



**JACKSON ENERGY  
COOPERATIVE**

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November 18, 2011

Jeff Derouen, Executive Director  
Kentucky Public Service Commission  
211 Sower Blvd.  
PO Box 615  
Frankfort, KY 40602-0615

**RECEIVED**

NOV 22 2011

PUBLIC SERVICE  
COMMISSION

Re: Case No. 2011-00372  
First Information Request

Mr. Derouen:

Jackson Energy Cooperative respectfully submits the information requested regarding Case No. 2011-00372.

Please inform me if any further information is required.

Sincerely,

Clayton Oswald  
Attorney for Jackson Energy Cooperative

STATE OF KENTUCKY)

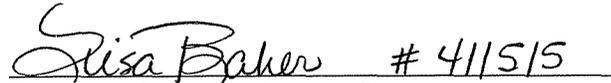
COUNTY OF JACKSON)

I, Donald R. Schaefer, state that I am the President & CEO at Jackson Energy Cooperative, that I have personal knowledge of the matters set forth in this application and attached exhibits, and that the statements and calculations contained in each are true as I verily believe.

This 18<sup>th</sup> day of November 2011.

  
Donald R. Schaefer

SUBSCRIBED AND SWORN to before me by Donald R. Schaefer this  
18<sup>th</sup> day of November, 2011.

  
Notary Public, KY State at Large

My Commission Expires: 1/19/14

JACKSON ENERGY COOPERATIVE  
CASE NO. 2011-00372  
RESPONSE TO COMMISSION STAFF'S FIRST DATA REQUEST

**1. Refer to the proposed Electric Heat Pump Tune Up Program tariff.**

**Response by: Don Schaefer, President & CEO**

**a. Provide the cost support for the \$50 program fee.**

Please see attached "TUNEUPBC" assumption sheet provided by East Kentucky Power Cooperative ("EKPC"). The EKPC transfer payment to Jackson Energy is \$260 (the typical cost of a tune up service is \$300). Jackson Energy has chosen to pay an even \$250 with the balance of \$50 due from its member. (see Exhibit 1)

**b. Explain how the member fee if \$50 will be accounted for on Jackson Energy's books.**

The member fee of \$50 will be posted to Account 908.50 Tune Up Program Expenses.

**c. Will the \$50 fee be used to offset the costs of the Electric Heat Pump Tune Up Program? If yes, provide the type of costs that will be offset.**

The \$50 fee will be used to offset the remaining balance of the tune-up service after Jackson Energy pays \$250. See response to 1.a. above.

**d. Explain how it was determined that the tune-up service cost would be \$300.**

The \$300 was derived from the results of a member system survey completed in November 2007 by EKPC.

**e. If the tune-up service costs more than \$300, provide the name of the party responsible for paying the additional costs.**

The tune up does not cost more than \$300 so there are no additional costs.

**f. Explain the process of how the HVAC technician is selected to perform the tune-up service.**

Jackson Energy has utilized a local HVAC technician for many years. This technician has performed the service in a favorable manner and the work load for the tune up service has not required any additional technicians.

**2. Refer to the proposed Electric Thermal Storage ("ETS") Program tariff.**

**Response by: Don Schaefer, President & CEO**

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**a. Explain how the rebate amount of \$500 was calculated.**

Please see attached "ETSFURN" assumption sheet provided by EKPC. Jackson Energy is passing thru the \$500 from EKPC. (see Exhibit 2)

**b. If known, provide the cost to the customer of installing an ETS device.**

As indicated on the assumption sheet provided by EKPC, the participant cost is \$2,080. (see Exhibit 2)

**c. State whether Jackson Energy's wholesale supplier, East Kentucky Power Cooperative, Inc. ("EKPC") has an ETS tariff. If no, explain why Jackson Energy is proposing such a tariff.**

EKPC does not have an ETS tariff.

**3. Refer to Jackson Energy's proposed Button Up Weatherization Program.**

**Response by: Don Schaefer, President & CEO**

**a. Explain how the rebate amount of \$20 per 1,000 BTU reduction was calculated.**

Please see attached "BUTTON" provided by EKPC. The \$20/1,000 BTU is the result of an internal EKPC research project that modeled consumption (BTU) reductions resulting from insulation improvements for a typical home. (see Exhibit 3)

**b. Provide the formula referred to in the "Rebates" section of this tariff.**

The rebate provision as initially filed in the tariff contains an error. The last sentence under the rebate provision should be deleted. Please see the attached revised tariff sheet. (see Exhibit 4)

**c. What proof will Jackson Energy require customers to provide that the weatherization was performed?**

Jackson Energy requires customers to provide contractor invoices and payment receipts to verify that the work was performed.

**4. Refer to the proposed Air Source Heat Pump Program tariff. Explain how the rebate amount of \$500 was calculated.**

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**Response by: Don Schaefer, President & CEO**

Please see attached "F2ASHP" assumption sheet as provided by EKPC. The rebate is based on like utility programs. (see Exhibit 5)

**5. Refer to Jackson Energy's Advanced Lighting Program tariff.**

**Response by: Don Schaefer, President & CEO**

- a. Refer to the "Purpose" section of this tariff. Explain the meaning of the sentence "[t]his would also include LED exit signs."**

Since the filing of these tariffs in this proceeding, the Commission issued its Order in Case No. 2011-00148 approving the advanced lighting program tariff. Jackson Energy has submitted this tariff as directed by Commission Order in Case No. 2011-00148.

- b. Explain how the rebate amount of \$213 per kW reduction was calculated.**

Since the filing of these tariffs in this proceeding, the Commission issued its Order in Case No. 2011-00148 approving the advanced lighting program tariff. Jackson Energy has submitted this tariff as directed by Commission Order in Case No. 2011-00148.

- c. Explain how the maximum rebates were calculated.**

Since the filing of these tariffs in this proceeding, the Commission issued its Order in Case No. 2011-00148 approving the advanced lighting program tariff. Jackson Energy has submitted this tariff as directed by Commission Order in Case No. 2011-00148.

**6. Refer to all five proposed tariffs. It is stated under the "Term" of each tariff that the program is contingent upon EKPC "being an active participant by supplying most if not all the funds" that are used to pay either the HVAC technician services or the rebates, depending on the tariff.**

**Response by: Don Schaefer, President & CEO**

- a. Has EKPC given its commitment to actively participate in these proposed programs? If so, provide documentation that EKPC has committed to participate in these programs. If not, what is the status of EKPC's consideration of such participation?**

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EKPC has committed to actively support these programs as evidenced in its most recent Integrated Resource Plan, as filed with the Commission in Case No. 2009-00106.

**b. Define "most" as it is used in the above quote?**

Other than the \$50 provided by the member in Request 1, EKPC currently provides the funds Jackson Energy uses in the four (4) proposed tariffs. However, Jackson Energy may, in the future, provide additional funds for rebates on its own, thereby it used the word "most".

**7. Provide the goal or forecasted participation level for each program for the first five years.**

**Response by: Don Schaefer, President & CEO**

These are not new programs, but these are Jackson Energy's goals for the next five years.

<u>Program</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Electric Heat Pump Tune Up	30	34	38	42	46
Electric Thermal Storage (ETS)	10	10	10	10	10
Button Up Weatherization	60	70	80	90	100
Air Source Heat Pump	25	30	35	40	45

**8. Provide the detailed estimated costs of administering each program.**

**Response by: Don Schaefer, President & CEO**

The average amount of time to administer each program is three (3) hours per job. The costs are as follows:

Payroll & Fringes	\$139.82
Transportation	\$18.54
Total	\$158.36

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9. **Does Jackson Energy know how its wholesale power supplier is proposing to recover the funds used to cover the costs of these programs?**

**Response by: Don Schaefer, President & CEO**

EKPC recovers the costs of these programs through its base rates.

**EKPC 2011 Case for Jackson Tariff**

Tune-Up HVAC Maintenance Program = "TUNEUPBC"

<u>Assumption</u>	<u>Source</u>
<p><b>Load Impacts</b>            Before Participant            11,286 kWh, 8.96 kW (coincident with winter system peak), 3.33 kW (summer)</p> <p>After Participant            9,932 kWh, 7.89 kW (coincident with winter system peak), 2.93 kW (summer)</p>	<p>HVAC loads for a typical heat pump in typical residence</p> <p>HVAC loads for a typical heat pump home reduced by 12% savings. 12 % savings derived from ACEEE report and site specific blower door results.</p>
<p><b>Lifetime of savings</b></p>	<p>12 Years</p>
<p><b>Generation Capacity Cost - Hybrid</b></p>	<p>PJM Market (2011-12); Peaker (2013-2016); Combined Cycle Baseload (2017 on)</p>
<p><b>Participant Costs</b> \$ 300.00 in 2011, with 3% annual escalation</p>	<p>Average payment to contractors for performing the measures in the program. Source: EKPC Marketing Department - based on Jackson program</p>
<p><b>Administrative Cost</b>            EK \$5,400 per year fixed (2011-2020), 3% escalation</p> <p>Co-op \$ 90 per customer, 3% escal.</p>	<p>All cost estimates provided by EKPC Marketing/Communications, October 2010.</p> <p>Cost estimated from survey of coops in November 2007.</p>
<p><b>Rate Schedule - Retail</b>            Average Residential Rate for Co-ops            Cust chrg \$9.62, Energy Rate \$.09635</p> <p><b>Rate Schedule - Wholesale</b>            East Kentucky E-2 rate.</p>	<p>Current rates in effect as of January, 2011.</p> <p>Current rates in effect as of January, 2011.</p>
<p><b>Participation</b> - 150 new in 2011 &amp; 2012; 200 new per year for 2013-2020.</p>	<p>Marketing Goal for 2011 and DSM Forecast.</p>
<p><b>Rebates</b>            Co-op to Participant \$260</p>	<p>Average payment to contractors is \$300; participating member pays \$40.</p>

**EKPC 2011 Case for Jackson Tariff**

ETS Furnace Program = "ETSFURNC"

<u>Assumption</u>	<u>Source</u>
<b>Load Impacts</b>	
Before Participant 12,675 kWh, 9.62 kW (coincident with winter system peak), 0 therms	Typical electric furnace (metered study) adjusted for avg square footage of participants (1708 square feet)
After Participant 13,307 kWh, 2.83 kW (coincident with winter system peak), 0 therms	ETS unit, 1708 square foot home. Electric furnace with ETS in the home, 1708 square foot home. Both loads come from the EKPC end use metering study (1996-1998).
<b>Lifetime of savings</b>	20 Years
<b>Generation Capacity Cost - Hybrid</b>	PJM Market (2011-12); Peaker (2013-2016); Combined Cycle Baseload (2017 on)
<b>Participant Costs</b> \$ 2,080. 3% annual escalator	Billy Abner 3/02. Typical system size 9 kW. Includes \$500 installation cost, \$1,184 for the unit, \$40 for the meter base, and \$175 for the TOU meter. Inflated 20% to 2009 \$.
<b>Administrative Cost</b> EK \$16,500 fixed annual (2011-2020), \$73 per new participant. 3% escal.	All cost estimates provided by EKPC Marketing/Communications, June 2005. adjusted 10% to 2009 \$.
Co-op \$255 per new participant. 3% esc.	Cost information provided by 2 Coops (InterCo. and South KY) 2003. adjusted 20% to 2009 \$.
<b>Rate Schedule - Retail</b> Average Residential Rate for Co-ops Cust chrg \$9.62, Energy Rate \$.09635 AFTER = Energy Rate \$0.05781 <b>Rate Schedule - Wholesale</b> East Kentucky E-2 rate.	Current rates in effect as of January, 2011.  60% of the Avg Energy Rate (no change to Cust chrg)  Current rates in effect as of January, 2011.
<b>Participation</b> - 70 new in 2011, 2012; 93 new per year for 2013-2020.	Marketing Goal for 2011 and DSM forecast.
<b>Rebates</b>  Co-op to Participant \$540 EK to Co-op \$ 500	\$60 per kW of installed capacity times 9 kW. EKPC Marketing Summary of Coop Rebates dated 2008: Rebates range from \$25 - \$ 70 per kW. Anticipated transfer payment for 2012.

**EKPC 2011 Case for Jackson Tariff**

Button-Up Weatherization Program = "BUTTONBC"

<u>Assumption</u>	<u>Source</u>
<b>Load Impacts</b> Before Participant 11286 kWh, 8.96 kW (coincident with winter system peak), 3.33 kW (summer)	Typical heat pump in typical residence
After Participant 8882 kWh, 7.05 kW (coincident with winter system peak), 2.62 kW (summer)	21.3% savings applied to typical heat pump. Savings derived from site specific engineering estimates and impact.
<b>Lifetime of savings</b>	15 Years
<b>Generation Capacity Cost - Hybrid</b>	PJM Market (2011-12); Peaker (2013-2016); Combined Cycle Baseload (2017 on)
<b>Participant Costs \$ 563, 3% escalation.</b>	Verified by energy auditor, 5/2011.
<b>Administrative Cost</b> EK \$4,300 per year (2011-2020), 3% esc.	All cost estimates provided by EKPC Marketing/Communications, October 2010
Co-op \$263 per new participant, 3% esc.	Cost estimated from survey of coops in November 2007.
<b>Rate Schedule - Retail</b> Average Residential Rate for Co-ops Cust chrg \$9.62, Energy Rate \$.09635	Current rates in effect as of January, 2011.
<b>Rate Schedule - Wholesale</b> East Kentucky E-2 rate.	Current rates in effect as of January, 2011.
<b>Participation</b> - 150 new in 2011 & 2012; 200 new per year for 2013-2020.	Marketing Goal for 2011 and DSM Forecast.
<b>Rebates</b> Co-op to Participant \$240	EKPC Marketing Summary of Coop Rebates dated March 2008, \$20 per 1,000 BTU heat loss times typical savings of 12,000 BTU heat loss.

# Exhibit 4

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**Button Up Weatherization Program**

**Purpose**

The button up weatherization program ("Program") is a program to encourage the members of Jackson Energy Cooperative Corporation ("Jackson Energy") to add insulation and/or energy efficient doors, windows, etc. to their existing homes. This program is a part of Jackson Energy's overall demand side management (DSM) effort. Adding insulation and using other weatherization techniques to reduce the heat and cooling losses of a home is economically beneficial for the member and is beneficial for the power supplier.

**Availability**

This program is available in all service territory served by Jackson Energy Cooperative Corporation.

**Eligibility**

This program is designed primarily for single family stick built homes that use electricity as the primary fuel for whole house heating needs. However manufactured homes and multifamily housing may be eligible. The home is required to be a minimum of two years old.

**Rebates**

Jackson Energy will provide an incentive to members who participate in this program by offering a one time rebate equal to \$20 per 1,000 BTU reduction resulting from the addition of insulation and/or energy efficient doors, windows, etc. to their homes.

**Term**

This program is contingent upon Jackson Energy's wholesale power supplier East Kentucky Power Cooperative being an active participant by supplying most if not all the funds used to pay the rebates.

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DATE OF ISSUE: August 31, 2011 DATE EFFECTIVE: October 3, 2011

ISSUED BY Donald K. Schaefer TITLE President & CEO

Issued by authority of an Order of the Public Service Commission of Kentucky in  
Case No. \_\_\_\_\_ Dated: \_\_\_\_\_.

**EKPC 2011 Case for Jackson Tariff**

Electric Furnace conversion to SEER 14 Air Source Heat Pump - Replacement  
where the existing furnace is 10 years old or older

<u>Assumption</u>	<u>Source</u>
<b>Load Impacts</b> Before Participant 14,843 kWh, 8.12 kW (coinc. with winter system peak), 2.25 kW (summer)	Electric Furnace and Central A.C.
After Participant 7,310 kWh, 8.12 kW (coinc. with winter system peak), 1.93 kW (summer)	Efficient new heat pump: SEER 14, HSPF 8.0
<b>Lifetime of savings</b>	20 Years
<b>Generation Capacity Cost - Hybrid</b>	PJM Market (2011-12); Peaker (2013-2016); Combined Cycle Baseload (2017 on)
<b>Participant Costs</b> \$4,150 to \$5,150 - use \$4,600 for the cost benefit; 3% escal.	Difference in installed cost between SEER 14 heat pump and electric furnace. Spread accounts for fact that the cost of a future purchase of a furnace would be discounted.
<b>Administrative Cost</b> EK \$2,877 fixed annual (2011-2020) 3% escalation	Estimated costs per Marketing Department, October 2010.
Co-op \$217 per new participant, 3% esc.	Cost information provided by various coops. Verified 5/2011.
<b>Rate Schedule - Retail</b> Average Residential Rate for Co-ops Cust chrg \$9.62, Energy Rate \$.09635	Current rates in effect as of January, 2011.
<b>Rate Schedule - Wholesale</b> East Kentucky E-2 rate.	Current rates in effect as of January, 2011.
<b>Participation</b> - 475 new in 2011 & 2012; 633 new per year for 2013-2020.	Marketing Goal for 2011 & DSM Forecast.
<b>Rebates</b> Co-op to Participant \$500	Based on other utility programs