In the Matter of:

JOINT APPLICATION OF BIG SANDY RURAL ELECTRIC COOPERATIVE ENERGY COOPERATIVE, INC., GRAYSON RURAL ELECTRIC COOPERATIVE CORPORATION, AND JACKSON ENERGY COOPERATIVE FOR AN ORDER PILOT PROGRAM TITLED THE "KY ENERGY RETROFIT RIDER"

RECEIVED

JUN 3 0 2011

PUBLIC SERVICE COMMISSION

CASE NO. 2010-00089

Semi Annual Reporting

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Big Sandy Rural Electric Cooperative Corporation, Fleming-Mason Energy Cooperative, Inc., Grayson Rural Electric Cooperative Corporation, and Jackson Energy Cooperative (collectively "Joint Applicants") hereby file their first report on the approved pilot program pursuant to the Commission's December 16th Order.

Program Development Update

The Joint Applicants launched the KERR pilot (marketed as How\$martKY) in April after a few months of additional program development after approval of the tariff rider application. Specifically, the Joint Applicants and the Mountain Association for Community Economic Development (MACED) undertook the following activities:

• Development of Energy assessment protocol (i.e., steps and procedures for consistent assessment) developed, adopted, and auditors fully trained.

MACED staff contributed early to the discussions that lead to the adoption of BPI BA as the standard for assessments in both KHP and KERR.

In November, two of MACED's staff were certified as Building Analysts through BCTC. MACED staff worked diligently over many weeks to coordinate with KCTCS a training event for Cooperative staff, resulting in a course being offered in early March. Four Cooperatives sent ten employees to JCTC for the course and certification. The availability of BPI certification opportunities proved to be a significant timing challenge.

The BPI Standard pertains to health/safety issues for the most part. MACED recognized early that there are two other primary components to successful assessments as well – customer interaction and cost-effective efficiency measures. MACED and the coops continue to on refining resources for customer interaction, beginning with the pre-screen, through initial interaction, the assessment and moving forward.

• Selection of energy assessment and retrofit proposal generating software.

MACED has tentatively adopted the Green Energy Compass/Surveyor package for conducting the assessments in order to better integrate KERR customers with Ky Home Performance. To date, MACED staff has provided significant input into the development and testing of Surveyor.

MACED staff has also developed a standalone Excel workbook for generating the Efficiency Report (Conservation Plan) and Customer Agreements required for the KERR program.

MACED is tracking ongoing usage post-retrofit. This data-pool will allow us to check Surveyor's accuracy at savings projections, which we will share with the Public Service Commission. If patterns emerge of inconsistent projections, we are also cataloging all of the input variables so that we can test other energy models against the Green Energy Suite.

• Launching of Database that will track customer usage, energy assessment data, and investment repayment; and report data to the Kentucky Home Performance data system.

MACED staff has developed and launched it's web-based Project Management System, which integrates with utility billing systems, Green Energy Compass and MACED's internal loan management software. The database is designed as a project management system, so that data is captured at each step of the process – billing history, assessment, workscope, usage post-retrofit, repayment and financing. This integrated approach provides a powerful tool for the utilities to utilize for project management and eliminates the need for data to be manually entered or recorded as a separate function.

• Preparation to carry out KERR, including customer selection, frequently asked questions and responses, and procedural guidelines to ensure execution is smooth and participation is maximized.

Each of the Coops have outlined their initial method of customer recruitment/selection. Additionally, as a group, they have lined out consistent pre-screening criteria which is encapsulated in a quick-reference sheet for customer service representatives to use for directing calls about the program or high-bill complaints. MACED staff is providing support in orienting customer service about the program as necessary.

A FAQ has been developed and circulated as well as an informational one-pager about the program. These are currently being compiled into a reference binder along with information on working with KHP, best practices in efficiency improvements, and assessment guidelines and cheat sheets.

The approval of the program by the PSC has generated national inquiries about program design from the Center for Working Families (NY), Center for Wisconsin Strategy, UNC – Environmental Finance Center, and the Environmental and Energy Study Institute. All are advising utilities or legislative bodies on

program design for Energy Efficiency programs. The US Department of Energy has recently invited MACED staff to sit on a national summit panel to discuss the program design.

The first assessments began in April, with the first completed retrofit achieved in June. The Joint Applicants are refining the program over the summer and expect to be ready to increase program participation through the upcoming heating season.

Data Report

	Big Sandy	Fleming Mason	Grayson	Jackson	TOTAL
Number of homes that have completed an energy assessment	0	4	16	6	26
Number of homes that have completed a retrofit	0	0	0	2	2
New participants this period	0	0	0	2	2
Average Monthly Payment	N/A	N/A	N/A	\$21.00	\$21.00
Average Estimated Savings	N/A	N/A	N/A	\$24.00	\$24.00
Actual Savings	N/A	N/A	N/A	N/A	
Defaults	N/A	N/A	N/A	0	-

Attachments

- Copies of Assessments performed during period (2)
- List of approved contractors

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A Touchstone Energy Cooperative

The undersigned, Joni Hazelrigg, as Chief Financial Officer of Fleming-Mason Energy Cooperative, Inc., being first duly sworn, states that the responses to requested data in an order dated December 16, 2010, herein are true to the best of my knowledge and belief formed after reasonable inquiry.

Dated: June 29, 2011

Fleming-Mason Energy Cooperative, Inc.

By: Jon Hayebrigg

Subscribed, sworn to, and acknowledged before me by <u>Joni HazeIrigg</u>, as CFO for Fleming-Mason Energy Cooperative, Inc., on this <u>29th</u> day of <u>June</u>, <u>2011</u>.

Notary Public:



The undersigned, Don M. Combs, as Manage of Finance & Accounting of Grayson RECC, being first duly sworn, states that the responses to requested data in an order dated December 16, 2010, herein are true to the best of my knowledge and belief formed after reasonable inquiry.

Dated: June 16, 2011

Grayson RECC

Bv:

Don M. Combs Manager of Finance & Accounting

Subscribed, sworn to, and acknowledged before me by $\underline{Don Combs}$, as $\underline{Managera - Finance}$ for <u>Geason RECC</u> on behalf of said Corporation this <u>Lefth</u> day of <u>June</u>, **2010**. 2011,

Marshow A. Shacker Notary Public State at-dange, KY My Commission Expires 1-9-2014

The undersigned, David Estepp, as President & General Manager of Big Sandy RECC, being first duly sworn, states that the responses to requested data in an order dated December 16, 2010, herein are true to the best of my knowledge and belief formed after reasonable inquiry.

Dated: June 16, 2011

Big Sandy RECC

By:

David Estepp President & General Manager

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The undersigned, Rodney Chrisman, as Manager of Economic Development and Community Relations of Jackson Energy Cooperative, being first duly sworn, states that the responses to requested data in an order dated June 29, 2011, herein are true to the best of my knowledge and belief formed after reasonable inquiry.

Dated: June 29, 2011

Jackson Energy Cooperative

By: They Chur

Rodney Chrisman Manager of Economic Development and Community Relations

Subscribed, sworn to, and acknowledged before me by <u>Rodney Chrisman</u>, as <u>Manager of Economic</u> for <u>Sackson Energy Ceoperative</u> on behalf of said Corporation this <u>19th</u> day of <u>June</u>, 2010. Community Reflations

Connie Reid Motacy Public Commission expires 7-30-2012



Location ID:	204119
Name:	Joshua Ward
Owner:	N/A
Assessor:	Roger Medlock
Date:	4/27/2011

ver. 4/5/2011

How Your Home Uses Energy

	model baseline	Ele	ec	Gas	Propane	Wood/Coal
8	Heating	6,490	kWh	kBTU	kBTU	kBTU
*	Cooling	270	kWh			
N	Base	12,000	kWh	kbtu	kbtu	<u></u>
=	Total (yr)	18,760	kWh	0 kBTU	0 kBTU	- kBTU
	actual usage	19,000	kWh	kBTU	kBTU	kBTU

Your home uses energy for heating, cooling, and base load (which is everything that is not heating or cooling).

How Your Home Could Save Energy

Replace existing Electricity Air Source Heat Pump

Replace existing Air Source Heat Pump - Ducted, for cooling, with new Air Source Heat Pump - Ducted.

Install Floor insulation 6"

□ Improve 1,582 sq. ft. of attic floor insulation from 9 inches to 12 inches.

Savings from Baseline:					
2024 kWh (Elec)					
	kBTU (Gas)				
	kBTU (Propane)				

Savings from Actuals kWh (Elec) 2,264 kBTU (Gas) kBTU (Propane)

Conversions to Fuel				
2,264	kWh			
0	therms			
0	Gal			

Current Rates 0.12 /kWh /Therm /Gal

Projected Savings (yr)				
	\$272			
	\$0			
	\$0			
no)	\$23			

Projected Avg Energy Savings (mo) before monthly How\$mart Charge

Financing

\$ 4,824.82	Cost of Improvements (est):				
\$ 550.00	Customer Contribution	\$	2,	809.86	Utility Contribution
\$ 500.00	Rebates - Utility			\$2,788	Not to Exceed Amount (90% of Savings)
\$ 964.96	Kentucky Home Performance				
 	Tax Credits - Federal		@	3%	
 	Weatherization Program	ov	er -	15	years
 	Other			\$20	Monthly Charge
 	Other			90%	of projected savings
 	Other				

Next Steps

1. Sign Purchase Agreement

- 2. Select contractor and schedule the job
- 3. Energy Specialist returns to inspect completed work
- 4. Savings begin and installments charge appears on utility bill.

If, after operation, any of the upgrades fail, the Utility will reevaluate the work

Acceptance:

I understand that:

Values on previous page are estimates only and are not a guarantee of savings. Energy savings are a best-effort estimation calculated using a computer model. The model takes into account previous usage and characteristics of the house to determine usage and potential savings. Actual savings will vary depending on behavior, weather events, maintenance of the efficiency improvements, and future utility rates.

The Utility has explained what I can do to reduce my energy consumption including, but no limited to: thermastat and other equipment settings, the impact of lighting changes, and additional appliance or home investments not covered under How\$martKY.

Value of the improvements (cost of work) is an estimate and will be verified with the selected contractor. Final monthly charge will be determined at the time of contractor selection. If final project cost is more than the "not to exceed" amount, then customer may opt out of the installation.

Non-payment of the charge will be treated like non-payment of the utility bill potentially resulting in disconnection of service.

The Kentucky Energy Retrofit Rider (marketed as How\$martKY) is a voluntary utility tariff that amortizes the cost of the efficiency improvement over the course of fifteen years or 75% of the expected life of the improvement (whichever is less) at a fixed interest rate. The expected cumulative cost to the customer over the course of the payback period of the improvements is as follows:

Estimate	Not to Exceed
\$20	\$20
\$2,810	\$2,788
\$140	\$139
<u>\$717</u>	<u>\$740</u>
\$3,667	\$3,668
	<u>Estimate</u> \$20 \$140 <u>\$717</u> \$3,667

Payback Period (years) 15 Cost of Capital 3%

Account Holder:	Owner:	
print name	print name	
Date:	Date:	
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Energy Efficiency for Everyone



Location ID:	203749
Name:	Dorothy Smith
Owner:	N/A
Assessor:	Roger Medlock
Date:	4/7/2011

ver. 4/5/2011

How Your Home Uses Energy

	model baseline	Elec	Gas	Propane	Wood/Coal
l	Heating	6,910 kWh	kBTU	kBTU	kBTU
衆	Cooling	423 kWh			
N	Base	6,910 kWh	kbtu	kbtu	
=	Total (yr)	12,800 kWh	0 kBTU	0 kbtu	- kBTU
	actual usage	12,800 kWh	kBTU	kBTU	kBTU

Your home uses energy for heating, cooling, and base load (which is everything that is not heating or cooling).

How Your Home Could Save Energy

Replace existing Electricity Air Source Heat Pump

Replace existing Air Source Heat Pump - Ducted, for cooling, with new Air Source Heat Pump - Ducted.

□ Reduce the house air leakage from 1199 CFM50 to 1086 CFM50.

Improve 1,164 sq. ft. of attic floor insulation from 6 inches to 12 inches.

Install 1.0 programmable thermostat(s).

□ Reduce Duct Leakage from 100 to 25 cfm25

<u>Savings from Baseline:</u> 2498 kWh (Elec) kBTU (Gas) kBTU (Propane)
 Savings from Actuals

 2,498
 kWh (Elec)

 kBTU (Gas)

 kBTU (Propane)

Conversions to Fuel 2,498 kWh 0 therms 0 Gal <u>Current Rates</u> 0.12 /kWh /Therm /Gal

^{\$0} **\$25**

\$300

\$0

Projected Savings (yr)

Projected Avg Energy Savings (mo) before monthly How\$mart Charge

Financing

\$ 5,155.55	Cost of Improvements (est):			
\$ 500.00	Customer Contribution	\$	3,080.44	Utility Contribution
\$ 544.00	Rebates - Utility		\$3,076	Not to Exceed Amount (90% of Savings)
\$ 1,031.11	Kentucky Home Performance			
	Tax Credits - Federal	e	3%	
 	Weatherization Program	over	15	years
 	Other		\$22	Monthly Charge
 	Other		89%	of projected savings
	Other			

Next Steps

1. Sign Purchase Agreement

- 2. Select contractor and schedule the job
- 3. Energy Specialist returns to inspect completed work
- 4. Savings begin and installments charge appears on utility bill.

If, after operation, any of the upgrades fail, the Utility will reevaluate the work.

Acceptance:

I understand that:

Values on previous page are estimates only and are not a guarantee of savings. Energy savings are a best-effort estimation calculated using a computer model. The model takes into account previous usage and characteristics of the house to determine usage and potential savings. Actual savings will vary depending on behavior, weather events, maintenance of the efficiency improvements, and future utility rates.

The Utility has explained what I can do to reduce my energy consumption including, but no limited to: thermastat and other equipment settings, the impact of lighting changes, and additional appliance or home investments not covered under How\$martKY.

Value of the improvements (cost of work) is an estimate and will be verified with the selected contractor. Final monthly charge will be determined at the time of contractor selection. If final project cost is more than the "not to exceed" amount, then customer may opt out of the installation.

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	Estimate	Not to Exceed
Fixed Monthly Charge	\$22	\$22
Capital Investment	\$3,080	\$3,076
Project Management Fee (5%)	\$154	\$154
Total Interest over life of payback	<u>\$786</u>	<u>\$816</u>
Total Cost over life of payback	\$4,021	\$4,047

Payback Period (years) 15 Cost of Capital 3%

Account Holder:	Оwлег	
print name	print name	
Date: _	Date	***************************************



Energy Efficiency for Everyone

KERR Approved Contractor List as of 6/15/2011

<u>Biq Sandy</u>

TBD

<u>Fleming Mason</u>

TBD

<u>Grayson</u>

All Temp Heating and Cooling

Howards Construction

Frontier Housing

<u>Jackson</u>

Comfort Pro Heating and Air

Virgil Creech

Leo Jones and Sons