to $25.00, this cost is still much less than the cost incurred by the Companies to perform those audits. As the Companies propose to provide participants utilizing the on-site audits with a variety of measures including, programmable thermostats, low-flow showerheads, aerators, water heater blankets, CFLs, and air sealing (weather-stripping), and considering that the program as proposed collects and spends $0.82 for every dollar saved, the Attorney General believes the fee charged to customers participating in the program should be higher. Although the Companies did not provide estimates for the cost of the devices furnished to participants as part of the on-site audit, devices such as the programmable thermostat, low flow shower head and water heater blanket are of significant enough value to warrant a higher fee increase to participants.

The Attorney General also notes that the Residential Conservation program budget includes approximately $7,000.00 in office supplies and expenses.[129] As the Program Development and Administration program described in section 11 of the Application already includes approximately $49,000.00 for office supplies and equipment,[130] the inclusion of additional expenses in this program and the other individual programs should be disallowed unless reasonable justification can be made by the Companies.

The budget expense for program advertising, estimated at $656,992.00,[131] should also be significantly reduced as this program has been offered by the Companies since 1998 and its customers should be aware of its existence by this time.

2. Residential and Commercial Load Management Program

Originally implemented in 2001, this program is another long-term offering of the Companies. Under the current program, the Companies provide and install load control devices to turn off or "cycle" customer HVAC equipment, although additional items such as pool pumps and water heaters may also be controlled. These controllers are then cycled by the Companies

[129] See Application, Section 1.0, p. 17.
[130] See Application, Section 11.0, p. 72.
[131] See Application, Section 1.0, p. 17

and reduce energy consumption during times of peak demand and energy usage. The Companies state that while the program plan calls for up to 20 control days per year, it has averaged only 11 control days since 2003.[132] In late 2005, the Companies began to deploy programmable thermostats incorporating a load control switch to participants. The rationale behind this was that additional energy savings could be achieved by participants through the setback features of the thermostat.[133] Under the current program, participants installing load control devices are provided an incentive of $20.00 per year for each HVAC unit controlled and $8.00 per year, per device for other equipment. Commercial customers receive the same incentives for HVAC units up to 5 tons but larger units may qualify for a larger incentive. Customers choosing the programmable thermostat are not provided the incentive for control of HVAC units, but still receive the incentive for other controlled equipment.[134] Additionally, the Companies have worked with owners of multi-family units (e.g., apartment complexes) to install load control devices. Incentives for multi-family units are reduced to $16.00 per year and the incentive is split between property owners and tenants.[135]

The Companies propose little change to the operation of the program, but intend to aggressively pursue additional participants. The Companies propose the budget for the program at $71.8 million dollars for the seven years of the program or an average of approximately $10.2 million dollars per year[136] and estimate the savings at 125,766 Mwh, 118.2 Mw electric and

132 See Application, Section 2 0, p 20
133 See Application, Section 2 0, p 20
134 See Application, Section 2 0, p 20
135 See Application, Section 2 0, p 22
136 See Application, Section 2 0, p 24

7,435,000 CCF of natural gas cumulative for the seven years.[137] Using these numbers and the tariff costs from the Companies' website, the program estimates that it will save approximately $7,589,978.00 in electric and $7,709,425.00 in natural gas for a total estimated savings of $15,299,403.00. When compared to the expenditures for the program, the Companies propose to collect and spend over $4.70 of ratepayer funds for every dollar saved under the program.

Although this program does have some benefit to the Companies, the benefits to ratepayers are non-existent. The controls provided under the program are utilized *only* an average of *11 days per year* and then for *less than 50% of the time*. Additionally, the Companies acknowledge that "[p]articipating customers see very little if any Kwh savings as a result of load management with the switch option."[138] Simply put, if this program were truly needed by the Companies to offset capacity increases, then the number of control days utilized by the Companies would be well over the current 11 day per year average.

Additionally, while the Companies may argue that the program avoids construction or purchase of additional generating capacity, this argument is not supported by the Companies own filings in previous cases. As previously referenced, an examination of the Companies' projections in previous filings reveals that the overall demand and load projected by the Company is forecasted to increase each year.[139] In fact, the Commission staff recognized in its report on the Companies 2005 Integrated Resource Plan that the Companies projected growth

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[137] See Application, Section 2 0, p 22

[138] See Application, Section 2 0, p 23

[139] See 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No 2005-00162

was a robust 2.0% per year for the period between 2005-2019.[140] From their 2005 Integrated Resource Plan, the Companies forecast their the demand peaks to set new records each and every year[141] and, as evidenced by the Companies' current and proposed construction projects, the Companies are increasing generation capacity to keep up with this increasing demand.[142] From the Companies latest Integrated Resource Plan, the Companies propose to add 549 MW of capacity in 2010 with the construction of Trimble Unit #2, 148 MW of capacity with the addition of Greenfield CT unit #1 in 2013 and to purchase an undetermined amount of capacity as a result of their West Virginia Hydro purchase power agreement in 2014.

While this program *may* have an effect on capacity, any impact would merely shift required increases in generation capacity to a later date and would not eliminate demand increases entirely as suggested by the Company. This is clearly illustrated by the fact that immediately after the expiration of the proposed DSM program, the Companies plan an additional 740 MW of capacity resulting from five (5) Greenfield CT units which are projected for installation between 2015 and 2018 and another 750 MW Greenfield supercritical coal unit planned for 2019.[143] While the growth rate projected by the Companies was disputed by the

140 See Staff Report on the 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No. 2005-00162, p 2.

141 See 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No. 2005-00162, Table 8.(4)(a)-1, p 8-93 and Table 8.(4)(a)-2, p 8-94

142 See 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No. 2005-00162, Table 8 (4), p 8-91

143 See 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No. 2005-00162, Table 8 (4), p 8-91

Attorney General in Case No. 2004-00507[144], because the Companies plan to add 2,187 MW of new generating capacity between 2005 and 2019 it is clear that the Companies are planning for this growth in spite of any claims as to reductions in generating capacity increases from this program.

It should also be noted that while the Companies estimate capacity reductions of 118.2 MW from this program, the Companies currently operate with excess reserve capacity and it is expected they will continue to do so during the time period encompassed by this application.[145] Thus, any capacity savings resulting from the program will merely allow the Companies to generate more off-system sales.

Clearly, when compared to the program cost, this program is not cost effective from a ratepayer standpoint. This program consumes _*nearly 40%*_ of the Companies' proposed DSM budget while generating only 3.7% of the total portfolio electric savings. Further, while the program estimates saving 7,435,000 CCF of natural gas, the monetary value of those savings is only $7,709,425.00. With an estimate of only $15.3 million dollars in savings, this program simply does not generate enough energy savings to offset the $71.8 million dollar investment by ratepayers.

Therefore, the Attorney General does not recommend this program be approved going forward and further recommends the current program be ended as expeditiously as possible.

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[144] See Post Hearing Brief of the Attorney General, Case No. 2004-00507.

[145] See 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No. 2005-00162, Table 8 (4)(a)-1, p 8-93 and Table 8 (4)(a)-2, p 8-94.

3. Residential Low Income Weatherization Program (WeCare)

The Residential Low Income Weatherization program was originally implemented as the Residential Conservation and Energy Education Program pilot in 1994. That program did not achieve its goals and was terminated by the Commission in April 1998. Subsequently, the program was redesigned by the Company and the current program was approved by the Commission in Case No. 2000-00459. Simply stated, this program provides essentially the same services as those found in the Residential Conservation Program. The main differences in the two programs are that participants are not charged for the services and the Companies install some of the recommended measures free of charge.[146] The Companies budget these implementation projects according to a tier system which rates participants on their annual energy usage. These three tiers provide that measures from $200.00 up to a maximum of $1,700.00 are available based on a participant's energy usage.[147] As the Community Action Council noted in its initial data requests to the Companies,[148] there is <u>duplication</u> of the services offered under the program with those sponsored by other governmental and private agencies (e.g., Federal Weatherization Assistance Program, etc.). However, the Companies state that the need for such services exceeds the resources available.[149]

In its responses, the Companies have confirmed that the Low Income Weatherization Program, while offering substantially the same services as the Residential Conservation Program, has a participant cost of nearly 13 times that of a participant in the Residential

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146 See Company Responses to the Data Requests of the Attorney General, Question No. 19.

147 See Application, Section 3.0, p. 30.

148 See Interrogatories of Community Action Council, Question Nos. 9, 10 and 11.

149 See Company Responses to the Data Requests of the Attorney General, Question No. 18.

Conservation Program.[150] Specifically, the Residential Conservation Program serves 43,600 customers at an average cost of $120.00 per customer while the Low Income Weatherization Program serves only 8,400 customers at an average cost of over $1,500 per customer.[151] It should be noted, however, that roughly half of the program participants are classified in the lowest tier and, therefore, qualify for only $200.00 worth of implemented measures. Therefore, the average participant cost of $1,500.00 per participant appears to be somewhat skewed. The Companies state the reason for such disparity is that the Companies provide extensive weatherization services to qualified low income participants while participants in the Residential Conservation program must arrange and pay for these services on their own.[152] However, it should be noted that the Companies admit that most participants in the Residential Conservation Program also do not implement the recommended measures due to cost concerns.[153] Although the participants in these two programs are served under the same rate structure, it would seem the treatment of the participants in these two programs is unequal as the statements given by the Companies indicate that neither group can afford to implement the measures recommended by the Companies; however, the Companies have chosen to provide ratepayer financed implementation services for participants under this program and not those under their Residential Conservation Program.

The Attorney General recommends that neither group be provided implementation services beyond that furnished to those participants in the Residential Conservation Program and that more extensive services are beyond the scope of DSM/Energy Efficiency programs. With

[150] See Company Responses to the Data Requests of the Attorney General, Question No 20

[151] See Company Responses to the Data Requests of the Attorney General, Question No. 20.

[152] See Company Responses to the Data Requests of the Attorney General, Question No 20

[153] See Application, Section 1.0, p 12

the two highest tiers receiving $750.00 and $1,700.00 worth of home improvements, these are obviously not minor repairs and ratepayers should not be expected to finance what are essentially extensive home improvement projects.

The Attorney General states that these extensive implementation services are more properly addressed through existing social services agencies, which the Companies are not.

Additionally, the lowest tier, which comprises nearly half of the participants in the program, receives a maximum of $200.00 for weatherization services; this cost closely matches the cost of services provided under the Residential Conservation Program. Therefore, the participants in the lowest tier level could be more economically served under the Residential Conservation Program.

The Attorney General notes that according to the Companies' estimates, it would be cheaper for ratepayers to provide participants in this program limited services under the Residential Conservation Program and waive the fee for **all** participants than to serve both groups under two separate programs. For example, the Low Income Weatherization Program budget is $12,996,874.00 over the seven year life of the program, while the Residential Conservation Program budget is less than half of that, or $5,242,288.00. Eliminating the Low Income Weatherization Program and providing services under the Residential Conservation Program for the projected 8,400 participants would only increase ratepayer costs by $1,680,000.00. Waiving the fee for all participants would only increase the cost by an additional $140,000.

Therefore, in eliminating the proposed Low Income Weatherization Program, the Companies would save ratepayers the $12,996,874.00 cost of the program by expending only an additional $1,820,000.00 under the Companies' Residential Conservation Program. When this sum is added to the Residential Conservation Budget proposed by the Companies, the revised total of $7,062,288.00 to serve **all** customers under the Residential Conservation Program is ***nearly half*** of that proposed for the Low Income Weatherization Program. Clearly, the ratepayers would be better served by the elimination of this program and requiring the Companies to provide weatherization services to all customers under the Companies' Residential Conservation Program.

Additionally, this program estimates savings at 64,308 Mwh, 1,835 Kw electric and 5,976,348 CCF of natural gas cumulative for the seven years.[154] Using these numbers and the tariff costs from the Companies' website, the program estimates that it will save approximately $3,880,987.00 in electric and $6,196,935.00 in natural gas for a total estimated savings of $10,077,922.00. When compared to the expenditures for the program, the Companies propose to collect and spend over $1.29 of ratepayer funds for every dollar saved under the program.

For these reasons, the Attorney General recommends that this program not be approved.

4. Commercial Conservation Program

This program is a long-term offering of the Companies having been originally approved by the Commission in Case No. 93-150. Essentially, this program is a commercial version of the Companies' Residential Conservation Program. The main differences are that under this program, commercial participants are not charged a fee for the audit services, and the Companies propose to assist commercial customers with implementation of recommended measures through the use of rebates. The Companies state that they intend to expand this program to offer five

[154] See Application, Section 3 0, p 30

levels of audits over the existing three levels.[155] The proposed new audit levels will primarily serve the small commercial client whose energy levels do not make intensive audit levels cost effective. A description of the services offered by the Companies under the various levels is given in the Companies' Responses to the Data Requests of the Attorney General, Question No. 30.

The Companies propose to increase implementation rates through the use of the dealer referral network described in Section 10.0. The Companies intend to partner with appropriate contractors to provide customers with installation solutions of the measures recommended by the audit.[156]

The existing program was independently evaluated in 2006. The evaluation found that the program was achieving its targeted electrical savings and was exceeding its targeted gas savings. The Companies propose the budget for the program at $22.4 million dollars for the seven years of the program, or an average of approximately $3.2 million dollars per year.[157] Under its current proposal, the Companies estimate the cumulative savings over the seven year life of the program at 1,539,664 Mwh, 144,821 Kw electric and notes that the gas savings of (4,280,688) CCF of natural gas is negative due to the lost heat factor from lighting in winter.[158] Using these numbers and the tariff costs from the Companies' website, it is estimated that the program will save approximately $92,918,722.00 in electric, but will cost participants an additional $4,438,688.00 in natural gas due to increased use in winter, for a total net estimated savings of

155 See Application, Section 4.0, p. 34
156 See Application, Section 4.0, p. 34
157 See Application, Section 2.0, p. 24
158 See Application, Section 4.0, p. 36

$88,480,034.00. When compared to the expenditures for the program, the Companies propose to collect and spend approximately $0.25 dollars of ratepayer funds for every dollar saved under the program.

Basėd upon the program data provided by the Company, this is clearly a reasonable use of ratepayer funds. However, since the Companies charge residential customers under its Residential Conservation Program, it should also be required to charge a fee to its commercial customers participating in this program. These funds could be used to offset the costs of the program such that the Companies may not need to collect as much from ratepayers. Obviously, such a change would continue to represent a positive return on the ratepayer investment. Therefore, the Attorney General recommends approval of this program subject to the foregoing recommendations.

5. Smart Metering/Responsive Pricing Program

The Attorney General's comments regarding this program are of record in Case No. 2007-00117 and incorporated herein by reference. The Attorney General offers no further comments on this program.

6. Residential High Efficiency Lighting Program

This program is a new offering of the Companies. Its goal is to encourage consumer use of Compact Florescent Lighting.[159] To facilitate this, the Companies propose to partner with leading retailers in their service areas to provide consumers with coupons discounting the purchase price of CFLs. The Companies also propose to work with their retailers to create and maintain point-of-sale and educational materials which will be made available to consumers at

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[159] See Application, Section 6.0, p. 44.

the retailer's locations. To distribute the aforementioned coupons, the Companies propose to direct mail consumers multiple times a year with coupons which are redeemable upon the purchase of a specified number of Energy Star rated CFL bulbs.[160] The Companies propose incentives to include a $1.00 per CFL discount for standard bulbs and a $2.00 per CFL discount for CFL flood lights.[161] The Companies propose to monitor retailer sales and to adjust the number of bulbs that may be purchased at various times to ensure that all customers have an equal opportunity to receive a discount.

The Companies propose the budget for the program at $24.1 million dollars over the seven year life of the program or $3.44 million dollars per year on average. The Companies estimate cumulative energy savings at 1,470,476 Mwh, 23,083 Kw over the seven years of the program. Using the savings estimate and the tariff information from the Companies' website, it is estimated that the program will save approximately $88,743,226.00 in electric over the program's life. When compared to program expenditures, the Companies propose to collect and spend approximately $0.29 of ratepayer funds for every dollar saved under the program.

The Attorney General is concerned that the program promotional costs begin initially at approximately 50% of the yearly budget and increase over the life of the program to 70% of the program budget, while the amount for consumer rebates decreases from 39% of the program budget to 24%. Although the Companies have stated that this is due to the promotional costs being adjusted for inflation, while rebate costs are not,[162] the stated goal of the program is to get

[160] See Application, Section 6 0, p 46
[161] See Application, Section 6 0, p 46
[162] See Application, Section 6 0, p 47

CFL bulbs into the homes of customers. It is unclear how spending more on advertising than on rebates accomplishes this goal.

Additionally, the Attorney General asked the Companies whether it would be more cost effective to merely mail a bulb to each of the Companies' 830,000 customers.[163] The Companies' response was that it would indeed be less expensive to direct mail CFL's to customers, but that the Company felt it was not a prudent use of ratepayer funds as bulbs could end up not being utilized. However, it is common knowledge that coupons are routinely discarded by consumers. Further, the use of a coupon requires the consumer to save the coupon, take it to the retailer, purchase the bulb and install it to evaluate the product, whereas a sample bulb sent to the consumer merely requires the consumer to install the CFL to evaluate it. The Attorney General notes that the mailing of product "samples" to consumers has been in use for decades by various marketers. In fact, on or around October 6th, 2007, many consumers subscribing to the Lexington-Herald Leader newspaper received samples of a breakfast cereal inserted along with their newspaper. In addition, the Herald Leader also included a sample for Advil on October 21, 2007. While not possessing any data to show the results of that effort, if the goal of this program is to distribute CFL lighting to consumers, then direct mailing would accomplish that goal using fewer ratepayer dollars. Therefore, the Attorney General recommends approval of the program, although he recommends that the Commission require the Companies to evaluate direct mailing of bulbs to consumers as a more cost effective use of ratepayer dollars.

[163] See Company Responses to the Data Requests of the Attorney General, Question No. 36

7. Residential New Construction Program

This program is a new addition to the Companies' DSM/Energy Efficiency portfolio. Its goal is to encourage residential home builders to construct homes using the energy efficiency construction standards as set forth in the U.S. Department of Energy's "Energy Star" program.

The Companies note that Energy Star requires homes to be inspected to qualify under the program and that the number of certified inspectors or "raters" in Kentucky is insufficient to serve the homes projected to participate under the program. To increase the number of raters, the Companies propose to provide support, training assistance and equipment purchase incentives to develop the necessary rater infrastructure.[164] The Companies also propose to provide educational assistance to builders in the form of seminars to disseminate information concerning Energy Star construction standards and guidelines.[165]

The Companies note that an analysis by the University of Kentucky Department of Agriculture found that for an additional $1,763.00, the typical 2,000 sq. ft. home can be constructed to meet Energy Star standards[166] and that this additional cost actually saves the homeowner money because additional costs, spread over the life of the mortgage, are offset by the energy savings achieved.[167]

The Companies have set a program goal of 4,487 homes constructed in Kentucky under the Energy Star standards over the seven year life of the program.[168] The Companies propose the budget for the program at $7.8 million dollars over the seven year life of the program or $1.11

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164 See Application, Section 7.0, p. 51.
165 See Application, Section 7.0, p. 51.
166 See Application, Section 7.0, p. 49.
167 See Application, Section 7.0, p 50.
168 See Application, Section 7.0, p. 51.

million dollars per year on average.[169] The Companies estimate cumulative energy savings at 36,839 Mwh, 3,807 Kw for electric and 1,267,491 CCF for natural gas over the seven years of the program.[170] Using the savings estimate and the tariff information from the Companies' website,program savings are estimated at approximately $2,223,233.00 in electric and $1,314,274.00 in natural gas, for a total of $3,537,507.00 over the program's life. When compared to the expenditures for the program, the Companies propose to collect and spend approximately $2.20 of ratepayer funds for every dollar saved under the program.

The goal of this program is to build program infrastructure on the supply-side of the equation to ensure an adequate supply of energy star rated homes. The Companies assume that if this is done, then the corresponding consumer demand for Energy Star rated homes will follow. However as the Companies note in the application, thus far, demand for Energy Star homes has been extremely low.[171] The Companies note that according to Energy Star statistics, only 80 units were built for 2006 by 20 certified builders.[172] Therefore, the assumption that demand will follow supply once this infrastructure is in place is not well founded. The Attorney General notes that various home builder associations (e.g., Home Builders Association of Lexington, etc.) are also encouraging their builders and contractors to use Energy Star construction standards and, therefore, it would be a more efficient use of ratepayer funds for the Companies to provide incentives designed to increase the consumer demand for these homes. Although the Companies

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[169] See Application, Section 7.0, p. 54.
[170] See Application, Section 7.0, p. 51.
[171] See Application, Section 7.0, p. 50.
[172] See Application, Section 7.0, p 50.

may succeed in building the 4,487 Energy Star rated homes as a result of the program, these efforts are for naught if the homes are not embraced by homebuyers.

The Companies cite one reason in the application for the poor market penetration is the perception by customers that these are high cost homes.[173] Therefore, using ratepayer funds to promote and encourage the purchase of these homes is more cost effective than encouraging builders to build them. It is more appropriate that the home building market address the *supply* of these homes and to let the Companies encourage the *demand* for the homes through the use of appropriate incentives applied toward the construction and/or purchase of Energy Star homes.

It is interesting to note that dividing the program budget proposed by the Companies, which is $7.8 million dollars, by the number of houses the Company proposes to build, which is 4,487, yields a figure of $1,738.00. This nearly equals the average additional cost of building an Energy Star compliant home, which as noted was $1,763.00.

Therefore, the Attorney General would recommend that, rather than encouraging the building of houses that the public is reluctant to purchase, the program be designed to encourage and assist homebuyers in the purchase of these homes. Moreover, it is hoped over time that the public will want Energy Star homes and that any incentives offered by the Companies will no longer be needed.

[173] See Application, Section 7.0, p. 50.

8. Residential & Commercial HVAC Diagnostics & Tune-up Program

This program is a new offering by the Companies and is designed to address minor operation problems with customers HVAC equipment that degrade operational efficiency of the system and waste energy. The Companies note that this program is not designed to provide major repairs to a system but to provide a diagnostic check in four areas.[174] These areas are air restrictions in either the indoor and/or outdoor coils and an over or under charge of refrigerant.[175]

The Companies cite field studies that indicate over 60% of existing HVAC systems require one or more of the corrective actions address as part of the program.[176] To address these problems, the Companies propose to provide customers an opportunity to obtain a diagnostic check of their system at a reduced cost.[177] Under the program, the Companies will partner with a professional, licensed HVAC technician who will examine the customer's system for one of the specified problems.[178] Although the technician may inspect for other issues affecting system performance, this will be incidental and not part of the program's scope. After the inspection, the technician will provide the customer with a report of the findings indicating if any of the specified problems exist. If so, the customer will be eligible to receive corrective action to remedy the problem at a reduced rate.[179] While no incentives will be paid directly to customers, the Companies will reimburse the technician for the full cost of the service.

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[174] See Application, Section 8.0, p. 56
[175] See Application, Section 8.0, p. 56
[176] See Application, Section 8.0, p. 56.
[177] See Application, Section 8.0, p. 58
[178] See Application, Section 8.0, p. 58.
[179] See Application, Section 8.0, p. 58

The cost to the Companies of the diagnostic inspection is estimated at $125.00 per residential unit and $200.00 per commercial unit.[180] The Companies estimate the cost of corrective actions under the tune-up program to be $200.00 per residential unit and $300.00 per commercial unit.[181] The Companies state they have addressed any potential conflict of interest of the contractor performing the service by requiring that the contractor diagnosing the system will not be the same contractor that performs the repairs.[182] Such requirement should eliminate the incentive for a contractor to diagnose non-existent or unnecessary repairs.

The Companies intend to charge residential customers a fixed fee of $35.00 and commercial customers $50.00 for diagnostics of the unit and a fixed fee of $50.00 for residential customers and $100.00 for commercial customers for the tune-up of the unit.[183]

It should be noted that in the Companies' 2005 Integrated Resource Plan, a proposed Heat Pump Tune-Up program and a propose A/C Tune-up Program aimed at residential customers failed the Companies quantitative screening process.[184] How the proposed program differs from those previous programs was not disclosed by the Companies in its application.

The Companies propose the budget for the program at $5.5 million dollars over the seven year life of the program or $795,000 dollars per year on average.[185] The Companies estimate cumulative energy savings at 53,018 Mwh, 4,949 Kw for electric over the seven years of the

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[180] See Application, Section 8.0, p. 59

[181] See Application, Section 8.0, p. 59.

[182] See Company Responses to the Data Requests of the Attorney General, Question No. 47.

[183] See Application, Section 8.0, p. 59

[184] See 2005 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company – Case No 2005-00162, Volume 3-02, p 6 and 7.

[185] See Application, Section 8.0, p. 59

program.[186] No savings from gas usage was estimated. Using the savings estimate and the tariff information from the Companies' website, it is estimated that the program will save approximately $3,199,636.00 in electric over the program's life. When compared to the expenditures for the program, the Companies proposes to collect and spend approximately $1.23 of ratepayer funds for every dollar saved under the program.

The Companies' cost for providing these services is only partially offset by the amount charged to customers taking advantage of the program. Assuming that a customer needs only the diagnostics portion of the program, a residential customer would only be charged $35.00 for a service that costs the Companies $125.00. Commercial customers would be charged $50.00 for a service that costs the Companies $200.00. For the tune-up services, a residential customer would be charged $50.00 for a service that costs the Companies $200.00 and a commercial customer would be charged $100.00 for a service that costs the Companies $300.00.[187] While this service is beneficial to participants, participants should be responsible for more of the true costs associated with the service. Under the current proposal, participants are charged only a portion (25%-33%) of the true cost of the service which is not cost effective and may limit the number of participants in the program. However, if participants are provided ***discounts*** of 25%-33% on the services provided by the program, which would still represent a substantial benefit to customers, then the program would be more cost effective and be able to provide these services to more customers. Therefore, while the Attorney General recommends approval of the program, he

[186] See Application, Section 8 0, p 58
[187] See Application, Section 8 0, p 59

suggests that participants be given a discount off the services of 25%-33% rather than only paying 25%-33% of the true cost.

9. Customer Education & Public Information Program

This program is a new offering designed to increase customer awareness of energy and climate change issues, and encourage efficient use of energy resources.[188] The Companies state that while no incentives will be paid under this program, printed materials and web-based information on these issues will be disseminated to customers along with outreach programs specifically targeted at elementary and middle school students.[189] In addition, the Companies intend to use mass media (television, radio and newspaper) advertisements to inform customers of these issues[190] and their energy efficiency programs.

As part of their web-based strategy, the Companies intend to provide customers with various on-line tools including energy cost calculators, descriptions of the various energy efficiency programs offered by the Companies, and information on energy efficiency technology and products.[191]

The Companies proposed budget for the program is $23.5 million dollars over the seven year life of the program or $3.4 million dollars per year on average.[192] There are no discernable energy savings associated with this program.

While the Attorney General agrees that efforts to inform the public regarding energy and climate change issues are important, the efficient use of ratepayer funds is equally important. To

[188] See Application, Section 9.0, p. 61.
[189] See Application, Section 9.0, p. 61.
[190] See Application, Section 9.0, p. 61
[191] See Application, Section 9.0, p. 63.
[192] See Application, Section 9.0, p. 63

that end, the Attorney General questions the reasonableness of the Companies' proposal to utilize a dedicated employee specifically for the purpose of school outreach.

In the application, the Companies state that they believe it is important to reach out to school children as they are not only future customers, "but also may significantly influence consumption behavior of their parents and families."[193] However, when questioned regarding this statement, the Companies responded that it did not have any "hard data" to support it and that it was an intuitive statement based on information obtained from third parties.[194] It should be noted that the Companies already have a school outreach program related to public safety[195] and while the public safety program certainly disseminates some useful information to those children, such efforts also generate "goodwill" among the community in which the Companies operate. However, in regard to the statement that children exercise significant influence over their parents' energy decisions, the Attorney General respectfully disagrees and states that decisions such as the purchase of major appliances, light bulbs, etc. are not likely ones in which a child can significantly influence parental behavior.

While informing children of the need to "turn off lights" when they leave a room is of some benefit, these efforts can probably be combined with the Companies' current outreach efforts in regard to public safety without the need for a dedicated full-time employee. Further, the Companies state that they do not consider these efforts to be merely "goodwill" efforts and that their "outreach efforts will be technical in nature and while they may generate some

[193] See Application, Section 9.0, p. 61.

[194] See Company Responses to the Data Requests of the Attorney General, Question No. 55

[195] See Company Responses to the Data Requests of the Attorney General, Question No. 56

"goodwill" [they] are certainly not designed for that purpose."[196] Again, the Attorney General respectfully disagrees.

While the proposed program may disseminate some useful information to children, it is misleading to characterize the proposed program as disseminating "technical" information to school children rather than a "goodwill" effort on behalf of the Companies. Simply stated, is not clear how much "technical" information can elementary and middle school children can comprehend. However, the issues concerning energy use and its effects on climate change are difficult concepts and it is seriously questioned as to how much "technical" information can be absorbed by the average elementary school child. Such efforts would, by necessity, be confined to simple and relatively generic statements, such as turning off lights when you leave the room and, as such, are not truly "technical" in nature. Additionally, it will be many years before children participating under the program will be customers of the Companies, and, therefore, the use of ratepayer funds to "educate" these future consumers is likely an unproductive use of those funds and any benefit derived is more along the lines of increased goodwill to the Companies rather than specific energy savings. Importantly, and perhaps more telling about the purpose of the program, the Companies estimate that there are no energy savings as a result of this program. Therefore, the Attorney General does not recommend approval of this portion of the proposed program.

The Companies propose to spend \$19.6 million dollars over the seven year life of the program or \$2.8 million dollars on average per year on their mass media efforts. These funds are over and above the advertising dollars included in the specific program budgets. As stated

[196] See Company Responses to the Data Requests of the Attorney General, Question No. 56.

previously herein, some advertising regarding the portfolio of programs is reasonable. However, these funds are not targeted toward any one program but are intended to inform the public of all of the Companies offerings. The Companies state that the efforts of this program should not be considered as overlapping their efforts with regard to their individual programs.[197] If that is true, then such efforts to generally inform the public of its energy efficiency efforts should also be considered as providing some benefit to shareholders in the form of increased corporate goodwill and as evidence of responsible corporate citizenship. These benefits are difficult to quantify; however, as was previously stated, they exist nonetheless.

Again, while the Companies have not submitted examples of their proposed advertising under the program, common examples of previous advertisements by the Companies in printed media and on radio and television clearly indicate that these advertisements are not in the pure form of a public service announcement type of advertisement. These ads prominently feature the Companies, along with statements encouraging energy conservation, supporting the assertion that the Companies recognize a benefit, however intangible, for sponsoring such advertising. In addition, the need for informing the public regarding these issues is not as great as it may have been previously as energy related and climate change issues have been the topic of extensive media coverage over the last few years. Therefore, the Attorney General recommends reducing the advertising budget of these programs. Additionally, as there is a benefit to the Companies' shareholders from such advertising, it is recommended that the shareholders should share in the costs of the proposed advertising.

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[197] See Company Responses to the Data Requests of the Attorney General, Question No. 59.

10. Dealer Referral Network

This program is a new offering wherein the Companies propose to establish a web-based database identifying contractors who can provide customers with assistance in installing energy efficiency improvements recommended as part of their other programs. The database will also identify subcontractors with energy efficiency construction experience to contractors seeking to build energy efficient homes or additions to existing homes, and will assist with fulfillment of incentives and rebates.[198]

The Companies note that one weakness of their audit programs is that recommended energy efficiency measures are not installed by customers. The Dealer Referral Network proposed by the Companies is intended to address this area by providing customers with the names of qualified contractors who may be contacted to provide installation services. The Companies state that no direct incentives are to be provided under this program.[199] The Companies claim that the program will increase energy savings as the program will facilitate the implementation of energy saving measures recommended under other programs; however, these energy savings are captured in the results for those other programs.[200]

The Companies intend to provide the dealer referral database through the use of a contractor who will create and maintain a website listing contractor information.[201] The Companies will provide program oversight and establish the criteria for listing of participating contractors. It is anticipated that such criteria will consist of verification of service provider

[198] See Application, Section 10.0, p. 65

[199] See Application, Section 10.0, p. 66.

[200] See Application, Section, 10.0, p. 66.

[201] See Application, Section 10.0, p. 66.

qualifications, certifications and licensing, execution of agreements requiring the service provider to comply with all applicable building codes, manufacturer required installation procedures and/or best practices, and verification of acceptable levels of liability and errors and omissions insurance.[202] The Companies will not guarantee or accept any liability for work performed by service providers, nor will the Companies provide any type of rating system for service providers participating in the program.[203]

Under the rebate and incentive fulfillment process, the Companies intend to utilize a contractor experienced in rebate processing. This contractor will require verifications and follow specific procedures established by the Companies prior to the payment of any claim by customers and vendors.[204] The Companies will require the contractor to obtain three documents prior to the processing of any claim under the program: an approved application, original receipts, and written approval by the Companies' program manager. Once these documents have been received, the contractor will process the claim submitted and funds will be reimbursed to the appropriate party.[205]

The Companies provide a program budget in table 10.6 and estimate total program expenditures at approximately $1.08 million dollars over the life of the program or approximately $155,000.00 dollars per year on average for the program.[206]

The Companies claim that the program will be helpful to the public because the program will provide assistance to anyone seeking qualified contractors to install recommended measures

[202] See Application, Section 10.0, p. 66.
[203] See Application, Section 10.0, p. 66.
[204] See Application, Section 10.0, p. 67.
[205] See Application, Section 10.0, p. 67.
[206] See Application, Section 10.0, p. 67.

and that it will verify contractor qualifications prior to inclusion on the database listing. Additionally, access to website data on participating contractors is not contingent upon customer participation in any other program.

The Attorney General supports this program and recommends its approval, but strongly suggests that the Commission require the Companies to vigilantly maintain the proposed oversight procedures to ensure that contractors failing to meet licensing and/or other requirements are removed in a timely fashion. Additionally, to avoid any customer confusion, the Companies should be required to notify customers using the website in clear and certain terms that the Companies are not endorsing or recommending any contracting firm merely by the inclusion of the contractor on the website nor are the Companies guaranteeing the quality of the work or accepting any liability for same.

11. Program Development & Administration

Although this is a new program, it is essentially a support program because it incorporates and captures generic development and administrative costs and functions that are common to the Companies' other programs but not directly assignable to those programs.

There are no specific program goals, energy impacts or incentives associated with this program.[207]

The Companies provide a program budget in table 11.6 and estimate total program expenditures at approximately $5.6 million dollars over the life of the program or approximately $798,000.00 dollars per year on average for the program.[208]

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[207] See Application, Section 11 0, p 71
[208] See Application, Section 11 0, p 72

The Companies state that this program will capture costs associated with development and administration of Energy Efficiency programs that are difficult to assign to an individual program. The Companies state that these costs include, *but are not limited to*:

- Consultant costs for new program concept and initial design,
- Market research related to new programming,
- Research and technical evaluation of new technologies and programs,
- Overall program tracking and management,
- Attendance at Energy Efficiency/DSM conferences and workshops,
- Development of key personnel,
- Membership in associated trade organizations,
- Subscriptions to educational and trade publications, and
- Office supplies and equipment related to general management of the organization.[209]

The Companies assert these activities are necessary to the program. However, some of these activities, such as consultant costs for new program concept and initial design, and research and technical evaluation, are simply too remote to provide any direct benefit to ratepayers, and, therefore, the costs associated with these activities should be disallowed. In similar fashion, some of the proposed activities mainly provide benefits to the Companies rather than ratepayers. Specifically, the Attorney General believes that activities such as personnel development, workshop and conference attendance, and membership in trade organizations and subscriptions, primarily benefit the Companies and their personnel and should be disallowed.

[209] See Application, Section II 0, p 70

Finally, the Attorney General notes that the individual programs also list line items for market research costs and office supplies and equipment associated with each program. Since individual programs also provide for expenses under this line item, it appears that these costs may be duplicative. Therefore, unless the Companies can provide justification for the inclusion of these expenses, they should be disallowed.

IV. Conclusion

In summary, the total expenditures for the portfolio of programs over their seven year life as estimated by the Companies are $182 Million Dollars.[210] This is an unprecedented increase in DSM/Energy Efficiency spending over those programs previously approved by the Commission and represents a significant increase to individual ratepayers. The Companies estimate energy savings from their programs to be 3,346,213 Mwh (303 Mw) for electricity, and 13,322 MCF of natural gas,[211] which equates to approximately $201.9 million dollars savings in electricity and $13.8 million dollars savings in natural gas as a result of the proposed programs. In short, the Companies propose to spend $182 million of ratepayer provided funds to achieve $215.7 million of energy savings. Simply put, the ratepayers will spend $0.84 dollars for every dollar saved under the program. Based on an examination of the individual program budgets, however, significant discrepancies exist between certain program expenditures and savings. Although DSM/Energy Efficiency programs may not "pay for themselves" given Kentucky's historically low energy rates, the Commission should ensure that DSM/Energy Efficiency programs are as cost efficient as possible given that ratepayers are ***required*** to participate in the

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[210] See Application, p. 9

[211] See Application, p. 9

program. Therefore, the expenses associated with DSM/Energy Efficiency programs should be closely and carefully examined to ensure that monies paid by ratepayers toward these programs are expended by the Companies in programs that directly benefit as many ratepayers as possible. Upon a thorough review of the Application, and as is outlined herein, it is clear that some aspects of the Application are not a good return on the forced investment of ratepayer funds.

For the reasons outlined hereinabove, the Attorney General recommends the Commission approve the Companies' application but Order them to incorporate the suggestions and modifications discussed herein.

Respectfully submitted,

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CERTIFICATE OF SERVICE AND NOTICE OF FILING

I hereby give notice that this the 16th day of November, 2007, I have filed the original and ten copies of the foregoing Attorney General's Amended Comments with the Kentucky Public Service Commission at 211 Sower Boulevard, Frankfort, Kentucky, 40601 and certify that this same day I have served the parties by mailing a true copy of same, postage prepaid, to those listed below.

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