

**BEFORE
THE OHIO POWER SITING BOARD**

In The Matter of The Application of Wild)	
Grains Solar, LLC for a Certificate of)	
Environmental Compatibility and Public)	Case No. 21-0823-EL-BGN
Need. Located in Van Wert County, Ohio.)	

**DIRECT TESTIMONY OF
JEFFREY REINKEMEYER, P.E., C.E.M.**

on behalf of

Wild Grains Solar, LLC

May 13, 2022

Q-1. Please state your name, title, and business address.

A-1. My name is Jeffrey Reinkemeyer, P.E. (IN, IL, WI, MO, KY, TN, SC, NC, NE), C.E.M, and I am the Director of Eastern Renewables Development, for Avangrid Renewables, Inc. (“Avangrid”). My business address is 1237 Inverness CT, Schererville, IN 46375. Applicant Wild Grains Solar, LLC (“Wild Grains”) is a subsidiary of Avangrid

Q-2. What are your duties as Director of Eastern Renewables Development at Avangrid?

A-2. My duties consist of developing energy infrastructure projects in the clean energy space. I have worked in this area since 2007. Currently, my duties and experience include identifying project opportunities in the Eastern region of the United States (the PJM interconnect) and leading work across the project development lifecycle for solar power projects, including but not limited to Wild Grains. These efforts include market analysis, site screening, landowner outreach, permitting and late-stage development until transition to our construction team. While at Avangrid, I have developed renewable energy projects in multiple states, and utilize this experience to lead Avangrid’s renewable development activity in the Eastern region of the United States.

Q-3. What is your education and professional background?

A-3. I received a Bachelor of Science Degree in 1990 from University of Missouri-Rolla (now Missouri University of Science and Technology) in Mechanical Engineering. I then received a Master’s of Business Administration, focusing on Sustainable Business, in 2013 from Marylhurst University.

I have worked with Avangrid since 2007 as the Director of Eastern Renewables Development. Prior to Avangrid, I was Manager of the CM Project Management Group for RMT (now IEA) Construction for five years, where I was responsible for project development, design engineering/engineering oversight, estimating, and project management. Prior to this role, I worked as a consulting engineer, and a plant/process engineer in the Petrochemical and Rubber industries.

Q-4. On whose behalf are you offering testimony?

A-4. I am offering testimony on behalf of Wild Grains.

1 **Q-5. What is the purpose of your testimony?**

2 **A-5.** The purpose of my testimony is twofold. First, I intend to provide a summary of
3 the Wild Grains Solar Project (“Project” or “Wild Grains”), including background
4 information concerning Wild Grain’s Application and the Exhibits thereto. Second, I
5 intend to summarize the primary components of the Application and sponsor its admission
6 into evidence along with certain Exhibits to the Application, all certificates of service, all
7 required proofs of publications, and all other letters and documents required by OPSB
8 rules. The Exhibits I am sponsoring are the reports prepared at my direction by our
9 consultant Westwood: Substation General Arrangement (Applicant Exhibit 1, at Exhibit
10 A); Geotechnical Report (Application Exhibit 1, at Exhibit C); Traffic Study (Applicant
11 Exhibit 1, at Exhibit K); Decommissioning Plan (Applicant Exhibit 1, at Exhibit L);
12 Groundwater, Hydrogeological, and Geotechnical Desktop Review (Applicant Exhibit 1,
13 at Exhibit P), the Phase IA Cultural Resources Survey and the Phase I Archaeological
14 Survey (Applicant Exhibit 1, at Exhibits S and U). The remaining Exhibits to the
15 Application are being sponsored by additional witnesses.

16 **Q-6. Are the Wild Grains Application, Exhibits, and responses to Staff Data Requests true**
17 **and accurate to the best of your knowledge and belief?**

18 **A-6.** Yes, the Application and Exhibits (Applicant Exhibit 1) and all of Wild Grain’s Responses
19 to the Staff Data Requests (Applicant Exhibit 2) are true and accurate and were prepared
20 under my direction.

21 **Q-7. Were copies of the accepted Application served on local public officials and libraries**
22 **in accordance with OAC Rule 4906-3-07(A)?**

23 **A-7.** Yes, such service was made, and I am sponsoring Applicant Exhibit 3, which is proof of
24 service of the Application.

25 **Q-8. Did Wild Grains file and serve a copy of the letter sent to property owners and tenants**
26 **with the plan or contiguous to the plan site pursuant to OAC Rule 4906-3-03(B)?**

27 **A-8.** Yes. A letter was sent to property owners and tenants within the plan site or contiguous to
28 the plan site on July 28, 2021 announcing that the Public Informational Meeting would be
29 held on August 18, 2021. (Applicant Exhibit 4.)

1 **Q-9. Did Wild Grains cause notice of the Public Informational Meetings, the Application,**
2 **and the hearing dates to be published in the local newspaper?**

3 **A-9.** Yes. Such notice was published in *The Times Bulletin* at the appropriate times. Proof of
4 publications in this newspaper was filed on the docket on August 26, 2021. (Applicant
5 Exhibit 5.)

6 **Q-10. Please list all consultants Wild Grains retained to prepare its Application and**
7 **Exhibits, including for each the respective areas of responsibility.**

8 **A-10.** Under my direction and supervision, Wild Grains worked with Environmental Design &
9 Research, Landscape Architecture, Engineering & Environmental Services, D.C.P.
10 (“EDR”) as the lead consultant on the Application. EDR assisted in coordinating the studies
11 used in the Application and Exhibits. I directed and supervised consultants in the following
12 areas of responsibility:

- 13 • Terracon: Geotechnical Report (Application Exhibit 1, at Exhibit C).
- 14
- 15 • Westwood: Substation General Arrangement (Applicant Exhibit 1, at Exhibit A);
16 Traffic Study (Applicant Exhibit 1, at Exhibit K); Decommissioning Plan
17 (Applicant Exhibit 1, at Exhibit L); Groundwater, Hydrogeological, and
18 Geotechnical Desktop Review (Applicant Exhibit 1, at Exhibit P).
- 19
- 20 • ESI: Ecological Survey Report (Applicant Exhibit 1, at Exhibit Q).
- 21
- 22 • EDR: Vegetation Management Plan (Application Exhibit 1, at Exhibit D);
23 Lighting Strategy (Applicant Exhibit 1, at Exhibit F); Socioeconomic Report
24 (Applicant Exhibit 1, at Exhibit H); Public Information Program (Applicant Exhibit
25 1, at Exhibit I); Complaint Resolution Plan (Applicant Exhibit 1, at Exhibit J); Solar
26 Glare Analysis Report (Applicant Exhibit 1, at Exhibit N); Typical Best
27 Management Practices (Applicant Exhibit 1, at Exhibit R); Phase 1A Cultural
28 Resources Survey (Applicant Exhibit 1, at Exhibit S); Historic Resources Survey
29 (Applicant Exhibit 1, at Exhibit T); Visual Resources Assessment (Applicant
30 Exhibit 1, at Exhibit V).
- 31 • Jacobs: Noise Assessment (Applicant Exhibit 1, at Exhibit O).
- 32

33 **Q-11. What is the general purpose of the Project?**

34 **A-11.** The general purpose of the Project is to produce solar-powered electricity that will
35 maximize energy production from solar resources to deliver clean, renewable energy to the
36 Ohio bulk power transmission system to serve the needs of electric utilities and their

1 customers. The electricity generated by the Project will be transferred to the transmission
2 grid operated by PJM Interconnection, LLC (“PJM”) for sale at wholesale to the grid or
3 under a power purchase agreement.

4 **Q-12. Would you describe the proposed Project, the Project Area, and the power generation**
5 **potential of the solar farm?**

6 **A-12.** The Project is a 150 MW solar-powered electric generating facility for which Wild Grains
7 has applied for a certificate to construct in Hoaglin Township in Van Wert County, Ohio.
8 The Project would occupy approximately 818 acres within an approximate 2,312-acre
9 project area comprised of private land secured by Wild Grains through agreements with
10 the landowners.

11 The Project will be located on rural, previously disturbed land that has been mostly cleared
12 for agriculture and is generally flat. The facility will consist of large arrays of photovoltaic
13 (PV) panels (known as solar panels), which will be ground-mounted on a tracking rack
14 system. The racking includes steel posts driven five to ten feet into the ground. Depending
15 on the PV module selected, the facility will include approximately 470,440 panels. The
16 solar panel arrays will be fenced with gated entrances and electronic security systems.

17 The Project also includes access roads, electric collection lines, a collection substation, a
18 100 foot-long transmission line to the POI substation, a laydown area for construction
19 staging, an operation and maintenance (O&M) building, and pyranometers. The energy
20 generated at the facility will deliver power from the proposed Point of Interconnect (“POI”)
21 substation to the existing Maddox Creek 345 kV transmission line owned by AEP.

22 **Q-13. Do you believe the Project will have a positive impact on the local community?**

23 **A-13.** Yes. As also noted in the Staff Report of Investigation (“Staff Report”), the Project is
24 expected to create approximately 675 construction jobs for the State of Ohio during the
25 construction period and 6 long-term operational jobs for the State of Ohio.

26 Additionally, the Project would generate revenue based on a payment in lieu of taxes
27 (“PILOT”) plan under the Ohio Air Quality Development Authority (“OAQDA”). The
28 Wild Grains project pursued an OAQDA PILOT with the local county, township, and
29 school district because of the ability to customize the PILOT in order to better target local
30 needs. The Project interacted with these local stakeholders for multiple months. As a result,

1 the Project and local stakeholders were able to develop a PILOT framework and agreement
2 to accomplish a variety of goals.

3 First, this arrangement will continue to allocate annual PILOT revenue to a variety of local
4 taxing entities, including an increase the funding to the local township general revenue
5 fund.

6 Second, the arrangement will provide an annual payment to existing non-participating
7 homeowners in the township where the project is located. The annual payment will be
8 administered by a not for profit entity controlled by the local county and township.

9 Further, the Project is consistent with agricultural industry support, as the facility will
10 provide supplemental income to farmers, and the land can be returned to agricultural
11 production after decommissioning.

12 In recognition of these benefits, the Hoaglin Township Trustees have written a letter in
13 support of the Project, which was posted in the Public Comments on January 3, 2021. In
14 that letter, the Trustees indicate that “Hoaglin Township is excited the benefits of Wild
15 Grains for our community” and request approval of the Project.

16 **Q-14. Did you attend the local public hearing held on May 3, 2022?**

17 **A-14.** Yes.

18 **Q-15. What has Wild Grains done to address and respond to the comments raised at the**
19 **local public hearing?**

20 **A-15.** Nine individuals offered sworn testimony during the local public hearing. Six spoke in
21 support of the Project, citing economic benefits, environmental stewardship, landowner
22 rights, and productive land use. Two of these individuals testified that they would like the
23 setback areas to be planted with crops. To the extent a landowner or tenant is interested in
24 planting those areas, Wild Grains is amendable to that suggestion. As discussed later in
25 my testimony, Wild Grains proposes a modification to Condition 17 in order to support
26 this request.

27 Three individuals raised concerns related to property values and wildlife impacts. With
28 respect to property values, the existing research suggests that there will be no negative
29 impact to the surrounding property values. Solar development in rural and agricultural

1 areas has not been linked to lost property value. Further, to the extent the testimony was
2 concerned about homes being “surrounded” by panels, Wild Grains has ensured that no
3 nonparticipating residence has panels on more than one side of the property. The fear of
4 being surrounded is unwarranted. Wild Grains is also willing to allow the setback areas to
5 be planted with crops, where possible, in order to maintain the agricultural aesthetic the
6 neighbors are accustomed to.

7 With respect to the impact to wildlife, the Application deals extensively with the
8 environmental impact of the project and those studies will be the subject of other testimony.

9 **Q-16. Are you aware that the OPSB must make certain determinations under Ohio Revised**
10 **Code (“R.C.”) 4906.10 before issuing the certificate for which Wild Grains has**
11 **applied?**

12 **A-16.** Yes. I have been advised there are eight criteria considered by the OPSB in making its
13 decision whether or not to issue a certificate.

14 **Q-17. Does the Application meet Wild Grains’ obligation to make the required showings**
15 **under R.C. 4906.10?**

16 **A-17.** Yes. The Application and Exhibits thereto enable the OPSB to determine Wild Grains has
17 met each of the eight criteria under R.C. 4906.10.

18 **Q-18. Has the Project been designed to achieve minimum impacts?**

19 **A-18.** Yes. From the inception of the Project through the studies completed in connection with
20 the Application, Wild Grains has been working with landowners, consultants, and the
21 community to minimize or eliminate the impacts of construction and operation of the
22 Project.

23 With respect to construction, activities are expected to have typical and relatively limited
24 impacts as they are temporary, intermittent, subject to time-of-day restrictions, and Wild
25 Grains will use best management practices. Increased traffic during construction will be
26 managed with no expected road closures and will end when the Project is operational. Wild
27 Grains will obtain all required permits and authorizations.

1 With respect to operations, on behalf of Wild Grains, I engaged, directed, and supervised
2 consultants to study the potential environmental, ecological, cultural, and visual impacts of
3 the Projects. (Applicant Exhibit 1, at Exhibits A-V.)

4 Among these, Wild Grains requested study of the Project Area to determine the presence
5 of threatened or endangered species. The study revealed only that the Project Area includes
6 the historical range and presence of the Indiana bat and the northern long-eared bat and is
7 not of concern for other listed species. Wild Grains will avoid impacts to these bat species
8 by minimizing and seasonally limiting tree-clearing activities during the proscribed
9 months.

10 Wild Grain's Sound Assessment resulted in a finding that any noise impacts will be limited
11 to construction. Construction noise will be minimized by practices such as limiting hours
12 of work, locating staging away from sensitive receptors, and controlling vehicle movement
13 to prevent backup alarms. Once operational, the ambient noise level will be higher than the
14 Project operational noise. As a result, the Project will be essentially inaudible for
15 participating and non-participating residences.

16 Visual impacts of the Project were studied by EDR within a five-mile radius of the Project
17 Area and determined to be minimal. Visual impacts of the Project are mitigated by the flat
18 terrain, low profile of the solar panels, efforts to preserve existing vegetation, and by adding
19 vegetative screening, including the use of pollinator habitat in landscaping.

20 Additionally, Wild Grains' studies determined that there are no impacts to wetlands and
21 surface waters. Similarly, the Project will generate no wastewater, no air emissions, and
22 minimal solid waste. With respect to aviation, the nearest public-use airport is Van Wert
23 Airport, 4.5 miles from the Project Area. No concerns have been identified by ODOT.

24 To the extent there are concerns, Wild Grains will implement a complaint resolution
25 procedure to ensure any complaints regarding construction and operation of the Project are
26 appropriately investigated and addressed.

27 **Q-19. How did Wild Grains decide to locate the Project in Van Wert County?**

28 **A-19.** Wild Grains selected the Project site using data and considering a number of factors. These
29 include strong solar resources, manageable access to the bulk power transmission system,
30 sufficiently low population density, positive feedback from local landowners and officials,

highly-compatible land-use characteristics, and few environmentally sensitive areas. Specifically, data from the National Renewable Energy Laboratory’s (“NREL”) U.S. National Solar Radiation Database, along with site visits and capacity analysis shows that this region of Ohio, including Van Wert County, has suitable solar resources. Additionally, existing bulk transmission lines are located within the vicinity of the facility in Van Wert County. Land use in Van Wert County is primarily agricultural and characterized by open spaces suitable for hosting a utility-scale solar project. The Project Area is bounded and traversed by roads appropriate for transportation purposes. Further, the Project site’s proximity to the Avangrid Blue Creek Wind Farm will allow for efficient use of existing operations staff and infrastructure.

Q-20. Will the Project adversely impact cultural historic resources?

A-20. Few cultural or historic resource impacts are anticipated, and those have been minimized. Wild Grains enlisted and directed EDR to gather information and complete a cultural resources review for a 2-mile radius around the Project. Wild Grains’ historical study resulted in finding a total of 98 archaeological sites that were newly identified within the Project Area and four previously identified sites. All but 20 sites were recommended by EDR as ineligible for listing in the National Register of Historic Places (NRHP), and EDR recommended avoidance of those 20 sites. On November 19, 2022, Wild Grains filed correspondence on the docket stating concurrence had been obtained from the Ohio Historic Preservation Office (“OHPO”) that there are no adverse effects on historic properties, resulting in no additional required mitigation.

Q-21. How will the Project protect existing drain tile in the Project Area?

A-21. With assistance from Avangrid, Wild Grains has developed and included as Exhibit E to its Application a Tile Maintenance Plan that will aid protection of existing drain tile in the Project Area. Wild Grains has also agreed to repair or replace drain tiles damaged during construction with modern, functional equivalent systems and to restore land temporarily impacted during construction to its original use. Wild Grains has consulted with landowners and studied records and GIS data to determine the location of drain tile mains, and has committed to trying to locate drain tiles as accurately as possible prior to construction.

1 **Q-22. How will Wild Grains address viewshed concerns?**

2 **A-22.** At my direction and supervision, EDR performed a Visual Resource Assessment
3 (Applicant Exhibit 1, at Exhibit V). The visual impact of the Project is relatively modest,
4 as the area is flat and the solar panels are low-profile. Wild Grains will also take additional
5 steps to minimize visual impact. These include avoiding removing existing vegetation
6 when possible and using best practices in designing a landscaping plan. To the extent there
7 is a visual impact to an adjacent, non-participating parcel containing a residence with a
8 direct line of sight, Wild Grains will use landscape management and vegetative buffers to
9 mitigate effects.

10 **Q-23. Will the Project comply with applicable safety and equipment standards?**

11 **A-23.** Yes. With regard to safety, Wild Grains plans to use warning signs, gates, and fencing to
12 restrict access to potential hazards within the Project Area.

13 **Q-24. Have you reviewed the Staff Report and does Wild Grains have any concerns with or**
14 **proposed revisions to any of the Conditions recommended by the Staff in the Staff**
15 **Report?**

16 **A-24.** Yes, I reviewed the Staff Report. Wild Grains was generally satisfied with and amenable
17 to the Recommended Conditions. Wild Grains does, however, have minor suggested edits
18 as indicated by the underlined text below.

19 For conditions 17 and 18, Wild Grains proposes language that will allow greater local input
20 into the perimeter screening and fencing selected. Although the default fencing selection
21 for the project will be “agricultural style” fencing, the local community may state a clear
22 preference for an alternative. In addition, the community has expressed a preference for
23 agricultural plantings on the perimeter of the Project. His proposed revision enables this
24 local accommodation.

25 (17) Prior to commencement of any construction, the Applicant shall prepare a
26 landscape and lighting plan in consultation with a landscape architect licensed
27 by the Ohio Landscape Architects Board that addresses the aesthetic and
28 lighting impacts of the facility with an emphasis on any locations where an
29 adjacent non-participating parcel contains a residence with a direct line of sight
30 to the project area. The plan shall also address potential aesthetic impacts to
31 nearby communities, the travelling public, and recreationalists by incorporating
32 appropriate landscaping measures such as shrub plantings or enhanced

1 pollinator plantings. The plan shall include measures such as fencing,
2 vegetative screening, or good neighbor agreements. Unless alternative
3 mitigation is agreed upon with the owner of any such adjacent, non-
4 participating parcel containing a residence with a direct line of sight to the fence
5 of the facility, the plan shall provide for the planting of vegetative screening
6 designed by the landscape architect to enhance the view from the residence and
7 be in harmony with the existing vegetation and viewshed in the area, and/or
8 shall provide for crops to be planted on the perimeter of the Project that would
9 help maintain the existing agricultural viewshed if desired by the community.
10 The Applicant shall maintain vegetative screening for the life of the facility and
11 the Applicant shall replace any failed plantings so that, after five years, at least
12 90 percent of the vegetation has survived. Prior to commencement of
13 construction, the Applicant shall submit to Staff for approval a solar panel
14 perimeter fence type that is both small-wildlife permeable and aesthetically
15 fitting for a rural location. The determination that a fence type is “aesthetically
16 fitting” may be demonstrated by the Applicant through written feedback from
17 local government officials, landowners, and project neighbors. This condition
18 shall not apply to substation fencing. The Applicant shall maintain all fencing
19 along the perimeter of the project in good repair for the term of the project and
20 shall promptly repair any damage as needed. Lights shall be motion-activated
21 and designed to narrowly focus light inward toward the facility, such as being
22 downward facing and/or fitted with side shields. The Applicant shall provide
23 the plan to Staff and file it on the public docket for review and confirmation
24 that it complies with this condition.

- 25
- 26 (18) Prior to commencement of construction, the Applicant shall submit to Staff
27 for approval a solar panel perimeter fence type that is both small-wildlife
28 permeable and “aesthetically fitting” for a rural location. The determination
29 that a fence type is “aesthetically fitting” may be demonstrated by the
30 Applicant through written feedback from local government officials,
31 landowners, and project neighbors. This condition shall not apply to
32 substation fencing.

33 For Condition 24, Wild Grains proposes a minor clarification concerning the scope and
34 applicability of the condition:

- 35 (24) All water wells within the project area shall be “ground-truthed” to determine
36 the exact locations prior to construction. The Applicant shall adhere to a
37 minimum project infrastructure setback of 50 feet from any existing domestic
38 use water supply well. The Applicant shall obtain concurrence from the
39 landowner prior to the plugging and abandonment of any water wells within
40 the project area. Documentation of that concurrence shall be filed on the case
41 docket. Plugging and abandonment of any water wells within the project area
42 shall occur prior to construction in the vicinity of the well.

1 For Condition 26, Wild Grains proposes a revision to correct a typo in the recommended
2 condition:

3 (26) The Applicant shall construct the facility in a manner that incorporates post
4 construction stormwater management under OHC000005 (Part III.G.2.e,
5 pp. 19-27) in accordance with the Ohio Environmental Protection Agency's
6 Guidance on Post-Construction Storm Water Controls for Solar Panel
7 Arrays.

8 **Q-25. Does this conclude your direct testimony?**

9 **A-25.** Yes, it does. However, I reserve the right to offer supplemental testimony if necessary.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the foregoing Direct Testimony of Jeffrey Reinkemeyer was served via electronic mail upon the parties of record listed below this 13th day of May 2022:



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Summary: Testimony of Jeffery Reinkemeyer on behalf of Wild Grains Solar, LLC
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