



MONTHLY ZONING AND PLANNING REPORT

August 13, 2024 – County Services Committee

ACTIONS COMING FROM THE ZONING BOARD OF APPEALS

1. Petition No. 24-P-1629 by Richard A. Humphrey, Jr. and Brenda D. Humphrey, regarding part of PIN 18-08-13-100-006, located in South Dixon Township. The parcel is currently zoned Ag-1, Rural/Agricultural District. Petitioner is requesting a Special Use Permit for the purpose of Inventory or Materials Storage, Outdoor for the purpose of storing of inventory or materials in relation to the operation of a Skilled Trades Special Use Permit for Midwest Disposal. The ZBA voted unanimously (3-0) to recommend approval of the petition with the following conditions:
 - a. If the owners sell the business (Midwest Disposal) or the property referred to in Petition No. 24-P-1629, the special use permit will become null and void upon sale.
 - b. Additional screening of the area where the containers are being stored.
 - c. No more than fifteen (15) packer trucks may be stored outdoors.
 - d. The washing of the interiors of the packer trucks shall not occur at 1556 Red Brick Road, Dixon, Illinois.

ACTIONS GOING TO THE ZONING BOARD OF APPEALS

1. Petition No. 24-P-1630 by Alicia Hall, Brandon Miller, ReAnn Miller, Heather Settles and William Schaneberg, as owners of certain real property known as PIN 07-02-33-252-011, commonly known as 1127 E. River Road, Dixon, Illinois located along E. River Road, approximately 925 feet northeast of Stony Point Road and 667 feet southwest of Shop Road, in Dixon Township, Lee County, Illinois, filed a Petition for Special Use with the Lee County Zoning Office for the purpose of a private campground. The parcel is currently zoned Ag-1, Rural/Agricultural District and is approximately 1.75 acres in size.

ACTIONS COMING FROM THE PLANNING COMMISSION - None

ACTIONS GOING TO THE PLANNING COMMISSION - None

OTHER ACTIONS FROM THE ZONING OFFICE

On July 29th, the County Board and the Zoning office held a public meeting to discuss the County's floodplain ordinance and the County's participation in the National Flood Insurance Program (NFIP). Erin Conley from IDNR was present to discuss the State's role, as well as FEMA's, and why Lee County's compliance is so important. Approximately 35-45 people were present, including board members. We would like to thank all those who were able to be present.

We understand that zoning is a complex topic and that two hours was not enough time to cover everything related to the floodplain ordinance so we would like to emphasize that the Zoning office will always make



time to educate board members and/or members of the public about County policy. We would also like to emphasize that the goal of the Zoning office is to work with landowners to achieve compliance. So long as a non-compliant property owner makes reasonable efforts to correct the violation(s), no fines will be pursued by the Zoning office.

The Zoning office has been contracting with retired Sheriff's Deputy Jared Yater to bring back the Junk and Junk Vehicle Program in conjunction with the Sheriff's Department. A copy of Mr. Yater's status report for the month of July is attached hereto. To summarize, Mr. Yater is currently working to resolve junk, debris and junk vehicle violations on 31 properties. He is now able to request junk/salvage titles for abandoned vehicles or vehicles with lost title without the involvement of the Sheriff's department, freeing up valuable time for our deputies. Mr. Yater has overseen the resolution of violations at five properties. Mr. Yater and I recently travelled to Nachusa to do a comprehensive check of the town. There are approximately 10 properties in Nachusa that we will be looking to work with the property owners to resolve the violations.

It is my understanding that the Zoning office used to do an onsite inspection once new construction was "staked out" and this was part of the building permit process. Due to limited staffing, this practice fell to the wayside. This practice helps confirm that the information reported on the permit is correct (building size, building location, amenities, etc.) which helps the Assessment office. Not having this initial oversight also leads to property owners getting violation notices a year or years after the violation has occurred when it is identified through the Assessment office. I would like to bring this practice back by expanding on Mr. Yater's duties to include zoning compliance check as part of the building permit process.

A zoning compliance check is nothing more than confirming that what is reported on the building permit is what is constructed. Mr. Yater will conduct his first check once the new construction is staked out. He will return to the property mid-construction to confirm the status of the construction. He will complete his last check once construction has been completed and a photograph will be taken at that time. The report from the final compliance check and photo will be provided to the Assessment office.

Mr. Yater is currently performing these duties as part of the work with the Assessment office; however, it may be a year or years after the permit was issued. In talking with Chief Assessment Officer Jennifer Boyd, she agreed that taking a proactive approach would have benefits to both offices and would be more efficient. County Administrator Jeremy England, Mrs. Boyd and I will be meeting to further discuss this process.

The Zoning office has been working with the owner of 511 Willett Ave., Dixon to correct zoning violations specific to the floodplain. The owner has been diligently working to clear materials from the floodplain that occupies a large portion of the property. We are starting to see visible improvement at the location. We look forward to continuing working with the property owner to complete the corrective action.

On July 18, 2023, Steward Creek Solar Project (Phase 1) requested a determination from the Zoning Administrator as to whether the project would be considered substantially underway. On August 11, 2023, Zoning Administrator Dee Duffy found the project to be substantially underway and validating the special use permit to still be active. As part of that determination, Mrs. Duffy requested bi-annual updates on the project as it continues to grind through the PJM interconnection process. A copy of their report is attached hereto. Steward Creek Solar is projecting to achieve interconnection by late 2025.

Lee County's Certified Floodplain Manager Laura Mangrum is currently working with two communities in Lee County that may be able to capitalize on grant opportunities that could be used to correct or minimize their floodplain and/or stormwater management issues. Mrs. Mangrum is helping to educate these communities as to the options that may be available to them and will act as a resource during their application;



however, she will not be telling them what to do nor will she be overseeing their grant application process as these communities have their own governmental structure.

Zoning Board of Appeals Chair Bruce Forster asked me to share a couple of articles with the County Board and they are attached hereto. One article discusses the use of agrivoltaics in southern Illinois (dual use of land to produce agriculture products and solar). The other article discusses the issues surrounding the PJM restructuring.

During the month of July 2024, the Zoning Office processed forty-seven (47) building permits. Permit fees in the amount of \$5,337.40 were collected.

2024

Status Report-Jared (July 2024)

31 Properties with junk/debris/junk cars

Vehicles removed: 6, but most of the clean up is debris/rubbish

Closed: 5 (4 in Woodland Shores)

Working with 14 property owners and making progress

Boats removed: 2

(The average cost to dispose of a boat is \$100)

No response/compliance from property owner(s): 2

Pending SA request for summons due to most items being debris/junk: 2

Needing a letter sent regarding violation(s): 10

Completing junk title work for prop owner: 1

Learning Zoning rules and processes.

-Meet with property owners for building setbacks and provide contact information when needed (EX: When septic/water is involved)

-Working with Alice on forms for:

 Zoning letter to be sent to last known owners of abandoned vehicles to start the junk title process

 Building permit checklist

 New letter concerning junk, debris, rubbish, junk cars (One letter to notify property owners the county has ordinances for all of these things)



STEWARD CREEK SOLAR PHASE 1 SPECIAL USE PERMIT EXTENSION
H2 2024 BIENNIAL DEVELOPMENT UPDATE

STEWARD CREEK SOLAR, LLC
ALTO AND WILLOW CREEK TOWNSHIPS
LEE COUNTY, ILLINOIS

AUGUST 6, 2024

Prepared for:
Lee County Zoning Administrator
112 E. Second St.
Dixon, IL

Prepared by:
Hexagon Energy, LLC
321 E. Main St. | Suite 500 | Charlottesville, VA 22902
Tel: 434-227-5090 | hexagon-energy.com

INTRODUCTION

On July 18, 2023, the Steward Creek Solar Project (Petition 20-P-1555) provided a letter to the Lee County Zoning Administrator, Dee Duffy, in which the project explicated the justification for a formal substantially underway determination for the project. Based on the information provided and the authority granted to the Lee County Zoning Administrator by the Lee County Board, on August 11, 2023, the Lee County Zoning Administrator determined the Steward Creek Solar Project (Petition 20-P-1555) to be substantially underway, thereby extending the term and validity of its Special Use Permit. This determination was based upon evidence of the project's continued development, compliance with the provisions of the Special Use Permit, the project not being in default of the Lee County ordinance, and the delays, outside of the project's control, to which the project has been subjected.

In conjunction with this determination, the Lee County Zoning Administrator requested the project provide bi-annual updates regarding PJM as it pertains to Steward Creek Solar. The following is the second such update provided by Steward Creek Solar to the Lee County Zoning Administrator.

STEWARD CREEK SOLAR: PJM UPDATES

Since our last update provided in February, there have been a few key Steward Creek Phase 1 developments that pertain to PJM which have been provided below:

MAY, 2024

1. PJM completed the first cluster study of Transition Cycle #1 and provided Steward Creek Solar with the Phase I System Impact Study (SIS) for its TC1 queue positions.
2. These SIS reports documented the identified network upgrades and cost allocations for the project.

JUNE, 2024

1. As required by the PJM Transition Cycle, following the completion of each study phase, the interconnection customer has 30 days to make a decision to continue into the second phase of the interconnection study process. This decision requires the project to demonstrate that site control has been maintained and a second readiness deposit of 10% of identified network upgrades to be made.
2. Steward Creek Solar has elected to continue into the second study phase and has made all of the associated payments. Additionally, PJM has confirmed that the project has been accepted into the second phase.
3. Updated Cycle Timeline
 - a. PJM has updated the TC1 schedule to reflect the actual completion date of TC1 Phase 1, May 21, 2024.



4. Based on the most recent PJM TC1 schedule, a timeline for Steward Creek Solar Phase 1 has been provided below:
 - a. Phase 1 Study (Completed)
 - i. January 22, 2024 through May 21, 2024
 - b. Phase 1 Study Results: Decision Point 1 (Completed)
 - i. May 15, 2024 through June 15, 2024
 - c. Phase 2 Study (In Progress)
 - i. June 21, 2024 through December 17, 2024
 - d. Phase 2 Study Results: Decision Point 2
 - i. December 17, 2024 through January 17, 2025
 - e. Phase 3 Study
 - i. January 17, 2025 through July 17, 2025
 - f. Phase 3 Study Results: Decision Point 3
 - i. July 17, 2025 through August 17, 2025
 - g. Final Interconnection Agreement Negotiation Phase
 - i. July 17, 2025 through September 17, 2025

SUMMARY

PJM confirmed that Steward Creek Solar has progressed into the second phase of the first transition cycle, which began on June 21, 2024 and is scheduled to be completed by December 17, 2024. This means that Steward Creek Solar Phase 1 is still on track to have a completed interconnection study by the fall of 2025. Thus far, PJM has largely kept to their anticipated interconnection schedule for TC1 projects. PJM's adherence to their proposed transition cycle scheduled represents an important step towards receiving permission to place the Steward Creek Solar into service. Furthermore, the completion of the Phase 1 SIS has resulted in Steward Creek Solar Phase 1 having increased clarity regarding expected interconnection costs and timing, thereby allowing us to plan on commencing construction in Q1 of 2026.



Advocates hit try at end run by power grid operator

Company seeks exemptions from some fed reforms

By Nara Schoenberg Chicago Tribune

Last year federal regulators approved a long-awaited set of reforms designed to ease waitlists for new power sources seeking to come online and deliver electricity to homes and businesses.

Such waitlists have emerged as one of the leading barriers to clean energy — including wind and solar power — and the federal reforms were widely viewed as an important step forward.

But now PJM Interconnection, the powerful but little-known company that runs the waitlist in northern Illinois, is pushing back, with requests for exemptions from aspects of the reforms, including a new timeline for key studies.

“PJM is dragging its feet on the clean energy transition and doing everything it can, instead, to create exceptions for itself,” said Clara Summers, the Consumers for a Better Grid campaign manager at the Citizens Utility Board.

CUB is one of seven public interest groups — including the Sierra Club, the Natural Resources Defense Council, and the Union of Concerned Scientists — that have filed a protest with federal regulators saying that PJM is resisting reform and should not be granted many of the exceptions it seeks.

PJM, a federally regulated private company that manages part of the high-voltage electric grid, said in a written statement that it started implementing its own reforms in July 2023, and the exceptions it seeks are “consistent with the ... goals set forth” in the federal reforms.

PJM noted that those goals included streamlining the process by which new power projects connect to the grid and providing useful information to project developers.

PJM’s requests for exemptions come at a time when experts say the United States isn’t moving fast enough to cut planet-warming carbon emissions and stave off the worst effects of climate change.

Adding new wind, solar and battery power is central to state and national plans to reduce emissions and meet ambitious climate goals.

Among the concerns that critics lay out in their protest filing: PJM is seeking an exception to a 150-day time limit for a key study, which examines how a series of proposed projects will affect the electric grid.

PJM is asking to keep its 480-day timeline for the study and an additional facilities study, which compares with only 240 to 330 days allowed for both studies under the federal reforms, according to the protest filing by public interest groups.

“PJM is asking for really long timelines here, and that runs counter to the desired goal: to have a new generation coming online and connecting in a timely and cost-effective manner,” said Summers.

In its filing seeking the exemptions, PJM notes that its time frame for studies is longer but says that's "appropriate for a large (grid operator) with a commensurate size and volume of Interconnection Requests such as PJM, given the complexity and number of Interconnection Requests PJM receives and expects to continue receiving, as well as the number of Transmission Owners with which PJM must coordinate."

PJM is the nation's largest grid operator, coordinating and directing the flow of electricity to more than 65 million people in 13 states and Washington, D.C.

Waits to connect to the grid in the PJM region are typically the longest in the United States, according to a 2024 report by Lawrence Berkeley National Laboratory. And PJM received the lowest score among seven regions in a 2024 report prepared for the business association Advanced Energy United.

That report, the Generator Interconnection Scorecard, gave PJM a D-minus for its grid-connection process.

PJM has said that the scorecard report was based on outdated data and does not take into account reforms implemented by the company starting in 2023.

In the PJM region, the median time a new energy project had to wait before being allowed to connect to the grid was more than five years in 2022, up from just 20 months in 2005.

Among the other proposed exemptions that critics object to: PJM wants permission to impose lower penalties on utilities that fail to complete studies of new energy projects in a timely manner.

Critics are also concerned about PJM's approach to energy storage, or technologies that capture energy for use at a later time.

PJM assumes that energy storage will draw electricity from the grid at times of peak demand, which critics consider "inaccurate" and "nonsensical," according to the protest filing. Peak demand is when energy is most expensive, and energy storage operators would most likely follow economic incentives and charge when energy is least expensive, critics say.

Critics want PJM to follow the procedure set forth in the federal reform package and consider, in some cases, whether the energy storage system will draw electricity during peak demand.

That's important, critics say, because adding energy storage can increase the reliability of the grid at a time when old power plants are retiring.

"It's problematic for this one resource that could really be adding benefit to the grid (to be) treated like it's going to be more of a drain than an addition," Summers said.

Another key issue for critics is grid-enhancing technologies, or GETs, which increase the amount of electricity that existing power lines can safely transmit, using sensors, power flow control devices and analytical tools.

GETs are getting a lot of attention because the existing power grid is too small for today's needs, and new high-voltage power lines are expensive. GETs are cheaper and easier to add.

The federal reforms include a requirement that GETs be considered systematically and consistently when new power projects apply to connect to the grid. Specifically, studies in which utilities determine the grid upgrades necessary to connect new power have to include an evaluation of the cost, feasibility and time savings associated with using certain GETs.

PJM doesn't want to require that in all cases.

"The fact is that a broad spectrum of potential solutions, including GETs, are already considered as part of PJM's (grid-connection) study process," according to PJM's filing.

In its written statement to the Tribune, PJM noted that it has its own grid-connection reform package, approved in 2022. As part of that package, PJM moved to a cluster study approach, in which projects proposing to connect to the grid are studied in groups, rather than one by one.

Cluster studies are widely used and considered to be an improvement over studying projects one by one.

PJM also said in its statement that it plans to process over 250 gigawatts of grid-connection requests by the end of 2026, enough to power millions of homes.

And PJM pointed out that 40 gigawatts of power that it has already approved for grid connection remains unbuilt, due, the company said, to factors unrelated to PJM's approval process. In the past, PJM has argued that such failures to build are the real problem.

"This is the challenge we need to confront as an industry rather than looking back on problems that have been largely addressed," PJM told the Tribune in April.

Critics counter that long waits under PJM's grid-connection process can cause serious problems for a project, even after it gets approval to build.

Chicago
Trib
7-31-24

Sharing the land — not competing for it

Some farmers and solar developers want to work side by side



Alson Time, a postdoctoral research associate, checks soil moisture and a temperature sensor in a soybean plot on July 23. The plot is between solar panels in the University of Illinois Urbana-Champaign's agrivoltaics farm, where researchers are exploring how crops can coexist with solar panels.

Stacey Wescott/Chicago Tribune

BY KARINA ATKINS CHICAGO TRIBUNE

Matt Riggs' family has been farming in Urbana since 1874. But, his parents had to work second jobs to cushion themselves from the volatile corn and soybean

markets that dominate Illinois' agricultural sector.

It quickly became clear that Riggs would also need to find another income stream if he wanted to keep the farm. He expects to lose \$200 to \$300 on each acre of corn this year, but a craft brewery he and his brother started is keeping the family farm afloat.

In the past few years, Riggs has realized the land his family has worked for 150 years is also ideal for solar panels. It's flat, well-drained and gets lots of sunlight.

As Illinois strives to convert 40% of its energy consumption to renewables by 2030 and 100% by 2050, solar installations are expected to increase by 1,700% over the next five years, according to the Solar Energy Industries Association.

Across the country, approximately 83% of new solar projects developed by 2040 will be installed on farm and ranch land, according to a 2022 American Farmland Trust analysis.

But, broad, low-lying solar arrays are not inherently compatible with farming. They typically take land out of agricultural production. This doesn't have to be the case, however. An emerging field called agrivoltaics suggests shorter, shade-tolerant crops may grow well in the small spaces between panels.

After installing solar panels at his brewery and seeing how reliable they were, Riggs wondered if he could use them to hedge his farm's balance sheet.

"The sun is going to come up on average a certain amount of time so you can build a really stable, predictable financial model, which I looked at having grown up on a farm and was like 'Wow, that's awesome,'" said Riggs.

Some Google searches led him to agrivoltaics.

While there are very few agrivoltaic projects in Illinois, early research and small projects show synergies between solar energy and agriculture. The co-location of solar panels and agriculture could keep farmers in business, improve ecosystem health, feed the country and provide clean energy.

Learning to speak the same language

Agrovoltics is a meeting of the minds between two groups that don't always look at the land the same way. This was on display at a recent farmer forum.

"He became bilingual and now speaks nature as well as technology," said Will Harris, a cattleman from southwest Georgia, of a developer he partnered with to graze sheep beneath solar panels.

Riggs also received a roar of laughter and scoffs during the forum when he said a developer he had considered partnering with last year wouldn't give him first right of refusal on vegetation mowing and trimming plans.

Riggs said he immediately stopped talking to the company, in disbelief that anyone would suggest they knew what was best for his family's land.

"You could offer me a trillion dollars an acre per year. There's no scenario where me or my family would feel comfortable signing the contract," he said.

One of the few Illinois farmers who still owns his farmland, he's passionate about maintaining control and is holding out for the right developer. But, many farmers don't have this luxury.

Approximately 70% of farmland in Illinois is rented from landowners who often live in cities or out of state. When solar developers approach with decadeslong contracts that pay double or triple the going rate per acre, it's hard for landowners to turn down the offers. A farmer whose yearly income is subject to fluctuating market demand can't compete.

But, if farmers and solar companies can find a way to understand each other, a growing number of farmers like Riggs see solar energy as a potential safety net. They could make a passive income from the solar company leases while still raising products for the market.

Opportunities and challenges

The logo for the Solar Farm Summit hosted in Chicago — a sheep overlaid on solar panels — is emblematic of the work that must still be done for agrivoltaics to take off in Illinois.

Sheep and solar panels pair well together. The sheep appreciate the shade from the panels and do a good job keeping the grasses low. But, there aren't many sheep farmers in Illinois, and there isn't a large appetite for lamb products in the United States.

Still, registration more than doubled at this July's summit compared with the inaugural one last year, organizers said.

On a 54-acre property called Solar Farm 2.0 in Champaign, University of Illinois researchers are exploring how row crops, which monopolize Illinois' agricultural output, can coexist alongside solar panels.

Their preliminary research suggests corn, which needs lots of sun and grows high, won't do well among solar arrays. But, shorter, more shade-tolerant crops such as soybeans, wheat, barley and hay may grow well in the small

spaces between panels. In other parts of the country such as Arizona and Massachusetts, agrivoltaic farms are seeing promising yields of specialty groups such as tomatoes, basil and berries.

In Saline County, 165 miles south of Solar Farm 2.0, the American Farmland Trust has partnered with solar developer Sol Systems to see if kernza, a hybrid wheat that improves soil health, might also grow well alongside solar panels in Illinois. However, as with sheep, there isn't a large demand for kernza among American consumers.

Environmentalists have long questioned whether Illinois should be growing so much corn and soybeans in the first place. They're water-intensive, primarily used for biofuels and livestock feed rather than human consumption, and monocropping has degraded soil health, according to a study published by the National Academy of Sciences.

"You have food deserts all over the Midwest where farmers markets are about the only thing going in terms of getting produce there. Is there a way for us to rebuild some specialty crop supply at scale?" posed Ethan Winter, director of the American Farmland Trust's Smart Solar division. The 12-person team only came about three years ago to explore the intersection of solar and agriculture. This is new territory.

The passive income stream from solar arrays could give Illinois farmers the cushioning they need to diversify their harvests.

"For us to nurture this thing and grow it, it won't deliver massive profit year one. We may fall on our faces as we're establishing these crops that are foreign to central Illinois," said Riggs, who is interested in experimenting with more direct-to-consumer products such as berries and flowers. "The cool thing is agrivoltaics can mitigate that risk until we're good at it."

Agrivoltaics is also being pitched as a way to make farming more resilient to climate change. The solar panels could shield crops from the sun and storms as weather becomes more severe.

"As the climate changes, where we may have extreme heat and extreme precipitation, it may actually benefit plants to have some shade. So, it's also very forward-looking research," said Madhu Khanna, director of the University of Illinois research project.

Slowly warming up to solar

Many Illinois farmers are on the defensive as they watch utility-scale, non-agrivoltaic solar projects pop up next to their fields.

Last year, Illinois passed a zoning law that made any land approved for agricultural or industrial use also eligible for solar installations.

Farmers have already had to adapt to an influx of windmills and raised concerns about carbon sequestration in recent years.

“It just seems like people are wanting to start a war right here in central Illinois over all of this green energy stuff,” said Shane Gray, a first-generation farmer in Waverly, Illinois, whose farm is next to Double Black Diamond. At 4,100 acres, it’s the largest solar project east of the Mississippi and is expected to offset 70% of the electricity from the city of Chicago’s municipal operations.

The land was chosen because it’s near a transmission line, said Matt Birchby, president and co-founder of the project developer, Swift Current Energy. While he said the company is open to incorporating agrivoltaics into future plans, nothing will be farmed on this site, which is about the size of 11 family farms.

“If you’re a landowner within a certain radius of a transmission line, you’re either getting a letter in the mail or a knock on the door,” said Alan Bailey, the Midwest solar specialist at American Farmland Trust.

The Illinois Farm Bureau, which represents 3 of every 4 farmers in the state, is against putting solar projects on productive farmland. It advocates for placing them on abandoned brownfield sites, vacant lots and rooftops instead.

But, projects on brownfields and former landfills tend to be smaller and more expensive because of land remediation costs, according to Anna Toenjes, associate vice president of impact at Sol Systems, a solar company experimenting with agrivoltaics in Illinois.

“Having the flexibility to develop projects on different types of land is really critical to achieving the scale needed to achieve the goals set on the federal and state levels,” Toenjes said.

Although solar panels are only projected to cover 1% of total farmland in the United States, the most productive farmland is most likely to be affected, according to the American Farmland Trust analysis. Historically, towns and cities were built next to the richest farmland. Transmission lines, which solar arrays must connect to, were subsequently built next to these highly populated areas, said the organization’s President and CEO John Piotti.

However, agrivoltaics is slowly catching on in rural Illinois. Earlier this month, Riggs’ county Farm Bureau sent his proposal to modify the organization’s hardline stance against solar development to the state-level resolution

committee. If approved, the Illinois Farm Bureau would support public funding for agrivoltaic projects.

Policy will set the pace

Ultimately, state and federal policy will set the pace of progress for agrivoltaics.

Lightstar Renewables, a Boston-based solar developer, applied last month to construct Illinois' largest commercial agrivoltaic project in Kane County.

The fate of the 4.95 megawatt, 36-acre project, which is anticipated to provide enough energy to power 1,100 homes annually and grow hay and soybeans, is in the hands of the state government.

The company found an interested landowner near a transmission line, worked with a local farmer to design an array he can grow beneath and between and successfully pushed the project through the county permitting process.

Now, Lightstar is waiting to be accepted into Illinois Shines, a state-run solar incentive program that can cover up to 40% of the cost of a solar system.

The program receives more applications than grid capacity, even after being allocated more megawatts under the Pritzker administration's 2021 Climate and Equitable Jobs Act.

"We anticipate it will be slow to actually get built and put into operation because of the timeline and capacity limits with Illinois Shines," said Cecelia Stephens, a development manager at Lightstar.

While hopeful the Kane County project will be approved this year, the company plans to apply again in 2025 if it isn't.

Illinois Shines is generally regarded as a national model of how states can support solar development, but Stephens said there is an opportunity for more weight to be given to agrivoltaic projects.

Applications are evaluated with a points-based system. Currently, agrivoltaics only receives one point. For comparison, projects built on rooftops receive three points and projects built on brownfields receive two.

"If the Illinois Shines program could further incentivize or prioritize agrivoltaic projects, I think that would really be something that would help push us forward more quickly," said Stephens.

She pointed to New York as an example of a state that has really invested in the new field. It just announced a grant program that will award up to \$750,000 to

agrivoltaic projects.

Riggs would like to see Illinois Shines' points-based system broken down even further to prioritize projects that will produce the highest agricultural output and create the most farming jobs.

Given that solar farm leases typically last two to four decades, he feels an urgency to get agrivoltaic projects underway.

"Every day we don't have a tiered incentive structure to incentivize real, robust dual-use, there's another project going in that's going to be there for 25 years, and it's a missed opportunity," he said.

The U.S. Department of Energy and Department of Agriculture have put tens of millions of dollars into agrivoltaic research. Solar Farm 2.0 is funded under a \$10 million USDA grant.

There is also bipartisan support in Congress for further research into agrivoltaics. The Farm Bill introduced by House Republicans this May directs the agriculture department to study the impacts of and best practices for "shared solar energy and agricultural production." Additionally, it tells the agriculture department not to fund any solar projects on prime farmland unless they incorporate agrivoltaics or have local government approval.

"The rise of agrivoltatics is a great reason why we need a new Farm Bill every five years," said Samantha Levy, conservation and climate policy manager at American Farmland Trust.

Agrivoltaics was only beginning to be discussed in 2018, so it was not included in the last Farm Bill, which reached its five-year expiration date last year. After failing to come to a consensus, a divided Congress opted to extend the 2018 Farm Bill until this September.

History suggests Congress will likely be in gridlock until after the presidential election in November and consequently extend the 2018 bill another year.

With these federal delays and the backlogs at the state level, Riggs worries that family farmers will lose out on an opportunity to be a part of the clean energy transition and maintain their cherished livelihoods.

"If a project has real agricultural dual-use and was partnered with a small family farm, it's the golden ticket for that family," said Riggs. "Every one of these little community solar projects could literally sustain a family farm for the next generation."