Goss Samford PLLC

October 24, 2014

#### VIA HAND DELIVERY

Mr. Jeff Derouen Executive Director Kentucky Public Service Commission P.O. Box 615 211 Sower Boulevard Frankfort, KY 40602

RECEIVED OCT 2 4 2014 PUBLIC SERVICE COMMISSION

Re: PSC Case No. 2014-00359

Dear Mr. Derouen:

Please find enclosed for filing with the Commission in the above-referenced case an original and ten copies of the responses of East Kentucky Power Cooperative, Inc. ("EKPC"), to the Staff's Request for Information in the Appendix to an Order dated October 10, 2014.

Very truly yours, and S. Samford (by Rope K ( and )

David S. Samford

Enclosures

Cc: Parties of Record

#### **COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION** 

RECEIVED

OCT 2 4 2014

PUBLIC SERVICE COMMISSION

In the Matter of:

TARIFF FILING OF EAST KENTUCKY POWER	)	
<b>COOPERATIVE, INC. FOR APPROVAL OF A</b>	)	CASE NO.
NEW DEMAND-SIDE MANAGEMENT PROGRAM	)	2014-00359
ENERGY STAR MANUFACTURED HOME	)	
PROGRAM	1	

RESPONSES TO COMMISSION STAFF'S INITIAL REQUEST FOR INFORMATION TO EAST KENTUCKY POWER COOPERATIVE, INC., DATED OCTOBER 10, 2014

#### EAST KENTUCKY POWER COOPERATIVE, INC.

#### PSC CASE NO. 2014-00359

#### PUBLIC SERVICE COMMISSION REQUEST DATED 10/10/14

East Kentucky Power Cooperative, Inc. ("EKPC") hereby submits responses to the information requests contained in the Appendix to the Order of the Public Service Commission ("PSC") in this case dated October 10, 2014. Each response with its associated supportive reference materials is individually tabbed.

#### **COMMONWEALTH OF KENTUCKY**

#### **BEFORE THE PUBLIC SERVICE COMMISSION**

#### IN THE MATTER OF:

TARIFF FILING OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL OF A NEW DEMAND-SIDE MANAGEMENT PROGRAM ENERGY STAR MANUFACTURED HOME PROGRAM

CASE NO. 2014-00359

)

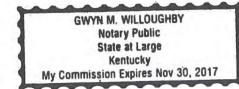
#### CERTIFICATE

# STATE OF KENTUCKY COUNTY OF CLARK

Scott Drake, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's Initial Request for Information in the above-referenced case dated October 10, 2014, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

At A rall

Subscribed and sworn before me on this  $24^{44}$ day of October 2014.



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## EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2014-00359 RESPONSE TO INFORMATION REQUEST

## COMMISSION STAFF'S INITIAL REQUEST FOR INFORMATION DATED 10/10/14 REQUEST 1 RESPONSIBLE PARTY: Scott Drake

**Request 1.** Explain whether EKPC's member cooperatives requested this proposed program. If the program was so requested, identify the member-owners that made the request.

**Response 1.** This Demand Side Management ("DSM") Program concept stemmed from discussions between EKPC staff and DSM staff at the Tennessee Valley Authority ("TVA"). TVA currently includes the Energy Star Manufactured Home ("ESMH") program in its DSM offerings. EKPC staff evaluated the TVA program and presented its potential to the EKPC DSM Steering Committee ("steering committee"), which includes staff from EKPC and its owner-member cooperatives ("owner-member"). The steering committee agreed this incentive program should be recommended to EKPC Executive Staff and the owner-member CEO's for approval as a new DSM program. Once approval of the EKPC Executive Staff was obtained, this program was presented to the owner-member CEOs. Although a roll call and voting results were not taken or recorded, the owner-member CEOs encouraged EKPC to move forward with seeking Commission approval for the program.

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### EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2014-00359 RESPONSE TO INFORMATION REQUEST

#### COMMISSION STAFF'S INITIAL REQUEST FOR INFORMATION DATED 10/10/14 REQUEST 2 RESPONSIBLE PARTY: Scott Drake

Request 2.By year, provide the projected number of annual participants for 2015-2018.

**Response 2.**The current projected participation for this program over the period 2015-2018, is as follows:

2015: 200

2016: 300

2017: 400

2018: 400

The numbers EKPC used on its cost-effectiveness analysis were based on the parameters in EKPC's contract with Systems Building Research Alliance ("SBRA"). The projected number of homes in that contract is 400 over an 18-month period. EKPC used that figure so that the participation, savings, and costs would all match.

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The SBRA monitors all manufactured homes sales in the United States and estimates EKPC's eligible market to be 800 new homes per year. Typically, homes ordered by the retail lot and available on the retail lot for purchase are not ordered ENERGY STAR<sup>®</sup>. While, homes that are custom ordered by an EKPC owner-member cooperative end-use member will typically choose to upgrade to ENERGY STAR<sup>®</sup> because the address for the new home will be known by the manufacturer and the end-use member will be eligible for the rebate from the owner-member. Therefore, according to SBRA, EKPC should expect that 50% of the eligible market each year will order ENERGY STAR<sup>®</sup> manufactured homes, after a two year ramp-up period.

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## EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2014-00359 RESPONSE TO INFORMATION REQUEST

## COMMISSION STAFF'S INITIAL REQUEST FOR INFORMATION DATED 10/10/14 REQUEST 3 RESPONSIBLE PARTY: Scott Drake

**<u>Request 3.</u>** Explain the impact of the proposed demand-side management ("DSM") program on the funds EKPC has set aside in base rates for its current DSM portfolio of programs.

**Response 3.** The DSM expenditure portion of the last EKPC base rate case test year did not include this new program. Therefore, this and any other new DSM program expenditure is not allocated within the current base rate. This DSM program expenditure is funded in future budgets and any such expenditure will therefore reduce EKPC's annual margin.

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## EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2014-00359 RESPONSE TO INFORMATION REQUEST

## COMMISSION STAFF'S INITIAL REQUEST FOR INFORMATION DATED 10/10/14 REQUEST 4 RESPONSIBLE PARTY: Scott Drake

**Request 4a.** Explain the Systems Building Research Alliance ("SBRA") process of ensuring that Energy Star standards are applied to each manufactured home constructed.

**Response 4a.** According to the SBRA, as part of the certification process required of each home manufacturing plant, the ENERGY STAR<sup>®</sup> requirements must be included in what's called the Design Approval Primary Inspection Agency ("DAPIA") package, a set of specifications for the construction of the each manufactured home type that is required under the United States Housing and Urban Development ("HUD") code. The HUD-authorized inspector inspects each home during the plant production process for compliance with the DAPIA package specifications. Therefore, the ENERGY STAR<sup>®</sup> specifications (included in the DAPIA package) are being inspected on each ENERGY STAR<sup>®</sup> home by HUD's inspection agent at the plant.

**Request 4b.** Provide the location where the SBRA process of verifying and ensuring that Energy Star standards are applied occurs.

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**Response 4b.** According to the SBRA, the principal inspection site is the home manufacturing plant where approximately 95% of the total construction work is performed. Additional inspections and testing are required of ENERGY STAR<sup>®</sup> homes once they are placed in service at the building site. This inspection is performed by a third-party independent inspection agency.

**<u>Request 4c.</u>** Describe the type of manufactured home to which the Energy Star standards are applied, and whether the home is an Energy Star home at the time of purchase.

**Response 4c.** Many manufactured homes are custom ordered by the customer and then manufactured to the customer's specifications. Most manufactured home types can be ordered by the customer to conform to the ENERGY STAR<sup>®</sup> standards. Due to the fact that the incentive included in the ESMH program will cover all additional costs to upgrade to the ENERGY STAR<sup>®</sup> standard, a customer will typically choose to have their home upgraded to ENERGY STAR<sup>®</sup> at the time of order and purchase. In some instances, the home retailers have models available at the retail site whose construction conforms to ENERGY STAR<sup>®</sup> provisions. However, a home is <u>only</u> designated as ENERGY STAR<sup>®</sup> and qualifies for the ENERGY STAR<sup>®</sup> label following field installation and inspection by a third-party independent inspection agency.

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### EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2014-00359 RESPONSE TO INFORMATION REQUEST

### COMMISSION STAFF'S INITIAL REQUEST FOR INFORMATION DATED 10/10/14 REQUEST 5 RESPONSIBLE PARTY: Scott Drake

**Request 5.** Explain why the estimated net lost revenues are for ten years.

**Response 5.** The number of years of net lost revenues is applied to a simplified calculation of kWh savings and typical difference in cents per kWh between the retail and the wholesale price of electricity. The number of years of net lost revenues to use in calculating the transfer payment that EKPC pays its owner-member cooperatives is the result of considering several factors that include: (1) the lifetime of the savings; (2) the relationship between energy savings and peak demand savings for the program (the wholesale rate includes a demand charge while residential retail rates do not); and (3) the combined RIM across both EKPC and its ownermembers. For this program, the lifetime of the savings is estimated to be 15 years. The program provides a relatively large amount of energy savings compared to peak-demand savings. The goal is to provide a transfer payment that will result in the owner-member's RIM being as close to 1.0 as possible while maintaining some equity between EKPC and the owner-members in regard to the overall financial impact of the program. For this program, using 10 years of

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estimated net lost revenues resulted in a RIM of 0.85 for the owner-members and 0.64 for EKPC.

The following chart shows the impact that using different numbers of years of lost

revenue in the payment from the owner-member to EKPC has on the resulting RIMs:

Years of Lost Revenue	Owner-Member RIM	EKPC RIM	
8	0.81	0.66	
9	0.83	0.65	
10	0.85	0.64	
11	0.86	0.63	
12	0.88	0.62	

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## EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2014-00359 RESPONSE TO INFORMATION REQUEST

## COMMISSION STAFF'S INITIAL REQUEST FOR INFORMATION DATED 10/10/14 REQUEST 6 RESPONSIBLE PARTY: Scott Drake

**Request 6.** Refer to the ENERGY STAR<sup>®</sup> Manufactured Home Program Guidelines. Explain whether the type of new home that is eligible for this program is an Energy Star manufactured home, and if so, explain how the SBRA process will further enhance the energy efficiency of the manufactured home.

**Response 6.** The homes for which the EKPC ESMH program will provide incentives would most likely NOT be ENERGY STAR<sup>®</sup> Manufactured Homes in the absence of this program. According to *Next Step*, a non-profit organization promoting ENERGY STAR<sup>®</sup> manufactured homes, Kentucky averages 2,000 new manufactured homes each year with less than 1% of those being certified as ENERGY STAR<sup>®</sup> homes. Through a partnership with SBRA and home manufacturers, EKPC's ESMH program will ensure that a much higher number of new manufactured homes will be built to ENERGY STAR<sup>®</sup> standards. In addition, the EKPC ESMH program will also implement the SBRA standard that requires every home to have a heat pump rather than an electric furnace. This requirement will result in much greater electricity

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savings than simply building to ENERGY STAR<sup>®</sup> standards for just the home shell or thermal envelope.