<u>Section DSM</u> <u>Direct Load Control Program – Residential</u>

<u>Purpose</u>

The Direct Load Control Program will encourage the reduction in growth of peak demand, enabling East Kentucky Power Cooperative ("EKPC") to utilize its system more efficiently, manage market purchases, and defer the construction of new generation.

Availability

The Direct Load Control Program is available to residential members in the service territories of Blue Grass Energy and will include the control of existing water heaters, existing and new air conditioners and heat pumps.

Availability may be denied where, in the judgment of the Blue Grass Energy, installation of the load control equipment is impractical.

Eligibility

To qualify for this Program, the new participant must be located in the service territory of Blue Grass Energy and have:

• Central air conditioning or heat pump units with single-stage compressors.

The above appliances may be electrically cycled or interrupted in accordance with the rules of this Tariff.

The participant may either own or rent the residence where the qualifying appliances are located. The residence may be either a single-family structure or a multi-family apartment facility.

The participant is responsible for obtaining the permission of the owner of the rented residence to participate in the load control program. Blue Grass Energy may require that a rental property agreement be executed between Blue Grass Energy and the owner of the rented residence.

	KENTUCKY
	PUBLIC SERVICE COMMISSION
DATE OF ISSUE: February 27, 2019	Gwen R. Pinson Executive Director
DATE EFFECTIVE: <u>March 2, 2019</u> ISSUED BY: <i>Conduct: Conditioned</i>	Shwen R. Punson
ISSUED BY: WILLIAM C. OVICE CONTROL OF	EFFECTIVE
TITLE: Vice President & CFO	3/2/2010
INLE: Vice President & CFO Issued by authority of an Order of the Public Service Commis	Sion of Kentuck winkar 5:011 SECTION 9 (1)
Case No. <u>2019-00060</u> Dated: <u>November 26, 2019</u>	

<u>Section DSM – (con't.)</u> <u>Direct Load Control Program – Residential</u>

Program Incentives

Blue Grass Energy will provide an incentive to the participants in this program for the following appliances:

<u>Water Heaters:</u> Blue Grass Energy will credit the residential power bill of the participant \$10.00 per water heater annually or provide the incentive via other payment means including, but not limited to, a check. The participant will receive this credit regardless of whether the water heater is actually controlled during any program month.

<u>Air Conditioners and Heat Pumps.</u> Blue Grass Energy will provide an incentive to the participants in this program. The participant may select one of three alternatives. The participant will receive one of these incentives regardless of whether the air conditioner or heat pump is actually controlled during any program month.

<u>Alternative One.</u> For each direct load control switch, Blue Grass Energy will credit the residential power bill of the participant \$20.00 annually or provide the incentive via other payment means including, but not limited to, a check per air conditioner or heat pump.

<u>Alternative Two</u>. When technically feasible, Blue Grass Energy may provide and install at no cost one or more Wi-Fi enabled thermostats as needed for control purposes or Blue Grass Energy may provide a Wi-Fi enabled thermostat and a rebate up to \$100 to offset the member's cost to have the thermostat installed by the member's own heating and air-conditioning contractor. The member must sign-up each Blue Grass Energy provided thermostat within 60 days or return it to Blue Grass Energy or be invoiced by Blue Grass Energy for the cost of the thermostat. Wi-Fi enabled means any thermostat utilizing the Wi-Fi communication protocol or similar local networking communication protocols. The member must have a fixed location and reliable internet for communication. Blue Grass Energy will reimburse the participating member \$20 per qualifying Wi-Fi enabled thermostat annually.

<u>Alternative Three:</u> Blue Grass Energy will credit the residential power bill of the participant \$20.00 per qualifying Wi-Fi enabled thermostat provided by the retail member that controls an air conditioner or heat pump annually or provide the incentive via other payment means including, but not limited to, a check. Blue Grass Energy will provide a rebate up to \$100 to offset the member's cost to have the thermostat installed by the member's own heating and air-conditioning contractor. The member must have a fixed location and reliable internet for communication.

	KENTHCKY
	PUBLIC SERVICE COMMISSION
DATE OF ISSUE: February 27, 2019	Gwen R. Pinson Executive Director
DATE EFFECTIVE: March 2, 2019	
ISSUED BY: Culture 4. Collinson -	Suven R. Punson
ISSUED BY: (///////////	EFFECTIVE
TITLE: Vice President & CFO	
Issued by authority of an Order of the Public Service Commis	sion of Kentucky 7/2019
Case No. 2019-00060 Dated: <u>November 26, 201</u> 9	

<u>Section DSM -(con't.)</u> <u>Direct Load Control Program – Residential</u>

When the qualifying appliances are located in rental residences, program incentives will be paid to the participant, regardless of whether the participant owns or rents the residence where the qualifying appliances are located. Nothing contained in this Tariff will prohibit a further disposition of the program incentive between the participant and the owner of a rented residence.

Program Special Incentives

Blue Grass Energy will provide a special incentive up to \$25.00 for new participants that install a load control switch on qualifying air conditioners and heat pumps, Utility supplied Wi-Fi enabled thermostat or retail member supplied Wi-Fi enabled thermostat. This one time per residence incentive will be in the form of a bill credit on the electric bill following the switch installation or provided via other payment means including, but not limited to, a check..

Time Periods for Direct Load Control Program

<u>Water Heaters.</u> Existing load control switches may be electrically interrupted for a maximum time period of six (6) hours per event during the May through September months indicated below and for a maximum time period of four (4) hours during the October through April months indicated below.

EKPC will cycle the water heaters only during the hours listed below.

<u>Months</u>	Hours Applicable for Demand Billing – EPT
October through April	6:00 a.m. to 12:00 noon
	4:00 p.m. to 10:00 p.m.
May through September	10:00 a.m. to 10:00 p.m.

<u>Air Conditioners and Heat Pumps.</u> A load control device (switch or Wi-Fi enabled thermostat) will be placed on each central air conditioning unit or heat pump that will allow the operating characteristics of the unit to be modified to reduce demand on the system. Communication to the load control device will be accomplished via AMR, Wi-Fi, or similar communication technologies.

EKPC will control the air conditioning units and heat pumps only during its summer on-peak billing hours listed below and up to four (4) hours per event.

<u>Months</u> May through September Hours Applicable for Demand Billing – EPT 10:00 a.m. to 10:00 p.m.

	KENTUCKY PUBLIC SERVICE COMMISSION
DATE OF ISSUE: <u>February 27, 2019</u> DATE EFFECTIVE: <u>March 2, 2019</u> ISSUED BY: <i>Mundre L. Williamson - F</i>	Gwen R. Pinson Executive Director Suven R. Punson
ISSUED BY: <u>Vice President & CFO</u> TITLE: <u>Vice President & CFO</u> Issued by authority of an Order of the Public Service Commi Case No. <u>2019-00060</u> Dated: <u>November 26, 2019</u>	3/2/2019

<u>Section DSM – (con't.)</u> Direct Load Control Program – Residential

Terms and Conditions

1. Prior to the installation of load control devices, Blue Grass Energy may inspect the participant's electrical equipment to insure good repair and working condition, but Blue Grass Energy shall not be responsible for the repair or maintenance of the electrical equipment.

2. EKPC, on behalf of Blue Grass Energy, will install in some cases, own, and maintain the load management devices controlling the participant's air conditioner or heat pump for alternatives One and Two as noted in this tariff. The participant must allow Blue Grass Energy, or their representative, reasonable access to install, maintain, inspect, test and remove load control devices. Inability of the Blue Grass Energy to gain access to the load management device to perform any of the above activities for a period exceeding 30 days may, at Blue Grass Energy's option, result in discontinuance of credits under this tariff until such time as Blue Grass Energy is able to gain the required access.

3. Participants may join the program at any time during the year. Participants with air conditioning or heat pump units who join during the months of June through September can select an incentive alternative as described in this Tariff. If the incentive is selected, incentives will be provided annually.

4. If a participant decides to withdraw from the program or change incentive alternatives, Blue Grass Energy will endeavor to implement the change as soon as possible.

5. If a participant decides to withdraw from the program, the participant may not apply to rejoin the program for a period of six (6) months. Returning participants for air conditioning and heat pump units will be required to initially select the bill credit alternative but may change alternatives later as described in this Tariff.

	KENTUCKY
	PUBLIC SERVICE COMMISSION
DATE OF ISSUE: <u>February 27, 2019</u>	Gwen R. Pinson
DATE EFFECTIVE: <u>March 2, 2019</u>	Executive Director
ISSUED BY:	Studen R. Punson
TITLE: <u>Vice President & CFO</u>	EFFECTIVE
Issued by authority of an Order of the Public Service Commis	3/2/2019
Case No. <u>2019-00060</u> Dated: <u>November 26, 2019</u>	sion of Kentuck add kar 5:011 SECTION 9 (1)

Section DSM **Direct Load Control Program – Commercial**

Purpose

The Direct Load Control Program will encourage the reduction in growth of peak demand, enabling EKPC to utilize its system more efficiently, manage market purchases, and defer the construction of new generation.

Availability

The Direct Load Control Program is available to commercial customers in the service territories of Blue Grass Energy Cooperative Corporation and will include the control of air conditioners and water heaters.

Availability may be denied where, in the judgment of Blue Grass Energy Cooperative Corporation, installation of the load control equipment is impractical.

Eligibility

To qualify for this Program, the new participant must be located in the service territory of Blue Grass Energy Cooperative Corporation and have a central air conditioning unit or heat pump units. The appliance may be electrically cycled or interrupted in accordance with the rules of this Tariff.

The participant is responsible for obtaining the permission of the commercial property owner to participate in the load control program. Blue Grass Energy Cooperative Corporation may require that a rental property agreement be executed between Blue Grass Energy Cooperative Corporation and the owner of the rented commercial property.

Program Incentives

Blue Grass Energy Cooperative Corporation will provide an incentive to the participants in this program for the following appliances.

	KENTUCKY PUBLIC SERVICE COMMISSION
DATE OF ISSUE: February 27, 2019	Gwen R. Pinson
DATE EFFECTIVE: <u>March 2, 2019</u>	Executive Director
ISSUED BY: Anolus & Ulling	Steven R. Punson
TITLE: Vice President & CFO	EFFECTIVE
Issued by authority of an Order of the Public Service Commis	sion of Kentuck <mark>3//2/2019</mark>
Case No. 2019-00060 Dated: November 26, 2019	PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

Case No. 2019-00060 Dated: November 26, 2019

<u>Section DSM)- (con't.)</u> Direct Load Control Program – Commercial

<u>Air Conditioners and Heat Pumps:</u> The incentive will be based on the tonnage of the air conditioning unit. Units up to and including five (5) tons will receive \$20.00 per unit. Units over five (5) tons will receive an additional annual credit of \$4.00 per ton per unit. Blue Grass Energy Cooperative Corporation will credit the commercial power bill of the participant the applicable incentive credit or provide the incentive via other payment means including, but not limited to, a check. The participant will receive the incentive regardless of whether the air conditioner is actually controlled during any program month.

<u>Water Heaters</u>. Blue Grass Energy Cooperative Corporation will credit the existing participating commercial power bill of the participant \$10.00 per water heater annually or provide the incentive via other payment means including, but not limited to, a check. The participant will receive this credit regardless of whether the water heater is actually controlled.

Time Period for Direct Load Control Program

<u>Air Conditioners and Heat Pumps</u>: A load control device will be placed on each central air conditioning unit or heat pump that will allow the operating characteristics of the unit to be modified to reduce demand on the system. The member must have internet for communication. Utility of member supplied Wi-Fi enabled thermostat programs may also be available. Communication to the load control device or thermostat will be accomplished via AMR, AMI, Wi-Fi or similar communication technologies.

EKPC will control the air conditioning units only during its summer on-peak billing hours listed below and up to four (4) hours per event:

Months May through September Hours Applicable for Demand Billing - EPT 10:00 a.m. to 10:00 p.m.

<u>Water Heaters</u>. Existing load control switches may be electrically interrupted for a maximum time period of six hours per event during the May through September months indicated below and for a maximum time period of four (4) hours per event during the October through April months indicated below.

DATE OF ISSUE: February 27, 2019	KENTUCKY PUBLIC SERVICE COMMISSION
DATE EFFECTIVE: <u>March 2, 2019</u>	Gwen R. Pinson Executive Director
ISSUED BY: Mulu & Chliman	Shwen R. Runson
Issued by authority of an Order of the Public Service Commi	sion of Kentucky in
Case No. <u>2019-00060</u> Dated: <u>November 26, 2019</u>	PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

<u>Section DSM- (con't.)</u> Direct Load Control Program – Commercial

EKPC will cycle the water heaters only during the hours listed below.

Months	Hours Applicable for Demand Billing - EPT
October through April	6:00 a.m. to 12:00 noon
	4:00 p.m. to 10:00 p.m.
May through September	10:00 a.m. to 10:00 p.m.

Terms and Conditions

1. Prior to the installation of load control devices, Blue Grass Energy may inspect the participant's electrical equipment to ensure good repair and working condition, but Blue Grass Energy shall not be responsible for the repair or maintenance of the electrical equipment.

2. EKPC on behalf of Blue Grass Energy, will install, in some cases own, and maintain the load management devices controlling the participant's air conditioner or heat pump. The participant must allow Blue Grass Energy, or their representative, reasonable access to install, maintain, inspect, test and remove load control devices. Inability of Blue Grass Energy to gain access to the load management device to perform any of the above activities for a period exceeding 30 days may, at Blue Grass Energy's option, result in discontinuance of credits under this tariff until such time as Blue Grass Energy is able to gain the required access.

3. Participants may join the program at any time during the year. Participants with air conditioning or heat pumps who join during the months of June through September will receive the bill credits annually.

4. If a participant decides to withdraw from the program, Blue Grass Energy will endeavor to implement the withdrawal as soon as possible. If a participant decides to withdraw from the program, the participant may not apply to rejoin the program for a period of six (6) months.

DATE OF ISSUE: February 27, 2019	KENTUCKY PUBLIC SERVICE COMMISSION
DATE EFFECTIVE: <u>March 2, 2019</u>	Gwen R. Pinson Executive Director
ISSUED BY: Chendren & Walling	Shwen R. Punson
TITLE: Vice President & CFO	EFFECTIVE
Issued by authority of an Order of the Public Service Commis	sion of Kentucky/ig/2010
Case No. 2019-00060 Dated: November 26, 2019	PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

<u>Section DSM – 2</u>

Touchstone Energy Home

Purpose

In an effort to improve new residential home energy performance, Blue Grass Energy has designed the Touchstone Energy Home Program. This program provides guidance during the building process to guarantee a home that is $\geq 25-30$ % more efficient than the Kentucky standard built home. The standard built new home in rural Kentucky typically receives a 105 on the Home Energy Rating System ("HERS") Index.

Availability

This program is available to home owners served by Blue Grass Energy.

Eligibility

To qualify as a Touchstone Energy Home under Blue Grass Energy's program, the participating single-family home must be located in the service territory of Blue Grass Energy and must meet the program guidelines following one of the two available paths of approval. Multi-family dwellings pre-approved by East Kentucky Power Cooperative, Inc. may be eligible.

Program Guidelines

- Home must receive a HERS Index score of < 75 (At least 30% more efficient than the KY standard built home)
- Home must receive pre-drywall inspection and complete Blue Grass Energy's pre-drywall checklist (contact the Energy Advisor at Blue Grass Energy for a copy of the checklist)
- Home must receive a final inspection, pass a whole house air leakage test), and duct leakage test.
- Primary source of heat must be an Air Source Heat Pump ≥ current Energy and Water conservation standard established by the Federal DOE or Geothermal
- Home must pass current energy code requirements established in the KY Residential Code.
- Water Heater must be an electric storage tank water heater that is ≥ current Energy and Water conservation standard established by the Federal DOE.

Incentive

Blue Grass Energy will provide a free energy rating using the Home Energy Rating System (HERS) to each qualifying participant that builds their new home to meet the requirements listed above. Any homes not able to meet the requirements listed above will be charged market value for the service provided. A HERS rating is valued at \$450 to \$750.

<u>Term</u>

The program is an ongoing program.

DATE OF ISSUE: <u>February 27, 2019</u> DATE EFFECTIVE: <u>March 2, 2019</u>

ISSUED BY: Commen 4. Della

TITLE: <u>Vice President & CFO</u> Issued by authority of an Order of the Public Service Commission of Kentucky in Case No. <u>2019-00060</u> Dated: <u>November 26, 2019</u>

KENTUCKY PUBLIC SERVICE COMMISSION	
Gwen R. Pinson Executive Director	
- Stwen R. Punson-	
EFFECTIVE	
3/2/2019 PURSUANT TO 807 KAR 5:011 SECTION 9 (1)	

DSM ENERGY STAR[®] Manufactured Home Program

<u>Purpose</u>

Blue Grass Energy's ENERGY STAR[®] Manufactured Home Program ("ESMH") is designed to ensure that members of Blue Grass Energy purchase an energy efficient manufactured home. Blue Grass Energy will accomplish this by providing the purchaser of a manufactured home with an incentive to purchase and install a new ENERGY STAR[®] certified manufactured home.

<u>Availability</u>

This program is available to residential members served by Blue Grass Energy.

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.
- Home must be all electric.
- Home must be installed by the member on lines served by Blue Grass Energy.
- Participants in the ENERGY STAR Manufactured Home Program are not eligible for participation in the Heat Pump Retrofit Program.

Payments

After new home installation and after receiving certification as an ENERGY STAR[®] manufactured home, Blue Grass Energy will tender a \$1,150 incentive payment to their end-use member. The incentive is intended to help cover 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.

<u>Term</u>

This program is an ongoing program.

	KENTUCKY PUBLIC SERVICE COMMISSION
DATE OF ISSUE: <u>February 27, 2019</u> DATE EFFECTIVE: <u>March 2, 2019</u>	Gwen R. Pinson Executive Director Stuven R. Punson
ISSUED BY: TITLE: <u>Vice President & CFO</u> Issued by authority of an Order of the Public Service Commission Case No. <u>2019-00060</u> Dated: <u>November 26, 2019</u>	EFFECTIVE 3/2/2019 PURSUANT TO 807 KAR 5:011 SECTION 9 (1) of Kentucky in

Section DSM -

Button-Up Weatherization Program

<u>Purpose</u>

The Button-Up Weatherization Program offers an incentive for reducing the heat loss of a home. The retail member may qualify for this incentive by improving attic insulation and reducing the air leakage of their home.

<u>Availability</u>

This program is available to home owners served by Blue Grass Energy.

Eligibility

This program is targeted at older single-family, multi-family or manufactured dwellings. Eligibility requirements are:

- Home must be 2 years old or older to qualify for the incentive.
- Primary source of heat must be electricity.

The Button Up incentive will promote the reduction of energy usage through air sealing on the part of the retail member. Typical air sealing could include caulking, improved weather stripping, sealing attic accesses, etc. To receive this incentive either an EKPC approved contractor or Blue Grass Energy representative must perform a "pre" and "post" blower door test to measure actual Btuh reduced.

The attic insulation portion of the Button Up incentive will promote the reduction of energy usage on the part of the retail member. Heat loss calculation of Btuh reduced will be made by Blue Grass Energy using either the Manual J 8th Edition or through other methods approved by East Kentucky Power Cooperative (EKPC). Heat loss calculations in Btuh are based on the winter design temperature. In order to receive an incentive for attic insulation, an air seal must be completed.

Incentives

Blue Grass Energy will provide an incentive to home owners of \$40 per one thousand Btuh reduced, up to \$750.

<u>Term</u>

The program is an ongoing program.

DATE OF ISSUE: <u>February 27, 2019</u> DATE EFFECTIVE: <u>March 2, 2019</u>

ISSUED BY: Mulle 4. lillia

TITLE: <u>Vice President & CFO</u> Issued by authority of an Order of the Public Service Commission of Kentucky in Case No. 2019-00060 Dated: November 26, 2019

KENTUCKY PUBLIC SERVICE COMMISSION
Gwen R. Pinson Executive Director
Shwen R. Runson
EFFECTIVE
3/2/2019 CentucRyPin

[SHEET CANCELLED]

[RESERVED FOR FUTURE USE]

·	KENTUCKY PUBLIC SERVICE COMMISSION
DATE OF ISSUE: <u>February 27, 2019</u> DATE EFFECTIVE: <u>March 2, 2019</u>	Gwen R. Pinson Executive Director Suven R. Punson
ISSUED BY: Junita M. Odlikiument TITLE: Vice President & CFO Issued by authority of an Order of the Public Service Commission of I Case No. 2019-00060 Dated: November 26, 2019	EFFECTIVE Centucky in 3/2/2019 PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

[SHEET CANCELLED]

[RESERVED FOR FUTURE USE]

Contract of the Public Service Commission of Kentucky in Case No. 2019-00060 Dated: November 26, 2019
Kentucky in Status of Kentuc

<u>Section DSM –</u> <u>Heat Pump Retrofit Program</u>

Purpose

The Heat Pump Retrofit Program provides incentives for residential members to replace their existing resistance heat source with an efficiency heat pump.

Availability

This program is available to home owners served by Blue Grass Energy.

Eligibility

This program is targeted to home owners who currently heat their home with a resistance heat source; this program is targeted to site built homes, manufactured homes, and multi-family dwellings. Eligibility requirements are:

- Incentive only applies when homeowner's primary source of heat is an electric resistance heat furnace, ceiling cable heat, baseboard heat, or electric thermal storage.
- Existing heat source must be at least 2 years old.
- New manufactured homes are eligible for the incentive.
- Two (2) maximum incentive payments per location, per lifetime for centrally ducted systems.
- Ducted and Ductless mini-splits applying for the incentive will be incentivized at a rate of \$250 per indoor head unit up to a maximum of three head units per location, per lifetime.
- Participants in the Heat Pump Retrofit Program are not eligible for participation in the ENERGY STAR® Manufactured Home Program.

Incentives

Homeowners replacing their existing resistance heat source with a heat pump will qualify for the following incentive based on the equipment type:

Equipment Type

INCENTIVE TO MEMBER

Centrally Ducted Systems:	
Current Energy Conservation Standard established By the Federal Department of Energy "DOE"	\$500
Current ENERGY STAR® level equipment or greater	\$750
Mini Split Systems:	
Ducted or Ductless Mini-Splits ENERGY STAR®	\$250 KENTUCKY
Level equipment or greater	PUBLIC SERVICE COMMISSION
Term	Gwen R. Pinson Executive Director
The program is an ongoing program.	Shwen R. Punson
DATE OF ISSUE: February 27, 2019	EFFECTIVE
DATE EFFECTIVE: March 2, 2019	
ISSUED BY: Minita 4. In Structure	3/2/2019
TITLE: Vice President & CFO	PURSUANT TO 807 KAR 5:011 SECTION 9 (1)
Issued by authority of an Order of the Public Service Commission of	f Kentucky in
Case No. 2019-00060 Dated: November 26, 2019	