

DSM

Demand Side Management
2025 Annual Report





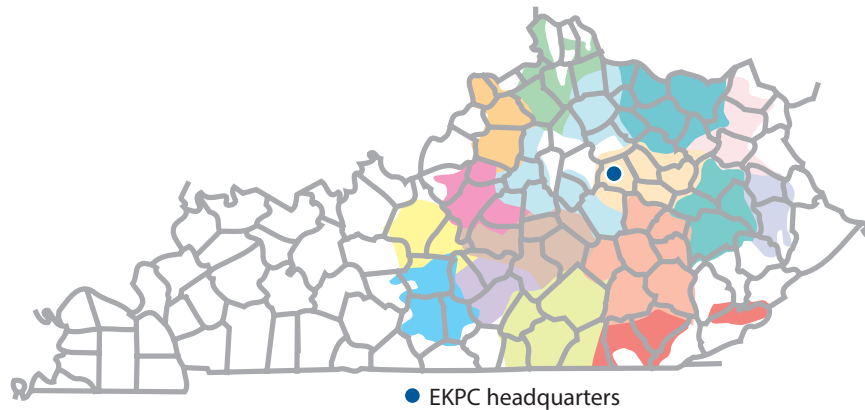
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Who We Are

Located in the heart of the Bluegrass state, East Kentucky Power Cooperative is a not-for-profit generation and transmission (G&T) electric utility with headquarters in Winchester, Ky. Our cooperative has a vital mission: to safely generate and deliver affordable, reliable, sustainable electric power to 16 owner-member cooperatives serving more than one million Kentuckians.

Together, with our 16 owner-members, we're known as Kentucky's Touchstone Energy Cooperatives. The member co-ops distribute energy to over 569,000 Kentucky homes, farms, businesses and industries across 89 counties. We're leaders in energy efficiency and environmental stewardship. And we're committed to providing power to improve the lives of people in Kentucky.



Sixteen distribution cooperatives, which are called the member systems, own EKPC. The 16 co-ops include:

- Big Sandy RECC
- Blue Grass Energy Cooperative
- Clark Energy Cooperative
- Cumberland Valley Electric
- Farmers RECC
- Fleming-Mason Energy Cooperative
- Grayson RECC
- Inter-County Energy
- Jackson Energy Cooperative
- Licking Valley RECC
- Nolin RECC
- Owen Electric Cooperative
- Salt River Electric Cooperative
- Shelby Energy Cooperative
- South Kentucky RECC
- Taylor County RECC

East Kentucky Power Generation

Coal	Generation	Natural Gas	Generation	Landfill	Generation
Spurlock	1,346 net MW	Smith	Summer	Bavarian	4.6 net MW
Cooper	341 net MW	Combustion	753 net MW	Green Valley	3.1 net MW
		Turbine	Winter	Hardin	2.3 net MW
Total	1,687 net MW	Units	989 net MW	Pendleton	3.0 net MW
		Bluegrass	Summer	Glasgow*	0.9 net MW
Hydro	Generation	Combustion	501 net MW	Total Landfill	13.9 net MW
Southeastern	170 MW	Turbine	Winter		
Power Adm.		Units	567 net MW	Solar	
(SEPA)		Total Natural Gas Summer	1,254 net MW	Generation	
		Total Natural Gas Winter	1,556 net MW	Cooperative Solar	8.5 net MW

* Under an existing agreement, a third party receives the output of Glasgow in a 10-year power purchase agreement.

Button-Up Weatherization:

Since the early 1990s, EKPC and its owner-member cooperatives have offered this program to improve a home's energy efficiency, comfort, and reduce energy use. In recent years, this program has been limited to incentives only for members who air seal the shell of their home. In 2025, EKPC's owner-members began offering the Button-Up incentive for all weatherization measures. Any member who resides in a site-built or manufactured home that is at least two years old and uses electricity as their primary source of heat is eligible.

Button-Up Weatherization:

The Button-Up Weatherization Program offers an incentive for reducing the heat loss of a home. The residential end-use member may qualify for this incentive by making improvements such as increasing insulation, installing higher efficiency windows and doors, by reducing the air leakage of their home, or by sealing their HVAC duct system.

In 2025, 30 Button-Up rebates were provided to members, resulting in a lifetime savings of 715 MWh and 1,429,148 pounds of carbon dioxide emissions.



Direct Load Control:

Since 2008, EKPC and its owner-member cooperatives have offered this program to manage peak usage. This program offers incentives to members who enroll central air-conditioners. Switches are installed and, during periods of high demand, the utility briefly cycles the appliance off in order to reduce system peaks and save on costs for peak power. Although EKPC's system typically peaks in winter, member's heating appliances are not interrupted to lower peak. Member comfort and safety are top priority.

This program is targeted to any member with central air-conditioning or heat pump. Beginning in 2019, EKPC also began offering a thermostat program that includes a qualifying Wi-Fi enabled thermostat so that end use members could enroll their smart thermostats in direct load control events. Enrollees in this program help lower energy demand during EKPC's system peaks.



Touchstone Energy Home:

Since 2003, EKPC and its owner-member cooperatives have offered this program to promote energy efficiency in new-home construction. This program is designed to encourage new homes to be built to higher standards for thermal integrity and equipment efficiency, as well as to choose a geothermal or an air-source heat pump, rather than less efficient forms of heating and cooling. Homes built to Touchstone Energy Home standards typically use 30 percent less energy than the same home built to typical construction standards. Plans are submitted before the home is built, a pre-drywall inspection is made, and a blower door test is administered after the home is built to verify that the home meets the standard.

This program is targeted towards the residential new construction market and members who are constructing new site-built homes.

In 2025, 621 Touchstone Energy Home rebates were provided to members, resulting in a lifetime savings of 39,459 MWh and 78,919,360 pounds of carbon dioxide emissions.

EKPC's owner-members have also used this program to partner with Kentucky's affordable housing builders. Relationships with these organizations have led to improved efficiency in affordable housing and lower monthly energy costs for recipients of these homes.



Heat Pump Retrofit:

For decades, EKPC and its owner-member cooperatives have offered this program to lower the cost of heating homes and increase comfort. This program provides incentives for members to replace their existing resistance heat source with a high-efficiency heat pump through two levels of rebates.

Level 1 offers a rebate for a federal minimum standard heat pump. Level 2 offers a rebate for a ENERGY STAR® level heat pump or higher efficiency heat pump. The retrofit program also offers a special incentive for mini-split systems. The existing heating system must be two years or older to qualify for incentives unless the heat pump is being installed in a new manufactured home. New manufactured homeowners who install a heat pump qualify for this incentive.

The program is targeted to members who currently use a resistance heat source. Incentives are offered when the homeowner's primary source of heat is an electric resistance furnace, ceiling cable heat, or baseboard heat in both site-built and manufactured homes.

In 2025, 243 Heat Pump Retrofit rebates were provided to members, resulting in a lifetime savings of 35,708 MWh and 71,416,640 pounds of carbon dioxide emissions.



High-Efficiency Heat Pump

In August of 2025, EKPC's owner-members began implementing the new High-Efficiency Heat Pump program. The High-Efficiency Heat Pump (HEHP) Program offers two incentive levels to residential end-use members for choosing to install either an air source heat pump that meets or exceeds the current ENERGY STAR® Program requirements, product specification for heat pump equipment established by the Environmental Protection Agency (EPA), or by installing a heat pump that has received the EPA cold climate air source heat pump (ccASHP) designation. The HEHP Program also provides an incentive for end-use members to choose a high-efficiency heat pump water heater over the standard conventional tank or instantaneous water heater.

In 2025, 64 rebates were provided to members, resulting in a lifetime savings of 1,634 MWh and 3,268,560 pounds of carbon dioxide emissions.

CARES:

The Community Assistance Resources for Energy Savings (CARES) program began in early 2015, and provides an incentive to enhance the weatherization and energy efficiency services provided to the end-use members by the Kentucky Community Action Agencies (CAA) network and Kentucky's Affordable Housing Organizations (AHO). EKPC and its owner-members provide an incentive to the CAA/AHO implementing the project on behalf of the end-use member.

This program is available to end-use members who qualify for weatherization and energy-efficiency services through their local CAA or AHO in all service territories of participating cooperatives. The maximum incentive possible per household was increased to \$3,000 in 2025.

In 2025, 84 CARES incentives were provided, resulting in a lifetime savings of 5,961 MWh and 11,922,120 pounds of carbon dioxide emissions.



Residential Off-Peak Electric Vehicle Pilot Program:

In 2023, EKPC and its owner-members received approval to conduct an Off-Peak EV charging pilot. The pilot program offers a \$.02 per kWh incentive for energy consumed by the EV during off-peak hours (10 p.m. and 6 a.m. eastern prevailing time year round). EV owners charging their EV as soon as they arrive home (typically at peak demand times in the early evening), create a significant demand on the grid, resulting in increased cost for the co-op. By delaying EV charging to after 10 p.m., EV owners can reduce the cost of demand during those peak times. This program helps owner-member co-ops shift peak demand times and helps end-use members save money.

At the end of 2025, there were 321 EVs enrolled in the Residential Off-Peak Electric Vehicle Pilot Program.



Impact Measures:

System summary of 2025 DSM program savings

DSM program totals (totals for installed energy-efficiency measures and total DLC participation for 2025)

All programs	Participation	Annual Energy Savings (MWh)	Summer Demand Savings (MW)	Winter Demand Savings (MW)	2025 program costs*	Lifetime energy savings (MWh)	Cost of demand saved (\$/kW)	Cost of energy saved (\$/kWh)	Lifetime CO2 savings (lbs)
All DSM Programs	29,723	4,475	27.795	6.640	\$4,540,152	83,478	\$73	0.031	166,955,828

Button-Up Weatherization

Residential program	Participation	Annual Energy Savings (MWh)	Summer Demand Savings (MW)	Winter Demand Savings (MW)	2025 program costs	Measure life (years)	Lifetime energy savings (MWh)	Cost of energy saved (\$/kWh)	Lifetime CO2 savings (lbs)
Button-Up	30	48	0.011	0.037	\$33,870	20	715	\$0.05	1,429,148

CARES

Residential program	Participation	Annual Energy Savings (MWh)	Summer Demand Savings (MW)	Winter Demand Savings (MW)	2025 program costs	Measure life (years)	Lifetime energy savings (MWh)	Cost of energy saved (\$/kWh)	Lifetime CO2 savings (lbs)
CARES	84	397	0.060	0.121	\$216,347	17	5,961	\$0.04	11,922,120

* Includes \$953,107 program administration and promotional expenses.

High-Efficiency Heat Pump

Residential program	Participation	Annual Energy Savings (MWh)	Summer Demand Savings (MW)	Winter Demand Savings (MW)	2025 program costs	Measure life (years)	Lifetime energy savings (MWh)	Cost of energy saved (\$/kWh)	Lifetime CO2 savings (lbs)
High-Efficiency Heat Pump	64	82	0.019	0.071	\$45,248	16	1,634	\$0.03	3,268,560

Heat Pump Retrofit

Residential program	Participation	Annual Energy Savings (MWh)	Summer Demand Savings (MW)	Winter Demand Savings (MW)	2025 program costs	Measure life (years)	Lifetime energy savings (MWh)	Cost of energy saved (\$/kWh)	Lifetime CO2 savings (lbs)
Heat Pump	243	1,785	0.082	0.000	\$424,843	16	28,567	\$0.01	57,133,312

Touchstone Energy Home

Residential program	Participation	Annual Energy Savings (MWh)	Summer Demand Savings (MW)	Winter Demand Savings (MW)	2025 program costs	Measure life (years)	Lifetime energy savings (MWh)	Cost of energy saved (\$/kWh)	Lifetime CO2 savings (lbs)
TSE Home Prescriptive	20	67	0.015	0.055	\$30,450	20	1,332	\$0.02	2,664,480
TSE Home Performance	601	1,906	0.427	1.569	\$865,150	20	38,127	\$0.02	76,254,880

Direct Load Control Cumulative

Residential program	Participation	Annual Energy Savings (MWh)	Summer Demand Savings (MW)	Winter Demand Savings (MW)	2025 program costs	Cost of Demand saved (\$/KW)
DLC Air Conditioner	12,307	61.535	12.307	0.000	\$780,774	\$63.44
DLC Water Heater	9,208	92.080	3.407	4.788	\$561,779	\$164.89
Thermostats	7,166	35.830	11.466	0.000	\$628,583	\$54.82
Totals	28,681	189.445	27.180	4.788	\$1,971,137	\$72.52

2025 Basic Program Assumptions ¹

Measure: Button-Up Weatherization with Air Sealing

Annual kWh Saved:	3,000
Winter Demand Savings:	2.20
Summer Demand Savings:	0.95
Lifetime of Savings:	15 years
TRC: ²	2.41

Measure: Heat Pump Federal Standard

From Electric Furnace & CAC to
Heat Pump Federal Standard

Annual kWh Saved:	7,533
Winter Demand Savings:	0
Summer Demand Savings:	0.32
Lifetime of Savings:	20 years
TRC: ²	1.60

Measure: Heat Pump ENERGY STAR®

From Electric Furnace & CAC to
ENERGY STAR Heat Pump

Annual kWh Saved:	7,978
Winter Demand Savings:	0
Summer Demand Savings:	0.45
Lifetime of Savings:	20 years
TRC: ²	1.60

Measure: Touchstone Energy Home

Prescriptive or Performance

Annual kWh Saved:	3,172
Winter Demand Savings:	2.94
Summer Demand Savings:	0.70
Lifetime of Savings:	20 years
TRC:	2.10

Measure: Wi-fi Enabled Thermostat

Annual kWh Saved:	36
Winter Demand Savings:	0.00
Summer Demand Savings:	1.20
Lifetime of Savings:	15 years
TRC:	2.17

Measure: CARES

Annual kWh Saved:	4,495
Winter Demand Savings:	1.34
Summer Demand Savings:	0.66
Lifetime of Savings:	15 years
TRC:	1.15

Measure: High-Efficiency Heat Pump

Annual kWh Saved:	890
Winter Demand Savings:	0.16
Summer Demand Savings:	0.203
Lifetime of Savings:	16 years
TRC:	2.43

¹ Savings numbers are "ex ante" or as planned gross savings except where noted.

² Total Resource Cost (TRC) is an overall program benefits/costs analysts ratio.

Kentucky's Touchstone Energy® Cooperatives

Big Sandy RECC Blue Grass Energy Clark Energy Cumberland Valley Electric Farmers RECC
Fleming-Mason Energy Grayson RECC Inter-County Energy Jackson Energy Licking Valley RECC Nolin RECC
Owen Electric Salt River Electric Shelby Energy South Kentucky RECC Taylor County RECC



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