**Proposal to Oppose the Exie Solar Project**

Submitted to The Kentucky state board on electric generation and transmission siting

Date: 8-1-2025

To Whom It May Concern,

We, the undersigned residents and stakeholders of Green County respectfully submit this proposal urging the board to oppose the proposed Exie Solar Project. While we recognize the value of renewable energy, this specific project raises serious concerns for our land, water, safety, wildlife, and economy.

**1. Loss of Agricultural Land**

The proposed site encompasses productive farmland that has supported generations of local farmers and contributed to our regional food supply and economy. Converting this land into a solar facility would:

Permanently remove acreage from agricultural production.

Disrupt local food chains and livestock operations reliant on nearby cropland.

Undermine the rural character and farming heritage of our region.

At a time when national food security is increasingly important, it is irresponsible to sacrifice arable land for industrial solar use, particularly when non-agricultural, degraded, or brownfield sites are more appropriate. The reality is that this rural land will be lost forever. Industrial-scale solar projects are typically for 30-40 years. Stripping and compaction removes topsoil, destroys healthy soil organisms and allows for invasion of exotic plants that choke out native species.

**2. Impact on Local Wildlife and Habitat**

The area includes vital habitat for deer, birds, pollinators, and other native species. Solar fields:

Fragment natural landscapes and disrupt wildlife corridors.

Eliminate native vegetation and nesting grounds.

Introduce fencing and artificial lighting that disorient wildlife.

Perimeter fencing, often 6-feet high and topped with barbed wire, will restrict movement of wildlife in the area. Removal of vegetation will impact bird population and other wildlife.

In Kentucky, we are already witnessing the dramatic loss of one of our most iconic native species: the Northern Bobwhite quail. Since the 1960s, Kentucky's bobwhite population has dropped by over 80%, primarily due to the loss of native habitat, including grasslands, edge cover, and early successional growth. Projects like Exie Solar would further strip the land of vital biodiversity, replacing dynamic ecosystems with sterile, industrial landscapes.

The state and conservation groups like Quail Forever have spent years and millions of dollars trying to restore quail habitat in targeted areas. In some regions, these efforts have shown real progress—with populations rebounding by over 700% where native grasses and brush were brought back. All of this would be undone if projects like this one continue to replace native lands with panels and gravel.

Quail hunting is a major part of Kentucky's upland bird hunting culture, attracting both resident and out-of-state hunters. In areas such as this local landowners have restored native habitat, quail populations have increased sharply—sparking renewed hunter interest. You don't see hunters traveling across the state to walk solar farms.

The developers completely dodged questions about the impact on local wildlife, which clearly shows a lack of concern for the ecosystem and the people who live near it. If they can't answer basic environmental questions now, how can we trust them to protect our community in the long term?

Grazing sheep and beekeeping are token gestures and in no way compensate for the lost potential of the land.

**3. Threat to Groundwater and Drinking Water Safety**

Many homes rely on well water in this area. The risk of:

Chemical runoff from herbicide use,

Soil compaction altering drainage patterns, and

Potential panel degradation releasing toxic materials

This poses unacceptable threats to our drinking water and watershed integrity.

Uncontrolled runoff of water and topsoil is a well-documented byproduct of industrial-scale solar site development. This massive increase in watershed sedimentation impacts all downstream rivers and estuaries. Water contamination doesn't stop with the end of construction. Removal of all trees and deep-rooted plants, along with inadequate stormwater controls lead to long-term runoff and water contamination issues. Local municipalities usually do not have adequate resources to monitor construction and stormwater violations and, even when properly monitored, site developers have no problem paying fines, and there is no effective check on environmental damage.

*When asked, the developer could not explain what the effects on drinking water and runoff would be—this shows a clear lack of proper environmental studies and due diligence before moving forward.*

We are located just 25 miles from Mammoth Cave National Park—a globally significant natural and cultural treasure. As the world's longest cave system, Mammoth Cave relies on a delicate and interconnected system of karst geology, underground rivers, and groundwater flow. Large-scale land alterations, like those proposed by the Exie Solar project, have the potential to disrupt these systems, especially in a region with fragile limestone bedrock and complex water tables.

**4. Increased Fire Risk**

Solar farms have documented instances of:

Equipment fires caused by overheating or electrical faults,

Rapid vegetation fires in dry, unmanaged buffer zones, and Delayed emergency response due to poor site access.

Our rural fire services lack the resources to respond to industrial-scale emergencies, especially in isolated areas.

Toxic emissions: Fires can release hazardous gases like hydrogen fluoride, which pose risks to health and surrounding ecosystems—even if initial air quality tests remain inconclusive

Another serious concern is the potential inclusion of battery energy storage systems (BESS)—often used to store excess solar power on-site. These systems typically rely on

lithium-ion batteries, which are known to pose significant fire and explosion risks, especially when exposed to heat, water, or physical damage.

Fires involving lithium batteries are extremely difficult to control and can burn for hours or days, releasing toxic gases and requiring massive emergency response efforts. In rural communities like ours—with limited firefighting infrastructure and long response times—such incidents could be catastrophic.

In recent years, there have been multiple lithium battery fires at solar and wind storage sites across the U.S., including:

The Moss Landing fire in California (2021), which forced evacuations.

A fire in Arizona (2019) that caused an explosion and serious injuries to first responders.

On January 16, 2025, a fire broke out in the 300 MW Phase 1 lithium-ion battery facility at Moss Landing, California. The flames burned for days, forcing the evacuation of over 1,200 residents, destroyed approximately 80% of the system, and produced toxic black smoke

Independent testing after the fire detected elevated levels of heavy metals—including nickel, manganese, and cobalt—in surrounding marsh soils, raising concerns about environmental contamination

In Otay Mesa, San Diego, a lithium-ion BESS fire in May 2024 burned for five consecutive days, significantly disrupting local communities and prompting emergency evacuation

Across Australia, battery fires at grid-scale installations and consumer devices like e-scooters have increased dramatically. New South Wales termed lithium batteries the state's "fastest-growing fire risk," with many fires proving extremely difficult to suppress due to thermal runaway and high temperatures

Ongoing BESS failures in multiple states leading to shutdowns and new safety regulations.

Despite these risks, most developers don't disclose battery storage plans up front, leaving communities in the dark until it's too late. If battery storage is being considered for this project, the public deserves full transparency and a detailed emergency management plan before any permit is granted.

**5. Decreased Property Values**

Homes adjacent to solar farms often suffer from:

Aesthetic degradation,

Noise and dust during construction,

Perceived health and environmental risks,

All of which deter buyers and diminish property value. This results in financial losses for families and decreased tax revenue for the county.

Based on recent studies, the expected reduction in property value ranged from **5-25%** depending on proximity.

We, along with many other families, have worked hard to build a home in this community. We did not move to rural America to look out at industrial solar panels. This is where we chose to invest our life savings, our time, and our future — building not just a house, but a way of life.

In addition to living here, we also operate two businesses that draw visitors from out of town. These guests support our local economy, spending their hard-earned tax dollars at restaurants, stores, and lodging in the area. Projects like this threaten not only the rural character of our home, but also the economic vitality that depends on preserving the area's natural beauty and small-town appeal.

Destruction of rural landscapes and areas of historic interest result in the decline in eco and historical-tourism (or may prevent the development of these industries), reducing the prosperity of the local community.

The lack of a sufficient surety fund from the developer could leave the county—and ultimately taxpayers—responsible for the high costs of decommissioning. Net decommissioning costs have been estimated to range from $43,584 to $101,915 per megawatt, depending on site-specific conditions. No project plan or cost estimate should be approved without a comprehensive, transparent assessment of the full expense required to restore the land to its original condition. The financial burden of decommissioning must not fall on the county under any circumstances.

**The power generated by this project won't even reduce our local energy bills.**

Despite the disruption to our rural landscape, the strain on natural resources, and the potential long-term liability to the county.

The power generated by this project won't reduce our local energy bills — This was confirmed in a meeting with the company. In fact, the only real benefits go to the solar company and a few landowners who signed contracts without full transparency or community input.

Local residents won't see lower electricity rates, job creation is temporary and minimal, and the long-term burden — including decommissioning costs — could fall on taxpayers. Meanwhile, the rural character of our community, local wildlife, and valuable farmland are permanently altered for the profit of outside interests. The money being offered to Green County will never come close to covering the long-term costs or the irreversible damage to our farmland, natural resources, and rural way of life. Local families are left with all the risks — from environmental degradation to fire hazards and loss of property value — while the profits leave our community.

**6. Lack of transparency**

One of the most troubling aspects of the Exie Solar project has been the lack of transparency and genuine opportunity for public input. Meetings regarding this project have often been scheduled with short notice, leaving affected residents little time to rearrange work or family commitments to attend. This tactic significantly limits community involvement and erodes public trust.

Transparency requires timely, clear communication—especially when decisions have lasting impacts on land use, property values, and the character of our rural communities. By failing to provide sufficient notice, the project developers and local officials are denying residents a fair chance to voice concerns, ask questions, and participate in meaningful dialogue.

Short-notice meetings raise serious red flags about how this project is being pushed through. If the project truly benefits the community, why avoid scrutiny? The lack of proper notice suggests a deliberate attempt to minimize opposition and rush approvals through without thorough public vetting.

For a project of this magnitude, the public deserves ample time to review documents, prepare questions, and organize responses—not to find out about critical decisions days,

or even hours, before they're made. This is not how responsible development happens. The community deserves better.

**7. Solar panels can cause localized warming of the ground—a phenomenon known as the "photovoltaic heat island effect" (PVHI).**

Similar to how cities experience "urban heat islands," solar arrays can trap heat and alter the natural energy balance of the land they cover.

Local wildlife, insects, and ground-nesting birds like quail may be impacted as their preferred microclimates shift or disappear.

A 2016 study by ASU (Arizona State University) found that the ground beneath solar farms was up to 5.4°F (3°C) warmer at night than nearby natural desert land.

Panels absorb sunlight and convert some to electricity, but the rest becomes heat.

because panels are mounted above the ground, they block airflow and shade the land, altering natural cooling processes like evapotranspiration from plants.

**8. Solar Panels and Landfill Space**

Solar panels have a lifespan of 25–30 years, after which they become electronic waste. Millions of panels will be retired globally, potentially occupying several acres of landfill space if not recycled properly. Our community must consider the long-term disposal and environmental impact of solar panel waste before approving large-scale solar projects.

The International Renewable Energy Agency (IRENA) estimates that by 2050, 78 million metric tons of solar panel waste could be generated globally

This adds to environmental hazards since panels contain glass, aluminum, and potentially toxic materials like lead or cadmium in some types

We (Sierra & Alex combs) have invested years of time, resources, and personal effort into building our home, business, and farm here in Exie. This is not just the place where we live, it is the foundation of our livelihood. We have put significant money into remodeling our home, constructing specialized kennels to support our business, and developing our farm to create a productive and sustainable operation. We moved all the way from WV, have spent thousands of dollars, and years of our time on our property to become our dream home and place to run our business to support ourselves.

The proposed solar project directly threatens everything we have worked to build. Our business depends on the health and well-being of our animals, and we are deeply concerned about the impact this project could have on our water sources. Any disruption or contamination could affect the reproductive health of my animals and jeopardize breeding programs that are essential to my livelihood. Our business draws clients from all over the USA and even Canada. This loss of appeal translates into a direct loss of income for my business. These visitors bring tourism dollars that directly support other local businesses, restaurants, lodging, shops, and service providers. That economic boost will be lost if the project moves forward, and the ripple effect will be felt across the community.

We are also gravely concerned about the potential long-term health risks to our child. We do not yet fully understand the impacts of large-scale solar developments on air, soil, and water quality, and I will not gamble with our child's future well-being.

In addition, we want our child to have the opportunity to one day farm this land that we have worked so hard to build up. If we are forced to move and start over, we may never be able to afford to provide him with that same opportunity.

Finally, the property value of our home and farm—into which we have poured significant investment—will inevitably decline if this project moves forward. After years of building and improving our property, it is unacceptable to see its worth and potential diminished by an industrial development that provides no meaningful benefit to residents.

**In conclusion:** We ask that the board to reject or halt approval of the Exie Solar Project. Responsible energy should not come at the cost of Productive farmland, safe drinking water, local wildlife, fires, community safety, property value of those who have worked hard to improve their homes and land values. There is only so much land and once it has gone its gone. The state of Kentucky should be working to protect it, not sell it off for short term gain that does not benefit residents.

*Thank you for your time and for protecting the interests of the citizens you represent.*

Respectfully Sierra & Alexander Combs

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