

March 23, 2024

Case # 21-1231-EL-BGN  
Fountain Point Solar Project

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Dear Ohio Power Siting Board Members,

Solar in Ohio is unreliable, inefficient and intermittent.

Since January 1, 2024 there have been 18 confirmed tornadoes in Ohio.

An EF3 tornado went through Logan County on March 14, 2024. Three people lost their lives. How much more devastation, destruction and loss of lives could there have been if there had been thousands of acres of solar panels??? The tornado was downgraded to an EF2 when it was within ONE MILE of the proposed Fountain Point Project.

In 2023, the "OurSolar" project at the Logan County Electric Cooperative's office "remained inactive for 4,768 hours - - equivalent to a **staggering 198 days** of the year—**because of nighttime darkness and the lack of morning and evening sunshine.**"

And where will the backup electric generation come from to make up for the pathetic inefficiency from solar??? Our coal and natural gas facilities which supply us with a constant, reliable, affordable, source of electric generation.

Don't forget to add straight line winds, cloudy days, rainy days, snow, blizzards, hail and the normal dust and grime floating around in the air that will collect onto the panels. How often will the panels get their "windows" washed?

Please read the attached article from the February 2024 issue of the "Ohio Cooperative Living" magazine. It reports the **facts, figures and "real statistics"** of the OurSolar project in Logan County. Located next to the Logan County Coop's office.

Two graphs will prove how unreliable and intermittent solar is in Ohio. And raises the questions as to what will happen when peak generation is only from 11am to 3pm. Raising the point, again, "about the challenge of aligning solar generation with periods of high energy consumption in the home, which often peaks in the evening."

This project does not meet the public interest, convenience, and necessity and should be denied. We are **OPPOSED** to the Fountain Point Large Scale Solar Facility taking up 3,860 acres of fertile farmland within Logan County. Case #21-1231-EL-BGN

Regards,

Brian and Jocelyn Kavanagh

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# OURSOLAR

## What can we learn about solar production in Logan County?

**R**enewable energy, specifically solar power, has become a topic of consideration among co-op members. The question lingers: Is it a viable option for them, or an idea they should overlook? As they consider this question, OurSolar, a community solar initiative by Ohio's Electric Cooperatives (OEC) and generation co-op Buckeye Power, steps in to illuminate the situation with real statistics, aiding members in making informed decisions.

OurSolar is a project that includes the installation of 6,200 solar photovoltaic panels across various electric cooperatives in Ohio. This project installed 152 panels at Logan County Electric Cooperative's (LCEC) office.

Building on this success, Buckeye Power has recently added nearly 8,000 new solar panels near Hancock-Wood Electric Cooperative in Findlay, Ohio. This expansion not only increases generation capacity — contributing 2.66 megawatts (mW) to the existing solar, hydro, coal, and natural gas power generation sources — but also underscores Buckeye Power's commitment to a diverse energy mix.

Furthermore, state-of-the-art environmental controls in coal and natural gas facilities ensure responsible and reliable energy production. Buckeye Power's energy

portfolio includes cutting-edge baseload and renewable sources: 4.76 mW of solar energy, 4.45 mW from biogas projects at livestock farms, 9.6 mW from methane generation at landfills, and 55 mW from hydropower.

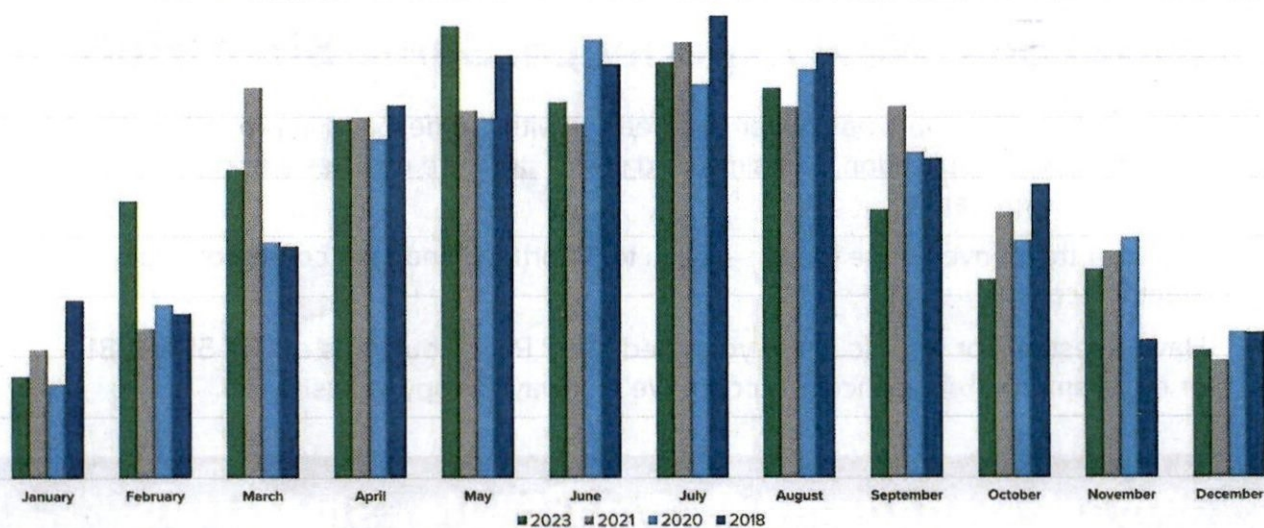
To provide perspective, the Cardinal Power Plant is OEC's primary electricity source, generating a substantial 1,230 mW day and night. This highlights the scale required to match traditional power generation.

Beyond statistics, OurSolar empowers co-op members by offering insights into solar energy generation in Logan County. Providing members with crucial information, OurSolar empowers them to make informed decisions when considering substantial investments in renewable energy.

### Solar energy - AC/DC unveiled

Considering technical details, the 152 panels at LCEC provide a peak power-generation capacity of 50 kilowatts (kW) of direct current (DC) electricity. However, for consumption by co-op members, DC electricity undergoes inversion to alternating current (AC), reducing the maximum generation capacity to 40 kW. Understanding the loss of electricity in this conversion process becomes pivotal for members evaluating solar investments.

## OurSolar performance: 4-year monthly kWh comparison





Keep in mind, the efficiency of the solar panels is influenced by factors such as sunlight intensity and weather conditions. The varying angles of sunlight throughout the day and the impact of seasonal changes affect the overall electric output. It's essential for co-op members to be aware of these dynamic factors, as they play a significant role in determining the actual energy production.

### 2023 insights

In 2023, OurSolar achieved 3,992 hours of electricity production, equivalent to a 76-work week. Notably, during 1,106 of these hours, the electricity generated was less than 5 kWh, emphasizing the intermittent nature of solar energy. Additionally, the solar array reached its maximum output of 40 kWh for only 37 hours in the year, a decrease from 63 hours recorded in 2018. These insights illuminate the variable performance of solar panels, forming a baseline for evaluating their effectiveness. On average, the hourly electric production was 14 kWh — translating to 0.09 kWh per panel per hour.

Another fact emerges during the same time frame, as these solar panels remained inactive for 4,768 hours — equivalent to a staggering 198 days of the year — because of nighttime darkness and the lack of morning and evening sunshine. This reality raises concerns about electric generation and prompts exploration into the practicality of implementing a battery wall, despite their current high cost.

### Insights for decision-making

The bar chart below demonstrates another statistic that reveals the temporal generation patterns realized in

2023. From 8 p.m. to 7 a.m., the array produced little or no electricity, while the peak generation occurred from 11 a.m. to 3 p.m.

It is crucial to note that the peak generation typically happens when households experience reduced energy demand, often due to occupants being away. This raises an interesting point about the challenge of aligning solar generation with periods of high energy consumption in the home, which often peaks in the evening.

It is also important to note that during the months of June, July, and August, more than twice as much electricity was generated than in the months of November, December, January, and February.

### Encouraging informed decisions

There is a critical nature of these insights for members considering solar installations. In Logan County, Ohio, solar panels generate an average of 0.09 kWh of electricity daily. This highlights the importance of setting realistic expectations for potential residential solar investors.

For those considering solar panel installations, LCEC invites members to call at 937-592-4781. The cooperative is here to provide guidance on the benefits and considerations of solar energy, ensuring members' specific questions are addressed before they make any final decisions.

In summary, OurSolar serves not only to generate electricity but as an educational tool. It empowers members with information to navigate the evolving landscape of renewable energy with knowledge and confidence.

kWh generated

