STITES & HARBISON PLLC

ATTORNEYS

March 23, 2012

HAND DELIVERED

Jeff R. Derouen Executive Director Public Service Commission 211 Sower Boulevard P.O. Box 615 Frankfort, KY 40602-0615

RECEIVED

MAR 2 3 2012 PUBLIC SERVICE

COMMISSION

Re: <u>Case No. 2012-00051</u>

Dear Mr. Derouen:

Enclosed please find and accept for filing the original and ten copies of the Responses of Kentucky Power Company to the Data Requests propounded by Staff and the Attorney General in this proceeding.

Please do not hesitate to contact me if you have any questions.

Very truly yours, HARBISON, PLLC RO

MRO

cc: Jennifer Black Hans Dennis G. Howard II Larry Cook Michael L. Kurtz 421 West Main Street Post Office Box 634 Frankfort, KY 40602-0634 [502] 223-3477 [502] 223-4124 Fax www.stites.com

Mark R. Overstreet (502) 209-1219 (502) 223-4387 FAX moverstreet@stites.com

COMMONWEALTH OF KENTUCKY

BEFORE THE

PUBLIC SERVICE COMMISSION OF KENTUCKY

RECEIVED

MAR 2 3 2012

PUBLIC SERVICE COMMISSION

IN THE MATTER OF

APPLICATION OF KENTUCKY POWER COMPANY) FOR COLLABORATIVE DEMAND-SIDE MANAGEMENT) PROGRAMS AND FOR AUTHORITY TO IMPLEMENT) A TARIFF TO RECOVER COSTS AND NET LOST **REVENUES AND RECEIVE INCENTIVES ASSOCIATED** CASE NO. WITH THE IMPLEMENTATION OF THE KENTUCKY 2012-00051) POWER COMPANY COLLABORATIVE DEMAND-SIDE) MANAGEMENT PROGRAMS)

> KENTUCKY POWER COMPANY RESPONSES TO COMMISSION STAFF'S FIRST SET OF DATA REQUESTS

March 23, 2012

VERIFICATION

The undersigned, Edgar J. Clayton, being duly sworn, deposes and says he is the Manager, Energy Efficiency & Consumer Programs for Kentucky Power, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge, and belief

Edgar & Clafton

COUNTY OF BOYD

COMMONWEALTH OF KENTUCKY

) CASE NO. 2012-00051

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Edgar J. Clayton, this the $/\underline{\mathcal{H}}^{4}$ day of March 2012.

Debora Leigh Jones Notary Public

My Commission Expires: $\frac{3/20/2012}{}$

VERIFICATION

The undersigned, Lila P. Munsey, being duly sworn, deposes and says she is the Manager, Regulatory Services for Kentucky Power, that she has personal knowledge of the matters set forth in the forgoing responses for which she is the identified witness and that the information contained therein is true and correct to the best of her information, knowledge, and belief

<u>Lila P. Munsey</u>

COMMONWEALTH OF KENTUCKY) COUNTY OF FRANKLIN)

) CASE NO. 2012-00051

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Lila P. Munsey, this <u>23</u>rd day of March 2012.

Jaedy K Rosquest Notary Jublic

My Commission Expires Americany 23, 2013

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 1 Page 1 of 1

Kentucky Power Company

REQUEST

Refer to the Joint Application ("Application") cover letter ("Letter"), page 1, which states "[t]he DSM [Demand-Side Management] Collaborative ["Collaborative"] is requesting Commission approval for the implementation of a new three-year contract with National Energy Education Development (NEED) to run from 2012 through 2014. The contract being negotiated with NEED includes projected fees to remain at the current levels including more contract controls to improve teacher participation levels with NEED administered program energy education."

- a. The proposed three-year contract is to run from 2012-2014. Provide the target date by which the contract is to be signed.
- b. Explain how Kentucky Power will have more contract controls to improve teacher participation levels with NEED administered program energy education.
- c. Provide a copy of the current NEED contract that is in effect.

RESPONSE

- a. The target date for the new contract is April 2, 2012.
- b. The new contract establishes performance goals linked to teacher seminar attendance. In addition, the new contract grants Kentucky Power the ability to withhold a portion of the payment for the NEED training invoice if goals are not met.
- c. A copy of the current NEED contract dated January 1, 2009, is attached.

WITNESS: E J Clayton

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 1 Attachment 1 Page 1 of 10

SERVICE AGREEMENT NO. 198518X110

This Service Agreement No. 198518X110 (the "Agreement") is made between Kentucky Power Company ("Owner" or "KPCo") having an address of 1 Riverside Plaza, Columbus, Ohio 43215, and National Energy Education Development Project ("Contractor" or "NEED"), having an address of 8408 Kao Circle, Manassas, Virginia 20110 as of this 1st day of January, 2009 (the "Effective Date").

1. Description of Services

Subject to the terms and conditions hereof, Contractor shall furnish all labor, equipment, materials, and supervision to provide services of implementing an energy education program at participating middle schools in the KPCo service area as detailed in the attached Energy Education for Students Program description, Exhibit C. KPCo will supply compact fluorescent lamps (CFLs) to NEED for distribution to participating students.

2. Incorporation

The Agreement consists of the following documents:

- a. this Service Agreement;
- b. the attached Service Agreement General Terms and Conditions dated 06/30/04, Exhibit A;
- c. the attached Contractor's DSM Proposal, Exhibit B; and
- d. the attached Energy Education for Students Program, Exhibit C.

3. Term

The term of the Agreement shall commence on the Effective Date and shall remain in full force and effect until December 31, 2011, unless otherwise agreed to in writing and signed by both parties, or terminated earlier as provided elsewhere herein.

4. Pricing and Payment Terms

Pricing for Services shall be in accordance with Contractor's Kentucky Power DSM Proposal dated April 18, 2008, attached hereto as Exhibit B. Contractor shall provide an invoice within thirty (30) days of completion of billable Services, and payment shall be made within thirty (30) days of receipt of invoice from Contractor.

5. Invoices

Each invoice shall include the following information:

- a. unique invoice number;
- b. Agreement number 198518X110
- c. detailed line item description of the services;
- d. total amount of the invoice.

Contractor shall mail invoices to: Kentucky Power, 12333 Kevin Ave., Ashland, KY 41102, ATTN: Don Music.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 1 Attachment 1 Page 2 of 10

Service Agreement 198518X110 Page 2

6. Notices. Any notice required or permitted under the terms of the Agreement or required by law must be in writing and must be (a) delivered in person, (b) sent by Third class registered mail, or certified mail with proof of delivery, or (c) sent by overnight air courier with proof of delivery, or (d) by fax or email provided such notice is dispatched the same day by (a), (b), or (c) above, in each case properly posted and fully prepaid to the appropriate address set forth below, or as may be changed from time to time.

If to Contractor:	The NEED Project 8408 Kao Circle Manassas, VA 20110 Attn: Mary Spruill
If to Owner:	American Electric Power Service Corporation 825 Tech Center Drive, 2 nd Floor Gahanna, OH 43230 Attn: Contracts Supply Chain Department
cc:	Kentucky Power Company 12333 Kevin Avenue Ashland, KY 41102 Attn: Don Music

7. Operation Contacts.

Name	Role	Email	Phone	Address
Barbara Wallace	AEP Dist. Contracts	bswallace@aep.com	614.883.7128	825 Tech Center Dr., 2 nd FL,
				Gahanna, OH 43230
Don Music	AEP project rep	dmusic@aep.com	606.929.1540	12333 Kevin Ave., Ashland,
				KY 41102
Mary Spruill	NEED project rep	mspruill@need.org	703.257.1117	8408 Kao Circle, Manassas, VA
				20110

IN WITNESS WHEREOF, authorized representatives of the parties have executed this Agreement.

Kentucky Power Company

Timothy C. Mosher President & COO, KYPCo

Date

National Energy Education Development Project

Mary Spójáll Title:

Date

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 1 Attachment 1 Page 3 of 10

EXHIBIT A

SERVICE AGREEMENT GENERAL TERMS AND CONDITIONS

The following terms and conditions shall apply to the Service Agreement ("Agreement")

- Definitions. "Work" means all of Contractor's obligations under the Agreement. "Owner" means one or more of the companies of the American Electric Power System identified in the Agreement.
- 2. Priority. The Agreement consists of the following documents, listed in their order of priority in the event of a conflict: any amendment to the Agreement; the Agreement Form; these Terms and Conditions; and any exhibit(s), schedule(s), or proposal(s) incorporated into the Agreement Additional or different terms contained in Contractor's proposal or Contractor's acceptance shall not become a part of the Agreement unless expressly agreed to in writing and signed by Owner.
- Schedule. The scheduled completion dates must be met. Contractor shall notify Owner within 24 hours of the first knowledge that any completion date(s) will not be met. Contractor shall be liable for any direct damages incurred by Owner arising out of Contractor's failure to perform on time.
- 4 Inspection and Acceptance. Owner shall have free access to the Work for inspection purposes. Owner's inspection or acceptance of the Work shall not relieve Contractor of its obligation to comply with the terms of the Agreement. Owner may reject non-conforming Work at any time and Contractor shall correct such non-conformity at Contractor's expense. Any part of the Work not rejected by Owner following final inspection shall be deemed accepted. Title to the Work shall pass to Owner upon completion and acceptance.
- 5. Borrowing of Tools and Equipment. If Contractor borrows tools, vehicles, materials or equipment ("equipment") of Owner, Contractor (a) agrees that Owner has provided the equipment AS IS, with no representation or warranties; (b) assumes full responsibility for the protection of the borrowed equipment; (c) assumes all liability for injuries or damages resulting from the use of the borrowed equipment, and (d) agrees to return the borrowed equipment to Owner in the same condition as when it was borrowed, or, if repairs are necessary, to cause such repairs to be performed at Contractor's expense before the equipment is returned to Owner. Owner has no obligation to lend equipment to Contractor.
- 6. Other Obligations. Contractor shall assign qualified and competent supervision and personnel to perform the Work. Key personnel shall not be removed or replaced without prior consent of Owner which shall not be unreasonably withheld Contractor shall cooperate with Owner and others working at or near the site of the Work. Contractor shall promptly report to Owner any defects in the work of others which affects the Work Failure to report such defects constitutes acceptance of the conditions by Contractor. Contractor shall keep all of its work areas free from trash and debris, and keep its work areas "broom clean" on a continuous basis. Contractor shall provided materials, tools, equipment and the Work, including Owner provided materials and equipment. Contractor shall provide Owner with periodic progress reports hall pay, all taxes and assessments for unemployment insurance, social security and disability benefits, and older taxes which are based upon the compensation paid to persons employed by Contractor is subcontractors for the performance of any Work
- Changes in Work. Owner may change the scope of Work Contractor shall perform the changed scope of Work. If Contractor's price or schedule will be affected by the change, Contractor must submit a request for an amendment to the Agreement prior to starting the change.
- 8 Payment. Contractor shall invoice Owner, with proper documentation, for all Work performed during the prior month. Owner shall pay Contractor, upon submission of proper invoices, the price for Work performed within 30 days after receipt of the invoice. Owner may withhold all or part of payment if Owner disputes

Contractor's compliance with the terms of the Agreement Owner's payment does not constitute acceptance of the Work The Agreement number must appear on all invoices and notices.

- 9 Taxes. The price shall include all applicable foreign, federal, state and local taxes payable with respect to this Agreement. However, if Owner specifies that services or tangible personal property to be furnished by Contractor qualify for exemption from sales or use taxes or that Owner has a direct pay permit, Contractor shall, at the direction of Owner, not include sales or use taxes in its price. Owner shall provide Contractor with Owner's direct pay permit or exemption certificate where applicable Contractor agrees to cooperate in obtaining exemption certificates necessary to claim such exemptions.
- 10 Warranty. Contractor warrants that the Work shall be free of workmanship, material and design delects, new, and in conformance with the Agreement and applicable industry standards. For a period of 12 months from completion and acceptance of the Work, Contractor shall repair or replace, at its expense, including any removal, installation or transportation cost, any defective or non-conforming Work. Owner's acceptance of the Work shall not relieve Contractor of its warranty obligations. In the event of an emergency, or if Contractor fails to correct a defect within a reasonable period of time, Owner may repair or replace any defect in warranted Work at Contractor's expense
- 11. Insurance. The insurance required by this section shall include contractual liability insurance covering the obligations under this Agreement. Contractor and its subcontractors shall (a) comply with the workers' compensation and occupational disease law of the state where the services are performed; (b) maintain commercial general liability insurance with limits of not less than \$1,000,000 each occurrence and aggregate; (c) maintain commercial automobile liability insurance with limits for bodily injury and property damage of not less than \$1,000,000 each accident, or evidence of self-insurance; (d) if applicable, maintain aircraft liability (including passenger liability) insurance with a combined limit for bodily injury and property damage of not less than \$10,000,000 each occurrence; (e) if applicable, maintain protection and indemnity insurance (including Jones Act liability coverage) with limits of liability of not less than \$10,000,000 each accident; (f) if applicable, maintain professional liability insurance with limits of not less than \$1,000,000 each occurrence and aggregate; and (g) if applicable, maintain any insurance required by federal compensation statutes (including Longshoreman's and Harbor Workers' Compensation Acts). Policies written on a claims-made basis shall be maintained for five years after performance of the Agreement is completed. Prior to entering Owner's site, Contractor and its subcontractors shall provide Owner with acceptable certificates of insurance waiving subregation against Owner and naming Owner as an additional insured for the coverages listed in (b) and (c) herein. The certificate of insurance must state that the insurance carrier has issued the insurance specified, that such policies are in force, and that the insurance carrier will give Owner 30 days prior written notice of any material change in, or cancellation of, such policies

For Work performed in Louisiana, Contractor hereby acknowledges and agrees that its employees, together with any of its subcontractors' employees shall be deened to be the statutory employees of Owner only for the purpose of Workers' Compensation law and Contractor further agrees that it will amend its Workers Compensation insurance to include an Alternate Employer Endorsement and have all its subcontractors execute agreements also acknowledging and recognizing the statutory employer status of Owner

12. Force Majeure. Neither party shall be in breach of the Agreement to the extent that any delay or default in performance is due to causes beyond the reasonable control of the delayed or defaulting party, provided that the delayed or defaulting party immediately notifies the other party of the event, an estimate of the duration of the event, and the delaying or defaulting party's plan to mitigate the effects of the delay or default:

06/30/04

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 1 Attachment 1 Page 4 of 10

SERVICE A GREEMENT GENERAL TERMS AND CONDITIONS

- Compliance with Laws. Contractor shall comply with all applicable 13 laws, rules, regulations and orders of any governmental authority, and will obtain at its expense all permits and licenses, pertaining to its obligations under the Agreement. Contractor agrees to indemnify and save Owner harmless from and against any liability or damages, including attorneys' fees, for non-compliance therewith by Contractor.
- Safety and Security. Contractor shall perform the Work in a safe and 14 careful manner and use such safely devices and methods as are necessary to protect its employees, agents, subcontractors, Owner's employees and agents, other contractors and the public from bodily harm and damage. Contractor shall comply with and enforce all laws, rules and regulations applicable to safety and health standards, including but not limited to the Occupational Safety and Health Act of 1970 (OSHA), and any revisions to OSHA or successor legislation Contractor shall comply with all project and site safety and security rules and procedures issued by Owner, provided that such rules and procedures do not conflict with OSHA or other safety laws, rules and regulations. Contractor shall provide Owner with Material Safety Data Sheets for all applicable materials prior to delivery to Owner's site

Contractor and all subcontractors performing Work at Site must have a substance abuse program. This program must apply to all personnel. Minimum requirements of this program shall include pre-hire testing, testing for cause and if requested, random testing Screening substances and their associated cut-off limits are listed below. Screening Cut-Off Confirmation Cut-Off Drug Classes Ampliciamines Limit (ng/ml) 1,000 Limit (ng/ml) 500 Benzoylecgonine .300 150 Cannabinoids 50 15 2,000 2,000 Opiates

Phencyclidine 25 25 Blood & Breath alcohol content: 04% per Dept. of Transportation.

Testing shall be performed by a testing facility certified by Department of Health & Human Services. Personnel must have evidence of having tested negative within a year prior to employment. Owner will accept conditional employment predicated upon (a) employee(s) furnishing evidence that they have submitted to testing within forty-eight (48) hours of initial employment and (b) employee(s) furnishing evidence of negative test results within five (5) work days of initial employment. Contractor shall ensure personnel are "drug free". Owner reserves the right to examine evidence outlined herein Contractor's program shall incorporate reciprocity on "drug free" employee verification to minimize Owner's economic impact, and employees' recertificiation while maintaining the program's intent

If required by Owner. Contractor must meet certain security criteria set forth herein. Contractor is responsible for assuring that each of its employees meet these criteria Contractor must perform a background check to assure that each of its employees: (a) has never been convicted of a felony; (b) has never been convicted of a trime involving drugs or firearms; (c) has never been convicted of a crime involving violence or assault; and (d) has no immigration violations and is eligible to work in the United States For the purpose of performing the background check, and to otherwise screen the potential Contractor employee, Contractor shall: (a) conduct a fingerprint background check through the repository of the individual's current state of residence and states of residence during the past five (5) years; (b) contact two listed and two developed references; (c) verify education and any professional license to the extent claimed by the individual; (d) obtain employment history for seven-year period prior to employment with Contractor, including all periods of unemployment within that seven-year period; (c) perform a diver's license verification if the individual will operate vehicles on Owner's property (This includes motor vehicle records check in the state where the individual currently resides, as well as verification of a valid license); and (f) perform an individual Social Security number trace. Contractor shall submit to Owner a copy of its proprietary background investigation process for Owner's review and file Owner reserves the

06/30/04

right to conduct a background screen at Contractor expense if agreed between Owner and Contractor Owner may audit or review specific Contractor screening files to ensure compliance. Contractor shall not perform any screening activities that violate the federal Fair Credit Reporting Act, Title VII of the Civil Rights Act of 1964 or any other applicable law in any circumstances. Contractor shall ensure that the substance and manner of any and all background checks performed by Contractor conform fully to applicable law. Owner, in its sole discretion, shall have the option of barring from any Work site any person whom Owner determines does not meet the qualification requirements set forth above.

- Intellectual Property. Contractor warrants that its performance of the 15. Work will not infringe upon or violate any trademarks, patents, copyrights, trade secrets or other third party property rights If the performance of Work is held in any action to constitute infringement. or the use of the Work is enjoined, Contractor, at its expense, shall procure for Owner the right to continue use of the Work, or replace the Work with non-infringing materials or methods satisfactory to Owner, or modify the Work in a manner satisfactory to Owner so that th Work becomes non-infringing. Contractor agrees to indemnify and save Owner harmless from and against any liability or damages, including attorneys' fees, arising out of any alleged infringement or violation. Owner will own the Work and any tarloget innighten of including trademarks, patents, copyrights and trade scorets, resulting from the Work. Work performed hereunder shall be deemed "work made for hire". Contractor will execute documents, including agreements with its employees and agents and assignment documents necessary to effectuate Owner's ownership of such intellectual property
- Confidentiality. Each party agrees (a) to protect the Confidential Information of the other with at least the same degree of care used to 16. protect its own most confidential information; (b) not to use (except for the purpose described herein), publish or disclose to third parties such Confidential Information; and (c) upon the request of the other party, to promptly deliver to the other party all written copies of its Confidential Information "Confidential Information" shall include, but not be limited to, business plans and methods; customer information; engineering, operating and technical data; and the dates of Owner's outage schedulc(s). Contractor shall not use Owner's name or logo in marketing or endorsements without the prior written consent of Owner
- Termination. Owner may terminate, for its convenience or for cause, 17 all or any part of the Agreement upon notice to Contractor Upon termination for convenience, Contractor shall immediately stop work on the terminated portion of the Agreement and shall submit to Owner an invoice with supporting information setting forth the Agreement price for the Work performed prior to the notice of termination, plus Contractor's actual, direct, unavoidable costs resulting from the termination, less salvage value, in no event to exceed the Agreement price. Upon termination for cause, Owner may pursue all rights and remedies available under the law. Upon termination for convenience or cause, Owner shall not be liable to Contractor for Contractor's lost profits on the terminated portion of the Agreement
- Indemultication. (a) The laws of the state where the Work giving rise to the claim is performed shall apply to this Section. (b) IN STATES OTHER THAN OFHO, TO THE EXTERNT PERMITTED BY LAW, CONTRACTOR SHALL, INDEMNEY, DEFEND AT ITS EXPENSE, AND SAVE OWNER HARMLESS, FROM ANY LUDGMENTS RENDERED AGAINST, AND FINES AND FUNDERED INFOSED UPON, OWNER AND REASONABLE ATTORNEYS' FEES AND ALL OTHER COSTS OF LITIGATION, ARISING OUT OF THIS AGREEMENT, INCLUDING INJURIES, DISEASE OR DEATH TO PERSONS, OR DAMAGE TO PROPERTY, INCLUDING Indemnification. (a) The laws of the state where the Work giving rise 18 OR DAMAGE TO PROPERTY, INCLUDING ENVIRONMENTAL CLAIMS AND LIABILITIES, CAUSED BY CONTRACTOR, ITS EMPLOYEES, AGENTS OR SUBCONTRACTORS, OR IN ANY WAY ATTRIBUTABLE TO

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 1 Attachment 1 Page 5 of 10

SERVICE AGREEMENT GENERAL TERMS AND CONDITIONS

THE PERFORMANCE OF THIS AGREEMENT, EXCEPT THAT CONTRACTOR'S OBLIGATION TO INDEMNIFY OWNER SHALL NOT APPLY TO ANY LIABILITIES ARISING FROM OWNER'S SOLE NEGLIGENCE. TO THE EXTENT PROVIDED IN THIS SECTION, CONTRACTOR EXTRESSLY AGREES TO INDEMNIFY OWNER FOR OWNER'S ACTS AND OMISSIONS, NEGLIGENT OR OWNER'S ACTS AND OMISSIONS, NEGLIGENT OR OTHERWISE. (c) In Ohio, Contractor shall indomnify and save Owner harmless from any and all costs and expenses, including but not limited to reasonable attorneys' fees and court costs, arising from or relating to injurics, disease or death to persons, or damage to properly, caused by Contractor, its employees, agents or subcontractors, or in any way attributable to the Agreement. (d) WITH RESPECT TO CLAIMS AGAINST OWNER BY CONTRACTOR'S EMPLOYEES, CONTRACTOR AGREES TO EXPRESSLY WAIVE ITS INMUNITY AS A COMPLAYING EMPLOYER UNDER THE WORKERS' COMPENSATION LAW, BUT ONLY TO THE EXTENT THAT SUCH IMMUNITY WOULD BAR OR ARFECT RECOVERY UNDER OR ENFORCEMENT OF THIS NDEMNIFICATION OBLIGATION. With respect to the State of Ohio, this waiver applies to Section 35, Article 11 of the Ohio Constitution and Ohio Rev Code Section 4123 74 (e) Contractor shall pay Owner's reasonable attorneys' fees and all costs of filigation associated with enforcement of the obligation sectort in this Section

- 19 Limitation of Liability. Except as expressly provided herein, neither party shall be liable to the other for any incidental, indirect, special, punitive or consequential damages. Contractor must bring any cause of action arising under the Agreement within one year from the time the cause of action accrues.
- 20. Liens. Contractor shall not file or permit to be filed any lien with respect to the Work and hereby expressly waives any right to file or cause to be filed a lien. Contractor, in its subcontracts, shall require all subcontractors to expressly waive the right to file any liens against Owner's property and, if requested, provide Owner with copies of such waivers. Contractor shall indemnify Owner for any costs or expenses resulting from a breach of this paragraph.
- Assignment and Subcontracting. Contractor may not subcontract, assign, or otherwise dispose of the Agreement without the prior written consent of Owner
- 22 Records. Owner reserves the right to audit records necessary to permit evaluation and verification of claims submitted, and Contractor's compliance, in the performance of this Agreement and its dealings with Owner, with (a) the Contract requirements; and (b) Owner's Corporate Code of Conduct governing business ethics. Contractor shall retain for a period of three years following final payment all information and records retaining to the Work performed under the Agreement. Owner may examine and copy such information and records at Contractor's premises during regular business hears
- 23 Affiliated Companies. Any indemnification of Owner and any limitation of Owner's liability shall to the same extent apply to Owner's directors, officers, employees, agents and affiliated companies, and the directors, officers, employees and agents thereof. The affiliated companies of the American Electric Power System are severally and not jointly liable for obligations arising hereunder
- 24 Government Contractor Compliance. (a) Unless exempted, Contractor shall comply with the equal employment opportunity clause in Section 202 of Executive Order 11246 and all applicable rules, regulations, and relevant orders pertaining to Executive Order 11246, Section 503 of the Rehabilitation Act of 1973, and Section 4212 of the Vietnam Era Readjustment Assistance Act of 1974, as amended (b) Contractor represents that it does not, and shall not for the term of the Agreement, provide or maintain for its employees facilities that are segregated on the basis of race, color, religion, sex or national origin any work related to this Agreement at a location where facilities are segregated on the basis of race, color, religion, sex or national origin

Contractor agrees that it will not enter into any agreement to obtain gools or services relating to this Agreement with any entity that provides, maintains or assigns its employees to work at hocations where facilities are segregated on the basis of race, color, religion, sex or national origin. As used herein, "facility" means waiting rooms; work areas; restaurants and other eating areas; time clocks; locker rooms and other storage or sleeping areas, except as necessary to assure privacy between male and female employees; parking lots, drinking fountains; recreation or entertationed areas; and transportation. (c) If not otherwise exempted by Tilde 48 and to the extent applicable, Contractor will comply with 48 CFR §52 219-8, Utilization of Small, Small Disadvantaged, and Women-Owned Small Business Concerns, and 48 CFR §52.219-9, Small, Small Disadvantaged, and Women-Owned Small Business Subcontracting Plan. (d) If not otherwise exempted by 41 CFR §60-1-5, Contractor represents that it will file all reports or other required information specified in 41 CFR §60-1.7

- 25. Notices. Each party shall designate a representative for the receipt of notices, which may be changed from time to time. All notices required to be given under the Agreement shall be in writing and delivered by fax, personal delivery, e-mail or U.S. mail. Notices shall be effective upon receipt, or such later date specified in the notice.
- 26. Governing Law. The laws of the State of Ohio shall govern the Agreement. Contractor agrees that all actions and proceedings brought by Owner against Contractor may be litigated in courts located in the State of Ohio or in the state where the work was performed Contractor agrees that such courts are convenient forums and irrevoeably submits to the personal jurisdiction of such courts Contractor waives personal service of process and consents to service of process by certified or registered mail at the address designated for receiving notices under the Agreement
- 27 Miscellaneous. The effective date of the Agreement shall be the earlier of the date on which Contractor begins performance hereunder or the date of the later signature on the Agreement. Contractor shall be an independent contractor in the performance of the Agreement. No waiver by either party of any default shall be deemed a waiver of any subsequent default. The Agreement constitutes the entire agreement of the parties. If any provision of the Agreement must be in which, such invalidity shall not affect the remaining provisions of the Agreement to the Agreement must be in writing and signed by both parties. Headings are provision of any provision

END OF DOCUMENT

06/30/04

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 1 Attachment 1 Page 6 of 10

EXHIBIT B

ENERGY EDUCATION FOR STUDENTS PROGRAM

1. DESCRIPTION

Kentucky Power Company (KPCo) will partner with the National Energy Education Development Project (NEED) to implement an energy education program at participating middle schools throughout the KPCo service territory.

2. ELIGIBLE PARTICIPANTS

All 7th grade students at participating schools will be eligible for the program.

3. PARTICIPATION GOALS

Jan. 2009 through Dec. 2009	1,200 Students	
Jan. 2010 through Dec. 2010	1,700 Students	
Jan. 2011 through Dec. 2011	2,000 Students	

4. IMPLEMENTATION PLAN

A. Promotion

NEED staff will conduct training workshops on a scheduled basis to ensure all participating schools are reached during a calendar year. Educational materials on energy, electricity, environment and economics will be provided. The program will also provide a package of four 23 watt compact fluorescent lamps (CFLs) that will allow students to directly install the CFLs in their homes as it relates to the curriculum. This allows learning and direct savings from the program.

B. Delivery

NEED staff will mail invitations to each middle school within the KPCo service territory. KPCo and NEED staff members will coordinate the enrollment of participating schools, delivery of educational materials & compact fluorescent lamps and scheduling of educational workshops.

5. EVALUATION

A. Goais

KPCo will perform an evaluation assessing and documenting the program's processes and estimating the program's impacts as well as performing a benefit/cost analysis.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 1 Attachment 1 Page 7 of 10

B. Objectives

The program evaluation objectives will be to:

- 1. Assess educator and student satisfaction with the program;
- 2. Gain insight into the potential for expanding the program to additional grade levels;
- Determine the program impacts, including energy savings (KWh) and demand reduction (kW), and program value to educators and students;
- 4. Assess the program's cost-effectiveness based on various economic tests;

6. TIMELINE

. A.

Action	<u>Start</u>	End
Program Approval	08/08	10/08
Implementation	01/09	12/11
Evaluation	01/10 01/11	06/10* 06/11*

* Evaluation report will be provided on 08/15/10 and 08/15/11.

7. ANNUAL BUDGET

	<u>Year 1</u>	<u>Year 2</u>	Year 3
Program Development & Administration	\$ 4,000	\$ 3,000	\$ 3,000
Promotion	\$ 1,000	\$ 1,000	\$ 1,000
Educational Workshops (Includes food costs)	\$ 5,000	\$ 5,000	\$ 5,000
Compact Fluorescent Lamps	\$12,000	\$17,000	20,000
Evaluation	\$ 0,000	<u>\$ 5,000</u>	\$ 5,000
TOTAL COSTS	\$22,000	\$31,000	\$34,000

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KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 1 Attachment 1 Page 8 of 10

EXPECTED SAVINGS / BENEFITS

. .

8.

a. Anticipated load Impact Per Lamp

Energy Savings Per	Year	=	46	kWh
Demand Reduction		*	.023	kW
	(@	system	winter 1	oeak)
		==	.001	kW
	(@	system s	summer j	peak)

b. <u>Annual Expected Program Savings/Benefits</u> @ 4,800 CFLs in one year:

Summer Peak W	/inter Peak	Annual
Demand (kW) D	emand (kW) Energy	(MWh)
Reduction	Reduction	Reduction
4	110	220.8

Projected energy savings and demand reductions are estimated based on the anticipated number of students living within the KPCo service territory and installing compact fluorescent lamps in their homes.

c. <u>Projected Program MWh Savings and kW Reduction Assuming</u> <u>Participation:</u>

Goal of 19,600 CFLs is achieved (all students in three years)

Energy Savings	=	901.6 MWh
Demand Reduction	=	451 kW
	(@ syster	m winter peak)
	=	18 kW
	(@ syster	n summer peak)

9. COST / BENEFIT ANALYSIS

Benefit / cost ratios based on the best information available at the time of program design.

a.	Total Resource Cost	=	11.21
b.	Ratepayer Impact Measure		2.84
C.	Participant		29.31
d.	Utility Cost	=	21.64

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 1 Attachment 1 Page 9 of 10

EXHIBIT C

<u>Kentucky Power DSM Proposal</u> Submitted by The NEED Project – April 18, 2008

TERMS

Year one of the program will launch in January 2009 and be completed by December 31, 2009. Subsequent years will follow the same schedule. NEED will facilitate the design and delivery for the program, working with Kentucky Power to contact school administrators and teachers in the Kentucky Power service territory to promote and implement the CFL project. The target audience will be seventh grade students across the KP/AEP service territory, with an estimated first year distribution of 1200 CFL's. This number may be adjusted after completion of the year one project evaluation. Three, three hour in-services will be scheduled for Ashland, Pikeville and Hazard. Kentucky NEED currently facilitates 6-hour workshops in Eastern KY and will leverage sponsor funds to strengthen the program for K-12 teachers and students.

PAYMENT TERMS

NEED and Kentucky Power will create a payment schedule acceptable to each entity.

BUDGET

Budget - Year One*

Program Development and Administration

Includes staff time, staff travel, and program expansion activities, meetings with school administrators, data collection and evaluation

NEED In-services

Three Professional Development at \$1,000/each Includes NEED energy education materials

TOTAL

*NOTE: Kentucky Power is purchasing the CFL's and covering the cost of shipping. They are also covering the cost of the meeting space and food for the professional development workshops.

Budget - Year Two\$3,000.00Program Development and Administration\$3,000.00Includes staff time, staff travel, and program expansion activities, meetingswith school administrators, data collection and evaluation

NEED In-services\$3,000.00Three Professional Development at \$1,000/eachIncludes NEED energy education materials

TOTAL \$6,000.00

\$4,000.00

\$3,000.00

\$7,000.00

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 1 Attachment 1 Page 10 of 10

Budget - Year Three\$3,000.00Program Development and Administration\$3,000.00Includes staff time, staff travel, and program expansion activities, meetingswith school administrators, data collection and evaluation

NEED In-services\$3,000.00Three Professional Development at \$1,000/eachIncludes NEED energy education materials

TOTAL \$6,000.00

TIMETABLE

<u>January – February 2009</u>

Meetings with superintendents in districts in Kentucky Power service territory.

<u>February - March 2009</u> Schedule and Facilitate Professional Development Workshops

<u>March – May 2009</u> Implement project – deliver CFL's

June 2009

Evaluate current status of delivery of CFL's. Determine what, if any actions need to be taken for the fall.

December 2009 Final report due.

Timetable for years 2 & 3

Annual timetable would remain the same unless both parties agree on any recommended changes.

Kentucky Power Company

REQUEST

Refer to the Letter, pages 1 and 2, which states:

In 2011 the Community Action Agencies (CAAs) were unable to meet their targets for the Targeted Energy Efficiency (TEE) Program. "This was primarily attributed to the CAAs increased spending of the American Recovery and Reinvestment Act (ARRA) stimulus funds and to the method for prioritizing eligible customers for the program. The ARRA stimulus funds have affected this program for the past 2 years because the CAAs were required to meet the funding requirements for the housing authority which caused fewer homes to be charged to DSM. The DSM TEE program is filed and is administered to be a supplemental weatherization and energy efficiency service to the Weatherization Assistance Program (WAP) administered by Community Action Kentucky. It should be noted that the program evaluation filed August 15, 2011 found this program to be cost effective and the DSM Collaborative is therefore requesting that the program not only continue, but is requesting the program participation levels be increased from 405 to 425 customers. Since this program is supplemental to the DOE (WAP) service, DOE changes to WAP funding could impact the projected DSM program participant levels.

- a. Provide, by CAAs that are in Kentucky Power's operating area, what the participant levels might have reached if the CAAs would not have received ARRA stimulus funds.
- b. Explain, if known, whether the homes weatherized by the CAAs using stimulus funds would have qualified for weatherization in the TEE program.
- c. In Case No. 2011-00300, ¹ the TEE evaluation report on page 4 states that the WAP funds expire March 31, 2012. Explain what Kentucky Power has done in partnering with the CAAs in its operating area, to prioritize the weatherization of eligible customers in the TEE program to accomplish the goal of 425 participants.

¹Case No. 2011-00300, Application of Kentucky Power Company for Collaborative Demand-Side Management Programs and for Authority to Implement a Tariff to Recover Costs and Net Lost Revenues and Receive Incentives Associated with the Implementation of the Kentucky Power Company Collaborative Demand-Side Management Programs (Ky. PSC Jan. 23, 2011).

RESPONSE

- a. The Company cannot provide an estimate. However, based on information provided by the CAK, KPCo believes more progress would have been made toward meeting the goals for the TEE program for 2011 without the ARRA.
- b. The homes that were selected by the CAAs would have qualified for the TEE program as long as those homes were serviced by Kentucky Power Company.
- c. The current method of prioritizing homes for WAP does not include consideration of the utility service provider. Participation in the Weatherization program is open to all households that report being 200% or less of the Federal Poverty Level and have not received Weatherization services since 1994. The eligible applicants are placed on a waiting list and are ranked according to a priority point system that assigns points for family composition, age, disability, income, and energy burden. The homes that were selected by the CAAs would have qualified for the TEE program as long as those homes were serviced by Kentucky Power Company. KHC does not allow an agency to select a household and place them at the top of the list based on their service provider. Reaching the established goals of the TEE program will require a concerted effort from the CAAs to spread awareness of the program and have clients in Kentucky Power's service area sign up for Weatherization.

Kentucky Power has worked with the CAAs to raise awareness of the TEE program through mailers, Kentucky Power's website and community outreach. Those efforts will continue throughout 2012. The Company also coordinates quarterly conference calls with CAAs to review and plan program activities and provides monthly updates on the status of the budget and participant levels to the CAAs. KPCo sends out bill inserts to customers promoting the TEE program and schedules site visits with CAA's as needed for training on TEE program administration.

WITNESS: E J Clayton

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 3 Page 1 of 2

Kentucky Power Company

REQUEST

Refer to the Letter, page 2, which states:

The Pilot Load Management program includes projections for 2012 which are based on cellular coverage currently available with vendor gateway meter equipment. If the vendor achieves expanded cellular coverage projected for March 2012, then we will be able to expand the promotion to all-electric customers within the KPCO service area. As of February 7th, promotional mailings had been issued to 3,455 residential customers with the first mailings having been completed January 17th. In addition to customer self-mailers, program promotion is planned to include automated voice messaging, emails, and customer post cards. Program promotion will continue to be evaluated based on availability of acceptable cellular service for the vendor gateway meter and the program evaluation report scheduled for filing August 15, 2012.

- a. Explain whether the vendor achieved the expanded cellular coverage projected for March 2012.
- b. Explain whether non-all-electric residential customers with air conditioners ("A/C") and heat pumps ("HP") will be included in this program.
- c. The following table shows the 2011 actual participation for residential and commercial customers, the 2011 participation goals, and the 2012 participation goals. Based on the actual participation in 2011 for both the residential and commercial programs and the 2012 participation goals, explain whether there will be enough participation and program information for the evaluation report.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 3 Page 2 of 2

Programs Goal	2011 Actual Participant	2011 Participants Goal	2012 Participant
Residential Load Management - Air Conditioner -Water Heating	6 4	250 250	110 110
Commercial Load Management - Air Conditioner - Water Heating	0 0	25 25	10 10

RESPONSE

- a. The vendor notified the Company on March 16, 2012, that some expanded cellular coverage was achieved. Preliminary review indicates that due to the expanded coverage, KPCo anticipates being able to offer the program to an additional 11,000 to 12,000 residential customers located in approximately 16 counties. However, cellular coverage is still not available to the entire service territory.
- b. Non-all-electric customers can participate, but promotion is targeted specifically to all-electric customers for this pilot program. There is one non-all-electric customer currently participating in the program.
- c. Notwithstanding the lower than anticipated participation, the evaluation contractor assures KPCo there are sufficient numbers to conduct a preliminary evaluation of the Pilot Load Management program at this time. A primary goal of an evaluation effort is to guide program design by identifying aspects of the program that are working and not working. The evaluation of the Load Management program will seek reasons for low participation and present alternatives for the Company and stakeholders including modifications to the existing program design.

,

WITNESS: E J Clayton

Kentucky Power Company

REQUEST

Refer to the DSM Collaborative Status Report ("Status Report") of the Application, page 2, under COMMENTS.

- a. Explain whether the kWh Transmission and Distribution ("T&D") losses were calculated on an incremental basis or on an average basis.
- b. Provide all calculations used to support the 10 percent T&D kWh line losses.
- c. Provide a reconciliation between the 10 percent T&D kWh line loss the Collaborative is claiming in this proceeding with the line loss the Company claimed in Case No. 2010-00490¹ in its response to Item 13, Appendix B, of the Commission Order of January 26, 2010.
- d. Explain whether the kW T&D losses were calculated on an incremental basis or on an average basis.
- e. Provide all calculations used to support the 11 percent T & D kW line losses.

¹Case No. 2010-00490, An Examination of the Application of the Fuel Adjustment Clause of Kentucky Power Company From November 1, 2008 through October 31, 2010 (Ky. PSC May 31 2011).

RESPONSE

a Losses were estimated on an average basis. Losses vary by customer and by hour based upon the equipment and loading characteristics of the system, from the generator to the customer service drop. The 10% energy losses and 11% demand losses applied to the meter values represent an approximation of the expected losses of the program participants and are consistent with the loss estimates historically used. A loss study of the KPCo system was conducted in 2007, and that study provided average secondary service customer loss estimates of 8.7% for energy and 10.8% for peak demand. Although the numbers used in the filing were slightly higher than these average loss estimates, participants in these programs, which are almost exclusively residential customers, incur slightly higher losses than the secondary service population as a whole, which includes both residential and commercial customers.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Page 2 of 2

- b. For KPCo, the most recent comprehensive loss study was performed in 2007 based upon a calendar year 2006 load period. That loss study produced a secondary peak loss factor of 10.8% for application to at-the-meter peak demand impacts, and a secondary average loss factor of 8.7% which most appropriately would be applied to at-the-meter energy impacts. A copy of the loss study that was completed in 2007 for Kentucky Power is attached.
- c. The Company does not believe that the two calculations can be compared. The line loss calculated in Case No. 2010-00490 is a net loss factor of all KPCo load. Much of the KPCo load is served at transmission and, therefore, has no distribution losses. The DSM program participants are smaller customers served at secondary; therefore, the secondary loss factors determined in the comprehensive loss studies are the appropriate factors.
- d. See the answer to part a above.
- e. See the answer to part b above.

WITNESS: E J Clayton

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 1 of 28

KENTUCKY POWER COMPANY

2006 Analysis of System Losses

August 13, 2007

Prepared by:



Management Applications Consulting, Inc. 1103 Rocky Drive – Suite 201 Reading, PA 19609 Phone: (610) 670-9199 / Fax: (610) 670-9190

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 2 of 28



MANAGEMENT APPLICATIONS CONSULTING, INC.

1103 Rocky Drive • Suite 201 • Reading, PA 19609-1157 • 610/670-9199 • fax 610/670-9190 • www.manapp.com

August 13, 2007

Mr. Meredith Gafford East Transmission Planning American Electric Power 700 Morrison Road Gahanna, OH 43230

RE: 2006 LOSS ANALYSIS

Dear Mr. Gafford:

Transmitted herewith are the results of the 2006 Analysis of System Losses for the Kentucky Power Company's (KPCO) power system. Our analysis develops cumulative expansion factors (loss factors) for both demand (peak/kW) and energy (average/kWh) losses by discrete voltage levels applicable to metered sales data. Table 1 of the Executive Summary presents the results and appropriate loss factors to apply to metered load research or sales data for adjustment to system input.

On behalf of MAC, we appreciate the opportunity to assist you in performing the loss analysis contained herein. The level of detailed load research and sales data by voltage level, coupled with a summary of power flow data and power system model, forms the foundation for determining reasonable and representative power losses on the KPCO system. Our review of these data and calculated loss results support the proposed loss factors as presented herein for your use in various cost of service, rate studies, and demand analyses.

Should you require any additional information, please let us know at your earliest convenience.

Sincerely,

Dank Internal

Paul M. Normand Principal

Enclosure PMN/rjp

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 3 of 28

Kentucky Power Company 2006 Analysis of System Losses

TABLE OF CONTENTS

1.0		KECUTIVE SUMMARY	
2.0	IN	TRODUCTION	3
2.		Conduct of Study	
2.	2 1	Description of Model	4
3.0		ETHODOLOGY	
3.	1 1	Background	5
3.		Analysis and Calculations	
	3.2.1		
	3.2.2		8
	3.2.3	Distribution System	9
4.0	DI	SCUSSION OF RESULTS	0

Appendix A - Results of Kentucky Power Company Total Company 2006 Loss Analysis

Appendix B - Discussion of Hoebel Coefficient

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 4 of 28

Kentucky Power Company 2006 Analysis of System Losses

1.0 EXECUTIVE SUMMARY

This report presents Kentucky Power Company's (KPCO) 2006 Analysis of System Losses for the power systems as performed by Management Applications Consulting, Inc. (MAC). The study developed separate demand (kW) and energy (kWh) loss factors for each voltage level of service in the power system for KPCO. The cumulative loss factor results by voltage level, as presented herein, can be used to adjust metered kW and kWh sales data for losses in performing cost of service studies, determining voltage discounts, and other analyses which may require a loss adjustment.

The procedures used in the overall loss study were similar to prior studies and emphasized the use of "in house" resources where possible. To this end, extensive use was made of the Company's peak hour power flow data and transformer plant investments in the model. In addition, measured and estimated load data provided a means of calculating reasonable estimates of losses by using a "top-down" and "bottom-up" procedure. In the "top-down" approach, losses from the high voltage system, through and including distribution substations, were calculated along with power flow data, conductor and transformer loss estimates, and energy delivery.

With the recent emergence of transmission as a stand-alone function throughout various regions of the country, a modification to the historical calculation of the transmission loss factors was required. Previous loss studies recognized the multipath approach to losses from high voltage to low voltage delivery. The current definition of transmission losses recognized in the industry is simply to sum all losses at transmission as an integrated system. This approach will typically increase the resulting transmission loss factors.

The load research data provided the starting point for performing a "bottom-up" approach for estimating the remaining distribution losses. Basically, this "bottom-up" approach develops line loadings by first determining loads and losses at each level beginning at a customer's meter and service entrance and then going through secondary lines, line transformers, primary lines and finally distribution substation. These distribution system loads and associated losses are then compared to the initial calculated input into Distribution Substation loadings for reasonableness prior to finalizing the loss factors. An overview of the loss study is shown on Figure 1 on the next page.

Table 1, below, provides the final results from Appendix A for the 2006 calendar year. Exhibit 8 of Appendix A presents a more detailed analysis of the final calculated summary results of losses by segments of the power system. These Table 1 cumulative loss expansion factors are applicable only to metered sales at the point of receipt for adjustment to the power system's input level.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 5 of 28

Kentucky Power Company 2006 Analysis of System Losses

 TABLE 1

 Loss Factors at Sales Level, Calendar Year 2006

Voltage Level of Service	Total KPCO	Distribution Only
or but rice	I OTAL THE CO	<u>Only</u>
Demand (kW)		
Transmission ¹	1.03935	***
Subtransmission	1.05210	1.01227
Primary Lines	1.07402	1.03336
Secondary	1.10790	1.06595
Energy (kWh)		
Transmission ¹	1.02781	~
Subtransmission	1.03780	1.00972
Primary Lines	1.05205	1.02358
Secondary	1.08674	1.05734
Losses – Net System Input ²	5,91%	
Losses – Net System Output	6.29%	

The loss factors presented in the Distribution Only column of Table 1 are the Total KPCO loss factors divided by the transmission loss factor in order to remove these losses from each service level loss factor. For example, the secondary distribution demand loss factor of 1.06595 includes the recovery of all remaining non-transmission losses from the subtransmission, distribution substation, primary lines, line transformers, secondary conductors and services.

The net system input shown in Table 1 represents percent losses of 5.91% for the total KPCO load using calculated losses divided by the associated input energy to the system. The 6.29% represents the same losses using system output instead of input as a reference.

¹ Reflects results for 765 kV, 345 kV 161 kV, and 138 kV.

² Net system input equals firm sales plus losses, Company use less non-requirement sales and related losses. See Appendix A, Exhibit 1, for their calculations.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 6 of 28



KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 7 of 28

Kentucky Power Company 2006 Analysis of System Losses

2.0 INTRODUCTION

This report of the 2006 Analysis of System Losses for the Kentucky Power Company provides a summary of results, conceptual background or methodology, description of the analyses, and input information related to the study.

2.1 Conduct of Study

Typically, between five to ten percent of the total kWh requirements of an electric utility is lost or unaccounted for in the delivery of power to customers. Investments must be made in facilities which support the total load which includes losses or unaccounted for load. Revenue requirements associated with load losses are an important concern to utilities and regulators in that customers must equitably share in all of these cost responsibilities. Loss expansion factors are the mechanism by which customers' metered demand and energy data are mathematically adjusted to the generation or input level (point of reference) when performing cost and revenue calculations.

An acceptable accounting of losses can be determined for any given time period using available engineering, system, and customer data along with empirical relationships. This loss analysis for the delivery of demand and energy utilizes such an approach. A microcomputer loss model³ is utilized as the vehicle to organize the available data, develop the relationships, calculate the losses, and provide an efficient and timely avenue for future updates and sensitivity analyses. Our procedures and calculations are similar with prior loss studies, and they rely on numerous databases that include customer statistics and power system investments.

Company personnel performed most of the data gathering and data processing efforts and checked for reasonableness. MAC provided assistance as necessary to construct databases, transfer files, perform calculations, and check the reasonableness of results. A review of the preliminary results provided for additions to the database and modifications to certain initial assumptions based on available data. Efforts in determining the data required to perform the loss analysis centered on information which was available from existing studies or reports within the Company. From an overall perspective, our efforts concentrated on five major areas:

- 1. System information concerning peak demand and annual energy requirements by voltage level of service using metered data and load research,
- 2. High voltage power system power flow data and associated loss calculations,
- 3. Distribution system primary and secondary loss calculations,
- 4. Derivation of fixed and variable losses by voltage level, and
- 5. Development of final cumulative expansion factors at each voltage for peak demand (kW) and annual energy (kWh) requirements at the point of delivery (meter).

³Copyright by Management Applications Consulting, Inc.



KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 8 of 28

Kentucky Power Company 2006 Analysis of System Losses

2.2 Description of Model

The loss model is a customized applications model, constructed using the Excel software program. Documentation consists primarily of the model equations at each cell location. A significant advantage of such a model is that the actual formulas and their corresponding computed values at each cell of the model are immediately available to the analyst.

A brief description of the three (3) major categories of effort for the preparation of each loss model is as follows:

- Main sheet which contains calculations for all primary and secondary losses, summaries of all conductor and transformer calculations from other sheets discussed below, output reports and supporting results.
- Transformer sheet which contains data input and loss calculations for each distribution substation and high voltage transformer. Separate iron and copper losses are calculated for each transformer by identified type.
- Conductor sheet containing summary data by major voltage level as to circuit miles, loading assumptions, and kW and kWh loss calculations. Separate loss calculations for each line segment were made using the Company's power flow data by line segment and summarized by voltage level in this model.

Appendix A presents a detailed loss study result which derives the loss factors for the Company's system-wide power system. Appendix A, Exhibit 8, presents the final detailed summary results of the demand and energy losses for each major portion of the total KPCO power system.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 9 of 28

Kentucky Power Company 2006 Analysis of System Losses

3.0 METHODOLOGY

3.1 Background

The objective of a Loss Study is to provide a reasonable set of energy (average) and demand (peak) loss expansion factors which account for system losses associated with the transmission and delivery of power to each voltage level over a designated period of time. The focus of this study is to identify the difference between total energy inputs and the associated sales with the difference being equitably allocated to all delivery levels. Several key elements are important in establishing the methodology for calculating and reporting the Company's losses. These elements are:

- Selection of voltage level of services,
- Recognition of losses associated with conductors, transformations, and other electrical equipment/components within voltage levels,
- Identification of customers and loads at various voltage levels of service,
- Review of generation or net power supply input at each level for the test period studied, and
- Analysis of kW and kWh sales by voltage levels within the test period.

The three major areas of data gathering and calculations in the loss analysis were as follows:

- 1. System Information (monthly and annual)
 - MWH generation and MWH sales.
 - Coincident peak estimates and net power supply input from all sources and voltage levels.
 - Customer load data estimates from available load research information, adjusted MWH sales, and number of customers in the customer groupings and voltage levels identified in the model.
 - System default values, such as power factor, loading factors, and load factors by voltage level.



KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 10 of 28

Kentucky Power Company 2006 Analysis of System Losses

- 2. High Voltage System
 - Conductor information was summarized from a database by the Company which reflects the transmission system by voltage level. Extensive use was made of the Company's power flow data with the losses calculated and incorporated into the final loss calculations.
 - Transformer information was developed in a database to model transformation at each voltage level. Substation power, step-up, and auto transformers were individually identified along with any operating data related to loads and losses.
 - Power flow data of peak condition was the primary source of equipment loadings and derivation of load losses in the high voltage loss calculations.

3. Distribution System

- Distribution Substations Data was developed for modeling each substation as to its size and loading. Loss calculations were performed from this data to determine load and no load losses separately for each transformer.
- Primary lines Line loading and loss characteristics for several representative primary circuits were obtained from the Company. These loss results developed kW loss per MW of load and a composite average was calculated to derive the primary loss estimate.
- Line transformers Losses in line transformers were based on each customer service group's size, as well as the number of customers per transformer. Accounting and load data provided the foundation with which to model the transformer loadings and to calculate load and no load losses.
- Secondary network Typical secondary networks were estimated for conductor sizes, lengths, loadings, and customer penetration for residential and small general service customers based on data provided by the Company.
- Services Typical services were estimated for each secondary service class of customers identified in the study with respect to type, length, and loading.



KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 11 of 28

Kentucky Power Company 2006 Analysis of System Losses

The loss analysis was thus performed by constructing the model in segments and subsequently calculating the composite until the constraints of peak demand and energy were met:

- Information as to the physical characteristics and loading of each transformer and conductor segment was modeled.
- Conductors, transformers, and distribution were grouped by voltage level, and unadjusted losses were calculated.
- The loss factors calculated at each voltage level were determined by "compounding" the per-unit losses. Equivalent sales at the supply point were obtained by dividing sales at a specific level by the compounded loss factor to determine losses by voltage level.
- The resulting demand and energy loss expansion factors were then used to adjust all sales to the generation or input level in order to estimate the difference.
- Reconciliation of kW and kWh sales by voltage level using the reported system kW and kWh was accomplished by adjusting the initial loss factor estimates until the mismatch or difference was eliminated.

3.2 Calculations and Analysis

This section provides a discussion of the input data, assumptions, and calculations performed in the loss analysis. Specific appendices have been included in order to provide documentation of the input data utilized in the model.

3.2.1 Bulk, Transmission and Subtransmission Lines

The transmission and subtransmission line losses were calculated based on a modeling of unique voltage levels identified by the Company's power flow data and configuration for the entire integrated KPCO Power System. Specific information as to length of line, type of conductor, voltage level, peak load, maximum load, etc., were provided based on Company records and utilized as data input in the loss model.

Actual MW and MVA line loadings were based on KPCO's peak loading conditions. Calculations of line losses were performed for each line segment separately and combined by voltage levels for reporting purposes as shown in the Discussion of Results (Section 4.0) of this report. The loss calculations consisted of determining a circuit current value based on MVA line loadings and evaluating the I²R results for each line segment.


KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 12 of 28

Kentucky Power Company 2006 Analysis of System Losses

After system coincident peak hour losses were identified for each voltage level, a separate calculation was then made to develop annual average energy losses based on a loss factor approach. Load factors were determined for each voltage level based on system and customer load information. An estimate of the Hoebel coefficient (see Appendix B) was then used to calculate energy losses for the entire period being analyzed. The results are presented in Section 4.0 of this report.

3.2.2 Transformers

The transformer loss analysis required several steps in order to properly consider the characteristics associated with various transformer types; such as, step-up, auto transformers, distribution substations, and line transformers. In addition, further efforts were required to identify both iron and copper losses within each of these transformer types in order to obtain reasonable peak (kW) and average energy (kWh) losses. While iron losses were considered essentially constant for each hour, recognition had to be made for the varying degree of copper losses due to hourly equipment loadings.

Standardized test data tables were used to represent no load (fixed) and full load losses for different types and sizes of transformers. This test data was incorporated into the loss model to develop relationships representing copper and iron losses for the transformer loss calculation. These results were then totaled by various groups, as identified and discussed in Section 4.0.

The remaining miscellaneous losses considered in the loss study consisted of several areas which do not lend themselves to any reasonable level of modeling for estimating their respective losses and were therefore lumped together into a single loss factor of 0.10%. The typical range of values for these losses is from 0.10% to 0.25%, and we have assumed the lower value to be conservative at this time. The losses associated with this loss factor include bus bars, unmetered station use, and grounding transformers.



KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 13 of 28

Kentucky Power Company 2006 Analysis of System Losses

3.2.3 Distribution System

The load data at the substation and customer level, coupled with primary and secondary network information, was sufficient to model the distribution system in adequate detail to calculate losses.

Primary Lines

Primary line loadings take into consideration the available distribution load along with the actual customer loads including losses. Primary line loss estimates were prepared by the Company for use in this loss study. These estimates considered loads per substation, voltage levels, loadings, total circuit miles, wire size, and single- to three-phase investment estimates. All of these factors were considered in calculating the actual demand (kW) and energy (kWh) for the primary system.

Line Transformers

Losses in line transformers were determined based on typical transformer sizes for each secondary customer service group and an estimated or calculated number of customers per transformer. Accounting records and estimates of load data provided the necessary database with which to model the loadings. These calculations also made it possible to determine separate copper and iron losses for distribution line transformers, based on a table of representative losses for various transformer sizes.

Secondary Line Circuits

A calculation of secondary line circuit losses was performed for loads served through these secondary line investments. Estimates of typical conductor sizes, lengths, loadings and customer class penetrations were made to obtain total circuit miles and losses for the secondary network. Customer loads which do not have secondary line requirements were also identified so that a reasonable estimate of losses and circuit miles of these investments could be made.

Service Drops and Meters

Service drops were estimated for each secondary customer reflecting conductor size, length and loadings to obtain demand losses. A separate calculation was also performed using customer maximum demands to obtain kWh losses. Meter loss estimates were also made for each customer and incorporated into the calculations of kW and kWh losses included in the Summary Results.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 14 of 28

Kentucky Power Company 2006 Analysis of System Losses

4.0 DISCUSSION OF RESULTS

A brief description of each Exhibit provided in Appendix A follows:

Exhibit 1 - Summary of Company Data

This exhibit reflects system information used to determine percent losses and a detailed summary of kW and kWh losses by voltage level. The loss factors developed in Exhibit 7 are also summarized by voltage level.

Exhibit 2 - Summary of Conductor Information

A summary of MW and MWH load and no load losses for conductors by voltage levels is presented. The sum of all calculated losses by voltage level is based on input data information provided in Appendix A. Percent losses are based on equipment loadings.

Exhibit 3 - Summary of Transformer Information

This exhibit summarizes transformer losses by various types and voltage levels throughout the system. Load losses reflect the copper portion of transformer losses while iron losses reflect the no load or constant losses. MWH losses are estimated using a calculated loss factor for copper and the test year hours times no load losses.

Exhibit 4 - Summary of Losses Diagram (2 Pages)

This loss diagram represents the inputs and output of power at system peak conditions. Page 1 details information from all points of the power system and what is provided to the distribution system for primary loads. This portion of the summary can be viewed as a "top down" summary into the distribution system.

Page 2 represents a summary of the development of primary line loads and distribution substations based on a "bottom up" approach. Basically, loadings are developed from the customer meter through the Company's physical investments based on load research and other metered information by voltage level to arrive at MW and MVA requirements during peak load conditions by voltage levels.

Exhibit 5 - Summary of Sales and Calculated Losses

Summary of Calculated Losses represents a tabular summary of MW and MWH load and no load losses by discrete areas of delivery within each voltage level. Losses have been identified and are derived based on summaries obtained from Exhibits 2 and 3 and losses associated with meters, capacitors and regulators.



KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 15 of 28

Kentucky Power Company 2006 Analysis of System Losses

Exhibit 6 - Development of Loss Factors, Unadjusted

This exhibit calculates demand and energy losses and loss factors by specific voltage levels based on sales level requirements. The actual results reflect loads by level and summary totals of losses at that level, or up to that level, based on the results as shown in Exhibit 5. Finally, the estimated values at generation are developed and compared to actual generation to obtain any difference or mismatch.

Exhibit 7 - Development of Loss Factors, Adjusted

The adjusted loss factors are the results of adjusting Exhibit 6 for any difference. All differences between estimated and actual are prorated to each level based on the ratio of each level's total load plus losses to the system total. These new loss factors reflect an adjustment in losses due only to the kW and kWh mismatch.

Exhibit 8 - Adjusted Losses and Loss Factors by Facility

These calculations present an expanded summary detail of Exhibit 7 for each segment of the power system with respect to the flow of power and associated losses from the receipt of energy at the meter to the generation for the KPCO power system.



KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 16 of 28

Kentucky Power Company 2006 Analysis of System Losses

Appendix A

Results of 2006 KPCO Integrated Power System Loss Analysis

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 17 of 28

KENTUCKY POWER 2006 LOSS ANALYSIS

KENTUCKY POWER

SUMMARY OF COMPANY DATA

EXHIBIT 1

ANNUAL PEAK	1,539	MW
ANNUAL SYSTEM INPUT	7,750,202	MWH
ANNUAL SALES OUTPUT	7,291,865	MWH
SYSTEM LOSSES @ INPUT SYSTEM LOSSES @ OUTPUT		or 5.91% or 6.29%
SYSTEM LOAD FACTOR	57.5%	

SUMMARY OF LOSSES - OUTPUT RESULTS

SERVICE	KV		MW Input	% TOTAL	MWH Input	% TOTAL
TRANS	765,345 161,138	50.9	3.31%	40.31%	181,171 <u>2.34%</u>	39.53%
SUBTRANS	69,46,34	13.7	0.89%	10:87%	58,146 0.75%	12 69%
PRIMARY	34,12,1	30.0	1.95%	23.73%	87,695 <u>1.13%</u>	19.13%
SECONDARY	120/240,to,477	31.7	2.06%	25.09%	131,324 1.69%	28.65%
TOTAL		126.3	3 	100.00%	458,337 5.91%	100.00%

SUMMARY OF LOSS FACTORS

SERVICE	KV	CUMMU DEMANI d		S EXPANSION FA ENERGY e	
TOT TRANS	765,345 161,138	1.03935	0.96214	1.02781	0.97294
SUBTRAN	69,46,34	1.05210	0.95048	1.03780	0.96358
PRIMARY	34,12,1	1.07402	0.93108	1.05205	0.95053
SECONDARY	120/240,to,477	1.10790	0.90261	1.08674	0.92018

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 18 of 28

243,705

31,217

212,488

24,060 5,753 283 30,097 13,182 0 14,268 14,268 3,325 125,214 128,539 41,838 15,781 0 TOTAL ---- MWH LOSSES NO LOAD 0 2,431 0 2,504 3,207 0 12,700 12,700 11,273 0 0 352 1,182 1,533 12,575 0 1,568 1,568 2,973 124.032 127,006 0 5,753 21,629 5,753 210 27,592 30,565 13,182 0 LOAD

KENTUCKY POWER 2006 LOSS ANALYSIS

SUMMARY OF CONDUCTOR INFORMATION

EXHIBIT 2

DESCRIPTION		CIRCUIT MILES	LOADING % RATING	LOAD WW I	- MW LOSSES NO LOAD	TOTAL
BULK	765 KV OR GREATER	KEATER				
TIE LINES BULK TRANS SUBTOT		0.0 <u>183.5</u> 183.5	0.00% 0.00%	0.000 0.566 0.566	0.000 0.014 0.014	0.000 0.580 0.580
TRANS	138 KV TO	TO 765.00	 KV			
TIE LINES		0	0.00%	0.000	0.00	0.000
TRANS1 <u>TRANS2</u> SUBTQT	161 KV <u>138 KV</u>	56.5 <u>328.1</u> 384.7	0.00% 0.00%	1.149 <u>41.861</u> 43.010	0.040 0.135 0.175	1.189 <u>41.996</u> 43.185
	35 KV T	TO 138	KV			
TIE LINES SUBTRANS (SUBTRANS2 SUBTRANS2 SUBTRANS3 SUBTOT	69 46 KV 3 <u>5 KV</u>	0 997.5 169.2 1,169.8	0.00% 0.00% 0.00%	0.000 7.066 1.879 0.071 9.017	0.000 0.489 0.000 0.008 0.497	0.000 7.556 1.879 <u>0.079</u> 9.514
PRIMARY LINES		8,089		15.358	. 1.287	16.645
SECONDARY LINES		2,632		6.249	0000	6,249
SERVICES	-	3,175		5.420	0.366	5.786
TOTAL		15,634		79.619	2.339	81.959

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KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 19 of 28

International constraints Manuelise matrix Manuelis					S	JMMARY OF T	SUMMARY OF TRANSFORMER INFORMATION	VFORMATION					Ξ	EXHIBIT 3
175 0.0 0.00 0.00	DESCRIPTION	KV VOLTA	CAPACITY GE M	A)	NUMBER TRANSFMR	AVERAGE SIZE	LOADING	MVA LOAD				1	WH LOSSES	TOTAL
151 150 1 150 0.000 <td>BULK STEP-UP BULK - BULK BULK - TRANS1 BULK - TRANS2</td> <td></td> <td>765 161 138</td> <td>0.0 1,500.0</td> <td>0000</td> <td>0.0 500.0</td> <td>0.00% 0.00% 22.56% 0.00%</td> <td>33800</td> <td>0.000 0.418 0.000</td> <td>0.000 0.000 1.507 0.000</td> <td>0.000 0.000 1.925 0.000</td> <td>0 0 1,082 0</td> <td>0 0 11,941</td> <td>0 0 13,022 0</td>	BULK STEP-UP BULK - BULK BULK - TRANS1 BULK - TRANS2		765 161 138	0.0 1,500.0	0000	0.0 500.0	0.00% 0.00% 22.56% 0.00%	33800	0.000 0.418 0.000	0.000 0.000 1.507 0.000	0.000 0.000 1.925 0.000	0 0 1,082 0	0 0 11,941	0 0 13,022 0
138 34,0 3 118,0 62,51,1 10,60,5 225 0,55 10,60,5 12,06 12,	TRANS1 STEP-UP TRANS1 - TRANS2 TRANS1-SUBTRANS1 TRANS1-SUBTRANS1 TRANS1-SUBTRANS2 TRANS1-SUBTRANS3		161 138 69 35	950.0 735.0 54.0 0.0	-4-00	950.0 950.0 54.0 0.0 0.0	61.01% 86.06% 104.12% 0.00% 0.00%	0 28 28 28 28 28 28 28 28 28 28 28 28 28	0.970 0.785 0.098 0.000 0.000	1.028 1.239 0.112 0.000	1.998 2.024 0.210 0.000	2,257 2,326 595 0	6,448 8,498 770 0	8,705 10,824 1,366 0 0
69 55 5 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TRANS2 STEP-UP TRANS2-SUBTRANS1 TRANS2-SUBTRANS2 TRANS2-SUBTRANS3		138 69 35	354.0 826.5 75.0 57.0	ю 1 0 0	118.0 55.1 37.5 28.5	62.61% 109.65% 92.79% 32.40%	222 906 70	0.656 1.555 0.269 0.036	0.550 1.776 0.150 0.081	1.206 3.331 0.419 0.117	1,906 11,277 785 75	3,907 12,181 1,059 637	5,813 23,459 1,843 711
46 240 2 120 0.00% 0.000	SUBTRAN1 STEP-UP SUBTRAN2 STEP-UP SUBTRAN3 STEP-UP		69 46 35	0.00	000	0.0	0000 0000	000	0.000 0.000 0.000	0.000 0.000 0.000	0.000 0.000 0.000	000	000	000
DISTRIBUTION SUBSTATIONS 161 33 22.0 2 11.0 66.73% 19 0.000 <td>SUBTRAN1-SUBTRAN2 SUBTRAN1-SUBTRAN3 SUBTRAN2-SUBTRAN3</td> <td></td> <td>46 35 35</td> <td>24.0 0.0 0.0</td> <td>000</td> <td>12.0 0.0 0.0</td> <td>91.84% 0.00% 0.00%</td> <td>500</td> <td>0.082 0.000 0.000</td> <td>0.053 0.000 0.000</td> <td>0.135 0.000 0.000</td> <td>283 0 0</td> <td>386 0 0</td> <td>670 0</td>	SUBTRAN1-SUBTRAN2 SUBTRAN1-SUBTRAN3 SUBTRAN2-SUBTRAN3		46 35 35	24.0 0.0 0.0	000	12.0 0.0 0.0	91.84% 0.00% 0.00%	500	0.082 0.000 0.000	0.053 0.000 0.000	0.135 0.000 0.000	283 0 0	386 0 0	670 0
161 33 22.0 2 11.0 66.73% 19 0.000								ISTRIBUTION S	UBSTATIONS					
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		61 61	33 12	22.0 0.0	N 0 [°] 0	11.0 0.0 0.0		000	0.080 0.000 0.000	0.049 0.000 0.000	0.129 0.000 0.000	173 0 0	356 0 0	0 223 223
69 33 1475 12 12.3 120.83% 178 1.143 0.372 1.515 2.471 2.595 69 12 448.5 5.4 6.3 44.27% 119 0.055 3997 6.144 8.164 69 12 12.3 15.30 4.4 5.3 44.27% 1135 0.055 0.058 0.146 1.77 4.19 46 12 10.7 14 0.77 2461% 91 0.056 0.056 0.146 1.77 4.19 46 13 10.7 15 24.17% 113 0.026 0.046 1.49 0.104 46 12 12 13 77 24.52% 0 0.0267 0.046 1.49 1.93 35 12 0.70 0 0.000 0.000 0.000 0.000 1.93 1.93 35 12 0.1 5.01 0.0160 0.000 0.000 0.000		138 138 38	33 12	183.0 43.5 0.0	040	20.3 10.9 0.0	96.56% 103.30% 0.00%	177 45 0	0.850 0.247 0.000	0.395 0.104 0.000	1.245 0.351 0.000	1,837 533 .0	2,806 744 0	4,643 1,277 0
45 33 6.3.0 4 15.8 104.95% 66 0.376 0.146 0.524 B17 1.034 46 1 0.7 1 0.7 28.61% 0 0.000 0.002 0.002 1.495 1.995 46 1 0.7 28.61% 0 0 0.000 0.002 0.002 1.195 1.995 35 12 0 0 0 0 0 0.000 0.002 0.002 1.195 1.13 35 12 1 0.7 28.61% 7 0.007 0.002 0.002 0 0 0 0 1 13 35 12 0 0 0 0 0 0 0 0 0 1 1 13 35 1 0.05 0.006 0.000 0.000 0.003 101 1 1 1 1 1 1 1 1 1	SUBTRAN1- SUBTRAN1- SUBTRAN1-	69 69	33 12	147.5 448.5 25.0	12 54 4	12.3 8.3 6.3	120.83% 107.07% 44.27%	178 480 11	1.143 2.861 0.035	0.372 1.136 0.053	1.515 3.997 0.088	2,471 6,184 77	2,595 8,164 419	5,067 14,348 495
35 33 0.0 0 0.000 0.000 0.000 0 0 35 12 5.0 1 5.0 135.48% 7 0.057 0.016 0.073 123 111 35 1 0.0 0 0.000 0.000 0.000 0.000 0 0 1 35 1 0.0 0 0 0.007 0.005 0.000 0.000 0 1 35 1 0.0 0.007 0.005 0.007 0.000 0 0 1 0 RIMARY 21.3 4 5.3 63.76% 14 0.055 0.037 0.002 119 321 FRMR 2.982.7 95.534 31.2 34.92% 1.041 5.012 9.988 15.000 11.044 87.498	SUBTRAN2- SUBTRAN2- SUBTRAN2-	46 46 46	33 12	63.0 121.3 0.7	4 10	15.8 8.1 0.7	104.95% 75.22% 28.61%	96 91 0	0.378 0.680 0.000	0.146 0.267 0.002	0.524 0.946 0.002	817 1,469 1	1,034 1,995 13	1,851 3,464 14
21.3 4 5.3 63.76% 14 0.055 0.037 0.092 119 321 2.982.7 95,534 31.2 34.92% 1,041 5.012 9.988 15.000 11,054 87,498 ***********************************	SUBTRAN3- SUBTRAN3- SUBTRAN3- SUBTRAN3-	35 35 35	33 12	0.0 0.0	0-0	0.0 5.0		0 ~ 0	0.000 0.057 0.000	0.000 0.016 0.000	0.000 0.073 0.000	0 123 0	010	0 235 0
ZANSFRMR 2,982.7 95,534 31.2 34.92% 1,041 5,012 9.988 15,000 11,054 87,498 	PRIMARY - PRIMARY			21.3	4	5.3		14	0.055	0.037	0.092	119	321	440
8.639 95.677 15.187 19.059 35.327 45,446 151,883	LINE TRANSFRMR			2,982.7	95,534			1,041	5.012	9.988	15.000	11,054	87,498	98,553
	TOTAL			8,639	95,677			u	16.267			45,446	151,883	197,329

KENTUCKY POWER 2006 LOSS ANALYSIS

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KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 20 of 28



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KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 21 of 28



KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 22 of 28

KENTUCKY POWER 2006 LOSS ANALYSIS	

EXHIBIT 5

SUMMARY of SALES and CALCULATED LOSSES

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EXP FAC		1.0089978	1.017769	1.005609	1 009201			0100701	1.02/80/	1.032937	1.033273	1.0322753		0.000000	1.033401	707850 F	1210001	1.038280	100000 0	0.000000	1.036105	0.0000000	0.000000	1.0310990	1.03779			1.0348993	1.03464	1.03992;	1 04705		1.04000	1.03979		1.0527754	1.0807410	1.08459	1.0892445			
FACTOR	0	1.0089978	1.0086933	1.0017357	1 0035721			1.0210009	1.0278076	1.0049913	1.0053182	1.0043468		0.0000000	1.0054429	1 0080800	00070001	2881010.1		0.000000	1.0080774	0.0000000	0.0000000	1.0032023	1.0097183			1.0068999	1.0066500	1 0074094	1 0084378		000000011	1.0074019	0.0000000	1.0124879	1.0265636	1.0035658	1.0042872			
000-	0	14,268	13,022	12.030	10 874			131,027	181,171	1,366	23.459	24.060		0	1 843	023	010	5,753		0	711	0	0	283	58,146			529	5.920	19 910	0000 3	240'0	227	31,922		53,230	98,553	13,182	15,781			451,987
	0	1,568	1,082	5.230	2 326	4	0 200	066'CZL	136,145	596	11.277	21 629		0	785	202	202	5,753		0	75	0	0	210	40,609			173	2.370	CF7.8	10.00	107'7	123	13,686		30,684	11,054	13,182	12,575			257,934
NU LUAU +	0	12,700	11,941	6.800	8 408		0.02	5,089	45,027	0///	12.181	2 431	ī	0	1 059		005	0		0	637	0	o	73	17,538			356	3.550	11 178		240,0	111	18,236		22,547	87,498	0	3,207			194,053
MWH LOAD	0	1,600,000	1,510,960	6 943 169	2 040 081	100,040,0	-	6,174,465	6,696,350	275.125	4 474 461	5 550 224	1410000	с	340 536	000,040	107,853	569,792		0	88,791	0	0	88,791	6,041,339	-		77.155	RG6 161	2 706 000		020,210	Z7,390	4,344,624	0	4,315,778	3,808,609	3.710.057	3,696,874		,1	
EXP FAC	0.000000	1.001659	1.007506	1 006332	1000001	1.005020	0,00000	1.040506	1.039346	1.043319	1 043250	1 046481		0,00000	1 0.45778	01/0001	1.053086	1.056053		0.000000	1.046081	0.00000	0.000000	1.043922	1.052104			1.046555	1 047039	000 100 1	0000001	1.006223	1.055474	1.055162		1.072336	1.089469	1.096769	1.103616			
EXP FACTOR	0.00000	1.001659	1.005837	1 003555	200000 F	0/70001	0.000000	1.035589	1.039346	1 003823	1 003765	1 006865	0000001	0,00000	1 006100	1.000100	1.006312	1.016075		0.00000	1.006480	0,000000	0.000000	1.004403	1.012275	-		1 006936	1 007402		600000'I	1.009630	1.011066	1.008495	0.000000	1.016277	1 015978	1 006700	1 006243			
TOTLOSS	00.0	0.58	1.92	101 5	2.0	2017	0.00	43.20	50.92	0.21	100	4 00	DD- /	000		0.42	0.14	1.88		00.0	0.12	0.00	000	0.08	13.73			0.13	1 60	0.1	0.0	1.47	0.07	8.87		16.70	15 00	6.25	67.5			117.25
LOAD = TOT	0.00	0.57	0.42	57 0	11.10	0./2	0.00	42.52	46.40	0.10		20.1	10.1	000	20.0	0.27	0.08	1.88		0.00	0.04	0.00	0.00	0.07	11.06			0.08			4.04	1.06	0.06	6.33		15.41	504	R 05	5 42	4		95.89
+ UO LOAD +	0.00	0.01	1.51	20.5	10.1	1.24	0.00	0.68	4.51	0 11	12.4		0.43	00.0		0.15	0.05	0.00		0.00	0.08	00 0	000	0.0	2.67	1.11		0.05		0.00	dC.1	0.41	0.02	2.54		1 29	00 0	0000	0.37	0.0		21.36
MW LOAD	0.0	350.0	331.7	1.000	0.00	619.9	0.0	1.257.1	1.345.0	1 22	1 000	1 4000	1,106.2	0	0.0	68.2	21.6	118.8		0.0	18.1	00		1.41	0 021 1	1, 105.0		7 8 7		7.117	656.1	154.4	6.6	1.053.0	0.0	2 CFU 1	0 5 3 D	8 8 6 0	0206	2000		
LOSS # AND LEVEL	1 BH K YEMMR		2 TDANCI YEAR		4 I KANST LINES	5 TRANSZTR1 SD	6 TRANS2BLK SD	7 TRANS2 LINES	TOTAL TRAN				11 SUBIRANSI LINES		12 21 4211 20	13 STR2T2 SD	14 STR2S1 SD	15 SUBTRANS2 LINES		16 STR3T1 SD	17 STR3T2 SD	18 6712361 61					DISTRIBUTION SUBST			I HANSZ	SUBTR1	SUBTR2	SUBTR3	WEIGHTED AVERAGE	DRIMARY INTRCHNGE					מנוצאוכנים		TOTAL SYSTEM

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KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 23 of 28

EXHIBIT 6

		UNADJUSTED DEMAND			
LOSS FACTOR LEVEL	CUSTOMER SALES MW	CALC LOSS TO LEVEL	SALES MW @ GEN	CUM PEAK EX FACTORS	PANSION
	a	b	C	d	1/d
BULK LINES	0.0	0.0	0.0	0.0000	0.0000.0
TRANS SUBS	0.0	0.0	0.0	0.00000	0.00000
TRANS LINES	46.8	1.8	48.6	1.03935	0.96214
TOTAL TRANS	0.0	0.0	0.0	0.00000	0.00000
SUBTRANS	366.9	19.1	386.0	1.05210	0.95048
PRIM SUBS	0.0	0.0	0.0	0.00000	0.00000
PRIM LINES	72.2	5.2	77.4	1.07234	0.93254
SECONDARY	<u>926.8</u>	<u>96.0</u>	<u>1,022.8</u>	110362	0.90611
TOTALS	1,412.7	122.2	1,534.9	a 1749 - A TALLER	

KENTUCKY POWER 2006 LOSS ANALYSIS

DEVELOPMENT of LOSS FACTORS

DEVELOPMENT of LOSS FACTORS UNADJUSTED ENERGY

LOSS FACTOR LEVEL	CUSTOMER SALES MWH	CALC LOSS TO LEVEL	SALES MWH @ GEN	CUM ANNUAL EXPANSIO FACTORS	N
	а	b	C	d 1/d	_
BULK LINES	0	0	0	0.0000 0.000	00
TRANS SUBS	0	0	0	0.000 0.000	00
TRANS LINES	390,468	10,858	401,326	1.02781 0.972	94
TOTAL TRANS	0	0	0	0.000 00000.0	00
SUBTRANS	2,766,366	104,558	2,870,924	1.03780 0.963	58
PRIM SUBS	0	0	0	0.000 0.000	00
PRIM LINES	453,938	23,957	477,895	1.05278 0.949	87
SECONDARY	<u>3,681,093</u>	328,517	4,009,610		07
TOTALS	7,291,865	467,890	7,759,755		

ESTIMATED VALUES AT GENERATION

	EG HIMATED VALUES AT G	ENERATION
LOSS FACTOR AT		
VOLTAGE LEVEL	MW	MWH
BULK LINES	0.00	0
TRANS SUBS	0.00	0
TRANS LINES	48.64	401,326
SUBTRANS SUBS	0.00	0
SUBTRANS LINES	386.02	2,870,924
PRIM SUBS	0.00	0
PRIM LINES	77.42	477,895
SECONDARY	1,022.83	4,009,610
SUBTOTAL	1,534.91	7,759,755
		[
ACTUAL ENERGY	1,539.00	7,750,202
MISSMATCH	(4.09)	9,553
% MISSMATCH	-0.27%	0.12%
/ MISSWATCH	-0.2770	U.12.70
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KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 24 of 28

KENTUCKY POWER 2006 LOSS ANALYSIS

DEVELOPMENT of LOSS FACTORS ADJUSTED DEMAND

EXHIBIT 7

LOSS FACTOR	CUSTOMER SALES MW	SALES ADJUST	CALC LOSS TO LEVEL	SALES MW	CUM PEAK EXP	ANSION
	a SALES MW	b	C	@ GEN d	e	f=1/e
BULKLINES	0.0	0.0	0.0	0.0	0.00000	0.0000
TRANS SUBS	0.0	0.0	0.0	0.0	0.00000	0.00000
TRANS LINES	46.8	0.0	1.8	48.6	1.03935	0.96214
TOTAL TRANS	0.0	0.0	0.0	0.0	0.00000	0.00000
SUBTRANS	366.9	0.0	19.1	386.0	1.05210	0.95048
PRIM SUBS	0.0	0.0	0.0	0.0	0.00000	0.00000
PRIM LINES	72.2	0.0	5.3	77.5	1.07402	0.93108
SECONDARY	<u>926.8</u>	0.0	100.0	1,026.8	1.10790	0.90261
			126.3			
TOTALS	1,412.7	0.0	126.3	1,539.0		

DEVELOPMENT of LOSS FACTORS ADJUSTED ENERGY

LOSS FACTOR LEVEL	CUSTOMER SALES MWH	SALES ADJUST	CALC LOSS TO LEVEL	GEN	FACTORS	EXPANSION f=1/e
	d	U	Ú			1-1/6
BULK LINES	0	0	0	0	0.00000	0.00000
TRANS SUBS	0	0	0	0	0.00000	0.00000
TRANS LINES	390,468	0	10,858	401,326	1.02781	0.97294
TOTAL TRANS	0	0	0	0	0.00000	0.00000
SUBTRANS	2,766,366	0	104,558	2,870,924	1.03780	0.96358
PRIM SUBS	0	0	. 0	0	0.00000	0.0000.0
PRIM LINES	453,938	0	23,626	477,564	1.05205	0.95053
SECONDARY	3,681,093	0	319,295	4,000,388	1.08674	0.92018
			458,337			
TOTALS	7,291,865	0	458,337	7,750,202		

ESTIMATED VALUES AT GENERATION

	ESTIMATED VALUES AT	GENERATION
LOSS FACTOR AT	A 40.07	5456/11
VOLTAGE LEVEL	MW	MWH
BULK LINES	0.00	0
TRANS SUBS	0.00	0
TRANS LINES	48.64	401,326
SUBTRANS SUBS	0.00	0
SUBTRANS LINES	386.02	2,870,924
PRIM SUBS	0.00	0
PRIM LINES	77.54	477,564
SECONDARY	1,026.80	4,000,388
		5
	1,539.00	7,750,202
ACTUAL ENERGY	1,539.00	7,750,202
MISSMATCH	0.00	0
% MISSMATCH	0.00%	0.00%
% WISSWATCH	0.00%	0.00%

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8/12/2007

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 25 of 28

KENTUCKY POWER 2006 LOSS ANALYSIS

EXHIBIT 8

Adjusted Losses and Loss Factors by Facility					
Unadjusted Loss	es by Segment MW	Unadjusted	MWH	Unadjusted	
Service Drop Losses	5.79	6.33	15,781	16,962	
Secondary Losses Line Transformer Losses	6.25 15 00	6.84 16.42	13,182 98,553	14,168 105,922	
Primary Line Losses	16 70	18 28	53,230	57.211	
Distribution Substation Losses	8.87	9.71	31,922	34,309	
Subtransmission Losses Transmission System Losses	13.73 50.92	13.73 50.92	58,146 <u>181,171</u>	58.146 181,171	
Total	117.25	122.21	451,987	467,890	
Mismatch Allocati	on by Segmen MW	t	MWH		
Service Drop Losses	-0 45		709		
Secondary Losses Line Transformer Losses	-0.49 -1.17		592 4,427		
Primary Line Losses	-1.30		2.391		
Distribution Substation Losses Subtransmission Losses	-0 69 0 00		1,434 0		
Transmission System Losses	0.00		Q		
Total	-4 09		9.553		
Adjusted Losses	s by Segment MW	% of Total	MWH	%.of.Total	
Service Drop Losses	678	5.4%	16.253	3 5%	
Secondary Losses Line Transformer Losses	7.32 17.58	5 8% 13 9%	13,576 101,495	3.0% 22.1%	
Primary Line Losses	19 57	15 5%	54,820	12.0%	
Distribution Substation Losses	10 40	8.2%	32.875	7.2%	
Subtransmission Losses Transmission System Losses	13 73 50 92	10.9% 40.3%	58,146 181,171	12 7% 39 5%	
Tolal	126.30	100.0%	458,337	100 0%	
Loss Factors by Segment Retail Sales from Service Drops	MW 926 80	M	WH 3,681,093		
Adjusted Service Drop Losses	6,78		16,253		
Input to Service Drops	933.58		3,697,346		
Service Drop Loss Factor	1.00732		1.00442		
Output from Secondary Adjusted Secondary Losses	933.58 <u>7.32</u>		3,697.346 <u>13,576</u>		
Input to Secondary	940.91		3,710,922		
Secondary Conductor Loss Factor	1.00784		1.00367		
Output from Line Transformers	940.91		3,710,922		
Adjusted Line Transformer Losses Input to Line Transformers	<u>17.58</u> 958.49		<u>101,495</u> 3.812,417		
Line Transformer Loss Factor	1.01869		1.02735		
Secondary Composite	1.03419		1.03568		
Retail Sales from Primary Req. Whis Sales from Primary	69.20 3.00		432,151 21,787		
Input to Line Transformers	958.49		3,812,417		
Output from Primary Lines	1030 69		4,266,355		
Adjusted Primary Line Losses Input to Primary Lines	<u>19.57</u> 1050.26		<u>54,820</u> 4,321,175		
Primary Line Loss Factor	1.01899		1.01285		
Output PI from Distribution Substations Reg. Whis Sales from Substations	1050 26 0.00		4.321,175 D		
Retail Sales from Substations	0.00		ő		
TotalOutput from Distribution Substations	1050.26		4.321,175		
Adjusted Distribution Substation Losses Input to Distribution Substations	<u>10.40</u> 1060 66		<u>32,875</u> 4,354,050		
Distribution Substation Loss Factor	1.00990		1.00761		
Retail Sales at from SubTransmission Reg. Whis Sales from SubTransmission	351.90 15.00		2,695,544 70,822		
Input to Distribution Substations	751.37		3,216,827		
Output from SubTransmission	1118 27		5,983.193		
Adjusted SubTransmission System Losses Input to SubTransmission	<u>13.73</u> 1132.00		<u>58,146</u> 6,041,339		
SubTransmission Loss Factor	1.01227		1.00972		
Retail Sales at from Transmission Reg. Whis Sales from Transmission	32 80 14 00		320,160 70,308		
Input Subtransmission	1247 28		6,041.339		
Output from Transmission	1294.08		6,515,179		
Adjusted Transmission System Losses Input to Transmission	50.92 1345.00		181,171 6,696,350		
Transmission Loss Factor	1.03935		1.02781		

8/12/2007

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 26 of 28

Kentucky Power Company 2006 Analysis of System Losses

Appendix B

Discussion of Hoebel Coefficient

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 27 of 28

COMMENTS ON THE HOEBEL COEFFICIENT

The Hoebel coefficient represents an established industry standard relationship between peak losses and average losses and is used in a loss study to estimate energy losses from peak demand losses. H. F. Hoebel described this relationship in his article, "Cost of Electric Distribution Losses," <u>Electric Light and Power</u>, March 15, 1959. A copy of this article is attached.

Within any loss evaluation study, peak demand losses can readily be calculated given equipment resistance and approximate loading. Energy losses, however, are much more difficult to determine given their time-varying nature. This difficulty can be reduced by the use of an equation which relates peak load losses (demand) to average losses (energy). Once the relationship between peak and average losses is known, average losses can be estimated from the known peak load losses.

Within the electric utility industry, the relationship between peak and average losses is known as the loss factor. For definitional purposes, loss factor is the ratio of the average power loss to the peak load power loss, during a specified period of time. This relationship is expressed mathematically as follows:

$(1) \Sigma = A = D$	where: F _{LS}		Loss Factor
(1) $F_{LS} \approx A_{LS} \div P_{LS}$	ALS	122	Average Losses
	PLS	===	Peak Losses

The loss factor provides an estimate of the degree to which the load loss is maintained throughout the period in which the loss is being considered. In other words, loss factor is the ratio of the actual kWh losses incurred to the kWh losses which would have occurred if full load had continued throughout the period under study.

Examining the loss factor expression in light of a similar expression for load factor indicates a high degree of similarity. The mathematical expression for load factor is as follows:

	where: F _{LD}		Load Factor
(2) $F_{LD} \approx A_{LD} \div P_{LD}$	A _{LD}		Average Load
	PLD	_	Peak Load

This load factor result provides an estimate of the degree to which the load loss is maintained throughout the period in which the load is being considered. Because of the similarities in definition, the loss factor is sometimes called the "load factor of losses." While the definitions are similar, a strict equating of the two factors cannot be made. There does exist, however, a relationship between these two factors which is dependent upon the shape of the load duration curve. Since resistive losses vary as the square of the load, it can be shown mathematically that the loss factor can vary between the extreme limits of load factor and load factor squared. The relationship between load factor and loss factor has become an industry standard and is as follows:

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 4 Attachment 1 Page 28 of 28

Participant and a state of the		- market market		A Standing and a stand of the s
(2) 17	77	an 1		4 TT\
(1) 800	22 H	*H. n	+ 1	1-H)*FLD
		· + LD	· 1	I I I I I I I I I I I I I I I I I I I

where: $F_{1S} = Loss Factor$ $F_{LD} = Load Factor$ H = Hoebel Coeff

As noted in the attached article, the suggested value for H (the Hoebel coefficient) is 0.7. The exact value of H will vary as a function of the shape of the utility's load duration curve. In recent years, values of H have been computed directly for a number of utilities based on EEI load data. It appears on this basis, the suggested value of 0.7 should be considered a lower bound and that values approaching unity may be considered a reasonable upper bound. Based on experience, values of H have ranged from approximately 0.85 to 0.95. The standard default value of 0.9 is generally used.

Inserting the Hoebel coefficient estimate gives the following loss factor relationship using Equation (3):

(4) $F_{LS} \approx 0.90 * F_{LD}^2 + 0.10 * F_{LD}$

Once the Hoebel constant has been estimated and the load factor and peak losses associated with a piece of equipment have been estimated, one can calculate the average, or energy losses as follows:

(5) $A_{LS} \approx P_{LS} * [H*F_{LD}^2 + (1-H)*F_{LD}]$	where: A _{LS}	=	Average Losses
	P_{LS}	=	Peak Losses
	Н	=	Hoebel Coefficient
	F _{LD}	==	Load Factor

Loss studies use this equation to calculate energy losses at each major voltage level in the analysis.



KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 5 Page 1 of 1

Kentucky Power Company

REQUEST

Refer to the Status Report, page 5. The TEE program's projected participant level for 2012 is 390 all-electric homes, 35 non-all-electric homes and sets the budget level at \$400,000. It appears the Collaborative is proposing a 55 percent ((390-251)/251) increase in the number of all-electric homes and a 21 percent ((35-29)/29) increase in the number of non-all-electric homes while at the same time increasing the annual program cost by 42 percent ((\$400,000-\$281,000)/\$281,000). Explain what actions the Collaborative is doing to achieve the 2012 projected participant levels for the TEE program.

RESPONSE

Specific measures the Company is administering or is planning for 2012 on behalf of the program include:

- Coordinating quarterly conference calls with CAA's to review and plan program activities;
- Providing monthly updates on the status of the budgetary levels and participant levels to the Community Action Agencies; and
- Sending out bill inserts to customers promoting the program.

REQUEST

Refer to the Status Report, Modified Energy Fitness program, page 8.

- a. Explain or provide calculations supporting the negative 40 kW summer year-to-date impact.
- b Explain or provide calculations supporting the positive 1,018 kW summer programto-date impact.

RESPONSE

a. The Modified Energy Fitness Program is primarily focused on providing savings in the winter, when the Company faces the highest requirements for meeting load. Net savings achieved from the program were determined through a billing analysis which compared the pre/post usage changes of the program participants to the pre/post usage changes of a selected similar group of nonparticipants. The demand impacts were then estimated by allocating monthly energy changes to daily values, then applying an hourly load profile to the daily energy changes to determine the expected demand change at time of the Company peak demand. The billing analysis showed that significant savings were achieved in winter, but that overall energy usage was slightly increased in the summer. The demand savings is an estimate. Determination of actual demand savings would require expensive interval metering on every program participant.

Increased summer demand was estimated to be 0.03 kW per participant x 1201 YTD participants x 1.11 loss factor = 40 kW.

b. 12/31/2010 PTD Summer Demand 1,058 kW, 2011 Summer Impact Savings - 40 kW, 12/31/2011 PTD Summer Demand Savings 1,018 kW.

1,058 - 40 = 1,018

REQUEST

Refer to the Status Report, High Efficiency Heat Pumps program, page 9.

- a. Explain or provide calculations supporting the negative 52 kW summer year-to-date impact.
- b. Explain or provide calculations supporting the positive 137 kW summer program-todate impact.
- c. Explain what actions the Collaborative is taking in 2012 so that the projected participant levels for the non-resistance heat replacement customers of 475, or an increase of 17 percent over the 2011 actual participation, will be achieved.

RESPONSE

a. The High Efficiency Heat Pump Program is primarily focused on providing savings in the winter, when the Company faces the highest requirements for meeting load. The program includes replacement of resistance heat with a high efficiency heat pump. Since a heat pump provides both heating and cooling, in some cases the customer obtains the benefit of cooling where no cooling system previously was used, but that translates into increased summer usage. Net savings achieved from the program were determined through a billing analysis which compared the pre/post usage changes of the program participants to the pre/post usage changes of a selected similar group of nonparticipants. The demand impacts were then estimated by allocating monthly energy changes to daily values, then applying an hourly load profile to the daily energy changes to determine the expected demand change at time of the Company peak demand. The billing analysis showed that significant savings were achieved in winter, but that energy usage was overall slightly increased in the summer. The demand savings amount is an estimate. Determination of actual demand savings would require expensive interval metering for every participant.

Increased summer demand was estimated to be 0.14 kW per resistance heating participant x 275 YTD participants x 1.11 loss factor = 43 kW

Increased summer demand was estimated to be 0.02 KW per heat pump replacement participant x 406 YTD participants x 1.11 loss factor = 9 KW

Total = 52 kW.

b. 12/31/2010 PTD Summer Demand 189 kW, 2011 Summer Impact Savings - 52 kW, 12/31/2011 PTD Summer Demand Savings 137 kW.

189 - 52 = 137

c. The program will continue to be promoted through direct marketing to HVAC dealers and bill inserts to residential customers. The Customer Solution Center added a program promotion on-hold message for Kentucky Power customers. Kentucky Power is working with the marketing department to identify other opportunities to promote the program.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 8 Page 1 of 1

Kentucky Power Company

REQUEST

Refer to the Status Report, Pilot Residential Load Management program, page 13.

- a. Provide, by type of cost, a breakdown of the \$94,705 equipment/vendor cost, such as the vendors paid and the type of equipment.
- b. Explain what actions the Collaborative is taking to achieve the projected goals of 110 A/C switches and 110 water heater ("WH") switches for 2012, considering that there were only 10 switches installed after four months of 2011.

RESPONSE

a. Consert Inc. was paid \$94,705. The amount includes \$94,500 for fixed vendor expense for project management (May through November) and \$205 for equipment installed for one residential customer.

b. Completed program promotion includes: 1/17/2012 Direct Mailer (501 customers) 1/23/2012 Direct Mailer (502 customers) 2/6/2012 Direct Mailer (3,455 customers)
2/22/2012 Phone Messaging (3,347 customers called, 2,842 customers contacted) 3/16/2012 Customer Letter (3,455 customers)

Other promotional programs planned for the remainder of 2012 may include additional direct mailers, phone messaging, customer letter, postcard, and email where available.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 9 Page 1 of 1

Kentucky Power Company

REQUEST

Refer to the Status Report, Commercial Heating Ventilation Air Conditioner ("HVAC") Diagnostic and Tune-up program, page 18. The Collaborative has established the 2012 projective participant level at 55 for central A/C and 115 for HP with the annual budget level at \$37,380, or an average cost of \$ 219.88 (\$37,380/(55+115)). The 2011 total program cost was \$27,093 with 152 (106+46) participants. The 2011 average cost per participant was \$178.24 (27,093/(106+46)). Explain the reasons for the 23 percent (\$219.88-\$178.24)/\$178.24) increase in average cost per participant.

RESPONSE

This program is undergoing an evaluation of cost-effectiveness. The program evaluation expense increased from \$4,100 in 2011 to a projected \$10,230 in 2012. The evaluation expense accounts for 80% of the increase in average cost per participant.

REQUEST

Refer to the Status Report, Pilot Commercial Load Management program, page 19.

- a. Provide, by type of cost and the vendor, a breakdown of the \$10,500 equipment/vendor year-to-date cost as of December 31, 2011.
- b. Explain how there was \$14,315 of total program costs in 2011, but no participants.
- c. Provide, by type of cost, a breakdown of the projected \$36,105 for 2012 costs for the 10 A/C switches and 10 WH switches which result in a projected average cost per participant of \$1,805.25.
- d. Explain what actions the Collaborative is taking to achieve the projected goals of 10 A/C switches and 10 WH switches for 2012, considering that there were no switches installed in 2011.

RESPONSE

- a. The \$10,500 paid to Consert Inc. is the vendor's fixed vendor expense for project management (May through November) for administering the program.
- b. Although there were no participants, there were fixed expenses. The charges include \$10,500 for vendor expense for project management and \$3,815 for program evaluation.
- c. Evaluation \$11,500, Equipment/Vendor \$21,325, Promotion \$3,000, Customer Incentives \$280.
- d. Issued direct mailer to 77 small commercial, non-demand customers on March 9, 2012. The commercial customer target is currently based on vendor cellular coverage area and commercial accounts having non-demand meters. Other planned promotion includes phone promotion, customer letter, postcard, and email where available.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 10 Page 2 of 2

Kentucky Power Company

The Company has also received inquiry from a representative of local schools which might have non-demand meter service locations that are eligible for the program.

The Company received notification from the program implementation contractor/vendor, that some expanded cellular coverage is now available for additional promotion. The Company will review the expanded coverage to determine additional promotion opportunities for small commercial accounts with non-demand meters.

REQUEST

Refer to the Status Report, Commercial High Efficiency HP/AC program, page 20.

- a. The range of customer incentives that can be paid is from \$250 to \$450. Provide a breakdown of the \$7,950 of customer incentives paid in 2011.
- b. Explain what actions the Collaborative is taking to achieve the projected goal of 20 A/Cs for 2012, considering that there were only three in 2011.
- c. Explain what actions the Collaborative is taking to achieve the projected goal of 40 HPs for 2012, considering that there were only 21 in 2011

RESPONSE

- a. For this DSM program, Kentucky Power paid \$1,050 in incentives for new Air Conditioner units and \$6,900 in incentives for new Heat Pump units.
- b-c. Kentucky Power has provided all HVAC dealers on record as of 2/24/2012 a summary list of active DSM programs relating to HVAC work. This includes sending out new rebate application forms, program fact sheets and a list of all current DSM programs. Kentucky Power staff is actively recruiting HVAC dealers specializing in Commercial and Industrial work.

Kentucky Power plans to purchase several newspaper advertisements promoting the program. Bill inserts promoting the programs are also planned. Kentucky Power is working with the marketing department to identify other opportunities to promote the program.

REQUEST

Refer to the Status Report, Commercial Incentives program, page 21.

- a. Provide, by type of cost, the \$195,543 of equipment/vendor costs.
- b. Provide a breakdown of the \$30,288 in customer incentives by participant.
- c. The total program costs for the calendar year ending December 31, 2011 totaled \$252,314. There were 18 participants for the same time period, resulting in an average of \$14,017 (\$252,314/18) per participant. Looking at the 2012 projected information, it appears the Collaborative is estimating and average cost per participant at \$9,481 (\$1,630,725/172). Provide a detailed explanation as to how the Collaborative purposes to reduce the average participant's costs by 32 percent ((\$14,017-\$9,481)/\$14,017) during 2012.
- d. Explain what actions the Collaborative is taking to achieve the projected goal of 172 customers for 2012, considering that there were only 18 in 2011.

RESPONSE

a. The cost breakdown for 2011 vendor expenses of \$195,542.81 includes labor of \$168,297.98 and expenses of \$27,244.83. The Marketing expense included costs for mailers, fact sheets, printing materials, and other miscellaneous items. The Education expense was comprised of meetings with trade groups and individual customers. The administrative costs are about 70% for start-up and 30% for normal operations of the program. All of the direct install (DI) and IT costs are in the program start-up costs.

Туре	Labor	Expense	Incentive	Total
Administration	\$108,860.43	\$14,308.62	\$0.00	\$123,169.05
Marketing	\$15,412.07	\$11,147.63	\$0.00	\$26,559.70
Education	\$13,208.64	\$1,788.58	\$0.00	\$14,997.22
IT	\$29,100.10		\$0.00	\$29,100.10
Direct Install	\$1,716.75		\$0.00	\$1,716.75
Incentive		wy far f sú Tri gery sy an Higger y ann "al Type by an he hay sy far SHT by sy an an	\$25,125.76	\$25,125.76
Totals	\$168,297.98	\$27,244.83	\$25,125.76	
Total Labor and Expenses		\$195,542.81		
Total Incentives			\$25,125.76	

b. The project totals with savings and incentives are shown below. The number reported was \$30,288, and the actual number is \$25,125.76. The last project on the list AEPKY-11-00003 was reported in error, as \$12,480 but it was paid at \$7,317.23. The error was from reporting the calculated numbers and not the final incentive amount. The customer has received the correct amount. The report generation has also been fixed to report true incentive value and not the calculated amount.

Month Total	Project Number	KWH Savings	kW Savings	Incentive
REPORT	18	412,432	70.76	\$25,125.76
11/04/201 1 Week Total:	23,283	4.25	\$1,620.00	
	<u>AEPKY-11-00005</u>	23,283	4.25	\$1,620.00
12/09/201	82,728	11.78	\$5,651.08	
1 Week				
Total:				
	<u>AEPKY-11-00049</u>	14,063	2.55	\$875.00
	<u>AEPKY-11-00041</u>	3,984	0.03	\$318.72
	AEPKY-11-00022	7,025	1.29	\$420.00
	AEPKY-11-00015	3,045	0.57	\$286.00
	AEPKY-11-00014	3,045	0.57	\$286.00
	AEPKY-11-00012	14,442	0.03	\$1,155.36
	AEPKY-11-00008	37,125	6.73	\$2,310.00
12/16/201	151,296	27.11	\$7,464.17	
1 Week				
Total:				
	<u>AEPKY-11-00029</u>	13,549	2.48	\$810.00
	AEPKY-11-00024	25,843	4.74	\$1,545.00
KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 12 Page 3 of 3

12/30/201 1 Week Total:	AEPKY-11-00023 AEPKY-11-00017 AEPKY-11-00013 155,125	14,050 89,884 7,971 27.62	2.58 15.88 1.43 \$10,390.51	\$840.00 \$3,631.49 \$637.68
	AEPKY-11-00085	10,733	2.5	\$873.60
	AEPKY-11-00047	8,930	1.4	\$714.40
	AEPKY-11-00046	13,317	2.09	\$1,065.36
	AEPKY-11-00045	5,249	0.83	\$419.92
	AEPKY-11-00003	116,896	20.8	\$7,317.23

- c. The main reason for the higher than expected cost per application administration cost was lower than expected participation. If the costs were taken over the expected 88 customers, the cost per participant would have been \$2,867 (\$252,314/88). The program has certain fixed costs associated with the program. As more customers participate, the cost per participant will decrease. Therefore, the administrative cost per participant in 2012 is expected to decrease as participation levels are expected to be at least 172 customers as shown below in part d.
- d. Currently the 2012 program year is on track with the marketing plan that has been established. We have held Trade Ally events in February and are currently presenting in many Master Electrician courses throughout the service territory. As you can see from the chart below we are well on our way to the 172 customers needed in 2012. We currently have 126 projects that are either active or the customer is finishing the true scope of the projects. As expected the true savings, measures and costs associated with any one project are better defined as we move through the process.

Projected Proj	ects for Pr	ogram Year	2012			
Status	Projects	Projected	Total Annual	Total	Forecast	Projected
		Payment	kWh Savings	kW	kWh	\$/kWh
Initiated	<u>66</u>	\$37,089.40	18,606.00	2.12	9,303.00	*
Pre Review	<u>25</u>	\$123,162.00	587,274.90	94.2	381,728.65	\$0.21
Reserved	<u>30</u>	\$81,048.67	1,199,993.90	206.44	959,995.12	\$0.07
Final Review	3	\$9,180.51	145,632.20	22.4	131,068.98	\$0.06
Final Approved	<u>1</u>	\$3,935.40	48,349.20	11.24	48,349.20	\$0.08
Paid	<u>1</u>	\$4,018.00	49,028.80	9.18	49,028.80	\$0.08
Cancelled	4	\$26,665.00	311,390.20	42.03	0	\$0.09

* The vendor is unable to estimate the projected cost because the expected annual kWh savings amounts for all participants have not been verified.

Kentucky Power Company

REQUEST

In Case No. 2011-00300, ³ the following table of DSM programs had evaluation reports. In Case No. 2011-00055,⁴ received by the Commission February 15, 2011, there were no program evaluations performed. The table also includes evaluation costs by program from the Status Report of the current Application. Explain whether these are the total costs to evaluate these programs, whether the costs were direct or allocated costs, and what time period did these evaluation costs cover.

Program	
Targeted Energy Efficiency	\$20,357
High Efficiency Heat Pump Mobile Home	\$6,182
Mobile Home New Construction	\$6,235
Modified Home New Construction	\$9,222
High Efficiency Heat Pump	\$12,236
Community Outreach Compact Florescent Lamp	\$9,610
Energy Education for Students	\$6,082

³Case No. 2011-00300, Kentucky Power Company (Ky. PSC Jan. 23, 2011).

⁴Case No. 2011-00055, Joint Application Pursuant to 1994 House Bill No. 501 for the Approval of Kentucky Power Company Collaborative Demand-Side Management Programs, and for Authority to Implement a Tariff to Recover Costs, Net Lost Revenues, and Receive Incentives Associated with the Implementation of the Kentucky Power Company Collaborative Demand-Side Management Programs (Ky. PSC May 25, 2011).

RESPONSE

We are assuming the Modified Home New Construction program listed above is the Modified Energy Fitness Program. The evaluation costs represent the total expense directly related to these program evaluations. The costs in Case No. 2012-00051 above represent program evaluations conducted in 2011 for program years 2009 through 2010.

Kentucky Power Company

REQUEST

The programs in the following table have evaluation costs detailed on the Status Report. Explain why the DSM programs in the following table have evaluation costs, but no program evaluation report was filed in 2011, and whether these evaluation costs have been recovered in previous DSM filings when the programs were evaluated.

In addition, what time period did these evaluation costs cover?

Program	Evaluation costs
Residential HVAC Diagnostic and Tune-up	\$4,756
Pilot Residential Load Management	\$8,793
Residential Efficiency Product	\$6,068
Commercial HVAC Diagnostic and Tune-up	\$4,100
Pilot Commercial Load Management	\$3,815
Commercial High Efficiency HP/AC	\$4,780
Commercial Incentive	\$17,189

RESPONSE

These program expenses have not been recovered with previous DSM filings. The cost represents direct expense for program evaluation services received in 2011 to support final evaluation reports scheduled to be filed August 15, 2012. A third party vendor is contracted to provide the program evaluation review and formal report for five DSM programs for an evaluation period which includes program activities beginning in 2010.

REQUEST

- a. Explain whether the Collaborative is aware that incandescent bulbs are to be phased out in 2014.
- b. If the answer to part a. is yes, explain whether the Collaborative has considered not spending DSM funds on promoting Compact Fluorescent Light bulbs after 2014.

RESPONSE

- a. The issues related to the DSM CFL programs have been discussed at collaborative meetings. The EISA legislation as related to incandescent lights will be reviewed at the 2012 second quarter collaborative meeting with information provided to each member summarizing this issue.
- b. The Collaborative has not discussed terminating promotion funds for the CFL program after 2014.

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REQUEST

Refer to Schedule C, page 17A-1, Residential Efficient Products. Explain how there are no participants for the Specialty Bulbs and LED Lights, but there are program costs in column 4 and kWh impacts in column 5.

RESPONSE

With regards to the column 4 program costs, this program has fixed expenses applicable with program implementation. These expenses are incurred even if there are no program participants.

Column 5 is an impact measurement that would be used if there were participants. Because there are no participants for the Specialty Bulbs and LED lights, there is no energy savings. Any energy savings that would occur would be noted in the Schedule C, page 17A-1, in column 6.

REQUEST

Refer to Schedule C, page 17A-2, HVAC Diagnostic & Tune-up. Explain how there is one participant for the A/C in column 1, no cumulative participants in column 2, no program costs in column 4, and 343 kWh impacts in column 5.

RESPONSE

The "Cumulative participants" count is the calculation of the equivalent number of customers participating for a full year. It is not a running tally of the number of new customers in a given year. For example, two customers joining effective July 1st of any year have the same effect as a single customer joining effective January 1st of the same year. Similarly, four new customers joining effective October 1st of a given year (that is, participation for one-fourth of the year) are the equivalent of one cumulative customer (that is, one customer joining effective January 1st). Unless all customers join effective January 1st of the same year is of a year, the number of cumulative participants for the first year of the program will be less than the total number of new customers.

Because there is not a single "start" date within a month for participation in DSM Programs, the Company employs a "half-month" convention in calculating the number of cumulative participants. Under that convention, participants joining in a particular month are treated as having joined on the 15th day of that month without regard to the actual day of the month their participation began. The calculation also uses a 360 day year. The convention simplifies calculations without prejudicing ratepayers or the Company, and has been used by Kentucky Power since 1996 when the first DSM Program was implemented.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March8, 2012 Item No. 17 Page 2 of 2

KENTUCKY POWER COMPANY

For more information and for an example of how the cumulative participants are calculated please see KPSC Case No. 2008-00059 Commission Staff's First Set of Data Requests Item No. 1.

Program costs reflect \$0 in Column 4 for the HVAC Diagnostic & Tune-up program. The expenses related to this participant were not booked until a later period and, therefore, were recorded in the total actual program costs on page 17B-2 for the 2nd half of the year.

The net lost revenue kWh per participant for the 1st half of the year would have applied to program costs recorded during this period. Because no program costs were recorded for this period, the net lost revenue kWh impact per participant has no effect on the total energy savings and, therefore, reflects \$0 savings in Column 6.

WITNESS: Lila P Munsey

REQUEST

Refer to Schedule C, page 17B-1, Residential Efficient Products. Explain how there are no participants for the Specialty Bulbs and LED Lights, but there are program costs in column 4 and kWh impacts in column 5.

RESPONSE

With regards to the column 4 program costs, this program has fixed expenses applicable with program implementation. These expenses are incurred even if there are no program participants.

Column 5 is an impact measurement that would be used if there were participants. Because there are no participants for the Specialty Bulbs and LED lights, there is no energy savings. The energy savings would be noted in the Schedule C, page 17B-1, in column 6.

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REQUEST

Refer to Schedule C, page 17B-1, Residential Load Management (Pilot Program). Explain the average cost per participant of \$8,624.83 for A/C and \$12,937.75 for WH in column 3.

RESPONSE

Total Residential Program Expense = 103,498, Total Expense AC = 51,749, Number of AC participants = 6, Total Expense WH = 51,749, Number of WH participants = 4

Average AC participant cost \$8,624.83 = \$51,749 / 6

Average WH participant cost \$12,937.25 = \$51,749 / 4

REQUEST

Refer to Schedule C, page 178-2, Commercial Load Management (Pilot Program). Explain how there are no participants for either the A/C or WH in column 1, but there are \$7,157 in program costs in column 4.

RESPONSE

The expenses represent fixed program costs for the implementation contractor and program evaluation expenses charged by the EMV contractor.

Kentucky Power Company

REQUEST

In the Order in Case No. 2011-00300,¹ the Commission expressed its concern as to promotion and participation of the Commercial High Efficiency Heat Pump/Air Conditioner Program and the Residential and Small Commercial Load Control Program. The Order stated:

The Commission realizes that customer participation in DSM is voluntary and that Kentucky Power cannot compel greater participation; however, the Commission believes that most well-informed customers would choose to participate in DSM programs to avoid higher energy bills. Therefore, the Commission strongly encourages Kentucky Power to promote its DSM programs, educate applicable customers who would qualify for DSM program participation, and work to increase participation levels in its DSM programs. The Commission, also, strongly encourages Kentucky Power to educate its customers about the need for greater energy efficiency due to the rising cost of electric energy and the strain that the demand of electric usage at peak times places on both the Kentucky Power and the American Electric Power systems. We believe that Kentucky Power should make every effort to educate its customers that participation in demand-side programs represents one way in which the customers can impact the extent to which ever-increasing energy costs increase their electric bills. The Commission will closely monitor Kentucky Power's efforts to develop and promote cost-effective programs.

Explain what efforts Kentucky Power has made or is planning to make to develop and promote cost-effective DSM programs.

Case No. 2011-00300, Kentucky Power Company (Ky. PSC Jan. 23,201 1).

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March8, 2012 Item No. 21 Page 2 of 2

RESPONSE

To increase participation in DSM programs and the cost efficiency of the programs, Kentucky Power has significantly increased marketing and promotion of DSM programs since 2010, as evident from the following summary of activities and expenses:

Data	2010	2011	% Increase
Direct Marketing & Promotion Expense	\$ 6,884	\$ 30,949	350%
Direct Customer Education Expense	\$ 5,000	\$ 3,000	-40%
Vendor Marketing Promotion	\$ 34,776	\$ 74,453	114%
Vendor Customer Education	\$ 26,898	\$ 46,749	74%
Bill Insert Cost (not included in DSM surcharge)	\$ -	\$ 6,463	
TOTAL EXPENSE	\$ 73,558	\$ 161,614	120%
Bill Inserts - quantity	-	13	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Newspaper Ads - quantity	unknown	96	1 1 a station point of stations
Phone Message Promotion - Customers	-	45,000	 A state of the sta
Employee Email Promotion (DSM Survey, Load Management)	-	1,089	n en serve an bestadaar
Program Fact Sheets (delivered)		1,500	

2012 DSM program marketing activities include:

Company website updates

Bill inserts (completed for January; scheduled March, April, May, October, December) Customer bill messages (targeted for April, June, August, October, December)

Fact sheets for residential and commercial programs for distribution by program vendors and CAAs

Customer Solution Center (CSC) on-hold messaging (Efficient Lighting Products, High Efficiency Heat Pump, HVAC Diagnostic & Tune-up)

Updated CSC Reference Guides

Newspaper advertisement

Direct customer mailers

Customer letters

Postcards

Phone messaging

Outside of the DSM programs, Kentucky Power offers newspaper and television advertisements which include general promotion of energy efficiency and DSM programs that are not included with the DSM filed expenses.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March8, 2012 Item No. 22 Page 1 of 1

Kentucky Power Company

REQUEST

Provide, in electronic format with formulas intact and unprotected, Schedule C.

RESPONSE

Please see the enclosed CD for the electronic file with formulas intact and unprotected.

WITNESS: Lila P Munsey

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 1 of 44

				Page 1 of 4	4	
KENTUCKY POWER COMPANY DERIVATION OF 3 SECTOR SURCHARGES FOR 3 YR EXPERIMENT	Exhibit C				PAGE 1 of	20
RESIDENTIAL SECTOR	TOTAL YEARS 1 thru 15	YEAR 16 (2011) 1st	YEAR 16 (2011) 2nd	YEAR 17 (2012) 1st	YEAR 17 (2012) 2nd, 3rd, & 4th	TOTAL
	(1)	HALF (2)	HALF (3)	QTR (4)	QTRs (5)	(6)
CURRENT PERIOD AMOUNT TO BE RECOVERED	\$14,413,742	\$1,175,415	\$1,319,989	\$685,229	\$2,595,322	\$20,189,697
CUMULATIVE (OVER)/UNDER COLLECTION	0	427,163	(488,221)	20,161 0	35,844	(41,824)
18 MOS. RETROACTIVE(OVER)/UNDER ADJUSTMENT	(41,824)	0	0		·	
TOTAL TO BE RECOVERED	14,371,918 13,944,409	1,602,578 2,090,799	831,768 811,607	705,390 D	2,631,166 0	20,147,873
TOTAL AMOUNT RECOVERED EXPECTED FUTURE RECOVERIES	13,944,409	0	0	669,546	1,334,266	2,003,812
TRANSFER PORTION OF BALANCE FROM INDUSTRIAL TRANSFER PORTION OF BALANCE FROM COMMERCIAL	(9,833) 9,487	0	0	0	0	(9,833) 9,487
OVER)/UNDER COLLECTION TO BE REFUNDED	\$427,163	(\$488,221)	\$20,161	\$35,844	\$1,296,900	\$1,296,900
AMOUNT TO BE RECOVERED					\$2,631,166	
ADJ. ESTIMATED SECTOR KWH - YEAR 17				788,628,600	1,615,333,700	
SURCHARGE RANGE (\$ PER KWH) FLOOR (CARRYOVER)	COL. 5, L 2 / COL.	5, L 11			0.000022	
MIDPOINT - proposed rate CEILING (TOTAL COST)	COL. 5, L 4 / COL.			0.000849	0.000826	
	TOTAL YEARS	YEAR 16	YEAR 16	YEAR 17	YEAR 17	_
COMMERCIAL SECTOR	1 thru 15	(2011) 1st	(2011) 2nd	(2012) 1st	(2012) 2nd, 3rd, & 4th	TOTAL
		HALF	HALF	QTR	QTRs	
	(1)	(2)	(3)	(4)	(5)	(6)
CURRENT PERIOD AMOUNT TO BE RECOVERED	\$2,899,453	\$7,431 (20,360)	\$360,340 (81,846)	\$421,726 (100,405)	\$1,572,501 (213,879)	\$5,261,451 0
CUMULATIVE (OVER)/UNDER COLLECTION 18 MOS. RETROACTIVE(OVER)/UNDER ADJUSTMENT	1,520	(20,360)	0	(100,403)	0	
TOTAL TO BE RECOVERED	2,900,973	(12,929)	278,494	321,321	1,358,622	5,262,971
FOTAL AMOUNT RECOVERED	2,908,568	68,917	378,899 0	0 535,200	0 572,432	
EXPECTED FUTURE RECOVERIES	(3,278)	0	0	0	0	(3,278)
2 TRANSFER BALANCE TO RESIDENTIAL	(9,487)	0	0	0	0	(9,487)
2 (OVER)/UNDER COLLECTION TO BE REFUNDED	(\$20,360)	(\$81,846) ========	(\$100,405) ========	(\$213,879)	\$786,190	
3 AMOUNT TO BE RECOVERED					\$1,358,622	
ADJ. ESTIMATED SECTOR KWH - YEAR 17				350,032,500	1,063,999,500	
SURCHARGE RANGE (\$ PER KWH) 5 FLOOR (CARRYOVER)					(0.000201)
6 MIDPOINT - proposed rate				0.001529	0.00053	
7 CEILING (TOTAL COST)					0.00121	
	TOTAL YEARS	YEAR 16	YEAR 16	YEAR 17	YEAR 17	
INDUSTRIAL SECTOR	1 thru 15	(2011) 1st	(2011) 2nd	(2012) 1st	(2012) 2nd, 3rd, & 4th	TOTAL
		HALF	HALF	QTR	QTRs	
	(1)	(2)	(3)	(4)	(5)	(6)
8 CURRENT PERIOD AMOUNT TO BE RECOVERED	\$79,026	\$0 0	\$0 0	\$0 0		
CUMULATIVE (OVER)/UNDER COLLECTION 18 MOS. RETROACTIVE(OVER)/UNDER ADJUSTMENT	0	0	0	0		
1 TOTAL TO BE RECOVERED	79,026	0	0	0	0	79,026
2 TOTAL AMOUNT RECOVERED	92,137	0	0	0	0	92,137
3 EXPECTED FUTURE RECOVERIES 4 TRANSFER BALANCE TO RESIDENTIAL & COMMERCIAL	13,111	0	0	0		
6 (OVER)/UNDER COLLECTION TO BE REFUNDED	\$0	\$0	\$0	\$0	\$0	
	22222222	=======================================			\$0	
6 AMOUNT TO BE RECOVERED				207		
7 ADJ. ESTIMATED SECTOR KWH - YEAR 17				805,239,400	2,424,266,600	
SURCHARGE RANGE (\$ PER KWH)					0.00000	
8 FLOOR (CARRYOVER) 9 MIDPOINT				0.000000	0.00000	0
0 CEILING (TOTAL COST) - proposed rate					0.00000	0

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 2 of 44

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KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 3 of 44

1997												
											Exhibit C PAGE 3A of	20
KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 1997												TOTAL FST
verse of tet HALE1	NEW	CUMULATIVE	TOTAL ESTIMATED	TOTAL ACT. PROGRAM	NET LOST REV/6 MOS	TOTAL ENERGY SAVINGS	NET LOST S REVENUE	T TOTAL NET •	EFFICIENCY INCENTIVE	MAXIMIZING	TOTAL .	COSTS TO BE
	PARTICIPANT	PARTICIPANT	PROGRAM CUSIS				(S/	REVENUES	PG.19C)	(5% of COSTS) (10)	INCENTIVE (11)	RECOVERED
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DESIDENTIAL PROGRAMS			89 0900					3 \$27,266	6 \$21,354 50	n/a \$4,832	\$21,354 \$4,832	\$119,787 \$125,658
Energy Fitness Tarochted Frenov Efficiency - All Electric	273	279		\$96,638 \$22,294	340	29,920	015 \$0.03 920 \$0.03					
- Non-All Electric	26				31		8,339 \$0.03	13 \$258	8 \$0	n/a		
Compact Fluorescent Bulb		0 269						3 S20,895	5 \$2,427	7 n/a	\$2,427	\$23,639 \$9,752
High - Efficiency Heat Pump - Resistance Heat	123	3 590	0 \$2.56 1 \$2.56	s317 \$318	8 407	236,467	467 \$0.03					
- Non Kesistance Heat			C367 87	z S17 208	1,080	0 435,240	,240 \$0.03	33 \$13,540	10 S4,236	6 n/a		
High - Efficiency Heat Pump - Mobile Home	100	9					0	n/a	n/a S(\$0 \$381	\$381	
ALLER Home New Construction	-	12 76	78 \$635.17	1 \$1,022					C20 330	a \$5.213		\$325,562
	01	9 030	10	\$195,564	4	3,033,996	,996	294,440		B		
TOTAL RESIDENTIAL PROGRAMS					11							
COMMERCIAL PROGRAMS	-	202							n/a	\$0 \$1,488	8 S1,488	
Smart Audit - Class 1	4			0 \$29,755			11,000 SO.	25		SZ		0 S4,742
- Class Z nancing - Existing Building		0	1 n/a c4 692 00		92 15,300	00	0 \$0.	\$0.04 80				
Smart Financing - New Building							11 000	45	\$469 \$50			2109,124
TOTAL COMMERCIAL PROGRAMS	255	11 12 13 11 11 11 11 11 11	217	\$104,228	28							
SWVGOOGE TTE												10 S2,642
INDUSTRIAL PROGRAMS - (w/Est. Opt-Outs Removed)			2079 56		16	0		n/a	n/a	so \$57	57 \$57	
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TOTAL INDUSTRIAL PROGRAMS			22		100			212 COA 915				
	1 050		3.178	\$311,281	281	3,04	3,044,990	100			91 10 10 10 10 10 10 10 10 10 10 10 10 10	
TOTAL COMPANY		11111	42		1.01							
	sed on initial valu	les per the settlem	nent agreement.									
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Refer Description Refer Description Refer Description Sector is an interaction in the interaction interaction in the interaction in the interaction intera	KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YR I	PROGRAM											0
Image: Indication (1) Image: (1) Image: (1) Image: (1) <thimage: (1)<="" th=""> Image: (1) <</thimage:>	YEAR 2 (3rd QTR)	NEW	_	TOTAL ESTIMATED PROGRAM COSTS		NET LOST REV/QTR	TOTAL ENERGY SAVINGS	NET LOST REVENUE	TOTAL NET *	EFFICIENCY INCENTIVE	MAXIMIZING	TOTAL *	TOTAL EST. COSTS TO BE
Michaelication 287 961 58.040 58.04	PROGRAM DESCRIPTIONS	NUMBER (1)		PER PARTICIPANT (3)		(KWH/PARTIC) (5)	KWH/QTR (6) (2)X(5)	(HWH) (7)	REVENUES (8) (6)X(7)	(EX. C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
Intelligence 151 309 51/300<	RESIDENTIAL PROGRAMS	25							\$10,156	\$5,340	5 63	\$5,340 \$2,780	\$63,038 \$74,354
• 1 0 280 100 500 5100	Targeted Energy Efficiency - All Electric - Non-All Electric	1.0				-			\$15,980 \$574	\$25 \$25	1.26	\$25	\$3,499
P. Fessioner feature (10) (11) (56,10) (54,10) (52,10) (54,10)						16			S133	\$0	SO	\$0	\$133
matter researce T State of the constant of the consta	High - Efficiency Heat Pump - Resistance Heat	10							\$12,213 \$4,786	\$787 \$2,445		\$787 \$2,445	\$19,000 \$12,790
Image: constraint of	- NON RESIStance Heat High - Efficiency Heat Pump - Mobile Home								\$9,894	\$2,503		\$2,503	\$65,498
Definition Internation Internation Internation SU1100 SU050 SU1400 SU040 <	Mobile Home New Construction									80		\$305	\$6,397
CMUD MERLIANCE MER				1.00	\$176,788		1,726,568		\$53,736	\$11,100		\$14,185	\$244,709
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$													
98 333 32,761,01 32,047 0 0 0 50,0 557,0	COMMERCIAL PROGRAMS									U\$		\$2.024	\$42,511
2 12 53,06/100 54,130 11,100 22,200 50,04 58,401 51,627 54,001 56,101	Smart Audit - Class 1	6								so	3		\$14,201
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	- Class 2		and the second se						\$940	\$1,627			58,701
RAMS	Smart Financing - Existing Building Smart Financing - New Building		40							20			1900
KUAL-PHOLONANISannumentannumentannumentannumentannumentannumentannumentannumentAMMSannumentannumentannumentannumentannumentannumentannumentannumentannumentAMMSannumentannumentannumentannumentannumentannumentannumentannumentannumentannumentAMMSannumentannumentannumentannumentannumentannumentannumentannumentannumentannumentAMMSannumentannumentannumentannumentannumentannumentannumentannumentannumentannumentAMMSannumentannumentannumentannumentannumentannumentannumentannumentannumentannumentAMMSannumentannumentannumentannumentannumentannumentannumentannumentannumentAnnumentannumentannumentannumentannumentannumentannumentannumentannumentAnnumentannumentannumentannumentannumentannumentannumentannumentannumentAnnumentannumentannumentannumentannumentannumentannumentannumentAnnumentannumentannumentannumentannumentannumentannumentannumentAnnumentannumentannumentannumentannumentannumentannumentannument<	OWVOODDD THERE I	JF		1 4	S60.146		29,850		\$1,267	\$1,627			\$65,740
AMS. AMS. <th< td=""><td>TOTAL COMMERCIAL PROGRAMS</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	TOTAL COMMERCIAL PROGRAMS												
Sit Distribution Sit Sit <t< td=""><td>INDUSTRIAL PROGRAMS -</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	INDUSTRIAL PROGRAMS -												
Ref 0 2 > 00000 (1 - 3) 0	(w/Est. Opt-Outs Removed)									\$0	5		
Including One O O O SO SO <t< td=""><td>Smart Audit - Class 1</td><td></td><td></td><td>0000</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Smart Audit - Class 1			0000									
Glige 0 0 0 50.4 <td>Smart Audit - Class 2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>SO</td> <td></td> <td></td> <td></td> <td></td>	Smart Audit - Class 2								SO				
Image: Non-section Image: Non-section S100 S101 S100 S100 S101	Smart Financing - Compressed Air System								20				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$					ce 783				\$0				\$6,883
4,140 \$243,717 1,756,418 \$55,003 \$12,127 sesses connect connect connect connect connect connect connect connect connect connect connect connect	TOTAL INDUSTRIAL PROGRAMS			1					11				
	TOTAL COMPANY	12		40	\$243,717		1,756,41		\$55,003		13		
Loss revenue and efficiency incentives are based on prospective values.			_										
	Lost revenue and efficiency incentives are b	pased on prospec	tive values.										
				1000 1000 1000 1000 1000 1000 1000 100									

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No 22 Page 4 of 44

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 5 of 44

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KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YR PROGRAM	PROGRAM										Exhibit C PAGE 3C of 2	20
YEAR 2 (4th OTR)	NEW		TOTAL ESTIMATED	TOTAL ACT.	NET LOST RFV/OTR	TOTAL ENERGY SAVINGS	NET LOST REVENUE	TOTAL NET • LOST	EFFICIENCY INCENTIVE	MAXIMIZING INCENTIVE	TOTAL •	TOTAL EST. COSTS TO BE
PROGRAM DESCRIPTIONS	NUMBER (1)		PER PARTICIPANT (3)	COSTS (4) (1)X(3)	(KWH/PARTIC) (5)	KWH/QTR (6) (2)X(5)	(\$/KWH) (7)	REVENUES (8) (6)X(7)	(EX. C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
RESIDENTIAL PROGRAMS Energy Filness Targeted Energy Efficiency - All Electric - Non-All Electric	432 124 78	1,287	\$259.53 \$924.15 \$103.55		341 1,393 170	438,867 617,099 24,820	7 \$0.03 9 \$0.03 0 \$0.03	\$13,658 \$19,198 \$775	\$8,977 \$0 \$129	n/a \$5,730 n/a	\$8,977 \$5,730 \$129	\$134,750 \$139,523 \$8,981
Compact Fluorescent Bulb	0	269	n/a	ŝo	17	4,573	3 \$0.03	\$141	\$0	\$0	\$0	S141
High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat	111	823 782	\$106.90 \$142.21	\$11,866 \$14,505	547 221	450,181	1 \$0.03 2 \$0.03	\$14,019 \$5,385	\$801 \$2,969	n/a n/a	\$801 \$2,969	\$22,859
High - Efficiency Heat Pump - Mobile Home	20	565	\$406.70	\$20,335	625	353,125	5 S0.03	S10,982	\$1,625	n/a	\$1,625	\$32,942 167967
Mobile Home New Construction	0	82	n/a	(\$749)	0	1	01			(/ 55)	(100)	(00/0)
TOTAL RESIDENTIAL PROGRAMS	897	4,397		\$280,744		2,061,487		564,158 	\$14,501	\$5,693 ======	S20,194	S365,U90
COMMERCIAL PROGRAMS Smart Audit - Class 1	12	473	S230.92	\$16,395 \$56,805	00		00		\$0 80	\$820 \$2,840	\$820 \$2,840	\$17,215 \$59,645
- Class 2 Smart Financing - Existing Building	6				11,10	θ	0 \$0.04 50.04	\$3,761	\$7,320 \$0	n/a n/a	S7,320 S0	\$31,624 \$327
Smart Financing - New Building	0		U/a								C10 080	C108 811
TOTAL COMMERCIAL PROGRAMS	101	515	10 2	S93,743		96,450	9 !!]	24,088	076, 16	n		
INDUSTRIAL PROGRAMS - (w/Est. Opt-Duts Removed)									5	6273	5472	
Smart Audit - Class 1	18	~	\$524.	59,436 S1,094	00		00		\$0 80	5 07	\$55 \$55	
Smart Audit - Class 2 Smart Financing - General			0 n/a		14,62				SO	n/a		\$11,802 \$0
Smart Financing - Compressed Air System)	0					0 S0.04	\$0	\$0			
	0	07		\$22.337	1		0	\$0				\$22,859
TOTAL INDUSTRIAL PROGRAMS							11			14	102 123	SAGE 766
TOTAL COMPANY	1,016		2	\$396,819		2,157,937	37	\$68,246	521,621	100'80	101,100	
				51 12 13 13 13 13 14 14 15 15 14 15 15 15 16 10	81							
Lost revenue and efficiency incentives are based on prospective values.	ased on prospectiv	e values.										
							_					

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 6 of 44

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Mundler Her Her Her Her Her Her Her Her Her H													
Image: constraint of constraints of constra	KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAI	R PROGRAM											
Multicity Multicity <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>TOTAL COT</td></t<>													TOTAL COT
Protection Proteco		NEW	CUMULATIVE TO	DTAL ESTIMATED	TOTAL ACT.		TOTAL TOTAL	NET LOST	TOTAL NET • LOST	EFFICIENCY INCENTIVE	MAXIMIZING	TOTAL .	COSTS TO BE
Number Number Forthand Number Forthand Number Num	YEAR 3(1st HALF)	PARTICIPANT		ROGRAM COSTS	PROGRAM		ENERGI SAVINGS	COLUMNY	REVENIES	(EX. C, PG.19C)	(5% of COSTS)	INCENTIVE	RECOVERED
(1) (2) (3) <td>DESCRIPTIONS</td> <td>NUMBER</td> <td></td> <td></td> <td>COSTS</td> <td>(KWH/PARTIC)</td> <td>KVVH/6 MUS</td> <td>(1)</td> <td>(8)</td> <td>(6)</td> <td>(10)</td> <td>(11)</td> <td>(12)</td>	DESCRIPTIONS	NUMBER			COSTS	(KWH/PARTIC)	KVVH/6 MUS	(1)	(8)	(6)	(10)	(11)	(12)
1 5		(1)	(2)	(3)	(1)X(3)	6	(2)X(5)		(6)X(7)		(0/C)/(4)	Int Life)	
1 1	RESIDENTIAL PROGRAMS			00 PBF3			1,205,776	\$0.03	\$37,524	\$11,304 50	n/a SE 011	\$11,304 \$6.911	\$194,062 \$194,062
No. Statut Statut <td>Energy Fitness</td> <td>54</td> <td></td> <td>\$1.132.92</td> <td></td> <td></td> <td>1,572,960</td> <td>\$0.03</td> <td>S48,935</td> <td>30 S40</td> <td>n/a</td> <td>S40</td> <td>\$4,906</td>	Energy Fitness	54		\$1.132.92			1,572,960	\$0.03	S48,935	30 S40	n/a	S40	\$4,906
0 200 500	Targeted Energy Efficiency - All Electric - Non-All Electric	2		\$112.92			69,020	cn:ne	221 .24			ç	\$266
1 0				S0.00		32	8,608	\$0.03	\$266	SO	R	2	
21 680 570.0 51,872 4.42 24,450 57,440 577.1 4.42 24,450 57,146 760 76,24 760 76,24 760 76,24 </td <td>Compact Fluorescent Bulb</td> <td></td> <td></td> <td></td> <td></td> <td>1004</td> <td>970.378</td> <td>S0.03</td> <td>\$30,218</td> <td>\$152</td> <td>n/a</td> <td>\$152 e7e7</td> <td>\$31,842 \$14.256</td>	Compact Fluorescent Bulb					1004	970.378	S0.03	\$30,218	\$152	n/a	\$152 e7e7	\$31,842 \$14.256
matrix matrix<	High - Efficiency Heat Pump - Resistance Heat	2		S70.10			374,816	\$0.03	\$11,679	\$757	n/a	1010	
1 0	- Non Resistance Heat	7							\$23,947	\$2,145		\$2,145	\$61,422
1 0	High - Efficiency Heat Pump - Mobile Home	Ø		S535.30						C9	SD	SO	ŝ
Matrix Matrix<				n/a			0	n/a		00			
MMS 600 5.236 1 2 2	Mobile Home New Construction						A 074 658		\$154.725	\$14,398		\$21,309	S455,976
Manual Insummariant	PBOGRAMS	80			\$279,882		1000'110'H						
None Signation Sig													
204 519,413 539,602 0 0 16 55,003 50,60 51,500 51,500 52,200 53,500 52,200 53,500 52,200 52,0													
2041 5971 5734012 5734012 573401 573401 57341	SWADDOCT WOOL									SO		51,980	
28 60 55:501.00 344,620 22,200 365,041 36,543 56,143 56,543 56,143 56,143 56,143 56,143 56,143 56,143 56,143 56,143 56,143 56,143 56,143 56,143 56,143 56,144 56,144 56,144 56,144 56,144 56,144 56,146 <td>COMMERCIAL PROGRAMS</td> <td>2(</td> <td></td> <td>\$194.13</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>S</td> <td>\$2,2</td> <td>32,24U SG 506</td> <td></td>	COMMERCIAL PROGRAMS	2(\$194.13						S	\$2,2	32,24U SG 506	
Rimoved I State 15,300 50,04 565,647 54,564,00	- Class 2			S1,600.00				20	\$15,043	\$6,500		\$29	
RAMIS	Smart Financing - Existing Building			20,001,00					\$654				
RAMIS 241 674 513.616 513.616 373.0516 373.0516 373.0516 373.0516 373.0516 373.0516 373.0516 373.0516 373.0516 373.0516 373.0516 373.0516 373.0516 373.0516 373.0516 373.0616 323.0616	Smart Financing - New Building			00.100.100					C15 607	S6.535		\$10,755	
Procorvino manamenta <	OMACOCIC INICALINIC				\$133,618		3/0,5/						
····································	TOTAL COMMERCIAL PROGRAMS					8							
pp-Could Removed) 11 5246.08 52.953 0 0 14 500 5148 500	SWADOODD											24.40	
12 51 52,450 0<	INDUSTRIAL PROGRAMS - (w/Est. Opt-Outs Removed)			DU EVUS						US C			
Saed Air System 0	Smart Audit - Class 1		ŋ										
Seed Air System 0	Smart Audit - Class 2								00			SC	
Image: sector	Smart Financing - General								27				•
13 54 86.01 ======== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ===== ===== ====== ===== ===== ===== ===== ====== ====== ====== ======= ====== ====== ====== ===== ====== ====== ====== ====== ====== ====== ====== ====== ===== ===== ======	Smart Financing - Compressed Air System				1				S				
memory and second sec	TOTAL MULICIPAL DROGRAMS				\$6,09			2 11					
					C110 F0		5,342,05	8	\$170,422				
	TOTAL COMPANY	1,						1	1				
Lost revenue and efficiency incentives are based on prospective values.													
	are solution recording to	hased on prospec	tive values.										
	Fost revenue and enicement incertifica are												

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 7 of 44

KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM YEAR 3(2nd HALF) NEW NEW NUMBER PROGRAM DESCRIPTIONS (1)											
UCKY POWER COMPANY IATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM (3 (2nd HALF) NEW NEW NEW STAM DESCRIPTIONS (1)										Exhibit C PAGE 4B of 2	20
PTIONS											
PTIONS	CUMULATIVE		TOTAL ACT.	NET LOST	TOTAL N	NET LOST REVENUE	TOTAL NET •	EFFICIENCY	MAXIMIZING	TOTAL -	TOTAL EST. COSTS TO BE
	F PARTICIPANT			1	KUNAHIR MOS	(HWN)	REVENUES	(EX. C, PG.19C)	(5% of COSTS)	INCENTIVE	RECOVERED
	NUMBER (2)	PER PARTICIPANT (3)	11	(5)		(2)	(8) (6)X(7)	(6)	(10) (4)X(5%)	(9)+(10)	(4)+(8)+(11)
			(1)X(3)		12/2/2/					\$9,309	\$192,618
PROGRAMS				682	1,552,914	\$0.03 \$0.03	548,327 560.367	0S ancies	S7,778	\$7,778	\$223,709
	131 697	S1,187.51	\$155,564	2,784	80,920	S0.03	\$2,528			2/0	204,00
Targered Energy Emocrety - Non-All Electric				2			SPER	so	\$0	so	\$266
	0 269	\$0.00	\$0	32	8,508	50'D¢	0044			0010	S48 728
Compact Fluorescent Bulb				1,094	1,028,360	S0.03	\$32,023	\$780 \$182	20 SD	\$1,863 \$1,863	\$18,801
High - Efficiency Heat Pump - Resistance Heat	108 94U 64 894	S72.27	\$4,625	442	395,148		512,313				CCC FUFU
				1 250	955.000	\$0.03	\$29,701	\$5,623	\$0	\$5,623	000'4710
High - Efficiency Heat Pump - Mobile Home	173 764	4 \$514.50	A00'800	2241				05	S907	206S	\$19,039
	11	1 \$549.45	\$18,132	0	0	n/a					000 2000
Mobile Home New Construction					5 961 398		\$185,525			\$26,330	005,000
TOTAL RESIDENTIAL PROGRAMS		0	5424,101 								
								SO		\$4,760	\$99,963
SRAMS	178 79					n/a		SO	S1,2	\$1,260	
Smart Audit - Class 1		3 \$2,800.00	\$25,200		710.40	SO	\$30,085	\$2	20	523,555	
Smart Einancind - Existing Building				15.300		50.04 S	\$3,926	5 \$144			
Smart Financing - New Building	2	17:670'10 G			1		C34 011	1 S23.729	3 \$6,020		S
JAN COO	221 906	9	\$182,536		802,200						
TOTAL COMMERCIAL PROGRAMIS											
NICTERAL DROGRAMS -									C128		\$2,685
(w/Est. Opt-Outs Removed)			a \$7.557	0				05		so	
art Audit - Class 1						0 U/a					\$2,813
Smart Audit - Class 2	0	A S0.00	0 \$2,430	29,250		0 \$0.04		S(S0 S0		
art Financing - General	- 0								1		007 30
Smart Financing - Compressed Air System				-			S	S0 \$383	3 \$128		
	4	63	\$4,987				20-0222				
TOTAL INDUSTRIAL PROGRAMS		1			6 763 50R	1 00	\$219,536	36 \$41,757			
	224 7,059	59	S611,624			5.0			5		
		==									
	the vehice										
 Lost revenue and efficiency incentives are based on prospective variues. 	Illye values.										

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NEW COMACTE INCLUSION COMACTE NETCOST	KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEA!	R PROGRAM											0
Provincienti Incontinue Recontine Description Recontine Description Recontine Description Recontine Description Recontine Description Recontine Recontine </td <td></td> <td></td> <td></td> <td></td> <td>TOTAL ACT</td> <td>NETLOST</td> <td>TOTAL</td> <td>NET LOST</td> <td>TOTAL NET •</td> <td>EFFICIENCY</td> <td>MAXIMIZING</td> <td></td> <td>TOTAL EST.</td>					TOTAL ACT	NETLOST	TOTAL	NET LOST	TOTAL NET •	EFFICIENCY	MAXIMIZING		TOTAL EST.
Number Numbr Numbr Numbr <td>YEAR 4 (1st HALF)</td> <td>PARTICIPANT PAR</td> <td>TICIPANT</td> <td></td> <td>PROGRAM</td> <td>REVIHALF</td> <td>ENERGY SAVINGS</td> <td>REVENUE</td> <td></td> <td>INCENTIVE (EX. C, PG 19C)</td> <td>INCENTIVE (5% of COSTS)</td> <td>TOTAL *</td> <td>COSTS TO BE RECOVERED</td>	YEAR 4 (1st HALF)	PARTICIPANT PAR	TICIPANT		PROGRAM	REVIHALF	ENERGY SAVINGS	REVENUE		INCENTIVE (EX. C, PG 19C)	INCENTIVE (5% of COSTS)	TOTAL *	COSTS TO BE RECOVERED
100 2000	PROGRAM DESCRIPTIONS		:	2ER PARTICIPANT (3)	(1)X(3)	(KVM/PAK11C) (5)			(6)X(7)	(6)	(10) (4)X(5%)	(11) (9)+(10)	(12) (4)+(8)+(11)
1 7/3 7/13 51/30<	RESIDENTIAL PROGRAMS	306	2 694	\$312.58	\$95,650		1		\$59,273	\$10,370	SO	\$10,370	\$165,293
1 200 200 500	Targeted Energy Efficiency - All Electric - Non-All Flectric	75	773	\$1,907.41 \$112.00	\$143,056 \$1,344				\$15,150 \$2,380	\$60	21	Sel./2	\$3,784
1 1	Comnact Fluorescent Bulb	0	269	\$0.00	so	31			\$258	SO		\$0	\$258
1 1	High - Efficiency Heat Pump - Resistance Heat	66	1,002	\$273.74	\$27,100	L			\$37,443 \$11.748	\$4,375 \$0		\$4,375 \$5	568,918 \$11,853
1 361.3 587.361 587.36	- Non Resistance Heat	101	826	S545.99	\$5	1,475			\$37,891	\$8,505		\$8,505	\$101,541
$ \begin{array}{ $	רווקה - בווכופוניט הפמר רמווף - חטווה דוסווים	g	45	S587.20		1.756				\$4,353		\$4,353	\$64,357
AMMS Estentioned Intermediate STATABILITY Terrent intermediate									6166 601	C77 663	22	S34 821	S581.363
Immune Immune Immune SS0,017 SS0,016 S	TOTAL RESIDENTIAL PROGRAMS		6,711		5379,941		16'7cc'c					112300111	
16 61 51 53,016													
166 054 S20.4/1 530.1/5 030 0 1 0	COMMERCIAL DROGRAMS											N00 13	630 0BD
1 16 871 55,0500 50,04 536,07 536,05 51,355 51,355 51,355 51,355 51,355 51,355 51,355 51,355 51,355 51,355 51,355 51,355 55,365 51,355 51,355 51,355 55,365 51,356 51,355 55,365 51,356 51,356 51,355 55,365 51,356 51,357 55,365 51,357 55,367 55,367 53,357 55,367 53,357 55,367 53,357 55,367 53,357 55,367 53,357 55,367 53,357 55,367 53,357 55,367 53,357 55,367 53,357	Smart Audit - Class 1	186	964	\$204.71						5		S2 164	S45.444
NIMS 01 030,000 52,330 14,101 726,063 50,04 55,426 57,171 000 57,171 000 57,171 000	- Class 2	16	87	S2,705.00				SO		\$1,395		\$1,395	\$60,740
	Smart Financing - Existing Building Smart Financing - New Building	90	6	00'0S						\$787		\$787	S8,565
CI,LI, PPOGRAMIS 211 1/11 Demonstrate antimation Demonstrate antinter Demonstrate antimation						-	00 100	11+	534 115	S2 182	'	\$6,250	\$154,729
AMS- Ext. Dpt-Outs Removed) I<	TOTAL COMMERCIAL PROGRAMS		1,111		100°,4116			- 11			11		
AMMS. AMMS. <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
Est. Dpl-Oute Removed) 0 60 50.00 50 70 50	INDUSTRIAL PROGRAMS -												
Interact 0 4 S0.00 S0 RIAL PROGRAMS ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ======= ====== ======	(w/Est. Opt-Outs Removed)	0	60	\$0.00						\$0		S	050
metal 0 1 \$0.00 50 0 00 50	Smart Audit - Class 1 Smart Audit - Class 2	0	4	\$0.00						SC SC		De OS	0S
Image: constraint of the cumulative participants as of 06/30/96. Sound of the cumulative participants as of 06/30/96	Smart Financing - General	0	1	\$0.00						6 0		Sol	so
TOTAL INDUSTRIAL PROGRAMS 0 65 50 5	Smart Financing - Compressed Air System	0	0	S0.00						11		111	1 ! 1
TOTAL COMPANY ========== ========= ======== ======== ====== ======= ====== ====== ====== ====== ====== ====== ====== ====== ======= ======= ======= ======= ======= ======= ======= ======= ======= ======= ======= ====== ======= ======= ======== ======= ======= ======= ======= ======= ======= ======= ======= ======== ======= ======= ======= ======= ======= =======	TOTAL INDUSTRIAL PROGRAMS	0	65		S			0	\$0	ŝ		20	0.00
TOTAL COMPANY = 904 7,920 944,935 = 444,955 = 444,955 = 444,150		-					10 2FC 2	11 4	22000 716	529 B4		S41.071	\$736,092
Cost revenue and efficiency incentives are based on prospective values. Comutative participants include a reduction for the cumulative participants as of 06(30/96. Participants since 09(0/198.	TOTAL COMPANY		7,920		2424,302	- 11		2 11	01-10040 I				12222
Lost revenue and efficiency incentives are based on prospective values. Unutative participants include a reduction for the cumulative participants as of 06/30/96. The cumulative participants since 09/01/98.													
Cumulative participants include a reduction for the cumulative participants as vi vouvevu. Participants since 09(01/96.	Lost revenue and efficiency incentives are ba	ased on prospective val	ues.	16/30/06									
	 Cumulative participants include a reduction is		המנווס מה מו								Au 10-		
							and the second se						

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 8 of 44

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 9 of 44

											C	
KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM	ROGRAM										PAGE 5B of 20	
VEAP 4 / Joint HALF)		CUMULATIVE TO	TOTAL ESTIMATED	TOTAL ACT.	NET LOST	TOTAL NET LOST ENERGY SAVINGS REVENUE		TOTAL NET • LOST	EFFICIENCY INCENTIVE	MAXIMIZING	TOTAL *	TOTAL EST. COSTS TO BE
PTIONS	PARTICIPANT NUMBER	NUMBER - PE	PEROGRAM CUSIS PER PARTICIPANT (3)			KWH/HALF (6)		REVENUES (8)	(EX. C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
	11	/-/		(1)X(3)		(c)X(Z)		6.10/01	G	US	S	S56,395
RESIDENTIAL PROGRAMS	0	2,519	\$0.00		107	1,780,933	\$0.03 \$0.03	\$55,423 \$13,720	SO	S4,035	\$4,035	\$98,457 \$2,683
Energy Fitness Targeted Energy Efficiency - All Electric	66	700	\$1,222.76 \$67.50	\$80,702 \$540	306	67,320	\$0.03	\$2,103	\$40	So	\$40	000'70
		102	00.02	So	31	3,813	S0.03	S118	SO	ŝ	80	0110
Compact Fluorescent Bulb	5		17F FFC3		1 200	972,000	\$0.03	\$30,268	\$6,187	05	\$6,187 \$0	\$66,015 \$8,260
High - Efficiency Heat Pump - Resistance Heat	140	810 593	\$0.00 \$0.00	0S	447	265,071		\$8,260	De l	00	10C FF3	S117 420
	VCF	739	S539.07	\$72,236	1,475	1,090,025	\$0.03	\$33,900	S11,284	0%	11071110	
High - Efficiency Heat Pump - Mobile Home	101		CK 1023	\$71.515	1.755	343,980	\$0.03	\$10,698	S5,464	so	S5,464	587,677
Mobile Home New Construction	123	ORI I	341000					C15A AGD	\$22.975	\$4,035	\$27,010	\$437,025
TOTAL RESIDENTIAL PROGRAMS	471			\$255,525		4, 304, 142						
											745 62	S70.295
COMMERCIAL PROGRAMS			44 00C0			0	n/a		S	53,347 c2 840	52,840 \$2,840	\$59,645
Smart Audit - Class 1	186						e	C27 105	55.814		\$5,814	S111,090
- Class 2	25	69	\$2,726.04	t \$68,151		876,612	\$0.04 \$0.04	S7.840			\$2,099	\$34,635
Smart Financing - Existing Building					14, 101				•	CG 107	S14 100	\$275,665
	242	2 1,311		\$216,600		1,059,925		S44,965	======================================	1		
					1							
IND ISTRIAL PROGRAMS -												
(w/Est. Opt-Outs Removed)		571	S0.00						DS US	000	80	SO
Smart Audit - Class 1					0			08				
Smart Audit - Class 2		0	\$0.00	0 \$0			0 \$0.04	0S SO				
Smart Financing - General					0						05	0S
Smart Financing - compressed at 2000				03			0	\$0				
TOTAL INDUSTRIAL PROGRAMS		0 62				12011102			Can ARR			
	713			\$472,125	2	6,024,067	2					
TOTAL COMPANY												
f ost revenue and efficiency incentives are based on prospective values.	sed on prospecti	1	00100									
 Cumulative participants include a reduction for the cumulative participants as conditioned 	r the cumulative	5	12/31/30.									
Participants since UV/U 1/30.												

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 10 of 44

Year 2000											Exhibit C		
KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM	ROGRAM										PAGE 6A of 20		
	NEW	CUMULATIVE	TOTAL ESTIMATED PROGRAM COSTS	TOTAL ACT. PROGRAM	NET LOST REV/HALF	TOTAL NET LOST ENERGY SAVINGS REVENUE	NET LOST REVENUE	TOTAL NET • LOST	EFFICIENCY INCENTIVE (EX. C,	MAXIMIZING	TOTAL *	TOTAL EST. COSTS TO BE RECOVERED	
PROGRAM DESCRIPTIONS	NUMBER (1)	NUMBER **	PER PARTICIPANT (3)	COSTS (4) (1)X(3)	(KWH/PARTIC) (5)	KWH/HALF (6) (2)X(5)	(T) (T)	REVENUES (8) (6)X(7)	PG.19C) (9)	(5% of CUS1S) (10) (4)X(5%)	(11) (9)+(10)	(12) (4)+(8)+(11)	
RESIDENTIAL PROGRAMS			S0.00					\$47,546 \$47,546	OS SO	\$0 \$4,200	\$0 \$4,200	5101,108	
Energy Fitness Targeted Energy Efficiency - All Electric - Non-All Electric	20	0 2,101 66 659 28 202	\$1,272.61 \$90.82	\$83,992 \$2,543	306	415.17 61.81		\$1,931	\$141	SO SO	\$141 \$0	\$4,015 \$0	
Comment Elemented Bull		0	\$0.00	\$0				00	C1 870		\$1,679	\$34,801	
Compact Florescent com	61	38 683	\$200.00 \$0.00	57,600 S0	1,200	7 819,600	00 \$0.03 56 \$0.03	525,847 \$4,847	2010		0\$	\$4,847	
- Non Resistance Heat				500 EDD	1.475	1,007,425	25 \$0.03	\$31,331	\$3,789	so	\$3,789	070'/00	
High - Efficiency Heat Pump - Mobile Home		45 683					10 \$0.03	S16,483		8			
Materia Liame New Construction ***	1	101 302	\$530.20						C10 005	\$4.200	\$14,295		
TOTAL RESIDENTIAL PROGRAMS	278	278 5,038		\$170,185		4,517,400	00	2/6/0/2					
									US			\$60,055	
COMMERCIAL PROGRAMS		1.126					0 n/a		So	51,082			
t - Class 1				0 \$21,640		32 1,142,252	80		\$3,721		51,049		
Smart Financing - Existing Building		16 85 4 20	56,298.75			01 282,020						\$194,095	
- New Building				S174 947		1,424,272	272	S60,436	\$4,770	-			
TOTAL COMMERCIAL PROGRAMS	172	172 1,344											
SAAGOOG													Pag
INDUSTRIAL PROGRAMS - (w/Fst. Opt-Outs Removed)					0	0		n/a		sol os	\$0 \$0	80	
ass 1					0	0	0	20					
Smart Audit - Class 2			00 S0.00		so	0	0 20.00						_
g - General		000	0 80.0		0	0					1.00		
g - Compressed Air System					1.00		0	G					1
TOTAL INDI STRIAL PROGRAMS		0	0	0.5	0					==			
			11 0	S295.132	32	5,941,672	672	210,1028	2222222				<u></u>
TOTAL COMPANY		2000'0 0000	22		=								-1-1-
Least and affirement incentives are based on prospective values.	based on prospe	ctive values.											.
Cumulative participants include a reduction	n for the cumulati	ve participants as of	06/30/97.										
						-	-	-			_		

Year 2000												
KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM	R PROGRAM										Exhibit C PAGE 6B of 2	20
YEAR 5 (2nd half)	NEW	CUMULATIVE	TOTAL ESTIMATED PROGRAM COSTS	TOTAL ACT. PROGRAM	NET LOST REV/HALF	TOTAL ENERGY SAVINGS	NET LOST REVENUE	TOTAL NET • LOST	EFFICIENCY INCENTIVE	MAXIMIZING INCENTIVE	TOTAL •	TOTAL EST. COSTS TO BE
PROGRAM DESCRIPTIONS	NUMBER (1)		PER P/	COSTS (4) (1)X(3)	(KWH/PARTIC) (5)	KWH/HALF (6) (2)X(5)	(S/KWH) (7)	REVENUES (8) (6)X(7)	(EX. C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
RESIDENTIAL PROGRAMS Energy Fitness Targeted Energy Efficiency - All Electric - Non-All Electric	36	0 1,525 99 583 21 170	5 \$0.00 3 \$1,115,41 594,67		706 630 306	1,076,650 367,290 52,020	\$0.03 \$0.03 \$0.03	\$33,505 \$11,426 \$1,625	\$0 \$0 \$105	\$0 \$5,521	\$0 \$5,521 \$105	\$33,505 \$127,373 \$3,718
Compact Fluorescent Bulb		0	0 80.00		0	0		\$0	\$0		\$0 \$1 105	\$0 \$24.079
High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat	Ň	25 481 0 147	1 \$200.00 7 \$0.00	\$5,000	1,200	577,200 65,562	\$0.03 \$0.03	\$11,974 \$2,043		808	05	S2,043
High - Efficiency Heat Pump - Mobile Home	4	43 572	2 \$495.35	\$21.300	1,476	844,272	\$0.03	\$26,257	\$3,621	0\$	\$3,621	\$51,178
Mohile Home New Construction ***	6	94 403	3 \$575.00	\$54,050	1,755	707,265	\$0.03	\$21,996	\$4,175		S4,175	\$80,221
TOTAL RESIDENTIAL PROGRAMS	282	3,881		\$192,764 ==========		3,690,259		\$114,826	\$9,006 =====	\$5,521	\$14,527 =======	\$322,117
											100 10	103 100
COMMERCIAL PROGRAMS Smart Audit - Class 1	15	1,026	26 S165.24 58 S2 705 00		00	0			88	S1,2 S3,5	\$1,314 \$3,922	582,367
- Class 2 Smart Financing - Existing Building				\$21,949 \$7,269	13,28	1,288,354	2 S0.04 S0.04	\$54,562 \$12,666		\$0	\$5,581 \$0	\$19,935 \$19,935
Smart Financing - New Bulling TOTAL COMMERCIAL PROGRAMS	212	12				1,584,496		S67,228	\$5,581	\$5,236	S10,817	\$211,981 =======
INDUSTRIAL PROGRAMS - (w/Est. Opt-Outs Removed)											0	
Smart Audit - Class 1		00	0 20.00	SO SO			0 n/a		SO	\$0	80	80
Smart Audit - Class 2 Smart Einspeine - General								05			De Us	80
Smart Financing - Compressed Air System					0		20.00	0%				
OMACOOCC INCLOUDE				Sol				\$0				0
							p t	720 COP3		=	S25.344	
TOTAL COMPANY	494	494 5,123	23	\$326,700			0 "					
Lost revenue and efficiency incertives are based on prospective values. Comulation prospective values.	ased on prospect	tive values. participants as of	12/31/97									
Cumulative perioperties incerted a recordence of the second se												

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 11 of 44

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 12 of 44

Year 2001													
											Exhibit C PAGE 7A of 2	20	
KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM	ROGRAM											40 a	
L		CUMULATIVE	TOTAL ESTIMATED	TOTAL ACT. PROGRAM	NET LOST REV/QTR	TOTAL ENERGY SAVINGS	NET LOST	T TOTAL NET *	EFFICIENCY INCENTIVE (EX. C.	MAXIMIZING INCENTIVE	TOTAL -	COSTS TO BE	
YEAR 6 (131 Hail) PROGRAM DESCRIPTIONS	PARTICIPANT NUMBER (1)	PARTICIPANT NUMBER ** (2)	PRUGRAMI COSIS PER PARTICIPANT (3)	COSTS (4)	(KWHIPARTIC) (5)	KWH/HALF (6) (2)X(5)	(S/KWH) (7)	(8) (6)X(7)	PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	(12) (4)+(8)+(11)	
DESIDENTIAL PROGRAMS		1	<u>\$0.00</u>	Ē			08 S0.03112	12 \$22,970 11 \$10,486	\$0 80	50'S	\$3,959	\$22,970 \$93,615 \$2,982	
Energy Filness Targeled Energy Efficiency - All Electric	0 62 18	1,044 535 137	\$1,276.94 \$87.89	\$79,1 \$1,5	306	337,050	111	S1,3				SO	
Compact Fluorescent Bulb	0	D	\$0.00						\$1,0	80	\$1,016 \$016	\$22,007 \$1,128	
High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat	23 0	438	\$201.04 \$0.00	\$4,624 \$0			07 \$0.03116	16 \$1,128 110 \$25,597			\$4,4	\$55,084	
uish - Fffcsency Heat Pump - Mabile Home	53	558	\$472.15			920,050				so	\$3,687	\$74,896	
Mobile Home New Construction ***	83	488	\$537.04	\$44,574 545,574	4 1755	10				5 S3,959	\$13,215	\$272,682	
TOTAL RESIDENTIAL PROGRAMS	239	3,281	12										
								n/a	\$0 80	S0 S2,156			
COMMERCIAL PROGRAMS Smart Audit - Class 1	134	1,017	5 \$1,510.00	2 \$43,124 0 \$42,280		0 0 0 0 0 0		n/a \$62,999	23,4		0 \$3,488 0 \$2,099	s101,122 \$49,305	
- Class 2 Smart Financing - Existing Building	15				29 14,101		352,525 \$0.04277			S4.2		0	
t Financing - New Burlong TOTAL COMMERCIAL PROGRAMS	185	5 1,259		\$152,168	00	1,840,109	109	2/n's/s					
(w/Est. Opt-Outs Removed)		0			\$0	0	10	n/a n/a		SO SO	\$0 \$0	\$0 80 80	
Smart Audit - Class 1		0	0000 20.00		s0	0	0 50.0	50.0000	so				
Smart Financing - General		00			s0	0					so		
Smart Financing - Compressed All Systems			0		<u>so</u>		0	200		1222	223.072	72 \$512,783	
TOTAL INDUSTRIAL PROGRAMS	424	4 4,540	01	S307,142	142	5,198	5,198,486	S182	S182,569 S18,443				11.
TOLAL COMPANT		*****	11										
Lost revenue and efficiency incentives are based on prospective values. Comutative participants and of a reduction for the cumutative participants as of 06/30/98.	r the cumulative part	ralues. icipants as of 06/	30/98.										
		_											

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 13 of 44

KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR P	PROGRAM										Exhibit C PAGE 7B of 2	20
YEAR 6 (2nd Hait)	NEW	CUMULATIVE	TOTAL ESTIMATED PROGRAM COSTS	TOTAL ACT. PROGRAM	NET LOST REV/QTR	TOTAL ENERGY SAVINGS	NET LOST REVENUE	TOTAL NET • LOST	EFFICIENCY INCENTIVE	MAXIMIZING INCENTIVE	TOTAL *	TOTAL EST. COSTS TO BE
PROGRAM DESCRIPTIONS	NUMBER (1)	NUMBER (2)	PER PARTICIPANT (3)	COSTS (4) (1)X(3)	(KWHIPARTIC) (5)	KWH/HALF (6) (2)X(5)	(S/KWH) (7)	REVENUES (8) (6)X(7)	(EX.C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
RESIDENTIAL PROGRAMS Energy Filness Targeted Energy Efficiency - All Electric , Non-All Electric	0 88 46	535 486 122	\$0.00 \$1,018.86 \$81.46		706 630 306	377,710 306,180 37,332	\$0.03112 \$0.03111 \$0.03124	\$11,754 \$9,525 \$1,166	\$0 \$0 \$231	\$0 \$4,483 \$0	\$0 \$4,483 \$231	\$11,754 \$103,668 \$5,144
Compact Fluorescent Bulb	0	0	\$0.00	\$0	0	0	S0.00000	\$0	80	so	\$0	\$0
High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat	30	412	\$173.33 \$0.00	\$5,200 \$0	1,200	494,400	S0.03114 S0.03116	\$15,396 \$486	\$1,326 \$0	\$0 \$0	\$1,326 \$0	S21,922 \$486
High - Efficiency Heat Pump - Mobile Home	47	469	\$510.64		1,476	692,244		\$21,529	\$3,958	80	\$3,958	\$49,487 \$86,189
Mobile Hame New Construction ***	92	568	\$555.43	\$51,100	1,755	996,840	S0.03110	\$31,002	24,087		200'50	201 (202)
TOTAL RESIDENTIAL PROGRAMS	303	2,627		\$173,707		2,920,316		\$90,858	\$9,602	54,483 ======	\$14,085 =======	\$278,650
												CE2 453
COMMERCIAL PROGRAMS	131			\$59,479		00	n/a	SO SO	S0 S0	\$2,454 \$2,454	52,454	S51,540
- Class 2	15		\$1,664.27		13,282	1	\$0.042	S61,312	\$3,488			S89,764
Smart Financing - Existing buruning Smart Financing - New Building	18	34					s s0.04277	\$20,507	54,722			10,100
TOTAL COMMERCIAL PROGRAMS	169	1,220		\$165,916		1,927,206		\$81,819	\$8,210 =======	55,428 =======	\$13,638 =====	5261,373
INDUSTRIAL PROGRAMS -												
(w/Est. Opt-Outs Removed)									S	80	\$0	\$0 \$0
Sinan Audit - Class - Smart Audit - Class 2					0		0 50 0000	20	os S0			00
Smart Financing - General Smart Financing - Compressed Air System		00	0 S0.00 S0.00	88			000000	20	\$			5
				so		0		SO		0\$		
				2330 693		4 847 522		\$172,677	\$17,812		\$27,723	07
TOTAL COMPANY	2/6	240'0							1922			
Lost revenue and efficiency incentives are based on prospective values. Cumulative participants include a reduction for the cumulative participants as of 12/3/198	d on prospective vertee the cumulative partie	alues. apants as of 12/31/	(98									
Participants since 0//01/96.												
KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 14 of 44

							-	-		-		
											Exhibit C	
KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM											PAGE 8A of 20	
								10101				TOTAL
		TIVE OTIVE	TOTAL	TOTAL	NET LOST		NET LOST	NET *	EFFICIENCY	MAXIMIZING		ACTUAL
YEAR 7 (1st Half)	NEW CUMULATIVE	DARTICIPANT	PROGRAM	PROGRAM	REV/HALF	ENERGY SAVINGS	REVENUE	LOST	INCENTIVE	INCENTIVE		COSTS TO BE
			PER	COSTS	(KWH/PARTIC)	KWH/HALF	(S/KWH) F	REVENUES	PG.19C)	(5% of COSTS)	INCENTIVE	RECOVERED (12)
PROGRAM DESCRIPTIONS	(1)		(3)	(4) (1)X(3)	(5)	(6) (2)X(5)	(2)	(8) (6)X(7)	(2)	(4)X(5%)	(9)+(10)	(4)+(8)+(11)
0000000						010 00	01100	\$2 550	80	0\$	\$0	\$2,552
RESIDENTIAL PROGRAMS	0	116	\$0.00	0\$	707	454 376	\$0.03111	\$14,136	\$0	\$5,520	\$5,520	\$130,057
Targeted Energy Efficiency - All Electric	32	135	\$1,752.40	\$110,401	315	42,525	\$0.03124	\$1,328	\$137	20	1016	00'0#
		C	00.09	SO	0	0	\$0.00000	\$0	\$0	\$0	0ç	80
Compact Fluorescent Bulb	0	D	00.00				11	100 113	544	\$0	\$44	\$12,930
Hinh - Efficiency Heat Pump - Resistance Heat		314	\$1,152.00	\$1,152	1,200	376,800	\$0.03116	+c / 1 e	0\$	\$0	\$0	\$0
- Non Resistance Heat	0		00.00				\$0.03110	\$14.729	\$1,244	\$0	\$1,244	\$42,623
Hich - Efficiency Heat Pump - Mobile Home	43	414	\$619.77	\$26,650	1,144	0000	0.00			ć	\$231	\$68.768
	57	568	\$641.77	\$36,581	1,809	1,027,512	\$0.03110	\$31,956	\$231	0,0	1070	
Mobile Home New Construction ***	<u> </u>					0 456 944		\$76.435	\$1,656	\$5,520	\$7,176	\$260,490
TOTAL RESIDENTIAL PROGRAMS	196	1,989		=======								
SWAGOODD INICOLINICO						C	n/a		0\$	\$2,706	\$2,706	
COMMERCIAL FIXOUNTION	125	923					1					\$76.309
- Class 2	1 0	104	\$3,711.00	\$17.869	13,26	-	\$0.04235		\$1,628	0.9		
Smart Financing - Existing Building	2	42			14,101	592,242	1	055,624				
mart Financing - New Building						1022 724		\$82.142	\$2,940	0 \$4,190		
TOTAL COMMERCIAL PROGRAMS	145	1,170		\$108,645		177,000,1 171,000,1			11			
INDUSTRIAL PROGRAMS - (w/Est. Oot-Outs Removed)				÷			0 n/a		Ģ	0\$	80	
Smart Audit - Class 1	00		01 \$0.00							20		09
Smart Audit - Class 2				\$0		0	0 \$0.00000	DA G			20	
Smart Financing - General			0 \$0.00				0 20.00000					
smart Financing - Compressed An Oracin				9	03		0	00			20	
TOTAL INDUSTRIAL PROGRAMS							11		= =======	39.710		\$458,407
	1 341	3,1	59	\$285,524	4	4,390,565		//00100100		i		
TOTAL COMPANT			14									
	ased on prospectiv	e values.										
Lost revenue and enrice or and the sector of the cumulative participants as	or the criminative C	articipants as C	of 06/30/1999.									

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 15 of 44

Year 2002												
KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM											Exhibit C PAGE 8B of 2	20
YEAR 7 (2nd Hail)	NEW	CUMULATIVE	EST T	TOTAL ACTUAL PROGRAM	NET LOST REV/QTR	TOTAL ENERGY SAVINGS	NET LOST REVENUE	TOTAL NET • LOST	EFFICIENCY INCENTIVE (EX. C,	MAXIMIZING	TOTAL *	TOTAL ACTUAL COSTS TO BE
PROGRAM DESCRIPTIONS	NUMBER (1)	NUMBER ** (2)	PER PARTICIPANT (3)	COSTS (4) (1)X(3)	(KWH/PARTIC) (5)	KWH/HALF (6) (2)X(5)	(S/KWH) (7)	REVENUES (8) (6)X(7)	PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	(11) (11) (9)+(10)	(12) (4)+(8)+(11)
EESIDENTIAL PROGRAMS Energy Fitness Targeted Energy Efficiency - All Electric	0	45	0 \$0.00 37 \$1,039.33 66 \$85.92	\$78,989 \$1,117	706 1,028 315	469,79		\$14,6 \$1,5	\$0 \$56 \$56	S0 S3,949 S0 S0	\$3,949 \$3,949 \$56 \$56 \$56	\$0 \$97,553 \$2,708 \$2,708
Compact Fluorescent Bulb High - Efficiency Heat Purp - Resistance Heat		17	0 \$0.00 77 0 \$0.00	(S352) (S352) (S352)	0 1,200	212,40	0 \$0,00000 0 \$0.03114 0 \$0.03116	\$6,614 \$6,614	20 20			S6,262 S0
- NULL RESIDENTION - NULL RESIDENTION - High - Efficiency Heat Pump - Mobile Home	43				1,144	352,352 038.871	2 \$0.03110 1 \$0.03110	\$10,958 \$29,199	\$1,244 \$248	\$0 \$0	\$1,244 \$248	\$38,167 \$68,759
Mobile Home New Construction *** TOTAL RESIDENTIAL PROGRAMS	193	1	519 \$644.46 	5 539,312 5145,031 ======		5			\$1,548	\$3,949	\$5,497	S213,449
COMMERCIAL PROGRAMS Smart Audit - Class 1 - Class 2 Smart Financing - Existing Building Smart Financing - New Building		0 78	786 \$0.00 90 \$0.00 97 \$90.76 44 \$22,424.94		13,28	1,288,35	0 n/a 0 n/a 54 \$0.04235 38 \$0.04277	80 80 80 80 80 80 854,562 80 80 80 80 80 80 80 80 80 80 80 80 80	\$5,814 \$5,814 \$4,197 \$4,0011	0 S3,721 0 S3,721 50 50 50 50 7 50 50 50 1 53,721	\$3,721 \$3,721 \$5,814 \$5,814 \$5,814 \$5,814 \$5,813 \$5,814 \$5	578,143 \$0 \$83,120 \$69,534 \$230,797
TOTAL COMMERCIAL PROGRAMS	41	41 1,017	17	\$135,965 	99 11	1,908,842			11			
INDUSTRIAL PROJEKAMS - (w/Est. Opt-Outs Removed) Smart Audit - Class 1 Smart Audit - Class 2 Smart Fundit - Class 2		000	0 0000 0 0 000000000000000000000000000		000000000000000000000000000000000000000	0000	0 n/a 0 50.00000 0 50.00000	a 0 0 0 0 0 0 0 0 0 0 0		\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$		8 8 8 8
Smart Financing - Compressed Air System TOTAL INDUSTRIAL PROGRAMS		0 1 0 1				0						9 S444,245
TOTAL COMPANY 2,634 2,634 TOTAL COMPANY ========= I ========= I I ======== I I I I I I I I I	234	234 2,634	2,634		0,11							

Item No. 22 Page 16 of 44 \$290,241 8888 20 \$0 \$0 \$61,874 \$29,552 \$91,426 \$48,252 \$0 \$17,398 \$198,815 \$3,513 \$0 \$23,418 \$104,168 \$2,066 ß 0 COSTS TO BE RECOVERED (12) (4)+(8)+(11) TOTAL 20 \$0 \$7,576 2 2 2 2 2 2 C \$7,576 ß 8888 \$187 \$2,127 \$983 \$4,249 G G \$0 20 INCENTIVE Exhibit C PAGE 9A of (9)+(10)TOTAL \$0 0\$ 8888 \$ \$ \$ \$ \$ \$ \$4,249 22 30 930 \$0 \$0 ŝ 88 MAXIMIZING INCENTIVE (10) (4)X(5%) (5% of COSTS) \$4 \$3,327 80808 \$0 80808 \$3,327 ß 11 \$187 \$0 \$2,127 \$983 0G 808 8 \$30 \$30 EFFICIENCY INCENTIVE (EX. C, PG.19C) 6 \$147,611 80 20 \$0 \$61,874 \$29,552 \$91,426 \$56,185 \$3,513 \$9,535 \$25,865 \$856 \$14,935 \$1,481 S REVENUES (8) (6)X(7) 30 TOTAL NET -LOST n/a n/a \$0.04235 \$0.04277 n/a n/a \$0.00000 \$0.00000 \$0.03110 \$0.03114 \$0.03116 \$0.03110 \$0.03116 \$0.03111 \$0.03124 \$0.03112 \$0.00000 REVENUE (5/KWH) (7) NET LOST 000 3,957,993 1,461,020 690,949 2,151,969 0 27,462 1,806,024 831,680 112,800 306,592 480,076 KWH/HALF (6) (2)X(5) TOTAL ENERGY SAVINGS 0000 0 13,282 14,101 (KWH/ PARTICIPANT) 1,194 1,144 1,808 ,028 1,200 0 707 REVIHALF NET LOST \$135,054 \$135,054 20 80808 \$22,200 \$14,415 \$12,900 \$84,984 \$555 \$0 ß PROGRAM COSTS (4) (1)X(3) TOTAL \$0.00 \$0.00 \$0.00 PER PARTICIPANT (3) \$0.00 \$0.00 \$0.00 \$142.72 \$0.00 \$379.41 50 \$0.00 \$0.00 TOTAL ESTIMATED PROGRAM COSTS 84 \$482. \$79. Lost revenue and efficiency incentives are based on prospective values.
 Cumulative participants include a reduction for the cumulative participants as of
 Participants since 01/01/2000. 2,315 0000 620 73 110 49 852 460 1,463 23 268 0 940 0 467 PARTICIPANT CUMULATIVE ŧ NUMBER Î 288 1010100 288 940 00 34 0 0 100 PARTICIPANT -----NUMBER NEW INDUSTRIAL PROGRAMS -(w/Est. Opt-Outs Removed) Smart Audit - Class 1 Smart Audit - Class 2 Smart Financung - General Smart Financung - Compressed Air System KENTUCKY POWER COMPANY IESTIMATED SECTOR SURCHARGES FOR (YEAR PROGRAM TOTAL COMMERCIAL PROGRAMS TOTAL RESIDENTIAL PROGRAMS TOTAL INDUSTRIAL PROGRAMS Smart Financing - Existing Building Smart Financing - New Building ŧ Mobile Home New Construction COMMERCIAL PROGRAMS Smart Audit - Class 1 - Class 2 High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat Targeted Energy Efficiency - All Electric - Non-All Electric High - Efficiency Heat Pump - Mobile Home PROGRAM DESCRIPTIONS TOTAL COMPANY RESIDENTIAL PROGRAMS Compact Fluorescent Bulb Modified Energy Fitness - Heat Pump - Air Conditioner YEAR 8 (1st HALF) nergy Fitness

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KPSC Case No. 2012-00051

Order Dated March 8, 2012

Commission Staff's First Set of Data Requests

06/30/2000.

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 17 of 44

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KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3											PAGE 9B of	20
YEAR PRUGRAM	NEW	CUMULATIVE	TOTAL ESTIMATED PROGRAM COSTS	TOTAL ACTUAL PROGRAM	NET LOST REV/HALF	TOTAL ENERGY SAVINGS	NET LOST REVENUE	TOTAL NET * LOST	EFFICIENCY INCENTIVE	MAXIMIZING	TOTAL *	TOTAL ACTUAL COSTS TO BE
PROGRAM DESCRIPTIONS	NUMBER (1)	NUMBER ** (2)	PER PARTICIPANT (3)	COSTS 1 (4) (1)X(3)	(KWH/ PARTICIPANT) (5)	KWH/HALF (6) (2)X(5)	(S/KWH) (7)	REVENUES (8) (6)X(7)	(EX. C. PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
RESIDENTIAL PROGRAMS Energy Fitness	0	0	\$0.00	\$0	706	0	\$0.03112	0¢	80	O\$	0\$	20
Targeted Energy Efficiency - All Electric	69 69	473	\$974.94 \$76.10	\$67,271 \$5,251	1,028 316	486,244 52,772	\$0.03111 \$0.03124	\$15,127 \$1,649	\$0 \$295	\$3,364	\$3,364	\$85,762 \$7,195
- NULTAR LEGUIC Compact Fluorescent Bulb	0	0	\$0.00	80	0	0	\$0.00000	\$0	Ş	0\$	0\$	80
High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat		0	\$0.00	\$0 80	1,200	75,600	\$0.03114 \$0.03116	\$2,354 \$0	\$0 \$0	80	80 80	\$2,354 \$0
High - Efficiency Heat Pump - Mobile Home	59	256	\$453.45	\$13,150	1,144	292,864	\$0.03110	\$9,108	\$839	80	\$839	\$23,097
Mobile Home New Construction *** - Heat Pump - Air Conditioner	64	419 0	\$649.59 \$150.00	\$41,574 \$150	1,810	758,390	\$0.03110 \$0.03124	\$23,586 \$0	\$260		\$260	\$65,420 \$150
Modified Energy Filness	441	324	\$431.43		1,194		\$0.03116	\$12,054	\$9,287	\$0 5	\$9,287	\$211,603
TOTAL RESIDENTIAL PROGRAMS		1,702		\$317,658 =======		2,052,726		0/0'00¢			11	
DMMERCIAL PROGRAMS							e/u	\$0				80
Smart Audit - Class 1		0 453							0\$	80	80	\$43,3
- Class 2 Smart Financing - Existing Building		0 77 0	7 \$0.00 50.00	0\$ 20	13,282	662,794 662,794	\$0.04277 \$0.04277	\$28,348				
nart Financing - New Dullung TOTAL COMMERCIAL PROGRAMS						1,685,508		\$71,660		03		\$71,660
INDUSTRIAL PROGRAMS -												
(w/Est. Opt-Outs Removed)		0	0 \$0.0						69 6			
mart Audit - Class 1 mart Audit - Class 2		0	00 \$0.00	0 \$0		00	0 \$0.00000	80		\$0 \$0	05	
Smart Financing - General Smart Financing - Compressed Air System		00	00 \$0.0				\$0.00000	\$0				
TOTAL INDUSTRIAL PROGRAMS		0	0	\$0			0	20		l		
			1 0			3.738.234		\$135,538	\$10,		t \$14,045	\$467,241
TOTAL COMPANY	2/0	11	2 22									
 Lost revenue and efficiency incentives are based on prospective values. 	are based on prospe	ctive values.										
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VALL 2004												
											Exhibit C	
KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM											ď	20
YEAR 9 (1st HALF)	NEW	CUMULATIVE	TOTAL	TOTAL ACTUAL	NET LOST	TOTAL	NET LOST	TOTAL NET *	EFFICIENCY	MAXIMIZING		TOTAL ACTUAL
	PARTICIPANT	PARTICIPANT	COSTS	PROGRAM	REV/QTR	SAVINGS	REVENUE	LOST	INCENTIVE	INCENTIVE	TOTAL *	COSTS TO BE
PROGRAM DESCRIPTIONS	NUMBER (1)	NUMBER ** (2)	PER PARTICIPANT (3)	COSTS (4)	(KWH/PARTIC) (5)	KWH/ HALF (6)	(\$/KWH) (7)	REVENUES (8)	(EX. C, PG.19C) (9)	(5% of COSTS) (10)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
RESIDENTIAL PROGRAMS Energy Fitness	0	0	\$0.00	(1)X(3) \$0	707	0 (c)v(z)	\$0.03112	0\$ (1)\(b)	0\$	0\$ 80	80 80	0\$
Targeted Energy Efficiency MII Flavier	72	463	\$751.54		1,028	475,964	\$0.03111	\$14,807	0\$	\$2,706	\$2,706	\$71,624
- All Llectric	10	179	\$78.60	\$786 sn	314	56,206	\$0.03124 \$0.00000	\$1,756 \$0	\$43	DÅ OS	\$43 \$0	0\$ 0\$
Compact Fluorescent Bulb				<u>}</u>		>						CUU Yế
- Right - Einbeity neat, unp - Resistance Heat - Non Resistance Heat	00	42	\$0.00	80	1,200	50,400	\$0.03114 \$0.03116	\$1,569 \$0	80	80	DA CO	80C'1¢
High - Efficiency Heat Pump - Mobile Home	41	247	\$428.05	\$17,550	1,144	282,568	\$0.03110	\$8,788	\$1,186	\$0	\$1,186	\$27,524
Mobile Home New Construction *** - Heat Pump - Air Conditioner	68	394	\$503.68 \$150.00	\$34,250 \$150	1,808	712,352	\$0.03110 \$0.03124	\$22,154	\$276 \$0	80	\$276 \$0	\$56,680 \$155
Modified Energy Fitness	334	735	\$417.76	\$139,531	1,194		\$0.03116	\$27,346	\$7,034		\$7,034	
TOTAL RESIDENTIAL PROGRAMS	526			\$246,378		2,455,237		\$76,425	\$8,539	\$2,706	\$11,245	5334,048
COMMERCIAL PROGRAMS		335					n/a	80	\$0			80
		Ň	\$0.00	S S		0	\$0.04235		G G	00	DA S	\$30,3
Smart Financing - Existing Building Smart Financing - New Building		00			14,101							
TOTAL COMMERCIAL PROGRAMS		46		\$0		1,323,571		\$56,308	0\$		\$0 \$	\$56,308
INDUSTRIAL PROGRAMS -												
Smart Audit - Class 1			0 \$0.00	05	00		n/a n/a		88	0,00	P 9	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Smart Audit - Class 2 Smart Financind - General						0	\$0.00		0\$			
Smart Financing - Compressed Air System		0						20				
TOTAL INDUSTRIAL PROGRAMS		0	0	\$0		0		05	\$0	80	20	
	======================================		в сс			3,778,808		\$132,733				
I D I AL COMPANY												
* Lost revenue and efficiency incentives are	based on prospect	ive values.										
** Cumulative participants include a reduction for the cumulative participants as	n for the cumulative	participants as o	of 06/30/2001.									
Hamopans since on any read.		_	-									

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 18 of 44

\$0 \$446,364 808080 \$0 \$23,062 \$18,094 \$41,156 \$63,418 \$183,799 \$405,208 \$31,433 \$119,292 \$6,695 ß 8 \$561 100 COSTS TO BE RECOVERED (12) (4)+(8)+(11) TOTAL \$0 \$0 \$15,133 80 80 80 80 80 80 20 \$8,234 \$15,133 \$1,330 \$284 20 20 20 \$4,977 \$308 20 INCENTIVE (11) (9)+(10) 10B of li TOTAL Exhibit (PAGE \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 80 80 80 8 \$4,977 8 20 않않 \$4,977 88 3 20 MAXIMIZING INCENTIVE (5% of COSTS) (10) (4)X(5%) \$10,156 \$0 88888 \$10,156 \$8,234 \$ \$ \$ \$ \$ \$ \$1,330 \$284 \$0 \$0 \$308 ß 80 EFFICIENCY INCENTIVE (EX. C, PG.19C) 6 \$0 \$128,172 202020 \$41,156 \$0 \$23,062 \$18,094 \$87,016 \$39,809 \$21,334 \$8,503 \$561 \$14,775 \$2,024 \$0 REVENUES (8) (6)X(7) 20 TOTAL NET * LOST n/a n/a \$0.00000 \$0.00000 n/a n/a \$0.04235 \$0.04277 \$0.03110 \$0.03124 \$0.03114 \$0.03110 \$0.03116 \$0.03111 \$0.00000 \$0.03112 REVENUE (\$/KWH) NET LOST 2 3,762,640 544,562 423,060 685,990 316 1,277,580 2,795,018 967,622 273,416 18,000 474,936 64,780 TOTAL ENERGY SAVINGS KWH/ HALF (6) (2)X(5) 0000 0 13,282 14,102 1,144 158 1,194 200 (KWH/PARTIC) (5) ,028 316 0 902 NET LOST REV/QTR \$303,059 20 20 20 \$0 203 \$303,059 \$135,756 \$ \$ \$ \$ \$ \$21,600 \$41,800 \$99,540 \$4,363 20 \$0 Q; PROGRAM COSTS (4) (1)X(3) TOTAL \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 PER PARTICIPANT (3) \$597.14 #DIV/0! \$347.20 12/31/2001. \$0.00 \$469.57 \$1,118.43 \$60.60 \$0.00 \$0.00 TOTAL ESTIMATED PROGRAM COSTS Lost revenue and efficiency incentives are based on prospective values.
 Cumulative participants include a reduction for the cumulative participants as of
 Participants since 07/01/2001. 2,644 191 41 30 2,372 272 1,070 379 2 239 50 0 462 205 PARTICIPANT CUMULATIVE : NUMBER * 668 668 20 391 00 46 0 0 89 ļ PARTICIPANT NUMBER NEW F INDUSTRIAL PROGRAMS -(w/Est. Opt-Outs Removed) Smart Audit - Class 1 Smart Audit - Class 2 Smart Financing - General Smart Financing - Compressed Air System KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM TOTAL COMMERCIAL PROGRAMS TOTAL RESIDENTIAL PROGRAMS PROGRAMS Smart Financing - Existing Building Smart Financing - New Building *** Mobile Home New Construction - Heat Pump - Air Conditioner COMMERCIAL PROGRAMS Smart Audit - Class 1 - Class 2 High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat TOTAL INDUSTRIAL TOTAL COMPANY High - Efficiency Heat Pump - Mobile Home Targeted Energy Efficiency - Ail Electric - Non-Ail Electric PROGRAM DESCRIPTIONS RESIDENTIAL PROGRAMS Energy Fitness Year 2004 Compact Fluorescent Bulb Modified Energy Fitness YEAR 9 (2nd HALF)

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 19 of 44

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 20 of 44

COMPANY DECOMPANY SURVEY Net Net Net Net Net Net Net Net Net Net	Year 2005											Exhibit C	
0 1												PAGE	ç
NEW COMAL COVAL C	WER COWPANT ECTOR SURCHARGES FOR 3											11A 01	TOTAL
Mumber Manuel (1) Mumber Manuel (1) <	YEAR PROGRAM YEAR 10 (1st Half)	NEW		TOTAL ESTIMATED PROGRAM COSTS	TOTAL ACTUAL PROGRAM	NET LOST REV/QTR	TOTAL ENERGY SAVINGS	NET LOST REVENUE	TOTAL NET * LOST	EFFICIENCY INCENTIVE	MAXIMIZING	TOTAL *	ACTUAL COSTS TO BE
Non- Non- <th< td=""><td>PROGRAM DESCRIPTIONS</td><td>NUMBER (1)</td><td>NUMBER</td><td>PER PARTICIPANT (3)</td><td>COSTS (4) (1)X(3)</td><td>(KWH/ PARTICIPANT) (5)</td><td>KWH/ HALF (6) (2)X(5)</td><td></td><td>REVENUES (B) (6)X(7) S0</td><td></td><td></td><td>(11) (9)+(10)</td><td>RECOVERED (12) (4)+(8)+(11)</td></th<>	PROGRAM DESCRIPTIONS	NUMBER (1)	NUMBER	PER PARTICIPANT (3)	COSTS (4) (1)X(3)	(KWH/ PARTICIPANT) (5)	KWH/ HALF (6) (2)X(5)		REVENUES (B) (6)X(7) S0			(11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
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Image: constraint of the	gy Efficiency iic	88				896 267				\$1,1	\$4,881 \$0	\$4,8 \$1,1	
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Interproting Interproting<	New Construction ***		37			-			\$20	89			
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RAMS	Class 2							1					
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manage manage manage 531,602 \$4,801 532,663 \$531,0137 2,966,798 \$599,629 \$27,802 \$4,801 \$332,663 \$551,0127 2,966,798 \$599,629 \$27,802 \$4,801 \$332,663 \$551,01202 ####################################	Granden - Burger		10	0	5	00		0	800225		11		
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06/30/2002.	AL COMPANY		17	892	\$310,12	3/							
	revenue and efficiency incentives	are based on pros	pective values.										

\$431,557 \$0 \$0 \$0 So S77,215 \$10 \$0 \$11,250 \$6,635 \$17,885 \$413,672 <u>so</u> \$180,557 \$121,485 \$4,161 \$30,244 0 20 RECOVERED (12) Ш (4)+(8)+(11)TOTAL COSTS TO 20 \$0 \$0 \$0 \$0 \$0 SO SO SO \$33,955 \$10,372 \$0 S3, 168 S14.770 \$5,132 \$513 20 20 So INCENTIVE (11) (9)+(10) 8 Exhibit C PAGE 11B of TOTAL \$0 \$5,132 \$5,132 8 S S S S 80808 So 20 20 30 2000 \$5,132 \$0 80 ŝ MAXIMIZING INCENTIVE (5% of COSTS) (10) (4)X(5%) 528,823 \$0 80 80 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 So | \$28,823 \$3,168 \$10,372 \$0 \$14,770 \$0 \$513 20 20 2 20 EFFICIENCY INCENTIVE (EX. C, PG.19C) 6 \$17,885 \$0 \$11,250 \$6,635 \$8,005 \$80,159 \$21,672 \$10 \$34,822 S0 S0 so \$13,714 \$1,936 So REVENUES (8) (6)X(7) TOTAL NET • LOST n/a n/a \$0.00000 \$0.00000 n/a n/a \$0.04235 \$0.04277 S0.03110 S0.03124 \$0.03114 \$0.03116 S0.03116 \$0.03111 \$0.03124 \$0.03110 2 \$0.00000 REVENUE (S/KWH) (7) \$0.031 NET LOST 2,995,650 420,762 1,117,512 640 257,400 696,850 316 2,574,888 440,832 61,978 TOTAL ENERGY SAVINGS 155, KWH/ HALF (6) (2)X(5) 11 0000 13,282 14,102 (KWH/ PARTICIPANT) (5) 158 612 1,200 1,144 896 266 0 706 REV/QTRS NET LOST \$0 \$299,558 \$0 20 20 20 \$0 \$0 \$0 \$130,965 \$299,558 \$45,171 \$0 \$102,639 \$1,712 20 20 20 \$19,071 \$0 PROGRAM COSTS (4) (1)X(3) TOTAL \$0.00 \$0.00 \$0.00 PER PARTICIPANT (3) \$0.00 \$0.00 \$0.00 \$544.23 \$0.00 \$476.78 S373.12 \$1,207.52 \$65.85 \$0.00 88 12/3-1/2002. TOTAL ESTIMATED PROGRAM COSTS \$0.00 SO.SO. 3,194 Lost revenue and efficiency incentives are based on prospective values. Cumulative participants include a reduction for the cumulative participants as of Participants since 07101/2002. 3,163 11 33 1200 1,826 00 225 385 0 0 492 233 CUMULATIVE PARTICIPANT : NUMBER 585 0 0000 585 800 351 00 40 0 85 0 PARTICIPANT NUMBER NEV -INDUSTRIAL PROGRAMS -(w/Est, Opt-Outs Removed) Smart Audit - Class 1 Smart Lenss 2 Smart Finanong - General Smart Financing - Compresed Air System KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM PROGRAMS PROGRAMS TOTAL INDUSTRIAL PROGRAMS - Class 2 Smart Financing - Existing Building Smart Financing - New Building ÷ itobile Home New Construction - Heat Pump - Air Conditioner COMMERCIAL PROGRAMS Smart Audit - Class 1 High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat TOTAL COMMERCIAL TOTAL RESIDENTIAL High - Efficiency Heat Pump - Mobile Home Year 2005 PROGRAM DESCRIPTIONS TOTAL COMPANY RESIDENTIAL PROGRAMS Targeted Energy Efficiency - All Electric Compact Fluorescent Bulb Modified Energy Fitness - Non-All Electric YEAR 10 (2nd HALF) nergy Fitness :

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 21 of 44

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New CUML VOM VOM NOM NOM <td>CKY POWER COMPANY TED SECTOR SURCHARGES FOR 3</td> <td></td> <td>12A of</td> <td>20</td>	CKY POWER COMPANY TED SECTOR SURCHARGES FOR 3											12A of	20
PARTING PARTING <t< td=""><td>ROGRAM</td><td>N N N N</td><td>CUMULATIVE</td><td>TOTAL ESTIMATED</td><td></td><td>NET LOST</td><td>TOTAL</td><td>NET LOST</td><td>TOTAL NET •</td><td>EFFICIENCY</td><td>MAXIMIZING</td><td>* 17 H</td><td>TOTAL ACTUAL COSTS TO RF</td></t<>	ROGRAM	N N N N	CUMULATIVE	TOTAL ESTIMATED		NET LOST	TOTAL	NET LOST	TOTAL NET •	EFFICIENCY	MAXIMIZING	* 17 H	TOTAL ACTUAL COSTS TO RF
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No. No. <td>AM DESCRIPTIONS</td> <td>NUMBER (1)</td> <td>:</td> <td>PER PARTICIPANT (3)</td> <td>COSTS (4)</td> <td>(KWH/ PARTICIPANT) (5)</td> <td>KWH/ HALF (6) (2)X(5)</td> <td>(S/KWH) (7)</td> <td>REVENUES (8) (6)X(7)</td> <td>PG.19C) (9)</td> <td>COSTS) (10) (4)X(5%)</td> <td>INCENTIVE (11) (9)+(10)</td> <td>RECOVERED (12) (4)+(8)+(11)</td>	AM DESCRIPTIONS	NUMBER (1)	:	PER PARTICIPANT (3)	COSTS (4)	(KWH/ PARTICIPANT) (5)	KWH/ HALF (6) (2)X(5)	(S/KWH) (7)	REVENUES (8) (6)X(7)	PG.19C) (9)	COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
Flucture I 1 2<	ENTIAL PROGRAMS	0				707			\$0	SO	\$0	20	80
P 340 351.51 567 66.450 80.002 59 90 90 P 1 0 90.00 90 90.000 90	· Fitness ed Energy Efficiency	1				896			\$13,826 52,027	95	\$3,654 \$0	\$3,654 \$671	\$90,553 \$5,623
International Internat	All Electric von-All Electric	34	24			267			0\$ \$			0\$	09 19
International 48 230 5446.05 521,411 1,145 283,350 80.03110 53,802 50 90 International 1 90 425 560,500 157 730,500 5003110 511,246 90	act Fluorescent Bulb Efficiency Heat Pump Resistance Heat												80 80
International Internat	Von Resistance Heat Efficiency Heat Pump	48				1,145							\$33,403
0 440 2,165 5,275,33 5/17,144 6/13 1,339,405 5,647,756 5/18,57	lion	6								\$11,2			
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	ied Energy Fitness TOTAL RESIDENTIAL PROGRAMS	89					2,883,218		\$89,76		1		
Indication Indicat													
Integration 0 <th< td=""><td>MERCIAL PROGRAMS</td><td></td><td>0</td><td></td><td></td><td></td><td>00</td><td></td><td></td><td></td><td></td><td></td><td>2002</td></th<>	MERCIAL PROGRAMS		0				00						2002
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S269,012 2,883,218 addr. row addr. row = <	TOTAL INDUSTRIAL PROGRAMS		0						1 CB0 7		\$3,6		
			37	587	\$269,0	12	2,883,2	18	1000		12		
	TOTAL COMPANY		111										
	Lost revenue and efficiency incentives a	re based on prospe	ctive values.	- of 06/30/2003.									

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 22 of 44

Registeringeringeringeringeringeringeringering	ICKY POWER COMPANY ATED SECTOR SURCHARGES FOR 3 PROGRAM 11 (2nd HALF)												
Norm Norm <th< td=""><td>CKY POWER COMPANY ATED SECTOR SURCHARGES FOR 3 PROGRAM 11 (2nd HALF)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>PAGE</td><td></td></th<>	CKY POWER COMPANY ATED SECTOR SURCHARGES FOR 3 PROGRAM 11 (2nd HALF)											PAGE	
New Non-	PROGRAM 11 (2nd HALF)											12B of	20
Instruction		NEW		TOTAL ESTIMATED PROGRAM	TOTAL ACTUAL	NET LOST	TOTAL	NET LOST	TOTAL NET *	EFFICIENCY	MAXIMIZING		ACTUAL COSTS TO BE
NUMBER NUMBER<		PARTICIPANT		COSTS PER	PROGRAM	REV/QTRS (KWH/ PARTICIPANT)	SAVINGS KWH/ HALF	(S/KWH)	REVENUES	(EX. C, PG.19C)	(5% of COSTS) (10)	INCENTIVE (11)	RECOVERED (12)
1 0	RAM DESCRIPTIONS	NUMBER (1)		(3)	(4) (1)X(3)	(5)		(2)				(9)+(10) \$0	(4)+(8)+(11)
1 1	DENTIAL PROGRAMS	0	0	\$0.00	0ġ	706	0	\$0.03112	De				
0 1	ted Energy Efficiency	87	481	\$1,147.46		896			\$13,408 \$2,111	\$08 \$908	\$4,991		\$118,228
0 0	All Electric Non-All Electric	46	25			0			\$0	0ŝ	\$0		0\$
1 0 9003114 <td>pact Fluorescent Bulb</td> <td>0</td> <td></td>	pact Fluorescent Bulb	0											
1 240 230 500	- Efficiency Heat Pump Resistance Heat					1,200				09 09			0\$
International International Sectional	Non Resistance Heat - Efficiency Heat Pump					1,144							\$32,981
1 94 460 554,150 1,806 57160 000310 55565 71,00 500	Mobile Home	4										\$11	\$ \$88,761
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		76				1,806							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	- Air Conditioner												5 \$308,757
	fied Energy Fitness	26		\$427							1		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	SMAGOODA (WITHDRIVER)	83		8	\$415,139		3,074,108		101,026				
Interfact Interfact <t< td=""><td>ו 10 אר אראומבוא וואר די גאמיני איינ</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	ו 10 אר אראומבוא וואר די גאמיני איינ												
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	MMERCIAL PROGRAMS		0										0
I 0	art Audit - Class 1 - Class 2							\$0.000					00
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	art Financing - Existing Building												
I 0 0 0 0 1	art Financing - New Building							10	69				
1 1	TOTAL COMMERCIAL PROGRAMS			0									
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Image: constraint state Sol (1)	nart Financing - General Dart Financing - Compressed Air System		0									\$0	
Emerand Emerand S35,707 S39,763 S,491 S44,174 \$415,139 1,307,4108 555,707 539,763 54,174 54,174 #======= =				0	69	0		0					
	TOTAL INDUSTRIAL PROGRAMS		IL It				3 074.1	08	\$95,7				
	TOTAL COMPANY			333	2415,13	1							
	I DIAL COMIT ANY												
	ale serviceocci receit-33. 1	- haced on prospi	active values.										

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 23 of 44

											0 1919-0	
KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR											PAGE 13A of	20
r roennam YEAR 12 (1st HAI E)	NEW	CUMULATIVE	TOTAL ESTIMATED	TOTAL ACTUAL	NET LOST	TOTAL	NET LOST	TOTAL NET •	EFFICIENCY	MAXIMIZING		TOTAL ACTUAL
	PARTICIPANT	PARTICIPANT	PROGRAM COSTS	PROGRAM	REV/QTRS	SAVINGS	REVENUE	LOST	INCENTIVE	INCENTIVE	TOTAL .	COSTS TO BE
PROGRAM DESCRIPTIONS	NUMBER (1)	NUMBER (2)	PER PARTICIPANT (3)	COSTS (4) (1)X(3)	(KWH/ PARTICIPANT) (5)	KWH/ HALF (6) (2)X(5)	(S/KWH) F	REVENUES (8) (6)X(7)	(EX. C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
RESIDENTIAL PROGRAMS Energy Fitness	0	0	\$0.00	20 80	707	0	\$0.03112	\$0 80	S0	\$0	80	20 20
Targeted Energy Efficiency - All Electric - Non-All Electric	128	295	\$1,022.27 \$86.48	\$130,851 \$2,508	896 277	264,320 31,855	\$0.04346 \$0.04362	\$11,487 \$1,390	\$0 \$572	\$6,543 \$0	\$6,543 \$572	\$148,881 \$4,470
Compact Fluorescent Bulb	0	0	\$0.00	so	0	0	s0.00000	S0	SO	80 80	\$0	\$0
High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat	00	00	\$0.00 \$0.00	80 80	1,200	00	\$0.03114 \$0.03116	\$0 80	<u>\$0</u>	\$0 \$0	\$0 \$0	\$0 \$0
High - Efficiency Heat Pump - Mobile Home	20	153	\$450.00	\$22,500	1,145	175,185	\$0.04346	\$7,614	\$3,960	SO	\$3,960	\$34,074
Mobile Home New Construction - Heat Pump	84	304	\$563.10 \$0.00	\$47,300 \$0	1,810	550,240 0	\$0.04348 \$0.04343	\$23,924 \$0	\$10,497 \$0	<u>\$0</u>	\$10,497 \$0	\$81,721 \$0
- Au Vouvoure. Modified Energy Fitness	515	1,605	\$381.00	\$196,214	613	983,865	\$0.04349	\$42,788	\$21,671	\$0	\$21,671	\$260,673
Case No 2006 - 00373, Dated December 14, 2006:												
HEAP - Kentucky Power Company's Information Technology Implementation Costs				\$58,968								558,968
- HEAP - KACA's Information Technology Implementation Costs				\$15,700								S15.700
TOTAL RESIDENTIAL PROGRAMS	806	2,472		S474,041 ========		2,005,465		\$87,203 =======	\$36,700	56,543	243,243	
COMMERCIAL PROGRAMS Smart Audit - Class 1		00			00	00	n/a	\$0 \$0	\$0 \$		\$0 \$0 \$0	80 80
- Class 2 Smart Financing - Existing Building			\$0.00 \$0.00	\$0 \$0	00		\$0.00000 \$0.00000					
rt Financing - New Bullding TOTAL COMMERCIAL PROGRAMS						0		\$0	\$0 80		\$0 ========	
		11 11 11 11 11										
INDUSTRIAL PROGRAMS - (w/Fst_Obt-Outs Removed)									So			
dit - Class 1 dit - Class 1		0		20 20			n/a n/a		20		S0 S0 S0	0 80
un - Vieus - lancing - General Annorad Air Svetern			0 \$0.00			00	\$0,00000 \$0,00000	80	20			
			10			0		SO	SO			
TOTAL INDUSTRIAL PROGRAMS			> 4					587 203		s6.543	3 S43,243	3 \$604,487
TOTAL COMPANY	806	6 2,472	0,11	54/4,U41 ========						11		
Lost revenue and efficiency incentives are based on prospective values.	n prospective value	S.										
imulative participants include a reduction for une or rticipants since 07/01/2005.	כמשמואה אמוזריאי	115 do ut vere								-	-	

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 24 of 44

Billion Signet services Image Service Service </th <th>Year 2007</th> <th></th>	Year 2007												
Image: Sec: <												Exhibit C	
Image: constraint of the	ESTIMATED SECTOR SURCHARGES FOR 3											13B of	20
Metric Description Description <thdescripion< th=""> <thdescription< th=""> <thde< td=""><td></td><td></td><td></td><td>TOTAL</td><td>TOTAI</td><td></td><td></td><td>NET</td><td>TOTAL</td><td></td><td></td><td></td><td>TOTAL</td></thde<></thdescription<></thdescripion<>				TOTAL	TOTAI			NET	TOTAL				TOTAL
Interfactor Interfactor Proposition	YEAR 12 (2nd Half)	NEW	CUMULATIVE	ESTIMATED	ACTUAL	NET LOST	TOTAL	LOST	NET *	EFFICIENCY	MAXIMIZING		ACTUAL
Number Numer Numer Numer <td></td> <td>PARTICIPANT</td> <td>PARTICIPANT</td> <td>PROGRAM COSTS</td> <td>PROGRAM</td> <td>REV/QTRS</td> <td>SAVINGS</td> <td>REVENUE</td> <td>LOST</td> <td>INCENTIVE</td> <td>INCENTIVE</td> <td>TOTAL *</td> <td>COSTS TO BE</td>		PARTICIPANT	PARTICIPANT	PROGRAM COSTS	PROGRAM	REV/QTRS	SAVINGS	REVENUE	LOST	INCENTIVE	INCENTIVE	TOTAL *	COSTS TO BE
Image: constraint of	SNOLEDIOCSEC	NUMBER	NUMBER	PER PARTICIPANT	COSTS	(KWH/ PARTICIPANT)	KWH/ HALF	(HWH)	REVENUES	(EX. C, PG.19C)	(5% of COSTS)	INCENTIVE	RECOVERED
1 1 1 1 1 1 2		(1)	(2)	(3)		(5)	(6) (2)X(5)	6	(8) (6)X(7)	(8)	(10) (4)X(5%)	(01)+(6)	(4)+(8)+(11)
1 1	RESIDENTIAL PROGRAMS Energy Fitness	0				706	0	\$0.03112	20 S	ŝo	SO	\$0	20
1 1 2	Targeted Energy Efficiency - All Electric	100				896 776	377,216		\$16,394 \$1,818	\$0 \$987	\$4,399 \$0	\$4,399 \$987	\$108,775 \$7,284
1 1	- Non-All Electric	20				0	0		so	\$0	80	SO	\$0
1 0	Compact Fluorescent Bulb												
Image: constant in the state in th	High - Efficiency Heat Pump - Resistance Heat - Nno Resistance Heat	00				1,200 446			\$0		80		
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1 123 446 551.94 371,200 1600 500,4343 533,469 516,120 50 516,120 50 516,120 50 516,120 50 516,120 500 500,100 500,	High - Effictency Heat Pump - Mobile Home	45				1,144	239,096		S10,391	\$3,564			
I 130 470 350,14 1.1.00									\$33.489				
Image: constraint of	- Heat Pump	129							ŝ				
$ \begin{array}{ $						612			\$56,239	\$20,409			
CGRAMIG 1 2335,601 2,221,352 2,212,352 2,212,352 2,212,352	Modified Energy Fitness	485			_								
Terrential meaning	TOTAL RESIDENTIAL PROGRAMS	808			\$355,501		2,721,352		100,0110				
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Individuality Inditex Individuality Individuality<													
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	COMMERCIAL PROGRAMS												
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I SO	Smart Financing - General Smart Financing - Compressed Air System		0										
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5355,501 2,721,352 \$118,331 \$41,080 94,089 943,473 = ========= ======== ======== ======== ======= = = ======== ======= ======= ======= ======= = = ======= ======= ======= ======= ====== = = = ======= ======= ======= ======= ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ====== ===== ===== ===== ===== ===== ====== ====== ====== ====== ====== ===== ===== ===== ===== ===== ===== ===== ===== ===== ===== ===== ===== ===== ===== ===== ===== ===== ===== ====== ====== ====== ===== ===== ===== ====== ===== =====	TOTAL INDUSTRIAL PROGRAMS			0									
	TOTAL COMPANY	1 1 80		0	S355,501		2,721,352		S118,331				
								11					
		a based on prospect	ive values										
w. Parlinearies Parlies 2019/12/2005.	Lost revenue and enclements include a reductio ** Criminative participants include a reductio	on for the cumulative	participants as c	1									
	*** Participants since 07/01/2005.												

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 25 of 44

\$614,969 S S S S 20 \$614,969 80 80 80 8 \$82,564 \$0 \$279,624 \$12,945 8 22 \$46,022 2 \$193,814 RECOVERED (12) (4)+(8)+(11) COSTS TO BE TOTAL 20 \$0 20 20 20 80 80 80 ß \$27,871 \$59,650 \$8,539 \$10,597 \$0 \$Q \$9,189 \$3,454 8 8 INCENTIVE (11) (9)+(10) TOTAL * Exhibit C PAGE 14A of 0\$ \$0 80808 8 \$0 88 80 ß 30 20 20 MAXIMIZING INCENTIVE (10) (4)X(5%) (5% of COSTS) \$0 \$59,650 80 80 80 80 80 80 \$Q \$Q \$Q \$27,871 \$59,650 \$8,539 \$9,189 \$3,454 ₿ 808 597 \$0 8 EFFICIENCY \$10, INCENTIVE (EX. C, PG.19C) 6 8 \$106,306 88888 \$19,467 \$0 \$49,414 \$9,583 \$23,005 \$4,837 \$0 Q S \$0 REVENUES (8) (6)X(7) TOTAL NET * LOST n/a \$0.00000 \$0.00000 n/a n/a \$0.00000 \$0.00000 \$0.04348 \$0.00000 \$0.00000 \$0.00000 \$0.04346 \$0.04349 \$0.04346 \$0.04345 \$0.00000 \$0.00000 (\$/KWH) (7) REVENUE NET 00 2,445,104 0 0000 447,720 0 2,445,104 ole 220,500 1,136,220 529,336 111,328 TOTAL ENERGY SAVINGS KWH/ HALF (6) (2)X(5) 0000 0000 (KWH/ PARTICIPANT) 861 435 ,016 568 0 00 875 0 NET LOST **REV/QTRS** \$0 \$449,013 \$0 20202 \$449,013 \$202,339 8 8 8 8 \$27,900 \$00 20 \$161,620 \$4,654 Ç; ទ្ឋ PROGRAM COSTS (4) (1)X(3) TOTAL \$52, \$0.00 \$0.00 \$0.00 PER PARTICIPANT (3) \$0.00 \$0.00 \$0.00 \$552.63 \$361.32 \$457.38 \$0.00 \$1,358.15 \$83.11 \$0.00 TOTAL ESTIMATED PROGRAM COSTS \$0.00 Lost revenue and efficiency incentives are based on prospective values.
 Cumulative participants include a reduction for the cumulative participants as of 06/30/2006.
 Participants since 07/01/2005. 00 4,101 0 2,612 4,101 0000 520 0 0 00 252 521 196 CUMULATIVE PARTICIPANT \$ NUMBER (2) 0 891 891 00 95 560 0 6 0 19 PARTICIPANT NUMBER NEW Ξ INDUSTRIAL PROGRAMS -(w/Est. Opt-Outs Removed) Smart Audit - Class 1 Smart Financing - General Smart Financing - Compressed Air System KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM TOTAL COMMERCIAL PROGRAMS TOTAL RESIDENTIAL PROGRAMS TOTAL INDUSTRIAL PROGRAMS Smart Financing - Existing Building Smart Financing - New Building : Mobile Home New Construction - Heat Pump COMMERCIAL PROGRAMS Smart Audit - Class 1 High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat High - Efficiency Heat Pump - Mobile Home Year 2008 PROGRAM DESCRIPTIONS RESIDENTIAL PROGRAMS Targeted Energy Efficiency - All Electric - Non-All Electric TOTAL COMPANY Compact Fluorescent Bulb Modified Energy Fitness - Class 2 - Air Conditioner YEAR 13 (1st HALF) Energy Fitness

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 26 of 44

KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM									-	-		
UCKY POWER COMPANY WATED SECTOR SURCHARGES FOR 3 R PROGRAM											PAGE	G
- PROGRAMM											14B of	TOTAL
YEAR 13 (2nd HALF)	and a second second second	CUMULATIVE	TOTAL ESTIMATED PROGRAM COSTS	TOTAL ACTUAL PROGRAM	NET LOST REV/QTRS	TOTAL ENERGY SAVINGS	NET LOST REVENUE	TOTAL NET • LOST	EFFICIENCY INCENTIVE	MAXIMIZING INCENTIVE	TOTAL *	ACTUAL COSTS TO BE
PROGRAM DESCRIFTIONS	NUMBER (1)		PER PARTICIPANT (3)	COSTS (4)	(KWH/ PARTICIPANT) (5)	KWH/ HALF (6) (2)X(5)	(1) (+////the	REVENUES (8) (6)X(7)	(EX. C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
RESIDENTIAL PROGRAMS	0	0	\$0.00	0\$ (c)v(1)	0		\$0.00000	\$0	0\$	0\$	80	\$0
Energy Flutess Targeted Energy Efficiency - All Flectific	68	545	\$991.21 \$87 50	\$88,218 \$1 750	1,016	553,720 126,664	\$0.04346 \$0.04345	\$24,065 \$5,504	\$6,873 \$1,234	88	\$6,873 \$1,234	\$119,156 \$8,488
- Non-All Electric	50				0	0	\$0.0000	0\$	0\$	0\$	0\$	0\$
Compact Fluorescent build High - Efficiency Heat Pump - Resistance Heat			\$0.00	0%	00	00	\$0.00000 \$0.00000	80	80	00 00 00 00 00 00 00 00 00 00 00 00 00	09 09 09	80
- Non Resistance Heat High - Efficiency Heat Pump	74	289	\$442.57	\$32,750	874	t 252,586	\$0.04346	\$10,977	\$10,359	80	\$10,359	\$54,086
- Mobile notice					860	471.280	0 \$0.04348	\$20,4	\$12,047	80	\$12,047	\$91,938
- Heat Pump	108	54	00.02	0\$							8,522	\$231,529
	UVV	2 793	3356.35	5 \$156,792	435	5 1,214,955	5 \$0.04349	\$52,838				
Modified Energy Fitness TOTAL RESIDENTIAL PROGRAMS	731			\$338,910		2,619,205		\$113,875	\$52,412	2 \$	552,412 == =======	
SMAGOOD INFORMATION						c		n/a \$1			0	
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imart Audit - Class 2		0			08	0	0 \$0.00000		20	80	08	00
Smart Financing - General		0 0	0 \$0.00		\$0	0						00
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TOTAL INDUSTRIAL PROGRAMS		0	0								\$0 \$52,412	12 \$505,197
Minocone	11		4,398	\$338,910	10	2,619,205	55	010/0110				
TOTAL COMPANY												
		ative values										

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 27 of 44

Year 2009 KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM												
				-							PAGE	00
								- 1 1			10 Act	TOTAL
	NEW	CUMULATIVE	AVERAGE ACTUAL PROGRAM	TOTAL ACTUAL	NET LOST	TOTAL NET ENERGY	LOST	LE N	EFFICIENCY	MAXIMIZING	TOTAL.	ACTUAL COSTS TO BE
	PARTICIPANT P	PARTICIPANT	COSTS	PROGRAM	REV/QTRS		KEVENUE	-CO31	rex. c.	(5% of		
PROGRAM DESCRIPTIONS	NUMBER (1)	NUMBER (2)	PER PARTICIPANT (3) (4)/(1)	COSTS (4)	(KWH/ PARTICIPANT) (5)	KWH/ HALF (6) (2)X(5)	(S/KWH) R (7)	REVENUES (8) (6)X(7)	PG.19C) (9)	COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	(12) (12) (4)+(8)+(11) (4)
RESIDENTIAL PROGRAMS	C	0	\$0.00	SO	0	0	\$0.00000	ŝ	20	0\$	80	00
gy Fitness					0.00		S0 04346	\$25,389	\$9,189	\$0	S9,189	\$160,737 \$8,600
Targeted Energy Efficiency - All Electric	119	575 -	** \$1,060.16	\$126,159 \$2,052	1,010	119,280	\$0.04352	\$5,191	\$1,357	00	Voc'le	SO
- Non-All Electric	0	0	\$0.00	so	0	0	\$0.00000	80	80	S	00	
Compact Fluorescent purp	0	0	00.02	\$0 80	00	00	\$0.00000 \$0.00000	80 80	80 80	S S S	80	\$0 80
- Non Resistance Heat	0	0	00.00				04360	S11.381	S8,539	so	\$8,539	\$47,320
High - Efficiency Heat Pump - Mobile Home	61	299	** \$449,18	\$27,400	875	CZ01,102	necto.ne			5	co 816	S79.14
Mobile Home New Construction	88	552	** \$552.84	\$48,650 \$48,650	861	475,272	\$0.04351 \$0.00000	\$20,679 \$0	\$9,816 \$0	80	OS OS	\$0
- Air Conditioner	0		5383.51		435	5 1,207,125	S0.04345	\$52,450	\$21,152	80	\$21,152	\$236,595
Modified Energy Fitness	425	c//'7							100 CF3	08	\$13,387	\$22,509
High Efficiency Heat Pump	28	7	*** \$305.36	5 \$8,550	1,879	9 13,153 1 4,816	\$0.04349 \$0.04353	\$210 \$210	0\$	\$1,350	\$1,350	\$28,56
- Resistance mean neprecement - Heat Pump Replacement	61	16	40					SO	ŝ	SO	SO	\$8,139
Energy Education for Student Program (NEED)	0	D				10 708	SD 04370	\$599	\$4,621	\$0	\$4,621	S10,624
Community Outreach Program (CFL)	926	149	*** \$5.84			76 76		C14B A71	S68.061	\$1,350	\$69,411	\$602,229
TOTAL RESIDENTIAL PROGRAMS	1,730	4,583		S416,347		2,679,179		x=====================================				
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Smart Audit - Class 1		000	20.00		\$0		0 \$0.00000	20 %				
- Class 2 smart Financing - Existing Building					0							
Smart Financing - New Building						0				SO SO		
TOTAL COMMERCIAL PROGRAMS		0 0		22	2		11	100				
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(w/Est. Opt-Outs Removed)		0			50	0 0						
Smart Audit - Class 1 Smart Audit - Class 2			0 0 SO.	s0.00 s0.00	50 S0	0	0 \$0.00000	SO SO		202	SO SO	
Smart Financing - General					\$0	0					05	
Smart Financing - Compressed Air System			10		so		0	\$0				
TOTAL INDUSTRIAL PROGRAMS			2	1 5446 347		2.679,179	6	\$116,471	S68,(569,411	
TOTAL COMPANY	2'1						Lu an					

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 28 of 44

Cumulative participants include a reduction for the cumulative participants as of 07/01/2009. (High Efficiency Heat Pump, Energy Edu Cumulative participants include a reduction for the cumulative participants as of 01/01/2009 (High Efficiency Heat Pump, Energy Edu

NEW AUGRAGE ACTIVIAL ACCEPTAGE NUTLICASE ACTIVIAL COSTS NUTLICASE ACTIVICASE A
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KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 29 of 44

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KENTUCKY POWER COMPANY												PAGE 16A of		20
VEAR PROGRAM	NEW	CUMULATIVE	AVEI ACT PROC	AVERAGE TO ACTUAL AC PROGRAM COSTS PRO	TOTAL ACTUAL PROGRAM	NET LOST REV/QTRS	TOTAL ENERGY SAVINGS	NET LOST REVENUE	TOTAL NET		MAXIMIZING	TOTAL		TOTAL ACTUAL COSTS TO BE
PROGRAM DESCRIPTIONS	NUMBER (1)		PARTI		COSTS F	(KWH/ PARTICIPANT) (5)	KWH/ QTR (6) (2)X(5)	(S/KWH)	REVENUES (8) (6)X(7)	(EX. C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)		RECOVERED (12) (4)+(8)+(11) S0
RESIDENTIAL PROGRAMS Energy Filness	0	0		\$0.00	80	0		0 20.0000		S OS	80		00000	2047 931
Targeted Energy Efficiency - All Electric	174	4 720	::	\$1,161.51 \$114.10	\$202,103 \$3,537	1,016	731,520 134,616		\$31,7 ⁵ \$5,8	\$13,4	12	\$13 \$10 \$10 \$10 \$13	\$13,436 \$1,912 \$0	S11,307 S11,307 S0
- Non-All Elevero Compact Fluorescent Bulb		0		\$0.00	S	0		0 20.0000			ne		05	S
High - Elficiency Heat Pump - Resistance Heat		00		\$0.00 \$0.00	<u>80</u>	00		0 \$0.00000 0 \$0.00000		80 80 80	80.80	808	05	80
- Noti Resistance noor High - Efficiency Heat Pump - Mohile Home	6	97 416	:	\$422.16	\$40,950	875	364,000	00 S0.04350	50 \$15,834	34 \$13,579	62	64	\$13,579	\$70,363
Mobile Home New Construction - Heat Pump	F	115 621 0 0	:	\$527.83 \$0.00	\$60,700 \$0	88	1 534,681	81 \$0.04351 0 \$0.00000			162 \$0	S 0 0 0	\$4,462 \$0 \$0	\$88,420 \$0 \$273,975
- Air Conditioner Modified Energy Fitness	2(501 2,762	:	\$392.89	\$196,836	435	5 1,201,470	170 \$0.04345	345 S52,204					930 059
High Efficiency Heat Pump - Resistance Heat Replacement		97 135 272 348		\$450.00 \$416.73	\$43,650 \$113,350	1,879	9 253,665 11 104,748	565 \$0.04349 748 \$0.04353	349 \$11,032 353 \$4,560	63			\$5,668	\$123,578 \$123,578 \$31,414
- Heat Pump Replacement	4			\$50.99	\$24,881		73 94,827				\$2,430 \$43 464	0° 08	\$13,194	\$73,606
Community Suuceron for Science (CFL)	2,6	2,644 4,482		\$16.10	\$42,564		91 407,862	862 \$0.04376			1		\$125,992	\$1,021,058
TOTAL RESIDENTIAL PROGRAMS	4,419	4,419 11,020			\$728,571 ======		3,827,389	389	C64'001 ¢		Ĩ			
MMERCIAL PROGRAMS				00.02	08		0		n/a	S0	80	\$0 \$0	20 20	\$0 \$0
lart Audit - Class 1 - Class 2		000		\$0.00	80	0	00	0 20.00	\$0.00000 \$0.00000	0,00	\$0 \$0	<u>\$0</u>	\$0 \$0	
Smart Financing - Existing Building Smart Financing - New Building		001		\$0.00	3	010	0		000		\$0	000	SO	S0
TOTAL COMMERCIAL PROGRAMS		0	0		08						a 1 1			
INDUSTRIAL PROGRAMS -							0		n/a	\$0	05	\$00 \$0	\$0	
mart Audit - Class 1 mart Audit - Class 2		000	000	\$0.00 \$0.00		\$0 \$0	00	0 80.0	n/a \$0.00000	20 20	ne OS OS	\$0 \$0	so	
Smart Financing - General Smart Financing - Compressed Air System		001		\$0.00		S0 50	0					1 00		
TOTAL INDUSTRIAL PROGRAMS		ii	0		000 274	00	3.827	3.827,389	=== \$16	s166,495 S12	S120,324	\$5,668	\$125,992	\$1,021,058
TOTAL COMPANY	,	4,419 11,0	020						1233					
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KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 30 of 44

Cumulative participants include a reduction for the cumulative participants as of 01/01/2007,
 Cumulative participants include a reduction for the cumulative participants as of 01/01/2009 (High Efficiency Heat Pump, Energy Education

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Network Avecacie Voltation Avecacie Montalies Mo	VER COMPANY CTOR SURCHARGES FOR 3											16B-1 of	20
Image: Image:	W			AVERAGE	TOTAL	NET LOST	TOTAL	NET LOST	TOTAL NET •	EFFICIENCY	MAXIMIZING		ACTUAL
	HALF)	PARTICIPANT	PARTICIPANT	PROGRAM COSTS	PROGRAM	REV/QTRS	ENERGY SAVINGS	REVENUE	LOST	INCENTIVE	INCENTIVE	TOTAL *	COSTS TO BE
= 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 =	SCRIPTIONS	NUMBER	NUMBER (2)	PER PARTICIPANT (3)		(KWH/ PARTICIPANT) (5)		(S/KWH)	REVENUES (8) (6)X(7)	(EX. C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
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P G69 2,303 5,317,39 5271,857 6435 1,60,000 500,000 <td>tioner</td> <td></td> <td></td> <td>S0.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$330,183</td>	tioner			S0.0									\$330,183
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	leating			~			A 275.07	1 0	\$245,79				
	TOTAL RESIDENTIAL PROGRAMS	4,7			\$700.3	315	4,4,0,01						

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 31 of 44

KENTUCKY POWER COMPANY ESTINATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM YEAR 15 (2nd HALF) NEW CUMU PROGRAM DESCRIPTIONS NUMBER NUM PROGRAM DESCRIPTIONS (1) PARTICIPANT PARTIC COMMERCIAL PROGRAMS 00 Smart Financing - Existing Building 0 Smart Financing - Existing Building 0 Smart Financing - New Building 0	CUMULATIVE PARTICIPANT NUMBER (2) 0 0 0 0 0 0 0	AVERAGE ACTUAL PROGRAM COSTS F COSTS F COSTS F (4)/(1)	5	NET LOST	TOTAL					16B-2 of	20
PARTICIPANT NUMBER NUMBER (1) (1) 0 0				NET LOST	TOTAL						
LF) NEW RIPTIONS NUMBER CGRAMS NUMBER CGRAMS 0 CGCRAMS 0 CGRAMS				NET LOST	TOTAL	NET	TOTAL				TOTAL
TIONS NUMBER (1) PARTICIPANT PARTICIPANT (1) (1) SRAMS 0 SRAMS 0 SRAMS 0 SRAMS 0 SRAMS 0 SRAMS						LOST	NET •	EFFICIENCY	MAXIMIZING		ACTORE
PARTICIPANT NUMBER (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)				REVIGTRS	ENERGY SAVINGS	REVENUE	LOST	INCENTIVE	INCENTIVE	TOTAL *	COSTS TO BE
NUMBER (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	000000	ARTICIPANT (CIPANT (3) (4) / (1) \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$		THOMH	KWH/			(EX. C,	(5% of	INCENTIVE	RECOVERED
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		(3) (4) / (1) \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	2	PARTICIPANT)	QTRs	(S/KWH)	REVENUES (8)	PG.19C) (9)	(10)	(11)	(12) (A)+(B)+(11)
	000000	\$0.00 \$0.000 \$0.0000 \$0.00000 \$0.0000 \$0.00000 \$0.0000 \$0.00000 \$0.00000 \$0.00000 \$0.00000 \$0.000000 \$0.00000 \$0.0000000 \$0.00000000	(4)	(6)	(2)X(5)		(6)X(7)		(4)X(5%)	(01)+(8)	
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- Heat Pump Replacement											
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- All Containance	0	00.0210									
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Smart Audit - Class 2	0	\$0.00	so			000000	\$0				0
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Smart Financing - Compressed Air System							\$0		\$0		
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TOTAL COMPANY											
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KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 32 of 44

Year 2011											Exhibit C	
KENTUCKY POWER COMPANY											PAGE 17A-1 of	20
ESTIMATED SECTOR SUCCESSION	NEW	CUMULATIVE	AVERAGE ACTUAL PROGRAM COSTS	TOTAL ACTUAL PROGRAM	NET LOST REV/DTRS	TOTAL ENERGY SAVINGS	NET LOST REVENUE	TOTAL NET • LOST	EFFICIENCY INCENTIVE	MAXIMIZING	TOTAL *	TOTAL ACTUAL COSTS TO BE
PROGRAM DESCRIPTIONS	PARTICIPANT NUMBER (1)		PER PARTICIPANT (3) (4) / (1)		(KWH/ PARTICIPANT) (5)	KWH/ QTR (5) (2)X(5)	(S/KWH)	REVENUES (8) (6)X(7)	(EX. C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11) S0
RESIDENTIAL PROGRAMS Energy Fitness		0	\$0.00	80		0	\$0.00000	\$0 540 111	\$0 \$16.253	su su su	516,253	\$141,488
Targeted Energy Efficiency - All Electric - Non-All Electric	0110	0 814 6 208	\$692.04 \$140.17 \$0.00	\$76.124 \$841 \$0	1,050	854,700 93,184 0	\$0.05746 \$0.05746 \$0.00000	\$5,354 \$5,354 \$0	\$0 \$0	\$42 \$0	\$42 \$0	\$6,23/ \$0
Compact Fluorescent Bulb High - Efficiency Heat Pump - Resistance Heat - Anon Dravistance Heat		00	\$0.00 \$0.00	\$0 \$0	00	00	\$0.00000 \$0.00000	\$0 \$0	80			\$0 \$0
High - Efficiency Heat Pump		94 442	\$502.11	1 \$47,198	1,403	620,126	\$0.05750	\$35,657	\$27,615	20	5	
- Mobile Home Mobile Home New Construction - Heat Pump - Air Conditioner		68 624 0 0 0	\$680.15 \$0.00 \$346.52	\$46,2 \$223,5	50 731 50 0 0 03 283	456,144 0 860,037	s0.05745 \$0.00000 \$0.05752	\$26,205 \$0 \$49,469	\$6,393 \$0 \$9,456	80 80 80 80	\$6,393 59,456 59,456	\$78,848 \$0 \$282,428 \$282,428
Modified Energy Fitness High Efficiency Heat Pump - Resistance Heat Replacement - Har Pump Replacement		645 5,059 154 328 212 608	** \$452.59			N 40		\$13,725 \$32,268 \$32,268	\$12,030 \$25,033 \$1,613		S0 \$12,030 \$0 \$25,033 \$0 \$1,613	\$95,454 \$148,301 \$18,827
Energy Education for Student Program (NEED) Community Outreach Program (CFL)	2,5	938 2,034 518 5,442	** \$12.40	40 \$11,635 33 \$50,179	35 48 79 50	97,632	\$0.05/14 \$0.05768					575,745
Residential Efficient Products Compact Flourescent Lamp (CFL) Specially Bulbs		77.764 20,801 0 0 0	\$1.82 \$0.00 \$0.00	S14		17 353,617 15 353,617 21 00 21 0	7 \$0.05818 0 \$0.05793 0 \$0.05854	\$20,573 \$0 \$0	\$24,1		50 \$24,107 \$0 \$24,207 \$0 \$20	
LED Lights HVAC Diagnostic & Tune-Up Air Conditioner Heat Pump		64 19 290 148	\$50.00 \$72.24	00 \$3,200 24 \$20,950	200 155 350 371	5 2,945 1 54,908		S3,1	83.21		\$33.3	4 S3,453 0 \$27,407 0 \$27,407
Residential Load Management (Pilot Program) - Air Conditioner - Vater Heating		00	0 0	\$0.00 \$0.00	\$0 \$0	00	0 \$0,00000		\$135,7		\$0 \$0 \$42 \$135,797	S
TOTAL RESIDENTIAL PROGRAMS	82	82,863 34,507		S782,656	656	4,465,361		202,002,0				

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No 22 Page 33 of 44

Year 2011												Exhibit C PAGE 17A-2 of	20	
KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM			AVERAGE	TOTAL		NET LOST	TOTAL	NET LOST	TOTAL NET *	EFFICIENCY	MAXIMIZING	TOTAL *	TOTAL ACTUAL COSTS TO BE	
YEAR 16 (1st HALF)	PARTICIPANT		PROGRAM COSTS PER	M PROGRAM NUT COSTS		REV/QTRS (KWH/ (KWH/ PARTICIPANT)	S = ~	REVENUE (S/KWH)	LOST REVENUES	INCENTIVE (EX. C, PG.19C) (9)	(10)	INCENTIVE (11)		0
PROGRAM DESCRIPTIONS	NUMBER (1)	NUMBER (2)	(3) (4) / (1)			(2)	(6) (2)X(5)	(/) n/a	(6)X(7)		(4)X(5%)	(9)+(10)	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0 \$0
COMMERCIAL PROGRAMS Smart Audit - Class 1 - Class 2 - Class 2				\$0.00 \$0.00 \$0.00	\$0 \$0 \$0	0000	000	\$0.00000 \$0.00000	80 80 80	808		\$20 \$20	0.03	808
Smart Financing - Extantly externing Smart Financing - New Bulding Commercia A/C & Heat Pump Program		7 0 0			\$300 \$3,850	140 558	2,232	\$0.06482 \$0.06482	\$0 \$145	8		so s172 s0 s872		\$301 \$4,867
- Har Durantons - Heat - Heat - Heat - Heat - Heat - Hurb Reparement - HAAC - Hard - Jup - Art Conditioner - Art Conditioner		t 0 0 8			\$0 \$1,300	343 818	6,544	\$0.06480 \$0.06476	\$424 \$424	8	57 322	\$0 \$5		\$7 \$2,256
- Hear Pump Commercial Load Management (Pilot Program) - Air Conditioner - Water Heating				\$0.00 \$0.00 \$0.00	\$0 \$0	000		0 \$0.00000 0 \$0.00000 0 \$0.06603			20 20 20 20		50 50 50 51 412	\$0 \$0 \$0 \$0 \$7,431
Commercial Incentive TOTAL COMMERCIAL PROGRAMS	32				\$5,450		8,776		\$569	59 \$1,412		11		
NDUSTRIAL PROGRAMS - (wEst. Opt-Outs Removed) Smart Audit - Class 1 Smart Audit - Class 2 Smart Financing - General		0000	0000	\$0.00 \$0.00 \$0.00 \$0.00	\$0 \$0 \$0		000	0 n/a 0 \$0.00000 0 \$0.00000		22 22 22 22 22 22 22 22 22 22 22 22 22	so so so so so so so so so so so so so s	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$		8 8 8 8
Smart Financing - Compressed Air System TOTAL INDUSTRIAL PROGRAMS TOTAL COMPANY		0 00 ==================================			\$0 \$788,106		4,474,137	37	S257,531					51,182,846

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 34 of 44

Year 2011											Exhibit C PAGE	
KENTUCKY POWER COMPANY											17B-1 of	20
YEAR PROGRAM			AVERAGE	TOTAL	NFT LOST	TOTAL	NET LOST	TOTAL NET *	EFFICIENCY	MAXIMIZING		TUTAL
YEAR 16 (2nd HALF)	NEW	CUMULATIVE PARTICIPANT	PROGRAM COSTS	and the second sec		ENERGY SAVINGS	REVENUE	LOST	INCENTIVE	INCENTIVE	TOTAL *	COSTS TO BE
PROGRAM DESCRIPTIONS	NUMBER (1)		PER PARTICIPANT (3) (4) (1)	T COSTS (4)	(KWH/ PARTICIPANT) (5)	KWHI QTRs (5) (2)X(5)	(S/KWH) (7)	REVENUES (8) (6)X(7)	(EX. C, PG.19C) (9)	(5% 01 (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
RESIDENTIAL PROGRAMS		0	\$0.00	0\$	0	0	\$0.00000	S	SO	S	so	ne
Energy Fitness Targeted Energy Efficiency All Elector	141		\$1,428.37 \$1,428.37	7 \$201,400 52 629	0 526 9 224	404,494	\$0.05749 \$0.05746	\$23,254 \$2,510	\$20,833 \$0	\$0 \$131	\$20,833 \$131	\$245,487 \$5,270
- All Electric - Non-All Electric	3	23 195 0 0	S0.00				\$0.00000	80	SO	80	\$0	80
Compact Fluorescent Build High - Efficiency Heat Pump Poststance Heat			00.00 00.08		200 800	00	s0.00000 \$0.00000	\$0 \$0	80	\$0 \$0	\$0 \$0	808
- Non Resistance Heat High - Efficiency Heat Pump		0 114 552	S417.85	S47,6	35 702	2 387,504	\$0.05750	\$22,281	\$33,491	SO	\$33,491	\$103,407
- Mobile Home Mobile Home New Construction			\$500.38	S46,0	39	220,09	5 \$0.05749	\$12,653 \$0	\$8,649 \$0	\$0 80	\$8,649 \$0	\$67,337 \$0
- Heat Pump - Air Conditioner		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	\$0.00 \$397.49	\$221,0	14	476,26		\$27,4	S8,151	0\$	\$8,151	\$256,574
Modified Energy Fitness	2									s0		\$77,721 \$131,326
High Efficiency Heat Pump - Resistance Heat Replacement - Heat Pump Replacement		121 483 194 678	** \$480.50 ** \$466.22			461 312,558	8 \$0.05750	\$17,972 54,669			522,500	
Energy Education for Student Program (NEED)	2	958 3,383 2.397 3,845	** \$12 ** \$33	\$12.90 \$12,361 \$33.89 \$9,335		26 99,970			3 \$9,396	80	29,396	
Community Outreact Program (2012) Residential Efficient Products		200 00 015		3.06 \$170,927	726	8 225,720		8 \$13,132 50 \$0	S17,3	80 \$0	\$17,3	301.397 526 526 54135
- Compact Flourescent Lamp (CFL) - Specialty Bulbs	<u>6</u>	0 0 0		<u>\$0.00</u> \$0.00 \$1,	\$26 \$1,125	10	0 50.05854 0 50.05854			<u>so</u>	20	
- LEU Liguis HVAC Diagnostic & Tune-Up - Air Conditioner - Heat Pump		168 101 440 178		\$142.19 \$23, \$118.61 \$52,	\$23,888 \$52,188	7,878 185 32,930	78 \$0.05749 30 \$0.05749	9 \$453 9 \$1,893	\$2 \$5,0		\$5,0 \$5,0	7 \$24,561 7 \$550,088 6 \$551,749
Residential Load Management (Pilot Program)		6	\$8,624.83		\$51,749 51,749	00	0 \$0.00000		\$0 \$0	\$ \$0 \$	S0	so s51,749
- Air Conditioner - Water Heating		4		i i	(143 637	2,468,584		\$142,127	27 \$137,094	94 \$131	31 \$137,225	5 \$1,319,989
TOTAL RESIDENTIAL PROGRAMS	61	61,142 42,358		1,040,037			13	12222				

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 35 of 44

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$												() : : :	
												Exhibit C	
	KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3											PAGE 17B-2 of	20
Image: constraint of the properties of the properis of the properise of the properties of the properties of the pro	YEAR PROGRAM			AVERAGE	TOTAL	NET LOST	TOTAI	NET	TOTAL NET *	EFFICIENCY	MAXIMIZING		TOTAL ESTIMATED
	YEAR 16 (2nd HALF)	PARTICIPANT	CUMULATIVE PARTICIPANT	PROGRAM	PROGRAM	REVIGTRS	ENERGY SAVINGS	REVENUE	LOST	INCENTIVE	INCENTIVE	TOTAL *	COSTS TO BE
	PROGRAM DESCRIPTIONS	NUMBER	NUMBER	PER PARTICIPANT	1	(KWH/ PARTICIPANT)	KWH/ QTRs (6)	(S/KWH)	REVENUES (8)	(EX. C, PG.19C) (9)	(5% of COSTS) (10)	INCENTIVE (11)	RECOVERED (12)
Gents I 0 <td></td> <td>(1)</td> <td>(2)</td> <td>(4) / (1)</td> <td>(4)</td> <td>12)</td> <td>(2)X(5)</td> <td></td> <td>(6)X(7)</td> <td></td> <td>(4)X(5%)</td> <td>(9)+(10)</td> <td>(4)+(8)+(11)</td>		(1)	(2)	(4) / (1)	(4)	12)	(2)X(5)		(6)X(7)		(4)X(5%)	(9)+(10)	(4)+(8)+(11)
Highling Image	COMMERCIAL PROGRAMS			00.0%		0	0	n/a	\$0	\$0			
Imm 0 0 500 50 000 50 <	Smart Audit - Class 1			\$0.00		0	0	n/a	SO	<u>so</u>			De US
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	- Class Z Smart Financino - Existing Building			\$0.00		0	00	\$0.00000	80	0.5			-
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Smart Financing - New Building	0		\$0.00	20		5	00000.00	2				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$										č			\$R 113
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Commercial A/C & Heat Pump Program			\$4,053.00	\$8,106		71	\$0.07447	\$5 244	25			
Image: light of light program (light program) Image: light program (light program (light program) Image: light program (light program) I	- Heat Pump Replacement			\$1,876.33	\$11,258		RCC	20.07430	5				
4 301 512 510 301 420 301	1 N.A.C. Disconstice & Turned In									9063			
		45		\$223.56					Ú	50 601		62	\$19,768
1 0	- All Containers	38		\$178.81						100'20			
0 0													
	Commercial Load Management (Pilot Program)			SO DO				1		\$0			101,151 27,157
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	- Air Conditioner			\$0.00						80			
	- Water Heating								CEED	SA7 857			\$295,728
	Commercial Incentive	18	2	S14,017.44	_				7000	2001260			
CIAL PROGRAMS Instant					S311 787		32.537		\$2,423				
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	TOTAL COMMERCIAL PROGRAMS												
$ \frac{\text{AMS}}{\text{Cubic Removed}} = \left(\begin{array}{c c c c c c c c c c c c c c c c c c c $													
O-Udis Removed) ()<	INDUSTRIAL PROGRAMS -												
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	(w/Est. Opt-Outs Removed)			10 03									
1 0 0 00000 50 00 500000 50 <th< td=""><td>Smart Audit - Class 1</td><td></td><td></td><td>S0.00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>00</td></th<>	Smart Audit - Class 1			S0.00									00
1 0 0 00 00 50.0000 5	Smart Audit - Class 2			\$0.00									
Image: Constraint con	Smart Financing - Getietal		0	\$0.00									
0 50 0						-1							0s
	TOTAL INDUSTRIAL PROGRAMS		0		80								
			11				1 0 501 101		1 S144 550				\$
	TOTAL COMPANY	61,30			\$1,352,424	+	171,100,2						
						1							

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No 22 Page 36 of 44

								-				
Year 2012									-		Exhibit C	
TUCKY POWER COMPANY											PAGE 18A-1 of	20
YEAR PROGRAM			AVERAGE	TOTAL	NET LOST	TOTAL	NET LOST	TOTAL NET *	EFFICIENCY	MAXIMIZING		TOTAL ESTIMATED
YEAR 17 (1st QTR)	NEW PARTICIPANT	CUMULATIVE PARTICIPANT	PROGRAM COSTS	PROGRAM	REV/QTRS	> 0	REVENUE	LOST	INCENTIVE	INCENTIVE	TOTAL *	COSTS TO BE
PROGRAM DESCRIPTIONS	NUMBER (1)		PER PARTICIPANT (3)	r COSTS (4)	(KWH/ PARTICIPANT) (5)	KWH/ QTRs (6) (2)X(5)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	REVENUES (8) (6)X(7)	(EX. C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
RESIDENTIAL PROGRAMS		0	\$0.00	\$0	0	0	\$0.00000	80	80	ŝ	SO	80
Targeted Energy Efficiency - All Electric		65 865 5 161	\$1,019.35 \$70.00	5 \$66,258 0 \$350	491 218	424,715 35,098	\$0.05749 \$0.05746	\$24,417 \$2,017	\$6,033 \$464	80	\$6,033 \$464 \$	\$96,708 \$2,831 \$0
- Non-All Electric Commact Fluorescent Bulb		0	\$0.00	\$0	0	0	\$0.00000	D\$	80	08	00	
High - Efficiency Heat Pump - Resistance Heat		00	\$0.00	20 20 00	00	00	\$0.00000 \$0.00000	\$0	\$0	<u>so</u>	\$0 \$0	80
High - Efficiency Heat Pump		38 615	\$450.00	0 \$17,100	0 646	397,290	\$0.05750	\$22,844	\$8,997	so	\$8,997	\$48,941
- Moule Flome New Construction		34 580	\$551.32	\$18,7	420	243,600	\$0.05749 \$0.00000	\$14,005 \$0	\$2,821 \$0	80 80	\$2,821 \$0	\$35,571 \$0
- Heat Pump - Air Conditioner		0 0 290 3,235	\$0.00	33 \$103,192	10	527,30		\$30,357	S1,847	09	\$1,847	\$135,396
Modified Erheigy Finitess High Efficiency Heat Pump - Resistance Heat Replacement		71 342 110 530	** \$450.00 ** \$450.00	00 \$31,950 00 \$49,500	00 336 425	5 114,912 5 225,250	s0.05745 \$0.05750	05	0,00		\$16,099 \$24,941 \$24,941	\$54,651 \$87,393 \$18,483
- Heat Pump Replacement Energy Education for Student Program (NEED)		600 2,196 280 2,368	** \$15.85 ** \$12.19	85 \$9,510 19 \$3,413	10 13 62 62	6 122,976 2 146,816	s s0.05750 s s0.05765	\$7,071 \$8,464	\$1,902 \$1,336	s0 80		
Community Outreautrogram	29.5	29.988 13,813		\$79,9		8 110,504 7 0	4 \$0.05818 0 \$0.05793	\$6,429 \$0	\$9,2	96 50 50	59,296 59,296 50	\$95,722 50 50 50
- Compact Hourescent Lamp (or E) - Specially Bulbs - LED Lights		00		\$0.00 \$0.00	SO 1			OS .		80 80		
HVAC Diagnostic & Tune-Up - Air Conditioner - Heat Pump		25 11 125 114	\$135.	.56 S3,389 .55 \$16,944		78 858 185 21,090	8 \$0.05749 0 \$0.05749	\$49 \$1,212	533 51,423		\$1,4	3 33,4/1 3 519,5/9 536,635
Residential Load Management (Pilot Program) - Air Conditioner		29 10	51,263.28 51,263.28 51,763.78	3.28 \$36,635 2.28 \$36,635	355	00	0 \$0.00000	S0 S0		\$0 \$0	80 80	
- Water Healing		1			18	2,370,414	4	\$136,419	9 S75,192		so \$75,192	2 \$685,229
TOTAL RESIDENTIAL PROGRAMS	31,689	31,689 24,850			1		11					

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No 22 Page 37 of 44

KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3 YEAR PROGRAM											Exhibit C PAGE	
AI EU SECION SONO PROGRAM											18A-2 of	20
				102.02			NET	TOTAL		CINIZINIC AN		TOTAL ESTIMATED
VEAD 17 (1st OTR)	NEW	CUMULATIVE	ESTIMATED BDCCPAM	ESTIMATED	NET LOST	TOTAL ENERGY	LOST	NET *	EFFICIENCY	INCENTIVE	TOTAL .	COSTS TO BE
	PARTICIPANT	PARTICIPANT	COSTS	PROGRAM	REV/QTRS		REVENUE	FOSI	JEX C	(5% of		
	NUMBER	NUMBER	PER PARTICIPANT	8	(KWH/ PARTICIPANT)		(S/KWH)	REVENUES (8)	PG.19C)	COSTS) (10)	INCENTIVE (11) (01+(10)	RECOVERED (12) (4)+(8)+(11)
PROGRAM DESCRIPTIONS	(1)	(2)	(4) / (1)	(4)	61	(2)X(5)		(6)X(7)		(0/C)X(4)		
0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					c	0	n/a	so	\$0	SO SO	20	SO
COMMERCIAL PROGRAMS	0	0	\$0.00	00			n/a	So	20	80	SO	sc
Smart Audut - Grass 1	0	0 0	0.04				\$0.00000	SU SU	05	SO	SO	sc
Smart Financing - Existing Building	00		\$0.00		0	0	\$0,00000	2				
							TAATO OO	05	50	\$0	ŝ	50 20
Commercial A/C & Heat Pump Program	0	0	\$0.00	50 SO	71	837	\$0.07430	562 S62	\$465	SO	\$465	27,15
- Air Conditioner Neplacement	8		5841.13									C,
								SO	SO	\$0		1 62
HVAC Diagnostic & Tune-Up - Air Conditioner	10	0 9	#DIV/0! \$135.58	0 \$1,627 8 \$1,627	410	2,460	\$0.07429	\$183	\$355	ŝ	0000	AF1.3
- Heat Pump								0	05		\$0	\$1,263
Commercial Load Management (Pilot Program)	-	0	\$1,263.00	0 \$1,263		00	\$0,00000 \$0,00000	205	205	S		
- Air Conditioner			S1,263.(000 000	SO	\$22,820	\$409,779
- Watel meaning			C10 E02 R0	3381.344	4 5,750	0 74,750	\$0.07512	\$5,615	070'770			
Commercial Incentive	36	2			-	10.047		\$5.860	\$23,640			5421,/2b
	g	22		\$392,226	9	18,041						
TOTAL COMMERCIAL PROGRAMS												
OW COOCE												
(NDUS I RIAL PROGRAM - (W/Est. Opt-Outs Removed)					0			SO	De OS		SO SO	S0
Smart Audit - Class 1		000		20.00	SO	0	0 00000					0
Smart Audit - Class 2					00							
Smart Financing - General					00							
Smart Financing - Compressed Air System					-			so				
011404		0			\$0				11			67
TOTAL INDUSTRIAL PROGRAMS		1		ALC TOOL I		2 448.461		\$142,279				
TOTAL COMBANY	31,747			4440'CORC	44							
					CELU			dutroach	Drootam (CFL)).			

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 38 of 44

KENTUCKY POWER COMPANY ESTIMATED SECTOR SURCHARGES FOR 3		-										
ESTIMATED SECTOR SURCHARGES FOR 3											Exhibit C	
VEAR PROGRAM											PAGE 18B-1 of	20
VEAP 17 (2nd 3rd & dth OTRs)	NEW	CUMULATIVE	AVERAGE ESTIMATED	TOTAL ESTIMATED	NET LOST	TOTAL	NET LOST	TOTAL NET *	EFFICIENCY	MAXIMIZING		TOTAL ESTIMATED
	PARTICIPANT	PARTICIPANT	PROGRAM COSTS	PROGRAM	REVIQTRS	ENERGY SAVINGS	REVENUE	LOST	INCENTIVE	INCENTIVE	TOTAL *	COSTS TO BE
PROGRAM DESCRIPTIONS	NUMBER (1)	NUMBER (2)	PER PARTICIPANT (3)	COSTS (4)	(KWH/ PARTICIPANT) (5)	KWH/ QTRs (6)	(S/KWH) (7)	REVENUES (8)	(EX. C, PG.19C) (9)	(5% of COSTS) (10) (4)X(5%)	INCENTIVE (11) (9)+(10)	RECOVERED (12) (4)+(8)+(11)
RESIDENTIAL PROGRAMS Energy Fitness	0	0	(4) / (1) \$0.00	so	0	0	\$0.0000	1000 SO	\$0	\$0	\$0	\$0
Targeted Energy Efficiency - All Elector - All Elector	325	939	\$1,019.21 \$71.63	\$331,242 \$2,149	1,471	1,381,269 118,555	\$0.05749 \$0.05746	\$79,409 \$6,812	\$30,163 \$2,784	\$0 \$0	\$30,163 \$2,784	\$440,814 \$11,745
Compact Fluorescent Bulb	0	O	\$0.00	\$0	0	D	\$0.00000	\$0	\$0	\$0	\$0	80
High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat	00	00	\$0.00 \$0.00	80	00	00	\$0.00000 \$0.00000	\$0 \$0	80	80	80	80 80
High - Efficiency Heat Pump - Mobile Home	172	637	\$450.00	\$77,400	1,937	1,233,869	\$0.05747	\$70,910	\$40,721	80	\$40,721	\$189,031
Mobile Home New Construction - Heat Pump Air Conditioner	156	584	\$551.31 \$000	<u>\$86,005</u> \$0	1,261	736,424	\$0.05747 \$0.00000	\$42,322 \$0	\$12,942 \$0	\$0 80	\$12,942 \$0	\$141,269 \$0
Modified Energy Fitness	910	3,057	\$355.83	\$323,808	488	1,491,816	\$0.05751	\$85,794	\$5,797	80	\$5,797	\$415,399
High Efficiency Heat Pump - Resistance Heat Replacement - Heat Pump Replacement	204	574 771	** \$450.00	03	£. £.	577,444 981,483		\$33,203 \$56,396	\$46,255 \$82,760 \$82,760	888	\$46,255 \$82,760 \$4.438	\$171,258 \$303,406 \$52,472
Energy Education for Student Program (NEED) Community Outreach Program (CFL)	1,400	2,717	** \$15.85	\$22,190 \$55,087	186	1,464,750	\$0.05758	\$23,644 \$84,340			07	69
Residential Efficient Products - Compact Flourescent Lamp (CFL) - Specially Butbs - LED Lights	102,355 102,355 775	52,115 9 114	\$2.66 \$69.40 \$1.81	\$272,068 \$1,735 \$1,405	25 22 31	1,302,875 198 3,534	\$0.05818 \$0.05793 \$0.05854	\$75,801 \$11 \$207	S31,730 59 50 50	02 08 08	\$31,730 \$9 \$70	S379,599 \$1,755 \$1,682
HVAC Diagnostic & Tune-Up - Air Conditioner - Heat Pump	225	237	\$143.29 \$109.90	532,241 \$68,686	233	55,221 358,064	\$0.05749 \$0.05749	\$3,175 \$20,585	\$295 \$7,113	8 80 80	\$295 \$7,113	\$35,711 \$96,384
Residential Load Management (Pilot Program) - Air Conditioner - Water Heating	81		\$1,196.36 \$1,196.36		00		\$0.00000 \$0.00000	\$0 50 50 50 50 50	\$0 \$0 \$0	S 0 2 7 0 2 1 0 2 1 0 2 0 2 1 0 2	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$96,905 \$96,905 \$95,322 \$2,595,322
TOTAL RESIDENTIAL PROGRAMS	112,249	70,562		\$1,723,876 ======		========		0004'000				

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 39 of 44

											PAGE	
UCKY POWER COMPANY											18B-2 of	20
YEAR PROGRAM				TOTAL			NET	TOTAL		MAXIMIZING		TOTAL ESTIMATED
VEAR 17 (2nd. 3rd & 4th QTRs)	NEW	CUMULATIVE	ESTIMATED	ш	NET LOST	TOTAL ENERGY	LOST	NET -	INCENTIVE	INCENTIVE	TOTAL.	COSTS TO BE
	PARTICIPANT	PARTICIPANT	COSTS	PROGRAM	REV/QTRS	SAVINGS	KEVENUE	LOOI	LEX C	(5% of		
	NIMBER	NUMBER	PER PARTICIPANT	8	(KWHI PARTICIPANT)	KWH/ QTRs	(S/KVVH)	REVENUES (B)	PG.19C) (9)	COSTS) (10)	INCENTIVE (11)	RECOVERED (12) (4)+(8)+(11)
PROGRAM DESCRIPTIONS	(1)	(2)	(3)	(4)	(6)	(2)X(5)		(6)X(7)		(4)X(5%)	1011-161	
			1. 1. 1. 1				n/a	SO	SO	so	80	OS OS
COMMERCIAL PROGRAMS	0		\$0.00	S0		50	n/a	ŝo	so	80		20
Smart Audit - Class 1	0		\$0.00				\$0,00000	\$0	80	02		so
- Class 4 Smart Financing - Existing Building		0	20.00 S0.00	SOS OS			\$0.00000	\$0	ne	2		
Smart Financing - New Building	D								\$10	80		\$17,027
Commercial A/C & Heat Pump Program	20		\$841.15		211	2,532	\$0.07319 \$0.07344	\$1,598	\$1,859	so	\$1,859	\$30,374
- Air Conditioner Keplacement	32	26	\$841.1	6 \$26,917								
								S1 747	\$398	\$0		\$16,585
HVAC Diagnostic & Tune-Up - Air Conditioner	55	5 33 61	\$271.64 \$202.07	54 \$14,940 7 \$20,813	1,228	3 74,908	\$0.07341	\$5,499	\$3,045		\$3,045	
- Heat Pump									US		SO	
Commercial Load Management (Pilot Program)		6	\$1,865.56	56 \$16,790		00	\$0.00000	2 S	so	SO		
- Air Conditioner		9	\$1,865.					2400.007	CR6 210	0\$	\$86,210	\$1,445,578
	136	86	\$9,186.63	53 S1,249,381	1 17,250	0 1,483,500	\$0.07414	108'801 \$				- c1 572 501
Commercial Incentive				3,000,10		1 599.697		\$118,516				
TOTAL COMMERCIAL PROGRAMS	364	228		51,302,404								
INDUSTRIAL PROGRAMS -					0		0 n/a	\$0	\$0 80		50 S0	200
(WESt. Oprovisional)				20.00	20	0						
Smart Audit - Class 2					00		0 \$0.00000					
Smart Financing - General		00			00		0 \$0.00000	200				
Smart Financing - Compressed Air System							10	SO	SO		S0 S0	
		10	0		so							54 167 823
TOTAL INDUSTRIAL PROGRAMS		1	11		11	1 11 756.221		\$703,325				
TOTAL COMPANY	112,613			\$3,080,330	20		11					
		salilas			(CFL)).	1.10	Topo	minity Outreach	Program (CFL)).			

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 40 of 44

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No 22 Page 41 of 44

ENTUCKY POWER COMPANY ERIVATION FOR											_		-			Exhibit C		
3 YEAN DAIL EVERIMENT 3 YEAN DAIL OF TO		-									NUMBER OF	NEW PARTICIPANTS				19 V of	20	
PROGRAM DESCRIPTIONS	ARGENTE CONTRACTOR CON		io w	YEAR 1 (11)	1(E1) (12) 2 (E1) (12)	YEAR 3 (19) (15)	YEAR 4 (16)	YEAR 5 (11) (10)	1591 (20)	теля 1 (21) (22)	1 YEAR 8 (23) (24)		YEAR 10 11 (29)	теля 11 (29) (20) (76AR 12 (31) (32)	13 13 (FC) (CC)	14 14 (25)(26)	15 (37) (39)
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RESIDENTIAL PROGRAMS Energy Family	60 EES : 00 EES 92 DZS 22 915	бл	1/12 C/22 C/22		2	-	448 305	0	0	0 0	0 0	0 0	0	0 0				
	59.71 51,000 55.02 51.28	54.28 515.73 561.69 5	27.7512 (02.752		118 26	175 93 24 24	13) 42 12	- 59 59 59 59 59 59 59 50 50 50 50 50 50 50 50 50 50 50 50 50	21: 10	63 63 46 32	76 100 13 7 0	101 0 0 0	29 (18 72 57 0 0	85 - 75 26 - 34 0 - 0	67 128 46 29 29 0	50 119 50 55 0	20 119 20 22	140 174 61 31 0 0
Compact Fluctrescent Bulb	51.59 mid	eln	5/3 E/3	eya	0							, i				0 0	0 0	0 0
High . Efficiency Heal Pump - Resultance Heal - Hen Resultance Heal	515,732. 57.22 544,19 544,19 544,19 743 743 743 743 743 743 743 743 743 744 743 744 744	544, 19 544, 19 n/a 118 r/a n/a	6/3 . 6/4 6/3	c/a D/3	539 123- 2 527: 124- 1	220 21 18G 26	59 64 59	140 0 0			50							0 0
Hgh - Elitpency Heal Pump	\$38.86 \$32.50 \$64.21	510.66. 532.20 504.21. 528.92 579.20 5139.69 5139.69 5129.59 5293.70	139.69 \$129.59 : \$293.78	\$226.75	356. 100. 1	127 66	101 . 171	134 45.	13, 53	- Cr - 17	9	62						
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	90 125	221 06 245 09 240 11	542 03 540 77 549 77 549 77 514 00	16.02							101	. FEE . LVT	1/C 160	351 440	515 515	465 : 500	440 425	
Ngh Effeorey Heal Pump - Ressinner Heal Replacement			S476 10 5478 10 578.12 528674 25050 5050 510 01 52874	\$220.74 \$226.74													61.28	156 - 272 156 - 272
- Heal Pump Replacement				. 4 5													0	1,130
Energy Education for Student Program (NEED) Community Onlicath Program (CFL)		T	24 59 53 92	54,77													926	2,818 2,644
esidential Elficient Products											-		+					
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Residential Load Atanagement • Air Conditioner			\$0.00 \$0.00	20.00														
- Water Healing																		
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TOTAL COMMERCIAL PROGRAMS																		
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PAGE 19B of 20	12 12 165) (50) 5)X(32) (5)X(33)	fst Znd haf half \$0	50 55/2 50	DS DS						S 001/905	20 20 20		05	219 100 20 20 20 20 20 20 20 20 20 20 20 20 2
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	(35)		5137 556 5137 556 50 50		5211 57.244 5211 5248		_			51.54	51 212 24 25 20 20 20 20 20 20 20 20 20 20 20 20 20		22200 \$10011	05 05 05 15 15 15 10 10 10 10 10 10 10 10 10 10 10 10 10
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	YEAR 5 (51)		5141 \$105	51.6	4 \$3,769					\$22.975 \$10.005	500 510 510 50 50 50 50 50 50 50 50 50 50 50 50 50		0/175 016/5	8 8 8 8 8
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	YEAR 3 (47) (4	9	075		51 145 S0					. B95, Mrs	50 56,506 519		36,505	8888
			\$154 \$154	51,588	54.128 50					\$25,601	50 50 50 50 50 50 50 50		230	8 6 8 8 8 8
	YEAR	121 121 121 122	50 5253 50	52	6 \$4236					6trees 50	20 20 20			0, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	YEAR 1	and me when a second	5719 5719	510.63 58,70	PCU CIS	0 2 0	0 0	5 9 9		01 577,585	00000000000000000000000000000000000000	20 37 65 100 1	0 2 2005 5	000
	YEAR 17	0	65 325 5 325			200 010 71 204 110 365	603 : 1,400 260 - 4,520	77.764 55.928 20.468 102.355 0 0 25 0 0 0 775	25 225 125 625	29 01 29 01	1111111111	0 36 35	1:	
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ΝT	Sti	ßS	15	e du	e g	mp epiacement emont	Binergy Education for Student Program (NEED) Community Ordersch Pressan (CFU)	Restornial Encent Products - Compart Francesch Lamp (CFL - Streetsky Burss	ae-Us	denot Load Mangener As Consistent As Consistent Associations Associati	countificau, ProGranus Sand Arab. Carab. Sand Arab. Carab. Sand Factory, Carab. Orbitan Commercial Arab. Here Busian Commercial Arab. Here Busian	g	mercal toad Managemer Ar Conditioner Water Haaling TOTAL COMMERCIAL PROGRAMS	adoustinal, informations West Co. Constructions West Co. Constructions and Co. Constructions and Co. Construction and Co. Construction and Co. Construction and Co. Construction and Co. Co. Construction and Co. Co. Construction and Co. Co. Construction and Co. Co. Co. Co. Co. Co. and Co. Co. Co. Co. Co. and Co. Co. Co. Co. and Co. Co. Co. Co. and Co. Co. Co. and Co. Co. and Co. a
DERIVATION FOR 3 YEAR DSM EXPERIMENT CALCULATION OF	EFFICIENCY WCSNIWE	RESIDÊNTIM, PROGRAMS	Targologi Erecy, Elicond, . Al Electre . Hon-Al Electro	Compact Faurescont Bub High - Eliconcy Heat Punp - Reveance Heat - Non Feartance Heat	High - Efficiency Heal Pump Mobile Home And Construct Actuale Home Mark Construct - Neal Pump	Acculed Encry Finera Han Eluceczy Heal Fump - Hear Pump Reparement - Hear Pump Reparement	Bnergy Education for Student Progra	al Elected Pr act Flourescer Aphs	AVAC Diagnostic & Tune-US Ar Conditional - Heal Pump	Residents/Lead Manuppmer / An Conditionts / Vator Hoaling TOTAL RE SUDSVITAL PR	COMMERCIAL PROGRAMS Smalthark - Carao A Cora 2 Cora 2 Carao Budago Smalt Francara - New Budago Commercia Acc A Heat Puelano Commercia Acc A Heat Puelano	Air Constructer Replacement Heat Pump Replacement (MAC Dispecting & Tune-Up Air Constituent Heat Pump	Commercial Load Management Air Conditioner Water Hoalting ToTat CommErclat PF	REUSE FRAM, PROGRAMS (wiest Oct-Onia Reasored) (wiest Oct-Onia Reasored) Signal (widt - Class, 2 Signal Practice), General Signal Practice), General Signal Practice), General Signal Practice), General

KPSC Case No 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 42 of 44

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 (tem No. 22 Page 43 of 44

KENTUCKY POWER COMPANY DERIVATION FOR						
3 YEAR DSM EXPERIMENT CALCULATION OF EFFICIENCY INCENTIVE					Exhibit C PAGE 19C of	20
		÷				
PROGRAM DESCRIPTIONS	YEAR 15		YEAR 16		YEAR 17	
	(17) (8)X(8)	(62)X(39)	(73) (9)X(40)	(74) (9)X(41)	(75) (10)X(42)	(76) (76)
	ts T	2nd	151	2nd	 1	Znd, 3rd & 4lh
RESIDENTIAL PROGRAMS	Ded	hall	hat	half	9tr	gtrs
Energy Filmess	5	20	22	\$0	80	8
Autorium Externet - All Electric - Non-All Electric	\$13,436 \$1,912	\$13,282 \$1,419	\$16,253 (\$224)	\$20,633 (5657)	56,033 5464	\$30,163
Compact Flueroscent Bulb	3 0	\$0	50	\$0	50	\$0
High - Efficiency Heat Pump - Resistance Heat - Non Resistance Heat	50	88	88	\$0	50	80
High - Efficioncy Heat Pump - Mobile Nome	\$13,579	519.035	\$27.615	167'015	56,93	\$40.721
Itablia Henno Navy Construction *** - Heat Pump. - Art Conditionut	\$4,462 \$0	\$13.274 50	111	\$8.649 \$0	\$2,621 50	
Modiled Enorgy Filmess	524,935	\$34,789 :	1 2 3	\$8.151	\$1.847	25,797
High Efficiency Heal Pump 	\$46,376 \$0	\$74,105 \$0	\$12,030 \$25,033	\$9,453 \$22,908	\$16,039 \$24,941	\$46,255 \$62,760
Energy Education for Student Program (NEED)	\$2,430	55,274	\$1,613	51,648	\$1,902	\$4,428
Community Outreach Program (CFL)	\$13,194	\$10,613	\$9.871	\$9,396	\$1,336	
Tosidoniai Elifcioni Producti - Compact Flaurosconi Lamp (CFL - Specialty Bullys - LED Lights		50 50	\$24,107 \$0 \$0	005 02	\$9.256 \$0 \$0	007,162 88 89 (0922)
WAC Diagnesis & Tune-UE - Air Conditions - Heat Pump		50 \$319	53,300		\$33	\$295 \$7,113
Rosidentisi Load Managemer - Air Conditioner - Water Heading			50 50	50 50		20
TOTAL RESIDENTIAL PROGRAMS	5120,324	\$172,315	\$135,531	\$135,237	\$75.192	75.192 \$285.978
COMMERCIAL PROGRAMS						
Smart Audit - Class 1 - Class 1 - Smart Financing - Existing Building Smart Financing - New Building	8888	8888	8888	8888	50 50 50	8888
Commercial AVC & Heal Pump Program - Art Conditioner Replacemen - Heat Pump Replacemen		20 20	\$1 \$872	\$2 \$349	\$0 \$465	212 21,059
HVAC Dignostie 3 Turre-UF - Alt Conditionen - Hoat Purre		05 05	57 \$7	\$326 \$2,601	\$0	\$398 \$3,045
Commercial Incontive		205 2	\$0	\$42,852	\$22,820	\$66,210
Commercial Load Mahagemer - Air Cenditioner - Water Hoaning			8.63	22	50 S0	50
TOTAL COMMERCIAL PROGRAMS	8	\$30	\$1,412	546.130	\$23,640	\$91,531
INDUSTRIAL PROGRAMS.						
(w/Est. Opt-Outs Removed) Smart Audit - Class 1 Smart Audit - Class 2	05 D2	50 50	8 8	20 20	50 : 50 :	50
ssed A	28	88	88 (88	88	
TOTAL INDUSTRIAL PROGRAMS	20	. 05		20		8
MINUAL SHAKEU SAVINGS (3)	\$120.324	\$172.345	5136,943	5182,367	\$90,032	\$377,509 E577,509

KPSC Case No. 2012-00051 Commission Staff's First Set of Data Requests Order Dated March 8, 2012 Item No. 22 Page 44 of 44

			Exhibit C	
	KENTUCKY POWER COMPANY ORECAST OF 2012 KENTUCKY RETAIL ENERGY SALES IN KWH		PAGE 20 of	20
	FOR RESIDENTIAL, COMMERCIAL AND INDUSTRIAL SECTORS			
	FOR RESIDENTIAL, COMMERCIALS INC.			
	22002AM/VD 17 0040			
	PROGRAM YR 17 - 2012	RESIDENTIAL	COMMERCIAL	INDUSTRIAL
LINE NO.	YEAR	SECTOR	SECTOR	SECTOR
1			1 104 000 000	3,249,000,000
1	TOTAL ULTIMATE SALES (KWH) *	2,430,700,000	1,424,000,000	3,249,000,000
		14,584,200	8,544,000	19,494,000
2	LESS NON-METERED **			
3	TOTAL ESTIMATED RETAIL KWH SALES	2,416,115,800	1,415,456,000	3,229,506,000
		0	0	0
4	LESS OPT - OUT CUSTOMERS KWH			
5	KWH BEFORE LOST REVENUE IMPACTS	2,416,115,800	1,415,456,000	3,229,506,000
		10 700 000	1.077.744	0
6	LESS LOST REVENUE IMPACTS ***	12,526,938	1,677,744	
		2,403,588,862	1,413,778,256	3,229,506,000
7	ADJUSTED KWH BY SECTOR	anno ball proj han ann ann ann ann ann ann ann ann		
8	LINE 7/LINE 1	98.9%	99.3%	99.4%
		begin bilds geliek Anny pake work had being the start work that work the start work and the start work the star		
1.15.155		RESIDENTIAL	COMMERCIAL	INDUSTRIAL
LINE NO.	PROGRAM YR 17 (1st QTR)	SECTOR	SECTOR	SECTOF
		707 400 000	352,500,000	810,100,000
9	TOTAL ULTIMATE SALES (KWH) *	797,400,000	352,500,000	010,100,000
		98.9%	99.3%	99.4%
10	LINE 8			005 000 400
11	ADJUSTED KWH BY SECTOR	788,628,600	350,032,500	805,239,400
LINE		RESIDENTIAL	COMMERCIAL	INDUSTRIA
NO.	PROGRAM YR 17 (2nd, 3rd & 4th QTRs)	SECTOR	SECTOR	SECTOR
		1,633,300,000	1,071,500,000	2,438,900,000
12	TOTAL ULTIMATE SALES (KWH) *	1,000,000,000	1,071,000,000	
13	LINE 8	98.9%	99.3%	99.4%
10			1.063,999,500	2,424,266,60
14	ADJUSTED KWH BY SECTOR	1,615,333,700		
*	SOURCE: 2012 LOAD FORECAST COMPILED BY			
	AEP CORPORATE PLANNING AND BUDGETING DEPT.			
**	.60% ESTIMATED TO BE NON-METERED (OL) DETERMINED			
	FROM BILLED JURISDICTIONAL TARIFF SUMMARY FOR 12 MOS. ENDED DECEMBER 2009.			
	IZ WOS. ENDED DECEMBER 2000.			
***	LOST REVENUE IMPACTS	0.070.444	78,047	
	Page 18A of 20, Column 6 - TOTAL RESIDENTIAL PROGRAMS	2,370,414	and a second	-
	Page 18B of 20, Column 6 - TOTAL RESIDENTIAL PROGRAMS	12,526,938	and the second se	~
	IUIAL			

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Kentucky Power Company

REQUEST

Provide the date of the first billing cycle for the revenue months from March 2012 through January 2013.

RESPONSE

Please see the table below for the date of the first billing cycle for revenue months March 2012 through January 2013.

Cycle 1 Begin Date
T 1 00 0010
February 29, 2012
March 29, 2012
April 30, 2012
May 30, 2012
June 28, 2012
July 30, 2012
August 28, 2012
September 27, 2012
October 26, 2012
November 28, 2012
December 31, 2012

WITNESS: Lila P Munsey