1 2		pBEFORE THE OHIO POWER SITING BOARD			
3 4 5 6 7 8	of Kir Certif	Matter of the Application) ngwood Solar I LLC, for a) icate of Environmental) Case No. 21-0117-EL-BGN patibility and Public Need)			
9 10 11 12 13 14 15 16		DIRECT TESTIMONY OF SUSAN JENNINGS ON BEHALF OF CITIZENS FOR GREENE ACRES, INC., JENIFER ADAMS, P. CHANCE BALDWIN, JACOB CHURCH, VERITY DIGEL, JED HANNA, KRAJICEK FAMILY FRUST, JAMES JOSEPH KRAJICEK, KAREN LANDON, NICOLE MARVIN, HAD MOSSING, KAREN MOSSING, NICHOLAS PITSTICK, KYLE SHELTON, MARLIN VANGSNESS, JEAN WEYANDT, AND JERALD WEYANDT			
17 18	Q.1.	Please state your name.			
19	A.1.	Susan Jennings.			
20	Q.2.	What is your educational background?			
21 22	A.2.	I have a BA in Political Science and English from Washington and Jefferson College.			
23	Q.3.	What is your occupation?			
24 25	A.3.	I am an Executive Director of a non-profit focused on regenerative land use.			
26	Q.4.	Please provide an overview of your occupational experience.			
27 28	A.4.	I have served for 7 years as the Executive Director of The Agraria Center for			
29		Regenerative Practice in Yellow Springs. I previously served as the Director of Campus			
30		and Community Sustainability at the University of Massachusetts Dartmouth. In both of			
31		these positions I have supported education and on the ground work in community			
32		resilience, including supporting the development of regenerative food systems. I			
33		previously served on The Village of Yellow Springs' Economic Sustainability			
34		Commission and have served for four years on the national Council for Agricultural			
35		Research, Extension, and Teaching on behalf of Central State University. I am the chair			

of Board of Greater Dayton Conservation Fund, which provides funds for regional conservational initiatives, including the conservation of farm land. I also facilitate a Community Climate Resilience class for the University of Dayton's lifelong learning institute. I have worked with the Ohio Farm Bureau Federation on land conservation issues. We received a grant from the Ohio Environmental Protection Agency to teach children about the importance of soil and another grant from that agency to teach new farmers about soils. We have also hosted several soil conferences with speakers from around the country as well as from Australia. All of my experience described in this answer involve the regenerative management and preservation of agricultural land. A true and accurate copy of my resume is attached as Exhibit A.

11 Q.5. What is the mission of Agraria?

- 12 A.5. Agraria is a non-profit organization that cultivates community resilience by modeling
 13 regenerative practices that restore ecosystem health, heal our relationship with the land,
 14 and grow just and equitable food systems. Agraria owns 200 acres of land-- 80 of which
 15 is farmland preserved by an agriculture easement which prevents development on the
 16 land.
- 17 Q.6. Where is Agraria located?
- 18 A.6. Miami Township, Greene County, Ohio
- 19 Q.7. On whose behalf are you offering testimony in this case?
- A.7. I am offering testimony on behalf of Intervenors Citizens of Greene Acres, Inc., Jenifer
 Adams, P. Chance Baldwin, Jacob Church, Verity Digel, Jed Hanna, Krajicek Family
 Trust, James Joseph Krajicek, Karen Landon, Nicole Marvin, Chad Mossing, Karen

Mossing, Nicholas Pitstick, Kyle Shelton, Marlin Vangsness, Jean Weyandt, and Jerald
Weyandt. My testimony will refer to the Citizens for Greene Acres, Inc. as "CGA."

Q.8. What is the purpose of your testimony?

A.

A.8. The purpose of my testimony is to inform the Ohio Power Siting Board about the importance of agricultural lands to the people of Ohio and the economic, environmental, and community challenges of the Kingwood proposal.

Q.9. What is the importance of conserving agricultural land?

Nationally and internationally, farmland is under threat from a variety of sources including development, desertification and drought, and conflict. Two recent examples are the Ukraine conflict which had an immediate impact on commodity availability internationally, and the drought in California, which is driving up food prices. Other recent price and supply challenges include a steep rise in the price of fertilizer and other inputs, and transportation and processing issues. The empty store shelves that began in the shutdowns two years ago alerted all of us of the need to be growing food closer to home and thus protecting farmland in our communities.

We in Ohio are blessed with some of the best farmland in the country, as well as abundant water. These have led to agriculture and related industries being Ohio's number one economic driver with 1 in 7 of our jobs related to agriculture.

At the same time, the state has lost over 7 million acres, or 1/3rd, of its farmland since 1950. These threats of development are continuing with an influx of climate refugees from other parts of the country. Both the State of Ohio and Greene County Commissioners agree that farmland preservation is a priority, and many non-profits are working to educate communities and protect land with agricultural easements. There is

1		also an increased focus by the Ohio Ecological Food and Farming Association, Agraria,
2		and our land grant universities in helping farmers transition to more local and
3		regenerative growing.
4	Q.10.	What, if any, professional experience do you have with the conservation of
5		agricultural land that informs your testimony in this case?
6	A10.	Since our founding, our organization has operated as a land trust. We own over 200 acres
7		ourselves and also work with local farmers on regenerative land use and agricultural
8		preservation. We also run and speak at conferences about the importance of agriculture
9		as a climate tool and basis of a strong economy.
10	Q.11.	In which, if any, organizations do you serve that deal with the conservation of
11		agricultural land?
12	A.11.	We work closely with Tecumseh Land Trust, The Coalition of Ohio Land Trusts, The
13		Nature Conservancy, and the American Farmland Trust.
14	Q.12.	What have you done in order to prepare your testimony?
15	A.12.	I have interviewed colleagues from the American Farmland Trust and other land trusts,
16		soil scientists and other conservationists. I have also researched online studies about best
17		practices for solar installation on agricultural land.
18	Q.13.	What documents did you consult in preparing for your testimony?
19	A.13.	I examined the application and public testimony and also did research on soil and land in
20		Ohio as well as the research mentioned above.
21	Q.14.	What is the quality of the farm land contained in the Project Area for the Kingwood
22		Solar Project?

1	A.14.	There are 40 types of soils covered by the installation area. According to the USDA,
2		98% of the Project Area contains prime or locally important soils. I obtained this
3		percentage from a chart developed by Tecumseh Land Trust based on data on soil types
4		from the USDA.
5	Q.15.	What is the basis for your opinion about the quality of the farm land in the Project
6		Area for the Kingwood Solar Project?
7	A.15.	From soil maps and from consultation with farmland preservation and soil experts
8	Q.16.	Based on your experience and your review of Kingwood Solar's Application, do you
9		have any concerns about the potential effects that the Kingwood Solar Project may
10		have on agricultural land in the area?
11	A.16.	Yes, I have concerns about the economic, environmental, and community impacts of the
12		solar installation. As a sustainability and community resilience professional, I understand
13		the need for our communities to develop renewable energy systems. However, all of the
14		studies I have read have concluded that these systems are best developed on brownfields,
15		on buildings, in non-agricultural lands, or, if in agricultural areas, at a small enough scale
16		to not significantly impact agriculture. The Kingwood solar proposed project instead is
17		covering primarily productive farmland. While Kingwood proposes to plant grasses and
18		pollinators under the panels, this does not constitute a dual use project, which is the only
19		way that solar energy systems can directly complement agriculture.
20		From an economic angle, the project is problematic because it takes land directly
21		out of farming. Tenant farmers are already faced with historically high rents, and as land
22		is taken out of production, fewer are able to find the acres they need to be profitable. The

land taken out of production for this project is estimated to reduce commodity sales in the

area by \$1 million annually. As land is taken out of farming, this also creates stresses on all the support industries that rely on agriculture, including equipment dealers, processors, transport firms, and the food industry. Other economic impacts are likely to include a decline in surrounding property values and a decline in tourism revenue for surrounding communities.

Productive agriculture depends on healthy soils and water, and there are no studies in the United States that I have found that show the long- term impact of large-scale solar development on soil and water. The compaction of soil during installation, the challenge to the life below the soil, and the likely leaching of the panels into the soil make it unlikely that the soil will return to its present state when it is time to decommission the array. Studies on farm soil impacted by gas pipelines show significant decreases in productivity post installation.

The proposed site impacts two watersheds covering 4,500 acres of land. The 10 foot poles that the Kingwood array will be mounted on will provide preferential pathways for rainwater to enter into groundwater. Along with likely damage to agricultural tiles, this increased flow will likely mean more flooding and sustained pooling of water in and surrounding the site. Healthy soils provide important holding and filtering functions which help to prevent run off and soil loss. Since Ohio is experiencing heavier and more frequent rain events, the degradation of this soil could lead to yet more flooding and more legacy nutrients like nitrogen flowing into the Ohio River and the Mississippi Delta.

Beyond the impact to critical watersheds, including those that contain the important areas of Glen Helen, John Bryan Park, and Clifton Gorge, I am concerned that Kingwood Solar's proposal contains no plans to monitor water flow and water quality

before, during, and after the project. This means that any water quality or flooding challenges will only be discovered when they have reached critical conservation areas, if at all.

Healthy soils are also an important carbon sink, so the carbon benefits of solar panels need to be balanced against the carbon sequestration potential that will be lost by the damaging of the soil in the project area.

Other ecosystem challenges include the loss of habitat for birds, insects, and other wildlife. While the idea of planting pollinators under the panels may alleviate some of this loss, the plan does not take into account the varying soil types and the challenges of maintaining new plantings in degraded and disturbed soil, including the likely profusion of invasive species. When land is taken out of conventional agricultural production, which includes much of the land in the proposal, it is particularly susceptible to noxious weed growth and invasive species which can be difficult to eradicate and can be challenges for neighboring farmers and landowners. I see nothing in Kingwood Solar's application that suggests they have any sense of how challenging the project that they are suggesting is, and how much work would be required for them to be successful at it.

Q.17. Do you have other concerns to share with the Board?

A.17. I think it's important for the siting board to think systemically and long term about each application for solar installations. Since two large installations have been sited in Ohio, and two more have been approved, it would be prudent for the Board to work with Ohio State and Central State researchers to measure the impact on soil and water of these installations before approving more installations. They could also be forward-looking in thinking systemically about climate and community resilience issues, understanding that

- as we reach our limits to growth we need to make good choices about balancing our
- 2 needs for locally produced energy with our needs for locally-produced foods.
- 3 Q.18. Does this conclude your direct testimony?
- 4 A.18. Yes.

EXHIBIT A

Susan Jennings

131 E Dayton-Yellow Springs Road Yellow Springs, OH (937) 208-1191 (C) (937) 767-2826 (W) sjennings@communitysolution.org

Recent Professional Experience

Executive Director, Arthur Morgan Institute of Community Solutions/Agraria, Yellow Springs, OH (June 2014-Present)

Key Accomplishments:

- Development of Agraria, a 138-acre farm, into a Center for Regenerative Practice including research, conservation and education activities.
- Hosting of roughly 20 events yearly including conferences and workshops on regional food systems, soil regeneration, land conservation, and farming.
- Development of regional working group to re-develop a local food system.
- Development of a Black Farmer's Network and training for beginning BIPOC farmers.
- Development of The Agraria Journal and other media.
- Supervision of average of 20 staff and interns.
- Grant writing and implementation (see below)

Director, Office of Campus and Community Sustainability, UMass Dartmouth, Dartmouth, Massachusetts (July 2007-November 2013)

Key Accomplishments:

- Led the implementation of the American College and University President's Climate Commitment and developed, in collaboration with faculty and students, a 144- page Campus Sustainability Assessment and Climate Action Plan.
- Wrote (or co-wrote), managed, and reported on over \$1.5 million in grants and contracts.
- Developed and hosted statewide conferences on food systems, land conservation, energy systems, and forestry.
- Co-founded and co-led The Southeastern Massachusetts Council on Sustainability.
- Developed a <u>Living Classroom Initiative</u> and a Forest Stewardship Plan for UMD's 400 acres of open space and campus gardens.
- Produced, in collaboration with graduate students, regular newsletters and a weekly Sustainability Almanac that reached over 3000 subscribers.
- Developed community sustainability conversations including Presentations on Peak Oil, Transition Towns, and Resilience Circles.
- Partnered to develop food and energy security plans for the region.
- Co-founded and supervised the Southeastern Massachusetts Time Exchange.

Education

Washington and Jefferson College, Washington, PA, BA in English/Political Science; Magna Cum Laude; Phi Beta Kappa; Editor, Literary Journal (1981)

University of Keele, Staffordshire England One year program in International Relations as Rotary Scholar; Distinction in the History and Philosophy of Science (1981)

Public Service

Chair of the Greater Dayton Conservation Fund Co- Chair, Sustainable Ecosystems branch of the Montgomery County Food Security Network CSU Representative for the National Council for Agricultural Research, Extension, and Teaching (CARET)

Select Funded Grants

Ohio EPA: \$40k to fund a Regenerative Farming Fellows Training Program (2021-22)

USDA Community Food Project Grant: \$400k to develop an urban ag education center in collaboration with a Springfield Community Group (2020-2024)

Ohio Humanities Council: \$16k for a Grounded Hope Podcast on Regenerative Agriculture.

Clean Ohio Trail Fund: \$500k to Develop a bikepath to Agraria from a local school (2020).

Ohio EPA: \$50k to run a Soils for Life Program and Teacher Training. (2018)

Christopher Reynolds Foundation: \$20,000 to support the development of the film Earth Island, Energy and Community (2014)

Yellow Springs Community Foundation: \$10,000 for Local Resilience (2014-2015)

US Community Service Corporation: 2 Americorps VISTA Members for regional foodshed assessment and community garden support. (2016-2022)

UMass President's Office: \$22,000 to fund permaculture projects at UMass Amherst and UMass Dartmouth. (2013)

Island Foundation: \$10,000 to Support work with Regional Community Gardens and Develop a Regional Community Gardens Database. (2013)

US Department of Labor through Brockton Workforce Investment Board: \$150,000 to Develop and Offer to Unemployed Professionals a Graduate Certificate in Sustainable Development. (2010-2012)

US Department of Energy: \$964,000 to develop a weatherization training center in New Bedford. (2010-2013)

National Endowment for the Humanities: \$180,000 to build website and CD/ROM for Changing Lives Through Literature program. (2002)

1	
2	<u>CERTIFICATE OF SERVICE</u>
3 4	I hereby certify that, on February 28, 2022, a copy of the foregoing written direct
5	testimony was served by electronic mail on the following: Jodi Bair at
6	Jodi.Bair@ohioattorneygeneral.gov; Daniel A. Brown at dbrown@brownlawdayton.com; Kevin
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14 15 16	/s/ Jack A. Van Kley Jack A. Van Kley

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Summary: Testimony of Susan Jennings electronically filed by Mr. Jack A. Van Kley on behalf of Citizens for Greene Acres & Its Member Intervenors