

Grayson Rural Electric Cooperative Corporation

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Telephone 606-474-5136 • 1-800-562-3532 • Fax 606-474-5862

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

OCT 05 2010

**PUBLIC SERVICE
COMMISSION**

In the Matter of:

THE JOINT APPLICATION OF BIG SANDY)
RURAL ELECTRIC, FLEMING-MASON)
ENERGY, GRAYSON RURAL ELECTRIC,) CASE 2010-00089
AND JACKSON ENERGY FOR AN ORDER)
APPROVING AN ON-BILL FINANCING)
PILOT PROGRAM TITLED THE "KY)
ENERGY RETROFIT RIDER")

October 5, 2010

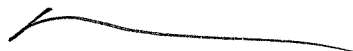
Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601

Mr. Derouen:

Please find attached a response answering issues brought up at the informal conference held on September 21, 2010.

If there are any questions, please feel free to inquire at (606) 474-5136.

Sincerely,




Don M. Combs
Grayson Rural Electric

For:
Big Sandy Rural Electric
Fleming-Mason Energy
Grayson Rural Electric
Jackson Energy

The undersigned, Don M. Combs , as Mgr. of Finance & Accounting , being first duly sworn, states that the responses herein are true to the best of my knowledge and belief formed after reasonable inquiry.

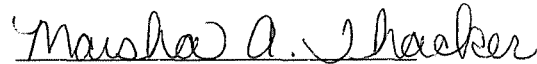
Dated: October 4, 2010

Grayson Rural Electric

By: 

Don M. Combs
Mgr. Finance & Accounting

Subscribed, sworn to, and acknowledged before me by Don M. Combs, as Mgr. Finance & Accounting for Grayson Rural Electric on behalf of said Corporation this 4th day of October, 2010.


Notary Public, State at Large

My commission expires: 1-9-2011

The undersigned, Joni K. Hazelrigg, as CFO of Fleming-Mason Energy Cooperative, Inc., being first duly sworn, states that the responses herein are true to the best of my knowledge and belief formed after reasonable inquiry.

Dated: October 4, 2010

Fleming-Mason Energy Cooperative, Inc.

By: Joni K Hazelrigg

Joni K. Hazelrigg
Chief Financial Officer

Subscribed, sworn to, and acknowledged before me by Joni K. Hazelrigg, on behalf of said Corporation this 4th day of October, 2010.

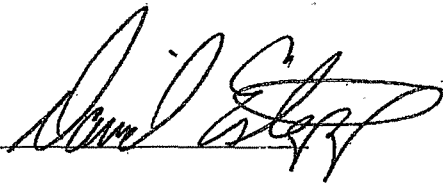
Julie Clark
Notary Public, State of Kentucky At Large

My commission expires: June 6, 2012

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

Dated: October 4, 2010

Big Sandy RECC

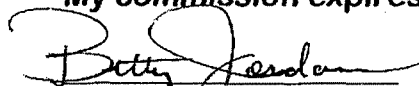
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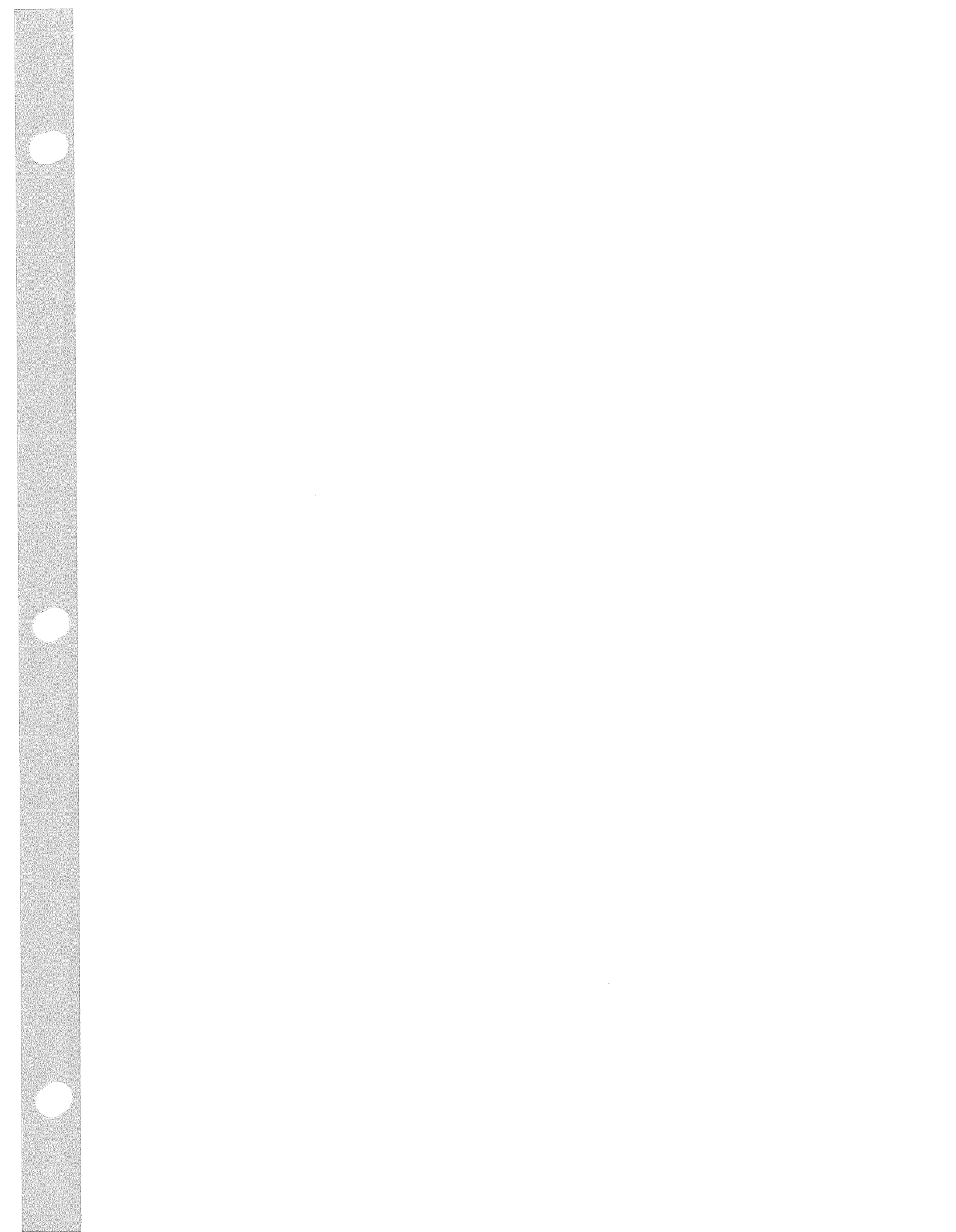
David Estepp
President & General Manager

I, Beth Jordan, a Notary Public of the County of Johnson, State of Kentucky, do hereby certify that David Estepp personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and official seal this 4th day of October, 2010

My commission expires 4/12/12.


(Notary Public)



1. Joint Applicants information from actual audits conducted by the utilities and how the on-bill tariff would be applied:

The joint applicants have reviewed a sample of energy retrofits under prior program initiatives that are representative of the scope of retrofits likely to be completed through the KY Energy Retrofit Rider pilot (fig. A). These six retrofits reduced energy usage by 25% to 45%, resulting in annual savings in year one of \$665 to \$1903. Initial capital investments ranged from \$1,845 to \$7,855.

Figure A – Utility Retrofit Outcomes

Example	Annual Savings in Year 1 (kWh)	Annual Savings in Year 1 (\$)	Customer’s Cost of Retrofit (\$)
A – Weatherization	6,197	\$ 665	\$ 4,000
B – HVAC replacement	8,484	\$ 911	\$ 4,500
C – HVAC, Weatherization	19,035	\$ 1,904	\$ 7,855
D – HVAC, Wx, Windows	6,914	\$ 691	\$ 7,548
E – Weatherization	12,919	\$ 1,292	\$ 1,845
F – Weatherization	6,093	\$ 609	\$ 3,422

Had these retrofits been completed through the KY Energy Retrofit Rider tariff, participants would not have had to come up with the upfront investment; a portion of the realized energy savings (47% on average) would have been tapped to amortize the retrofit (see attached spreadsheet for calculations). These examples clearly demonstrate the applicability of the On Bill model to real-life retrofits in the Joint-Applicants’ service areas.

Figure B – On Bill Tariff Applied

Example	Annual Tariff (\$)	% of Savings used for Tariff	Customer’s Cost of Retrofit (\$)	Annual Savings after Tariff in Year 1
A – Weatherization	\$ 348	52%	-	\$ 317
B – HVAC replacement	\$ 392	43%	-	\$ 519
C – HVAC, Weatherization	\$ 683	36%	-	\$ 1,220
D – HVAC, Wx, Windows*	\$ 615	89%	\$ 500	\$ 76
E – Weatherization	\$ 161	12%	-	\$ 1,131
F – Weatherization	\$ 298	49%	-	\$ 312

* Example of a case where additional subsidy may be needed to reduce the upfront capital cost

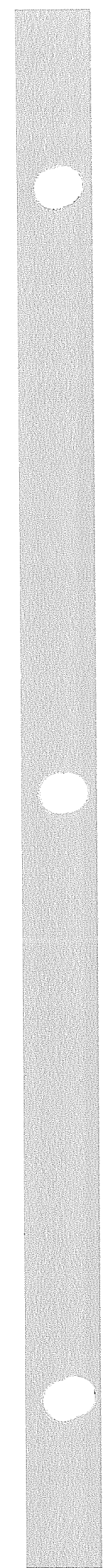
Please note that 15 year amortization schedules are assumed – though customers may opt to amortize their retrofit sooner if desired. All the retrofit measures included have expected useful lives beyond the amortization period – including HVAC systems.¹

¹ ASHRAE’s average service life for the types of HVAC systems installed in typical retrofits is 24.5 years [http://xp20.ashrae.org/publicdatabase/system_service_life.asp?selected_system_type=6].

How Tariffed Retrofits Would Work Using Energy Savings Data From Actual Retrofits Completed by Joint Applicants

	A - Farmhouse	B - Single Story	C - House	D - House	E - House	F - House	
	Grayson RECC	Grayson RECC	Jackson RECC	Jackson RECC	Fleming-Mason RECC	Fleming-Mason RECC	
	Insulation, Air Sealing, Foundation	HVAC Replacement of Resistance Heat	Insulation, Air Sealing, HVAC	Insulation, Air Sealing, HVAC, Windows	Duct Sealing, Insulation, Air Sealing	Insulation, Air Sealing	Energy Efficiency Measures
	\$ 4,000.00	\$ 4,500.00	\$ 7,854.74	\$ 7,548.30	\$ 1,845.00	\$ 3,422.00	Cost of Retrofit
x	24,509	33,122	41,930	22,144	36,031	23,121	kWh Historical Annual Usage
	0.10732	0.10732	0.10	0.10	0.10	0.10	Rate
	\$ 2,630.31	\$ 3,554.66	\$ 4,192.99	\$ 2,214.44	\$ 3,603.10	\$ 2,312.10	Annual Utility Charge
x	18,312	24,638	22,895	15,231	23,112	17,028	kWh Post-retrofit Usage
	0.10732	0.10732	0.10	0.10	0.10	0.10	Rate/kWh
	\$ 1,965.24	\$ 2,644.13	\$ 2,289.47	\$ 1,523.05	\$ 2,311.20	\$ 1,702.80	Annual Utility Charge
	\$ 4,000.00	\$ 4,500.00	\$ 7,854.74	\$ 7,548.30	\$ 1,845.00	\$ 3,422.00	Cost of Retrofit to Customer
	\$ (665.06)	\$ (910.54)	\$ (1,903.52)	\$ (691.39)	\$ (1,291.90)	\$ (609.30)	Annual Consumer Savings Year 1
	(6,197)	(8,484)	(19,035)	(6,914)	(12,919)	(6,093)	kWh Total Energy Reduction

On-Bill Model Applied							
	\$ 4,000.00	\$ 4,500.00	\$ 7,854.74	\$ 7,548.30	\$ 1,845.00	\$ 3,422.00	Cost of Retrofit
+	5%	5%	5%	5%	5%	5%	Energy Services Fee
	\$ 4,200.00	\$ 4,725.00	\$ 8,247.48	\$ 7,925.72	\$ 1,937.25	\$ 3,593.10	Total Efficiency Investment
x	24,509	33,122	41,930	22,144	36,031	23,121	kWh Historical Annual Usage
	0.10732	0.10732	0.10	0.10	0.10	0.10	Rate
	\$ 2,630.31	\$ 3,554.66	\$ 4,192.99	\$ 2,214.44	\$ 3,603.10	\$ 2,312.10	Annual Utility Charge
x	18,312	24,638	22,895	15,231	23,112	17,028	kWh Post-retrofit Usage
	\$0.10732	\$0.10732	0.10	0.10	0.10	0.10	Rate/kWh
	\$ 1,965.24	\$ 2,644.13	\$ 2,289.47	\$ 1,523.05	\$ 2,311.20	\$ 1,702.80	Annual Utility Charge
+	\$ 348.05	\$ 391.56	\$ 683.47	\$ 615.37	\$ 160.54	\$ 297.76	KY Energy Retrofit Rider Tariff (15 years at 3%)
	\$ 2,313.30	\$ 3,035.69	\$ 2,972.94	\$ 2,138.42	\$ 2,471.74	\$ 2,000.56	Annual Utility Charge
	\$ -	\$ -	\$ -	\$ 500.00	\$ -	\$ -	Cost of Retrofit to Customer
	\$ (317.01)	\$ (518.98)	\$ (1,220.06)	\$ (76.02)	\$ (1,131.36)	\$ (311.54)	Annual Consumer Savings Year 1
	(6,197)	(8,484)	(19,035)	(6,914)	(12,919)	(6,093)	kWh Total Energy Reduction
	52%	43%	36%	89%	12%	49%	% of Savings used for Tariff



2. How energy assistance payments from Low Income Home Energy Assistance Program or from a community action agency would apply to customers who are on an on-bill financing program:

The joint applicants have consulted with the Community Action Council partners about currently available energy assistance programs for low income people including LIHEAP Low Income Housing Energy Assistance Program, CSBG ARRA Emergency Assistance Fund, and the assistance funds offered by local utilities. In each case the participation criteria were limited to (1) demonstrating income and (2) pending disconnection. Assistance amounts are a function of the total utility bill outstanding, a qualified persons' income and the available budget of assistance funds. Assistance providers refer to beneficiary's total outstanding utility bills, not component line items of those bills. None of the programs consulted reported any chance of diminished qualification for emergency assistance payments as a result of a customer's participation in a tariffed energy retrofit.