# Cooperative Solar Farm Three – Marion





## **About Cooperative Solar Farm Three – Marion**

EKPC plans to develop a 635-acre solar farm in Marion County, Ky., north of Lebanon. This solar farm will generate 96 megawatts of electricity, enough to serve the annual electricity needs of 10,940 typical Kentucky homes

# Why does EKPC need to build this project?

This solar farm will help to diversify EKPC's fleet of electric-generating resources, providing a resource to meet growing demand for electricity, especially demand from industrial and commercial users seeking to lower their carbon footprint. This project will help EKPC comply with increasing government regulatory pressure to reduce the carbon intensity of its generation portfolio. This solar project will provide a cost-competitive resource to meet these goals.

# What approvals must be secured for this project?

The Kentucky Public Service Commission must grant a Certificate of Public Convenience and Necessity (CPCN) for this project to be constructed. The Rural Utilities Service, an agency that administers the U.S. Department of Agriculture's Rural Development Programs (USDA Rural Development), must ensure that EKPC meets appropriate environmental obligations including compliance with the National Environmental Policy Act, the National Historic Preservation Act and the Endangered Species Act.





# Location of Cooperative Solar Farm Three – Marion

Cooperative Solar Farm Three – Marion will be located on 635 acres of property in Marion County, north of Lebanon, on the east side of Ky. 55.







#### AIRPORTLN 5 <u>Ş.</u> Vashington County Marion County TRL RD HORAN LN HUNDLEY LN (55 GENE CAMPBELL RD 1404 (1195) D STATION RD Cooperative Solar Farm Three - Marion Preliminary Panel Layout Existing EKPC Marion Co. Substation RIA DR ---- Existing Transmission Lines LING AVE 0.25 0.5

# **Cooperative Solar Farm Three - Marion**

Cooperative Solar Farm Three - Marion will feature photovoltaic (PV) solar panels mounted on single-axis tracking systems supported by steel posts. When operating, the solar panels will move to track the sun from east to west over the course of the day. The solar farm will have capacity to generate 96 megawatts of electricity at alternating current (AC). That is enough to serve the annual electricity needs of 10,940 typical Kentucky homes.



# **Project Schedule**

Application filed with Kentucky PSC for Certificate of Public Convenience and Necessity	April 26, 2024
Informational public meeting	May 16, 2024
Begin construction	Early to mid-2026
Complete construction	Early 2027
Facility commissioned	Mid-2027

# FAQs



# Project background

#### Why is EKPC building a solar farm?

Deploying an increasingly diverse portfolio of generating resources is vital to maintaining reliable, cost-competitive and sustainable electric service for Kentucky's homes, businesses, factories and other energy users. In 2020, EKPC established a sustainability plan that included targets for reducing carbon dioxide emissions and increasing renewables. This sustainability plan recognizes increasing demand for renewable energy, especially among commercial and industrial electric users, and also increasing regulatory pressure for utilities to reduce emissions of carbon dioxide. In 2022, EKPC submitted an Integrated Resource Plan to the Kentucky Public Service Commission with plans for the cooperative to add about 1,000 megawatts of new solar energy resources over the coming decade.

#### Does EKPC plan to close any of its existing power plants as it adds new solar farms?

EKPC has no present plans to close existing power plants. EKPC has advocated for the United States to maintain reliable electric-generating resources that are available 24/7/365, regardless of weather conditions, while the nation transitions to lower carbon intensity.

#### Why is this solar farm in Marion County?

This project resulted from a solicitation for proposals EKPC issued to obtain renewable sources of electric generation. This particular project met EKPC's need for a resource to provide cost-competitive renewable power. The location of Cooperative Solar Farm Three-Marion provides flexibility to deliver solar energy across much of Kentucky without expensive investments in new transmission line facilities and equipment. Access to electric transmission lines to deliver the electricity to homes and businesses is a vital part of any power plant. The Cooperative Solar Farm Three-Marion site adjoins a substation with access to high-voltage transmission lines.

#### Is EKPC receiving government funds for this project?

As a not-for-profit electric cooperative, EKPC qualifies for low-interest financing from the U.S. Department of Agriculture for capital expenditures like this project. This solar farm project also qualifies for direct-payment federal investment tax credits. In addition, EKPC plans to submit an application for grant funding through the 2022 Inflation Reduction Act (IRA) passed by Congress. EKPC plans to proceed with this project regardless of the outcome of its request for IRA funding. All of these sources of funding help to reduce the cost of the project and keep electric rates competitive for electric cooperative members.

# Solar farm operations

#### What type of solar panels will be used?

EKPC plans to use photovoltaic (PV) solar panels mounted on single-axis tracking systems supported by steel posts. When operating, the solar panels will move to track the sun from east to west over the course of the day.

#### How tall are the solar panels?

When mounted on racks and at maximum tilt, the top edge of the solar panels will be approximately 15 feet above the ground.

#### Will EKPC provide visual screening around the solar farm?

Where possible, EKPC will maintain natural vegetative screening. Where visual mitigation is warranted, EKPC will plant a vegetative buffer with trees and/or shrubs.





#### What type of ground cover will be used?

EKPC plans to sow grasses around and between the solar panels. Occasional mowing is expected during warm weather months to maintain the height of the grass and to prevent trees and shrubs from growing near the panels.

#### Will there be a fence around the solar farm?

Yes, in order to maintain security and safety, EKPC plans to install a fence around the solar farm.

#### Will there be light from the solar farm?

EKPC does not anticipate installing security lighting. Anti-glare photovoltaic panels will be used to minimize glare impacts.

#### Will there be sound from the solar farm?

Once the solar farm is in operation, there will be minimal sound from the solar farm. Acoustic studies of solar farms indicate sound levels are consistent with agricultural and residential areas.

#### How long does EKPC expect to operate the solar farm?

EKPC expects to operate this solar farm for at least 25 years.

### Construction

#### How much construction traffic will there be?

During the 12-month peak period of construction, EKPC anticipates approximately 400 workers will be on-site daily.

#### How many people will be employed during construction?

At peak construction, approximately 400 workers will be employed at the site

#### Will there be sound from construction solar farm?

During construction, metal posts will be placed in the ground; these racks of solar panels will be mounted on the posts. Placing the posts will generate sound as they are driven into the ground. Contractors will perform this task between 7 a.m. and 10 p.m.



# **About EKPC**

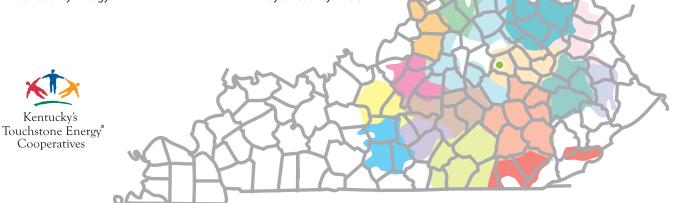
EKPC is a not-for-profit generation and transmission utility with headquarters in Winchester. EKPC generates electric power and transports it to 16 locally-owned cooperatives that distribute it to homes, farms, businesses and industries in 89 Kentucky counties, serving 1.1 million people. Together, EKPC and its owner-member cooperatives are known as Kentucky's Touchstone Energy Cooperatives.

EKPC's 16 owner-member cooperatives 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

Kentucky's

- Jackson Energy Cooperative
- Licking Valley RECC
- Nolin RECC
- Owen Electric Cooperative
- Salt River Electric Cooperative
- Shelby Energy Cooperative
- South Kentucky RECC
- **Taylor County RECC**



EKPC headquarters





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