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Russellville Solar Project Case 2021-00235

Please add the following articles to the public records for this case. They are articles relating to solar power and the world's food supply issues.

Submitted by John Mason and Gwen Barnes 122 Barnes Road Adairville, KY 42202 (Logan County)

courier journal

OPINION This piece expresses the views of its author(s), separate from those of this publication.

Industrial solar exploits Kentucky's farmland for outside interests

Sarah Steele, Elizabeth Berry, Dan Feeser and Will Mayer Opinion Contributors Published 5:34 a.m. ET Oct. 7, 2021

Jim Waters paints an overly simplistic picture in his Sept. 24 opinion piece about solar development on Kentucky farmland.

While he breezily references Stephen Foster's famous lines in our state song, perhaps it would be more useful to look at the data. In fact, much of Kentucky is only a moderate solar resource -4.5 peak sun hours per day, less than the surrounding states of Virginia, Tennessee, Illinois and Missouri, and more similar to Ohio and Indiana, and the northern climes of Maine and the Canadian provinces.

Why, then, are out-of-state and foreign-owned solar developers targeting Kentucky's agricultural land? Because utility-scale solar projects have more to do with harvesting tax credits than harvesting sunlight.

Solar in Kentucky: The promise of solar farm income in Kentucky is not winning everyone's heart

The current push to site massive industrial-solar facilities on Kentucky farmland is largely the result of a lavish federal tax credit, which returns 26% of the project's cost to the developers. This flies in the face of Mr. Waters' assertion that solar is competing in the marketplace without government intervention.

Commercial solar developers further benefit from a state regulation that classifies solar electric generation as "manufacturing" enabling them to qualify for locally issued Industrial Revenue Bonds to finance their projects. This arrangement reduces the developers' state tax bill by up to 90% – robbing Kentucky taxpayers of revenue that could otherwise be put towards pension liabilities, education, infrastructure and other priorities.

In return for facilitating low-cost financing through IRBs, local communities get a paltry payment in lieu of taxes – generally amounting to a fraction of 1% of their current revenue. So,

the community gets a couple hundred-thousand dollars while the developers reap tens of millions, without bearing any of the risks. Free-market? Hardly.

The purpose of the IRB tax break is to create long-term jobs in local communities. However, by the solar developers' own admission, their projects don't generate many long-term jobs. Nor do they make communities more attractive for corporate investment.

More: Kentucky counties need to get with the future and on board with solar power

The interregional nature of our electric grid means that East Coast states and companies with renewable energy mandates can source those renewable credits from flyover states while hypocritically opposing such developments in their own communities – a well-documented occurrence from New York to Northern Virginia.

That the benefits of large-scale solar developments disproportionately accrue to the developers and outside interests is only half the story. What about the costs?

The unfortunate reality is that – without proper oversight from local and state government – the costs will be borne largely by our citizens, whether they be neighboring property owners, taxpayers or electricity consumers.

The detrimental effect of large solar facilities on nearby properties is significantly greater than Mr. Waters will admit. Valuation studies conducted by independent appraisers have identified multiple case studies of diminution of 30%.

This isn't just a question of viewsheds – which are important in their own right to local tourism and quality of life – but whether it's justifiable for out-of-state and foreign interests to destroy the life savings of hard-working Kentuckians, particularly without due process as Mr. Waters advocates.

The impact of industrial-scale solar facilities reaches far beyond neighboring property owners. Indeed, everyone who pays taxes or consumes services in Kentucky should be concerned. Given the current lack of decommissioning standards, local – and ultimately state– taxpayers will be on the hook to decommission, reclaim and recycle potentially 60 million-plus solar panels. The current proposals alone would comprise a liability of \$1.3 to \$2.6 billion.

More: Nuclear power is what Kentucky needs for jobs and economic boost in coal communities

This should be a red flag to our state legislators and anyone even remotely aware of our commonwealth's long history of bonding failures vis-à-vis energy production.

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Finally, it is important to recognize the fallacy of Mr. Waters' claim that widespread adoption of industrial solar would result in cheap and reliable energy.

While the cost of solar modules has declined –largely due to state-sponsored, anti-competitive practices in China, which have manipulated the global market– the price of electricity in places that have pursued vast utility-scale renewable generation has risen substantially.

Take California, as an example. The average price of electricity in California, which sources a third of its energy from renewables, is $19.90 \notin / kWh$. This is 88% higher than Kentucky's $10.56 \notin / kWh$. Not only is the energy more expensive, it's less reliable – as has been well-documented in recent brownouts and blackouts from California to Germany.

It is ironic that Mr. Waters' purported "think-tank" – which claims to promote transparent government – would advocate for such thoughtless policy.

What communities need is a thorough understanding of the costs and benefits of large-scale solar developments and a transparent process by which to evaluate them. Not empty promises from outsiders seeking to extract value from our natural resources that leave us to deal with the environmental and economic fallout.

Sarah Steele lives in Mercer County. Elizabeth Berry is a member of the Citizens Voice of Mason County. Dan Feeser is a member of the Hardin County Citizens for Responsible Solar. Will Mayer is the executive director of the Clark Coalition.

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JSDA Farm Service Agency U.S. DEPARTMENT OF AGRICULTURE

Kentucky FSA Update - June 01, 2022

USDA to Allow Producers to Request Voluntary Termination of Conservation **Reserve Program Contract**

The U.S. Department of Agriculture (USDA) will allow **Conservation Reserve**



Program (CRP) participants who are in the final year of their CRP contract to request voluntary termination of their CRP contract following the end of the primary nesting season for fiscal year 2022. Participants approved for this one-time, voluntary termination will not have to repay rental. payments, a flexibility implemented this year to help mitigate the global food supply challenges caused by the Russian invasion - This has wever happened with CRP

of Ukraine and other factors. Today, USDA also announced additional flexibilities for the Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP).

FSA is <u>mailing letters to producers</u> with expiring acres that detail this flexibility and share other options, such as re-enrolling sensitive acres in the CRP Continuous signup and considering growing organic crops. Producers will be asked to make the request for voluntary termination in writing through their local USDA <u>Service Center</u>.

If approved for voluntary termination, preparations can occur after the conclusion of the <u>primary nesting season</u>. Producers will then be able to hay, graze, begin land preparation activities and plant a fall-seeded crop before October 1, 2022. For land in colder climates, this flexibility may allow for better establishment of a winter wheat crop or better prepare the land for spring planting.

Organic Considerations

Since CRP land typically does not have a recent history of pesticide or herbicide application, USDA is encouraging producers to consider organic production. USDA's Natural Resources Conservation Service (NRCS) provides technical and financial assistance to help producers plan and implement conservation practices, including those that work well for organic operations, such as pest management and mulching. Meanwhile, FSA offers cost-share for certification costs and other fees.

Other CRP Options

Participants can also choose to enroll all or part of their expiring acres into the Continuous CRP signup for 2022. Important conservation benefits may still be achieved by re-enrolling sensitive acres such as buffers or wetlands. Expiring water quality practices such as filter strips, grass waterways, and riparian buffers may be eligible to be reenrolled under the Clean Lakes, Estuaries, and Rivers (CLEAR) and CLEAR 30 options under CRP. Additionally, expiring continuous CRP practices such as shelterbelts, field windbreaks, and other buffer practices may also be re-enrolled to provide benefits for organic farming operations.

If producers are not planning to farm the land from their expiring CRP contract, the Transition Incentives Program (TIP) may also provide them two additional annual rental payments after their contract expires on the condition that they sell or rent their land to a beginning or veteran farmer or rancher or a member of a socially disadvantaged group.

Producers interested in the Continuous CRP signup, CLEAR 30, or TIP should contact FSA by Aug. 5, 2022.

NRCS Conservation Programs

USDA also encourages producers to

consider NRCS conservation programs, which help producers integrate conservation on croplands, grazing lands and other agricultural landscapes. EQIP and CSP can help producers plant cover crops, manage nutrients and improve irrigation and grazing systems. Additionally, the Agricultural Conservation Easement Program (ACEP), or state or private easement programs, may be such an option. In many cases, a combination of approaches can be taken on the same parcel. For example, riparian areas or other sensitive parts of a parcel may be enrolled in continuous CRP and the remaining land that is returned to farming can participate in CSP or EQIP and may be eligible to receive additional ranking points.

Other Flexibilities to Support Conservation

Additionally, NRCS is also offering a new flexibility for EQIP and CSP participants who have cover cropping including in their existing contracts. NRCS will allow



Salena Zito: Half-built Pa. solar farm shows renewables aren't ready for prime time

SALENA ZITO

JUN 18, 2022 11:00 PM

PORTAGE, Pa. — The pitch to the people of Cambria County when the Maple Hill Solar Farm was first announced two years ago was that the \$200 million project would create 150 megawatts of electricity while eliminating 150,000 tons of carbon emissions that fossil fuel plants would have emitted — and that it would employ 250 workers at peak construction.

Even the Appalachian region's reputation for cloudy weather was going to be overcome by technological advances that made the solar panels more efficient. In short, the promise of the Green New Deal had come to coal country. In fact, the solar panel farm was to be constructed on an old coalmine strip.

With the exception of the reliably cloudy weather, though, none of it has lived up to its promise — to the frustration of the owners of the solar farm, climate change activists and the men and women who looked forward to new jobs to replace the ones lost in coal.

Climb to the top of the mountain where the solar farm is and you see thousands of racking systems spread across hundreds of acres that hold solar modules — but no panels.

The scene is jarring. The question is: Why?

The answer is Joe Biden — or at least that was the answer until a week ago, when Mr. Biden finally waived the tariffs on solar panels from Southeast Asia he had enacted after Auxin Solar filed an inquiry into whether China was circumventing tariffs.

The delay caused by the ensuing Commerce Department investigation has stalled solar farms like this one for months — others permanently and threatened the climate change goals Mr. Biden laid out at his inauguration.

"The tariffs derailed renewable projects across the country," said Tom Rumsey, senior vice president of Competitive Power Ventures, the developer behind Maple Hill. "Lifting the tariffs has helped, but here at this solar panel farm, we're expecting it to go commercial second quarter next year."

The uncertainty of the tariffs caused over 315 projects to be cancelled or delayed, according to the Solar Energy Industries Association, the industry's top trade organization.

On the same day Mr. Biden lifted the tariffs, he also announced he was going to use wartime powers granted under the Defense Production Act to ramp up solar equipment production to speed up American made clean energy manufacturing.

That's the other rub: We don't make solar panels in this country.

"The capability to manufacture the amount that you're going to need, well that's going to take probably over a decade," explained Mr. Rumsey.

"And it's not just build them — then where are you going to get the raw materials needed that go into them? That's the part no one talks about. Yes, you can assemble them in the United States. You're still going back to China, to the mines that everybody hates," he said.

Solar energy requires rare earth minerals, and China holds most of them, primarily in Xinjiang, where manufacturing is tainted by the use of forced labor.

The problem here is the problem everywhere with renewable energy: It's just not ready for prime time — at least not ready enough to produce the energy needed to keep this country humming.

Energy has become just another polarized "us versus them" issue, with climate activists treating it with religious fervor. Statements like "the world is going to end in 12 years if we don't address climate change," by Rep. Alexandria Ocasio-Cortez, D-N.Y., make it extraordinarily difficult to have a pragmatic discussion about how to balance an "all of the above" solution to energy.

The other less visible problem at this facility is wages. Shawn Steffee, the business agent for the International Brotherhood of Boilermakers Local 154, said the jobs available for this solar farm are a slap in the face — and won't help the power plant workers who lost their jobs. "We were told these jobs were going to be family-sustaining jobs. Well, \$16 an hour is not a family-sustaining wage," Mr. Steffee said, shaking his head. "I honestly don't know anyone who has gotten a green energy job."

Mr. Rumsey said you'll never hear his company talk green jobs: "That's a

political statement. We never say 'green jobs.' Why? Because it takes a day and a half to put up a wind turbine and once you construct the solar projects — and there are construction jobs there, for sure — but once they're constructed, that's it. There's no operating jobs. There's nothing," he said honestly.

Mr. Rumsey, who has spent years in the energy industry, said ten years ago he was telling Republicans that they needed to be adaptable on climate change — and eventually, he said, they were. Today he is having the same conversation with Democrats, who want full renewable use to have started yesterday.

"There is no technology right now that you can simply call that can come up quickly if you have a bunch of wind or solar cut out, or go away because like nuclear, you start it and you're running," he said.

Steady supply is an issue, Mr. Rumsey said of the renewable industry: "Battery storage just doesn't have the capacity duration. There is no technology that can do it, other than natural gas. Our struggle is trying to break through the mindset that any new natural gas is just more dependence on fossil fuel."

The hard truth is that renewables aren't ready to play the role in the national energy mix that activists and politicians claim. But instead of acknowledging that an all-of-the-above approach keeps our electricity going while reducing our carbon emissions, the Biden administration remains beholden to a Democratic base resistant to compromise.

The worst part isn't just the wind whistling among the thousands of empty racks that make up Maple Hill or the temporary, low-paying jobs to install the panels: It's the blackouts that, according to the Washington Post, could hit much of the country this summer.

Many of the coal fired power plants that for decades lit our homes and kept us cool in the summer have gone offline, having been driven out of existence. But the country doesn't have reliable renewable energy infrastructure to replace it.

And if that wasn't enough, the Federal Energy Regulatory Commission predicts electricity prices will rise as much as 233% over last summer's prices, which will go nicely with the prices Americans are paying at pump.

Maple Hill is a symbol of both promise and overreach. Eventually, it will be productive. But without clear minds to manage the energy mix, the financial pain and inconvenience Americans are experiencing will only continue, or get worse.

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with this unwanted vegetation: herbicides, mowing, or ground cover or a combination of all three. All of us who have farmed this land understand how hard it is to control weeds in crops that intercept over 80% of the solar radiation. You can only imagine how hard it will be to control this vegetation in a solar farm. High rates of herbicides, frequent mowing, and the use of mulches, rock, or plastic will all have negative impacts on the land from herbicide residues, soil compaction and erosion, and particles of damaged panels left in the soil resulting in contamination from heavy metals and rare earth elements used in solar panels. Remember, you still own this land and you will be held responsible for water runoff, cleanup, and off site effects not to mention the accumulation of weeds like Palmer Amaranth over time and the eventual need to replace fertility lost. Make sure your contract with the solar farm has a clearly stated plan for dealing with unwanted vegetation. Plans that just state the use of herbicides, mowing or even the use of goats or sheep should be specific about types of herbicides, timing, rates, etc. Make sure these specific plans make sense for your land! Don't accept anything that will harm the soil or its future productivity.

Fact 2. Because of this lost productivity and the resulting changes in the farming communities caused by the loss of land, it is highly unlikely this land will ever be farmed again.

Loss of a scarce resources like farmland will have significant impacts on you and your community. Land rents are increasing and will increase even more as solar farms compete for agricultural land. Currently, solar farms are leasing land at prices ranging from \$400 to \$1200 an acre. Not many farmers can afford to pay these kind of prices to farm the land. With the loss of land comes the loss of business for seed, fertilizer, and chemical dealers, hardware and lumber suppliers, equipment manufacturers and others in your community who depend on agriculture for their living. It is highly likely that our grain markets will have to adjust by moving livestock out of the state to areas with better grain supplies resulting in lower prices for grains in North Carolina. In short, over the span of the current 20-year lease agreements, agriculture will change such that even when the land becomes available, you will not be able to afford to put it back into production. Make sure you have a viable plan for how you will move forward with your farming enterprise. Today, farming depends on size of scale to make a profit. As you scale down, expect it to become more and more difficult to remain in the farming business. If you aren't

are paying the bill. It doesn't make sense to pay for solar before paying teachers" salaries. How much longer this can go on is anyone's guess. I think it is unlikely that this can continue for very long and once this taxpayer largess ends it will end the era of the solar farm. For what? Not for green energy. Because solar power only occurs for 5 hours on sunny days. There are no batteries at any of these solar farm sites. The traditional utility companies still have to produce their normal power load for the remaining 19 hours on a sunny day. And, on a cloudy rainy day, they have to provide power for all 24 hours. They still have to be prepared to generate the same amount of electricity using fossil fuels with or without the solar farm! So let's get this straight - we pay the taxes, we pay higher utility rates, we change our agricultural communities to accommodate these solar farms, and we don't improve our climate or our environment. And, it can potentially ruin the land for our children and grandchildren. NO, THIS IS NOT A GOOD USE OF OUR LAND!

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By admin | December 11th, 2015 | Categories: Home

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NO More BIG Solar in KRUM

From today's Monroe News

Herbert M. Eckerlin Guest columnist

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Solar farms speaker: Be aware of hidden agendas

On December 9, 2021, I was asked to speak to a group of citizens in Erie, Michigan about solar farms. My presentation stimulated much discussion, both pro and con.

Here is some background information on this important topic: I am a retired professor in Mechanical Engineering at North Carolina State University. I have been proponent of solar energy for over 40 years. In 1980, I designed and built the NCSU Solar House on the university campus.

The house served as a research and educational facility for over 30 years and educated thousands of people on the magic of solar energy. The Solar House incorporated three types of solar energy systems – solar hot water, solar space heating, and solar electricity. Each of these systems involves a different technology. The Erie presentation focused on solar electricity.

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The panels used in the generation of solar electricity can be mounted of the roofs of buildings (residential or commercial) or on metal racks in an open field. Solar developers prefer flat, open farmland because it is less expensive to erect the panels and to build larger solar power systems. They call these systems 'farms' to make them appear more user-friendly to an agricultural community.

Placing solar panels on farmland raises some interesting questions for township residents. People might wonder, for example, about the impact of solar farms on the value of their property? Mary Clay, an MAI appraiser in Paris KY, has conducted a multi-state property value research project and has found that solar farms reduce the value of neighboring properties by as much as 15 to 30%.

People across the country have begun to ask questions like, 'How efficient are these solar farms and are they an efficient use of our land?' It turns out that solar power is intermittent and has a capacity factor of only about 20%. Because of this low efficiency, solar farms require 70% to 80% more land than a conventional power plant to generate the same number of megawatt-hours in a given year. This increase in solar farm land requirements should be of concern to our national leaders. Perhaps local leaders (township and state) will have to speak up to call attention to this land-use problem.

Another troubling question is, 'How can an intermittent power source like solar farms seamlessly replace reliable conventional power?' In truth, it can't. Solar advocates claim that batteries will solve the intermittency problem, but they fail to say who is going to charge the batteries. Questions abound.

Americans are an intelligent people. Perhaps the question that troubles them most is, 'What's driving this solar farm movement?' In a word, it's the 30% Federal Tax Credit Program. In 2015, for example, the largest investor in solar farms in North Carolina was Blue Cross/Blue Shield with tax credits worth in excess of \$40 million. Obviously, BC/BS is not in the solar farm business, but it is in the tax reduction business. The largest investors in the solar farm program, as a group, are financial institutions like banks and insurance companies. Warren Buffett summed it up best when he said, 'Solar farms don't make any sense without tax credits.'

Solar developers know that the tax credits won't last forever. This explains why they are so anxious to get these Solar Farm Applications approved as soon as possible. This also explains why solar developers are LLCs and lease the land. They want the freedom to be able to walk away when the benefits dry up.

Given this additional insight, we must ask ourselves 'What is the life of a solar farm?' Six years ago, it was 15 years. Today that has grown to 30 to 35 years. In truth, the solar developers don't really know. What they do know is that the solar panel efficiency degrades every year.

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When the solar developer decides to pull up stakes, 'What is the nation going to do for electric power? Go back to coal?'

Dr. Herbert M. Eckerlin is emeritus professor of Mechanical & Aerospace Engineering at North Carolina State University, Raleigh, NC. His email is eckerlin1935@gmail.com. .



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ENERGY + ENVIRONMENT

COMMENTARY

Should solar panels be placed on land that can produce food?

GUEST COLUMN

JANUARY 25, 2021 12:01 AM

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A solar array. (Getty Images)

By Robert Whitescarver

Virginia is on a path to achieve 100 percent carbon free energy by 2050, and utility-scale solar projects are being proposed in many counties throughout the commonwealth. Energy companies are seeking landowners who will let their property be used for solar panels that will produce clean, renewable energy.

Solar photovoltaic panels require a lot of space – experts say between 5 and 10 acres per megawatt they produce. The best place for solar panels is on rooftops, industrial lands, brownfields, degraded land and marginal farmland. Clearing forests for solar panels is not a good choice, nor is the use of prime farmland.

We can't plop an expanse of solar panels just anywhere and expect it to be right. Solar panels require special conditions to function at their best, and every locality planning to welcome solar panels needs to develop a strategy for optimal placement.

Should solar panels be placed on land that can produce food? - Virginia Mercury

If approved, will it be a solar farm? I think so. It will produce food for wildlife, clean water and clean air. It will build soil health. It can produce 83 megawatts of electricity an hour – enough to supply 14,000 homes annually with clean, renewable energy.

Virginia's goal is to achieve 100 carbon free by 2050. We will need utility-scale solar projects to get there. Make sure your locality has a plan for proper siting of such a project. One of the most important considerations is to avoid siting solar projects on prime farmland or land that's best suited for growing food for a hungry planet.

Robert Whitescarver is a farmer, a retired district conservationist for USDA, a National Association of Conservation Districts Soil Health Champion, an author, and an adjunct professor of natural resources management at James Madison University. He can be reached through his website: www.gettingmoreontheground.com.

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