

September 11, 2014

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

Re: East Kentucky Power Cooperative, Inc. Section DSM-7 ENERGY STAR[®] Manufactured Home Program (New)

Dear Mr. Derouen:

Please find enclosed for filing with the Commission, via the electronic tariff filing system, the above-referenced tariff.

Previously, East Kentucky Power Cooperative, Inc. ("EKPC") and its 16 owner-member cooperatives ("owner-members") administered a tariffed Touchstone Energy Manufactured Home Demand Side Management ("DSM") program. However, that program was discontinued in early 2013 due to lack of program participation. Since then, the EKPC DSM Steering Committee ("Steering Committee"), a committee of EKPC and owner-member staff, has been looking for opportunities to initiate a new DSM program featuring manufactured homes. After much research, the Steering Committee determined that the Tennessee Valley Authority's ("TVA") ENERGY STAR[®] manufactured home program provides an excellent model for such a program. Subsequently, the Steering Committee sought, and received, approval from the executive staff of EKPC and owner-members' chief executive officers to develop and fund a similar program, pending Commission approval.

EKPC believes the TVA ENERGY STAR[®] manufactured home program works well because it targets and works with the home manufacturers and their manufacturing facilities, utilizing a process developed by the Systems Building Research Alliance ("SBRA"), the non-profit research and development organization for the manufactured home industry. SBRA's process, which has been approved by the United States Environmental Protection Agency ("EPA"), involves ensuring that Energy Star standards are applied to each manufactured home constructed and that appropriate verification of such applications takes place. Energy Star Standards include upgrades to home envelope insulation and sealing, installation of a programmable thermostat, low-energy lighting, and a properly sized and installed heat pump. SBRA is the only organization recognized by the EPA that administers and tracks all ENERGY STAR[®] manufactured homes constructed in the United States.

As part of this filing, please find attached a copy of the California Tests results and the program assumption sheet. The Total Resource Cost (TRC) is over 4.0 while the Rate Impact Measures ("RIM") for EKPC and the owner-members is slightly below 1.0. The RIM is lower than usual because of the program design. It is anticipated that the decision to work directly with the

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manufacturers will drive participation rates higher than prior attempts to incentivize homeowners. However, EKPC alone will bear 100% of the home improvement costs. For each home, EKPC will pay SBRA \$1,750 to cover the home upgrade costs noted in the tariff, plus a \$150 administration fee. Despite these initial costs, according to TVA, implementing this program in its service territory resulted in annual savings of over 11,000 kWh per home when compared to the basic United States Department of Housing and Urban Development (“HUD”) standard manufactured home. Thus, EKPC anticipates that the high level of kWh saved by the customer will result in significant revenue loss for each participating distribution cooperative. To cover this revenue shortfall, for each new ENERGY STAR[®] manufactured home built in its territory, EKPC will make a one-time payment of \$2,400 to the respective owner-member to cover lost revenue and administration expenses.

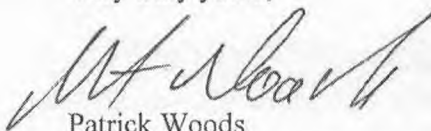
Upon Commission approval of this tariff, EKPC will execute an agreement with SBRA to administer the ENERGY STAR[®] manufactured home program for EKPC and its participating owner-members. For all new manufactured homes ordered and verified to be sited in an owner-member’s service territory, SBRA will work with the manufacturers to ensure the homes will be automatically upgraded to ENERGY STAR[®] manufactured home standards. SBRA will also track each home and verify the structure’s upgrade in the factory, as well as verifying proper onsite installation of both the structure and the heat pump. Attached, for your reference, is a document further detailing the program guidelines.

EKPC and its 16 owner-members are excited about implementing this DSM program. Collectively, 35% of the Kentuckians we serve live in manufactured homes. We feel this program could, over time, greatly improve the housing stock, resulting in improved comfort and quality of life for many Kentuckians.

Pursuant to KRS 278.180 EKPC must give at least 30 days notice to the Commission. Therefore, the proposed effective date of this program will be October 15, 2014. Pursuant to 807 KAR 5:011, EKPC has posted the requisite notice at its office located at 4775 Lexington Road, Winchester, Kentucky and will post on its website, no later than five (5) business days from today’s date, which will include a hyperlink to the Commission’s website where the tariff can be found. EKPC has also given written notice to its 16 owner-members by mailing a copy of the notice and proposed tariff to each of them, on this date.

Please contact me if you have any questions.

Very truly yours,



Patrick Woods
Director, Regulatory Services

Enclosures

Energy Star Manufactured Home: 2014 update based on TVA program. Updated avoided energy costs. Prepared for tariff filing.

Distribution System Benefits		Distribution System Costs	
Power Bill Declines	\$ 3,341,990	Revenue Declines	(\$5,085,117)
Rebates From EK	\$980,000	Administrative Costs	(\$20,000)
		Rebates Paid To Consumers	\$0
Total Benefits	\$4,321,990	Total Costs	(\$5,105,117)
Benefit / Cost Ratio: 0.85			

Participant Benefits		Participant Costs	
Electric Bill Declines	\$3,637,462	Up Front Investment	\$0
Rebates From Distribution System	\$ -		
Reductions in O&M costs	\$0		
Total Benefits	\$3,637,462	Total Costs	\$0
Benefit / Cost Ratio: #DIV/0!			

Total Resource Benefits		Total Resource Costs	
Avoided Energy Costs	\$2,784,906	Up Front Customer Investment	\$0
Avoided Gen Capacity Costs	\$291,606	Distribution System Admin. Costs	(\$20,000)
Avoided Transmission Expense	\$178,892	EK Administrative Costs	(\$775,800)
Reduced Customer O&M costs	\$0		
Total Benefits	\$3,255,405	Total Costs	(\$795,800)
Benefit / Cost Ratio: 4.09			

EK Benefits		EK Costs	
Avoided Energy Costs	\$2,784,906	Decrease In Revenue	(\$3,341,990)
Avoided Gen Capacity Costs	\$291,606	Rebates Paid	(\$980,000)
Avoided Transmission Expense	\$178,892	Administrative Costs	(\$775,800)
Total Benefits	\$3,255,405	Total Costs	(\$5,097,790)
Benefit / Cost Ratio: 0.64			

Societal Benefits		Societal Costs	
Avoided Energy Costs	\$3,051,131	Up Front Customer Investment	\$0
Avoided Gen Capacity Costs	\$319,260	Distribution System Admin. Costs	(\$20,000)
Avoided Transmission Expense	\$195,848	EK Administrative Costs	(\$775,800)
Environmental Externalities	\$0		
Total Benefits	\$3,566,239	Total Costs	(\$795,800)
Benefit / Cost Ratio: 4.48			

Combined RIM:			
Benefits:	\$3,255,405	Costs:	(\$5,880,917)
Benefit / Cost Ratio: 0.55			

For Tariff filing

August, 2014

EnergyStar Manufactured Home with heat pump: rebate to manufacturer (SBRA)

All Electric manufactured home built to Energy Star standards with a SEER 13 ASHP

<u>Assumption</u>	<u>Source</u>
<p>Load Impacts Before Participant 17,194 kWh, 9.58 kW (coincident with winter system peak), 3.06 kW (summer)</p> <p>After Participant 5,247 kWh, 6.70 kW (coincident with winter system peak), 2.55 kW (summer)</p>	<p>Heating & cooling electricity loads for a standard efficiency manufactured home with an electric furnace</p> <p>Heating & Cooling loads for a Manufactured home built to energy star standards with a SEER 13 ASHP . kWh savings and summer kW savings as reported by TVA (Jan 2014, Haislip)</p>
<p>Lifetime of savings</p> <p>Generation Capacity Cost - EE = combined cycle, 100% summer \$119.00 in 2013 Avoided Electricity Energy Costs - PJM Market</p> <p>Participant Costs \$ 0</p>	<p>15 Years - TVA assumption</p> <p>Combined Cycle Baseload unit. 100% allocation to summer based on ACES July 1 2014 energy forward curve for AEP_Dayton. DSMore Scenario 1, 0.717 esc in 2015</p> <p>Incremental measure costs are expected to be covered 100% by rebates and tax credits passed on to participating home buyer. Energy star upgrades (assumed to be \$1,650) plus incremental cost for the heat pump (\$500) less pass-through of rebate paid to home producer (\$1,750) and state of Kentucky tax credit to the dealer (\$400, through 2015).</p>
<p>Administrative Cost EK \$5,800 one time startup fee, plus \$10,000 fixed annual, plus \$1,900 per home</p> <p>Co-op \$50 per new participant</p>	<p>One time startup fee to SBRA (\$5,800). Fixed annual allocated administrative costs (\$3,000) plus M&V (\$7,000). Variable cost per home is the incentive for home producer paid to SBRA (\$1,750 per home) plus SBRA admin fee (\$150 per home).</p> <p>\$50 for rebate processing and tracking</p>
<p>Rate Schedule - Retail Average Residential Rate for Co-ops Cust chrg \$9.62, Energy Rate \$.08966</p> <p>Rate Schedule - Wholesale East Kentucky E-2 rate.</p>	<p>Current rates in effect as of June, 2011.</p> <p>Current rates in effect as of June, 2011.</p>
<p>Participation -400 for 2015. 0% Free Riders projected because of nature of program</p>	
<p>Rebates</p> <p>Co-op to Participant \$0 EK to Co-op \$2,400</p>	<p>No direct rebate paid to participant. Rebates are modeled as administrative costs because they are paid to the home producer and heat pump contractor 100% of coop admin, plus 10 years estimated net lost revenue.</p>

ENERGY STAR® MANUFACTURED HOME PROGRAM GUIDELINES

OBJECTIVE:

East Kentucky Power Cooperative's ("EKPC") ENERGY STAR® Manufactured Home Program ("ESMH") is intended to expand the market for ENERGY STAR® homes in the EKPC service area by providing manufactured home producers with an incentive to promote and facilitate the production and installation of new ENERGY STAR® certified manufactured homes.

AVAILABILITY:

This program is available to all EKPC's owner-member cooperatives ("owner-members") on whose system an ENERGY STAR® certified manufactured home is installed.

TERM: The ESMH program is an ongoing program.

ELIGIBILITY: TYPE OF NEW HOMES:

- ENERGY STAR® Certified Manufactured Homes
- Primary source of heat must be a heat pump 13 SEER & 7.5 HSPF or higher.
- Home must be all electric.
- Home must be installed by the manufacturer on lines served by one of EKPC's 16 owner-members.

PROGRAM DESCRIPTION:

Through the ESMH program, EKPC will pay incentives in the form of rebates for electrically heated manufactured homes that qualify for the ENERGY STAR® label as defined by the United States Environmental Protection Agency ("EPA"). ENERGY STAR® compliance requires the use of a combination of structural envelope and equipment measures that, in combination, result in performance that is significantly more energy efficient than comparable factory-built homes produced in accordance with the United States Department of Housing and Urban Development ("HUD") code.

An ENERGY STAR® certified manufactured home is equipped with the following features:

- Thermal envelope improvements
 - increased envelope insulation
 - improved duct insulation
 - tighter duct construction
 - higher efficiency windows
 - tighter envelope construction
- High efficiency equipment/control strategies
 - high efficiency heat pumps in place of standard electric resistance furnaces and air conditioning equipment
 - high efficiency domestic water heater
 - programmable thermostat

INCENTIVE AMOUNT:

An incentive of \$1,750 will be paid to the home manufacturer for each new ENERGY STAR® Certified home that is sold at retail to an end-use cooperative member (“end-use member”) of one of EKPC’s owner-members and equipped with a heat pump approved by Systems Building Research Alliance (“SBRA”). EKPC will pay the incentive to the home manufacturer per qualified home after demonstrated completion of the following items:

- Construction of the home with features that meet or exceed the provisions of the ENERGY STAR® Manufactured Homes program for manufactured homes along with all required documentation.
- Affixing the EPA ENERGY STAR® (blue) and SBRA Quality Assurance (gray) labels to the home (see Figure 1), signifying that the home is built in accordance with the program quality control procedures.

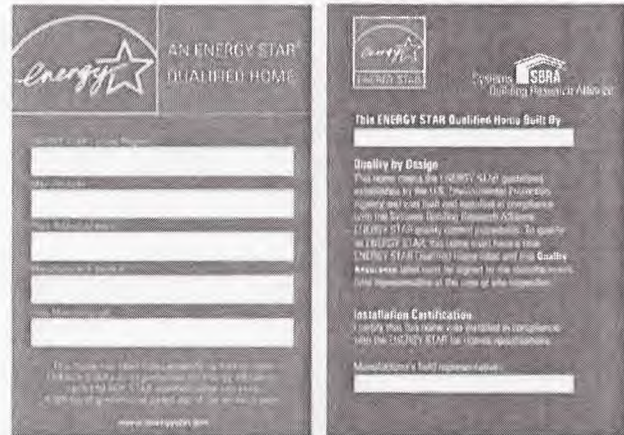


Figure 1. Labels for ENERGY STAR Manufactured Homes

- Recording information about the home in the ENERGY STAR® *Information Manager*, SBRA’s proprietary web-based compliance tracking software.
- Installation of the home at the building site and completion of the ENERGY STAR® *Site Installation Checklist*. As part of this process, verifying the installation of the heat pump is required under the program. Service provided by the manufacturer’s certified installer.
- Signing of the Site Installation Checklist and the Quality Assurance label by an authorized agent of the manufacturer.
- Archiving documentation detailing the items above for inspection by SBRA and the plant’s ENERGY STAR® Certifier. (The Certifier will further verify compliance with these requirements by field testing a representative sample of homes built by the manufacturer.)

QUALITY ASSURANCE:

Under a policy effective November 1, 2005, the EPA made manufactured housing plant certification, third-party plant Certifier oversight and field performance verification for ENERGY STAR® manufactured homes the responsibility of SBRA as the national Quality Assurance Provider (“QAP”). To assure quality at every step in the ENERGY STAR® process, SBRA has established a process that both leverages the quality control measures already in place for manufactured homes (the plant Design Approval Primary Inspection Agency (“DAPIA”) and In-Plant Plan Inspection Agency (“IPIA”) process discussed below) and has created a separate network of third-party agents called ENERGY STAR® Certifiers that function in a similar capacity as Home Energy Rating System (“HERS”) raters and providers. This four-tiered quality

control system—DAPIAs, IPIAs, Certifiers and SBRA—taken together assure that ENERGY STAR® manufactured homes consistently perform to expectations.

There are several overlapping and reinforcing procedures identified below that assure that the manufacturer that builds ENERGY STAR® homes is meeting or exceeding the requirements of the program.

- **DAPIA approvals of the ENERGY STAR package:** Under the HUD standards that regulate manufactured homes, every design must be approved by a third-party agent, called the DAPIA. Manufacturers develop ENERGY STAR® compliant packages that are incorporated into the DAPIA package and are thus covered under the umbrella of HUD enforcement. Therefore, failure to build the home as specified would be a violation of HUD regulations. Conformance of the design to the ENERGY STAR® requirements is verified by the ENERGY STAR® Certifiers.
- **IPIA approval during construction:** The HUD standards also require an in-plant inspection of all homes by another third party called an IPIA. The IPIA is responsible for verifying that the manufacturer is building the home in accordance with the DAPIA-approved plans. For ENERGY STAR® homes, the IPIA checks during the production process that the home is built with the required insulation, equipment, windows, controls and other features found on the approved plans.
- **ENERGY STAR Certifiers:** Separate and apart from the above process that leverages the existing inspection agencies, every manufacturer must have a third-party ENERGY STAR Certifier. The Certifiers are responsible to SBRA as the ENERGY STAR® QAP. SBRA requires these agents to have skills equivalent to HERS raters and be familiar with factory building practices. The actions of the manufactured home Plant Certifiers are governed by procedures stipulated by SBRA. The Certifiers provide a unique function and are on the front lines of assuring conformance to ENERGY STAR® requirements. The role of the Certifier includes the following:
 - Oversee the plant ENERGY STAR® qualification process.
 - Train plant production staff in ENERGY STAR® techniques.
 - Review and if acceptable, approve plant processes and the plant’s ENERGY STAR® -related documentation, including ENERGY STAR® qualified home designs, ENERGY STAR® Site Installation Checklist, Quality Control Manual and the Manufacturer’s Site Installation Manual.
 - After initial plant certification, conduct ongoing quality control inspection and testing of a representative sample of completed homes.
 - Participate in and contribute to periodic meetings of Certifiers conducted by SBRA regarding program quality control and oversight.

SBRA Oversight: As the national QAP, SBRA oversees the work of the Certifiers and routinely reviews quality control methods and approaches with the Certifiers.

Section DSM - 7

ENERGY STAR® Manufactured Home Program

Purpose

East Kentucky Power Cooperative's ("EKPC") ENERGY STAR® Manufactured Home Program ("ESMH") is designed to ensure that end-use cooperative members ("end-use members") of EKPC's owner-member cooperatives ("owner-members") purchase an energy efficient manufactured home. EKPC will accomplish this by providing manufactured home producers with an incentive to manufacture and install new ENERGY STAR® certified manufactured homes.

Availability

This program is available to all EKPC's owner-members on whose system an ENERGY STAR® certified manufactured home is installed.

Eligibility

To be eligible for this ESMH incentive, new manufactured homes must meet the following criteria:

- United States Environmental Protection Agency ("EPA") and Systems Building Research Alliance ("SBRA") guidelines as an ENERGY STAR® Manufactured Home.
- Primary source of heat must be a heat pump 13 SEER & 7.5 HSPF or higher as required by SBRA.
- Home must be all electric.
- Home must be installed by the manufacturer on lines served by one of EKPC's 16 owner-members.

Payments

After new home installation and after SBRA certifies the new home as an ENERGY STAR® manufactured home, EKPC will tender a \$1,750 incentive payment to the manufactured home producer. The incentive covers the cost of upgrading the home from the standard United States Department of Housing and Urban Development (HUD) construction requirements to the SBRA and EPA ENERGY STAR® manufactured home construction requirements. EKPC will also pay SBRA an administrative fee. EKPC will pay \$2,400 to the owner-member on whose system the manufactured home is located to cover administrative costs and lost revenue.

Term

This program is an ongoing program.

DATE OF ISSUE September 11, 2014
Month / Date / Year

DATE EFFECTIVE Service Rendered on or after October 15, 2014
Month / Date / Year

ISSUED BY *Anthony S. Campbell*
(Signature of Officer)

TITLE President and Chief Executive Officer

(N)

